

Bibliography of Soft X-ray Microscopy

Adam P. Hitchcock

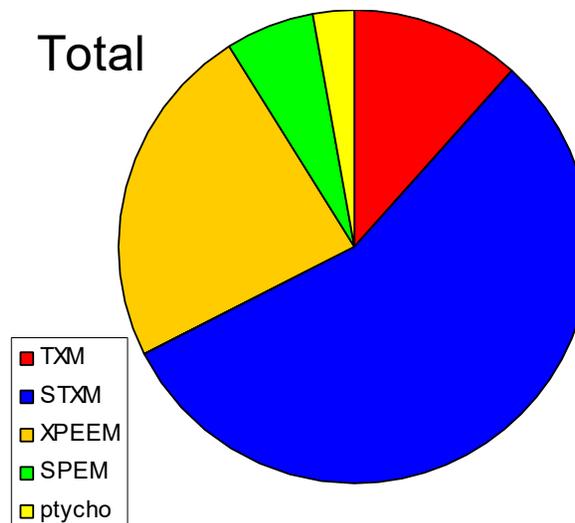
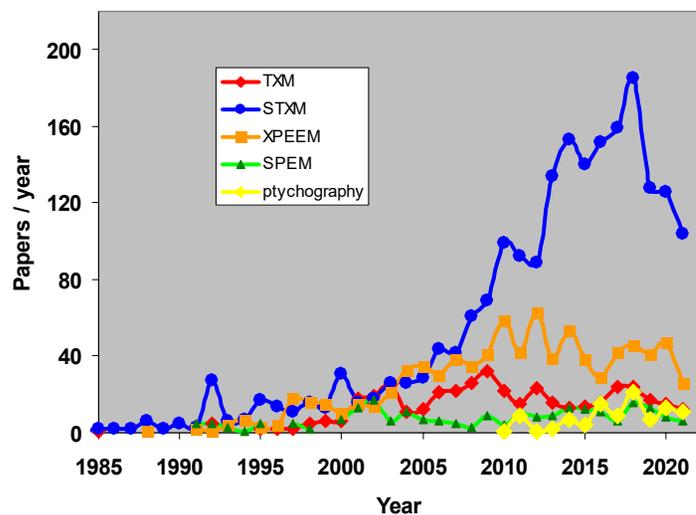
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Composition and orientation probed in real and reciprocal space, Polymer **49** (2008) 643-67

Publications/year for the different types of soft X-ray microscopy - tallied 16 December 2022



Materials

P – polymer; M – material (non-polymer); E – environmental; B - biological

Types

R – review; I – instrumentation; T – technique; A - application

Techniques

CDI – coherent diffraction imaging (includes DIXH – Digital in-line X-ray holography, FTH – Fourier transform holography)

Ptycho - ptycography

RSoXS – resonant Soft X-ray Scattering

SPEM – scanning photoemission X-ray microscopy (includes ESCA Microscopy, scanning Auger microscopy)

STXM – scanning transmission X-ray microscopy

TXM – full field transmission X-ray microscopy

XPEEM – X-ray photoemission electron microscopy (includes time-resolved PEEM)

Polymer and materials abbreviations

Alb, HSA	human serum albumin	PAA	polyacrylic acid
ABS	polybutadiene-acrylonitrile blend	PE	polyethylene
DVB55	divinylbenzene (45% monovinylbenzene)	PEP	poly(ethylene- <i>alt</i> -propylene)
EGDMA	ethylene glycoldimethylacrylate	PFSA	perfluorosulfonic acid
EVA	poly (ethylene-co-vinyl alcohol	PI	polyisoprene
Fg	fibrinogen	PLA	polylactide (polylactic acid)
F8BT	poly(9,9'-dioctylfluorene-co-benzothiadiazole)	PP	polypropylene
LDPE	low density polyethylene	PPC	poly(propylene carbonate)
Kraton	type of rubber	PP-g-MA	polypropylene-graft maleic anhydride
MDI	merhlyene di(isocyanate)	PPTA	poly(p-phenylene terphthalamide) = Kevlar™
MMT	montmorillonite clay	PS	polystyrene
Nylon-6	poly(ϵ -caprolacatam)	PTMO-ED	polytetramethylene oxide + ethylenediamine + MDI)
PAN	polyacrylonitrile	RBC	poly[(styrene- <i>r</i> -isoprene)'- <i>b</i> -(styrene- <i>r</i> - isoprene)''], (S/I)'- <i>b</i> -(S/I)'', copolymer; ' = 75/25; '' = 50/50 (wt %) S/I block compositions
PAR	polyacrylate	SEBS	poly(styrene- <i>b</i> -ethylene butylene- <i>b</i> -styrene)
PBMA	poly-n-butyl-methacrylate	TDI	toluene di(isocyanate)
PPrS	poly-bromo-styrene	TFB	poly(9,9-dioctylfluorene-co-N-(4- butylphenyl)diphenylamine)
PC	polycarbonate	Vectra	poly(butylene terephthalate)
PEC	poly(ethylene carbonate)		
PECA	poly(ethyl cyanoacrylate)		
PET	poly(ethyleneterephthalate)		
PFSA	perfluorosulfonic acid (Nafion, ionomer)		
PMMA	polymethylmethacrylate		
PMGI	poly dimethylgultarimide		

code	materials	type	technique	species	Subject / Comments
1969SR	M	I	TXM		First zone plates designed for XRM
1972HH	M	I	pinhole		2 um resolution (at NSLS)
1974K	M	I	STXM		zone plate theory
1976NRS	M	I	TXM	<i>Eremosphaera viridis</i> , cotton fibre	First synchrotron TXM (at DESY)
1977SK&a	B	T	STXM		radiation dose (electron vs. X-ray)
1977SK&b	B	T	STXM		water window theory
1980Ka	B	A	STXM		elemental mapping
1980Kb	B	I	STXM		radiation damage
1980KS	B	R	STXM		early review of soft X-ray microscopy
1980RK&	B	I	STXM		UV ring STXM – first results
1980SR&	B	R	TXM		
1984RK&	B	A	STXM		UV ring STXM
1985HK&	B	R	STXM, TXM		popular review
1985KR	B	I, R	STXM		first NSLS microscope
1986JK&	B	I	STXM		U15 BM STXM
1986RS&	B	I	STXM		plans for X1A STXM
1987JK	B	R	STXM		
1987YH	M	I	STXM		zone plate theory
1988DH&	M	A, T	RSoXS	sulphonated PS	resonant scattering
1988RS&a	B	I	STXM		first X1A result (?)
1988RS&b	B	I	STXM		UV ring STXM
1988SS&	M	I	STXM		interferometer encoder for STXM
1988TR	M	I	XPEEM	BaO cathode, Au/Si	First synchrotron PEEM
1988YH	M	I	STXM		ZP fabrication
1989BR&	B	I	STXM		
1989RI&	B	A	STXM	zymogen granules	
1990AK&	M	I	STXM		
1990KA&	B	R	STXM		
1990RA&	B	R	STXM		
1990RB&	M	I	STXM		NSLS X1a STXM
1990RB&b	M	I	STXM		X1a beamline and undulator
1990RCa	M	A	RSoXS	Amorphous polymer films	
1990RCa	M	A, T	RSoXS	sulphonated PS	resonant scattering
1990RCb	M	A	RSoXS	Semicrystalline polymer films	
1990RCb	M	A, T	RSoXS	sulphonated PS	resonant scattering
1991AK&	M	I	SPEM	circuits	

code	materials	type	technique	species	Subject / Comments
1991DC&	B	A	SPEM	neurons	
1991HKS	B	R	STXM, SPEM		popular review
1991JR&	M	A	RSoXS	Langmuir-Blodgett films	
1991JR&	M	A, T	RSoXS	Langmuir-Blodgett films	soft X-ray non-resonant scattering
1991JW&	B	I	STXM		
1991M	M	R	PEEM	Hg lamp Cu/Mo(100)	
1991MD&	B	A	SPEM	neurons	
1991T	M	R	PEEM, SPEM		
1991TG&	M	I	STXM		zone plate fabrication
1992A	M, I	R, T	SPEM		theory
1992AK&a	M	I	SPEM		astigmatism correction
1992AK&b	M	I	SPEM		
1992AK&c	M	A,I	SPEM		
1992AZ&	M	A	STXM	PAN, PS, PP	
1992B	B	A	STXM	Ca in bone	
1992BA&	B	A	STXM	Ca mapping in cartilage	
1992BB&	B	A	STXM	collagen fibrils	
1992BB&a	B	A	STXM	Ca mapping in cartilage	
1992BB&b	B	A	STXM	Ca mapping in cartilage	
1992BF&	B	A	STXM	Ca mapping in cartilage	
1992CKW	M	I	STXM		resolution evaluation
1992DK&	B	A	PEEM	neurons	
1992FP&	B	T	TXM/TEM	radiation damage to cells	
1992GM&	B	A	STXM	organelles in cells	
1992GP	B	A	STXM	whole cell imaging	
1992GP&	B	A	STXM	whole, wet tissue imaging	
1992GR	B	A	STXM	protein secretion from zymogen granules	
1992J	B	I	STXM		
1992JKW	I	T,R	TXM, STXM		resolution
1992JL&a	B	I	STXM		luminescence detection
1992JL&b	M	I	STXM		ZP replication (litho)
1992KA&a	B	R	STXM		coherence effects
1992KA&b	M	I	SPEM		
1992LK&	B	T	STXM		3d imaging by stereo microscopy
1992LR&	I	I	STXM		NSLS X1A undulator and beamline
1992LTJ	B	T	STXM/TXM	radiation damage	
1992LW&	B	T	STXM		steromicroscopy

code	materials	type	technique	species	Subject / Comments
1992M	I	T	STXM, TXM		phase, dark field
1992PG	B	T	STXM	live cells	
1992RGL	B	T	STXM		protein transport
1992WJ&a	B	T	STXM	chromosomes	radiation damage
1992WJ&b	B	T	STXM	chromosomes	
1992WJ&c	B	T	STXM	chromosomes	
1992WS&	B	A	TXM		
1992ZJW	B	T	STXM		deconvolution image enhancement
1993AH	M	A	STXM	polyimide	Dichroism mapping
1993AH	M	A,T	STXM	Kevlar	dichroism
1993AJ&	B, M	R	STXM		
1993BF&	B	A	STXM	myofibrils	radiation damage
1993CM&	I	I	SPEM		Maximum
1993DD&	B	A	PEEM	Al in neurons	
1993DH&	B	A	PEEM	neurons	
1993DM	B	R	PEEM	neurons	
1993DP&a	B	A	SPEM	neurons	
1993DP&b	B	A	SPEM	neurons	
1993JL&	B	T	STXM		luminescence microscopy
1993SW&	M	T	PEEM	first XMCD imaging	
1993WZ&	B	A	STXM	wet chromosome imaging	
1994AH&	M	A, R	STXM		dichoism
1994BC&	E	A	STXM	coal	
1994BD&	B	A	STXM	Ca in bone	
1994D	B	A	PEEM	neurons	
1994DC&	B	R	PEEM		
1994DD&	B	A	PEEM	Al in metals	
1994DM&a	B	A	PEEM	Al in neurons	
1994DM&b	B	A	PEEM	Al in neurons	
1994HM&a	B	T	STXM		microtomography
1994HM&b	B	T	STXM		microtomography
1994KA&	B	R, I	STXM	Na salicylate	luminescence
1994RC	M	A, R	SPEM, PEEM	GaAs, Al-Cu-S, XMCD	
1994T	I, M	A	PEEM	first XMCD PEEM	
1994ZA&	M	I, A	STXM		micro-XANES demonstrated
1995AH&	M	A	STXM	various polymers	
1995AS&	M	R	STXM	PS-PAN-polypropylene, PC-PET, Kevlar,	

code	materials	type	technique	species	Subject / Comments
				PUR	
1995B	B	A	STXM	mapping Ca in tissue	
1995BB&	B	A	STXM	biological Calcium phosphates	
1995CB&a	E	A	STXM	coal	
1995CB&b	E	A	STXM	C, Ca, Cl in coal	
1995CB&c	E	A	STXM	coal	
1995CJW	B	I	STXM		CCD detector
1995DD&	B	A	PEEM	neurons	UV-ashed samples
1995GBR	B	A	STXM	zymogen granules	
1995GR	B	A	STXM	zymogen granules	
1995HT&a	B	T	STXM		microtomography
1995HT&b	B	I	SPEM		
1995J	M	I	TXM		effect of partial coherence
1995KJH	B	R	TXM, STXM		
1995KK&a	M	I	SPEM		NSLS SPEM
1995KK&b	M	A	SPEM		
1995KK&c	M	A	SPEM		
1995MC&	B	R	STXM		
1995MDC	B	R	PEEM		
1995MH&	B	T	STXM		microtomography
1995SC	B, M	R	STXM		
1995TD&	M	R	PEEM, SPEM	PAN, magnetic samples	
1995WJ&	B, M	R,B, P	STXM		NSLS STXM review
1995ZF&	I, M	A	scan-SXM	Gd ₂ O ₂ S:Pr phosphor	
1995ZJ&	B	I	STXM		
1996AC&	M	A	PEEM	Pt/GaP(001) interface	
1996AS&	M	A	STXM	LC polyester, LDPE/PET/Kraton. PC/ ABS	
1996CB&	B, M	A	STXM	sporinite in coal	
1996CF&	B	T	STXM		dark field, immuno-gold labels
1996CJW	M	I	STXM		zone plate fabrication
1996DL&	B	I	PEEM	Transmission by PEEM	
1996DM&	B	A	PEEM	Co in granule cells	
1996J	B	R	STXM		
1996JC&	B, M	R	STXM		X1A STXM review
1996K	B	R	TXM, SM		
1996KY&	B	A	TXM	COS cells; Mn enhanced	
1996MAS	B	R	PEEM		

code	materials	type	technique	species	Subject / Comments
1996MKV	M	I	SFXM	mirror focused system	instrument , luminescence detection
1996OJ&	B	I	STXM		cryo sample preparation
1996SA	M	A	STXM	polyimide	Dichroism mapping
1996UH&	M	A	STXM	polyurethane characterization	
1996VF&	M	R, I	SFXM	ceramics, porous Si	luminescence, PE, transmission detection
1996WA&	B, M	R, I	STXM		NSLS X1A revised beamline
1996WH&	B, M	R, I	STXM		NSLS X1ASTXM IV design
1996ZB&	B	A	STXM	Sperm (DNA, protein)	
1997A	M	R	STXM		
1997AD&	B	A	PEEM	Boron Neutron Capture Therapy	
1997AS&	M	I, R	STXM, SPEM	PS, PC, PE, PP, PET, PAR, Kevlar (PPTA), PS, PU, polyester, Nylon-6, MDI. SAN, TDI, (LDPE, PET, Kraton)-blend; PC-ABS blend PUR, polyurea. BM, B2, B0, LC-polyester, ,ZDDP	NSLS polymer & tribology review (Ade)
1997BK&	M	I, A	(L) PEEM	Ag/Si	
1997BK&a	B	A	STXM	tissue	
1997BO&	B	A	STXM		amino acid spectroscopy
1997BS&	M	A	STXM	silica	colloids
1997BY&	M	I	STXM+	collimator after ZP	design
1997CD&	M	R	PEEM		
1997CM	M	I	SPEM	various	
1997D	B	R	PEEM		
1997DC&	B	T	PEEM		Effect of ashing
1997DG&	B	A	PEEM	Boron NCT	
1997DM	B	A	PEEM	neurobiology	
1997DMT	E	A	PEEM	ilmenite	
1997FW&	M	I	PEEM	SMART	
1997H	M	A	PEEM	high-Tc superconductors	
1997HS&	M	A	PEEM	XMCD, FeNi alloys	
1997JZN	M	I	SPEM	Si oxides	
1997MB&	M	A	PEEM	various	
1997MC&	M	I,R	SPEM	Au/Si, MoO3/sapphire,	
1997MD	B	A,T	PEEM	neurobiology	
1997MG	M	I	PEEM	Ag/Cu	angle-resolved PEEM (lab)
1997MGS	M	I	PEEM	Wien filter	
1997ML&	B	A	TXM	Plasmodium falciparum parasites	

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1997MR&	M	I	XPEEM	various	
1997MTB	E	A	TXM	Fe oxides / Se	
1997RH&	M	A, T	STXM	polyethylene terephthalate	damage rate relative to EM
1997SF&	M	A	PEEM	XMCD, FePt alloy	
1997SJT	M	I	STXM		Lucent zone plate fabrication
1997SL&	M	A	STXM		
1997SS&	M	A	PEEM	TiSi test (PRISM)	
1997TD&	M	I	PEEM	PRISM	
1997V	M	I	SFXM	luminescence	Hasylab mirrors
1997WA&	M	I	STXM, PEEM	Kevlar, PU	
1997WW&	M	I	SPAM	scanning Auger, undulator	
1998A	M	R	STXM, PEEM	PC, PET, PPTA, PAR, PS, SAN, Nylon-6, PP, PE; LDPE, PET, Kraton; Liq. crystal polyester; Kevlar, magnetic domains; wood; coke	
1998AA	M	I	TXM		resolution - partial coherence issues
1998Ab	M	R	STXM, PEEM		dichroism
1998Ac	M	A	STXM	PET, Vectra™ blend	
1998AW&	M	A	PEEM		dewetting
1998AY&	I	R	PEEM	FEL based PEEM metals	
1998BB&	B	A	STXM	sperm	
1998BK&	B	A	STXM	bone	
1998BO&	B	A	STXM	amino acids	
1998CA&	M	A	STXM	vitrinite	luminescence alteration
1998CD&	M	A	PEEM	polyimides	orientation, dichroism
1998DC&	B	I	PEEM		Mephisto
1998DG&	B	T	PEEM	Transmission by PEEM	
1998FC&	B, M	R, I	STXM		NSLS X1ASTXM IV design
1998FK&	E	A	STXM	interplanetary dust	
1998FR&	B	A	STXM	Axon	
1998GR&	B	A	PEEM	Boron NCT	
1998GT&	M	A,R	XPEEM	impurity particles in Si wafers	
1998JK	B, M	R	STXM, TXM		review
1998JMW	B	R	STXM		comp. to electron microscopy
1998KK&	M	I	SPEM		SRRC SPEM project
1998KLM	B	A	TXM	parasite metazoa	
1998KW&	M	A	STXM	PAN heat treatment	

code	materials	type	technique	species	Subject / Comments
1998MJ&	B	I	STXM	cell tomography	cryo STXM instrumentation
1998MU	B	I	TXM	wet cell	instrument
1998SA&a	M	A	PEEM		dewetting
1998SA&b	M	A, R	PEEM	various	
1998SB&	M	A	STXM	PET-Vectra™	Mechanical blends
1998SH&	I	R	PEEM	leem, leed, peem metals	
1998SJT	M	I	STXM		zone plate fabrication
1998SP&	M	R	XPEEM		XMCD microscopy
1998SS&	M	A	PEEM	tribology – hard disk wear	
1998WF&a	M	I, R	STXM		ALS BL 7.0 first instrument
1998WF&b	M	I	PEEM	SMART design description	
1998WJ	B	I	contact-XRM		contact; contrast versus resolution
1998YB&	B	A	TXM	CD36 cytoadherence by p. falciparum	
1998ZM&	M	A	PEEM	Boron carbide	
1998ZZ&	M	I	SPEM		
1999AP&	I	T	PEEM	PEEM2 (ALS) instrument	
1999AS&a	M	A	PEEM	hard disk wear	
1999AS&b	M	A	PEEM	hard disk wear	
1999AS&c	M	I	XPEEM	magnetic materials	
1999AW&	M	A	STXM	PS/PMMA	Phase segregation
1999BF&	M	A	XPEEM	disk-head interface tribology	
1999CS&a	M	A	PEEM	ZDDP tribology	
1999CS&b	M	A	PEEM	ZDDP tribology	
1999DG&	B	T	PEEM		Ashing by UV/ozone
1999GKK	E	A	TXM	biofilm formation	
1999GS&	M	A	STXM	2,5-diphenyl-1,3,4-oxadiazole films	
1999HS&	I	R	SPELEEM	FET junctions	
1999HT&a	M	A	STXM	polyurea capsules, PS-PI layers	
1999HT&b	M,B	A	PEEM	Protein - polyurethane studies	
1999HT&c	M	B	TXM		Ritsumeikan TXM
1999J	B	R	STXM	cell biology	
1999JN	E	A	STXM		
1999KM&	M	A	TXM	ASR gel	Hydration kinetics & mechanisms
1999KMB	M, E	A	TXM	concrete	deterioration products
1999M	M	I	STXM	luminescent probes	
1999MH&	M	A	PEEM	polypyrrole, defects	
1999MM	E	A	TXM	humic substance imaging	

code	materials	type	technique	species	Subject / Comments
1999MZ&	M	A	PEEM	Boron carbide nanowires	
1999NA&	E	A	STXM	colloid emulsions. milk	
1999PJP	M	I	STXM		phase contrast
1999RK&	E, B	A	STXM, TXM	Mn, Fe biomineralization	
1999SG&	M	A	PEEM	PS/PBMA	
1999SP&	M	I	PEEM		20 nm resolution
1999SS&a	M	A	STXM	PMMA / PI blend	Mechanical blends
1999SS&b	M	A	XPEEM	NiO	AFM structure
1999TD&	E, B	A	STXM, TXM	Mn, Fe biomineralization	
1999UH&	M	A	STXM	polyurethanes	
1999ZL&	M	A	STXM	PS/PMMA	confinement induced miscibility
2000SC&	M	A	STXM	Nanopillar spin valves	Spin injection dynamics
2000A	B	R		many	
2000AO&	M	I	STXM		CXRO zone plate fabrication
2000BR&a	B	T	TXM		Compact water window TXM
2000BR&b	B	T	TXM		Compact water window TXM
2000C	B	A	STXM	lignin, cellulose	modern wood (oak, cedar)
2000DG&	B	I	PEEM		wet samples by inverted PEEM
2000EH&	M	A	SPEM	Cu(In, Ga)Se ₂ films	
2000FB&	M	I	STXM		STXMIV, segmented detector
2000GA&	B	T	PEEM		Charging & effects on imaging
2000GKM	M	A	TXM	cement	Hydration kinetics & mechanisms
2000GP&a	B	T	PEEM		Ashing effects on cells
2000GP&b	B	A	PEEM	BSH effect on glioblastomas	
2000JA&	B, E	R	STXM		review of NSLS program
2000JW&	M	I	STXM		Stack method
2000Ka	M	I, R	SPEM	surface & interfaces	
2000Kb	M	I, R	SPEM	surface & interfaces	
2000KG&	M	A	SPEM	(Ni,Ag)/Si(111)	
2000KJ&	B	I	STXM		sealed wet cell
2000KW&	B	I	STXM		cryo tomography
2000LD&	B, E	A	PEEM	Sulfate reducing bacteria	
2000LG&	M	A	SPEM	O at Pt/YSZ interface	
2000LR	B	A	TXM		image montage
2000LYB	B	A	TXM		
2000MO&	B	I	STXM		Cryo microscopy
2000NA&	E	A	STXM		

code	materials	type	technique	species	Subject / Comments
2000ND&	M	A	SPEM	laser annealed CdTe	
2000NJ&	B	I	STXM		wet cell
2000NS&	M	A	PEEM	AFM, FM coupling - pinning	
2000OJ	E	T	STXM		principle component analysis
2000PJ&	B	T	STXM		phase contrast: expt-simulation comparison
2000PK&	E	A	STXM	Mn, Fe particles ox st.	
2000RDD	E	A	STXM	colloids	
2000S	M	A, R	XPEEM		magnetic structure
2000SA	M	A, R	PEEM	XMCD, tribology	
2000SA&	M	A	STXM		Cryo-mechanical blends
2000SA&a	M	A	STXM	PMMA, PI, poly(ethylene- <i>alt</i> -propylene)	Cryo-mechanical blends
2000SA&b	M	A	STXM	PMMA, PI, poly(ethylene- <i>alt</i> -propylene)	Cryo-mechanical blends
2000SA&c	M	A	STXM	PMMA, PI, poly(ethylene- <i>alt</i> -propylene)	bilayer polymer contact angles
2000SR&	M	A, R	XPEEM	Thin metal film growth	
2000SS&a	M	A	STXM	PMMA, PEP	rubber modified PMMA
2000SS&b	M	A	STXM	PMMA, Polyisoprene , Poly(ethylene- <i>alt</i> -propylene)	Mechanical blends
2000SS&c	M	A	STXM	PMMA, PI, poly(ethylene- <i>alt</i> -propylene)	Ball milling
2000SS&d	M	A	XPEEM		antiferromagnetic domain visualization
2000ST&	E	A	STXM	soils	
2000TL&	M	A	XPEEM	domain wall oscillations	
2000TS&	M	I	STXM		zone plate fabrication
2000WA&a	M	A	STXM	PS, PMMA	
2000WA&b	B	I	STXM		renewed X1A beamline
2000WG&	M	A	STXM	PS, PMMA	Phase segregation
2000WJ&	B	I	STXM		cryo-tomography
2000WS&	B	A	TXM	green algae tomography	
2000WT&	M	I	STXM		BESSY STXM
2000WZ&	M	A	STXM	PS, PMMA	Phase segregation
2000ZN	M	A	SPEM	benzoic acid / Ni(11)	linear dichroism , orientation
2000ZS&	M	A	STXM	a-C, graphite, diamond	
2001 SO&	I	I	TR-PEEM	In, Cu	Time-resolved PEEM
2001AU	M	R	STXM		
2001BC&	M	A	SPEM	Ni/GaN	
2001BC&a	M	A	SPEM	Au/GaN	
2001BC&b	M	A	SPEM	Au/GaN	
2001BGK	M	A	SPEM	metal/GaN(0001) interfaces – Shottky	

code	materials	type	technique	species	Subject / Comments
				barriers	
2001CL&	M	A	PEEM	liquid crystal alignment	
2001DA&	B	R	TXM	Biological and materials applications	
2001DC&	B	A	PEEM	Gd in glioblastoma cells	Gd NCT
2001DF&	M	A	TXM		Magnetic domain imaging
2001DG&	B, E	R	PEEM		
2001EF&a	M	A	TXM		Magnetic domain imaging
2001EF&b	M	A	TXM		XMCD - magnetic imaging
2001ES&	M	A	TXM	FeGd nanodot array	Magnetic reversal
2001FB&a	B, E	R	STXM		review of NSLS program
2001FE&a	M	A	TXM	permalloy	Magnetic imaging
2001FE&b	M	A	TXM	permalloy	Magnetic imaging
2001FE&c	M	A	TXM		magnetic imaging
2001FE&d	M	A	TXM		magnetic imaging
2001FJ&	M	I	STXM		segmented detector
2001GB&	M	A	SPEM	(Ni,Ag)/Si(111)	
2001GM&a	B	R	PEEM		
2001GM&b	E	A,I	PEEM	biomineralization	Charge compensation
2001GM&c	M	I	SPEM	multi-channel detection	
2001GM&d	M	A	SPEM	laterally inhomogeneous surface reactions	
2001H	B, M	R	STXM, PEEM	PUR (MDI)-polyurea precipitates; 355 (PU-matrix, SAN, pipa); PS-PI-PS trilayer; polyurea capsules; HSA on PUR-filler; Alb on PTMO-ED-MDI (polytetramethylene oxide±ethylenediamine±MDI)	Polymer examples
2001HH&	M	A	XPEEM	Au faceting on Si(111)	
2001HK&	M	A	STXM	Polyurethanes, urea precipitates	
2001HL&	B	A	TXM		protein localization
2001HS	M,B	R	STXM, PEEM	many	
2001HT&	I	T	PEEM	hard X-rays, Fe K-edge	
2001KH&	M	A	STXM	DVB55, EGDMA	core-shell microspheres
2001KK&	M	A	TXM	CoPt ML	magnetic imaging
2001LD&a	M	A	SPEM	laser annealed Ti/Si(111)	
2001LD&b	M	A	SPEM	laser annealed Ti/Si(111)	
2001LD&c	M	A	SPEM	laser annealed Ti/Si(111)	
2001LS&	B	A	TXM	Protein in eukaryotic cells	Embedding method
2001LSa	M	I	SPEM		PSL beamline and undulator
2001LSb	M	I	SPEM	electrical circuits	instrument description

code	materials	type	technique	species	Subject / Comments
2001MH&	B	A	TXM	Protein in cells	
2001MI&	M	A	PEEM, STXM	PS, PMMA	Compare to AFM; phase segregation
2001OJ&	B	I	STXM	sperm	cryo STXM instrumentation
2001OR&	M	A	PEEM	interfacial mag. spin imaging	
2001OS&	M	A	PEEM	AFM, FM coupling - pinning	
2001QF&	M	I	XPEEM		time resolved XPEEM; dual undulator
2001RO&	M	A	PEEM	metal-oxide interfaces (pinning)	
2001SA&a	M	A	STXM	Polycarbonate; poly(ABS)	
2001SA&b	M	A	STXM	tires	Mechanical blends
2001SA&c	M	A	STXM	PMMA/ poly(ethylene- <i>alt</i> -propylene)	Cryo-mechanical blends
2001SB	M	A	PEEM	Pb on Si(111) with Au interfacant	
2001SK&	E	A	STXM	humic acid, fulvic acid	
2001SL	M	I	SPEM		PSL SPEM
2001SN&	M	A	PEEM	AFM, FM coupling - pinning	
2001SU&	M	A, R	STXM	PC, P(BrS), PS, PMMA, PE, PVC-PET (food packaging film), PP	
2001TF&a	M	A	TXM	TbFeCo Films	thermo-magnetic recording
2001TFT	M	A	TXM		Thermo-magnetic recording
2001TFTb	M	A	TXM	TbFeCo Films	thermo-magnetic recording
2001VC&	B	I	STXM		dark field microscopy
2001WK&	M	I	TXM		DIC mode
2001ZG&	M	A	STXM	PB/ BIMS / filler (= C-black or SiO ₂)	nanofiller effect on interfaces
2001ZG&b	M	A	XPEEM		hard disk lubricant test
2001ZS&	B	A	TXM	Transcription factor MIZ-1	microtubule imaging
2002A	M, B	R	TXM	various	Optics and samples
2002AA&	M	A	TXM	various	Zone plate improvements
2002AK&	M	A	STXM	polylefins	
2002AS	M	R	REVIEW-ALL	many	
2002AS&	M	A	XPEEM	lithography prepared nanomagnets	
2002AT&a	M	A	XPEEM	polymer/FePt nanoparticles	
2002AT&b	M	B, I	TXM - replica	Tumor cell	AFM readout after laser plasma irradiation.
2002BC&a	B	A	STXM	Fossil plant cells	
2002BC&b	M	I	STXM		Combined for STXM & topography (AFM?)
2002BC&c	M	A	XPEEM	MnAs / Ga As	XMCD
2002BF&	B	R	STXM		review of NSLS program
2002BG&a	M	A	SPEM	electrochemically patterned Ga on GaN	
2002BG&b	M	A	SPEM	metal/GaN – Schottky barriers	

code	materials	type	technique	species	Subject / Comments
2002BK	M	R	SPEM	zone plate microscopies	
2002BS&	M	A	SPEM	O/Ru(0001)	
2002CB&	E	A	STXM	high-pH clays	
2002CL&	M	A	XPEEM	Fe/Cu/Ni/Cu(001)	spin reorientation transition
2002CUA	M	A	STXM	PMMA, many others	radiation damage
2002ES&	M	A	TXM	magnetic multilayers	undulation instabilities
2002FD&a	M	A	TXM		Magnetic domain imaging
2002FD&a	M	R	TXM		magnetic imaging
2002FD&b	M	A	TXM		Magnetic domain imaging
2002FD&c	M	A	TXM		magnetic imaging
2002FE&	M	A	TXM		Magnetic domain imaging
2002FGD	B, E	T	PEEM	Transmission in PEEM	
2002FP	M	A, R	PEEM	magnetic ordering	XMCD , XMLD
2002GK&	M	R	SPEM, u-ESCA	review	
2002GL&	M	A	SPEM	XPS of single carbon nanotubes	
2002GM&	M	A	SPEM	K transport on catalysts	
2002GM&b	M	A	SPEM	patterns in H&O on Rh(110)/Pt	
2002HM&	M, B	A	STXM	polyurethane, SAN, pipa, Fg	protein on polymers, dry vs. wet
2002I	M	A	XPEEM		magnetic imaging
2002JB&	B, E	R	STXM		review of NSLS program
2002KCM	M	A	TXM	cement	Alkali-Si reaction
2002KD&	M	A	STXM	PS	craze alignment, dichroism
2002KH&	M	A	STXM	PAA, PE	Filtration membranes
2002KO&	B	A	STXM		amino acid spectroscopy
2002KP&	M	I	STXM		Differential phase contrast aperture
2002KT&	M	A	TXM	CoPt ML	magnetic imaging
2002KZ&	M	A	TXM	Fe(001)/Au(001) ML	magnetic imaging
2002LC&	M	A, I	XPEEM		XMCD
2002LG&	M	A	microprobe	LiF direct patterning	
2002LJ&	M	A	SPEM	reduction fronts in zirconia	
2002LO&	M	A	XPEEM	SiC transition metals	
2002MG&a	M	A	SPEM	patterned alkali on metals	
2002MG&b	M	A	SPEM	transport of alkali on metals	
2002MM&	M	A	XPEEM	polymer brushes	lateral versus perpendicular segregation
2002MW&	M	A	STXM	PAA	Cross-link mapping
2002ND&	M	A	SPEM	laser modified Pt/Si(001)	
2002NL&	M	A	XPEEM	FeOx nanocrystals	

code	materials	type	technique	species	Subject / Comments
2002PD&	M	A	TXM		Magnetic domain imaging
2002PH&	M	A	SPEM	PbS oxidation	
2002PM&a	M	I	SPEM	multi-channel detection in SPEM (e)	
2002PM&b	M	A	SPEM	Au/Ni(poly)	
2002PR	E	A	STXM	Eu(III) – humics agglomeration	
2002RMM	M	A	STXM	Organics on atmospheric particles	
2002RN&	M	A	PEEM	singl ~10 nm Fe ₂ O ₃ nanoxlls	sub spatial resolution spectroscopy
2002RU&	M	A	STXM	Polyurethanes, SAN, pipa	
2002S	M	R	XPEEM		review of magnetic imaging
2002SA&a	B	A	TXM	Whole cells	tomography
2002SA&b	M	A	XPEEM	polymer-mediated magnetic np	
2002SD&	M	A	TXM	Cu interconnects	electromigration
2002SG&	M	I	XPEEM		SMART - frst results
2002SM&a	M	A	TXM	Cu interconnects	electromigration
2002SM&b	M	A	TXM	Cu interconnects	electromigration
2002SO&	M, I	A, T	PEEM	XMCD at PEEM2	
2002SW&	M	A	SPEM	Cs in carbon nanotubes	
2002SW&b	M	A	SPEM	XPS of carbon nanotubes	
2002UA	E	A	STXM	carbonyl compounds	
2002WK&	M	I	TXM		DIC mode
2002WW&	M	A	XPEEM	Ni/Fe/Co/Cu(100)	Fe interfacial magnetism
2002YS	B	A	TXM	macrophages	
2002ZF&	M	A	STXM	PMMA, Silsequioxane	
2003AA&	M	R	TXM		
2003AK&	M	I	STXM	STXM532 instrumentation	
2003AT&	M	A	XPEEM	polymer/FePt nanoparticle assemblis	
2003BC&a	B	A	STXM	Fossil plant cells	
2003BC&b	M	A	SPEM	Si nanowires catalysed by C nanoparticles	
2003BF&	M	A	SPEM	Fe/Au(001) magnetic films	role of Au segregation
2003BG&	M	R	STXM, PEEM	review	
2003BJ	M	A	STXM	PMMA	radiation damage
2003BJ&	M, B	I	CDI		Tomo, CDI, on ALS BL 9.0.1
2003CA&a	M	I	TXM		20 nm resolution
2003CA&b	M	I	TXM		20 nm resolution
2003CA&c	M	I	TXM		20 nm resolution
2003CB&	M	A	STXM		Crystal structure from dichroism
2003CD&	M	A	XPEEM	Co-doped TiO ₂ anatase	

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2003CM&	M	A	STXM	polyurea capsules	
2003DA&	M	A	TXM		magnetic imaging
2003DC&	M	I	STXM		Optics design
2003DF&	E	I	PEEM	zircon	Charge compensation
2003DS&	M	I, R	TXM		XM1 status
2003EE&	M	A	TXM	magnetic nanostrips	
2003ES&	M	A	TXM	magnetic systems	polarization with coherent scattering
2003F	M	A,R	TXM		magnetic imaging
2003FD&	M	A	TXM		Magnetic domain imaging
2003FE&	M	A,R	TXM		magnetic imaging
2003FG&	M	T	PEEM		Depth sensitivity
2003FJ&	M	I	STXM		segmented detector
2003FK&a	E	A	STXM	interplanetary dust	
2003FK&b	E	A	STXM	extraterrestrial organics	
2003GK	M	R	STXM, PEEM	PS/P(BrS) wetting	wetting of polymer surfaces
2003GT&	E	T	STXM		analysis program for Fe-organic interactions
2003HA&	M	A	STXM	3d chemical mapping of toners	First serial section STXM tomo
2003HAA	M	A	PEEM	PS, PMMA	
2003HC&	M	A	SPEM	Aligned CNT	Without polarization dep.
2003HD&	M	A	TXM	out-of-plane magnetization	stripe domains
2003IF&	M	A	TXM	CoCrPt films	magnetization reversal
2003IL&	M, E	A	XPEEM		reversible chemical patterning (stimuli-response)
2003JC&	M	B	contact	E. coli cells	
2003JF&	E	T	STXM		cluster analysis
2003JL&	M	A	TXM	cement	Hydration kinetics & mechanisms
2003K	M	R	SPEM, u-ESCA	review	
2003KB&	M	I	TXM, STXM	Twin-mic progress report	
2003KD&	B	A	TXM	parasite metazoa	
2003KK&	M	A	TXM	CoPt ML	
2003KM	M	A	TXM	Chemical additives	
2003KMM	M	A	TXM	Steel-in-cement - corrosion	
2003KR	M	A	TXM	Ash filler in cement	Hydration kinetics
2003KT&	M	I	STXM	polyurethane, SAN, pipa	ALS interferometric STXM
2003KV&	M	A	XPEEM		Domain walls in ferromagnetic rings
2003KZ&	M	A	SPEM	Patterning SAMs with SPEM beam	
2003LB&	M	A, I	XPEEM		Nanospectroscopy beamline
2003LN&	M	A	PEEM	AFM, FM coupling - pinning	

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2003LO&	M	A	XPEEM	SiC/ Ti	
2003LS&	B, E	A	STXM	bio-mapping biofilms	
2003MK&	M	A	PEEM	ZDDP tribology	
2003MS&	M	A	TXM	E. coli	imaging by diffraction (CDI)
2003OS&	M	A	PEEM	exchange bias	
2003PM&	M	A	SPEM, XPEEM	Pd/Ni(poly) dynamics	
2003PW&	M	A	XPEEM		Nanoparticles catalyst activation
2003RMD	E	A	STXM	Eu(111)-humic aggregates	
2003RU	M	A	STXM	spectroscopy by 5322	
2003S	M	R	XPEEM		
2003SA&	M	A	XPEEM	FePt nanoparticles	
2003SC&a	E	A	STXM	organics in clays	
2003SC&b	M	A	SPEM	SiN/Si(111)	
2003SD&	M	A	TXM	Cu interconnects	electromigration
2003SH&	E	A	STXM	colloid functional groups	
2003SL&	M	I	SPEM	Zn/Fe electro-deposition	Instrument at PLS
2003SS&	E	A	XPEEM	mineral intergrowths	
2003ST&	E	A	STXM	soil colloids	
2003TSK	E	A	TXM	Bacteria & soil colloids	tomography
2003TT&	M	A	TXM		Thermo-magnetic recording
2003WA&	M	A	STXM		Application to rubber science
2003WO&	M	A	XPEEM	NO	antiferromagnetic
2003WS&	M	A	STXM, PEEM	PS, PMMA	
2003WT&	M	I	STXM	polyimide	In air, modified TXM design
2003WW&a	M	A	XPEEM	Ni/Co/Ni/Cu(100)	magnetic anisotropy
2003WW&b	M	A	XPEEM	Co/Cu/Ni/Cu(100) , Co/Fe/Ni/Cu(100)	magnetic phase transitions
2003WYJ	M	I	STXM		achromatic Fresnel optics
2003ZG	M	A	STXM	PS, PMMA, WS ₂ nanotubes	
2004A	M	R		many	
2004AB&a	M	A	XPEEM	electron quantum confinement	nanospectroscopy
2004AB&b	M	A	XPEEM	Pd/W(110)	
2004AG&	M	A	SPEM	Au/Si ₃ N ₄ /Si(111) interfaces	
2004AT&	M	A	SPEM	TM nanocrystals in carbon	XPS mapping
2004BL&	E, B	A	STXM	marine particulates	
2004BS&	E	A	STXM	diesel soot	
2004BY&	E	A	STXM	Mn redox states	
2004BZ&	B	A	STXM	Fossil plant cell walls	

code	materials	type	technique	species	Subject / Comments
2004CA&a	M	A	PEEM(t)	magnetic vortex dynamics	
2004CA&b	M	A	PEEM-(t)	vortex dynamics	
2004CA&c	M	A	SPEM	UV metallization of TiO ₂	Valence band patterning
2004CD&	E	A	PEEM	Polysaccharide templating of Fe nanofibers	
2004CV&	M	A	PEEM	Ag/Si(111)	
2004DF&	B	T	PEEM	Cell surfaces	Ion sputtering depth profile
2004DL&a	M	I	STXM	Cu, CO, CO ₂	in situ gas-solid absorption cell, catalysis
2004DL&b	M	A	TXM	surfactant aggregates	shape control
2004DM&	M	A	SPEM	promoter induced phase segregation	
2004FE&	M	A	XPEEM	Fe stripes	Surface – bulk bridge structures
2004FG&	B	I	PEEM		Sphinx performance
2004FK&a	E	A	STXM	interplanetary dust	
2004FK&b	E	A	STXM	extraterrestrial organics	
2004FKT	M	I	STXM		phosphor detectors
2004FM&	I	T	PEEM	aberration corrector design	
2004FS&	M	A	TXM		magnetic dynamics
2004FW&	M	A	SPEM	Au/Si(111)-H interface	annealing effects
2004GB&	M	I	u-ESCA	48-channel XPS detector	
2004GE&	M	A	SPEM	MoO ₃ on Al ₂ O ₃	gas transport
2004GJ&	M	A	XPEEM	Fe ₂ O ₃ nanocrystal ink	Dip-pen lithography
2004GL	B	A	TXM	cells	cryo-tomo at <50 nm
2004GS&	E	A	STXM	radionuclide migration	
2004HK&	M	A	XPEEM	Co ₂ MnSi Heusler alloy	magnetic tunnel junctions
2004HRH	M	T	TXM		Micro zone plate fabrication
2004IW&	M	A	SPEM	O at Al/organic interfaces	
2004JK&	B	A	TXM	inner ear structures	
2004KH&	M	A	XPEEM	SiC / Zr	
2004KM&	E	A	STXM	interplanetary dust	
2004KT	M	I	STXM		fast beam shutter
2004KV&a	M	A	XPEEM		Domain walls in ferromagnetic rings
2004KV&b	M	A	XPEEM		Ring magnet domain walls
2004KV&c	M	A	XPEEM		
2004LH&	B, E	A	STXM	biofilms	
2004LHK	M	A	XPEEM	Au/Rh(110)	kinetics of lateral spread
2004LJ&	E	T	STXM		cluster analysis
2004LLa	B	A	TXM	Saccharomyces cerevisiae,	cryo tomo
2004LLb	B	A	TXM	Saccharomyces cerevisiae,	cryo tomo

code	materials	type	technique	species	Subject / Comments
2004LN&	M	A	XPEEM		Quantum confinement tuned reactivity
2004M	B, M	A	XPEEM	HSA/PS-PMMA	biomaterials
2004ME&	M	A	TXM	microcontacts	magnetization reversal
2004MG&	M	A	SPEM	O ₂ +H ₂ reaction on Rh(110)	
2004MH&	M	A	PEEM	PS, PMMA, Fg	protein adsorption on polymer blend
2004MR&	E	A	STXM	aerosols	Impact on climate forcing
2004NB&	M	A	PEEM	Antiwear films	
2004NK&	M	A	PEEM	Antiwear films	
2004NN&	M	A	PEEM	Antiwear films	
2004OH&	M	A	STXM		buttressed zone plates - 25 nm outer zone
2004OK&	I, M	T	PEEM(t)	time-of-flight energy analysis	
2004OO&	M	A	XPEEM		colossal magnetoresistance
2004PR&	E	A	STXM	humic acid analysis	
2004PRD	E	A	STXM	groundwater colloids	
2004RH&	M	T	TXM		Condenser zone plate fabrication
2004RPD	E	A	STXM	organics speciation in soils	
2004RR&	M	A	XPEEM	SiGe on Si(111)	Domain walls in ferromagnetic rings
2004SJ&	M	A	XPEEM	FeNi films	
2004SL&a	M	A	PEEM	AFM exchange spring	
2004SL&b	M	A	XPEEM	FeO _x / Al ₂ O ₃	
2004SN	M	A	PEEM	exchange bias – domain size effect	
2004SP&	M	A	TXM		magnetization dynamics
2004ST&	M	A	SPEM	La ₁₋₄ Pr ₃₋₈ Ca ₃₋₈ MnO ₃ Manganite	Detect insulating domains in metallic mtz
2004SW&a	M	A	SPEM	valence band of SW carbon nanotubes	
2004SW&b	M	A	XPEEM	Single walled carbon nanotubes	Work function
2004SZ&	M	A	XPEEM	MFe ₂ O ₄ (M=Fe, Co, Mn) nanoparticles	
2004TW&	B, E, M	I	STXM		ALS STXM11.0.2 instrument description
2004U	M, P	A	STXM	binary polymer brushes	thesis
2004W	M	A	STXM	BR/BIMS rubbers	
2004WD&	M	I	STXM		Twinmic Ta zone plates
2004WG&	M, P	A	STXM	PEVA	
2004WK&	M	I	STXM		Twinmic Ta zone plates
2004WW&	M	A	XPEEM	Ni/Fe/Co/Cu(100)	interlayer coupling
2004WW&b	M	A	XPEEM		magnetic stripe domains
2004YJ&	E	A	STXM	Al micro-organisms	
2004ZO&	M	A	XPEEM	polyimide	lithography
2004ZW&	M	A	XPEEM	Cu/Ni/Fe/Cu(001)	spin-reorientation transition

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2005AH&	M	A	STXM	Ca alginate; poly N-vinylpyrrolidone	
2005AMS	B	I	TXM		Design principles of water window table top
2005BC&	M	A	SPEM	nanoparticles to nanotubes	catalytic free transformation
2005BE&	M	A	TXM		magnetic imaging, micromagnetic simulations
2005BG&	M	A	XPEEM	patterned double-vortex	
2005BH&a	E	A	STXM	diesel soot	TEM-EELS comparison
2005BH&b	M	A	XPEEM	InAs/GaAs quantum dots	
2005BK&	M	A	XPEEM	exchange-biased Fe/MnPd bilayers	
2005BN&	M	A	SPEM	subsurface O in O/Ru(0001)	
2005BR&	E	A	STXM	Eu(III) adsorb. on smectite	
2005BS&	E	A	STXM	diesel soot	
2005BT&	E	A	STXM	Eu on smectite	
2005BY&	E	A	STXM	Meteoritic Mg-Fe Pyroxene	Bio-weatherin
2005BY&b	M	A	XPEEM	patterned trilayer nanodots	magnetism
2005CH&a	M	I	STXM		CXRO zone plate fabrication – 15 nm resolution
2005CH&b	M	A	XPEEM	Co	nanopatterned
2005CS&	M	A	STXM	DVB55, malonic acid, EGDMA	tectocapsules
2005CS&b	E	A	STXM	Cm(III) sorption	
2005DB&	M	A	SPEM	oxid/ reduct of Rh(110)	
2005DC&	M	I	STXM		Optics design
2005DH&	M	A	XPEEM	MnAs/GaAs	
2005DRC	B	A	PEEM	Gd CNT	
2005DSG	E	A	PEEM	biomineralization	
2005EL&	M	A	XPEEM	GaAs	Oxide desorption at high UV flux
2005FA&	M	A	STXM	P4VP/SiO ₂ microgel particles	pH swellable stimulus response microgels
2005FF&	I	T	PEEM	aberration corrector design	
2005FI&	M	A	TXM	CoCrPt films	magnetization reversal
2005FU	M	A	STXM	linear alkanes	dichroism
2005GFA	E	A	PEEM	biomineralization	
2005GML	B	A	TXM	Yeast cells (S. Pombe)	tomography
2005GS&	M	I	STXM	polyaniline	in situ electrochemistry
2005GT&	M	A	XPEEM	LaFeO ₃	AFM structure - thermal effects
2005HF&	M	A	XPEEM	Fe islands	Flux closure
2005HK&a	M	A	STXM	ternary PS/PCHMA/PMMA	
2005HK&b	M	A	XPEEM	SiO ₂ nanostructures	Damage by EUV
2005HLZ	M	A	XPEEM		Ferroelectric thin films
2005HM&	M, E	R	STXM	Polyurethanes, biofilms	review

code	materials	type	technique	species	Subject / Comments
2005JM&	M	A	TXM	CaCl ₂ in cement	
2005KK&	M	A	TXM		polarization modulation mag. imaging
2005KK&	M	A	TXM		Barkhausen avalanche
2005KS	E	A	STXM	metal transport	
2005LB&	M	R	SPEM, XPEEM	review	
2005LJ&	E	T	STXM		Cluster analysis method
2005LL&	E	A	STXM	black carbon, soil	
2005LS&	M	A	XPEEM	H ₂ +O ₂ on au/Ru(110)	
2005MB&	M	A	SPEM	dark spots on OLEDs	
2005MF&	M	A	XPEEM		Magnetic nanodots on semiconductors
2005ML&a	B	A	STXM	lignin mapping	
2005ML&b	M	A	XPEEM		Local anodic nanolithography
2005ML&c	M	A	XPEEM		Anodic oxidation nanolithography
2005MP&	M	A	STXM	Polymer resists	
2005NB&	M	A	PEEM	Antiwear films	
2005NN&	M	A	PEEM	Antiwear films	
2005NT&	M	A	STXM	Actinide particles	
2005OK&	M	T	PEEM(t)	XMCD dynamics	
2005PL&	M	A	PEEM	Antiwear films	
2005PM&	M	A	SPEM	Pd/Ni as f(T)	
2005PR&	E	A	STXM	model studies for humics in soil	
2005PS&	M	A	TXM		magnetization dynamics
2005PW&	M	A	STXM	Fe magnetic particles	ferromagnetic eignemode imaging
2005RR&	M	A	XPEEM	SiGe islands on Si(111)	
2005SB&	E	A	STXM	fulvic acids in aquifers	
2005SC&a	B, M	A	SPEM	cysteine on Pt(111)	
2005SC&a	E	A	STXM	humics in soil	
2005SC&b	E	A	STXM	organic soil colloids	
2005SF&	M	I	XPEEM		Beam separator design, PEEM3
2005SG	M	A	XPEEM	Ga/Si(111)	Self-organization
2005SL&	E	A	STXM	organics speciation in soils	
2005SM	M	A	TXM	Cement deterioration	
2005SMb	M	A	TXM	C(3), EVA cements	hydration imaging
2005SMc	M	A	TXM	C(3), EVA cements	hydration imaging
2005SO&	M	R	XPEEM	FM - AFM coupling	
2005SR&a	M	A	TXM	Electromigration visualization	
2005SR&b	B	A	STXM	Gd compounds	Neutron capture therapy

code	materials	type	technique	species	Subject / Comments
2005SS&	E, B	R	PEEM	nacre; Fe-OOH template; zircons;	designer peptides for guiding mineralization
2005SW&	M	A	XPEEM	Single walled carbon nanotubes	
2005TF&	E, B	A	STXM	Biogenic MnOx	bacterial
2005TK&	M	A	XPEEM	adhesion layer	
2005TO&	M	A	STXM	PS, PMMA	
2005TR&	M	A	XPEEM	magnetic nanowires	
2005WAA	M	R	RSoXS	Organic thin films	
2005WAA	M	A, T	RSoXS	PS-PMMA	resonant scattering
2005WW&a	M	A	XPEEM	FeMn/Co/Cu(001)	magnetic phase transitions
2005WW&b	M	A	XPEEM	Fe/Ni/Cu(001)	magnetic stripe melting
2005ZL&	M	A, R	XPEEM		nanomagnetism
2005ZP&	M	A	XPEEM		Magnetic imaging
2005ZS&	M	A	XPEEM	polyimide	lithography
2006A	B, M	R	TXM		nanotomography
2006AA&	M	A	RSoXS	PS & PMMA particles	
2006AA&	M	A	REXS		
2006AC&	M	B	TXM	15 nm bio imaging	
2006AH&	B	A	STXM	melanomas in mouse iris	
2006AS&	M	A	PEEM(t)	quantum magnetism dynamics	
2006BA&	B, E	R,I	STXM	environmental apps.	ALS BL 11.0.2 MES science overview
2006BB&	M	A	XPEEM		Ferromagnetism by XMCD
2006BE&	M	A	TXM	Fe array	magnetic interactions
2006BM&	M	A	STXM	Calcification deposits	Bacterial origin of human calcification
2006BM&b	E	A	STXM	carbonate microbialites	Organic speciation
2006BT&	E	A	STXM	Wild 2 comet analysis	
2006BW&	E	A	STXM	diesel soot	
2006CH&a	M	A	PEEM	polyimide alignment	
2006CH&b	M	A	SPEM	SAM (CH, CF)/Au	Line patterns
2006CP&	M	A	STXM	Coupled permalloy magnets	Vortex switching
2006CR&	M, B	A	STXM	silk	Dichroism mapping
2006CS&	M	I	TXM		interference contrast objective lens
2006CZ&	M	A	SPEM	organic LED degradation	
2006D	E	A	STXM	actinide speciation	
2006DA&	M	A	SPEM	Oxidation of Rh(001)	
2006DK&	M	A	XPEEM	MnAs/GaAs	
2006DL&	B, E	A	STXM	chlorhexidine in biofilms	antimicrobials
2006DR&	B	A	PEEM	Gd neutron capture therapy	

code	materials	type	technique	species	Subject / Comments
2006DT&	B, E	A	STXM	Fe, Ni, Mn in biofilms	
2006DZ&	E	A	STXM	zeolites	H ⁺ , Cu ⁺ exchange
2006EL&	M	A	XPEEM		Ferromagnetic stripes ; magnetic coupling
2006EO&	M	T	STM-SR	Ni-dots	STM tip current modulation by SR, 20 nm
2006ES&	M	A	XPEEM	MgAs	Zig-zag domains
2006F	M	A,R	TXM		magnetic imaging
2006FB&a	M	A	TXM	Ni ₈₁ Fe ₁₉ /Ru/Co ₉₀ Fe ₁₀	magnetization reversal
2006FB&b	M	A	XPEEM		interface coupling transition
2006FH&a	M	A	STXM	carbon nanotubes	
2006FH&b	B	I	STXM		dark/phase detector (seg. Si photodiode)
2006FK&a	E	A	STXM	extraterrestrial organics	
2006FK&b	M	A,R	TXM		magnetic imaging
2006FK&c	M	A,R	TXM		magnetic dynamics
2006GH&	M	A	SPEM	K 7 K/O on Rh(111)	
2006GM&	M	I	STXM		Twinmic STXM & configurable detector
2006GM&	M	T	STXM	CCD-based segmented detector	
2006GR&	M	A	TXM	Electromigration visualization	
2006HB&	E	A	STXM	black carbon, sediments	
2006HC&	M	A	SPEM	C-H, C-F SAM/Au	XPS of line patterns
2006HH&a	M, B	A	STXM	silk worm cocoon silk	orientation mapping
2006HH&b	I, M, B	A	STXM	spider dragline silk	in situ azimuthal rotation; orientation mapping
2006HH&c	M	A	PEEM	Hexanoic acid; terphenylmethanethiol SAM, pentacene	C 1s spectra & dichroism
2006HLH	M	T	TXM		Optimizing zone plate fabrication
2006HN&	M	A	TXM	Co antidot arrays	magnetization reversal
2006HS&a	M	A	XPEEM	magnetic nanostructures	thermal stability in ion-bombarded samples
2006HS&b	M	A	XPEEM	half-metal Heusler alloys	
2006IT&a	M	A	STXM	toners	
2006IT&b	M	A	STXM	toners	
2006JD&a	B	A	STXM	Tomography - biofilm	First 3d chemical mapping by tomo
2006JD&b	M	A	STXM	Tomography – PS, acrylate spheres	
2006JMG	M	A	TXM	blast furnace slag	hydration
2006KF&a	M	A	TXM	CoCrPt multilayer	15 nm XMCD imaging of domains
2006KF&b	M	A	TXM		BM elliptical polarization charact.
2006KL&	M	A	XPEEM		Vortex dynamics
2006KR&	M	A	XPEEM		Wide, angular magnetic domains
2006KS&	E	A	STXM	soils	

code	materials	type	technique	species	Subject / Comments
2006KS&	M	I	TXM/STXM		Elettra Twinmic description
2006L	B, M	A	XPEEM	HSA/ & Fg / PS-PMMA	biomaterials
2006LA&	M	A, R	XPEEM	review	
2006LB&a	M	A	XPEEM		Domain wall coupling
2006LB&b	M	A	XPEEM		Domain wall motion
2006LH&	M	A	PEEM	PS, PMMA, alb	protein adsorption on polymer blend
2006LH&b	I, M	A	PEEM		CLS PEEM described
2006LK	M	R	SPEM	review	
2006LL&	E	A	STXM	black carbon in sediments	
2006LM&a	M	A	XPEEM	periodic surface reactions	
2006LM&b	M	A	XPEEM	Ga(Al)As	Anodic oxidation nano-lithography
2006MG&	M	I	STXM		CCD system for bright/dark/phase
2006ML&a	M	A	RSoXS	SiLK structure	
2006ML&b	M	A, T	RSoXS	low K dielectric	resonant scattering
2006ML&c	M	A	XPEEM	GaAs/AlAs oxide nanostructures	X-ray modification
2006MW&a	M	A	STXM	poly(9,9-dioctylfluorene-co-N-(4-butylphenyl)diphenylamine) (TFB) and poly(9,9'-dioctylfluorene-co-benzothiadiazole) (F8BT)	solar cell blend
2006MW&b	M	A	STXM	fullerene-PHT, PCBM composites	reinforcement
2006NP&	E	A	STXM	Eu(II) in humics	
2006NT&	M	R	STXM	actinies	
2006OL&	M	A	STXM	Hydrogen Silsesquioxane Resist	Damage mechansims
2006OS&	M	A	PEEM	exchange bias	
2006OU	M	A	STXM	amino acids	zwitterionic spectral effects
2006PL&	M	A	XPEEM	Tribofilms on steel	Role of cation
2006RL&	M	A	XPEEM	GeSi islands on Si(111)	
2006RL&b	M	A	XPEEM	SiGe islands on Si	Chemical mapping
2006SA&a	M	A	STXM	PS/PMMA, PC/SN and PMMA/EVA blends with Cloisite 20A or Cloisite 6A	Clay compatibilizers
2006SA&b	E	A	STXM	Wild 2 comet analysis	
2006SC&	E	A	STXM	dissolved organic matter	
2006SM	M	A	TXM	polymers in Portland cement	
2006SR&	B	A	STXM	Motexafin-Gadolinium	
2006SW	M	R	all	Magnetism	spectroscopy & microscopy
2006TC&	M	A	XPEEM	La _{0.7} Sr _{0.3} MnO ₃	magnetic domains
2006TE&	M	A	STXM	tomo of yeast cell	CDI tomography
2006TO&	B	A	TXM	Diatom, latex spheres, NIH 3T3 cells	

code	materials	type	technique	species	Subject / Comments
2006TVH	B	T	TXM	Diatom, COS-cells	Liquid jet TXM design & performance
2006VL&a	B	T	TXM	Diatom, COS-cells	Liquid jet TXM design & performance
2006VL&b	M	I	TXM		Twinmic condenser (coherence breaking)
2006WF&	M	I	XPEEM		Aberration corrected optics, PEEM3
2006WP&	M	A	STXM	vortex dynamics	80 ps time resolution
2006WR&	M	A	PEEM	PE	T-m depends on substrate
2006WS&	M, P	A	STXM	PE	
2006WW&	M	I	TXM-lab	diatom	HHG at 100 eV; 200 nm resolution; 2 eV ΔE
2006YB&	E	A	STXM	Coke, carbon black, soot	
2006ZA&	M	A	STXM	polyethylene	Solid state effects on C 1s spectrum
2006ZS&	M	A	XPEEM	BiFeO3 films	electric control of AFM domains
2006ZZ&	E	A	STXM	Wild 2 comet analysis	
2007AB&a	M	A, R	SPEM, XPEEM	review	
2007AB&b	M	A	XPEEM	Mg/W(110)	
2007AC&	M	A	STXM	Permalloy magnetic dynamics	Software for acquisition
2007AF&	M	A	XPEEM	Ge islands on Si(111)	
2007AL&	M	A	STXM	Fe/Gd multilayers on nanosphere SAM	Magnetization reversal
2007BB&	M	A	XPEEM	MnAs/GaAs	
2007BC&	M	A	XPEEM	CuCr2Se4 thin films	
2007BE&	M	I	XPEEM	CoFe Nanoparticle Ensembles	Superferromagnetism
2007BH&	M	A	XPEEM	InAs/ GaAs quantum dots	
2007BM&	E	A	STXM	submarine basaltic glass	
2007BT&	M	T	TXM		Zone plate testing rig
2007BV&	M	A	XPEEM	Pt(100)	(1x1) \rightarrow hex phase transition, XPS
2007C	M	A	STXM	hydrocarbon-clay mixtures	thesis
2007CH&	M	A	XPEEM		Magnetic stripes; domain wall orientation
2007CK	E	A	STXM	humic acids	
2007CM&	M	A	XPEEM	multiferroics	
2007CO&	M	A	XPEEM		exchange coupling
2007CP&	M	A	STXM	permalloy	Vortex core dynamics
2007CW&a	M	A	XPEEM	Ultrathin Fe/Ni/Cu(001)	magnetic bubble
2007CW&b	M	A	XPEEM	FeMn/Co films / vicinal Cu(001)	
2007DK&	M	A	TXM	Polyelectrolyte capsules	
2007EG&	M, B	R	SPEM, TXM, STXM, IR	Bone, catalysts	Overview of Elettra capabilities as TwinMIC turns on
2007ES&	M	A	XPEEM		pump - probe magnetic dynamics
2007F	M	A	TXM	correlated electron systems	expt-theory integration

code	materials	type	technique	species	Subject / Comments
2007FA&	M	A	STXM	P4VP-SiO ₂ microgel	
2007FB&a	M	A	STXM	nanotubes	
2007FB&b	M	A	STXM	Actinide spectroscopy	
2007FD&	M	A	STXM	Actinide spectroscopy	
2007FK&a	M	A	TXM	permalloy	Magnetic dynamics
2007FK&b	M	A	TXM		nanomagnetism
2007FS&	M	A	XPEEM		high electric field-SPM lithography
2007FU	M	A	STXM	n-alkane films	growth (n, T dependence)
2007GD&	M	A	TXM	exchange biased nanocap arrays	magnetization reversal
2007GG&	M	A	SPEM	organic LED degradation	
2007GGL	B	A	TXM	S. pombe yeast	
2007GS&	B	A	TXM	Yeast cells (S. Pombe)	tomography
2007GS&	M	A	XPEEM	Tibology properties on nano-diamond	
2007GS&	M	A	XPEEM		
2007GT&	B, M	A	TXM	dragline spider silk	
2007HB&	M	A	XPEEM	InAs/ GaAs quantum dots	
2007HFJ	M	T	STXM		Quantitative amplitude & phase imaging
2007HH&	I, M, B	A	STXM	spider dragline silk	orientation mapping
2007HJ&	M, I	A	STXM	Polyacrylate-polystyrene spheres in 3d	Tomography at C 1s edge
2007HJW	B, E, M	R, I	STXM, SPEM, TXM	many	Zone plate microscopy
2007HL&a	M	A	STXM	polyurea – aromatic, aliphatic	capsules
2007HL&b	E	A	STXM	Aerosol balls	correlate optical, chemical, physical props
2007HN&	M	A	TXM	Co antidot arrays	fabrication
2007HT&	E	A	STXM	black carbon & aerosols	
2007HYV	M	T	TXM	Modeling image formation	Phase contrast microscope
2007JT&	M, I	A	STXM	Polyacrylate-polystyrene spheres in 3d	tomography
2007KB&	M	A	STXM	permalloy	Mag. Vortex dynamics
2007KD&a	M, P	A	STXM	Liquid crystal	orientation mapping
2007KD&b	M	A	TXM	Polyelectrolyte assemblies (colloids)	
2007KH	M	A	STXM	smectic liquid crystal	orientation mapping
2007KK&	M	I	STXM, PEEM	CLS 10ID beamline & microscopes	
2007KOC	M	A	XPEEM	Co ₂ Cr _{1-x} Fe _x Al	XMCD
2007KV&	B	A	XPEEM	surface protein layers	X-ray damage
2007LA&	M	A	XPEEM	Au + Pd and O on Rh(110)	Phase segregation
2007LF&	M	A	TXM		magnetic dynamics
2007LHH	M	T	TXM		High resolution ZP manufacture
2007LK&	M	A	XPEEM		Domain wall spin structures

code	materials	type	technique	species	Subject / Comments
2007LR&	M	A	XPEEM	Au/TiO2	
2007LT&	M	T	TXM		High resolution ZP manufacture
2007MA&	B, M	A	PEEM	nacre (aragonite)	polarization mapping
2007MB&a	M	A	SPEM	LiF damage & patterning	
2007MB&b	M	A	TXM	permalloy	Magnetic dynamics
2007ML&	M	A	XPEEM	Metal oxides	e-beam patterning
2007MS&	M	A	STXM	endohedral Sc ₃ N@C ⁺ ₈₀ and Ce@C ⁺ ₈₂	
2007MT&	E	A	STXM	Soot by laser – aerosol models	
2007MW&	M	A	STXM	Photovoltaic cells	
2007OT&	M	A	STXM	carbon	magnetism
2007PB&	M	A	TXM		disorder induced magnetic memory
2007PL&a	M	A	XPEEM	Tribofilms on steel	
2007PL&b	M	A	XPEEM	Tribofilms on AlSi	
2007PL&b	M	A	XPEEM	ZDDP tribofilms on AlSi	
2007RH&	M, B	A	STXM	silk	orientation mapping
2007RR&	M	A	XPEEM	Ge islands/Si	Au np directed assembly
2007SA&	M	A	SPEM	SiC	Atomic cracks
2007SC&a	E	A	STXM	colloid particulates in lake water	
2007SC&b	M	A	STXM		pulses for Xray pump probe
2007SC&c	M	A	XPEEM	Ge islands on Si(113)	
2007SG&a	M	A	XPEEM	Tibology properties on nano-diamond	
2007SG&b	M	T	TXM	diatom	Algorithm for auto-locating Au cols
2007SM	M	A	TXM	Ettringite in Tricalcium Aluminate	
2007SPH	M	T	STXM	wet cell design	
2007SW&	M	A	XPEEM	antase nc on TiO2 rutile thin films	
2007TG&	M	A	STXM	phase change microcapsules	first SLS science paper ?
2007TG&a	E	A	STXM	aerosol tar balls	
2007TG&b	E	A	STXM	organic aerosol particles	
2007TOH	M	T	TXM		Phase contrast microscope
2007TS&	B	T	TXM	Diatom, COS-cells	Liquid jet TXM design & performance
2007ULF	M	R	STXM, PEEM	orientation mapping	
2007VC&	M	A	XPEEM	Magnetic tunnel junctions	Domain wall imaging
2007VH&	M	A	XPEEM		Ferromagnetic pinning
2007VT&	M	A	RSoXS	Block copolymer films	
2007W	E	A	STXM	organics in soil	thesis
2007WA&	M	R	RSoXS	Organic thin films	
2007WB&	M	A	STXM	Stardust tracks	

code	materials	type	technique	species	Subject / Comments
2007WS&	M	A	STXM	PMMA, PAN	chemically sensitive patterning
2007WSH	M	A	STXM	PMMA, PAN, PEC, PPC	Tricolor chemically sensitive patterning
2007WT	M	A	STXM	rubbers	filler migration
2007WTT	E	A	STXM	soil	Organic carbon forms
2007ZS&	M	A	XPEEM	multi-ferroics	nanoscale magnetism, XMCD
2008AA&	M	A	STXM	Compare to TEM-EELS	
2008AG&	B	T	STXM	TiO ₂ nanoparticles	Contrast agent tests
2008AH	M	R	STXM		Review of polymer X-ray microscopy
2008AL&	B	I	STXM	hepatocyte from human liver	Low energy X-ray fluorescence in STXM
2008BB&	M	A	STXM	PFB-F8BT organic solar cell films	Role of solvent
2008BC&	M, E	A	STXM	Natural graphites	Orientation and chemical variation
2008BC&a	M	A	SPEM		lithography
2008BF&	M	A	TXM	magnetic nanowires	
2008BG&	E	A	STXM	Carbonaceous material	FIB damage
2008BH&a	M, B	A	PEEM	HSA, sub-6 peptide competitive adsorption on PS/PMMA	
2008BH&b	M	T	TXM		Differential interference contrast microscope
2008BH&c	E, B	A	STXM	Aerosol particles	Distinguishing woodsmoke & diesel exhaust
2008BH&d	M	A	XPEEM	Magnetic nanoparticle array	Loss of long range order
2008BK&	M	A	TXM	domain wall oscillations	magnetic dynamics
2008BM&a	E	A	STXM	Nanoscale arsenic	
2008BM&b	M	A	STXM	permalloy	Mag. Vortex dynamics
2008BT&	E	A	STXM	stardust	
2008BU&	M	T	STXM	Silver corrosion	Technique demonstration
2008CA&a	E	A	STXM	Comet Wild 2 particles	
2008CA&b	E	A	STXM	chondritic meteorites	
2008CC&	M	A	XPEEM		STM & PEEM
2008CL&	M	A	PEEM	Langmuir-Blodgett films	Phase segregation, SEEM contrast
2008CM&	M	A	XPEEM	magnetoelectric multiferroic	electric field control
2008CR&	M	A	XPEEM		
2008CW&	M	A	STXM	permalloy	Magnetic dynamics, vortex switching
2008DF&	E	A	STXM	Elemental carbon	
2008DL&	E	A	STXM	Chlorhexidine – antimicrobial maps	
2008DR&	M	A	STXM	Zircaloy-2	Phase precipitates
2008DSE	E	A	STXM	Renazzo CR chondrite	
2008DV&	M	A	STXM	uranium carbide	
2008EGG	B	A	TXM	contact elements of insect attachment	

code	materials	type	technique	species	Subject / Comments
2008EU&	M	A	STXM	Co/Pt ML nanospheres	Spin reorientation dynamics
2008F	M	A,R	TXM		magnetic dynamics
2008FK&	M	A	TXM	Permalloy	Vortex dynamics
2008FT&	M	A	STXM	Gas filled PVA microballoons	
2008GF&	B, E	A	STXM		Biom mineralization by bacteria
2008GFK	M	A	PEEM	Polyaniline/steel	Corrosion protection
2008GG&	M	A	XPEEM	Co on Au(455)	
2008GK&	M	A	XPEEM	Diamond film	Low friction mechanism
2008GM&	B, M	A	STXM	Au nanoparticles in skin	
2008GM&a	E	A	XPEEM	Aragonite in abalone nacre	Ordering kinetics
2008GP&	M	A	XPEEM	Co/Au nanodot arrays	
2008GR&	M	A	XPEEM	Ag(111)	Chemical patterning by electron beam
2008GS&	E	A	STXM	Stardust	
2008HB&	M	T	TXM	Test structure	Simple Zernicke phase contrast
2008HBV	M	T	TXM		Differential interference contrast optic
2008HD&	M	A	STXM	Acrylate/PS microsphere tomo; PET radiation damage	comparison of STXM-NEXAFS and TEM-EELS
2008HD&b	E	A	STXM	Cloud droplets	
2008HG&a	M	A	TXM	perpendicular anisotropy films	domain nucleation
2008HG&b	M	A	TXM	perpendicular anisotropy films	H, T induced nucleation
2008HH	M	R	STXM, PEEM	comprehensive polymer review	Contains this biblio as supplement
2008HH&	E	A	STXM	<i>Pseudomonas Aeruginosa</i> & iron	
2008HJ&	M	A,T	STXM	Latex PS, p-MMA microspheres	tomography
2008HK&	M	A	XPEEM	permalloy	Current induced spin transitions
2008HL&	M	A	XPEEM		Magnetic tunnel junctions
2008HT&	M	A	PEEM	Fluorocarbon / Ti stent	Reliability analysis
2008HU&	M	A	XPEEM	Alkali metals	Mass transport by electric pulses
2008II&	M	A	TXM	arrical time	random walk magnetic domain formation
2008IK&	M	A	TXM		magnetic domain formation
2008JS&	M	A	STXM	FeOx nanorings	
2008JV&	M	I	TXM		Condenser design
2008KG&	M	A	XPEEM	ultrananocrystalline diamond	origin of low friction
2008KO&	M	A	TXM		standing wave XPS in XM1
2008KP&	M	A	XPEEM		1-D networks of nano-lines
2008KW&a	M	A	STXM	Water particulate matter	Quantification (size, chemistry)
2008KW&b	M	A	XPEEM	graphene	
2008LB	M	A, R	XPEEM		Magnetic & chemical analysis review

code	materials	type	technique	species	Subject / Comments
2008LB&	M, B	A	XPEEM	Alb on PS/PMMA	pH effect
2008LG&a	M	A	STXM	RuO ₂ in Nafion fuel cell membrane	
2008LG&b	M	A	XPEEM	NiCo/(Ni, Co)O Bilayers	
2008LH&	M,B	A	PEEM	Peptide (sub-6) vs. protein (albumin) competititve adsorption on PS/PMMA	Natural NEXAFS contrast
2008LK&	M	A	TXM	magnetic nanodots	universal criterion for switching
2008LM&	E	A	STXM	Asian atmospheric aerosols	
2008LR&	M	A,I	X-SNOM	ZnO	ESRF implementation of tip detection of XAS
2008LS&	E	A	STXM	soil organics	
2008MC&	M	A	XPEEM	multi-ferroics	
2008MC&b	M	A	XPEEM	BiFeO ₃ Thin Film	exchange bias
2008MD&	E	A	STXM	Atmospheric aerosols - metals	
2008MH&a	M	A	TXM	[Pt /Co] _{xn} /TbFe	magnetic imaging
2008MH&b	M	A	TXM	[Pt /Co] _{xn} /TbFe	magnetic imaging
2008MK&	E	A	STXM	Aragonite in abalone nacre	Polarization; growth mechanism
2008ML&a	E	A	STXM	framboidal pyrite	Formation inside bacteria
2008ML&b	M	A	XPEEM	Pd/W(110)	Stress induced stripes
2008MM&	E	A	STXM	Ferrihydrite & polysaccharides	Alginate, xanthan spectra; multi-technique
2008MS&	M	A	XPEEM	O/W(110)	Stress relief in islands
2008MT&a	M	A	TXM	Soil colloids	
2008MT&b	E	A	STXM	Framboidal pyrite in biofilm	
2008MW&	M	A	STXM	polyfluorene blends	Photovoltaic optimization
2008MZ&	E	A	STXM	Aragonite in abalone nacre	Polarization; growth mechanism
2008NA&	M	A	XPEEM		Ultra-short light pulses
2008NH&	M	A	STXM	Multi-wall carbon nanotubes	Dichroism; quality evaluation (AD, vs, CVD)
2008NM&	B	A	STXM	Lipid membranes (solid supported)	
2008O	M	A	STXM	organics	thesis
2008PM&a	B	A	TXM	Tomography with NCXT	
2008PM&b	B	A	TXM	eukaryotic cells	quantitative tomography
2008PM&c	B, E	A	XPEEM	Sea urchin spicule	
2008PP&	M	A	PEEM	graphene	1-5 layer NEXAFS
2008PT&	M	A	STXM	Fe nanoparticles	surface oxidation
2008RB&	M	I,A	DIXH	PS and Fe ₃ O ₄ spheres	First chemical (elemental) contrast
2008RT&	M	I	STXM	Pt-Ir-Co film - XMCD, TCNQ - XLD	PoLux BL & STXM description
2008SC&	M	A	STXM		spin-torque magnetization reversal
2008SP&	M	A	XPEEM	Multilayer graphene nanoflakes	biosensing
2008SRW	M	I	TXM		Zone plate fabrication

code	materials	type	technique	species	Subject / Comments
2008SS&a	M	A	STXM	Fe-oxide catalyst	In situ, H ₂ , 1 atm, T to 450 C
2008SS&b	E	A	XPEEM	mineral intergrowths	
2008TG&a	M	A	STXM	Phase change microcapsules	
2008TG&b	E	R	TXM		
2008TG&c	M	A	STXM	N ₂ filled PVA balloons in water	
2008TGR	E	A	STXM	Atmospheric aerosols	
2008TS&	E	AR	TXM		enviro applications
2008ULF	M	R	STXM, PEEM	Dichroic measurements	
2008VB&	M	A	STXM	permalloy	Mag. Vortex dynamics
2008VJ&	M	I	STXM/TXM		high heat load Si zone plates
2008W	M	A	STXM	PMMA, PAN, PS, Fg, PEC	Lithography, chemically selective patterns
2008WA	M	A	STXM	graphite	polarization calibration
2008Wb	M	A	STXM	RSoXS of polymer films (PV)	thesis
2008WL&a	M	A	SPEM	Wurtzite InN/GaN Heterojunction	
2008WL&b	M	A	SPEM	InN	
2008WS&	M	A	XPEEM	Kagome lattice	magnetic reversal
2008YA&	E	A	STXM	kerogen in sediments	
2008ZG&	M	A	TXM	Semiconductor circuits	
2008ZM&	M	A	STXM	Biogenic aragonite	C 1s spectroscopy & pol. Dep.
2008ZYS	M	A	TXM	Semiconductor circuits	non-destructive imaging
2009AF&	M	A	STXM	Nanoparticles aggregates	Time resolved, shear, in situ
2009AK&	M, B	I	STXM	NIST 2783 particulates, hepatocytes	Low energy X-ray fluorescence in STXM
2009AS	M, P	R	STXM	Magnetic & polymer applications	review
2009AS&	M	A	STXM	Metal-carboxylates	C 1s spectroscopy & calc
2009AW&	M	A	STXM	Polymer solar cells	Predicts hard X-rays will win out
2009AW&	M	A	SXoXS	Polymer trilayers	
2009BB&a	M	I	TXM	design	Colorado State; EUV HH-laser
2009BB&b	M	A	STXM	Ternary blend organic solar cells	
2009BB&c	B	A	STXM	sporopollen	Related to coalification & palaeobotany
2009BB&d	M	A	STXM	ternary blend PV	solvent trapping
2009BB&e	M	A	XPEEM	InAs/ GaAs quantum dots & rings	With AFM, PL
2009BB&f	M	A	XPEEM	Pr(Sr _{0.1} Ca _{0.9}) ₂ Mn ₂ O ₇	Heat induced rotation of 3d orbital stripes
2009BD&	M, R	A	XPEEM		SR-based XPEEM
2009BH&	B	A	TXM	Diatom, soil particles	Stockholm compact lab-TXM
2009BK&	E	A	STXM	Soot particles	Radiation damage in EELS
2009BM&a	M	A	XPEEM	InAs/ GaAs quantum rings	Surface composition
2009BM&b	B, E	A	XPEEM	Amorphous calcium phosphate	

code	materials	type	technique	species	Subject / Comments
2009BN&	E	A	STXM	Primitive dust particles in space	
2009BN&b	M	A	XPEEM	AFM-FM-AFM trilayers	
2009BS&	M	A	XPEEM	Fe-Co-O	
2009BU&a	M	A	STXM	Ni Electrodeposition	In situ electrochemistry
2009BU&b	M	A	STXM	Ag corrosion by chloride	In situ electrochemistry
2009CB&	B	A	STXM	Polysaccharides, lignin, cellulose	Plant cell wall analysis
2009CC&	B	A	TXM	Vaccinia Virus	tomography
2009CF&	E	A	STXM	Fe-oxyhydride mineralization	on polysaccharides
2009CGM	B, E	A	XPEEM	Red abalone nacre	Structural modelling
2009CH&	E	A	STXM	Hydrocarbon, clay	Oil sands issues
2009CH&b	M	A	SPEM	Ti-Zr-V Getter Films	
2009CK&a	M	I	TXM		12 nm resolution
2009CK&b	M	I	TXM	HSQ resist for 12 nm ZP	
2009CM&	M	A	XPEEM		Magnetic dots
2009CP	M	A	PEEM	pyrite	Surface oxidation
2009CR&	B	A	TXM	Vaccina-virus infected cells	Inner compartments
2009CS&	M	A	STXM	Spin torque switching	Magnetic dynamics
2009DD&	M	A	STXM	Actinide spectroscopy	
2009DG&	M	A	XPEEM	Co dots	Vortex annihilation
2009DH&	M	A	SPEM	Ta2O5 nanorod arrays	
2009DH&a	M	A	TXM	Co/Pt ML	high field irreversibility
2009DH&b	M	A	TXM	Co/Pt ML	stripe domain formation
2009DL&a	E	A	STXM	Chlorhexidine – antimicrobial maps	
2009DL&b	M	A	STXM	manganese oxide np	
2009DR&	E	A	STXM	Clay colloidal aggregates	
2009DT&	E	A	STXM	Organics in aerosols	
2009FD&	M	A	STXM	Poly(2-vinylpyridine) microgels	pH, electrolyte; wet cell
2009GA&a	E	A	STXM	Carbonaceous nanoglobules	meteorites
2009GA&b	B, E	A	XPEEM	Sea urchin teeth	
2009GK&a	M	I	STXM		Low energy X-ray fluorescence in STXM
2009GK&b	M, B	I	STXM	Star pattern, hepatocytes	Low energy X-ray fluorescence in STXM
2009GK&c	M	A	XPEEM	Polysilicon	weak
2009GM&a	M	A	XPEEM		Radiation damage
2009GM&b	M, B	A	STXM		Single np detection in skin
2009GS&a	E	I	TXM	soils	Stereoscopic methods
2009GS&b	E	A	STXM	Organic matter in comets	
2009GT&	E	A	TXM	Haematite; clay suspensions	Stereo imaging

code	materials	type	technique	species	Subject / Comments
2009HB&a	M	I	TXM	design	Stockholm compact lab-TXM
2009HB&b	M	I	TXM	phase contrast ZP optics	Stockholm compact lab-TXM – phase contrast
2009HB&c	B, M	R	STXM, CDI	Expect to limit at 10 nm	Radiation damage limitations
2009HC&	M	A	SPEM	ALD Al ₂ O ₃ and HfO ₂ on In _x Ga _{1-x} As	Band structure
2009HC&	M	A	XPEEM	Pd nanowires on rutile	
2009HD&	B, E	A	STXM	Ni, Mn, Fe in Ni-loaded biofilm	co-localized metals
2009HG&	M, B	I	TXM	TiO ₂ particles; cell;	First real spectroscopy in TXM
2009HK&	M	A	TXM	Ca(OH) ₂ crystal formation	cements
2009HM&	M	A	SPEM	Re _{0.7} Ca _{0.3} MnO ₃ Epitaxial Films	
2009HS&	M	T	STXM	Dealing with absorption saturation	Ca compounds
2009HSH	M	I	TXM	design	Energetiq Technology, Inc.
2009IB&	M	A	TXM	magnetic nanowires	stochastic domain-wall depinning
2009IF&	M	A	TXM		Barkhausen avalanches
2009JS&	M	A	TXM		coupled magnetic vortices
2009KG&	B	A	STXM	Aleurone cells, bio applications	Low energy X-ray fluorescence in STXM
2009KI&a	M	I	STXM	Mirror characterization	
2009KI&b	M	A	XPEEM		Domain wall motion
2009KJ	B, E	R	all		history of X-ray Microscopy
2009KJ&	M	A	STXM	Water in PEM-FC	
2009KL&	M	A	SPEM	GaN p-n Junction	Cross-section SPEM
2009KM&	B, E	A	XPEEM	Calcite sea urchin tooth	orientation
2009LB&	B	A	STXM	Organics in 2.9 Gy stromalites	Biogeo, compare to STEM-EELS
2009LC&a	M	A	SPEM	SAMs	Chemical patterning
2009LC&b	M	A	XPEEM	Exchange-biased NiFe/Mn Bilayers	
2009LH&a	M	A	STXM	Polyurea capsules	Gradient mapping, mechanisms
2009LH&b	M	A	XPEEM	PS-PLA blends	Comp to AFM
2009LH&c	M	A	SPEM	Ti-Zr-V Getter Films	
2009LH&d	M	A	XPEEM	permalloy	Spin transfer torque; polarization
2009LK&	M	A	SPEM	Epitaxial Si ₃ N ₄ /Si(111)	
2009LM&	B	I	TXM	Yeast cells (S. Pombe)	Light microscopy & tomo complement
2009LM&	E	A	STXM	aerosols	
2009LP&	B	A	STXM	Spider silk – beta sheet orientation –	effect of water
2009LP&	B, M	A	STXM	N. clavipes silk	effect of humidity on alignment
2009LT&	E	A	STXM	aerosols	
2009LW&a	B	A	XPEEM	Albumin on PS-PLA	
2009LW&b	B	A	STXM	Albumin on PS-PMMA	
2009MA&a	B	A	XPEEM	Sea urchin teeth	Dichroic mapping

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2009MA&b	M	A	XPEEM	Co islands , 3 Ml films	magnetism
2009MB&a	B, E	A	STXM	Iron biomineralization	Anoxic studies
2009MB&b	B, E	A	STXM	Vivianite reduction by bacteria	
2009MG&	B	A,R	TXM		Cro-TXM & cryo-CLSM
2009MGK	M	I	STXM	PS microspheres (test object)	Image reconstruction (toward ptychography)
2009MH&	E	A	STXM	Aerosols in Mexico city	
2009MJ&	M	A	STXM	PP /Montmorillonite Nanocomposites	
2009MJ&b	M	A	XPEEM	Chirally sculpted polycrystalline Au	Asymmetric photoelectron transmission
2009MK&a	M	A	STXM	(CpSiMe ₃) ₃ M-ECp* (M = Nd, U; E = Al, Ga; Cp* = C ₅ Me ₅)	Actinide structure by STXM spectroscopy
2009MK&b	M	A	XPEEM	Permalloy nanowire	Magnetization dynamics
2009ML&a	B	I	TXM	Yeast cells (S. Pombe)	tomography
2009ML&b	M	A	XPEEM	Ge islands on Si(111)	Shape transition
2009ML&c	M	A	XPEEM	Pt(O ₂)/YSZ electrodes	
2009MM&a	M	A	TXM	lateral spin valves	magnetic imaging
2009MM&b	M	A	XPEEM	NiO (001)	
2009MP&	B	A	STXM	wood	
2009MT&	E	A	STXM	Pyrite in biofilm	
2009NA&	E	A	STXM	Stardust	
2009NH&	M	A	STXM	Defects in MW-CNTs	
2009NS&	E	A	STXM	S-metabolizing - syntrophic	
2009OD&	E	A	STXM	Biomineralization – calcite & bacteria	
2009OKU	M	A	STXM	ferrocene and related compounds	
2009OL&	M	A	XPEEM	Co/NiO(001) interfaces	
2009OWHa	E	A	STXM	Calcite biomineralization in cyanobacteria	Grid tomography
2009OWHb	E	A	STXM	Calcite biomineralization in cyanobacteria	Grid tomography
2009PN&	B	I	TXM	TXM beamline at Alba	
2009PR&	E	A	STXM	Eu-humic acid complexes	
2009QU&	M	A	XPEEM	Palmitic & Perfluorooctadecanoic Acid	phase segregation, LB films
2009RR&	M	I	TXM		Higher order ZP focusing
2009RS&	B	I	DIXH	diatom	Fs coherent imaging at 140 eV
2009RY&	M	A	XPEEM	BiFeO ₃ Thin Film	electric control of magnetism
2009SA&	E	A	STXM	Stardust	
2009SB&	M	I	TXM	design	Accel: Electric discharge source
2009SC	M	I	TXM	Test patterns	Hefei NSRL instrument
2009SF&	M	A	XPEEM	Ge growth on Ga/Si	
2009SK&	M	A	XPEEM	Exchange biased microdisks	Vortex states

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2009SS&a	M	A	STXM	Fischer Torpoch catalyst (Fe)	in situ operation (, H2, 1 atm, T to 450 C)
2009SS&b	M	A	XPEEM	Ge/Si(113)	Ag growth catalyst
2009SW&	M	R	RSoXS	Polymer tri-layers	
2009SW&	M	A	RSoXS	polymers	
2009SY&	M	A	XPEEM	TiO2 memresistors	
2009TF&	M	A	STXM	Gas filled PVA microballoons	
2009TF&b	E	A	STXM	Fe(II) in carbonmatrices	
2009TI&	B	A	TXM	Plankton in Lake Biwa (eutrophic)	COD, BOD
2009TS&	E	A	TXM	soils	Stockholm compact lab-TXM
2009UM&	B	A	TXM	<i>Candida albicans</i>	Fungae tomography
2009VB&	M	A	XPEEM	Synthetic trioctahedral smectites	Clay structure
2009VC&	M	A	STXM	permalloy vortex	core deformation
2009VJ&a	M	A	STXM		Zone plate fabrication
2009VJ&a	M	A	STXM	Thin films	Sample prep for STXM
2009VM&	E	A	STXM	Wood and diesel soot particles	
2009WA&	M	A	RSoXS	Solar cell interfaces	
2009WB&a	M	A	STXM	Rad. Dmg in PET	Comp. to TEM-EELS
2009WB&b	M	A	STXM	P3HT:PCBM blend films	Solar cells
2009WC&	M	A	XPEEM	(Fe/Ni)/Cu/Ni/Cu(001)	stripe to bubble
2009WG&	M	A	STXM	Conjugated Polymer Bilayers	Interfacial widths
2009WL&	M	A	SPEM	Alkane-thiol SAM	+ve and -ve resist patterning
2009WM&	M	A,T	PEEM, STXM	PS, PMMA, Fg	radiation damage
2009WR&	M	I	TXM		Stacked zone plates
2009WV&	M	A	STXM	permalloy	Vortex core dynamics
2009Y	M	R	STXM	In situ echem, PS-PMMA blends, CNT	Organic PV - ALS 5.3.2.2 results
2009YC&	E	A	STXM	early solar system history by STXM	
2009YT&a	B	A	TXM	chromosomes	
2009YT&b	B	A	TXM	Immuno-labelled cells	
2009ZH&a	M	A	TXM	Electronic interconnects	
2009ZH&b	M	A	TXM	Copper interconnects	
2009ZM&	M	A	XPEEM	Ultrathin Fe	magnetism
2010AB&	M	A	XPEEM		Electron density effects on surface kinetics
2010AE&	M	A	STXM	FeGd ML on nanospheres	
2010AH&	E	A	XPEEM	Pentlandite, Pyrrhotite & Chalcopyrite	
2010AH&	M	A	XPEEM	Pentlandite, Pyrrhotite, Chalcopyrite	compared to TOF-SIMS
2010AL&	M	A	STXM	Nanosphere magnets	out-of-plane magnetized
2010AL&	M	A	STXM	Fe/Gd multilayers on nanosphere SAM	Out of plane magnetization

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2010BA&	E, B	A	XPEEM	Calcium-organic composites	Paleobotany, coal formation
2010BB&	E	A	STXM	Fossils in pyrite	Organic residues
2010BC&a	M	A	STXM	La ₂ U ₂ Se ₉	
2010BC&b	M	A	XPEEM	CoFe/Al ₂ O ₃ multilayers	
2010BF&	M	A	TXM	domain wall injection	
2010BG&	M	A	STXM	Metal corrosion of nafion in fuel cell	In situ electrochemistry
2010BK&	M	A	TXM	domain wall oscillations	magnetic dynamics
2010BM&	E	A	STXM	phototrophic iron-oxidizing bacterium	Fe biomineralization
2010BR&a	M	A	STXM		Magnetic imaging & dynamics
2010BR&b	M	A	STXM	foraminiferal calcite	Mg co-odination
2010BRP	E	A	STXM	Soot particles	
2010BRP	E	A	STXM	aerosol analysis	
2010BS&	M	A	TXM	superparamagnetic Fe beads	
2010BV&	M	A	STXM	pentacene	In a FET
2010BV&a	M	A	STXM	Pentacene FET	Grain orientation
2010BV&b	M	A	STXM	Pentacene FET	Grain orientation
2010BW&	M, B	A	STXM, PEEM	PEO, albumin adsorption	
2010BY&	M	A	STXM	NaReO ₄ – O 1s spectrum	FY, TEY, I-t (STXM) comparison
2010C	M	A	STXM	Si based photoresists	thesis
2010CE&	M	A	XPEEM	Polycrystalline Ni	oxidation
2010CF&	E	A	STXM	Iron oxidizing bacteria M. ferrooxydans	Polysaccharides in stalks
2010CG	E	A	XPEEM	pyrite	Oxidation & weathering
2010CG&	M	A	STXM	Polymer-fullerene (organic solar cell)	Miscibility
2010CH&	M	A	PEEM	Fluorocarbon coatings on implants	
2010CH&b	M	A	XPEEM	Co-Pentacene	
2010CK&	M	A	STXM	HSQ	Radiation damage spreading
2010CL&	M	A	XPEEM	spinel thin films	
2010CP&c	M	A	XPEEM	GeSi	Magnetic dynamics (2-photon)
2010DA&	M	A	SPEM	Pt on Gas Diffusion Layer	PEM-FC
2010DC&	M	I	XPEEM		Diamond XPEEM beamline
2010DK&	M	A,R	STXM	Nuclear materials	STXM applications
2010DL&	M	I	SPEM		Elettra SPEM (3.2L) beamline
2010DS&	E	A	STXM	organics in Comet 81P/Wild 2	
2010DV&	M	A	XPEEM	Sm _{0.974} Gd _{0.026} Al ₂	Zero-moment ferromagnet
2010ET&	M	A	RSoXS	manganites	Ultrafast dynamics
2010Fa	M	R	TXM	(Co _x Cy _y) _z , permalloy	Spin dynamics
2010Fb	M	A,R	TXM		magnetic dynamics

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2010FG&a	M	A	STXM	Defects mapping in carbon nanotubes	
2010FG&b	M	A	STXM	Uranyl compound spectroscopy	
2010FI	M	A	TXM		magnetic dynamics
2010FR&a	M	A	XPEEM		Neel caps, Q-dots, Asym. hysteresis
2010FR&b	M	I	STXM		Higher order suppression at PolLux
2010FT&	M	A	XPEEM	LaFeO ₃	Antiferromagnetic domains
2010FW&	E	A	STXM	2.0-Ga pillow lavas	Septate tubular pillow lavas
2010G	M	R	TXM, STXM		Nanoscience applications review
2010GB&	M	A	XPEEM	Ag	Redox patterning
2010GK&	M	A	TXM	Co microdot arrays	standing wave XPS in TXM
2010GN&	E	A	STXM	Organic nanoglobules	
2010GS&	M	R, A	STXM	Fe catalysts	In situ; review comparing to TEM-EELS
2010GS&b	M	A	STXM	actinides	
2010GT	E	A	STXM	Aerosol particles	Hygroscopic effects
2010HB&	M	A	STXM	pentacene based P-FET	In situ operating device
2010HB&a	M	A	TXM	planar magnetic nanowires	pinning
2010HB&b	M	A	TXM	Ni ₈₀ Fe ₂₀ planar nanowires	
2010HC&a	E	A	STXM	Carbonated Calcium Silicate Hydrate	
2010HC&b	M	A	XPEEM	Strained Nd _{1-x} CaxMnO ₃ Thin Film	
2010HM&	M	A	XPEEM	multiferroics	
2010HO&	E	A	STXM	Acidovorax cells As / Fe	As binding mechanisms
2010HR	E	A	STXM	Classification of aerosol organics	
2010HS&a	M	A	SPEM	Pt/MgO/Pt Nonvolatile Memory Device	
2010HS&b	M	A	XPEEM	Co-doped InO films	magnetism
2010HT&	E, B	A	STXM	Acidovorax cells As / Fe	X-ray fluorescence yield stacks
2010HW&	M	I	STXM		Electron yield detection
2010HWO	E	A	STXM	CaCO ₃ S. leopolensis Biomineralization	STXM spectro-tomography
2010HZ&	M	I	STXM	Aerosol particles	In situ cell
2010IN&	M	A	XPEEM		Domain-Wall depinning
2010JR&	M	A	XPEEM	GaAs nanowires	
2010JY&	M	A	TXM	coupled vortice	mag dynamics, 70 ps, 20 nm resolution
2010KA&	M	I	STXM		Stxm5321 design
2010KB&a	M	A	STXM	Pentacene, per-F-pentacene on PEN	Crystal ordering in thin films
2010KB&b	M	A	XPEEM	<i>Pb(Zr_{0.48}Ti_{0.52})O₃</i>	Ferroelectric domains
2010KH&	E	A	SPEM	NaCl/water surface	XPS. YEY=nexafs
2010KJ&	M	A	XPEEM	Fe/NiO/Ag(001), Fe/NiO/MgO(001)	NiO spin orientation
2010KK&	M, B	A	XPEEM	protein-metal composites	X-ray damage

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2010KM&	M	A	STXM		Magnetic dynamics: pulsed chirality reversal
2010KN&	E	A	STXM	biochar	
2010KW&	E	A	STXM	Ice formation on anthropogenic NP	
2010La	B	A	STXM	MV-1 MTB, MMP	XMCD of single magnetosomes
2010Lb	B, M	A	XPEEM	HSA PS-PMMA-b-PAA, HSA / PS-PMMA-b-PAA, HSA/PS-PLA; Ubq/PEO-ppAA,	Protein-polymer interactions
2010LBH	M	A	XPEEM, STXM	HSA, Fg, peptides adsorbed on : PS/PMMA, PS/PEO, PS/PLA	Protein – polymer adsorption in context of biomaterials
2010Lc	M	A	STXM	Aromatic, aliphatic	Microcapsule synthesis methods
2010Lc	M	A	STXM	microcapsules	thesis
2010LC&a	M	A	XPEEM	permalloy	Domain wall depinning
2010LC&b	M	A	XPEEM	V-doped permalloy	Domain wall depinning, spin-current polarization
2010LC&c	M	A	XPEEM	Gd doped permalloy	Domain wall depinning
2010LH&a	B, E	A	STXM	MV-1 magnetotactic bacteria	XMCD of individual magnetosomes
2010LH&b	M, B	A	PEEM	PEO, albumin adsorption	
2010LHS	M	A	STXM	Polymer capsules	
2010LN	B	A,R	TXM		Sub-cellular imaging
2010LS	E	R	STXM	soils	spectroscopy
2010LS&	M	A	TXM	nanostructured sulfated zirconias	
2010LT&	M, P	A	PEEM	Fluorocarbon coatings on stainless steel	
2010LW&a	M	A	PEEM	Cross-linked PEO	PETA at levels >5% destroys protein repellancy
2010LW&b	B, M	A	XPEEM	HSA adsorbed to PS-PEO(x-link)	
2010LW&c	M	A	XPEEM		Domain wall spin torque resonators
2010Ma	E, M	R	PEEM, SPEM	Ge/Au; SnO2 nanowires, Co np, abalone	Rules for efficient spectromicroscopy
2010MA&	M	A	STXM	Ferroelectric polymers	
2010Mb	M	A	STXM	Actinide materials	Technique comparison
2010MB&	M	A	XPEEM		Magnetic exchange coupling
2010ME&	B, E	A	XPEEM	Protein template to aragonite in nacre	biomineralization
2010MG&	B	I, T	CXDI, FTH, DIXH	diatom	Fs coherent imaging at 140 eV
2010MG&c	M	A	STXM	Cubic Tricalcium Aluminate	
2010MH&a	M	A	STXM	Aerosol particles	Automated analysis
2010MH&b	E	A	STXM	carbonaceous aerosol particle	Mexico city
2010MH&c	M	A	XPEEM	InAs/ GaAs quantum rings	Surface composition
2010MJ&	M	A	STXM	PP/MMT/SEBS polymer nanocomposite	
2010MK&a	M	I	STXM		Ptychography set-up
2010MK&b	M	A	XPEEM	permalloy nanowires	Domain wall motion, velocity

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2010MM&	M	A	XPEEM	Permalloy nanowires	Domain wall motion; Gilbert damping
2010MN&	E	A	STXM	aerosols	
2010MT&a	B, E	A	XPEEM	asp2 peptide in calcite (CaCO ₃)	biomineralization
2010MT&b	E	A	STXM	aerosols	
2010MT&c	E	A	STXM	aerosols	
2010MTG	E	A	STXM	aerosols	
2010MU&	M	A	TXM	vortex core imaging	
2010NH&	M	A	ptycho	Yeast cells	First soft X-ray ptycho-tomography
2010NK&	E	R	STXM		Soil organic-mineral interactions
2010NM&a	B, E	R	STXM	Bacterial biofilms	Compare to LSCM, nmr
2010NM&b	E	A	STXM	Artificial cometary ice	
2010NW&	M	A	STXM	SW-CNT; dodecyl-functionalization	Dichroism of SWCNT like that in MWCNT
2010O	M	R	XPEEM	antiferromagnetic domains	
2010OB&	M	A	XPEEM	graphene	Nano magnetic vortices
2010OC&	M	A, I	XPEEM	Co ₂ MnSi	Time resolved emagnetization
2010OR&	M	R	XPEEM	Time & energy- resolved PEEM	108 ps time resolution, xmed dynamics; use for chromatic aberration correction
2010OW&	M	A	XPEEM	Fe/(Ga,Mn)As multi-layer	Ferromagnetic semiconductor
2010PG&	E	A	STXM	Graphite in quartz-pyroxene	
2010PR&	E	A	STXM	Eu(III) – humic acid aggregates	Luminescence yield correlated; calculations
2010PT&	E	A	STXM	Playa salts – nucleating clouds	
2010QR&	M	R	STXM		Magnetic dynamics
2010RD&	E	A	STXM	Cloud droplets	
2010RF&	B, E	A	STXM	Amorphous CaCO ₃	
2010RH&	E	A	STXM	Particles in ocean bubble bursts	
2010RL	E	A	STXM	roots	Nutrient flow
2010SA	M	R	STXM, SPEM		Review of ZP based soft X-ray methods
2010SC&	M	A	STXM, R-SoXS	Bulk heterojunction photovoltaics	R-SoXS , STXM combined
2010SD&	M, E	A	STXM	Organics in meteorites	
2010SF&	M	A	XPEEM	Mn-doped ZnO	Strain dependent defect based magnetism
2010SG&	B	A, I	TXM	mouse adenocarcinoma cells	First tissue tomo by TXM, 70 nm resolution
2010SG&b	E	A	STXM	Meteorite inclusions	
2010SK&a	M	A	TR-PEEM	In Co/Cr/Fe(0 0 1) pads	Vortex motion
2010SK&b	M	A	TXM	permalloy	magnetic dynamics
2010SM&	M	I	PEEM		Optics – 4 nm in LEEM
2010SM&b	M	A	XPEEM	p(1x2)O/W(110)	T-dependence of stress
2010SMS	M	A	XPEEM	Magnetic spinels	

code	materials	type	technique	species	Subject / Comments
2010SP&	M	A	STXM	Memresistive device	Identify functional channels
2010SR&a	M	I	SP-STXM	Scanning probe enhanced STXM	Instrument description
2010SR&b	E	A	STXM	Organic aerosol particles	
2010SR&c	M	I	TXM		High efficiency zone plates
2010SR&c	M	I	STXM	25 nm zone plates	EUV holography method
2010SR&d	M	I	STXM		SPM as STXM detector
2010SR&e	M	I	STXM		SPM as STXM detector
2010SS&a	M	A	TXM	SmCo5/Fe nanocomposite bilayers	layer resolved magnetism
2010SS&b	M, E	A	XPEEM	Santa Catarina meteorite	
2010SS&c	M	A	XPEEM	Ge growth on Ag/Si(111)	
2010SW&a	M	A	STXM	N in fuel cell membranes	
2010SW&b	M	A	RSoXS	Heterojunction photovoltaics	
2010SW&b	M	A	RSoXS	PFB/F8BT polymer solar cell	Morphology analysis
2010TC	M	R	STXM	Permalloy vortices; spin valves	Magnetization dynamics
2010TG&	E	A	TXM	Nanoparticles in water	
2010TH&	E	A	STXM	carboxylic acids in aerosols	
2010TLR	E	A	STXM	Carboxylic acids - aerosols	
2010TP&a	M	A	STXM	lyotropic chromonic liquid crystals	Effect of additives
2010TP&b	M, B	A	STXM	PVA microballoons	Water dispersion
2010TS&	B	R	TXM, STXM	Soil	Review of soil & environmental apps.
2010TV&	M	A	XPEEM	direct write Ge nanostructures	
2010UP&	M	A	XPEEM		Spin valve nanowires
2010VG&a	M	I	STXM	HSQ	High aspect ratio lithography
2010VG&b	M	I	STXM	Double zone plates	
2010VM&	M	A	XPEEM		In-plane magnetic transition
2010VW&	M	A	TXM		domain wall pinning
2010W&	M	I	RSoXS		ALS 11.0.1 instrument
2010WC&	M	A	STXM	Montmorillonite exchange $\text{Na}^+/\text{NH}_4^+$	
2010WH&	M	I	RSoXS	PS, PMMA scattering curves	ALS 11.0.1.2 system
2010WM	M	A	STXM	PS-PMMA; polyfluorene	TEY, transmission
2010WP&	M	A	XPEEM	CoO/Fe/Ag(001)	Freezing CoO spins
2010WR&	M	I	TXM	15 nm Zone plate development	
2010WS&b	M	A	XPEEM		
2010WW&	M	I	XPEEM		UHV polarimeter
2010WZ&	M	A	STXM	PE orientation	
2010YA&	E	A	STXM	Organics in meteorites	
2010YS&	M	A	RSoXS		Organic PV materials

code	materials	type	technique	species	Subject / Comments
2010YW&	M, P	A	STXM	Organic photovoltaics	Interface roughness / annealing
2010ZG&	M	I	CDI	Differential holography encoding	
2010ZV&	M	A	XPEEM	Graphene nanoribbons	Wafer scale growth
2010ZW&a	M	A	STXM	N in carbon nanotubes	
2010ZW&b	M	A	STXM	RuO ₂ /CNT sensors	
2011TI&a	B	A	TXM	Lakwe Biwa phytoplankton EPS	
2011AG&	M	A	STXM	Fe ₃ O ₄ nanoparticles	catechol-derived anchors
2011AH&	M	A	SPEM	Metal sulfide minerals	
2011B	M	A	STXM	organic PV	thesis
2011BA&	M	A	SPEM		
2011BB&a	M	A	STXM	Magnetic nanopillar	Spin torque switching
2011BB&b	M	A	XPEEM	a-Fe ₂ O ₃	AFM domain structure
2011BB&c	M	A	XPEEM	InAs / GaAs quantum dots	
2011BB&d	M	I	ptycho	permalloy	Active pixel sensor camera for ptycho
2011BC&	M	A	STXM	Uranium selenides	
2011BG&	M	A	STXM	Ni corrosion in ionic liquid	XRF and in situ electrochem
2011BH&a	E	A	STXM	Organics in shale	
2011BH&b	M	A	STXM		Surface-sensitive TEY
2011BM&a	E	A	STXM	coral	Dichroic mapping
2011BM&b	M	A	STXM	Fuel cells	In situ electrochem; XRF
2011BS&	M	A	ptycho	PMMA, SiO ₂	first spectro-ptycho
2011BS&a	M	A	STXM	Mapping gas & liquid water in fuel cells	
2011BS&b	M	A	STXM	PFB-F8BT organic solar cell films	Composition & morphology
2011BS&c	M	A	ptycho	PMMA, SiO ₂	O 1s phase and amplitude contrast
2011BT&	M	A	STXM	SOFC interconnects	
2011CB&	M	A	STXM	MEH-PPV:Porphyrin:PCBM solar cells	
2011CC&	E, B	A	STXM	Fe biomineralization	
2011CD&	M	A	STXM	MgO-SiO ₂ -Al ₂ O ₃ -SiO ₂ -TiO ₂ glasses	Nucleating agent effects
2011CG	M	A	XPEEM	FeS ₂ pyrite	pH 1, redox potential
2011CG&	E	A	STXM	Chitin-protein complexes	
2011CH&	M	A	XPEEM		SEEM in energy filtered XPEEM
2011CH&b	E	A	STXM		chondritic and cometary organic solids
2011CJ&	M	A	XPEEM	Dipole coupled nanomagnets	
2011CL&	M	A	STXM	Silole- PSBTBT-08 fullerene PV	
2011CM&	M	A	XPEEM	NiPd	magnetization
2011CR&	M	A	SPEM	Au/ZnO nanorod photocatalysts	
2011CS&	M	A	STXM		Fe film ion-beam patterning

code	materials	type	technique	species	Subject / Comments
2011CS&	M	A	XPEEM	diindenoperylene thin films / Au(100)	
2011CT&	M	A	STXM	P3HT:PCBM PV	morphology
2011CTA	M	A	RSoXS		Organic solar cells
2011DG&	M	A	SPEM	high O SiO _x protrusions on SiO ₂	
2011DQ&	B	A	TXM	myelinated axon	TXM tomo coupled to ESRF XRF-STXM
2011DV&	M	A	STXM	Co in cement	
2011ET&	M	A	RSoXS	La _{0.5} Sr _{1.5} MnO ₄	Ultrafast resonant dynamics
2011F	M	A	TXM		magnetic dynamics
2011FI&	M	A	TXM	NiFe	vortex core visualization
2011FJ&	M	I, A	STXM, ptycho		review
2011FS&	B	A	ptycho	diatom	Coherence characterized
2011FS&	M	A	XPEEM	LaFeO ₃ thin film	antiferromagnetism
2011FW&	E	A	STXM	ophiolite	Pillow lava tubular structures
2011GB&	M	A	TXM	TiO ₂ nano ribbons	First TXM spectromicroscopy, dichroism
2011GB&b	B	A	ptycho	diatom	water window ptycho demo-ed, 50 nm res.
2011GC&	M	A	STXM	PVA-(PMMA-co-N-IPA) microgels	Thermoresponsive drug delivery; volume trans.
2011GF&	M	A	STXM	Polymer microcontainers	In situ
2011GK&	M	A	STXM	Fe – Au galvanic couple	in situ Electrochem
2011GLT	M	A	STXM	Malonic acid particles	Keto-enol tautomerism
2011GS&	E	A	STXM	stardust	
2011GW	B	R	XPEEM		Biominalization review
2011GYC	M	A	XPEEM	Mollusk calcite	C 1s Linear dichroism
2011H	M	A	STXM	block copolymers - Li batt	thesis
2011HB&	E	A	STXM	Organics in Tagish lake meteorite	
2011HC&	M	A	XPEEM	Multi-ferroics	
2011HF&	M	A	STXM	GaN nanowires	
2011HG&	M	A	XPEEM	Au np/Ge(111)	Thermal dewetting
2011HK&	B	A	TXM	Malaria parasite, <i>P. falciparum</i>	
2011HM&	M	A	STXM	Anticontamination N ₂ trap	
2011HZ&	M	I	STXM		In situ (T, RH) cell (-40C to 50 C, full RH)
2011IW&	B	A	STXM	Latarcin A antimicrobial peptide	
2011JL&	M	A	TXM	vortex gyration	tunable E-transfer
2011K	M	A	XPEEM	FeNi	magnetic imaging
2011KB&	M	T	STXM	Magnetic materials	Lock-in methods
2011KC&a	M	A	SPEM	InN/GaN/AlN Nanorod Heterojunctions	
2011KC&b	M	A	SPEM	II-nitrides	Spontaneous polarization-induced asymmetry
2011KD&a	M	T	SPEM	Graphene windows allow liquid PES	

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2011KD&b	E, M	A	TXM	C(3)A cement	
2011KL&	M	A	SPEM	InN	charging
2011KL&b	M	A	XPEEM	Suspended single layer graphene	ARPES
2011KM&a	B, M	A	PEEM	Sea urchin teeth	Sharpening mechanism
2011KM&b	M	A	STXM	permalloy	Magnetic dynamics; antivortex
2011KN&	E	A	STXM	Organics in soil	
2011KT&	M, E	I, A	STXM, ptycho		review
2011LD&b	E	A	STXM		Aerosols from burning
2011LH&a	B	A	STXM	Anoplin (antimicrobial-peptide)	Lipid interactions
2011LH&b	M	A	XPEEM	VO on Rh(111)	
2011LHa	M	A	STXM	PMMA	Source of 'damage spreading' is PSF
2011LHb	E	R	STXM	chlorhexidine	Organic contaminants in environment
2011LHc	M, I	I	STXM	PMMA	point spread function mapping at 3 STXMs
2011LM&a	M	A	STXM	polyurea microcapsules	Surface modification for triggered release
2011LM&b	B	A	XPEEM	Rat tendon collagen	C 1s Linear dichroism
2011LM&c	M	A	XPEEM		Image blur effects
2011LN&d	M	A	XPEEM		Coupled magnetic domain wall currents
2011LP&	M	A	XPEEM	CoO/Fe/Ag(001)	Magnetic anisotropy
2011LR&	M	A	STXM	Monopole magnetic defects	
2011LS&	M	A	SPEM	1-dodecanethiol/ Si	SAM
2011MA&	M	A	STXM	naphthalenediimide polymer acceptor	PV
2011MC&	B	A	STXM	CoFe particles in fibroblasts	XRF mapping
2011MJ&	M	A	RSoXS	Heteropolymer thin films	Molecular orientation
2011MJ&	M	A	STXM	Polypropylene-clay-elastomer	Compatibilizer mapping
2011MK&	M	A	XPEEM	Ferromagnetic resonances	XRF yield
2011ML&	M	A	XPEEM	NiO/Ag/CoO/Fe on vicinal Ag(001)	
2011MM&a	M	A	STXM	Reverse osmosis filtration membranes	
2011MM&b	B, E	A	STXM	Protein & peptidoglycan in cell walls	
2011MM&c	M	A	XPEEM	Surface antiferromagnetic domains	
2011MM&d	M	A	XPEEM	Ar / Ru(0001)	Valence band CD
2011MM&e	M	A	XPEEM	Fe-Ni(001)	Surface & interfacial magnetism
2011MM&f	M	A	XPEEM	NiO(001), Fe/ NiO(001)	Surface spin orientation
2011MNL	M, R	A	XPEEM		XPEEM spectromicroscopy
2011MP&	M	A	XPEEM	Graphene / Re(001)	
2011MS&a	M	A	XPEEM		Stress engineering, striped surfaces
2011MS&b	M	A	STXM	Conducting polymer blend films	Residual solvent
2011N	M	A	STXM	MWCNT, SWCNT	Dichroism, functionalization

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2011NM&	E	A	STXM	Organic residues in ice analogs	Star-dust related
2011NW&	M	A	STXM	CoTb, FePt, FePt np	Surface-sensitive TEY
2011OA&a	M	A	STXM	(Nd, Dy)-Fe-B sintered magnets	Magnetic domain imaging
2011OA&b	M	A	STXM	(Nd, Dy)-Fe-B sintered magnets	element specific Magnetic domain imaging
2011OF&	B	A, I	TXM	mouse cerebral cortex	tomography
2011OG&	M	A	STXM	Carbon black sorbents	
2011PC&	M	A	STXM	Diamonoid aerogel	
2011PG&a	E	A	STXM		Graphite in old banded-Fe formations
2011PG&b	M	A	STXM	asbestos	
2011PW&	M	A	STXM	Wadsley-type Tunnel Bronze	
2011RM&	M	A	XPEEM	Co nanomagnets	Artificial Kagome lattice
2011RV&	M	A	XPEEM	half-metallic $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$	
2011S	E, B	R	STXM	Humic substances	Enviro & bio; Bessy & lab XRM
2011SB&	M	A	STXM	Ionomer in cathode	Fuel cell optimization
2011SB&b	M	A	STXM	Uranium compounds	
2011SB&c	M	I	ptycho	permalloy	CMOS (APS) versus CCD for soft Xray diffr
2011SC&	M	A	STXM	MWCNT and GO nanoribbons	
2011SD&	M	A	STXM	VO_2 Nanowires	
2011SG&	B	A	TXM	Smooth muscle cells	good C 1s, Ca 2p spectroscopy
2011SH&a	M	A	STXM	Photonic crystals	
2011SH&b	M	A	STXM	ultrathin SnTTBPP(OH)_2 -films / Ag(100)	Interface properties
2011SH&c	M	A	STXM	High mobility electron transport polymer	PV
2011SH&d	M	A	STXM	Soft X-ray CCD	Improving spatial resolution
2011SM&	M	A	STXM	polymeric n-channel FET	Sub-um charge modulation
2011SS&	M	A	STXM	memresistor	Switching effects
2011ST&	M	A	XPEEM	$\text{CeWO}_x(001)$ films	
2011TH&	M	A	TXM	magnetic nanostructures	X-ray diffraction (XM1 as reference)
2011TI&b	B	A	TXM	Synechococcus sp. cyanobacterial	quantify organic content
2011TK&	B	I	TXM	cryo-TXM	improved system
2011TL&	M	A	STXM	Cobalt Diamond-like films	
2011TM&	M	A	CDI-ptycho	GdFe magnetic film	First resonance dichroic (XMCD) imaging
2011TN&	B	A	TXM	live cell imaging	antifreeze (ethylene glycol)
2011TS&	E	A	STXM		Aerosols from burning
2011US&	B	A	TXM	<i>Schizosaccharomyces pombe</i> ., <i>Candida albicans coff1-22</i> mutant strain of <i>S. cerevisiae</i> .	Cryotomography, segmentation
2011VD&	M	A	TXM		domain wall pinning

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2011VK&a	M	A	STXM	permalloy	Mag. Dynamics coupled oscillations
2011VK&b	M	A	XPEEM	Si, Ge, SiGe	Direct write scanning probes
2011VR&	M	A	STXM	Co ₂ FeAl _{0.4} Si _{0.6} Heusler alloy	Spin structure
2011VT&	M	A	XPEEM	Co/NiO(001)	Anisotropic XMLD
2011VW&	M	A	TXM	permalloy nanowires,magnetic soft spots	
2011WC&a	M	A	XPEEM	Co-Pentacene-Co	
2011WC&b	M	A	XPEEM	CoO/Fe/Ag(001)	Antivortex state
2011WD&	M	I	XPEEM		Soft Xray polarimeter
2011WH&a	M	A	PEEM	Magnetoelectric antiferromagnet	
2011WH&b	B	A	STXM	Sulfur(0) in S-metabolizing bacteria	tomography
2011WJ&	M	A	XPEEM		Perpendicular magnetic anisotropy
2011WK&	B	A	STXM	Anoplin antimicrobial peptide	
2011WK&	B, M	A	STXM	Anoplin antimicrobial peptide/lipid membrane interactions	
2011WL&a	M	A	RSoXS		Tri-block co-polymer morphology
2011WL&b	M	A	SPEM	Pb(Zr0.2Ti0.8)O3 (PZT) / La0.7Sr0.3MnO3 (LSMO) electrode	in situ charging
2011WM	M	A	STXM	Redox of Pd nanoparticles	
2011WS&	M	A	STXM	Magnetic/non/magnetic structures	AFM coupling of vortex states
2011WS&b	M	A	XPEEM	FeMn/Ni/Cu(001)	Magnetic phase diagram
2011WSM	M	A	STXM	poly(9,9'-dioctylfluorene-co-benzothiadiazole) (F8BT)	Molecular orientation & order mapping
2011WZ&a	M	A	STXM	SnO2-CNT humidity effects	
2011WZ&b	M	A	STXM	domain ordering in polyc films	
2011YJ&	M	A	TXM	vortex-core cross-point architecture	mag memory
2011YK&	E, B	A	XPEEM	Biological nanoparticles	Space filling
2011YK&	M	A	XPEEM	Perovskite oxides	
2011YL&	M	A	TXM		
2011YP&	M	A	STXM	Spin driven oscillator	
2011YP&	M	A	TXM	magnetic nano-oscillator	
2011ZH&	E	A	STXM	Complex organic particles	Humidity induced separations, in situ
2011ZL&	M	A	STXM	Nanoparticle compatibilizers	
2011ZM&a	M	A	STXM	Diesel soot particles	Reaction with water
2011ZM&b	E	A	STXM	ammonium sulfate/adipic acid particles	Water uptake , in situ
2011ZM&b	E	A	STXM	Soot ; ozone uptake	UV/vis augmentation
2011ZW&a	M	A	STXM	Water on SnO ₂ carbon nanotubes	Humid cell
2011ZW&b	M	A	STXM	Single sheet graphene oxide NEXAFS	

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2011ZX&	M	A	STXM	Functionalized CNT	
2012AO&	M	A	XPEEM	Co nanowire, Si(111)	magnetism
2012AS&	M	A	STXM	Alumina zeolites	
2012B	M	R	XPEEM		Historical perspective LEEM, PEEM etc
2012BA&	M	R	STXM, SPEM	PEM-FC metal electrodes; SOFC	Review of fuel cell in situ studies
2012BD&	M	A	STXM	FIB sample prep of soft matter	Minimizing damage
2012BE&	M	A	XPEEM	Cr nanostructures on W(100)	Dewetting induced
2012BG&a	M	A	STEM	Mn, MnO ₂	In situ electrochem
2012BG&b	M	A	STXM	Liquid crystal - Au corrosion	In situ, X-ray fluorescence
2012BH&a	E	A	STXM	Organic-rich shales	
2012BH&b	M	A	TXM	NaTiO ₃ nanorods	Spectroscopy & linear dichroism
2012BH&b	M	A	XPEEM	Rh ₂ O ₃ (0001)	
2012BH&c	M	A	XPEEM	La _{0.35} Pr _{0.275} Ca _{0.375} MnO ₃	1 st order magnetic transition
2012BKM	E	A	STXM		NanoSIMS & STXM
2012BL&a	M	T	STXM	Knife-edge (FIB met glass)	Resolution profile
2012BM&	M, P	A	STXM	N-ligands to Pt	Fuel cell degradation
2012BM&c	M	A	XPEEM	stepped α -Fe ₂ O ₃ /Ni ₈₁ Fe ₁₉ bilayers	Spin relaxation imaged
2012BMb	M	A	STXM	Fe-rich carbonates from lower mantle	
2012BS&	M	A	STXM	Cathode porosity in PEM-FC	Spectro-tomography
2012BW	M	A, R	STXM	Catalyst particles	Review of science
2012BW&	E	A	STXM	nanoporous pyrobitumen residue	
2012BW&b	M	A	RSoXS	Multi-ferroics	O K-edge X-ray magnetic scattering
2012C	M	A	STXM	energy materials	thesis
2012CA	M	A	STXM	P3HT, P61BM organic photovoltaics	
2012CB	M	A	STXM	Ghz magnetic susceptibility	Sub-micron mapping of
2012CB&a	E, M	A	STXM	Geobacter – external magnetite	XMCD
2012CB&b	E	A	STXM	microbialite cyanobacterium fossil	
2012CC&a	M	R	RSoXS	Organic films	Polarized X-ray scattering (SAXS dichroism)
2012CC&b	M	A	STXM	Polymer cement	
2012CC&c	M	A	SPEM	TiN/Si buried interface	
2012CC&d	B	A	TXM	Vaccina-virus infected cells	tomography
2012CF&	M, I	I	STXM		10 nm resolution
2012CI&	M	A	STXM	Cr(VI) reduction by aerobic bacteria	
2012CJ&	M	A	XPEEM	nanocircuits	Defect imagng
2012CK	M	A	STXM		nanomagnetism
2012CKB	M	A	STXM	permalloy	sub-micron magnetization dynamics
2012CL&	B	A	TXM	Olfactory receptors	

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2012CM&	M	A	XPEEM	multiferroic	
2012CP&	I	I	CDI		CDI and holography (SiN window as ref.)
2012CP&b	E	A	XPEEM	Cu, Xanthate adsorption on pyrite	
2012CW&	M	A	SPEM	Graphene/Au/SiOx	
2012CZ&	M	A	STXM	ternary MEH-PPV:porphyrin:PCBM PV	
2012DC&	M	T	XPEEM		Cryo PEEM-2 aberration corrected
2012FF	M	A,R	TXM		magnetic dynamics
2012FS&	M	A	STXM	Co nanoconstrictions	Magnetic imaging, magnetostriction
2012FS&b	M	A	XPEEM	magnetic stripes on Pd(11N) terrace	
2012FS&c	M	A	XPEEM	Antiferromagnetic/Ferromagnetic Nanostructures	Spin flop to spin alignment transition
2012FTG	M	A	XPEEM	LaFeO3	Antiferromagnetic domains
2012FZ&	M	A	XPEEM	(6 x 1) NiO Surface Oxide on Rh(111)	
2012G	E, B	R	XPEEM	Carbonate biominerals	Biominalization; PIC
2012GB&	M	A	TXM	TiO2	Spectroscopy & dichroism
2012GH&	M	A	TXM	spin valves	
2012GK&	B	R	TXM		Sub-cellular imaging
2012GK&	E, B	R	XPEEM	Amorphous Calcium carbonate	Phase transitions
2012GK&b	B	A	TXM		Sub-cellular imaging
2012GK&c	M	A	XPEEM	O / graphene / Ir(111)	
2012GK&d	M	A	XPEEM	O / Ag	
2012GLO	M	A	XPEEM	AISI 4340 steel	transformed shear bands
2012GM&	M	A	XPEEM	ordered arrays of nanoparticles	
2012GP&	M	A	STXM	Metal-metal hip joints	Chemical speciation of particles
2012H	M, E, B	R	TXM, STXM, SPEM, XPEEM	many	Review of all soft X-ray techniques & many applications
2012HA&	M	R	XPEEM	multiferroics	
2012HB&	M	A	XPEEM	mangetites	
2012HC&a	M	A	STXM	PTB7:PC ₇₁ BM solar cells	Domain composition
2012HC&b	E	A	STXM	Polymer cement	
2012HK&	E	R	STXM	Natural organics, ferric iron interact	
2012HK&b	B	A	TXM	Malaria parasite, <i>P. falciparum</i>	
2012HL&	B, M	A	XPEEM STXM	Collagen; HSA/PS-PMMA; HSA / PS-PMMA-b-PAA, HSA/PS-PLA; HSA / PIPA-SAN&polyurethane; Ubq/PEO-ppAA	Protein-polymer interactions
2012HP&	M	A, R	XPEEM		Electric field control of magnetism
2012HR&a	E	A	STXM		distinct Fe pool is S. Pacific

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2012HR&b	M	A	XPEEM	Half-metallic La _{0.7} Sr _{0.3} MnO ₃	
2012HR&c	M	I	STXM		OMNY tomography instrument
2012HS&a	M	A	STXM	Colloidal photonic crystals	tomography
2012HS&b	E	A	STXM	aerosols	
2012HS&c	M	A	STXM	water	Size of hydrophobic solvation
2012HV&c	M	A	SPEM	Plasma modified pentacene	Organic spin valve
2012HW&	M	A	XPEEM	nanowires	
2012I	M	A	XPEEM	H ₂ , O ₂ react with VO _x	Pattern formation
2012IA&	M	I	XPEEM	Diamond coated samples	10 nm resolution
2012IB&	M	A	TXM	permalloy magnetic nanowires	
2012IF&	M	A	TXM	magnetic vortex states in nanodisks	symmetry breaking
2012JC&	B	A	XPEEM	Cu, Mn in prion plaques	
2012JL&	M	A	TXM	magnetic vortex networks	logic functiond
2012JS&a	M	A	STXM	Nanocrystalline Cr ³⁺ -Doped BaTiO ₃	Phase transitions
2012JS&b	M	A	XPEEM	Fe ₂ MnGa	Shape memory magnetism
2012K	B	A	STXM	MV-1 Magnetotactic bacteria	XMCD improvements, reversal
2012KB&	E	A	STXM	iron (hydr)oxides in a forest soil	
2012KG&	M	A	XPEEM	Diamond like films	
2012KL&a	E	A	STXM	MV-1 magnetotactic bacteria	
2012KM&a	M	A	XPEEM	Graphene growth on Cu	
2012KM&b	M	A	XPEEM	Bi ₅ Ti ₃ Fe _{0.7} Co _{0.3} O ₁₅ thin films,	Fewrroelectgric, magnetism
2012KO&	M	T	XPEEM	instrument	Pump probe dynamics
2012KP	M	A	XPEEM	Ga,Fe,N	Heterogeneous magnetism
2012KY&	E	A	STXM	simulated early atmospheres	particulate formation
2012L	M	A	STXM	PMMA, stearic acid	Lithography, nanofluidics, dosimetry
2012LA&	E	A	STXM	organic aerosols	
2012LD&	E	A	STXM	Cu nanoparticles, river biofilms	
2012LE&	M	A	STXM		35 nm island; magnetic switching
2012LG&	M	A	STXM	organic PV	morphology
2012LG&	M	A	XPEEM	La _{0.67} Sr _{0.33} MnO ₃ / NdGaO ₃ (001).	Transverse magnetic domains
2012LH&a	B, M	A	XPEEM	HSA PS-PMMA-b-PAA	Protein-polymer interactions
2012LH&b	M, I	I	STXM	PMMA	Detector efficiency & dosimetry
2012LHa	M	A	STXM	Stearic acid melting	Heatingin STXM
2012LHb	M	A	STXM	PMMA, PMGI layers	Nanofluidic lithography
2012LHc	M	A	STXM	carbon	Contamination rates for EUV
2012LHd	M, B	A	XPEEM, STXM	Apb, sub-6 on PS/PM-b-PAA	Review and new system
2012LJ&	M	A	XPEEM	Concave nanomagnets	

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2012LK&a	M	A	XPEEM		Magnetic vectometry
2012LK&b	M	A	SPEM	In, GaN	
2012LM&a	E, B	A	XPEEM	collagen	Xanes anisotropy
2012LM&b	E	A	STXM	sea salt & org. acid reactions	
2012LS&	E	A	STXM	organonitrates in aerosol	
2012LS&	M	A	XPEEM	H ₂ + O ₂ on Rh(111)/Ni	spatial & rate oscillations
2012LW&	M	A	STXM	Artificial spin-ice honeycombs	Magnetic monopole defects
2012MB&	M	A	TXM	magnetic nanodisks	
2012MF&a	B	A,R	TXM	cells	Phenotype identification
2012MF&b	E	A	STXM	Fe in aerosols from Asia	
2012ML	M	A	XPEEM		Angle resolved XPEEM
2012ML&a	B	A,R	TXM		Sub-cellular imaging
2012ML&b	B	A	TXM	Human Amnion Epithelial Cells	Cystic fibrosis regulation
2012ML&c	M	A	XPEEM	O adsorb on graphene / SiC	
2012MR&	M	A	XPEEM	ML growth	Atom exchange
2012MS&	M	A	XPEEM	Fe oxide films	oxidation
2012MS&b	M	A	XPEEM	Magnetite ML	magnetism
2012MU	M	A	STXM	n-alkane epitaxy films	Substrate T effect
2012MW&	M	A	TXM	ultrathin Co Ni multilayer films	
2012MZ&	M	A	STXM	TiO ₂ nanocrystals on C-film	
2012NN&	M	A	STXM	multiferroic Bi ₂ FeCrO ₆ nanostructures	Anti-FM and FM
2012NY	M	A	XPEEM	Cs/Ni/Cu(001)	MCD laser
2012O	M	I	STXM		UVSOR BL4U instrument
2012OG	E, B	A	XPEEM	Pinctada margaritifera. mollusks	Biom mineralization; PIC
2012OH&a	M	A	XPEEM	18 nm Fe nanocubes	T-dependent magnetism
2012OH&b	E	A	STXM	chondrule	Wild 2 comet
2012OK&	E, B	A	XPEEM	Pinctada margaritifera. mollusks	T,P effects on ultrastructure
2012OS&	B	I	TXM	Incoherent image formation	Modeling to improve resolution
2012PC&a	M	A	TXM	epitaxial Fe antidot arrays	
2012PC&b	M	A	XPEEM	Magnetostrictive epitaxial thin film	V-driven, non-volatile, magnetism control
2012PF&	B	A	STXM	Aspergillus nidulans hyphae	Confirm SERS
2012PK&	B	A	TXM		Image alignment protocols
2012PO&	E	A	STXM	BoFeN1 anaerobic Fe eating bacteria	Green rust
2012PR&	M	A	STXM/SPM	PS-P3HT, Cr/Ti; CoPt ML	Combined nano-XAS,AFM
2012PS&a	B	A	STXM	Ag np in sea urchin	Nanomaterials safety
2012PS&b	M	A	XPEEM	Ni/Cu(001) Films	Perpendicular magnetic anisotropy
2012PW&	E	A	STXM	Amazon aerosols	

code	materials	type	technique	species	Subject / Comments
2012PZ&	M	A	XPEEM	ferroelectric	dichroism
2012RB&	M	A	STXM	Semicond & metal SWCNT	Linear dichroism; C 1s pi* fine structure
2012RH&	M	A	STXM	organics in soil	
2012SB&	M	A	STXM	Ionomer mapping in PEM-FC	
2012SC&	M	A	STXM		Magnetic vortex dynamics
2012SE&	M	A	STXM	PTB ₇ :PC ₇₁ BM solar cells	Oligomeric compatibilizers
2012SG&	B	I	TXM	Algae, tomo of cell	Bessy full field TXM, spectroscopy
2012SH&	M	A	XPEEM	Fe nanocubes magnetic hysteresis	Spin-polarized, Bessy, variable T, H
2012SH&b	M	A	XPEEM	Magnetic Fe, Co adatoms on Bi ₂ Te ₃	
2012SK&	M	A	TXM	CO on Cu core-shell nanoparticles	DRIFTS
2012SL&a	E	A	STXM	Organics in soil	
2012SL&b	E	A	STXM	Organics in soil	
2012SS&	M	A	SPEM	SnO ₂ electronic noses	Alcohol beverage discrimination
2012SV&	M	A	STXM	organic PV	
2012SW&a	M	A	STXM	PBTTT solar cells	Domain mapping
2012SW&b	M	A	SPEM	Graphene, Bi ₂ Te ₂	Nano-ESCA
2012SY&	M	A	SPEM	Co _x Cu _{1-x} O ₂	PES in SPEM
2012T	M	A	STXM	polymers	thesis
2012TL&	M	A	XPEEM	CoO/MgO/Fe/Ag(001)	Exchange bias
2012VA&	M	A	TXM	Co dot, antidot	magnetization reversal
2012VM&	M	I	STXM	magnetic materials	luminescence detection
2012VN&	M	A	TXM	triangular structures	vortex dynamics
2012WA	M	R	STXM	Organic materials	Review & overview
2012WB&	M	A	STXM	spin vortex pairs	coupling
2012WC&	M	A	XPEEM	Soft magnets	Anti-ferro-ferro coupling
2012WCH	M	A	XPEEM	Pentacene (Pn) , Co/Pn, Pn/Co	
2012WH&	M	A	STXM		Magnetic vortex dynamics
2012WHM	M	R	STXM	Zone plates	Hard X-ray focus; S:N, contrast, resolution
2012WM&	M	I	XPEEM		1-2 kV polarization analyser
2012WMR	M	R	STXM	F8BT, PFB	Organic semiconductors & solar cells; bulk-surface
2012WS&	M	A	STXM		Magnetic vortex dynamics
2012WSK	M	A	XPEEM	titanium alloy (Ti-6Al-4V)	dimpling
2012WTM	M	A	XPEEM	pentacene	
2012WW&a	M	A	STXM	ZnS/ZnO nano-heterostructure	
2012WW&b	M	A	STXM		Gaussian noise filter
2012WW&c	M	A	XPEEM	Organic SC-ferromagnet Heterojunction	

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2012YC&	M	A	RSoXS		Organic PV materials
2012YC&	M	A	STXM	correlating STXM & resonant SoXS	
2012YS&	E	A	STXM	uranium transport, NOM	multi-scale
2012YZ&	M	A	STXM	PDPP3T PV	
2012ZA&	E	A	STXM	NH4SO4, adipic acid particles	Water uptake in aerosol particles
2012ZMA	M	A	XPEEM	SiOx / InAs(111)B; GaP(111)	Spin resolved, band mapping
2012ZP&	M	A	STXM	Spin-cross over Fe adsorbate	
2012ZS&	E	A	STXM	carbonaceous aerosols	
2012ZW&	M	A	STXM	TiO2-decorated 2-wall CNT	
2013A	E	A	STXM	aerosols	thesis
2013AL&	M	A	STXM	zeolites	tomography
2013AM&	E	A	STXM	sea-spray aerosol	
2013AOL	M	A	XPEEM	AA 6061 aluminum	aging, strain rates
2013AP&	M	A	XPEEM	Graphene	
2013AR&a	M	I	SEM		Soleil nano-ARPES interferometry
2013AR&b	M	I	SEM		Soleil nano-ARPES performance
2013AS&	E	A	STXM	aerosol particles	WACS210
2013AT&	M	A	STXM	H-ZSM-5 catalysts	
2013BA&a	M	A	STXM		Energy materials applications, in situ
2013BA&b	M	A	SPEM	Co pNi YSZ Mn	SOFC
2013BB&a	E	A	STXM		Fe(II)/Fe(III) determination
2013BB&b	M	A	STXM	fullerene percolation	bulk heterojunction solar cells
2013BE&	M	A	STXM	magnetization dynamics	spin torque magnetic switching
2013BG&a	M	T	STXM	polypyrrole	In situ echem-cell
2013BG&b	M	A	STXM	Au-Mn electrodeposition	
2013BG&c	M	A	STXM	I.L.-Based Nano-PEMFC Half-Cells	Fe interconnect corrosion
2013BL&	M	A	STXM	Graphene (1L to 20L)	Thickness determination
2013BM&	M	A	STXM	LiFePO4	Intercalation process
2013BN&	M	A	STXM	Eu-Fe thin films	magnetism
2013BR&a	E	A	STXM	Mg in foraminiferal calcite	Daily calcite growth in fossils
2013BR&c	E	A	STXM	SiO2 glass	Fe alteration
2013BR&d	M	A	XPEEM	ferroelectrics	
2013BRb	E	A	STXM	B in foraminiferal calcite	Daily calcite growth in fossils
2013BS&a	M	A	STXM	PEM-FC	Spectro-tomography
2013BS&b	M	A	STXM		Magnetic domain wall velocities
2013BW&	M	A	STXM	CNT	Disorder , tube-tube interactions
2013BY&	M	I	LARIAT	combinatorial surface studies, LARIAT	high throughput TEY-NEXAFS imaging

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2013CA&a	M	A	STXM	Conjugated Polythiophene-S,S-dioxides,	
2013CA&b	E	A	STXM	sea spray aerosol	
2013CB&a	E	A	STXM	Bacterial fossils	phosphorogenesis
2013CB&b	E	A	STXM	cyanobacteria	calcification
2013CD&	M	A	STXM	ultra-soft CoZrTa/SiO ₂ /CoZrTa trilayer	inductors
2013CE&	M	A	STXM	Li battery material	Charge state
2013CF&	M	A	RSoXS	correlated electron insulator NdNiO ₃	Magnetic melting
2013CH&a	E	A	STXM	organic aerosols from burning	
2013CH&b	M	A	XPEEM	MnTiO ₃	magnetism
2013CL&	M	A	STXM	PTB ₇ :PC ₇₁ BM solar cells	Domain composition
2013CL&a	M	A	SPEM	ZnO	UV sensor
2013CL&b	M	A	SPEM	Au/graphene	SERS substrate
2013CL&c	M	A	STXM	PTB ₇ :PC ₇₁ BM PV	domain composition & size
2013CL&d	E	A	STXM	ferrihydrite	
2013CM&	M	R	STXM	cements	
2013CP&	M	A	XPEEM	Magnetistrictive device	Current control of magnetism reversal
2013DC&a	M	A	STXM	Th, Np, Pu (CN) ₆ Fe(III) compounds	
2013DC&b	M	A	STXM	Li _{1.2} Ni _{0.2} Mn _{0.6} O ₂ cathode	Li battery
2013EJ&	M	I	XPEEM		Siam photon lab
2013FD&	M	A	XPEEM	Spin ice	
2013FF&	E	A	STXM	Mn compounds	Effect on membrane stability
2013FHR	E	A	STXM	Cr(III)-Doped In ₂ O ₃ Nanocrystals	
2013FI&	M	A	TXM		magnetic imaging
2013FP	M	I	TXM	Heritage (MnOx, MnSO ₄ pigments	Proper spectroscopy (tender X-ray) ID21
2013FS&	M	R	RSoXS	Resonant soft X-ray scattering	Review all applications
2013FU&	M	A	STXM	nanoparticulate organic PV	
2013GB&	M	A	XPEEM	O / Ag(111)	
2013GFP	M, B	A	STXM	PVA-(PMMA-co-N-IPA) microgels	Thermoresponsive drug delivery
2013GK&	M	A	STXM	Organic solar cells	Multi-phase formation
2013GK&a	M	A	STXM	Open, using ionic liquids	In situ echem cell description
2013GK&b	M	I	STXM		8-detector XRF system Twinmic
2013GK&c	B	A,R	STXM		Life science applications
2013GL&	M	A	RSoXS	Organic solar cells	3 % efficient
2013GL&	M	A	XPEEM	Surface reactions	Pulse electric transport
2013GM&	B	A	STXM	Magnetic particles	Nanomaterials safety
2013GN&	M	A	STXM	di-Nb complexes - spectroscopy	NbL (2370) & N L (2465) on ALS 5.3.2.1
2013GR&a	E	A	STXM	kerogens	e-beam radiation damage – interstellar effect

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2013GR&b	M	I	TXM	Cells, TiO ₂	Cryo-tomo, spectromicroscopy
2013GS&	E	A	STXM	Organo globules in meteorites	
2013GY&	M	A	XPEEM	Ceria / W(001)	Electron emitters
2013H	E	A	STXM	seafloor microbe-mineral interactions	thesis
2013HB&a	E	A	STXM	ice crystals from clouds	Isdac 2008
2013HB&b	M	A	STXM	P3HT:PCBM nanoparticles PV	
2013HD&	B	A	TXM	Malaria parasite, <i>P. falciparum</i>	Mechanism of erythrocyte invasion
2013HG&	E	A	STXM	Gibbsite	Litter degradation
2013HH&	M	A	STXM	Magnetic dopants in semiconductors	
2013HJ&	M	A	RSoXS	Ba _{0.5} Sr _{1.5} Zn ₂ Fe ₁₂ O ₂₂ hexaferrite	Magnetic resonant diffraction
2013HK&	M	A	TXM	Calcium Sulfoaluminate	cement
2013HV&	M	A	TXM	magnonic crystals	
2013HW&	M	A	XPEEM		Magnetic wall depinning
2013IL&	B	A	TXM	Chromatin mapping	
2013JC&	M, E	A	STXM	Al-tobermorite	Understanding Roman sea cement
2013JD&	M	A	STXM	Graphene oxide	Domain mapping
2013JG&	B	A	XPEEM	Prion plaques – low Cu , High Mn	
2013JL&	M	A	TXM	correction to earlier paper	
2013JW&	M	A	XPEEM	Soft magnets	Anti-ferro-ferro coupling
2013K	E	A	STXM	soil organic material	thesis
2013KB&	M	A	XPEEM	Graphene / Cu	growth
2013KBH	B	A	STXM	MV-1 magnetotactic bacteria	Magnetic reversal anomaly
2013KG&	M	A	TXM	magnetic nanowires	
2013KL&	B	A	STXM	Methyl mercury	
2013KM&	M	A	STXM	VO ₂	thermal structural (insulator-metal) transition
2013KM&	M, B, E	A	XPEEM	vaterite	Intertwined xll structures
2013KN&	M, I	A	STXM	Humidity cell	
2013La	M	A	STXM	PAN	Radiation damage, G-values
2013Lb	E	A	STXM	bacterial EPS & goethite	thesis
2013LB&	E	A	STXM	Fe biomineralization → fossils	review
2013LC&	M	A	SPEM	Cr / InN	
2013LC&b	M	A	SPEM	SiO _x	2D protrusion layers
2013LE&	E	A	STXM	goethite - EPS	S-rich aggregates
2013LF&	B, E	A	STXM	ferric oxyhydroxide np aggregates	Iron-reducing bacteria
2013LG&	M	A	STXM	np on CNT	
2013LG&b	M	A	STXM	organic PV	morphology
2013LH	M	A	STXM	PMMA / PMGI	Nanofluidic channel

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2013LH&	M	A	STXM	PMMA	28 nm record direct write optical
2013LL&	M	A	SPEM	Zwitterionic Polysquaraine	
2013LS&	M	A	STXM	PEM-FC	NSTF anode – reversal & SU/SD effects
2013LW&a	M	A	STXM	Diketopyrrolopyrrole based PV	
2013LW&b	M	A	XPEEM	Graphene	rippling
2013MA	M	R	STXN, RSoXS	Polymer semiconductor films	
2013MB&a	M	A	STXM	Silicate glass - iron	
2013MB&b	E	A	STXM	Fe, siderite	Effect on archaeological matter
2013MC&a	M	I	STXM	Au-Mn electrodeposition	
2013MC&b	E	A	STXM	Carbon sequestration in concrete	
2013MC&c	M	A	STXM	Solid oxide fuel cell	operando
2013MD&	M	A	STXM	Ferrous archaeology artefacts	corrosion
2013MF&	E	A	STXM	cloud condensation nuclei	
2013MH&	M	A	XPEEM	La 0.7 Ca 0.3 MnO 3 films	Giant, reversible extrinsic magnetocaloric effect
2013MI&	M	A	STXM		Self absorption correction for XRF
2013MK&a	M	A	STXM	permalloy	Vortex core switching
2013MK&b	M	A	STXM	MO ₄ ²⁻ (Cr, Mo, W) MO ₄ ⁻ (Mn, Tc, Re)	M-O bonding; O 1s spectroscopy in STXm
2013MK&c	M	A	STXM	MCp ₂ Cl ₂ (M=Ti, Zr, Hf)	M-C bonding
2013MKC	E	A	STXM	interstellar formaldehyde	
2013ML&	M	A	XPEEM	Fe on Pd-O/W(110)	Magnetic nanowire
2013MM&	M	I	STXM-ptycho	ptychography	Random phase illumination
2013MO&	E	A	STXM	Cd in Geobacter	
2013MR&	E	A	STXM	carbonaceous aerosols	California
2013MT&	M	A	STXM	organic PV	domain purity
2013MV&	M	A	XPEEM	La _{2/3} Sr _{1/3} MnO ₃ / La _{2/3} Sr _{1/3} CoO ₃	Magnetic coupling
2013MY&	M	A	STXM	organic PV	thermal annealing; additives
2013NB&	M	A	STXM	FeOx np on CNT	
2013ND&	B	A	STXM		Nanomaterials safety
2013NH&	M	A	TXM		magnetic dynamics
2013NP&	B	A	CDI	Hydrated cells	
2013NT	M	I	XPEEM		Siam photon lab
2013NT&	M	A	TXM	Pt-Co nanocatalysts	electrochemical stability
2013OA&a	M	I	STXM		UVSOR STXM
2013OA&b	M	I	STXM		UVSOR STXM beamline
2013OB&	B	A	XPEEM	Nacre structure	
2013OM&	B	A	XPEEM	Nacre structure	
2013P	E	A	STXM	biogenic aerosols	thesis

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2013PB&a	E	A	STXM	hydrothermal oil	mid-ocean ridge
2013PB&b	M	A	STXM	lab based sea spray aerosol	
2013PG&	B	A	STXM	Asbestos & Fe in lung tissue	
2013PG&	B	A	STXM	Cerebral Fluorodeoxy D-Glucose	Metabolism imaged by F XRF
2013PM&	B	A	TXM		Sub-cellular imaging
2013PM&b	M	A	STXM	Vanadium Bisimide	Compare stxm, xlog, nmr
2013PV&	B	A	STXM	Metals in buckwheat	Quantitative (wt%)
2013RB&	E	A	STXM	foraminifera	tomography
2013RE&	B	A	STXM	<i>Noccaea praecox (Brassicaceae)</i>	metal hyperaccumulation
2013RG	M	A	STXM	Nuclear waste glass	Effect of iron
2013RM&	M	A	STXM	Kaolinite, metallic iron	
2013RSF	M	A	STXM	Ag-TCNQ salts	Role of solvent in crystallization mechanism
2013SA	M	A	STXM	odd vs. even long chain alkanes	
2013SA&	E	A	STXM	U(VI)	Microbial reduction
2013SB&	M	A	STXM	PEM-FC	Overview of STXM to fuel cell materials
2013SC&a	B	A,R	TXM		Cell imaging; correlative TXM, CLSM
2013SC&b	M	A	SPEM	transparent graphene on GaN	
2013SC&b	M	A	STXM	graphene/GaN	
2013SCH	E	A, R	STXM		Organics in soil, metal redox coupling
2013SF&	M	A	STXM	Co nm	domain wall modification by Ga ⁺ irradiation.
2013SG&	E	A	STXM	Wild 2 comet	Fe valence
2013SH&a	M	A	STXM	CCD	verifying sub-pixel detection
2013SH&b	M	I	STXM		CCD with high spatial res. For RIXS
2013SL&	M	A	SPEM	Sc on TM surfaces	
2013SM&	M	A	STXM	magnetization dynamics	dynamic domain stabilization
2013SMB	M	A	XPEEM	Pd/W(001)	
2013SR&	M	I	ptycho		Cosmic developments at ALS
2013ST&a	M	A	STXM	Ionomer in cathodes	Inkjet printed electrodes
2013ST&b	M	A	XPEEM	CoxNi1-x/Cu(001)	Surface oxidation
2013ST&c	M	A	STXM	organic PV	
2013SY&	M	A	STXM	TiO2 memresistors	
2013SZ&	E	A	STXM	ferrihydrite-humic acid coprecipitates	
2013TB&	M	A	STXM		Cultural heritage
2013TF&	M	A	XPEEM	Complex oxide micromagnets	
2013TG&a	E	A	STXM	organic aerosols	
2013TG&b	M	A	STXM	organic PV	
2013TK&	M	A	STXM	telephones	

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2013TM	M	A	STXM	photovoltaics	all polymer system
2013TS&	M	A	RSoXS	Effect of fluorination	Organic PV materials
2013TS&	M	A	STXM	fluorinated organic PV	
2013TU&	B	I	TXM	cryo 3D imaging	microscope improvements
2013TZ&	M	A	STXM	Aerospace materials	Synchrotron method overview
2013UH&	M	A	STXM	P3HT:PCBM PV	
2013UU&	M	A	TXM	tapered nanodisks	
2013V	M	R	XPEEM		XMCD, XMLD
2013VDM	E	A	STXM	stromatolites	banded Fe in modern ones
2013VM&	M	A	STXM	Metal oxide crystals	XEOL
2013WB&	M	A	STXM	magnetization dynamics	spin-meron pairs
2013WF&	M	A	TXM	ferromagnetic organic sandwiches	
2013WH&a	M	A	SPEM	alkane thiol SAM	micro-plasma stamp
2013WH&b	M	A	XPEEM		Antiferromagnetism creates out-of-plane M
2013WR&	M	A	XPEEM	Patterned $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$	Magnetic anisotropy
2013WZ&	M	A	STXM	Single sheet graphene – Co_3O_4	
2013XB&	M	A	STXM	CNT – Xray induced C-coatings	
2013YH&	M	A	TXM	vortex core oscillations	
2013YNK	B	A	STXM	quinoa	
2013YT&	M	A	STXM	organic PV	
2013YW&	M	A	RSoXS	PMMA	Derive optical constants
2013YW&	M	A	STXM	organics	C Is index of refraction determination
2013ZM&	M	A	XPEEM		Slow electron reflectivity
2013ZW&a	M	A	STXM	Graphidyne	
2013ZW&b	M	A	STXM	$\text{LiMn}_{0.75}\text{Fe}_{0.25}\text{P}_4$ nanorod graphene	
2013ZW&c	M	A	STXM	chiral magnetic carriers on spin ice	
2013ZW&d	M	A	XPEEM	$\text{Ni}_{80}\text{Fe}_{20}/\text{Co}$ nanowires	Domain motion
2014AA&	M, B	A	STXM	PVP-coated Ag np	Cell culture & in vivo toxicity
2014AB&	M	A	TXM	$\text{Ni}_{80}\text{Fe}_{20}$ contacts	spin valves
2014AC&	M	A	STXM	Cinnamate photoaligners	photoreactions
2014AH&	M	A	STXM	DVB modification	separation media
2014AT&	M	A	STXM	Fluorinated PCPDTBT PV	quantifying charge
2014AV&	M	A	STXM	polymer-fullerene PV	charge transfer efficiency
2014B	M	R	XPEEM	Review, book	PEEM, LEEM
2014BA&a	M	A	SPEM	Co/PPY fuel cell catalysts	Electrochemically prepared
2014BA&b	M	A	STXM	Zeolite H-ZSM-5	
2014BA&c	M	I	STXM		Multi-element SDD

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2014BB&a	M	A	STXM	Electrodeposited Co/CoO	Fuel cell catalysts
2014BB&b	M	A	STXM	Mica, chlorite	Low-T magnetism
2014BB&c	M	A	SPEM	$K_xFe_{2-y}Se_2$	Electronic phase seg.
2014BC&	M	A	STXM	Zeolite catalysts, Al-PO4 binder	
2014BF&	M	A	STXM	polymer:fullerene PV	
2014BF&b	M	A	STXM		StarDust (IR STXM)
2014BG&a	M	A	STXM	MnCuZnO supercapaciter	
2014BG&b	M	A	STXM	Co/PPY fuel cell catalysts	Raman & STXM
2014BG&c	M	A	STXM	MnCuZnO supercapaciter	
2014BG&d	M	A	STXM	Pr ³⁺ and Pr ³⁺ -Yb ³⁺ Co-doped ZnO	luminescence
2014BG&e	M	A I	STXM	Co-Polypyrrole ORR catalyst	In situ echem instrument
2014BJ&	M	A	LARIAT	surface treatment optimization, MOSAIX	80 element curved array TEY-NEXAFS imaging
2014BK&a	B, E	A	STXM	Microbial biofilms on U tailings	
2014BK&b	M	A	SPEM	graphene	nanoscale fnctionalization
2014BM&a	M	A	XPEEM	greigite	In situ vapor-solid synthesis
2014BM&b	M	A	STXM	Phosphated Zeolite H-ZSM-5	
2014BN&	E	A	STXM	ambient & lab-generated aerosols	
2014BP	E	A	STXM	Graphitic carbon	biosignatures
2014BS&	E	A	STXM	Intracellular CaCO ₃ , cyanobacteria	
2014BT&	E	A	STXM	Fe oxyhydroxyide stacks	bacterial produced
2014BW	M	A	STXM	Phosphated H-ZSM-5 Zeolite	
2014BW&	E	A	STXM	stardust	
2014BW&b	M	A	STXM		StarDust (ESRF; STXM)
2014BY&	M	A	SPEM	BiTeI Rashba semiconductor	band bending
2014CB	B, E	R	STXM		Biominerals handbook review
2014CB&	E	A	STXM	Iron phosphates	biomineralization
2014CC	M	A	XPEEM	Organic magnets on Si	
2014CC&a	M	A	XPEEM	Kagome array	Magnetic frustration, variable-T
2014CC&b	M	A	SPEM	graphene	defects by scanning probe litho
2014CC&d	M	A	XPEEM	Co-C60 Interfaces	
2014CD&a	B, E	A	STXM	Pasture soil	Mineral-bio interactions
2014CD&b	B, E	A	STXM		Fe-organic matter association
2014CD&c	B	A, R	TXM	Correlative CLSM and TXM	cells
2014CD&d	B	A	TXM	Adherent cells	Survey of European synchrotron capabilities
2014CGM	M	A	TXM	nano-SiO ₂ additive, Portland cement	
2014CJ&	M	A	STXM	Tridentate N- UO ₂ ²⁺ Complexes	
2014CK&	M	A	XPEEM	Fe/MgO films on GaAs(001	Uniaxial magnetic anisotropy

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2014CR&a	M	A	XPEEM	Cylindrical magnetic nanowires	Bloch points
2014CR&b	B	A	TXM	mice	T-cells are antibacterial
2014CS&	M	A	ptycho	HHG source	Carbon K-edge for ptychography
2014DH&	M	A	STXM	nanoparticulate organic PV	
2014DM&	B	A	XPEEM		O 1s of carbonates
2014DR&	M	A	XPEEM	Cylindrical magnetic nanowires	Bloch-point domain walls
2014DZ&	M	A	SPEM	Au/graphene	SERS substrate
2014EC&a	B	A	STXM	β -amyloid Fe(II)	
2014EC&b	B	A	STXM		redox after Fe(III)- β -amyloid interactions
2014EK&	B	A	STXM	Mouse Leydig cell	Cluster PCA analysis
2014EO&	E	A	STXM	Ni in biogenic & abiogenic ferrihydrite	
2014Fa	M	A,R	TXM		magnetic dynamics
2014Fb	M	A,R	TXM		magnetic dynamics
2014FF&	M	A	RSoXS	YBa ₂ Cu ₃ O _{6.6} .	Femtosecond diffraction
2014FG&	M	A	XPEEM	CO reduction of <i>Pd₇₅Ag₂₅(100) Surfaces</i>	
2014FKO	M	A	SPEM	Graphene transistors	operando
2014FR&	E	A	STXM	artificial versus natural sea aerosols	
2014FS	M	A	XPEEM	quasi free-standing graphene	
2014FS&	M	A	STXM	Dilute magnetic oxides	Charge transfer ferromagnetism
2014FS&b	M	A	STXM		StarDust (APS; STXM)
2014FT&	M	A	RSoXS	La _{1.875} Ba _{0.125} CuO ₄	Melting charge stripes
2014FW&	E	A	STXM	Stardust	
2014G	B, E	R	XPEEM		biomineralization
2014GB&	E	A	STXM	Stardust	
2014GB&b	E	A	STXM	meteorite hydration	
2014GK&	B, E	A	XPEEM	biomineralization	crystal growth by particles from ACC
2014GM&a	M	A	XPEEM	O ₂ /Ag(111)	Desorption kinetics site specific
2014GM&b	M	A	XPEEM	Au on CeO	Water-gas shift catalyst
2014GN&	E	A	STXM	Presolar Supernova Graphite Grain	
2014GP&	M	A	XPEEM	Ceria films	
2014GR	I	A	ptycho	Water window diatom (120 nm)	HORST mobile apparatus (SR, FELS)
2014GS&a	E	A	STXM	Fe in FeBoN1	Wet cell spectro tomography
2014GS&b	E	A	STXM	StarDust	Cometary organic matter
2014GSM	B, M	A	STXM	lignocellulose	bioconversion
2014GZ&	M	A	STXM	CNT, CN-fibers - catalysts	
2014H	E, B	A	STXM	siderophores	
2014HB&a	M	A	STXM	ionomer, carbon-black	carbon corrosion of PEM-FC

code	materials	type	technique	species	Subject / Comments
2014HB&b	M	A	STXM	ionomer, water	in situ studies of PEM-FC
2014HB&c	M	A	TXM		virtual domain walls
2014HB&d	M	A	XPEEM		E-field switching of magnetism
2014HH&	M	A	STXM	polymer - cement composites	STXM combined with u-CT
2014HH&	M	A	STXM	Polymer cement	
2014HM&	M	A	STXM	photovoltaics	influence of F, MWt
2014HT	M	R	STXM, ptycho	MTB XMCD-ptycho; fuel cells	DLSR effect on field
2014HU&	M	A	STXM	P3HT:PCBM nanoparticles PV	polymer MW effect
2014HW&	M	A	STXM	PV	polymer modifiers
2014HY&	M	A	XPEEM	3,4,9,10-perylene-teracarboxylic Dianhydride	Organic Spin-valve
2014IL&	M	A	TXM	asymmetric nanodisks	stochastic vortex formation
2014IO&	B	A	STXM	DNA, Protein in cell nuclei	apoptosis
2014IW&	M	A	STXM	Au/graphene	Plasmonic structure
2014JA&	M	A	SPEM	graphite / Cu	sub-100 nm nano-ARPES
2014JC&	M	A	XPEEM	Fe ₂ TeO ₆	Magneto-electric thin films
2014JE&	B	A, M	ptycho	MEF cell	quantitative phase / amplitudes
2014JG&	M	A	STXM	xylanase	Plant wall lignin modifications
2014JS&	B	A	STXM	<i>Bacillus subtilis</i> , <i>Desulfotomaculum reducens</i> endospores	
2014JV	M	A	XPEEM	C-face SiC & Si-face SiC graphene	
2014K	M	A	STXM	TM oxide resistance switching	thesis
2014KA&a	E	A	STXM	ice nucleating particles	
2014KA&b	M	A	XPEEM	Spin ice	
2014KD&	B	A	STXM	Leaf optical properties	
2014KE&	M	A	STXM	VO ₂	
2014KL&	M	A	XPEEM	Pd-doped FeRh epilayer	T-dependent domain structure asymmetry
2014KV&	B	A	STXM	Metals in leaves	
2014KZ&	E	A	STXM	Sutter's Mill meteorite - diamonds	
2014LA&a	M	A	STXM	organic PV	
2014LA&b	M	A	XPEEM	NiO/Fe/Ag(001)	Antivortex states
2014LB&a	M	A	STXM	perylene	NSTF (nanostructured thin film) electrodes
2014LB&b	M	A	STXM	CNT	Inside damage in CNT
2014LB&c	E	A	STXM	Preservation of biominerals	fossilization
2014LD&	M	A	STXM	Cu-SSZ-13 ammonia selective catalyst	
2014LE&	M	A	STXM	LiFePO ₄ battery cathode	Whole particle conversion
2014LG&	B	A	STXM	Human superoxide dismutase	nmr & STXM

code	materials	type	technique	species	Subject / Comments
2014LL&	M	A	XPEEM	NiCo/(Ni, Co)O	Exchange Bias
2014LL&b	E	A	STXM	Brown carbon	
2014LM	M	A, R	XPEEM		review
2014LMb	M	A	STXM	MANTis	Data processing, NNM
2014LP&	M	A	XPEEM	Memresistor oxide	Electrochemical reduction, multi-filaments
2014LQ&	M	A	STXM	Memresistive oxide	Electrochemical reduction at 3-phase boundary
2014LS&	M	A	SPEM	graphene	layer dependent spectroscopy
2014LT&a	M	A	TXM	Fe/NiO/Fe/CoO/Ag(001)	antiferromagnetic NiO domain walls
2014LT&b	E	A	STXM	microbial iron	deep sea vents
2014LT&c	M	A	XPEEM	Magnetic skyrmion	
2014LT&d	M	A	XPEEM	Fe/Ag(001)	Vortex / antivortex
2014LY&	M	A	STXM	organic PV	MW effects
2014LZM	M	A	XPEEM	Graphene / Ir(111)	
2014MB&	M	A	XPEEM	NiO	XMCD, AFM surface magnetism
2014MBK	M	R	STXM		microbe-mineral interactions
2014MC&	E	A	STXM	carboxylic acids, nitriles, and urea in N ₂ :CH ₄ :CO ices	ice chemistry
2014MI&	B	A	STXM	Metals in intact cells	Quantitative XRF mapping (abs. corrected)
2014MI&	B	A	STXM	Single cells	
2014MK&a	M	A	STXM	actinocenes	covalency
2014MK&b	E	A	STXM	biochar	
2014MK&c	M	A	XPEEM	O/Ag(111)	
2014ML&a	M	A	XPEEM	Kagome spin ice	
2014ML&b	B, E	A	STXM	Green rust formation	nitrate-dependent iron oxidation
2014ML&c	M	A	STXM	Fuel cell MEA	FIB destroys ionomer
2014ML&d	M	A	STXM	crystalline low bandgap PV	
2014MM&a	M	A	XPEEM	Silicene in Si/ Ag(111)	
2014MM&b	M	A	STXM	Magnetite → maghemite oxidation	
2014MP&a	M	A	XPEEM	Fe/ZnSe(001)	
2014MP&b	M	A	XPEEM	Graphene / Re(0001)	
2014MR&a	B, E, M	A	XPEEM	aragonite	dichroism
2014MR&b	E	A	STXM	α-Fe ₂ O ₃	Echem biomineralization by Li
2014MT&	M	A	STXM	fullerene based PV	phase segregation
2014MZ&a	M	A, R	XPEEM	Graphene/ Ir(001), Au intercalation	
2014MZ&b	E	A	STXM	Ferrihydrite-Humic Acid precipitates	
2014MZ&c	E	A	STXM	pyrite-bacteria interface	bioleaching mechanism
2014NK&	M	A	STXM	graphene-oxide	resistive random access memory

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2014NK&	M	A	TXM		thermodynamics
2014NV&	B	A	STXM	Spider silk	
2014NW&	M	A	XPEEM	Graphene nanoribbons	
2014OB&	B	A	XPEEM	nacre	growth mechanisms
2014OH&	M	A	XPEEM	Graphen/alumina nanosheets	
2014OI&a	M	A	STXM	Nd-Fe-B nanocrystalline magnets	Magnetic hysteresis
2014OI&b	M	A	STXM		Magnetic dipolar interactions
2014OS	B, E	R	STXM		3D chemical mapping; STXM tomo
2014PB&	B	A	STXM	PLGA nanoparticles	SR-IR & STXM-XRF
2014PB&ab	M	A	XPEEM	Fe/ GaAs	Flux controlled domains
2014PC&	E	A	STXM	Uranyl complexes	
2014PG&	B	A	STXM	Ca microdeposits in cells	Hard (ESRF) & soft (Twinmic) X-ray
2014PH&	E	A	STXM	stardust	
2014PL&	B	A	STXM	jugular truncular malformations	
2014PM&	M	A	XPEEM	La _{0.67} Sr _{0.33} MnO ₃	Surface magnetism
2014PO&	B	A	STXM	BODIPY indacene	drug carrier Skin penetration
2014RE&	M	A	XPEEM	GaN	Strain at N 1s edge
2014RL&	E, B	A	STXM	Delftia	Antimicrobial resistance
2014RM&	M	A	XPEEM	BaTiO ₃	Domain switching by low current
2014RZ&	M	A	STXM	pentacene OFETS	charge trapping visualized
2014SA&	M	A	STXM	Al craters	StarDust (STXM)
2014SC&a	M	A	STXM	polymer PV	
2014SCB	B	A	STXM	Membrane vesicles	
2014SD&	M	A	STXM	Graphene interfaces	
2014SD&	M	A	SPEM	Rb _x Fe _{2-y} Se	annealing
2014SE&	M	A	STXM	LiFePO ₄ LiB particles	TEM-EELS vs. STXM
2014SH&	M	A	STXM	Carbon-Coated Li ₄ Ti ₅ O ₁₂	Li ion battery
2014SK&	M	A	TXM	CoFeB	spin-wave excitations
2014SL&a	M	A	STXM		StarDust (STXM-XRF)
2014SL&b	M	A	STXM	shikimic acid ozonolysis	In situ study
2014SM&	M	I, R	ptycho		review - bridging atomic and molecular
2014SM&b	M	A	STXM	ionic liquids	radiation damage effects
2014SM&c	M	A	TXM	roll up magnetic sturctures	
2014SN&	M	I	SPEM		ambient pressure SPEM BL11.0.2
2014SO&	M	A	SPEM	LaO _{1-x} F _x BiSe ₂ (x=0.18)	
2014SS&a	M	I	STXM		3D by through focal series
2014SS&b	M	A	TXM	chiral domain walls	

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2014ST&	M	A	ptycho	LiFePO ₄	Li battery characterization; 3 nm resolution
2014SW&a	B	A	STXM	Insect eyes	Damage enhanced contrast
2014SW&b	M	A	STXM	ZnO nano	d ⁰ magnetism, XEOL
2014SW&b	M	A	STXM		StarDust (STXM) – grain orientation
2014SW&c	M	A	STXM	Styrene-co-DVB/SiO ₂	Radioactive sorbent efficiency
2014SW&c	M	A	STXM	ZnO nanostructures	d ⁰ magnetism
2014SY&	M	A	ptycho	LiFePO ₄	
2014SZ&	M	A	STXM	protein-based polymer blends	Correlative with FTIR
2014SZ&b	B, E	A	STXM	BoFeN1 cell-(iron)mineral aggregates	STXM tomo
2014SZ&b	B, E	A	STXM	BoFeN1 aggregates	wet tomo
2014TC&a	M	A	STXM		Bulk heterojunction solar cells
2014TC&b	M	A	XPEEM	O/Au catalysis of olefin epoxidation	
2014TGM	M	R	ptycho		
2014TI&	M	I	STXM	biofilm, NaCl	attocube based mobile STXM
2014TSF	M	A	STXM	PVA membranes	radiolysis type damage in STXM
2014TY&	M	A	STXM	organic PV	
2014UN	E	A	STXM	C- particles of asteroid Itokawa	Compare to STEM
2014UN&	E	A	STXM	Hayabusa comet carbonaceous phase	
2014VA&	M	A	STXM	Zeolite H-ZSM-5	Phosphatation
2014VC&	M	A	STXM	Al phosphates	catalyst binders
2014VD&	M	A	STXM	Co(CO)(3)NO	autocatalysis
2014VDM	E	A	STXM	stromatolites	Microbiogenesis forms laminae
2014VK&	M	A	XPEEM	Co intercalation into graphene/Ir(111)	
2014VM&	M	A	STXM	Steamed Phosphated Zeolite H-ZSM-5	Hexane cracking catalyst
2014VR&	B	A	STXM	Nanoparticles in human skin	
2014VW	M	A	STXM	Zeolite H-ZSM-5	
2014W	M	A	STXM		Kramers-Kronig calculation
2014WA&	M	I	STXM	Ni nanoparticles, β-keto ester	In situ, chiral modification
2014WC&	M	A	XPEEM	Fe ₂ TeO ₆	Magnetolectric effect
2014WH&a	M	A	XPEEM	Ultrathin antiferromagnets	Magneto-elastic effects
2014WH&b	M	A	XPEEM	TiO ₂ / SrTiO ₃	
2014WK&	M	A	XPEEM		magnetic vortex imaging dynamics
2014WL&	M	A	STXM	U ₃ O ₈	spectroscopy
2014WM&a	M	A	STXM	8 uranium complexes	spectroscopy
2014WM&b	M	A	STXM	Percival detector	Fluorescence mapper
2014WO&	E	A	STXM	org-Cl, org-NO ₃ - aerosols	
2014WS&	E	A	STXM	stardust	interstellar grains

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2014WT&	M	A	SPEM	ZnO nanowire	piezoelectric potential
2014WW&	M	A	STXM	ZnO/CdS Core/shell Nanowire	luminescence
2014XJ&	M	A	XPEEM	Al - graphene on 6H-SiC(0001).	
2014YH&a	M	A	STXM	NaCl in cements	
2014YH&b	M	A	XPEEM	manganite	magnetism
2014YL&	E	A	STXM	Cu in mining soil	Multi-technique comparison
2014YO&	B	A	STXM	Dexamethasone	Skin penetration
2014YT&	E	A	STXM	Synthetic meteorite analogs	FIB damage
2014YT&	M	A	STXM	Hayabusa carbonaceous meteor	
2014ZG&	M	A	STXM	Benzodithiophene PV	
2014ZH&	B, E	A	STXM	MV1 magnetotactic bacteria	MTB NS vs. SS ; biomineraization
2014ZH&b	M	A	STXM	LiNi _{0.5} Mn _{1.5} O ₄ cathode	
2014ZH&c	M	A	STXM	Fe-activated graphene	
2014ZJ	M	A	XPEEM	PTCDA on Sn/Si(111)-2√3 x 2√3.	
2014ZO&	M	A	STXM	NaTiOx nanorods	linear dichroism (2D) - O 1s
2014ZW&	M	A	STXM	Water in nano-bubbles	
2014ZWS	M	A	STXM	Nanoplatelet Ni/Graphene	
2014ZZ&	M, R	A	STXM		Energy materials, C, Si based
2015AA&	E	A	STXM	Amazon Tall Tower Observatory	
2015AB&	E	A	STXM	Chondrite meteorite	N/C ratio
2015AG&	M	A	STXM	periodically strained graphene	
2015AP&	M	A	STXM	Al co-ordination complexes	
2015BA&	M	A	STXM	Zn-air batteries	
2015BB&a	M	A	XPEEM	FeRh	
2015BB&b	E	A	STXM	sporopollenin	Thermal degradation - fossilization
2015BB&c	M	A	STXM	Mn based ORR catalysts	aging
2015BB&d	M	A	STXM	Mn/polypyrrole nanocomposites	
2015BB&e	M	A	STXM	Mn-Co/polypyrrole	In situ electrodeposition
2015BBG	M	A	STXM	Mn-Oxide/Polypyrrole Composites	ORR catalysts
2015BK&	E	A	STXM	B in foraminiferal calcite	
2015BQ&	M	A	TXM	Buried topological defects	
2015BS&	M, B	A	LARIAT	snakeskin surface lipid lubricant	mm scale dichroic mapping, TEY-NEXAFS
2015BT&a	M	A	STXM	Synthetic C-S-H & C 3S	Hydration Products
2015BT&b	M	A	STXM, ptycho	cement	ptychography
2015BW	M, R	A	STXM	Zeolite catalysts	
2015BW&a	E	A	STXM	Awrosol particles	
2015BW&b	E	A	STXM	In situ liquid phase separation	

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2015C	M	R	XPEEM	Organic thin films / metals	
2015CB&	B, E	A	STXM	Ca-phosphate biominerals	
2015CD&d	M	A	TXM		Correlative TXM, cryo-fluorescence
2015CM&	M	A	STXM	Polyethylene catalysts	
2015CW&	M	A	STXM	Fe ₂ O ₃ on ZnO nanorod	
2015CW&b	B	A	STXM	Gd nanoparticles with SiO _x shell	brain tissue uptake, chemotherapy
2015DB&	M	A,R	XPEEM	Non-volatile magneto-electric devices	spintronics
2015DC&	B	A	TXM	Alpha-Synuclein	Regulates normal Mg, Ca
2015DG&	B, E, M	A	XPEEM	carbonates	Particle attachment crystallization
2015DH&	M	A	STXM	Nanoparticle effects	OPV
2015DH&b	M	A	ptycho		CAMERA SHARP
2015DM&	M	A	STXM	vinylene diketopyrrolopyrrole copolymers	Effect of O, S
2015DR&	E	A	STXM		soils analysis
2015DS&	M	A	STXM	metal np	Li battery
2015DS&b	B, E	A	XPEEM	nacre	energy landscape
2015DS&c	B, E	A	STXM	Barnacle Amphibalanus amphitrite	
2015EB&	E	A	STXM	Murray chondrite	
2015EM&	M	A	RSoXS	Ferroelectric BaTiO ₃	AFM /FM coupling dynamics
2015Fa	M	R	TXM		Magnetic imaging
2015Fb	M	R	TXM		Magnetic imaging
2015FB&	M	A	XPEEM		Exchange coupling
2015FK&	M	A	XPEEM	Co ₂ / MnGa	magnetism
2015FL&	M	A	XPEEM		AFM – FM coupling
2015GB	M	R	TXM, STXM	NaTiO _x nanorods	
2015GB&	E	A	STXM	Chondrule particles from Wild	
2015GCB	E	A	STXM	silicates in chondritic meteorites	
2015GD&	M	A	STXM	Aqueous silicates	
2015GG&	M	A	STXM	Di Niobium benzene	
2015GM&a	B, E	A	STXM	Pistacia lentiscus L. roots	Zn bioavailability
2015GM&b	M	A	TXM		skyrmions
2015GN&	M	A	STXM	Human skin	Nanoparticle penetration
2015GN&b	M	A	STXM	Nb ₂ (benzene)	
2015GN&c	M	A	XPEEM		Ps dynamics
2015GN&c	M	A	XPEEM	Ferroelectric BaTiO ₃	Perpendicular local magnetism
2015GS&	M	A	STXM	electrocatalysts	modelling
2015GT&	M	A	STXM	Aged concrete	
2015GV&	M	A	STXM	Fixed cells	Radiation damage

code	materials	type	technique	species	Subject / Comments
2015GW&a	M	A	STXM	calcium silicate hydrate, ibuprofen	Drug delivery
2015GW&b	M	A	STXM	calcium silicate hydrate, ibuprofen	Drug loading
2015H	M	R	STXM, TXM, XPEEM, SPEM		Review & perspective
2015Hb	M	A	STXM	Solar cells	
2015HB&	M	A	XPEEM		Island ripening by poly/de-poly
2015HE&	M	A	STXM	thiophene–quinoxaline copolymer:PC70BM blend	Vertical and lateral inhomogeneity effects
2015HH&	M	A	TXM	CuO particles	Gas adsorption , sensors
2015HH&a	M	A	STXM	peroxides	
2015HH&b	M	A	STXM	cement	
2015HHR	M	A	STXM	β -Ga ₂ O ₃ Nanowires	dichroism
2015HK&	M	A	STXM	peroxides	spectroscopy
2015HM&	M	A	XPEEM	CeOx–Ru	H2 activaton
2015HN&	M	A	STXM	nanoparticulate organic photovoltaics	
2015HP	M	A	SPEM	Pb(Zr,Ti)O ₃ (111)	Ferroelectric domains
2015HR&	M	I	STXM		Interferometer tacking with rotation
2015HS&	M	I	XPEEM		Pseudo single-bunch
2015HS&	M	A	XPEEM	La _{0.7} Sr _{0.3} MnO ₃ /PbZr _{0.2} Ti _{0.8} O ₃	Magnetic, ferroelectric domain mapping
2015HW&	M	A	STXM	Defective Ni(OH) ₂ in Platinum-Hydroxide-Graphene	Methanol Oxidation Electrocatalysis
2015IO&	B	A	STXM	DNA, protein in mammalian cell nuclei	
2015IS&	B, E	A	STXM	Synechococcus sp. cyanobacterial	quantify organic content
2015IW&	M	A	STXM	N-doped graphene	dichroism
2015JC&	M	A	XPEEM	La _{0.7} Sr _{0.3} MnO ₃ /PbZr _{0.2} Ti _{0.8} O ₃	Exchange coupling
2015JD&	M	A	XPEEM		Shadow XMCD origin
2015JY&	M	A	XPEEM	Graphene / MoS ₂	
2015KA&	M	I	STXM		NeXUS data format
2015KB&	E	A	STXM	artificial soil - rhizome	effect of bio-acids
2015KC&	M, E	A	XPEEM	Xanthate Induced Chalcopyrite	flotation
2015KG&	M	A	STXM	TaOx memristors	Operando studies
2015KL&	B	A	STXM		Compared to EM, IR
2015KM&	E	A	STXM	Aluminum toxicity	Plant roots
2015KP&	B, E	A	STXM	Nanoparticles in cells	
2015LB&	M, B	A	STXM	Lipids on SiOx nanowires	Nanoscale ordering
2015LD&	M	A	STXM	Carbon-coated α -Fe ₂ O ₃	LIB
2015LG&a	M	A	STXM	Hydration of Tricalcium Silicate	CaCl ₂ -Acceleration

code	materials	type	technique	species	Subject / Comments
2015LG&b	B	A	STXM	human superoxide dismutase 1	With nmr
2015LJ&	M	A	STXM	orientation on org. solar cells	
2015LK&	M	A	STXM	LaCl _{6-x} , x=2,3	
2015LL&	M	A	STXM	Pd catalyst - O activation	
2015LM&a	M	A	STXM	LiFePO4 LIB anodes	Particle size effects
2015LM&b	M	A	STXM	Magnetic domain wall	Localization by quasi walls
2015LN&	M	A	STXM	LiFePO ₄ LIB	Operando imaging – particle shape effects
2015LT&	E	A	STXM	Marine particles	
2015LW&a	M	A	STXM	LiFePO4 LIB anodes	Operando imaging
2015LW&b	M	A	STXM	TiO ₂ Nanowire , Na intercalated	
2015MB&	M	A	STXM		Cultural heritage
2015MBH	M	A	STXM	Fuel cell cathode	FIB damage
2015MC&	E	A	STXM	N ₂ -, CH ₄ -, and CO-containing Ices	Electro radiolysis
2015MD&	M	A	XPEEM	BaTiO3/Nb:SrTiO3 photoanodes	Ferroelectric polarization current control
2015MG&a	M	A	STXM	strained graphene	
2015MG&b	B, E	A	STXM	Euphorbia pithyusa L. roots	Zn bioavailability
2015MJ&	E	A	STXM	Rock varnish	
2015ML&	M	A	XPEEM	InP	
2015MM&	E	A	STXM	Aerosol particles	
2015MP&a	M	A	STXM	organic PV	domain purity
2015MP&b	M	A	STXM	Organic solar cells	
2015MR	M	I	STXM, ptycho		OMNY interferometry
2015MS&a	E	A	STXM	S, Ca speciation of aerosols	
2015MS&b	M	A	XPEEM	Fe _{0.70} Ni _{0.30}	2d phase coexistence
2015MZ&a	B, E	A	STXM	<i>Acidithiobacillus Ferroxidans</i> pyrite	
2015MZ&b	M	E	STXM	Extracellular Organic Substances	Microbe-Mineral Interface
2015NM&	M	A	TXM		2D magnetism
2015NO&	M	A	STXM	water	Liquid cell
2015NOK	M	A	STXM		In situ electrochemistry
2015NU	E	A	STXM	Chondrites	FIB contamination
2015OB&	M	A	TXM		Domain wall chirality
2015OI&	M	A	STXM	PEM-FC – humidity changes	in situ humidity
2015OI&	M	A	STXM	Nd-Fe-B magnets	Dipole energies, Nd-Cu effects
2015ON&	B, M	A,R	STXM	Nanoparticles in human skin	Review of techniques
2015ON&	M	I	STXM	in situ devices: echem, humidity, rotation	
2015OS&	M	A	TXM	Li/O2 batteries – discharge products	
2015OS&	M	A	TXM	Siemens Star	modulation transfer function for resolution

code	materials	type	technique	species	Subject / Comments
2015OS&b	B, M	I	TXM	Siemens star	FRC resolution evaluation
2015OW&a	E	A	STXM	Aerosol particles	Liq – Liq phase separation
2015OW&b	E	A	STXM	aerosols	
2015P	M	A	STXM	Singlet O ₂	IR on SC, Met nanostructures
2015PB&	B, E	A	STXM	Asbestos in lungs	Protein folding issues
2015PH&	M	A	SPEM	Pb(Zr,Ti)O ₃ (001)	Charge uncompensated areas
2015PK&a	B, E	A	XPEEM	vaterite	orientation
2015PK&b	E	A	STXM	Fe(II)-oxidizing bacteria	diagenesis
2015PN	M	R	STXM	polymers	Nano- and micro-grafting
2015PY&	M	A	XPEEM	La _{0.67} Sr _{0.33} MnO ₃ electrodes	spintronics
2015RA&	M	A	TXM		Magnetic dichroism mapping
2015RB	M, E	A	STXM	Iron gall ink	In historic paper
2015RB&a	E	A	STXM	Bacterial colonies	calcification
2015RB&b	M	A	XPEEM	Ti-doped α -hematite	Photovoltaic performance
2015RR&a	M	A	STXM	poly(3-hexylthiophene)	Laser patterning
2015RR&b	M	A	STXM	Ag-TCNQ nanocrystals	Resistivity switching
2015RS&a	M	A	ptycho		Water window spectro-ptychography
2015RS&b	M	A	STXM	P3HT/PCDTBT heterojunction PV	Confinement versus phase segregation
2015RT&	E	A	STXM	Radionuclides, magnetite	Transport in nuclear waste glass
2015S	M	R	XPEEM		Review of PEEM magnetic studies
2015SB&	M	A	STXM		Dose-Damage concerns raised
2015SBO	E	A	STXM	Impact glass, microbes	
2015SD&	E	A	STXM	Fe–Si-rich layer, livine-water interface	carbonation
2015SF&	M	A	TXM		Topological states
2015SH	M	A	TXM		Topological states
2015SK&	M	A	TXM		Spin texture of curved magnetic systems
2015SL&	M	A	STXM	shikimic acid ozonolysis	In situ study
2015SM&	M	A	STXM	Hair (human, lamb)	Damage qualitatively
2015SM&b	E	A	STXM	FeO _x nanoparticles	
2015SM&c	M	A	STXM	CoMoS Hydrodesulfurization Catalyst	
2015SN&a	M	A	XPEEM	On-chip magnetic particles	Domain wall rottion
2015SN&b	M	A	STXM	Spin dynamics XMCD(t)	100 ps time resolution
2015SN&c	B, M	I	TXM	Biological, magnetic samples	MISTRAL instrumentation paper
2015SR&a	M	A	STXM	singlet O ₂ from metal nanowires	
2015SR&b	M	A	STXM	non-linear optical nanowires	
2015SRF	M	A	STXM		Confocal STMX set-up
2015SS&	B	A	CDI	XFEL living cyanobacteria	XFEL imaging single shot

code	materials	type	technique	species	Subject / Comments
2015SWK	M	A	STXM	SiO ₂ –polymer radioactive sorber	
2015SZ&	E	A	STXM	Fe(II)-oxidizing bacteria	Ni sorption
2015SZ&b	M	A	XPEEM	Graphene 2D heterojunction	N ₂ ⁺ bombardment
2015TY&	M	A	STXM	Uranium oxidation	
2015UN&	M	A	STXM	Extra-terrestrial particles	Contamination ?
2015UU&	M	A	TXM		Magnetic vortex reversal
2015VB&	M	I	STXM	Percival sensor	Spatial resolution
2015VD&	M	A	STXM	Zeolite catalyst for alcohol dehydration	Effect of water soaking
2015VP&	M	A	STXM	TiO ₂ : anatase → rutile	Laser induced transition
2015VW&	B	R	STXM	plants	review
2015VY&	M	A	XPEEM	Hard disk heads	
2015WB&	E	A	STXM	aerosols	
2015WB&b	M	A	STXM	Magnetic hybrid systems	Nanoscale vortex switching
2015WH&	M	A	STXM	TiO ₂ core-shell nanostructures	
2015WL&a	E	A	STXM	marine origin aerosols	
2015WL&b	M	A	XPEEM	Graphene from N-seeded Si	Patterned growth
2015WM&	M	I	STXM	Percival sensor	
2015WO	E	A	STXM	atmospheric aerosol reactions	
2015WP&	M	A	STXM	Ta/TaO ₂ M-RAM switching	
2015WS&	M	A	STXM	graphene oxide, defects	magnetism
2015WT&a	B	I	TXM	CT 26 fibroblast	N ₂ plasma based SXR
2015WT&b	M	A	XPEEM	Cylindrical nanowires	Domain wall motion
2015WW&	M	A	STXM	BN nanosheets	
2015YA&	E	A	STXM	Meteoric organics	
2015YF&a	B	A	STXM	Dexamethasone	skin penetration
2015YF&b	M	I	TXM		Random structure for MTF determination
2015YG&	B, E	A	XPEEM		crystal growth by particles
2015YJ&a	M	A	STXM	organic solar cells	
2015YJ&b	M	A	STXM	organic solar cells	
2015YK&	M	A	STXM	LiFePO ₄ LIB anodes	Particle size effects
2015YK&b	B	A	STXM	Tacrolimus skin penetration	
2015YK&c	M	A	XPEEM	Permalloy nanomagnet array	
2015YP&	M	A	XPEEM	CO / Pd np	Particle dependent adsorption
2015ZH&	M	A	STXM	NaTiOx nanorods	3D polarization; theory
2015ZI&	M	A	XPEEM	Graphene traps nanobubbles at GPa	
2015ZK&	M	A	STXM	Magnetite, maghemite	correct Fe 2p spectrum; purity important
2015ZL&	M	A	STXM	C-stabilized Fe oxide NS	

code	materials	type	technique	species	Subject / Comments
2015ZR&	M	A	STXM	acetamide functionalised quaterthiophene	
2015ZW&	M	A	STXM	Thick carbon nanotubes	
2015ZY&	M	A	STXM	Pt np/Mo2C nanotube catalyst	
2015ZZ&	M	A	STXM	Carbon nanotubes, Ni np	Ammonia borane hydrolysis
2016AB&a	E	A	STXM	Bacterial fossilization	SuOx facilitates diagenesis
2016AB&b	E	A	STXM	1.88-Ga Gunflint organic microfossil	
2016AC&	M	A	XPEEM	NiC / graphene	Sublayer intercalation
2016AE&	M	A	STXM	design	STXM at P04 PetraIII (250-2000eV)
2016AG&	M	A	XPEEM		Induced surface magnetism
2016AK&a	M, B	A	STXM	Lys-nanodiamonds	Gene transfer uptake
2016AK&b	M	A	STXM	Macroporous Polymers & RAFT Agent	
2016AP&a	M	A	STXM	Lanthanide Sesquioxides	O 1s spectroscopy
2016AP&b	M	A	STXM	(BDI)Al, (BDI)AlR2, and (BDI)AlX2	
2016AS&	M	A	STXM		In situ catalysis
2016BB&	E	R	STXM		SR applications in Natural History museums
2016BBB	M	E	STXM	ectomycorrhizal fungi	Fe(II) oxidation in biotite → mechanical forcing
2016BK&a	M	A	STXM	concrete	Early Tricalcium Silicate Hydration
2016BK&b	M	I	STXM		XRF artifacts from topology
2016BP&	M	A	SPEM		Super hydrophobic surface
2016BS&	E	A	STXM		Biomodification of U mine tailings
2016BV&a	M	A	XPEEM	Magnetic skyrmions	
2016BV&b	E	A	STXM	Neolithic pottery	
2016CC&a	B	A	TXM	MAST cancer cell	Cryo tomography
2016CC&b	M	A	XPEEM	Kagome dipolar spin ice	Magnetic fragmentation
2016CC&c	B	A	TXM	Nanoparticles – cell interactions	Cryo-tomo – model interactions
2016CH&a	M	A	TXM	TiO2 memristors	
2016CH&b	M	A	SPEM		CuGaSe solar cell depth profiling
2016CL&a	M	A	TXM	Beta SnO4 photocatalyst	
2016CL&b	M	A	SPEM	Trypsin, BSA	Liquid crystal interface
2016CO&	B	A	TXM	SPION iron oxide np in MCF-7 cells	Nexafs nanotomography
2016CP&	M	A	TXM		Li Battery
2016CS&	M	A	XPEEM	diindenoperylene / Au(110)	
2016CT	E, B	A	STXM	Bimorphic C-S structures	Self-assembly
2016CW&	E	A	STXM	spores	At. Particle nucleation
2016CZ&a	M	A	XPEEM	LuFeO3	Phase segregation
2016CZ&b	M	A	XPEEM	LuFeO3	Single ion magnetic anisotropy
2016CZ&c	M	A	STXM	PLA/PLAE blends	Improved mechanical properties

code	materials	type	technique	species	Subject / Comments
2016DB&	M	A	STXM	Lanthanide, actinide ferricyanides	
2016DG&	E	A	STXM	silicate glass Fe corrosion	
2016DG&b	M	A	STXM	Lanthanide, actinide ferricyanides	
2016DR&	M	A	TXM	Polymer-CNT composites	Tomo used to verify uniform CNT; p-n switching
2016DUS	M	A	STXM	Nanoparticles FeOx phases	
2016DV&	B, E	A	ptycho		Cryo-ptycho; ptycho processing
2016DZ&	B	A	TXM	sphingosine kinase 1; sickle cell	
2016ES&	M	A	TXM, STXM	Aza-fullerene	
2016ES&	M	A	TXM, STXM	C69, 59N	Surface adsorbed water
2016EW&	M	A	TXM	permalloy	Magnetic structure imaging & dynamics
2016FC&	E	A	XPEEM	Calcite shell formation	Effect of ocean acidification
2016FC&	E	A	XPEEM	Amorphouse CaCO3 (ACC)	<i>Mytilus edulis</i> shells
2016FH&	M	A	XPEEM	Ceria(001) on Ru(0001)	
2016FO&	M	R	TXM		Magnetic imaging
2016FS&a	B	A	CDI	Hydrated cells	XFEL imaging single shot
2016FS&b	M	A	XPEEM	Spin ice	
2016FS&c	M	A	TXM, STXM, ptycho	SmCo ₅ films	nanoscale magnetic and structural correlation
2016FW&	M	A, I	STXM	membranes	Strain Bending apparatus
2016GB&a	M	I	STXM	Multi-element SDD	
2016GB&b	M	A	STXM	Fullerene bulk-heterojunctions	PV
2016GBL	E	R	STXM		Review of paleontological applications
2016GC&a	B	A	TXM	Chromatin Compaction & Neurogenesis	in vivo studied
2016GC&b	B	R	TXM	cell imaging	correlative light ,soft X-ray
2016GGB	E	R	STXM	Paleontological specimens	Multi SR technique comparison
2016GJ&a	M	A	XPEEM	VO ₂	
2016GJ&b	M	A	STXM	Organic solar cells	77% fill factor
2016GK&a	M	A	STXM		Multi-technique
2016GK&b	M	R	STXM		Twin-mic review
2016GL&	M	A	XPEEM	Spin ice	Vertex frustration
2016GM&	M	A	XPEEM	Ceria nanoparticles	
2016GS&	E	A	STXM		Factors affecting biofilms in sediments
2016GW&a	M	A	STXM	PEM-FC	
2016GW&b	M	A	STXM	Organic solar cells	
2016GZ&	M	A	STXM	PBDTTT-C-T/PC71BM OPV	
2016HA&	B	A	TXM	HU multimerization	Nucleoid compaction
2016HB&a	M	A	STXM	V2O5	Lithiation, LIB

code	materials	type	technique	species	Subject / Comments
2016HB&b	M	A	STXM	Carbonate balls	(mostly IR microscopy, mentions STXM)
2016HC&a	M	A	STXM	Fly ash	Nanoparticle sizing
2016HC&b	M	A	STXM	Organic solar cells	
2016HG&	M	A	XPEEM	Patterned reactive surfaces	Low work function areas
2016HL&a	M	A	STXM	Fuel cells	
2016HL&b	E	A	STXM	aerosols	Humic material
2016HM&	M	A	STXM	BHJ Solar cells	
2016HQ&	M	A	STXM	Cu electrodeposition	In situ
2016HS&	M	A	TXM		Photovoltaic waste to Li battery anode
2016HW&	M	A	STXM	Fuel cell cathodes	Ionomer mapping
2016IH&	M	A	STXM	Cellulose Nanocrystal/Nanofibrils	
2016II&	B	A	STXM		Biomedical applications
2016IO&	B	A	STXM		Biomolecule mapping from C 1s
2016J	M, B, E	R	all		Future challenges
2016JH&	M	A	STXM	V ₂ O ₅ nanowire	Polaron states, Li gradients, LIB
2016JL&	E	A	STXM	Fe redox states	oxycline in a lignite mine lake
2016K	M	R	STXM		X-rays & neutrons
2016KB&a	M	A	STXM	Graphene nanomeshes	supercapaciters
2016KB&b	M	A	STXM, ptycho		Electrochem dynamics
2016KB&c	M	A	SPEM	ZnO, NiPS3 nanosheets	Band alignment
2016KG&	M	A	STXM	TiO ₂ memresistors	Operando radical O. migration
2016KGB	M	I	STXM	Automated non-linear XRF alignment	
2016KK&	B	A	STXM	Live cells	Correlative imaging
2016KP&	M	A	STXM	Zeolite FCC particle	dealuminization
2016KS&	M	A	STXM	VO ₂	phase transition
2016KU&	E	I	STXM		Sample preparation methods
2016KW&	M	A	STXM	HfO memresistors	
2016LC&a	M	A	STXM	Li ₂ FeSiO ₄	Li battery dynamics
2016LC&b	B	A	TXM	Nerve cell chromatin connectivity	tomography
2016LC&c	B	R, I	TXM		TXM review
2016LG&	E	A,R	STXM	Atmospheric particles	review
2016LH&	M	A	SPEM	Cu ₂ O	Water splitting PV catalyst
2016LHE	M	A	STXM	pmma, ps	Critical dose same for E < or > C 1s edge
2016LK&	M	A	SPEM	UPD Cu / Au	Making a bimetallic SERS substrate
2016LL&a	M	A	STXM	LiFePO ₄ LiB	Operando – rate dependent structure
2016LL&b	M	A	SPEM	W/MoSe ₂	
2016LL&c	M	A	STXM	(Pb(SCN) ₂) & FA _{0.9} Cs _{0.1} PbI ₃ PV	

code	materials	type	technique	species	Subject / Comments
2016LM&	M	A	STXM	Tc, Spinel ferrites	
2016LS&a	E	A, R	STXM	Cu np, CNT	Nanomaterial toxicity
2016LS&b	E	A, R	STXM	CNT	Nanomaterial toxicity
2016LW&a	E, M	A	STXM	SWCNT	Enviro impact
2016LW&b	M	A	STXM	TiO2 nanotubes, anatase ,rutile	
2016LW&c	M	A	STXM	CH3NH3-PbI3 / NiO photovoltaic	interface
2016LW&d	M	A	XPEEM	complex oxide micromagnets	
2016LW&e	E	A	STXM	Fullerene,SW-CNT, MW-CNT	Effect on river biofilms
2016LW&e	M	A	STXM	Au@TiO2-coated Fe2O3 Nanorods	
2016LY&	M	A	STXM	Organic solar cells	
2016MB&a	M	A	SPEM	Fe chalcogenide	Mesoscopic magnetic stripes
2016MB&b	M	A	XPEEM	Multilayer ferroic	
2016MB&c	E	A	STXM	Black carbon aerosols	CARES California
2016MB&d	B	A	STXM	Heart	Composition changes after chemo
2016MC&	E	A	STXM	Tim Mersoï Basi	Hot fluid flows
2016MF&	B	A,R	STXM	cells	Elemental quantitation in single cells
2016MH&a	M	A	STXM	PEM-FC MEA	FIB damages
2016MH&b	B, E	A	STXM	K in cells	quantitation
2016MI&	M	A	STXM	Anticancer drugs	
2016MJ&	M	A	STXM	solution processed solar cells	
2016MJA	M	A	STXM	Polymer:Fullerene BHJ Solar Cells	
2016MK&	M	A	ptycho		SHARP GUI code
2016ML&a	E	A	STXM	Fe distribution across oxycline	lignite mine lake
2016ML&b	B	A	STXM	<i>Planococcus halocryophilus Or1</i>	Sub-15 C growth
2016MM&a	M	A	XPEEM	Epitaxial graphene on SiC	Au intercalation
2016MM&b	B	I	STXM		Molar concentration precision
2016MM&c	M	E	STXM	skyrmions	
2016MMW	E, B	A	STXM	Medicinal clay	Antibacterial
2016MOO	E	A	STXM	FeS	Microbial alteration
2016MP&	M	E	STXM	smectite-to-chlorite conversion	
2016MR&a	B, E	A	XPEEM	Oyster adhesive	
2016MR&b	B	A	TXM	Herpes Simplex 1	Induced egress channels in chromatin
2016MS&	E	A	STXM	Europium in Aplysina Cavernicol	
2016MW&	M	A	XPEEM	Graphene/h-BN on Pt(111)	Single precursor synthesis
2016MWJ	M	A	STXM		Regularizers for NNM analysis
2016MZ&a	M	A	XPEEM	nickelates	Striped phases – metal-insulator transition
2016MZ&b	E	A	STXM	Fe(II) in EPS of bacteria by pyrite	

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2016N	B, E	A	STXM	Environmental nanoparticles	Health risk evaluation
2016NA&	M	R	TXM		EUV research at Berkeley Lab
2016NF&	M	I	STXM		Microfluidic cell
2016NK&	M	A	TXM	PS	Photonic crystals, rad damage
2016NO&	M	A	STXM	Triethylamine, Water	Liquid-liquid interface
2016NP&	M	A	XPEEM	Graphene/h-BN on Pt(111)	Quasi free standing
2016NU	E	A	STXM	Hydrous aerosols	organics
2016OI&a	B	A	STXM	HeLa cells	DNA, protein
2016OI&b	M	I	STXM		3D quantitative method
2016OK&	M	A	STXM	Patterned polyelectrolytes	
2016ON&	M	I	STXM	Humidity, azi-rotate, tomo, echem	In situ sample cells
2016OP&	B	I	TXM	Resolution improvement	Wiener deconvolution
2016PA&	M	A	STXM		Selective chelation of Ln ⁴⁺
2016PB&a	M	A	ptycho	Real-time data intensive processing	
2016PB&b	B	A	STXM	sperm	Fe mediated DNA damage
2016PG&a	E	A	STXM	stromatolites	
2016PG&b	E, B	A	STXM	Asbestos in lungs	
2016PH&	M	A	STXM	nanobubbles	
2016PK&	E	A	STXM	Atmospheric particles	hygroscopicity
2016PO&	E	A	STXM	Si, Fe-encrusted bacteria	SiOx does not facilitate diagenesis
2016PP&	M	A	STXM	photo-generated anti-fouling surfaces	
2016PR&a	M	A	STXM	CeO2	solubility
2016PR&b	B	A	TXM	Hepatitis C virus	Structural changes
2016PS&	M	A	STXM	PEM-FC Fuel cell electrodes	Tomography, modeling
2016PY&	M	A	STXM	CeO2	solubility
2016PZ&	B, E	A	STXM	Crocidolite fibres	Asbestos in mice lungs
2016RA&	M	I	STXM		8-cell SDD
2016RC&	M	A	STXM	cubic and orthorhombic C 3A	Effect of gypsum
2016RH&	E	A	STXM		Marine Microbial Induced Corrosion
2016RI&	M	A	STXM	Conduction polymers	Transport mechanisms
2016RPB	M	A	STXM	chondrites	Organic components
2016RPP	M	A	SPEM	Doped diamond-like carbon films	
2016RR&	B	A	TXM	Lymphocyte, clathrin	Clathrin regulates migration
2016SF&a	M	A	ptycho, TXM	SmCo ₅	Magnetic patterns
2016SF&b	M	A	TXM		Magnetism in curved geometries
2016SG&a	M	A	STXM	Thermoresponsive microgels	in situ liquid, thermal
2016SG&b	B	A	TXM	coccolithophorid alga	Vacuole concentrates Ca

code	materials	type	technique	species	Subject / Comments
2016SO&	E, M	R	STXM	FeBoN1, fuel cells	tomography
2016SP&	B, E	A	STXM	Sea urchins	S-compund generation
2016SS&a	M	A	XPEEM	Ge growth on As/Si(111)	
2016SS&b	E	A	STXM	Martian meteorites	
2016ST&a	M	A	XPEEM	MnAs nanoribbons	Magnetic properties
2016ST&b	M	A	STXM		Additive fabrication by STXM
2016SW&	M	A	STXM	Absorbent for radioactives	
2016TB&	B, E	A	STXM	lignocellulic plant cell walls (Ca)	
2016TD&	M	A	STXM	Iron oxide np grown by e- beam	Magnetic properties
2016TG&	E	A, R	STXM	Deep Ocean Particle analysis	
2016TI&	M	I	STXM		Compact STXM PF
2016TL&a	M	A	XPEEM	Ni/Fe/Co/Cu(001)	
2016TL&b	B	A	TXM		spatial genome organization
2016TMS	E	A	STXM	Sulfate aerosols	
2016TT&	M	A	STXM	Carbon foams	From coal tar pitch
2016TW&a	M	A	SPEM	a-Si3N4 defect free	Gate dielectric
2016TW&b	M	A	STXM	Polymer np	Liesegang band formation
2016TY&	B	A	STXM	Pseudanabaena foetida, organelles	speciation
2016VD&	B	A	TXM	Cholesterol crystals in cells	Correlative cryo-TXM & super-resolution
2016VF&	M	A	ptycho		X-ray phase ptycho-tomo
2016W	M	A	STXM	Lipid bilayers	
2016WB&	M, E	A	STXM	uranyl materials	
2016WH&a	E	A	STXM	airborne particles in precipitation	
2016WH&b	M	A	STXM	Mesoporous Organosilica	
2016WH&c	M	A	XPEEM	CuMnAs / GaP or GaAs. antiferromagnet	Electrical switching
2016WJ&	M	A	XPEEM	BiFeO ₃ multiferroic	Coherent Magneto-elastic domains
2016WK&a	E	A	STXM	aerosols	Ice nucleation
2016WK&b	M	A	STXM, ptycho	Fischer-Tropsch catalyst	Fe oxidation states
2016WL&	M	A	TXM		Magnetic skyrmions
2016WN&	M	A	STXM ptycho	catalysts	
2016WR	M	A	STXM	STXXM data file format NeXus	
2016WT&	M	A	STXM	Magnetic vortex cores	Spin-wave emitters
2016WW&a	M	A	STXM, ptycho	catalyst imaging	3D
2016WW&b	M	A	STXM	BN co-doped graphene	
2016YG&	E	A	STXM	Selenate ions, SeOx particles	Biofilm transformation
2016YH&	M	A	STXM	Monosulfoaluminate in NaCl	Solution phase changes
2016YJ&	M	A	STXM	All-polymer solar cells	

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2016YK&a	B	A	STXM	dimethosone	Controlled release in skin
2016YK&b	B	A	STXM	Human skin; dexamathasone	
2016YK&c	M	A	XPEEM	Strained BiFeO ₃ films	magnetism
2016YP&	M	A	XPEEM	Fe layer graphene	Long spin diffusion length
2016YPT	M	A	XPEEM	CO adsorption on Pd np	Nexafs simulation
2016YW&	E	A	STXM	Ternary Kaolinite-Fe(III)-Citrate Acid	
2016YX&	M	A	STXM	Organic solar cells	Food additives
2016ZE&	B, M	A	TXM	hydroxyapatite np internalization	Ion doping modulatres
2016ZH&	M	A	STXM, ptycho	Magnetite magnetosomes, MV-1 MTB	7 nm resolution at 700 eV
2016ZK&	M	A	STXM	multiple species organic PV cells	
2016ZL&	M	A	STXM	m-graphene M=Ni, Co, NiCo) catalysts	Dehydrogenation of Ammonia Borane
2016ZS&	E	A	STXM		ScatterJ – correlating signals
2016ZT&a	M	A	STXM, ptycho	Magnetosomes in MV1	
2016ZT&b	E	A	TXM		Shale formation tomo
2016ZW&	M	A	XPEEM	LiNi1/3Fe1/3Mn4/3O4	Imaging facets
2016ZZ&	M	A	XPEEM	Mesocrystal nanocomposites	magnetism
2017AB&	E	A	STXM	3 b year old organics	
2017AC&	M	A	STXM	Fatty acid surfactants	
2017AJ&	M	A	STXM	Layered Ternary Vanadium Oxide	intercalation
2017AK&	M	A	STXM	RAFT agents in polymer pillars	
2017AL&	B	A	STXM, TXM	Mouse liver	PetraIII-soft Xray STXM/TXM, XRF
2017AM&	B	A	TXM	chromatin	Viral egress
2017AP&	M	A	STXM	Al, AlO _x	
2017AT&	M	A	SPEM	PbZrTiO ₃	Polarization mapping
2017B	M	R	STXM, PEEM	Many	SR studies of echem energy materials
2017BA&	M	A	STXM	polylactide	Reactive extrusion
2017BB&a	M	A	STXM	Mn-Co/Polypyrrole Nanocomposites	In situ echem
2017BB&b	M	A	XPEEM	PMN-PT layered	Vortex wall chirality = current control
2017BB&c	E	A	STXM	Marine sediments	Organics preserved by reactive Fe species
2017BD&	E	A	STXM	U adsorption by NOM sediments	
2017BG&a	E	A	STXM	Rainforest air particles	anthropogenic
2017BG&b	M	I	STXM	Multi-element SDD	
2017BG&c	M	A	STXM		Spin-orbit torque → space, time patterning
2017BK&a	M	A	ptycho	Mn-Co/Ppy	In situ echem wet cell
2017BK&b	M	A	STXM	MnNi/polypyrrole	Mn/Ni air batteries
2017BKG	M	A	STXM		In situ electrodespoistion
2017BM&	M	A	XPEEM	V and VO _x on Rh(110)	

code	materials	type	technique	species	Subject / Comments
2017BP&	M	A	XPEEM	Fe ₈₁ Ga ₁₉	Strain relaxation
2017BS&	M	A	STXM	PEM-FC cathode porosity	
2017BT&	M	A	STXM	concrete	Effects of fly ash
2017BV&	M	A	XPEEM	memristors	Subfilamentary structures
2017BZ&a	M	A	STXM	Organic solar cells	
2017BZ&b	M	A	STXM	Organic solar cells	Fluorination doubles efficiency
2017BZ&c	M	A	XPEEM	Graphene / C-face 4H-SiC	Interface properties; stacking order
2017CA&	E	A	STXM	Cloud formation	biogenic-anthropogenic interactions
2017CAA	M	A	SPEM	Nano-ARPES CVD graphene	
2017CC&	E	A	STXM	aerosols	Cloud formation
2017CCB	M	A	STXM	permalloy	Spin wave dynamics
2017CFAa	B	A	STXM	brain	
2017CFAb	B	R	STXM		Metals in bran
2017CL&a	B	A	TXM	Biomass , cells, cAMP	Flocculation of biomass causes AM actoin
2017CL&b	M	A	XPEEM	Complex oxides	Artificial spin ice
2017CN&	M	I	ptycho	Tomo sert up	Nanosurveyor 2 apparatus
2017CS&	M	A	XPEEM	Cr2O3	Stoner excitation
2017CW&	M	A	STXM	TaOx resistive switching memory	
2017DB&	B	A	TXM		4D nucleome project (no results)
2017DC&	M	A	XPEEM	Oxide superlattices	Toroidal order – E field control
2017DG&	E	A	STXM	Juncus acutus	Zn excess, bioremediation
2017DJ&	M	A	STXM	Si-/C-PCPDTBT-sensitized P3HT:ICBA	organic PV
2017DL&	B	A	TXM		Segmentation methods - JoVE
2017DP&	B	A	TXM	glioblastoma cells	in situ visible and X-ray imaging
2017DV&	M	A	STXM	Plutonium colloids	Sono synthesis
2017EA&	E	A	STXM	Biogenic Mn oxides	Carbon reservoir
2017EC&	B	A,R	TXM		Sub-cellular structures
2017EK&	B	A	Laser; contact	Leydig cells	
2017EO&	B	A	STXM	Plasmid DNA	
2017F	M	R	TXM,, STXM, PEEM, ptycho	metal alloy & multilayer systems	Review of magnetic imaging
2017FC&	M	A	ptycho	Spectroscopy by ptycho	Combined phase and amplitude analysis
2017FJ&a	E	A	STXM	Hydrothermal vents	
2017FO&	M	A	STXM	Immiscible blends	Organic PV
2017FP&	M	A	XPEEM	dipolar trident lattice	Nanoscale control
2017FP&a	M	A	XPEEM	Dipolar trident lattice	
2017FP&b	M	A	STXM	Aerosols	

code	materials	type	technique	species	Subject / Comments
2017FP&c	M	A	STXM, RSOXS	3d photovoltaic polymers	Interfacial width – real vs. reciprocal space
2017FPC	M	A	STXM, RSoXS	3D organic nanostructures	Interface width
2017FR&	M	A	XPEEM	WS ₂ on epitaxial graphene/SiC	
2017FS&	M	A	XPEEM		Artificial spin ice; magnetic monopole
2017FW&a	M	A	XPEEM	Antimonene (Sb=Sb) / Ge	
2017FW&b	M	A	STXM	magnetic vortices	gyration dynamics by magnetoelastic effect
2017FW&c	M	A	STXM	metallofullerene peapods	magnetic
2017GB&	E	A	XPEEM	nacre	Tablet thickness correlates with T
2017GD&	B, E	A	XPEEM	Nacre	Modern vs. fossil shells
2017GDC	E	A	STXM	Groundwater contamination	desalination
2017GF&	M	I	STXM	Precipitation reactions	Fluidic cell
2017GH&	M	A	XPEEM	Spin ratchet	
2017GJ&	M	A	STXM	tricalcium aluminate, gypsum, and calcium (sulfo)aluminate hydrates	
2017GK&	B	A	STXM	mesothelial cells	AFM & STXM
2017GL&a	M	A	STXM	concrete	curing
2017GL&b	M	I	STXM		Cryo-STXM instrument
2017GL&c	M	A	STXM	LiFeO ₄ LIB	O redox and cation migration coupled
2017GL&d	M	I	STXM	CaCl ₂ solution	Liquids, up to 2 bar
2017GM&a	M	A	STXM	concrete	Ca spectroscopy
2017GM&b	M	A	STXM	nanocalcium aluminosilicate hydrate	dreierketten chain cross-links
2017GP&	E	A	STXM	Acid mine drainage	
2017GS&a	M	A	XPEEM	Liquid XPS	Graphene windows on MCP
2017GS&b	E	A	STXM	Cometary dust particle	
2017GW&	M	A	XPEEM	CuMnAs	Current switched magnetic domains; spintronics
2017HA&	E	A	STXM	Fe particles	in Russian river basin
2017HE&	M	A	STXM	Organic blends	Organic PV
2017HJ&a	E	A	STXM	biochar	Soil fertility
2017HJ&b	M	R	STXM	Lithium Battery electrodes	intercalation
2017HM&a	M	A	STXM	C-fiber / resin composite interface	PF stxm
2017HM&b	M	A	XPEEM	LaFeO ₃ (111)	Magnetic domains
2017HQ&a	M	A	TXM	Vortex-anti-vortex pairs	
2017HQ&b	M	A	TXM	Magnetic multilayers	Asymmetric magnetic singularities
2017HS&	M	A	STXM	Spring8 test pattern at Mn K-edge	KK-constraint in spectro-ptycho reconstruct
2017HV&	M	A	STXM	Organic photovoltaics	
2017HW&	B	A	TXM	<i>Plasmodium falciparum</i>	Malarial mechanism
2017HY	M	A	STXM	unary and binary colloidal crystals	Structured color

code	materials	type	technique	species	Subject / Comments
2017IF&	M	A	TXM		reconfigurable vortex arrays
2017IH&	M	A	STXM	Cellulose nanocrystal / nanofibrils	
2017IN&	E	A	STXM	Extraterrestrial samples	S detection
2017IO&	B	A	STXM	Cells with FINCA disease	
2017IS&	B	A	STXM	DNA / Protein in chromosomes	
2017JI&	M	A	TXM	hypo-oxide	FM, AFM states
2017JJ&	M	A	XPEEM	Confined Magnetic skyrmions	
2017JL&	M	A	STXM	W/CoFeB/MgO thin films and microwires	Dzyaloshinskii-Moriya interaction
2017JP&	M	A	STXM	C8-BTBT thin-film transistors	
2017JZ&	M	A	STXM	V2O5 Nanoparticle Networks	Lithiation across networks
2017KA&	M	A	STXM	polyHIPE (PS-PA) surface chemistry	macro- RAFT polymerization optimization
2017KAK	M	A	STXM	Au nanorods	
2017KD&	M	A	STXM	TiNb oxide memresistors	
2017KG&	B	A	STXM	Sorghum root	Al-Si complexes
2017KG&a	B	A	TXM	Malarial cells	Correlative tomo, XRF
2017KG&b	M	A	STXM	Organic solar cells	MWt effects
2017KH&	E	A	STXM	aerosols	
2017KL&	M	A	TXM	Malaria infected blood cells	
2017KM&	B	A	STXM	Wheat roots	Al-malate complexes
2017KO&	B	A	STXM	Mammalian cells	
2017KSW	M	A	STXM	NbO ₂ memresistors	
2017KW&a	M	A	STXM	NbO ₂ memresistors	Origin of i- and T-control of -ve R
2017KW&b	M	A	STXM	HfO ₂ memresistors	
2017KZ&a	E	A	STXM	Carbonaceous matter, Sharps meteorite	
2017KZ&b	E	A	STXM	Carancas Meteorites	organics
2017LA&	E	A	STXM	Fe microfossils	
2017LB&	M	A	STXM	Sodium titanate	amorph → xlline phase transition
2017LC&	E	A	STXM	allotropes of cyclo-S ₈ (b-S8 and c-S8)	
2017LD&a	E, M	A	STXM	iron	corrosion
2017LD&b	M	A	TXM		Segmentation methods
2017LG&	M	A	STXM	CaCl ₂ solution under pressure	
2017LL&a	M	A	STXM	Skyrmion-Hall effecgt	Time resolved
2017LL&b	M	A	STXM	(Pb(SCN) ₂) FA _{0.9} CS _{0.1} PbI ₃ PV	
2017LO&	M	A	TXM	Li 0 O2 batteries	K extends performance
2017LS&a	M	A	XPEEM	Ferrimangetic nanowires	Inter-wire coupling
2017LS&b	M	A	TXM	Na-O2 battery	
2017LT&a	M	I	STXM		PMT-phosphor detector

code	materials	type	technique	species	Subject / Comments
2017LT&b	M	A	XPEEM	Co/Cu/PMN-Pt(011)	Magnetic vortex
2017LW&a	M	A	STXM	Na Titanate	Phase transition
2017LW&b	M	A	XPEEM		ferromagnet-antiferromagnet spin alignment
2017LW&c	M	A	STXM	Au@TiO ₂ -coated Fe ₂ O ₃ nanorods	Photoelectric studies
2017LY&	E	A	STXM	Fe(III), citric acid ads. on kaolinite	
2017MA&	B, E	A	XPEEM	Parrotfish teeth	
2017MB&	M	A	STXM	CeO ₂ , PrO ₂ , and TbO ₂	
2017MC&a	M	A	ptycho	LiFePO ₄	Li battery; refractive analysis methodology
2017MC&b	M	A	TXM	Fe/Gd ML	skyrmions
2017MC&c	M	A	TXM	Fe/Gd ML	skyrmions
2017MG&a	M	A	STXM	Organic solar cells	Solvent, T effects
2017MG&b	E	A	XPEEM	Amorphous CaCO ₃	Coral skeltons
2017MG&c	M	A	STXM	Cubic Tricalcium Aluminate	
2017MH&a	M	A	STXM	PFSA ionomer	Quantitative mapping
2017MH&b	E	A	STXM	Mn-rich crust on cathedral	
2017MJ&a	B, E	A	XPEEM	Coral; Amorphous CaCO ₃	
2017MJ&b	E	A	STXM	Rock varnish	
2017MJ&c	M	A	STXM	Cubic Tricalcium Aluminate	Dissolution
2017MM&	B	A	STXM	Alkaptonuria	
2017MO&	E	A	STXM	Black carbon	CARES field study
2017MOO	E	A	STXM	Oceanic crust	Microbial alteration
2017MP&a	M	A	XPEEM	Micro- nano- MnAs ribbons	Magnetic properties
2017MP&b	B	A	STXM		cell cell valriabilitt
2017MS&	M	A	STXM	Fe ₂ P(10-10)	Phosphorus segregation
2017MT&	M	A	TXM	dipole skyrmions and skyrmion lattices	
2017MY&	M	A	TXM	W, Zn nanoparticles	Improved KB optics, 50 nm, hard Xray
2017NOK	M	I	STXM		Electrochem operando cells
2017NY&	E	A	STXM	Antarctic meteroites	Water effect
2017NZY	M	A	XPEEM	Sn-intercalated graphene on SiC(0001)	Metal-dielectric transition
2017OC&	M	A	STXM	Calcium Silicate Hydrate	Polymer plasticizers
2017OE&	M	A	SPEM	graphene	Laterally selective oxidation
2017OI&a	M	A, I	STXM	Polymer-phantom	UVSOR STXM tomo optimization
2017OI&b	B	A	STXM	Cell nucleus	3d structure
2017OK&	M	I	STXM	Vulcanized rubber	Cryo-cooling system
2017OP&	B	I	TXM	<i>Scenedemus</i> cell	Computational increased depth of field in TOMO
2017OS&	M	A	TXM	Li-O ₂ ionic liquid batteries	
2017PB&a	B, E	A	XPEEM		Pre-stressed carbonate shells

code	materials	type	technique	species	Subject / Comments
2017PB&b	E	A	STXM	Aerosols	
2017PM&	E	A	STXM	CM chondrites	
2017PS&	M	A	SPEM	Eu ₃ F ₄ Bi ₂ S ₄	Self doping
2017PU	M	A	STXM	Paracyclophanes,	π - π interactions
2017RB&	M	A, R	STXM	Skymions	
2017RBR	E	A	PEEM, STXM	Foraminifera plankton	Mg, Na, S, Fe
2017RC&	B	A	TXM	Green Alga Chromochloris formation	
2017RD&	M	I	ptycho	Siemans star	Water window, beam stops
2017RSF	M	A	STXM	Ag-TCNQ nanocrystals	
2017SB&	M	A	STXM	Polyurethane & reinforcing particles	C K-edge performance
2017SC&a	M	I	ptycho	FePO ₄ spectro; Y-stabilized Zirconia - TOMO	Nanosurveyor I apparatus
2017SC&b	M	A	STXM	BiVO _x coated ZnO	
2017SD&	M	A	XPEEM	BiFeO ₃ multiferroic	
2017SDU	M	A	STXM	FeO _x magnetic np	Transmission, TEY
2017SK&	E	A	STXM	Extracelular Fe oxides	
2017SL&	M	A	STXM	NA-air batteries	ALD
2017SL&b	M	A	STXM	(PEA) ₂ (MA) _n -1PbnI _{3n+1} PV	
2017SL&c	B	A	TXM	AMPK, μ -lipophagy	Glucose starvation
2017SM&	B, E	A	XPEEM	coral	Spherulitic growth
2017SO&	B	A	STXM	CHO cells	
2017SR&	M	A	TXM	Ir/Fe/Co/Pt multilayers	skymions
2017SS&	E	A	STXM	Martian Meterorites	silica
2017SW&	M	R	STXM	Solar cells	Correlative microsc (hard & soft Xray)
2017SY&	E	A	STXM	soil	
2017TE&	B	A	STXM	Amyloid plaques	Fe implicated
2017TH	M	I	ptycho	Spring8 test pattern at Mn K-edge	Use of KK-constraint in ptycho reconstruct
2017TL&	M	A	SPEM	Mn _x Ge _{1-x}	Lateral magnetic interactions
2017TS&	M	A	STXM	Co, Mn	Patterned structures by X-ray damage
2017TW&a	M	A	STXM	Cr(OH) _x hollow spheres	
2017TW&b	E	A	STXM	Environmental hydrosphere	
2017TY&	M	B, E	STXM	hydrosphere	Microbiological applications
2017UH	M	A	STXM	SmCo multilayer	XMCD magnetic mapping; PF compact STXM
2017UI&	E	A	STXM	Hayabusa2 returned extra-terrestials	
2017UM&	M	A	STXM	P3HT	Conformation – aggregation links
2017UOI	E	A	STXM	Ureilite	Organics in shocked mineral
2017V	M	Thesis	STXM	Chondrite particles	

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2017VC&	E	A	STXM	Atmospheric particles	Optical properties
2017VG&	E	A	STXM	Organic matter in chondrite meteorite	
2017VR&	M	A	XPEEM	Co intercalated in graphene/ Ir (111)	
2017VS&	M	A	XPEEM	Microdisk arrays	vortices
2017VU&	M	A	TXM		Magnetic vortex nucleation
2017WA&	M	A	STXM	Cr(OH) _x hollow spheres , np	
2017WE&	M	A	XPEEM	Fe/CuMnAs	Spin axis orientation control
2017WH&	M	A	STXM, ptycho	PFSA in PEM-FC cathode	4D imaging by STXM & ptycho, tomography
2017WJ&	M	A	XPEEM	LiCoO ₂ composite electrodes LIB	Additive effects
2017WL&	M	A	STXM	ME, Au np, latex particles	Compressed sensing tomo analysis
2017WM&	E	A	STXM	P in soil	microheterogeneity
2017WO&	M	A	STXM	Complex Metal Hyrides	In situ (de) hydrogenation
2017WS&	M	A	TXM		Vortex circulation
2017WS&	M	A	TXM		Spyrmion dynamics
2017WT&	B	I	TXM	DAN plasmids	Lab based; laser- N2 gas puff target; 60 nm
2017WX&	M	A	ptycho		Background removal algorithm
2017WY&	M	A	STXM	Mg electrodeposition on Ti and Au	<i>In situ</i> multi-modal EChem-(TEM, STXM, XAS)
2017WZ&	B	A	STXM	DOPC, DSPC, DOTAB	Lipid bilayer, phase seg. mapping
2017XW&	M, B	I	ptycho	Au nanowires; bamboo	SSRF 8.5 nm resolution
2017YC&	M	A	STXM	ZIF-8 , ammonium ferric citrate	CO2 electroreduction
2017YJ&	M	A	STXM	Organic solar cells	
2017YK&a	B	A	STXM	Dexamethasone in skin	Drug penetration
2017YK&b	B	A	STXM	Murine skin	Drug penetration
2017YN&	E	A	STXM	ultracarbonaceous Antarctic micrometeorite	
2017YNW _a	B, E	A	STXM	Norfloxacin adsorption on barley straw	
2017YNW _b	B, E	A	STXM	Levofloxacin adsorption - barley straw	
2017YS&	M	A	XPEEM	Nanostructured complex oxides	Spin ice
2017YW	M	A	STXM	Fecitrite, ferrihydrite, Fe(2)oxalate; PAN, PECA, PPC, PEC	Radiation dmaage
2017YW&	M	A	SPEM	BaV ₁₀ O ₁₅	Charge-orbital disorder
2017YX&	M	A	STXM	Organic solar cells	
2017YZ&a	M	A	STXM	Organic solar cells	
2017YZ&b	M	A	XPEEM	Sc on ZnO nanowires	dewetting
2017ZB&	E	A	STXM	Acidovorax sp. BoFeN1	Mineral aggregation
2017ZGS	M	A	STXM	Ca silicate	Drug delivery
2017ZJ&	M	A	STXM	LiFePO ₄ LIB	Phase segregation

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2017ZM&	M	A	STXM	Pt/Co/Ir superlattice stacks	Skyrmions
2017ZMG	M	A	XPEEM	Metal supported graphene	Indexing moire
2017ZN&	B	A	STXM	MMP magnetotactic bacteria, greigite	Greigite XAS and XMCD
2017ZQ&	M	A	XPEEM	LiFePO ₄ LIB	
2017ZW&a	M	A	STXM	LiNi _{1/3} Fe _{1/3} Mn _{4/3} O ₄	Li battery
2017ZW&b	M	A	XPEEM	ferrite	Field assisted self-assembly
2017ZZ&	B	R	TXM	yeast	
2018AA&a	M	A	STXM	Aerosol particles, Ozone	Diffusion & reactions
2018AA&b	M	A	XPEEM	WSe ₂ / graphene	
2018AA&c	M	A	STXM	Organic PV	Aqueous inks
2018AA&d	M	A	SPEM	Ag nanoparticle oxidation	Graphene cell
2018AB&	E	A	STXM	microfossils	
2018AB&b	M	R	XPEEM		Elettra XPEEM review
2018AB&c	M	A	STXM		Polymer solar cells
2018AG&	M	A	STXM	Non-fullerene polymer PV	Side-chain influences efficiency
2018AH&a	E	A	STXM	Organics in soil	Recalcitrant components
2018AH&b	M	I	STXM	XRF-STXM	Petra III STXM P04
2018AH&c	M	A	XPEEM	Ferritic stainless steel	Mn-rich coating
2018AI&	M	A	STXM	SiC membranes	Stxm substrates
2018AM&	M	A	STXM	V ₂ O ₅	Phase transitions
2018AM&b	M	A	STXM	Non-fullerene polymer PV	
2018AP&	M	A	STXM	lanthanide and actinide dialuminides	
2018AP&b	M	A	STXM		Spin-wave circuits
2018AP&c	M	A	XPEEM	Graphene nanoribbons	Ballistic tracks
2018AVV	M	A	SPEM	Carbon nanofibers	
2018AW&	M	A	STXM	Hole carrier thin film for solar cell	Molecular orientation
2018B&	E	A	STXM	Si minerals in chondrites	
2018BA&a	M	A, R	STXM	Zn-air batteries	In situ
2018BA&b	M	A	SPEM	Alloy electrodeposition mechanism	Depth dependent SPEM
2018BA&c	M	A	STXM	Organic PV	Hole carrier
2018BB&a	E	A	STXM	Aerosol particles	SE US chemical mixing
2018BB&b	M	A	holography	(Co/Ni) ₄ multilayer – magnetic drops	Soliton imaging
2018BE&	M	A	XPEEM	Magnetic FeOx nc	Form by reactive dewetting
2018BG	M	A	STXM		Battery applications
2018BK&a	M	A, I	STXM		7 nm resolution
2018BK&b	M	A	ptychography	skyrmion	Sub-100 nm magnetic dynamics
2018BK&c	E	A	STXM	CO chondrites; Fe, silicates	

code	materials	type	technique	species	Subject / Comments
2018BK&d	M	A	SPEM	Solid oxide fuel cell -	operando
2018BL&	M	A	STXM	Li battery electrodes	Stochastic model of multi-particle system
2018BM&a	M	A	XPEEM	VO _x / Rh(110) – CH ₃ OH oxidation	Reactive phase separation
2018BM&b	M	A	SPEM	La ₂ NiO _{4+y}	VUV pump,, probe of interstitial O
2018BM&c	B	A	STXM	Paraffin embedded rat tissue	Radiation damage
2018BO&	M	A	XPEEM	Ultrathin complex oxide NS	Magnetic domain mapping
2018BR&	M	A	STXM	PFSA	First principles damage(dose)
2018BS&	M	I	STXM		Large solid angle XRF detector
2018BW&	M	A	TXM	TiO ₂ -B nanoribbons, dichroism	Ti & O spectromicroscopy, old Bessy TXM
2018BZ&	M	A	STXM	Organic solar cells	Fluorination of D & A improves performance
2018CB&	M	A	STXM	aerosols	Fungal spore nuclei
2018CG&a	E	A	STXM	chondrites	
2018CG&b	M	A	XPEEM	multiferroic BaTiO ₃ /CoFe	
2018CG&c	B, M	A	STXM	Human skin cells – CNT, crocidolite	Fe toxicity
2018CK	M	A	STXM		
2018CK	M	A	STXM	Fe-amyloid complexes & Alzheimer	proton based Alzheimer therapy
2018CK&	M	A	XPEEM	Anisotropic magnetic thin films	Domain walls
2018CL&	E	A	STXM	CR (Renazzo-type) chondrites	Hydrothermal evolution of chemistry
2018CN&a	M	I	ptycho		Nanosurveyor II
2018CN&b	E	A	STXM	Tagish Lake meteor	Heating changes organics
2018CW&	M	A	XPEEM	planar α -Fe ₂ O ₃ /Co heterostructure.	Magnetic vortex pairs
2018CX&	M	A	XPEEM		magnetic u-structure strain distributions
2018CZ&	E	A	STXM		Extra-terrestrial organics
2018DA&	M	A	STXM	Citric acid, carbonate	KB, SGM – IR correlative
2018DB&	M	A	TXM		Lab-based laser plasma TXM
2018DG&	M	A	STXM	f-block Prussian blue analogs	Actinide spectroscopy
2018DR&	I	A	STXM	Diffreactive optics - progress	
2018EC&	B	A	STXM	Amyloid plaques – Fe, Ca	
2018EF&	B	A	STXM	Amyloid plaques – Fe, Ca speciation	
2018EN&	M	A	ptycho	Fe ₂ O ₃ nanoparticles	Data acquisition & analysis data flow
2018EO&	B	A	contact	HeLa S3 cells	Water window soft X-ray with LPP
2018EP&	B	R, I	TXM		TXM review
2018ET&	M	A	CDI – FT-holog.	Siemens star	70 eV HHG source
2018ET&b	M	A	STXM	human brain - EtOH ,embed, cut	Expoxy signal removed from high-E bgnd
2018EW&	B	A	TXM		PSF correction to tomo
2018FL&	E	A	STXM	Se	Bioreduction; cryo-STXM
2018FP&	E	A	STXM	aerosols	Organic quantitation

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2018FR&	M	A	STXM	pentacene	operando
2018FS&	M	A	STXM	SWCNT, crocidolite fibres	Effect in humans
2018FW&a	M	I	STXM		Magnetic dynamics @100 ps
2018FW&b	M	A	STXM	Organic & inorganic resists	
2018FW&c	M	A	STXM	permallo	Magnetic dynamics
2018FW&d	M	A	STXM		Isotropic strain changes mag. dynamics
2018FZ&	M	A	STXM	Pt/Co/Ir	STXM-XMCD & electrical / magnetic
2018G	M	B	XPEEM	CaCO3 biomineralization	
2018GA&	M	R	SPEM	Catalysis	UHV - ambient
2018GB&	M	A	STXM		C functional group quantitation
2018GC&	M	A	SPEM	Ag-Cu catalyst (ethane epoxidation)	Cu(1), Cu(2) operando
2018GD&	E	A	STXM		desalination
2018GD&	M	A	STXM	CoFeOx LIB	
2018GDC	E	A	STXM		Water purification
2018GG&	M	A	XPEEM	Magnetic patterning by e- beam	Carbon litho assisted patterning
2018GJ&	M	A	STXM	Gypsum in cement	
2018GK&	B	A, R	STXM		Reproductive medicine
2018GK&b	M	A	ptycho		Optimizing (x,y) positions
2018GL&	M	I	STXM	PEM-FC ionomer-cathode cryo-tomo	CLS cryo-STXM
2018GM&	M	A	STXM	tricalcium aluminate, gypsum	
2018GN	E	A	STXM	Pre-solar graphite grains	
2018GR&	B	A	STXM	Human lung tissue	
2018GS&	M	A	TXM	Marine algae	Ca storage organelles, tomo, spectroscopy
2018GW&a	M	I	TXM		10 nm spatial resolution
2018GW&b	M	I	TXM		Beamline for upgraded Bessy TXM
2018GZ&	M	A	XPEEM	Ni disks on BaTiO3	V control of single domains
2018H	M	A	STXM	N2 in CNT	High pressure !!
2018HA&	I	A	STXM	Fast CCD	Petra P04 STXM
2018HB&	E	A	STXM	Fe particles in glacial sediments	
2018HG&	M	A	STXM	Li rich oxides	M-O deco-ordination
2018HH&	M	A	STXM	Cr ₃₊ in ruby	Mechanisms of lasers
2018HL&a	B	A	STXM	Plant cell walls	Correlative
2018HL&b	M, B	A	TXM		Magnetic micro-robots
2018HM&a	M	A	STXM		Polymer solar cells
2018HM&b	M	A	XPEEM	RbxFe ₂ -ySe ₂ crystals.	Magnetic & superconducting domain imaging
2018HN&	E	A	STXM	Hydrothermal plume particles	
2018HP&	M	B	STXM	Lignans in wood	C 1s, O 1s spectromicroscopy

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2018HT&	M	A	STXM	Martensite phase in steel	C 1s mapping , PF STXM
2018HW&a	M	I	STXM, TXM	Cryo (S)TXM design	AnImaX @ P04 Petra
2018HW&b	M	I	XPEEM	Apple II undulator	Quantitative linear pol. evaluation
2018I	M	A	TXM		Stochastic aspects of magnetism
2018IN&	M	A	STXM	Fluoro-polymers for PV	Orientation by long alkyl chains
2018JA&	M	A	STXM	Epitaxial CoFe2O4/BaTiO3	Multiferroic; effect of strain
2018JJ&a	M	A	XPEEM	Magnetic skyrmions	
2018JJ&b	M	A	TXM		Sub-100 nm magnetic bubbles
2018JR&	M	A	TXM	Ferrimagnetic alloys	Spin-torque
2018JR&	M	A	TXM	Magnetic Skyrmion Bubble Lattices	
2018JW&a	M	R	STXM		CLS SM performance
2018JW&b	M	A	XPEEM	Ag – ethylene epoxidation	Active species identified
2018KA&a	M	A	STXM	DOPC – A-beta complexes	Effect of 3 drugs on A-beta in membrane
2018KA&b	M	A	STXM	RAFT polymer	Surface composition
2018KB&a	E	A	STXM	Sulfite in sea spray aerosols	
2018KB&b	M	A	STXM, ptycho	Co-doped, MnO2-polypyrrole	In situ echem, spectro-ptycho
2018KC&	M	A	SPEM	ZnO / graphene	
2018KF&	M	B	TXM		Water window, lab
2018KL&	M	A	STXM	LNMC	Li battery morphology analysis
2018KL&b	M	A	TXM	Si IC chip	In situ tensile test – crack propogation
2018KL&c	M	A	XPEEM	Ni nanowires	Chiral magnetic domains
2018KS&	M	A	XPEEM	CuSO4	And SEM, electrochemistry
2018KW	M	A	STXM	memresistors	Current density, field separation
2018LA&a	M	A	STXM	Mouse tissue	Large solid angle (1.2 sr) XRF detection
2018LA&b	M	A	STXM	La, Cu and Fe test sample	Large solid angle XRF detection
2018LB&a	M	I	STXM	PEM-FC ionomer-cathode cryo-tomo	CLS - Cryo STXM
2018LB&b	M	A	STXM	CePd ₂ P ₂	ferrmagnetism
2018LB&c	E	A	STXM	Organics in soil	lifetime
2018LC	M	A, R	STXM	LiB	
2018LC&a	M	I	TXM		Combined optical SIFM & TXM
2018LC&b	M	A	XPEEM	Spin ice	Topological order
2018LC&c	M	A	STXM	Li batteries	Fluid enhanced surface diffusion
2018LCG	B	A	TXM	Yeast tomo; RGO@PDA	
2018LI&	B	A	STXM	Fresh & frozen ovarian tissues	
2018LJ&	M	A	XPEEM	Strained VO2	V-V dimmers in metallic phase
2018LL&	M	A	TXM	Chiral Ferromagnetic Heterostructures	Heat generated Skyrmions
2018LM&a	M	A	STXM	Li _{0.5} CoO ₂ LIB electrode	

code	materials	type	technique	species	Subject / Comments
2018LM&b	E	A	STXM	desert varnish	STXM aided by metagenomic analysis
2018LPM&	M	A	STXM	Uranium oxide nc	
2018LS&a	M	A	STXM	CH3MH3PbI3 solar cell materia	
2018LS&b	M	I	STXM	Compact 1-flange instrument	XRF & transmission; Bessy II tests
2018LV&	M	A	ptycho	Magnetic samples	Nes soft Xray ptycho @ SLS
2018LV&	M	A	STXM	Human ovarian tissue	XRF light element analysis
2018LW&	M	A	STXM	Li _{1-x} Ni _{0.5} Mn _{1.5} O ₄ LIB	
2018LX&a	E	A	ptycho	Aerosol dust	
2018LX&b	M	I	TXM		Combined optical FM & TXM (home design)
2018LX&c	M	A	XPEEM	Multiferroic Heterostructure	E-field reorientation of strain in magnetic
2018LY&a	B	A	TXM	cells	Soft Xray tomography
2018LY&b	M	A	XPEEM	Fe ₃ GeTe ₂	Patterning induced ferromagnetism
2018LY&c	M	A	STXM	2D/3D perovskite solar cells	
2018LY&d	M	A	STXM	2D/3D perovskite solar cells	
2018LZ&	M	A	STXM	AMB1 magnetotactic bacteria	Time course
2018MB&a	E	A	XPEEM	Late Cretaceous Pinna fossil	Organics preserved
2018MB&b	M	R	TXM, SPEM, STXM, XPEEM		Overview of all SR nanoprobe methods
2018MC&	E	A	STXM	Zn in Bivalve shells	polluted sediment
2018MH	M	A	STXM	PFSA	Radiation damage
2018MH	M	A	STXM	PFSA	Damage rates
2018MH	M	A	STXM	PFSA	TEM radiation damage
2018MH&a	B	A	STXM	skin	
2018MH&b	M	A	STXM	PFSA, PS, PMMA	UV/air veruss X-ray damage & thickness
2018ML&	M	A	STXM	Magnetic multilayers	Electrically detected skyrmions
2018MM&	B	A	STXM	Aorta after rad. treatment	
2018MP&a	E	A	STXM	low-temperature serpentinization	Org. C drives mineral formation
2018MP&b	B	A	STXM	Mg in single cells	
2018MR&a	B	A	STXM	papillary thyroid carcinoma tissue	
2018MR&b	M	A	STXM	2D coordination polymers	Ferromagnetic surfaces
2018MS&a	B	A	STXM	Mg channel MRS2	
2018MS&b	B	A	TXM	engineered yeast endosymbiants	mitochondria evolution
2018MS&c	M	A	STXM	PTFE / PS core-shell np	Shell thickness measurement
2018MSF	M	A	STXM		Low dose methods (few E)
2018MT&	M	A	TXM	dipole skyrmion motion	Spin-orbit torque induced
2018MW	M	A,R	STXM	catalysts	Review of operando
2018MZ&	M	A	ptycho		Randomized zone plates

code	materials	type	technique	species	Subject / Comments
2018NT&	M	A	SPEM	Nanoparticles in liquid	Graphene cell 150 C , in situ
2018OG&	M	I	STXM	3500 EigerX frames per second	Data pipeline for high speed XRF/pixel
2018OHG	B, E	I	ptycho		Arbitrary 2D fly-scan
2018OI&a	E, B	A	STXM	Bacteria redox	In situ echem
2018OI&b	B	A	STXM	Cell nucleus	tomography
2018OR&	M	I	STXM	9 nm ZP 7 nm half-pitch	STXM_deconvolv program
2018ORC	E	A	STXM		DOM retention in subsurface soils,
2018OS&	M	A	XPEEM	Spin ice	
2018P	M	R	ptycho		
2018PA&a	B	A	STXM	Rat brain	Krebs cycle; gender differences
2018PA&b	M	I	STXM	Forensic nuclear studies	New 11.0.2 STXM instrument
2018PA&c	M	A	STXM		Magnonics: magnetic SP lithography
2018PC&	M	A	STXM	MoS ₂	
2018PF&	M	A	XPEEM	Dipolar square kite tessellation	Magnetic order
2018PG&	B	A	STXM	Ferruginous bodies in a dog cancer	XRF-STXM
2018PH&	E	A	STXM	Clays	nucleotide adsorption mechanism
2018PJ&	M	A	STXM	Polymer solar cells	T-dependent miscibility
2018PN&	M	A	XPEEM	Fe in C(graphene)/hBN / Pt(111)	intercalation
2018PO&	M	A	STXM	CuSO ₄ reduction	In situ flow echem
2018PS	B	A, I	TXM		Neural net density segmentation
2018PS	B	T	TXM		neural network analysis
2018PS&	M	A	STXM		Organic solar cell
2018PS&b	M	A	STXM	Linear alkane thin films	Temperature dependence
2018PT	E	R	STXM	soil organic characterization	NEXAFS compared to C-13 nmr
2018PV&a	B	A	STXM	ovarian tissues	
2018PV&b	B	A	STXM	Human ovarian tissue	XRF elemental map
2018RA&	M	A	SPEM	Pt nanoparticles / graphene	Size contrast
2018RK&	I	A	STXM	ALD fabricated sub-10 nm ZP	
2018RK&a	M	I	STXM		7 nm STXM resolution
2018RK&b	M	I	STXM	Sub 10 nm ZP lens fabrication	ALD
2018RK&b	M	I	STXM		7 nm resolution zone plates
2018RR&	M	A	STXM	P3HT/PCDTBT PV	Laser patterning
2018RS&	M	A	ptycho	Water window fibroblast cell (~100 nm)	compare ptycho reconstruct methods
2018RT&a	E	A	STXM	Fe(O(OH))	Hydrothermal vents
2018RT&b	B, M	R	ptycho	Polyimide C 1s, cell, XCT, ptycho	EUV table top review
2018RV&	M	A	STXM	Fischer-Tropsch catalyst	operando
2018SA&a	M	A	XPEEM	apatite	dichroism

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2018SA&b	M	A	SPEM	Cu electrostrip / deposit	Cu(I) intermediate
2018SB&	M	A	STXM	Electrochem reduced CO2	Synthesis on Mars
2018SC&	M	A	ptycho		
2018SC&b	M	I	ptycho		KB focus 8 um, cryo-tomo
2018SC&c	M	A	STXM		3D kiniform ZPs; 3D print ZPs for ptycho
2018SC&d	M	A	STXM	Eu(Ga _{1-x} Al _x) ₄ ,	antiferromagnetism
2018SD&	B	A	TXM	HEK293 cells	Cryo structure, water window, correlative FM
2018SF&	M	A	XPEEM	Mn ₂ Au	Imaging AFM domains at high B
2018SG&	E	A	STXM		Water purification
2018SG&b	M	A	STXM		mesoscopic ferromagnetic by SC; out-of-plane M
2018SH&	M	I	STXM	Mn ox state, simulated	Machine learning spectral extraction
2018SH&a	M	A	XPEEM	Ni-MoS ₂ contacts	
2018SH&c	M	A	SPEM	Rh(111) O ₂ + H ₂ reaction	Chemical waves
2018SI&	B	A	STXM	Mammalian cells	RNA – DNA differentiation
2018SK&a	M	I	STXM		STXM at Pohang Light Source
2018SK&b	M	A	XPEEM		(r,t) Correlation of macro XY spins
2018SK&c	E	A	STXM	Mutchison CM2 chondrite	Aqyeous alteration
2018SKK	M	I	STXM/ptycho		TEY, XRF, ptycho modes
2018SL&	M	A	TXM	Amorphous GdCo	Chiral ferrimagnetism
2018SM&	M	I	XPEEM	PEEM-3 optics	
2018SO&a	M	A	XPEEM	Artificial spin ice	
2018SO&b	M	B	STXM	Mammalian chromosomes	Quantitative analysis
2018SP&	M	A	SPEM	CeOBiS ₂ metallic phase	Spatially resolved ARPES
2018SP&b	M	A	XPEEM	MoS ₂ – Ni binding	Au nanoglue
2018SS&a	M	A	STXM	Peryline-diimide	Solar cells
2018SS&b	M	A	STXM	CoNiB nanotubes	Flux closure domains
2018SS&c	M	A	SPEM	graphene	Intrinsic XPS
2018ST&	M	I	STXM		SoftiMAX STXM
2018SV&	M	A	STXM	Co/Cu from Co(CO) ₃ NO	X-ray induced metal deposition
2018SW&	M	A	STXM	BiVO ₄ / ZnO Nanocomposite	photovoltaic
2018SW&b	E	A	XPEEM	apatite	dichroism
2018SW&c	E	A	STXM	Microbia AlSiO _x formation	acidic anaerobic environments:
2018SZ&	M	A	XPEEM	graphene on off-axis 3C-SiC (111)	Step-bunching effects
2018TG&	M	I	STXM		Softimax beamline Max IV
2018TX&	M	A	ptycho	ptychography at SSRF	
2018VB&	E	A	STXM	Interstellar organic compounds	asteroidal hydrothermal conditions
2018VC&	E	A	STXM	Atmospheric particles	Heat transformation

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2018VM&	B	A	STXM	chlorhexidine	In lipids
2018VR&	M	A	XPEEM	graphene	Out-of-plane distortion
2018VV&	M	A	STXM	Fischer-Tropsch catalystd	operando
2018Wa	M	A	STXM, XPEEM	LiMn0.75Fe0.25PO4	Li battery materials
2018WA&	M, B	A	STXM	Bone-Ti dental implant	Correlative microscopy
2018Wb	M	A	STXM	catalysts	
2018WB&	E	A	STXM	Interstellar Medium	Fe oxidation state
2018WC	M	A	STXM	np in biology	
2018WF&	M	I	STXM	Reduce C contamination	PoLLux beamline
2018WG&	M	I	STXM, PEEM		CLS SM overview – all capabilities
2018WM&b	M	A	STXM	Cu chlorophyllin	NEXAFS
2018WP&	M	I	STXM	carbon contamination	Controlling on optics and in STXM
2018WR&	M	A	XPEEM	antiferromagnet	Current manipulation of domains
2018WS&a	M	A	STXM	Zwischgold	corrosion
2018WS&b	M	A	STXM	GdFeCo	ferrimagnetic skyrmions, i-driven dynamics
2018WS&c	M	A	STXM		single magnetic skyrmion
2018WS&d	M	A	STXM	C-implanted ZnO nanowires	magnetism
2018WS&e	M	A	XPEEM	Rhomohedral 4L graphene	
2018WX&	M	A	ptycho	Siemen's star	Decoherence correction
2018WZ&a	M	A	STXM	PFSA in PEM-FC cathodes	Spectro-ptycho-tomography
2018WZ&b	M	A	STXM, ptycho	ZnO ALD on Al2O3 aerogel	
2018XC&	M	A	STXM	Nanoparticles inks	Water processed PV
2018XH&	M	A	STXM	Nanoparticles inks	Water processed PV; minimize micro-defects
2018XK&	M	A	XPEEM	Cytocompatible magnetostrictive mat.	
2018XM&	M	A	XPEEM	Multiferroic / polymer	
2018XM&	M	A	XPEEM	Polymer – multiferroic layers	Enhanced magnetoelectric coupling
2018XT&	M	A	STXM	Fullerene np	Organic PV
2018YC&a	M	A	STXM, ptycho	FeGd	Ptycho XMCD
2018YC&b	M	A	SPEM	Aligned graphene sheets	
2018YC&c	M	A	STXM	Polymer solar cells	T-dependent miscibility
2018YF&	M	A	ptycho	LiFePO4	LIB, spectro tomography
2018YF&b	B	A	STXM	Gd labeled macrophage	2D and 3D
2018YH&	M	A	STXM	PFSA spectroscopy	
2018YH&b	M	A	STXM	Organic solar cells	Rules of the game
2018YK&	B	A	RSoXS	Cellulose fibrils	Cell walls
2018YL&	B	A	STXM	Cell in liquid inside graphene cell	
2018YSL	M	R	TXM	Li battery	operando

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2018YW	M	A	STXM	Cu-contaminated soil	Combine C 1s STXM, Cu K-exafs
2018YX&	M	A	STXM	Non-fullerence OPV	>10% eff.
2018ZA&	M	R	SPEM	various	ZP SPEM at Elettra
2018ZA&	M	R	SPEM	F-doped CNT, GaAs, (V 1-x Cr x)2O3	Functional XPS mapping
2018ZF&	M	A	STXM	nanodiscs	Néel skyrmions
2018ZH&	E, B	A	STXM	Greigite, MMP	
2018ZM&	M	A	STXM	permalloy nanotubes	Stable vortex ground state
2018ZN&	M	A	STXM	PVDF/Si/Graphite Anode for LIB	
2019AB&	M	R	SPEM	Various systems	Operando studies
2019AB&	M	A	XPEEM	graphene nanoribbons	Imaging electric pathways
2019AC&a	M	A	XPEEM	graphene on β -SiC/Si(001)	Layer-by-layer growth
2019AC&b	M	E	STXM	Xanthan gum aerosols	O3 induced diffusion & reaction
2019AE&	E	A	STXM	organics in volcanic soils	
2019AF&	E	A	STXM	3.5 Ga Mount Ada Basalt	Organo-metal associations
2019AF&b	M	I	XPEEM	Magnetic dynamics	SR pulse co-ordination
2019AG&a	M	A	SPEM	Liquid CuSO4 in graphene cell	Radiation damage
2019AG&b	M	A	XPEEM	CeO2?(111)/ZrO2-x(111) on Rh(111)	Redox catalyst
2019AH&	M	A	STXM	Lysine functionalized nanodiamonds	Gene carriers
2019AK&	M	A	STXM	Nanowire cathodes	LiB
2019AL&	M	A	STXM	Root effects on weathering	Pedogenic time scales
2019AM&	B	A	TXM	chromatin	Herpes virus alterations
2019AP&	M	A	SPEM	Graphen electronics	Ultra-high-P (diamonds) \rightarrow p-doping
2019AS&a	M	A	u-XPS	L4Ti5O12 LIB	Operando XPS mapping
2019AS&b	M	A	XPEEM	AmorphousCaCO3	Sea urchin spines
2019AS&c	M	A	XPEEM	Pd on bilayer AlSiOx	
2019BA&	M	I	STXM	Silicon Drift Detectors for XRF	32 element large solid angle
2019BB&	E	A	STXM	75 million year hadrosaur skin	
2019BC&	M	A	STXM	N-doped NiCo2O4	Zn – air batterines
2019BF&a	M	A	XPEEM	Memresistive device	In-gap & band transport
2019BF&b	M	A	XPEEM	Mn2Au	Current induced Neel vector switching
2019BG&	M	A	XPEEM	Antiferromagnetic Thin Films	Neel Order Switching
2019BH&c	B	A	TXM	Protein-RNA condensates	
2019BJ&	B	A	LARIAT	Scarab cuticle	
2019BJ&	I, B	A	LARIAT	African Flower Scarab <i>Eudicella gralli</i>	Auger EY , magnetic lens
2019BK	M, B	R	STXM		Memristors for brain inspired computing
2019BK&	M	A	STXM	Zn-air; anode, eutectic electrolyte	operando
2019BK&b	M	R	SPEM	SOFC surfaces, Ag-In	

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2019BM&	M	I	STXM	LEXRF - STXM	On-the-fly XRF mapping
2019BS&a	M	A	STXM	La NiO ₃ in Zn/air batteries	
2019BS&a	M	A	XPEEM	Complex oxide nanostructures	Neel vector re-orientation
2019BS&a	M	A	XPEEM	Complex oxide nanostructures	Shape-imposed anisotropy
2019BS&b	E, B	A	XPEEM		Human dental enamel
2019BW&	M	A	XPEEM	Chondrite asteroid	Paleomagnetic differentiation
2019CE&	E	A	STXM	iron-silicates in a glass/iron/argillite	Np as probes of deep geological disposal
2019CE&	M	A	ptycho		Advanced denoising
2019CF&	M	A	XPEEM	Artificial antiferromagnet	Superdomain formation
2019CH&	M	A	STXM	Gas-dependent nano-bubbles	Graphene cell
2019CL&	B	A	TXM	Cationic antimicrobial peptides	Biomass flocculation AM mechanism
2019CN&	E	A	STXM	Elemental Sulfur	organomineralization
2019DD&	M	A	TXM	Ordered skyrmions	
2019DG&	E	A	STXM	Porous microrules	
2019DT&	M	A	SPEM	Li-doped graphene oxide / SnO np	White luminescence
2019EC&a	M	A	ptycho	Multi-probe approach	Partial coherent ptychography
2019EC&b	B	A, R	TXM		Correlative light, TXM
2019EK&	B	A	STXM	Plasmid DNA and Cell Nucleus	P 2p spectromicroscopy
2019FP&	E	A	STXM	Mixed org/inorg particles	Quantitative olume fractions
2019FS	M	R	XPEEM		Review of PEEM
2019FW&	M	A	STXM		Domain wall magnetic dynamics
2019FZ&	M	A	STXM		Field free Skyrmion nucleation
2019GB&	B, E	A	XPEEM	Nacre thickness	Thickness relates to T (paleothermometer)
2019GC&	B, E	A	STXM	SWCNT in BeWo human laccental cells	
2019GG&	M	A	XPEEM	CO dissociation / graphitization	μ-focus Xray & electron beam damage
2019GH&	M	A	STXM	printed organic devices	Nanostructure effects
2019GJ&	M	A	TXM	topological meron pairs	
2019GK&	B	R	STXM		Reproductive medicine applications
2019GL&	B	A	TXM		Cell imaging
2019GM&	M	A	XPEEM	Ni / MgNbO _x -PbTiO ₃ polyxlline	Sheer-strain mediated magnetoelectric effect
2019GML	M	A	XPEEM	Co/Re(0001), C(graphite) cap	Domain nucleation
2019GO&	B	A	STXM	Rapamycin in Fixed Human Skin	
2019GP&	B, E	A	XPEEM	Early animals	Biominalize by particle attachment
2019HB&	M	A	XPEEM	AFM SmFeO ₃	Spin Hall effect
2019HG&	M	A	STXM	Li batteries	
2019HJ&	M	A	STXM	Aromatization over Zn/HZSM-5	catalysis
2019HL&a	M	A	ptycho	Al wire – Xray damaged; TEY-XBIC	Compare STXM, ptycho, STEM

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2019HL&b	M	A	TXM	Fe nanoparticles	Self alignment
2019HO&	M	A	STXM	Water around bubbles	
2019HT	M	A	STXM	Natural rubber	Network structure
2019HW&	B, M	A	STXM	Bone implants, Fe - Alzheimers	highlight
2019ID&	E	A	STXM	Organics in 128 Ma microtubules	
2019IH&a	M	A	TXM	Bloch point, asymmetric permalloy disk	dynamics
2019IH&b	M	A	STXM	Nanocellulose Huybrid Materials	
2019IN&	E	A	STXM	meteorites	Organo-sulfur mapping
2019IO&	E	A	STXM	~3.95 Billion-year-old Sedimentary Rocks	Carbonaceous speciation
2019IP&	M, B	A	STXM	Cellulose/chitosan. Nanosilica films	
2019IS&	M	A	STXM	chromosomes	RNA versus DNA distributions
2019JG&	M	A	XPEEM	Co/graphene	C-dissolution / recondense
2019JJ&	M	A	XPEEM	Skyrmion	Skyrmion Hall effect
2019JV&	E	A	STXM	Clay minerals	Effect of degraded organic matter
2019KB&a	M	A	STXM	Arctic Sea Spray Aerosol	Sea Ice Lead Microbiology → winter Composition
2019KB&b	M	I	STXM	Novel SDD	XRF topography
2019KC&	M	A	XPEEM	perovskite oxide exchange spring bilayer	
2019KE&	M	A	STXM	solutions ((NH ₂)C=O; CaCl ₂ , NaNO ₃)	table-top XAS, parallel measure (flatjet)
2019KK&a	E	A	STXM	Tagish Lake Meteorite	C, Fe analysis of lithologies
2019KK&b	M	A	STXM	low-C steel for pressurized reactors	passive layer composition
2019KL&	E	A	STXM	aerosols	
2019KO&a	E	A	STXM	Murchison meteorites	Organic degradaration
2019KO&b	E	A	STXM	Ediacara Fossils, early cambrian chegjiang	Carbonaceous Matte
2019KS&a	M	A	TXM	skyrmions in magnetic multilayers	
2019KS&b	M	A	XPEEM	FeN nanocrystals	AFM RT stable
2019LA&a	B	I	STXM	Mouse tissue	P04 STXM-XRF
2019LA&b	M	A	STXM	Stabilization of SR sources	Machine Learning Stabilization
2019LB&	E	A	STXM	Organics in multi-decadal soil	
2019LC&	M	A	STXM	Perovskite hydroxide	OER catalyst
2019LC&a	M	A	XPEEM	BiFeO ₃	Optical control of multi-ferroicity
2019LC&b	E	A	STXM	Hydrothermal vents	Ocean Fe source
2019LE&	B	A, R	STXM	proteinpathies	Novel methods - review
2019LF&	M	A	XPEEM	Gd intercapation into graphene	
2019LG&a	M	A	STXM	cement	hydration
2019LG&b	M	A	ptycho	calcium (alumino) silicate hydrate	
2019LH&	E	A	STXM	Colloidal iron	Hydrothermal plumes
2019LL&a	M	A	STXM	Si/C composite anode	Li B

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2019LL&b	M	A	ptycho		Elemental analysis from scattering ratio
2019LL&c	M	A	STXM	Stabilization of SR sources	Machine Learning Stabilization
2019LMG	M	A, R	STXM	Aerosol particles	STXM chemical imaging
2019LP&	M	A	XPEEM	NdNiO ₃	Scale-invariant magnetic textures
2019LS&	E	A	STXM	Aircraft soot from idle & climb-out	JP4 versus Biofuels
2019LW&	E	A	STXM	2.7 Ga stromatolites	S-fueled anaerobic CH ₄ oxidation
2019LY&	M	A	STXM	AMB1 magnetotactic bacteria	
2019LZ&	B, E	A	STXM	Magnetite biomineralization in MTB	Time course study
2019MA&	M	I	STXM	Percival detector	Minimum E of 350 eV see 2015WM&
2019MD&	E, B	A	STXM	Biomineralized Zn in Juncus acutus	Mine pollution
2019MF&	E	A	STXM	rock samples	FIB artifacts – Mn reduction
2019MG&	E, B	A	STXM	Cellulose waster, bio-catalyst	bio-fuel
2019MH	M	A	STXM	PFSA	Radiation damage by TEM
2019MH&	M	A	STXM	water-processable organic photovoltaics	intermixed donor-acceptor architectures
2019MK&	M	A	STXM	Co(OH) ₂ OER Electrocatalysts	operando
2019MKS	M	A	SPEM	Ba-Sc-O on W(100).	
2019MM&a	M	A	STXM	PFSA	Radiation damage by X-rays
2019MM&b	M	A	XPEEM	Co ₂ Fe _{0.4} Mn _{0.6} Si Heusler alloy	Magnonic spectra
2019MM&c	M	A	STXM	twinning at cleaved graphite edges	dichroism; PES angular distribution
2019MN&	M	A	STXM	Sulfur Cross-linked Isoprene Rubber	2-phase network
2019MP&	M	A	STXM	Organic/inorganic composites	Quantitating organic fraction
2019MP&	M	A	TXM	square artificial spin ice	Thermally and field-driven magnetic mobility
2019MUF	E	A	STXM	Basalt-cell interface of oceanic crust	Microbial weathering
2019MV&	M	R	SPEM	Pb-Bi Eutectic	Micro-scale segregation
2019MZ&	M	I	STXM		Confocal 3D STXM
2019NE&	E	A	TXM	Dusty Olivine, Semarkona Chondrite	Magnetic Vortices
2019NS&	E	A	STXM	primitive asteroidal meteorite	cometary building block
2019O	M	A	ptycho	Fe oxide nanoparticles	Spectro-ptycho Fe L3 edge
2019OB&	M	A	TXM		Chirality-Encoded Domain Wall Logic
2019OG&	M	I	STXM		Petra III STXM P04
2019OO&	M	A	XPEEM		Time resolved; Spring-8
2019OY	M	A	STXM		TEY detector
2019OY&	B	A	STXM	Cell nucleus	tomography
2019PC&	B	A	STXM	Sin p in Colon cancer cells	
2019PD&	E	A	STXM	Paleoproterozoic banded iron	Fossil biomass preserved as graphitic carbon
2019PG&	E	A	STXM	Fe-Sulfides, microbial C	
2019PL&	M	A	STXM	Fe adsorption on C nanoparticles	

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2019PM&a	B	A	STXM	angiotensin II receptor blockers	Hypertense rats
2019PM&b	B	A	STXM	Aortic arch	angiotensin II receptor blocker
2019PM&c	B	A	TXM	Zn hydroxyl apatite	Osteogenic differentiation, Mistral TXM spectra
2019PS&	M	B	STXM	Human ovaries	Hard and soft Xray imaging
2019PWU	M	A	STXM	Linear alkanes	dichroism
2019PY&	B	A	STXM	Mice Liver	
2019PZ&	B	A	STXM	Human sperm capacitation	Changes Mg, Cu levels
2019RB&a	E	A	STXM	Uranium in <i>P. lividus</i> Sea Urchin	
2019RB&b	B	A	STXM	Maize endosperm	
2019RE&	M	A	XPEEM	Al 6063	Surface oxide, heat treatment
2019RG&a	B	A	TXM	Green Alga <i>Chromochloris</i> formation	
2019RG&b	M, E	A	STXM	Heritage sandstone protectives	XRM inspection
2019RH&	M	A	XPEEM	Nanotextured V ₂ O ₃ Mott insulator	Metallic droplets
2019RK&	B	A	STXM	oral delivery vehicle SBA-15	hepatitis B vaccine visualization
2019RP&a	M	A	STXM	Ni and NiCu ex-hydrotalcite catalysts	Operando study of coke formation
2019RP&b	B, E	A	STXM	A549 cells, human monocytes	Si nanoparticle mapping
2019RR&	M	A	SPEM	Carbon nanotube spun fibers	
2019S	M	R	STXM	Review of X-ray patterning	Direct write additive nano-lithography
2019SB&	E	A	STXM	Early fossil - formation	
2019SD&	M	A	XPEEM	Cylindrical nanowires	Topology driven domain wall motion
2019SE&	E	A	STXM	Space-exposed carbonaceous dust	
2019SF&	E	A	STXM	Arcti soils: Si & P	
2019SH&a	E	A	STXM	Bacteriogenic Iron (Oxyhydr)oxides,	DOM
2019SH&b	M	A	XPEEM	Dipolar Cairo magnetic lattice	
2019SI&	B	A	STXM	DNA versus RNA mapping	CHO cell nuvlei
2019SK&	M	A	SPEM	Electgrtocalytic surfaces	Correlative XPS, SPEM, APT
2019SL&a	M	A	STXM	Organodisulfide Cathode	Li battery
2019SL&b	M	A	STXM	Perovskite soloar cells	
2019SM&	M	A	STXM	BaTiO ₃	Electrostriction
2019SN&	M	A	SPEM	IrO ₂ OER catalysts	Correlative SPEM & APT
2019SS	M	A, R	STXM	Plutonium materials	
2019SS&a	M	A	XPEEM	artificial Ising spin glasses	
2019SS&b	M	A	SPEM	Graphene / Cu	Operando; oxidation protection by graphene
2019SS&c	M	A	STXM	1D and 2D spin waves	magnetic dynamics
2019SS&d	E	A	STXM	Martigan Meteorite	Aqueous modifications
2019SS&e	M	A	ptycho	Organic photovoltaics	800 eV; Ptychography reduces DAMAGE
2019ST&	B	A	STXM	Mammalian cells	DNA, RNA, histone quantitative imaging

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2019SY&a	M	A	STXM	Zeolite catalysts	APM, STXM correlation
2019SY&b	M	A	STXM	Cs-adsorbed clays	DFT - STXM
2019SZ&	M	A	STXM	Néel-type skyrmions in an antidot lattice	
2019TKK	M	A	STXM	Fe(III)-oxides at magnetite(111) surface	Hydrothermal treatment effects
2019UI&a	E	A	STXM	Hayabusa comet carbonaceous phase	
2019UI&b	E	A	STXM	Organics in Hayabusa2 returns	Facility & model tests
2019UW&	M	R	SPEM	Cs _x C ₅₈ fullerides	High T
2019UZ&	M	A	STXM	Nano Li-TiO ₃ electrodes	Li B
2019VB&	B	A	STXM	Mars rocks	Biosignatures
2019WA&	B	A	TXM	yeast	Nuclear envelope expansion
2019WB&	M	A	STXM	Fe in interstellar medium	
2019WC&	B	A, R	TXM		Morphology, physiology multimodal imaging
2019WL&	M	A	STXM	Ti-doped NaAlH ₄	Surface hydroxides
2019WR&	M	A	STXM	Dehydrogenation of Ti-doped NaAlH ₄	Dynamic surface hydroxides
2019WT&	M	A	XPEEM	Cylindrical nanowire magnetism	stopology mediated domain wall motion
2019WU&	M	A	SPEM	Cs _x C ₆₈	High capacity fullerene
2019WY&	M	A	STXM	P-doped Li-0rich layered oxide	Li B
2019XL&	M	A	XPEEM	CoFeB/Ni bilayer	E-field control of magnetic reorientation
2019XZ&	M	A	STXM	Co / LiNi _{0.5} Mn _{1.5} O ₄ cathode	
2019XZ&	M	A	STXM	nano Li _{0.5} FePO ₄ electrodes	Co surface modification
2019YA&	M	A	XPEEM	graphene	Gas absorption, effect of morphology
2019YJ&	M	A	STXM	Layered Vanadium Oxide	Mg intercalation
2019YK&	B	A	STXM	Tacromilus	Drug delivery
2019ZC&	E, B	A	STXM	Biofilm matrices	
2019ZH&	B, E	A	XPEEM	Calcium carbonate hemihydrate	
2019ZM&a	M	A	STXM	resin	SEM radiation damage
2019ZM&b	M	A	Ptycho, STXM		Correlative STXM, ptycho
2019ZO&	M	A	STXM	calcium silicate hydrates	Effect of PEG
2019ZW&	M	A	STXM	VO ₂ microrods	
2020AB&	M	R	XPEEM		Operando PES, PEEM at APE, BACH, ESCA microscopy and Nanospect beamlines
2020AD&	E	A	STXM	granitoids	chloritization
2020AG&a	M	A	SPEM	Ag-np on free-standing graphene	
2020AG&b	M	R	SPEM	Liquid electrolyte	Radiation damage
2020AH&	M	A	STXM		organic-PV, printed devices
2020AL&	M	A	STXM	Weak stripe angle determination	XMCD
2020AN&	M	A	RSOXS	Organic Field-Effect Transistors	

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2020AP&	M	A	RSoXS	Y-shaped tricatena azobenzenes	liquid crystal phase transitions C 1s RSoXS
2020AP&	M	A	RSoXS	Quaternary Blend Organic Solar Cells	
2020AR&	M	A	XPEEM	Graphene/ Ge/Si(100)	epitaxy
2020AT&	M	A	STXM	nanomagnets	Non-reciprocal spin waves
2020AT&	M	A	STXM	synthetic antiferromagnets	nonreciprocal spin waves
2020AZ&	M	A	RSoXS	non-fullerene polymer solar cells	
2020BA&	M	A	STXM	NiCo methane reform catalyst	In situ study
2020BA&a	M	A	RSoXS	organic solar cells	controlled phase segregation
2020BA&b	M	A	RSoXS	benzodithiophene-alt-benzotriazole PV	main & side-chain chlorination
2020BC&	E	A	STXM	Uranium mobility in anoxic sediments	Organic matter control
2020BD&a	E	A	STXM	Fungi microfossils	
2020BD&b	E	A	STXM	Pyritization by S, SO ₄ bact. Consort.	
2020BE&	B	A	STXM	FeOx deposits in neuronal tissue	
2020BE&a	B	A	STXM	Neuromelanin in brain	Parkinson's disease
2020BE&b	B	A	STXM	Neuromelanin in brain	Parkinson's disease
2020BF&a	M	A	XPEEM	LiNbO ₃	Catalysis promoted by surface acoustic waves
2020BF&b	M	A	XPEEM	CoNi nanowires on Cu	Composition/mag domain modulation
2020BM&a	E	A	STXM	Soil-plant – high metal	Zn speciation
2020BM&b	M	A	STXM, PEEM	Thulium Fe garnet	Sub-surface magnetic bubbles; perpendic. M
2020BM&c	B	A	TXM	Cytotoxic T-cells	Supramolecular attack particles
2020BM&d	M	A	TXM	Co/Ni/Py- ML	skyrmions induced by Joule heating
2020BMF	M	A	TXM	Co-Ni-Pt thin films	skyrmions
2020BR&	E, B	A	STXM	River biofilms	ZnO exposure effects
2020BS&	B	A	TXM	human prostate cancer cells	Cryo tomography
2020BS&b	M	A	STXM	NiCo dry methane reforming catalyst	operando
2020BSM	M	A, R	ptycho	cement	Multi-scale tomography
2020CA&	M	A	RSoXS	Gyroid Cubic Phases	
2020CB&	E	A	STXM	chondrites	Meteoritic phosphorus in planetary atmospheres
2020CC&	M	A	RSoXS	organic solar cells	
2020CD&	M	I	ptycho	algorithms	big data
2020CD&	M	A	ptycho	data processing	big data
2020CF&	M	A	RSoXS	chiral structures	
2020CH&	M	A	STXM	CeO ₂ Nanoparticles	Photocatalytic degradation
2020CK&	M	A	RSoXS	Ternary Organic Solar Cells	asymmetric side chain
2020CK&a	M	A	XPEEM	Nd _{0.5} Sr _{0.5} MnO ₃	Phase transitions; magnetic domain coexistence
2020CK&b	M	A	STXM	memristor neural networks	noise used for combinatorial optimization
2020CK&c	M	A	PEEM	ultrathin Fe / Si wafers	enhanced ferroelectricity

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2020CL&	M	A	RSoXS	organic solar cells	Non-fused Ring Acceptor
2020CR&a	I	A	ptycho	PS-PMMA	'blind' iterative spectro-ptycho
2020CR&b	B, M	R	TXM, XPEEM	various	cryoSTXM(Mistral); XPEEM (CIRCE)
2020CS&a	E	A	STXM	buoyant deep-sea hydrothermal plume	biogeochemistry of particulate sulfur pool
2020CS&b	M	A	XPEEM	LiNbO ₃	Magneto-acoustic waves > 1 mm
2020CT&	M	A	STXM		Impurity effects on organic PV
2020CT&	M	A	RSoXS	BHJ organic solar cells	doping
2020CV&	E	A	STXM	Model grass	Biological particle emissions
2020CY&	M	A	RSoXS	benzothiadiazole-based non-fullerene	
2020CZ&	M	A	RSoXS	Nonfullerene Organic Solar Cells	
2020DB&	E	A	STXM	Pyrite formation, sulfate reducing bact.	
2020DC&	B	A	STXM	Zn, Cu in rat brain	STXM calibrated quantification by nano-SXRF
2020DG&	M	A	STXM	Atmospheric particles	Fe
2020DGJ	M	A	ptycho		Dose estimation & efficiency
2020DK&	E	A	STXM	Soil analysis	TEM, STXM
2020DM&	M	I	ptycho		sCMOS camera characterization
2020DS&a	M	A	XPEEM	Dipolar metamaterials	long range F, AF order
2020DS&b	M	A	TXM	THP-1 cells	combined lab-TXM and VLM at BLIX
2020EB&	M	A	STXM	Ferritin	Alzheimer brains reduce the Fe
2020ER&	M	A	STXM	Mo-BiVO ₄ Thin Films	
2020ER&	M	A	STXM	Mo-BiVO ₄ Thin Films	Mapping heterogeneity
2020FB&a	E	A	STXM	Viscous organic particle aerosols	Great Southern Plains
2020FB&b	E	A	STXM	Organic carbon	From shale erosion
2020FD&a	E	A	STXM	Viscous organic particles	
2020FD&b	M	A	XPEEM	FeRh	FM / AFM transition
2020FG&a	E	I	STXM	Aerosols with control (T, RH)	-23 t 25 C; -98% RH
2020FG&b	M	I	RSoXS	PS	Absolute scattering intensities
2020FHG	M	R	STXM		O K-edge spectroscopy
2020FM&	M	A	XPEEM	FeRh alloys- AFM-FM close to RT	Strain nanopatterning magnetism
2020FMR	M	A	STXM	Time resolved STXM	Photon arrival detection → 10 ps time resolution
2020FS&	M	fA	PEEM	quasi 3D artificial spin ice	frustrated antiferromagnetism
2020FS&	M	A	PEEM		3D artificial spin-ice
2020GD&a	B, E	A	STXM	Epithelial cells , SWCNT	
2020GD&b	M	A	XPEEM	BaTiO ₃ (BTO) (PMN-PT)	Nanoscale magneto-electric coupling
2020GM&a	M	A	XPEEM	FeNiOx – metal interface	Magnetic properties
2020GM&b	M	A	XPEEM	graphene/Ru(0001)	Edge effects
2020GM&c	M	A	XPEEM	Ni disks	V-driven magnetic vortices

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2020GO&	B	A	STXM	Human skin, photo-sensitive nanocarriers	
2020GS&a	M	I	STXM	CaCO ₃ particles in water	Ultra-stable flow in situ cell
2020GS&b	M	A	ptycho	FeGd out-of-plane magnetized	Thermal melting of magnetic domains
2020HA&	M	A	PEEM	atomically thin Cr ₂ TiC ₂ T _x MXene	magnetic transition
2020HB&	E	A	STXM	Hydrothermal carbon deposits	Core shell structure
2020HH&	M	A	PEEM	artificial kagome spin ice	thermally superactive
2020HH&	M	A	PEEM		Spin-ice
2020HK&	M	A	STXM	ZnO nanocrystals	binary defect mapping
2020HK&	M	I	ptycho	Brownian motion of 400 nm FeOx particles	0.5 ms spatio-temporal kinetics, tracking
2020HN&	M	A	PEEM	multi-ferroics	magnetoelectric energy landscape
2020HN&	M	A	PEEM	multi ferroics	Manipulating magnetic energy
2020HO&	E	A	STXM	Fen peat	Si induces Fe, PO ₄ release
2020HT&	M	I	STXM	spherical graphite - dichroism	azimuthal rotation holder
2020HW&	M	A	STXM	1D single crystals	Secondary battery cathodes
2020IS&	B	A	STXM	Mammalian Nuclei	Optimize mapping
2020IT&	M	I	STXM	extraterrestrial materials	Universal multi-method sample holders
2020J	B, E, M	R	all		X-ray microscopy BOOK
2020JB&	E	A	STXM	thylacocephalan specimens from Jurassic	fast biodegradation = exceptional preservation
2020JG&	M	A	XPEEM	Graphene / cobalt interface	O – intercalation tunes
2020JH&	M	A	TXM	topological stability of magnetic skyrmiond	
2020JK&	M	A	TXM	nanostructured magnetic thin films	exchange bias effect
2020JL&	M	A	RSoXS	Soft matter liquid crystal	Martensitic transition, in situ
2020JS&	M	A	STXM	C-coating on aluminide coatings	Tritium-generators
2020JW&	B, M	A	STXM	CaPO ₄ /ATP nanocomposites	Drug interactions
2020KB&	M	A	STXM	Chemically modulated Ferromagnetic films	Anisotropy-induced spin reorientation in
2020KD&	M	I, R	TXM	Diatoms, clay, HEK293Tcell, virus-attack	Lab-TXM water window; 3D cryo
2020KG&	M	A	XPEEM	Fe _{2-x} Mn _{1+x} Al Heusler films	Exchange-bias via nanosegregation
2020KH&a	M	A	XPEEM	1-atom Pt/ graphene/ SiC	Chemi-resistors
2020KH&b	M	A	XPEEM	Graphene/SiC	Ambi-polar charge transport
2020KM&	M	A	STXM	BN nanotubes	dichroism
2020KN&	M	A	XPEEM	graphene nanoribbons	1-D confinement, width-dependent bandgap
2020KS&a	M	A	STXM	particulates	High-S marine fuels
2020KS&b	B	A	TXM	Reovirus Intracellular Release Pathway	Correlative Optical & full field TXM
2020KS&c	M	I	ptycho	Ni inverse opal	first NanoMAX ptycho-tomography (Ni K)
2020KWZ	M	A	STXM	3 rd order nanocircuit elements	Neuromorphic engineering
2020KZ&a	B	A	STXM	Genetically encoded X-ray tags (GXET)	Protein imaging
2020KZ&b	E	A	STXM	xenolithic clast in the Zag H chondrite	organic matter

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2020LB&	B	A	XPEEM	Coral CaCO ₃ polymorph	Controlled by acid-rich protein
2020LC&	M	A	STXM	Steel corrosion 1100C in MX20 bentonite	
2020LG&	M	A	SPEM	blue-Colored Titanium Dioxide	EtOH reflux, PV
2020LH&a	M	A	STXM		i-driven domain wall logic
2020LH&b	M	A	PEEM	patterned La _{0.7} Sr _{0.3} FeO ₃ thin films,	AFM domains
2020LH&c	M	A	PEEM	CH ₃ NH ₃ PbI ₃ perovskites	carbon heterogeneity at grain boundaries
2020LL&	E	A	STXM	S-shuttling across oxic-anoxic interface	magnetotaxis
2020LL&b	E, B	A	STXM	Protist - magnetosomes	First eukaryotic intracellular magnetite
2020LL&c	M	A	PEEM	La _{0.7} Sr _{0.3} FeO	control antiferromagnetic domain patterns
2020LL&d	M	A	STXM	[Pt/CoFeB/MgO] 15layer	T, I control Skyrmion deformation
2020LP&	E	A	STXM	River biofilms	CeO
2020LR&	M	A	STXM	CrN thin film	130 kV N ⁺ implantation damage
2020LS&a	M	A	XPEEM	Graphene/SiC Schottly junction	PE-PV
2020LS&b	B, E	A	PEEM	leaf-cutter ants	Biominerall armor
2020LW&	M	A	STXM	phosphorene	Nanoscale phase changes & degraqdaton
2020LW&b	E, B	A	STXM	Epithelial metallothioneins	Effect of np in subways
2020LW&c	M	A	STXM	Fe ₂ Co ₃ coated ZnO nanowires	Photo-electrochemical water splitting
2020LX&	M	A	STXM		
2020LY&	M	A	STXM	nano Li0.5FePO ₄ electrodes,	Ion transport
2020LZ&	M	A	XPEEM	La _{0.9} Ba _{0.1} MnO ₃ / SrTiO ₃	RT ferromagnetic insulator, spintronics
2020LZM	M	A	STXM	Nanocrystalline Calcium Silicate Hydrate	
2020MA&	E	A	STXM	Black soot Aerosol	Aging [phobic → phillic] effects ice nucleation
2020MB&a	M	A	SPEM	CNT fibre/TiO ₂ photoelectrodes	H ₂ from water splitting
2020MB&b	E	A	PEEM	planetesimals	meteorites show differentiation
2020MD&	B	A	TXM	cell membrane – nucleaus signalling	
2020MF&	M	A, I	XPEEM	Fe ₃ O ₄ ML on Ru(0001)	High mag field, high T (1200K) in XPEEM
2020MG&	M	A	XPEEM	Fe-doped NiO	XAS, XMLD; Xll-field versus AFM
2020MH&a	M	A	STXM	ThO ₂ , UO ₂ nanoparticles in organics	
2020MH&b	M	A	STXM		photocatalysts
2020MK&	M	A	XPEEM	Ba-Sc-O desorption from W(100).	
2020MM&	M	A	STXM	Pt-ionmer interface – SEI ??	PEM-FC
2020MM&a	M	A	STXM	Fuel cell (PEEM-FC)	Pt-catalysed damage to PFSA
2020MM&b	M	A	NEXAFS-I	(Sm, Ce) ₂ (Co, Fe, Cu, Zr) ₁₇ magnets	XMCD
2020MP&	B	A	STXM	Norway spruce	
2020MV&	M	A	SPEM	InP nanowire p-n junctions	Operando surface characterization
2020MW&	M	A	XPEEM	TiO ₂ (110)/Au nanoparticles	BE decreases as size decreases
2020NQ&	M	A	PEEM	spin current polarization	non-collinear antiferromagnetism

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2020NS	M	A	STXM	Mn _{0.7} Fe _{2.3} O ₄ in BaTiO ₃ films	
2020NW&	M	A	STXM	Conducting polymer composites	LiB electrodes
2020OI&a	M	A	STXM	Graphite oxide films	Correlative microscopy
2020OI&b	M	I	STXM	Permalloy, nafion	Spring8 ; nafion rad damage determination
2020OIY	M	I	STXM	SiO ₂ , Ni ₈₁ Fe ₁₉ (permalloy); buried	O Ka, Fe La XRF detection
2020OK&	M	A	TXM		magnetic skyrmion nano-lithography
2020OL&	M	A	STXM	Co ₄₀ Fe ₄₀ B ₂₀ magnetic layer	stripe angle determination
2020OP&	E	A	STXM	Wild 2	
2020OY	B	A	STXM	Jewel Beetle Elytron	Structural color
2020OYK	M	I	STXM		Low pass Fresnel ZP for Li K-edge
2020PC&	B	A	STXM	Saos2 cells – osteogenic commit	Intracellular Mg
2020PC&b	M	A	XPEEM	CrTe	In-Plane Magnetic Domains, domain walls
2020PH&	M	A	PEEM	Ferromagnetism	Ultralow Voltage Manipulation
2020PL&	M	A	STXM	Poly-Diketopyrrolopyrrole (D) Nonfullerene (A)	organic-PV
2020PS&	M	A	XPEEM	Graphene, doping	SiC stacking order dependence
2020PV&	M	R	SPEM	chemically exfoliated MoS ₂	Metallicity, metastable
2020RC&	M	A	STXM, XPEEM	PEDOT encapsulated Si nc	High-energy density LiB cathode
2020RF&b	M	A	STXM	polyoxovanadate-based nanostructures	Switchable resistivity
2020RFa	M	I	STXM	Magnetic skyrmions	7 nm spatial resolution by 6 nm ZP
2020RM&	M	A	XPEEM	Co/Fe ₃ O ₄ on Ru(0001)	Real-time growth study
2020RP&	M	A	ptycho	B-doped Ni-rich NiCoAl LIB cathode	
2020RV&	B	A	TXM	DNA	HU-dependent DNA bundling
2020SA&	M	A	STXM	LiB cathodes	Particle stability
2020SB&a	E	A	STXM	Tidal marsh	Carbon cycling
2020SB&b	M, B	A, I, R	Ptycho, STXM	LiFeO ₄ , yeast cell	COSMIC NS-2 system report
2020SB&c	M	A	STXM	Lanthanide & actinide metallocenes	covalency
2020SDC	E	A	STXM	zeolites	Na adsorption – groundwater treatment
2020SG&	M	A	STXM	Forward volume spin waves	Perpendicular magnetization
2020SJ&	M	A	STXM		Skrmion-based neuromorphic computing
2020SK&	M	A	STXM	Hard disk operation	Time-dependent imaging
2020SM&	M	A	XPEEM	Co/SrFe ₁₂ O ₁₉ bilayer magnetism	Growth condition dependence
2020SN&	M	A	PEEM	LaMnO ₃ /SrIrO ₃ heterostructures	chiral magnetism, topological Hall effect
2020SP&	M	A	STXM	Hematite based photovoltaics	Role of surface states
2020SS&a	M	A	XPEEM	2D Au / graphene heterostack	SC \leftrightarrow metal transition
2020SS&b	B, E	A	PEEM	coral	organization
2020SW&	E	A	STXM	Permafrost chronosequence	organometallics

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2020SWU	M	A	STXM	Liquid n-alkanes	Chain length effect on NEXAFS
2020SY&	M	A	STXM	Vanadium Nitride/Oxide	supercapacitors
2020SZ&a	M	I	STXM		Bidirectional scanning
2020SZ&b	M	A	XPEEM	graphene nanoribbons	off-oriented 4H-SiC(0001) epilayers
2020SZ&c	M	A	XPEEM	Graphene /off-Axis C-Face 3C-SiC(111)	
2020TJ&	E	A	STXM	Aerosol particles over farms	
2020TK&	B	A	STXM	Ca-rich granules in human platelets	
2020TK&	E	A	STXM		Impactor debris
2020TS&	M	A	SPEM	Cr at surface, Al-Cr metglass	
2020UH&	M, E	I	STXM	carbon nanotubes, polimide	extraterrestrial sample holder
2020UI&	E	A	STXM	Extraterrestrial organic materials	IR correlative
2020VB&	E	A	STXM	RNA degradation	Fossilization affected by type of gas
2020VL&	E	A	STXM	Phyllosilicates aler organics	asteroids
2020W	M, M	A, I, R	STXM, ptycho	many	CLS STXM, SP data analysis
2020WA&	M	A	XPEEM	CuMnAs	crystalline anisotropic magnetoresistance
2020WB&a	M	A	STXM	Li-N-H Hydrogen Storage System	Phase evolution imaged
2020WB&b	M	A	STXM	Hybrd UV resists	Enhanced by fluorinating ligands
2020WC&	B	A	TXM	single cell imaging	switchable resolution
2020WCL	M	A	STXM	Heterostructured Oxygen Catalyst	
2020WFR	M	I	STXM	abs. sat; background; I vs Io; resolution	signal quality quantitation
2020WG&	M	A	TXM	akrymions	thermal detection & manipulation
2020WG&	M	A	TXM	magnetic skyrmion	Therm generation, change, detect
2020WS&a	M	A, I	STXM	PVA u-spheres, butterfly wings, permalloy	Laminography, 3D magnetism
2020WS&b	B	A	TXM	Pancreatic beta-cells 3D organization	Cryo-TXM-tomo
2020WY&	M	A	STXM , ptycho	LiNi _{0.8} Co _{0.15} Al _{0.05} O ₂ in situ LIB	competitive reduction
2020WZ&	M	A	STXM	NiFe alloy/nitride catalyst	Zn-air battery
2020XL&a	E, B	A	STXM	Arsenic	Quantitative toxicity
2020XL&b	M	A	XPEEM	Composite Multiferroic Microstructures	Tunable Magnetoelastic Effect
2020XY&	E	A	STXM	Cr(III) adsorption to organo-Ferrihydride	
2020YG&	M	A	XPEEM	Cr-doped Bi ₂ Se ₃	Pol. Dep.
2020YL&b	M	A	XPEEM	Fe ₃ GeTe ₂	Enhanced Curie T
2020YOa	M	A	STXM	CNT	IR laser in situ desorption
2020YOb	M	A	STXM	Mn ₂ O ₃ calcination	IR laser in situ heating
2020YX&	E	A	STXM	Organo-ferrihydrite co-precipitates	Cr(III) immobilization
2020YY	M	A	Ptycho, STXM	ZnO ALD coated Al ₂ O ₃ aerogel	6 nm (2D), 9 nm (3D) resolution
2020YY&	M	A	ptycho	Pt single atom catalyst CeO ₂	
2020ZA&	M	A	Ptycho, STXM	Tunnel structured TM oxide	Reviserible F insertion

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2020ZC&	M	A	PEEM	Fe _{5-x} GeTe ₂ crystals	Itinerant ferromagnetism
2020ZF&	M	A	STXM	Chiral magnetic ML	Diameter-independent skyrmion Hall angle
2020ZL&	M	A	STXM	Halide-based solid state electrolyte	Li-air battery
2020ZW&	M	A	STXM	Surface nanobubbles	High gas pressure in water nanobubbles
2020ZZ&	M	A	STXM	Sulfide-based solid state LiB	ALD SEI
2021AB&	E	A	STXM	organic films	Buck Reef Chert, SA
2021AC&	M	R	STXM	Energy materials	In situ / operando STXM
2021AD&	E, B	A	STXM	Viscous aerosol particles	Anaerobic by radical photoysis
2021AH&	M	A	STXM	organic solar cells	sharp interfaces = less recombination
2021AH&	M	A	RSoXS	organic solar cells	sharp edges suppress recombination ?
2021AK&	M	A	XPEEM	graphene	Mobility anisotropy
2021AQ&	M	A	RSoXS	small molecule organic solar cells	efficiency
2021AS&	B, E	A	STXM	<i>Citrobacter freundii</i>	Cr(VI) bioremediation
2021BC&	M	A	RSoXS	organic solar cells	non-fullerene ordering
2021BC&a	M	A	STXM	Colloidal inks, non-fullerene acceptors	organic-PV
2021BC&b	E	A	STXM	wildfire smoke chemistry	
2021BD&	E	A	STXM	Kaolinite-to-chlorite conversion	Carboniferous shales
2021BL&a	M	A	STXM	LaNiO ₃ – surface transitions	Water electrolysis
2021BL&b	E	A	STXM	MnOx in silicate minerals	
2021BL&c	M	A	STXM	LaNiO ₃ for water splitting	in situ optimization
2021BR&	M	A	STXM	PFSA	Calculate dose for damage-modified materials
2021BS&	M	A	STXM	Energy material mechanical deformation	
2021CB&	M	A	RSoXS	Nonfullerene Acceptors	
2021CD&	M	A	STXM	Si, Fe in nuclear waste glass	
2021CK&	M	A	STXM	Li-rich layered oxides	mobile O vacancies
2021CK&	M	A	STXM, ptycho	Li-rich layered oxides	mobile O vacancies
2021CL	M	R	STXM	Metal phthalocyanine thin films	Review
2021CL&	B	A	TXM	SnO ₂ nanowires	T-dependence; O-vacancies
2021CM&	M	A	RSoXS	Perylene Diimide Organic Solar Cells	
2021CMC	E	A	STXM	Sulfurovum-rich biofilm	
2021CS&a	E	A	STXM	aerosols	Phase changes with humidication
2021CS&b	M	A	STXM	PbI-MeNH ₄ I perovskite	cation size effects
2021CS&c	M	A	PEEM	α -Fe ₂ O ₃ epitaxial films	antiferromagnetic Néel order in
2021CS&c	M	A	PEEM	Fe ₂ O ₃	Electrical switching of AFM Neel order
2021CZ&	M	A	RSoXS	organic PV	
2021DA&	E	A	STXM	Fe citrate aerosol	Photochemical degradation kinetics
2021DB&	E	A	STXM	3.4 Gy-old micro-fossils Australia	C 1s spectra

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2021DC&	E, B	A	STXM	Metals & cytoskeletal proteins	STED, correlative
2021EB&	B	A	STXM	Beta-amyloid / Fe plaques	
2021EJ&	M	A	STXM	Cu-V photoanodes (PV)	
2021EJ&	M	A	STXM	Cu Vanadium photoanodes	Mapping reactivity & composition
2021EL&	B	A	STXM	brain	biogenic metal elements
2021EL&	B	A	STXM	FeOx species	Biogenic metal elements in the brain
2021FB&	M	A	ptycho	Rock varnish	
2021FF&	M	A	STXM	Waste plastic particles	Nexafs identification
2021FJ&	M	A	STXM	Cu-VOx photoanodes	Composition – reactivity probed
2021GB&	B	R	STXM, TXM, ptycho	Mouse Fibroblas, Sperm, Rhodnius Prolixus, ovarian tissue	Overview of Elettra XRM
2021GD&a	M	A	STXM	P3HT, Silicon Phthalocyanine OPV	>4% eff.
2021GD&b	E	A	STXM	Photochemical nitrate-forming aerosols	W. Antarctica
2021GF&	M	A	STXM	Ternary Copolymerization of Donors	Organic-PV 17.6% eff.
2021GF&	M	A	RSoXS	organic PV	
2021GM&	M	A	STXM	Gelatine; paper sizing	
2021GMT	M	A, R	STXM	Skyrmions, other magnetic quasi-particles	STXM – XMCD – magnetic dynamics
2021GO&a	B	A	STXM	Rapamycin, skin penetration	Serine protease treatment effect
2021GO&b	M	I, A	STXM	Functional materials	Sparse sampling; compressive sensing
2021GR&	B, E	A	PEEM	Mollusks, corals	Phase field modelling
2021GW&	E	A	STXM	Nitrates on Antarctic sea salt aerosols	
2021GZ&	B	A	Ptycho, STXM	Au@citrate nanoparticles / 4T1 cells	Cancer detection
2021HH&	M	A	TXM	vortex-antivortex structures	Topology controls stability
2021HK&	E, B	A	STXM	Mussel adhesive	
2021HK&b	M	A	STXM	ZnO crystals	XEOL, XAS correlative imaging
2021HK&c	B	A	STXM	Mussel adhesive proteins	
2021HL&	M	A	STXM	differential electron yield (DEY)	XBIC; failure testing; map connectivity landscape
2021HL&	M	A	STXM	Al nanowire	differential electron yield (DEY) imaging, XBIC
2021HL&b	M	A	TXM	nanodisks	Optimized random computing
2021HL&c	M	A	TXM	Vortex-anti-vortex	Topology dependent stability
2021HT&	M	A	STXM	ZnO crystals, powders, thin films	quantitative XLD
2021HZ&	M	A	STXM	Cu CO2R electro-catalyst	In situ
2021IT&	E	A	STXM	Ryuku asteroid collision analysis	simulation of contamination from impactor
2021JH&	M	A	TXM		magnetic skyrmion diode
2021JK&	M	A	RSoXS	organic PV	
2021JM&	M	A	STXM	Cr/SiO ₂ Phillips Catalyst	ethylene polymerization
2021JM&	M	A	STXM	Cr/SiO ₂ Phillips catalyst	Polymerization mechanism

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2021JQ&	M	A	RSoXS	organic PV	
2021JT&	M	A	TXM	magnetic skyrmions	writing and deleting
2021JT&	M	A	TXM	2-terminal nanowire devices	R/W magnetic skyrmions
2021JT&	M	A	TXM	2-terminal magnetic skyrmions	Targeted write / delete
2021KB&	E	A	STXM	aerosol-ice	
2021KH&	M	A	PEEM	Perovskite solar cells	anisotropic strain engineering
2021KH&a	M	A	XPEEM	perovskite oxide thin film	strain control of Neel vector
2021KH&b	M	A	XPEEM	Gd-Fe-Co single magnetic layer	S-O coupling & inversion symmetry; DM
2021KJ&	M	A	STXM	perovskite solar cells	halide ion migration
2021KK&	M	A	STXM	Fe ₃ -XGeTe ₂ . ferromagnet	Fe L XMCD; surface oxidation
2021KM&	M	A	STXM	Si phthalocyanines	OFET
2021KP&	M	A	STXM	Li[Ni _{0.80} Co _{0.05} Mn _{0.15}]O layered Ni	Long life battery
2021KR&	M	A	PEEM	magnetic multilayers	hopfion crreation
2021KR&	M	A	PEEM	Magnetic multi-layers	hopfions
2021KX&	M	A	PEEM	Terfenol-D (SMArT) Micromagnets	single cell capture / release
2021KX&	M, B	A	PEEM	Terfenol-D (SMArT) Micromagnets	Programmable single cell capture/release
2021KZ&	E	A	STXM	carbonaceous chondrites [Almahata Sitta]	organics analysis
2021KZ&	M	A	STXM	Hexagonal nanotubes	Vortex state magnetic dynamics
2021KZ&b	E	A	STXM	carbonaceous chondrites	ureilitic regoliths
2021LC&	M	A	STXM	Steel in MX80 bentonite	Corrosion at 120 C
2021LC&	M	A	RSoXS	organic PV	
2021LC&b	B	A	TXM	SARS-CoV-2 infected cells	whole cell imaing
2021LG&	B	I	TXM		Optical fibre, Fresnel diffraction
2021LJ&	M	A	RSoXS	organic PV	
2021LL&	E, B	A	STXM	MTB cells	intracellular inclusion
2021LM&	M	A	RSoXS	organic PV	
2021LS&	M	A	RSoXS	organic PV	
2021LZ	M	A	STXM	polycarboxylate ether and graphene oxide strengthened calcium silicate hydrate	Better cement
2021LZ&a	E	A	STXM, ptycho	calcite	XLD – spectro-ptycho
2021LZ&b	E	A	STXM	tropospheric aerosol particles	composition, phase; ice clouds
2021MA&	M	A	STXM	Co hydroxide OER catalysts	operando
2021MB&a	E	A	STXM	MTB (alpha proteobacteria)	CaCO ₂ , magnetite intracell
2021MB&b	E	A	PEEM	Planetesimal Dynamo	Core Crystallization
2021MC&	M	I	STXM		Percival detector – 250 – 1kV performance
2021MF&a	M	I	STXM		Xe plasma FIB
2021MF&a	M	A	RSoXS	Block Copolymer Electrolytes	limiting current

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2021MF&b	M	A	RSoXS	organic nano-carriers	hydrocarbon sequestration
2021MF&b	M	A	STXM	Vortex cores	Spin-wave emission
2021MG&	M	A	STXM	Polystyrene . [Fe(acac)3 fibres	fast 2-E 3d elemental mapping
2021ML&	M	A	STXM	Amorphous carbon (chem. states)	EELS, NEXAFS comparison
2021MO&	E	A	STXM	Pyrite exposed 1 year to deep sea float	microbiological, biogeochemical characterization
2021MS&	M	A	PEEM	finite-size dipolar Cairo lattices	variable frustration
2021MS&	M	A	PEEM		Cairo lattice
2021MSY	M	I	STXM, pycho	PC 61 BM; P3HT PV; LiFePO4	Ptycho has less spatial distortion
2021MX&	M	A	STXM	2E mapping	3D chemical mapping
2021NL&	E	A	STXM	Organic bimorph	Early earth sediment; organic preservation
2021OB&	M	A	PEEM	La _{0.7} Sr _{0.3} MnO ₃	magnetic signal at edges
2021PB&	B	A	STXM, ptycho	milk interacted dietary particles,	Corona proteome
2021PGG	E	A	STXM	iron sulfide minera – organic interactions	biosignature detection (search for ET)
2021PGG	E	A	STXM	Fe-sulfide mneral – org. soil carbon	
2021PP&	M	A	STXM		Neel type Skyrmions
2021PX&	M	A	PEEM	Terfenol-D microstructures	single magnetic domains
2021PZ&	M	A	STXM	Li-rich layered oxides	fictitious phase segregation; electro-autocatalysis
2021PZ&	M	A	STXM	Li-rich layered oxides	fictitioul phase seg.; electro-autocatalysis
2021QG&	M	A	STXM	5f-δ bonding in [U(C7H7)2]	Magnetic carbon
2021RO&	M	A	STXM	graphen oxide membranes	electrochemical reduction preparation
2021RS&	B	I	TXM		Bayesian meta-modelling
2021SA&a	M	R	STXM , TXM	Nano-bio interface; Gd fullerenes,	Overview of hard & soft X-ray methods
2021SA&b	M	A	PEEM		St. George lattice
2021SC&	E, B	A	XPEEM	nacre	Hyperspectral interference tomography
2021SD&a	M	A	PEEM		dipolar-coupled magnetic metamaterials,
2021SD&b	M	A	STXM	VO ₂ test sample, quantum materials	RIXS detection with 2 um spatial resolution
2021SF&	M	A	STXM	Cylindrical magnetic nanowires	Magnetic dynamics
2021SG&	B, E	A	PEEM	Spherulties in coral skeletons	
2021SG&	B, E	A	PEEM	coral spherulites	Crystal nucleation and growth
2021SJ&	B	A	XPEEM	tooth enamel	crystal misorientation controls hardness ?
2021SK&a	M	A	STXM	Li(NiCoMn)O2 particles	ox. .state det.
2021SK&b	M	A	STXM	Li(NiCoMn)O2 particles	annealing changes ox. states
2021SKG	B, E	A	PEEM	biomineralization	Liquid pre-cursor
2021SKK	M	A	STXM	memristors	temperature dynamics
2021SKK	M	A	STXM	memresistors	T-dyanmics modelling
2021SL&	M	R	TXM	Li batteries	spectro-TXM; compare to STXM
2021SM&a	M	A	ptycho	calcite	O 1s dichroic ptychography

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2021SM&b	M, E	A	STXM	Fsabric fibre analysis	Siberian Neolithic dyers
2021SO&	M	A	STXM	Thorium amidates	Precursors for Thorium dioxide
2021SS&a	M	A	Ptycho, STXM	Li-rich LiB cathode	Degradation mechanisms
2021SS&b	E	A	STXM	Martian Nakhllite	Constraint on Chem. Comp. in Amazonian epoch
2021SS&c	E	A	STXM	South ocean aerosols	Composition (particle size)
2021SS&d	E	A	STXM	Hydrothermal plumes	Iron particulate speciation
2021SS&e	M	A	XPEEM	magnetic metamaterials	T-dependent collapse spin dimension
2021SS&e	M	A	STXM	magnetic meta-materials	T-induced spin dimensional collapse
2021SS&f	M	A	STXM, ptycho	VO2 Metal-SC switching	ultrafast operando diffraction
2021SS&g	M	A	STXM	amorphous Particles	Crystallization by attachment:
2021SZ&	M	A	STXM	Li-rich cathodes	
2021SZ&b	M	I	STXM		Bidirectional scanning
2021TB&	E	A	STXM	peralkaline granite	H2 generation
2021TD&	E	A	STXM	Southern ocean, cloud prep. particles	Link to climate change
2021TG&	M	A	STXM		space-time crystals , magnons
2021TJ&a	E	A	STXM	East N.Atlantic aerosol	dry intrusion events
2021TJ&b	M	A	STXM	Carbon nanosheets	sodiation
2021TK&	M	A	STXM	ACE-ENA aerosol particles	Dry intrusion events
2021VL&	M	A	TXM		high NA EUV lithography - review
2021WC&a	M	A	STXM	BiVO4 coated ZnO dendrites for PV	defect characterization
2021WC&b	M	A	PEEM	Artificial Spin Ice	Switchable X-Ray Orbital Angular Momentum
2021WG&	M	A	RSoXS	organic PV	
2021WL&	M	A	RSoXS	organic PV	
2021WM&	M	A	RSoXS	organic PV	
2021WRC	E	A	STXM	Biochar	sorbs As from acid mine drainage
2021WY&	E	A	STXM	Cr(VI) in agricultural soils	
2021WZ&	M	A	STXM	O-deficient Co(III)oxide catalysts	Zn-air batteries
2021XC&	M	A	TXM	antiferromagnetic Mn ₃ Sn	Spin chirality imaging
2021XX&	M	A	ptycho	Multi-slice ptycho-tomography	
2021XZ&	M	A	STXM	Graphene-Coated SiOAnodes	Li battery
2021YJ&	M	A	RSoXS	organic PV	
2021YL&a	M	A	PEEM	Ga-Implanted Fe ₃ GeTe ₂	Enhanced Curie T
2021YLN	E	A	STXM	Plastic nanoparticles	From washing fibres
2021YM&	E	A	STXM	lherzolithic shergottite NWA 7397 meteorite	23 GPa, 2000 C at impact
2021YO&	M	A	STXM	C-fibre reinforced plastics adhesion	XRF mapping, FY-NEXAFS
2021YP&	M	A	RSoXS	organic PV	
2021YWL]	E	A	STXM	PFAS, PFOA on clays	Computational studies

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2021ZA&	M	A	STXM , ptycho	FeSb2O4	anion insertion stereoactive lone pairs
2021ZC&	M	A	PEEM	Fe _{5-x} GeTe ₂ crystals	Itinerant ferromagnetism
2021ZD&	M	A	PEEM		Spin ice
2021ZF&	M	A	RSoXS	organic PV	
2021ZL&	M	A	TXM	SmCo5	Spin-orbitronics
2021ZM&	M	A	RSoXS	organic PV	
2021ZS&	M	A	ptycho		Differentiate Fourier ptycho / reg. ptycho
2021ZU	M	A	STXM	PVD organic glasses	Molecular conformation from XLD
2021ZZ&	M	A	RSoXS	organic PV	
2021ZZ&	M	A	STXM, ptycho	Solid state Li battery	2 halogen solid electrolyte
2022AA&	M, E	A	STXM	Aerosols – faster photochemical rxns	Light amplification in particles (lensing?)
2022AB&a	M	A	STXM	H2O(s)	ice nucleation
2022AB&c	B	A	TXM		Organelle 3D imaging & modelling
2022AC&	M	A	STXM		Electrically Induced Adhesive Debonding:
2022AD&	E	A	STXM	aerosol	lensing light amplifies photochemistry
2022AK&a	M	A	ptycho	sulfurized poly(n- butyl methacrylate)	S Is chemical mapping; ptycho spectro-phase
2022AK&b	E	A	STXM	Ice nucleating aerosols	
2022AL&	M	A	STXM	Non-fullerence OPV	
2022AP&	M	A	STXM	Adhesive removal	In situ electrical debonding; correlate to FTIR
2022AR&	M	A	XPEEM	soft-magnetic cylindrical nanowires	magnetic chemical modulations
2022BB&	E	R	STXM	Organic-Fe interactions	Metalloid mobilization
2022BO&	M	A	STXM	polystyrene	densification under P, flow
2022BZ&	M	A	XPEEM	Van detr Waals crystal	Dative epitaxy
2022CG	M	A	STXM. RSoXs	RSoXs supported by STXM	Polymer morphology & chemistry
2022CK&	M	A	STXM	Si-phythalocyanine for organic TFT	
2022CL&a	M	A	TXM	Magnetic multiayers	Chiral spin textures
2022CL&b	E	A	STXM	Spheroidal microstructures	Differentiating biotic / abiotic
2022CL&c	E	A	STXM	Aerosol collector	Vertical sampling collector; size, time resolved
2022CM&	E	A	STXM	N. Atlantic aerosols	transport effects
2022CV&a	B	I	TXM		Protocol for full rottion
2022CV&b	B	A	TXM	HSV1 cells remodel human B cells	Herpes infection mechanism
2022CY&	E	A	STXM	fungi	Pollution oxidation
2022CZ&	M	A	STXM	ZIF-8-Derived Single-Atom Catalysts	Grinding im;roves performace
2022DH&	M	A	STXM	permalloy	3D magnetic nanostructures
2022DJ&	M	A	STXM	metal halide perovskites	
2022DK&	M	A	STXM	Bis(perF-phenoxy)silicon phthalocyanine	Orientation & transistor performance
2022DL&	B, E	A	PEEM	Black drum fish teeth	structure

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2022DL&	M	A	RSoXS	organic PV	
2022DP&	M	A	STXM	UO2	Effect of humidity
2022DS&	M	A	STXM	Spent nuclear fuel	
2022DZ&	M	A	STXM , ptycho	LiB particle chemo-mechanics	correlative image learning
2022FB&	M	A	STXM	Pump-probe FAST dynamics	Time-resolved STXM WITHOUT ring trigger
2022FD&	M	A	STXM	CoFeB vortex gyration dynamics	laminography
2022FF&	M, E	A	STXM	plastic identification	C 1s NEXAFS
2022GB&	E	R	STXM	Astro-biology	Ocean system science
2022GF&	E, B	A	STXM	U(V), V(V), carnotite group minerals	dissimilatory respiration in metal reducing bact.
2022GK&	B	I, A	ptycho	MET cells & Asbestos (1020, 1495 eV)	Sci-ComPty – general framework for ptycho recon
2022GM&	M	A	XPEEM	Ge quantum dots on Si(111)	Dynamics: islands → high-T decay
2022GZ&	B	A	STXM, ptycho	Pancreatic beta cells	Vesicle visualization
2022Ha	M	R	STXM	PMMA, PFSA	NEXAFS review
2022Hb	M	R	Ptycho, STXM	PEM fuel cell applications	Ionomer in cathode; 2D, 3D, 4D;
2022HD&	M	A	XPEEM	Fe(II) spin-cross-over system	kinetics
2022HJ&	M	A	STXM	C8-BTBT-C8 films	organic PV
2022HJ&b	M	A	STXM	BTBT p-type layers	Organic PV
2022HKR	M	I	ptycho	Simulation, Eiger detector; 0.5 ms DI	kHz rate CDI / ptycho
2022HL&	M	A	STXM	P3HT / PC ₆₁ BM Janus particles	Nano-precipitation, organic V
2022HP&	M	A	STXM	Zn-CO2 battery, SnO2 np, Ti-xene	CO2R
2022HR&	M	A	NEXAFS microsc	Gercko feet - keratin morphology	
2022HS&	M	A	STXM, ptycho	LixFePO4 platelets	correlative with 4D-STEM
2022IT&a	E	A	STXM	Ryugu asteroid organic / carbonaceous	
2022IT&b	M	A	ptycho	LiFeMnPO4 LIB, Mn K-edge	EXAFS from phase& ampl. (KK transform)
2022JL&	M	A	STXM	Halide perovskite PV	
2022JN&	M	A, I, R	STXM	Ocean sampling	Guide for protocols
2022JR&	M, I	A	STXM	shale	10kV; high speed ptycho 140 μm ² s ⁻¹
2022JS&	M	A	STXM	Co/Ru/Pt/CoNiFe multilayer	skyrmions in synthetic AF magnets
2022JS&	M	A	STXM	Synthetic antiferromagnets	Skyrmions; generation by current & lasers
2022JX&	M	A	XPEEM	FeGa	Magnetic switching
2022KC&	E	A	STXM	Ice nucleating aerosols	Eastren N. Atlantic
2022KL&	E	A	STXM	organic-coated (NH4)2(SO4) particles	Summertime artic
2022KR&	M	A	STXM, ptycho	ZnO, Na2ZnO2 (zincate)	On Zinc anodes in acid in situ
2022LA&	M	A	STXM	CNT yarn	covalent reinforcement
2022LB&	E, B	A	XPEEM	Human teeth cracks	Mineral involved in self-healing
2022LE&	M	A	STXM		Machine learning
2022LH&	M	A	STXM	Water processed PV	

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2022LH&b	M	A	TXM	Magnetic domain dimensionality	Control by tuning oscillation modes
2022LL&a	E	A	STXM	early-branching magnetotactic bacteria	silicification
2022LL&b	E	A	STXM	Dust/salt aerosols	East Asian dust storms
2022LR&	M	A	STXM	Li mechanisms in 1D ζ - and 2D α -V2O5	Cation re-ordering
2022LS&	B	I	TXM		organelle interactions
2022LT&	E	A	STXM	High-arctic S-, Fe-minerals	Mars analogs
2022LW	B	I	TXM		mitochondrial structure and function
2022LZ&a	B	A	TXM	β -cells, insulin secretion	t-dependence
2022LZ&b	B	I	TXM	organelles	3D instance segmentation
2022M	M	A, I	STXM		3D dichroism analysis
2022MO&	M	A	STXM	Magnetic bacteria, Fe3O4 magnetosomes	Single m'some magnetic anisotropy
2022MS&	M	A	XPEEM	tetrataenite	Magnetic domain sizes
2022MT&	E	A	STXM	nanoplastics	From sewer pipe repairs
2022MY&	M	A	ptycho, STXM	CNT	carbon K-edge ptycho
2022MZ&	M	A	STXM		sskyrmion motion
2022NK&	B	I, R	SXCM	HCC38 breast cancer cell	Review, Soft X-ray contact mic., laser plasma
2022NS	E	A	STXM	Titan haze simulation III	Spectroscopy of postulated species
2022NY&	M	A	STXM	LiMn1.5-xNi0.5TixO4	Ti substitution → longer cathode life
2022PH&	E	A	STXM	Fungal-mineral interfaces	metabolites
2022PK&	M	A	STXM	Carbon in Li-S batteries - fabrication	
2022PS&	M	A	STXM	permalloy strips	FM-resonance - moving
2022PT&	M	A	STXM	GdCo	spin-ice magnetic building blocks; laminography
2022PT&	M	I, A	TXM - XRF	Metal nanoparticles in cells	XMIDAS – multi-modal chem. analysis (stxm ?)
2022QF&	M	A	XPEEM	MIM junctions	AFM coupling at interfaces
2022QX&	M	A	STXM	CoGd	skyrmion racetrack $v = 610$ m.s
2022RM&	M	A	STXM	PET films	FLASH spectro-ptycho study of plasma treatment
2022SA&	M	A, I	STXM, ptycho	LiVxO5 Electrode analysis	Phase ID by multivariate statistical analysis
2022SC&	M	A	XPEEM	La _{0.7} Sr _{0.3} MnO ₃ Artificial-Spin-Ice	Spin structure after thermal demagnetization
2022SCY	M	R	ptycho	challenges of ptycho	Brief review of ALS Cosmic capabilities
2022SD&a	M	A	XPEEM	3D Magnetic Helical Interconnects	Domain wall automotion; shadow PEEM
2022SD&b	M	A	XPEEM	Nanomagnet arrays	Entropy driven ORDER
2022SL&a	M	A	STXM	GdFeCo, TbCo ferrimagnets	current induced sub-lattice switching
2022SL&b	M	A	STXM	CNT-GO heterostructure	Echem biosensors
2022SL&c	M	A	STXM	hydroxyapatite/titanium oxide composites	Piezoelectric properties
2022SP&	B	A	STXM	Granules in human platelets	
2022SS&	M	A	STXM	Sulfide based solid state battery	
2022SS&b	E	A	XPEEM	Coral	Faster xllization → more resilient to acidification

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2022SS&c	M	A	TXM	a-chiral stripe phase , Fe/Gd thin film	Discretized evolution of solitons
2022SW&	E	A	STXM	Paddy soils - rice, SiO _x , PO _x	Si controls P availability
2022SY&a	M	A	XPEEM	Overlithiated Li _{1+x} CoO ₂ electrodes	Heterogenous surface composition
2022SY&b	E, B	A	XPEEM	phosphorylation-deficient mice	Loss of bio-control of enamel mineralization
2022TU&	E	A	STXM	Aerosol particles	Bonfire burning
2022TV&	M	A	STXM	F-rich (ZnO) _n clusters	UV photoresist
2022U	M, E	R	ptycho	hematite, magnetosomes, FeGd – GdL ₃ , ZnO/Al ₂ O ₃ aerogel; LiFePO ₄	mini-review
2022VC&a	M	A	STXM	Co oxide on graphene	graphene windows as C_support
2022VC&b	B	I	TXM	Cell – cell adhesion complexes	
2022VL&a	E	A	STXM	Fe-clay/organics - asteroids	
2022VW	M	R	STXM	Zeolite catalysts	Review of characterization methods
2022WFR	M	I	STXM		quantifying signal quality
2022WH&	M	A	TXM	permalloy	Magnetic anisotropy
2022WL	E	R	STXM, ptycho	soils, etc	
2022WS	E	R	STXM	Geoscience applications	At CLS-SM
2022WS&a	M	A	STXM	PEO-Based Solid-State Electrolyte	Li battery
2022WS&b	M	A	XPEEM	Co/Gd/Pt multilayers, AGM skyrmion	Topological spin memory
2022XW&	E	A	STXM, ptycho	Dissolved org. matter	Cr(III) , Fe(III) immobilization
2022YA&	M	A	STXM	Garnet-based Li batteries	Liquid electrolytes
2022YE&	M	A	STXM	MnO ₂ supercapacitor	activation
2022YK&	M	A	STXM	PtSACon TiO ₂ @ CeO _x -TiO ₂ interface	TR operandoXAS in STXM (2020YY&)
2022YR&	M	A	RSOXS	Cu/Cu ₂ O nanoparticles	Operando RSOXS of CO ₂ R; rad. damage
2022YS&	M	R	STXM	Li bBattery – review,ex- and in-situ results	
2022ZD&	M	A	STXM	Metal free (C-based) CO ₂ R catalysts	
2022ZS&	M	A	STXM	Ni single-atom OER catalyst	heterogeneity
2023A	B, M	A,I	STXM	As-biofilm; Cu-CO ₂ R, biofilm, CNT dichr	aXis2000 software description
2023AD&	M	A	STXM	CeO ₂ , ThO ₂ (actinides)	Spectroscopy only
2023AF&	E	A	STXM	Abalone nacre	Organic – mineral interface
2023AL&	M	A	STXM	Solid state Li batteries	Eliminate electrolyte failure
2023ALD	M	A	SPEM	Graphene; 2D materials	Spatial resolved band structure
2023AS&	M	A	STXM	Fe L23 spectrum of one (1) atom !!! in Fe-terpyridine molecule	Soft Xray modulated STM
2023BE&	E	A	STXM	Fe-, Mn-rich silicates	Biomineralization by cyanobacteria
2023BF&	M	A	STXM	Synthetic antiferromagnetic nanowire	spintronics
2023BG&	B, E	A	STXM	cyanobacteria	A reservoirs
2023BN&	E	A	STXM	Soil C-organic & Ca association	grasslands

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2023CJ&	E	A	STXM	ectosymbionts	Collective magnetotaxis
2023CM&	E	A	STXM	Heterogeneous aerosols N. Atlantic	Cloud condensation nuclei activity
2023CZ&	B	A	TXM	Pinus elliottii metal carboxylate pigment	High quality NEXAFS; no damage
2023DA&	B	A	XRF-mapping	Na, Mg in yellow jacket wasp	pFY maps
2023DB&	M	A	STXM	Pt-Co-Pt multilayer	Out-of-plane magnetization
2023DMJ	M	I	ptycho	Promote 2023TA&	Advanced X-ry detectors
2023EB&	B	A	TXM	Microbial interior morphology	Strain design for higher yield
2023EB&	M	A	STXM	Alzheimer brain tissue – Fe nanoparticles	
2023EC&	B	A	TXM		Extended volume imaging / tomography
2023ET&	B	A	STXM	Mineral-(bio)organic interactions	P-O-Fe linkages
2023EV&	M	R	STXM	Carbon deposit analysis on catalysts	Catalyst deactivation
2023FL&	I	R	STXM, ptycho	TR-STXM (digitizer arrival times)	Review of STXMs at the ALS; future ALS-U
2023G	E, B	A	XPEEM	Shells, teeth etc	Biominerals mesostructure
2023GB&a	M	A, R	TXM	BN	overview
2023GB&b	E, B	A	XPEEM		Biominerals evolutionary trends
2023GD&	M	A	STXM		
2023GD&	M	A	STXM	F-substituted β -Ni(OH) ₂ (Ni-F-OH) plates	Energy storage supercapacitors
2023GG&	I	A	ptycho	Parallelized readout CCD camera	Next gen Fast DoE CCD (85% efficient at 285 eV)
2023GO&	B	A	STXM	Human skin	Topical dermal drug delivery
2023GP&	M	A	STXM	Mn oxide EELS vs XAS	TEM, STXM correlative microscopy
2023Ha	M	A	STXM	Perfluoro sulfonic acid ; PEM fuel cell	Chapter in book on PEM-FC optimization
2023Hb	M	A	STXM	CuCO ₂ R in situ chemi-movie	aXis2000 Toolkit description
2023HC&	M	A	STXM	Carbo-nitride-triazine catalyst	H ₂ from solar direct
2023HD&	E	A	STXM	hypersaline potash mining byproducts	Mapping Cu(II) & Cr(VI); extremophiles
2023HH	B	A	TXM	Fe in human skin	Fe-sensitive tomography
2023HM&	M	A	STXM		Water processed organic PV
2023HS&	M	A	STXM	C8-BTBT, peerylene	Growth anisotropy (dichroism)
2023HY&	M	A	STXM	phenoxy-resin/nylon-12 alloy	Effect of compatibilizer
2023JD&	M	A	STXM	Halide Perovskite PV	
2023KC&	M	A	STXM	Li batt ; high rate C, DC	Phase separating electrodes
2023KD&	M	A	SPEM	SnO ₂ nanowire chemiresistors.	Operando; surface chem. & transport
2023KL&	M	A, R	STXM	Energy Materials; LIB	
2023KP&	B	A	STXM	Biomass combustion - aerosols	
2023KS&	B	A	STXM	Cyanobacteria PCC 7942 mutants	Ca distributions
2023KW&	E	A	STXM	Ice-nucleating aerosol particles	North Atlantic
2023KX&	B	A	TXM	Pancreatic cells	Enhancing insulin excretion
2023LA&a	M	A	STXM, ptycho	solid-state batteries	Tortuosity gradient → better transport

code	materials	type	technique	species	Subject / Comments
2023LA&b	M	A	ptycho	Long-cycle SS Li-batteries	Encapsulation of excess solvent
2023LC&a	B	I	TXM		Whole cell modelling
2023LC&b	E	A	STXM	Arctic in-cloud & above-cloud Aerosols	Vertical chemical gradients
2023LE&	B	A	ptycho	Micro-organisms (bacteria)	Table top EUV (92 eV) ptycho
2023LL&	M	I	STXM	Instrument trests; T=-150C	CRYO-STXM
2023LN&	E	A	STXM	Corrosion of iron & Steel	Callovo-Oxfordian pore water
2023LS&	M	A	XPEEM		Multiferroic Magnetic Domain-Wall Logic
2023LS&a	E, B	A	XPEEM	Corals and shells	Misorientation Toughening
2023LS&b	E, B	A	XPEEM	virtual indenter maps nanoscale hardness	Machine learning
2023LW&	B, E	A	STXM	Arbuscular mycorrhizal fungi., FeOx tail.	Organo-mineral association
2023LX&	M	A	ptycho	Simulations	Gen. & suppress. Periodic artifacts
2023M	M	A, I	STXM	“T” stack, polymers	LabView-based STXM data analysis
2023MB&	M	A	STXM, ptycho	CNT-polymer Composite Dry-Spun Yarns	Process – structure correlation
2023MO&	B	A	STXM	mouse & kidney liver; <i>Slc17a5</i> mice.	ultrastructural abnormalities
2023MR&	M	A	STXM	Co /graphene oxide	HER catalysis
2023MZH	M	A	STXM	Cellulose nanocrystal / polymer matrix	
2023N	M	A	ptycho	LiS battery operando	first tender X-ray im situ SPECTRO-ptycho’ S Is
2023OK	M, I	A, R	STXM	Cryo, tomography, Li K-edge, air free tsfr	In situ devices
2023OS&	M	A	XPEEM	CoFeB	Oscillatory buckling of magnetic stripe
2023OT&	M	A	PEEM	Many examples	LEEM/PEEM Spring8
2023PL&	M	A	STXM	Organic PV phase mapping	Sub 4nm is low-E STEM-EDS
2023PM&	M	A	STXM	microplastics	Generated by sewer pipe repairs
2023PP&	B	A	STXM	Fresh & aged soot - coatings	
2023PW&	M	A	ptycho	W test pattern (cat face)	Machine learning based reconstructio; overlap
2023QB&	E	A	STXM	Dissolving calcite	Ca-organic associations
2023QX&	M	R	STXM, ptycho, TXM	cement	Advanced imaging methods for cementious materials, including 3D, in situ
2023RJ&	E	A	STXM	Ca compounds	Library by parallel TEY-XAS
2023RK&	M	A	STXM	tetravalent praseodymium	Chemical control of E, H
2023RL&	M	A	STXM	3D magnetic moment visualization (static)	soft X-ray vector ptycho-tomography @ 10 nm
2023RR&	I	A	SPEM	4H-SiC(0001) substrates (Si-face)	First ARPES in a magnetic field
2023S	M	I	STXM	Principles of optimization	X-ray induced deposition (FXBID)
2023SA&a	M	A	XPEEM	EuO _{1-x} & Ferroelectric BaTi ₂ O ₅	Interface Engineering
2023SA&b	M	A	STXM	Ti-doped Hematite	Solar water splitting efficiency
2023SB&a	B, E	A	STXM	Diatom roles	Lake, whitening events
2023SB&b	M	A	STXM	Magnetic nanowire shape anisotropy	1D magnetic mapping by XMCD
2023SC&a	M	A, R	TXM, STXM,		Overview of XRM at TLS and TPS

code	materials	type	technique	species	Subject / Comments
			XPEEM, SPEM		
2023SC&b	M	A	XPEEM	artificial spin ice	ergodicity transitions
2023SH	M	R	STXM	Organic PV	Review of Soleil research
2023SM&	B	A	STXM, ptycho	calcite	Linear dichroism sensitivity as f(#-angles)
2023SM&	B	I	TXM	nuclear-vacuolar & perinuclear ESCRT	spatial protein quality control
2023SO&	E	A	STXM	Arctic soils; Si&Ca, control Fe, Al mobility	
2023SR&a	M	A	STXM	CuO/Al ₂ O ₃ catalysts	Cu migration correlative microscopy
2023SR&b	M	A	STXM	LiB anodes	Chemistry–mechanics–geometry coupling
2023SS&	E	A	STXM	Ship exhaust, low FSC fuels	Cloud generating aerosols
2023SSH	M	A	STXM	Hematite PV material	
2023SWU	M	A	ptycho	SiO ₂ spheres	Interpreting phase
2023SZ&a	M	A	STXM, ptycho	Ionic liquid-functionalized perovskite PV	PVK/EMITFSI
2023SZ&b	M	A	STXM	NiSe ₂ /NiFe ₂ O ₄ OER catalyst	atomic migration
2023TA&	M	I	ptycho	6.5 keV Ta test patterns	
2023TB&	B, E	A	STXM	pyrite spherules	hyperthermophilic Thermococcales
2023TD&	M	A	STXM	Rubrene films	Oriental discontinuities
2023TW&	M	A	TXM	skyrmions in magnetic multilayers	Field-driven collapsing dynamics
2023TY	M	A	STXM	Plutonium dioxide	Pu 5f occupancy
2023VL&	E	A	STXM	carbonaceous particles	Wildfire burning
2023VM&	M	A	STXM, ptycho	BN nanobamboo, CNT, permalloy	Low energy ptychography
2023WB&	E	A	STXM	Iron ore tailings	N-rich organics stabilize
2023WG&	M	A	STXM	S-Al ₂ O ₃ / CaCl ₂ (aq) interactions	cement
2023WM&	M	R	STXM	Single Catalyst Particles	Olefin Polymerization
2023WO&	M	A	STXM	TiO _x layered flexible sensors	
2023WO&	M	A	STXM	Ti-based layered oxide	sensor
2023XP&	M	A	STXM	LiX (halide) cathodes	LiB
2023YC&	M	A	STXM, ptycho	CuAg nanoparticles	CO ₂ R - chem.- activity correlations
2023YC&b	E	A	STXM	asteroid (162173) Ryugu	Macromolekular organic matter
2023YS&	M	A	STXM	Ternary-blend OPV	Resonant energy transfer
2023YY&a	M	I	STXM	LLZO particle (battery)	No-atmosphere transport box
2023YY&b	M	A	ptycho	Garnet based sol. St. Li batteries	Origin of capacity fade
2023YY&c	E	A	STXM	S, OM in Mineral tailings	S-oxidizing bacteria
2023ZC&	M	A	STXM	Ni-single-atom catalysts	Ex situ spectro-ptychography
2023ZD&	M	A	STXM, ptycho	carbon-coated LiFePO ₄ (LFP)	In situ; complex reaction mechanism model matches pixel-by-pixel spectral changes
2023ZE&a	M	A	STXM, ptycho	Cu CO ₂ R electro-catalyst	In situ STXM & ptycho
2023ZE&b	M	A	STXM	Cu CO ₂ R electro-catalyst	In situ STXM

code	materials	type	technique	species	Subject / Comments

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Adam P. Hitchcock (Dept. of Chemistry & Chemical Biology, McMaster University, Hamilton, ON, Canada aph@mcmaster.ca

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CODE: YYYYABC or YYYYAB& where YYYY = year, A – first letter of last name of first author, B – first letter of last name of second author, C – first letter of last name of third author; if more than 3 authors, replace C with &; if not unique, append a, b, c etc

DATABASES

NEXAFS of polymers: <https://www.physics.ncsu.edu/stxm/polymerspectro/>

Inner shell EELS of gas phase molecules: <http://unicorn.mcmaster.ca/corex/cedb-title.html>

DATA ANALYSIS SOFTWARE

aXis2000	2000 – present	Hitchcock	free	IDL source & compiled MacOS version AVAILABLE FROM SOLEIL GITLAB site	http://unicorn.chemistry.mcmaster.ca/aXis2000.html (May 2020) http://ifit.mccode.org/tmp/Programs/axis2000/
stack_analyze	2004 – present	Jacobsen	free	IDL compiled	embedded in aXis2000 (source from CJJ on request)
DAWN	2015-present	Basham et al	free	Eclipse, python, Jython	https://dawnsci.org/ (May 2020)
Mantis	2012-present	Lerotic	free	python	http://spectromicroscopy.com/ (May 2020)
Particle analysis	2010-present	Moffet	free	MatLab script	https://www.mathworks.com/matlabcentral/fileexchange/29085-stxm-spectromicroscopy-particle-analysis-routines (May 2020)
PyMCA	2007 - present	Solé et al	free	python scripts for X-ray fluorescence analysis	http://pymca.sourceforge.net/ (May 2020)
STACKLab	2020– present	Tobias Henn	free	MatLab scripts	https://www.mathworks.com/matlabcentral/fileexchange/24006-stxm-data-analysis-script-collection-stacklab
STXMPy	2010-present	Haraszti et al	free	python (10.1186/1752-153X-4-11) (could not find source site, May 2020)	
XMIDAS	2022 – present	2022PT&		X-ray multimodal image data analysis software (from TXM-XRF-mapping, NSLS-II)	

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