

## Synchrotron Soft X-ray microscopes (last changed: 09 Oct 2024)

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Type	Facility	name	City	Country	Source	E-range (eV)	1 <sup>st</sup> image	Status	Comments; instrument
TXM	Alba	Mistral	Barcelona	Spain	BM	270-2600	2013	operating	Xradia
TXM	ALS	XM1	Berkeley	USA	BM	250-900	1995	operating	custom
TXM	ALS	XM2 (NCXT)	Berkeley	USA	BM	250-6000	2009	operating	custom
TXM	Astrid	XRM	Aarhus	Denmark	BM	500	1998	operating	
TXM	Bessy-I		Berlin	Germany	BM	500	1989	ended 1999	
TXM	Bessy-II	U41-TXM	Berlin	Germany	Und-L	250 - 600	2010	operating	moved beamlines 2014-17
TXM	Bessy-II	AnImaX	Berlin	Germany	???	250-3000	2019	operating	TXM / STXM (XRF)
TXM	Diamond	B24 cryo-TXM	Harwell	UK	BM	250-2500	2013	operating	Xradia
TXM	Elettra	TwinMic 1.1L	Trieste	Italy	EPU	50-1000	2001	operating	TXM / STXM
TXM	NSRL	TXM	Hefei	China	BM	500	2011	operating	Xradia
TXM	NSRRC	TXM	Hsinchu	Taiwan	BM	250-1800	2018	operating	custom
TXM	Ritsumeikan	BL12	Kyoto	Japan	BM	500	1996	operating	
XPEEM	Alba	Circe	Barcelona	Spain	EPU	100-2000	2016	operating	Elmitec
XPEEM	ALS	PEEM-2	Berkeley	USA	BM	175-1500	1999	ended 2011	custom electrostatic
XPEEM	ALS	PEEM-3	Berkeley	USA	EPU	150-2000	2009	operating	custom electrostatic
XPEEM	APS	BL 4IDC	Argonne	USA	Und-L	500-2500	2012	operating	Omicron, Elmitec
XPEEM	Bessy-II	UE49PGM	Berlin	Germany	EPU	100-1800	2004	operating	SMART (custom)
XPEEM	Bessy-II	UE49	Berlin	Germany	EPU	100-1800	2006	operating	Elmitec
XPEEM	Bessy-II	UE56-1_SGM	Berlin	Germany	EPU	100-1800	2012	operating	Specs
XPEEM	CLS	CaPeRS	Saskatoon	Canada	EPU	130-2500	2003	UPGRADING	Elmitec
XPEEM	Diamond	IO6	Chilton	UK	EPU	80-2100	2012	operating	Elmitec
XPEEM	Elettra	BL 1.2 L	Trieste	Italy	EPU	50-1000	1999	operating	Elmitec SPELEEM
XPEEM	Elettra	BL 1.2 L	Trieste	Italy	Und-L	50-1000	2012	operating	NanoESCA
XPEEM	Hi-SOR	BL-5	Hiroshima	Japan	BM	50-300	2006	operating	
XPEEM	MAXIV	I311	Lund	Sweden	Und-L	100-1400	2011	operating	Elmitec
XPEEM	NSLS-I	U5UA	Brookhaven	USA	Und-L	15-150	2006	ended 2015	
XPEEM	NSLS-II	21-ID-2	Brookhaven	USA	Und-L	20-1500	2017	operating	Elmitec XPEEM/LEEM
XPEEM	NSRRC	BL05B2	Hsinchu	Taiwan	EPU	60-1400	2002	operating	Omicron
XPEEM	NSRRC	TPS-27A	Hsinchu	Taiwan	EPU	90-2200	2023	operating	PRINS (custom)
XPEEM	PLS	4B1	Pohang	Korea	BM	200-1000	2000	operating	
XPEEM	PF	BL 19B	Tsukuba	Japan	BM	50-150	2001	operating	
XPEEM	PF	BL 27A	Tsukuba	Japan	BM	50-150	2010	operating	STAIB Spector
XPEEM	SLS	SIM	Villigen	Switzerland	EPU	90-1200	2005	operating	
XPEEM	Solaris	Demeter	Krakow	Poland	EPU	250-1700	2020	operating	Elmitec
XPEEM	Soleil	Tempo	Saint-Aubin	France	EPU	50 - 1500	2008	operating	Focus, Omicron
XPEEM	Soleil	Hermes	Saint-Aubin	France	EPU	250 - 1500	2013	operating	Elmitec, XPEEM/LEEM
XPEEM	SRLI	BL4	N.Ratchasima	Thailand	BM	40-1040	2015	operating	
XPEEM	Spring-8	BL25SU	Hyogo	Japan	EPU	220-2000	2001	operating	Elmitec
XPEEM	Spring-8	BL17SU	Hyogo	Japan	EPU	300 - 1800	2005	operating	SPELEEM
XPEEM	SRC	Sphinx	Stoughton	USA	Und-L	70-2000	2004	ended 2013	Elmitec; now at APS

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XPEEM	SLS	SINS	Singapore	Singapore	BM	50-1200	2011	operating	Focus-PEEM
XPEEM	SSRF	BL08U1	Shanghai	China	Und-L	50-1200	2012	operating	Elmitec
STXM	ALS	7.0.1	Berkeley	USA	Und-L	100 - 1200	1995	ended 2001	
STXM	ALS	5.3.2.2	Berkeley	USA	BM	250-750	2001	operating	New STXM 2018
STXM	ALS	11.0.2	Berkeley	USA	EPU	<b>60</b> -2000	2002	operating	New STXM 2012
STXM	ALS	5.3.2.1	Berkeley	USA	BM	250-3500	2011	operating	Old-STXM
STXM	ALS	7.0.1	Berkeley	USA	EPU	250-3000	2018	operating	COSMIC NS-1, NS-2
STXM	Australian SR	(side station)	Melbourne	Australia	Und-L	100-2000	2014	Retired 2016	Xradia / APS upgraded
STXM	Bessy -II	old-STXM	Berlin	Germany	BM	250-600	2004	ended 2011	
STXM	Bessy-II	MAXYMUS	Berlin	Germany	EPU	250 – 1500	2008	operating	Bruker
STXM	Bessy-II	Mystiic	Berlin	Germany			2022	operating	custom
STXM	CLS	10ID1	Saskatoon	Canada	EPU	130-2800	2006	Rebuild, 2024	Custom, ambient STXM
STXM	CLS	10ID1	Saskatoon	Canada	EPU	130-2800	2018	operating	custom, cryo-STXM
STXM	Diamond	I08	Harwell	UK	EPU	250- <b>4200</b>	2015	operating	Bruker
(S)TXM	Elettra	TwinMic 1.1L	Trieste	Italy	Und-L	250 - 2000	2002	operating	STXM / TXM (XRF) custom
STXM	NSLS	X1A	Upton	USA	Und-L	250-1000	1989	ended 2000	
STXM	NSLS	X1A	Upton	USA	Und-L	250-1000	1998	ended 2011	cryo-STXM
STXM	NSLS	X1A	Upton	USA	Und-L	250-1000	2004	ended 2011	STXM IV
STXM	MaxIV	SoftiMAX	Lund	Sweden	EPU	<b>278-2600</b>	2021	operating	STXM, ptychography
STXM	NSLS-II	SXN	Upton	USA	EPU	<b>250 - 2500</b>	2026	construction	STXM (Axilon), ptychography
STXM	NSRRC	TPS-27A	Hinschu	Taiwan	EPU	<b>90</b> -2200	2017	commissioning	Custom
STXM	Petra-III	PO6	Hamburg	Germany	Und	250-3000	2016	operating	Cryo-tomo; (at XRM16, 188)
STXM	PLS	nanoscopy	Pohang	Korea	EPU	100 - 2000	2014	operating	Bruker
STXM	PF	Various BL	Tsukuba	Japan	BM	100-8000	2013	operating	Atto-cube, mobile
STXM	PF	BL 9A	Tsukuba	Japan	EPU	160 - 1900	2022	operating	
STXM	PTB	Various BL	Berlin	Germany	BM	various	2018	operating	Ultra compact (at XRM18)
STXM	SLS	PolLux	Villigen	Switzerland	BM	250-1600	2006	operating	Bruker
STXM	SLS	Sophie	Villigen	Switzerland	EPU	???	2023	commissioning	At MaxIV softiMAX 23-25
STXM	SLS	NanoXAS	Villigen	Switzerland	BM	270-1800	2009	Ended 2016	custom
STXM	Soleil	Hermes	Saint-Aubin	France	EPU	250 – 1500	2015	operating	Research Instruments
STXM	SSRF	SXS	Shanghai	China	EPU	200 - 2000	2011	operating	Xradia
STXM	SSRF	SXS	Shanghai	China	EPU	200 - 2000	2019	operating	
STXM	SSRL	13-1	Stanford	USA	EPU	250 – 1000	2010	operating	Custom (Atto-cube based)
STXM	UVSOR	BL4U	Okazaki	Japan	Und-L	50-800	2013	operating	Bruker
SPEM	ALS	BL 7.0	Berkeley	USA	Und-L	90-1300	1996	ended 2006	
SPEM	ALS	BL 11.0.2	Berkeley	USA	EPU	100 - 2000	2013	operating	ambient pressure
SPEM	ALS	Maestro	Berkeley	USA	EPU	90-1300	2015	operating	
SPEM	Elettra	BL 2.2 L	Trieste	Italy	Und-L	350-750	1994	operating	
SPEM	Elettra	BL 3.2 L	Trieste	Italy	Und-L	27, 95	2000	operating	Schwarzchild, nanoARPES
SPEM	MAX-lab	BL 31	Lund	Sweden	Und-L	15-150	1992	operating	
SPEM	NSLS-I	X1A	Brookhaven	USA	Und-L	250-600	1990	ended 2002	
SPEM	NSRRC	BL09A1	Hinschu	Taiwan	Und	250-1500	1998	operating	

