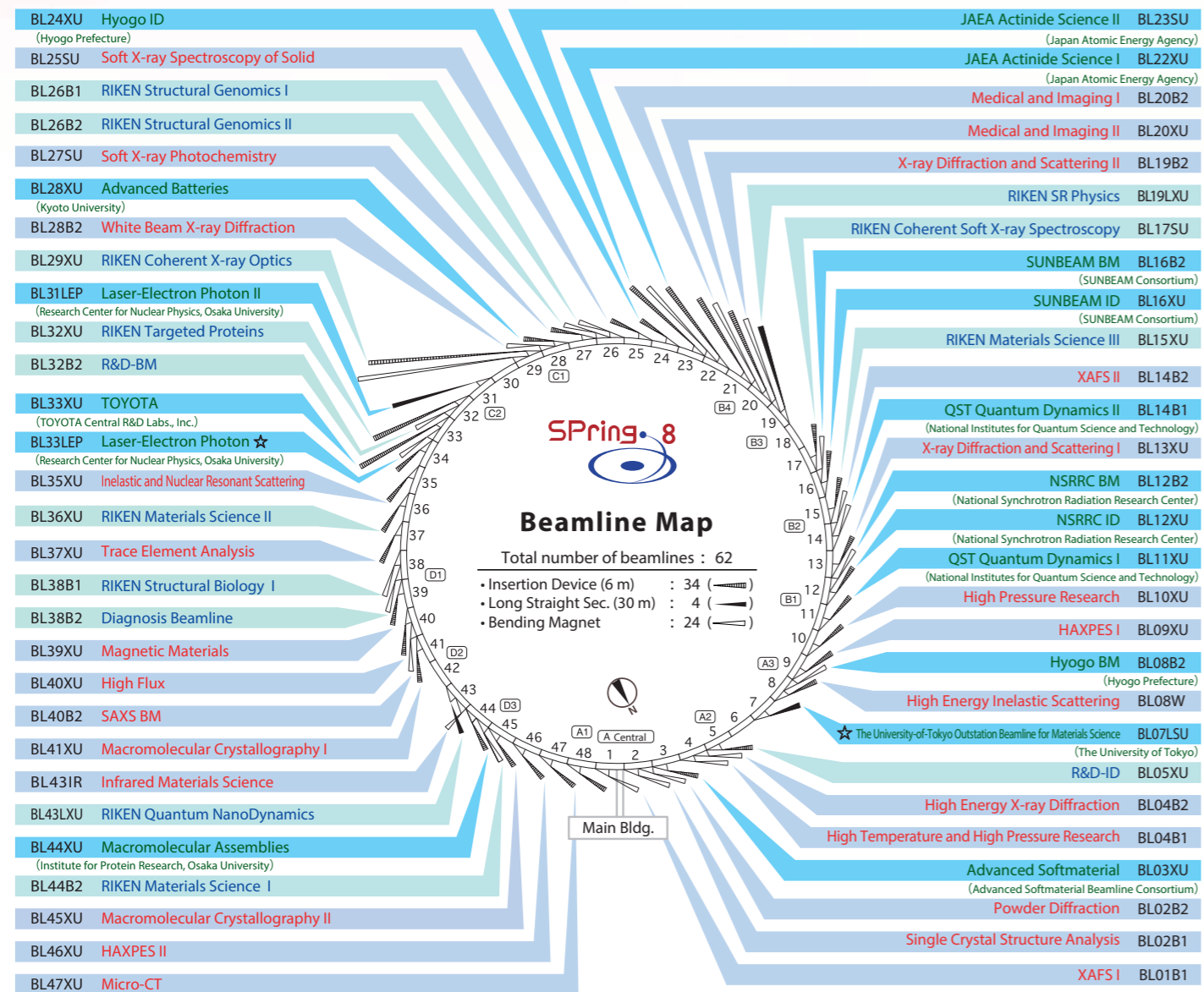


# SPring-8 Beamline

## Beamline Map

The beamlines are shown below with the names, source types and locations. The lengths of normal beamlines are designed to be less than 80 m from the source point. The lengths of nine and three beamlines are able to extend to 300 m and 1,000 m, respectively.



BL : Beamline  
 B1,B2 : Bending Magnets  
 XU : X-ray Undulator  
 SU : Soft X-ray Undulator  
 W : Wiggler  
 IR : Infrared Radiation  
 LEP : Laser-Electron Photon  
 LXU : Long-length X-ray Undulator  
 LSU : Long-length Soft X-ray Undulator

- Public Beamlines
- Contract Beamlines
- RIKEN Beamlines
- ★ Planned or Under Construction

- Public Beamlines constructed by SPring-8 and opened for users in Japan and from overseas.
- Contract Beamlines constructed by external organizations for their exclusive use.
- RIKEN Beamlines constructed by RIKEN for its own research.

Aug, 2022

## Tables of Beamlines in Use

Light source types and photon energies are designed according to each beamline's research requirements. Basic research equipment is installed in the experimental hutch.

### SPring-8 Beamlines

	Public	Contract	RIKEN	Total
Operational	26	15	14	55
Under Construction	0	2	0	2
Total	26	17	14	57

### Public Beamlines (26)

Name of Beamline	Beamline No.	Source	Photon Energy
XAFS I	BL01B1	BM	3.8 ~ 113 KeV
Single Crystal Structure Analysis	BL02B1	BM	5 ~ 115 KeV
Powder Diffraction	BL02B2	BM	12 ~ 37 KeV
High Temperature and High Pressure Research	BL04B1	BM	20 ~ 150 KeV
High Energy X-ray Diffraction	BL04B2	BM	37.8 ~ 113.4 KeV
High Energy Inelastic Scattering	BL08W	W	110 ~ 300 KeV
HAXPES I	BL09XU	U	4.91 ~ 12 KeV
High Pressure Research	BL10XU	U	6 ~ 61 KeV
X-ray Diffraction and Scattering I	BL13XU	U	5 ~ 72 KeV
XAFS II	BL14B2	BM	3.8 ~ 72 KeV
X-ray Diffraction and Scattering II	BL19B2	BM	5 ~ 72 KeV
Medical and Imaging II	BL20XU	U	7.62 ~ 61 KeV
Medical and Imaging I	BL20B2	BM	5.0 ~ 113.3 KeV
Soft X-ray Spectroscopy of Solid	BL25SU	U	0.12 ~ 2 KeV
Soft X-ray Photochemistry	BL27SU	U	0.17 ~ 3.3 KeV
White Beam X-ray Diffraction	BL28B2	BM	5 ~ 200 KeV
Inelastic and Nuclear Resonant Scattering	BL35XU	U	1.44 ~ 100 KeV
Trace Element Analysis	BL37XU	U	4.5 ~ 113 KeV
Magnetic Materials	BL39XU	U	5 ~ 37 KeV
High Flux	BL40XU	U	8 ~ 17 KeV
SAXS BM	BL40B2	BM	6.5 ~ 21 KeV
Macromolecular Crystallography I	BL41XU	U	6.5 ~ 35 KeV
Infrared Materials Science	BL43IR	BM	10 meV ~ 2 eV
Macromolecular Crystallography II	BL45XU	U	6.5 ~ 16 KeV
HAXPES II	BL46XU	U	6 ~ 37 KeV
Micro-CT	BL47XU	U	5.2 ~ 37.7 KeV

### Contract Beamlines (17)

Name of Beamline	Beamline No.	Source	Photon Energy
Advanced Softmaterial	BL03XU	U	6 ~ 35 KeV
The University-of-Tokyo Outstation Beamline for Materials Science (The University of Tokyo)	BL07LSU	U	0.25 ~ 2 KeV
Hyogo BM (Hyogo Prefecture)	BL08B2	BM	4.6 ~ 70 KeV
Hyogo ID (Hyogo Prefecture)	BL24XU	U	5 ~ 20 KeV
NSRRC ID (Taiwan)	BL12XU	U	4.5 ~ 30 KeV
NSRRC BM (Taiwan)	BL12B2	BM	7 ~ 35 KeV
SUNBEAM ID (13 companies)	BL16XU	U	4.5 ~ 40 KeV
SUNBEAM BM (13 companies)	BL16B2	BM	4.5 ~ 113 KeV
Advanced Batteries (Kyoto University)	BL28XU	U	4 ~ 46 KeV
TOYOTA	BL33XU	U	4 ~ 46 KeV
Laser-Electron Photon II (Osaka Univ.)	BL31LEP	LEP	1.4 ~ 2.9 GeV
Laser-Electron Photon (Osaka Univ.)	BL33LEP	LEP	1.5 ~ 2.9 GeV
Macromolecular Assemblies (Osaka Univ.)	BL44XU	U	6.5 ~ 17.7 KeV
QST Quantum Dynamics I (National Institutes for Quantum Science and Technology)	BL11XU	U	6 ~ 70 KeV
QST Quantum Dynamics II (National Institutes for Quantum Science and Technology)	BL14B1	BM	5 ~ 150 KeV
JAEA Actinide Science I (Japan Atomic Energy Agency)	BL22XU	U	5 ~ 70 KeV
JAEA Actinide Science II (Japan Atomic Energy Agency)	BL23SU	U	0.4 ~ 1.8 KeV

### RIKEN Beamlines (14)

Name of Beamline	Beamline No.	Source	Photon Energy
RIKEN R&D-ID	BL05XU	U	7 ~ 15 KeV
RIKEN Materials Science III	BL15XU	U	
RIKEN Coherent Soft X-ray Spectroscopy	BL17SU	U	0.48 ~ 2.0 KeV
RIKEN SR Physics	BL19LXU	U	7.1 ~ 51 KeV
RIKEN Structural Genomics I	BL26B1	BM	6 ~ 17 KeV
RIKEN Structural Genomics II	BL26B2	BM	6 ~ 17 KeV
RIKEN Coherent X-ray Optics	BL29XU	U	4.4 ~ 56 KeV
RIKEN Targeted Proteins	BL32XU	U	12 ~ 15 KeV
RIKEN R&D-BM	BL32B2	BM	
RIKEN Materials Science II	BL36XU	U	4.5 ~ 35 KeV
RIKEN Structural Biology I	BL38B1	BM	6.5 ~ 14 KeV
RIKEN Diagnosis Beamline	BL38B2	BM	
RIKEN Quantum NanoDynamics	BL43LXU	U	1.44 ~ 25 KeV
RIKEN Materials Science I	BL44B2	BM	15.5 ~ 30.2 KeV