

S/N	Proposal Number	Performed Proposal Title	Project Leader	Affiliation	Country	Type of Proposal	Beamline	Shift
1	2023A8001 1)	Time-resolved Crystallography of photosystem I by use of the XFEL at SACLA	Raimund Fromme	Arizona State University	USA	SACLA General Proposal (Non-proprietary)	BL2	5
2	2023A8002	Applications of X-ray Free Electron Laser Pair Distribution Function Studies in Materials Science	Bo Iversen	University of Aarhus	Denmark	SACLA General Proposal (Non-proprietary)	BL3	3
3	2023A8003 2)	Observation of metal complex reaction in a multiple metal binding porous RNaseA crystal	Takafumi Ueno	Tokyo Institute of Technology	Japan	SACLA General Proposal (Non-proprietary)	BL2	3.5
4	2023A8004	Analysis of the structural changes of photosystem II at a fast time range by pump-probe SFX analysis	Jian-Ren Shen	Okayama University	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
5	2023A8005	Excited intermediates in a photo induced C-C bond formation enzyme captured by XFEL	Jiangyun Wang	Chinese Academy of Sciences	China	SACLA General Proposal (Non-proprietary)	BL2	5
6	2023A8006	Time-resolved serial femtosecond crystallography using temperature-jump techniques	Takaaki Fujiwara	Tohoku University	Japan	SACLA General Proposal (Non-proprietary)	BL2	3
7	2023A8007	Rapid structure determination system for drug-target proteins using the X-ray free electron laser	So Iwata	RIKEN	Japan	SACLA General Proposal (Non-proprietary)	BL2	5
8	2023A8008	Development of versatile methods for protein structural dynamics analysis using X-ray free electron lasers	Eriko Nango	Tohoku University	Japan	SACLA General Proposal (Non-proprietary)	BL2	3
9	2023A8009 1)	Time-resolved SFX analysis of structural changes in the copper amine oxidase reaction	Takeshi Murakawa	Osaka Medical and Pharmaceutical University	Japan	SACLA General Proposal (Non-proprietary)	BL2	3
10	2023A8012	Probing Intercluster-exchange Processes in Mixtures of H <sub>2</sub> O and D <sub>2</sub> O at Supercritical Conditions	Werner Ihme	Stanford University	USA	SACLA General Proposal (Non-proprietary)	BL3	5
11	2023A8014	Investigation of high-filled surface plasmon propagation on the solid surface	Mohammadreza Banjafar	European XFEL GmbH	Germany	SACLA General Proposal (Non-proprietary)	BL2	7
12	2023A8015	Generation and characterization of ultra-mesoscopic high-energy density plasmas	Keisuke Shigemori	Osaka University	Japan	SACLA General Proposal (Non-proprietary)	BL2	4
13	2023A8016	Phase transitions and microstructure evolutions of strong yet ductile high-entropy alloy under dynamic deformation	Leora Dresselhaus-Marais	Stanford University	USA	SACLA General Proposal (Non-proprietary)	BL3	3
14	2023A8017	Texture evolution in nano-polycrystalline diamond during high-strain rate deformation	Kento Katagiri	Stanford University	USA	SACLA General Proposal (Non-proprietary)	BL3	4
15	2023A8018	Study of laser pulse dependence on laser-driven fast electron isochoric heating using ultrafast time-resolved x-ray transmission imaging	Hiroshi Sawada	University of Nevada Reno	USA	SACLA General Proposal (Non-proprietary)	BL2	7
16	2023A8019	Study of the charge-density-wave amplitude mode and photo-induced phase transition in TaTe <sub>2</sub>	Takeshi Suzuki	The University of Tokyo	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
17	2023A8020	Development of portable nano-focusing system and its applications to X-ray nonlinear optics	Yuichi Inubushi	Japan Synchrotron Radiation Research Institute	Japan	SACLA General Proposal (Non-proprietary)	BL2	5
18	2023A8021	Study of electronic state of manganese compounds using resonant two-photon absorption III	Kenji Tamasaku	RIKEN	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
19	2023A8022	Phonon transport and dispersion in a one dimensional phonon crystal	Urs Staub	Paul Scherrer Institute	Switzerland	SACLA General Proposal (Non-proprietary)	BL3	5
20	2023A8024	Time-resolved crystallography of light-driven reactions by photolyases and cryptochromes	Junpei Yamamoto	Osaka University	Japan	SACLA General Proposal (Non-proprietary)	BL2	5
21	2023A8026	Shooting molecular movies of Diels-Alderase and other enzymes	Shingo Nagano	Tottori University	Japan	SACLA General Proposal (Non-proprietary)	BL2	3
22	2023A8028	Dynamics of phase competition during a photo-induced phase transition	Simon Wall	Aarhus University	Denmark	SACLA General Proposal (Non-proprietary)	BL3	5
23	2023A8029 1)	Ultrafast Solvation Dynamics in Aqueous Solution: Determining the Structures of the Transient Species Following UV Excitation of Fe(CN) <sub>6</sub> anions in Water	Verena Markmann	Technical University of Denmark	Denmark	SACLA General Proposal (Non-proprietary)	BL3	5
24	2023A8030	Dynamic compression states of high-density germanium and its oxide systems analyzed by X-ray absorption spectroscopy (II)	Takuo Okuchi	Kyoto University	Japan	SACLA General Proposal (Non-proprietary)	BL3	4
25	2023A8032	Analysis of structural changes in the oxygen-evolving photosystem II by multiphoton absorption process using femtosecond lasers	Keisuke Kawakami	RIKEN	Japan	SACLA General Proposal (Non-proprietary)	BL3	3
26	2023A8033	Revealing the dynamics of circularly polarized XFEL-induced magnetization reversal in a ferromagnetic metal	Kihiro Yamada	Tokyo Institute of Technology	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
27	2023A8034	High spatiotemporal-resolution serial X-ray crystallography of organic molecules to observe photo-electron trajectories with twin XFEL pulses	Kiyofumi Takaba	RIKEN	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
28	2023A8035 2)	Extended development of serial femtosecond crystallography complementing electron diffraction for structural analysis of micro crystalline sponge	Sota Sato	The University of Tokyo	Japan	SACLA General Proposal (Non-proprietary)	BL2	7.5
29	2023A8036	Elucidation of dynamic phenomena of development of ferromagnetism in ferromagnetic semiconductor quantum-well structures by element-specific non-linear spectroscopy	Masaki Kobayashi	The University of Tokyo	Japan	SACLA General Proposal (Non-proprietary)	BL1	6
30	2023A8038	Real-time observation of crystallization dynamics of rare-gas nanoparticles by single-particle X-ray diffraction	Akinobu Niozu	Hiroshima University	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
31	2023A8039	Shortening of the XUV FEL pulses by laser-assisted transient absorption of helium	Shigeki Owada	Japan Synchrotron Radiation Research Institute	Japan	SACLA General Proposal (Non-proprietary)	BL1	9
32	2023A8040 1)	Molecular-level imaging using 100-nm Focused XFEL	Yoshinori Nishino	Hokkaido University	Japan	SACLA General Proposal (Non-proprietary)	BL2	6.833
33	2023A8041	Ultrafast spectroscopy by electron-ion coincidence spectroscopy: Applications to photodissociation reaction of iodine-containing molecules	Mizuho Fushitani	Nagoya University	Japan	SACLA General Proposal (Non-proprietary)	BL1	9
34	2023A8042	Characterization of Non-Thermal Phase Transitions in Sodium Chloride and Yttrium Oxide with Two-color X-ray Pulses	Philip Heimann	SLAC National Accelerator Laboratory	USA	SACLA General Proposal (Non-proprietary)	BL3	5
35	2023A8043	Time-resolved imaging of transient charge transfer dynamics in alkyl iodides with high temporal resolution	Ruaridh Forbes	SLAC National Accelerator Laboratory	USA	SACLA General Proposal (Non-proprietary)	BL1	7
36	2023A8045	Observation of X-ray three-photon absorption by highly-intense sub-10 nm focused XFELs	Junpei Yamada	Osaka University	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
37	2023A8047	Resolving the fragile-to-strong transition in water by following temperature-induced structural changes and anisotropy	Robin Tyburski	Stockholm University	Sweden	SACLA General Proposal (Non-proprietary)	BL3	5
38	2023A8048	Investigation of soft X-ray nonlinear optics due to symmetry of electronic states	Yuya Kubota	RIKEN	Japan	SACLA General Proposal (Non-proprietary)	BL1	7
39	2023A8049	Determining cation surface activity of the aqueous interface via Soft X-ray Second Harmonic Generation	Craig Schwartz	University of Nevada, Las Vegas	USA	SACLA General Proposal (Non-proprietary)	BL1	9
40	2023A8050	Transient Resonances in the hard X-ray regime	Stephan Kuschel	Technical University of Darmstadt	Germany	SACLA General Proposal (Non-proprietary)	BL3	5
41	2023A8051	Shortening X-ray pulse duration via nonlinear diffraction	Ichiro Inoue	RIKEN	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
42	2023A8052	X-ray Diffraction Study on the Magnetic Field Induced Transition of the Valley Structure in Dirac Electron System Bi	Hiroyuki Nojiri	Tohoku University	Japan	SACLA General Proposal (Non-proprietary)	BL2	9
43	2023A8053	In-line holography using sub-10 nm focused XFEL	Gota Yamaguchi	RIKEN	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
44	2023A8057	Visualization of interaction between laser shock waves and heterogeneous material structures	Norimasa Ozaki	Osaka University	Japan	SACLA General Proposal (Non-proprietary)	BL3	4
45	2023A8059	Study of redox state in catalytic intermediates of metal protein by time-resolved simultaneous measurements of X-ray spectroscopy and SFX	Atsuhiko Shimada	Gifu University	Japan	SACLA General Proposal (Non-proprietary)	BL2	5
46	2023A8060	Disentangling the coupled dynamics of the multi-component charge density wave in (TaSe <sub>4</sub> ) <sub>2</sub> I	Ryan Duncan	Stanford University	USA	SACLA General Proposal (Non-proprietary)	BL3	5
47	2023A8061	Development of X-ray emission spectroscopy for studying shock-induced spin transition in iron-bearing minerals.	Alexis Amouretti	Osaka University	Japan	SACLA General Proposal (Non-proprietary)	BL3	3
48	2023A8063	Investigation of lattice symmetry of the novel phase of a geometrically frustrated magnet induced at 50 Tesla and low temperatures II	Akihiko Ikeda	The University of Electro-Communications	Japan	SACLA General Proposal (Non-proprietary)	BL3	5

<sup>1)</sup> SACLA Research Proposals for Complementary Use with Spring-8, J-PARC/MLF or HPCI including the K computer / the supercomputer Fugaku.

<sup>2)</sup> Including the feasibility check beamtime (FCBT) of 0.5 shifts in performed shift.