SACLA

2021B, Performed Proposals

1Shift =12Hours

S/N	Proposal Number	Performed Proposal Title	Project Leader	Affiliation	Country	Type of Proposal	Beamline	Shift
1	2021B8001	Vibrational coherences in Mn-based single-molecule magnets	Johan Johansson	University of Edinburgh	UK	SACLA General Proposal (Non-proprietary)	BL3	5
2	2021B8002	Triggering Star Formation : from the Cosmos to the Laboratory	Bruno Albertazzi	LULI, Ecole Polytechnique	France	SACLA General Proposal (Non-proprietary)	BL3	4
3	2021B8004	Investigation of the solvent- and the wavelength-dependent photoreaction pathways of triruthenium dodecacarbonyl (Ru3(CO)12) using time-resolved x-ray solution scattering	Hyotcherl Ihee	Korea Advanced Institute of Science and Technology	Korea	SACLA General Proposal (Non-proprietary)	BL3	7
4	2021B8008	Study of transient states of intense-laser-produced plasma using XFEL pulses	Yuichi Inubushi	Japan Synchrotron Radiation Research Institute	Japan	SACLA General Proposal (Non-proprietary)	BL2	9
5	2021B8010 [2]	Subpicosecond time-resolved structural analysis of light energy transfer in antenna protein phycocyanin by pump-probe serial femtosecond crystallography	Yasufumi Umena	Nagoya University	Japan	SACLA General Proposal (Non-proprietary)	BL3	5.5
6	2021B8011	Ultrafast spin dynamics of the rare-earth element in a ferrimagnetic metal alloy	Kohei Yamamoto	National Institutes of Natural Sciences	Japan	SACLA General Proposal (Non-proprietary)	BL1	8
7	2021B8012 [1]	Structural changes of photosystem II upon light absorption probed by the pump-probe SFX method	Jian-Ren Shen	Okayama University	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
8	2021B8015	Observation of Bioluminescence Process by Serial Femtosecond Crystallography	Toru Nakatsu	Wakayama Medical University	Japan	SACLA General Proposal (Non-proprietary)	BL2	3
9	2021B8016	Study of redox state in metal protein crystal by simultaneous measurements of X-ray spectroscopy and SFX	Atsuhiro Shimada	Gifu University	Japan	SACLA General Proposal (Non-proprietary)	BL2	6
10	2021B8018	Pilot study for serial femtosecond molecular crystallography and complementary use with cryo-electron diffraction	Koji Yonekura	RIKEN	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
11	2021B8019 [1]	Damage-free imaging of catalyst layer nano-structure of polymer electrolyte fuel cell (PEFC)	Hideto Imai	NISSAN ARC, LTD.	Japan	SACLA General Proposal (Non-proprietary)	BL2	4
12	2021B8020	Study of electronic state of manganese compounds using nonlinear spectroscopy	Kenji Tamasaku	RIKEN	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
13	2021B8022	Feasibility study of X-ray structure determination with sub-10 nm focused XFEL beam (II)	Ichiro Inoue	RIKEN	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
14	2021B8023	Shortening the FEL pulse duration by laser-assisted transient absorption change of noble gas	Shigeki Owada	Japan Synchrotron Radiation Research Institute	Japan	SACLA General Proposal (Non-proprietary)	BL1	9
15	2021B8024	Exploring the mechanism of a CO release reaction by time-resolved serial crystallography	Takafumi Ueno	Tokyo Institute of Technology	Japan	SACLA General Proposal (Non-proprietary)	BL2	4
16	2021B8029 [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	4
17	2021B8030	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	2
18	2021B8031 [1]	Exploring quenching mechanism of higher energy state using ultrafast strain measurement behind femtosecond laser-driven shock front	Tomokazu Sano	Osaka University	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
19	2021B8032	High throughput and time-resolved fixed target SFX of metalloproteins	Michael Hough	Diamond Light Source	UK	SACLA General Proposal (Non-proprietary)	BL2	4.833
20	2021B8034	Metal-to-ligand charge transfer of Iron complex molecules probed by time-resolved XAFS	Hiroshi Iwayama	National Institutes of Natural Sciences	Japan	SACLA General Proposal (Non-proprietary)	BL1	7
21	2021B8035	Development of stable sub-10 nm XFEL focusing system based on advanced KB mirror optics	Kazuto Yamauchi	Osaka University	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
22	2021B8037	Development of soft x-ray magnetization-induced second harmonic generation	Masafumi Horio	The University of Tokyo	Japan	SACLA General Proposal (Non-proprietary)	BL1	8
23	2021B8038	Development of wavelength-scale focusing system for soft x-ray free-electron laser pulses	Hiroto Motoyama	The University of Tokyo	Japan	SACLA General Proposal (Non-proprietary)	BL1	7
24	2021B8040 [1]	Molecular-level imaging using 100-nm Focused XFEL	Yoshinori Nishino	Hokkaido University	Japan	SACLA General Proposal (Non-proprietary)	BL2	7
25	2021B8042	Evaluation of imaging quality of refined Wolter mirrors and apodization filters, improvement of bio-imaging, and spectral imaging with a soft X-ray transmission microscope using soft X-ray free-electron laser and Wolter mirrors	Satoru Egawa	RIKEN	Japan	SACLA General Proposal (Non-proprietary)	BL1	9
26	2021B8043	Investigation of various energy transport channels in dense plasmas using x-ray surface scattering	Lisa Randolph	University of Siegen	Germany	SACLA General Proposal (Non-proprietary)	BL2	9
27	2021B8045 [1]	After-shock evolution of shock-generated non-equilibrium amorphous structures of planetary materials	Takuo Okuchi	Kyoto University	Japan	SACLA General Proposal (Non-proprietary)	BL3	6
28	2021B8046 [1,2]	C-N bond activation and C-O bond formation in a photosensitizer protein captured by XFEL	Jiangyun Wang	Chinese Academy of Sciences	China	SACLA General Proposal (Non-proprietary)	BL2	5.5
29	2021B8047 [1]	Using femtosecond X-ray tools to study exciton dynamics and hole localization in CuInS2 quantum dots	Wojciech Gawelda	Autonoma University	Spain	SACLA General Proposal (Non-proprietary)	BL3	5
30	2021B8048	Research on spectral narrowing of Hard X-ray lasers with combined Bragg crystals	Yurina Michine	The University of Electro-Communications	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
31	2021B8051	Time-resolved crystallography of ultrafast light driven DNA repair by photolyases	Yoshitaka Bessho	Academia Sinica	Taiwan, ROC	SACLA General Proposal (Non-proprietary)	BL2	3
32	2021B8052	Time-resolved site-selective Coulomb explosion imaging of photodissociation and ring-opening in structural isomers of iodothiophene	Ruaridh Forbes	SLAC National Accelerator Laboratory	USA	SACLA General Proposal (Non-proprietary)	BL1	7
33	2021B8054	Investigation of lattice distortions excited by mid-infrared laser in Fe-based superconductors	Yuya Kubota	RIKEN	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
34	2021B8056	Time-resolved x-ray diffraction imaging of strong-field molecular ionization.	Philip Bucksbaum	SLAC National Accelerator Laboratory	USA	SACLA General Proposal (Non-proprietary)	BL3	5
35	2021B8058	Magnetic Field Induced Phase Transition of Graphite in the Quantum Limit	Hiroyuki Nojiri	Tohoku University	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
36	2021B8061	Serial femtosecond crystallography of CO2 fixation enzyme with a mix-and-jet injector	Eiichi Mizohata	Osaka University	Japan	SACLA General Proposal (Non-proprietary)	BL2	3
37	2021B8062	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
38	2021B8063	Coherent diffraction imaging of reacting nanoparticles in solution with a femtosecond100-nm focused XFEL pulse.	Takashi Kimura	The University of Tokyo	Japan	SACLA General Proposal (Non-proprietary)	BL2	6
39	2021B8064	Single shot powder x-ray diffraction study of the field induced phase transition of a praseodymium cobaltite with the duality of itineracy and localization of charge and spin	Akihiko Ikeda	The University of Electro-Communications	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
40	2021B8066	Elucidation of the mechanism of oxygen activation in metalloenzymes by structural analysis of the reaction intermediate	Takehiko Tosha	RIKEN	Japan	SACLA General Proposal (Non-proprietary)	BL2	5
41	2021B8067	Creating and probing off-Hugoniot states of hard materials using laser-shock reverberation	Norimasa Ozaki	Osaka University	Japan	SACLA General Proposal (Non-proprietary)	BL3	6
42	2021B8068	Circularly-polarized XFEL-induced ultrafast magnetization dynamics in GdFeCo ferrimagnet	Motohiro Suzuki	Kwansei Gakuin University	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
43	2021B8069	Time-resolved serial femtosecond crystallography using Temperature-jump techniques	Takaaki Fujiwara	Tohoku University	Japan	SACLA General Proposal (Non-proprietary)	BL2	3
44	2021B8070	Ultrafast time-resolved x-ray transmission imaging for relativistic electron isochoric heating of a solid target	Hiroshi Sawada	University of Nevada Reno	USA	SACLA General Proposal (Non-proprietary)	BL2	7
45	2021B8072	Observation of ultrafast molecular processes induced by core-to-core transitions in EUV	Mizuho Fushitani	Nagoya University	Japan	SACLA General Proposal (Non-proprietary)	BL1	7
46	2021B8075	Seeded Two-Color Stimulated XES and RIXS on Mn Solutions	Uwe Bergmann	University of Wisconsin-Madison	USA	SACLA General Proposal (Non-proprietary)	BL3	5

[1] SACLA Research Proposals for Complementary Use with SPring-8, J-PARC/MLF or HPCI including the K computer / the supercomputer Fugaku.

[2] Including the feasibility check beamtime (FCBT) of 0.5 shifts in performed shift.