

Proposal No Country Performed Proposal Title Project Leader Affiliation Type of Proposal SACLA General Pro SLAC National Accelerator Laboraton 201988001 Jun-Sik Lee Charge density wave in the clean limit: exploring the intrinsic high-field CDW in YBa2Cu4O8 USA BI 2 5 (Non-proprietary) SACLA General Prop 201988004 slocation dynamics and carbon diffusion in steels using femto - second X-ray diffraction Mitsuharu Yonemura Ninnon Steel Cornoration Janan BI 3 3 SACLA General Propo (Non-proprietary) 2019B8005 2) Time-resolved crystallography of ultrafast light driven DNA repair by photolyases Yoshitaka Bessho Academia Sinica aiwan, RO BL2 3.5 SACLA General Proposal 5 2019B8007 tudy of redox state in metal protein crystal by simultaneous measurements of X-ray spectroscopy and SFX Yasufumi Umena Okayama University Japan BL2 SACLA General Proposa 2019B8008 Triplet energy transfer induced disulfide cleavage of a photosensitizer protein captured by XFEL Jiangyun Wang Institute of Biophysics China BL2 2 (Non-proprietary) SACLA General Proposa 2019B8009 Takehiko Tosha BL2 5 isualization of metalloenzyme-catalyzed reactions using photosensitive caged oxygen molecule RIKEN Japan (Non-proprietary) 2019B8010 Japan Synchrotron Radiation Research SACLA General Prop Ultrafast magnetization dynamics of XFEL-induced spin-polarized states (II) Motohiro Suzuki BL3 5 Japan (Non-proprietary) 2019B8011 Q-dependent dynamics of aqueous salt solution using split-and-delay X-ray speckle visibility spectroscopy Yuya Shinohara Oak Ridge National Laboratory USA 6.917 2019B8012 Japan BL3 Ultrafast band dynamics of GaAs induced by XFEL excitation studied by near-infrared transient-SACLA General Propos 201988015 Yoshihito Tanaka University of Hyogo Japan BL3 5 SACLA General Pro (Non-proprietary 2019B8016 1 ingle Particle Imaging with 100-nm Focused XFEL by Pulsed Coherent X-Ray Solution Scattering Yoshinori Nishino Hokkaido University Janan BI 2 7 SACLA General Proposa 5 2019B8017 BL3 XFEL-XRD observations of highly shock-compressed diamond at TPa pressures Norimasa Ozaki Osaka University Japan (Non-proprie SACLA General Proposi 5 2019B8019 Ultrafast pathways to "hidden" lattice orders created by a single-shot light pulse Haidan Wen Argonne National Lab USA BL3 High-resolution structure of photosystem II in the intermediate state of the oxygen-evolving and water-splitting SACLA General Proposa 2019B8020 1 Michihiro Suga Okayama University BL2 Japan 5 iction using fixed-target protein crystallography (Non-proprietary) SACLA General Propo 2019B8021 Jasper vanThor Imperial College London UK BL3 3 Multi-pulse optical control of structural dynamics using TR-SFX (Non-proprietary) Exploring Photoinduced Directional Charge Transfer Pathways in a Bimetallic Cu-Os Complex By Ultrafast X-r SACLA General Pro 2019B8022 Michael Mara USA BL3 5 SACLA General Propo sachusetts Institute of Technology 2019B8023 5 The evolution of Neel order in transition metal oxides thin film upon transient photodoping Jiarui Li USA BL3 (Non-proprietary) Femtosecond time-resolved and high-resolution X-ray solution scattering study for understanding solvent reorganization processes during photo-induced electron transfer reaction High Energy Accelerator Research SACLA General Propo (Non-proprietary) 201988025 Shin-ichi Adachi Janan BL3 5 SACLA General Prop 2019B8026 1) Time-resolved Crystallography of Photosynthetic reactions by use of the XFEL at SACLA Raimund Fromme Arizona State University USA BI 2 5 Structural analysis of intermediate states of the photosystem II water-splitting reaction by time-resolved SACLA General Proposa 2019B8028 1 Jian-Ren Shen Okayama University Japan BL2 5 structural analysis using pump-probe serial femtosecond crystallography SACLA General Propos 2019B8029 Rapid structure determination system for drug-target proteins using the X-ray free electron laser So Iwata RIKEN Japan BL2 3 (Non-proprietary) SACLA General Proposal 2 2019B8032 1) Takuo Okuchi Okavama University Japan BL3 roperties of shock-generated magmas at extreme conditions as a function of time (Non-proprietary) SACLA General Propo 2019B8033 Kazuyuki Sakaue The University of Tokyo Japan BL1 Research on high-quality direct manufacturing by extremely high density EUV pulse (Non-proprietary) SACLA General Pro 2019B8034 Nonlinear absorption spectroscopy in K-shell core-hole state Kenji Tamasaku RIKEN 5 Filming electronic and structural dynamics in molecules containing heavy elements by site-selective X-ray 2019B8035 Hironobu Fukuzawa Tohoku University Japan BL3 5 SACLA General Propo (Non-proprietary) The University of Tokyo 2019B8036 hermal description of the magnetization dynamics in RE-TM metal alloys. Souliman El Moussaou Japan BL1 5 The atomic structure of size and shape controlled catalytic Pt nanocrystals – developing an XFEL crystallography of small unit cell structures SACLA General Pro 2019B8038 Bo Iversen University of Aarhus Denmark BI 3 5 llography of small unit cell str SACLA General Proposa 2019B8039 Time-resolved pump-probe serial crystallography of visual rhodopsin Thomas Grant University at Buffalo USA BL3 5 on-proprie SACLA General Proposa The University of Tokyo 2 2019B8040 Fime-resolved Serial Femtoseconds Crystallography (TR-SFX) of non-canonical rhodopsi Osamu Nurek Japan RI 2 (Non-proprie SACLA General Proposa 2019B8043 evelopment of versatile methods for protein structural dynamics analysis using X-ray free electron lasers Eriko Nango Kyoto University BL2 3 Japan (Non-proprietary) Chemical bond activation by high-valent intermediates in metalloenzymes: Combined XES and XRD at room temperature targeting intermediate Q in methane monooxygenase SACLA General Propo 2019B8044 Jan Kern Lawrence Berkeley National Laboratory USA 5 BL2 (Non-proprietary) Japan Synchrotron Radiation Res SACLA General Propo 2019B8045 nvestigation of the Mott insulator-to-metal transition under high electric field THz pulses BL3 SACLA General Proposal 2019B8046 Observation of nonlinear atomic ionization processes with inner-shell electrons Mizuho Fushitani Japan 7 Nagoya University BL1 (Non-proprietary) SACLA General Pro (Non-proprietar 201988048 ructural evaluation of Tetrabutylammonium bromide (TBAB) supercooled aqueous solutio Hironobu Machida Panasonic Corporatio Janan BL3 3 Time-resolved serial femtosecond crystallography to reveal dynamical properties of oncogene product H-Ras protein using light protecting group, caged GTP SACLA General Prop 2019B8049 Fumi Shima Kobe University Japan BI 2 2 Coherent diffraction imaging of reacting nanoparticles in solution using a 100-nm-focused femtosecond XFEL SACLA General Proposa 2019B8050 Takashi Kimura The University of Tokyo Japan BL2 5 The University of Electro SACLA General Proposa 2019B8051 evelopment of precisely controlled hard x-ray laser with resonant Bragg diffraction condition Hitoki Yoneda Japan BL3 5 (Non-proprietary) Real-time observation of the mechanism of chemical reactions promoted within the designed protein crystals by SACLA General Proposal Takafumi Ueno BL2 3 2019B8053 Tokyo Institute of Technology Japan rial femtosecond crystallography. (Non-proprietary) Time-resolved Coulomb explosion imaging following core-level photoionization in disubstituted methane SACLA General Propo 2019B8054 Tohoku University Japan BL1 5 Kiyoshi Ueda (Non-proprietary) SACLA General Proposa (Non-proprietary) 2019B8057 nvestigations of phase transitions in tantalum Bruno Albertazz LULI, Ecole Polytechnique France 2 2019B8058 Daniel Gabriel Mazzo USA BL3 5 SACLA General Proposi (Non-proprietary) 201988059 Magnetization dynamics of Co/Pt probed by time-resolved x-ray magneto-optical Kerr effect measurement Kohei Yamamoto National Institutes of Natural Sciences Japan BL1 7 SACLA General Prop The University of Tokyo 2019B8060 Dynamics of photo-induced magnetization in ferromagnetic iron oxide thin films Masaki Kobayashi Janan BI 1 7 SACLA General Propos 2019B8062 Higher-Order X-ray - Optical Wave Mixing Matthias Fuchs University of Nebraska Lincoln USA BL3 5 (Non-proprie Time resolved Coulomb explosion imaging of multi-channel non-adiabatic photodissociation dynamics in SACLA General Proposi 2019B8063 Ruaridh Forhes Stanford Linear Accelerator Centr LISA RI 1 odomethane and iodobenzene (Non-proprietary) Stanford University/SLAC National Accelerator Laboratory SACLA General Proposa 2019B8064 Impact of Electron Phonon Coupling on SnTe Lattice Instability David Reis USA BL3 5 (Non-proprietary) SACLA General Prop 2019B8065 Split-pulse Femtosecond X-ray Fourier Transform Holography imaging Wojciech Roseker Deutsches Elektronen-Synchrotron Germany 5 BL3 (Non-proprie omparison of the Bulk and Surface Structure of Solid State Electrolyte Materials at the Lithium K-edge with S SACLA General Prop (Non-proprietary) 2019B8066 Craig Schwartz UC Berkeley USA BL1 9 SACLA General Proposa Fime-Resolved X-ray Spectroscopy Combined with Crystallography of Photosystems I and II at Room 2019B8067 Junko Yano Lawrence Berkeley National Laboratory 5 USA BL2 (Non-proprietary) haracterization of the Non-Thermal Graphitization of Diamond with Two-color X-ray Pulse 201988070 Philip Heimann SLAC National Accelerator Laborator LISA BL3 5 Exploring Laser Astrophysics with coherent x-ray: Basic experiment for the realization of collisionless Weibel shock generation and particle acceleration (II) SACLA General Propo 2019B8071 Youichi Sakawa Osaka University Japan BI 2 5 SACLA General Propo 2019B8072 Demonstration of incoherent X-ray fluorescence imaging with high spatial resolution Taisia Gorkhover SLAC National Accelerator Laboratory USA BL3 5 SACLA General Propo 2019B8073 BL3 Seeded Two-Color Stimulated X-ray Emission Spectroscopy on Mn Solutions Uwe Bergmann SLAC National Accelerator Laboratory USA 4 (Non-proprietary) SACLA General Proposal 2019B8075 Ultrafast Control of lattice entropy in a photo-induced phase transition Mariano Trigo SLAC National Accelerator Laborator USA BL3 5 (Non-proprietary) High-resolution characterization of high-intensity laser-irradiated dense-plasmas using time-resolved grazing-incidence small-angle x-ray scattering (TR-GISAXS) SACLA General Propo 2.333 (Non-proprietary) SACLA General Pro 2019B8077 1) Real-space molecular reorientation dynamics for the state-of-the-art scenario of colossal barocaloric effects Northwestern University 5

¹⁾ SACLA Research Proposals for Complementary Use with SPring-8, J-PARC/MLF or Supercomputers (public computational resource of HPCI including the K computer)

 $^{^{\}rm 2)}$ Including the feasibility check beamtime (FCBT) of 0.5 shifts in performed shift.