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Proposal Title Project Leader Affiliation Country Type of Proposal SACLA General Prope Mitsuharu Yonemura Nippon Steel Corporation ocation dynamics and carbon diffusion in steels using femto-second X-ray diff Japan (Non-proprietary) Centre National de la Recherche Scientifique SACLA General Proposal derstanding instabilities in supernovae remnants in the laboratory with ultra-high resolution X-ray diagnostics Michel Koenig France 2020A8002 resolution structure of photosystem II in the intermediate state of the oxygen-evolving and wate on using fixed-larget protein crystallography Okayama University (Non-proprietary) (FEL-XDI experiment for non-crystalline particles after treatment to increase nominal scattering cross-sections for ifficient phase-retrieval analyses 2020A8004 Masavoshi Nakasako Keio University (Non-proprietary) SACLA General Propo 202048005 tudy of redox state in metal protein crystal by simultaneous measurements of X-ray spectroscopy and SFX Yasufumi I Imena Jichi Medical University Japan SACLA General Propo (Non-proprietary) ate of a charge density wave (CDW) in the clean limit: exploring the intrinsic high-field CDW in YBa2Cu4O8 (YBCO-2020A8012 Jun-Sik Lee SLAC National Accelerator Laboratory USA SACLA General Pro 2020A8013 Takeshi Murakawa Osaka Medical College Japan Japan Synchrotron Radiation Research SACLA General Proposa 2020A8014 Iltrafast magnetization dynamics of XFEL-induced spin-polarized states (III) Motohiro Suzuki Japan (Non-proprietary) High Energy Accelerator Research emtosecond time-resolved XAFS study on photo-induced electron transfer dynamics of Ru-Re supramolecular SACLA General Proposi 2020A8015 Shin-ichi Adachi Japan mplex photocatalyst Organization (Non-proprietary) RIKEN SACLA General Proposi 2020A8016 tudy on electronic state of nickel compounds using resonant two-photon absorption spect Kenji Tamasaku Japan (Non-proprietary) apan Synch Study of interaction between XFEL and plasma produced by intense laser 2020A8017 Japan (Non-proprietary) SACLA General Proposi 2020A8018 cited state dynamics of fluorescent proteins by engaging X-ray free electron lase SACLA General Propos (Non-proprietary) racing the elemental magnetization dynamics of TbFe, TbCo rare earth-transition metal alloys with time resolved asonant MOKE 202048019 Souliman El Moussaou The University of Tokyo Japan SACLA General Propo (Non-proprietary) University of Hyogo 2020A8020 lobel spectroscopy development of laser assisted inner-shell photoelectron using two photons including SX-FEL Tatsuo Geio Japan SACLA General Prop 2020A8021 Shortening XFEL duration through saturable absorption Ichiro Inoue RIKEN Japan SACLA General Proposa 2020A8022 tapid structure determination system for drug-target proteins using the X-ray free electron laser So lwata Japan SACLA General Propos 2020A8024 rch on high-quality direct manufacturing by extremely high density EUV pulse Kazuyuki Sakaue The University of Tokyo Japan (Non-proprietary) SACLA General Proposal itudy on atomic scale fluctuation in matter via duration-controlled X-ray photon correlation spectroscopy 2020A8025 RIKEN Japan Taito Osaka nt of versatile methods for protein structural dynamics analysis using X-ray free electron laser SACLA General Proposal xciton-Lattice Coupling in Lead Halide Perovskite Nanocrystals 2020A8028 <sup>1</sup> Nuri Yazdani ETH Zurich Switzerlar (Non-proprietary) structural analysis of reaction intermediate in metalloenzyme-catalyzed reaction using photo-sensitive caged oxyge Japan 202048030 Takehiko Tosha RIKEN SACLA General Propo (Non-proprietary) 2020A8033 XFEL-XRD observations of diamond under multiple shock compression to tera-Pascal pressures Norimasa Ozaki Osaka University Japan SACLA General Pro 2020A8034 Takafumi Ueno Tokyo Institute of Technology Japan The University of Electro-SACLA General Proposa 2020A8036 Development of new type of hard x-ray laser with XFEL pumping Hitoki Yoneda Japan (Non-proprietary) SACLA General Proposa 2020A8039 <sup>2</sup> ignal generation in Bacteriophytochromes studied by Serial Femtosecond Crystallography stian Westenhoff Sweder University of Gothenburg (Non-proprietary) nraveling the nature and the formation time of excitons and polarons in photoexcited lead-free halide perovskite anocrystals with femtosecond X-ray absorption spectroscopy and scattering SACLA General Proposa 2020A8040 Sophie Canton ELI-ALPS Hungary (Non-proprietary) Observation of ultrafast dynamics of charge density wave order in LaAgSb2 RIKEN Japan SACLA General Proposa 2020A8044 oherent diffraction imaging of reacting nanoparticles in solution using a femtosecond 100-nm focused XFEL puls (Non-proprietary) SACLA General Propos (Non-proprietary) Hokkaido University 2020A8045 ingle Particle Imaging with 100-nm Focused XFEL by Pulsed Coherent X-Ray Solution Scattering Yoshinori Nishino Japan Ecole Polytechnique Fédérale de SACLA General Propo 2020A8046 Maied Cherqui Switzerlan ISTerre, CNRS, University Grenoble SACLA General Prop 2020A8047 Structural investigation of liquid silicates over 100 GPa using high power lasers combined with SACLA FEL Guillaume Morard France SACLA General Proposa 2020A8048 roperties of shock-generated magmas at extreme conditions as a function of time I Takuo Okuchi Kvoto University Japan 2020A8049 SACLA General Proposa ectron-ion coincidence spectroscopy of molecular double-core-hole decay processes Mizuho Fushitani Nagoya University Japan (Non-proprietary) SACLA General Proposa me-resolved crystallography of ultrafast light driven DNA repair by photolyases 2020A8055 <sup>2</sup> Yoshitaka Bessho Academia Sinica aiwan, RO SACLA General Prop SACLA General Proposal 2020A8058 me-resolved Serial Femtoseconds Crystallography (TR-SFX) of non-canonical rhodopsins Osamu Nureki The University of Tokyo (Non-proprietary) tructural analysis of intermediate states of the photosystem II water-splitting reaction by time-resolved structural 202048059 Jian-Ren Shen Okavama University SACLA General Propo (Non-proprietary) Los Alamos National Laboratory 2020A8060 Optical control of a superconducting oxide heterostructure Rohit Prasankumar USA ural distortions in the formation of self-trapped excitons in white-light emitting halide perovskil SACLA General Pr 2020A8062 Nicholas Weadock SLAC National Accelerator Laborator USA ia UV pump-XFEL probe spectro SACLA General Proposa 2020A8063 lltra-high-speed magnetic response of tri-layer quantum well structure using ferromagnetic semiconductor Masaki Kobayashi The University of Tokyo Japan (Non-proprietary) SACLA General Proposa mic structure changes in the excited state of a photose Chinese Academy of Sciences 2020A8064 <sup>2</sup> Jiangyun Wang China (Non-proprietary) SACLA General Proposi 2020A8105 apid structure determination system for drug-target proteins using the X-ray free electron laser So Iwata RIKEN Japan (Non-proprietary) SACLA General Prop Damage-free nano-level imaging of fuel cell catalyst layer materials Hideto Imai NISSAN ARC, LTD Japan SACLA General Proposa ment of wavelength-scale focusing system for soft x-ray free-electron laser pu 2020A8112 Fime-resolved Serial Femtoseconds Crystallography (TR-SFX) of non-canonical rhodopsins Osamu Nureki The University of Tokyo Japan SACLA General Propo 2020A8114 Soft X-ray transmission imaging with ultrashort pulse illumination using high-precision Wolter mirrors Satoru Egawa RIKEN Japan SACLA General Pro 2020A8116 Observation of OH radical in water by soft x-ray absorption spectroscopy in transmission mode Hiroshi Iwayama National Institutes of Natural Sciences Japan SACLA General Proposal 2020A8117 Woiciech Roseke Deutsches Elektronen-Sv German SACLA General Proposa ata collection from sub-micron protein crystals with self-seeded XFEL 2020A8120 BL3 Kunio Hirata Japan (Non-proprietary) hoto-induced magnetization dynamics of Co/Pt probed by time-resolved x-ray magneto-optical Kerr effect Kohei Yamamoto SACLA General Proposa 5 National Institutes of Natural Sciences 2020A8122 Japan BL1 SACLA General Proj (Non-proprietary) 3 2020A8128 tructural analysis on the reaction intermediate of monooxygenase using caged compound Takehiko Tosha RIKEN (Non-proprietary) 2020A8131 nt of sub-10 nm XFEL focusing system based on novel imaging mirror optics Kazuto Yamauchi Osaka University SACLA General Propo Technical development of heterodyne detections for soft X-ray nonlinear spectroscopy 2020A8135 Iwao Matsuda The University of Tokyo 4

SACLA Research Proposals for Complementary Use with SPring-8, J-PARC/MLF or HPCI including the K computer / the supercom outer Fugaku

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