# 2021B, Performed General Proposals

* SPring-8 Research Proposals in Complementary Use with SACLA, J-PARC/MLF or HPCI including the K computer / the supercomputer Fugaku

1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2021B1083 | Structural elucidation of a water cluster within a noncovalent porous crystal | Shinnosuke Horiuchi | Nagasaki University | Japan | Educational Organization | Chemical Science | 9 | BL43IR | Np |
| 2 | 2021B1085 | Myosin functional and structural evolution among vertebrate species | Julien Ochala | University of Copenhagen | Denmark | Foreign | Life Science | 12 | BL40XU | Np |
| 3 | 2021B1086 | Experimental Syntheses of Clathrate Superhydrides CaH6 under high pressures | Yanming Ma | Jilin University | China | Foreign | Materials Science and Engineering | 6 | BL10XU | Np |
| 4 | 2021B1089 | Structural Analysis of Block Polymer Assemblies having Bioorthogonal Functional Groups Using SAXS Measurements | Tomoki Nishimura | Shinshu University | Japan | Educational Organization | Chemical Science | 6 | BL40B2 | Np |
| 5 | 2021B1090 | In-situ XAFS Analysis of Oxygen-deficient Molybdenum Oxide Active for Reverse Water-Gas Shift Reaction at Low Temperature | Yasutaka Kuwahara | Osaka University | Japan | Educational Organization | Chemical Science | 6 | BL01B1 | Np |
| 6 | 2021B1091 | Photoelectric holographic observation of atomic structure changes on GaN and diamond single-crystal surface caused by Al2O3 deposition | Mami Fujii | Kindai University | Japan | Educational Organization | Materials Science and Engineering | 12 | BL25SU | Np |
| 7 | 2021B1092 | X-ray crystallographic analysis of molecular bearings composed of tubular hosts and spherical guest rotors | Taisuke Matsuno | The University of Tokyo | Japan | Educational Organization | Chemical Science | 6 | BL26B1 | Np |
| 8 | 2021B1096 | Structural analysis and the elucidation of formation mechanism of high entropy alloy nanoparticles using in-situ XAFS/XRD | Kohsuke Mori | Osaka University | Japan | Educational Organization | Chemical Science | 6 | BL01B1 | Np |
| 9 | 2021B1097 | XAFS Studies on Active Sites and Catalysis of Mo/$SiO_2$ Catalysts for Dehydration of Amides | Mizuho Yabushita | Tohoku University | Japan | Educational Organization | Chemical Science | 3 | BL01B1 | Np |
| 10 | 2021B1098 | Microcrystal X-ray Structural Analysis for Extremely Unstable and Reactive Organometallic Compounds | Hikaru Takaya | Kyoto University | Japan | Educational Organization | Chemical Science | 5.5 | BL40XU | Np |
| 11 | 2021B1099 | Atom-by-atom synthesis of bi- and tri-nuclear metal nanoclusters in metal-organic frameworks and in-situ formation study | Benedict Lo | The Hong Kong Polytechnic University | Hong Kong | Foreign | Chemical Science | 6 | BL01B1 | Np |
| 12 | 2021B1100 | Structural elucidation of binuclear 3d transition metal nanoclusters in zeolites for C-X coupling reaction | Benedict Lo | The Hong Kong Polytechnic University | Hong Kong | Foreign | Chemical Science | 3 | BL02B2 | Np |
| 13 | 2021B1103 | Study of reorientational viscoelasticity of molecular liquids by means of X-ray inelastic scattering | Koji Yoshida | Fukuoka University | Japan | Educational Organization | Materials Science and Engineering | 12 | BL43LXU | Np |
| 14 | 2021B1104 | XAFS Analysis with Cryostat for Precise Characterization of Active Sites and Catalysis of ReOx-Ag/$CeO_2$ Catalysts for Transformation of Biomass-Derived Compounds | Keiichi Tomishige | Tohoku University | Japan | Educational Organization | Chemical Science | 6 | BL01B1 | Np |
| 15 | 2021B1106 | Investigation of confinement effect on morphology in perfluorosulfonate ionomer nanofibers using precise structural analysis | Hidetoshi Matsumoto | Tokyo Institute of Technology | Japan | Educational Organization | Materials Science and Engineering | 3 | BL40B2 | Np |
| 16 | 2021B1109 | Negative thermal expansion in diamond-like AgInX2 (X=S, Se, Te) thermoelectric materials | Yingcai Zhu | Beijing Institute of Technology | China | Foreign | Materials Science and Engineering | 3 | BL01B1 | Np |
| 17 | 2021B1110 | Hyper-ordered partial structures of Er-doped GaGeS infrared optical fiber glasses | Shinya Hosokawa | Kumamoto University | Japan | Educational Organization | Materials Science and Engineering | 14.375 | BL13XU | Np |
| 18 | 2021B1111 | Thermal cycle rejuvenation effect of particle dynamics in Gd65Co35 metallic glass | Shinya Hosokawa | Kumamoto University | Japan | Educational Organization | Materials Science and Engineering | 15 | BL35XU | Np |
| 19 | 2021B1113 | Phosphorus speciation in pasuture soils after 53-year of continuous application of chemical fertilizer and manure | Noriko Yamaguchi | National Agriculture and Food Research Organization | Japan | National and Nonprofit Organization | Environmental Science | 6 | BL27SU | Np |
| 20 | 2021B1116 | Elucidation of shrinkage mechanism of Zr2SP2O12 having negative coefficient of thermal expansion and improvement of its thermal expansion properties | Toshihiro Isobe | Tokyo Institute of Technology | Japan | Educational Organization | Materials Science and Engineering | 6 | BL02B2 | Np |
| 21 | 2021B1119 | Low-temperature high-energy X-ray diffraction experiments on pressure-induced dimerization transition candidates | NAOYUKI KATAYAMA | Nagoya University | Japan | Educational Organization | Materials Science and Engineering | 9 | BL04B2 | Np |

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|---|---|---|---|---|---|---|---|---|---|---|
| 22 | 2021B1120 | Exploration of structural phase transition in CuRh2Se4 with a spinel lattice | NAOYUKI KATAYAMA | Nagoya University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL10XU | Np |
| 23 | 2021B1121 | The Mechanistic Study of the Phase Transitions between Rod-like and Discotic Liquid Crystalline Phases of ether linkage derivatives | Kingo Uchida | Ryukoku University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL40B2 | Np |
| 24 | 2021B1122 | Mechanical Analysis of the Phase Transitions between Rod-like and Discotic Liquid Crystalline Phases of Ester Linkage Derivative | Kingo Uchida | Ryukoku University | Japan | Educational Organization | Materials Science and Engineering | 5.875 | BL40B2 | Np |
| 25 | 2021B1123 | Tomography for bridging nano and macro: semi-spontaneous interfacial debonding | Hiroyuki Toda | Kyushu University | Japan | Educational Organization | Materials Science and Engineering | 9 | BL20XU | Np |
| 26 | 2021B1124 | Understanding the Competition of hydrogen embrittlement and ductile fracture for the Development of Next-Generation high-strength Aluminum Alloys | Kazuyuki Shimizu | Iwate University | Japan | Educational Organization | Materials Science and Engineering | 8.25 | BL20XU | Np |
| 27 | 2021B1125 | Rapid X-Ray Crystallographic Analysis of Organic Electronic Materials by High-Brightness Microbeam | Takuji Hatakeyama | Kwansei Gakuin University | Japan | Educational Organization | Chemical Science | 6 | BL40XU | Np |
| 28 | 2021B1127 | Structural analysis of uniaxially aligned structure of liquid-crystalline molecules using polarized infrared micro-spectrometry | Shinichiro Kawano | Nagoya University | Japan | Educational Organization | Chemical Science | 6 | BL43IR | Np |
| 29 | 2021B1128 | New method for evaluation of hydrophilic or hydrophobic surface with FT-IR measurements | Go Matsuba | Yamagata University | Japan | Educational Organization | Chemical Science | 11.875 | BL43IR | Np |
| 30 | 2021B1132 | X-Ray Structural Analysis for Microcrystals of New d–π Electron Systems Containing Heavier Main Group Elements | Shogo Morisako | University of Tsukuba | Japan | Educational Organization | Chemical Science | 3 | BL02B1 | Np |
| 31 | 2021B1133 | Ultra-Small-Angle X-Ray Scattering Studies on Changes in Micrometer-scale Structures Upon Formation of Kink Band in Polymeric Materials Having Mille-Feuille Structure (Stacking Structure Comprising Soft and Hard Layers) | Shinichi Sakurai | Kyoto Institute of Technology | Japan | Educational Organization | Materials Science and Engineering | 2 | BL20XU | Np |
| 32 | 2021B1136 | Observation of anomalous structural parameters in the short-range order formation process of dimers | NAOYUKI KATAYAMA | Nagoya University | Japan | Educational Organization | Materials Science and Engineering | 3 | BL02B2 | Np |
| 33 | 2021B1138 | Complex formation behavior consisting of nanoparticles and collagen | Ken Terao | Osaka University | Japan | Educational Organization | Chemical Science | 6 | BL40B2 | Np |
| 34 | 2021B1139 | Temperature induced complex formation behavior of chemically different temperature responsive star polymers | Ken Terao | Osaka University | Japan | Educational Organization | Chemical Science | 6 | BL40B2 | Np |
| 35 | 2021B1140 | Diffuse scattering and high pressure research based on high energy single crystal X-ray diffraction | Eiji Nishibori | University of Tsukuba | Japan | Educational Organization | Materials Science and Engineering | 23.875 | BL02B1 | Np |
| 36 | 2021B1141 | Local structure analysis of PbPdO2 which shows a novel Co-doping induced ferromagnetism | Akitoshi Nakano | Nagoya University | Japan | Educational Organization | Materials Science and Engineering | 12 | BL13XU | Np |
| 37 | 2021B1143 | Dynamic visualization of the morphology of hydrogen micropores during rapid fracture of aluminum | Keitaro Horikawa | Osaka University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL20B2 | Np |
| 38 | 2021B1145 | Designing zeolites by time resolved PDF analysis of non-crystalline ingredients and crystalline materials at an atomic scale | Toru Wakihara | The University of Tokyo | Japan | Educational Organization | Materials Science and Engineering | 18 | BL08W | Np |
| 39 | 2021B1149 | Vibration analysis of silicate glasses using infrared spectroscopy | Hirokazu Masai | National Institute of Advanced Industrial Science and Technology | Japan | National and Nonprofit Organization | Materials Science and Engineering | 3 | BL43IR | Np |
| 40 | 2021B1150 | Microtomographic scanning of hominoid dentognathic fossils from central Myanmar | Reiko Kono | Keio University | Japan | Educational Organization | Life Science | 6 | BL28B2 | Np |
| 41 | 2021B1152 | In situ observation of solidification behaviors for FMS alloy during arc welding and the effect of addition of alloying element using X-ray imaging | Tomoya Nagira | National Institute for Materials Science | Japan | National and Nonprofit Organization | Materials Science and Engineering | 9 | BL20XU | Np |

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|---|---|---|---|---|---|---|---|---|---|---|
| 42 | 2021B1153 | Technical development for the generation of P-T in the Kawai-type multianvil apparatus and the investigation of pressure calibrants above 30 GPa | Daisuke Yamazaki | Okayama University | Japan | Educational Organization | Earth and Planetary Science | 8.875 | BL04B1 | Np |
| 43 | 2021B1154 | Detection of organelle containing storage reserves in various seeds using X-ray micro-CT and analysis of degradation of the reserves during seed germination | Daisuke Yamauchi | University of Hyogo | Japan | Educational Organization | Life Science | 6 | BL20B2 | Np |
| 44 | 2021B1157 | Evaluation of molecular aggregation state in an organic-inorganic hybrid block copolymer with well-controlled stereoregularity | Tomoyasu Hirai | Osaka Institute of Technology | Japan | Educational Organization | Chemical Science | 6 | BL40B2 | Np |
| 45 | 2021B1159 | Time resolved measurement of a topochemical redox reaction on iron oxides by using synchrotron X-ray | Takafumi Yamamoto | Tokyo Institute of Technology | Japan | Educational Organization | Chemical Science | 5.5 | BL02B2 | Np |
| 46 | 2021B1161 | The skin penetration mechanism of W/O type microemulsion containing hydrophobic deep eutectic solvent | Mina Sakuragi | Sojo University | Japan | Educational Organization | Chemical Science | 9 | BL40B2 | Np |
| 47 | 2021B1162 | Chemical-state-discriminated atomic structures of active and inactive dopants in Mg or Si doped GaN structures | Yoshiyuki Yamashita | National Institute for Materials Science | Japan | National and Nonprofit Organization | Materials Science and Engineering | 9 | BL25SU | Np |
| 48 | 2021B1163 | Elucidation of activation mechanism of oxygen reduction reaction using atomically precise platinum nanocluster by in situ XAFS measurement | Tokuhisa Kawawaki | Tokyo University of Science | Japan | Educational Organization | Materials Science and Engineering | 9 | BL01B1 | Np |
| 49 | 2021B1164 | Effect of premelting on seismic attenuation by short period cyclic loading part2 | Takashi Yoshino | Okayama University | Japan | Educational Organization | Earth and Planetary Science | 15 | BL04B1 | Np |
| 50 | 2021B1165 | Probing Nematic Correlations Across a Unidirectional Charge-Density-Wave Quantum Phase Transition | Yu Song | Zhejiang University | China | Foreign | Materials Science and Engineering | 18 | BL35XU | Np |
| 51 | 2021B1166 | Structural investigations of flexible ferroelectric molecular crystals as function of strain | Somnath Dey | RWTH Aachen University | Germany | Foreign | Materials Science and Engineering | 8.875 | BL40XU | Np |
| 52 | 2021B1167 | Effects of the topology of Pluronic® surfactants on the structure of their micelles | Daichi Ida | Kyoto University | Japan | Educational Organization | Chemical Science | 6 | BL40B2 | Np |
| 53 | 2021B1168 | Development of highly active water splitting catalysts by reaction site control using operando all-element observation | Masaaki Yoshida | Yamaguchi University | Japan | Educational Organization | Chemical Science | 9 | BL01B1 | Np |
| 54 | 2021B1169 | Correlation between crystal structure and superprotonic conduction in platinum-dimer based metal–organic frameworks having a preinstalled cationic guest | Hiroshi Kitagawa | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 9 | BL02B1 | Np |
| 55 | 2021B1170 | Investigation of structural phase transitions of novel Pt-dimer based electrically conductive 1D chain complexes with the unsaturated coordination sites | Kazuya Otsubo | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL02B2 | Np |
| 56 | 2021B1171 | Study on real-space observation of antiferromagnetic magnetization behavior in antiferromagnetic and noble metallic heterojunction system | Akinobu Yamaguchi | University of Hyogo | Japan | Educational Organization | Materials Science and Engineering | 9 | BL17SU | Np |
| 57 | 2021B1174 | The role of mitochondrial dysfunction in accelerated coronary vascular ageing in obese diabetic rodents | James Pearson | National Cerebral and Cardiovascular Center | Japan | National and Nonprofit Organization | Medical Applications | 12 | BL20B2 | Np |
| 58 | 2021B1175 | Defect formation and thermoelectric properties of n-type Zintl thermoelectric materials | Yosuke Goto | Tokyo Metropolitan University | Japan | Educational Organization | Materials Science and Engineering | 3 | BL02B2 | Np |
| 59 | 2021B1176 | Development of Highly Active and Durable Precious Metal Phosphide Catalysts and Investigation of Their Structure-Activity Relationship | Takato Mitsudome | Osaka University | Japan | Educational Organization | Chemical Science | 7 | BL01B1 | Np |
| 60 | 2021B1179 | Effect of dendrite configuration of alpha phase on internal damages at eutectic phase in hypo-eutectic aluminium casting alloys | Masakazu Kobayashi | Toyohashi University of Technology | Japan | Educational Organization | Materials Science and Engineering | 6 | BL20XU | Np |
| 61 | 2021B1180 | Creation of light-responsive porous frameworks based on photo-isomerization of dihydropyrene derivatives | Ichiro Hisaki | Osaka University | Japan | Educational Organization | Materials Science and Engineering | 8.75 | BL40XU | Np |

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|---|---|---|---|---|---|---|---|---|---|---|
| 62 | 2021B1181 | Mechanistic Study on Mechanochemical Solid-Phase Organic Reactions | Hikaru Takaya | Kyoto University | Japan | Educational Organization | Chemical Science | 12 | BL39XU | Np |
| 63 | 2021B1182 | Multiscale XMCT Analysis of Wood Cells for Understanding Lignin Degradation | Hikaru Takaya | Kyoto University | Japan | Educational Organization | Chemical Science | 9 | BL47XU | Np |
| 64 | 2021B1183 | Investigation of geometric and electronic structures of tungsten- and rhenium-doped alloy clusters | Shinjiro Takano | The University of Tokyo | Japan | Educational Organization | Materials Science and Engineering | 3 | BL01B1 | Np |
| 65 | 2021B1185 | Frustrated Lewis Pairs in Metal-Organic Frameworks for Ammonia Decomposition | Pu Zhao | University of Oxford | UK | Foreign | Chemical Science | 1 | BL02B2 | Np |
| 66 | 2021B1187 | Unraveling local structures of rare-earth ions codoped in long-persistent phosphor crystals by X-ray fluorescence holography | Mamoru Kitaura | Yamagata University | Japan | Educational Organization | Materials Science and Engineering | 12 | BL13XU | Np |
| 67 | 2021B1188 | Elucidation of photoinduced phase transition phenomenon of photochromic diarylethene crystals | Kingo Uchida | Ryukoku University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL02B1 | Np |
| 68 | 2021B1189 | Synthesis and Physical Properties of High-Temperature Superconducting Hydride Systems II | Katsuya Shimizu | Osaka University | Japan | Educational Organization | Materials Science and Engineering | 18 | BL10XU | Np |
| 69 | 2021B1190 | Study on the polymorphic crystallization and re-organization process of polypropylene random copolymer | Ken Taguchi | Hiroshima University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL40B2 | Np |
| 70 | 2021B1191 | CT-XAFS analysis on reaction distribution in lithium titan oxide battery electrode | Yuki Orikasa | Ritsumeikan University | Japan | Educational Organization | Chemical Science | 6 | BL37XU | Np |
| 71 | 2021B1195 | Further investigate tunable thermal expansion behaviours of Ho2(Fe,Al)17 alloys under pressure by X-ray powder diffraction | Xianran Xing | University of Science and Technology Beijing | China | Foreign | Materials Science and Engineering | 8.5 | BL10XU | Np |
| 72 | 2021B1197 | New amorphous arsenic allotrope and liquid-liquid transition on heating | Evgeny Bychkov | University of the Littoral Opal Coast | France | Foreign | Materials Science and Engineering | 8.375 | BL04B2 | Np |
| 73 | 2021B1198 | Structure-function relationship on a novel thermoelectric semimetal Ta2PdSe6 | Akitoshi Nakano | Nagoya University | Japan | Educational Organization | Materials Science and Engineering | 9 | BL02B1 | Np |
| 74 | 2021B1199 | Studies on the deuteron-lattice interaction in K3D(XO4)2 (X = S, Se) with far-infrared microspectroscopy | Hiroshi Matsui | Tohoku University | Japan | Educational Organization | Materials Science and Engineering | 5 | BL43IR | Np |
| 75 | 2021B1200 | Structural study on dual-cation electrolyte based on specific phase separation of spiro-type quaternary ammonium salt | Katsuhiko Naoi | Tokyo University of Agriculture and Technology | Japan | Educational Organization | Chemical Science | 8.875 | BL04B2 | Np |
| 76 | 2021B1201 | In situ observation of bubble formation in flowing magma using small-angle X-ray scattering and X-ray imaging | Satoshi Okumura | Tohoku University | Japan | Educational Organization | Earth and Planetary Science | 12 | BL47XU | Np |
| 77 | 2021B1202 | Observation of Composition Dependence of the Structural Change in Platinum Group Metal High Entropy Alloy (PGM-HEA) Nanoparticles under Reaction Conditions | Hiroshi Kitagawa | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 9 | BL02B2 | Np |
| 78 | 2021B1203 | Evaluation of phonon dispersion of single crystalline GeSn thin layers | Yousuke Shimura | Shizuoka University | Japan | Educational Organization | Materials Science and Engineering | 9 | BL35XU | Np |
| 79 | 2021B1204 | Development of artificial carbonic anhydrase | Kazuhide Kamiya | Osaka University | Japan | Educational Organization | Chemical Science | 6 | BL01B1 | Np |
| 80 | 2021B1205 | The operando observation of 1nm PGM high-entropy alloy electrocatalysts | Hiroshi Kitagawa | Kyoto University | Japan | Educational Organization | Chemical Science | 9 | BL01B1 | Np |
| 81 | 2021B1206 | Visualization of perpendicularly-directed antiferromagnetic domain and electric-field induced operation based on nano magnetic characterization using scanning XMCD spectromicroscopy | Yu Shiratsuchi | Osaka University | Japan | Educational Organization | Materials Science and Engineering | 12 | BL25SU | Np |

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|---|---|---|---|---|---|---|---|---|---|---|
| 82 | 2021B1207 | Local fine structure of Al-doped $Cr_2O_3$ thin film exhibiting spontaneous magnetization | Yu Shiratsuchi | Osaka University | Japan | Educational Organization | Materials Science and Engineering | 3 | BL01B1 | Np |
| 83 | 2021B1210 | In-situ observation of the precipitation of metallic iron from bridgmanite | Masayuki Nishi | Osaka University | Japan | Educational Organization | Earth and Planetary Science | 12 | BL04B1 | Np |
| 84 | 2021B1215 | Structural Analysis of self-assemblies composed of an amphiphilic copolymer and the kinetics study of their formation | Kazuo Sakurai | The University of Kitakyushu | Japan | Educational Organization | Materials Science and Engineering | 5.875 | BL40B2 | Np |
| 85 | 2021B1217 | Structural analysis of Pt NPs by HERFD-XAS | Hiroshi Kitagawa | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 9 | BL39XU | Np |
| 86 | 2021B1218 | Elucidation of the anisotropic lattice shrinkage of a novel europium oxyhydride under high pressure | Hiroshi Takatsu | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 5.875 | BL04B1 | Np |
| 87 | 2021B1220 | Ion liquid facilitated melting and glass formation of Coordination polymers for high anhydrous proton conductivity | Satoshi Horike | Kyoto University | Japan | Educational Organization | Chemical Science | 6 | BL04B2 | Np |
| 88 | 2021B1222 | Development of high-pressure viscosity measurement of low viscous liquids using high-speed X-ray imaging | Yoshio Kono | Ehime University | Japan | Educational Organization | Earth and Planetary Science | 6 | BL04B1 | Np |
| 89 | 2021B1223 | Structural Analysis of Transition Metal Complexes Exhibiting Thermally-induced Proton Transfer and Coordination Environment Change | Osamu Sato | Kyushu University | Japan | Educational Organization | Materials Science and Engineering | 3 | BL02B1 | Np |
| 90 | 2021B1226 | Structural Investigation of He Atomic Layers on Graphene and Graphite in Ultra-Low Temperatures | Akira Yamaguchi | University of Hyogo | Japan | Educational Organization | Materials Science and Engineering | 12 | BL13XU | Np |
| 91 | 2021B1228 | Correlative X-ray and Electron imaging of PtNi catalysts degradation in Proton Exchanged Fuel Cell: nanoparticle statistics and beyond | Feng Ryan Wang | University College London | UK | Foreign | Chemical Science | 11.875 | BL37XU | Np |
| 92 | 2021B1229 | Quantification of absorption and desorption of water molecules in Polysaccharide | Go Matsuba | Yamagata University | Japan | Educational Organization | Chemical Science | 12 | BL43IR | Np |
| 93 | 2021B1231 | Atomic-scale design of metal atom-containing zeolites by X-ray fluorescent holography | Toru Wakihara | The University of Tokyo | Japan | Educational Organization | Materials Science and Engineering | 12 | BL13XU | Np |
| 94 | 2021B1232 | Development of Tumor-Targeting Drug Delivery System with Controlled Release Using Multimeric Lipid-Transporter Protein | Takashi Inui | Osaka Prefecture University | Japan | Educational Organization | Medical Applications | 8.875 | BL40B2 | Np |
| 95 | 2021B1233 | Structural refinements of proton-electron mixed conducting metal complexes | Yukihiro Yoshida | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 5.875 | BL02B1 | Np |
| 96 | 2021B1234 | in situ structural refinements of dimensional-crossover coordination polymers | Yukihiro Yoshida | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL02B2 | Np |
| 97 | 2021B1235 | Dynamics of valence fluctuations in YbAlB4 under multi-extreme conditions studied by synchrotron radiation-based 174Yb Mössbauer spectroscopy | Hisao Kobayashi | University of Hyogo | Japan | Educational Organization | Materials Science and Engineering | 15 | BL35XU | Np |
| 98 | 2021B1236 | Structural properties of Fe based superconductors in electronic-nematic states | Hisao Kobayashi | University of Hyogo | Japan | Educational Organization | Materials Science and Engineering | 9 | BL10XU | Np |
| 99 | 2021B1237 | Real space mapping of microscope Far-IR spectroscopy in molecular organic materials with strongly correlated pi-electrons | Takahiko Sasaki | Tohoku University | Japan | Educational Organization | Materials Science and Engineering | 12 | BL43IR | Np |
| 100 | 2021B1239 | Precious crystal structure analysis of subnanosized metal cluster molecules with three dimensional architecture | Yusuke Sunada | The University of Tokyo | Japan | Educational Organization | Chemical Science | 3 | BL02B1 | Np |
| 101 | 2021B1240 | Deformation of peridotite under the conditions of subducting slabs: in-situ high-speed stress/strain measurements and implications for the process triggering the occurrence of intraslab earthquakes | Tomohiro Ohuchi | Ehime University | Japan | Educational Organization | Earth and Planetary Science | 12 | BL04B1 | Np |

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| 102 | 2021B1241 | Observation of intravascular kinetics as primary embolic material of imipenem silastatin in vivo using monochromatic X-ray | Hiroki Nakamura | Kawasaki Medical School | Japan | Educational Organization | Medical Applications | 6 | BL20B2 | Np |
| 103 | 2021B1242 | Exploration of superionic phase of CaF2 under high temperature and pressure | Kimura Kimura | Gifu University | Japan | Educational Organization | Materials Science and Engineering | 12 | BL04B1 | Np |
| 104 | 2021B1243 | Synchrotron X-ray CT observation of defect elimination process in Alumina during stress-assisted sintering | Gaku Okuma | National Institute for Materials Science | Japan | National and Nonprofit Organization | Materials Science and Engineering | 6 | BL20XU | Np |
| 105 | 2021B1244 | Giant size effect on ferroelectricity in barium titanate polyhedral particles with micrometer-level particle sizes | Yoshihiro Kuroiwa | Hiroshima University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL02B2 | Np |
| 106 | 2021B1245 | Clarification of the formation mechanism of the peculiar region on the internal fracture surface of titanium alloy | Fumiyoshi Yoshinaka | National Institute for Materials Science | Japan | National and Nonprofit Organization | Materials Science and Engineering | 9 | BL20XU | Np |
| 107 | 2021B1246 | Innovative Self-Assembly of Huge Cage Molecules Based on Weak Metal Coordination | Yuya Domoto | The University of Tokyo | Japan | Educational Organization | Chemical Science | 3 | BL26B1 | Np |
| 108 | 2021B1247 | Development of sample for in-situ XAFS measurement of oxygen desorption reaction of perovskite-type oxides in high temperature atmosphere. | Masatsugu Oishi | Tokushima University | Japan | Educational Organization | Chemical Science | 6 | BL01B1 | Np |
| 109 | 2021B1248 | In situ observation of magma crystallization by fast X-ray CT | Satoshi Okumura | Tohoku University | Japan | Educational Organization | Earth and Planetary Science | 6 | BL20B2 | Np |
| 110 | 2021B1250 | Effects of PKG, oxyfenicine and metformin on the regulation of myosin heads and sarcomere shortening in the in situ myocardium of insulin resistant rodents | James Pearson | National Cerebral and Cardiovascular Center | Japan | National and Nonprofit Organization | Medical Applications | 12 | BL40XU | Np |
| 111 | 2021B1252 | Relationship between ferroelectric phase transition and lattice instability evaluated by valence electron density study for perovskite-type ferroelectrics | Yoshihiro Kuroiwa | Hiroshima University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL02B2 | Np |
| 112 | 2021B1254 | Constraint on seismic signature of partial melts in mantle rocks by combined time-resolved sound velocity and X-ray measurements at high pressure and high temperature | Steeve Greaux | Ehime University | Japan | Educational Organization | Earth and Planetary Science | 12 | BL04B1 | Np |
| 113 | 2021B1255 | Crystal Structure Determination of Low-Crystalline Sulfide MOFs Synthesized by Materials Informatics | Daisuke Tanaka | Kwansei Gakuin University | Japan | Educational Organization | Chemical Science | 6 | BL02B1 | Np |
| 114 | 2021B1258 | A study on brain organoids prepared from iPS cells of schizophrenia cases | Ryuta Mizutani | Tokai University | Japan | Educational Organization | Life Science | 15 | BL47XU | Np |
| 115 | 2021B1260 | In-situ fracture observation in the F/M interphase of SiC/SiC composites by X-ray multiscale CT | Kazuya Shimoda | National Institute for Materials Science | Japan | National and Nonprofit Organization | Materials Science and Engineering | 3 | BL20XU | Np |
| 116 | 2021B1261 | Real-space observation of orbital electrons using high-energy X-rays | Shunsuke Kitou | RIKEN | Japan | National and Nonprofit Organization | Materials Science and Engineering | 11.875 | BL02B1 | Np |
| 117 | 2021B1262 | Structural analysis of thin molecular films arranged amphiphilic lanthanide complexes exhibiting both circularly and linearly polarized luminescence | Hitomi Ohmagari | Aoyama Gakuin University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL02B2 | Np |
| 118 | 2021B1263 | Structural Rearrangement of As-Polymerized Ultra-High Molecular Weight Polyethylene as Evaluated by In-Situ X-ray Measurements during Heating | Hiroki Uehara | Gunma University | Japan | Educational Organization | Chemical Science | 9 | BL40XU | Np |
| 119 | 2021B1265 | Structural analysis of composite oxide mesocrystals | Takashi Tachikawa | Kobe University | Japan | Educational Organization | Materials Science and Engineering | 12 | BL04B2 | Np |
| 120 | 2021B1266 | A Study of Dynamic Fermi Surfaces in High-Tc Cuprate Superconductors by High-resolution Compton Scattering (2) | Yoshiharu Sakurai | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Materials Science and Engineering | 20.875 | BL08W | Np |
| 121 | 2021B1267 | Structural analysis of novel supramolecular architectures created in microfluidic field | Munenori Numata | Kyoto Prefectural University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL40B2 | Np |

# 2021B, Performed General Proposals

* SPring-8 Research Proposals in Complementary Use with SACLA, J-PARC/MLF or HPCI including the K computer / the supercomputer Fugaku

1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 122 | 2021B1268 | High precision multi megabar pressure-generation using improved type DAC operating with ultra-fine actuator. | Hitoshi Yusa | National Institute for Materials Science | Japan | National and Nonprofit Organization | Materials Science and Engineering | 6 | BL10XU | Np |
| 123 | 2021B1270 | Stress-induced successive phase transformation and deformation behavior in single crystal Cu-Al-Mn superelastic alloy | Hiroshi Akamine | Kyushu University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL02B1 | Np |
| 124 | 2021B1271 | High pressure far-infrared study of excitonic insulator related compounds Ta2Ni(Se,S)5 | Hidekazu Okamura | Tokushima University | Japan | Educational Organization | Materials Science and Engineering | 14.875 | BL43IR | Np |
| 125 | 2021B1273 | Differences in cross-bridge behavior between physiological muscle contraction induced by neural stimulation and artificial muscle contraction induced by direct muscle stimulation | Atsuki Fukutani | Ritsumeikan University | Japan | Educational Organization | Life Science | 9 | BL40XU | Np |
| 126 | 2021B1275 | Non-destructive rock magnetism by 3D X-ray nano-CT | Yoichi Usui | Japan Agency for Marine-Earth Science and Technology | Japan | National and Nonprofit Organization | Earth and Planetary Science | 6 | BL47XU | Np |
| 127 | 2021B1276 | Local structure analysis of proton-conducting perovskite of BaZr0.4Sc0.6-xMxO3 (M=Bi, Sn, Nb, In+ x<0.5) | Yoshitaka Aoki | Hokkaido University | Japan | Educational Organization | Materials Science and Engineering | 3 | BL01B1 | Np |
| 128 | 2021B1280 | Accurate local structure analysis of high-temperature elemental liquids focusing on constituents of metallic glasses | Akitoshi Mizuno | National Institute of Technology, Hakodate College | Japan | Educational Organization | Materials Science and Engineering | 6 | BL04B2 | Np |
| 129 | 2021B1282 | High-resolution nano-CT measurement for evaluation of nanoscale fracture behavior in multi-material joints | Tomoki Matsuda | Osaka University | Japan | Educational Organization | Materials Science and Engineering | 8.875 | BL47XU | Np |
| 130 | 2021B1284 | Development of new methodology for study on the electronic states using non-electric dipole transitions by X-ray emission spectrometer equipped with multi-analyzer crystals (II) | Naomi Kawamura | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Materials Science and Engineering | 14.875 | BL39XU | Np |
| 131 | 2021B1287 | Study on the crystalline-field ground-state symmetry of rare-earth elements probed by resonant hard X-ray photoemission spectroscopy | Naomi Kawamura | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Materials Science and Engineering | 15 | BL09XU | Np |
| 132 | 2021B1289 | Measurements of conformational changes of proteins in a single molecule with white X-ray | Hirofumi Shimizu | University of Fukui | Japan | Educational Organization | Life Science | 18 | BL28B2 | Np |
| 133 | 2021B1290 | Study of highly accurate observation of fracture phenomenon of rubber by fast four-dimensional X-Ray CT imaging. | Ryo Mashita | Sumitomo Rubber Industries, Ltd. | Japan | Industry | Industrial Applications | 9 | BL28B2 | Np |
| 134 | 2021B1291 | Observation of redispersion process of metal particles on zeolites by means of oeprando XAFS-XRD | Kazu Okumura | Kogakuin University | Japan | Educational Organization | Chemical Science | 3 | BL01B1 | Np |
| 135 | 2021B1292 | Observation of d-wave superconducting state in heavy fermion compound CeCoIn5 through Compton scattering experiment | Akihisa Koizumi | University of Hyogo | Japan | Educational Organization | Materials Science and Engineering | 30 | BL08W | Np |
| 136 | 2021B1293 | Myofiber analysis of right ventricular outflow tract in tetralogy of Fallot and associated anomalies using phase-contrast X ray CT | Yoshihiro Oshima | HYOGO PREFECTURAL KOBE CHILDREN'S HOSPITAL | Japan | National and Nonprofit Organization | Life Science | 9 | BL20B2 | Np |
| 137 | 2021B1294 | Imaging Nano-meter Scale Structures of Epitaxial Bismuth Thin-Films using Coherent X-ray Scattering | Hiroo Tajiri | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Materials Science and Engineering | 11 | BL13XU | Np |
| 138 | 2021B1296 | Structure analysis of nano-cluster crystals of transition-metal chalcogenides | Shinobu Aoyagi | Nagoya City University | Japan | Educational Organization | Materials Science and Engineering | 3 | BL41XU | Np |
| 139 | 2021B1298 | Adsorption Behavior of a Single Water Molecule on Hydroxylated Open-Cage Fullerene Derivatives | Yoshifumi Hashikawa | Kyoto University | Japan | Educational Organization | Chemical Science | 6 | BL43IR | Np |
| 140 | 2021B1300 | Optical study of electronic structure in FeS at high pressure | Naoki Noguchi | Tokushima University | Japan | Educational Organization | Earth and Planetary Science | 9 | BL43IR | Np |
| 141 | 2021B1301 | Operando 3D multi-scale analysis of the cycle degradation in solid state batteries using projection CT-XAFS and imaging nano CT-XAFS | Yuta Kimura | Tohoku University | Japan | Educational Organization | Chemical Science | 18 | BL37XU | Np |

# 2021B, Performed General Proposals

* SPring-8 Research Proposals in Complementary Use with SACLA, J-PARC/MLF or HPCI including the K computer / the supercomputer Fugaku

1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 142 | 2021B1305 | Structural study of metallic compounds by means of High-Energy X-Ray Diffraction and Pair Distribution Function analysis | Saeed Kamali-Moghaddam | University of Tennessee Space Institute | USA | Foreign | Materials Science and Engineering | 12 | BL04B2 | Np |
| 143 | 2021B1307 | Studies on the $N_2O$ adsorption and activation phenomena found in zeolite systems by making use of a Far-IR method | Yasushige Kuroda | Okayama University | Japan | Educational Organization | Chemical Science | 6 | BL43IR | Np |
| 144 | 2021B1309 | Involvement of angiogenesis in the acceleration of bone repair by low-intensity vibratory stimulation with rest insertion | Takeshi Matsumoto | Tokushima University | Japan | Educational Organization | Medical Applications | 9 | BL20B2 | Np |
| 145 | 2021B1311 | Investigation of local structure and intrinsic/extrinsic contribution on piezoelectricity in nano/macro domain engineered $Bi(Mg1/2Ti1/2)O_3$-based piezoelectrics. | Sangwook Kim | Hiroshima University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL02B2 | Np |
| 146 | 2021B1312 | Investigation of gate-opening-type gas-sorption mechanism of porous coordination polymers by X-ray diffraction and solid-state NMR measurements | Takuya Kurihara | Kanazawa University | Japan | Educational Organization | Chemical Science | 6 | BL02B2 | Np |
| 147 | 2021B1313 | Structural Analysis of Crystalline Block Copolymers Composed of Porous Coordination Polymers | Hiroshi Sato | RIKEN | Japan | National and Nonprofit Organization | Chemical Science | 6 | BL40XU | Np |
| 148 | 2021B1314 | Hard X-ray Photoemission Spectroscopy of impurity-doped Metal/Perovskite Oxide Junction Resistive Memory | Takeo Ohsawa | National Institute for Materials Science | Japan | National and Nonprofit Organization | Materials Science and Engineering | 6 | BL09XU | Np |
| 149 | 2021B1315 | Development of a high-speed two-dimensional in-situ XRD measurement system at a maximum temperature of 1500℃ | Shintaro Kobayashi | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Materials Science and Engineering | 6 | BL02B2 | Np |
| 150 | 2021B1318 | Advancement of X-ray elastographic tomography using propagating shear waves for high elastic modulus | Wataru Yashiro | Tohoku University | Japan | Educational Organization | Medical Applications | 12 | BL28B2 | Np |
| 151 | 2021B1319 | Local structure analysis of the novel oxide-ion conductors by X-ray total scattering | Kotaro Fujii | Tokyo Institute of Technology | Japan | Educational Organization | Materials Science and Engineering | 9 | BL04B2 | Np |
| 152 | 2021B1322 | Observation of Edelstein effect by using soft-X ray magnetic circular dichroism microscopy | Yoshiyuki Ohtsubo | National Institutes for Quantum Science and Technology | Japan | National and Nonprofit Organization | Materials Science and Engineering | 9 | BL25SU | Np |
| 153 | 2021B1323 | Effects of substitution on local structure of MgV2O4-based cathode materials for magnesium rechargeable batteries | Yasushi Idemoto | Tokyo University of Science | Japan | Educational Organization | Chemical Science | 9 | BL04B2 | Np |
| 154 | 2021B1324 | High temperature in-situ time-division PDF analysis for qualifying phase transition behavior of Fe, P-doped dicalcium silicate crystal precipitated in molten steelmaking slag | Masanori Suzuki | Osaka University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL08W | Np |
| 155 | 2021B1325 | Precise measurement of the production and decay point of double hypernuclei in nuclear emulsion using X-ray microscopy | Junya Yoshida | Tohoku University | Japan | Educational Organization | Elementary Particles, Nuclear Science | 6 | BL47XU | Np |
| 156 | 2021B1326 | Study of the relationship between local dynamics of rubber and contained reinforcing agent by quasielastic gamma-ray scattering. | Ryo Mashita | Sumitomo Rubber Industries, Ltd. | Japan | Industry | Industrial Applications | 18 | BL35XU | Np |
| 157 | 2021B1327 | Circular Peierls transition in ilmenite-type vanadates. | Hajime Yamamoto | Tohoku University | Japan | Educational Organization | Materials Science and Engineering | 3 | BL02B2 | Np |
| 158 | 2021B1328 | Development of analytical method for elucidating distribution of drugs in mixed power and hair | Yasuo Seto | RIKEN | Japan | National and Nonprofit Organization | Other | 18 | BL43IR | Np |
| 159 | 2021B1329 | Development of X-ray magnetic nanotomography using full-field imaging optics | Motohiro Suzuki | Kwansei Gakuin University | Japan | Educational Organization | Materials Science and Engineering | 12 | BL37XU | Np |
| 160 | 2021B1330 | photoelectron holography of Si crystals doped with Sb | Tomohiro Matsushita | Nara Institute of Science and Technology | Japan | Educational Organization | Industrial Applications | 9 | BL25SU | Np |
| 161 | 2021B1331 | Determination of the life-related chemical compound delivered by shock process | Ryosuke Sinmyo | Meiji University | Japan | Educational Organization | Earth and Planetary Science | 6 | BL10XU | Np |

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1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 162 | 2021B1332 | Development of the capillary sealing method for precise structural analysis of supramolecular crystal with cavity | Kosuke Katagiri | Konan University | Japan | Educational Organization | Chemical Science | 6 | BL26B1 | Np |
| 163 | 2021B1333 | Micron-sized single crystal X-ray structure analysis and investigation of charge density distributions of mixed-valence trinuclear ruthenium complexes | Keishiro Tahara | University of Hyogo | Japan | Educational Organization | Chemical Science | 3 | BL02B1 | Np |
| 164 | 2021B1334 | Unveiling fuel-property effect on the near-nozzle spray dynamics: aiming to e-fuel designs towards future ICEs | Weidi Huang | National Institute of Advanced Industrial Science and Technology | Japan | National and Nonprofit Organization | Industrial Applications | 23.875 | BL40XU | Np |
| 165 | 2021B1335 | In Situ Observation of Phase-Separation Behavior and Deformation Behavior of Cyclic Olefin Copolymers with Gradient and Block Sequences | Takumitsu Kida | Japan Advanced Institute of Science and Technology | Japan | Educational Organization | Chemical Science | 3 | BL40XU | Np |
| 166 | 2021B1337 | Mechanism of light-induced structural change of invertebrate rhodopsin | Yasushi Imamoto | Kyoto University | Japan | Educational Organization | Life Science | 6 | BL40B2 | Np |
| 167 | 2021B1338 | Amorphous structure of poly fumarates with different thermal histories | Yasuhito Suzuki | Osaka Prefecture University | Japan | Educational Organization | Chemical Science | 3 | BL40B2 | Np |
| 168 | 2021B1341 | In situ visualization of laser welding by pink-beam 4D phase tomography | Atsushi Momose | Tohoku University | Japan | Educational Organization | Materials Science and Engineering | 9 | BL28B2 | Np |
| 169 | 2021B1342 | Electronic structure determination of dynamic molecular crystals to explore polarization switching properties | Osamu Sato | Kyushu University | Japan | Educational Organization | Materials Science and Engineering | 1 | BL01B1 | Np |
| 170 | 2021B1344 | Visualization measurement of the internal structure of woody biomass of pyrolyzing under radiation high heat flux by ultra-high-speed X-ray CT | Tadafumi Daitoku | Akita Prefectural University | Japan | Educational Organization | Industrial Applications | 3 | BL20B2 | Np |
| 171 | 2021B1345 | High-spatial-resolution 3D tomographic analysis using differential aperture technique for AlN/NPSS nanostructures. | Yusuke Hayashi | Osaka University | Japan | Educational Organization | Materials Science and Engineering | 15 | BL13XU | Np |
| 172 | 2021B1346 | 4f-5d Coulomb interaction for the critical valence-fluctuation mediated quantum-critical phenomena on CeTIn5 (T = Co, Rh, Ir) | Hidenori Fujiwara | Osaka University | Japan | Educational Organization | Materials Science and Engineering | 9 | BL09XU | Np |
| 173 | 2021B1348 | Structural changes of As clusters by co-implantation of As and B in Si: Analyses by photoelectron holography | Kazuo Tsutsui | Tokyo Institute of Technology | Japan | Educational Organization | Materials Science and Engineering | 11.875 | BL25SU | Np |
| 174 | 2021B1349 | Insitu Structural investigation of guest-induced multiple structural transitions in a flexible chiral porous-coordination-polymer | Susumu Kitagawa | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 9 | BL02B1 | Np |
| 175 | 2021B1350 | Characterization of Oxygen Intermediates in Non-heme Iron Enzymes Utilizing Nuclear Resonance Vibrational Spectroscopy | Edward Solomon | Stanford University | USA | Foreign | Life Science | 17.875 | BL35XU | Np |
| 176 | 2021B1351 | In situ observation of failure in polymeric solids under step-cycle tests | Yusuke Hiejima | Kanazawa University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL40B2 | Np |
| 177 | 2021B1353* | Effects of ball milling processes on atomic configurations of Li3NbO4-based positive-electrode materials with a disordered rocksalt structure | Naoto Kitamura | Tokyo University of Science | Japan | Educational Organization | Chemical Science | 6 | BL04B2 | Np |
| 178 | 2021B1354 | Precise Crystal Structure Analysis of Cubic Ice in Crystalline Nanospace | Tatsuhiro Kojima | Osaka University | Japan | Educational Organization | Chemical Science | 3 | BL02B1 | Np |
| 179 | 2021B1356 | Precise Analysis of the Water State Trapped in Nanovoids of Hydrophilic Polymer Gel in Moisture Absorption and Drying Process | Yoshihisa Fujii | Mie University | Japan | Educational Organization | Chemical Science | 6 | BL43IR | Np |
| 180 | 2021B1357 | in situ XAFS Study on Local Structures and Electronic States of Supported Metal Phosphides for CO2 Hydrogenation | Tetsuya Shishido | Tokyo Metropolitan University | Japan | Educational Organization | Materials Science and Engineering | 9 | BL01B1 | Np |
| 181 | 2021B1358 | Investigation of charge distribution change in Bi.5Pb0.5MO3 (M: 3d transition metal) | Masaki Azuma | Tokyo Institute of Technology | Japan | Educational Organization | Materials Science and Engineering | 3 | BL09XU | Np |
| 182 | 2021B1360 | Infrared Synchrotron Magnetic Circular Dichroism Spectroscopy and Spin State of Organic Conductor | Yuka Ikemoto | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Materials Science and Engineering | 18 | BL43IR | Np |

# 2021B, Performed General Proposals

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1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 183 | 2021B1361 | 3D analysis of hydrogen-affected crack opening/phase transformation behavior in a structural material using imaging CT and XRD | Osamu Takakuwa | Kyushu University | Japan | Educational Organization | Materials Science and Engineering | 9 | BL20XU | Np |
| 184 | 2021B1362 | Local structural analysis of lithium ionic conductive sulfide glasses and effects of added halogen elements and milling conditions | Koji Ohara | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Chemical Science | 9 | BL04B2 | Np |
| 185 | 2021B1363 | Study on water absorption and evaporation processes of polymers by infrared synchrotron radiation microspectroscopy | Yuka Ikemoto | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Materials Science and Engineering | 3 | BL43IR | Np |
| 186 | 2021B1365 | Formation of fluid artificial cell membrane using Marangoni convection and observation of its structural dynamics | Yohko Yano | Kindai University | Japan | Educational Organization | Life Science | 9 | BL37XU | Np |
| 187 | 2021B1366 | Investigation of Hydration Behaviors of PEGylated Nanoparticles Used for DDS | Chie Kojima | Osaka Prefecture University | Japan | Educational Organization | Chemical Science | 5.875 | BL43IR | Np |
| 188 | 2021B1367 | Analyses of distribution and chemical species of mercury and the other essential trace elements in the mongoose brain with aging and concentration dependence. | Sawako Horai | The National Institute for Minamata Disease | Japan | National and Nonprofit Organization | Environmental Science | 20 | BL39XU | Np |
| 189 | 2021B1368 | Change in the elasticity of hard aluminosilicate glasses with coordination change of Al3+ induced by pressure | Akihiro Yamada | University of Shiga Prefecture | Japan | Educational Organization | Materials Science and Engineering | 6 | BL04B1 | Np |
| 190 | 2021B1369 | Analysis of oxygen release from perovskite material by in-situ XAFS | Saburo Hosokawa | Kyoto Institute of Technology | Japan | Educational Organization | Chemical Science | 8.875 | BL01B1 | Np |
| 191 | 2021B1370 | Chemical state analysis at polymer / interface using total internal reflection XAFS measurement. | Koichiro Hori | Sumitomo Rubber Industries, Ltd. | Japan | Industry | Industrial Applications | 6 | BL27SU | Np |
| 192 | 2021B1373 | Micro-Second Time-Resolved XAFS Study on Dynamic Behavior of Electronic State of Electrode on Pb(Zr,Ti)O3 Piezoelectric Thin Films under Vibration | Seiji Yamazoe | Tokyo Metropolitan University | Japan | Educational Organization | Materials Science and Engineering | 12 | BL01B1 | Np |
| 193 | 2021B1374 | Analysis for electronic structure in perovskite-type oxyfluoride cathode materials with fluoride ion intercalation/deintercalation | Kentaro Yamamoto | Kyoto University | Japan | Educational Organization | Chemical Science | 6 | BL27SU | Np |
| 194 | 2021B1375 | Study on the self-organized structural formation mechanism of silk nanofibrils | Taiyo Yoshioka | National Agriculture and Food Research Organization | Japan | National and Nonprofit Organization | Chemical Science | 9 | BL40B2 | Np |
| 195 | 2021B1376 | Observation of the molecular orbital degrees of freedom in X[Pd(dmit)2]2 by valence electron density analysis | Hiroshi Sawa | Nagoya University | Japan | Educational Organization | Materials Science and Engineering | 18 | BL02B1 | Np |
| 196 | 2021B1377 | Exploration of glassy state in Prussian blue analogues | Satoshi Horike | Kyoto University | Japan | Educational Organization | Chemical Science | 1 | BL01B1 | Np |
| 197 | 2021B1379 | In situ X-ray diffraction studies of thermogenesis in insect flight muscles - 3 | Madoka Suzuki | Osaka University | Japan | Educational Organization | Life Science | 9 | BL40XU | Np |
| 198 | 2021B1380 | Study on dynamic behavior of (Ta6-xNbx)O19 cluster catalysts under styrene oxide conversion reactions by time-resolved QXAFS | Seiji Yamazoe | Tokyo Metropolitan University | Japan | Educational Organization | Chemical Science | 8 | BL36XU | Np |
| 199 | 2021B1381 | Feasibility study of X-ray fluorescence holography experiments on micrometer sized single crystal of Pb-free ferroelectric BCZT | Kouichi Hayashi | Nagoya Institute of Technology | Japan | Educational Organization | Materials Science and Engineering | 13 | BL37XU | Np |
| 200 | 2021B1384 | In-situ white X-ray diffraction measurement of Ni-RE (RE=Dy, Nd) alloying/dealloying reaction in high temperature molten salt | Yumi Katasho | National Institute of Advanced Industrial Science and Technology | Japan | National and Nonprofit Organization | Chemical Science | 9 | BL28B2 | Np |
| 201 | 2021B1385 | HAXPES measurement of hydrogen adsorption and desorption from a Titanium thin film coated with Pd film. | Yasumasa Takagi | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Materials Science and Engineering | 6 | BL09XU | Np |
| 202 | 2021B1386 | Search for superconductivity by high-pressure synthesis of novel carbon-based network materials | Takehito Nakano | Ibaraki University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL04B1 | Np |

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|---|---|---|---|---|---|---|---|---|---|---|
| 203 | 2021B1387 | Study on strain-induced crystallization of peroxide cross-linked isoprene rubbers: Effects of molecular weight, its distribution and defect | Yuko Ikeda | Kyoto Institute of Technology | Japan | Educational Organization | Materials Science and Engineering | 3 | BL40XU | Np |
| 204 | 2021B1388 | Study on solid solution phase obtained after the crystal rearrangement occurring in Lithium-rich cathode materials by pair distribution function analysis. | Masatsugu Oishi | Tokushima University | Japan | Educational Organization | Chemical Science | 6 | BL04B2 | Np |
| 205 | 2021B1389 | Yb L3 resonant hard X-ray photoemission spectroscopy of Kondo lattice YbInCu4: valence transition and f-d interaction | Hitoshi Sato | Hiroshima University | Japan | Educational Organization | Materials Science and Engineering | 12 | BL09XU | Np |
| 206 | 2021B1392 | Microsecond molecular dynamics measurement of polymer films using diffracted x-ray blinking (DXB) method | Yuji Sasaki | The University of Tokyo | Japan | Educational Organization | Materials Science and Engineering | 11.875 | BL40XU | Np |
| 207 | 2021B1393 | Observation of internal dynamics of functional proteins with light and thermal excitation by Diffracted X-ray Tracking | Yuji Sasaki | The University of Tokyo | Japan | Educational Organization | Life Science | 15 | BL40XU | Np |
| 208 | 2021B1394 | Non-equilibrium vibration mode of cations confined in zeolite nanocavities induced by Microwave irradiation | Fuminao Kishimoto | The University of Tokyo | Japan | Educational Organization | Materials Science and Engineering | 12 | BL04B2 | Np |
| 209 | 2021B1395 | Nanoscale geo-spatiotemporal microbiology: visualization of environmental microbes by element-specific nano CT | Yuki Morono | Japan Agency for Marine-Earth Science and Technology | Japan | National and Nonprofit Organization | Environmental Science | 9 | BL47XU | Np |
| 210 | 2021B1397 | Study on the mechanism for ferromagnetic 4f-2p coupling in Gadolinium-radical complexes by means of radiation-based $^{155}$Gd-Mössbauer spectroscopy | Takuya Kanetomo | Tokyo University of Science | Japan | Educational Organization | Materials Science and Engineering | 17.875 | BL35XU | Np |
| 211 | 2021B1398 | Development of high-energy X-ray microtomography using 110keV pink beam from multilayer monochromator and optimization of measurement conditions | Masato Hoshino | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Beamline Engineering | 12 | BL20B2 | Np |
| 212 | 2021B1399 | High-pressure Single Crystal X-ray structure analyses of photoluminescent tetranuclear iminothiolato-gold(I) complex. | Yoshiki Ozawa | University of Hyogo | Japan | Educational Organization | Chemical Science | 3 | BL02B1 | Np |
| 213 | 2021B1401 | In situ 4D observation of Kink structure development on MgZnY alloy using compression tester | Masayuki Uesugi | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Materials Science and Engineering | 9 | BL20B2 | Np |
| 214 | 2021B1403 | Investigation of the interaction between Li+ and Na+ and local structure in Li+/Na+ mixed ion conductor | Reona Miyazaki | Nagoya Institute of Technology | Japan | Educational Organization | Materials Science and Engineering | 4 | BL04B2 | Np |
| 215 | 2021B1404 | Three dimensional observation of organic globules in meteorites and investigation of their origin using high resolution imaging tomography | Masayuki Uesugi | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Earth and Planetary Science | 6 | BL47XU | Np |
| 216 | 2021B1405 | Evaluation of Insecurity Phenomenon Using Visualization of Dynamic Structure for Nail Penetration Test Inside High-Nickel Cathode Battery | Yoshiharu Uchimoto | Kyoto University | Japan | Educational Organization | Chemical Science | 11.875 | BL28B2 | Np |
| 217 | 2021B1407 | Pressure-induced crystal structure transition and transporting transformation of honeycomb structure Iridates at low temperature | Jinlong Zhu | Southern University of Science and Technology | China | Foreign | Materials Science and Engineering | 9 | BL10XU | Np |
| 218 | 2021B1408 | Homogeneous polymer network gel electrolytes cross-linked via a reversible metal ion-ligand complexation | Kenta Fujii | Yamaguchi University | Japan | Educational Organization | Chemical Science | 9 | BL04B2 | Np |
| 219 | 2021B1409 | Synthesis and elucidation of the reaction behavior of novel oxyfluorides | Yoshiyuki Inaguma | Gakushuin University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL02B2 | Np |
| 220 | 2021B1411 | Photoelectric holographic observation of atomic structures on Mg-doped GaN and SiO2/GaN interface | Mutsunori Uenuma | Nara Institute of Science and Technology | Japan | Educational Organization | Materials Science and Engineering | 12 | BL25SU | Np |
| 221 | 2021B1413 | Investigation of the relationship between structural changes at high temperature and crystallization behavior of lead halide-containing glasses by high temperature in situ HXRD measurement | Kenji Shinozaki | National Institute of Advanced Industrial Science and Technology | Japan | National and Nonprofit Organization | Materials Science and Engineering | 9 | BL08W | Np |
| 222 | 2021B1414 | Measurement of local dynamic stress by means of ultra-high speed camera in metallic materials | Masakazu Kobayashi | Toyohashi University of Technology | Japan | Educational Organization | Materials Science and Engineering | 12 | BL47XU | Np |

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|---|---|---|---|---|---|---|---|---|---|---|
| 223 | 2021B1415 | Elucidation of the Structure and Characterization of Surface Coordination Environment of Supported Catalysts using Phosphine Protected MAu12 Cluster as Precursor | Shinya Masuda | The University of Tokyo | Japan | Educational Organization | Materials Science and Engineering | 6 | BL01B1 | Np |
| 224 | 2021B1416 | Chemical state analysis of organic compounds with degradation by X-ray Raman scattering spectroscopy. | Fusae Kaneko | Sumitomo Rubber Industries, Ltd. | Japan | Industry | Industrial Applications | 15 | BL39XU | Np |
| 225 | 2021B1418 | In situ observation on allotropic transformation by severe plastic deformation and reversible transformation of high-pressure phase | Takahiro Masuda | Yokohama National University | Japan | Educational Organization | Materials Science and Engineering | 12 | BL04B1 | Np |
| 226 | 2021B1419 | SAXS study on Structure of micelles formed by Bora-type surfactants with different stereochemistry of linkers | Isamu Akiba | The University of Kitakyushu | Japan | Educational Organization | Materials Science and Engineering | 6 | BL40B2 | Np |
| 227 | 2021B1420 | Higher ordered structure and dynamics in nanocomposites | Koji Fukao | Ritsumeikan University | Japan | Educational Organization | Materials Science and Engineering | 3 | BL40B2 | Np |
| 228 | 2021B1422 | Vitrification and crystallization of imidazolium-based ionic liquid crystals in nanopores | Koji Fukao | Ritsumeikan University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL40B2 | Np |
| 229 | 2021B1423 | Determination of local structure around oxygen vacancies in bismuth oxyhalides with high photoanodic efficiency by X-ray fluorescence holography | Daichi Oka | Tohoku University | Japan | Educational Organization | Materials Science and Engineering | 12 | BL13XU | Np |
| 230 | 2021B1426 | X-ray fluorescence holography of topological insulators (Pd,Pt)Bi2 | Yoshihiro Kubozono | Okayama University | Japan | Educational Organization | Materials Science and Engineering | 12 | BL13XU | Np |
| 231 | 2021B1430 | Development of visualization methodology of pinning magnetic domain by Persistent Homology | Masato Kotsugi | Tokyo University of Science | Japan | Educational Organization | Materials Science and Engineering | 15 | BL17SU | Np |
| 232 | 2021B1431 | Feasibility study of a D111-type guide-block for in situ deformation experiments at high-pressure and high-temperature 2 | Yu Nishihara | Ehime University | Japan | Educational Organization | Earth and Planetary Science | 17.875 | BL04B1 | Np |
| 233 | 2021B1432 | A study on the migration of arsenic and uranium in environment through iron mineral transformation process | Kouhei Tokunaga | Japan Atomic Energy Agency | Japan | National and Nonprofit Organization | Earth and Planetary Science | 6 | BL01B1 | Np |
| 234 | 2021B1433 | Local structure of a deep dopant, Fe in Ga oxide: XAFS characterization | Kazushi Miki | University of Hyogo | Japan | Educational Organization | Materials Science and Engineering | 3 | BL37XU | Np |
| 235 | 2021B1434 | Synthesis of hydride superconductor from hydrogen halides under high pressure condition | Masafumi Sakata | Gifu University | Japan | Educational Organization | Materials Science and Engineering | 9 | BL10XU | Np |
| 236 | 2021B1435 | Single-Crystal X-ray Diffraction Analysis of Conjugated Materials for Energy Conversion | Michihisa Murata | Osaka Institute of Technology | Japan | Educational Organization | Chemical Science | 6 | BL02B1 | Np |
| 237 | 2021B1436 | Structural Investigation of Novel Ternary Y-Mg and La-Mg Hydrides - Near Room-temperature Superconductors | Ivan Troyan | FSRC Crystallography and Photonics RAS. | Russia | Foreign | Materials Science and Engineering | 6 | BL10XU | Np |
| 238 | 2021B1437 | Study of the structural behavior of Na-ion conducting Na3-2n(H)(SO4)1-n and Na3-2n(NH2)(SO4)1-n (n = 0, 0.25, 0.5) antiperovskites | Masato Goto | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 3 | BL02B2 | Np |
| 239 | 2021B1438 | Small-angle X-ray Scattering Analyses of Structures of Polymer Micelles of Amphiphilic (AB)n-type Star-shaped Block Copolymers | Isamu Akiba | The University of Kitakyushu | Japan | Educational Organization | Chemical Science | 6 | BL40B2 | Np |
| 240 | 2021B1439 | Elucidation of anomalous dynamic behavior of glycerol by using quasi-elastic gamma-ray scattering system based on nuclear Bragg monochromator | Makina Saito | Tohoku University | Japan | Educational Organization | Materials Science and Engineering | 15 | BL35XU | Np |
| 241 | 2021B1443 | Elucidation of co-catalytic function of Ni and Binary AuNi nanoparticle using resonant Hard X-ray Photoelectron Spectroscopy and Absorption Spectroscopy | Satoshi Ogawa | Nagoya University | Japan | Educational Organization | Chemical Science | 15 | BL09XU | Np |
| 242 | 2021B1444 | Elucidation of host-guest co-structures of P4MP1-alkane and CNT-alkane systems | Ayano Chiba | Keio University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL40B2 | Np |

# 2021B, Performed General Proposals

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1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 243 | 2021B1445 | Synchrotron X-ray micro-CT imaging of the Ediacaran and early Cambrian phosphate microfossils: Primary producers in the Ediacaran and early Cambrian and origins of legs | Tsuyoshi Komiya | The University of Tokyo | Japan | Educational Organization | Earth and Planetary Science | 6 | BL20XU | Np |
| 244 | 2021B1446 | 2D arrangement of module units in sulfosalt of PbS-Bi2S3 system and structural role of minor elements | Ryo Yamane | Tohoku University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL02B1 | Np |
| 245 | 2021B1447 | A study on the temperature dependence of casein micelle structure in cow milk using in-situ SAXS experiments | Hideaki Takagi | High Energy Accelerator Research Organization | Japan | National and Nonprofit Organization | Chemical Science | 6 | BL40B2 | Np |
| 246 | 2021B1449 | Dynamic structural study of human mitral valvular apparatus with synchrotron radiation phase-contrast X-ray CT | Takuro Tsukube | Japanese Red Cross Kobe Hospital | Japan | National and Nonprofit Organization | Medical Applications | 6 | BL20B2 | Np |
| 247 | 2021B1455 | Analysis of local structure in hydrogenated In2O3 thin-films | Yusaku Magari | Shimane University | Japan | Educational Organization | Materials Science and Engineering | 3 | BL01B1 | Np |
| 248 | 2021B1456 | Exploration of CaTiO3-MTiO3 (M = Mn and Ni) phase diagrams for the synthesis of perovskite materials with A-site divalent transition metal cations | Midori Amano-Patino | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL04B1 | Np |
| 249 | 2021B1457 | Correlations between oxygen defects and the electronic structure in In-Ga-Zn-O by using hard x-ray photoemission spectroscopy | Tomohiko Saitoh | Tokyo University of Science | Japan | Educational Organization | Materials Science and Engineering | 3 | BL09XU | Np |
| 250 | 2021B1459 | Development of low-frequency X-ray chopper and time-resolved X-ray structure analysis on dynamics of fluctured ferroelectrics | Yoshihiro Kuroiwa | Hiroshima University | Japan | Educational Organization | Materials Science and Engineering | 12 | BL02B1 | Np |
| 251 | 2021B1460 | Evaluation of microdomain structure of thermoplastic elastomers under various external stimuli by in-situ small angle X-ray scattering measurements | Ken Kojio | Kyushu University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL05XU | Np |
| 252 | 2021B1461 | Pressure induced valence transition and helical magnetic order in a chiral magnet YbNi3Ga9 | Takeshi Matsumura | Hiroshima University | Japan | Educational Organization | Materials Science and Engineering | 5.875 | BL10XU | Np |
| 253 | 2021B1462 | Energy scanning single crystal X-ray diffraction analysis of asteroid Ryugu samples returned by the Hayabusa 2 spacecraft: Assessment of shock metamorphism and implication for its formation condition | Takashi Mikouchi | The University of Tokyo | Japan | Educational Organization | Earth and Planetary Science | 9 | BL37XU | Np |
| 254 | 2021B1464 | Dynamic change of oxygen chemical potential distribution in solid oxide fuel cell electrolyte by using high temperature electrochemical nano XAFS | Koji Amezawa | Tohoku University | Japan | Educational Organization | Materials Science and Engineering | 18 | BL37XU | Np |
| 255 | 2021B1467 | Effect of additional trace element of Mg and S for the formation of graphite in high-purity Fe melt. | Akira Sugiyama | Osaka Sangyo University | Japan | Educational Organization | Industrial Applications | 9 | BL20B2 | Np |
| 256 | 2021B1468 | Analysis of bulk-sensitive electronic structure in Co2FeZ composition-spread film for an exploration of Weyl semi-metallic nature | Yuya Sakuraba | National Institute for Materials Science | Japan | National and Nonprofit Organization | Materials Science and Engineering | 12 | BL09XU | Np |
| 257 | 2021B1469 | Development of a remote controlled rotating-type DAC and the investigation of the strain effect on phase transition. | Hitoshi Yusa | National Institute for Materials Science | Japan | National and Nonprofit Organization | Earth and Planetary Science | 12 | BL04B2 | Np |
| 258 | 2021B1470 | Relationship between polar ordering and local structures in Bi-based lead-free ferroelectrics | Manabu Hagiwara | Keio University | Japan | Educational Organization | Materials Science and Engineering | 4 | BL04B2 | Np |
| 259 | 2021B1471 | Mechanism of deep earthquakes occurring at the mantle transition zone: insight from the direct observation of the ultra-high-pressure faulting using rotational diamond anvil cell | Keishi Okazaki | Japan Agency for Marine-Earth Science and Technology | Japan | National and Nonprofit Organization | Earth and Planetary Science | 14.375 | BL47XU | Np |
| 260 | 2021B1472 | In-situ observation of atomic structure in Mn-doped $BiFeO_3$ single crystalline thin film under an electric field by inverse mode X-ray fluorescence holography | Seiji Nakashima | University of Hyogo | Japan | Educational Organization | Materials Science and Engineering | 15 | BL13XU | Np |
| 261 | 2021B1474 | Development of high speed X-ray imaging system toward 100kHz | Kentaro Uesugi | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Beamline Engineering | 9 | BL20B2 | Np |
| 262 | 2021B1475 | Precise determination of dynamic mixtures of triple-helicates with single-crystal X-ray analysis | Nobuto Yoshinari | Osaka University | Japan | Educational Organization | Chemical Science | 3 | BL02B1 | Np |

# 2021B, Performed General Proposals

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1Shift =8Hours

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|---|---|---|---|---|---|---|---|---|---|---|
| 263 | 2021B1476 | Fatigue mechanism of polymeric composites during fatigue process based on small- and wide-angle X-ray scattering | Ken Kojio | Kyushu University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL05XU | Np |
| 264 | 2021B1477 | Observation of the Electronic State of Metal Nanoparticle Colloid Solution for Elucidating the Solid-Liquid Interface Phenomena using HAXPES with Ambient Pressure Cell | Eiji Ikenaga | Nagoya University | Japan | Educational Organization | Chemical Science | 15 | BL09XU | Np |
| 265 | 2021B1480 | Local Structural Analysis of Dilute Mg-Zn-Y Alloy using X-ray Fluorescence Holography: Elucidation of Annealing-Induced Variations of the Zn/Y Arrangements | Koji Kimura | Nagoya Institute of Technology | Japan | Educational Organization | Materials Science and Engineering | 11.875 | BL13XU | Np |
| 266 | 2021B1481 | Atomic-Level Observation of Cluster Formation Processes in Mg-Zn-Gd Alloy using Micro-Beam X-ray Fluorescence Holography | Koji Kimura | Nagoya Institute of Technology | Japan | Educational Organization | Materials Science and Engineering | 13 | BL39XU | Np |
| 267 | 2021B1482 | Chemical-State Selective 3D Structural Analysis of Mg-Zn-Y Alloy using Photoelectron Holography | Koji Kimura | Nagoya Institute of Technology | Japan | Educational Organization | Materials Science and Engineering | 9 | BL25SU | Np |
| 268 | 2021B1485 | Molecular aggregation structure of polymer thin films under carbon dioxide atmosphere | Ken Kojio | Kyushu University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL40B2 | Np |
| 269 | 2021B1488 | Structural elucidation of active site on metal surfaces activating the oxygen evolution reaction | Masashi Nakamura | Chiba University | Japan | Educational Organization | Chemical Science | 12 | BL13XU | Np |
| 270 | 2021B1489 | Reaction process of novel transition metal silicide under high temperature and high pressure | Takuya Sasaki | Nagoya University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL04B1 | Np |
| 271 | 2021B1491 | Electronic states for Redox reaction of positive electrode CaSrFeO2 system which possess the capacity more than 500mAh/g | Hiroshi Sakurai | Gunma University | Japan | Educational Organization | Materials Science and Engineering | 17.875 | BL08W | Np |
| 272 | 2021B1494 | In-situ observation of the band modulation by polarization switching in graphene/ferroelectrics structure | Seiji Nakashima | University of Hyogo | Japan | Educational Organization | Materials Science and Engineering | 12 | BL17SU | Np |
| 273 | 2021B1496 | Antiferromagnetic domain wall imaging in Mn3Sn by micro-focused XMCD | Yuichi Yamasaki | National Institute for Materials Science | Japan | National and Nonprofit Organization | Materials Science and Engineering | 11.875 | BL25SU | Np |
| 274 | 2021B1497 | Structural study of short-range ordering in amorphous alloys induced by diversification of bond lengths of homologous element pairs | Toru Kawamata | Tohoku University | Japan | Educational Organization | Materials Science and Engineering | 18 | BL02B1 | Np |
| 275 | 2021B1499 | High-pressure synthesis of noble gas compounds | Ken Niwa | Nagoya University | Japan | Educational Organization | Materials Science and Engineering | 2.875 | BL10XU | Np |
| 276 | 2021B1500 | X-ray powder diffraction structural analyses of polymorphic imidoylamidinato Pt(II) complexes under high pressure and their phase transition | Keisuke Umakoshi | Nagasaki University | Japan | Educational Organization | Chemical Science | 6 | BL10XU | Np |
| 277 | 2021B1501 | Operando observation of lithium distributions on high temperature in all-solid lithium batteries | Kosuke Suzuki | Gunma University | Japan | Educational Organization | Chemical Science | 18 | BL08W | Np |
| 278 | 2021B1503 | In-situ viscosity contrast measurements between olivine and enstatite | Noriyoshi Tsujino | Okayama University | Japan | Educational Organization | Earth and Planetary Science | 9 | BL04B1 | Np |
| 279 | 2021B1505 | Multi-pinhole Compton scattering imaging for degradation analysis of large-size high-power layered capacitor | Kosuke Suzuki | Gunma University | Japan | Educational Organization | Chemical Science | 9 | BL08W | Np |
| 280 | 2021B1506 | High energy resolution X-ray fluorescence hologram measurement using photoelectron conversion | Yusuke Hashimoto | Nara Institute of Science and Technology | Japan | Educational Organization | Materials Science and Engineering | 9 | BL25SU | Np |
| 281 | 2021B1507 | Development of compressed sensing for the reconstruction of the three dimensional electron momentum densities obtained from the high resolution Compton profiles | Hiroshi Sakurai | Gunma University | Japan | Educational Organization | Materials Science and Engineering | 20.5 | BL08W | Np |
| 282 | 2021B1508 | Structural investigation of Ruddlesden−Popper compounds La1.2Sr1.8Mn2O7Fx | Toshiyuki Matsunaga | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 3 | BL02B2 | Np |

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|---|---|---|---|---|---|---|---|---|---|---|
| 283 | 2021B1509 | Local structures of glass-forming molecular liquids under low-temperature and high-pressure | Osamu Yamamuro | The University of Tokyo | Japan | Educational Organization | Materials Science and Engineering | 9 | BL37XU | Np |
| 284 | 2021B1512 | Study on advanced crystalline sponge method by crystallization plate measurement using synchrotron X-rays | Sota Sato | The University of Tokyo | Japan | Educational Organization | Chemical Science | 9 | BL26B1 | Np |
| 285 | 2021B1513 | Identification of diffusion process for forming Z3-Fe(Pd,In)3 layered structure from A1-PdInx@FeOy core@shell nanoparticles | Kenshi Matsumoto | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 3 | BL02B2 | Np |
| 286 | 2021B1514 | Observation of grain deformation, fragmentation and poly-crystallization in semisolid Fe-C alloys by using a simultaneous measurement of compression test and 4D-CT | Taka Narumi | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 9 | BL20B2 | Np |
| 287 | 2021B1516 | Measurement of ultra-low energy level of Thorium-229 Isomer with high brightness X-ray light source | Koji Yoshimura | Okayama University | Japan | Educational Organization | Elementary Particles, Nuclear Science | 17.875 | BL19LXU | Np |
| 288 | 2021B1517 | Study on advanced crystalline sponge method by serial crystallography using high-flux synchrotron X-rays | Sota Sato | The University of Tokyo | Japan | Educational Organization | Chemical Science | 7.875 | BL45XU | Np |
| 289 | 2021B1518 | Deformation experiments of lowermost mantle materials under ultra-high pressure conditions using rotational diamond anvil cell and its rheological properties | Shintaro Azuma | Tokyo Institute of Technology | Japan | Educational Organization | Earth and Planetary Science | 9 | BL47XU | Np |
| 290 | 2021B1519 | Evaluation of Au Fresnel zone plate for the improvement of spatial resolution and diffraction efficiency at high energy x-ray region of x-ray nano-tomography. | Akihisa Takeuchi | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Materials Science and Engineering | 9 | BL47XU | Np |
| 291 | 2021B1521 | Visualization of the dental and maxillary microstructures in the herbivorous dinosaur Iguanodontia and evaluation of their adaptation to herbivory through synchrotron X-ray micro-CT analyses: a case study with a primitive iguanodontian Fukuisaurus from Japan | Takuya Imai | Fukui Prefectural University | Japan | Educational Organization | Life Science | 9 | BL28B2 | Np |
| 292 | 2021B1522 | Nuclei-like mirrors for an x-ray cavity quantum electrodynamics system with high finesse | Xiangjin Kong | National University of Defense Technology | China | Foreign | Materials Science and Engineering | 15 | BL35XU | Np |
| 293 | 2021B1526 | Determination of two closed structures of elastic layer-structured metal-organic framework-12 | Shotaro Hiraide | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL02B2 | Np |
| 294 | 2021B1528 | Structural Investigation of gas adsorption processes of flexible porous coordination polymers exhibiting cycle-dependent sorption property | Susumu Kitagawa | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 9 | BL02B2 | Np |
| 295 | 2021B1529 | The enhancing effect of the hydration and electric filed for the skin permeation. | Hiromitsu Nakazawa | Kwansei Gakuin University | Japan | Educational Organization | Medical Applications | 3 | BL40B2 | Np |
| 296 | 2021B1534 | The study on Sm permanent magnet by means of magnetic circular dichroism of hard x-ray photoelectron spectroscopy | Norimasa Sasabe | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Materials Science and Engineering | 9 | BL09XU | Np |
| 297 | 2021B1535 | Design of metal nanoparticle—polyoxometalate composite catalysts for CO2 absorption and conversion by operand DRIFTS-XAS observation | Soichi Kikkawa | Tokyo Metropolitan University | Japan | Educational Organization | Chemical Science | 9 | BL01B1 | Np |
| 298 | 2021B1536 | Study on the electronic structures of 3d-transition metal-doped AlN films for photoelectrode design | Saki Imada | Kyoto Institute of Technology | Japan | Educational Organization | Materials Science and Engineering | 15 | BL27SU | Np |
| 299 | 2021B1537 | Observation of semisolid deformation in Al alloys containing 100000 solid grains by using 4D-CT | Taka Narumi | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 9 | BL20B2 | Np |
| 300 | 2021B1540 | structural investigation of Li-excess layered cathode material Li2MnO3 with a distorted octahedral coordination of oxygen | Toshiyuki Matsunaga | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL02B2 | Np |
| 301 | 2021B1542 | Response measurements of fine spatial resolution semiconductor detectors in imaging spectroscopy and imaging polarimetry for astrophysics and solar physics | Hirokazu Odaka | The University of Tokyo | Japan | Educational Organization | Elementary Particles, Nuclear Science | 15 | BL20B2 | Np |

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|---|---|---|---|---|---|---|---|---|---|---|
| 302 | 2021B1543 | Electronic structure of the novel valence transition system $YbPd_2Al_3$ investigated by high-energy resolution fluorescence detected x-ray absorption and x-ray emission spectroscopies | Kojiro Mimura | Osaka Prefecture University | Japan | Educational Organization | Materials Science and Engineering | 9 | BL39XU | Np |
| 303 | 2021B1544 | Phase relation and elastic property of (Fe,Ni,Co)2P under high pressure | Yoichi Nakajima | Kumamoto University | Japan | Educational Organization | Earth and Planetary Science | 6 | BL10XU | Np |
| 304 | 2021B1545 | 4f ground-state symmetry in $YbRh_2Si_2$ and $YbCu_2Si_2$ probed by linear dichroism of resonant x-ray emission spectroscopy | Kojiro Mimura | Osaka Prefecture University | Japan | Educational Organization | Materials Science and Engineering | 15 | BL39XU | Np |
| 305 | 2021B1546 | Eu 4f Orbital Symmetry in Temperature-Induced Valence Transition Compound $EuNi_2(Si_{0.21}Ge_{0.79})_2$ Revealed by Polarization Dependent Resonant Hard X-ray Photoemission Spectroscopy | Kojiro Mimura | Osaka Prefecture University | Japan | Educational Organization | Materials Science and Engineering | 15 | BL09XU | Np |
| 306 | 2021B1549 | Post B1 phase transition of Fe-rich (Mg,Fe)O | Takeshi Sakai | Ehime University | Japan | Educational Organization | Earth and Planetary Science | 6 | BL10XU | Np |
| 307 | 2021B1551 | Ultralow thermal conductivity in thermoelectric Half- Heusler materials of MNiBi(M=Y,Lu) | Xueyun Wang | Beijing Institute of Technology | China | Foreign | Materials Science and Engineering | 15 | BL35XU | Np |
| 308 | 2021B1552 | Structural imaging analysis of the human hair and stratum corneum treated with nanoscale clustered water and cosmetics by infrared microspectroscopy. | Hiromitsu Nakazawa | Kwansei Gakuin University | Japan | Educational Organization | Life Science | 6 | BL43IR | Np |
| 309 | 2021B1553 | Crystalline structure analysis of composite materials having plant cell wall like skeleton structure (II) | Daisuke Tatsumi | Kyushu University | Japan | Educational Organization | Materials Science and Engineering | 3 | BL40XU | Np |
| 310 | 2021B1554 | Unveiling the elementary process of composites failure using an fatigue testing machine for in-situ observation by synchrotron radiation X-ray CT | Kosuke Takahashi | Hokkaido University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL20XU | Np |
| 311 | 2021B1558 | Local structure analysis of Ga(1-x)In(x)N/GaN/Al(x)Ga(1-x)N quantum shells with high indium contents grown on a GaN substrate by using an X-ray nano-beam | Takao Miyajima | Meijo University | Japan | Educational Organization | Materials Science and Engineering | 8.875 | BL13XU | Np |
| 312 | 2021B1560 | Time sharing measurement of coarsening, volume change and lattice constant after a massive-like transformation in Fe-C alloys | Hideyuki Yasuda | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 9 | BL47XU | Np |
| 313 | 2021B1561 | Feasibility study of time-resolved tomography using multilayer reflection for solidification in metallic alloys | Hideyuki Yasuda | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 9 | BL20B2 | Np |
| 314 | 2021B1562 | Nuclear resonance vibrational investigations of de novo designed heme-containing metalloenzymes: detection of catalytic intermediates involved in the activation of hydrogen peroxide. | Giorgio Caserta | Technical University of Berlin | Germany | Foreign | Life Science | 18 | BL19LXU | Np |
| 315 | 2021B1563 | X-ray nano-beam analysis of a single Ga(1-x)In(x)N/GaN/Al(x)Ga(1-x)N quantum shell on a GaN substrate processed by using a focused-ion beam | Takao Miyajima | Meijo University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL40XU | Np |
| 316 | 2021B1566 | Operando chemical state imaging of LNMO lithium battery active materials particles during charging/discharging processes by CT-XAFS | Nozomu Ishiguro | Tohoku University | Japan | Educational Organization | Chemical Science | 15 | BL37XU | Np |
| 317 | 2021B1567 | A study on the formation process and characteristics of of rare-earth ion-adsorption type ores using HERFD-XANES at La and Eu LIII-edges | Yoshio Takahashi | The University of Tokyo | Japan | Educational Organization | Earth and Planetary Science | 6 | BL39XU | Np |
| 318 | 2021B1569 | Integrating X-ray phase-contrast tomography and imaging mass spectrometry for in depth tissue proteomics of human heart, kidney and brain from patients with amyloidosis | Masaya Ikegawa | Doshisha University | Japan | Educational Organization | Life Science | 9 | BL20B2 | Np |
| 319 | 2021B1572 | Structural study on water cluster in hydrophobic environment | Kouki Oka | The University of Tokyo | Japan | Educational Organization | Materials Science and Engineering | 9 | BL04B2 | Np |
| 320 | 2021B1573* | Phonon dispersion relations of high-entropy alloys | Satoshi Tsutsui | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Materials Science and Engineering | 12 | BL35XU | Np |
| 321 | 2021B1574 | Dense hydrogenation effects on the magnetic structure of rare-earth transition metal compounds: crystal structures determined by XRD under high pressure | Naoki Ishimatsu | Hiroshima University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL10XU | Np |

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|---|---|---|---|---|---|---|---|---|---|---|
| 322 | 2021B1575 | Magnetism and electronic structure of the multiferroic Skyrmion system Cu(2)OSeO(3) | Jonathan Duffy | University of Warwick | UK | Foreign | Materials Science and Engineering | 17.875 | BL08W | Np |
| 323 | 2021B1576 | Phonon dispersion mesurement of SrGeO3 transparent conductive oxide | Hiroshi Uchiyama | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Materials Science and Engineering | 17.875 | BL35XU | Np |
| 324 | 2021B1577 | Development of RMC method with EXAFS and PDF data: study on magnetovolume effect of Fe-based alloys by mesoscopic structural analysis | Naoki Ishimatsu | Hiroshima University | Japan | Educational Organization | Materials Science and Engineering | 12 | BL37XU | Np |
| 325 | 2021B1579 | Tracking the translational and rotational motions of metal particles by time-resolved X-ray imaging and diffraction experiments | Hiroshi Sekiguchi | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Beamline Engineering | 6 | BL40XU | Np |
| 326 | 2021B1580 | Search for metallization and superconductivity of hydrogen under ultra-high pressure using a toroidal diamond anvil cell III | Yuki Nakamoto | Osaka University | Japan | Educational Organization | Materials Science and Engineering | 12 | BL10XU | Np |
| 327 | 2021B1584 | Time-resolved in-situ observation of rapid melting process of metallic powder induced by laser irradiation | Kohei Morishita | Kyushu University | Japan | Educational Organization | Materials Science and Engineering | 12 | BL47XU | Np |
| 328 | 2021B1585 | Analysis for chemical bonds in polycrystalline photovoltaic materials Cu2Zn(Sn,Ge)S4 and Cu2(Sn,Ge)S3 | Kousuke Beppu | Ryukoku University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL01B1 | Np |
| 329 | 2021B1586 | Measurement of sound velocity of basaltic glass under high pressure condition | Tatsuya Sakamaki | Tohoku University | Japan | Educational Organization | Earth and Planetary Science | 12 | BL43LXU | Np |
| 330 | 2021B1587 | Capacity loss mechanisms in P2- versus P3-type Na battery cathodes studied by RIXS | Laurent Duda | Uppsala University | Sweden | Foreign | Materials Science and Engineering | 15 | BL27SU | Np |
| 331 | 2021B1588 | Investigation of a first-order AFM-FM transition driven by magnetic fields in FeNiRh alloy using soft x-ray MCD spectroscopy under pulsed high magnetic fields | Shingo Yamamoto | Helmholtz-Zentrum Dresden-Rossendorf | Germany | Foreign | Materials Science and Engineering | 12 | BL25SU | Np |
| 332 | 2021B1590 | Microscopic nature of magnetic phase transitions in Nd3Fe3Sb7 studied by element selective XMCD | Shingo Yamamoto | Helmholtz-Zentrum Dresden-Rossendorf | Germany | Foreign | Materials Science and Engineering | 6 | BL25SU | Np |
| 333 | 2021B1591 | Structural Investigation of Variety of Stimuli-responsive functional crystals composed of non-planar pi-conjugated molecules | Yumi Yakiyama | Osaka University | Japan | Educational Organization | Chemical Science | 6 | BL02B1 | Np |
| 334 | 2021B1593 | Precise SAXS analysis of novel tiling cylindrical structures formed by four-component multiblock copolymers. | Atsushi Takano | Nagoya University | Japan | Educational Organization | Chemical Science | 6 | BL40B2 | Np |
| 335 | 2021B1594 | Structural analysis of catalytically active species for efficient carbon-carbon bond formations by titanium, vanadium, and niobium catalysts by solution XAFS analysis | Kotohiro Nomura | Tokyo Metropolitan University | Japan | Educational Organization | Chemical Science | 3 | BL01B1 | Np |
| 336 | 2021B1595 | Chemical State Imaging of Cathode Active Materials for Lithium-Sulfur Battery by Tender X-ray Ptychography-XAFS Method | Yukio Takahashi | Tohoku University | Japan | Educational Organization | Materials Science and Engineering | 17.875 | BL27SU | Np |
| 337 | 2021B1597 | Magnetic-field-induced quantum criticality for YbRh2Si2 studied by using resonant HAXPES combined with x-ray polarization controlling under external magnetic field | Akira Yasui | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Materials Science and Engineering | 18 | BL09XU | Np |
| 338 | 2021B1598 | Electron Density Distribution Analysis of Zeolite Oriented by Rare-Earth Ions in Low Magnetic Fields. | Anna Nagai | Kumamoto University | Japan | Educational Organization | Materials Science and Engineering | 3 | BL02B2 | Np |
| 339 | 2021B1600 | Research of potential on the vertical focusing of scanning/imaging X-ray microscopy | Masahiro Yasutake | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Beamline Engineering | 15 | BL47XU | Np |
| 340 | 2021B1602 | Correlative tomography using imaging CT and pencil-beam XRD for deformation and fracture of structural material | Kyosuke Hirayama | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 15 | BL20XU | Np |
| 341 | 2021B1604 | Direct observation of distribution of ions by means of operando X-ray nanospectroscopy | Shimpei Ono | Central Research Institute of Electric Power Industry | Japan | National and Nonprofit Organization | Materials Science and Engineering | 9 | BL17SU | Np |

# 2021B, Performed General Proposals

* SPring-8 Research Proposals in Complementary Use with SACLA, J-PARC/MLF or HPCI including the K computer / the supercomputer Fugaku

1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 342 | 2021B1605 | Operando analysis of the interface reaction in solid state batteries under controlled Li activity using thin film X-ray diffraction method | Yuta Kimura | Tohoku University | Japan | Educational Organization | Chemical Science | 6 | BL02B2 | Np |
| 343 | 2021B1607 | Pressure-dependence crystal structure of photo-luminescent cubane-type tetranuclear iodo-silver(I) complexes and gest solvent effects in the porous molecular-crystalline state. | Yoshiki Ozawa | University of Hyogo | Japan | Educational Organization | Chemical Science | 6 | BL10XU | Np |
| 344 | 2021B1609 | Revealing crystal structures and phase transition mechanisms of novel polar zirconate double perovskites | Hirofumi Akamatsu | Kyushu University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL02B2 | Np |
| 345 | 2021B1610 | Structural analysis of visible-light responsible photocatalysts based on Ta-doped Bi compounds | Fuminao Kishimoto | The University of Tokyo | Japan | Educational Organization | Chemical Science | 2 | BL01B1 | Np |
| 346 | 2021B1612 | Comprehensive understanding of the degradation process of zeolites by high-temperature PDF analyses | Hiroki Yamada | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Materials Science and Engineering | 18 | BL04B2 | Np |
| 347 | 2021B1615 | The evaluation of dehydration stability of DNA-functionalized nanoparticle superlattice and the creation of nano-gapped particle superlattice | Miho Tagawa | Nagoya University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL40B2 | Np |
| 348 | 2021B1616 | Exploration of topological band structures in Mn-based ferrimagnetic alloys | Akio Kimura | Hiroshima University | Japan | Educational Organization | Materials Science and Engineering | 14.875 | BL25SU | Np |
| 349 | 2021B1617 | Structure determination of illicit drugs and their metabolites by single crystal X-ray crystallography using crystalline sponge method | Shimpei Watanabe | RIKEN | Japan | National and Nonprofit Organization | Other | 5.5 | BL02B1 | Np |
| 350 | 2021B1619 | Crystal structure analysis of disordered structure in porous coordination polymers with the gas adsorption | Yoshiki Kubota | Osaka Prefecture University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL02B2 | Np |
| 351 | 2021B1620 | The development of in situ observation method and analysis of strain and crystal structure evolution under nanoindentation compression test by high-intensity X-ray irradiation towards the elucidation of room-temperature deformation mechanism of brittle materials | Kentaro Shinoda | National Institute of Advanced Industrial Science and Technology | Japan | National and Nonprofit Organization | Materials Science and Engineering | 6 | BL40XU | Np |
| 352 | 2021B1621 | A Study of Sulfur Speciation of Carbonates for the Evolution of Surface Environment on Mars | Tomohiro Usui | Japan Aerospace Exploration Agency | Japan | National and Nonprofit Organization | Earth and Planetary Science | 12 | BL27SU | Np |
| 353 | 2021B1623 | Adsorbate-induced frustrated Lewis pairs as catalytic active sites in Zeolite | Shik Chi Edman Tsang | University of Oxford | UK | Foreign | Chemical Science | 6 | BL02B2 | Np |
| 354 | 2021B1624 | Elucidation of the chemical structure of the reaction intermediate of nitric oxide reductase by nuclear resonance vibrational spectroscopy | Takehiko Tosha | RIKEN | Japan | National and Nonprofit Organization | Life Science | 15 | BL19LXU | Np |
| 355 | 2021B1625 | A study on the migration of uranium in environment using various types of X-ray microscopy | Yoshio Takahashi | The University of Tokyo | Japan | Educational Organization | Environmental Science | 12 | BL37XU | Np |
| 356 | 2021B1628 | Near-field Spectroscopy using high brilliant infrared synchrotron source | Yuka Ikemoto | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Materials Science and Engineering | 12 | BL43IR | Np |
| 357 | 2021B1629 | Brittle-plastic transition and dehydration embrittlement in lawsonite at high pressures | Tomoaki Kubo | Kyushu University | Japan | Educational Organization | Earth and Planetary Science | 15 | BL04B1 | Np |
| 358 | 2021B1630 | Synchrotron X-ray powder diffraction under pressure up to a few ten MPa | Hidetaka Kasai | University of Tsukuba | Japan | Educational Organization | Materials Science and Engineering | 3 | BL02B2 | Np |
| 359 | 2021B1631 | Local structure analysis of iron selenide superconductors incorporating metal-based hyper-ordered structure by X-ray fluorescence holography | Ritsuko Eguchi | Okayama University | Japan | Educational Organization | Materials Science and Engineering | 12 | BL13XU | Np |
| 360 | 2021B1632 | Circumstance effects of distinguished temperature dependent properties of Au clusters | Ryo Takahata | Kyoto University | Japan | Educational Organization | Chemical Science | 9 | BL01B1 | Np |
| 361 | 2021B1633 | Local structures around heavy elements in functional zeolites | Shinya Hosokawa | Kumamoto University | Japan | Educational Organization | Materials Science and Engineering | 12 | BL13XU | Np |

# 2021B, Performed General Proposals

* SPring-8 Research Proposals in Complementary Use with SACLA, J-PARC/MLF or HPCI including the K computer / the supercomputer Fugaku

1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 362 | 2021B1634 | Crystal structure and superconductivity of alkaline earth metals strontium and calcium under low temperature and high pressure III | Yuki Nakamoto | Osaka University | Japan | Educational Organization | Materials Science and Engineering | 12 | BL10XU | Np |
| 363 | 2021B1635 | Stereo live imaging analysis of structure and function of oral, pharyngeal and hyoid jaws of teleosts | Kohei Hatta | University of Hyogo | Japan | Educational Organization | Life Science | 8.875 | BL20B2 | Np |
| 364 | 2021B1639 | Temperature dependence of spin and orbital coercivity in Nd-Fe-B magnets by magnetic Compton scattering | Naruki Tsuji | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Materials Science and Engineering | 21 | BL08W | Np |
| 365 | 2021B1640 | Operando-XAFS +DRIFT analysis for development of noble metal – base metal composite catalysts for exhaust purification. (II) | Katsutoshi Sato | Kyoto University | Japan | Educational Organization | Chemical Science | 5 | BL01B1 | Np |
| 366 | 2021B1642 | Precise structural analysis of layered manganese oxides with oxygen storage properties | Hiroki Ishibashi | Osaka Prefecture University | Japan | Educational Organization | Materials Science and Engineering | 3 | BL02B2 | Np |
| 367 | 2021B1646* | Phase relations, equation of states and hydrogen solubility for Fe-Si-H ternary systems from in-situ X-ray diffraction measurements at high pressure and high temperature using multi-anvil apparatus | Hiroyuki Kagi | The University of Tokyo | Japan | Educational Organization | Earth and Planetary Science | 12 | BL04B1 | Np |
| 368 | 2021B1650 | In-situ time-resolved nanobeam X-ray diffraction analysis of defect-dependent local piezo-response dynamics in AlGaN/GaN HEMT devices | Tetsuya Tohei | Osaka University | Japan | Educational Organization | Materials Science and Engineering | 14.875 | BL13XU | Np |
| 369 | 2021B1652 | Structural Analysis of Micelle for Hybrid Surfactant Consisting of Amino Acid (Valine) and Sugar (Lactobionic Acid) in Aqueous Solution | Tomokazu Yoshimura | Nara Women's University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL40B2 | Np |
| 370 | 2021B1655 | Search for novel high-pressure phases in phosphorus topological semimetals | Shintaro Ishiwata | Osaka University | Japan | Educational Organization | Materials Science and Engineering | 12 | BL10XU | Np |
| 371 | 2021B1657 | Local structure analysis of a novel thermoelectric material with amorphous structure fabricated by high-pressure torsional processing studied by total X-ray scattering | Hidetoshi Miyazaki | Nagoya Institute of Technology | Japan | Educational Organization | Materials Science and Engineering | 3 | BL04B2 | Np |
| 372 | 2021B1658 | Density measurement of liquid Fe-S at Martian core conditions | Hidenori Terasaki | Okayama University | Japan | Educational Organization | Earth and Planetary Science | 6 | BL10XU | Np |
| 373 | 2021B1660 | Investigation of the stability of the cathode solid electrolyte interface of all-solid-state Li-ion batteries by operando depth resolved soft X-ray absorption spectroscopy | Takashi Nakamura | Tohoku University | Japan | Educational Organization | Chemical Science | 24 | BL27SU | Np |
| 374 | 2021B1661 | X-ray diffuse scattering measurement of relaxor ferroelectrics under electric field | Shinobu Aoyagi | Nagoya City University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL02B1 | Np |
| 375 | 2021B1662 | Investigation of the formation process of plasmonic superlattice | Masaki Saruyama | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 3 | BL40B2 | Np |
| 376 | 2021B1663 | Synchrotron X-ray CT analysis of Japanese swords to clarify their making techniques and an experiment to reproduce fire damaged condition and check the inner structure of the fire damaged Japanese sword | Manako Tanaka | Showa Women's University | Japan | Educational Organization | Other | 18 | BL28B2 | Np |
| 377 | 2021B1664 | Elucidation of the nitrogen-cycle on Mars based on the N-XANES analysis of Martian meteorites and Martian analog samples. | Mizuho Koike | Hiroshima University | Japan | Educational Organization | Earth and Planetary Science | 15 | BL27SU | Np |
| 378 | 2021B1665 | Precise SAXS analysis of herical / tetragonally-packed cylindrical microphase-separated structures formed by ABAC tetrablock terpolymers. | Atsushi Takano | Nagoya University | Japan | Educational Organization | Chemical Science | 6 | BL40XU | Np |
| 379 | 2021B1668 | In situ monitoring of VOC-triggered dynamic processes in vapochromic rhenium(I) crystals by powder X-ray diffraction analysis | Masaaki Abe | University of Hyogo | Japan | Educational Organization | Chemical Science | 3 | BL02B2 | Np |
| 380 | 2021B1669 | X-ray Diffraction Study of Nano-Confined Liquids Under Shear | Kazue Kurihara | Tohoku University | Japan | Educational Organization | Materials Science and Engineering | 18 | BL40B2 | Np |
| 381 | 2021B1670 | Deformation experiments of high-pressure clinoenstatite under the conditions of subducting slab | Yumiko Tsubokawa | Kyushu University | Japan | Educational Organization | Earth and Planetary Science | 11.5 | BL04B1 | Np |

# 2021B, Performed General Proposals

* SPring-8 Research Proposals in Complementary Use with SACLA, J-PARC/MLF or HPCI including the K computer / the supercomputer Fugaku

1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 382 | 2021B1674 | X-ray imaging of food sorting behavior in fish | Takanori Ikenaga | Kagoshima University | Japan | Educational Organization | Life Science | 5 | BL20B2 | Np |
| 383 | 2021B1682 | Time-resolved SAXS study of hydrolysis kinetics of gum arabic using glycoside hydrolases | Noriyuki Isobe | Japan Agency for Marine-Earth Science and Technology | Japan | National and Nonprofit Organization | Life Science | 3 | BL40B2 | Np |
| 384 | 2021B1683 | Pressure, differential stress, and starting material dependence of direct conversion temperatures to fabricate polycrystalline cubic boron nitride | Norimasa Nishiyama | Sumitomo Electric Industries, Ltd. | Japan | Industry | Materials Science and Engineering | 12 | BL04B1 | Np |
| 385 | 2021B1684 | Charge-discharge operando Distribution analysis of constituent element on cross-sectional ceramic-type all-solid-state battery | Takeshi Kobayashi | Central Research Institute of Electric Power Industry | Japan | National and Nonprofit Organization | Chemical Science | 15 | BL27SU | Np |
| 386 | 2021B1691 | Local structure analysis of novel Rh subnanoparticle-encapsulated zeolite catalysts for low-temperature partial methane oxidation | Akira Oda | Nagoya University | Japan | Educational Organization | Chemical Science | 6 | BL01B1 | Np |
| 387 | 2021B1693 | Elucidation of Activation Mechanism of Metal Nanoparticle Catalysts Under Visible and Near Infra-red Light Irradiation by Time-resolved Simultaneous XAFS/XRD Measurements | Akira Yamamoto | Kyoto University | Japan | Educational Organization | Chemical Science | 9 | BL36XU | Np |
| 388 | 2021B1696 | Observation of interaction between solid-solution carbon and dislocations in steel by X-ray absorption spectroscopy under in-situ tensile testing. | Kakeru Ninomiya | Tohoku University | Japan | Educational Organization | Materials Science and Engineering | 8.875 | BL27SU | Np |
| 389 | 2021B1697 | Multi-scale CT analysis of the function of unique neurons exchanging between right and left halves of the brain in the zebrafish embryo | Kohei Hatta | University of Hyogo | Japan | Educational Organization | Life Science | 6 | BL47XU | Np |
| 390 | 2021B1698 | Large area elemental mapping and bulk analysis of C-type asteroid analog samples at BL27SU | Hikaru Yabuta | Hiroshima University | Japan | Educational Organization | Earth and Planetary Science | 9 | BL27SU | Np |
| 391 | 2021B1699 | Depth-selective magnetism measurement of Eu-Fe thin film by energy-discriminated Mossbauer spectroscopy | Shinji Kitao | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 12 | BL35XU | Np |
| 392 | 2021B1703 | Assemblies of π-Electronic Ion Pairs Exhibiting Polarized Structures | Hiromitsu Maeda | Ritsumeikan University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL40XU | Np |
| 393 | 2021B1704 | Cardiac mechanics of agnathan lamprey | Satoshi Mohri | Kawasaki Medical School | Japan | Educational Organization | Life Science | 6 | BL20B2 | Np |
| 394 | 2021B1705 | Observation of the anisotropic phonon excitation of soft materials to understand the materials dynamics measured by inelastic X-ray scattering | Junko Morikawa | Tokyo Institute of Technology | Japan | Educational Organization | Materials Science and Engineering | 12 | BL35XU | Np |
| 395 | 2021B1708 | Tuning of Plasmonic Features by Controlling Crystal Structure in Plasmonic Ordered Nanoalloys | Ryota Sato | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL02B2 | Np |
| 396 | 2021B1710 | Influence of slice condition on the distribution of glyoxylic acid in human hair | Makoto Uyama | Shiseido Company, Ltd. | Japan | Industry | Industrial Applications | 4 | BL43IR | Np |
| 397 | 2021B1711 | Exploration of next-generation photoelectric conversion materials and analysis of their thin film structures powered by machine learning and synthetic chemistry | Akinori Saeki | Osaka University | Japan | Educational Organization | Industrial Applications | 3 | BL46XU | Np |
| 398 | 2021B1712 | Analysis of dispersion state of functional inorganic nanoparticles in water-based mist by small angle X-ray scattering | Kiyoshi Kanie | Tohoku University | Japan | Educational Organization | Industrial Applications | 3 | BL19B2 | Np |
| 399 | 2021B1714 | Analysis of interface phenomena between cathode material and solid electrolyte during charging and discharging of all-solid-state batteries | Norikazu Ishigaki | Nagoya University | Japan | Educational Organization | Industrial Applications | 18 | BL46XU | Np |
| 400 | 2021B1716 | Effect of microstructure on self-relaxation mechanism of thermal stress in thermal barrier coating sprayed with fine particles | Yasuhiro Yamazaki | Chiba University | Japan | Educational Organization | Industrial Applications | 9 | BL02B1 | Np |
| 401 | 2021B1717 | In situ XAS experiment for structural analysis of boryl copper species in solution at low temperature | Yuta Uetake | Osaka University | Japan | Educational Organization | Industrial Applications | 9 | BL14B2 | Np |

# 2021B, Performed General Proposals

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1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 402 | 2021B1719 | Time-resolved and in-situ observation of Shear Deformation in Semi-solid Cu Alloys | Tomohiro Nishimura | Kobe Steel, Ltd. | Japan | Industry | Industrial Applications | 8.875 | BL20B2 | Np |
| 403 | 2021B1720 | Operando XAFS Measurement of the Intermediate in Coupling Reaction of Alkynes and Alcohols with Ni Catalyst for the development of Asymmetric Reaction | Takuya Kurahashi | Kyoto University | Japan | Educational Organization | Industrial Applications | 9 | BL14B2 | Np |
| 404 | 2021B1721 | Establishment of vapor deposition condition of thin film with good conductivity to enable to investigate chemical structure of organic insulating material | Tomoya Taji | JSR Corporation | Japan | Industry | Industrial Applications | 9 | BL17SU | Np |
| 405 | 2021B1722 | Study on Reaction Mechanisms of Li-excess Metal Sulfides as Positive Electrode Material by Synchrotron X-ray Diffraction | Naoaki Yabuuchi | Yokohama National University | Japan | Educational Organization | Industrial Applications | 3 | BL19B2 | Np |
| 406 | 2021B1723 | HERFD-XAS Study for the valence of Vanadium in Barium Titanate | Hitoshi Nishimura | Murata Manufacturing Co., Ltd. | Japan | Industry | Industrial Applications | 6 | BL39XU | Np |
| 407 | 2021B1724 | Operando X-ray CT analysis on metal dendrite formation in solid electrolyte of all-solid state battery | Yuki Orikasa | Ritsumeikan University | Japan | Educational Organization | Industrial Applications | 6 | BL20XU | Np |
| 408 | 2021B1725 | HAXPES Study on Irreversible Charge-discharge of Lithium-ion Battery Full-cell | Yuki Orikasa | Ritsumeikan University | Japan | Educational Organization | Industrial Applications | 3 | BL46XU | Np |
| 409 | 2021B1726 | Relationship between local structures, electronic states, and electrocatalytic activities for quadruple perovskite oxides | Ikuya Yamada | Osaka Prefecture University | Japan | Educational Organization | Industrial Applications | 1 | BL14B2 | Np |
| 410 | 2021B1730 | Non-destructive analysis of the electrical treeing in high-voltage cables | Keisuke Itoh | Industrial Technology Institute, Miyagi Prefectural Government | Japan | National and Nonprofit Organization | Industrial Applications | 3 | BL47XU | Np |
| 411 | 2021B1731 | Electronic structure analysis of Mg,Sr co-doped LLZ by soft X-ray absorption spectroscopy | Masahide Kaneko | NGK Spark Plug Co., Ltd. | Japan | Industry | Industrial Applications | 3 | BL27SU | Np |
| 412 | 2021B1732 | Feasibility study for fast measurement of magnetic fluorescence microscopy using a pink beam in BL36XU | Toshiya Inami | National Institutes for Quantum Science and Technology | Japan | National and Nonprofit Organization | Industrial Applications | 9 | BL36XU | Np |
| 413 | 2021B1733 | Development of highly functional rubber materials by controlling the orientation of polymer-modified hexagonal disk-shaped magnetite nanoparticles | Kiyoshi Kanie | Tohoku University | Japan | Educational Organization | Industrial Applications | 3 | BL19B2 | Np |
| 414 | 2021B1735 | Application of PDF analysis to search for stable structure of amorphized medicines 2 | Hironori Shimakura | Niigata University of Pharmacy and Applied Life Sciences | Japan | Educational Organization | Industrial Applications | 5.875 | BL04B2 | Np |
| 415 | 2021B1736 | Heteroepitaxy of solution-processable organic semiconductor molecules exhibiting high charge carrier mobility (III) | Yasuo Nakayama | Tokyo University of Science | Japan | Educational Organization | Industrial Applications | 9 | BL46XU | Np |
| 416 | 2021B1737 | Characterization of oxide film on Ni-Cr-Fe based alloy using resonant and angle-resolved hard x-ray photoemission spectroscopy | Katsuhiro Nishihara | Nippon Steel Corporation | Japan | Industry | Industrial Applications | 9 | BL09XU | Np |
| 417 | 2021B1738 | XAFS studies on Fe-N-C/Ti3C2Tx MXene as Electrocatalyst for Oxygen Reduction Reaction for Proton Exchange Membrane Fuel Cell Application | WaiYin Wong | Universiti Kebangsaan Malaysia | Malaysia | Foreign | Industrial Applications | 1 | BL14B2 | Np |
| 418 | 2021B1740 | Study of the horizontally focused X-ray beam using the bimorph mirror to observe the HAXPES measurement of the advanced devices and samples | Okkyun Seo | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Industrial Applications | 12 | BL46XU | Np |
| 419 | 2021B1741 | Spatial Distribution and Correlation Analysis of Sulfur and Zinc Compounds in Vulcanized Polyolefin Rubber Using Activated Zinc Oxide | Yohei Nakanishi | Kyoto University | Japan | Educational Organization | Industrial Applications | 8.875 | BL27SU | Np |
| 420 | 2021B1742 | Observation of Chemical State in ferric orthophosphate coating by Soft X-ray emission spectroscopic analysis | Hidekazu Fukushi | Nihon Parkerizing Co., Ltd. | Japan | Industry | Industrial Applications | 6 | BL27SU | Np |
| 421 | 2021B1743 | In-situ HERFD-XANES study of valence states of trace transition-metal elements in dielectrics for MLCCs in high temperature and reduced atmosphere | Minoru Ryu | Taiyo Yuden Co., Ltd. | Japan | Industry | Industrial Applications | 9 | BL39XU | Np |

# 2021B, Performed General Proposals

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1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 422 | 2021B1744 | Evaluation of Atmospheric Stability of Sulfide Solid Electrolytes by Time-Resolved PDF Analysis (2) | Koji Ohara | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Industrial Applications | 15 | BL08W | Np |
| 423 | 2021B1745 | Insitu Structural investigation of guest-induced multiple structural transitions in a flexible porous-coordination-polymer with gas adsorption | Susumu Kitagawa | Kyoto University | Japan | Educational Organization | Industrial Applications | 5 | BL14B2 | Np |
| 424 | 2021B1746 | Observation of structural disorder during tensile deformation and fracture of synthetic fibers by USAXS measurement | Ren Tomisawa | Shinshu University | Japan | Educational Organization | Industrial Applications | 3 | BL19B2 | Np |
| 425 | 2021B1747 | The speciation and optimization of chemical–assisted washing of fluorine in solid waste based on soft X-ray XAFS analysis by partial fluorescence yield method | Hikaru Sawai | National Institute of Technology (KOSEN), Ibaraki College | Japan | Educational Organization | Industrial Applications | 6 | BL27SU | Np |
| 426 | 2021B1748 | Safety evaluation of nickel-based cathode materials by observing the dynamic structure inside a storage battery | Toshiki Watanabe | Kyoto University | Japan | Educational Organization | Industrial Applications | 6 | BL14B2 | Np |
| 427 | 2021B1750 | Study of excitation energy dependence of probe depth of hard X-ray photoemission spectrum | Satoshi Yasuno | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Industrial Applications | 12 | BL46XU | Np |
| 428 | 2021B1751 | Operand Structural Analysis of Electrolytes in Lithium Ion Battery using Total X-ray Scattering | Tomoaki Takai | SOKEN,INC. | Japan | Industry | Industrial Applications | 12 | BL08W | Np |
| 429 | 2021B1758 | The effect of protein structure in hair during the heat treatment using infrared microspectroscopy. | Atsushi Baba | Milbon Co., Ltd. | Japan | Industry | Industrial Applications | 17.5 | BL43IR | Np |
| 430 | 2021B1759 | Elucidation of Phase Behavior of Polyoxyethylene Secondary Alkyl Ether Surfactants by SAXS (3) | Tomokazu Yoshimura | Nara Women's University | Japan | Educational Organization | Industrial Applications | 9 | BL19B2 | Np |
| 431 | 2021B1761 | In-situ x-ray powder diffraction of electrodeposited n-type Cu2O and p-type Cu2O to identify phase transformations and thermal expansion | Charith Jayathilaka | University of Kelaniya | Sri Lanka | Foreign | Industrial Applications | 3 | BL19B2 | Np |
| 432 | 2021B1762 | Hard X-ray Photoelectron Spectroscopic study of Iron in Acqueous-solution Environments | Takashi Doi | Nippon Steel Corporation | Japan | Industry | Industrial Applications | 15 | BL09XU | Np |
| 433 | 2021B1763 | Mechanistic Study on Mechanochemical Solid-Phase Organic Reactions | Hikaru Takaya | Kyoto University | Japan | Educational Organization | Industrial Applications | 3 | BL14B2 | Np |
| 434 | 2021B1764 | Analysis of local structure of hazardous metal adsorbents by XAFS (2) | Masaru Endo | Daicel Corporation | Japan | Industry | Industrial Applications | 3 | BL14B2 | Np |
| 435 | 2021B1767 | Non-destructive high-resolution imaging of laser processed single crystal materials | Yasunaga Nara | Hamamatsu Photonics K.K. | Japan | Industry | Industrial Applications | 14.875 | BL47XU | Np |
| 436 | 2021B1768 | Investigation of decrease of bond strength between concrete and reinforcement steel bar for development of the energy saving and high efficiency demolishing method by using non-destructive integrated CT-XRD method | Hayato Takahashi | Tokyo University of Science | Japan | Educational Organization | Industrial Applications | 12 | BL28B2 | Np |
| 437 | 2021B1770 | Study on the Emission Center for Hafnate Scintillator | Shunsuke Kurosawa | Tohoku University | Japan | Educational Organization | Industrial Applications | 6 | BL14B2 | Np |
| 438 | 2021B1846 | Development of Ultrathin Organic Ferroelectric Tunnel Junction Memristors | Pamarti Viswanath | Toyota Technological Institute | Japan | Educational Organization | Industrial Applications | 3 | BL19B2 | Np |
| 439 | 2021B1868 | Investigation of structural disorder during tensile deformation of various synthetic fibers by USAXS measurement | Ren Tomisawa | Shinshu University | Japan | Educational Organization | Industrial Applications | 3 | BL19B2 | Np |
| 440 | 2021B1869 | Evaluation of negative thermal expansion property of BiNi1-xFexO3 by commercial production VII | Masaki Azuma | Tokyo Institute of Technology | Japan | Educational Organization | Industrial Applications | 6 | BL19B2 | Np |
| 441 | 2021B1870 | Visualisation of the crystallisation process of perovskite polycrystals | Naoyuki Shibayama | Toin University of Yokohama | Japan | Educational Organization | Industrial Applications | 5.5 | BL19B2 | Np |

# 2021B, Performed General Proposals

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| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 442 | 2021B1871 | In-Situ observation of crystallographic deformation of PZT superlattices and KNN epitaxial thin films | Isaku Kanno | Kobe University | Japan | Educational Organization | Industrial Applications | 9 | BL19B2 | Np |
| 443 | 2021B1872 | Effects of solid solution ratio on electronic and local structures of MgCo2-xMnxO4-Mg(Mg0.33V1.67-yNiy)O4-based solid solution as cathode material for magnesium rechargeable battery | Yasushi Idemoto | Tokyo University of Science | Japan | Educational Organization | Industrial Applications | 3 | BL14B2 | Np |
| 444 | 2021B1873 | Investigation of the Crystal and Electronic Structures of Mg1.33(V1.67-xMnx)O4 as a Cahode Materials of Magnesium Secondary Battery during Discharge Process Using Rietveld and MEM analysis | Yasushi Idemoto | Tokyo University of Science | Japan | Educational Organization | Industrial Applications | 6 | BL19B2 | Np |
| 445 | 2021B1874 | Studies of maturation effect on the surface of a Si-based negative electrode for Li-ion batteries and electrochemically formed passivation layer by hard-X-ray photoelectron spectroscopy | Shinichi Komaba | Tokyo University of Science | Japan | Educational Organization | Industrial Applications | 5.5 | BL46XU | Np |
| 446 | 2021B1875 | Local structural analysis of zirconium tungstate by In-situ XAFS | Mihee Lee | JX Nippon Mining & Metals Corporation | Japan | Industry | Industrial Applications | 6 | BL14B2 | Np |
| 447 | 2021B1876 | X-ray scattering profile measurement of surface area of oxide melt for surface tension modelling of B2O3-based flux | Masanori Suzuki | Osaka University | Japan | Educational Organization | Industrial Applications | 3 | BL46XU | Np |
| 448 | 2021B1877 | Safety Evaluation of High-Nickel Cathode Materials by Observing the Dynamic Structure Inside the Battery Using operando XRD Measurements | Toshiki Watanabe | Kyoto University | Japan | Educational Organization | Industrial Applications | 6 | BL19B2 | Np |
| 449 | 2021B1878 | Analysis for electronic and local structures in perovskite-type oxyfluoride cathode materials with fluoride ion intercalation/deintercalation | Kentaro Yamamoto | Kyoto University | Japan | Educational Organization | Industrial Applications | 3 | BL14B2 | Np |
| 450 | 2021B1879 | Analysis for crystal structure in perovskite-type oxyfluoride cathode materials with fluoride ion intercalation/deintercalation | Kentaro Yamamoto | Kyoto University | Japan | Educational Organization | Industrial Applications | 6 | BL19B2 | Np |
| 451 | 2021B1883 | Optical measurements for the hardening mechanism elucidation of the food powders tablet and quality and production condition optimization | Akira Tamura | Meiji Co., Ltd. | Japan | Industry | Industrial Applications | 2 | BL14B2 | Np |
| 452 | 2021B1885 | 2D-GIWAXS analysis of covalent organic frameworks deposited on a reduced graphene oxide layer | Mitsuharu Suzuki | Osaka University | Japan | Educational Organization | Industrial Applications | 5.875 | BL19B2 | Np |
| 453 | 2021B1886 | Operando investigation of temperature and guest responsive structural change of catalyst-containing multi-layered flexible porous-coordination-polymer-based chemiresistors | Susumu Kitagawa | Kyoto University | Japan | Educational Organization | Industrial Applications | 7 | BL46XU | Np |
| 454 | 2021B1887 | Role of network structure on the deformation behavior of hetero bimodal metals using diffraction contrast tomography | Yoshikazu Nakai | Kobe University | Japan | Educational Organization | Industrial Applications | 6 | BL46XU | Np |
| 455 | 2021B1889 | Simultaneous in situ SAXS and XAS measurements of platinum catalysts for polymer electrolyte fuel cell during electrochemical accelerated degradation tests with Oxygen Reduction Reaction | Teppei Kawamoto | University of Yamanashi | Japan | Educational Organization | Industrial Applications | 9 | BL19B2 | Np |
| 456 | 2021B1891 | Nondestructive observation of corrosion products on Zn based coating using synchrotron radiation X-ray laminography (2) | Katsuhiro Nishihara | Nippon Steel Corporation | Japan | Industry | Industrial Applications | 6 | BL46XU | Np |
| 457 | 2021B1892 | In-situ XAFS local structure analysis of Ir-doped MnO2 catalysts for the water-splitting reaction | Kiyohiro Adachi | RIKEN | Japan | National and Nonprofit Organization | Industrial Applications | 5.5 | BL14B2 | Np |
| 458 | 2021B1895 | Development of GI-XAS, XRD measurement systems at BL19B2 | Takeshi Watanabe | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Industrial Applications | 3 | BL19B2 | Np |
| 459 | 2021B1897 | Structural Analysis of Heavy Metal Ion Adsorbed on Calcium Carbonate by XAS | Daisuke Kawamoto | Okayama University of Science | Japan | Educational Organization | Industrial Applications | 3 | BL14B2 | Np |
| 460 | 2021B1898 | Elucidation of structure-durability relationship of multimetallic catalysts for deoxygenation of biomass-derived chemicals | Tomoo Mizugaki | Osaka University | Japan | Educational Organization | Industrial Applications | 3 | BL14B2 | Np |
| 461 | 2021B1901 | Evaluation of thermal characteristics and damages of sputtered SiO2/Si interface by temperature variable X-ray diffraction with synchrotron radiation | Ryo Yokogawa | Meiji University | Japan | Educational Organization | Industrial Applications | 12 | BL19B2 | Np |

# 2021B, Performed General Proposals

* SPring-8 Research Proposals in Complementary Use with SACLA, J-PARC/MLF or HPCI including the K computer / the supercomputer Fugaku

1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 462 | 2021B1935 | Film Structure Analysis of High Performance Organic Solar Cells Prepared by Sequential Deposition Process | Keisuke Tajima | RIKEN | Japan | National and Nonprofit Organization | Industrial Applications | 4 | BL46XU | Np |
| 463 | 2021B1936 | Hard X-ray Photoelectron Spectroscopic Study on Mechanism of Imparting Functionality at Electrode-electrolyte Interface of All-solid-state Batteries | Yuki Orikasa | Ritsumeikan University | Japan | Educational Organization | Industrial Applications | 6 | BL46XU | Np |
| 464 | 2021B1937 | In situ XAFS measurement of BaO-SiO2 glasses during crystallization | Takato Kajihara | AGC Inc. | Japan | Industry | Industrial Applications | 5.875 | BL14B2 | Np |
| 465 | 2021B1938 | Development of Stable Dispersion Method of Inorganic Nanoparticles with High Refractive Index | Kiyoshi Kanie | Tohoku University | Japan | Educational Organization | Industrial Applications | 3 | BL19B2 | Np |
| 466 | 2021B1941 | Development of low-temperature solution XAS instrumentations and local structure analysis of boryl copper complexes | Yuta Uetake | Osaka University | Japan | Educational Organization | Industrial Applications | 6 | BL14B2 | Np |
| 467 | 2021B1944 | GIWAXS and GISAXS measurement of Ultrathin Organic Ferroelectric Polymers | Pamarti Viswanath | Toyota Technological Institute | Japan | Educational Organization | Industrial Applications | 6 | BL19B2 | Np |
| 468 | 2021B1945 | Elucidation of structure-durability relationship of multimetallic catalysts for deoxygenation of biomass-derived chemicals | Tomoo Mizugaki | Osaka University | Japan | Educational Organization | Industrial Applications | 6 | BL14B2 | Np |
| 469 | 2021B1947 | Start-up study of the new hexapod diffractometer | Tomoyuki Koganezawa | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Industrial Applications | 9 | BL46XU | Np |
| 470 | 2021B1948 | In-Situ observation of crystallographic deformation of piezoelectric PZT thin films: Investigation of piezoelectricity of PZT superlattice thin films | Isaku Kanno | Kobe University | Japan | Educational Organization | Industrial Applications | 8.875 | BL46XU | Np |
| 471 | 2021B1949 | Studies on effects of ligand addition to Pd catalysts for alkoxycarbonylation of alkenes by in situ XAFS | Haruno Murayama | Kyushu University | Japan | Educational Organization | Industrial Applications | 6 | BL14B2 | Np |
| 472 | 2021B1950 | Structural elucidation of conductive MOF and cMOF-on-MOF nano films by EXAFS | Susumu Kitagawa | Kyoto University | Japan | Educational Organization | Industrial Applications | 6 | BL14B2 | Np |
| 473 | 2021B1952 | Investigation of structural phase transition phenomena in perovskite crystals | Naoyuki Shibayama | Toin University of Yokohama | Japan | Educational Organization | Industrial Applications | 5 | BL19B2 | Np |
| 474 | 2021B1953 | Structural analysis of pi-conjugated polymer thin films grown by vapor deposition polymerization using two dimensional grazing incidence x-ray diffraction | Ryosuke Matsubara | Shizuoka University | Japan | Educational Organization | Industrial Applications | 3 | BL46XU | Np |
| 475 | 2021B1955 | Evaluation of extra peaks observed by around Si 006 using reciprocal space mapping by X-ray diffraction with synchrotron radiation | Ryo Yokogawa | Meiji University | Japan | Educational Organization | Industrial Applications | 9 | BL19B2 | Np |
| 476 | 2021B1957 | Analysis of the effect of surface treatment on the adhesive interface between metal and thermosetting resins for electronic materials | Yasuyuki Shudo | Sumitomo Bakelite Co., Ltd. | Japan | Industry | Industrial Applications | 6 | BL46XU | Np |
| 477 | 2021B1958 | Elucidation of Phase Behavior of Polyoxyethylene Secondary Alkyl Ether Surfactants by SAXS (4) | Tomokazu Yoshimura | Nara Women's University | Japan | Educational Organization | Industrial Applications | 9 | BL19B2 | Np |
| 478 | 2021B2520 | Structural studies to elucidate the catalytic mechanism of biodegradable polymer synthases | Min Fey Chek | Nara Institute of Science and Technology | Japan | Educational Organization | Life Science | 1 | PX-BL (BL45XU) | Np |
| 479 | 2021B2522 | Elucidation of molecular evolution of aconitase superfamily | Seiya Watanabe | Ehime University | Japan | Educational Organization | Life Science | 1 | PX-BL (BL32XU) | Np |
| 480 | 2021B2523 | Elucidation of molecular mechanisms of Complex IV by using allosteric ligands | Yasunori Shintani | National Cerebral and Cardiovascular Center | Japan | National and Nonprofit Organization | Life Science | 42 | PX-BL (EM01CT, EM02CT) | Np |
| 481 | 2021B2524 | Crystal structure of an Oxidoreductase enzyme reveals promiscuity for a methylating cofactor and allowed cofactor-switch protein engineering | Saacnicteh Toledo Patino | Okinawa Institute of Science and Technology Graduate University | Japan | Educational Organization | Life Science | 3 | PX-BL (BL32XU) | Np |

# 2021B, Performed General Proposals

* SPring-8 Research Proposals in Complementary Use with SACLA, J-PARC/MLF or HPCI including the K computer / the supercomputer Fugaku

1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 482 | 2021B2525 | Structural studies of light-induced energy conversion in photosynthetic proteins | Yasufumi Umena | Nagoya University | Japan | Educational Organization | Life Science | 8.5 | PX-BL (BL41XU, BL45XU) | Np |
| 483 | 2021B2528 | Development of room-temperature measurement and various structure analysis for protein crystals using synchrotron radiation | Seiki Baba | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Life Science | 34.375 | PX-BL (BL26B1) | Np |
| 484 | 2021B2530 | Structural analysis of membrane active transporters | Kazuhiro Abe | Nagoya University | Japan | Educational Organization | Life Science | 6 | PX-BL (EM01CT) | Np |
| 485 | 2021B2531 | Structural basis of flavohemoglobin from Candida norvegensis | Jotaro Igarashi | Fukushima Medical University | Japan | Educational Organization | Life Science | 0.5 | PX-BL (BL45XU) | Np |
| 486 | 2021B2532 | Investigation on the structure-function relationship of the photoprotein, nanoKAZ | Yusuke Ohnishi | Wakayama Medical University | Japan | Educational Organization | Life Science | 1 | PX-BL (BL45XU) | Np |
| 487 | 2021B2533 | Charge-density analysis of DNA crystals using synchrotron X-ray data at ultra-high resolution | Kazuki Takeda | Kyoto University | Japan | Educational Organization | Life Science | 3.25 | PX-BL (BL41XU) | Np |
| 488 | 2021B2534 | Crystal Structure Analysis of Building Block Proteins and Protein Supramolecular Nanostructures Based on 3D Domain Swapping | Shun Hirota | Nara Institute of Science and Technology | Japan | Educational Organization | Life Science | 1.75 | PX-BL (BL45XU) | Np |
| 489 | 2021B2536 | Structural determination of microtubule minus-end binding protein. | Tsuyoshi Imasaki | Kobe University | Japan | Educational Organization | Life Science | 12 | PX-BL (EM01CT) | Np |
| 490 | 2021B2537 | Structure analysis of an enzyme for a simple disposable aldehyde-sensor | Makoto Nakabayashi | Osaka Ohtani University | Japan | Educational Organization | Life Science | 1 | PX-BL (BL41XU, BL45XU) | Np |
| 491 | 2021B2538 | Integrative structural biology of type IV pilus system in enteric bacterial pathogens | Shota Nakamura | Osaka University | Japan | Educational Organization | Life Science | 11 | PX-BL (BL45XU, EM01CT) | Np |
| 492 | 2021B2540 | Structural analysis of enzymes and regulatory proteins involved in alpha-oxamine biosynthesis. | Hiroko Ikushiro | Osaka Medical and Pharmaceutical University | Japan | Educational Organization | Life Science | 2.25 | PX-BL (BL26B1, BL45XU) | Np |
| 493 | 2021B2541 | X-ray diffraction and cryoTEM to study the structures of protein aggregates produced by precipitant reagent | Masayoshi Nakasako | Keio University | Japan | Educational Organization | Life Science | 10 | PX-BL (BL41XU, EM01CT) | Np |
| 494 | 2021B2542 | Structural basis of molecular signaling for the epilepsy-related ligand-receptor complex LGI1-ADAM22 axis | Shuya Fukai | Kyoto University | Japan | Educational Organization | Life Science | 13 | PX-BL (BL45XU, EM01CT, EM02CT) | Np |
| 495 | 2021B2543* | Structural analysis of proteins involved in iron acquisition and transport system | Hiroshi Sugimoto | RIKEN | Japan | National and Nonprofit Organization | Life Science | 32.75 | PX-BL (BL41XU, BL45XU, BL32XU, EM01CT) | Np |
| 496 | 2021B2547 | Study on dynamic structure and functional regulation of bifunctional proteins | Satoshi Nagao | University of Hyogo | Japan | Educational Organization | Life Science | 11 | PX-BL (BL38B1) | Np |
| 497 | 2021B2548 | Structural and functional analysis of CRISPR-Cas effector complex | Tomoyuki Numata | Kyushu University | Japan | Educational Organization | Life Science | 49.5 | PX-BL (BL41XU, BL45XU, EM01CT) | Np |
| 498 | 2021B2550 | Time-Resolved X-ray Crystallography of Photoprotein Aequorin at SPring-8 | Toru Nakatsu | Wakayama Medical University | Japan | Educational Organization | Life Science | 3 | PX-BL (BL32XU) | Np |
| 499 | 2021B2552 | Analysis of cold-adaptation and thermal stability mechanism for cold-adapted enzymes from psychrophile bacteria in Antarctic Ocean | Masaki Horitani | Saga University | Japan | Educational Organization | Life Science | 12 | PX-BL (BL26B1, BL45XU) | Np |
| 500 | 2021B2553 | Structural analysis of novel sulfotransferase | Takamasa Teramoto | Kyushu University | Japan | Educational Organization | Life Science | 4 | PX-BL (BL41XU, BL45XU) | Np |
| 501 | 2021B2554 | Structural analysis of Trypanosoma brucei GMP reductase in complex with adenine nucleotides by means of X-ray crystallography and cryo-electron microscopy | Takashi Inui | Osaka Prefecture University | Japan | Educational Organization | Life Science | 2.875 | PX-BL (BL26B1) | Np |

# 2021B, Performed General Proposals

* SPring-8 Research Proposals in Complementary Use with SACLA, J-PARC/MLF or HPCI including the K computer / the supercomputer Fugaku

1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 502 | 2021B2556 | Single crystal structure analysis of giant artificial protein molecules using synchrotron radiation X-ray | Sota Sato | The University of Tokyo | Japan | Educational Organization | Chemical Science | 13.5 | PX-BL (BL26B1, BL41XU, BL45XU) | Np |
| 503 | 2021B2557 | Co-crystal Structures of Flowering Repressor Protein with Synthetic Ligands | Kotaro Nishiyama | RIKEN | Japan | National and Nonprofit Organization | Life Science | 3 | PX-BL (BL45XU) | Np |
| 504 | 2021B2559 | Development of an experimental method for visualising enzymatic reaction induced by temperature shift. | Takaaki Fujiwara | Tohoku University | Japan | Educational Organization | Life Science | 1.75 | PX-BL (BL45XU) | Np |
| 505 | 2021B2560 | Development of new therapeutic agents for high-risk emerging re-emerging infectious diseases | Hironori Hayashi | Tohoku University | Japan | Educational Organization | Life Science | 2 | PX-BL (BL41XU) | Np |
| 506 | 2021B2714 | [2021A APPD]Structural basis of catalytic mechanism of opine dehydrogenase involved in the "opine concept" by plant-pathogenic Agrobacterium tumefaciens. | Seiya Watanabe | Ehime University | Japan | Educational Organization | Life Science | 3.75 | PX-BL (BL45XU, BL32XU) | Np |
| 507 | 2021B2717 | [2021A APPD]Structural studies of Sphingosine-1-phosphate receptors in complex with different ligands | Beili Wu | Chinese Academy of Sciences | China | Foreign | Life Science | 3 | PX-BL (BL45XU) | Np |
| 508 | 2021B2718 | [2021A APPD]Low-dose diffraction data collection for metalloprotein crystals toward an understanding of metal complexation mechanism | Norifumi Muraki | National Institutes of Natural Sciences | Japan | National and Nonprofit Organization | Life Science | 0.5 | PX-BL (BL45XU) | Np |
| 509 | 2021B2719 | [2021A APPD]Crystallographic study on the functional interaction between the plant PCNA and FEN1 working for DNA replication | Takuji Oyama | University of Yamanashi | Japan | Educational Organization | Life Science | 1 | PX-BL (BL45XU) | Np |
| 510 | 2021B2721 | [2021A APPD]Structure analyses of an RNA aptamer in complex with AML-1 | Shigeru Sugiyama | Kochi University | Japan | Educational Organization | Life Science | 1.5 | PX-BL (BL41XU) | Np |
| 511 | 2021B2725 | [2021A APPD]Upgrade of BL41XU for time resolved and ultra high resolution structural analysis | Kazuya Hasegawa | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Life Science | 20.5 | PX-BL (BL41XU) | Np |
| 512 | 2021B2730 | [2021A APPD]Structural study on human GPR55 receptors. | Zhi-Jie Liu | ShanghaiTech University | China | Foreign | Life Science | 3 | PX-BL (BL41XU) | Np |
| 513 | 2021B2736 | [2021A APPD]Structural basis of modification of fluorescence proteins toward long wavelength fluorescence emission | Katsumi Imada | Osaka University | Japan | Educational Organization | Life Science | 1.25 | PX-BL (BL41XU) | Np |
| 514 | 2021B2737 | [2021A APPD]Structural basis of the adhesion machinery of Bacteroides | Katsumi Imada | Osaka University | Japan | Educational Organization | Life Science | 1.5 | PX-BL (BL41XU) | Np |
| 515 | 2021B2738 | [2021A APPD]Structural study of the bacterial type III protein export machinery | Katsumi Imada | Osaka University | Japan | Educational Organization | Life Science | 1.5 | PX-BL (BL41XU) | Np |
| 516 | 2021B2739 | [2021A APPD]Structural basis for enhancement of enzyme function regulated by calcium-dependent manner of PET degrading cutinase Cut190 | Nobutaka Numoto | Tokyo Medical and Dental University | Japan | Educational Organization | Life Science | 1.5 | PX-BL (BL45XU) | Np |
| 517 | 2021B2741 | [2021A APPD]Crystal structural analysis of photosystem II water-splitting reaction intermediates and photosystem II under different pH conditions | Jian-Ren Shen | Okayama University | Japan | Educational Organization | Life Science | 7.75 | PX-BL (BL41XU, BL45XU) | Np |
| 518 | 2021B2742 | [2021A APPD]Structural study of type V CRISPR-Cas systems | Yanli Wang | Chinese Academy of Sciences | China | Foreign | Life Science | 4.5 | PX-BL (BL45XU) | Np |
| 519 | 2021B2743 | [2021A APPD]Crystallographic analysis of enzymes related with phosphate elimination, addition and rearrangement | Masahiro Fujihashi | Osaka Medical and Pharmaceutical University | Japan | Educational Organization | Life Science | 3.5 | PX-BL (BL45XU) | Np |
| 520 | 2021B2744 | [2021A APPD]Rapid protein structural asnalyis | Satoshi Abe | Tokyo Institute of Technology | Japan | Educational Organization | Life Science | 9 | PX-BL (BL32XU) | Np |
| 521 | 2021B2745 | [2021A APPD]Structural analysis of the Sec translocon complex and lipid/sugar transporters | Tomoya Tsukazaki | Nara Institute of Science and Technology | Japan | Educational Organization | Life Science | 4 | PX-BL (BL32XU) | Np |
| 522 | 2021B2746 | [2021A APPD]Crystallographic Study of the Serotonin Receptors | Sheng Wang | Chinese Academy of Sciences | China | Foreign | Life Science | 3 | PX-BL (BL45XU) | Np |

# 2021B, Performed General Proposals

* SPring-8 Research Proposals in Complementary Use with SACLA, J-PARC/MLF or HPCI including the K computer / the supercomputer Fugaku

1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 523 | 2021B2747 | [2021A APPD]Structural analysis of reaction intermediate in nitric oxide reductase under anaerobic condition created by oxygen barrier film | Takehiko Tosha | RIKEN | Japan | National and Nonprofit Organization | Life Science | 8.875 | PX-BL (BL32XU) | Np |
| 524 | 2021B2748 | [2021A APPD]Ring-type quaternary structure and supramolecular assembly of peroxiredoxin | Tsutomu Nakamura | National Institute of Advanced Industrial Science and Technology | Japan | National and Nonprofit Organization | Life Science | 4.25 | PX-BL (BL41XU, BL45XU) | Np |
| 525 | 2021B2749 | [2021A APPD]Development aimed at improving the performance of the in-situ measurement environment with a crystallization plate | Hideo Okumura | Japan Synchrotron Radiation Research Institute | Japan | National and Nonprofit Organization | Life Science | 13.125 | PX-BL (BL26B1, BL45XU) | Np |
| 526 | 2021B2751 | [2021A APPD]X-ray structural analysis of tight junction related membrane proteins. | Shun Nakamura | Tokyo Medical and Dental University | Japan | Educational Organization | Life Science | 4 | PX-BL (BL45XU) | Np |
| 527 | 2021B2753 | [2021A APPD]Accurate structural analysis of biological macromolecules with X-ray crystallography | Kazuki Takeda | Kyoto University | Japan | Educational Organization | Life Science | 1.75 | PX-BL (BL41XU) | Np |
| 528 | 2021B2755 | [2021A APPD]Structural determination of a secreted protein responsible for type IV pili-mediated colonization by enteric pathogen | Shota Nakamura | Osaka University | Japan | Educational Organization | Life Science | 1 | PX-BL (BL45XU) | Np |
| 529 | 2021B2756 | [2021A APPD]Structural study on membrane protein BcsC: a subunit of bacterial cellulose synthesis complex | Jian Yu | Hokkaido University | Japan | Educational Organization | Life Science | 5 | PX-BL (BL45XU) | Np |
| 530 | 2021B2758 | [2021A APPD]“in crystallo” catalytic analysis using HAG method | Takeshi Murakawa | Osaka Medical and Pharmaceutical University | Japan | Educational Organization | Life Science | 9.375 | PX-BL (BL26B1, BL45XU) | Np |
| 531 | 2021B2760 | [2021A APPD]Elucidation of functions of food-related enzymes by X-ray analysis with freezing and non-freezing crystals. | Bunzo Mikami | Kyoto University | Japan | Educational Organization | Life Science | 15 | PX-BL (BL26B1) | Np |
| 532 | 2021B2761 | [2021A APPD]Mechanism of actin ATP hydrolysis revealed by high resolution crystal structures | Shuichi Takeda | Okayama University | Japan | Educational Organization | Life Science | 5.5 | PX-BL (BL41XU, BL45XU) | Np |
| 533 | 2021B2762 | [2021A APPD]Structural basis for phosphatidylcholine biosynthesis in plant pathogenic bacteria | Yasunori Watanabe | Yamagata University | Japan | Educational Organization | Life Science | 1 | PX-BL (BL45XU, BL32XU) | Np |
| 534 | 2021B2766 | [2021A APPD]Crystal structure analyses of ubiquitin chain recognition and ubiquitin chain formation by Triad3 | Kei Okatsu | Kyoto University | Japan | Educational Organization | Life Science | 1 | PX-BL (BL45XU) | Np |
| 535 | 2021B2767 | [2021A APPD]Integrated structural and functional analysis of a metalloprotein at the quantum level | Yota Fukuda | Osaka University | Japan | Educational Organization | Life Science | 1.75 | PX-BL (BL41XU) | Np |
| 536 | 2021B2769 | [2021A APPD]Structural study on new PDI family prroteins in protein quality control | Satoshi Watanabe | Tohoku University | Japan | Educational Organization | Life Science | 0.5 | PX-BL (BL45XU) | Np |
| 537 | 2021B1053 | X-ray Imaging Study of Li-ion Battery | Hisao Yamashige | Toyota Motor Corporation | Japan | Industry | Industrial Applications | 42 | BL20XU | P |
| 538 | 2021B1054 | X-ray Imaging Study of Li-ion Battery | Hisao Yamashige | Toyota Motor Corporation | Japan | Industry | Industrial Applications | 6 | BL47XU | P |
| 539 | 2021B1055 | Analysis of electroless plating reaction by XAFS | Junichi Nakajima | Nissan Chemical Corporation | Japan | Industry | Industrial Applications | 3 | BL01B1 | P |
| 540 | 2021B1056 | Analysis of electroless plating reaction by time-resolved XAFS | Junichi Nakajima | Nissan Chemical Corporation | Japan | Industry | Industrial Applications | 6 | BL28B2 | P |
| 541 | 2021B1057 | High resolution X-ray CT on Membrance Electrode Assembly in polymer electrolyte fuel cell | Shin Takahashi | JFE Techno-Research Corporation | Japan | Industry | Materials Science and Engineering | 1 | BL47XU | P |
| 542 | 2021B1058 | X-ray single crystal structural analysis for structural determination of low molecular organic compound | Takahiko Hashizuka | Sumitomo Dainippon Pharma Co., Ltd. | Japan | Industry | Industrial Applications | 2 | BL40XU | P |

# 2021B, Performed General Proposals

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1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 543 | 2021B1059 | Analysis of applied materials by Soft X-ray spectroscopy | Takashi Oyama | Murata Manufacturing Co., Ltd. | Japan | Industry | Industrial Applications | 8 | BL25SU | P |
| 544 | 2021B1060 | 3D structure observation of carbon materials | Takayuki Harano | NIPPON STEEL Chemical & Material Co., Ltd. | Japan | Industry | Industrial Applications | 1 | BL47XU | P |
| 545 | 2021B1061 | Precision structure analysis for ceramics by SR-XRD | Yuki Nagamine | TDK Corporation | Japan | Industry | Industrial Applications | 5 | BL02B2 | P |
| 546 | 2021B1062 | X-ray spectroscopy in rare-earth alloys | Kazushige Hyodo | Sumitomo Metal Mining Co., Ltd. | Japan | Industry | Industrial Applications | 2 | BL39XU | P |
| 547 | 2021B1064 | HAXPES study of semiconductor materials | Munetaka Taguchi | TOSHIBA NANOANALYSIS CORPORATION | Japan | Industry | Industrial Applications | 3 | BL09XU | P |
| 548 | 2021B1065 | Verification of wide-field-view and high-resolution X-ray CT imaging technology | Junishi Nakamura | Honda Motor Co., Ltd. | Japan | Industry | Industrial Applications | 1.875 | BL28B2 | P |
| 549 | 2021B1066 | Micro-beam XAFS study for Chemical State and distribution in Ceramics Part2 | Shota Fujinaka | Murata Manufacturing Co., Ltd. | Japan | Industry | Materials Science and Engineering | 5.875 | BL37XU | P |
| 550 | 2021B1067 | Structural analysis of small molecule inclusion state of polymer aggregate by X-ray scattering method | Ryota Nambara | Kao Corporation | Japan | Industry | Industrial Applications | 1 | BL40B2 | P |
| 551 | 2021B1068 | Structure shape analysis using X-ray microtomography | Masayuki Omoto | Seiko Epson Corporation | Japan | Industry | Industrial Applications | 1 | BL47XU | P |
| 552 | 2021B1069 | Dispersion state analysis of filler in resin using X-ray microtomography | Masayuki Omoto | Seiko Epson Corporation | Japan | Industry | Industrial Applications | 1 | BL47XU | P |
| 553 | 2021B1070 | 3D observation of microstructure in ceramics substrate | Takeshi Shimada | Hitachi Metals, Ltd. | Japan | Industry | Industrial Applications | 2 | BL47XU | P |
| 554 | 2021B1071 | Structural evaluation of porous materials | Takafumi Kawanishi | Nitto Analytical Techno-Center Co., Ltd. | Japan | Industry | Industrial Applications | 1 | BL20B2 | P |
| 555 | 2021B1072 | Structural evaluation of resin | Takafumi Kawanishi | Nitto Analytical Techno-Center Co., Ltd. | Japan | Industry | Industrial Applications | 1 | BL47XU | P |
| 556 | 2021B1073 | Structural evaluation of porous materials | Takafumi Kawanishi | Nitto Analytical Techno-Center Co., Ltd. | Japan | Industry | Industrial Applications | 1 | BL28B2 | P |
| 557 | 2021B1075 | SAXS measurement | Kazuhiko Komori | SPring-8 Service Co., Ltd. | Japan | Industry | Industrial Applications | 1 | BL19B2 | P |
| 558 | 2021B1076 | XAFS measurement | Kazuhiko Komori | SPring-8 Service Co., Ltd. | Japan | Industry | Industrial Applications | 1 | BL14B2 | P |
| 559 | 2021B1077 | Powder X-ray diffraction of active pharmaceutical ingredients and their intermediates | Tetsuya Suzuki | Daiichi Sankyo Co., Ltd. | Japan | Industry | Industrial Applications | 1 | BL19B2 | P |
| 560 | 2021B1078 | Characterization of oxide film on metal using HAXPES | Katsuhiro Nishihara | Nippon Steel Corporation | Japan | Industry | Industrial Applications | 3 | BL09XU | P |
| 561 | 2021B1080 | HAXPES analysis of metal compounds | Hiroko Hayamizu | Nippon Steel Technology Co., Ltd. | Japan | Industry | Industrial Applications | 2 | BL46XU | P |
| 562 | 2021B1081 | Analysis of cellulose structural changes using small-angle scattering | Masayuki Omoto | Seiko Epson Corporation | Japan | Industry | Industrial Applications | 1 | BL19B2 | P |
| 563 | 2021B1860 | Thin film X-ray structural analysis of organic thin film | Hisashi Tetsutani | Nissan Chemical Corporation | Japan | Industry | Industrial Applications | 3 | BL46XU | P |

# 2021B, Performed General Proposals

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1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 564 | 2021B1861 | Structural Analysis of SiO2 Thin Films for Surface Acoustic Wave Device utilizing HAXPES | Yoshiro Kabe | Skyworks Filter Solutions Japan Co., Ltd. | Japan | Industry | Industrial Applications | 0.875 | BL46XU | P |
| 565 | 2021B1862 | X-ray Laminography Measurement of Electronic Components | Takashi Kouzaki | Panasonic Corporation | Japan | Industry | Industrial Applications | 1 | BL46XU | P |
| 566 | 2021B1863 | Local structure analysis of solid catalysts by X-ray absorption fine structure | Shota Matsuo | Kao Corporation | Japan | Industry | Industrial Applications | 2 | BL14B2 | P |
| 567 | 2021B1864 | Crystal structure analysis of lithium ion battery electrode by In-situ X-ray diffraction | Ryo Oosone | KYOCERA Corporation | Japan | Industry | Industrial Applications | 2 | BL19B2 | P |
| 568 | 2021B1865 | Local crystal structure analysis of Ba-Y-Zr-O oxides by EXAFS method | Naoyuki Hatada | Kyoto University | Japan | Educational Organization | Industrial Applications | 1 | BL14B2 | P |
| 569 | 2021B1866 | Study on the electronic state of inorganic semiconductor materials | Ryouji Arai | Sony Group Corporation | Japan | Industry | Industrial Applications | 6 | BL46XU | P |
| 570 | 2021B1922 | Analysis of rubber by WAXS | Rika Ohashi | Sumitomo Riko Company Limited | Japan | Industry | Industrial Applications | 1 | BL46XU | P |
| 571 | 2021B1923 | XAFS analysis of cathode electrode for Li ion batteries | Naomi Suzuki | Sumitomo Metal Mining Co., Ltd. | Japan | Industry | Industrial Applications | 2 | BL14B2 | P |
| 572 | 2021B1924 | Characterization of L10-ordered FeNi alloy films with island structures by anomalous scattering X-ray diffraction | Takahiro Nishio | DENSO CORPORATION | Japan | Industry | Industrial Applications | 1 | BL46XU | P |
| 573 | 2021B1925 | XAFS measurement of zirconium species | Shota Matsuo | Kao Corporation | Japan | Industry | Industrial Applications | 1 | BL14B2 | P |
| 574 | 2021B1927 | CT-XAFS Study of Secondary Battery Cells | Masahiko Yoshiki | Toshiba Corporation | Japan | Industry | Industrial Applications | 1 | BL46XU | P |
| 575 | 2021B1928 | X-ray Computed Tomography Observations of Electronics Devices | Masahiko Yoshiki | Toshiba Corporation | Japan | Industry | Industrial Applications | 1 | BL14B2 | P |
| 576 | 2021B1930 | Visualization of tissue in swollen state of dried Wakame seaweed and its application to improvement of quality of dried Wakame | Takashi Oba | Riken Food Co., Ltd. | Japan | Industry | Industrial Applications | 2 | BL14B2 | P |
| 577 | 2021B1931 | Local structure analysis of Co and Ni catalysts by X-ray absorption fine structure | Tsuyoshi Hirota | Kao Corporation | Japan | Industry | Industrial Applications | 1 | BL14B2 | P |
| 578 | 2021B1932 | Structure analysis of The Reaction Process under Special Environment with in-situ X-ray diffraction | Mayu Morita | Murata Manufacturing Co., Ltd. | Japan | Industry | Industrial Applications | 5 | BL19B2 | P |
| 579 | 2021B1933 | Analysis on the mechanism of its ecxellent strength and ductility balance | Shiro Torizuka | University of Hyogo | Japan | Educational Organization | Industrial Applications | 1 | BL46XU | P |
| 580 | 2021B1934 | Analysis on the mechanism of its ecxellent strength and ductility balance | Shiro Torizuka | University of Hyogo | Japan | Educational Organization | Industrial Applications | 1 | BL46XU | P |
| 581 | 2021B2502 | Structure analysis of proteins related to disease | Noritaka Furuya | KISSEI PHARMACEUTICAL CO., LTD. | Japan | Industry | Industrial Applications | 4.25 | PX-BL (BL41XU, BL45XU) | P |
| 582 | 2021B2503 | Diffraction data collection for x-ray crystallography of drug-target proteins | Mizuki Takahashi | DAIICHI SANKYO RD NOVARE CO., LTD. | Japan | Industry | Industrial Applications | 2 | PX-BL (BL45XU) | P |
| 583 | 2021B2504 | Structure-based pesticide development | Yoshiki Tanaka | AgroDesign Studios | Japan | Industry | Industrial Applications | 1 | PX-BL (BL45XU) | P |
| 584 | 2021B2506 | Structure analysis of proteins related to disease | Toshiaki Yamaura | Asahi Kasei Pharma Corporation | Japan | Industry | Industrial Applications | 9.5 | PX-BL (BL45XU, EM01CT) | P |

# 2021B, Performed General Proposals

* SPring-8 Research Proposals in Complementary Use with SACLA, J-PARC/MLF or HPCI including the K computer / the supercomputer Fugaku

1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 585 | 2021B2508 | Structure analysis of complex of disease related proteins and their regulatory compounds | Yasushi Amano | Astellas Pharma Inc. | Japan | Industry | Life Science | 11.25 | PX-BL (BL45XU, BL32XU, EM01CT) | P |
| 586 | 2021B2509 | Structural insights into antibody/antigen complex | Jian Sun | BeiGene Ltd. | China | Foreign | Life Science | 1.5 | PX-BL (BL45XU) | P |
| 587 | 2021B2510 | Structure analysis of proteins related to disease | Yuichiro Nakaishi | Otsuka Pharmaceutical Co., Ltd. | Japan | Industry | Industrial Applications | 4 | PX-BL (BL45XU) | P |
| 588 | 2021B2511 | Structural analysis of protein and ligand/protein complex for structure-based drug design | So Nakagawa | CHUGAI PHARMACEUTICAL CO., LTD. | Japan | Industry | Industrial Applications | 8.75 | PX-BL (BL45XU) | P |
| 589 | 2021B2512 | Structural Biology of Protein-Ligand complex for Drug Discovery | Zenzaburo Nakata | Shionogi & Co., Ltd. | Japan | Industry | Life Science | 5 | PX-BL (BL45XU) | P |
| 590 | 2021B2513 | X-ray or Cryo-EM structure determination of the protein with compound | Tsuyoshi Adachi | Japan Tobacco Inc. | Japan | Industry | Industrial Applications | 10.5 | PX-BL (BL45XU, BL32XU, EM01CT) | P |
| 591 | 2021B2514 | Structural determination of target proteins for medical product development | Hiroyuki Kishida | Mitsubishi Tanabe Pharma Corporation | Japan | Industry | Life Science | 7 | PX-BL (BL45XU) | P |
| 592 | 2021B2515 | Correlation structure analysis of Proteins using X-ray Crystallography and Cryo-TEM on 'Platform Project for Supporting Drug Discovery and Life Science Research(BINDS)' | Masaki Yamamoto | RIKEN | Japan | National and Nonprofit Organization | Life Science | 30 | PX-BL (EM01CT, EM02CT) | P |
| 593 | 2021B2516 | Structural analysis of disease-related protein | Rie Omi | ONO PHARMACEUTICAL CO., LTD. | Japan | Industry | Life Science | 4.5 | PX-BL (BL32XU, EM01CT) | P |
| 594 | 2021B2517 | Structural analysis of drug candidate complexes | Hideki Shigematsu | RIKEN | Japan | National and Nonprofit Organization | Life Science | 30 | PX-BL (EM01CT) | P |
| 595 | 2021B2518 | Crystal structure analysis of target proteins in complex with drug candidate compounds | Masafumi Kamitani | Taisho Pharmaceutical Holdings Co., Ltd. | Japan | Industry | Life Science | 2 | PX-BL (BL45XU, BL32XU) | P |
| 596 | 2021B2701 | [2021A APPD]Structure analysis of proteins related to disease | Hiroki Omura | Teijin Pharma Limited | Japan | Industry | Industrial Applications | 2 | PX-BL (BL45XU) | P |
| 597 | 2021B2702 | [2021A APPD]Macromolecule protein crystals for data collection | Wang Cheng | Wuxi Biortus Biosciences Co. Ltd | China | Foreign | Industrial Applications | 8.5 | PX-BL (BL45XU) | P |
| 598 | 2021B2704 | [2021A APPD]Data collection on protein crystals for structure based drug design | Fan Jiang | Viva Biotech (Shanghai) Ltd. | China | Foreign | Life Science | 32.5 | PX-BL (BL45XU) | P |
| 599 | 2021B2708 | [2021A APPD]Protein X-ray crystallography | Hajime Saburi | Toray Industries, Inc. | Japan | Industry | Life Science | 1 | PX-BL (BL45XU) | P |
| 600 | 2021B2710 | [2021A APPD]Diffraction Data Acquisition and Evaluation of the Protein Crystals grown by Space Experiment. | Hiroaki Tanaka | Confocal Science Inc. | Japan | Industry | Life Science | 9 | PX-BL (BL41XU) | P |
| 601 | 2021B2711 | [2021A APPD]Structural analysis of the therapeutic target protein with its ligands | Satoshi Sogabe | Axcelead Drug Discovery Partners Inc. | Japan | Industry | Industrial Applications | 6.75 | PX-BL (BL41XU, EM01CT, EM02CT) | P |
| 602 | 2021B2712 | [2021A APPD]Evaluation of the Protein Crystals under Microgravity by Synchrotron Radiation | Mitsugu Yamada | Japan Aerospace Exploration Agency | Japan | National and Nonprofit Organization | Life Science | 4 | PX-BL (BL41XU, BL45XU) | P |
| 603 | 2021B2713 | [2021A APPD]X-ray crystallography of drug-related proteins | Tatsuya Suzuki | Taiho Pharmaceutical Co., Ltd. | Japan | Industry | Industrial Applications | 0.5 | PX-BL (BL45XU) | P |

# 2021B, Performed Budding Researchers Support Proposals

1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2021B1772 | Weyl phase transition in Ni-doped Co3Sn2S2 | Tyler Cochran | Princeton University | USA | Foreign | Materials Science and Engineering | 17.875 | BL25SU | Np |
| 2 | 2021B1774 | in situ observation of flux-growth dynamics under high pressure | Kohdai Ishida | Kyoto University | Japan | Educational Organization | Chemical Science | 6 | BL04B1 | Np |
| 3 | 2021B1775 | Crystalline phase control of TiO2 nano particle by supercritical reaction field. | Tomoki Fujita | University of Tsukuba | Japan | Educational Organization | Materials Science and Engineering | 6 | BL02B2 | Np |
| 4 | 2021B1776 | Search for phase and structure change of Li-P-S-X (X = O, Br, Cl, I) system | Subin Song | Tokyo Institute of Technology | Japan | Educational Organization | Materials Science and Engineering | 3 | BL02B2 | Np |
| 5 | 2021B1778 | Structural and dynamic analysis of supramolecular hydrogen-bonded networks | Chisako Kanzaki | Kyoto Prefectural University | Japan | Educational Organization | Materials Science and Engineering | 3 | BL43IR | Np |
| 6 | 2021B1780 | Temperature determination of Alumina-supported Rh catalysts under visible and near-infrared light irradiation by operando dispersive XAS measurement | Daichi Takami | Kyoto University | Japan | Educational Organization | Chemical Science | 12 | BL28B2 | Np |
| 7 | 2021B1783 | Development of In-situ Synchrotron X-ray Powder Diffraction of Ball Milling | Yanyan Zheng | University of Tsukuba | Japan | Educational Organization | Materials Science and Engineering | 8.875 | BL02B2 | Np |
| 8 | 2021B1785 | Direct synthesis of oxyhydride by mechanochemical method | Tasuku Uchimura | The Graduate University for Advanced Studies, SOKENDAI | Japan | Educational Organization | Materials Science and Engineering | 2.875 | BL02B2 | Np |
| 9 | 2021B1790 | Quantitative evaluation of interaction between adsorbed ions and clay minerals | Akiko Yamaguchi | The University of Tokyo | Japan | Educational Organization | Environmental Science | 6 | BL39XU | Np |
| 10 | 2021B1792 | Understanding the kinetics of adsorption-induced structural transition on flexible metal-organic frameworks | Yuta Sakanaka | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL02B2 | Np |
| 11 | 2021B1795 | In-situ XAFS analysis for nanoparticulate multimetallic alloy catalyst with high propane dehydrogenation performance | Yuki Nakaya | Hokkaido University | Japan | Educational Organization | Materials Science and Engineering | 12 | BL01B1 | Np |
| 12 | 2021B1797 | Bulk electronic structure of the wide-gap semiconductor h-BN measured by the combination of micro-focused soft x ray angle-resolved photoemission spectroscopy and exfoliation method | Hiroaki Tanaka | The University of Tokyo | Japan | Educational Organization | Materials Science and Engineering | 6 | BL25SU | Np |
| 13 | 2021B1798 | Development of functional materials based on precise structural analysis and elucidation of molecular alignment of pentafulvalene derivative ultrafine crystals | Masahiro Hayakawa | Nagoya University | Japan | Educational Organization | Chemical Science | 6 | BL02B1 | Np |
| 14 | 2021B1799 | in situ Structural Analysis of Near Infrared Light Responsive Porous Crystals | Shun Suginome | The University of Tokyo | Japan | Educational Organization | Chemical Science | 3 | BL02B2 | Np |
| 15 | 2021B1802 | Exploring the high-pressure phase of PbFCl-type BaHCl using in-situ XRD measurements | Hiroki Ubukata | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 5.875 | BL04B1 | Np |
| 16 | 2021B1803 | Virtual dental histology using SR micro-CT: Distinguishing between stillborn and newborn infants from neonatal line | Yuko Miyauchi | The Cyprus Institute | Cyprus | Foreign | Other | 6 | BL20XU | Np |
| 17 | 2021B1804 | Crystal structure analysis of additively manufactured maraging steel and titanium alloys | Akira Otsu | Tottori University | Japan | Educational Organization | Materials Science and Engineering | 3 | BL02B1 | Np |
| 18 | 2021B1807 | Average and local structure in hydride ion conductors A2H3X with chemical disorder | Hiroki Ubukata | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL02B2 | Np |
| 19 | 2021B1808 | Pyrrole-Based π-System–Anion Complexes : Countercation-Dependent Evaluation of Charge Density Distribution through High Resolution Crystal Structure X-ray Analysis | Hiroki Tanaka | Ritsumeikan University | Japan | Educational Organization | Materials Science and Engineering | 3 | BL02B1 | Np |
| 20 | 2021B1809 | Novel approach method to realize unconventional superconductivity in C60 fullerides: creation of quantum criticality and anomalous electronic phase via rare-earth valence fluctuation control | Naoya Yoshikane | Osaka Prefecture University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL10XU | Np |

# 2021B, Performed Budding Researchers Support Proposals

1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 21 | 2021B1810 | Investigating the evolutionary history of squids: exploration of “hidden fossil records” using high-resolution 3D imaging | Shin Ikegami | Hokkaido University | Japan | Educational Organization | Earth and Planetary Science | 12 | BL20B2 | Np |
| 22 | 2021B1813 | Three-dimensional cmparison of pigment-secreting organs in molluscan mantles and construction of a mathematical model for the secretion process | Hideaki Sato | The University of Tokyo | Japan | Educational Organization | Life Science | 3 | BL20B2 | Np |
| 23 | 2021B1814 | Structural Analysis of Polyurethanes with Non-Chemical Cross-linking Based on Acetylated Cyclodextrins by FT-IR under stretching | Subaru Konishi | Osaka University | Japan | Educational Organization | Materials Science and Engineering | 3 | BL43IR | Np |
| 24 | 2021B1815 | In situ x-ray diffraction study of the crystalline structure modification of ammonia synthesis catalysts during hydrogen/nitrogen treatment | Yu Cao | Kyoto University | Japan | Educational Organization | Chemical Science | 3 | BL02B2 | Np |
| 25 | 2021B1818 | In-situ observation of redox behavior and changes in structure and electronic state of W polyoxometalate using HERFD-XAS | Tomoki Matsuyama | Tokyo Metropolitan University | Japan | Educational Organization | Materials Science and Engineering | 12 | BL39XU | Np |
| 26 | 2021B1821 | Speciation of uranium in environmental sample by HERFD-XANES | Takumi Yomogida | The University of Tokyo | Japan | Educational Organization | Chemical Science | 5.875 | BL39XU | Np |
| 27 | 2021B1823 | Development of a nanoprecise figure correction cycle for axisymmetric focusing mirrors using soft x-ray ptychography | Shunya Yokomae | The University of Tokyo | Japan | Educational Organization | Beamline Engineering | 6 | BL25SU | Np |
| 28 | 2021B1826 | Crystal structure analysis of new structure-type ionic conductors based on oxides and oxychlorides by synchrotron X-ray powder diffraction method at high temperature | Hiroshi Yaguchi | Tokyo Institute of Technology | Japan | Educational Organization | Materials Science and Engineering | 6 | BL02B2 | Np |
| 29 | 2021B1827 | Elucidation of the pressure-induced local structural change around molybdenum in basaltic glasses based on in-situ XAFS measurements at ultra-high pressure using nano-polycrystalline diamond anvils and exploring the factors governing pressure changes in the coordination structure of trace elements | Keisuke Ozawa | The University of Tokyo | Japan | Educational Organization | Earth and Planetary Science | 8.5 | BL39XU | Np |
| 30 | 2021B1828 | Ion-Pairing Assemblies Based on Antiaromatic Charged π-Electronic Systems | Shinya Sugiura | Ritsumeikan University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL40B2 | Np |
| 31 | 2021B1829 | Lattice distortion analysis of single DNA-NP colloidal crystal by using small angle X-ray scattering with rotating crystal method | Lidong Zhang | Nagoya University | Japan | Educational Organization | Materials Science and Engineering | 6 | BL40B2 | Np |
| 32 | 2021B1830 | Structural Analysis of Polyurethanes With Non-Chemical Crosslinking (Acetylated Cyclodextrins) by X-ray Scattering Measurements | Soumei Kin | Osaka University | Japan | Educational Organization | Chemical Science | 3 | BL40B2 | Np |
| 33 | 2021B1832 | Local structural and compositional evolution of cationic POM crystalline samples with highly acidic protons | Yuki Watanabe | Kyoto University | Japan | Educational Organization | Materials Science and Engineering | 3 | BL01B1 | Np |
| 34 | 2021B1833 | Development of Functional Materials of π-Electron Systems Containing Main Group Elements by Control Over the Molecular Orientation | Hiroki Narita | Nagoya University | Japan | Educational Organization | Chemical Science | 6 | BL02B1 | Np |
| 35 | 2021B1836 | Demonstration of bright and stable sub-100-nm-wide nanoprobes in a soft-X-ray region by ptychography images at a 10-nm spatial resolution | Takenori Shimamura | The University of Tokyo | Japan | Educational Organization | Beamline Engineering | 12 | BL25SU | Np |
| 36 | 2021B1837 | MEM-Rietveld analyses for the precise crystal structure and the unusual thermal conductivity of silver chalcogenide, Ag2(S, Se, Te). | Keisuke Hirata | Toyota Technological Institute | Japan | Educational Organization | Materials Science and Engineering | 3 | BL02B2 | Np |
| 37 | 2021B1840 | In situ QXAFS analysis for oxygen storage materials supported Pt three-way catalysts | Yuan Jing | Hokkaido University | Japan | Educational Organization | Industrial Applications | 8.875 | BL14B2 | Np |
| 38 | 2021B1841 | Investigations on molecular alignments of non-fullerene acceptors and conjugated polymers in organic photovoltaic devices with high stability, reproducibility, and efficiency | Keiichi Ishida | Kyoto University | Japan | Educational Organization | Industrial Applications | 3 | BL46XU | Np |
| 39 | 2021B1843 | Evaluation of Thermal Expansion Coefficient in Strain-Relaxed GeSn by Reciprocal Space Mapping | Kazutoshi Yoshioka | Meiji University | Japan | Educational Organization | Industrial Applications | 9 | BL19B2 | Np |
| 40 | 2021B1844 | Analysis of Polydimethylsiloxane containing Host-Guest Interaction of Cyclodextrin through X-ray Scattering | Daichi Yoshida | Osaka University | Japan | Educational Organization | Industrial Applications | 0.875 | BL19B2 | Np |

# 2021B, Performed Budding Researchers Support Proposals

1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 41 | 2021B1902 | Electronic states study of La1–xSrxFe1–yCoyO3 by using X-ray absorption spectroscopy | Yuichi Okazaki | Osaka Prefecture University | Japan | Educational Organization | Industrial Applications | 6 | BL14B2 | Np |
| 42 | 2021B1903 | Homogenization mechanism of phase-separated Na2O-B2O3-SiO2 glass probed by Ni2+ local environment using XAFS analysis | Kana Tomita | Tokyo Institute of Technology | Japan | Educational Organization | Industrial Applications | 6 | BL14B2 | Np |
| 43 | 2021B1904 | Investigation into the effect of Ag addition on clustering behavior in Al-Mg-Si alloy by XAFS analysis | Serina Tanaka | University of Hyogo | Japan | Educational Organization | Industrial Applications | 3 | BL14B2 | Np |
| 44 | 2021B1905 | XAFS analysis of electronic state of a mesoporous silica-immobilized vanadium catalyst for dehydrogenative biaryl coupling reactions | Kengo Kasama | Osaka University | Japan | Educational Organization | Industrial Applications | 6 | BL14B2 | Np |
| 45 | 2021B1906 | Quantitative Evaluation of Band Alignment for the Carrier-Selective Contact layer in Two-Dimensional Layered Materials for Carrier-Selective Contact Solar Cells | Tappei Nishihara | Meiji University | Japan | Educational Organization | Industrial Applications | 9 | BL46XU | Np |
| 46 | 2021B1907 | Development of in situ observation at electrode/electrolyte interface using X-ray diffraction method for all-solid-state photo-rechargeable-battery under light irradiation | Masataka Yoshimoto | Tokyo Institute of Technology | Japan | Educational Organization | Industrial Applications | 8.875 | BL46XU | Np |
| 47 | 2021B1960 | Crystal structure change of Mg(Co1-xFex)2O4 as positive electrode active material in Mg rechargeable battery during charge/discharge process | Jonghyun Han | The University of Tokyo | Japan | Educational Organization | Industrial Applications | 3 | BL19B2 | Np |
| 48 | 2021B1962 | XAFS study on Pt-based multimetallic alloys as efficient catalysts for methylcyclohexane dehydrogenation | Feilong Xing | Hokkaido University | Japan | Educational Organization | Industrial Applications | 9 | BL14B2 | Np |
| 49 | 2021B1963 | Homogenization mechanism of phase-separated Na2O-B2O3-SiO2 glass with time-resolved SAXS analysis for micro-reactor. | Kana Tomita | Tokyo Institute of Technology | Japan | Educational Organization | Industrial Applications | 3 | BL19B2 | Np |
| 50 | 2021B1964 | Correlation between bonding state and mechanical and electrochemical properties of Li-Si alloy anode synthesized by arc plasma deposition method. | Sho Asano | Tokyo Institute of Technology | Japan | Educational Organization | Industrial Applications | 6 | BL46XU | Np |
| 51 | 2021B2562 | Crystal structures of a DNA/RNA methylase: Elucidation of the structural basis for broad substrate specificity and its application to enzyme engineering | Yoshiki Ochiai | Okinawa Institute of Science and Technology Graduate University | Japan | Educational Organization | Life Science | 1 | PX-BL (BL41XU) | Np |
| 52 | 2021B2772 | [2021A APPD]Dynamic Structure Trapping of Intrinsically Disordered Proteins immobilized in In-Cell Protein Crystal | Mariko Kojima | Tokyo Institute of Technology | Japan | Educational Organization | Life Science | 4 | PX-BL (BL32XU) | Np |

# 2021B, Performed Urgent Proposals

1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2021B1908 | Structural analysis of spike protein from SARS-CoV-2 in complex with a nanobody | Yota Fukuda | Osaka University | Japan | Educational Organization | Life Science | 0.5 | BL41XU | Np |

# 2021B, Performed Time-Designated Proposals

1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2021B2001 | Study of damage induced by x-ray irradiation and analysis of chemical state at interface | Masaki Oura | RIKEN | Japan | National and Nonprofit Organization | Materials Science and Engineering | 13 | BL17SU | P |
| 2 | 2021B2002 | High energy X-ray CT observation on welded part of steels. | Shin Takahashi | JFE Techno-Research Corporation | Japan | Industry | Industrial Applications | 1 | BL28B2 | P |
| 3 | 2021B2005 | Internal morphology measurement of electrification components by high-energy high-brilliance synchrotron radiation x-ray | Hidehiko Kimura | Toyota Central R&D Labs., Inc. | Japan | Industry | Industrial Applications | 1 | BL05XU | P |
| 4 | 2021B2012 | 3D chemical Imaging of metal oxide materials | Toshio Akai | Mitsubishi Chemical Corporation | Japan | Industry | Chemical Science | 2 | BL37XU | P |
| 5 | 2021B2013 | XMCD measurements for permanent magnets 4 | Akihito Kinoshita | Toyota Motor Corporation | Japan | Industry | Materials Science and Engineering | 3 | BL39XU | P |
| 6 | 2021B2016 | X-ray Imaging Study of Li-ion Battery | Hisao Yamashige | Toyota Motor Corporation | Japan | Industry | Industrial Applications | 3 | BL20XU | P |
| 7 | 2021B2018 | Mapping Measurement of Battery Materials by spatially resolved XAFS techniques | Kazunori Fukuda | Kobelco Research Institute, Inc. | Japan | Industry | Industrial Applications | 3 | BL37XU | P |
| 8 | 2021B2020 | Unveiling the elementary process of composites failure using an fatigue testing machine for in-situ observation by synchrotron radiation X-ray CT | Kosuke Takahashi | Hokkaido University | Japan | Educational Organization | Materials Science and Engineering | 2 | BL20XU | P |
| 9 | 2021B2021 | High speed X-ray imaging on switching IC | Shin Takahashi | JFE Techno-Research Corporation | Japan | Industry | Industrial Applications | 2 | BL20B2 | P |
| 10 | 2021B2038 | Surface analysis of regenerated cellulose fibers with new dyeing methods | Hidemi Aida | Tohoku Seiren Co., Ltd. | Japan | Industry | Industrial Applications | 1 | BL40XU | P |
| 11 | 2021B2039 | Operando soft X-ray absorption spectroscopy study of Pt-based catalyst for polymer electrolyte fuel cell | Hideto Imai | NISSAN ARC, LTD. | Japan | Industry | Chemical Science | 9 | BL27SU | P |
| 12 | 2021B2048 | Nondestructive observation of the internal microstructure of rice bran. | Shujiro Endo | Sanwa Yushi Co., Ltd. | Japan | Industry | Industrial Applications | 1 | BL47XU | P |
| 13 | 2021B2050 | X-ray Imaging Study of Li-ion Battery | Hisao Yamashige | Toyota Motor Corporation | Japan | Industry | Industrial Applications | 3 | BL47XU | P |
| 14 | 2021B2051 | Analysis of muscle component behavior in the hardening and softening process of the world's hardest food, katsuobushi, and application to marine product processing. | Hitoshi Abe | Abekame Shoten Co., LTD. | Japan | Industry | Industrial Applications | 1 | BL19B2 | P |
| 15 | 2021B2055 | Comparative survey of internal strains of shafts subjected to carburizing, quenching and tempering of surface-hardened steel and shafts subjected to quenching and tempering of high carbon steel, and comparative survey of strain changes after repeated torsional fatigue. | koji Yamamoto | Komatsu Ltd. | Japan | Industry | Industrial Applications | 4 | BL19LXU | P |
| 16 | 2021B2056 | Observation of bubbles in beer | Akifumi Oishi | Asahi Quality & Innovations, Ltd. | Japan | Industry | Industrial Applications | 1 | BL20B2 | P |
| 17 | 2021B2057 | Nondestructive analysis of fuel cell materials using laminography | Hideto Imai | NISSAN ARC, LTD. | Japan | Industry | Chemical Science | 6 | BL20B2 | P |
| 18 | 2021B2058 | Evaluation of pores in optical thin film | Daisuke Tanaka | Ahikofinetec | Japan | Industry | Materials Science and Engineering | 1 | BL40B2 | P |
| 19 | 2021B2062 | Observation of deformation process of rubber material under elongation with high resolution X-ray CT method | Yukiko Tamura | JSR Corporation | Japan | Industry | Industrial Applications | 1 | BL47XU | P |
| 20 | 2021B2063 | Total X-ray scattering measurement of carbon material | Takanori Itoh | NISSAN ARC, LTD. | Japan | Industry | Industrial Applications | 6 | BL04B2 | P |

# 2021B, Performed Time-Designated Proposals

1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 21 | 2021B2064 | X-ray CT analysis of all-solid-state battery | Yuki Orikasa | Ritsumeikan University | Japan | Educational Organization | Chemical Science | 2 | BL20B2 | P |
| 22 | 2021B2065 | SAR for drug development | Nithya Baburajendran | Experimental Drug Development Centre | Singapore | Foreign | Life Science | 0.5 | BL45XU | P |
| 23 | 2021B2078 | Liquid Water Distributions by Compton Scattering Imaging | Hideto Imai | NISSAN ARC, LTD. | Japan | Industry | Industrial Applications | 3 | BL08W | P |
| 24 | 2021B2079 | Operando soft X-ray absorption spectroscopy study of Pt-based catalyst for Polymer Electrolyte Fuel Cell | Hideto Imai | NISSAN ARC, LTD. | Japan | Industry | Chemical Science | 3 | BL27SU | P |
| 25 | 2021B2081 | XRD measurement for ceramics device | Yuki Nagamine | TDK Corporation | Japan | Industry | Industrial Applications | 1 | BL02B2 | P |

# 2021B, Performed SPring-8 Measurement Services

1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2021B2003 | XAFS analysis for rubber | Takayuki Saito | Zeon Corporation | Japan | Industry | Industrial Applications | 0.5 | BL14B2 | P |
| 2 | 2021B2004 | Local crystal structure analysis of Ba-Y-Zr-O oxides by EXAFS method | Naoyuki Hatada | Kyoto University | Japan | Educational Organization | Industrial Applications | 0.25 | BL14B2 | P |
| 3 | 2021B2008 | Electronic states and structures analysis of metal nanoparticle catalysts by XAFS | Yuta Hashiguchi | Research Association of High-Throughput Design and Development for Advanced Functional Materials | Japan | Industry | Industrial Applications | 2.75 | BL14B2 | P |
| 4 | 2021B2009 | Analysis of catalyst structures for nanotube growth | Toshiaki Kato | Tohoku University | Japan | Educational Organization | Materials Science and Engineering | 0.5 | BL19B2 | P |
| 5 | 2021B2010 | Analysis of Trace Crystal Structure in Tablets | Hikaru Nounaka | Sawai Pharmaceutical Co., Ltd. | Japan | Industry | Industrial Applications | 1 | BL19B2 | P |
| 6 | 2021B2011 | XRD measurements of battery materials | Kazunori Fukuda | Kobelco Research Institute, Inc. | Japan | Industry | Industrial Applications | 0.75 | BL19B2 | P |
| 7 | 2021B2014 | Ruthenium chemical form analysis in environmental samples | Yusuke Unno | Institute for Environmental Sciences | Japan | National and Nonprofit Organization | Industrial Applications | 1 | BL14B2 | P |
| 8 | 2021B2015 | Lithium ion battery | Huishu Huang | Fudan University | China | Foreign | Industrial Applications | 0.5 | BL14B2 | P |
| 9 | 2021B2017 | XAFS measurement of Li2O-Al2O3-SiO2 glass-ceramics | Takato Kajihara | AGC Inc. | Japan | Industry | Industrial Applications | 0.75 | BL14B2 | P |
| 10 | 2021B2019 | 5th Evaluation of silicon crystals using hard X-ray photoemission spectroscopy (HAXPES) | Masataka Hourai | SUMCO CORPORATION | Japan | Industry | Industrial Applications | 5.875 | BL46XU | P |
| 11 | 2021B2022 | Crystal Structure Analysis of Solid Electrolytes | Naoki Matsui | Tokyo Institute of Technology | Japan | Educational Organization | Industrial Applications | 0.25 | BL19B2 | P |
| 12 | 2021B2023 | SAXS analysis of glass | Tatsuya Miyajima | AGC Inc. | Japan | Industry | Industrial Applications | 0.25 | BL19B2 | P |
| 13 | 2021B2024 | X-ray characterization of thin films for 2.5 dimensional materials | Eiji Nishibori | University of Tsukuba | Japan | Educational Organization | Materials Science and Engineering | 0.25 | BL46XU | P |
| 14 | 2021B2025 | XRD analysis of layer structured compounds | Yuki Orikasa | Ritsumeikan University | Japan | Educational Organization | Industrial Applications | 0.25 | BL19B2 | P |
| 15 | 2021B2027 | Crystal structure analysis of materials for lithium ion battery using XRD. | Shugo Yamada | Panasonic Corporation | Japan | Industry | Industrial Applications | 1 | BL19B2 | P |
| 16 | 2021B2028 | XAFS analysis of catalyst | Qiuyi Yuan | NISSAN ARC, LTD. | Japan | Industry | Industrial Applications | 0.5 | BL14B2 | P |
| 17 | 2021B2029 | XAFS measurement of Ni and Zr compounds | Shogo Suehiro | Sumika Chemical Analysis Service, Ltd. | Japan | Industry | Industrial Applications | 1.25 | BL14B2 | P |
| 18 | 2021B2030 | XAFS analysis of layer-structure compounds | Yuki Orikasa | Ritsumeikan University | Japan | Educational Organization | Industrial Applications | 0.25 | BL14B2 | P |
| 19 | 2021B2032 | XAFS analysis of powder crystal | Atsushi Nakamura | Koito Manufacturing Co., Ltd. | Japan | Industry | Industrial Applications | 0.25 | BL14B2 | P |
| 20 | 2021B2033 | XAFS of Lithium ion battery | Zhendong Zhang | Fudan University | China | Foreign | Industrial Applications | 0.5 | BL14B2 | P |

# 2021B, Performed SPring-8 Measurement Services

1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 21 | 2021B2035 | XAFS measurement of battery materials (bulk) | Kazunori Fukuda | Kobelco Research Institute, Inc. | Japan | Industry | Industrial Applications | 0.5 | BL14B2 | P |
| 22 | 2021B2036 | XAFS Analysis of Yttria Oxide Ceramics | Keisuke Itoh | Industrial Technology Institute, Miyagi Prefectural Government | Japan | National and Nonprofit Organization | Industrial Applications | 0.25 | BL14B2 | P |
| 23 | 2021B2037 | Local structure analysis of positive materials for Lithium-ion battery | Yuichi Ikeda | GS Yuasa International Ltd. | Japan | Industry | Industrial Applications | 0.5 | BL14B2 | P |
| 24 | 2021B2042 | Structural analysis of positive electrode materials for advance lithium-ion batteries | Masanori Morishita | Yamagata University | Japan | Educational Organization | Industrial Applications | 0.25 | BL19B2 | P |
| 25 | 2021B2043 | Powder X-ray Diffraction of low-strain sample XI | Kazuya Tokuda | Sumitomo Electric Industries, Ltd. | Japan | Industry | Industrial Applications | 0.25 | BL19B2 | P |
| 26 | 2021B2044 | Powder X-ray Diffraction of low-strain sample XII | Kazuya Tokuda | Sumitomo Electric Industries, Ltd. | Japan | Industry | Industrial Applications | 0.25 | BL19B2 | P |
| 27 | 2021B2045 | Powder XRD measurement of battery materials | Kazunori Fukuda | Kobelco Research Institute, Inc. | Japan | Industry | Industrial Applications | 0.75 | BL19B2 | P |
| 28 | 2021B2046 | Investigation of metal deposits. | Maria Kawano | Daido Bunseki Research, INC. | Japan | Industry | Industrial Applications | 0.25 | BL19B2 | P |
| 29 | 2021B2047 | SAXS measurement of LCP(BL19B2) | Tomohiro Taki | Polyplastics Co., Ltd. | Japan | Industry | Industrial Applications | 0.25 | BL19B2 | P |
| 30 | 2021B2049 | X-ray Small Angle Scattering measurement of HASClay | Asuka Sasaki | Higashinihon Kiden Kaihatsu | Japan | Industry | Industrial Applications | 0.25 | BL19B2 | P |
| 31 | 2021B2053 | XAFS measurement of Ni, Co, Mn and W compounds | Shogo Suehiro | Sumika Chemical Analysis Service, Ltd. | Japan | Industry | Industrial Applications | 1 | BL14B2 | P |
| 32 | 2021B2059 | Chemical form analysis of ruthenium and related elements in soil | Yusuke Unno | Institute for Environmental Sciences | Japan | National and Nonprofit Organization | Industrial Applications | 1 | BL14B2 | P |
| 33 | 2021B2061 | Nb-K edge XAFS measurement | Qiuyi Yuan | NISSAN ARC, LTD. | Japan | Industry | Industrial Applications | 0.5 | BL14B2 | P |
| 34 | 2021B2066 | USAXS measurement of polymer | Kei Kubobuchi | Denka Company Limited. | Japan | Industry | Industrial Applications | 0.25 | BL19B2 | P |
| 35 | 2021B2068 | Powder XRD measurement of battery materials 2022.1 | Kazunori Fukuda | Kobelco Research Institute, Inc. | Japan | Industry | Industrial Applications | 0.75 | BL19B2 | P |
| 36 | 2021B2069 | Small-angle x-ray scattering measurement of industrial materials | Hirokazu Sasaki | Furukawa Electric Co., Ltd. | Japan | Industry | Industrial Applications | 0.5 | BL19B2 | P |
| 37 | 2021B2070 | XAFS measurements of Zr and W compounds | Shogo Suehiro | Sumika Chemical Analysis Service, Ltd. | Japan | Industry | Industrial Applications | 0.5 | BL14B2 | P |
| 38 | 2021B2071 | Ultra-small angle X-ray measurement for fuel-cell materials | Yuji Kurotani | Toyota Motor Corporation | Japan | Industry | Industrial Applications | 0.25 | BL19B2 | P |
| 39 | 2021B2072 | Local structure analysis of positive materials for Lithium-ion battery | Yuichi Ikeda | GS Yuasa International Ltd. | Japan | Industry | Industrial Applications | 0.25 | BL14B2 | P |
| 40 | 2021B2074 | U-SAXS measurement of organic film | Noriyuki Iwata | Ricoh Company, Ltd. | Japan | Industry | Industrial Applications | 0.25 | BL19B2 | P |
| 41 | 2021B2076 | XRD analysis of cathode materials for Li ion batteries | Naomi Suzuki | Sumitomo Metal Mining Co., Ltd. | Japan | Industry | Industrial Applications | 0.75 | BL19B2 | P |

# 2021B, Performed SPring-8 Measurement Services

1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 42 | 2021B2077 | Nanostructure analysis of Gouda cheese with different process | Masato Ohnuma | Hokkaido University | Japan | Educational Organization | Industrial Applications | 0.25 | BL19B2 | P |
| 43 | 2021B2080 | Crystal structure analysis of materials for lithium ion battery using XRD. | Shugo Yamada | Panasonic Corporation | Japan | Industry | Industrial Applications | 1 | BL19B2 | P |

# 2021B, Performed Feasibility Study Proposals for Industrial Application

1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2021B2031 | XAFS measurement of Zn-Al alloy | Masashi Nishimoto | Tohoku University | Japan | Educational Organization | Industrial Applications | 0.25 | BL14B2 | P |
| 2 | 2021B2040 | Pole figure measurement of machine tool | Atsuhiro Kunishige | UBE Scientific Analysis Laboratory, Inc. | Japan | Industry | Industrial Applications | 0.25 | BL46XU | P |
| 3 | 2021B2054 | Kinetics studies on beer foam structure using 4D-CT | Koichi Nakahara | Suntory Global Innovation Center Limited | Japan | Industry | Industrial Applications | 0.25 | BL46XU | P |

# 2021B, Performed Non-Proprietary Grant-Aided Proposals

1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2021B1001 | Electronic states analysis of porous metal catalysts by hard X-ray photoelectron spectroscopy (2) | Satoshi Kameoka | Tohoku University | Japan | Educational Organization | Materials Science and Engineering | 3 | BL09XU | Np |
| 2 | 2021B1002 | Protein Crystallographic Analyses on 'Platform Project for Supporting Drug Discovery and Life Science Research(BINDS)' | Masaki Yamamoto | RIKEN | Japan | National and Nonprofit Organization | Life Science | 26.75 | BL41XU | Np |
| 3 | 2021B1003 | Designing hyperordered structure of heteroatom-containing zeolites by X-ray anomalous scattering | Toru Wakihara | The University of Tokyo | Japan | Educational Organization | Materials Science and Engineering | 9 | BL13XU | Np |
| 4 | 2021B1004 | High-resolution X-ray CT Measurement of Anode of All Solid-state Lithium-ion Battery Under High Pressure Condition for Numerical Simulation 3 | Manabu Kodama | Tokyo Institute of Technology | Japan | Educational Organization | Industrial Applications | 6 | BL47XU | Np |
| 5 | 2021B1005 | High-resolution X-ray CT Measurement of Cathode of All Solid-state Lithium-ion Battery Under High Pressure Condition for Numerical Simulation3 | Manabu Kodama | Tokyo Institute of Technology | Japan | Educational Organization | Industrial Applications | 3 | BL20XU | Np |
| 6 | 2021B1006 | Trace of Hierarchical Structure Change of Poly(vinylidene Fluoride) in the High-electric-field-induced Dielectric Breakdown Phenomenon | Kohji Tashiro | Toyota Technological Institute | Japan | Educational Organization | Materials Science and Engineering | 18 | BL40XU | Np |
| 7 | 2021B1008 | Application of synchrotron X-ray diffraction for materials infomatics | Nobuhiro Kumada | University of Yamanashi | Japan | Educational Organization | Materials Science and Engineering | 3 | BL02B2 | Np |
| 8 | 2021B1009 | Mechanical optimization of an acquired leaf structures by light adaptation in plants | Eiji Gotoh | Kyushu University | Japan | Educational Organization | Life Science | 3 | BL20B2 | Np |
| 9 | 2021B1010 | operando study of polymer electrolyte fuel cell catalysts by high-resolution X-ray absorption spectroscopy (2) | Hideto Imai | NISSAN ARC, LTD. | Japan | Industry | Chemical Science | 23.875 | BL39XU | Np |
| 10 | 2021B1011 | Diffusion Coefficient Analysis in Polymer Electrolyte Membrane of PEM Fuel Cells using operando Micro-beam X-ray Fluorescence Spectroscopy | Hideto Imai | NISSAN ARC, LTD. | Japan | Industry | Chemical Science | 24 | BL37XU | Np |
| 11 | 2021B1012 | Visualizing Liquid Water in PEFC using Compton Scattering Imaging (2) | Hideto Imai | NISSAN ARC, LTD. | Japan | Industry | Chemical Science | 17.5 | BL28B2 | Np |
| 12 | 2021B1013 | Evaluation of degradation behavior in Nafion films | Hideto Imai | NISSAN ARC, LTD. | Japan | Industry | Chemical Science | 3 | BL40XU | Np |
| 13 | 2021B1014 | Evaluation of catalyst particles and molecular aggregation states in Nafion films | Hideto Imai | NISSAN ARC, LTD. | Japan | Industry | Chemical Science | 12 | BL40B2 | Np |
| 14 | 2021B1015 | Observation of liquid water in gas diffusion layer and catalyst layer of polymer electrolyte fuel cells using operando CT (2) | Hideto Imai | NISSAN ARC, LTD. | Japan | Industry | Chemical Science | 27 | BL20XU | Np |
| 15 | 2021B1016 | Structure analysis of polymer electrolyte fuel cell catalyst by X-ray total scattering (2) | Hideto Imai | NISSAN ARC, LTD. | Japan | Industry | Industrial Applications | 18 | BL04B2 | Np |
| 16 | 2021B1017 | Analysis of Chemical State of Catalyst for H2 Generation from NH3 Decomposition in Layered Perovskite-based Hybrid and Investigation of its Optimum State by Materials Informatics | Takahiro Takei | University of Yamanashi | Japan | Educational Organization | Materials Science and Engineering | 3 | BL01B1 | Np |
| 17 | 2021B1018 | Precise Crystal Structural Analysis of Hybrid Polyoxometalates as Advanced Functional Energy Materials by High-flux X-ray Diffraction Analysis | Tatsuhiro Kojima | Osaka University | Japan | Educational Organization | Chemical Science | 3 | BL02B1 | Np |
| 18 | 2021B1019 | Direct observation of Li metal dendrite growth inside all-solid-state lithium battery using operando X-ray imaging method (2) | Yoshiharu Uchimoto | Kyoto University | Japan | Educational Organization | Chemical Science | 24 | BL20XU | Np |
| 19 | 2021B1020 | Soft X-ray MCD microscopy study of the temperature dependence of magnetization reversal process for Ga doped Nd-Fe-B sintered magnet and correlation analysis between coercivity, grain size, and composition for each grain | Satoshi Hirosawa | National Institute for Materials Science | Japan | National and Nonprofit Organization | Materials Science and Engineering | 15 | BL25SU | Np |
| 20 | 2021B1021 | Numerical correlation analysis of process parameters, 3D structure, and mechanical strength of Ti-AM material–Quantification of 3D micro-defect configuration using Persistent homology | Yukiko Ozaki | Kyushu University | Japan | Educational Organization | Materials Science and Engineering | 5.875 | BL20B2 | Np |

# 2021B, Performed Non-Proprietary Grant-Aided Proposals

1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 21 | 2021B1022 | Electronic states and structures analysis of metal nanoparticle catalysts by XAFS | Suguru Fukazawa | Research Association of High-Throughput Design and Development for Advanced Functional Materials | Japan | Industry | Industrial Applications | 3 | BL39XU | Np |
| 22 | 2021B1023 | Quantitative Evaluation of Safety by Different Degradation Modes Using Visualization of Dynamic Structure Inside a Battery with High-Nickel Cathode | Yoshiharu Uchimoto | Kyoto University | Japan | Educational Organization | Chemical Science | 12 | BL28B2 | Np |
| 23 | 2021B1024 | Fundamental examination of uranium distribution in bone | Shino Takeda | National Institutes for Quantum Science and Technology | Japan | National and Nonprofit Organization | Medical Applications | 6 | BL37XU | Np |
| 24 | 2021B1025 | Alteration of concrete in contact with contaminated water by the non-destructive integrated CT-XRD method | Takafumi Sugiyama | Hokkaido University | Japan | Educational Organization | Industrial Applications | 9 | BL28B2 | Np |
| 25 | 2021B1026 | Fundamental examination of chemical state analysis for cellular uranium | Shino Takeda | National Institutes for Quantum Science and Technology | Japan | National and Nonprofit Organization | Medical Applications | 6 | BL37XU | Np |
| 26 | 2021B1027 | Nb site positions in a doped topological superconductor candidate NbxBi2Se3 | Takayoshi Yokoya | Okayama University | Japan | Educational Organization | Materials Science and Engineering | 5.875 | BL25SU | Np |
| 27 | 2021B1028 | In-situ measurement of structural change during compressive fracture of carbon fibers | Wataru Takarada | Tokyo Institute of Technology | Japan | Educational Organization | Materials Science and Engineering | 9 | BL13XU | Np |
| 28 | 2021B1029 | Electronic structure study on the candidate and related materials for a spacecraft radiator with thermal switching | Tomohiko Saitoh | Tokyo University of Science | Japan | Educational Organization | Materials Science and Engineering | 2.875 | BL09XU | Np |
| 29 | 2021B1031 | Structural analysis by X-ray absorption fine structure for clarification of hyper-ordered structure | Hirokazu Masai | National Institute of Advanced Industrial Science and Technology | Japan | National and Nonprofit Organization | Materials Science and Engineering | 6 | BL01B1 | Np |
| 30 | 2021B1032 | Local Structural Analysis of Novel Amorphous Nanomaterials Fabricated by Cryo-Milling using X-ray Total Scattering | Koji Kimura | Nagoya Institute of Technology | Japan | Educational Organization | Materials Science and Engineering | 6 | BL04B2 | Np |
| 31 | 2021B1033 | Electronic structure change analysis of sulfide solid electrolyte under humidity condition by using soft X-ray absorption spectroscopy (1) | Kentaro Yamamoto | Kyoto University | Japan | Educational Organization | Chemical Science | 12 | BL27SU | Np |
| 32 | 2021B1034 | Electronic structure change analysis of sulfide solid electrolyte under humidity condition by using soft X-ray absorption spectroscopy (2) | Kentaro Yamamoto | Kyoto University | Japan | Educational Organization | Chemical Science | 12 | BL27SU | Np |
| 33 | 2021B1035 | Application of SRCT to visualization of solid-liquid-gas phase dynamics in electrolytic cells for the development of toluene electrolytic reduction technology | Sachiko Maki | Tohoku University | Japan | Educational Organization | Industrial Applications | 6 | BL20B2 | Np |
| 34 | 2021B1036 | operando study of PEFC catalyst | Tomoki Uchiyama | Kyoto University | Japan | Educational Organization | Chemical Science | 3 | BL01B1 | Np |
| 35 | 2021B1037 | Investigation of Pt-based alloy catalyst ink for polymer electrolyte fuel cells via total X-ray scattering(2) | Tomoki Uchiyama | Kyoto University | Japan | Educational Organization | Chemical Science | 6 | BL04B2 | Np |
| 36 | 2021B1038 | Operando XAS study on the oxygen reduction reaction activity of PEFC nanowire catalyst(2) | Tomoki Uchiyama | Kyoto University | Japan | Educational Organization | Chemical Science | 8.375 | BL37XU | Np |
| 37 | 2021B1039 | operando HERFD-XANES study of PEFC catalyst | Tomoki Uchiyama | Kyoto University | Japan | Educational Organization | Chemical Science | 9 | BL39XU | Np |
| 38 | 2021B1040 | X-ray Emission Spectroscopy study of the catalyst for water electrolysis(2) | Yoshiharu Uchimoto | Kyoto University | Japan | Educational Organization | Chemical Science | 9 | BL27SU | Np |
| 39 | 2021B1041 | operando HERFD-XANES study of catalyst for water electrolysis | Yoshiharu Uchimoto | Kyoto University | Japan | Educational Organization | Chemical Science | 9 | BL39XU | Np |
| 40 | 2021B1042 | operando study of water electrolysis catalyst (1) | Yoshiharu Uchimoto | Kyoto University | Japan | Educational Organization | Chemical Science | 2.875 | BL36XU | Np |

# 2021B, Performed Non-Proprietary Grant-Aided Proposals

1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 41 | 2021B1043 | Structural analysis of metal oxide supported platinum catalysts for polymer electrolyte fuel cells by operando X-ray absorption spectroscopy | Katsuyoshi Kakinuma | University of Yamanashi | Japan | Educational Organization | Industrial Applications | 9 | BL37XU | Np |
| 42 | 2021B1044 | In-situ analysis of the dilatancy phenomenon under high-speed vibration to solid and liquid composite. | Soichiro Okubo | Sumitomo Electric Industries, Ltd. | Japan | Industry | Industrial Applications | 12 | BL40XU | Np |
| 43 | 2021B1045 | Effect of phase morphology on deformation behavior of heterogeneous materials composed of soft and hard phases | Hiroki Adachi | University of Hyogo | Japan | Educational Organization | Industrial Applications | 3 | BL46XU | Np |
| 44 | 2021B1046 | Structure analysis of polymer electrolyte fuel cell catalyst by hard X-ray photoelectron spectroscopy | Hideto Imai | NISSAN ARC, LTD. | Japan | Industry | Industrial Applications | 12 | BL46XU | Np |
| 45 | 2021B1047 | Structure analysis of polymer electrolyte fuel cell catalyst by X-ray diffraction | Hideto Imai | NISSAN ARC, LTD. | Japan | Industry | Industrial Applications | 6 | BL19B2 | Np |
| 46 | 2021B1048 | Structure analysis of polymer electrolyte fuel cell catalyst by operando X-ray absorption spectroscopy. | Hideto Imai | NISSAN ARC, LTD. | Japan | Industry | Industrial Applications | 6 | BL14B2 | Np |
| 47 | 2021B1049 | In-situ diffraction experiments during deformation for controlling different deformation modes in metallic materials V | Nobuhiro Tsuji | Kyoto University | Japan | Educational Organization | Industrial Applications | 4 | BL46XU | Np |
| 48 | 2021B1050 | Fine structure analyses of high performance metal-supported catalyst for hydrocarbon activation | Yasushi Sekine | Waseda University | Japan | Educational Organization | Industrial Applications | 5.125 | BL14B2 | Np |
| 49 | 2021B1051 | HAXPES study of water electrolysis catalyst | Yoshiharu Uchimoto | Kyoto University | Japan | Educational Organization | Industrial Applications | 3 | BL46XU | Np |
| 50 | 2021B1052 | Operando XAS study on the oxygen reduction reaction activity of PEFC nanowire catalyst(2) | Tomoki Uchiyama | Kyoto University | Japan | Educational Organization | Chemical Science | 9 | BL39XU | Np |
| 51 | 2021B1847 | Fine structure analysis of bi-metallic supported catalyst for environmental catalysis | Yasushi Sekine | Waseda University | Japan | Educational Organization | Industrial Applications | 9 | BL14B2 | Np |
| 52 | 2021B1848 | Electronic states and structures analysis of metal nanoparticle catalysts by XAFS | Yuta Hashiguchi | Research Association of High-Throughput Design and Development for Advanced Functional Materials | Japan | Industry | Industrial Applications | 6 | BL14B2 | Np |
| 53 | 2021B1849 | Structure analysis of polymer electrolyte fuel cell catalyst by operando X-ray absorption spectroscopy | Hideto Imai | NISSAN ARC, LTD. | Japan | Industry | Industrial Applications | 6 | BL14B2 | Np |
| 54 | 2021B1850 | Structure analysis of polymer electrolyte fuel cell catalyst by X-ray diffraction | Hideto Imai | NISSAN ARC, LTD. | Japan | Industry | Industrial Applications | 6 | BL19B2 | Np |
| 55 | 2021B1851 | Structure analysis of polymer electrolyte fuel cell catalyst by hard X-ray photoelectron spectroscopy | Hideto Imai | NISSAN ARC, LTD. | Japan | Industry | Industrial Applications | 6 | BL46XU | Np |
| 56 | 2021B1852 | Investigation of the chemical structure on the surface of cesium lead halide perovskite nanocrystals passivated with a cationic gemini ligand | Norio Saito | Tokyo University of Science | Japan | Educational Organization | Industrial Applications | 1 | BL46XU | Np |
| 57 | 2021B1853 | Deformation Mechanism of Nano-Heterostructured Metallic Materials Composed of Soft Domains and Hard Domains 1 | Nobuhiro Tsuji | Kyoto University | Japan | Educational Organization | Industrial Applications | 4 | BL46XU | Np |
| 58 | 2021B1854 | Structure analysis of polymer electrolyte fuel cell catalyst by hard X-ray photoelectron spectroscopy | Hideto Imai | NISSAN ARC, LTD. | Japan | Industry | Industrial Applications | 3 | BL46XU | Np |
| 59 | 2021B1855 | Structure analysis of metal oxide oxygen reduction reaction catalysts by hard X-ray photoelectron spectroscopy | Hideto Imai | NISSAN ARC, LTD. | Japan | Industry | Industrial Applications | 3 | BL46XU | Np |
| 60 | 2021B1856 | Exploration on the local structure and the mechanism of the degradation process of non-noble-metal catalysts for the water-splitting reaction | Ryuhei Nakamura | RIKEN | Japan | National and Nonprofit Organization | Industrial Applications | 6 | BL14B2 | Np |

# 2021B, Performed Non-Proprietary Grant-Aided Proposals

1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 61 | 2021B1857 | In-situ USAXS analysis of the dilatancy phenomenon under high-speed shearing to solid and liquid composite. | Soichiro Okubo | Sumitomo Electric Industries, Ltd. | Japan | Industry | Industrial Applications | 6 | BL19B2 | Np |
| 62 | 2021B1858 | In-situ analysis on work hardening behavior of 3D additive manufactured Inconel 738 alloy with excellent strength and ductility and ultrafine eqiaxed grained martensite | Shiro Torizuka | University of Hyogo | Japan | Educational Organization | Industrial Applications | 3 | BL46XU | Np |
| 63 | 2021B1859 | In-situ XAFS analysis of oxide nanoparticles synthesized by the supercritical method | Maiko Nishibori | Tohoku University | Japan | Educational Organization | Industrial Applications | 2.875 | BL14B2 | Np |
| 64 | 2021B1911 | In-situ diffraction experiments during deformation for controlling different deformation modes in metallic materials VI | Nobuhiro Tsuji | Kyoto University | Japan | Educational Organization | Industrial Applications | 3 | BL46XU | Np |
| 65 | 2021B1913 | Structure analysis of polymer electrolyte fuel cell catalyst by X-ray absorption spectroscopy | Hideto Imai | NISSAN ARC, LTD. | Japan | Industry | Industrial Applications | 6 | BL14B2 | Np |
| 66 | 2021B1914 | Structure analysis of polymer electrolyte fuel cell catalyst by X-ray diffraction | Hideto Imai | NISSAN ARC, LTD. | Japan | Industry | Industrial Applications | 6 | BL19B2 | Np |
| 67 | 2021B1915 | Structure analysis of polymer electrolyte fuel cell catalyst by hard X-ray photoelectron spectroscopy | Hideto Imai | NISSAN ARC, LTD. | Japan | Industry | Industrial Applications | 6 | BL46XU | Np |
| 68 | 2021B1917 | Observation of material matrix and void structure of the cement substitution material using integrated X-ray high-resolution CT and XRD method | Takashi Hitomi | OBAYASHI CORPORATION | Japan | Industry | Industrial Applications | 6 | BL46XU | Np |
| 69 | 2021B1918 | Elucidation of the electron state and local fine structure of metal active site on supported various ultra-small metal cluster catalyst combined with organic and/or inorganic ligands. We want to elucidate the ligand and ensemble effect, and metal-support interaction before/after the reaction. | Kazuya Yamaguchi | The University of Tokyo | Japan | Educational Organization | Industrial Applications | 3 | BL14B2 | Np |
| 70 | 2021B1920 | Exploration on the local structure and the mechanism of the degradation process of non-noble-metal catalysts for the water-splitting reaction-2 | Ryuhei Nakamura | RIKEN | Japan | National and Nonprofit Organization | Industrial Applications | 6 | BL14B2 | Np |
| 71 | 2021B1921 | In-situ analysis on change in dislocation density during tensile deformation of heat trated 3D additive manufactured Hastelly X<br><br>and Inconel 718 Ni alloy | Shiro Torizuka | University of Hyogo | Japan | Educational Organization | Industrial Applications | 2 | BL19B2 | Np |

# 2021B, Performed Long-term Proposals

1Shift =8Hours

| S/N | Proposal Number | Performed Proposal Title | Project Leader | Affiliation | Country | Affiliation Category | Research Category | Shift | Beamline | Proprietary(P)/Non-proprietary(Np) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2021B0168 | Structure Elucidation and Functionalization of Self-Assembled Gigantic Hollow Complexes by Single-Crystal Synchrotron X-ray Study | Makoto Fujita | The University of Tokyo | Japan | Educational Organization | Chemical Science | 9 | BL26B1 | Np |
| 2 | 2021B0171 | Crystal structure analysis of membrane transporters | Chikashi Toyoshima | The University of Tokyo | Japan | Educational Organization | Life Science | 12 | BL41XU | Np |
| 3 | 2021B0172 | Initiation and growth mechanisms of small internal cracks of high strength materials in the very high cycle fatigue | Takashi Nakamura | Hokkaido University | Japan | Educational Organization | Materials Science and Engineering | 15 | BL20XU | Np |
| 4 | 2021B0174 | Development of micro-XRF-XAFS study for geo- and cosmo-chemical samples: extention to higher energy region and introduction of transition-edge sendor detector | Yoshio Takahashi | The University of Tokyo | Japan | Educational Organization | Earth and Planetary Science | 9 | BL01B1 | Np |
| 5 | 2021B0176 | Development of multi-beam 4D X-ray tomography with a ms-order temporal resolution and its applications | Wataru Yashiro | Tohoku University | Japan | Educational Organization | Life Science | 41.875 | BL28B2 | Np |
| 6 | 2021B0180 | Development of micro-XRF-XAFS study for geo- and cosmo-chemical samples: extention to higher energy region and introduction of transition-edge sendor detector | Yoshio Takahashi | The University of Tokyo | Japan | Educational Organization | Earth and Planetary Science | 9 | BL37XU | Np |
| 7 | 2021B0181 | Study of iron alloys under ultrahigh pressures and the core light element composition | Kei Hirose | Tokyo Institute of Technology | Japan | Educational Organization | Earth and Planetary Science | 41.875 | BL10XU | Np |
| 8 | 2021B0185 | Initial and detailed analysis of Hayabusa2 return samples using X-ray tomography | Megumi Matsumoto | Tohoku University | Japan | Educational Organization | Earth and Planetary Science | 14.875 | BL20XU | Np |
| 9 | 2021B0188 | Initial and detailed analysis of Hayabusa2 return samples using X-ray tomography | Megumi Matsumoto | Tohoku University | Japan | Educational Organization | Earth and Planetary Science | 21 | BL47XU | Np |