

## 最近 SPring-8 もしくは SACLA から発表された成果リスト

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利用推進部

SPring-8 もしくは SACLA において実施された研究課題等の成果が公表された場合は JASRI の成果登録データベースに登録していただくことになっており、その内容は以下の URL (SPring-8 論文データベース検索ページ) で検索できます。

[http://www.spring8.or.jp/ja/science/publication\\_database/](http://www.spring8.or.jp/ja/science/publication_database/)

このデータベースに登録された原著論文の内、2021 年 7 月～9 月に登録されたものを以下に紹介します。論文の情報 (主著者、巻、発行年、ページ、タイトル) に加え、データベースの登録番号 (研究成果番号) を掲載していますので、詳細は上記検索ページの検索結果画面でご覧いただくことができます。また実施された課題の情報 (課題番号、ビームライン、実験責任者名) も掲載しています。課題番号は最初の 4 文字が「year」、次の 1 文字が「term」、後ろの 4 文字が「proposal no.」となっていますので、この情報から以下の URL で公表している、各課題の英文利用報告書 (SPring-8 User Experiment Report) を探してご覧いただくことができます。

[http://www.spring8.or.jp/ja/news\\_publications/publications/user\\_exp\\_report/](http://www.spring8.or.jp/ja/news_publications/publications/user_exp_report/)

今後も利用者情報には発行月の 2 ヶ月前の月末締めで、前号掲載分以降に登録された論文情報を掲載していく予定です。なお、データベースは毎日更新されていますので、最新情報は SPring-8 論文データベース検索ページでご確認ください。なお、実験責任者の方には、成果が公表されましたら速やかに登録いただきますようお願いいたします。

SPring-8 研究成果登録データベースに 2021 年 7 月～9 月に登録された論文が掲載された主な雑誌と掲載論文数

掲載雑誌	登録論文数	掲載雑誌	登録論文数
Journal of the Physical Society of Japan	7	Angewandte Chemie International Edition	5
Chemical Science	6	Japanese Journal of Applied Physics	5
Inorganic Chemistry	6	The Journal of Biological Chemistry B	5
Journal of Molecular Biology	6	Journal of Materials Chemistry A	5
Physical Review B	6	The Journal of Physical Chemistry C	5
ACS Applied Materials & Interfaces	5	Journal of Synchrotron Radiation	5
ACS Catalysis	5		

他全 154 誌、計 270 報

(注意) グループ課題として設定されている課題群については、その論文がグループ課題の中の複数の課題の成果である場合でも、代表課題となっている課題番号のみ表示しています。グループ課題に複数のビームラインの課題が含まれる場合、代表課題が複数のビームラインで実施されたように表示されています。

課題の成果として登録された論文

Journal of the Physical Society of Japan

研究成果番号	主著者	雑誌情報	課題番号	ビームライン	実験責任者	タイトル
42069	Satoshi Tsutsui	90 (2021) 083701	2020A2024 2020A2078	BL09XU BL09XU	筒井 智嗣 筒井 智嗣	<sup>199</sup> Ir Synchrotron-Radiation-Based Mössbauer Spectroscopy for Ir Valence Disproportionation in $\text{CaSr}_3\text{O}_{12}$
42123	Kosuke Fujiwara	90 (2021) 084705	2017B3551 2018A1635 2018B1671 2019A1108 2019B1385	BL11XU BL09XU BL09XU BL09XU BL09XU	三井 隆也 藤原 孝将 藤原 孝将 三井 隆也 藤原 孝将	Quantum Interference of Totally Reflected Mössbauer $\gamma$ -Rays from a <sup>57</sup> Fe Monolayer Embedded in a Thin Film
42160	Taku Konishi	90 (2021) 094703	2017B1723 2012B1689	BL39XU BL39XU	小西 卓 上垣 伸	Depth-dependent Spin Polarizations Induced in Cu(001) and Cu(111) Layers of Co/Cu Multilayers Determined by Resonant X-ray Magnetic Scattering at the Cu K Absorption Edge
42181	Yosuke Goto	88 (2019) 024705	2015A0074	BL02B2	森吉 千佳子	Effect of Bi Substitution on Thermoelectric Properties of SbSe <sub>2</sub> -based Layered Compounds $\text{NdO}_{0.8}\text{F}_{0.2}\text{Sb}_{1-x}\text{Bi}_x\text{Se}_2$
42236	Kazuki Takaoka	90 (2021) 084703	2017B1172 2019A1304	BL02B2 BL01B1	高津 浩 高津 浩	Spin Frustration in Protonated Rutile Oxides
42305	Sofia Michaela Souliou	90 (2021) 111006	2019A1203 2019B1345	BL35XU BL35XU	Souliou Sofia Michaela Souliou Sofia Michaela	In-plane Isotropy of the Low Energy Phonon Anomalies in $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$
42430	Shinichi Nakamura	90 (2021) 104713	2019B3583 2020A3583	BL11XU BL11XU	中村 真一 中村 真一	Pure Nuclear Bragg Reflection due to Combined Magnetic and Quadrupole Interaction in $\text{Fe}_3\text{O}_4$

Chemical Science

42138	Yuto Suzuki	12 (2021) 9607-9618	2018B1244 2019A1161 2019B1134	BL40XU BL40XU BL40XU	久木 一朗 久木 一朗 久木 一朗	Construction of Isostructural Hydrogen-bonded Organic Frameworks: Limitations and Possibilities of Pore Expansion
42171	Yoshifumi Sasano	12 (2021) 9645-9657	2015A0114 2017A1322 2017B1443 2017B1504	BL40XU BL40XU BL40XU BL40XU	高谷 光 前田 大光 前田 大光 平田 剛輝	Ion-pairing $\pi$ -electronic Systems: Ordered Arrangement and Noncovalent Interactions of Negatively Charged Porphyrins
42187	Mirai Ohara	12 (2021) 12383-12390	2019B1282	BL02B2	久保田 圭	A Vanadium-based Oxide-phosphate-pyrophosphate Framework as a 4 V Electrode Material for K-ion Batteries
42315	Kentaro Kadota	10 (2019) 6193-6198	2018A1336	BL02B2	堀毛 悟史	Borohydride-containing Coordination Polymers: Synthesis, Air Stability and Dehydrogenation
42323	Akira Nagai	12 (2021) 11585-11592	2016A1080 2016B1125 2018A1104 2018A1208 2018B1091 2018B1092 2018B1674 2019A1110 2019A1670 2019A1741	BL40B2 BL40B2 BL02B1 BL40XU BL02B1 BL40XU BL02B1 BL40XU BL02B1 BL02B1	内田 欣吾 内田 欣吾 内田 欣吾 内田 欣吾 内田 欣吾 内田 欣吾 西村 涼 内田 欣吾 西村 涼 西村 涼	Molecular Crystalline Capsules that Release Their Contents by Light
42325	Hiroto Takeda	12 (2021) 11045-11055	2018B1481 2019A1302 2019A1350	BL02B1 BL02B1 BL02B1	小島 達弘 吉成 信人 小島 達弘	A Mesoporous Ionic Solid with 272 $\text{Au}_6\text{Ag}_3\text{Cu}^{II}_3$ Complex Cations in a Super Huge Crystal Lattice

Inorganic Chemistry-1

42107	Marcera Calpa	60 (2021) 6964-6970	2018B1246	BL02B2	後藤 陽介	Formation Mechanism of $\beta$ - $\text{Li}_3\text{PS}_4$ through Decomposition of Complexes
42110	Kazuki Nakanishi	60 (2021) 9970-9976	2019B1464 2019B1469 2019B1622	BL01B1 BL01B1 BL37XU	平山 純 山添 誠司 山添 誠司	Synthesis and Isolation of an Anionic Bis(dipyrido-annulated) N-Heterocyclic Carbene CCC-Pincer Iridium(III) Complex by Facile C-H Bond Activation
42148	Yuushi Shimoda	60 (2021) 7773-7784	2020A8015	BL3	足立 伸一	Determining Excited-State Structures and Photophysical Properties in Phenylphosphine Rhenium(I) Diimine Biscarbonyl Complexes Using Time-Resolved Infrared and X-ray Absorption Spectroscopies
42263	Vladimir A. Morozov	60 (2021) 9471-9483	2020A4501	BL15XU	Belik Alexei	$\text{KTb}(\text{MoO}_4)_2$ Green Phosphor with $\text{K}^+$ -Ion Conductivity: Derived from Different Synthesis Routes

### Inorganic Chemistry-2

研究成果番号	主著者	雑誌情報	課題番号	ビームライン	実験責任者	タイトル
42286	Masanao Ishijima	60 (2021) 9432-9441	2020A1900	BL14B2	石島 政直	Theoretical and Experimental Evaluation of the Reduction Potential of Straight-Chain Alcohols for the Designed Synthesis of Bimetallic Nanostructures
42326	Sireenart Surinwong	60 (2021) 12555-12564	2017A1282	BL02B2	吉成 信人	Highly Porous Ionic Solids Consisting of Au <sub>5</sub> Co <sup>III</sup> <sub>2</sub> Complex Anions and Aqua Metal Cations
			2018A1476	BL02B1	吉成 信人	
			2020A1213	BL02B1	吉成 信人	

### Physical Review B

42078	Kristoffer A. U. Holm	103 (2021) 224302	2014A0078	BL02B1	Iversen Bo	Anharmonicity and Correlated Dynamics of PbTe and PbS Studied by Single Crystal X-ray Scattering
42157	Shingo Yamamoto	104 (2021) 064405	2019A1534	BL25SU	山本 真吾	High-field Soft-X-ray Dichroism of a Hard Ferrimagnet with Easy-plane Anisotropy
			2019A2065	BL25SU	小谷 佳範	
42180	Ryo Matsumoto	100 (2019) 094528	2015A0074	BL02B2	森吉 千佳子	Pressure-induced Superconductivity in the Layered Prictogen Diselenide NdO <sub>0.8</sub> F <sub>0.2</sub> Sb <sub>1-x</sub> Bi <sub>x</sub> Se <sub>2</sub> (x = 0.3 and 0.7)
			2018B1246	BL02B2	後藤 陽介	
42244	Masanori Inui	104 (2021) 064202	2018B1221	BL35XU	乾 雅祝	Longitudinal Acoustic and Higher-energy Excitations in the Liquid Phase-change Material Ge <sub>2</sub> Sb <sub>2</sub> Te <sub>5</sub>
			2019A1195	BL35XU	乾 雅祝	
			2013B1269	BL35XU	乾 雅祝	
42371	Josef Ketels	104 (2021) 075160	2016B1685	BL08W	Schmidbauer Josef	Momentum Density Spectroscopy of Pd: Comparison of 2D-ACAR and Compton Scattering using a 1D-to-2D Reconstruction Method
42378	Tatsuhiko Kanda	104 (2021) 115121	2019B1248	BL47XU	組頭 広志	Electronic Structure of SrTi <sub>1-x</sub> V <sub>x</sub> O <sub>3</sub> Films Studied by <i>in situ</i> Photoemission Spectroscopy: Screening for a Transparent Electrode Material

### ACS Applied Materials & Interfaces

42088	Sou Yasuhara	13 (2021) 34027-34032	2018B4906	BL15XU	安井 伸太郎	Suppression Mechanisms of the Solid-Electrolyte Interface Formation at the Triple-Phase Interfaces in Thin-Film Li-Ion Batteries
			2019A4900	BL15XU	安井 伸太郎	
			2017B4901	BL15XU	安井 伸太郎	
42108	F. A. Vásquez	13 (2021) 14056-14067	2019A1101	BL02B2	後藤 陽介	Kinetic Control of the Li <sub>0.9</sub> Mn <sub>1.6</sub> Ni <sub>0.4</sub> O <sub>4</sub> Spinel Structure with Enhanced Electrochemical Performance
42270	Takeshi Shimizu	13 (2021) 40612-40617	2019B3634	BL14B1	吉川 浩史	Application of μ-Nitrido- and μ-Carbido-Bridged Iron Phthalocyanine Dimers as Cathode-Active Materials for Rechargeable Batteries
			2020A1243	BL01B1	吉川 浩史	
			2020A3634	BL14B1	吉川 浩史	
42376	Kazuhiko Mukai	13 (2021) 42791-42802	2020A7037	BL33XU	宇山 健	Thermal Behavior of Li <sub>1-x</sub> [Li <sub>1/3</sub> Ti <sub>5/3</sub> ]O <sub>4</sub> and a Proof of Concept for Sustainable Batteries
42445	Shu-Jui Chang	13 (2021) 29212-29221	2018A4264	BL12XU	Tseng Yuan-Chieh	Visualizing Ferroelectric Uniformity of Hf <sub>1-x</sub> Zr <sub>x</sub> O <sub>2</sub> Films Using X-ray Mapping

### ACS Catalysis

42122	Hikaru Abe	11 (2021) 6390-6397	2020A1360	BL01B1	吉田 真明	Selective Catalyst for Oxygen Evolution in Neutral Brine Electrolysis: An Oxygen-Deficient Manganese Oxide Film
42199	Fuma Ando	11 (2021) 9317-9332	2018B1682	BL47XU	安藤 風馬	Enhancement of the Oxygen Reduction Reaction Activity of Pt by Tuning Its α-Band Center via Transition Metal Oxide Support Interactions
42281	Hiroshi Yoshida	11 (2021) 7302-7309	2020A1834	BL14B2	芳田 嘉志	Enhanced Catalytic NO Reduction in NO-CO-C <sub>3</sub> H <sub>6</sub> -O <sub>2</sub> Reaction Using Pseudo-Spinel (NiCu)Al <sub>2</sub> O <sub>4</sub> Supported on γ-Al <sub>2</sub> O <sub>3</sub>
42370	Shotaro Matsuda	11 (2021) 10502-10507	2020A0672	BL01B1	増田 晋也	Synergistic Effect in Ir- or Pt-Doped Ru Nanoparticles: Catalytic Hydrogenation of Carbonyl Compounds under Ambient Temperature and H <sub>2</sub> Pressure
			2021A1200	BL01B1	増田 晋也	
42425	Hiroe Kubota	11 (2021) 11180-11192	2021A1615	BL14B2	安村 駿作	Analogous Mechanistic Features of NH <sub>3</sub> -SCR over Vanadium Oxide and Copper Zeolite Catalysts

### Angewandte Chemie International Edition-1

42154	Hitoshi Nakamichi	45 (2006) 4270-4273	2005B0580	BL41XU	岡田 哲二	Crystallographic Analysis of Primary Visual Photochemistry
42170	Cheng Liu	60 (2021) 20489-20497	2020A1767	BL46XU	柴山 直之	Dopant-Free Hole Transport Materials Afford Efficient and Stable Inorganic Perovskite Solar Cells and Modules
			2019B1807	BL19B2	中村 唯我	
			2021A1689	BL46XU	柴山 直之	
42243	Longshuai Zhang	60 (2021) 21751-21755	2018A3631	BL14B1	崔 藝涛	Carbon Nitride Supported High-Loading Fe Single-Atom Catalyst for Activation of Peroxymonosulfate to Generate <sup>1</sup> O <sub>2</sub> with 100% Selectivity
			2016A3618	BL14B1	崔 藝涛	

Angewandte Chemie International Edition-2

研究成果番号	主著者	雑誌情報	課題番号	ビームライン	実験責任者	タイトル
42276	Yuko Mitsuka	60 (2021) 22283-22288	2018B1728	BL14B2	荻原 直希	Fabrication of Integrated Copper-Based Nanoparticles/Amorphous Metal–Organic Framework by a Facile Spray-Drying Method: Highly Enhanced CO <sub>2</sub> Hydrogenation Activity for Methanol Synthesis
			2018B1501	BL02B2	小林 浩和	
			2019A1232	BL02B2	小林 浩和	
			2019B1468	BL02B2	小林 浩和	
42414	Tokuhiwa Kawawaki	60 (2021) 21340-21350	2020A0695	BL01B1	川脇 徳久	Creation of High-Performance Heterogeneous Photocatalysts by Controlling Ligand Desorption and Particle Size of Gold Nanocluster
			2020A0715	BL01B1	山添 誠司	
			2018B1422	BL01B1	山添 誠司	
			2020A1410	BL01B1	平山 純	

Japanese Journal of Applied Physics

42082	Kenji Ohwada	60 (2021) SFFA05	2016A3763	BL22XU	大和田 謙二	Observation of 90° Domain Walls in Relaxor Ferroelectrics PMN-28.6%PT by Focusing upon the CTR Scattering
			2015A3713	BL22XU	大和田 謙二	
			2015B3713	BL22XU	大和田 謙二	
			2017A3761	BL22XU	大和田 謙二	
			2017B3761	BL22XU	大和田 謙二	
			2018A3761	BL22XU	大和田 謙二	
			2018B3761	BL22XU	大和田 謙二	
42152	Sangwook Kim	60 (2021) SFFD01	2018B1267	BL02B2	Kim Sangwook	Material Softening by Cation Off-centering in Bi-based Lead-free Piezoelectric Ceramics
			2017A1466	BL02B2	和田 智志	
			2017A1660	BL02B2	Kim Sangwook	
42169	Norihiro Oshime	60 (2021) SFFA07	2017B3761	BL22XU	大和田 謙二	Bragg Coherent Diffraction Imaging Allowing Simultaneous Retrieval of Three-dimensional Shape and Strain Distribution for 40–500 nm Particles
			2018A3761	BL22XU	大和田 謙二	
			2018B3761	BL22XU	大和田 謙二	
			2019A3761	BL22XU	大和田 謙二	
			2020A3761	BL22XU	大和田 謙二	
42246	Shinichi Honda	60 (2021) 095002	2016A1799	BL04B1	肥後 祐司	In situ Observation of Transformation of Neutron-irradiated Highly Oriented Pyrolytic Graphite (HOPG) by X-ray Diffraction under High-pressure and High-temperature Treatment
			2018A2016	BL04B1	肥後 祐司	
			2015A2004	BL04B1	肥後 祐司	
			2016B1949	BL04B1	肥後 祐司	
			2017A1851	BL04B1	肥後 祐司	
			2017A1864	BL04B1	肥後 祐司	
42331	Junichi Takino	60 (2021) 095501	2018A3202	BL24XU	津坂 佳幸	Floral Design GaN Crystals: Low-resistive and Low-dislocation-density Growth by Oxide Vapor Phase Epitaxy
			2018B3202	BL24XU	津坂 佳幸	

Journal of Materials Chemistry A

42083	Kei Kubota	9 (2021) 12830-12844	2015B1532	BL02B2	駒場 慎一	Impact of Mg and Ti Doping in O3 Type NaNi <sub>1/2</sub> Mn <sub>1/2</sub> O <sub>2</sub> on Reversibility and Phase Transition during Electrochemical Na Intercalation
			2017B1312	BL02B2	駒場 慎一	
			2018A1630	BL02B2	駒場 慎一	
			2018B1776	BL19B2	駒場 慎一	
42089	Hao Ge	9 (2021) 13898-13907	2020A1064	BL01B1	桑原 泰隆	Plasmon-induced Catalytic CO <sub>2</sub> Hydrogenation by a Nano-sheet Pt/H <sub>2</sub> MoO <sub>3-y</sub> Hybrid with Abundant Surface Oxygen Vacancies
			2018B1185	BL01B1	桑原 泰隆	
42179	Yosuke Goto	9 (2021) 7034-7041	2019A1101	BL02B2	後藤 陽介	The Crystal Structure and Electrical/Thermal Transport Properties of Li <sub>1-x</sub> Sn <sub>2x</sub> P <sub>2</sub> and its Performance as a Li-ion Battery Anode Material
42389	Tasuku Uchimura	9 (2021) 20371-20374	2020A1659	BL02B2	岡本 啓	Direct Synthesis of Barium Titanium Oxyhydride for Use as a Hydrogen Permeable Electrode
			2019A1084	BL02B2	竹入 史隆	
42399	Takahisa Omata	9 (2021) 20595-20606	2019A2058	BL04B2	尾原 幸治	Investigating the Role of GeO <sub>2</sub> in Enhancing the Thermal Stability and Proton Mobility of Proton-conducting Phosphate Glasses
			2019B2091	BL04B2	尾原 幸治	

The Journal of Physical Chemistry C-1

42067	Kenichi Ozawa	125 (2021) 13963-13970	2018B7589	BL07LSU	小澤 健一	Influence of Stacking Order of Phthalocyanine and Fullerene Layers on the Photoexcited Carrier Dynamics in Model Organic Solar Cell
			2016A7503	BL07LSU	小澤 健一	
			2017A7533	BL07LSU	小澤 健一	
			2017B7542	BL07LSU	小澤 健一	
42118	Takeo Ohsawa	125 (2021) 14836-14842	2018A4602	BL15XU	大澤 健男	Investigation of Temperature-Dependent Hard X-ray Photoemission Spectra on Au/Nb:SrTiO <sub>3</sub> Schottky Junctions
			2018B4603	BL15XU	大澤 健男	
			2017A4607	BL15XU	大澤 健男	
			2017B4603	BL15XU	大澤 健男	
			2016A4603	BL15XU	大澤 健男	
2016B4603	BL15XU	大澤 健男				

The Journal of Physical Chemistry C-2

研究成果番号	主著者	雑誌情報	課題番号	ビームライン	実験責任者	タイトル
42234	Fumito Fujishiro	125 (2021) 13283-13290	2018A1174	BL01B1	大石 昌嗣	Effects of the Crystal Host Structure on the Oxygen Desorption Behavior in Perovskite-Type $AeFe_{0.9}In_{0.1}O_{3-\delta}$ ( $Ae = Sr$ and $Ba$ )
			2018B1446	BL01B1	大石 昌嗣	
42282	Yukiko Hosono	125 (2021) 11411-11418	2020A1020	BL14B2	関根 泰	Co-CeO <sub>2</sub> Interaction Induces the Mars-van Krevelen Mechanism in Dehydrogenation of Ethane
			2019B1723	BL14B2	渡辺 剛	
			2018A1801	BL14B2	君島 堅一	
			2017B1920	BL14B2	渡辺 剛	
42434	Akhil Tayal	125 (2021) 20583-20591	2018B1018	BL28B2	坂田 修身	Investigation of Local Structure and Enhanced Thermal Stability of Ir-Doped PdRu Nanoparticles for Three-Way Catalytic Applications
			2018B1143	BL01B1	坂田 修身	
			2019A1002	BL28B2	坂田 修身	
			2019B1271	BL01B1	坂田 修身	
			2019B1278	BL28B2	坂田 修身	
			2020A1141	BL01B1	坂田 修身	
2020A1142	BL28B2	坂田 修身				

Journal of Synchrotron Radiation

42074	Noritake Isomura	28 (2021) 1114-1118	2019A5070	BL16XU	小坂 悟	Local Atomic Structure Analysis around Mg Atom Doped in GaN by X-ray Absorption Spectroscopy and Spectrum Simulations
42196	Talgat Mamyrbayev	28 (2021) 732-740	2019B1766	BL20B2	Mamyrbayev Talgat	Staircase Array of Inclined Refractive Multi-lenses for Large Field of View Pixel Super-resolution Scanning Transmission Hard X-ray Microscopy
42267	Takayuki Muro	28 (2021) 1631-1638	2014B1498	BL25SU	Kozina Xeniya	Soft X-ray ARPES for Three-dimensional Crystals in the Micrometre Region
			2015B2002	BL25SU	室 隆桂之	
			2016A1844	BL25SU	室 隆桂之	
			2017B1258	BL25SU	室 隆桂之	
			2017B1982	BL25SU	室 隆桂之	
			2018A1283	BL25SU	室 隆桂之	
			2018A2064	BL25SU	室 隆桂之	
			2018B2103	BL25SU	室 隆桂之	
			2019A1323	BL25SU	室 隆桂之	
			2019A2067	BL25SU	室 隆桂之	
42268	Takayuki Muro	28 (2021) 1669-1671	2019A1323	BL25SU	室 隆桂之	Spherical Micro-hole Grid for High-resolution Retarding Field Analyzer
			2019A2067	BL25SU	室 隆桂之	
			2019B2028	BL25SU	室 隆桂之	
			2020A2048	BL25SU	室 隆桂之	
42298	Masaki Abe	28 (2021) 1610-1615	2018A1307	BL27SU	岸本 浩通	Development and Application of a Tender X-ray Ptychographic Coherent Diffraction Imaging System on BL27SU at SPring-8
			2018B1303	BL27SU	岸本 浩通	
			2019A0164	BL27SU	高橋 幸生	
			2020A0629	BL27SU	高橋 幸生	

Chemical Communications

42255	Kento Shimamoto	57 (2021) 7649-7652	2018B1375	BL02B1	砂田 祐輔	Nuclearity Expansion in Pd Clusters Triggered by the Migration of a Phenyl Group in Cyclooligosilanes
42283	Yudai Hisai	57 (2021) 5737-5749	2020A1716	BL14B2	関根 泰	Enhanced Activity of Catalysts on Substrates with Surface Protonic Current in an Electrical Field – a Review
			2020A1853	BL14B2	関根 泰	
42314	Kentaro Kadota	55 (2019) 9283-9286	2018A1336	BL02B2	堀毛 悟史	Synthesis of Porous Coordination Polymers using Carbon Dioxide as a Direct Source
42407	Kazuhiko Mukai	57 (2021) 9752-9755	2020A7037	BL33XU	宇山 健	Development of an <i>in situ</i> High-temperature X-ray Diffraction Technique for Lithium-ion Battery Materials

Crystal Growth & Design-1

42070	Hayato Sumi	21 (2021) 4506-4515	2018A1520	BL40B2	田川 美穂	Two-step Nanoparticle Crystallization via DNA-guided Self-assembly and Nonequilibrium Dehydration Process
			2017A1545	BL40B2	田川 美穂	
			2017B1560	BL40B2	田川 美穂	
			2019B1586	BL40B2	田川 美穂	
42238	Hiroshi Takatsu	21 (2021) 3779-3785	2019A1304	BL01B1	高津 浩	Strain-Assisted Topochemical Synthesis of La-Doped SrVO <sub>3</sub> H Films
			2019B1084	BL01B1	高津 浩	
42256	Ryo Wakabayashi	21 (2021) 2844-2849	2018B4700	BL15XU	吉松 公平	Epitaxial Stabilization of Complete Solid-solution $\beta$ -(Al <sub>x</sub> Ga <sub>1-x</sub> ) <sub>2</sub> O <sub>3</sub> (100) Films by Pulsed-laser Deposition
			2017B4700	BL15XU	吉松 公平	

### Crystal Growth & Design-2

研究成果番号	主著者	雑誌情報	課題番号	ビームライン	実験責任者	タイトル
42322	Kazutaka Tomita	21 (2021) 5116-5125	2018B1595	BL46XU	尾坂 格	Substrate-Independent Control of Polymorphs in Tetraphenylporphyrin Thin Films by Varying the Solvent Evaporation Time Using a Simple Spin-Coating Technique

### Nature Communications

42285	Taisuke Matsuno	12 (2021) 5062	2018B1053	BL38B1	松野 太輔	A Hybrid Molecular Peapod of sp <sup>2</sup> - and sp <sup>3</sup> -nanocarbons Enabling Ultrafast Terahertz Rotations
42368	Takao Arimori	12 (2021) 4012	2017B6500	BL44XU	山下 栄樹	Structural Mechanism of Laminin Recognition by Integrin
42401	Motoi Kimata	12 (2021) 5582	2018A1525	BL25SU	木俣 基	X-ray Study of Ferroic Octupole Order Producing Anomalous Hall Effect
			2018B1533	BL25SU	野尻 浩之	
			2019A1589	BL25SU	木俣 基	
42429	Xubin Ye	12 (2021) 1917	2018A1667	BL09XU	西久保 匠	Observation of Novel Charge Ordering and Spin Reorientation in Perovskite Oxide PbFeO <sub>3</sub>
			2019B1896	BL19B2	東 正樹	
			2018A1636	BL02B2	西久保 匠	

### Proceedings of SPIE

42175	Kurumi Saitou	11600 (2021) 116001U	2020A1668	BL20B2	齊藤 くるみ	Alveolar Sac Analysis of 3D Human Lung Microstructure using Synchrotron Radiation Micro-CT
			2020A1127	BL20B2	仁木 登	
42307	Yoshitomo Maeda	11444 (2020) 114442X	2020A0746	BL20B2	前田 良知	XL-Calibur: the Next-Generation Balloon-borne Hard X-ray Polarimeter
			2020A1298	BL20B2	前田 良知	
			2019B1221	BL20B2	前田 良知	
42308	Kengo Hattori	11444 (2020) 114445W	2020A0746	BL20B2	前田 良知	Current Status of the X-ray Mirror for the XL-Calibur Experiment
			2019B1221	BL20B2	前田 良知	
			2020A1298	BL20B2	前田 良知	
42365	Takenori Shimamura	11492 (2020) 114920P	2019B1628	BL25SU	三村 秀和	Design of Ultrashort Kirkpatrick-Baez Mirror for Soft X-ray Nanofocusing

### Scientific Reports

42111	Yuya Higashi	11 (2021) 14192	2019A3658	BL14B1	安田 良	Iodine Containing Porous Organosilica Nanoparticles Trigger Tumor Spheroids Destruction upon Monochromatic X-ray Irradiation: DNA Breaks and K-edge Energy X-ray
			2019B3658	BL14B1	安田 良	
			2020A3658	BL14B1	安田 良	
			2020A3660	BL14B1	安田 良	
			2021A3660	BL14B1	城 鮎美	
42143	Rino Saiga	11 (2021) 11768	2011A0034	BL20XU	水谷 隆太	Brain Capillary Structures of Schizophrenia Cases and Controls Show a Correlation with Their Neuron Structures
			2015A1160	BL20XU	水谷 隆太	
			2015B1101	BL20XU	水谷 隆太	
			2016B1041	BL20XU	水谷 隆太	
			2018A1164	BL20XU	水谷 隆太	
42386	Hidenori Fujiwara	11 (2021) 18654	2016A3832	BL23SU	藤原 秀紀	Detecting Halfmetallic Electronic Structures of Spintronic Materials in a Magnetic Field
			2017A7530	BL07LSU	藤原 秀紀	
			2017B7552	BL07LSU	梅津 理恵	
			2018B7581	BL07LSU	藤原 秀紀	
			2019A7599	BL07LSU	梅津 理恵	
			2020A7475	BL07LSU	梅津 理恵	
			2021A7497	BL07LSU	梅津 理恵	
42393	Peter Winkel Rasmussen	11 (2021) 12501	2016A1459	BL47XU	Sorensen Henning	Improved Dynamic Imaging of Multiphase Flow by Constrained Tomographic Reconstruction

### Applied Surface Science

42202	Makoto Takayanagi	568 (2021) 150898	2020A4605	BL15XU	土屋 敬志	In situ Hard X-ray Photoelectron Spectroscopy on the Origin of Irreversibility in Electrochromic Li <sub>x</sub> WO <sub>3</sub> Thin Films
			2019B4605	BL15XU	土屋 敬志	
			2018A4604	BL15XU	土屋 敬志	
42379	Ke-Hsuan Wang	568 (2021) 150914	2019A1386	BL01B1	吉田 真明	Insights into the Deposition of Nanostructured Nickel Oxides by Amino Acid Chelated Complexes: Benefits of Mixed Side Chains in the Formation of Nanostructures for Energy-Efficient Electrochromic Windows
			2020A1360	BL01B1	吉田 真明	
42441	Tsai-Te Wang	511 (2020) 145548	2018A4137	BL12B2	Lin Yan-Gu	KSCN-activation of Hydrogenated NiO/TiO <sub>2</sub> for Enhanced Photocatalytic Hydrogen Evolution

Chemistry - A European Journal

研究成果番号	主著者	雑誌情報	課題番号	ビームライン	実験責任者	タイトル
42166	Masaki Takahashi	27 (2021) 14081-14091	2020A1627	BL19B2	中山 泰生	Influence of <i>N</i> -Substituents on Photovoltaic Properties of Singly Bay-Linked Dimeric Perylene Diimides
42173	Atsuko Kuno	27 (2021) 10068-10076	2015A0114	BL40XU	高谷 光	Dipyrrolyldiketone P <sup>II</sup> Complexes: Ion-Pairing π-Electronic Systems with Various Anion-Binding Modes
			2019A1475	BL40XU	前田 大光	
			2019A1508	BL02B1	羽毛田 洋平	
42329	Ko Urushibara	27 (2021) 11205-11215	2018B1425	BL38B1	片桐 幸輔	Accessing Improbable Foldamer Shapes with Strained Macrocycles

Journal of Alloys and Compounds

42351	Yongpeng Tang	889 (2022) 161815	2019A1312	BL04B1	増田 高大	Phase Transformations in Al-Ti-Mg Powders Consolidated by High-pressure Torsion: Experiments and First-principles Calculations
			2020A1755	BL04B1	堀田 善治	
42357	Riki Kataoka	890 (2022) 161763	2019B3782	BL22XU	片岡 理樹	Sodium Insertion and De-insertion Mechanism of Spinel-type Sodium Titanium Oxide Studied by <i>in situ</i> XRD
			2018B2087	BL19B2	橘田 晃宜	
42358	Rie Umetsu	890 (2022) 161590	2015B1345	BL25SU	梅津 理恵	Soft X-ray Absorption Spectroscopy and Magnetic Circular Dichroism under Pulsed High Magnetic Field of Ni-Co-Mn-In Metamagnetic Shape Memory Alloy

Journal of Catalysis

42109	Mizuki Ishimaru	397 (2021) 192-200	2020A1410	BL01B1	平山 純	Methane Coupling and Hydrogen Evolution Induced by Palladium-loaded Gallium Oxide Photocatalysts in the Presence of Water Vapor
42168	Yuan Jing	400 (2021) 387-396	2020A1695	BL14B2	井 元	Roles of the Basic Metals La, Ba, and Sr as Additives in Al <sub>2</sub> O <sub>3</sub> -Supported Pd-based Three-way Catalysts
			2019B1686	BL14B2	鳥屋尾 隆	
42390	Naonari Sakamoto	404 (2021) 12-17	2019B7038	BL33XU	坂本 直柔	Electrochemical CO <sub>2</sub> Reduction Improved by Tuning the Cu-Cu Distance in Halogen-Bridged Dinuclear Cuprous Coordination Polymers
			2020A7038	BL33XU	坂本 直柔	
			2020A5071	BL16XU	高橋 直子	

Journal of Physics: Condensed Matter

42141	Yoshiya Yamamoto	33 (2021) 255603	2014B4131	BL12B2	水木 純一郎	Electronic and Crystal Structures of LnFeAsO <sub>1-x</sub> H <sub>x</sub> (Ln = La, Sm) Studied by X-ray Absorption Spectroscopy, X-ray Emission Spectroscopy, and X-ray Diffraction: II Pressure Dependence
			2014B4256	BL12XU	水木 純一郎	
			2014B4268	BL12XU	水木 純一郎	
			2016A4137	BL12B2	山浦 淳一	
			2017A4255	BL12XU	山浦 淳一	
42142	Yoshiya Yamamoto	33 (2021) 255602	2013A3502	BL11XU	石井 賢司	Electronic and Crystal Structures of LnFeAsO <sub>1-x</sub> H <sub>x</sub> (Ln = La, Sm) Studied by X-ray Absorption Spectroscopy, X-ray Emission Spectroscopy, and X-ray Diffraction (Part I: Carrier-doping Dependence)
			2014B4131	BL11XU	水木 純一郎	
			2014B4256	BL12XU	水木 純一郎	
			2016A4137	BL12B2	山浦 淳一	
			2017A4255	BL12XU	山浦 淳一	
42156	Katariina Pussi	33 (2021) 395801	2020A1238	BL04B2	Kamali-Moghaddam Saeed	Atomic Arrangements in an Amorphous CoFeB Ribbon Extracted via an Analysis of Radial Distribution Functions

Langmuir

42297	Tomohiko Okada	37 (2021) 10469-10480	2019A1172	BL02B2	岡田 友彦	Important Roles of Water Clusters Confined in a Nanospace as Revealed by a Synchrotron X-ray Diffraction Study
			2015A0074	BL02B2	森吉 千佳子	
			2019A0068	BL02B2	森吉 千佳子	
			2018A1416	BL02B2	藤村 卓也	
			2017B1196	BL02B2	藤村 卓也	
			2017A1483	BL02B2	藤村 卓也	
42328	Kentaro Yamamoto	36 (2020) 9960-9966	2017B7274	BL03XU	小池 淳一郎	Surface Segregation of a Star-Shaped Polyhedral Oligomeric Silsesquioxane in a Polymer Matrix
42436	Takayuki Imoto	37 (2021) 8971-8977	2019A1790	BL19B2	大野 正司	Self-Assembled Palmitoyl-Glycine-Histidine as a Permeation Enhancer for Transdermal Delivery

### Polymer Journal

研究成果番号	主著者	雑誌情報	課題番号	ビームライン	実験責任者	タイトル
42068	Kazuhiro Shikinaka	53 (2021) 841-845	2018A1185	BL40B2	敷中 一洋	Polymer Heat-proofing using Defibered Plants Obtained by Wet-type Bead Milling of Japanese Cedar
42294	Mari Otsubo	(2021) Online published 26 Aug. 2021	2018A1123	BL45XU	寺尾 憲	Kinetics of the Complex Formation of Silica Nanoparticles with Collagen
42296	Yoshifumi Amamoto	(2021) Online published 28 Jul. 2021	2020A1525	BL40XU	高原 淳	Visualization of Judgment Regions in Convolutional Neural Networks for X-ray Diffraction and Scattering Images of Aliphatic Polyesters
			2019B1667	BL40B2	高原 淳	

### Proceedings of the National Academy of Sciences of the United States of America

42124	Simon Miller	118 (2021) e2026191118	2017A6743	BL44XU	廣田 毅	Structural Differences in the FAD-binding Pockets and Lid Loops of Mammalian CRY1 and CRY2 for Isoform-selective Regulation
			2017B6743	BL44XU	廣田 毅	
			2018B1011	BL41XU	山本 雅貴	
			2018B6843	BL44XU	廣田 毅	
			2019A6942	BL44XU	廣田 毅	
42155	Hitoshi Nakamichi	103 (2006) 12729-12734	2005B0580	BL41XU	岡田 哲二	Local Peptide Movement in the Photoreaction Intermediate of Rhodopsin
42300	Ziva Vuckovic Mueller	116 (2019) 26001-26007	2017B2731	BL32XU	Thal David	Crystal Structure of the M <sub>5</sub> Muscarinic Acetylcholine Receptor

### ACS Applied Energy Materials

42178	Keisuke Shinozaki	4 (2021) 5155-5164	2020A1096	BL02B2	三浦 章	Thermoelectric Properties of the As/P-Based Zintl Compounds Euln <sub>2</sub> As <sub>2-x</sub> P <sub>x</sub> (x = 0–2) and SrSn <sub>2</sub> As <sub>2</sub>
42423	Yadan Ren	(2021) Online published Sep. 26, 2021	2019A1820	BL14B2	内山 智貴	Quantitative Evaluation of the Activity of Low-Spin Tetravalent Nickel Ion Sites for the Oxygen Evolution Reaction
			2019B1855	BL14B2	内山 智貴	
			2019B1899	BL14B2	内山 智貴	
			2018A1749	BL14B2	内山 智貴	
			2018A1750	BL19B2	内山 智貴	
			2018B1616	BL19B2	内山 智貴	
2019A1763	BL14B2	内山 智貴				

### ACS Omega

42242	Yuuki Kawamura	6 (2021) 7387-7393	2019B7270	BL03XU	岩田 忠久	Mechanism of Elastic Properties of Biodegradable Poly[( <i>F</i> )-3-Hydroxybutyrate-co-4-hydroxybutyrate] Films Revealed by Synchrotron Radiation
			2019A7234	BL03XU	岩田 忠久	
			2019A1213	BL40B2	岩田 忠久	
			2019B1018	BL20B2	大嶋 義博	
42373	Xiao Gao	6 (2021) 14130-14137	理研	BL45XU		Impact of the Composition of Alcohol/Water Dispersion on the Proton Transport and Morphology of Cast Perfluorinated Sulfonic Acid Ionomer Thin Films
			2018A1020	BL40B2	今井 英人	
			2018B1034	BL40B2	内本 喜晴	
			2019A1025	BL40B2	内本 喜晴	
			2019B1023	BL27SU	内本 喜晴	
2019B1024	BL40B2	内本 喜晴				

### Advanced Science

42106	Hiroaki Ito	8 (2021) 2101413	2019B1195	BL02B2	後藤 陽介	Kinetically Stabilized Cation Arrangement in Li <sub>3</sub> YCl <sub>6</sub> Superionic Conductor during Solid-State Reaction
			2020A1096	BL02B2	三浦 章	
42158	Minami Oka	8 (2021) 2101143	2018A1746	BL19B2	本多 智	Photocleavable Regenerative Network Materials with Exceptional and Repeatable Viscoelastic Manipulability

### Applied Catalysis B

42135	Hongqiang Xin	297 (2021) 120457	2018B1728	BL14B2	荻原 直希	Recording the Pt-beyond Hydrogen Production Electrocatalysis by Dirhodium Phosphide with an Overpotential of only 4.3 mV in Alkaline Electrolyte
42198	Lujie Liu	292 (2021) 120164	2020A1744	BL14B2	Li Congcong	Structure and Performance Relationship of Silica-Supported Platinum-Tungsten Catalysts in Selective C-O Hydrogenolysis of Glycerol and 1,4-anhydroerythritol



### Applied Physics Express

研究成果番号	主著者	雑誌情報	課題番号	ビームライン	実験責任者	タイトル
42324	Haruna Shiomi	14 (2021) 095502	2017B1024	BL13XU	酒井 朗	Analysis of Inverse-Piezoelectric-Effect-Induced Lattice Deformation in AlGaIn/GaN High-Electron-Mobility Transistors by Time-Resolved Synchrotron Radiation Nanobeam X-ray Diffraction
			2018A1412	BL13XU	酒井 朗	
			2018B1013	BL13XU	酒井 朗	
			2018B1495	BL13XU	藤平 哲也	
			2019A1549	BL13XU	藤平 哲也	
			2019B1009	BL13XU	酒井 朗	
			2019B1627	BL13XU	藤平 哲也	
			2019B2101	BL13XU	今井 康彦	
			2020A1136	BL13XU	酒井 朗	
2020A1402	BL13XU	藤平 哲也				
2021A1207	BL13XU	酒井 朗				
42369	Ryoichi Mizutani	14 (2021) 105501	2021A1160	BL13XU	白石 貴久	Thickness Scaling of (Al <sub>0.8</sub> Sc <sub>0.2</sub> )N Films with Remanent Polarization beyond 100 μC cm <sup>-2</sup> around 10 nm in Thickness

### Applied Physics Letters

42312	Tasuku Yoshida	119 (2021) 092904	2014B1516	BL01B1	狩野 旬	High Valence States of Pd Supported on Ferroelectric BaTiO <sub>3</sub> Driven by Electric Polarization
			2015A1373	BL27SU	狩野 旬	
			2015A1567	BL01B1	狩野 旬	
42428	V. Thiruvengadam	115 (2019) 202402	2016A1429	BL39XU	水口 将輝	Magnetization Reversal, Damping Properties and Magnetic Anisotropy of L1 <sub>0</sub> -ordered FeNi Thin Films
			2016B1359	BL39XU	水口 将輝	
			2017A1462	BL39XU	水口 将輝	
			2018A1522	BL39XU	水口 将輝	
			2019A1559	BL39XU	水口 将輝	

### Applied Sciences

42136	Hiroyuki Saitoh	11 (2021) 6719	2016A3652	BL14B1	齋藤 寛之	Pressure-Temperature Phase Diagram of Ta-H System up to 9 GPa and 600°C
			2018A3651	BL14B1	齋藤 寛之	
			2018B3651	BL14B1	齋藤 寛之	
			2019A3651	BL14B1	齋藤 寛之	
			2019B3651	BL14B1	齋藤 寛之	
			2020A3651	BL14B1	齋藤 寛之	
			2021A3651	BL14B1	齋藤 寛之	
42380	Kazutaka Ikeda	11 (2021) 8349	2014B3784	BL22XU	神 浩司	Generating Mechanism of Catalytic Effect for Hydrogen Absorption/Desorption Reactions in NaAlH <sub>4</sub> -TiCl <sub>3</sub>

### Biological and Pharmaceutical Bulletin

42383	Akihiro Honda	44 (2021) 1210-1219	2017A2530	BL26B1	大山 拓次	Structural Basis for Anti-non-alcoholic Fatty Liver Disease and Diabetic Dyslipidemia Drug Saroglitazar as a PPAR α/γ Dual Agonist
			2018A2558	BL38B1	大山 拓次	
			2020A2582	BL45XU	大山 拓次	
42384	Takui Oyama	44 (2021) 1202-1209	2017A2530	BL26B1	大山 拓次	Crystal Structures of the Human Peroxisome Proliferator-Activated Receptor (PPAR)α Ligand-Binding Domain in Complexes with a Series of Phenylpropanoic Acid Derivatives Generated by a Ligand-Exchange Soaking Method
			2018A2558	BL38B1	大山 拓次	
			2020A2582	BL45XU	大山 拓次	

### Bulletin of the Chemical Society of Japan

42304	Rie Makiura	94 (2021) 2060-2067	2019B1860	BL19B2	大畑 考司	Air/Water Interfacial Monolayer Assembly of Peptide-Conjugated Liquid-Crystalline Molecules
			2019B1857	BL46XU	渡辺 剛	
42362	Takashi Kamegawa	94 (2021) 2089-2091	2018A1414	BL01B1	亀川 孝	Synthesis of Flower-Like Structured Calcium Silicide and Its Application in the Preparation of Palladium-Loaded Catalyst

### Carbohydrate Polymers

42402	Ryuji Hirase	275 (2022) 118669	2013A1055	BL40B2	山根 千弘	Dissolution of Cellulose into Supercritical Water and its Dissolving State Followed by Structure Formation from the Solution System
			2013B1073	BL40B2	山根 千弘	
42419	Yu Tomofuji	275 (2022) 118681	2017B1062	BL40B2	寺尾 憲	Kinetics of Denaturation and Renaturation Processes of Double-Stranded Helical Polysaccharide, Xanthan in Aqueous Sodium Chloride
			2018B1088	BL40B2	寺尾 憲	
			2019A1072	BL40B2	寺尾 憲	
			2019B1113	BL40B2	寺尾 憲	

### Chemistry of Materials

研究成果番号	主著者	雑誌情報	課題番号	ビームライン	実験責任者	タイトル
42100	Masayuki Wakioka	33 (2021) 5631-5638	2018A1584	BL19B2	脇岡 正幸	Formation of <i>trans</i> -Poly(thienylenevinylene) Thin Films by Solid-State Thermal Isomerization
			2018B1617	BL46XU	脇岡 正幸	
			2019B1843	BL46XU	脇岡 正幸	
			2020A1742	BL46XU	但馬 敬介	
42121	Satoshi Hiroi	33 (2021) 5943-5950	2017A4507	BL15XU	廣井 慧	Structural Characterization of the Delithiated Noncrystalline Phase in a Li-Rich Li <sub>2</sub> VO <sub>2</sub> F Cathode Material
			2017B1655	BL04B2	神前 隆	
			2018B1372	BL04B2	廣井 慧	
			2018A2057	BL04B2	尾原 幸治	

### ChemSusChem

42090	Ruiling Wang	14 (2021) 2180-2187	2020A1064	BL01B1	桑原 泰隆	Modification of Ti-doped Hematite Photoanode with Quasimolecular Cocatalyst: A Comparison of Improvement Mechanism Between Non-noble and Noble Metals
			2020A1062	BL01B1	森 浩亮	
42183	Minyan Gu	14 (2021) 642-654	2020A1744	BL14B2	Li Congcong	Selective Hydrogenolysis of Erythritol over Ir-ReO <sub>3</sub> /Rutile-TiO <sub>2</sub> Catalyst

### Communications Chemistry

42072	Hiroshi Yamagishi	3 (2020) 118	2018B1278	BL43IR	武田 洋平	Sigmoidally Hydrochromic Molecular Porous Crystal with Rotatable Dendrons
42164	Takashi Tsuchiya	4 (2021) 117	2020A4605	BL15XU	土屋 敬志	The Electric Double Layer Effect and its Strong Suppression at Li <sup>+</sup> Solid Electrolyte/Hydrogenated Diamond Interfaces
			2019B4605	BL15XU	土屋 敬志	
			2018A4604	BL15XU	土屋 敬志	

### Dalton Transactions

42182	Yosuke Goto	47 (2018) 2575-2580	2016B1078	BL02B2	水口 佳一	Effect of Te Substitution on Crystal Structure and Transport Properties of AgBiSe <sub>2</sub> Thermoelectric Material
42377	Tomoya Suzuki	50 (2021) 11390-11397	2019B3738	BL22XU	鈴木 智也	Speciation and Separation of Platinum(IV) Polynuclear Complexes in Concentrated Nitric Acid Solutions
			2020A3737	BL22XU	鈴木 智也	
			2018B3736	BL22XU	鈴木 智也	
			2019A3738	BL22XU	鈴木 智也	

### European Journal of Inorganic Chemistry

42114	Naoya Haraguchi	2021 (2021) 1531-1535	2020A0715	BL01B1	山添 誠司	Formation of Mixed-Valence Luminescent Silver Clusters via Cation-Coupled Electron-Transfer in a Redox-Active Ionic Crystal Based on a Dawson-type Polyoxometalate with Closed Pores
			2020A1219	BL01B1	山添 誠司	
42149	Sho Yamaguchi	2021 (2021) 3327-3331	2021A1091	BL01B1	満留 敬人	Efficient D-Xylose Hydrogenation to D-Xylitol over a Hydrotalcite-Supported Nickel Phosphide Nanoparticle Catalyst

### Historical Biology

42186	Martin Kundrát	(2021) Online published 12 Aug. 2021	2017A1714	BL20B2	Kundrat Martin	New Information on Multispherulitic Dinosaur Eggs: Faveoololithidae and Dendroolithidae
			2017B1755	BL20B2	Kundrat Martin	
42274	Quentin Monfroy	(2021) Online published 22 Aug. 2021	2018B1543	BL20B2	Kundrat Martin	Dichotomy in Formation and Growth of Bones of <i>Yanomisa martini</i> (Pygostylia, Ornithuromorpha): Study of Thermal Regime in an Extinct Bird

### Macromolecules

42119	Tomoki Nishimura	54 (2021) 7003-7009	2020A0524	BL40B2	西村 智貴	Manipulating the Morphology of Amphiphilic Graft-Copolymer Assemblies by Adjusting the Flexibility of the Main Chain
			2020A1070	BL40B2	西村 智貴	
			2021A1065	BL40B2	西村 智貴	
42264	Takuro Kogo	53 (2020) 10964-10971	2018A7222	BL03XU	小池 淳一郎	Spatial Heterogeneity Accompanying Gel Formation of Poly( <i>N</i> -isopropylacrylamide) Aqueous Solution at a Temperature below Cloud Point
			2018B7272	BL03XU	小池 淳一郎	

### Materials Today Physics

42241	Tomohiro Oku	20 (2021) 100484	2017A1464	BL02B2	小菅 厚子	Superior Room-temperature Power Factor in GeTe Systems via Multiple Valence Band Convergence to a Narrow Energy Range
			2015A0074	BL02B2	森吉 千佳子	
			2019A1463	BL02B2	小菅 厚子	
42302	Sudeshna Samanta	20 (2021) 100467	2018A1760	BL05XU	Li Mingtao	Unprecedented Pressure-driven Metallization and Topological Charge Transport in an Anion Radical Salt

### Organic Letters

研究成果番号	主著者	雑誌情報	課題番号	ビームライン	実験責任者	タイトル
42172	Nobuhiro Fumoto	23 (2021) 3897-3901	2018B1714	BL02B1	水口 敬	$\pi$ -Electronic Ion-Pairing Assemblies of Deprotonation-Induced Anions
			2018B1247	BL38B1	久木 一朗	
			2019A1508	BL02B1	羽毛田 洋平	
			2019A1704	BL02B1	水口 敬	
			2019B1638	BL02B1	羽毛田 洋平	
42417	Yong Yang	23 (2021) 7943-7948	2021A2765	BL41XU	佐藤 宗太	Cycloparaphenylene Double Nanohoop: Structure, Lamellar Packing, and Encapsulation of C <sub>60</sub> in the Solid State

### Physical Review X

42320	Akinobu Niozu	11 (2021) 031046	2018B8063	BL3	上田 潔	Relation between Inner Structural Dynamics and Ion Dynamics of Laser-Heated Nanoparticles
42396	Yujia Wang	10 (2020) 021030	2018A1044	BL25SU	Yu Pu	Robust Ferromagnetism in Highly Strained SrCoO <sub>3</sub> Thin Films
			2018B1305	BL25SU	Yu Pu	
			2019A1344	BL25SU	Yu Pu	

### RSC Advances

42101	Md. Mijanur Rahman	11 (2021) 20601-20611	2016A7901	BL36XU	竹口 竜弥	Synthesis of Catalysts with Fine Platinum Particles Supported by High-Surface-Area Activated Carbons and Optimization of Their Catalytic Activities for Polymer Electrolyte Fuel Cells
			2016B7901	BL36XU	竹口 竜弥	
			2017A7901	BL36XU	竹口 竜弥	
42103	Takeshi Aihara	10 (2020) 37538-37544	2019A1717	BL01B1	相原 健司	Highly Active and Durable WO <sub>3</sub> /Al <sub>2</sub> O <sub>3</sub> Catalysts for Gas-phase Dehydration of Polyols

### Structure

42301	Yingli Ma	25 (2017) 858-866	2016B2702	BL41XU	Xu Fei	Structural Basis for Apelin Control of the Human Apelin Receptor
			2017B2704	BL41XU	Xu Fei	
42416	Ryuji Yamazawa	26 (2018) 1393-1398	2007A6500	BL44XU	山下 栄樹	Structural Basis for Selective Binding of Export Cargoes by Exportin-5
			2007B6500	BL44XU	山下 栄樹	
			2008A6500	BL44XU	山下 栄樹	
			2008B6500	BL44XU	山下 栄樹	
			2009A6500	BL44XU	山下 栄樹	
			2009B6500	BL44XU	山下 栄樹	
			2012B6500	BL44XU	山下 栄樹	
			2013A6500	BL44XU	山下 栄樹	
			2013B6500	BL44XU	山下 栄樹	
			2014A6500	BL44XU	山下 栄樹	
			2014B6500	BL44XU	山下 栄樹	
2015A6500	BL44XU	山下 栄樹				
2015B6500	BL44XU	山下 栄樹				

### 鉄と鋼 (Tetsu to Hagane)

42185	Tomohiro Nishimura	107 (2021) 558-565	2018A1380	BL20XU	安田 秀幸	Selection of the Massive-like $\delta$ - $\gamma$ Transformation due to Nucleation of Metastable $\delta$ Phase in Fe-18 mass%Cr-Ni Alloys with Ni Contents of 8, 11, 14 and 20 mass%
			2016B1458	BL20XU	安田 秀幸	
			2015A1642	BL20B2	安田 秀幸	
			2014B1449	BL20B2	安田 秀幸	
			2014A1379	BL20B2	安田 秀幸	
42306	Hayato Nishimura	107 (2021) 760-768	2017B3681	BL14B1	秋山 英二	Effects of Residual Stress on Hydrogen Embrittlement of a Stretch-Formed Tempered Martensitic Steel Sheet
			2018A3681	BL14B1	秋山 英二	
			2019B3681	BL14B1	北條 智彦	

### ACS Applied Electronic Materials

42446	Kai-Wen Chen	2 (2020) 3843-3852	2018B4258	BL12XU	Tseng Yuan-Chieh	Pulse-Mediated Electronic Tuning of the MoS <sub>2</sub> -Perovskite Ferroelectric Field Effect Transistors
			2019A4250	BL12XU	Tseng Yuan-Chieh	
			2019A4268	BL12XU	Tseng Yuan-Chieh	

### ACS Applied Nano Materials

研究成果番号	主著者	雑誌情報	課題番号	ビームライン	実験責任者	タイトル
42140	Yohei Nakanishi	4 (2021) 6620-6628	2017B1638	BL19B2	中西 洋平	Concentrated-Polymer-Brush-Modified Silica Nanoparticles Self-Assembled in Ionic Liquid Containing Iodide/Triiodide ( $I^-/I_3^-$ )-Redox System as Quasi-Solid Electrolytes for Dye-Sensitized Solar Cells

### ACS Applied Polymer Materials

42167	Riku Omokawa	3 (2021) 3708-3713	2021A1065	BL40B2	西村 智貴	Preparation of Aqueous Solutions with Information on Solids (ASIS) of a Mechanochromic Luminescent Tetraphenylethylene Derivative by Complexation with Polysaccharides
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### ACS Sustainable Chemistry & Engineering

42150	Min Sheng	9 (2021) 11238-11246	2021A1091	BL01B1	溝留 敬人	Hydrotalcite-Supported Cobalt Phosphide Nanorods as a Highly Active and Reusable Heterogeneous Catalyst for Ammonia-Free Selective Hydrogenation of Nitriles to Primary Amines
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### Acta Crystallographica Section F

42412	Yusuke Nakamichi	76 (2020) 341-349	2018B6863	BL44XU	渡邊 真宏	Crystal Structure of GH30-7 Endoxylanase C from the Filamentous Fungus <i>Talaromyces cellulolyticus</i>
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### Acta Zoologica

42084	Quentin Monfroy	(2021) Online publication 11 July 2021	2019B1381	BL28B2	Kundrat Martin	The Osteohistological Variability in the Evolution of Basal Avialans
			2018B1543	BL20B2	Kundrat Martin	

### Advanced Materials

42105	Akira Miura	33 (2021) 2100312	2019A1101	BL02B2	後藤 陽介	Observing and Modeling the Sequential Pairwise Reactions that Drive Solid-State Ceramic Synthesis
			2019B1195	BL02B2	後藤 陽介	
			2020A1096	BL02B2	三浦 章	

### Advanced Functional Materials

42139	Zhanglin Guo	31 (2021) 2103614	2021A1689	BL46XU	柴山 直之	Dopant-Free Polymer HTM-Based CsPbI <sub>2</sub> Br Solar Cells with Efficiency Over 17% in Sunlight and 34% in Indoor Light
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### APL Materials

42374	Takahiro Nishio	9 (2021) 091108	2021A1675	BL46XU	西尾 隆宏	Fabrication of L1 <sub>0</sub> -FeNi Films with Island Structures by Nitrogen Insertion and Topotactic Extraction for Improved Coercivity
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### Applied Materials Today

42073	Heng-Jui Liu	24 (2021) 101101	2019A4252	BL12XU	Chin Yi-Ying	Atomic Origin of Room-Temperature Two-Dimensional Itinerant Ferromagnetism in an Oxide-Monolayer Heterostructure
			2019A4269	BL12XU	Chin Yi-Ying	

### Archives of Biochemistry and Biophysics

42254	Kazumasa Funabashi	708 (2021) 108911	2014B1401	BL41XU	海野 昌喜	Structures of Human Peptidylarginine Deiminase Type III Provide Insights into Substrate Recognition and Inhibitor Design
			2011B6607	BL44XU	海野 昌喜	

### Batteries & Supercaps

42442	Kai Tian	3 (2020) 1296-1305	2018A4127	BL12B2	Lin Yan-Gu	Exploring Lithium Storage Mechanism and Cycling Stability of Bi <sub>2</sub> Mo <sub>3</sub> O <sub>12</sub> Binary Metal Oxide Anode Compositing with Ti <sub>3</sub> C <sub>2</sub> MXene
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### Biophysical Chemistry

42189	Yuhi Hosoe	278 (2021) 106669	2018A1067	BL40XU	織田 昌幸	Structural Dynamics of a DNA-binding Protein Analyzed using Diffracted X-ray Tracking
			2019B1110	BL40XU	織田 昌幸	

### Biophysical Reviews

研究成果番号	主著者	雑誌情報	課題番号	ビームライン	実験責任者	タイトル
42426	Eiki Yamashita	11 (2019) 521-523	2015A6700	BL44XU	中川 敦史	SPring-8 BL44XU, a Synchrotron Radiation Beamline for Biological Macromolecular Assemblies, Operated by the Institute for Protein Research, Osaka University
			2015B6700	BL44XU	中川 敦史	
			2016A6700	BL44XU	中川 敦史	
			2016B6700	BL44XU	中川 敦史	
			2018A6700	BL44XU	中川 敦史	
			2018B6700	BL44XU	中川 敦史	
			2015A6500	BL44XU	山下 栄樹	
			2015B6500	BL44XU	山下 栄樹	
			2016A6500	BL44XU	山下 栄樹	
			2016B6500	BL44XU	山下 栄樹	
			2017A6500	BL44XU	山下 栄樹	
			2017B6500	BL44XU	山下 栄樹	
2018A6500	BL44XU	山下 栄樹				
2018B6500	BL44XU	山下 栄樹				

### Catalysis Science & Technology

42079	Espen Z. Eikeland	11 (2021) 1961-1964	2018B1536	BL01B1	Eikeland Espen	Locating Fe Dopants in Catalytic PtPd Nanoparticles on $\gamma$ -alumina using X-ray Absorption Spectroscopy
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### Cell Reports

42395	Sulhee Kim	35 (2021) 109031	2016A2726	BL26B1	Hwang Kwang Yeon	Leucine-sensing Mechanism of Leucyl-tRNA Synthetase 1 for mTORC1 Activation
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### Cellulose

42184	Masahisa Wada	28 (2021) 6757-6765	2017A1263	BL40B2	和田 昌久	Three-dimensional Alignment of Cellulose II Microcrystals under a Strong Magnetic Field
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### ChemCatChem

42113	Chikako Yanagisawa	13 (2021) 169-173	2018B1422	BL01B1	山添 誠司	Silylene-Bridged Tetranuclear Palladium Cluster as a Catalyst for Hydrogenation of Alkenes and Alkynes
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### Chemical and Pharmaceutical Bulletin

42062	Hiroki Ohnari	69 (2021) 652-660	2016A1502	BL19B2	大成 宏樹	Amino Acids and Their <i>N</i> -Acetylated Derivatives Maintain the Skin's Barrier Function
			2016A1754	BL19B2	大成 宏樹	
			2014A1049	BL40B2	小幡 誉子	
			2015A1139	BL40B2	小幡 誉子	
			2016B1114	BL40B2	小幡 誉子	
			2018A1078	BL40B2	小幡 誉子	

### Chemistry Letters

42137	Koji Kimura	50 (2021) 1526-1529	2016B7608	BL28XU	松原 英一郎	Development of an Evaluation Method for a Lithium/Electrolyte Interface Based on X-ray Reflectivity and Grazing Incidence X-ray Scattering Measurements
			2017A7608	BL28XU	松原 英一郎	
			2017B7608	BL28XU	松原 英一郎	
			2018A7608	BL28XU	松原 英一郎	
			2018B7608	BL28XU	松原 英一郎	
			2019A7616	BL28XU	安部 武志	
			2019B7616	BL28XU	安部 武志	
			2020A7616	BL28XU	安部 武志	

### Communications Biology

42161	Yuya Taguchi	4 (2021) 941	2019A6914	BL44XU	神田 大輔	The Structure of an Archaeal Oligosaccharyltransferase Provides Insight into the Strict Exclusion of Proline from the <i>N</i> -glycosylation Sequon
			理研	BL32XU		

### Crystals

42076	Hiroshi Sakurai	11 (2021) 787	2017B1506	BL08W	桜井 浩	Temperature and Chemical Reaction Distribution of a Laminar Diffusion Flame Measured by X-ray Compton Scattering
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### Electrochemistry

研究成果番号	主著者	雑誌情報	課題番号	ビームライン	実験責任者	タイトル
42162	Atsushi Sakuda	85 (2017) 580-584	2016A7601	BL28XU	小久見 善八	Cubic Rocksalt $\text{Li}_2\text{SnS}_3$ and a Solid Solution with $\text{Li}_3\text{NbS}_4$ Prepared by Mechanochemical Synthesis

### Electrochemistry Communications

42278	Yongho Kee	130 (2021) 107108	2021A1308	BL02B2	木村 勇太	An Appropriate Reference and Counter Electrode in an All-solid-state Battery using NASICON-structured Solid Electrolyte
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### Electronic Structure

42063	Shin-ichi Fujimori	3 (2021) 024008	2016A3810	BL23SU	藤森 伸一	Electronic Structure of $\text{URu}_2\text{Si}_2$ in Paramagnetic Phase: Three-dimensional Angle Resolved Photoelectron Spectroscopy Study
			2016B3811	BL23SU	藤森 伸一	
			2017A3811	BL23SU	藤森 伸一	
			2017B3811	BL23SU	藤森 伸一	
			2018A3811	BL23SU	藤森 伸一	

### Fatigue 2021, Proceedings of the 8th Engineering Integrity Society, International Conference on Durability & Fatigue

42258	Takashi Nakamura	(2021) 349-357	2018B1289	BL20XU	中村 孝	Detection of Small Internal Fatigue Cracks of Ti-6Al-4V in the Very High Cycle Regime via Synchrotron Radiation Nanocomputed Tomography
			2017B1421	BL20XU	中村 孝	

### FEBS Open Bio

42411	Yusuke Nakamichi	10 (2020) 1180-1189	2018B6863	BL44XU	渡邊 真宏	Substrate Recognition by a Bifunctional GH30-7 Xylanase B from <i>Talaromyces cellulolyticus</i>
			2019B6930	BL44XU	中道 優介	

### Food Science & Nutrition

42265	Akane Nagasaki	9 (2021) 4916-4926	2020A0538	BL43IR	松葉 豪	Analysis of the Sol and Gel Structures of Potato Starch over a Wide Spatial Scale
			2020A1262	BL40B2	松葉 豪	
			2020A1427	BL43IR	松葉 豪	
			2017B1108	BL40B2	松葉 豪	
			2019B1066	BL43IR	松葉 豪	
			2019B1055	BL19B2	松葉 豪	
			2018A1179	BL43IR	松葉 豪	
			2018B1156	BL43IR	松葉 豪	
2019A1185	BL43IR	松葉 豪				

### Food Structure

42250	Bowen Fang	27 (2021) 100181	2019B1697	BL19B2	中川 究也	Effect of pH, Ionic Strength, and Freezing Treatment on a Colloidal Suspension of Egg White Aggregates
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### Fuel Processing Technology

42195	Mii Betchaku	218 (2021) 106837	2019A1827	BL14B2	別役 美衣	Catalytic Performance of Hydrotalcite-like-compound-derived Ni-metal Alloy Catalyst for Toluene Reforming with Gasoline Engine Exhaust Model Gas as Reforming Agent
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### Geochimica et Cosmochimica Acta

42408	Masashi Shidare	313 (2021) 85-98	2013A1373	BL27SU	清水 健二	Survey of Impact Glasses in Shergottites Searching for Martian Sulfate using X-ray Absorption Near-edge Structure
			2014A1081	BL27SU	清水 健二	
			2015B1120	BL27SU	白井 寛裕	
			2016A1294	BL27SU	白井 寛裕	
			2016B1538	BL27SU	白井 寛裕	
			2017A1245	BL27SU	白井 寛裕	

### Green Chemistry

42194	Lujie Liu	23 (2021) 5665-5679	2020A1841	BL14B2	別役 美衣	Hydrodeoxygenation of C4-C6 Sugar Alcohols to Diols or Mono-alcohols with the Retention of the Carbon Chain over a Silica-Supported Tungsten Oxide-modified Platinum Catalyst
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### Inorganica Chimica Acta

研究成果番号	主著者	雑誌情報	課題番号	ビームライン	実験責任者	タイトル
42418	Masahiko Maekawa	528 (2021) 120628	2018B1819	BL02B1	前川 雅彦	Structurally Diverse Dinuclear Cu(I) Complexes and 1D Helical Cu(I) Coordination Polymers Bridged by 2,2',6',4"-terpyridine
			2019A1262	BL02B1	杉本 邦久	
			2019B1493	BL02B1	杉本 邦久	
			2019A2071	BL02B1	杉本 邦久	
			2019B2092	BL02B1	杉本 邦久	

### International Journal of Biological Macromolecules

42273	Yasuyuki Matoba	183 (2021) 1861-1870	2017B2713	BL26B1	坂口 剛正	The Basicity of an Active-site Water Molecule Discriminates between Tyrosinase and Catechol Oxidase Activity
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### International Journal of Hydrogen Energy

42145	Shunnosuke Tanaka	46 (2021) 28078-28086	2019A1246	BL13XU	中村 将志	Tailoring the Hydrophilic and Hydrophobic Reaction Fields of the Electrode Interface on Single Crystal Pt Electrodes for Hydrogen Evolution/Oxidation Reactions
			2020A1274	BL13XU	中村 将志	

### International Journal of Modern Physics B

42232	Masatsugu Oishi	35 (2021) 2140048	2017B1437	BL01B1	大石 昌嗣	Local Electronic and Atomic Structures of the Mixed B-site Ions in SrFe <sub>1-x</sub> Mn <sub>x</sub> O <sub>3-δ</sub> Studied with X-ray Absorption Spectroscopy
			2018B1446	BL01B1	大石 昌嗣	

### ISIJ International

42177	Taka Narumi	61 (2021) 1567-1578	2018B1499	BL20XU	安田 秀幸	Time-resolved and <i>in-situ</i> Observation of Semisolid Deformation in Al-Cu Alloys with Equiaxed and Columnar Grain Structures by Using a Combination Technique of 4D-CT and 3DXRD
			2017B1416	BL20XU	安田 秀幸	
			2019A1400	BL20XU	安田 秀幸	

### IUCrJ

42080	Nikolaj Roth	8 (2021) 695-702	2014A0078	BL02B1	Iversen Bo	Tuneable Local Order in Thermoelectric Crystals
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### Journal of Astronomical Telescopes, Instruments, and Systems

42309	Hisamitsu Awaki	7 (2021) 014001	2018B1106	BL20B2	前田 良知	Measuring the Atomic Scattering Factors Near the Iridium L-edges for the Athena Silicon Pore Optics Reflector
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### The Journal of Biochemistry

42098	Norihisa Yasui	169 (2021) 585-599	2018A2534	BL41XU	山下 敦子	A Sweet Protein Monellin as a Non-antibody Scaffold for Synthetic Binding Proteins
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### The Journal of Biological Chemistry

42257	Hanayo Nakanishi	295 (2020) 10180-10194	2019B2707	BL45XU	阿部 一啓	Crystal Structure of a Human Plasma Membrane Phospholipid Flippase
			2018B2703	BL41XU	阿部 一啓	

### Journal of Electroanalytical Chemistry

42096	Keiji Shimoda	895 (2021) 115508	2019A1148	BL02B2	下田 景士	Defluorination/Fluorination Mechanism of Bi <sub>0.8</sub> Ba <sub>0.2</sub> F <sub>2.8</sub> as a Fluoride Shuttle Battery Positive Electrode
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### Journal of Food Engineering

42249	Bowen Fang	296 (2021) 110452	2019B1697	BL19B2	中川 究也	Microstructure Change in Whole Egg Protein Aggregates upon Freezing: Effects of Freezing Time and Sucrose Addition
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### Journal of Geophysical Research: Solid Earth

42081	Yongsheng Huang	126 (2021) e2020JB021343	2018A1471	BL20XU	上杉 健太郎	Electrical Conductivity in Texturally Equilibrated Fluid-Bearing Forsterite Aggregates at 800°C and 1 GPa: Implications for the High Electrical Conductivity Anomalies in Mantle Wedges
			2018A1464	BL20B2	上杉 健太郎	
			2019B1785	BL20XU	藤田 和果奈	

### Journal of Materials Chemistry C

42262	Alexei A. Belik	9 (2021) 10232-10242	2016B4504	BL15XU	山浦 一成	A Plethora of Structural Transitions, Distortions and Modulations in Cu-doped BiMn <sub>7</sub> O <sub>12</sub> Quadruple Perovskites
			2017A4503	BL15XU	Belik Alexei	
			2019A4501	BL15XU	辻本 吉廣	
			2021A1334	BL02B2	Belik Alexei	

### Journal of Molecular Biology

研究成果番号	主著者	雑誌情報	課題番号	ビームライン	実験責任者	タイトル
42095	Kiyoshi Ito	362 (2006) 228-240	2005B0545	BL38B1	芳本 忠	Crystal Structure and Mechanism of Tripeptidyl Activity of Prolyl Tripeptidyl Aminopeptidase from <i>Porphyromonas gingivalis</i>

### Journal of Molecular Liquids

42287	Ildiko Pethes	340 (2021) 117188	2018B1210	BL04B2	Temleitner László	Temperature-dependent Structure of 1-propanol/water Mixtures: X-ray Diffraction Experiments and Computer Simulations at Low and High Alcohol Contents
			2019A1517	BL04B2	Temleitner László	

### Journal of Non-Crystalline Solids

42075	Masami Aono	568 (2021) 120963	2019B1174	BL43IR	青野 祐美	Visible Light Irradiation Effects on Chemical Bonding Structure of Amorphous Carbon Nitride Thin Films using Synchrotron Radiation Infrared Rays
			2018B1072	BL43IR	青野 祐美	

### The Journal of Physical Chemistry B

42217	Fumitoshi Kaneko	125 (2021) 9757-9767	2019A1206	BL43IR	金子 文俊	Cuticular Lipid Topology on Insect Body Surfaces Studied by Synchrotron Radiation FTIR ATR Microspectroscopy
			2019B1069	BL43IR	金子 文俊	

### Journal of Physics: Energy

42372	Akitoshi Nakano	3 (2021) 044004	2020A1431	BL02B1	中埜 彰俊	Giant Peltier Conductivity in an Uncompensated Semimetal Ta <sub>2</sub> PdSe <sub>6</sub>
			2021A1159	BL02B1	中埜 彰俊	

### Journal of Physics B: Atomic, Molecular and Optical Physics

42200	Tatsuo Gejo	54 (2021) 144004	2017B8021	BL1	大浦 正樹	Dissociation and Ionization Dynamics of CF <sub>3</sub> I and CH <sub>3</sub> I Molecules via Pump-and-Probe Experiments using Soft X-ray Free-Electron Laser
			2019A8026	BL1	下條 竜夫	
			2017A8070	BL1	大浦 正樹	

### Journal of Power Sources

42092	Hideyuki Nakano	506 (2021) 230209	2020A7037	BL33XU	宇山 健	Suppression of Thermal Runaway by Continuous Heat Generation using Porous Silicon Covered with a Thin Oxide Layer
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### Journal of the American Ceramic Society

42313	Sumin Im	104 (2021) 4803-4818	2018A3783	BL22XU	兼松 学	Temperature Effects on Local Structure, Phase Transformation, and Mechanical Properties of Calcium Silicate Hydrates
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### Journal of the Electrochemical Society

42279	Hiroyuki Fujimoto	168 (2021) 080508	2016A7602	BL28XU	小久見 善八	Synchronized Operando Analysis of Graphite Negative Electrode of Li-Ion Battery
			2016B7603	BL28XU	松原 英一郎	
			2017A7603	BL28XU	松原 英一郎	
			2017B7603	BL28XU	松原 英一郎	
			2018A7603	BL28XU	松原 英一郎	
			2019A7613	BL28XU	安部 武志	
2019B7613	BL28XU	安部 武志				

### Journal of the Japan Petroleum Institute

42335	Daichi Hata	64 (2021) 280-292	2019B1796	BL01B1	相原 健司	Lactic Acid Production from Glucose over Y <sub>2</sub> O <sub>3</sub> -based Catalysts under Base-free Conditions
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### Journal of the Magnetics Society of Japan

42427	Keita Ito	43 (2019) 79-83	2018A1028	BL25SU	水口 将輝	Fabrication of L <sub>1-x</sub> FeNi Films by Denitrifying FeNiN Films
			2018A4914	BL15XU	水口 将輝	
			2018B4901	BL15XU	水口 将輝	

### Journal of Virology

42359	Kosuke Oda	95 (2021) 00815-21	2014A1143	BL38B1	坂口 剛正	Structural Insight into the Interaction of Sendai Virus C Protein with Alix To Stimulate Viral Budding
			2018B2720	BL26B1	小田 康祐	
			2018B6868	BL44XU	小田 康祐	
			2019B6908	BL44XU	小田 康祐	



### Materials & Design

研究成果番号	主著者	雑誌情報	課題番号	ビームライン	実験責任者	タイトル
42174	Hiroyuki Saitoh	208 (2021) 109953	2016A3652	BL14B1	齋藤 寛之	Hydrogen Storage by Earth-abundant Metals, Synthesis and Characterization of Al <sub>3</sub> FeH <sub>3,9</sub>
			2018A3651	BL14B1	齋藤 寛之	
			2018B3651	BL14B1	齋藤 寛之	
			2019A3651	BL14B1	齋藤 寛之	
			2019B3651	BL14B1	齋藤 寛之	
2020A3651	BL14B1	齋藤 寛之				

### Materials and Corrosion

42097	Masamitsu Takahashi	(2021) Online published: 12 Jul. 2021	2020A5050	BL16XU	出口 博史	Corrosion Behavior of Carbon Steel Coated with a Zinc-Rich Paint Containing Metallic Compounds under Wet and Dry Cyclic Conditions
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### Materials Research Express

42193	Hiroko Yokota	8 (2021) 086402	2017B3844	BL23SU	横田 紘子	Element-specific Magnetic Hysteresis Loops Observed in Hexagonal ErFeO <sub>3</sub> Thin Films
			2017B3551	BL11XU	三井 隆也	
			2018A3551	BL11XU	三井 隆也	

### Materials Science and Engineering: A

42116	Md. Shahnewaz Bhuiyan	793 (2020) 139423	2013B1324	BL20XU	戸田 裕之	Damage Micromechanisms in High Mn and Zn Content 7XXX Aluminum Alloys
			2014A1018	BL20XU	戸田 裕之	
			2014B1157	BL20XU	戸田 裕之	

### Materials Transactions

42115	Hiro Fujihara	62 (2021) 636-641	2015A0076	BL20XU	戸田 裕之	Assessment of Hydrogen Accumulation Behavior in Al-Zn-Mg Alloy under Strain with Kelvin Force Microscopy
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### Metallurgical and Materials Transactions A

42134	Akira Taniyama	48 (2017) 4821-4830	2002A0711	BL19B2	谷山 明	Deformation Behavior of Cementite in Deformed High Carbon Steel Observed by X-ray Diffraction with Synchrotron Radiation
			2003A0139	BL19B2	谷山 明	

### Metallurgical and Materials Transactions B

42147	Sohei Sukenaga	52 (2021) 1945-1949	2017B1400	BL04B2	助永 壮平	Reconsideration of Viscosity Variation Mechanism in Calcium Ferrite Melt During Isothermal Melting Process
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### Microporous and Mesoporous Materials

42275	Kazu Okumura	325 (2021) 111336	2019B1325	BL01B1	奥村 和	Spontaneous Formation and Catalysis of Highly Dispersed Pd <sup>0</sup> on *BEA Zeolite
			2020A1518	BL01B1	奥村 和	

### Nano Letters

42261	Emma Berger	21 (2021) 6095-6101	2019B8066	BL1	Schwartz Craig	Extreme Ultraviolet Second Harmonic Generation Spectroscopy in a Polar Metal
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### Nanoscale

42415	Tokuhiisa Kawawaki	13 (2021) 14679-14687	2020A0695	BL01B1	川脇 徳久	Simple and High-yield Preparation of Carbon-black-supported ~1 nm Platinum Nanoclusters and Their Oxygen Reduction Reactivity
			2020A1219	BL01B1	山添 誠司	
			2020A1410	BL01B1	平山 純	

### Nature

42251	Xi Lin	579 (2020) 152-157	2018B2704	BL41XU	Xu Fei	Structural Basis of Ligand Recognition and Self-activation of Orphan GPR52
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### Nature Microbiology

42397	Olesia I. North	4 (2019) 1645-1653	2013B6500	BL44XU	山下 栄樹	Phage Tail Fibre Assembly Proteins Employ a Modular Structure to Drive the Correct Folding of Diverse Fibres
			2014A6500	BL44XU	山下 栄樹	
			2014B6500	BL44XU	山下 栄樹	

### Peptide Science 2020

42077	Sho Kobayashi	(2021) 151-154	2020A1641	BL43IR	鈴田 和之	The Changing Dynamics of Bound Water and Protein in Human Hair Caused by Bleaching
			2019B1733	BL43IR	菊地 哲宏	

### Physica B

研究成果番号	主著者	雑誌情報	課題番号	ビームライン	実験責任者	タイトル
42099	Kenji Tarui	619 (2021) 413158	2016B1226	BL01B1	山本 知之	Origin of Room-temperature Ferromagnetism in Co-doped CeO <sub>2</sub>

### Physica Status Solidi - Rapid Research Letters

42295	Takao Shimizu	15 (2021) 2000589	2019A4700	BL15XU	清水 荘雄	Electric-Field-Induced Ferroelectricity in 5%Y-doped Hf <sub>0.5</sub> Zr <sub>0.5</sub> O <sub>2</sub> : Transformation from the Paraelectric Tetragonal Phase to the Ferroelectric Orthorhombic Phase
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### Physical Review A

42163	Mizuho Fushitani	104 (2021) 023102	2020A8049	BL1	伏谷 瑞穂	Time-resolved Shot-by-shot Photoelectron Spectroscopy of Autoionizing Xe <sup>+</sup> States by EUV-free-electron-laser and Near-IR Laser Pulses
			2017B8081	BL1	伏谷 瑞穂	
			2018B8028	BL1	伏谷 瑞穂	
			2016B8018	BL1	彦坂 泰正	

### Physical Review Letters

42259	Michihiro Nagao	127 (2021) 078102	2018B1491	BL09XU	長尾 道弘	Relationship between Viscosity and Acyl Tail Dynamics in Lipid Bilayers
			2017B1512	BL09XU	長尾 道弘	

### Physical Review Materials

42127	Kou Takubo	5 (2021) 075002	2018B7577	BL07LSU	田久保 耕	Spin-orbital Liquid in Ba <sub>3</sub> CuSb <sub>2</sub> O <sub>9</sub> Stabilized by Oxygen Holes
			2015A7401	BL07LSU	松田 巖	
			2018B1449	BL47XU	Zhang Yujun	

### Physical Review Research

42391	Takeshi Suzuki	3 (2021) 033222	2017B8067	BL3	松田 巖	Ultrafast Optical Stress on BaFe <sub>2</sub> As <sub>2</sub>
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### Polymer

42091	ChaoHung Cheng	229 (2021) 124003	2018B1036	BL19B2	高原 淳	Dynamics of Matrix-free Nanocomposites Consisting of Block Copolymer-grafted Silica Nanoparticles under Elongation Evaluated through X-ray Photon Correlation Spectroscopy
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### Review of Scientific Instruments

42188	Kouichi Hayashi	92 (2021) 083703	2018A1214	BL39XU	細川 伸也	A Cryostat Designed for X-ray Fluorescence Holography Experiments down to 4 K
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### Science and Technology of Advanced Materials

42191	Takashi Horikawa	22 (2021) 729-747	2018A1645	BL02B2	山崎 理央	Recent Progress in the Development of High-performance Bonded Magnets using Rare Earth-Fe Compounds
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### Science Bulletin

42252	Qing Wang	65 (2020) 1743-1751	2019A1253	BL01B1	Waterhouse Geoffrey	Evolution of Zn(II) Single Atom Catalyst Sites during the Pyrolysis-induced Transformation of ZIF-8 to N-doped Carbons
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### Separation and Purification Technology

42381	Natsuki Hayashi	277 (2021) 119536	2016B3554	BL11XU	瀬古 典明	Chromium(VI) Adsorption-Reduction using a Fibrous Amidoxime-Grafted Adsorbent
			2017A3554	BL11XU	瀬古 典明	
			2017B3554	BL11XU	瀬古 典明	
			2018A3656	BL14B1	瀬古 典明	
			2018B3656	BL14B1	瀬古 典明	
			2019A3656	BL14B1	瀬古 典明	

### SID Symposium Digest of Technical Papers

42435	Yusaku Magari	52 (2021) 1096-1099	2019B1746	BL47XU	曲 勇作	Activation of IGZO Devices at 150°C via Reduction Process Using Hydrogen Gas During Sputtering
			2018B1669	BL47XU	曲 勇作	

### STAR Protocols

研究成果番号	主著者	雑誌情報	課題番号	ビームライン	実験責任者	タイトル
42382	Shotaro Kamata	2 (2021) 100364	2017A2530	BL26B1	大山 拓次	Preparation of Co-crystals of Human PPAR $\alpha$ -LBD and Ligand for High-resolution X-ray Crystallography
			2018A2558	BL38B1	大山 拓次	
			2020A2582	BL45XU	大山 拓次	

### Symmetry

42112	Soichi Kikkawa	13 (2021) 1267	2019B1464	BL01B1	平山 純	Base Catalysis of Sodium Salts of [Ta <sub>6</sub> Nb <sub>3</sub> O <sub>19</sub> ] <sup>3-</sup> Mixed-Oxide Clusters
			2019B1166	BL02B2	山本 隆文	
			2020A0715	BL01B1	山添 誠司	
			2020A1068	BL02B2	山本 隆文	
			2020A1219	BL01B1	山添 誠司	
			2020A1851	BL36XU	山添 誠司	

### Zeitschrift für Anorganische und Allgemeine Chemie

42327	Kota Shitamatsu	647 (2021) 1239-1244	2020A1795	BL02B1	小島 達弘	Structural Characterization of Cerium-encapsulated Preyssler-type Phosphotungstate: Additional Evidence of Ce(III) in the Cavity
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### X線分析の進歩 (Advances in X-ray Chemical Analysis, Japan)

42299	Hajime Tanida	52 (2021) 69-80	2019B3713	BL22XU	谷田 肇	Development of Fluorescence XAFS Imaging Using Pinhole Camera
			2020A3712	BL22XU	谷田 肇	

### オレオサイエンス (Oleosience)

42406	Tomokazu Yoshimura	20 (2020) 425-430	2016A1758	BL19B2	吉村 倫一	Amino Acid Surfactants with Hydroxy Group
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### 軽金属 (Journal of Japan Institute of Light Metals)

42233	Masahiro Hirata	71 (2021) 343-348	2016A1728	BL19B2	足立 大樹	Effect of Precipitation Size on Dislocation Density Change during Tensile Deformation in Al-Zn-Mg Alloy
			2017B1023	BL19B2	足立 大樹	
			2019A1744	BL19B2	足立 大樹	

### 色材協会誌 (Journal of the Japan Society of Colour Material)

42409	Tomokazu Yoshimura	93 (2020) 91-98	2014A1456	BL40B2	吉村 倫一	Quaternary-Ammonium-Salt-Type Amphiphilic Ionic Liquids
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### 低温生物工学会誌 (Cryobiology and Cryotechnology)

42197	Masaru Nakada	67 (2021) 15-22	2019A3205	BL24XU	中田 克	Study of Intracellular Ice Structure during Cryopreservation Process using Polyvinyl Pyrrolidone as Cryoprotectant Agent
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### 銅と銅合金 (Journal of Japan Institute of Copper)

42438	Kohei Morishita	60 (2021) 162-166	2019A1434	BL20XU	森下 浩平	In-situ Observation of Melting and Solidification Behaviors of Cu Powder Caused by Laser Irradiation
			2018B1411	BL20XU	森下 浩平	

### 日本化粧品技術者会誌 (Journal of the Society of Cosmetic Chemists of Japan)

42363	Akinori Nakano	55 (2021) 281-287	2018A1460	BL40B2	鳥飼 直也	Development of a Novel Technique Formulating "Pearl" Luster
			2019A1595	BL40B2	鳥飼 直也	

### 日本結晶成長学会誌 (Journal of the Japanese Association for Crystal Growth)

42146	Takeshi Watanabe	48 (2021) 48-2-5	2015B1908	BL46XU	渡辺 剛	Development of In Situ Measurement Systems for Characterizations of Organic Thin Film Transistor
			2016A1556	BL46XU	渡辺 剛	
			2016A1679	BL46XU	廣内 大地	
			2016B1884	BL46XU	渡辺 剛	
			2017B1920	BL14B2	渡辺 剛	
			2017A1608	BL46XU	渡辺 剛	
			2017A1783	BL46XU	渡辺 剛	
			2018A2065	BL19B2	渡辺 剛	
			2020A1892	BL46XU	渡辺 剛	
			2021A2031	BL19B2	渡辺 剛	

博士論文 (Technische Universität Dortmund)

研究成果番号	主著者	雑誌情報	課題番号	ビームライン	実験責任者	タイトル
42253	Mirko Elbers	(2021)	2016B1265	BL08W	Sternemann Christian	The Microscopic Structure of Water under Extreme Conditions

博士論文 (University of Science and Technology of China)

42269	Tao Xiong	(2020)	2019A4275	BL12XU	Zhu LinFan	The Study of the Dynamic Parameters of H <sub>2</sub> , D <sub>2</sub> and N <sub>2</sub> by Inelastic X-ray Scattering
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博士論文 (千葉大学)

42311	Tomoaki Kumeda	(2020)	2018B1679	BL13XU	久米田 友明	燃料電池反応を活性化させる電気二重層に関する研究
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博士論文 (東京大学)

42120	Shun Hayashi	(2019)	2018A1675	BL28B2	林 峻	Elucidation of Key Structural Factors of Group 5 Metal Oxide Clusters for Base Catalytic Application
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博士論文 (東京工業大学)

42277	Ryo Watari	(2020)	2017B5350	BL16B2	野口 真一	Development of Ru and Cu Catalysts Supported by Nitrogen Heterocycle Structures and Their Application to Hydrogenation of Carbon Oxygen Unsaturated Bonds
			2018A5350	BL16B2	野口 真一	
			2018B5350	BL16B2	野口 真一	
			2019A5350	BL16B2	野口 真一	

博士論文 (東京理科大学)

42176	Haruno Kunioka	(2020)	2019B1748	BL02B2	國岡 春乃	Development of Zintl Phase Thermoelectric Materials using Anharmonic Lattice Vibration
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博士論文 (奈良先端科学技術大学院大学)

42437	Hiroki Momono	(2020)	2018A1685	BL13XU	桃野 浩樹	Development of Simple Display-type VD-WAAEL Analyzer
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博士論文 (明治大学)

42159	Ryo Yokogawa	(2020)	2018B1718	BL13XU	横川 凌	Study on Phonon Properties of Si and SiGe Fine Structures for Next-Generation Thermoelectric Device
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課題以外の成果として登録された論文

Journal of Molecular Biology

研究成果番号	主著者	雑誌情報		ビームライン	タイトル
42093	Nobutada Tanaka	356 (2006) 312-324		BL38B1	Crystal Structures of Mouse Autocrine Motility Factor in Complex with Carbohydrate Phosphate Inhibitors Provide Insight into Structure-Activity Relationship of the Inhibitors
42094	Narandalai Danshiitsoodol	360 (2006) 398-408		BL38B1	The Mitomycin C (MMC)-binding Protein from MMC-producing Microorganisms Protects from the Lethal Effect of Bleomycin: Crystallographic Analysis to Elucidate the Binding Mode of the Antibiotic to the Protein
42102	Yuichiro Kezuka	358 (2006) 472-484		BL41XU	Structural Studies of a Two-domain Chitinase from <i>Streptomyces griseus</i> HUT6037
42144	Takeshi Yokoyama	356 (2006) 790-801		BL41XU	R-state Haemoglobin with Low Oxygen Affinity: Crystal Structures of Deoxy Human and Carbonmonoxy Horse Haemoglobin Bound to the Effector Molecule L35
42341	Kunishige Kataoka	373 (2007) 141-152	理研	BL26B2	Structure and Function of the Engineered Multicopper Oxidase CueO from <i>Escherichia coli</i> —Deletion of the Methionine-Rich Helical Region Covering the Substrate-Binding Site

### The Journal of Biological Chemistry

研究成果番号	主著者	雑誌情報		ビームライン	タイトル
42104	Masamichi Nagae	281 (2006) 35884-35893		BL41XU	Crystal Structure of the Galectin-9 N-terminal Carbohydrate Recognition Domain from <i>Mus musculus</i> Reveals the Basic Mechanism of Carbohydrate Recognition
42126	Tadashi Satoh	281 (2006) 10410-10419		BL41XU	Structures of the Carbohydrate Recognition Domain of Ca <sup>2+</sup> -independent Cargo Receptors Emp46p and Emp47p
42318	Dhirendra K. Simanshu	281 (2006) 39630-39641		BL44XU	Crystal Structures of <i>Salmonella typhimurium</i> Biodegradative Threonine Deaminase and Its Complex with CMP Provide Structural Insights into Ligand-induced Oligomerization and Enzyme Activation
42340	Kimiko Hasegawa	282 (2007) 24777-24783	理研	BL26B2	A Novel Subunit Structure of <i>Clostridium botulinum</i> Serotype D Toxin Complex with Three Extended Arms

### Biochemistry

42125	Rohini Qamra	45 (2006) 6997-7005		BL41XU	The 2.15 Å Crystal Structure of <i>Mycobacterium tuberculosis</i> Chorismate Mutase Reveals an Unexpected Gene Duplication and Suggests a Role in Host-Pathogen Interactions
42316	T. Mallett	45 (2006) 11278-11289		BL44XU	Structure of Coenzyme A–Disulfide Reductase from <i>Staphylococcus aureus</i> at 1.54 Å Resolution

### Faraday Discussions

42128	Felix Allum	228 (2021) 571-596		XFEL	Multi-channel Photodissociation and XUV-induced Charge Transfer Dynamics in Strong-Field-Ionized Methyl Iodide Studied with Time-resolved Recoil-frame Covariance Imaging
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### The Journal of Biochemistry

42356	Ryosuke Asai	141 (2007) 525-534		BL38B1	Two Mutations Convert Mammalian Xanthine Oxidoreductase to Highly Superoxide-productive Xanthine Oxidase
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### Journal of Physics B: Atomic, Molecular and Optical Physics

42319	Yoshiaki Kumagai	54 (2021) 044001	装置&技術	SACLA	Suppression of Thermal Nanoplasma Emission in Clusters Strongly Ionized by Hard X-rays
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### Nature Structural and Molecular Biology

42153	Satoshi Hirano	13 (2006) 1031-1032		BL41XU	Structural Basis of Ubiquitin Recognition by Mammalian Eap45 GLUE Domain
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### Nucleosides, Nucleotides and Nucleic Acids

42317	Jiro Kondo	25 (2006) 693-704		BL44XU	Crystal Structure of d(gcGXGAgc) with X = G: a Mutation at X is Possible to Occur in a Base-Intercalated Duplex for Multiplex Formation
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### Proceedings of the National Academy of Sciences of the United States of America

42339	Yoshitaka Bessho	104 (2007) 8293-8298	理研	BL26B1	Structural Basis for Functional Mimicry of Long-variable-arm tRNA by Transfer-messenger RNA
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### Protein Science

42087	Karuppasamy Manikandan	15 (2006) 1951-1960	理研	BL26B1	Crystal Structures of Native and Xylosaccharide-bound Alkali Thermostable Xylanase from an Alkalophilic <i>Bacillus</i> sp. NG-27: Structural Insights into Alkalophilicity and Implications for Adaptation to Polyextreme Conditions
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