

## 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、2019 年 10 月～12 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 2019 年 10 月～12 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 |
|--|-------|---|-------|
| Physical Review B                        | 15    | Macromolecules                          | 5     |
| Japanese Journal of Applied Physics      | 12    | Nature Communications                   | 5     |
| Journal of Synchrotron Radiation         | 7     | Physical Chemistry Chemical Physics     | 5     |
| Scientific Reports                       | 7     | The Journal of Physical Chemistry C     | 5     |
| Chemical Communications                  | 5     | Angewandte Chemie International Edition | 4     |
| Journal of the American Chemical Society | 5     | Journal of Hazardous Materials          | 4     |
| Journal of the Physical Society of Japan | 5     | Polymer                                 | 4     |

他全 176 誌、計 297 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

Japanese Journal of Applied Physics-1

| 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  |
|--------|--------------------------|---------------------|-----------|---------|---------------|---|
| 38923  | Yanan Wang               | 58 (2019)<br>110603 | 2019A4131 | BL12B2  | 久保園 芳博        | Preparation and Characterization of Superconducting Ba <sub>1-x</sub> Cs <sub>x</sub> Ti <sub>2</sub> Sb <sub>2</sub> O <sub>8</sub> , and Its Pressure Dependence of Superconductivity |
|        |                          |                     | 2018B4140 | BL12B2  | 久保園 芳博        |   |
| 38928  | Toyohiko Kinoshita       | 58 (2019)<br>110503 | 2016A1844 | BL25SU  | 室 隆桂之         | Progress in Photoelectron Holography at SPring-8  |
|        |                          |                     | 2014B1498 | BL25SU  | Kozina Xeniya |   |
|        |                          |                     | 2014B2048 | BL25SU  | 大沢 仁志         |   |
|        |                          |                     | 2015A1485 | BL25SU  | 大沢 仁志         |   |
|        |                          |                     | 2014A7462 | BL07LSU | 大門 寛          |   |
|        |                          |                     | 2016A1319 | BL39XU  | 田口 宗孝         |   |
|        |                          |                     | 2017B1348 | BL13XU  | 田口 宗孝         |   |
|        |                          |                     | 2015B7498 | BL07LSU | 加藤 有香子        |   |
| 38930  | Fumihiko Matsui          | 58 (2019)<br>110602 | 2016A1032 | BL25SU  | 松井 文彦         | Chemical and Magnetic Properties of Polycrystalline Iron Surface Revealed by Auger Electron Holography, Spectroscopy, and Microscopy  |
|        |                          |                     | 2011B1583 | BL25SU  | 大門 寛          |   |
|        |                          |                     | 2012B1698 | BL25SU  | 安田 馨          |   |
| 39050  | Mamoru Kitaura           | 58 (2019)<br>120602 | 2017B1282 | BL13XU  | 北浦 守          | Local Environment of W and Mo Atoms in CaW <sub>1-x</sub> Mo <sub>x</sub> O <sub>4</sub> (x = 0.12) Solid Solution Studied by X-ray Structural Analyses                                 |
|        |                          |                     | 2017B1061 | BL01B1  | 北浦 守          |   |
| 39058  | Shinya Hosokawa          | 58 (2019)<br>120601 | 2019A1591 | BL39XU  | 細川 伸也         | Valence-Selective Local Atomic Structures in Inorganic Materials by X-ray Fluorescence Holography   |
|        |                          |                     | 2018B4132 | BL12B2  | 細川 伸也         |   |
|        |                          |                     | 2018A1214 | BL39XU  | 細川 伸也         |   |
|        |                          |                     | 2015B1005 | BL13XU  | 細川 伸也         |   |
| 39071  | Koji Arafune             | 58 (2019)<br>125502 | 2014A1548 | BL19B2  | 新船 幸二         | Effect of Post-Deposition Annealing on Electrical Properties and Structures of Aluminum Oxide Passivation Film on a Crystalline Silicon Substrate                                       |
|        |                          |                     |           |         |               |   |
| 39083  | Hiroshi Sekiguchi        | 58 (2019)<br>120501 | 2014B1507 | BL20XU  | 関口 博史         | Dynamic 3D Visualization of Active Protein's Motion using Diffracted X-ray Tracking   |
|        |                          |                     | 2013A1301 | BL28B2  | 佐々木 裕次        |   |
|        |                          |                     | 2013A1353 | BL40XU  | 養王田 正文        |   |
|        |                          |                     | 2013B1429 | BL40XU  | 養王田 正文        |   |
|        |                          |                     | 2014A1188 | BL40XU  | 養王田 正文        |   |
|        |                          |                     | 2014B1205 | BL40XU  | 関口 博史         |   |
|        |                          |                     | 2015A1229 | BL40XU  | 関口 博史         |   |
|        |                          |                     | 2015A1219 | BL40XU  | 養王田 正文        |   |
|        |                          |                     | 2015B1195 | BL40XU  | 養王田 正文        |   |
|        |                          |                     | 2015B1200 | BL40XU  | 関口 博史         |   |
|        |                          |                     | 2016B1901 | BL40B2  | 関口 博史         |   |
|        |                          |                     | 2013B1380 | BL20XU  | 関口 博史         |   |
| 39084  | Artoni Kevin Roquero Ang | 59 (2020)<br>010505 | 2016B1099 | BL39XU  | 中村 照也         | X-ray Fluorescence Holography for Soft Matter   |
|        |                          |                     | 2016A1320 | BL39XU  | 久保 稔          |   |
|        |                          |                     | 2016B1393 | BL39XU  | 久保 稔          |   |
|        |                          |                     | 2016A1391 | BL39XU  | 佐々木 裕次        |   |
|        |                          |                     | 2016B1328 | BL39XU  | 佐々木 裕次        |   |
|        |                          |                     | 2017A1382 | BL39XU  | 佐藤 文菜         |   |
|        |                          |                     | 2017A1137 | BL39XU  | 佐々木 裕次        |   |
|        |                          |                     | 2017B1444 | BL39XU  | 佐藤 文菜         |   |
|        |                          |                     | 2017B1450 | BL39XU  | 林 好一          |   |
|        |                          |                     | 2017B1355 | BL39XU  | 梅名 泰史         |   |
|        |                          |                     | 2018A1155 | BL37XU  | 佐藤 文菜         |   |
|        |                          |                     | 2018A1097 | BL39XU  | 梅名 泰史         |   |
|        |                          |                     | 2018A1229 | BL37XU  | 林 好一          |   |
|        |                          |                     | 2018B1490 | BL39XU  | 佐藤 文菜         |   |
|        |                          |                     | 2018B1153 | BL39XU  | 梅名 泰史         |   |
|        |                          |                     | 2019A1230 | BL39XU  | 梅名 泰史         |   |

Japanese Journal of Applied Physics-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  |
|--------|-----------------|------------------|-----------|--------|-------|---|
| 39135  | Kotohiro Nomura | 58 (2019) 100502 | 2015B1308 | BL01B1 | 山添 誠司 | Direct Observation of Catalytically Active Species in Reaction Solution by X-ray Absorption Spectroscopy (XAS)      |
|        |                 |                  | 2016A1455 | BL01B1 | 野村 琴広 |   |
|        |                 |                  | 2016B1509 | BL01B1 | 野村 琴広 |   |
|        |                 |                  | 2017A1512 | BL01B1 | 野村 琴広 |   |
|        |                 |                  | 2018B1335 | BL01B1 | 野村 琴広 |   |
| 39166  | Noboru Ohashi   | 58 (2019) 121004 | 2017A0136 | BL46XU | 宮寺 哲彦 | Evaluation of Exciton Diffusion Length in Highly Oriented Fullerene Films of Fullerene/p-Si(100) Hybrid Solar Cells |
| 39241  | Seiji Nakashima | 59 (2020) 010602 | 2019A1296 | BL39XU | 中嶋 誠二 | Atomic Structure Stabilization in BiFeO <sub>3</sub> Thin Film by Mn Doping   |
|        |                 |                  | 2018B1456 | BL13XU | 中嶋 誠二 |   |

Physical Review B

|       |                     |                     |           |        |                 |   |
|-------|---------------------|---------------------|-----------|--------|-----------------|---|
| 38785 | Tong He             | 100 (2019) 094525   | 2017B1336 | BL10XU | 久保園 芳博          | Pressure-Induced Superconductivity in Bi <sub>2-x</sub> Sb <sub>x</sub> Te <sub>3-y</sub> Se <sub>y</sub>   |
|       |                     |                     | 2017B4133 | BL12B2 | 久保園 芳博          |   |
|       |                     |                     | 2018A4132 | BL12B2 | 久保園 芳博          |   |
|       |                     |                     | 2018B4140 | BL12B2 | 久保園 芳博          |   |
| 38827 | Takashi Kono        | 100 (2019) 165120   | 2018B1019 | BL25SU | 木村 昭夫           | Element-Specific Density of States of Co <sub>2</sub> MnGe Revealed by Resonant Photoelectron Spectroscopy  |
|       |                     |                     | 2018B3842 | BL23SU | 木村 昭夫           |   |
| 38929 | Hasnan Hafiz        | 100 (2019) 205104   | 2014B1335 | BL08W  | 鈴木 宏輔           | Identification of Ferrimagnetic Orbitals Preventing Spinel Degradation by Charge Ordering in Li <sub>3</sub> Mn <sub>2</sub> O <sub>4</sub>                         |
|       |                     |                     | 2015B1171 | BL08W  | 鈴木 宏輔           |   |
| 38961 | S. Yamada           | 100 (2019) 195137   | 2018A1016 | BL13XU | 宝野 和博           | Experimental Verification of the Origin of Positive Linear Magnetoresistance in CoFe(V <sub>1-x</sub> Mn <sub>x</sub> )Si Heusler Alloys                            |
|       |                     |                     | 2018A2052 | BL13XU | 田尻 寛男           |   |
|       |                     |                     | 2017B0921 | BL13XU | 壬生 攻            |   |
| 38986 | Hidekazu Okamura    | 100 (2019) 195112   | 2009A0089 | BL43IR | 岡村 英一           | Contrasting Pressure Evolution of <i>f</i> -electron Hybridized States in CeRhIn <sub>5</sub> and YbNi <sub>3</sub> Ga <sub>5</sub> : An Optical Conductivity Study |
|       |                     |                     | 2013B1159 | BL43IR | 大原 繁男           |   |
| 38988 | Mikhail Feygenson   | 100 (2019) 054306   | 2015B1176 | BL01B1 | Sikolenko Vadim | Manifold of Spin States and Dynamical Temperature Effects in LaCoO <sub>3</sub> : Experimental and Theoretical Insights   |
| 39036 | Yi-Ying Chin        | 99 (2019) 184407    | 2016B4255 | BL12XU | Huang Di-Jing   | Local Spin Moments, Valency, and Long-Range Magnetic Order in Monocrystalline and Ultrathin Films of Y <sub>3</sub> Fe <sub>5</sub> O <sub>12</sub> Garnet          |
|       |                     |                     | 2017A4251 | BL12XU | Chainani Ashish |   |
| 39070 | James McNulty       | 100 (2019) 094441   | 2014B1310 | BL39XU | Trodahl Joe     | Tunable Magnetic Exchange Springs in Semiconductor GdN/NdN Superlattices  |
| 39104 | Jack Binns          | 97 (2018) 024111    | 2017A1062 | BL10XU | Howie Ross      | Formation of H <sub>2</sub> -rich Iodine-Hydrogen Compounds at High Pressure  |
| 39105 | Jack Binns          | 98 (2018) 140101(R) | 2017A1062 | BL10XU | Howie Ross      | Synthesis of Ni <sub>2</sub> H <sub>3</sub> at High Temperatures and Pressures  |
|       |                     |                     | 2018A1041 | BL10XU | Howie Ross      |   |
| 39161 | Yasuhiro H. Matsuda | 100 (2019) 214105   | 2017B3787 | BL22XU | 松田 康弘           | High Magnetic Field X-ray Diffraction Study of the $\alpha$ Phase of Solid Oxygen: Absence of Giant Magnetostriction  |
|       |                     |                     | 2017A3786 | BL22XU | 松田 康弘           |   |

Scientific Reports

|       |                  |                |           |        |               |   |
|-------|------------------|----------------|-----------|--------|---------------|---|
| 38781 | Kotaro Matsumoto | 9 (2019) 13275 | 2018B3658 | BL14B1 | 安田 良          | Destruction of Tumor Mass by Gadolinium-Loaded Nanoparticles Irradiated with Monochromatic X-rays: Implications for the Auger Therapy |
|       |                  |                | 2019A3658 | BL14B1 | 安田 良          |   |
| 38809 | Masae Takahashi  | 9 (2019) 13104 | 2017A1354 | BL43IR | 高橋 まさえ        | Assessment of the VDW Interaction Converting DMAPS from the Thermal-Motion Form to the Hydrogen-Bonded Form                           |
|       |                  |                | 2018A1198 | BL43IR | 高橋 まさえ        |   |
|       |                  |                | 2016B1321 | BL43IR | 松井 広志         |   |
| 38876 | Takafumi Itoh    | 9 (2019) 14870 | 2016B2722 | BL26B1 | 伊藤 貴文         | Structural and Biochemical Characterisation of a Novel Alginate Lyase from <i>Paenibacillus</i> sp. str. FPU-7                        |
|       |                  |                | 2017A2528 | BL26B2 | 伊藤 貴文         |   |
|       |                  |                | 2018A2545 | BL38B1 | 伊藤 貴文         |   |
| 38916 | Chih Ming Lin    | 8 (2018) 1284  | 2016A4136 | BL12B2 | Lin Chih Ming | Pressure Effect on Impurity Local Vibrational Mode and Phase Transitions in <i>n</i> -type Iron-Doped Indium Phosphide                |
| 38951 | Wataru Yashiro   | 9 (2019) 14120 | 2014B1185 | BL20XU | 矢代 航          | Probing Surface Morphology using X-ray Grating Interferometry   |
|       |                  |                | 2015A1251 | BL20XU | 矢代 航          |   |
|       |                  |                | 2015A1244 | BL20XU | 矢代 航          |   |
|       |                  |                | 2015B1255 | BL20XU | 矢代 航          |   |
| 39139 | Makoto Minohara  | 7 (2017) 9516  | 2010B1696 | BL47XU | Hwang Harold  | Dielectric Collapse at the LaAlO <sub>3</sub> /SrTiO <sub>3</sub> (001) Heterointerface under Applied Electric Field                  |
| 39234 | Akio Yoneyama    | 9 (2019) 18831 | 2017A5400 | BL16B2 | 米山 明男         | Novel $Z_{eff}$ Imaging Method for Deep Internal Areas using Back-Scattered X-rays  |
|       |                  |                | 2017B5400 | BL16B2 | 米山 明男         |   |
|       |                  |                | 2018A5400 | BL16B2 | 米山 明男         |   |
|       |                  |                | 2018B5400 | BL16B2 | 米山 明男         |   |

### Chemical Communications

| 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   |
|-----------|------------------------|--------------------------|-----------|--------|--------|--|
| 38966     | Maki Torimoto          | 55 (2019)<br>6693-6695   | 2018B1759 | BL14B2 | 関根 泰   | Enhanced Methane Activation on Diluted Metal-Metal Ensembles under an Electric Field: Breakthrough in Alloy Catalysis  |
|           |                        |                          | 2018A1728 | BL14B2 | 関根 泰   |  |
| 38972     | Wiyanti F. Simanullang | 55 (2019)<br>13999-14002 | 2017A5071 | BL16XU | 高橋 直子  | Highly Active and Noble-Metal-Alternative Hydrogenation Catalysts Prepared by Dealloying Ni-Si Intermetallic Compounds   |
|           |                        |                          | 2017B5070 | BL16XU | 小坂 悟   |  |
| 39138     | Norifumi Muraki        | 55 (2019)<br>13864-13867 | 2015B6548 | BL44XU | 村木 則文  | Structural Basis for the Heme Transfer Reaction in Heme Uptake Machinery from Corynebacteria   |
|           |                        |                          | 2016A6647 | BL44XU | 村木 則文  |  |
|           |                        |                          | 2016B6647 | BL44XU | 村木 則文  |  |
|           |                        |                          | 2014B6955 | BL44XU | 村木 則文  |  |
|           |                        |                          | 2015A6548 | BL44XU | 村木 則文  |  |
| 2017A6757 | BL44XU                 | 村木 則文                    |           |        |        |  |
| 39213     | Koto Hirano            | 55 (2019)<br>15033-15036 | 2019A1146 | BL01B1 | 高野 慎二郎 | Asymmetric Aerobic Oxidation of Secondary Alcohols Catalyzed by Poly( <i>N</i> -Vinyl-2-Pyrrolidone)-Stabilized Gold Clusters Modified with Cyclodextrin Derivatives |
|           |                        |                          | 2018B1123 | BL01B1 | 高野 慎二郎 |  |
| 39217     | Tsuyoshi Nishikawa     | 55 (2019)<br>14950-14953 | 2018B1084 | BL40XU | 笹森 貴裕  | Hydrophobicity and CH/π-Interaction-Driven Self-Assembly of Amphiphilic Aromatic Hydrocarbons into Nanosheets  |
|           |                        |                          | 2018B1275 | BL40XU | 箕浦 真生  |  |

### The Journal of Physical Chemistry C

|           |                   |                           |           |        |       |  |
|-----------|-------------------|---------------------------|-----------|--------|-------|--|
| 38830     | Takahiro Matsuoka | 123 (2019)<br>25074-25080 | 2016B1242 | BL10XU | 松岡 岳洋 | Hydrogen-Storing Salt NaCl(H <sub>2</sub> ) Synthesized at High Pressure and High Temperature  |
|           |                   |                           | 2017A1218 | BL10XU | 松岡 岳洋 |  |
|           |                   |                           | 2014A1320 | BL10XU | 松岡 岳洋 |  |
|           |                   |                           | 2017B1492 | BL10XU | 松岡 岳洋 |  |
| 38967     | Hikaru Saito      | 123 (2019)<br>26272-26281 | 2019A1743 | BL14B2 | 関根 泰  | Dehydrogenation of Ethane via the Mars-van Krevelen Mechanism over La <sub>0.8</sub> Ba <sub>0.2</sub> MnO <sub>3-δ</sub> Perovskites under Anaerobic Conditions |
|           |                   |                           | 2018B1759 | BL14B2 | 関根 泰  |  |
| 39090     | Keisuke Itoh      | 123 (2019)<br>13467-13471 | 2017B1190 | BL40B2 | 伊藤 桂介 | Structural Alternation Correlated to the Conductivity Enhancement of PEDOT:PSS Films by Secondary Doping   |
|           |                   |                           | 2016A1617 | BL40B2 | 本間 優太 |  |
|           |                   |                           | 2015B1694 | BL40B2 | 本間 優太 |  |
| 39157     | Ching-Tien Chen   | 123 (2019)<br>20304-20313 | 2018A0155 | BL04B2 | 脇原 徹  | Zeolite Crystallization Triggered by Intermediate Stirring   |
| 39158     | Hiroki Yamada     | 123 (2019)<br>28419-28426 | 2015A0115 | BL04B2 | 脇原 徹  | Structural Evolution of Amorphous Precursors toward Crystalline Zeolites Visualized by an in Situ X-ray Pair Distribution Function Approach                      |
|           |                   |                           | 2017A1319 | BL08W  | 脇原 徹  |  |
|           |                   |                           | 2017A1217 | BL08W  | 尾原 幸治 |  |
|           |                   |                           | 2017B1452 | BL08W  | 脇原 徹  |  |
| 2018A0155 | BL04B2            | 脇原 徹                      |           |        |       |  |

### Journal of Synchrotron Radiation

|           |                  |                        |           |        |                |  |
|-----------|------------------|------------------------|-----------|--------|----------------|--|
| 38953     | Noritake Isomura | 26 (2019)<br>1936-1939 | 2018B1824 | BL46XU | 高橋 直子          | Thickness of Carbon Coatings on Silicon Materials Determined by Hard X-ray Photoelectron Spectroscopy at Multiple Photon Energies  |
| 38954     | Noritake Isomura | 26 (2019)<br>1951-1955 | 2018B5071 | BL16XU | 高橋 直子          | Local Atomic Structure Analysis of GaN Surfaces via X-ray Absorption Spectroscopy by Detecting Auger Electrons with Low Energies   |
|           |                  |                        | 2019A5071 | BL16XU | 高橋 直子          |  |
| 38969     | Yuki Sekiguchi   | 24 (2017)<br>1024-1038 | 2014A8033 | BL3    | 中迫 雅由          | A Protocol for Searching the Most Probable Phase-Retrieved Maps in Coherent X-ray Diffraction Imaging by Exploiting the Relationship between Convergence of the Retrieved Phase and Success of Calculation |
|           |                  |                        | 2014B8052 | BL3    | 中迫 雅由          |  |
|           |                  |                        | 2015A8051 | BL3    | 中迫 雅由          |  |
|           |                  |                        | 2016A8048 | BL3    | 中迫 雅由          |  |
| 2016B8064 | BL3              | 中迫 雅由                  |           |        |                |  |
| 39035     | Yi-Wei Tsai      | 26 (2019)<br>819-824   | 2015A4263 | BL12XU | Chang Shih Lin | Time-Resolved X-ray Reflection Phases of the Nearly Forbidden Si(222) Reflection under Laser Excitation  |
|           |                  |                        | 2015B4259 | BL12XU | Chang Shih Lin |  |
|           |                  |                        | 2016A4253 | BL12XU | Chang Shih Lin |  |
|           |                  |                        | 2016A4263 | BL12XU | Chang Shih Lin |  |
| 2017A4261 | BL12XU           | Chang Shih Lin         |           |        |                |  |
| 39115     | Ichiro Inoue     | 26 (2019)<br>2050-2054 | 2018B8023 | BL3    | 井上 伊知郎         | Determination of X-ray Pulse Duration via Intensity Correlation Measurements of X-ray Fluorescence   |

Journal of the American Chemical Society

| 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   |
|-----------|------------------|---------------------------|-----------|--------|--------|--|
| 38814     | Shinjiro Takano  | 141 (2019)<br>15994-16002 | 2018B1123 | BL01B1 | 高野 慎二郎 | Efficient and Selective Conversion of Phosphine-Protected (MAu <sub>6</sub> ) <sup>2+</sup> (M = Pd, Pt) Superatoms to Thiolate-Protected (MAu <sub>12</sub> ) <sup>6+</sup> or Alkynyl-Protected (MAu <sub>12</sub> ) <sup>4+</sup> Superatoms via Hydride Doping |
| 39042     | Takuo Wakisaka   | 142 (2020)<br>1247-1253   | 2016B1506 | BL02B2 | 北川 宏   | Rational Synthesis for a Noble Metal Carbide   |
|           |                  |                           | 2017A1165 | BL02B2 | 北川 宏   |  |
|           |                  |                           | 2017A4910 | BL15XU | 草田 康平  |  |
|           |                  |                           | 2017B4908 | BL15XU | 草田 康平  |  |
| 39130     | Motoya Yamagami  | 140 (2018)<br>8644-8647   | 2018A0154 | BL38B1 | 藤田 誠   | Synthetic $\beta$ -Barrel by Metal-Induced Folding and Assembly  |
|           |                  |                           | 2015A0120 | BL38B1 | 藤田 誠   |  |
| 39171     | Tomoki Nishimura | 142 (2020)<br>154-161     | 2017B1089 | BL40B2 | 西村 智貴  | Substrate-Sorting Nanoreactors Based on Permeable Peptide Polymer Vesicles and Hybrid Liposomes with Synthetic Macromolecular Channels   |
|           |                  |                           | 2018A1141 | BL40B2 | 西村 智貴  |  |
|           |                  |                           | 2018B1171 | BL40B2 | 西村 智貴  |  |
| 39208     | Takumi Nishikubo | 141 (2019)<br>19397-19403 | 2017B3751 | BL22XU | 町田 晃彦  | Enhanced Negative Thermal Expansion Induced by Simultaneous Charge Transfer and Polar-Nonpolar Transitions   |
|           |                  |                           | 2018A1636 | BL02B2 | 西久保 匠  |  |
|           |                  |                           | 2018A1667 | BL09XU | 西久保 匠  |  |
|           |                  |                           | 2018B3751 | BL22XU | 町田 晃彦  |  |
|           |                  |                           | 2017B1721 | BL47XU | 西久保 匠  |  |
|           |                  |                           | 2018B1672 | BL47XU | 尾形 昂洋  |  |
| 2019A1688 | BL02B2           | 西久保 匠                     |           |        |        |  |

Journal of the Physical Society of Japan

|       |                    |                     |           |        |            |  |
|-------|--------------------|---------------------|-----------|--------|------------|--|
| 38854 | Naoki Ishimatsu    | 88 (2019)<br>114601 | 2013B1297 | BL39XU | 鬼丸 孝博      | Pressure-Induced Collapse of the Guest Eu Off-Centering in Type-I Clathrate Eu <sub>8</sub> Ga <sub>16</sub> Ge <sub>30</sub>                                    |
|       |                    |                     | 2015B1253 | BL01B1 | 石松 直樹      |  |
|       |                    |                     | 2014A0078 | BL02B1 | Iversen Bo |  |
|       |                    |                     | 2016A1415 | BL39XU | 石松 直樹      |  |
|       |                    |                     | 2017A1296 | BL39XU | 石松 直樹      |  |
| 38878 | Chun Lin           | 88 (2019)<br>115004 | 2016A1210 | BL47XU | 藤森 淳       | Nature of Carrier Doping in T'-La <sub>1.8-x</sub> Eu <sub>0.2</sub> Sr <sub>x</sub> CuO <sub>4</sub> Studied by X-Ray Photoemission and Absorption Spectroscopy |
|       |                    |                     | 2018A1073 | BL47XU | 藤森 淳       |  |
| 38921 | Shin-ichi Fujimori | 88 (2019)<br>103701 | 2019A3811 | BL23SU | 藤森 伸一      | Electronic Structure of UTe <sub>2</sub> Studied by Photoelectron Spectroscopy   |
| 38952 | Harushige Nakao    | 88 (2019)<br>123701 | 2016A1615 | BL10XU | 中尾 敏臣      | Superconductivity of Pure H <sub>2</sub> S Synthesized from Elemental Sulfur and Hydrogen  |
|       |                    |                     | 2017B1711 | BL10XU | 中尾 敏臣      |  |
|       |                    |                     | 2018A0149 | BL10XU | 清水 克哉      |  |
| 39101 | Noriyuki Kataoka   | 88 (2019)<br>104709 | 2018B1283 | BL25SU | 横谷 尚睦      | $\mu$ -PES Studies on TiNCl and Quasi-two-dimensional Superconductor Na-intercalated TiNCl   |
|       |                    |                     | 2018B1369 | BL25SU | 横谷 尚睦      |  |

Macromolecules

|       |                  |                        |           |        |        |  |
|-------|------------------|------------------------|-----------|--------|--------|--|
| 38874 | DongChan Kim     | 52 (2019)<br>7806-7811 | 2016B1088 | BL40B2 | 寺尾 憲   | Lyotropic Liquid Crystallinity of Linear and Cyclic Amylose Derivatives: Amylose Tris( <i>n</i> -octadecylcarbamate) in Tetrahydrofuran and 2-Octanone                 |
|       |                  |                        | 2017A1082 | BL40B2 | 寺尾 憲   |  |
|       |                  |                        | 2017B1062 | BL40B2 | 寺尾 憲   |  |
| 38884 | Muhammad Ilyas   | 50 (2017)<br>8169-8177 | 2016B1430 | BL40B2 | 野々山 貴行 | Water-Triggered Ductile-Brittle Transition of Anisotropic Lamellar Hydrogels and Effect of Confinement on Polymer Dynamics   |
| 39004 | Kazuaki Rikiyama | 52 (2019)<br>7188-7196 | 2018B1385 | BL40B2 | 真田 雄介  | Unimer Structure and Micellization of Poly(ethylene oxide)-Stereocontrolled Poly( <i>N</i> -isopropylacrylamide) Alternating Multiblock Copolymers in Aqueous Solution |
| 39011 | Yuji Matsumoto   | 52 (2019)<br>8266-8274 | 2016B1424 | BL40B2 | 春藤 淳臣  | Effect of the Heterogeneous Structure on Mechanical Properties for a Nanocellulose-Reinforced Polymer Composite  |
|       |                  |                        | 2016B1659 | BL40B2 | 大野 正司  |  |
|       |                  |                        | 2016A1592 | BL40B2 | 大野 正司  |  |
| 39064 | Yuji Kinose      | 52 (2019)<br>8733-8740 | 2016B1208 | BL40B2 | 榑原 圭太  | Main-Chain Stiffness of Cellulosic Bottlebrushes with Polystyrene Side Chains Introduced Regioselectively at the C-6 Position  |
|       |                  |                        | 2017B1727 | BL40B2 | 黄瀬 雄司  |  |

Nature Communications-1

|       |                |                   |           |        |       |  |
|-------|----------------|-------------------|-----------|--------|-------|--|
| 38782 | Daisuke Morita | 7 (2016)<br>10356 | 2014A1279 | BL26B1 | 三上 文三 | Crystal Structure of the N-myristoylated Lipopeptide-Bound MHC Class I Complex |
|       |                |                   | 2014A1308 | BL26B1 | 三上 文三 |  |
|       |                |                   | 2014A1841 | BL26B2 | 三上 文三 |  |
|       |                |                   | 2014B1274 | BL26B1 | 三上 文三 |  |

Nature Communications-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  |
|--------|-------------------------|----------------|-----------|--------|---------------|---|
| 38987  | Ziqian Xue              | 10 (2019) 5048 | 2018B1728 | BL14B2 | 荻原 直希         | Missing-Linker Metal-Organic Frameworks for Oxygen Evolution Reaction   |
| 39106  | Philip Dalladay-Simpson | 10 (2019) 1134 | 2018A1041 | BL10XU | Howie Ross    | Band Gap Closure, Incommensurability and Molecular Dissociation of Dense Chlorine   |
| 39160  | Rui Lang                | 10 (2019) 234  | 2011B1974 | BL14B2 | 崔 藝濤          | Non Defect-Stabilized Thermally Stable Single-Atom Catalyst   |
| 39230  | Sheng Dai               | 10 (2019) 440  | 2016B4133 | BL12B2 | Chen Tsan Yao | Platinum-Trimer Decorated Cobalt-Palladium Core-Shell Nanocatalyst with Promising Performance for Oxygen Reduction Reaction |
|        |                         |                | 2017A4134 | BL12B2 | Chen Tsan Yao |   |
|        |                         |                | 2017B4145 | BL12B2 | Chen Tsan Yao |   |
|        |                         |                | 2017B4137 | BL12B2 | Chen Tsan Yao |   |

Physical Chemistry Chemical Physics

|           |                 |                                      |           |         |                |  |
|-----------|-----------------|--------------------------------------|-----------|---------|----------------|--|
| 38815     | Daehyun You     | (2019) Online published 16 Aug. 2019 | 2016B8076 | BL1     | 福澤 宏宣          | Multi-Particle Momentum Correlations Extracted using Covariance Methods on Multiple-Ionization of Diiodomethane Molecules by Soft-X-ray Free-Electron Laser Pulses |
|           |                 |                                      | 2017A8005 | BL1     | 福澤 宏宣          |  |
|           |                 |                                      | 2017B8065 | BL1     | 高梨 司           |  |
| 38859     | Akihiro Suzuki  | (2019) Online published 15 Aug. 2019 | 2016A8049 | BL3     | 西野 吉則          | Design of a Liquid Cell toward Three-Dimensional Imaging of Unidirectionally-Aligned Particles in Solution using X-ray Free-Electron Lasers                        |
|           |                 |                                      | 2016B8065 | BL3     | 西野 吉則          |  |
|           |                 |                                      | 2017A8006 | BL2     | 西野 吉則          |  |
|           |                 |                                      | 2017B8061 | BL2     | 西野 吉則          |  |
| 38883     | Ahmed Ismail    | (2019) Online published 16 Oct. 2019 | 2019A7592 | BL07LSU | De Groot Frank | Direct Observation of the Electronic States of Photoexcited Hematite with Ultrafast 2p3d X-ray Absorption Spectroscopy and Resonant Inelastic X-ray Scattering     |
| 39212     | Daisuke Asakura | 21 (2019) 26351-26357                | 2014A7464 | BL07LSU | 朝倉 大輔          | Operando Soft X-ray Emission Spectroscopy of the Fe <sub>2</sub> O <sub>3</sub> Anode to Observe the Conversion Reaction   |
|           |                 |                                      | 2014B7475 | BL07LSU | 朝倉 大輔          |  |
|           |                 |                                      | 2015A7483 | BL07LSU | 朝倉 大輔          |  |
|           |                 |                                      | 2015B7495 | BL07LSU | 朝倉 大輔          |  |
|           |                 |                                      | 2016A7511 | BL07LSU | 朝倉 大輔          |  |
| 2016B7517 | BL07LSU         | 朝倉 大輔                                |           |         |                |  |
| 39223     | Chia-Shuo Hsu   | 19 (2017) 8681-8693                  | 2016A4129 | BL12B2  | Chen Hao-Ming  | Valence- and Element-Dependent Water Oxidation Behaviors: <i>in situ</i> X-ray Diffraction, Absorption and Electrochemical Impedance Spectroscopies                |
|           |                 |                                      | 2016B4129 | BL12B2  | Chen Hao-Ming  |  |

Journal of Hazardous Materials

|       |                  |                    |           |        |               |  |
|-------|------------------|--------------------|-----------|--------|---------------|--|
| 38820 | Yawen Liu        | 366 (2019) 538-544 | 2016B1534 | BL01B1 | 高岡 昌輝         | Insight into the Low-Temperature Decomposition of Aroclor 1254 over Activated Carbon-Supported Bimetallic Catalysts Obtained with XANES and DFT Calculations |
|       |                  |                    | 2015B1830 | BL01B1 | 高岡 昌輝         |  |
| 39055 | Liang-Ching Hsu  | 296 (2015) 230-238 | 2014A4127 | BL12B2 | Liu Yu-Ting   | Comparison of the Spectroscopic Speciation and Chemical Fractionation of Chromium in Contaminated Paddy Soils  |
|       |                  |                    | 2014B4139 | BL12B2 | Chen Jin-Ming |  |
| 39170 | Daisuke Kawamoto | 378 (2019) 120593  | 2013A1820 | BL14B2 | 大橋 弘範         | A New and Practical Se(IV) Removal Method using Fe <sup>3+</sup> Type Cation Exchange Resin  |
|       |                  |                    | 2014A1534 | BL14B2 | 大橋 弘範         |  |
|       |                  |                    | 2016B1560 | BL14B2 | 川本 大祐         |  |
| 39232 | Sang-Ho Lee      | 384 (2020) 121223  | 2018A1228 | BL01B1 | 徳永 紘平         | Selective Immobilization of Iodide onto a Novel Bismuth-Impregnated Layered Mixed Metal Oxide: Batch and EXAFS Studies                                       |
|       |                  |                    | 2018B1801 | BL14B2 | 高橋 嘉夫         |  |
|       |                  |                    | 2017A1798 | BL05XU | 高橋 嘉夫         |  |
|       |                  |                    | 2018A0148 | BL37XU | 高橋 嘉夫         |  |
|       |                  |                    | 2018A0148 | BL01B1 | 高橋 嘉夫         |  |

Polymer

|       |                  |                   |           |        |        |   |
|-------|------------------|-------------------|-----------|--------|--------|---|
| 38867 | Hongyi Gan       | 172 (2019) 7-12   | 2017A7232 | BL03XU | 加部 泰三  | Crystal Structures and Crystalline Elastic Modulus of Paramylon Esters  |
|       |                  |                   | 2017B7281 | BL03XU | 加部 泰三  |   |
|       |                  |                   | 2018A7232 | BL03XU | 加部 泰三  |   |
| 38926 | Takuya Matsumoto | 119 (2017) 76-82  | 2011B3255 | BL24XU | 西野 孝   | Molecular Weight Effect on Surface and Bulk Structure of Poly(3-hexylthiophene) Thin Films                                    |
|       |                  |                   | 2012A4803 | BL15XU | 松井 純爾  |   |
|       |                  |                   | 2012B4803 | BL15XU | 松井 純爾  |   |
| 38933 | Yu Tomofuji      | 185 (2019) 121944 | 2018A1124 | BL40B2 | 寺尾 憲   | Single-Chain Conformation of Carboxylated Schizophyllan, a Triple Helical Polysaccharide, in Dilute Alkaline Aqueous Solution |
| 38956 | Atsushi Izumi    | 182 (2019) 121857 | 2017A1813 | BL19B2 | 加々良 剛志 | In situ Residual Stress Analysis in a Phenolic Resin and Copper Composite Material during Curing                              |
|       |                  |                   | 2017B1893 | BL19B2 | 和泉 篤士  |   |
|       |                  |                   | 2018A1751 | BL19B2 | 和泉 篤士  |   |
|       |                  |                   | 2018B1575 | BL19B2 | 和泉 篤士  |   |

Angewandte Chemie International Edition

| 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  |
|--------|--------------------|--------------------------|-----------|--------|-------------|---|
| 38779  | Misaki Ueda        | 58 (2019)<br>14673-14678 | 2016A1432 | BL02B1 | 吉成 信人       | Structurally Precise Silver Sulfide Nanoclusters Protected by Rhodium(III) Octahedra with Aminothiolates  |
|        |                    |                          | 2016B1076 | BL02B2 | 吉成 信人       |   |
|        |                    |                          | 2017A1282 | BL02B2 | 吉成 信人       |   |
|        |                    |                          | 2017B1203 | BL02B2 | 吉成 信人       |   |
|        |                    |                          | 2019A1362 | BL01B1 | 吉成 信人       |   |
| 38880  | Sanjog S. Nagarkar | 56 (2017)<br>4976-4981   | 2016B1231 | BL02B2 | 堀毛 悟史       | Enhanced and Optically Switchable Proton Conductivity in a Melting Coordination Polymer Crystal   |
| 38962  | Tianxiang Chen     | 59 (2020)<br>1093-1097   | 2018B1081 | BL02B2 | Lo Benedict | Differential Adsorption of L- and D-Lysine on Achiral MFI Zeolites as Determined by Synchrotron X-ray Powder Diffraction and Thermogravimetric Analysis |

Chemical Physics Letters

|       |              |                       |           |        |                  |   |
|-------|--------------|-----------------------|-----------|--------|------------------|---|
| 38860 | Chris Hull   | 736 (2019)<br>136811  | 2017B8072 | BL3    | Saykally Richard | Early Time Dynamics of Laser-Ablated Silicon using Ultrafast Grazing Incidence X-ray Scattering   |
| 38896 | Mitsuo Shoji | 730 (2019)<br>416-425 | 2016B8066 | BL3    | 沈 建仁             | Elucidation of the Entire Kok Cycle for Photosynthetic Water Oxidation by the Large-Scale Quantum Mechanics/Molecular Mechanics Calculations: Comparison with the Experimental Results by the Recent Serial Femtosecond Crystallography |
|       |              |                       | 2017A8041 | BL3    | 沈 建仁             |   |
|       |              |                       | 2017B8025 | BL2    | 沈 建仁             |   |
|       |              |                       | 2018A8037 | BL2    | 沈 建仁             |   |
|       |              |                       | 2018B8029 | BL2    | 沈 建仁             |   |
| 38963 | Shota Manabe | 711 (2018)<br>73-76   | 2018A1728 | BL14B2 | 関根 泰             | Theoretical Investigation on Structural Effects of Pt-Mn Catalyst on Activity and Selectivity for Methylcyclohexane Dehydrogenation   |

Dalton Transactions

|       |                |                          |           |        |                 |  |
|-------|----------------|--------------------------|-----------|--------|-----------------|--|
| 38918 | Malte Fugel    | 48 (2019)<br>16330-16339 | 2015A1329 | BL02B1 | Grabowsky Simon | Complementary Bonding Analysis of the N-Si Interaction in Pentacoordinated Silicon Compounds using Quantum Crystallography                               |
|       |                |                          | 2016B1204 | BL02B1 | Grabowsky Simon |  |
| 39033 | Hiroaki Ito    | 48 (2019)<br>12272-12278 | 2019A1114 | BL02B2 | 三浦 章            | An Electronic Structure Governed by the Displacement of the Indium Site in In-S <sub>6</sub> Octahedra: LnOInS <sub>2</sub> (Ln = La, Ce, and Pr)        |
|       |                |                          | 2017B1211 | BL02B2 | 三浦 章            |  |
|       |                |                          | 2018B1246 | BL02B2 | 後藤 陽介           |  |
| 39228 | Chia-Jui Chang | 48 (2019)<br>7122-7129   | 2018A4254 | BL12XU | Chen Hao-Ming   | Revealing the Structural Transformation of Rutile RuO <sub>2</sub> via <i>in situ</i> X-ray Absorption Spectroscopy during the Oxygen Evolution Reaction |
|       |                |                          | 2018B4126 | BL12B2 | Chen Hao-Ming   |  |

Geochemical Journal

|       |                 |                      |           |        |        |   |
|-------|-----------------|----------------------|-----------|--------|--------|---|
| 39001 | Akiko Yamaguchi | 52 (2018)<br>415-425 | 2015A0118 | BL01B1 | 高橋 嘉夫  | Discovery of Ion-Adsorption Type Deposits of Rare Earth Elements (REE) in Southwest Japan with Speciation of REE by Extended X-ray Absorption Fine Structure Spectroscopy                           |
|       |                 |                      | 2017A1798 | BL05XU | 高橋 嘉夫  |   |
|       |                 |                      | 2015A0118 | BL27SU | 高橋 嘉夫  |   |
|       |                 |                      | 2015A0118 | BL37XU | 高橋 嘉夫  |   |
| 39052 | Kazuya Tanaka   | 53 (2019)<br>329-331 | 2018A0148 | BL01B1 | 高橋 嘉夫  | Application of M <sub>V</sub> -edge XANES to Determination of U Oxidation State in Zircon   |
| 39136 | Yoko Kebukawa   | 53 (2019)<br>53-67   | 2015A1899 | BL43IR | 藪田 ひかる | STXM-XANES Analyses of Murchison Meteorite Samples Captured by Aerogel after Hypervelocity Impacts: A Potential Implication of Organic Matter Degradation for Micrometeoroid Collection Experiments |

The Journal of Physical Chemistry B

|       |                 |                           |           |        |                |   |
|-------|-----------------|---------------------------|-----------|--------|----------------|---|
| 38786 | Yasushi Imamoto | 123 (2019)<br>9134-9142   | 2016A1427 | BL40B2 | 今元 泰           | Conformational Differences among Metarhodopsin I, Metarhodopsin II, and Opsin Probed by Wide-Angle X-ray Scattering         |
|       |                 |                           | 2016B1258 | BL40B2 | 今元 泰           |   |
|       |                 |                           | 2012A1263 | BL40B2 | 今元 泰           |   |
|       |                 |                           | 2013A1136 | BL40B2 | 今元 泰           |   |
|       |                 |                           | 2014A1247 | BL40B2 | 今元 泰           |   |
| 38877 | Hikari Watanabe | 123 (2019)<br>6244-6252   | 2016B1219 | BL04B2 | 梅林 泰宏          | Possible Proton Conduction Mechanism in Pseudo-Protonic Ionic Liquids: A Concept of Specific Proton Conduction              |
|       |                 |                           | 2016B1053 | BL04B2 | 関 志朗           |   |
|       |                 |                           | 2012B1709 | BL04B2 | 土井 寛之          |   |
|       |                 |                           | 2012A1682 | BL04B2 | 上野 和英          |   |
| 39057 | Takeshi Usuki   | 123 (2019)<br>10260-10266 | 2016A1277 | BL04B2 | Bychkov Evgeny | Dimeric Molecular Structure of Molten Gallium Trichloride and a Hidden Evolution toward a Possible Liquid-Liquid Transition |
|       |                 |                           |           |        |                |   |

Nature

| 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  |
|--------|-----------------|-----------------------|-----------|---------|--------|---|
| 38902  | Takahiko Masuda | 573 (2019)<br>238-242 | 2014A1334 | BL09XU  | 吉村 浩司  | X-ray Pumping of the <sup>229</sup> Th Nuclear Clock Isomer   |
|        |                 |                       | 2014B1524 | BL09XU  | 吉村 浩司  |   |
|        |                 |                       | 2015B1380 | BL09XU  | 吉村 浩司  |   |
|        |                 |                       | 2016A1420 | BL09XU  | 吉村 浩司  |   |
|        |                 |                       | 2016B1232 | BL09XU  | 吉村 浩司  |   |
|        |                 |                       | 2017B1335 | BL09XU  | 吉村 浩司  |   |
|        |                 |                       | 2018A1326 | BL19LXU | 吉村 浩司  |   |
|        |                 |                       | 2018B1436 | BL19LXU | 吉村 浩司  |   |
| 38905  | Steeve Greaux   | 565 (2019)<br>218-221 | 2015A0075 | BL04B1  | 入船 徹男  | Sound Velocity of CaSiO <sub>3</sub> Perovskite Suggests the Presence of Basaltic Crust in the Earth's Lower Mantle |
| 39140  | Reiya Taniguchi | 548 (2017)<br>356-360 | 2015A1057 | BL32XU  | 西澤 知宏  | Structural Insights into Ligand Recognition by the Lysophosphatidic Acid Receptor LPA <sub>6</sub>                  |
|        |                 |                       | 2015A1024 | BL32XU  | 石谷 隆一郎 |   |
|        |                 |                       | 2016A2527 | BL32XU  | 石谷 隆一郎 |   |

New Journal of Physics

|       |                |                     |           |         |        |  |
|-------|----------------|---------------------|-----------|---------|--------|--|
| 38828 | Kazuki Sumida  | 21 (2019)<br>093006 | 2017A3842 | BL23SU  | 木村 昭夫  | Magnetic-Impurity-Induced Modifications to Ultrafast Carrier Dynamics in the Ferromagnetic Topological Insulators Sb <sub>2-x</sub> V <sub>x</sub> Te <sub>3</sub> |
| 38950 | Xiaofan Yang   | 21 (2019)<br>113010 | 2017B1336 | BL10XU  | 久保園 芳博 | Superconducting Properties of (NH <sub>4</sub> ) <sub>2</sub> Li <sub>x</sub> FeSe <sub>0.5</sub> Te <sub>0.5</sub> under Pressure                                 |
|       |                |                     | 2018A4132 | BL12B2  | 久保園 芳博 |  |
|       |                |                     | 2018B1265 | BL02B1  | 久保園 芳博 |  |
|       |                |                     | 2018B4140 | BL12B2  | 久保園 芳博 |  |
| 39089 | Kohei Yamamoto | 21 (2019)<br>123010 | 2017B8060 | BL3     | 和達 大樹  | Ultrafast Demagnetization of Pt Magnetic Moment in L1 <sub>0</sub> -FePt Probed by Magnetic Circular Dichroism at a Hard X-ray Free Electron Laser                 |
|       |                |                     | 2017B8088 | BL3     | 久保田 雄也 |  |
|       |                |                     | 理研        | BL19LXU |        |  |

RSC Advances

|       |                  |                         |           |        |               |   |
|-------|------------------|-------------------------|-----------|--------|---------------|---|
| 38932 | Toshiharu Ohnuma | 9 (2019)<br>35655-35661 | 2014A5350 | BL16B2 | 野口 真一         | X-ray Absorption Near Edge Structure Simulation of LiNi <sub>0.5</sub> Co <sub>0.2</sub> Mn <sub>0.3</sub> O <sub>2</sub> via First-Principles Calculation  |
|       |                  |                         | 2014B5350 | BL16B2 | 野口 真一         |   |
|       |                  |                         | 2015A5350 | BL16B2 | 野口 真一         |   |
|       |                  |                         | 2015B5350 | BL16B2 | 野口 真一         |   |
|       |                  |                         | 2016A1567 | BL14B2 | 小林 剛          |   |
|       |                  |                         | 2016A5350 | BL16B2 | 野口 真一         |   |
|       |                  |                         | 2016B5350 | BL16B2 | 野口 真一         |   |
|       |                  |                         | 2018A1596 | BL14B2 | 小林 剛          |   |
|       |                  |                         | 2018B5350 | BL16B2 | 野口 真一         |   |
|       |                  |                         | 2019A1818 | BL14B2 | 小林 剛          |   |
|       |                  |                         | 2019A5350 | BL16B2 | 野口 真一         |   |
|       |                  |                         | 2018B1593 | BL14B2 | 小林 剛          |   |
| 39172 | Yuto Tamura      | 8 (2018)<br>35237-35245 | 2017A1779 | BL19B2 | 鈴木 充朗         | Improvement in Interlayer Structure of p-i-n-type Organic Solar Cells with the Use of Fullerene-Linked Tetrabenzoporphyrin as Additive                      |
| 39222 | Tsan Yao Chen    | 6 (2016)<br>72607-72615 | 2014A4137 | BL12B2 | Chen Tsan Yao | Shell Thickness Effects on Reconfiguration of NiO <sub>core</sub> -Pt <sub>shell</sub> Anodic Catalysis in a High Current Density Direct Methanol Fuel Cell |
|       |                  |                         | 2014B4137 | BL12B2 | Chen Tsan Yao |   |
|       |                  |                         | 2015A4127 | BL12B2 | Chen Tsan Yao |   |
|       |                  |                         | 2015A4140 | BL12B2 | Chen Tsan Yao |   |
|       |                  |                         | 2015B4131 | BL12B2 | Chen Tsan Yao |   |

ACS Applied Energy Materials

|       |                 |                       |           |        |        |  |
|-------|-----------------|-----------------------|-----------|--------|--------|--|
| 38904 | Hidenori Kuroki | 1 (2018)<br>324-330   | 2016B5390 | BL16B2 | 今井 英人  | Refined Structural Analysis of Connected Platinum-Iron Nanoparticle Catalysts with Enhanced Oxygen Reduction Activity                          |
|       |                 |                       | 2017A5390 | BL16B2 | 今井 英人  |  |
| 39074 | Ikuma Takahashi | 2 (2019)<br>8118-8124 | 2014B5094 | BL16XU | 高橋 伊久磨 | Mechanism of Structural Change and the Trigger of Electrochemical Degradation of Li-Rich Layered Oxide Cathodes during Charge-Discharge Cycles |
|       |                 |                       | 2015A5391 | BL16B2 | 高橋 伊久磨 |  |
|       |                 |                       | 2016A5093 | BL16XU | 高橋 伊久磨 |  |
|       |                 |                       | 2016A7602 | BL28XU | 小久見 善八 |  |
|       |                 |                       | 2016B7610 | BL28XU | 松原 英一郎 |  |
|       |                 |                       | 2017A7610 | BL28XU | 松原 英一郎 |  |



### ACS Catalysis

| 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  |
|--------|------------------|-------------------------|-----------|---------|-------|---|
| 38964  | Tomohiro Yabe    | 8 (2018)<br>11470-11477 | 2018A1728 | BL14B2  | 関根 泰  | Ni-Mg Supported Catalysts on Low-Temperature Electrocatalytic Tri-reforming of Methane with Suppressed Oxidation        |
| 38982  | Takanori Koitaya | 9 (2019)<br>4539-4550   | 2015B7496 | BL07LSU | 吉信 淳  | CO <sub>2</sub> Activation and Reaction on Zn-Deposited Cu Studied by Ambient-Pressure X-ray Photoelectron Spectroscopy |
|        |                  |                         | 2016A7401 | BL07LSU | 吉信 淳  |   |

### Acta Crystallographica Section D

|           |              |                        |           |        |       |   |
|-----------|--------------|------------------------|-----------|--------|-------|---|
| 39107     | Yang Tai     | 75 (2019)<br>1096-1106 | 2015B2033 | BL41XU | 竹田 一旗 | X-ray Crystallographic Studies on the Hydrogen Isotope Effects of Green Fluorescent Protein at Sub-ångström Resolutions |
|           |              |                        | 2015B1037 | BL41XU | 竹田 一旗 |   |
|           |              |                        | 2016A6624 | BL44XU | 竹田 一旗 |   |
|           |              |                        | 2016A2536 | BL41XU | 竹田 一旗 |   |
|           |              |                        | 2017A6728 | BL44XU | 竹田 一旗 |   |
|           |              |                        | 2017A2542 | BL41XU | 竹田 一旗 |   |
|           |              |                        | 2017B6728 | BL44XU | 竹田 一旗 |   |
|           |              |                        | 2018A6827 | BL44XU | 竹田 一旗 |   |
|           |              |                        | 2018B2705 | BL41XU | 竹田 一旗 |   |
|           |              |                        | 2019A2560 | BL41XU | 竹田 一旗 |   |
| 2016B6624 | BL44XU       | 竹田 一旗                  |           |        |       |   |
| 39249     | Shigeki Arai | 76 (2020)<br>73-84     | 2014B1315 | BL38B1 | 新井 栄揮 | Catalytic Mechanism and Evolutionary Characteristics of Thioredoxin from <i>Halobacterium salinarum</i> NRC-1           |

### Acta Materialia

|       |                  |                       |           |        |       |   |
|-------|------------------|-----------------------|-----------|--------|-------|---|
| 38889 | Hiroyuki Okazaki | 181 (2019)<br>530-536 | 2015A1007 | BL02B2 | 廣澤 哲  | Quantitative Identification of Constituent Phases in a Nd-Fe-B-Cu Sintered Magnet and Temperature Dependent Change of Electron Density of Nd <sub>2</sub> Fe <sub>14</sub> B Studied by Synchrotron X-ray Diffraction |
|       |                  |                       | 2015A1326 | BL02B2 | 上野 若菜 |   |
|       |                  |                       | 2016A1009 | BL02B2 | 廣澤 哲  |   |
|       |                  |                       | 2017A1010 | BL02B2 | 廣澤 哲  |   |
|       |                  |                       | 2018A1009 | BL02B2 | 廣澤 哲  |   |
| 38890 | Satoshi Okamoto  | 178 (2019)<br>90-98   | 2017B1028 | BL25SU | 岡本 聡  | Temperature Dependent Magnetization Reversal Process of a Ga-doped Nd-Fe-B Sintered Magnet Based on First-Order Reversal Curve Analysis   |
|       |                  |                       | 2017A1022 | BL25SU | 廣澤 哲  |   |
|       |                  |                       | 2015B1998 | BL25SU | 小谷 佳範 |   |
|       |                  |                       | 2015A2042 | BL25SU | 小谷 佳範 |   |

### American Mineralogist

|       |               |                         |           |        |       |  |
|-------|---------------|-------------------------|-----------|--------|-------|--|
| 38995 | Mayumi Jige   | 103 (2018)<br>1126-1135 | 2017A1798 | BL05XU | 高橋 嘉夫 | Fe-Kaolinite in Granite Saprolite Beneath Sedimentary Kaolin Deposits: A Mode of Fe Substitution for Al in Kaolinite |
| 39131 | Helene Breton | 104 (2019)<br>1781-1787 | 2018B1464 | BL10XU | 駒林 鉄也 | Static Compression of Fe <sub>4</sub> N to 77 GPa and its Implication for Nitrogen Storage in the Deep Earth         |

### Atomization and Sprays

|       |                |                      |           |        |      |  |
|-------|----------------|----------------------|-----------|--------|------|--|
| 39147 | Rubby Prasetya | 29 (2019)<br>59-78   | 2014B0111 | BL40XU | 文 石洙 | X-ray Phase Contrast Imaging of Cavitation and Discharged Liquid Jet in Nozzles with Various Sizes |
|       |                |                      | 2018A0145 | BL40XU | 文 石洙 |  |
| 39148 | Rubby Prasetya | 29 (2019)<br>123-141 | 2014B0111 | BL40XU | 文 石洙 | In-Nozzle Cavitation and Discharges Liquid Jet during Transient Injection Process                  |
|       |                |                      | 2018A0145 | BL40XU | 文 石洙 |  |

### Bulletin of the Chemical Society of Japan

|       |                  |                        |           |        |        |  |
|-------|------------------|------------------------|-----------|--------|--------|--|
| 39041 | Chiaki Ishibashi | 92 (2019)<br>1950-1959 | 2016A1509 | BL19B2 | 井手本 康  | Crystal and Electronic Structures of MgCo <sub>2-x</sub> Mn <sub>x</sub> O <sub>4</sub> as Cathode Material for Magnesium Secondary Batteries Using First-Principles Calculations and Quantum Beam Measurements  |
|       |                  |                        | 2016B1859 | BL19B2 | 井手本 康  |  |
|       |                  |                        | 2018A1040 | BL04B2 | 井手本 康  |  |
| 39146 | Ryo Sasai        | 92 (2019)<br>1986-1992 | 2018A1416 | BL02B2 | 藤村 卓也  | Development of a Novel Time-Resolved Synchrotron-Radiation X-ray Diffraction Measurement System for In Situ Observation of Crystal Structure in Aqueous Solution during Chemical Reaction: Application to the Anion-Exchange Reaction of a Layered Double Hydroxide from Chloride to Nitrate |
|       |                  |                        | 2017B1196 | BL02B2 | 藤村 卓也  |  |
|       |                  |                        | 2017A1483 | BL02B2 | 藤村 卓也  |  |
|       |                  |                        | 2018A1004 | BL02B2 | 笹井 亮   |  |
|       |                  |                        | 2015A0074 | BL02B2 | 森吉 千佳子 |  |

### Catalysis Science & Technology

| 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  |
|--------|-------------|-----------------------|-----------|--------|-------|---|
| 39117  | Takao Gunji | 9 (2019)<br>6577-6584 | 2019A1316 | BL01B1 | 松本 太  | Electrocatalytic Conversion of Carbon Dioxide to Formic Acid over Nanosized Cu <sub>6</sub> Sn <sub>5</sub> Intermetallic Compounds with a SnO <sub>2</sub> Shell Layer |
| 39245  | Yuta Nabae  | 10 (2020)<br>493-501  | 2017A1035 | BL14B2 | 今井 英人 | Magnetic Purification of Non-Precious Metal Fuel Cell Catalysts for Obtaining Atomically Dispersed Fe Centers   |

### Chemistry - A European Journal

|       |                |                          |           |        |              |   |
|-------|----------------|--------------------------|-----------|--------|--------------|---|
| 38837 | Hidetoshi Ohta | 25 (2019)<br>14762-14766 | 2017A1576 | BL14B2 | 村山 美乃        | Surface Modification of a Supported Pt Catalyst Using Ionic Liquids for Selective Hydrodeoxygenation of Phenols into Arenes under Mild Conditions |
|       |                |                          | 2018A1736 | BL14B2 | 村山 美乃        |   |
| 39243 | Li Hong        | 25 (2019)<br>12842-12848 | 2017B1309 | BL02B2 | Sun Hong-Tao | Defective [Bi <sub>2</sub> O <sub>2</sub> ] <sup>2+</sup> Layers Exhibiting Ultrabroad Near-Infrared Luminescence                                 |

### Communications Physics

|       |                      |                 |           |        |       |  |
|-------|----------------------|-----------------|-----------|--------|-------|--|
| 39069 | Jonathan Pellicciari | 2 (2019)<br>139 | 2014A3502 | BL11XU | 石井 賢司 | Reciprocity between Local Moments and Collective Magnetic Excitations in the Phase Diagram of BaFe <sub>2</sub> (As <sub>1-x</sub> P <sub>x</sub> ) <sub>2</sub> |
|       |                      |                 | 2014B3502 | BL11XU | 石井 賢司 |  |
| 39256 | Thanh-Hung Dinh      | 2 (2019)<br>150 | 2016B8006 | BL1    | 錦野 将元 | Controlled Strong Excitation of Silicon as a Step towards Processing Materials at Sub-Nanometer Precision  |
|       |                      |                 | 2017B8004 | BL1    | 錦野 将元 |  |
|       |                      |                 | 2018A8024 | BL1    | 錦野 将元 |  |
|       |                      |                 | 2017A8026 | BL1    | 木下 博雄 |  |

### European Journal of Inorganic Chemistry

|       |              |                          |           |        |       |   |
|-------|--------------|--------------------------|-----------|--------|-------|---|
| 38866 | Haibo Yin    | 2019 (2019)<br>3745-3752 | 2017A1063 | BL01B1 | 桑原 泰隆 | RuPd Alloy Nanoparticles Supported on Plasmonic H <sub>2</sub> MoO <sub>3-y</sub> for Efficient Photocatalytic Reduction of <i>p</i> -Nitrophenol |
|       |              |                          | 2018B1185 | BL01B1 | 桑原 泰隆 |   |
| 39006 | Jun Maruyama | 2019 (2019)<br>4117-4121 | 2016A1027 | BL14B2 | 丸山 純  | Nanoscope Combination of Edge and Flat Planes in the Active Site for Oxygen Reduction and Evolution   |

### High Pressure Research

|       |                   |                                      |           |        |       |   |
|-------|-------------------|--------------------------------------|-----------|--------|-------|---|
| 39215 | Miu Kousa         | (2019) Published online 12 Dec. 2019 | 2017B1304 | BL39XU | 石松 直樹 | Element-Selective Elastic Properties of Fe <sub>65</sub> Ni <sub>35</sub> Invar Alloy and Fe <sub>72</sub> Pt <sub>28</sub> Alloy Studied by Extended X-ray Absorption Fine Structure |
|       |                   |                                      | 2017B1974 | BL39XU | 河村 直己 |   |
|       |                   |                                      | 2018B1355 | BL39XU | 石松 直樹 |   |
|       |                   |                                      | 2019A1530 | BL39XU | 石松 直樹 |   |
| 39238 | Keitaro Kuramochi | (2019) Published online 17 Dec. 2019 | 2018B1361 | BL39XU | 石松 直樹 | An Application of NPD to Double-Stage Diamond Anvil Cells: XAS Spectra of Rhenium Metal under High Pressures above 300 GPa  |
|       |                   |                                      | 2018B2091 | BL39XU | 河村 直己 |   |
|       |                   |                                      | 2018B1380 | BL10XU | 境 毅   |   |
|       |                   |                                      | 2019A1520 | BL39XU | 石松 直樹 |   |

### Inorganic Chemistry Frontiers

|       |                |                       |           |        |         |  |
|-------|----------------|-----------------------|-----------|--------|---------|--|
| 38807 | Hajime Toriumi | 6 (2019)<br>1587-1597 | 2016B1036 | BL01B1 | 青木 芳尚   | High-Valence-State Manganate(V) Ba <sub>3</sub> Mn <sub>2</sub> O <sub>8</sub> as an Efficient Anode of a Proton-Conducting Solid Oxide Steam Electrolyzer |
|       |                |                       | 2017B1288 | BL01B1 | 青木 芳尚   |  |
| 38935 | Jinyu Hu       | 6 (2019)<br>3146-3151 | 2018A1210 | BL44B2 | Lin Kun | A Case of Multifunctional Intermetallic Compounds: Negative Thermal Expansion Coupling with Magnetocaloric Effect in (Gd,Ho)(Co,Fe) <sub>2</sub>           |
|       |                |                       | 2018B1515 | BL44B2 | Lin Kun |  |

### IUCrJ

|       |                      |                       |           |     |               |   |
|-------|----------------------|-----------------------|-----------|-----|---------------|---|
| 38861 | Tadeo Moreno Chicano | 6 (2019)<br>1074-1085 | 2017B8014 | BL2 | Hough Michael | High-Throughput Structures of Protein-Ligand Complexes at Room Temperature using Serial Femtosecond Crystallography |
| 39114 | Toshiyuki Nishiyama  | 7 (2020)<br>10-17     | 2014A8038 | BL3 | 八尾 誠          | Refinement for Single-Nanoparticle Structure Determination from Low-Quality Single-Shot Coherent Diffraction Data   |

### The Journal of Biochemistry

|       |                 |                       |           |        |       |   |
|-------|-----------------|-----------------------|-----------|--------|-------|---|
| 39076 | Takafumi Itoh   | 166 (2019)<br>503-515 | 2018A2545 | BL26B2 | 伊藤 貴文 | Structural and Functional Characterization of a Glycoside Hydrolase Family 3 β-N-acetylglucosaminidase from <i>Paenibacillus</i> sp. str. FPU-7 |
|       |                 |                       | 2017A2528 | BL38B1 | 伊藤 貴文 |   |
|       |                 |                       | 2016B2722 | BL26B1 | 伊藤 貴文 |   |
|       |                 |                       | 2018A2545 | BL38B1 | 伊藤 貴文 |   |
| 39096 | Tomoki Himiyama | 166 (2019)<br>89-95   | 2017A2513 | BL38B1 | 中村 努  | Distinct Molecular Assembly of Homologous Peroxiredoxins from <i>Pyrococcus horikoshii</i> and <i>Thermococcus kodakaraensis</i>                |
|       |                 |                       | 2018A2521 | BL38B1 | 中村 努  |   |

### The Journal of Biological Chemistry

| 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  |
|--------|-------------|---------------------------|-----------|--------|--------------|---|
| 38780  | Do Hwan Ahn | 292 (2017)<br>18832-18847 | 2016A6662 | BL44XU | Lee Bong Jin | Structural Analyses of the MazEF4 Toxin-Antitoxin Pair in <i>Mycobacterium tuberculosis</i> Provide Evidence for a Unique Extracellular Death Factor          |
| 39118  | Haruka Seki | 294 (2019)<br>17143-17154 | 2018A2528 | BL26B2 | 伏信 進矢        | Structural Basis for the Specific Cleavage of Core-Fucosylated N-glycans by Endo- $\beta$ -N-acetylglucosaminidase from the Fungus <i>Cordyceps militaris</i> |
|        |             |                           | 2017A2540 | BL26B1 | 伏信 進矢        |   |
|        |             |                           | 2016B2714 | BL26B1 | 伏信 進矢        |   |

### The Journal of Immunology

|       |                |                         |           |        |       |  |
|-------|----------------|-------------------------|-----------|--------|-------|--|
| 38783 | Yukie Yamamoto | 202 (2019)<br>3349-3358 | 2016A2575 | BL26B1 | 三上 文三 | Identification and Structure of an MHC Class I-Encoded Protein with the Potential to Present N-Myristoylated 4-mer Peptides to T Cells |
|       |                |                         | 2017A6750 | BL44XU | 三上 文三 |  |
| 39066 | Kimiko Kuroki  | 203 (2019)<br>3386-3394 | 2011B1411 | BL41XU | 尾瀬 農之 | Structural and Functional Basis for LILRB Immune Checkpoint Receptor Recognition of HLA-G Isoforms                                     |

### Journal of Physics: Condensed Matter

|       |                 |                     |           |        |        |   |
|-------|-----------------|---------------------|-----------|--------|--------|---|
| 38924 | Xiaofan Yang    | 32 (2020)<br>025704 | 2017A4138 | BL12B2 | 久保園 芳博 | Superconducting Behavior of a New Metal Iridate Compound, SrIr <sub>2</sub> , under Pressure  |
|       |                 |                     | 2017B4133 | BL12B2 | 久保園 芳博 |   |
|       |                 |                     | 2018A4132 | BL12B2 | 久保園 芳博 |   |
| 38984 | Kenji Shinozaki | 32 (2020)<br>055705 | 2018B1408 | BL04B2 | 篠崎 健二  | Structural Origin of High-Density Gd <sub>2</sub> O <sub>3</sub> -MoO <sub>3</sub> -B <sub>2</sub> O <sub>3</sub> Glass and Low-Density $\beta$ -Gd <sub>2</sub> (MoO <sub>4</sub> ) <sub>3</sub> Crystal: a Study Conducted using High-Energy X-ray Diffraction and EXAFS at High Temperatures |
|       |                 |                     | 2019A1424 | BL01B1 | 篠崎 健二  |   |

### Materialia

|       |                 |                    |           |        |              |   |
|-------|-----------------|--------------------|-----------|--------|--------------|---|
| 38774 | Wei-Yu Kai      | 5 (2019)<br>100194 | 2016A4126 | BL12B2 | Chen Shi-Wei | Formation Mechanism of Ni <sub>2</sub> Ti <sub>4</sub> O <sub>x</sub> in NITI Shape Memory Alloy                |
| 38857 | Yosuke Kurosaki | 7 (2019)<br>100374 | 2018A5100 | BL16XU | 米山 明男        | Effects of Ge Addition on Thermoelectric Properties in a Nanocomposite of MnSi <sub>y</sub> and SiGe Thin Films |

### Materials Science and Engineering: A

|       |                    |                       |           |        |       |   |
|-------|--------------------|-----------------------|-----------|--------|-------|---|
| 39045 | Meysam Hassanipour | 751 (2019)<br>351-362 | 2015A0076 | BL20XU | 戸田 裕之 | Assessment of Predominant Microstructural Features Controlling 3D Short Crack Growth Behavior via a Surrogate Approach in Ti-6Al-4V |
| 39046 | Meysam Hassanipour | 766 (2019)<br>138264  | 2015A0076 | BL20XU | 戸田 裕之 | Effects of 3D Microstructural Distribution on Short Crack Growth Behavior in Two Bimodal Ti-6Al-4V Alloys                           |

### Nucleic Acids Research

|       |                  |                          |           |        |       |   |
|-------|------------------|--------------------------|-----------|--------|-------|---|
| 38872 | Takehito Tanzawa | 46 (2018)<br>3232-3244   | 2017A2551 | BL26B1 | 加藤 公児 | The C-Terminal Helix of Ribosomal P Stalk Recognizes a Hydrophobic Groove of Elongation Factor 2 in a Novel Fashion   |
|       |                  |                          | 2018A2508 | BL41XU | 加藤 公児 |   |
|       |                  |                          | 2016A6611 | BL44XU | 加藤 公児 |   |
| 39078 | Akira Hirata     | 47 (2019)<br>10942-10955 | 2013B1272 | BL45XU | 平田 章  | Structure of tRNA Methyltransferase Complex of Trm7 and Trm734 Reveals a Novel Binding Interface for tRNA Recognition |
|       |                  |                          | 2014A1246 | BL38B1 | 平田 章  |   |
|       |                  |                          | 2014A1063 | BL26B1 | 梶田 哲哉 |   |
|       |                  |                          | 2015B2047 | BL26B2 | 平田 章  |   |
|       |                  |                          | 2016A2547 | BL38B1 | 平田 章  |   |

### Organometallics

|       |                 |                        |           |        |       |  |
|-------|-----------------|------------------------|-----------|--------|-------|--|
| 39133 | Kotohiro Nomura | 38 (2019)<br>4497-4507 | 2017A1512 | BL01B1 | 野村 琴広 | Solution XAS Analysis for Exploring Active Species in Syndiospecific Styrene Polymerization and 1-Hexene Polymerization Using Half-Titanocene-MAO Catalysts: Significant Changes in the Oxidation State in the Presence of Styrene |
|       |                 |                        | 2018A1245 | BL01B1 | 野村 琴広 |  |
|       |                 |                        | 2019A1233 | BL01B1 | 野村 琴広 |  |
| 39134 | Masaharu Kuboki | 38 (2019)<br>1544-1559 | 2018B1335 | BL01B1 | 野村 琴広 | (Arylimido)niobium(V) Complexes Containing 2-Pyridylmethylamido Ligand as Catalyst Precursors for Ethylene Dimerization That Proceeds via Cationic Nb(V) Species   |

Science

| 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   |
|-----------|----------------|-------------------------|-----------|--------|--------|--|
| 38911     | Michihiro Suga | 366 (2019)<br>334-338   | 2016B8070 | BL3    | 吾郷 日出夫 | An Oxy/Oxo Mechanism for Oxygen-Oxygen Coupling in PSII Revealed by an X-ray Free-Electron Laser |
|           |                |                         | 2017A8040 | BL3    | 吾郷 日出夫 |  |
|           |                |                         | 2017B8015 | BL2    | 菅 倫寛   |  |
|           |                |                         | 2017B8028 | BL2    | 吾郷 日出夫 |  |
|           |                |                         | 2018A8009 | BL2    | 吾郷 日出夫 |  |
|           |                |                         | 2018A8010 | BL2    | 菅 倫寛   |  |
|           |                |                         | 2016A2542 | BL41XU | 沈 建仁   |  |
|           |                |                         | 2016B6621 | BL44XU | 菅 倫寛   |  |
|           |                |                         | 2017A2535 | BL41XU | 沈 建仁   |  |
|           |                |                         | 2017A6724 | BL44XU | 菅 倫寛   |  |
|           |                |                         | 2017B6724 | BL44XU | 菅 倫寛   |  |
| 2018A2530 | BL41XU         | 沈 建仁                    |           |        |        |  |
| 2018B6822 | BL44XU         | 菅 倫寛                    |           |        |        |  |
| 39240     | Yujiro Hayashi | 366 (2019)<br>1492-1496 | 2015A7002 | BL33XU | 林 雄二郎  | Intragranular Three-Dimensional Stress Tensor Fields in Plastically Deformed Polycrystals        |
|           |                |                         | 2015B7002 | BL33XU | 林 雄二郎  |  |
|           |                |                         | 2016A7002 | BL33XU | 林 雄二郎  |  |
|           |                |                         | 2016B7002 | BL33XU | 林 雄二郎  |  |
|           |                |                         | 2017A7002 | BL33XU | 林 雄二郎  |  |
|           |                |                         | 2017B7002 | BL33XU | 林 雄二郎  |  |
|           |                |                         | 2018A7002 | BL33XU | 林 雄二郎  |  |
|           |                |                         | 2018B7002 | BL33XU | 林 雄二郎  |  |
|           |                |                         | 2019A7002 | BL33XU | 林 雄二郎  |  |
| 2019B7002 | BL33XU         | 林 雄二郎                   |           |        |        |  |

Solid State Ionics

|       |               |                      |           |        |       |  |
|-------|---------------|----------------------|-----------|--------|-------|--|
| 38991 | Kazuhiro Mori | 344 (2020)<br>115141 | 2014A1413 | BL04B2 | 森 一広  | Structural and Electrochemical Features of $(\text{Li}_2\text{S})_x(\text{SiS}_2)_{100-x}$ Superionic Glasses  |
|       |               |                      | 2015A1372 | BL04B2 | 森 一広  |  |
| 39040 | Naoya Ishida  | 343 (2019)<br>115080 | 2016A1509 | BL19B2 | 井手本 康 | Crystal Structure and Cathode Properties of Delithiated $\text{Li}_{1-x}\text{Mn}_{1/3}\text{Ni}_{1/3}\text{Co}_{1/3}\text{O}_2$ for Mg Rechargeable Batteries |
|       |               |                      | 2016B1859 | BL19B2 | 井手本 康 |  |
|       |               |                      | 2016A1510 | BL14B2 | 井手本 康 |  |
|       |               |                      | 2016B1852 | BL14B2 | 井手本 康 |  |

軽金属 (Journal of Japan Institute of Light Metals)

|       |                  |                      |           |        |       |  |
|-------|------------------|----------------------|-----------|--------|-------|--|
| 39043 | Kyosuke Hirayama | 69 (2019)<br>223-227 | 2015A0076 | BL20XU | 戸田 裕之 | Influence of Hydrogen on Stress Corrosion Cracking Behavior in Al-10Mg Alloy |
| 39044 | Hiro Fujihara    | 69 (2019)<br>186-193 | 2015A0076 | BL20XU | 戸田 裕之 | Hydrogen Desorption Behavior in Al-8%Zn-1%Mg Alloy                           |

分析化学 (Bunseki Kagaku)

|           |               |                      |           |        |       |  |
|-----------|---------------|----------------------|-----------|--------|-------|--|
| 38971     | Satoru Kosaka | 68 (2019)<br>801-804 | 2013B5071 | BL16XU | 野崎 洋  | Determination of Trace Amount of Bromine Adsorbed on Aluminium Plate by Synchrotron Radiation XRF  |
|           |               |                      | 2014A5071 | BL16XU | 高橋 直子 |  |
|           |               |                      | 2014B5070 | BL16XU | 小坂 悟  |  |
|           |               |                      | 2015A5070 | BL16XU | 小坂 悟  |  |
|           |               |                      | 2015B5070 | BL16XU | 小坂 悟  |  |
| 39010     | Seika Onozaki | 68 (2019)<br>757-768 | 2018A1704 | BL37XU | 阿部 善也 | Investigation of Physical and Chemical Characteristics of Radioactive Aerosols Emitted from Reactor Unit 1 by Fukushima Daiichi Nuclear Power Plant Accident |
|           |               |                      | 2018B1748 | BL37XU | 阿部 善也 |  |
|           |               |                      | 2017B1757 | BL37XU | 中井 泉  |  |
|           |               |                      | 2017A1719 | BL37XU | 中井 泉  |  |
|           |               |                      | 2016B1811 | BL37XU | 中井 泉  |  |
| 2016A1705 | BL37XU        | 中井 泉                 |           |        |       |  |

2019 30th Annual SEMI Advanced Semiconductor Manufacturing Conference (ASMC)

|       |                     |               |           |        |                     |  |
|-------|---------------------|---------------|-----------|--------|---------------------|--|
| 38808 | Murugesan Mariappan | (2019)<br>1-5 | 2019A1540 | BL47XU | Mariappan Murugesan | 500 nm-sized Ni-TSV with Aspect Ratio 20 for Future 3D-LSIs_A Low-Cost Electroless-Ni Plating Approach |
|-------|---------------------|---------------|-----------|--------|---------------------|--|

ACS Applied Materials & Interfaces

|       |                     |                          |           |        |       |  |
|-------|---------------------|--------------------------|-----------|--------|-------|--|
| 38818 | Katsuyoshi Kakinuma | 11 (2019)<br>34957-34963 | 2016A1007 | BL14B2 | 犬飼 潤治 | Electronic States and Transport Phenomena of Pt Nanoparticle Catalysts Supported on Nb-Doped $\text{SnO}_2$ for Polymer Electrolyte Fuel Cells |
|       |                     |                          | 2017A1777 | BL46XU | 犬飼 潤治 |  |
|       |                     |                          | 2015B5092 | BL16XU | 今井 英人 |  |
|       |                     |                          | 2016A5090 | BL16XU | 今井 英人 |  |
|       |                     |                          | 2016B5091 | BL16XU | 今井 英人 |  |

### 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  |
|--------|------------------|-----------------------|-----------|--------|-------|---|
| 38903  | Daisuke Takimoto | 2 (2019)<br>5743-5751 | 2016B5091 | BL16XU | 今井 英人 | Two-Dimensional Effects on the Oxygen Reduction Reaction and Irreversible Surface Oxidation of Metallic Ru Nanosheets and Nanoparticles |
|        |                  |                       | 2017A1035 | BL14B2 | 今井 英人 |   |
|        |                  |                       | 2017B3397 | BL08B2 | 今井 英人 |   |
|        |                  |                       | 2017B1612 | BL14B2 | 今井 英人 |   |

### ACS Earth and Space Chemistry

|       |              |                   |           |        |       |  |
|-------|--------------|-------------------|-----------|--------|-------|--|
| 38998 | Shitong Yang | 3 (2019)<br>29-38 | 2015A0118 | BL01B1 | 高橋 嘉夫 | Comparison of Arsenate and Molybdate Speciation in Hydrogenetic Ferromanganese Nodules |
|       |              |                   | 2015A0118 | BL27SU | 高橋 嘉夫 |  |
|       |              |                   | 2018A0148 | BL37XU | 高橋 嘉夫 |  |

### ACS Materials Letters

|       |            |                     |           |        |              |   |
|-------|------------|---------------------|-----------|--------|--------------|---|
| 39244 | Ju-Ping Ma | 1 (2019)<br>185-191 | 2017B1309 | BL02B2 | Sun Hong-Tao | Defect-Triggered Phase Transition in Cesium Lead Halide Perovskite Nanocrystals |
|-------|------------|---------------------|-----------|--------|--------------|---|

### ACS Omega

|       |                 |                         |           |        |       |  |
|-------|-----------------|-------------------------|-----------|--------|-------|--|
| 39132 | Kotohiro Nomura | 4 (2019)<br>18833-18845 | 2016A1455 | BL01B1 | 野村 琴広 | XAS Analysis of Reactions of (Arylimido)vanadium(V) Dichloride Complexes Containing Anionic NHC That Contains a Weakly Coordinating B(C <sub>6</sub> F <sub>5</sub> ) <sub>3</sub> Moiety (WCA-NHC) or Phenoxide Ligands with Al Alkyls: A Potential Ethylene Polymerization Catalyst with WCA-NHC Ligands |
|       |                 |                         | 2016B1509 | BL01B1 | 野村 琴広 |  |
|       |                 |                         | 2017A1512 | BL01B1 | 野村 琴広 |  |
|       |                 |                         | 2018A1245 | BL01B1 | 野村 琴広 |  |

### ACS Sustainable Chemistry & Engineering

|       |                |                       |           |        |       |  |
|-------|----------------|-----------------------|-----------|--------|-------|--|
| 38793 | Kengo Nakajima | 7 (2019)<br>6522-6530 | 2017B1245 | BL01B1 | 宍戸 哲也 | Highly Efficient Supported Palladium-Gold Alloy Catalysts for Hydrogen Storage Based on Ammonium Bicarbonate/Formate Redox Cycle |
|       |                |                       | 2017B1326 | BL27SU | 三浦 大樹 |  |

### Advanced Energy Materials

|       |                |                     |           |        |               |  |
|-------|----------------|---------------------|-----------|--------|---------------|--|
| 39227 | Ching-Wei Tung | 9 (2019)<br>1901308 | 2017A4257 | BL12XU | Chen Hao-Ming | Light-Induced Activation of Adaptive Junction for Efficient Solar-Driven Oxygen Evolution: In Situ Unraveling the Interfacial Metal-Silicon Junction |
|       |                |                     | 2018A4125 | BL12B2 | Chen Hao-Ming |  |
|       |                |                     | 2018A4130 | BL12B2 | Chen Hao-Ming |  |
|       |                |                     | 2018B4137 | BL12B2 | Chen Hao-Ming |  |
|       |                |                     | 2018A4254 | BL12XU | Chen Hao-Ming |  |

### Advanced Optical Materials

|       |         |                                      |           |        |              |  |
|-------|---------|--------------------------------------|-----------|--------|--------------|--|
| 39242 | Li Hong | (2019) Online published 19 Dec. 2019 | 2017B1309 | BL02B2 | Sun Hong-Tao | Theory-Guided Defect Tuning through Topochemical Reactions for Accelerated Discovery of UVC Persistent Phosphors |
|-------|---------|--------------------------------------|-----------|--------|--------------|--|

### AIP Advances

|       |                |                    |           |        |       |  |
|-------|----------------|--------------------|-----------|--------|-------|--|
| 39122 | Yoichi Nishino | 9 (2019)<br>125003 | 2014B1809 | BL02B2 | 宮崎 秀俊 | Effects of Off-Stoichiometry and Ti Doping on Thermoelectric Performance of Fe <sub>2</sub> VAl Heusler Compound |
|       |                |                    | 2018A1445 | BL02B2 | 宮崎 秀俊 |  |

### Applied Catalysis A: General

|       |               |                     |           |        |      |   |
|-------|---------------|---------------------|-----------|--------|------|---|
| 38965 | Hirofumi Seki | 581 (2019)<br>23-30 | 2018B1759 | BL14B2 | 関根 泰 | Effect of Ba Addition to Ga- $\alpha$ -Al <sub>2</sub> O <sub>3</sub> Catalyst on Structure and Catalytic Selectivity for Dehydrogenation of Ethane |
|-------|---------------|---------------------|-----------|--------|------|---|

### Applied Microbiology and Biotechnology

|       |             |                         |           |        |                |  |
|-------|-------------|-------------------------|-----------|--------|----------------|--|
| 39231 | Hsi-Ho Chiu | 100 (2016)<br>8411-8424 | 2015A4000 | BL12B2 | Chen Chun Jung | Three Important Amino Acids Control the Regioselectivity of Flavonoid Glucosidation in Glycosyltransferase-1 from <i>Bacillus Cereus</i> |
|-------|-------------|-------------------------|-----------|--------|----------------|--|

### Applied Physics A

|       |                |                   |           |        |               |  |
|-------|----------------|-------------------|-----------|--------|---------------|--|
| 39080 | Kung-Liang Lin | 122 (2016)<br>117 | 2015A4130 | BL12B2 | Lin Chih Ming | Structural Properties of Pressure-Induced Structural Phase Transition of Si-doped GaAs by Angular-Dispersive X-ray Diffraction |
|       |                |                   | 2014B4142 | BL12B2 | Lin Chih Ming |  |
|       |                |                   | 2014A4134 | BL12B2 | Lin Chih Ming |  |
|       |                |                   | 2013B4129 | BL12B2 | Lin Chih Ming |  |
|       |                |                   | 2013A4131 | BL12B2 | Lin Chih Ming |  |

### Applied Sciences

| 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   |
|--------|---------------------|------------------|-----------|--------|-------|--|
| 39113  | Toshiyuki Nishiyama | 9 (2019)<br>4932 | 2014A8038 | BL3    | 八尾 誠  | Multispectroscopic Study of Single Xe Clusters Using XFEL Pulses |

### The Astrophysical Journal

|       |           |                   |           |        |            |   |
|-------|-----------|-------------------|-----------|--------|------------|---|
| 38974 | Tao Xiong | 885 (2019)<br>163 | 2018A4269 | BL12XU | Zhu LinFan | Oscillator Strengths for the Lyman and Werner Bands of Molecular Hydrogen Studied by the Dipole ( $\gamma, \gamma$ ) Method |
|       |           |                   | 2018B4263 | BL12XU | Zhu LinFan |   |

### Batteries and Supercaps

|           |                  |                     |           |        |       |  |
|-----------|------------------|---------------------|-----------|--------|-------|--|
| 39009     | Takashi Nakamura | 2 (2019)<br>688-694 | 2016B1194 | BL37XU | 雨澤 浩史 | Operando Observation of Formation and Annihilation of Inhomogeneous Reaction Distribution in a Composite Electrode for Lithium-Ion Batteries |
|           |                  |                     | 2017A1484 | BL37XU | 雨澤 浩史 |  |
|           |                  |                     | 2017B1509 | BL37XU | 雨澤 浩史 |  |
|           |                  |                     | 2016A1310 | BL37XU | 雨澤 浩史 |  |
|           |                  |                     | 2014B1301 | BL01B1 | 雨澤 浩史 |  |
|           |                  |                     | 2015A2059 | BL37XU | 寺田 靖子 |  |
|           |                  |                     | 2015B1389 | BL37XU | 雨澤 浩史 |  |
|           |                  |                     | 2015B1991 | BL37XU | 新田 清文 |  |
|           |                  |                     | 2016B1143 | BL01B1 | 中村 崇司 |  |
| 2016B1968 | BL37XU           | 新田 清文               |           |        |       |  |

### Beilstein Journal of Organic Chemistry

|       |           |                        |           |        |       |  |
|-------|-----------|------------------------|-----------|--------|-------|--|
| 38912 | Runa Kono | 15 (2019)<br>2204-2212 | 2019A1110 | BL40XU | 内田 欣吾 | Aggregation-Induced Emission Effect on Turn-off Fluorescent Switching of a Photochromic Diarylethene |
|-------|-----------|------------------------|-----------|--------|-------|--|

### Biochemical and Biophysical Research Communications

|       |          |                       |           |        |       |  |
|-------|----------|-----------------------|-----------|--------|-------|--|
| 38873 | Yuxin Ye | 519 (2019)<br>186-191 | 2017A2551 | BL26B1 | 加藤 公児 | The pH-Dependent Conformational Change of Eukaryotic Translation Initiation Factor 5: Insights into Partner-Binding Manner |
|       |          |                       | 2018A2508 | BL41XU | 加藤 公児 |  |

### Biochemistry

|       |               |                        |           |        |       |   |
|-------|---------------|------------------------|-----------|--------|-------|---|
| 38832 | Takumi Kuwata | 58 (2019)<br>2318-2325 | 2017A1403 | BL45XU | 池口 雅道 | Structure, Function, Folding, and Aggregation of a Neuroferritinopathy-Related Ferritin Variant |
|-------|---------------|------------------------|-----------|--------|-------|---|

### Biochimica et Biophysica Acta - Bioenergetics

|       |                   |                     |           |        |              |   |
|-------|-------------------|---------------------|-----------|--------|--------------|---|
| 39120 | Jannina Preissler | 1859 (2018)<br>8-18 | 2014B1032 | BL09XU | Wang Hongxin | Enzymatic and Spectroscopic Properties of a Thermostable [NiFe]-hydrogenase Performing H <sub>2</sub> -driven NAD <sup>+</sup> -reduction in the Presence of O <sub>2</sub> |
|-------|-------------------|---------------------|-----------|--------|--------------|---|

### Biochimica et Biophysica Acta - General Subjects

|       |            |                       |           |        |       |   |
|-------|------------|-----------------------|-----------|--------|-------|---|
| 39082 | Siqin Bala | 1864 (2020)<br>129418 | 2018B6815 | BL44XU | 神田 大輔 | Crystal Contact-Free Conformation of an Intrinsically Flexible Loop in Protein Crystal: Tim21 as the Case Study |
|       |            |                       | 2018A6815 | BL44XU | 神田 大輔 |   |
|       |            |                       | 2017B6718 | BL44XU | 神田 大輔 |   |
|       |            |                       | 2017A6718 | BL44XU | 神田 大輔 |   |
|       |            |                       | 2016B6617 | BL44XU | 神田 大輔 |   |
|       |            |                       | 2016A6617 | BL44XU | 神田 大輔 |   |

### Biochimie

|       |               |                     |           |        |       |   |
|-------|---------------|---------------------|-----------|--------|-------|---|
| 38871 | Wataru Saburi | 144 (2018)<br>63-73 | 2017A6713 | BL44XU | 加藤 公児 | Biochemical and Structural Characterization of <i>Marinomonas mediterranea</i> D-mannose Isomerase Marne_2490 Phylogenetically Distant from Known Enzymes |
|       |               |                     | 2017B6713 | BL44XU | 加藤 公児 |   |
|       |               |                     | 2016A6611 | BL44XU | 加藤 公児 |   |

### Bioorganic and Medicinal Chemistry Letters

|       |                   |                     |           |        |       |  |
|-------|-------------------|---------------------|-----------|--------|-------|--|
| 39255 | Masato Tsuyuguchi | 30 (2020)<br>126837 | 2018A6814 | BL44XU | 木下 誉富 | Structural Insights for Producing CK2 $\alpha$ 1-Specific Inhibitors |
|       |                   |                     | 2018B6814 | BL44XU | 木下 誉富 |  |

### 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  |
|-----------|--------------|----------------------|-----------|--------|-------|---|
| 38833     | Daisuke Sato | 11 (2019)<br>449-455 | 2012A1217 | BL45XU | 池口 雅道 | Mechanisms of Ferritin Assembly Studied by Time-Resolved Small-Angle X-ray Scattering |
|           |              |                      | 2012B1114 | BL45XU | 池口 雅道 |   |
|           |              |                      | 2013B1392 | BL45XU | 池口 雅道 |   |
|           |              |                      | 2015A1374 | BL45XU | 池口 雅道 |   |
|           |              |                      | 2016B1217 | BL45XU | 池口 雅道 |   |
|           |              |                      | 2017A1403 | BL45XU | 池口 雅道 |   |
|           |              |                      | 2017B1308 | BL45XU | 池口 雅道 |   |
|           |              |                      | 2018A1262 | BL45XU | 池口 雅道 |   |
|           |              |                      | 2018B1404 | BL45XU | 池口 雅道 |   |
|           |              |                      | 2018A1062 | BL45XU | 佐藤 大輔 |   |
| 2011A1133 | BL45XU       | 池口 雅道                |           |        |       |   |

### Carbohydrate Polymers

|       |               |                      |           |        |       |   |
|-------|---------------|----------------------|-----------|--------|-------|---|
| 39054 | Akari Okugawa | 231 (2020)<br>115663 | 2016A1098 | BL40B2 | 山根 千弘 | Relaxation Phenomenon and Swelling Behavior of Regenerated Cellulose Fibers Affected by Water |
|       |               |                      | 2016B1072 | BL40B2 | 山根 千弘 |   |

### Chem

|       |                  |                                     |           |       |       |   |
|-------|------------------|-------------------------------------|-----------|-------|-------|---|
| 39214 | Satoshi Tominaka | (2019) Published online 9 Dec. 2019 | 2017A1207 | BL08W | 富中 悟史 | Geometrical Frustration of B-H Bonds in Layered Hydrogen Borides Accessible by Soft Chemistry |
|       |                  |                                     | 2018A1304 | BL08W | 尾原 幸治 |   |

### ChemElectroChem

|       |                |                       |           |        |       |   |
|-------|----------------|-----------------------|-----------|--------|-------|---|
| 39053 | Shoutai Hitomi | 6 (2019)<br>5070-5079 | 2014A1543 | BL46XU | 駒場 慎一 | Application of Acrylic-Rubber-Based Latex Binder to High-Voltage Spinel Electrodes of Lithium-Ion Batteries |
|       |                |                       | 2016B1581 | BL46XU | 駒場 慎一 |   |

### Chemical Geology

|       |                     |                       |           |        |       |   |
|-------|---------------------|-----------------------|-----------|--------|-------|---|
| 39002 | Masanobu Sakakibara | 522 (2019)<br>121-134 | 2014A1277 | BL01B1 | 高橋 嘉夫 | Redistribution of Zn during Transformation of Ferrihydrite: Effects of Initial Zn Concentration |
|       |                     |                       | 2014B1348 | BL01B1 | 高橋 嘉夫 |   |

### Chemical Science

|       |            |                        |           |        |       |  |
|-------|------------|------------------------|-----------|--------|-------|--|
| 39226 | Naoki Ando | 10 (2019)<br>7816-7821 | 2017B1179 | BL40XU | 笹森 貴裕 | Near-Infrared Fluorescein Dyes Containing a Tricoordinate Boron Atom |
|-------|------------|------------------------|-----------|--------|-------|--|

### Chemistry of Materials

|       |               |                        |           |        |        |   |
|-------|---------------|------------------------|-----------|--------|--------|---|
| 38772 | Miwa Murakami | 31 (2019)<br>7704-7710 | 2015A1013 | BL02B2 | 小久見 善八 | High Anionic Conductive Form of $Pb_xSn_{2-x}F_4$ |
|       |               |                        | 2015B1014 | BL02B2 | 小久見 善八 |   |

### Chemosphere

|       |             |                       |           |        |       |  |
|-------|-------------|-----------------------|-----------|--------|-------|--|
| 38997 | Sang-Ho Lee | 211 (2018)<br>903-911 | 2018A0148 | BL01B1 | 高橋 嘉夫 | Enhanced Adsorption of Arsenate and Antimonate by Calcined Mg/Al Layered Double Hydroxide: Investigation of Comparative Adsorption Mechanism by Surface Characterization |
|-------|-------------|-----------------------|-----------|--------|-------|--|

### Communications Biology

|       |                 |                 |           |        |       |   |
|-------|-----------------|-----------------|-----------|--------|-------|---|
| 38894 | Norifumi Muraki | 2 (2019)<br>385 | 2017A6757 | BL44XU | 村木 則文 | Structural Characterization of HypX Responsible for CO Biosynthesis in the Maturation of NiFe-Hydrogenase |
|       |                 |                 | 2017B6757 | BL44XU | 村木 則文 |   |
|       |                 |                 | 2018A6853 | BL44XU | 村木 則文 |   |
|       |                 |                 | 2018B6853 | BL44XU | 村木 則文 |   |

### Comptes Rendus Geoscience

|       |                |                       |           |        |       |  |
|-------|----------------|-----------------------|-----------|--------|-------|--|
| 38913 | Tetsuo Irifune | 351 (2019)<br>260-268 | 2015A0075 | BL04B1 | 入船 徹男 | High Pressure Generation in Kawai-type Multianvil Apparatus using Nano-Polystalline Diamond Anvils |
|-------|----------------|-----------------------|-----------|--------|-------|--|

### Construction and Building Materials

|       |              |                      |           |        |      |   |
|-------|--------------|----------------------|-----------|--------|------|---|
| 39211 | Sungchul Bae | 237 (2020)<br>117714 | 2017A3782 | BL22XU | 裴 晟哲 | Analysis of Atomistic Structural Deformation Characteristics of Calcium Silicate Hydrate in 53-Year-Old Tricalcium Silicate Paste using Atomic Pair Distribution Function |
|-------|--------------|----------------------|-----------|--------|------|---|

Contributed Papers from Materials Science and Technology 2019 (MS&T19)

| 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   |
|--------|-----------------|-------------------|-----------|--------|-------|--|
| 39056  | Yoshikazu Nakai | (2019)<br>822-829 | 2016B1589 | BL46XU | 牧野 泰三 | Initiation and Propagation of Rolling Contact Fatigue Cracks Observed by Laminography Using Ultra-Bright Synchrotron Radiation X-ray |
|        |                 |                   | 2018A1548 | BL46XU | 牧野 泰三 |  |
|        |                 |                   | 2018B1612 | BL46XU | 牧野 泰三 |  |
|        |                 |                   | 2019A1635 | BL46XU | 牧野 泰三 |  |

Crystals

|       |                    |                 |           |        |       |  |
|-------|--------------------|-----------------|-----------|--------|-------|--|
| 39108 | Tomohiro Yamaguchi | 9 (2019)<br>631 | 2015A3512 | BL11XU | 山口 智広 | In Situ Synchrotron X-ray Diffraction Reciprocal Space Mapping Measurements in the RF-MBE Growth of GaInN on GaN and InN |
|       |                    |                 | 2016A3562 | BL11XU | 山口 智広 |  |
|       |                    |                 | 2017A3587 | BL11XU | 山口 智広 |  |

CrystEngComm

|       |               |                        |           |        |             |   |
|-------|---------------|------------------------|-----------|--------|-------------|---|
| 39142 | Tsan Yao Chen | 18 (2016)<br>5860-5868 | 2014A4139 | BL12B2 | Liu Yu-Ting | Self-Aligned Synthesis of a NiPt-Alloy <sub>core</sub> @Pt <sub>shell</sub> Nanocrystal with Contrivable Heterojunction Structure and Oxygen Reduction Activity |
|       |               |                        | 2014A4127 | BL12B2 | Liu Yu-Ting |   |

ECS Transactions

|       |            |                      |           |        |        |   |
|-------|------------|----------------------|-----------|--------|--------|---|
| 38862 | Yuta Nabae | 92 (2019)<br>621-625 | 2016B7907 | BL36XU | 難波江 裕太 | <i>In-Situ</i> XAFS Study to Monitor the Degradation of an Fe/N/C Cathode Catalyst in PEMFC |
|       |            |                      | 2017A1035 | BL14B2 | 今井 英人  |   |
|       |            |                      | 2018A7840 | BL36XU | 岩澤 康裕  |   |
|       |            |                      | 2018B7907 | BL36XU | 難波江 裕太 |   |

Electrochemistry

|       |                   |                      |           |        |       |  |
|-------|-------------------|----------------------|-----------|--------|-------|--|
| 39219 | Satoshi Hashigami | 87 (2019)<br>357-364 | 2017B5050 | BL16XU | 立松 正幹 | Hard X-ray Photoelectron Spectroscopy Analysis of Surface Chemistry of Spray Pyrolyzed LiNi <sub>0.5</sub> Co <sub>0.2</sub> Mn <sub>0.3</sub> O <sub>2</sub> Positive Electrode Coated with Lithium Boron Oxide |
|       |                   |                      | 2018A5050 | BL16XU | 立松 正幹 |  |
|       |                   |                      | 2018B5050 | BL16XU | 出口 博史 |  |

Electrochimica Acta

|       |                    |                      |           |        |                     |   |
|-------|--------------------|----------------------|-----------|--------|---------------------|---|
| 38985 | Lakmini Jayasingha | 329 (2020)<br>135177 | 2017B1539 | BL04B2 | Jayathilaka Charith | Nanoporous Cu <sub>2</sub> O Nanotube/Nanorod Array Electrodes for Non-Enzymatic Glucose Sensing with High Sensitivity and Very Low Detection Limit |
|-------|--------------------|----------------------|-----------|--------|---------------------|---|

Engineering Fracture Mechanics

|       |                  |                      |           |        |       |  |
|-------|------------------|----------------------|-----------|--------|-------|--|
| 39047 | Kazuyuki Shimizu | 216 (2019)<br>106503 | 2015A0076 | BL20XU | 戸田 裕之 | Hydrogen Partitioning Behavior and Related Hydrogen Embrittlement in Al-Zn-Mg Alloys |
|-------|------------------|----------------------|-----------|--------|-------|--|

Enzyme and Microbial Technology

|       |                |                      |           |        |       |   |
|-------|----------------|----------------------|-----------|--------|-------|---|
| 38784 | Teisuke Takita | 130 (2019)<br>109363 | 2018B6848 | BL44XU | 三上 文三 | Increase in the Thermostability of GH11 Xylanase XynJ from <i>Bacillus</i> sp. Strain 41M-1 using Site Saturation Mutagenesis |
|       |                |                      | 2018A2533 | BL26B1 | 三上 文三 |   |

FEBS Letters

|       |                        |                         |           |        |       |  |
|-------|------------------------|-------------------------|-----------|--------|-------|--|
| 38870 | Warapom Auiewiriyankul | 592 (2018)<br>2268-2281 | 2016A2562 | BL41XU | 加藤 公児 | Function and Structure of GH13_31 $\alpha$ -glucosidase with High $\alpha$ -(1 $\rightarrow$ 4)-glucosidic Linkage Specificity and Transglucosylation Activity |
|-------|------------------------|-------------------------|-----------|--------|-------|--|

Frontiers in Materials

|       |             |                 |           |        |            |  |
|-------|-------------|-----------------|-----------|--------|------------|--|
| 38891 | Orkun Furat | 6 (2019)<br>145 | 2015A1580 | BL20XU | Krill Carl | Machine Learning Techniques for the Segmentation of Tomographic Image Data of Functional Materials |
|-------|-------------|-----------------|-----------|--------|------------|--|

Geochemistry, Geophysics, Geosystems

|       |                |                        |           |        |       |   |
|-------|----------------|------------------------|-----------|--------|-------|---|
| 39253 | Ryoichi Nakada | 20 (2019)<br>5319-5333 | 2016B1452 | BL27SU | 中田 亮一 | Variation of Iron Species in Plagioclase Crystals by X-ray Absorption Fine Structure Analysis |
|       |                |                        | 2017A1091 | BL27SU | 中田 亮一 |   |

Geochimica et Cosmochimica Acta

|       |            |                       |           |        |       |   |
|-------|------------|-----------------------|-----------|--------|-------|---|
| 39000 | Hai-Bo Qin | 257 (2019)<br>110-130 | 2015A0118 | BL01B1 | 高橋 嘉夫 | Enrichment Mechanisms of Antimony and Arsenic in Marine Ferromanganese Oxides: Insights from the Structure Similarity |
|       |            |                       | 2015A0118 | BL27SU | 高橋 嘉夫 |   |
|       |            |                       | 2017A1798 | BL05XU | 高橋 嘉夫 |   |
|       |            |                       | 2018A0148 | BL37XU | 高橋 嘉夫 |   |
|       |            |                       | 2018B1801 | BL14B2 | 高橋 嘉夫 |   |



### Geophysical Research 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   |
|--------|------------------|--------------------------|-----------|--------|-------|--|
| 39014  | Shigehiko Tateno | 46 (2019)<br>11944-11949 | 2015B1367 | BL10XU | 館野 繁彦 | Fe <sub>2</sub> S: The Most Fe-Rich Iron Sulfide at the Earth's Inner Core Pressures |
|        |                  |                          | 2017A1372 | BL10XU | 館野 繁彦 |  |
|        |                  |                          | 2017A0072 | BL10XU | 廣瀬 敬  |  |

### Hyperfine Interactions

|       |            |                   |           |        |      |  |
|-------|------------|-------------------|-----------|--------|------|--|
| 39187 | Ryo Masuda | 240 (2019)<br>120 | 2017B3581 | BL11XU | 瀬戸 誠 | Synchrotron-Radiation-Based Mössbauer Absorption Spectroscopy with High Resonant Energy Nuclides |
|       |            |                   | 2018A3581 | BL11XU | 瀬戸 誠 |  |
|       |            |                   | 2018B3581 | BL11XU | 瀬戸 誠 |  |
|       |            |                   | 2019A3581 | BL11XU | 瀬戸 誠 |  |

### Icarus

|       |                |                      |           |        |      |  |
|-------|----------------|----------------------|-----------|--------|------|--|
| 39059 | Masayuki Nishi | 338 (2020)<br>113539 | 2016A1476 | BL10XU | 西 真之 | New Aluminium Hydroxide at Multimegabar Pressures: Implications for Water Reservoirs in Deep Planetary Interiors |
|       |                |                      | 2017B1110 | BL10XU | 西 真之 |  |

### Industrial & Engineering Chemistry Research

|       |             |                          |           |        |       |  |
|-------|-------------|--------------------------|-----------|--------|-------|--|
| 38939 | Shohei Tada | 58 (2019)<br>19434-19445 | 2018B1788 | BL14B2 | 多田 昌平 | Effects of Cu Precursor Types on the Catalytic Activity of Cu/ZrO <sub>2</sub> toward Methanol Synthesis via CO <sub>2</sub> Hydrogenation |
|-------|-------------|--------------------------|-----------|--------|-------|--|

### Inorganic Chemistry

|       |          |                          |           |        |              |  |
|-------|----------|--------------------------|-----------|--------|--------------|--|
| 38934 | Yili Cao | 58 (2019)<br>13742-13745 | 2018B1306 | BL02B2 | Xing Xianran | Neutron Diffraction Study of Unusual Magnetic Behaviors in the Ho <sub>2</sub> Fe <sub>11</sub> Al <sub>6</sub> Intermetallic Compound |
|       |          |                          | 2018B1515 | BL44B2 | Lin Kun      |  |

### Inorganica Chimica Acta

|       |                  |                      |           |        |       |  |
|-------|------------------|----------------------|-----------|--------|-------|--|
| 38875 | Masahiko Maekawa | 497 (2019)<br>119088 | 2016B1508 | BL02B1 | 杉本 邦久 | Self-assembly of Cu(I) Metallomacrocyclic and Coordination Polymers with 2,2':5',4''-terpyridine Directed by Anions and Solvents |
|       |                  |                      | 2017A1866 | BL02B1 | 杉本 邦久 |  |
|       |                  |                      | 2018B1819 | BL02B1 | 前川 雅彦 |  |

### Internal Journal of Hydrogen Energy

|       |               |                      |           |        |      |   |
|-------|---------------|----------------------|-----------|--------|------|---|
| 38968 | Misato Kosaka | 45 (2020)<br>738-743 | 2019A1743 | BL14B2 | 関根 泰 | Low-Temperature Selective Dehydrogenation of Methylcyclohexane by Surface Protonics over Pt/Anatase-TiO <sub>2</sub> Catalyst |
|-------|---------------|----------------------|-----------|--------|------|---|

### International Journal of Adhesion and Adhesives

|       |               |                      |           |        |       |  |
|-------|---------------|----------------------|-----------|--------|-------|--|
| 38925 | Megumi Komada | 84 (2018)<br>173-177 | 2011B3255 | BL24XU | 西野 孝  | Enhancement of Adhesion by Applying Amine Primer to <i>isotactic</i> Polypropylene and Open Time Dependence of Primer Effect |
|       |               |                      | 2012A4803 | BL15XU | 松井 純爾 |  |
|       |               |                      | 2012B4803 | BL15XU | 松井 純爾 |  |

### International Journal of Hydrogen Energy

|       |                  |                          |           |        |       |  |
|-------|------------------|--------------------------|-----------|--------|-------|--|
| 39019 | Hirotsu Watanabe | 44 (2019)<br>24028-24035 | 2017B1412 | BL27SU | 渡部 弘達 | Structural Evolution of Carbon Deposition on a Ni/YSZ Cermet of a SOFC Analyzed by Soft X-ray XANES Spectroscopy |
|-------|------------------|--------------------------|-----------|--------|-------|--|

### iScience

|       |                    |                        |           |        |       |  |
|-------|--------------------|------------------------|-----------|--------|-------|--|
| 38960 | Takahiro Yoshinaka | 19 (2019)<br>1065-1078 | 2018A1003 | BL41XU | 山本 雅貴 | Structural Basis of Mitochondrial Scaffolds by Prohibitin Complexes: Insight into a Role of the Coiled-Coil Region |
|-------|--------------------|------------------------|-----------|--------|-------|--|

### Journal of Alloys and Compounds

|       |            |                       |           |        |               |   |
|-------|------------|-----------------------|-----------|--------|---------------|---|
| 39229 | E-Wen Huan | 792 (2019)<br>116-121 | 2016A4136 | BL12B2 | Lin Chih Ming | Deviatoric Deformation Kinetics in High Entropy Alloy under Hydrostatic Compression |
|       |            |                       | 2016B4132 | BL12B2 | Lin Chih Ming |   |
|       |            |                       | 2017B4131 | BL12B2 | Lin Chih Ming |   |
|       |            |                       | 2018A4131 | BL12B2 | Lin Chih Ming |   |
|       |            |                       | 2018B4138 | BL12B2 | Lin Chih Ming |   |

### Journal of Applied Crystallography

|       |                  |                        |           |     |      |   |
|-------|------------------|------------------------|-----------|-----|------|---|
| 39116 | Yoshiaki Shimazu | 52 (2019)<br>1280-1288 | 2014A8032 | BL3 | 岩田 想 | High-Viscosity Sample-Injection Device for Serial Femtosecond Crystallography at Atmospheric Pressure |
|       |                  |                        | 2014B8050 | BL3 | 岩田 想 |   |
|       |                  |                        | 2015A8048 | BL3 | 岩田 想 |   |
|       |                  |                        | 2015B8042 | BL3 | 岩田 想 |   |
|       |                  |                        | 2016A8041 | BL3 | 岩田 想 |   |
|       |                  |                        | 2016B8060 | BL3 | 岩田 想 |   |

### Journal of Applied Physics

| 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   |
|--------|------------|----------------------|-----------|--------|--------|--|
| 38869  | T. Matsuda | 125 (2019)<br>194301 | 2016B1535 | BL13XU | 石川 史太郎 | Strain Deformation in GaAs/GaAsBi Core-Shell Nanowire Heterostructures |

### Journal of Astronomical Telescopes, Instruments, and Systems

|       |                 |                    |           |        |       |  |
|-------|-----------------|--------------------|-----------|--------|-------|--|
| 38868 | Hisamitsu Awaki | 5 (2019)<br>044001 | 2016B1291 | BL20B2 | 粟木 久光 | Effect of Barrier Layer on Moisture Absorption of Thin Carbon-Fiber-Reinforced Plastic Mirror Substrates |
|       |                 |                    | 2017B1098 | BL20B2 | 粟木 久光 |  |

### Journal of Catalysis

|       |               |                       |           |        |       |  |
|-------|---------------|-----------------------|-----------|--------|-------|--|
| 39065 | Ibrahim Gueye | 380 (2019)<br>247-253 | 2013A4908 | BL15XU | 北川 宏  | Investigation of Selective Chemisorption of fcc and hcp Ru Nanoparticles using X-ray Photoelectron Spectroscopy Analysis |
|       |               |                       | 2018A4506 | BL15XU | 坂田 修身 |  |
|       |               |                       | 2018B4504 | BL15XU | 坂田 修身 |  |
|       |               |                       | 2018A1351 | BL04B2 | 坂田 修身 |  |

### The Journal of Chemical Physics

|       |              |                      |           |        |            |  |
|-------|--------------|----------------------|-----------|--------|------------|--|
| 39103 | Mengnan Wang | 148 (2018)<br>144310 | 2017A1062 | BL10XU | Howie Ross | High Pressure Synthesis and Stability of Cobalt Hydrides |
|-------|--------------|----------------------|-----------|--------|------------|--|

### Journal of Chemical Theory and Computation

|       |               |                        |           |     |      |  |
|-------|---------------|------------------------|-----------|-----|------|--|
| 38895 | Hiroshi Isobe | 15 (2019)<br>2375-2391 | 2016B8066 | BL3 | 沈 建仁 | Spin, Valence, and Structural Isomerism in the S <sub>3</sub> State of the Oxygen-Evolving Complex of Photosystem II as a Manifestation of Multimetallic Cooperativity |
|       |               |                        | 2017A8041 | BL3 | 沈 建仁 |  |
|       |               |                        | 2017B8025 | BL2 | 沈 建仁 |  |
|       |               |                        | 2018A8037 | BL2 | 沈 建仁 |  |
|       |               |                        | 2018B8029 | BL2 | 沈 建仁 |  |

### Journal of Colloid and Interface Science

|       |            |                       |           |        |                   |  |
|-------|------------|-----------------------|-----------|--------|-------------------|--|
| 39169 | Jure Cerar | 560 (2020)<br>730-742 | 2018A1132 | BL04B2 | Temleitner László | Structural, Rheological and Dynamic Aspects of Hydrogen-Bonding Molecular Liquids: Aqueous Solutions of Hydrotropic <i>tert</i> -butyl Alcohol |
|-------|------------|-----------------------|-----------|--------|-------------------|--|

### Journal of Geophysical Research

|       |                |                           |           |        |       |   |
|-------|----------------|---------------------------|-----------|--------|-------|---|
| 38892 | Masayuki Nishi | 124 (2019)<br>10231-10239 | 2010A0082 | BL04B1 | 入船 徹男 | Solid Solution and Compression Behavior of Hydroxides in the Lower Mantle |
|       |                |                           | 2015A0075 | BL04B1 | 入船 徹男 |   |

### Journal of Magnetism and Magnetic Materials

|       |                 |                       |           |        |       |   |
|-------|-----------------|-----------------------|-----------|--------|-------|---|
| 39145 | Hayato Miyagawa | 476 (2019)<br>213-217 | 2012B1071 | BL39XU | 宮川 勇人 | Origin of Magnetization in Diluted Magnetic Semiconductor GaGdAs Monolayer and Superlattice |
|-------|-----------------|-----------------------|-----------|--------|-------|---|

### Journal of Materials Chemistry A

|       |               |                         |           |        |               |  |
|-------|---------------|-------------------------|-----------|--------|---------------|--|
| 39220 | Jeng Han Wang | 4 (2016)<br>17848-17856 | 2014B4137 | BL12B2 | Chen Tsan Yao | Local Heterojunctions of Atomic Pt Clusters Boost the Oxygen Reduction Activity of RuCore@Pdshell Nanocrystallites |
|       |               |                         | 2015A4127 | BL12B2 | Chen Tsan Yao |  |
|       |               |                         | 2015B4131 | BL12B2 | Chen Tsan Yao |  |

### Journal of Molecular and Cellular Cardiology

|       |                 |                       |           |        |               |   |
|-------|-----------------|-----------------------|-----------|--------|---------------|---|
| 38920 | Mark Waddingham | 137 (2019)<br>119-131 | 2010B1243 | BL28B2 | Pearson James | Diastolic Dysfunction is Initiated by Cardiomyocyte Impairment Ahead of Endothelial Dysfunction Due to Increased Oxidative Stress and Inflammation in an Experimental Prediabetes Model |
|       |                 |                       | 2010B1372 | BL40XU | Pearson James |   |
|       |                 |                       | 2011A1105 | BL28B2 | Pearson James |   |
|       |                 |                       | 2014B1445 | BL40XU | Pearson James |   |
|       |                 |                       | 2015B1533 | BL40XU | Pearson James |   |
|       |                 |                       | 2016B1070 | BL40XU | Pearson James |   |

### Journal of Molecular Liquids

|       |              |                      |           |        |       |  |
|-------|--------------|----------------------|-----------|--------|-------|--|
| 39005 | Koji Yoshida | 293 (2019)<br>111477 | 2018B1385 | BL40B2 | 真田 雄介 | The Effect of Alkyl Ammonium Ionic Liquids on Thermal Denaturation Aggregation of $\beta$ -Lactoglobulin |
|-------|--------------|----------------------|-----------|--------|-------|--|

### Journal of Nuclear Materials

|       |                 |                      |           |        |        |  |
|-------|-----------------|----------------------|-----------|--------|--------|--|
| 39246 | Takayuki Kumada | 528 (2020)<br>151890 | 2017B3722 | BL22XU | 大場 洋次郎 | Anomalous Small-Angle X-ray Scattering (ASAXS) Study of Irradiation-Induced Nanostructure Change in Fe-Ion Beam Irradiated Oxide Dispersion-Strengthened (ODS) Steel |
|       |                 |                      | 2018A3722 | BL22XU | 大場 洋次郎 |  |

### The Journal of Organic Chemistry

| 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  |
|--------|----------------|----------------------|-----------|--------|-------|---|
| 39173  | Eunjeong Jeong | 85 (2020)<br>168-178 | 2018B1774 | BL19B2 | 鈴木 充朗 | Orbital-Energy Modulation of Tetrabenzoporphyrin-Derived Non-Fullerene Acceptors for Improved Open-Circuit Voltage in Organic Solar Cells |
|        |                |                      | 2017A1779 | BL19B2 | 鈴木 充朗 |   |

### Journal of Power Sources

|           |                   |                      |           |        |       |  |
|-----------|-------------------|----------------------|-----------|--------|-------|--|
| 39254     | Takeshi Kobayashi | 450 (2020)<br>227597 | 2013B1562 | BL27SU | 小林 剛  | HBO <sub>2</sub> as an Adhesive Agent for the Multi-Step Fabrication of All-Solid-State Sodium Batteries |
|           |                   |                      | 2014A1538 | BL46XU | 小林 剛  |  |
|           |                   |                      | 2014A1585 | BL27SU | 小林 剛  |  |
|           |                   |                      | 2014A5350 | BL16B2 | 野口 真一 |  |
|           |                   |                      | 2014B1633 | BL27SU | 小林 剛  |  |
|           |                   |                      | 2014B1930 | BL46XU | 小林 剛  |  |
|           |                   |                      | 2014B1919 | BL46XU | 小林 剛  |  |
|           |                   |                      | 2014B5350 | BL16B2 | 野口 真一 |  |
|           |                   |                      | 2015A5350 | BL16B2 | 野口 真一 |  |
|           |                   |                      | 2015B1395 | BL27SU | 小林 剛  |  |
|           |                   |                      | 2015B1642 | BL46XU | 小林 剛  |  |
|           |                   |                      | 2015B5350 | BL16B2 | 野口 真一 |  |
|           |                   |                      | 2016A1443 | BL27SU | 小林 剛  |  |
|           |                   |                      | 2016A1567 | BL14B2 | 小林 剛  |  |
|           |                   |                      | 2016A5350 | BL16B2 | 野口 真一 |  |
|           |                   |                      | 2016B1521 | BL27SU | 小林 剛  |  |
|           |                   |                      | 2016B5350 | BL16B2 | 野口 真一 |  |
|           |                   |                      | 2018A1496 | BL27SU | 小林 剛  |  |
|           |                   |                      | 2018A1596 | BL14B2 | 小林 剛  |  |
|           |                   |                      | 2018A5350 | BL16B2 | 野口 真一 |  |
|           |                   |                      | 2018B1469 | BL27SU | 小林 剛  |  |
|           |                   |                      | 2018B1593 | BL14B2 | 小林 剛  |  |
|           |                   |                      | 2018B5350 | BL16B2 | 野口 真一 |  |
| 2019A1375 | BL27SU            | 小林 剛                 |           |        |       |  |
| 2019A1818 | BL14B2            | 小林 剛                 |           |        |       |  |
| 2019A5350 | BL16B2            | 野口 真一                |           |        |       |  |
| 2019B1100 | BL27SU            | 小林 剛                 |           |        |       |  |
| 2019B1538 | BL27SU            | 小林 剛                 |           |        |       |  |
| 2019B5352 | BL16B2            | 小林 剛                 |           |        |       |  |

### Journal of Radioanalytical and Nuclear Chemistry

|       |                 |                       |           |        |       |   |
|-------|-----------------|-----------------------|-----------|--------|-------|---|
| 38994 | Akiko Yamaguchi | 317 (2018)<br>545-551 | 2015A0118 | BL01B1 | 高橋 嘉夫 | Local Structure of Strontium Adsorbed on 2:1 Clay Minerals and its Comparison with Cesium by XAFS in Terms of Migration of Their Radioisotopes in the Environment |
|       |                 |                       | 2018A0148 | BL37XU | 高橋 嘉夫 |   |

### Journal of Solid State Chemistry

|       |                     |                      |           |        |       |  |
|-------|---------------------|----------------------|-----------|--------|-------|--|
| 38865 | Tetsuhiro Katsumata | 279 (2019)<br>120919 | 2016B1400 | BL02B2 | 勝又 哲裕 | Synthesis of New Perovskite-Type Oxyfluorides, BaInO <sub>2</sub> F and Comparison of the Structure among Perovskite-Type Oxyfluorides |
|       |                     |                      | 2016B3636 | BL14B1 | 勝又 哲裕 |  |

### Journal of Surface Analysis

|       |                |                      |           |        |       |  |
|-------|----------------|----------------------|-----------|--------|-------|--|
| 38976 | Satoshi Yasuno | 26 (2019)<br>202-203 | 2018A1563 | BL46XU | 安野 聡  | Charge Compensation in Hard X-ray Photoelectron Spectroscopy by Electron Beam of Several Kilo-electron-volts |
|       |                |                      | 2018A1695 | BL46XU | 池野 成裕 |  |
|       |                |                      | 2018A1745 | BL46XU | 安野 聡  |  |
|       |                |                      | 2018B1589 | BL46XU | 安野 聡  |  |
|       |                |                      | 2019A1640 | BL46XU | 安野 聡  |  |
|       |                |                      | 2019A1754 | BL46XU | 安野 聡  |  |

### Journal of the Ceramic Society of Japan

|       |               |                       |           |        |       |  |
|-------|---------------|-----------------------|-----------|--------|-------|--|
| 39111 | Yohei Onodera | 127 (2019)<br>853-863 | 2016A0130 | BL04B2 | 小原 真司 | Understanding Diffraction Pattern of Glassy, Liquid and Amorphous Materials via Persistent Homology Analyses |
|       |               |                       | 2016A4502 | BL15XU | 小原 真司 |  |

### Journal of Wood Science

| 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   |
|--------|---------------|-----------------|-----------|--------|--------|--|
| 39016  | Suyako Tazuru | 65 (2019)<br>60 | 2016B1794 | BL20XU | 田鶴 寿弥子 | Wood Identification of Japanese Shinto Deity Statues in Matsunoo-taisha Shrine in Kyoto by Synchrotron X-ray Microtomography and Conventional Microscopy Methods |
|        |               |                 | 2017B1761 | BL20XU | 田鶴 寿弥子 |  |
|        |               |                 | 2011B1239 | BL20XU | 田鶴 寿弥子 |  |

### Laboratory Investigation

|       |                   |                     |           |        |       |   |
|-------|-------------------|---------------------|-----------|--------|-------|---|
| 39012 | Takeshi Matsumoto | 100 (2020)<br>72-83 | 2013B1731 | BL20B2 | 松本 健志 | In vivo Monitoring of Bone Microstructure by Propagation-Based Phase-Contrast Computed Tomography using Monochromatic Synchrotron Light |
|       |                   |                     | 2014A1725 | BL20B2 | 松本 健志 |   |

### Life Science Alliance

|       |                  |                        |           |        |       |  |
|-------|------------------|------------------------|-----------|--------|-------|--|
| 38917 | Manabu Toyoshima | 2 (2019)<br>e201900478 | 2018A2552 | BL41XU | 小川 寛之 | Enhanced Carbonyl Stress Induces Irreversible Multimerization of CRMP2 in Schizophrenia Pathogenesis |
|       |                  |                        | 2018A1003 | BL41XU | 山本 雅貴 |  |
|       |                  |                        | 2018B1011 | BL41XU | 山本 雅貴 |  |

### Materials

|       |               |                 |           |        |               |  |
|-------|---------------|-----------------|-----------|--------|---------------|--|
| 39221 | Chih Ming Lin | 9 (2016)<br>561 | 2013B4129 | BL12B2 | Lin Chih Ming | Structural Transitions in Nanosized Zn <sub>0.97</sub> Al <sub>0.03</sub> P Powders under High Pressure Analyzed by in Situ Angle-Dispersive X-ray Diffraction |
|       |               |                 | 2013A4131 | BL12B2 | Lin Chih Ming |  |
|       |               |                 | 2014A4134 | BL12B2 | Lin Chih Ming |  |
|       |               |                 | 2014B4133 | BL12B2 | Lin Chih Ming |  |

### Materials Chemistry Frontiers

|       |              |                       |           |        |       |   |
|-------|--------------|-----------------------|-----------|--------|-------|---|
| 39039 | Ikuya Yamada | 3 (2019)<br>2696-2701 | 2019A1476 | BL02B2 | 山田 幾也 | Various Magnetic States for Novel Layered Cobalt Oxides CaCo <sub>6</sub> O <sub>11</sub> and BaCo <sub>6</sub> O <sub>11</sub> |
|-------|--------------|-----------------------|-----------|--------|-------|---|

### Metallomics

|       |              |                                       |           |        |       |   |
|-------|--------------|---------------------------------------|-----------|--------|-------|---|
| 39155 | Naoki Fukuda | (2019) Online publication 4 Dec. 2019 | 2005B0743 | BL37XU | 中井 泉  | Visible Cellular Distribution of Cadmium and Zinc in the Hyperaccumulator <i>Arabidopsis halleri</i> ssp. <i>gemmifera</i> Determined by 2-D X-ray Fluorescence Imaging using High-Energy Synchrotron Radiation |
|       |              |                                       | 2007A1256 | BL37XU | 中井 泉  |   |
|       |              |                                       | 2007A1667 | BL37XU | 北島 信行 |   |
|       |              |                                       | 2007A1947 | BL37XU | 北島 信行 |   |

### Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science

|       |                  |                   |           |        |       |   |
|-------|------------------|-------------------|-----------|--------|-------|---|
| 39048 | Kazuyuki Shimizu | 51 (2020)<br>1-19 | 2016A1199 | BL37XU | 戸田 裕之 | Local Deformation and Fracture Behavior of High-Strength Aluminum Alloys Under Hydrogen Influence |
|       |                  |                   | 2016B1081 | BL37XU | 清水 一行 |   |
|       |                  |                   | 2015A0076 | BL20XU | 戸田 裕之 |   |

### Metals

|           |               |                  |           |        |       |  |
|-----------|---------------|------------------|-----------|--------|-------|--|
| 38992     | Tomokazu Sano | 9 (2019)<br>1192 | 2016A3783 | BL22XU | 佐野 智一 | Improving Fatigue Performance of Laser-Welded 2024-T3 Aluminum Alloy Using Dry Laser Peening |
|           |               |                  | 2015B3782 | BL22XU | 佐野 智一 |  |
|           |               |                  | 2016B3786 | BL22XU | 佐野 智一 |  |
|           |               |                  | 2017A3788 | BL22XU | 佐野 智一 |  |
|           |               |                  | 2017B3737 | BL22XU | 佐野 智一 |  |
| 2019A3737 | BL22XU        | 佐野 智一            |           |        |       |  |

### Microporous and Mesoporous Materials

|       |            |                      |           |        |      |  |
|-------|------------|----------------------|-----------|--------|------|--|
| 39156 | Peidong Hu | 288 (2019)<br>109594 | 2018A0155 | BL04B2 | 脇原 徹 | Synthesis and Characterization of MFI-type Zincosilicate Zeolites with High Zinc Content using Mechanochemically Treated Si-Zn Oxide Composite |
|-------|------------|----------------------|-----------|--------|------|--|

### Minerals

|       |                  |                 |           |        |       |  |
|-------|------------------|-----------------|-----------|--------|-------|--|
| 38993 | Tsetsgee Solongo | 8 (2018)<br>288 | 2018A0148 | BL37XU | 高橋 嘉夫 | Distribution and Chemical Speciation of Molybdenum in River and Pond Sediments Affected by Mining Activity in Erdenet City, Mongolia |
|       |                  |                 | 2015A0118 | BL01B1 | 高橋 嘉夫 |  |

### Molecular Catalysis

|       |                 |                      |           |        |       |   |
|-------|-----------------|----------------------|-----------|--------|-------|---|
| 38839 | Zhenzhong Zhang | 475 (2019)<br>110502 | 2017A1780 | BL14B2 | 村山 美乃 | The Additive Effect of Amines on the Dihydroxylation of Buta-1,3-diene into Butenediols by Supported Pd Catalysts |
|       |                 |                      | 2014B1897 | BL14B2 | 大橋 弘範 |   |
|       |                 |                      | 2016A1521 | BL14B2 | 村山 美乃 |   |

### Molecular Cell

| 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  |
|--------|---------|----------------------|-----------|--------|------------|---|
| 39031  | Wei Sun | 76 (2019)<br>938-952 | 2017B2711 | BL26B1 | Wang Yanli | Structures of <i>Neisseria meningitidis</i> Cas9 Complexes in Catalytically Poised and Anti-CRISPR-Inhibited States |
|        |         |                      | 2018A2581 | BL41XU | Wang Yanli |   |

### Molecular Chemistry and Physics

|       |           |                       |           |        |       |  |
|-------|-----------|-----------------------|-----------|--------|-------|--|
| 38927 | Jian Shen | 218 (2017)<br>1700197 | 2015A7210 | BL03XU | 和泉 篤士 | Mechanical, Thermal, and Electrical Properties of Flexible Polythiophene with Disiloxane Side Chains |
|       |           |                       | 2015B7260 | BL03XU | 和泉 篤士 |  |
|       |           |                       | 2016A7210 | BL03XU | 和泉 篤士 |  |
|       |           |                       | 2016B7260 | BL03XU | 和泉 篤士 |  |

### Nano Letters

|       |               |                        |           |        |       |   |
|-------|---------------|------------------------|-----------|--------|-------|---|
| 39091 | Masaki Nakano | 19 (2019)<br>8806-8810 | 2018A3843 | BL23SU | 和達 大樹 | Intrinsic 2D Ferromagnetism in $V_5Se_7$ Epitaxial Thin Films |
|-------|---------------|------------------------|-----------|--------|-------|---|

### Nature Plants

|       |              |                     |           |        |        |   |
|-------|--------------|---------------------|-----------|--------|--------|---|
| 39141 | Yongchan Lee | 3 (2017)<br>825-832 | 2016B2717 | BL32XU | 西澤 知宏  | Structure of the Triose-Phosphate/Phosphate Translocator Reveals the Basis of Substrate Specificity |
|       |              |                     | 2015A1057 | BL41XU | 西澤 知宏  |   |
|       |              |                     | 2016A2527 | BL41XU | 石谷 隆一郎 |   |
|       |              |                     | 2015A0119 | BL41XU | 瀧木 理   |   |

### NPG Asia Materials

|       |               |                 |           |        |       |   |
|-------|---------------|-----------------|-----------|--------|-------|---|
| 39201 | Yohei Onodera | 11 (2019)<br>75 | 2016A1499 | BL04B2 | 滝本 康幸 | Origin of the Mixed Alkali Effect in Silicate Glass |
|       |               |                 | 2016A0130 | BL04B2 | 小原 真司 |   |

### OPMR2016-Opportunities in Processing of Metal Resources in South East Europe

|       |              |                   |           |        |       |  |
|-------|--------------|-------------------|-----------|--------|-------|--|
| 39013 | Kozo Shinoda | (2016)<br>235-239 | 2014A1800 | BL14B2 | 篠田 弘造 | Local Structure Analysis using High Temperature in situ XAS of Halide Molten Salts for Ta Recovery by Electrolytic Process |
|       |              |                   | 2015B1588 | BL01B1 | 篠田 弘造 |  |
|       |              |                   | 2016A1752 | BL14B2 | 篠田 弘造 |  |
|       |              |                   | 2016B1585 | BL14B2 | 篠田 弘造 |  |

### Organic Letters

|       |            |                        |           |        |       |  |
|-------|------------|------------------------|-----------|--------|-------|--|
| 38973 | Susumu Oda | 21 (2019)<br>1770-1773 | 2017A1132 | BL40XU | 畠山 琢次 | Tetracoordinate Boron-Fused Double [5]-Helicenes as Cathode Active Materials for Lithium Batteries |
|       |            |                        | 2017B1073 | BL40XU | 畠山 琢次 |  |
|       |            |                        | 2018A1114 | BL40XU | 畠山 琢次 |  |
|       |            |                        | 2018B1125 | BL40XU | 畠山 琢次 |  |
|       |            |                        | 2016B1059 | BL40XU | 畠山 琢次 |  |
|       |            |                        | 2016A1052 | BL40XU | 畠山 琢次 |  |

### Photosynthesis Research

|       |                  |                       |           |        |       |   |
|-------|------------------|-----------------------|-----------|--------|-------|---|
| 39143 | Keisuke Kawakami | 142 (2019)<br>195-201 | 2014B6969 | BL44XU | 川上 恵典 | Four Distinct Trimeric Forms of Light-Harvesting Complex II Isolated from the Green Alga <i>Chlamydomonas reinhardtii</i> |
|-------|------------------|-----------------------|-----------|--------|-------|---|

### Physical Review C

|       |                    |                      |           |         |       |   |
|-------|--------------------|----------------------|-----------|---------|-------|---|
| 38981 | Norihiro Muramatsu | 100 (2019)<br>055202 | 2015A6101 | BL31LEP | 村松 憲仁 | Measurement of Neutral Pion Photoproduction off the Proton with the Large Acceptance Electromagnetic Calorimeter BGOegg |
|       |                    |                      | 2015B6101 | BL31LEP | 村松 憲仁 |   |
|       |                    |                      | 2016A6101 | BL31LEP | 村松 憲仁 |   |
|       |                    |                      | 2016B6101 | BL31LEP | 村松 憲仁 |   |
|       |                    |                      | 2017A6101 | BL31LEP | 村松 憲仁 |   |
|       |                    |                      | 2017B6101 | BL31LEP | 村松 憲仁 |   |

### Physical Review Letters

|       |              |                      |           |        |              |   |
|-------|--------------|----------------------|-----------|--------|--------------|---|
| 39123 | Hyeonjun Lee | 123 (2019)<br>217601 | 2017A1361 | BL13XU | Cho Chi Yong | Electric-Field-Driven Nanosecond Ferroelastic-Domain Switching Dynamics in Epitaxial Pb(Zr,Ti)O <sub>3</sub> Film |
|       |              |                      | 2018A1337 | BL13XU | Cho Chi Yong |   |

### Physical Review Materials

|       |                |                    |           |        |      |   |
|-------|----------------|--------------------|-----------|--------|------|---|
| 38885 | Yong-Chang Lau | 3 (2019)<br>104419 | 2017A1048 | BL39XU | 藤森 淳 | Giant Perpendicular Magnetic Anisotropy in Ir/Co/Pt Multilayers |
|       |                |                    | 2018A1058 | BL39XU | 藤森 淳 |   |

### Physics and Chemistry of Minerals

| 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   |
|--------|----------------|-----------------------|-----------|--------|-------|--|
| 38893  | Masayuki Nishi | 45 (2018)<br>995-1001 | 2015A0075 | BL04B1 | 入船 徹男 | Thermal Equation of State of MgSiO <sub>4</sub> Phase H Determined by in situ X-ray Diffraction and a Multianvil Apparatus |

### Physics of the Earth and Planetary Interiors

|       |              |                      |           |        |       |  |
|-------|--------------|----------------------|-----------|--------|-------|--|
| 39159 | Yu Nishihara | 298 (2020)<br>106348 | 2015A0075 | BL04B1 | 入船 徹男 | Effect of Pressure on Temperature Measurements using WRe Thermocouple and its Geophysical Impact |
|-------|--------------|----------------------|-----------|--------|-------|--|

### PLoS One

|       |             |                       |           |        |      |  |
|-------|-------------|-----------------------|-----------|--------|------|--|
| 39038 | Sayoko Oiki | 14 (2019)<br>e0224753 | 2012A1317 | BL38B1 | 橋本 涉 | Streptococcal Phosphotransferase System Imports Unsaturated Hyaluronan Disaccharide Derived from Host Extracellular Matrices |
|       |             |                       | 2016A2574 | BL38B1 | 橋本 涉 |  |

### Polymer Journal

|       |             |                        |           |        |      |   |
|-------|-------------|------------------------|-----------|--------|------|---|
| 38829 | Saki Ishida | 51 (2019)<br>1181-1187 | 2015B1100 | BL40B2 | 寺尾 憲 | Complex Formation of a Triple-helical Peptide with Sodium Heparin |
|       |             |                        | 2016A1053 | BL40B2 | 寺尾 憲 |   |
|       |             |                        | 2016B1088 | BL40B2 | 寺尾 憲 |   |

### Proceedings of MicroTAS 2019

|       |                 |                     |           |        |       |   |
|-------|-----------------|---------------------|-----------|--------|-------|---|
| 39008 | Kazuma Mawatari | (2019)<br>1026-1027 | 2017B3784 | BL22XU | 馬渡 和真 | Structural Analysis of Water Confined in Nanochannels |
|       |                 |                     | 2018A3785 | BL22XU | 馬渡 和真 |   |
|       |                 |                     | 2018B1360 | BL04B2 | 馬渡 和真 |   |

### Proceedings of the 10th International Symposium on Cavitation (CAV2018)

|       |                |        |           |        |      |  |
|-------|----------------|--------|-----------|--------|------|--|
| 39153 | Rubby Prasetya | (2018) | 2014B0111 | BL40XU | 文 石洙 | X-Ray Imaging of Transient Cavitation Motion in Nozzles under Steady Injection Condition |
|-------|----------------|--------|-----------|--------|------|--|

### Proceedings of the 14th Triennial International Conference on Liquid Atomization and Spray Systems (ICLASS 2018)

|       |                |                 |           |        |      |   |
|-------|----------------|-----------------|-----------|--------|------|---|
| 39149 | Kazuuya Kotani | (2018)<br>ID200 | 2014B0111 | BL40XU | 文 石洙 | X-Ray High Speed Visualization and Measurement of Cavitation Flow in a Nozzle under Transient Injection Condition |
|       |                |                 | 2018A0145 | BL40XU | 文 石洙 |   |

### Proceedings of the 29th International Symposium on Space Technology and Science

|       |                |                      |           |        |        |  |
|-------|----------------|----------------------|-----------|--------|--------|--|
| 39137 | Yuichiro Ogata | (2013)<br>2013-r-51p | 2012B1042 | BL43IR | 藪田 ひかる | Hypervelocity Capture of Murchison Meteorite Particles in Aerogel: Ground-based Experiment for the Cosmic Dusts Capture at the International Space Station |
|-------|----------------|----------------------|-----------|--------|--------|--|

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

|           |               |                           |           |        |       |   |
|-----------|---------------|---------------------------|-----------|--------|-------|---|
| 38817     | Hiroshi Fukui | 116 (2019)<br>21385-21391 | 2014B4250 | BL12XU | 福井 宏之 | Electronic Structure of Dense Solid Oxygen from Insulator to Metal Investigated with X-ray Raman Scattering |
|           |               |                           | 2015A4252 | BL12XU | 福井 宏之 |   |
|           |               |                           | 2015B4253 | BL12XU | 福井 宏之 |   |
|           |               |                           | 2016A4267 | BL12XU | 福井 宏之 |   |
|           |               |                           | 2017A4266 | BL12XU | 福井 宏之 |   |
|           |               |                           | 2017B4250 | BL12XU | 福井 宏之 |   |
|           |               |                           | 2017B4265 | BL12XU | 福井 宏之 |   |
|           |               |                           | 2018A4268 | BL12XU | 福井 宏之 |   |
| 2015B1144 | BL10XU        | 福井 宏之                     |           |        |       |   |

### Progress in Nuclear Science and Technology

|       |                    |                   |           |        |       |   |
|-------|--------------------|-------------------|-----------|--------|-------|---|
| 38922 | Shin-ichi Fujimori | 5 (2018)<br>82-85 | 2015A3820 | BL23SU | 藤森 伸一 | Electro Structure of URu <sub>2</sub> Si <sub>2</sub> Studied by Photoelectron Spectroscopy |
|       |                    |                   | 2015B3820 | BL23SU | 藤森 伸一 |   |
|       |                    |                   | 2016A3810 | BL23SU | 藤森 伸一 |   |
|       |                    |                   | 2016B3811 | BL23SU | 藤森 伸一 |   |

### Protein and Peptide Letters

|           |                  |                      |           |        |       |   |
|-----------|------------------|----------------------|-----------|--------|-------|---|
| 38980     | Kunpei Yamanishi | 26 (2019)<br>792-797 | 2014A1035 | BL38B1 | 柴田 直樹 | Head-to-Tail Complex of Dishevelled and Axin-DIX Domains: Expression, Purification, Crystallographic Studies and Packing Analysis |
|           |                  |                      | 2017A2538 | BL38B1 | 柴田 直樹 |   |
|           |                  |                      | 2017A6723 | BL44XU | 柴田 直樹 |   |
|           |                  |                      | 2017B6723 | BL44XU | 柴田 直樹 |   |
| 2017A2538 | BL26B1           | 柴田 直樹                |           |        |       |   |

**Proteins: Structure, Function, and Bioinformatics**

| 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  |
|--------|---------------|----------------------|-----------|--------|-------|---|
| 39095  | Yuya Hanazono | 88 (2019)<br>251-259 | 2014B1975 | BL26B1 | 竹田 一旗 | Characterization of Perdeuterated High-Potential Iron-Sulfur Protein with High-Resolution X-ray Crystallography |
|        |               |                      | 2015B1041 | BL41XU | 竹田 一旗 |   |

**Pure and Applied Chemistry**

|       |             |                        |           |        |             |  |
|-------|-------------|------------------------|-----------|--------|-------------|--|
| 38834 | Milos Krbal | 91 (2019)<br>1769-1775 | 2012A1187 | BL01B1 | Krbal Milos | Investigation of the Oxidation Process in GeTe-based Phase Change Alloy using Ge K-edge XANES Spectroscopy |
|-------|-------------|------------------------|-----------|--------|-------------|--|

**Radiation Physics and Chemistry**

|       |                 |                                     |           |        |       |   |
|-------|-----------------|-------------------------------------|-----------|--------|-------|---|
| 38838 | Haruno Murayama | (2019) Available online 4 Feb. 2019 | 2016B1573 | BL14B2 | 村山 美乃 | Structure Analysis of Supported Ruthenium Catalysts under Asymmetric Hydrogenation Reaction |
|-------|-----------------|-------------------------------------|-----------|--------|-------|---|

**Science and Technology of Advanced Materials**

|       |                  |                      |           |        |       |   |
|-------|------------------|----------------------|-----------|--------|-------|---|
| 38773 | Norihiro Okamoto | 20 (2019)<br>543-556 | 2016B1096 | BL02B1 | 岡本 範彦 | Crystal Structure of $\eta''$ -Fe <sub>3</sub> Al <sub>7+x</sub> Determined by Single-Crystal Synchrotron X-ray Diffraction Combined with Scanning Transmission Electron Microscopy |
|       |                  |                      | 2017A1243 | BL02B1 | 岡本 範彦 |   |
|       |                  |                      | 2019A1568 | BL02B1 | 岡本 範彦 |   |

**Science Signaling**

|       |                  |                       |           |        |       |   |
|-------|------------------|-----------------------|-----------|--------|-------|---|
| 39235 | Kunpei Yamanishi | 12 (2019)<br>eaaw5505 | 2014A1035 | BL38B1 | 柴田 直樹 | A Direct Heterotypic Interaction between the DIX Domains of Dishevelled and Axin Mediates Signaling to $\beta$ -catenin |
|       |                  |                       | 2017A2538 | BL38B1 | 柴田 直樹 |   |
|       |                  |                       | 2017A6723 | BL44XU | 柴田 直樹 |   |
|       |                  |                       | 2017B6723 | BL44XU | 柴田 直樹 |   |
|       |                  |                       | 2017A2538 | BL26B1 | 柴田 直樹 |   |

**Surface Science**

|       |                   |                      |           |        |       |  |
|-------|-------------------|----------------------|-----------|--------|-------|--|
| 39216 | Takuhiro Kakiuchi | 693 (2020)<br>121551 | 2016B3832 | BL23SU | 垣内 拓大 | Initial Oxidation Processes of Ultrathin Hafnium Film and Hafnium Disilicide Islands on Si(100)-2 × 1 Surfaces Studied using Core-Level X-ray Photoelectron Spectroscopy |
|-------|-------------------|----------------------|-----------|--------|-------|--|

**材料 (Journal of the Society of Materials Science, Japan)**

|       |                |                      |           |        |       |   |
|-------|----------------|----------------------|-----------|--------|-------|---|
| 39079 | Hideki Tsuruta | 68 (2019)<br>599-606 | 2017A1547 | BL20XU | 鶴田 秀樹 | Quantitative Evaluation of Creep Voids in Mod.9Cr-1Mo Steel Welded Joints with X-Ray Micro-Tomography |
|       |                |                      | 2017B1586 | BL20XU | 鶴田 秀樹 |   |

**鉄と鋼 (Tetsu to Hagane)**

|       |               |                       |           |        |       |  |
|-------|---------------|-----------------------|-----------|--------|-------|--|
| 39093 | Hiroyuki Toda | 105 (2019)<br>240-253 | 2015A0076 | BL20XU | 戸田 裕之 | Optimization of Mechanical Properties in Aluminum Alloys via Hydrogen Partitioning Control |
|-------|---------------|-----------------------|-----------|--------|-------|--|

**日本接着学会誌 (Journal of the Adhesion Society of Japan)**

|       |                |                      |           |        |        |   |
|-------|----------------|----------------------|-----------|--------|--------|---|
| 39218 | Takeshi Kakara | 55 (2019)<br>421-426 | 2017A1813 | BL19B2 | 加々良 剛志 | In Situ Residual Stress Analysis in a Glass-Fiber-Reinforced Phenolic Resin and Copper Composite Material during Curing |
|       |                |                      | 2017B1893 | BL19B2 | 和泉 篤士  |   |
|       |                |                      | 2018A1751 | BL19B2 | 和泉 篤士  |   |
|       |                |                      | 2018B1575 | BL19B2 | 和泉 篤士  |   |

**日本調理科学会誌 (Journal of Cookery Science of Japan)**

|       |                |                      |           |        |       |  |
|-------|----------------|----------------------|-----------|--------|-------|--|
| 39121 | Natsuki Hosoda | 52 (2019)<br>386-394 | 2017B3201 | BL24XU | 高山 裕貴 | Physical Properties and Structure of Wheat Noodles after Various Storage Periods |
|-------|----------------|----------------------|-----------|--------|-------|--|

**放射光 (Journal of the Japanese Society for Synchrotron Radiation Research)**

|       |                    |                      |           |        |      |  |
|-------|--------------------|----------------------|-----------|--------|------|--|
| 39068 | Chikashi Toyoshima | 31 (2018)<br>212-218 | 2018A0144 | BL41XU | 豊島 近 | Dynamics of Membrane Protein and Phospholipid Interactions Revealed by X-ray Contrast Modulation |
|       |                    |                      | 2009B0025 | BL41XU | 豊島 近 |  |
|       |                    |                      | 2012B1486 | BL41XU | 豊島 近 |  |
|       |                    |                      | 2013A0049 | BL41XU | 豊島 近 |  |

博士論文 (奈良先端科学技術大学院大学)

| 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  |
|--------|--------------|--------|-----------|--------|--------|---|
| 39174  | Yuto Tamura  | (2018) | 2017A1779 | BL19B2 | 鈴木 充朗  | Covalent Approach toward Optimum Bulk Hetero-junction Morphology in Organic Solar Cells |
|        |              |        | 2015A1683 | BL19B2 | 鈴木 充朗  |   |
|        |              |        | 2015B1769 | BL19B2 | 高橋 功太郎 |   |
|        |              |        | 2014B1655 | BL19B2 | 吉本 則之  |   |
| 39175  | Takuya Okabe | (2018) | 2017A1779 | BL19B2 | 鈴木 充朗  | Interior and Exterior Shaping of Organic Molecular Dyes for Optoelectronic Applications |
|        |              |        | 2017B1817 | BL46XU | 山口 裕二  |   |
|        |              |        | 2015A1683 | BL19B2 | 鈴木 充朗  |   |

博士論文 (大阪大学)

|           |                |                 |           |        |        |  |
|-----------|----------------|-----------------|-----------|--------|--------|--|
| 38938     | Yasutaka Tsuda | (2019)<br>1-184 | 2019A3831 | BL23SU | 岡田 美智雄 | Oxide Formation Process and Stereodynamics of Chemical Reaction in the Initial Stage of Oxidation on Copper Alloy Surfaces |
|           |                |                 | 2019A3801 | BL23SU | 吉越 章隆  |  |
|           |                |                 | 2018B3831 | BL23SU | 岡田 美智雄 |  |
|           |                |                 | 2018B3801 | BL23SU | 吉越 章隆  |  |
|           |                |                 | 2018A3831 | BL23SU | 岡田 美智雄 |  |
|           |                |                 | 2018A3801 | BL23SU | 吉越 章隆  |  |
|           |                |                 | 2017B3831 | BL23SU | 岡田 美智雄 |  |
|           |                |                 | 2017B3801 | BL23SU | 吉越 章隆  |  |
|           |                |                 | 2017A3831 | BL23SU | 岡田 美智雄 |  |
|           |                |                 | 2017A3801 | BL23SU | 吉越 章隆  |  |
|           |                |                 | 2016B3831 | BL23SU | 岡田 美智雄 |  |
|           |                |                 | 2016B3801 | BL23SU | 吉越 章隆  |  |
|           |                |                 | 2016A3820 | BL23SU | 岡田 美智雄 |  |
|           |                |                 | 2016A3801 | BL23SU | 吉越 章隆  |  |
|           |                |                 | 2015B3870 | BL23SU | 岡田 美智雄 |  |
|           |                |                 | 2015B3801 | BL23SU | 吉越 章隆  |  |
|           |                |                 | 2015A3870 | BL23SU | 岡田 美智雄 |  |
|           |                |                 | 2014B3870 | BL23SU | 岡田 美智雄 |  |
| 2014A3870 | BL23SU         | 岡田 美智雄          |           |        |        |  |
| 2013B3870 | BL23SU         | 岡田 美智雄          |           |        |        |  |
| 2013A3870 | BL23SU         | 岡田 美智雄          |           |        |        |  |

博士論文 (神戸大学)

|       |                |        |           |        |      |   |
|-------|----------------|--------|-----------|--------|------|---|
| 39154 | Rubby Prasetya | (2016) | 2014B0111 | BL40XU | 文 石洙 | Cavitation in Nozzle of Fuel Injector and Its Effect on Discharged Liquid Jet |
|-------|----------------|--------|-----------|--------|------|---|

課題以外の成果として登録された論文

Physical Review B

| 研究成果番号 | 主著者              | 雑誌情報                |    | ビームライン | タイトル   |
|--------|------------------|---------------------|----|--------|--|
| 38812  | M. Kriener       | 95 (2017)<br>224418 | 理研 | BL44B2 | Enhanced Ferromagnetic Transition Temperature Induced by a Microscopic Structural Rearrangement in the Diluted Magnetic Semiconductor $Ge_{1-x}Mn_xTe$ |
| 38863  | Daisuke Takegami | 99 (2019)<br>165101 |    | BL12XU | Valence Band Hard X-ray Photoelectron Spectroscopy on 3d Transition-Metal Oxides Containing Rare-Earth Elements  |
| 39032  | Amol Singh       | 98 (2018)<br>235136 |    | BL12XU | Electronic Structure Investigation of a Charge Density Wave Coupled to a Metal-to-Metal Transition in $Ce_3Co_4Sn_{13}$                                |
| 39034  | W.-J. Gannon     | 98 (2018)<br>075101 |    | BL12XU | Intermediate Valence in Single Crystalline $Yb_2Si_2Al$  |

Journal of Synchrotron Radiation

|       |               |                        |       |        |   |
|-------|---------------|------------------------|-------|--------|---|
| 38970 | Ryota Kinjo   | 23 (2016)<br>751-757   | 装置&技術 | BL23SU | Spectrum Splitting for Fast Polarization Switching of Undulator Radiation         |
| 38975 | Pavle Juranic | 26 (2019)<br>2081-2085 | XFEL  |        | Transmission Measurement at the Bernina Branch of the Aramis Beamline of SwissFEL |

Angewandte Chemie International Edition

|       |             |                          |  |        |  |
|-------|-------------|--------------------------|--|--------|--|
| 38864 | Alfred Amon | 58 (2019)<br>15928-15933 |  | BL12XU | Interplay of Atomic Interactions in the Intermetallic Semiconductor $Be_3Pt$ |
|-------|-------------|--------------------------|--|--------|--|



### Applied Sciences

| 研究成果番号 | 主著者         | 雑誌情報             |       | ビームライン | タイトル  |
|--------|-------------|------------------|-------|--------|---|
| 39239  | Eriko Nango | 9 (2019)<br>5505 | 装置&技術 | SACLA  | Pump-Probe Time-Resolved Serial Femtosecond Crystallography at SACLA: Current Status and Data Collection Strategies |

### Catalysis Science & Technology

|       |             |                       |    |        |  |
|-------|-------------|-----------------------|----|--------|--|
| 39077 | M. Yamauchi | 9 (2019)<br>6561-6565 | 理研 | BL44B2 | Catalytic Enhancement on Ti-Zr Complex Oxide Particles for Electrochemical Hydrogenation of Oxalic Acid to Produce an Alcoholic Compound by Controlling Electronic States and Oxide Structures |
|-------|-------------|-----------------------|----|--------|--|

### Chemistry - A European Journal

|       |            |                          |    |        |  |
|-------|------------|--------------------------|----|--------|--|
| 38979 | Taizen Den | 25 (2019)<br>11512-11520 | 理研 | BL44B2 | Solid-Gas Phase Synthesis of Coordination Networks by Using Redox-Active Ligands and Elucidation of Their Oxidation Reaction |
|-------|------------|--------------------------|----|--------|--|

### Energy & Fuels

|       |                  |                        |  |        |   |
|-------|------------------|------------------------|--|--------|---|
| 39021 | Hirotsu Watanabe | 32 (2018)<br>4248-4254 |  | BL20B2 | X-ray Computed Tomography Visualization of the Woody Char Intraparticle Pore Structure and Its Role on Anisotropic Evolution during Char Gasification |
|-------|------------------|------------------------|--|--------|---|

### Japanese Journal of Applied Physics

|       |                |                     |    |        |  |
|-------|----------------|---------------------|----|--------|--|
| 38858 | Takuo Ohkouchi | 58 (2019)<br>118001 | 理研 | BL17SU | Present Status of Photoemission Electron Microscope Newly Installed in SPring-8 for Time-Resolved Nanospectroscopy |
|-------|----------------|---------------------|----|--------|--|

### Journal of Materials Chemistry C

|       |           |                       |     |        |  |
|-------|-----------|-----------------------|-----|--------|--|
| 39224 | Cheng Dai | 6 (2018)<br>3089-3096 | その他 | BL12B2 | Developed One-Pot Synthesis of Dual-Color CdSe Quantum Dots for White Light-Emitting Diode Application |
|-------|-----------|-----------------------|-----|--------|--|

### Journal of Power Sources

|       |            |                     |     |        |  |
|-------|------------|---------------------|-----|--------|--|
| 39225 | Po-Han Lee | 374 (2018)<br>31-39 | その他 | BL12B2 | The Storage Degradation of an 18650 Commercial Cell Studied using Neutron Powder Diffraction |
|-------|------------|---------------------|-----|--------|--|

### Journal of X-ray Science and Technology

|       |                   |                      |     |  |   |
|-------|-------------------|----------------------|-----|--|---|
| 38955 | Nobuteru Nariyama | 24 (2016)<br>343-351 | 加速器 |  | Photon Source Term after Single Collision in Targets of Silicon, Copper and Lead for 50-500 keV X-ray Beams |
|-------|-------------------|----------------------|-----|--|---|

### Physical Review X

|       |               |                    |  |        |  |
|-------|---------------|--------------------|--|--------|--|
| 39037 | Chun-Fu Chang | 8 (2018)<br>021004 |  | BL12XU | c-Axis Dimer and Its Electronic Breakup: The Insulator-to-Metal Transition in Ti <sub>2</sub> O <sub>3</sub> |
|-------|---------------|--------------------|--|--------|--|

### Physics of Plasmas

|       |               |                     |      |          |   |
|-------|---------------|---------------------|------|----------|---|
| 38831 | Masahiro Yano | 26 (2019)<br>093108 | XFEL | over all | Effects of Hole-Boring and Relativistic Transparency on Particle Acceleration in Overdense Plasma Irradiated by Short Multi-PW Laser Pulses |
|-------|---------------|---------------------|------|----------|---|

### Proceedings of SPIE

|       |          |                         |      |  |  |
|-------|----------|-------------------------|------|--|--|
| 38816 | S. Egawa | 11108 (2019)<br>1110804 | XFEL |  | An Optical Design of Twin Wolter Mirrors for Focusing and Imaging Experiments with Soft X-ray Free Electron Lasers |
|-------|----------|-------------------------|------|--|--|

### Progress in Nuclear Science and Technology

|       |                   |                     |     |  |  |
|-------|-------------------|---------------------|-----|--|--|
| 38957 | Nobuteru Nariyama | 4 (2014)<br>257-260 | 加速器 |  | Radiation Shielding in SPring-8 Linear Accelerator Tunnels for Safety Interlock System Upgrade |
|-------|-------------------|---------------------|-----|--|--|

### Radiation Physics and Chemistry

|       |                   |                        |    |  |  |
|-------|-------------------|------------------------|----|--|--|
| 38959 | Nobuteru Nariyama | 75 (2006)<br>1719-1722 | 理論 |  | Photon-Produced Electron Fluence Calculated with Photoelectron Angular Distribution of Sauter Expression |
|-------|-------------------|------------------------|----|--|--|