

最近SPring-8から発表された成果リスト

財団法人高輝度光科学研究センター
利用業務部

SPring-8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、以下のホームページから検索できます。

http://www.spring8.or.jp/ja/users/intellectual_property/article/publicfolder_view

このデータベースに登録された原著論文の内、平成18年2月～3月にその別刷もしくはコピー等を受理したもの（登録時期は問いません）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、詳細はホームページ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HP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けます。

http://www.spring8.or.jp/ja/support/download/publication/user_exp_report/

今後利用者情報には発行月の2ヶ月前の月末締めで、2ヶ月分ずつ登録された論文情報を掲載していく予定ですが、ホームページは毎日更新されていますので、最新情報はホームページをご覧ください。なお、実験責任者のかたには、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。

課題の成果として登録された論文

Japanese Journal of Applied Physics

| 主著者名 | 研究成果番号 | 巻、発行年、頁 | 課題番号 | ビームライン | 実験責任者 | タイトル |
|----------------|--------|------------------------|-----------|--------|-------------------|--|
| Sadao Aoki | 8280 | 44 (2005) 417-421 | 2000B0400 | BL47XU | 青木 貞雄 | Production of Reflection Point Sources for Hard X-Ray Gabor Holography |
| Paul Fons | 8905 | 44 (2005) 3345-3349 | 2005A0004 | BL01B1 | Paul Fons | Why Phase-Change Media Are Fast and Stable: A New Approach to an Old Problem |
| | | | 2001B0099 | BL01B1 | Kolobov Alexander | |
| Atsushi Momose | 8957 | 45 (2006) 314-316 | 2003A0458 | BL20XU | 百生 敦 | X-ray Talbot Interferometry with Capillary Plates |
| Kenji Nomura | 9036 | 45 (2006) L304-L306 | C05A4100 | BL16B2 | 淡路 直樹 | Nondestructive Measurement of Hexavalent Chromium in Chromate Conversion Coatings Using X-ray Absorption Near Edge Structure |
| | | | C05A3100 | BL16XU | 淡路 直樹 | |
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Physical Review B

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| Yoshiyuki Yamashita | 8903 | 73 (2006) 045336 | 2004A0345 | BL27SU | 山下 良之 | Direct Observation of Site-specific Valence Electronic Structure at the SiO ₂ /Si Interface |
| | | | 2003B0209 | BL27SU | 山下 良之 | |
| Makoto Tachibana | 8951 | 72 (2005) 224425 | 2005A0735 | BL02B2 | 川路 均 | Lattice Effects in Multiferroic RMn ₂ O ₅ (R=Sm-Dy,Y) |
| Anders Bentien | 9014 | 71 (2005) 114107 | 2004A0627 | BL02B2 | Iversen Bo | Crystal Structures, Atomic Vibration, and Disorder of the Type-I thermoelectric Clathrates Ba ₈ Ga ₁₆ Si ₃₀ , Ba ₈ Ga ₁₆ Ge ₃₀ , Ba ₈ In ₁₆ Ge ₃₀ , and Sr ₈ Ga ₁₆ Ge ₃₀ |
| Takanori Hattori | 8999 | 73 (2006) 054203 | 2003B0381 | BL04B1 | 辻 和彦 | Pressure-induced Structural Change of Liquid CdTe up to 23.5 GPa |
| | | | 2004A0306 | BL22XU | 辻 和彦 | |

Journal of Alloys and Compounds

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| Sou Watanabe | 8911 | 408-412 (2006) 71-75 | C04A4050 | BL16B2 | 出口 博史 | XAFS Analysis of Molten Rare-Earth-Alkali Metal Fluoride Systems |
| | | | 2004A0546 | BL38B1 | 松浦 治明 | |
| Haruaki Matsuura | 8912 | 408-412 (2006) 80-83 | 2003B0628 | BL01B1 | 松浦 治明 | Short-Range Structure of Molten CeCl ₃ and NdCl ₃ |
| | | | 2004A0548 | BL19B2 | 藤田 玲子 | Determined by XAFS |
| Hirohisa Tanaka | 8930 | 408-412 (2006) 1071-1077 | 2003B0595 | BL01B1 | 上西 真里 | LaFePdO ₃ Perovskite Automotive Catalyst Having a Self-Regenerative Function |
| | | | 原研 | BL14B1 | | |

Present Status of SPring-8

Biochemistry

| 主著者名 | 研究成果番号 | 巻、発行年、頁 | 課題番号 | ピームライン | 実験責任者 | タイトル |
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| Nobutaka Shimizu | 9070 | 45 (2006) 3542-3547 | J03B0505 | BL40B2 | 清水 伸隆 | The Crystal Structure of the R52Q Mutant |
| | | | J04A0501 | BL40B2 | 清水 伸隆 | Demonstrates a Role for R52 in Chromophore pK _a Regulation in Photoactive Yellow Protein |
| Masaki Nojiri | 9082 | 45 (2006) 3481-3492 | C05A7218 | BL44XU | 野尻 正樹 | Crystal Structures of Cytochrome c _L and Methanol Dehydrogenase from <i>Hyphomicrobium denitrificans</i> : Structural and Mechanistic Insights into Interactions between the Two Proteins |

Key Engineering Materials

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| Hiroyisa Tanaka | 9079 | 317-318 (2006) 827-832 | 2003A0623 | BL28B2 | 西畠 保雄 | The Intelligent Catalyst: Pd-perovskite having the Self-Regenerative Function in a Wide Temperature Range |
| | | | 2003B0758 | BL28B2 | 西畠 保雄 | |
| | | | 2003B0595 | BL01B1 | 上西 真里 | |
| Isao Tan | 9080 | 317-318 (2006) 833-836 | 2003B0595 | BL01B1 | 上西 真里 | The Self-regenerative "Intelligent" Catalyst for Automotive Emissions Control |

Nature

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| Masaaki Shiono | 8267 | 436 (2005) 791 | C03B7402 | BL44XU | 塩野 正明 | Structure of the Blue Cornflower Pigment |
| Ryotaro Matsuda | 9033 | 436 (2005) 238-241 | 2003B0461 | BL02B2 | 北川 進 | Highly Controlled Acetylene Accommodation in a Metal-Organic Microporous Material |

Nature Structural and Molecular Biology

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| Kyouhei Arita | 7868 | 11 (2004) 777-783 | 2003A0743 | BL38B1 | 橋本 博 | Structural Basis for Ca ²⁺ -induced Activation of Human PAD4 |
| | | | 2003A0744 | BL40B2 | 清水 敏之 | |
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| Mamoru Sato | 9114 | 11 (2004) 777-783 | 2003A0743 | BL38B1 | 橋本 博 | Structural Basis for Ca ²⁺ -induced Activation of Human PAD4 |

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| Yoshinori Hagiwara | 8914 | 103 (2006) 27-32 | 2005A0214 | BL41XU | 福山 恵一 | Crystal Structure of Phycocyanobilin:ferredoxin Oxidoreductase in Complex with Biliverdin Ix α , a Key Enzyme in the Biosynthesis of Phycocyanobilin |
| Mamoru Sato | 9111 | 103 (2006) 5291-5296 | 2003A0743 | BL38B1 | 橋本 博 | Structural Basis for Histone N-terminal Recognition by Human Peptidylarginine Deiminase 4 |

Solid State Communications

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| Makoto Tachibana | 8949 | 131 (2004) 745-748 | 2003A0395 | BL02B2 | 川路 均 | Heat Capacity and Magnetic Properties of Pyrochlore Hg ₂ Os ₂ O ₇ |
| Shigeaki Ono | 8967 | 137 (2006) 517-521 | 2003A0013 | BL10XU | 巽 好幸 | Structural Property of CsCl-type Sodium Chloride under Pressure |

可視化情報学会誌 (Journal of the Visualization Society of Japan)

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| Tomomasa Uemura | 9071 | 25 (2005) 203-206 | 2003A0415 | BL20XU | 植村 知正 | Synchrotron Radiation, X-ray Imaging, holography, Particle Image Velocimetry |
| Tomomasa Uemura | 9072 | 25 (2005) 205-208 | 2003A0415 | BL20XU | 植村 知正 | PIV Imaging for Multiphase Flow Measurement Utilizing Synchrotron Radiation X-ray |

Acta Crystallographica Section D

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| Eiki Yamashita | 8965 | 61 (2005) 1373-1377 | C04A7000 | BL44XU | 山下 栄樹 | Absolute Configuration of the Hydroxyfarnesylethyl Group of Haem A, Determined by X-ray Structural Analysis of Bovine Heart Cytochrome c Oxidase using Methods Applicable at 2.8 Å Resolution |
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| 主著者名 | 研究成果番号 | 巻、発行年、頁 | 課題番号 | ビームライン | 実験責任者 | タイトル |
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| Alberto De Fanis | 8184 | 70 (2004) 040702 | 2002B0558 | BL27SU | 北島 昌史 | Photoelectron Recapture as a Novel Tool for the Spectroscopy of Ionic Rydberg States |
| | | | 2002A0033 | BL27SU | 上田 潔 | |

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| Yoichi Horibe | 9074 | 96 (2006) 086406 | 2003B0067 | BL02B2 | 勝藤 拓郎 | Spontaneous Formation of Vanadium "Molecules" in a Geometrically Frustrated Crystal: AlV ₂ O ₄ |
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Science and Technology of Advanced Materials

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| Tomoyuki Sasaki | 9026 | 7 (2006) 17-21 | 2003A0206 | BL02B2 | 秋光 純 | Crystal Symmetry and Superlattice Reflections in Spin- |
| | | | R04B0020 | BL46XU | 水牧 仁一郎 | Peierls System TiOBr |

Structure

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| Daisuke Tsuchiya | 8917 | 14 (2006) 237-246 | 2003B0126 | BL40B2 | 土屋 大輔 | Ligand-Induced Domain Rearrangement of Fatty Acid -Oxidation Multienzyme Complex |
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Thermochimica Acta

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| Hitoshi Kawaiji | 8950 | 431 (2005) 49-52 | 2004A0296 | BL02B2 | 川路 均 | Heat Capacity of Ce _{0.8} Y _{0.2} O _{1.9} and the Effects of Dissolution of Water/Hydrogen |
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材料 (Journal of the Society of Materials Science, Japan)

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| Masaru Kotera | 8141 | 54 (2005) 780-784 | 2003B0473 | BL19B2 | 宮下 景子 | Hydration Process for Calcium-Aluminate Cement within EVA Emulsion by SPring-8 Synchrotron Radiation X-ray Diffraction Method |
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博士論文

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| Dilshad Masih | 8907 | 東京工業大学 (2006) 1-176 | 2003A0145 2002B0738 2003A0146 2002B0739 2004A0122 2003B0386 | BL10XU BL10XU BL15XU BL15XU BL37XU BL10XU | 泉 康雄 泉 康雄 泉 康雄 泉 康雄 泉 康雄 泉 康雄 | Understanding of Working Mechanism of Iron-based Materials for the Arsenic Removal and Surface Environmental Catalysts by Selective Spectroscopy |
| Sou Watanabe | 9118 | 東京工業大学 (2006) 1-183 | 2002B0541 2004A0546 2004A0548 C04A4050 2004B0668 | BL38B1 BL38B1 BL19B2 BL16B2 BL01B1 | 松浦 治明 松浦 治明 藤田 玲子 出口 博史 松浦 治明 | Local Structural Analyses on Divalent or Trivalent Metal Fluoride Systems at High Temperature |

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| Yoshikazu Tanaka | 8947 | 74 (2005) 2201-2204 | 理研 | BL19LXU | Manipulating the Multipole Moments in CeB ₆ by Magnetic Fields |
| Abdul Hannan | 8948 | 74 (2005) 2301-2309 | 理研 | BL19LXU | Study of High-Field Magnetic Phases of the Low-Carrier-System CeP by Synchrotron Radiation X-ray Diffraction |

Physical Review Letters

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| Masamitu Takahashi | 9120 | 96 (2006) 055506 | 原研 | BL11XU | Element-Specific Surface X-Ray Diffraction Study of GaAs(001)-c(4 x 4) |
| Yujiro Hayashi | 9122 | 96 (2006) 115505 | 理研 | BL19LXU | Acoustic Pulse Echoes Probed with Time-Resolved X-ray Triple-Crystal Diffractometry |

Acta Crystallographica Section D

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| Takahito Imagawa | 8942 | 60 (2004) 2006-2008 | 理研 | BL44B2 | Crystallization and Preliminary X-ray Diffraction Analysis of Homing Endonuclease I-Tsp061I |
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Present Status of SPring-8

Acta Crystallographica Section F

| 主著者名 | 研究成果番号 | 巻、発行年、頁 | | ピームライン | タイトル |
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| Syunichirou Oda | 8997 | 62 (2006) 221-223 | 理研 | BL26B1 | Crystallization and Preliminary Crystallographic Studies of Human Indoleamine 2,3-dioxygenase |

Applied Physics Letters

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| Masamitu Takahashi | 9121 | 88 (2006) 101917 | 原研 | BL11XU | <i>In situ</i> Monitoring of Internal Strain and Height of InAs Nanoislands Grown on GaAs(001) |
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The European Physical Journal D

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| Kousuke Moritani | 9069 | 38 (2006) 111-115 | 原研 | BL23SU | The Azimuthal Dependent Oxidation Process on Cu(100) by Energetic Oxygen Molecules |
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Journal of Applied Physics

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| Yoshiki Kohmura | 8933 | 98 (2005) 123105 | 光学系 | | Effect of Distorted Illumination Waves on Coherent Diffraction Microscopy |
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Journal of Molecular Biology

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| Tamao Hisano | 9065 | 356 (2006) 933-1004 | 理研 | BL44B2 | The Crystal Structure of Polyhydroxybutyrate Depolymerase from <i>Penicillium funiculosum</i> Provides Insights into the Recognition and Degradation of Biopolymers |
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Journal of Physics: Condensed Matter

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| Koichi Katsumata | 8946 | 17 (2005) L235-L239 | 理研 | BL19LXU | The Giant Magneto-Volume Effect in Solid Oxygen |
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Journal of Synchrotron Radiation

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| Kenji Tamasaku | 8192 | 12 (2005) 696-700 | 理研 | BL19LXU | On a Phase Problem of High-Resolution Fourier Transform X-ray Spectroscopy |
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Nature

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| Tohru Nakatsu | 9128 | 440 (2006) 372-376 | 理研 | BL45XU | Structural Basis for the Spectral Difference in Luciferase Bioluminescence |
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Nuclear Instruments and Methods in Physics Research Section B

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| Hiromitsu Tomizawa | 8989 | 557 (2006) 117-123 | 加速器 | | Adaptive Shaping System for Both Spatial and Temporal Profiles of a Highly Stabilized UV Laser Light Source for a Photocathode RF Gun |
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Physical Review B

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| Shin-ichi Fujimori | 9084 | 73 (2006) 125109 | 原研 | BL23SU | Itinerant U 5f Band States in the Layered Compound UFeGa ₅ Observed by Soft X-ray Angle-Resolved Photoemission Spectroscopy |
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Proceedings of the National Academy of Sciences of the United States of America

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| Hiroshi Sugimoto | 8955 | 103 (2006) 2611-2616 | 理研 | BL44B2 | Crystal Structure of Human Indoleamine 2,3-dioxygenase: Catalytic Mechanism of O ₂ Incorporation by a Heme-Containing Dioxygenase |
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Proteins: Structure, Function, and Bioinformatics

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| Jun Ishijima | 8939 | 62 (2006) 1133-1137 | 理研 | BL26B1 | Crystal Structure of Alanyl-tRNA Synthetase Editing-Domain Homolog (PH0574) from a Hyperthermophile, <i>Pyrococcus horikoshii</i> OT3 at 1.45 Å Resolution |
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表面科学 (Journal of the Surface Science Society of Japan)

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| FangZhun Guo | 8897 | 26 (2005) 20-27 | 装置技術 | BL27SU | Introduction of Spectroscopic Photoemission and Low Energy Electron Microscope in SPring-8 |
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