

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くことになります。以下のホームページから検索できます。

<http://4users.spring8.or.jp/publ/>

このデータベースに登録された原著論文の内、平成16年12月～17年1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/e/user_info/user_ex_repo/

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

Physical Review B

主著者	巻、発行年、ページ	研究成果番号	課題番号	ビームライン	実験責任者	タイトル
Aniruddha Deb	70 (2004) 104411	6908	2002A0564	BL08W	Deb Aniruddha	Evidence of Negative Spin Polarization in Ferromagnetic $\text{Sr}_2\text{FeMoO}_6$ as Observed in a Magnetic Compton Profile Study
Hiroyuki Kimura	70 (2004) 134512	6917	2002A0314	BL46XU	木村 宏之	Relationship between Charge Stripe Order and Structural Phase Transitions in $\text{La}_{1.875}\text{Ba}_{0.125-x}\text{Sr}_x\text{CuO}_4$
			2001B0301			
			2003B0117			
			2004B2117	BL02B1		
			R03A0012	水牧 仁一郎		
Hitoshi Sato	69 (2004) 165101	6980	2000B0438 2002B0060	BL25SU	佐藤 仁	Soft-X-ray High-Resolution Photoemission Study on the Valence Transitions in YbInCu_4
Aniruddha Deb	70 (2004) 104411	7117	2002A0564			
Hisao Kobayashi	71 (2005) 014110	7121	2001A0281	BL10XU	小林 寿夫	Structural and Electrical Properties of Stoichiometric FeS Compounds under High Pressure at Low Temperature
Yasujirou Taguchi	70 (2004) 104506	7155	2002B0497	BL10XU	岩佐 義宏	High-Pressure Study of Layered Nitride Superconductors

Biochemistry

Masayoshi Nakasako	43 (2004) 14881-14890	7084	2002B0152 2003A0106 2003B0141	BL40B2	中迫 雅由	Ligh-Induced Structural Changes of LOV Domain-Containing Polypeptides from <i>Arabidopsis</i> Phototropin 1 and 2 Studied by Small-Angle X-ray Scattering
Masayoshi Nakasako	40 (2001) 3069-3079	7087	1999B0056			Large-Scale Domain Movements and Hydration Structure Changes in the Active Site Cleft of Unligated Glutamate Dehydrogenase from <i>Thermococcus profundus</i> Studied by Cryogenic X-ray Crystal Structure Analysis and Small-Angle X-ray Scattering

PRESENT STATUS OF SPring-8

Journal of Applied Physics

主著者	巻、発行年、ページ	研究成果番号	課題番号	ビームライン	実験責任者	タイトル
Yoshifumi Suzuki	96 (2004) 6259-6261	6121	2002A0272	BL20B2	鈴木 芳文	Observation of Silicon front Surface Topographs of an Ultralarge-Scale-Integrated Water by Synchrotron X-ray Plane Wave
Kenichi Takarabe	96 (2004) 4903-4908	7030	2002B0047	BL10XU	森 嘉久	Structural Study of FeSi ₂ under Pressure

The Journal of Biological Chemistry

Michiyoshi Nukaga	279 (2004) 9344-9352	5926	2003A0052	BL40B2	Knox James	Hydrolysis of Third-Generation Cephalosporins by Class C -lactamases: Structures of a Transition-State Analog of Cefotaxime in Wild-Type and Extended-Spectrum Enzymes
Yasuaki Hiromasa	279 (2004) 6921-6933	6923	2002B0745 2001A0127 2000B0006	BL45XU	Roche Thomas E.	Organization of the Cores of the Mammalian Pyruvate Dehydrogenase Complex Formed by E2 and E2 Plus the E3-binding Protein and Their Capacities to Bind the E1 and E3 Components

The Journal of Physical Chemistry B

Tatsuya Kawashima	109 (2005) 1055-1062	7114	2004A0140	BL45XU	佐々木 茂男	Roles of Hydrophobic Interaction in a Volume Phase Transition of Alkylacrylamide Gel Induced by the Hydrogen-Bond-Driving Alkylphenol Binding
Shogo Koga	108 (2004) 10838-10844	7115	2003A0140	BL45XU	佐々木 茂男	Elastic Relaxation of Collapsed Poly(alkylacrylamide) Gels and Their Complexes with Phenol

Journal of Physics: Condensed Matter

Yoshiharu Sakurai	16 (2004) S5717-S5720	6986	2004A5008	BL08W	小泉 昭久	A Magnetic Compton Scattering Study of Double Perovskite Sr ₂ FeMoO ₆
Shigeaki Ono	17 (2005) 269-276	7091	2002B0162 2003A0013 2003A0031 2003A0017	BL10XU BL04B1	小野 重明 異 好幸 小野 重明	In situ X-ray Observation of Phase Transformation of Fe ₂ O ₃

Langmuir

Yeonhwan Jeong	21 (2005) 586-594	7154	2003A0314 2003B0792	BL40B2	櫻井 和朗	Solvent/Gelator Interactions and Supramolecular Structure of Gel Fibers in Cyclic Bis-Urea/Primary Alcohol Organogels
Tomoyuki Koga	21 (2005) 905-910	7163	2002B0227	BL13XU	高原 淳	Dependence of the Molecular Aggregation State of Octadecylsiloxane Monolayers on Preparation Methods

Acta Crystallographica Section D

Masakazu Sugishima	60 (2004) 2305-2309	6902	2002B0348	BL41XU	福山 恵一	Structure of Photoactive Yellow Protein (PYP) E46Q Mutant at 1.2 Resolution Suggests how Glu46 Controls the Spectroscopic and Kinetic Characteristics of PYP
--------------------	------------------------	------	-----------	--------	-------	--

Acta Crystallographica Section F

Ryuwa Fukunaga	61 (2005) 30-32	7134	2003B0077 理研	BL41XU BL26B1	石谷 隆一	Crystallization of Leucyl-tRNA Synthetase Complexed with tRNA ^{Leu} from the Archaeon <i>Pyrococcus horikoshii</i>
----------------	--------------------	------	-----------------	------------------	-------	---

Applied Physics Letters

Fumihiko Matsui	85 (2004) 3737-3739	6924	2002B0535	BL25SU	大門 寛	Visualization of Graphite Atomic Arrangement by Stereo Atomscope
-----------------	------------------------	------	-----------	--------	------	--

Bulletin of the Chemical Society of Japan

Nobuhiro Yasuda	77 (2004) 933-944	5908	2002B0329	BL02B2	植草 秀裕	X-ray Analysis of Excited-State Structures of the Diplatinum Complex Anions in Five Crystals with Different Cations
-----------------	----------------------	------	-----------	--------	-------	---

Chemistry Letters

Minako Maeda	33 (2004) 1566-1567	6842	2003A0395	BL04B2	堀 佳也子	Successive Phase Transitions in Crystalline State of Mesogenic Butyl 4-[2-(Perfluorooctyl)ethoxy]benzoate
--------------	------------------------	------	-----------	--------	-------	---

Colloids and Surfaces B: Biointerfaces

著者	巻、発行年、ページ	研究成果番号	課題番号	ピームライン	実験責任者	タイトル
Takayuki Narita	38 (2004) 187-190	6911	2002B0112	BL40B2	中村 洋	Preparation and Characterization of Core-Shell Nanoparticles Hardened by Gamma-Ray

Current Applied Physics

Hisao Makino	4 (2004) 615-617	7045	2002B0707	BL25SU	牧野 久雄	Soft X-ray Magnetic Circular Dichroism of Cr-doped GaN
			2003A0542			
			2003B0358			

Electrochimica Acta

Toshihiro Kondo	47 (2002) 3075-3080	7036	2000A0003 1999A0178	BL14B1	魚崎 浩平	A Novel Spectroelectrochemical Cell for in situ Surface X-ray Scattering Measurements of Single Crystal Disk Electrodes
-----------------	------------------------	------	------------------------	--------	-------	---

Environmental Science & Technology

Teruko Arai	38 (2004) 6468-6474	6999	2002A0505	BL01B1	中井 泉	Chemical Forms of Mercury and Cadmium Accumulated in Marine Mammals and Seabirds as Determined by XAFS Analysis
-------------	------------------------	------	-----------	--------	------	---

European Journal of Biochemistry

Masakazu Sugishima	271 (2004) 4517-4525	6901	2003B0488	BL41XU	福山 恵一	Crystal Structure of Heme Oxygenase-1 from Cyanobacterium <i>Synechocystis</i> sp. PCC 6803 in Complex with Heme
--------------------	-------------------------	------	-----------	--------	-------	--

The European Physical Journal - Applied Physics

Takayoshi Shimura	27 (2004) 439-442	6137	2002B0596 2003A0276	BL20B2	志村 考功	Characterization of SOI Wafers by Synchrotron X-ray Topography
-------------------	----------------------	------	------------------------	--------	-------	--

The FEBS Journal

Masayoshi Nakasako	272 (2005) 603-612	7085	2002B0153 2003A0107 2003B0142	BL40B2	中迫 雅由	Light-Induced Global Structural Changes in Phytochrome A Regulating Photomorphogenesis in Plants
--------------------	-----------------------	------	-------------------------------------	--------	-------	--

Japanese Journal of Applied Physics

Yoshihiro Kuroiwa	43 (2004) 6799-6802	6916	2003B2889 2004A3889	BL02B2	黒岩 芳弘	Distinctive Charge Density Distributions of Perovskite-Type Antiferroelectric Oxides $PbZrO_3$ and $PbHfO_3$ in Cubic Phase.
-------------------	------------------------	------	------------------------	--------	-------	--

Journal of Alloys and Compounds

Keiji Itoh	376 (2004) 9-16	7066	2003B0230	BL04B2	伊藤 恵司	Structural Analysis for Crystalline and Amorphous RFe_2D_x (R : Ho, Tb) by X-ray/Neutron Diffraction and Reverse Monte Carlo Modeling
------------	--------------------	------	-----------	--------	-------	--

Journal of the American Ceramic Society

Isao Tsuyumoto	87 (2004) 2294-2296	7142	2002A0074 2002A0075 2001B0227	BL38B1	露本 伊佐男	Chemical Speciation of Trace Zinc in Ordinary Portland Cement Using X-ray Absorption Fine Structure Analysis
----------------	------------------------	------	-------------------------------------	--------	--------	--

Journal of Applied Crystallography

Kimio Imaizumi	36 (2003) 976-981	7151	2002B0346	BL45XU	櫻井 伸一	Transformation of Cubic Symmetry for Spherical Microdomains from Face-Centred to Body-Centred Cubic upon Uniaxial Elongation in an Elastomeric Triblock Copolymer
----------------	----------------------	------	-----------	--------	-------	---

Journal of the Korean Physical Society

Yoshihiro Kuroiwa	46 (2005) 296-299	7128	2003B2889 2004A3889	BL02B2	黒岩 芳弘	Disorder in the Cubic Phase of $PbHfO_3$ Studied by High Energy Synchrotron-Radiation Diffraction
-------------------	----------------------	------	------------------------	--------	-------	---

Journal of Molecular Biology

Ryuya Fukunaga	346 (2005) 57-71	7131	2003B0077	BL41XU	石谷 隆一郎	Crystal Structure of Leucyl-tRNA Synthetase from the Archaeon <i>Pyrococcus horikoshii</i> Reveals a Novel Editing Domain Orientation
----------------	---------------------	------	-----------	--------	--------	---

PRESENT STATUS OF SPring-8

Journal of the Physical Society of Japan

主著者	巻、発行年、ページ	研究成果番号	課題番号	ビームライン	実験責任者	タイトル
Takashi Kamiyama	73 (2004) 1615-1618	6442	2003A0153	BL35XU	加美山 隆	Acoustic Phonon Dynamics in Liquid CCl_4

Journal of Physics and Chemistry of Solids

Yoshiharu Sakurai	65 (2004) 2061-2064	6906	2003A0657	BL08W	伊藤 真義	A Cauchois-type X-ray Spectrometer for Momentum Density Studies on Heavy-Element Materials
-------------------	------------------------	------	-----------	-------	-------	--

Macromolecules

Isamu Akiba	37 (2004) 10047-10051	7079	2004A0046	BL45XU	秋葉 勇	Phase Behavior of Hydrogen-Bonded Polymer-Surfactant Mixtures in Selective Solvent
-------------	--------------------------	------	-----------	--------	------	--

Nuclear Physics, Section A

Shunji Kishimoto	748 (2005) 3-11	7125	2001B0448	BL09XU	岸本 俊二	Evidence for Nuclear Excitation by Electron Transition on ^{193}Ir and Its Probability
------------------	--------------------	------	-----------	--------	-------	---

Philosophical Transactions of the Royal Society B: Biological Sciences

Masayoshi Nakasako	359 (2004) 1191-1206	7083	2001A0579	BL41XU	中迫 雅由	Water-Protein Interactions from High-Resolution Protein Crystallography
--------------------	-------------------------	------	-----------	--------	-------	---

Physica B

Sung-Kwan Mo	351 (2004) 235-239	6990	2000B0335 2001B0400 2002A0051	BL25SU	Allen James W.	Distortion of V 3d Line Shape due to Auger Emission in Resonant Photoemission Spectra of $(\text{V}_{1-x}\text{Cr}_x)_2\text{O}_3$ at the V 2p 3d Absorption Edge
--------------	-----------------------	------	-------------------------------------	--------	----------------	---

Physica Status Solidi B

Yoshihisa Mori	214 (2004) 3198-3202	7031	2001A0201 2002B0047	BL10XU	森 嘉久	High-Pressure X-ray Structural Study of BeO and ZnO to 200 GPa
----------------	-------------------------	------	------------------------	--------	------	--

Physical Review A

Norio Saito	70 (2004) 062724	7093	2002A0609 2004A0080 2003A0581	BL27SU	齋藤 則生 Hergenhahn Uwe 上田 潔	Symmetry- and Multiplet-Resolved N 1s Photoionization Cross Sections of the NO_2 Molecule
-------------	---------------------	------	-------------------------------------	--------	---------------------------------	--

Physical Review Letters

Sung-Kwan Mo	93 (2004) 076404	6989	2000B0335 2001B0400 2002A0051	BL25SU	Allen James W.	Filling of the Mott-Hubbard Gap in the High Temperature Photoemission Spectrum of $(\text{V}_{0.972}\text{Cr}_{0.028})_2\text{O}_3$
--------------	---------------------	------	-------------------------------------	--------	----------------	---

Polymer Bulletin

Hirohiko Yakabe	53 (2005) 213-222	7152	2002B0227 2003A0705 2003A0606 2003B0145 2003B0178	BL13XU BL01B1	高原 淳 佐々木 圭 高原 淳 佐々木 圭 高原 淳	Grazing Incidence X-ray Diffraction Study on Surface Crystal Structure of Polyethylene Thin Films
-----------------	----------------------	------	---	------------------	--	---

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

Takao Hibi	101 (2004) 15052-15057	6912	2001A0084 2002A0440 2002B0341	BL41XU	日弁 隆雄	Crystal Structure of -Glutamylcysteine Synthetase: Insights into the Mechanisms of Catalysis by a Key Enzyme for Glutathione Homeostasis
------------	---------------------------	------	-------------------------------------	--------	-------	--

Proceedings of SPIE

Yasushi Ogasaka	5488 (2004) 148-155	6919	2004A0009 2003A0036	BL20B2	小賀坂 康志	NeXT Hard X-ray Telescope
-----------------	------------------------	------	------------------------	--------	--------	---------------------------

Solid State Communications

Shigeaki Ono	133 (2005) 55-59	7158	2003A0013	BL10XU	巽 好幸	A High-Pressure and High-Temperature Synthesis of Platinum Carbide
--------------	---------------------	------	-----------	--------	------	--

Surface and Interface Analysis

主著者	巻、発行年、ページ	研究成果番号	課題番号	ビームライン	実験責任者	タイトル
Takeshi Iyasu	36 (2004) 1413-1416	6653	C03A2001	BL15XU	吉川 英樹	Monte-Carlo Simulation of Secondary Electron Emission by X-ray Irradiation – an Application of X-ray Absorption Near-Edge Structure (XANES)

Transactions of the Materials Research Society of Japan

Kaoru Mizuno	29 (2004) 3337-3340	7104	2001A0019	BL20B2	水野 薫	Direct Observation of Hydride Formed in Pure Titanium by Refraction-Enhanced X-ray Imaging Method
--------------	------------------------	------	-----------	--------	------	---

X-Ray Spectrometry

Sandor Kurunczi	34 (2005) 56-58	6985	2002B0147 2003A0143	BL40XU	桜井 健次	Natural Water Specimen Preparation for TXRF Analysis Using a Johansson Wavelength-Dispersive Spectrometer
-----------------	--------------------	------	------------------------	--------	-------	---

分析化学 (Bunseki Kagaku)

Teruo Tanabe	53 (2004) 1411-1418	7073	2004A0816	BL37XU	田邊 晃生	Distribution of Chemical Elements and Chemical States of Sulfur on Kosa Particles Fallen in Asian Industrialized Cities
--------------	------------------------	------	-----------	--------	-------	---

・課題の成果以外で登録された論文（原研、理研、加速器等）

Acta Crystallographica Section D

主著者	巻、発行年、ページ	研究成果番号		ビームライン	タイトル	
Ryuya Fukunaga	60 (2004) 1900-1902	7132	理研	BL26B1	Crystallization and Preliminary X-ray Crystallographic Study of the Editing Domain of <i>Thermus thermophilus</i> Isoleucyl-tRNA Synthetase Complexed with Pre- and Post-Transfer Editing-Substrate Analogues	
Ryuya Fukunaga	60 (2004) 1916-1918	7133	理研	BL26B1	Crystallization and Preliminary X-ray Crystallographic Study of Leucyl-tRNA Synthetase from the Archaeon <i>Pyrococcus horikoshii</i>	

Journal of Molecular Biology

Hiroshi Sugimoto	339 (2004) 873-885	6977	理研	BL44B2	Structural Basis of Human Cytoglobin for Ligand Binding
Shuji Akiyama	341 (2004) 651-668	6550	理研	BL45XU	Activation Mechanisms of Transcriptional Regulator CooA Revealed by Small-Angle X-ray Scattering

Journal of Magnetism and Magnetic Materials

Kenji Yoshii	272-276 (2004) E609-E611	7070	留保栄 留保栄	BL38B1 BL39XU	Neutron Diffraction and X-ray Absorption Study of CaMn _{0.6} Ru _{0.4} O ₃
--------------	-----------------------------	------	------------	------------------	--

The Journal of Physical Chemistry B

Kenntarou Fujii	108 (2004) 8031-8035	7064	原研	BL23SU	Near-Edge X-ray Absorption Fine Structure of DNA Nucleobases Thin Film in the Nitrogen and Oxygen K-edge Region
-----------------	-------------------------	------	----	--------	---

Journal of Synchrotron Radiation

Shigeo Kuwamoto	11 (2004) 462-468	6836	理研	BL45XU	Radiation Damage to a Protein Solution, Detected by Synchrotron X-ray Small-Angle Scattering: Dose-Related Considerations and Suppression by Cryoprotectants
-----------------	----------------------	------	----	--------	--

Microelectronics Reliability

Shinji Fujieda	45 (2005) 57-64	7127	原研	BL23SU	Characterization of Interface Defects Related to Negative-Bias Temperature Instability in Ultrathin Plasma-Nitrided SiON/Si<100> Systems
----------------	--------------------	------	----	--------	--

Physica B

Hitoshi Sato	351 (2004) 298-300	6981	理研	BL29XU	Hard X-ray Photoemission Spectroscopy of YbInCu ₄
--------------	-----------------------	------	----	--------	--

Physical Review B

Ashishi Chainani	69 (2004) R180508	6889	理研	BL29XU	Bulk Electronic Structure of Na _{0.35} CoO ₂ · 1.3H ₂ O
------------------	----------------------	------	----	--------	--

PRESENT STATUS OF SPring-8

Physical Review Letters

主著者	巻、発行年、ページ	研究成果番号		ビームライン	タイトル
Hitoshi Sato	63 (2004) 246404	6979	理研	BL29XU	Valence Transition of YbInCu_4 Observed in Hard X-Ray Photoemission Spectra

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

Takanori Uzawa	101 (2004) 1171-1176	7092	理研	BL45XU	Collapse and Search Dynamics of Apomyoglobin Folding Revealed by Submillisecond Observations of -Helical Content and Compactness
----------------	-------------------------	------	----	--------	--

Proteins: Structure, Function, and Bioinformatics

Ryoichi Arai	57 (2004) 829-838	6918	理研	BL45XU	Conformations of Variably Linked Chimeric Proteins Evaluated by Synchrotron X-ray Small-Angle Scattering
--------------	----------------------	------	----	--------	--

Radiation Research

Kenntarou Fujii	161 (2004) 435-441	7065	原研	BL23SU	Ion Desorption from DNA Components Irradiated with 0.5 keV Ultrasoft X-Ray Photons
-----------------	-----------------------	------	----	--------	--

Review of Scientific Instruments

Hiroshi Saeki	75 (2004) 5152-5159	6771	加速器		Hot-Cathode-Ionization-Gauge System with a Self-Compensating Circuit for Errors Caused by an External-Electron Source
---------------	------------------------	------	-----	--	---

Solid State Ionics

Masaichiro Mizumaki	172 (2004) 565-568	6890	原研	BL23SU	Investigation of the Electronic Structure in $\text{Eu}_{1-x}\text{Dy}_x\text{TiO}_3$ by means of Soft X-ray Absorption Spectroscopy
---------------------	-----------------------	------	----	--------	--

Zeitschrift für Naturforschung

Yoshihiro Okamoto	59a (2004) 819-824	7150	原研	BL11XU	Local Structure of Molten CdCl_2 Systems
-------------------	-----------------------	------	----	--------	---