

4. Publication List

1A

Y.Tokunaga, R.Kumai, N.Takeshita, Y.Kaneko, J.P.He, T.Arima and Y.Tokura
Effects of Uniaxial Stress on Orbital Stripe Direction in Half-Doped Layered Manganites: $\text{Eu}_{0.5}\text{Ca}_{1.5}\text{MnO}_4$ and $\text{Pr}(\text{Sr}, \text{Ca})_2\text{Mn}_2\text{O}_7$
Phys. Rev. B, **78** (2008) 155105.

S.Horiuchi and Y.Tokura
Organic Ferroelectrics
Nature Mater., **7** (2008) 357.

S.Horiuchi, R.Kumai, Y.Tokunaga and Y.Tokura
Proton Dynamics and Room-Temperature Ferroelectricity in Anilate Salts with a Proton Sponge
J. Am. Chem. Soc., **130** (2008) 13382.

T.Arima
Magneto-Electric Optics in Non-Centrosymmetric Ferromagnets
J. Phys.: Condens. Matter, **20** (2008) 434211.

1B

T.Akitsu and Y.Einaga
Tuning of Electronic Properties of One-Dimensional Cyano-Bridged $\text{Cu}^{\text{II}}\text{-Ni}^{\text{II}}$, $\text{Cu}^{\text{II}}\text{-Pd}^{\text{II}}$, and $\text{Cu}^{\text{II}}\text{-Pt}^{\text{II}}$ Bimetallic Assemblies by Stereochemistry of Ligands
Inorg. Chimica Acta, **361** (2008) 36.

M.Ohba, W.Kaneko, S.Kitagawa, T.Maeda and M.Mito
Pressure Response of Three-Dimensional Cyanide-Bridged Bimetallic Magnets
J. Am. Chem. Soc., **130** (2008) 4475.

T.Tajiri, H.Deguchi, S.Kohiki, M.Mito, S.Takagi, M.Mitome, Y.Murakami and A.Kohno
Phase Separation in $\text{La}_{1-x}\text{Sr}_x\text{MnO}_{3+\delta}$ Nanocrystals Studied by Electron Spin Resonance
J. Phys. Soc. Jpn., **77** (2008) 074715.

M.Mito, M.Fujino, Y.Komorida, H.Deguchi, S.Takagi, W.Fujita and K.Awaga
Pressure-Induced Ferromagnetic to Nonmagnetic Transition and the Enhancement of Ferromagnetic Interaction in the Thiazyl-Based Organic Ferromagnet γ -BBDTA-GaCl₄
J. Phys. Soc. Jpn., **77** (2008) 124719.

1C

H.Wadati, A.Maniwa, A.Chikamatsu, I.Ohkubo, H.Kumigashira, M.Oshima, A.Fujimori, M.Lippmaa, M.Kawasaki and H.Koinuma
In Situ Photoemission Study of $\text{Pr}_{1-x}\text{Ca}_x\text{MnO}_3$ Epitaxial Thin Films with Suppressed Charge Fluctuations
Phys. Rev. Lett., **100** (2008) 026402.

C.Iijima, K.Mase and M.Okusawa
Simple Evaporator for Metal Evaporation Mounted on a Conflat Flange with an Outer Diameter of 70 mm
J. Vac. Soc. Jpn., **51** (2008) 99. (in Japanese).

H.Kaneko, M.Tanaka, K.Ozawa and K.Edamoto
Electronic Structure of the TiO Thin Film on Ag(100): Angle-Resolved Photoemission Study
Surf. Sci., **602** (2008) 2295.

K.Edamoto, Y.Nakadai, H.Inomata, K.Ozawa and S.Otani
Soft X-Ray Photoelectron Spectroscopy Study of $\text{Ni}_2\text{P}(0001)$
Solid State Commun., **148** (2008) 135.

K.Edamoto, Y.Nakadai, Y.Abe and K.Ozawa
The Electronic Structure and Reactivity of the Oxygen-Modified $\text{Mo}_2\text{C}(0001)$ Surface
Appl. Surf. Sci., **254** (2008) 7622.

K.Ozawa, Y.Oba and K.Edamoto
Oxidation of Cu on ZnO(0001)-Zn: Angle-Resolved Photoelectron Spectroscopy and Low-Energy Electron Diffraction Study
e-J. Surf. Sci. Nanotech., **6** (2008) 226.

T.Kakiuchi, S.Hashimoto, N.Fujita, K.Mase, M.Tanaka and M.Okusawa
Development of an Apparatus for High-Resolution Auger Photoelectron Coincidence Spectroscopy (APECS) and Electron Ion Coincidence (EICO) Spectroscopy
J. Vac. Soc. Jpn., **51** (2008) 749. (in Japanese).

2C

H.Wadati, A.Maniwa, A.Chikamatsu, I.Ohkubo, H.Kumigashira, M.Oshima, A.Fujimori, M.Lippmaa, M.Kawasaki and H.Koinuma
In Situ Photoemission Study of $\text{Pr}_{1-x}\text{Ca}_x\text{MnO}_3$ Epitaxial Thin Films with Suppressed Charge Fluctuations
Phys. Rev. Lett., **100** (2008) 026402.

E.Kabasawa, J.Nakamura, N.Yamada, K.Kuroki, H.Yamazaki, M.Watanabe, J.D.Denlinger, S.Shin and R.C.C.Perera
Hole Distribution in $(\text{Sr,Ca,Y,La})_{14}\text{Cu}_{24}\text{O}_{41}$ Compounds Studied by X-Ray Absorption and Emission Spectroscopy
J. Phys. Soc. Jpn., **77** (2008) 034704.

T.Kaneyasu, Y.Hikosaka, E.Shigemasa, P.Lablanquie, F.Penent and K.Ito
Auger Decays of 1s Shake-Up and Shake-Off States in N₂ Molecules
J. Phys. B, **41** (2008) 135101.

T.Hitosugi, H.Kamisaka, K.Yamashita, H.Nogawa, Y.Furubayashi, S.Nakao, N.Yamada, A.Chikamatsu, H.Kumigashira, M.Oshima, Y.Hirose, T.Shimada and T.Hasegawa
Electronic Band Structure of Transparent Conductor: Nb-Doped Anatase TiO₂
Appl. Phys. Express, **1** (2008) 111203.

T.Tanimura, S.Toyoda, H.Kumigashira, M.Oshima, K.Ikeda, G.L.Liu and Z.Liu
Depth Profiling of Chemical States and Charge Density in HfSiON by Photoemission Spectroscopy using Synchrotron Radiation
Appl. Phys. Lett., **92** (2008) 082903.

I.Oshiyama, K.Tai, T.Hirano, S.Yamaguchi, K.Tanaka, Y.Hagimoto, T.Uemura, T.Ando, K.Watanabe, R.Yamamoto, S.Kanda, J.Wang, Y.Tateshita, H.Wakabayashi, Y.Tagawa, M.Tsukamoto, H.Iwamoto, M.Saito, M.Oshima, S.Toyoda, N.Nagashima and S.Kadomura
Tin Scaling and Gate Leakage Reduction for n-Type Metal Oxide Semiconductor Field Effect Transistor with HfSi_x/HfO₂ Gate Stack by Interfacial Layer Formation using Ozone-Water-Last Treatment
Jpn. J. Appl. Phys., **47** (2008) 2379.

S.Toyoda, H.Kamada, T.Tanimura, H.Kumigashira, M.Oshima, G.L.Liu, Z.Liu and K.Ikeda
Thermal Stability in $a\text{-Si/HfSiO(N)/Si}$ Gate Stack Structures Studied by Photoemission Spectroscopy using Synchrotron Radiation
Appl. Phys. Lett., **93** (2008) 182906.

H.Kamada, T.Tanimura, S.Toyoda, H.Kumigashira, M.Oshima, G.L.Liu, Z.Liu and K.Ikeda
Control of Oxidation and Reduction Reactions at HfSiO/Si Interfaces through N Exposure or Incorporation
Appl. Phys. Lett., **93** (2008) 212903.

T.Tanimura, S.Toyoda, H.Kumigashira, M.Oshima, K.Ikeda, G.L.Liu, Z.Liu and K.Usuda
Analysis of X-Ray Irradiation Effect in High- k Gate Dielectrics by Time-Dependent Photoemission Spectroscopy using Synchrotron Radiation
Surf. Interface Anal., **40** (2008) 1606.

S.Toyoda, J.Okabayashi, M.Oshima, G.L.Liu, Z.Liu, K.Ikeda and K.Usuda
Chemical-State-Resolved In-Depth Profiles of Gate-Stack Structures on Si Studied by Angular-Dependent Photoemission Spectroscopy
Surf. Interface Anal., **40** (2008) 1619.

M.Yamazaki, J.Adachi, Y.Kimura, A.Yagishita, M.Stener, P.Decleva, N.Kosugi, H.Iwayama, K.Nagaya and M.Yao
Decay Channel Dependence of the Photoelectron Angular Distributions in Core-Level Ionization of Ne Dimers
Phys. Rev. Lett., **101** (2008) 043004.

K.Yoshimatsu, R.Yasuhara, H.Kumigashira and M.Oshima
Origin of Metallic States at Heterointerface between Band Insulators LaAlO₃ and SrTiO₃
Phys. Rev. Lett., **101** (2008) 026802.

K.Tsubouchi, I.Ohkubo, H.Kumigashira, Y.Matsumoto, T.Ohnishi, M.Lippmaa, H.Koinuma and M.Oshima
Epitaxial Growth and Surface Metallic Nature of LaNiO₃ Thin Films
Appl. Phys. Lett., **92** (2008) 262109.

Z.Wei, Y.Kanzawa, K.Arita, Y.Katoh, K.Kawai, S.Muraoka, S.Mitani, S.Fujii, K.Katayama, M.Iijima, T.Mikawa, T.Ninomiya, R.Miyang, Y.Kawashima, K.Tsuji, A.Himeno, T.Okada, R.Azuma, K.Shimakawa, H.Sugaya, T.Takagi, R.Yasuhara, K.Horiba, H.Kumigashira and M.Oshima
Highly Reliable TaO_x ReRAM and Direct Evidence of Redox Reaction Mechanism Tech. Dig. - Int. Electron Devices Meet (IEEE), **2008** (2008) 293.

H.Kumigashira, M.Minohara, M.Takizawa, A.Fujimori, D.Toyota, I.Ohkubo, M.Oshima, M.Lippmaa and M.Kawasaki
Interfacial Electronic Structure of $SrTiO_3/SrRuO_3$ Heterojunctions Studied by *in situ* Photoemission Spectroscopy Appl. Phys. Lett., **92** (2008) 122105.

3A

K.Taniguchi, N.Abe, H.Sagayama, S.Ohtani, T.Takenobu, Y.Iwasa and T.Arima
Magnetic-Field Dependence of the Ferroelectric Polarization and Spin-Lattice Coupling in Multiferroic $MnWO_4$
Phys. Rev. B, **77** (2008) 064408.

K.Horigane, H.Nakao, Y.Kousaka, T.Murata, Y.Noda, Y.Murakami and J.Akimitsu
Crystal Structure and Charge-Ordering in $La_{1.5}Ca_{0.5}CoO_4$ Studied by Neutron and Resonant X-Ray Scattering
J. Phys. Soc. Jpn., **77** (2008) 044601.

T.Katsufuji, T.Suzuki, H.Takei, M.Shingu, K.Kato, K.Osaka, M.Takata, H.Sagayama and T.Arima
Structural and Magnetic Properties of Spinel FeV_2O_4 with Two Ions Having Orbital Degrees of Freedom
J. Phys. Soc. Jpn., **77** (2008) 053708.

T.Sasaki, Y.Miyazawa, S.Takahashi, R.Matsuyama, K.Sasaki and K.Hiratsuka
Application of Synchrotron Radiation to Residual Stress Analysis by IP/cos α Method
Materials Science Forum, **571-572** (2008) 249.

D.Okuyama, T.Matsumura, T.Mouri, N.Ishikawa, K.Ohoyama, H.Hiraka, H.Nakao, K.Iwasa and Y.Murakami
Competition of Magnetic and Quadrupolar Order Parameters in HoB_4
J. Phys. Soc. Jpn., **77** (2008) 044709.

T.Nakamura, A.Tsuchiyama, T.Akaki, K.Uesugi, T.Nakano, A.Takeuchi, Y.Suzuki and T.Noguchi
Bulk Mineralogy and Three-Dimensional Structures of Individual Stardust Particles Deduced from Synchrotron X-Ray Diffraction and Microtomography Analysis
Meteoritics and Planetary Sciences, **43** (2008) 247.

T.Arima
Magneto-Electric Optics in Non-Centrosymmetric Ferromagnets
J. Phys.: Condens. Matter, **20** (2008) 434211.

D.Bizen, K.Nakatsuka, T.Murata, H.Nakao, Y.Murakami, S.Miyasaka and Y.Tokura
Orbital Ordering in $RVO_3(R=Y,Tb)$ Controlled by Hydrostatic Pressure
Phys. Rev. B, **78** (2008) 224104.

S.M.Suturin, A.K.Kaveev, R.N.Kyutt, A.A.Sitnikova, V.P.Ulin and N.S.Sokolov
Growth and Structural Studies of Cobalt Epitaxial Nanoparticles on $CaF_2(111)$ Surface
Proc. of Forth Inter. Seminar on Modern Methods of Diffraction Data Analysis, (2008) 208. (in Russian).

J.Kokubun, A.Watanabe, M.Uehara, Y.Ninomiya, H.Sawai, N.Momozawa, K.Ishida and V.E.Dmitrienko
Chiral and Magnetic Effects in Forbidden X-Ray Scattering from Antiferromagnetic Hematite α - Fe_2O_3 and Eskolaite Cr_2O_3
Phys. Rev. B, **78** (2008) 115112.

3B

K.Edamoto, Y.Nakadai, Y.Abe and K.Ozawa
The Electronic Structure and Reactivity of the Oxygen-Modified $Mo_2C(0001)$ Surface
Appl. Surf. Sci., **254** (2008) 7622.

T.Osawa, Y.Tohyama, S.Obara, T.Nagata, Y.Azuma and F.Koike
Photoabsorption and Subsequent Decay of Na and Mg Atoms in the 2s-np Autoionizing Resonance Region
J. Phys. B, **41** (2008) 245206.

3C

N.Tsuji, M.Ito, H.Sakurai, K.Suzuki, K.Tanaka, K.Kitani, H.Adachi, H.Kawata, A.Koizumi, H.Nakao, Y.Murakami, Y.Taguchi and Y.Tokura
Magnetic Compton Profile Study of Orbital Ordering State of 3d Electrons in $YTiO_3$
J. Phys. Soc. Jpn., **77** (2008) 023705.

M.Ito
Observation of Spin Densities by the X-Ray Magnetic Diffraction
Acta Cryst. A, **64 Suppl.** (2008) C129.

K.Suzuki, M.Ito, N.Tsuji, K.Kitani, H.Adachi, H.Nakao, Y.Murakami, Y.Taguchi, Y.Tokura, E.Nishibori and M.Sakata
3D Spin Density Distribution and Orbital Ordering of $YTiO_3$ Observed by X-Ray Magnetic Diffraction Experiment
Acta Cryst. A, **64 Suppl.** (2008) C572.

T.Tadenuma, K.Suzuki, Y.Oba, K.Kitani, N.Tsuji, M.Ito, H.Adachi, Y.Sakurai and Y.Onuki
Study of Spin and Orbital Magnetic Form Factors of $CeRh_3B_2$ by X-Ray Magnetic Diffraction
Acta Cryst. A, **64 Suppl.** (2008) C572.

N.Tsuji, M.Ito, H.Sakurai, K.Suzuki, H.Adachi, H.Kawata, M.Ito, Y.Sakurai, A.Koizumi, H.Nakao, Y.Murakami, Y.Taguchi and Y.Tokura
Magnetic Compton Scattering from Ferromagnetic Perovskite Oxide $YTiO_3$
Acta Cryst. A, **64 Suppl.** (2008) C573.

4A

H.Nagaseki and K.Hayashi
Experimental Study of the Behavior of Copper and Zinc in a Boiling Hydrothermal System
Geology, **36** (2008) 27.

Y.Hayashi, T.Matsunaga and S.Tanabe
XAFS Analyses of Intracrystal Ainc in Enamel Remineralization
Annual Report of SPring-8 MedicalBio-Trial Use 2007, (2008) 35. (in Japanese).

T.Kurihara, T.Mikouchi, K.Saruwatari, J.Kameda, T.Arai, V.Hoffmann and M.Miyamoto
Transmission Electron Microscopy of "Brown" Color Olivines in Martian and Lunar Meteorites
Lunar and Planetary Science, **XXXIX** (2008) 2478.

H.Eba and K.Sakurai
Crystallinity Evaluation of Zinc-Gallate Nanoparticles using X-Ray Absorption Spectra
Adv. X-Ray Chem. Anal. Jpn., **39** (2008) 199. (in Japanese).

T.Shinohara, T.Takamizawa, S.Ueno, K.Sato, I.Kobayashi, M.Nakajima and Y.Amemiya
Microbeam X-Ray Diffraction Analysis of Interfacial Heterogeneous Nucleation of *n*-Hexadecane inside Oil-in-Water Emulsion Droplets
Cryst. Growth Design, **8** (2008) 3123.

S.Odake, S.Fukura, M.Arakawa, A.Ohta, B.Harte and H.Kagi
Divalent Chromium in Ferropericlase Inclusions in Lower-Mantle Diamonds Revealed by Micro-XANES Measurements
J. Mineralo. Petrolo. Sci., **103** (2008) 350.

Y.Gao, N.Liu, C.Chen, Y.Luo, Y.Li, Z.Zhang, Y.Zhao, B.Zhao, A.Iida and Z.Chai
Mapping Technique for Biodistribution of Elements in a Model Organism, *Caenorhabditis Elegans* after exposure to Copper Nanoparticles with Microbeam Synchrotron Radiation X-Ray Fluorescence
J. Analytical Atomic Spectrometry, **23** (2008) 1121.

S.Ueno, T.Nishida and K.Sato
Synchrotron Radiation Microbeam X-Ray Analysis of Microstructures and the Polymorphic Transformation of Spherulite Crystals of Trilaurin
Crystal Growth and Design, **8** (2008) 751.

4B1

M.E.Zolensky, K.Ohsumi, T.Mikouchi, K.Hagiya and L.Le
Crystallinity of Fe-Ni Sulfides in Carbonaceous Chondrites
Lunar and Planetary Science, **XXXIX** (2008) 1676.

K.Ohsumi, K.Hagiya, T.Mikouchi and M.E.Zolensky
Synchrotron X-Ray Diffraction Studies of Olivine from Comet Wild 2
Lunar and Planetary Science, **XXXIX** (2008) 1808.

M.E.Zolensky, M.Gounelle, T.Mikouchi, K.Ohsumi, K.Hagiya and O.Tachikawa Andreyivanovite: A Second New Phosphide from the Kaidun Meteorite Am. Mineral., **93** (2008) 1295.

4B2

T.Wakita and M.Yashima Structural Disorder in the Cubic $\text{Ce}_{0.5}\text{Zr}_{0.5}\text{O}_2$ Catalyst, A Possible Factor of the High Catalytic Activity Appl. Phys. Lett., **92** (2008) 101921.

M.Yashima and T.Wakita Success in the Visualization of Structural Disorders of the Automotive Exhaust Gas Catalyst, Ceria-Zirconia Bull. Ceram. Soc. Jpn., **43** (2008) 434. (*in Japanese*).

M.Yashima, K.Ogusu and K.Domen Structure and Electron Density of Oxsulfide $\text{Sm}_2\text{Ti}_2\text{S}_2\text{O}_{4.9}$, a Visible-Light-Responsive Photocatalyst Acta Cryst. B, **64** (2008) 291.

R.Ali, M.Yashima, Y.Matsushita, H.Yoshioka, K.Ohoyama and F.Izumi Diffusion Path of Oxide Ions in an Apatite-Type Ionic Conductor $\text{La}_{9.69}(\text{Si}_{5.70}\text{Mg}_{0.30})\text{O}_{26.24}$ Chem. Mater., **20** (2008) 5203.

S.Nishimura, G.Kobayashi, K.Ohoyama, R.Kanno, M.Yashima and A.Yamada Experimental Visualization of Lithium Diffusion in Li_xFePO_4 Nature Mater., **7** (2008) 707.

D.A.-Jove, Z.Pan, K.D.M.Harris and H.Uekusa A Solid-State Dehydration Process Associated with a Significant Change in the Topology of Dihydrogen Phosphate Chains, Established from Powder X-Ray Diffraction Crystal Growth and Design, **8** (2008) 3641.

S.Ohi, A.Miyake, N.Shimobayashi, M.Yashima and M.Kitamura An Isosymmetric Phase Transition of Orthopyroxene Found by High-Temperature X-Ray Diffraction Am. Mineral., **93** (2008) 1682.

S.Nishimura, S.Hayase, R.Kanno, M.Yashima, N.Nakayama and A.Yamada Structure of $\text{Li}_2\text{FeSiO}_4$ J. Am. Chem. Soc., **130**(**40**) (2008) 13212.

M.Yashima Crystal Structure-Property Correlation in Ionic and Mixed Conductors and Photocatalyst Bull. Ceram. Soc. Jpn., **43** (2008) 922. (*in Japanese*).

T.Wakita and M.Yashima, Phase Transition and Structural Disorder of the Ceria-Zirconia Solid-Solution Catalyst for Exhaust Gas Cleaning Fine Chemicals, **37**[**12**] (2008) 23. (*in Japanese*).

T.Ida, A.Oya and H.Hibino Statistical Properties of Measured Intensity Affected by Counting Losses of Detection Systems Annual Rep. Ceramics Res. Lab. Nagoya Inst. Tech., **7** (2008) 1. (*in Japanese*).

K.Fujii, Y.Ashida, H.Uekusa, S.Hirano, S.Toyota, F.Toda, Z.Pan and K.D.M.Harris Vapour Induced Crystalline Transformation Investigated by *ab initio* Powder X-Ray Diffraction Analysis Cryst. Growth Des., **9** (2008) 1201.

M.Yashima Visualization of Chemical Bonding and Structural Disorders from Diffraction Experiments Proc. Int'l. Conf. Contemporary Physics-IV, (2008) 395.

4C

Y.Wakabayashi, Y.Kubo, D.Bizen, H.Nakao, Y.Murakami, M.Nakamura, Y.Ogimoto, K.Miyano and H.Sawa Orbital Ordering Structures in $(\text{Nd},\text{Pr})_{0.5}\text{Sr}_{0.5}\text{MnO}_3$ Manganite Thin Films on Perovskite (011) Substrates J. Phys. Soc. Jpn., **77** (2008) 014712.

Y.Tokunaga, T.J.Sato, M.Uchida, R.Kumai, Y.Matsui, T.Arima and Y.Tokura Versatile and Competing Spin-Charge-Orbital Orders in the Bilayered Manganite System $\text{Pr}(\text{Sr}_{1-y}\text{Ca}_y)_2\text{Mn}_2\text{O}_7$ Phys. Rev. B, **77** (2008) 064428.

K.Taniguchi, N.Abe, H.Sagayama, S.Ohtani, T.Takenobu, Y.Iwasa and T.Arima Magnetic-Field Dependence of the Ferroelectric Polarization and Spin-Lattice Coupling in Multiferroic MnWO_4 Phys. Rev. B, **77** (2008) 064408.

K.Horigane, H.Nakao, Y.Kousaka, T.Murata, Y.Noda, Y.Murakami and J.Akimitsu Crystal Structure and Charge-Ordering in $\text{La}_{1.5}\text{Ca}_{0.5}\text{CoO}_4$ Studied by Neutron and Resonant X-Ray Scattering J. Phys. Soc. Jpn., **77** (2008) 044601.

T.Katsufuji, T.Suzuki, H.Takei, M.Shingu, K.Kato, K.Osaka, M.Takata, H.Sagayama and T.Arima

Structural and Magnetic Properties of Spinel FeV_2O_4 with Two Ions Having Orbital Degrees of Freedom J. Phys. Soc. Jpn., **77** (2008) 053708.

Y.Yamasaki, H.Sagayama, N.Abe, T.Arima, K.Sasai, M.Matsuura, K.Hirota, D.Okuyama, Y.Noda and Y.Tokura Cycloidal Spin Order in the a -Axis Polarized Ferroelectric Phase of Orthorhombic Perovskite Manganite Phys. Rev. Lett., **101** (2008) 097204.

T.Shimura, T.Inoue, Y.Okamoto, T.Hosoi, A.Ogura, O.Sakata, S.Kimura, H.Edo, S.Iida and H.Watanabe Application of Synchrotron X-Ray Diffraction Methods to Gate Stacks of Advanced MOS Devices ECS Transactions, **13** (2008) 75.

D.Bizen, K.Nakatsuka, T.Murata, H.Nakao, Y.Murakami, S.Miyasaka and Y.Tokura Orbital Ordering in $\text{RVO}_3(R=\text{Y,Tb})$ Controlled by Hydrostatic Pressure Phys. Rev. B, **78** (2008) 224104.

J.Kokubun, A.Watanabe, M.Uehara, Y.Ninomiya, H.Sawai, N.Momozawa, K.Ishida and V.E.Dmitrienko Chiral and Magnetic Effects in Forbidden X-Ray Scattering from Antiferromagnetic Hematite $\alpha\text{-Fe}_2\text{O}_3$ and Eskolaite Cr_2O_3 Phys. Rev. B, **78** (2008) 115112.

Y.Noda, H.Kimura, M.Fukunaga, S.Kobayashi, I.Kagomiya and K.Kohn Magnetic and Ferroelectric Properties of Multiferroic RMn_2O_5 J. Phys.: Condens. Matter, **20** (2008) 434206.

5A

M.Nagae, N.Nishi, S.Nakamura-Tsuruta, J.Hirabayashi, S.Wakatsuki and R.Kato Structural Analysis of the Human Galectin-9 N-Terminal Carbohydrate Recognition Domain Reveals Unexpected Properties that Differ from the Mouse Orthologue J. Mol. Biol., **375** (2008) 119.

M.Mizuno, A.Koide, A.Yamamura, H.Akeboshi, H.Yoshida, S.Kamitori, Y.Sakano, A.Nishikawa and T.Tonozuka Crystal Structure of *Aspergillus niger* Isopullulanase, a Member of Glycoside Hydrolase Family 49 J. Mol. Biol., **376** (2008) 210.

N.Kudo, K.Kumagai, N.Tomishige, T.Yamaji, S.Wakatsuki, M.Nishijima, K.Hanada and R.Kato Structural Basis for Specific Lipid Recognition by CERT Responsible for Nonvesicular Trafficking of Ceramide Proc. Natl. Acad. Sci. USA, **105** (2008) 488.

C.Ward, M. Lawrence, V.Streltsov, T.Garrett, N.McKern, M.-Z.Lou, G.Lovrecz and T.Adams Structural Insights into Ligand-Induced Activation of the Insulin Receptor Acta Physiol., **192** (2008) 3.

T.-W.Nam, H.I.Jung, Y.J.An, Y.-H.Park, S.H.Lee, Y.-J.Seok and S.-S.Cha Analyses of $\text{Mlc-IB}^{\text{Glc}}$ Interaction and a Plausible Molecular Mechanism of Mlc Inactivation by Membrane Sequestration Proc. Natl. Acad. Sci. USA, **105** (2008) 3751.

- T.Nakanishi, K.Tsumoto, A.Yokota, H.Kondo and I.Kumagai
Critical Contribution of VH-VL Interaction to Reshaping of an Antibody: The Case of Humanization of Anti-Lysozyme Antibody, HyHEL-10
Protein Sci., **17** (2008) 261.
- M.Hiraki, S.Watanabe, N.pHonda, Y.Yamada, N.Matsugaki, N.Igarashi, Y.Gaponov and S.Wakatsuki
High-Throughput Operation of Sample-Exchange Robots with Double Tongs at the Photon Factory Beamlines
J. Synchrotron Rad., **15** (2008) 300.
- Y.Yamada, N.pHonda, N.Matsugaki, N.Igarashi, M.Hiraki and S.Wakatsuki
Implementation of Remote Monitoring and Diffraction Evaluation Systems at the Photon Factory Macromolecular Crystallography Beamlines
J. Synchrotron Rad., **15** (2008) 296.
- T.Miyoshi, N.Igarashi, N.Matsugaki, Y.Yamada, K.Hirano, K.Hyodo, K.Tanioka, N.Egami, M.Namba, M.Kubota, T.Kawai and S.Wakatsuki
Development of an X-Ray HARP-FEA Detector System for High-Throughput Protein Crystallography
J. Synchrotron Rad., **15** (2008) 281.
- R.Suzuki, J.Wada, T.Katayama, S.Fushinobu, T.Wakagi, H.Shoun, H.Sugimoto, A.Tanaka, H.Kumagai, H.Ashida, M.Kitaoka and K.Yamamoto
Structural and Thermodynamic Analyses of Solute-Binding Protein from *Bifidobacterium longum* Specific for Core 1 Disaccharide and Lacto-*N*-Biose I
J. Biol. Chem., **238** (2008) 13165.
- C.Taguchi, F.Taura, T.Tamada, Yo.Shoyama, Yu.Shoyama, H.Tanaka, R.Kuroki and S.Morimoto
Crystallization and Preliminary X-Ray Diffraction Studies of Polyketide Synthase-1 (PKS-1) from *Cannabis sativa*
Acta Cryst. F, **64** (2008) 217.
- N.Muraki, D.Seo, T.Shiba, T.Sakurai and G.Kurisu
Crystallization and Preliminary X-Ray Studies of Ferredoxin-NAD(P)⁺ Reductase from *Chlorobium tepidum*
Acta Cryst. F, **64** (2008) 186.
- M.Igura, N.Maita, J.Kamishikiryō, M.Yamada, T.Obita, K.Maenaka and D.Kohda
Structure-Guided Identification of a New Catalytic Motif of Oligosaccharyltransferase
EMBO J., **27** (2008) 234.
- H.Sakuraba, K.Yoneda, I.Asai, H.Tsuge, N.Katunuma and T.Ohshima
Structure of L-Aspartate Oxidase from the Hyperthermophilic Archaeon *Sulfolobus tokodaii*.
Biochem. Biophys. Acta, **1784** (2008) 563.
- K.Miyazono, M.Tsujimura, Y.Kawarabayasi and M.Tanokura
Crystal Structure of STS042, a Stand-Alone RAM Module Protein, from Hyperthermophilic Archaeon *Sulfolobus tokodaii* Strain7
Proteins, **71** (2008) 1557.
- Y.Xu, Y.Nakajima, K.Ito, H.Zheng, H.Oyama, U.Heiser, T.Hoffmann, U.-T.Gartner, H.-U.Demuth and T.Yoshimoto
Novel Inhibitor for Prolyl Tripeptidyl Aminopeptidase from *Porphyromonas gingivalis* and Details of Substrate-Recognition Mechanism
J. Mol. Biol., **375** (2008) 708.
- L.M.Chavas, K.Ihara, M.Kawasaki, R.Kato, T.Izumi and S.Wakatsuki
Purification, Crystallization and Preliminary X-Ray Crystallographic Analysis of Rab27a GTPase in Complex with Exophilin4/Slp2-a Effector
Acta Cryst. F, **64** (2008) 599.
- Y.Toh, T.Numata, K.Watanabe, D.Takeshita, O.Nureki and K.Tomita
Molecular Basis for Maintenance of Fidelity during the CCA-Adding Reaction by a CCA-Adding Enzyme
EMBO J., **27** (2008) 1932.
- Y.Suwa, T.Nakamura, S.Toma, S.Ikemizu, H.Kai and Y.Yamagata
Preparation, Crystallization and Preliminary X-Ray Diffraction Analysis of the DNA-Binding Domain of the Ets Transcription Factor in Complex with Target DNA
Acta Cryst. F, **64** (2008) 171.
- Y.Hu, C.-P.Fan, G.Fu, D.Zhu, Q.Jin and D.-C.Wang
Crystal Structure of a Glutamate/Aspartate Binding Protein Complexed with a Glutamate Molecule: Structural Basis of Ligand Specificity at Atomic Resolution
J. Mol. Biol., **382** (2008) 99.
- D.-F.Li, P.Jiang, D.-Y.Zhu, Y.Hu, M.Max and D.-C.Wang
Crystal Structure of Mabinlin II: A Novel Structural Type of Sweet Proteins and the Main Structural Basis for its Sweetness
J. Structural Biology, **162** (2008) 50.
- R.Nitta, Y.Okada and N.Hirokawa
Structural Model for Strain-Dependent Microtubule Activation of Mg-ADP Release from Kinesin
Nature Structural Molecular Biology, **15** (2008) 1067.
- D.J.Kim, S.J.Lee, H.S.Kim, K.H.Kim, H.H.Lee, H.J.Yoon and S.W.Suh
Structural Basis of Octanoic Acid Recognition by Lipoate-Protein Ligase B
Proteins, **70** (2008) 1620.
- H.J.Yoon, S.J.Lee, B.Mikami, H.J.Park, J.K.Yoo and S.W.Suh
Crystal Structure of UDP-*N*-acetylglucosamine Enolpyruvyl Transferase from *Haemophilus influenzae* in Complex with UDP-*N*-acetylglucosamine and Fosfomycin
Proteins, **71** (2008) 1032.
- N.Adachi, M.Senda, R.Natsume, T.Senda and M.Horikoshi
Crystal Structure of *Methanococcus jannaschii* TATA Box-Binding Protein Genes to Cells, **13** (2008) 1127.
- M.Senda, S.Muto, M.Horikoshi and T.Senda
Effect of Leucine-to-Methionine Substitutions on the Diffraction Quality of Histone Chaperone SET/TAF-I β /INHAT Crystals
Acta Cryst. F, **64** (2008) 960.
- M.Senda, S.Kimura, M.Fukuda, T.Ishida and T.Senda
Molecular Mechanism of the Redox-Dependent Interaction between NADH-Dependent Ferredoxin Reductase and Rieske-Type [2Fe-2S] Ferredoxin
Kagakuseibutsu, **46** (2008) 689. (in Japanese).
- Z.Fujimoto, H.Ichinose and S.Kaneko
Crystallization and Preliminary Crystallographic Analysis of Exo- α -1,5-L-arabinofuranosidase from *Streptomyces avermitilis* NBRC14893
Acta Cryst. F, **64** (2008) 1007.
- Y.Fujioka, N.N.Noda, M.Matsuhashita, Y.Ohsumi and F.Inagaki
Crystallization of the Coiled-Coil Domain of Atg16 Essential for Autophagy
Acta Cryst. F, **64** (2008) 1046.
- Y.Zhu, H.Li, L.Hu, J.Wang, Y.Zhou, Z.Pang, L.Liu and F.Shao
Structure of a Shigella Effector Reveals a New Class of Ubiquitin Ligases
Nature Structural Molecular Biology, **15** (2008) 1302.
- E.Obayashi, H.Yoshida, F.Kawai, N.Shibayama, A.Kawaguchi, K.Nagata, J.R.Tame and S.-Y.Park
The Structural Basis for an Essential Subunit Interaction in Influenza Virus RNA Polymerase
Nature, **454** (2008) 1127.
- S.Ko, S.-H.Jun, H.Bae, J.-S.Byun, W.Han, H.Park, S.-W.Yang, S.-Y.Park, Y.-H.Jeon, C.Cheong, W.-T.Kim, W.Lee and H.-S.Cho
Structure of the DNA-Binding Domain of NgTRF1 Reveals Unique Features of Plant Telomere-Binding Proteins
Nucleic Acids Res., **36** (2008) 2739.
- H.Akazaki, F.Kawai, H.Chida, Y.Matsumoto, M.Hirayama, K.Hoshikawa, S.Unzai, W.Hakamata, T.Nishio, S.-Y.Park and T.Oku
Cloning, Expression and Purification of Cytochrome c₆ from the Brown Alga *Hizikia fusiformis* and Complete X-Ray Diffraction Analysis of the Structure.
Acta Cryst. F, **64** (2008) 674.
- T.Imagawa, H.Iino, M.Kanagawa, A.Ebihara, S.Kuramitsu and H.Tsuge
Crystal Structure of the YdjC-Family Protein TTHB029 from *Thermus thermophilus* HB8:Structural Relationship with Peptidoglycan N-Acetylglucosamine Deacetylase
Biochem. Biophys. Res. Commun., **367** (2008) 535.

- H.Tsuge, M.Nagahama, S.Iwamoto, H.Utsunomiya, E.M.Victor, N.Katunuma, M.Nishizawa and J.Sakurai
Structural Basis of Actin Recognition and Arginine ADP-Ribosylation by *Clostridium perfringens* Iota-Toxin
Proc. Natl. Acad. Sci. USA, **105** (2008) 7399.
- N.Shen, M.Zhou, B.Yang, Y.Yu, X.Dong and J.Ding
Catalytic Mechanism of the Tryptophan Activation Reaction Revealed by Crystal Structures of Human Tryptophanyl-tRNA Synthetase in Different Enzymatic States
Nucleic Acids Res., **36** (2008) 1288.
- L.Wang, L.Wang, S.Vavassori, S.Li, H.Ke, T.Anelli, M.Degano, R.Ronconi, R.Sitia, F.Sun and C.-C.Wang
Crystal Structure of Human ERp44 Shows a Dynamic Functional Modulation by Its Carboxy-Terminal Tail
EMBO report, **9** (2008) 642.
- S.-S.Cha, H.Jung, H.Jeon, Y.J.An, I.-K.Kim, S.Yun, S.H.Lee, P.-G.Suh, and S.-O.Kang
Crystal Structure of Filamentous Aggregates of Human DJ-1 Formed in an Inorganic Phosphate-dependent Manner
J. Biol. Chem., **283** (2008) 34069.
- H.Suzuki, M.Kawasaki, T.Inuzuka, M.Okumura, T.Kakiuchi, H.Shibata, S.Wakatsuki and M.Maki
Structural Basis for Ca^{2+} -Dependent Formation of ALG-2/Alix Peptide Complex: Ca^{2+} /EF3-Driven Arginine Switch Mechanism
Structure, **16** (2008) 1562.
- H.Suzuki, M.Kawasaki, T.Kakiuchi, H.Shibata, S.Wakatsuki and M.Maki
Crystallization and X-Ray Diffraction Analysis of N-Terminally Truncated Human ALG-2
Acta Cryst. F, **64** (2008) 974.
- K.Takeda, H.Yoshida, G.Takada, K.Izumori and S.Kamitori
Overexpression, Purification, Crystallization and Preliminary X-Ray Crystal Analysis of *Bacillus pallidus* D-Arabinose Isomerase
Acta Cryst. F, **64** (2008) 945.
- L.Li, X.Liu, W.Yang, F.Xu, W.Wang, L.Feng, M.Bart, L.Wang and Z.Rao
Crystal Structure of Long-Chain Alkane Monooxygenase (LadA) in Complex with Coenzyme FMN: Unveiling the Long-Chain Alkane Hydroxylase
J. Mol. Biol., **376** (2008) 453.
- X.Xue, H.Yu, H.Yang, F.Xue, Z.Wu, W.Shen, J.Li, Z.Zhou, Y.Ding, Q.Zhao, X.C.Zhang, M.Liao, M.Bartlam and Z.Rao
Structures of Two Coronavirus Main Proteases: Implications for Substrate Binding and Antiviral Drug Design
J. Virology, **82** (2008) 2515.
- R.Zhang, G.Zhu, W.Zhang, S.Cao, X.Ou, X.Li, M.Bartlam, Y.Xu, X.C.Zhang and Z.Rao
Crystal Structure of a Carbonyl Reductase from *Candida Parapsilosis* with Anti-Prelog Stereospecificity
Protein Science, **17** (2008) 1412.
- X.Yang, M.Morita, H.Wang, T.Suzuki, W.Yang, Y.Luo, C.Zhao, Y.Yu, M.Bartlam, T.Yamamoto and Z.Rao
Crystal Structures of Human BTG2 and Mouse TIS21 Involved in Suppression of CAF1 Deadenylase Activity
Nucleic Acids Res., **36** (2008) 6872.
- X.Li, Z.Lou, X.Li, W.Zhou, M.Ma, Y.Cao, Y.Geng, M.Bartlam, X.C.Zhang and Z.Rao
Structure of Human Cytosolic X-Prolyl Aminopeptidase A Double Mn(II)-Dependent Dimeric Enzyme with a Novel Three-Domain Subunit
J. Biol. Chem., **283** (2008)
- N.Tanaka, K.Aoki, S.Ishikura, M.Nagano, Y.Imamura, A.Hara and K.T.Nakamura
Molecular Basis for Peroxisomal Localization of Tetrameric Carbonyl Reductase Structure, **16** (2008) 388.
- K.Arita, M.Ariyoshi, H.Tochio, Y.Nakamura and M.Shirakawa
Recognition of Hemi-Methylated DNA by the SRA Protein UHRF1 by a Base-Flipping Mechanism
Nature, **455** (2008) 818.
- M.Senda, S.Kimura, M.Fukuda, T.Ishida and T.Senda
Molecular Mechanism of the Redox-Dependent Interaction between NADH-dependent Ferredoxin Reductase and Rieske-Type Ferredoxin
Kessyogakkaishi, **50** (2008) 341. (in Japanese).
- F.L.Imai, K.Nagata, N.Yonezawa, M.Nakano and M.Tanokura
Structure of Calcium-Bound Human S100A13 at pH 7.5 at 1.8 Å Resolution
Acta Cryst. F, **64** (2008) 70.
- T.Nogi, T.Sangawa, S.Tabata, M.Nagae, K.T.Kawakami, A.Beppe, M.Hattori, N.Yasui and J.Takagi
Novel Affinity Tag System using Structurally Defined Antibody-Tag Interaction: Application to Single-Step Protein Purification
Protein Science, **17** (2008) 2120.
- M.Nagae, K.Nishikawa, N.Yasui, M.Yamasaki, T.Nogi and J.Takagi
Structure of the F-Spondin Reeler Domain Reveals a Unique β -Sandwich Fold with a Deformable Disulfide-Bonded Loop
Acta Cryst. D, **64** (2008) 1138.
- K.Hashimoto, H.Suzuki, K.Taniguchi, T.Noguchi, M.Yohda and M.Odaka
Catalytic Mechanism of Nitrile Hydratase Proposed by Time-Resolved X-Ray Crystallography using a Novel Substrate, *tert*-Butylisonitrile
J. Biol. Chem., **283** (2008) 36617.
- M.Watanabe, Y.Tanaka, A.Suenaga, M.Kuroda, M.Yao, N.Watanabe, F.Arisaka, I.Tanaka and K.Tsumoto
Structural Basis for Multimeric Heme Complexation through a Specific Protein-Heme Interaction: The Case of the Third Neat Domain of *IsdH* from *Staphylococcus aureus*
J. Biol. Chem., **283** (2008) 28649.
- D.Sato, T.Karaki, A.Shimizu, K.Kamei, S.Harada and T.Nozaki
Crystallization and Preliminary X-Ray Analysis of L-methionine γ -Lyase 1 from *Entamoeba histolytica*
Acta Cryst. F, **64** (2008) 697.
- D.K.Inaoka, K.Sakamoto, H.Shimizu, T.Shiba, G.Kurisu, T.Nara, T.Aoki, K.Kita, and S.Harada
Structures of *Trypanosoma cruzi* Dihydroorotate Dehydrogenase Complexed with Substrates and Products: Atomic Resolution Insights into Mechanisms of Dihydroorotate Oxidation and Fumarate Reduction
Biochemistry, **47** (2008) 10881.
- H.Shimizu, C.Nihei, D.K.Inaoka, T.Mogi, K.Kita and S.Harada
Screening of Detergents for Solubilization, Purification and Crystallization of Membrane Proteins: a Case Study on Succinate:Ubiquinone Oxidoreductase from *Escherichia coli*
Acta Cryst. F, **64** (2008) 858.
- M.T.Hossain, T.Yamamoto, S.Imamura, K.Suzuki, M.Tsunoda, H.Amano, T.Sekiguchi and A.Takenaka
Structures of *Arthrobacter globiformis* Urate Oxidase-Ligand Complexes
Acta Cryst. D, **64** (2008) 815.
- M.M.Hoque, S.Shimizu, M.T.Hossain, T.Yamamoto, S.Imamura, K.Suzuki, M.Tsunoda, H.Amano, T.Sekiguchi and A.Takenaka
The Structures of *Alcaligenes faecalis* D-3-Hydroxybutyrate Dehydrogenase before and after NAD^+ and Acetate Binding Suggest a Dynamical Reaction Mechanism as a Member of the SDR Family
Acta Cryst. D, **64** (2008) 496.
- M.Akaboshi, H.Hashimoto, H.Ishida, S.Saijo, N.Koizumi, M.Sato and T.Shimizu
The Crystal Structure of Plant-Specific Calcium-Binding Protein AtCBL2 in Complex with the Regulatory Domain of AtCIPK14
J. Mol. Biol., **377** (2008) 246.
- M.Ui, Y.Tanaka, T.Tsumuraya, I.Fujii, M.Inoue, M.Hirama and K.Tsumoto
How Protein Recognizes Ladder-Like Polycyclic Ethers
Interactions between Ciguatoxin (CTX3C) Fragments and its Specific antibody 10C9
J. Biol. Chem., **283**(28) (2008) 19440.
- M.M.Islam, S.Sohya, K.Noguchi, M.Yohda and Y.Kuroda
Crystal Structure of an Extensively Simplified Variant of Bovine Pancreatic Trypsin Inhibitor in which over One-Third of the Residues are Alanines
Proc. Natl. Acad. Sci. USA, **105** (2008) 15334.

- T.Hashiguchi, M.Kajikawa, N.Maita, M.Takeda, K.Kuroki, K.Sasaki, D.Kohda, Y.Yanagi and K.Maenaka
Homogeneous Sugar Modification Improves Crystallization of Measles Virus Hemagglutinin
J. Virol. Methods, **149** (2008) 171.
- S.Tabata, K.Kuroki, N.Maita, J.Wang, I.Shiratori, H.Arase, D.Kohda and K.Maenaka
Expression, Crystallization and Preliminary X-Ray Diffraction Analysis of Human Paired Ig-Like Type 2 Receptor α (PILR α)
Acta Cryst. F, **64** (2008) 44.
- C.-I.Liu, G.Y.Liu, Y.Song, F.Yin, M.E.Hensler, W.-Y.Jeng, V.Nizet, A.H.-J.Wang and E.Oldfield
A Cholesterol Biosynthesis Inhibitor Blocks *Staphylococcus aureus* Virulence
Science, **319** (2008) 1391.
- W.-Y.Jeng, T.-P.Ko, C.-I.Liu, R.-T.Guo, C.-L.Liu, H.-L.Shr and A.H.-J.Wang
Crystal Structure of IcaR, a Repressor of the TetR Family Implicated in Biofilm Formation in *Staphylococcus epidermidis*
Nucleic Acids Res., **36** (2008) 1567.
- B.Padmanabhan, Y.Nakamura and S.Yokoyama
Structural Analysis of the Complex of Keap1 with a Prothymosin α Peptide
Acta Cryst. F, **21** (2008) 233.
- K.Ito and K.Inaba
The Disulfide Bond Formation (Dsb) System
Curr. Opin. Struct. Biol., **18** (2008) 450.
- K.Inaba and K.Ito
Structure and Mechanisms of the DsbB-DsbA Disulfide Bond Generation Machine
Biochim. Biophys. Acta, **1783** (2008) 520.
- K.Inaba
Protein Disulfide Bond Generation in Escherichia Coli DsbB-DsbA
J. Synchrotron Rad., **15** (2008) 199.
- D.Guo, F.Xu, S.G.Bell, X.Pang, M.Bartlam and L.-L.Wong
Purification, Crystallization and Preliminary Crystallographic Analysis of CYP 195A2, a P450 Enzyme from *Rhodopseudomonas Palustris*
Protein and Peptide Letters, **15** (2008) 423.
- X.Liu, L.Xu, Y.Liu, X.Tong, G.Zhu, X.C.Zhang, X.Li and Z.Rao
Crystal Structure of the Hexamer of Human Heat Shock Factor Binding Protein 1
Protein, **75** (2008) 1.
- Q.Zhao, S.Li, F.Xue, Y.Zou, C.Chen, M.Bartlam and Z.Rao
Structure of the Main Protease from a Global Infectious Human Coronavirus, HCoV-HKU1
Virology, **82** (2008) 8647.
- M.Nagae, N.Nishi, S.Nakamura-Tsuruta, J.Hirabayashi, S.Wakatsuki and R.Kato
Structural Analysis of the Human Galectin-9 N-Terminal Carbohydrate Recognition Domain Reveals Unexpected Properties that Differ from the Mouse Orthologue
J. Mol. Biol., **375** (2008) 119.
- M.Mizuno, A.Koide, A.Yamamura, H.Akeboshi, H.Yoshida, S.Kamitori, Y.Sakano, A.Nishikawa and T.Tonozuka
Crystal Structure of *Aspergillus niger* Isopullulanase, a Member of Glycoside Hydrolase Family 49
J. Mol. Biol., **376** (2008) 210.
- T.Nakamura, T.Tonozuka, A.Ide, T.Yuzawa, K.Oguma and A.Nishikawa
Sugar-Binding Sites of the HA1 Subcomponent of *Clostridium botulinum* Type C Progenitor Toxin
J. Mol. Biol., **376** (2008) 854.
- N.Yokoi, T.Ueno, M.Unno, T.Matsui, M.Ikeda-Saito and Y.Watanabe
Ligand Design for the Improvement of Stability of Metal Complex-Protein Hybrids
Chem. Commun., **14** (2008) 229.
- C.-Q.Liu, S.D.Nuttall, H.Tran, M.Wilkins, V.A.Streltsov and M.R.Alderton
Construction, Crystal Structure and Application of a Recombinant Protein that Lacks the Collagen-Like Region of BclA from *Bacillus anthracis* Spores
Biotech. Bioeng., **99** (2008) 774.
- K.Makabe, T.Nakanishi, K.Tsumoto, Y.Tanaka, H.Kondo, M.Umetsu, Y.Sone, R.Asano and I.Kumagai
Thermodynamic Consequences of Mutations in Vernier Zone Residues of a Humanized Anti-human Epidermal Growth Factor Receptor Murine Antibody, 528
J. Biol. Chem., **283** (2008) 1156.
- Y.Yamada, N.pHonda, N.Matsugaki, N.Igarashi, M.Hiraki and S.Wakatsuki
Implementation of Remote Monitoring and Diffraction Evaluation Systems at the Photon Factory Macromolecular Crystallography Beamlines
J. Synchrotron Rad., **15** (2008) 296.
- T.Miyoshi, N.Igarashi, N.Matsugaki, Y.Yamada, K.Hirano, K.Hyodo, K.Tanioka, N.Egami, M.Namba, M.Kubota, T.Kawai and S.Wakatsuki
Development of an X-Ray HARP-FEA Detector System for High-Throughput Protein Crystallography
J. Synchrotron Rad., **15** (2008) 281.
- T.Kinoshita, N.Miyano, R.Nakai, K.Yokota, H.Ishiguro and T.Tada
Protein Purification and Preliminary Crystallographic Analysis of Human Lyn Tyrosine Kinase
Protein Expression and Purification, **58** (2008) 318.
- M.Igura, N.Maita, J.Kamishikiryo, M.Yamada, T.Obita, K.Maenaka and D.Kohda
Structure-Guided Identification of a New Catalytic Motif of Oligosaccharyltransferase
EMBO J., **27** (2008) 234.
- S.Watanabe, A.Kita, K.Kobayashi and K.Miki
Crystal Structure of the [2Fe-2S] Oxidative-Stress Sensor SoxR bound to DNA
Proc. Natl. Acad. Sci. USA, **105** (2008) 4121.
- H.Yokoyama, S.Hamamatsu, S.Fujii and I.Matsu
Novel Dimer Structure of a Membrane-Bound Protease with a Catalytic Ser-Lys Dyad and its Linkage to Stomatin
J. Synchrotron Rad., **15** (2008) 254.
- Y.Kurakata, A.Uechi, H.Yoshida, S.Kamitori, Y.Sakano, A.Nishikawa and T.Tonozuka
Structural Insights into the Substrate Specificity and Function of *Escherichia coli* K12 YgiK, a Glucosidase Belonging to the Glycoside Hydrolase Family 63
J. Mol. Biol., **381** (2008) 116.
- D.J.Kim, S.J.Lee, H.S.Kim, K.H.Kim, H.H.Lee, H.J.Yoon and S.W.Suh
Structural Basis of Octanoic Acid Recognition by Lipoate-Protein Ligase B Proteins
Science, **70** (2008) 1620.
- H.J.Yoon, S.J.Lee, B.Mikami, H.J.Park, J.K.Yoo and S.W.Suh
Crystal Structure of UDP-N-acetylglucosamine Enolpyruvyl Transferase from *Haemophilus influenzae* in Complex with UDP-N-acetylglucosamine and Fosfomycin
Proteins, **71** (2008) 1032.
- M.Nakabayashi, S.Yamada, N.Yoshimoto, T.Tanaka, M.Igarashi, T.Ikura, N.Ito, M.Makishima, H.Tokiwa, H.F.DeLuca and M.Shimizu
Crystal Structures of Rat Vitamin D Receptor Bound to Adamantyl Vitamin D Analogs: Structural Basis for Vitamin D Receptor Antagonism and Partial Agonism
J. Med. Chem., **51** (2008) 5320.
- M.Shimizu, Y.Miyamoto, H.Takaku, M.Matsuo, M.Nakabayashi, H.Masuno, N.Udagawa, H.F.DeLuca, T.Ikura and N.Ito
2-Substituted-16-ene-22-thia-1 α ,25-dihydroxy-26,27-dimethyl-19-norvitamin D₃ Analogs: Synthesis, Biological Evaluation, and Crystal Structure
Bioorg. Med. Chem., **16** (2008) 6949.
- M.Senda, S.Muto, M.Horikoshi and T.Senda
Effect of Leucine-to-Methionine Substitutions on the Diffraction Quality of Histone Chaperone SET/TAF-I β /INHAT Crystals
Acta Cryst. F, **64** (2008) 960.
- A.Nishizawa, D.Muramatsu, S.Kimura, S.Kishigami, M.Senda, T.Senda and M.Fukuda
Inversion of NADH/NADPH-Specificity of BphA4 from *Pseudomonas* Sp. Strain KKS102 by Substitutions of Glu¹⁷⁵ and Gln¹⁷⁷
Flavins and Flavoproteins 2008, (2008) 273.

- M.Senda, S.Kimura, M.Fukuda, T.Ishida and T.Senda
Molecular Mechanism of the Redox-Dependent Interaction between NADH-Dependent Ferredoxin Reductase and Rieske-Type [2Fe-2S] Ferredoxin
Flavins and Flavoproteins 2008, (2008) 113.
- M.Senda, S.Kimura, M.Fukuda, T.Ishida and T.Senda
Molecular Mechanism of the Redox-Dependent Interaction between NADH-Dependent Ferredoxin Reductase and Rieske-Type [2Fe-2S] Ferredoxin
Kagakutoseibutsu, **46** (2008) 689. (in Japanese).
- Z.Fujimoto, H.Ichinose and S.Kaneko
Crystallization and Preliminary Crystallographic Analysis of Exo- α -1,5-L-arabinofuranosidase from *Streptomyces avermitilis* NBRC14893
Acta Cryst. F, **64** (2008) 1007.
- J.Wada, Y.Honda, M.Nagae, R.Kato, S.Wakatsuki, T.Katayama, H.Taniguchi, H.Kumagai, M.Kitaoka and K.Yamamoto
1,2- α -L-Fucosynthase: A Glycosynthase Derived from an Inverting α -Glycosidase with an Unusual Reaction Mechanism
FEBS Lett., **582** (2008) 3739.
- J.Du, H.Wang, C.Zhong, B.Peng, M.Zhang, B.Li, S.Hou, Y.Guo and J.Ding
Crystal Structure of Chimeric Antibody C2H7 Fab in Complex with a CD20 Peptide
Mol. Immunol., **45** (2008) 2861.
- M.Zha, Q.Guo, Y.Zhang, B.Yu, Y.Ou, C.Zhong and J.Ding
Molecular Mechanism of ADP-Ribose Hydrolysis by Human NUDT5 from Structural and Kinetic Studies
J. Mol. Biol., **379** (2008) 568.
- B.Sun, J.Hong, P.Zhang, X.Dong, X.Shen, D.Lin and J.Ding
Molecular Basis of the Interaction of *Saccharomyces cerevisiae* Eaf3 Chromo Domain with Methylated H3K36
J. Biol. Chem., **283** (2008) 36504.
- T.Kinoshita, I.Yoshida, S.Nakae, K.Okita, M.Gouda, M.Matsubara, K.Yokota, H.Ishiguro and T.Tada
Crystal Structure of Human Mono-Phosphorylated ERK1 at Try204
Biochem. Biophys. Res. Commun., **377** (2008) 1123.
- H.Suzuki, M.Kawasaki, T.Inuzuka, M.Okumura, T.Kakiuchi, H.Shibata, S.Wakatsuki and M.Maki
Structural Basis for Ca^{2+} -Dependent Formation of ALG-2/Alix Peptide Complex: Ca^{2+} /EF3-Driven Arginine Switch Mechanism
Structure, **16** (2008) 1562.
- N.Suzuki, Y.Yamazaki, R.L.Brown, Z.Fujimoto, T.Morita and H.Mizuno
Structures of Pseudechotoxin and Pseudecin, Two Snake-Venom Cysteine-Rich Secretory Proteins that Target Cyclic Nucleotide-Gated Ion Channels: Implications for Movement of the C-Terminal Cysteine-Rich Domain
Acta Cryst. D, **64** (2008) 1034.
- K.Takeda, H.Yoshida, G.Takada, K.Izumori and S.Kamitori
Overexpression, Purification, Crystallization and Preliminary X-Ray Crystal Analysis of *Bacillus pallidus* D-Arabinose Isomerase
Acta Cryst. F, **64** (2008) 945.
- T.Umeda, J.Katsuki, Y.Usami, K.Inoue, H.Noguchi, Z.Fujimoto, Y.Ashikawa, H.Yamane and H.Nojiri
Crystallization and Preliminary X-Ray Diffraction Studies of a Novel Ferredoxin Involved in the Dioxygenation of Carbazole by *Novosphingobium* sp. KA1
Acta Cryst. F, **64** (2008) 632.
- M.Senda, S.Kimura, M.Fukuda, T.Ishida and T.Senda
Molecular Mechanism of the Redox-Dependent Interaction between NADH-dependent Ferredoxin Reductase and Rieske-Type Ferredoxin
Kessyogakkaishi, **50** (2008) 341. (in Japanese).
- M.Nakakido, Y.Tanaka, M.Mitsuhori, M.Kudou, D.Ejima, T.Arakawa and K.Tsumoto
Structure-Based Analysis Reveals Hydration Changes Induced by Arginine Hydrochloride
Biophys. Chem., **137** (2008) 105.
- H.Yokoyama, S.Fujii and I.Matsui
Crystal Structure of a Core Domain of Stomatin from *Pyrococcus horikoshii* Illustrates a Novel Trimeric and Coiled-Coil Fold
J. Mol. Biol., **376** (2008) 868.
- S.Shimizu, E.C.M.Juan, Y.Miyashita, Y.Sato, K.Suzuki, M.Yogiashi, M.Tsunoda, A.-C.Dock-Bregeon, D.Moras, T.Sekiguchi and A.Takenaka
Crystallization and Preliminary Crystallographic Studies of Putative Threonyl-tRNA Synthetases from *Aeropyrum Pernix* and *Sulfolobus tokodaii*
Acta Cryst. F, **64** (2008) 903.
- M.T.Hossain, T.Yamamoto, S.Imamura, K.Suzuki, M.Tsunoda, H.Amano, T.Sekiguchi and A.Takenaka
Structures of *Arthrobacter globiformis* Urate Oxidase-Ligand Complexes
Acta Cryst. D, **64** (2008) 815.
- M.M.Hoque, S.Shimizu, M.T.Hossain, T.Yamamoto, S.Imamura, K.Suzuki, M.Tsunoda, H.Amano, T.Sekiguchi and A.Takenaka
The Structures of *Alcaligenes faecalis* D-3-Hydroxybutyrate Dehydrogenase before and after NAD^+ and Acetate Binding Suggest a Dynamical Reaction Mechanism as a Member of the SDR Family
Acta Cryst. D, **64** (2008) 496.
- M.Ui, Y.Tanaka, T.Tsumuraya, I.Fujii, M.Inoue, M.Hirama and K.Tsumoto
How Protein Recognizes Ladder-Like Polycyclic Ethers
Interactions between Ciguatoxin (CTX3C) Fragments and its Specific antibody 10C9
J. Biol. Chem., **283(28)** (2008) 19440.
- Y.Urakubo, T.Ikura and N.Ito
Crystal Structural Analysis of Protein-Protein Interactions Drastically Destabilized by a Single Mutation
Protein Sci., **17** (2008) 1055.
- K.Ito, M.Nakanishi, W.-C.Lee, Y.Zhi, H.Sasaki, S.Zenno, K.Saigo, Y.Kitade and M.Tanokura
Expansion of Substrate Specificity and Catalytic Mechanism of Azoreductase by X-Ray Crystallography and Site-Directed Mutagenesis
J. Biol. Chem., **283** (2008) 13889.
- W.-Y.Jeng, T.-P.Ko, C.-I.Liu, R.-T.Guo, C.-L.Liu, H.-L.Shr and A.H.-J.Wang
Crystal Structure of IcaR, a Repressor of the TetR Family Implicated in Biofilm Formation in *Staphylococcus epidermidis*
Nucleic Acids Res., **36** (2008) 1567.

6C

T.Shibata, K.Fukuda, Y.Ebina, T.Kogure and T.Sasaki
One-Nanometer-Thick Seed Layer of Unilamellar Nanosheets Promotes Oriented Growth of Oxide Crystal Films
Adv. Mater., **20** (2008) 231.

T.C.Ozawa, K.Fukuda, K.Akatsuka, Y.Ebina, T.Sasaki, K.Kurashima and K.Kosuda
 $\text{Eu}_{0.56}\text{Ta}_2\text{O}_7$: A New Nanosheet Phosphor with the High Intrananosheet-Site Photoactivator Concentration
J. Phys. Chem. C, **112** (2008) 1312.

T.Wakita and M.Yashima
Structural Disorder in the Cubic $\text{Ce}_{0.5}\text{Zr}_{0.5}\text{O}_2$ Catalyst, A Possible Factor of the High Catalytic Activity
Appl. Phys. Lett., **92** (2008) 101921.

M.Yashima and T.Wakita
Success in the Visualization of Structural Disorders of the Automotive Exhaust Gas Catalyst, Ceria-Zirconia
Bull. Ceram. Soc. Jpn., **43** (2008) 434. (in Japanese).

M.Yashima, K.Ogisu and K.Domen
Structure and Electron Density of Oxsulfide $\text{Sm}_2\text{Ti}_2\text{S}_2\text{O}_{4.9}$, a Visible-Light-Responsive Photocatalyst
Acta Cryst. B, **64** (2008) 291.

T.Sasaki, Y.Miyazawa, S.Takahashi, R.Matsuyama, K.Sasaki and K.Hiratsuka
Application of Synchrotron Radiation to Residual Stress Analysis by IP/cosa Method
Materials Science Forum, **571-572** (2008) 249.

S.Sakurai, S.Sasaki, M.Okube, H.Obara and T.Toyoda
Cation Distribution and Valence State in Mn-Zn Ferrite Examined by Synchrotron X-Rays
Physica B, **403** (2008) 3589.

R.Ali, M.Yashima, Y.Matsuhashita, H.Yoshioka, K.Ohyama and F.Izumi
Diffusion Path of Oxide Ions in an Apatite-Type Ionic Conductor $\text{La}_{0.69}(\text{Si}_{5.70}\text{Mg}_{0.30})\text{O}_{26.24}$
Chem. Mater., **20** (2008) 5203.

K.Fukuda, K.Akatsuka, Y.Ebina, R.Ma, K.Takada, I.Nakai and T.Sasaki
Exfoliated Nanosheet Crystallite of Cesium Tungstate with 2D Pyrochlore Structure: Synthesis, Characterization, and Photochromic Properties
ACS Nano, **2** (2008) 1689.

K.Takada, N.Ohta, L.Zhang, K.Fukuda, K.Sakaguchi, R.Ma, M.Osada and T.Sasaki
Interfacial Modification for High-Power Solid-State Lithium Batteries
Solid State Ionics, **179** (2008) 1333.

T.Hanashima and S.Sasaki
X-Ray Magnetic Circular Dichroism of $\text{La}_{1-x}\text{Sr}_x\text{CoO}_3$ and the First-Principles Calculations
J. Cryst. Soc. Jpn., **50** (2008) 269. (in Japanese).

M.Yashima
Crystal Structure-Property Correlation in Ionic and Mixed Conductors and Photocatalyst
Bull. Ceram. Soc. Jpn., **43** (2008) 922. (in Japanese).

T.Wakita and M.Yashima,
Phase Transition and Structural Disorder of the Ceria-Zirconia Solid-Solution Catalyst for Exhaust Gas Cleaning
Fine Chemicals, **37[12]** (2008) 23. (in Japanese).

T.C.Ozawa, K.Fukuda, K.Akatsuka, Y.Ebina, T.Sasaki, K.Kurashima and K.Kosuda
 $(\text{K}_{1.5}\text{Eu}_{0.5})\text{Ta}_3\text{O}_{10}$: A Far-Red Luminescent Nanosheet Phosphor with the Double Perovskite Structure
J. Phys. Chem. B, **112** (2008) 17115.

K.Hayashi, H.Takenaka, N.Happo and S.Hosokawa
Multilayer Structure Analysis using Angular Fluorescence Intensity Variation under Grazing Incidence Condition
Trans. Mater. Res. Soc. Jpn., **33** (2008) 561.

K.Hayashi, T.Shishido, N.Happo and S.Hosokawa
X-Ray Fluorescence Holography for Structural Analysis of Crystals and their Dopants
J. Flux Growth, **3** (2008) 56. (in Japanese).

M.Yashima
Visualization of Chemical Bonding and Structural Disorders from Diffraction Experiments
Proc. Int'l. Conf. Contemporary Physics-IV, (2008) 395.

7A

H.Abe, K.Amemiya, D.Matsumura, J.Miyawaki, E.O.Sako, T.Ohtsuki, E.Sakai and T.Ohta
Anomalous Magnetic Phases in Fe/Cu(001) Ultrathin Films Induced by CO Adsorption
Phys. Rev. B, **77** (2008) 054409.

M.Nagasaka, H.Kondoh, K.Amemiya, T.Ohta and Y.Iwasawa
Proton Transfer in a Two-Dimensional Hydrogen-Bonding Network: Water and Hydroxyl on a Pt(111) Surface
Phys. Rev. Lett., **100** (2008) 106101.

E.Kawabe, D.Yoshimura, K.Kanai, Y.Ouchi, S.Hasegawa, K.K.Okudaira, N.Ueno and K.Seki
Epitaxial Growth of Hexadecafluorozincphthalocyanine (F_{16}ZnPc) Film Deposited on GeS(001)
Surf. Sci., **602** (2008) 1328.

O.Endo, T.Furuta, H.Ozaki and Y.Mazaki
NEXAFS Study of a 17,19-Hexatriacontadiyne Monolayer on Au(111)
Surf. Sci., **602** (2008) 399.

K.Nakatsuji, Y.Yoshimoto, D.Sekiba, S.Doi, T.Iimori, K.Yagyu, Y.Takagi, S.Ohno, H.Miyaoka, M.Yamada, F.Komori, K.Amemiya, D.Matsumura and T.Ohta
Electron Correlation Effects in Co Nano-Islands on a Nitrogen Covered Cu(001) Surface
Phys. Rev. B, **77** (2008) 235436.

H.Abe, J.Miyawaki, E.O.Sako, M.Sakamaki and K.Amemiya
Huge Perpendicular Magnetic Anisotropy of Fe Single Layer and Spin-Reorientation Transitions Observed in Fe/Co/Pd(111) Films
Phys. Rev. B, **78** (2008) 014424.

T.Nishi, T.Iwashashi, H.Yamane, Y.Ouchi, K.Kanai and K.Seki
Electronic Structure of Ionic Liquids $[\text{C}_n\text{mim}]^+\text{BF}_4^-$ and $[\text{C}_n\text{mim}]^+\text{PF}_6^-$ Studied by Ultraviolet Photoemission, Inverse Photoemission, and Near-Edge X-Ray Absorption Fine Structure Spectroscopies
Chem. Phys. Lett., **455** (2008) 213.

Y.Matsumoto, S.Sakai, H.Naramoto, N.Hirao, Y.Baba, T.Shimada, I.Sugai, K.Takanashi and Y.Maeda
The Electronic Structures of Fullerene/Transition-Metal Hybrid Material
Mater. Res. Soc. Conf. Proc., **1081E** (2008) 1081-P07-0.

H.Abe, K.Amemiya, J.Miyawaki, E.O.Sako, M.Sakamaki, D.Matsumura, T.Ohtsuki, E.Sakai and T.Ohta
CO Adsorption Effects on the Magnetism and Surface Structure of Fe/Cu(001)
e-J. Surf. Scie. Nanotech., **6** (2008) 233.

K.Nakagawa, Z.Jin, I.Shimoyama, Y.Miyake, M.Ueno, Y.Kishigami, H.Horiuchi, M.Tanaka, F.Kaneko, H.Nishimagi, H.Kobayashi and M.Kotani
Evolution of Energy Deposition Processes in Anthracene Single Crystal from Photochemistry to Radiation Chemistry under Excitation with Synchrotron Radiation from 3 to 700 eV
Radiation Physics and Chemistry, **77** (2008) 1156.

7C

S.Kikkawa, S.Ohtaki, T.Takeda, A.Yoshiasa, T.Sakurai and Y.Miyamoto
Manganese Doped Gallium Oxynitride Prepared by Nitridation of Citrate Precursor
J. Alloys and Compounds, **450** (2008) 152.

S.Kikkawa, T.Takeda, A.Yoshiasa, P.Mailard and F.Tessier
Crystal Structure and Optical Properties of Oxynitride Rare-Earth Tantalates RTa_{(O,N)(R=Nd,Gd,Y)}
Mater. Res. Bull., **43** (2008) 811.

T.Sasaki, M.Tada, C.Zhong, T.Kume and Y.Iwasawa
Immobilized Metal Ion-Containing Ionic Liquids: Preparation, Structure and Catalytic Performances in Kharasch Addition Reaction and Suzuki Cross-Coupling Reactions
J. Mol. Catal. A: Chemical, **279** (2008) 200.

T.Kawai, W.J.Chun, K.Asakura, Y.Koike, M.Nomura, K.K.Bando, S.T.Oyama and H.Sumiya
Design of a High-Temeperature and High Pressure Liquid Flow Cell for XAFS Measurements under Catalytic Reaction Conditions
Rev. Sci. Instrum., **79** (2008) 014101.

Y.Izumi, K.Konishi, T.Miyajima and H.Yoshitake
Photo-Oxidation over Mesoporous V-TiO₂ Catalyst under Visible Light Monitored by Vanadium $K\beta_{5,2}$ -Selecting XANES Spectroscopy
Mater. Lett., **62** (2008) 861.

Y.Izumi, K.Konishi, D.Masih and H.Yoshitake
Development and Monitoring of Mesoporous Vanadium Catalysts under Visible Light
Proc. Environ. Sci. and Tec. 2007, **II** (2008) 419.

G.Naren, R.Masuda, M.Iida, M.Harada, H.Kurosu, T.Suzuki and T.Kimura
Formation of Molecular Glasses and the Aggregation in Solutions for Lanthanum(III), Calcium(II), and Yttrium(III) Complexes of Octanoyl-DL-Alaninate
Dalton Trans., (2008) 1698.

S.Kikkawa, T.Takeda, A.Yoshiasa, P.Maillard and F.Tessier
Crystal Structure and Optical Properties of Oxynitride Rare-Earth Tantalates RTa_{(O,N)(R=Nd,Gd,Y)}
Mater. Res. Bull., **91** (2008) 924.

M.Okamoto, H.Kiya, A.Matsumura and E.Suzuki
Vapor-Phase Hydrosilylation using a Transition Metal Complex Catalyst in a Liquid Polymer Medium Supported on Silica Gel
Catal. Lett., **123** (2008) 72.

L.Yuliati, T.Hamajima, T.Hattori and H.Yoshida
Nonoxidative Coupling of Methane over Supported Ceria Photocatalysts
J. Phys. Chem. C, **112** (2008) 7223.

K.Mori, K.Sugihara, Y.Kondo, T.Takeuchi, S.Morimoto and H.Yamashita
Synthesis and Characterization of Core-Shell FePt@Ti-Containing Silica Spherical Nanocomposite as a Catalyst Carrier for Liquid-Phase Reactions
J. Phys. Chem. C, **112** (2008) 16478.

Y.Kuwahara, T.Kamegawa, K.Mori and H.Yamashita
Fabrication of Hydrophobic Zeolites using Triethoxyfluorosilane and their Application as Supports for TiO₂ Photocatalysts
Chem. Commun., (2008) 4783.

S.Shironita, K.Mori, T.Shimizu, T.Ohmichi, N.Mimura and H.Yamashita,
Preparation of Nano-Sized Platinum Metal Catalyst using Photo-Assisted Deposition Method on Mesoporous Silica Including Single-Site Photocatalyst
Appl. Surf. Sci., **254** (2008) 7604.

H.Yamashita, K.Mori, S.Shironita and Y.Horiuchi
Applications of Single-Site Photocatalysts to the Design of Unique Surface Functional Materials
Catal. Surv. Asia, **12** (2008) 88.

H.Yamashita, S.Nishio, S.Imaoka, M.Shimada, K.Mori, T.Tanaka and N.Nishiyama
Photo-Induced Surface Property on Transparent Mesoporous Silica Thin Films Containing Single-Site
Top. Catal., **47** (2008) 116.

K.Mori, S.Shironita, T.Shimizu, T.Sakata, H.Mori, T.Ohmichi and H.Yamashita
Design of Nano-Sized Pt Metals Synthesized on Ti-Containing Mesoporous Silicas and Efficient Catalytic Application for NO Reduction
Materials Transaction, **49** (2008) 398.

H.Yamashita, Y.Horiuchi, S.Imaoka, S.Nishio, N.Nishiyama and K.Mori
Surface Hydrophilic-Hydrophobic Property on Transparent Mesoporous Silica Thin Films Containing Chromium Oxide Single-Site Photocatalyst
Catal. Today, **132** (2008) 146.

K.Mori, K.Kagohara and H.Yamashita
Synthesis of Tris(2,2'-bipyridine)iron(II) Complexes in Zeolite Y Cages: Influence of Exchanged Alkali Metal Cations on Physicochemical Properties and Catalytic Activity
J. Phys. Chem. C, **112** (2008) 2593.

K.Mori, Y.Kondo, S.Morimoto and H.Yamashita
Synthesis and Multifunctional Properties of Superparamagnetic Iron Oxide Nanoparticles Coated with Mesoporous Silica Involving Single-Site Ti-Oxide Moiety
J. Phys. Chem. C, **112** (2008) 397.

K.Mori, M.Shimada, Y.Horiuchi, T.Ohmichi, N.Nishiyama, H.Fujii and H.Yamashita
Preparation of Nano-Sized Pt Metal Particles by Photo-Assisted Deposition (PAD) on Transparent Ti-Containing Mesoporous Silica Thin Film
Res. Chem. Intermed., **34** (2008) 495.

Y.Kuwahara, T.Ohmichi, K.Mori, I.Katayama and H.Yamashita
Synthesis of Zeolite from Steel Slag and Its Application as a Support of Nano-Sized TiO₂ Photocatalyst
J. Mater. Sci., **43** (2008) 2407.

T.Baidya, K.R.Priolkar, P.R.Sarode, M.S.Hegde, K.Asakura, G.Tateno and Y.Koike,
Local Structure of Pt and Pd Ions in Ce_{1-x}Ti_xO₂: X-Ray Diffraction, X-Ray Photoelectron Spectroscopy, and Extended X-Ray Absorption Fine Structure
J. Chem. Phys., **128** (2008) 124711.

Y.Izumi, K.Konishi and H.Yoshitake
Specific Oxidative Dehydrogenation Reaction Mechanism over Vanadium(IV/III) Sites in TiO₂ with Uniform Mesopores under Visible Light
Bull. Chem. Soc. Jpn., **81** (2008) 1241.

M.Deguchi, N.Nakajima, K.Kawakami, N.Ishimatsu, H.Maruyama, C.Moriyoshi, Y.Kuroiwa, S.Nozawa, K.Ishiji and T.Iwazumi
Luminescence Mechanism of (Pr, Al)-doped SrTiO₃ Fine Particles Investigated by X-Ray Absorption Spectroscopy
Phys. Rev. B, **78** (2008) 073103.

K.Ikeue, T.Tanaka, N.Miyoshi and M.Machida
Synthesis and Characterization of Lanthanide-Incorporated FSM-16 Type Mesoporous Silica Solid State Sci., **10** (2008) 1584.

T.Ohkubo
Structure of Electrolytic Solution under Nano-Restricted Condition
Newsletter (The Division of Colloid and Surface Science, The Chemistry of Japan), **33** (2008) 2.
(in Japanese).

S.Dzwigaj and T.Shishido
State of Chromium in CrSiBEA Zeolite Prepared by the Two-Step Postsynthesis Method: XRD, FTIR, UV-Vis, EPR, TPR, and XAS Studies
J. Phys. Chem. C, **112** (2008) 5803.

K.Kashimoto, K.Shibata, T.Matsuda, M.Hoshide, Y.Jimura, I.Watanabe, H.Tanida, H.Matsubara, T.Takiue and M.Aratono
Preferential Adsorption of Cationic Surfactant Mixture Studied by Bromide Ion Selective Total-Reflection XAFS Measurement
Langmuir, **24** (2008) 6693.

M.Aratono, K.Kashimoto, A.Onohara, D.Murakami, H.Tanida, I.Watanabe, T.Ozeki, H.Matsubara and T.Takiue
Adsorption of 1-Decyl-3-Methylimidazolium Bromide and Solvation Structure of Bromide at the Air/Water Interface
Anal. Sci., **24** (2008) 1279.

Y.Okuno, Y.Hattori, T.Ohba, K.Kaneko and H.Kanoh
Mesoporous Ni-Fe Alloys
Adsorption Sci. and Tech., **26** (2008) 581.

S.Yamamoto, S.Kikkawa, Y.Masubuchi, T.Takeda, H.Wolff, R.Dronskowski and A.Yoshiasa
Chemical Synthesis, Structure Elucidation and Quantum-Chemical Modeling of a Cr³⁺-Doped Gallium Oxynitride Made by Precursor Nitridation
Solid State Commun., **147** (2008) 41.

T.Kakiuchi, E.Kobayashi, K.K.Okudaira, N.Fujita, M.Tanaka and K.Mase
Construction and Evaluation of a Miniature Electron Ion Coincidence Analyzer Mounted on a Conflat Flange with an Outer Diameter of 114 mm
Anal. Sci., **24** (2008) 87.

T.Kakiuchi and K.Mase
Titanium Dioxide (TiO₂) Single Crystal Holder with a Cold Trap and a Heating Mechanism Mounted on a Conflat Flange with an Outer Diameter of 70 mm
J. Vac. Soc. Jpn., **51** (2008) 44. (in Japanese).

9A

S.Kimura, S.Emura, Y.Yamauchi, Y.K.Zhou, S.Hasegawa, and H.Asahi
Low Temperature Molecular Beam Epitaxy Growth of Cubic GaCrN
J. Cryst. Growth, **310** (2008) 40.

T.Sasaki, M.Tada, C.Zhong, T.Kume and Y.Iwasawa
Immobilized Metal Ion-Containing Ionic Liquids: Preparation, Structure and Catalytic Performances in Kharasch Addition Reaction and Suzuki Cross-Coupling Reactions
J. Mol. Catal. A: Chemical, **279** (2008) 200.

T.Kawai, W.J.Chun, K.Asakura, Y.Koike, M.Nomura, K.K.Bando, S.T.Oyama and H.Sumiya
Design of a High-Temperature and High Pressure Liquid Flow Cell for XAFS Measurements under Catalytic Reaction Conditions
Rev. Sci. Instrum., **79** (2008) 014101.

Y.Izumi, K.Konishi, T.Miyajima and H.Yoshitake
Photo-Oxidation over Mesoporous V-TiO₂ Catalyst under Visible Light Monitored by Vanadium K_β_{5,2}-Selecting XANES Spectroscopy
Mater. Lett., **62** (2008) 861.

Y.Izumi, K.Konishi, D.Masih and H.Yoshitake
Development and Monitoring of Mesoporous Vanadium Catalysts under Visible Light
Proc. Environ. Sci. and Tec. 2007, **II** (2008) 419.

Y.Koike, K.Fujikawa, S.Suzuki, W.J.Chun, K.Iijima, M.Nomura, Y.Iwasawa and K.Asakura, Origin of Self-Regulated Cluster Growth on the TiO₂(110) Surface Studied using Polarization-Dependent Total Reflection Fluorescence XAFS
J. Phys. Chem. C, **112** (2008) 4667.

S.Mitsunobu, Y.Takahashi and Y.Sakai
Abiotic Reduction of Antimony(V) by Green Rust (Fe₄(II)Fe₂(III)(OH)₁₂SO₄·3H₂O)
Chemosphere, **70** (2008) 942.

T.Harada and Y.Takahashi
Origin of the Difference in the Distribution Behavior of Tellurium and Selenium in a Soil-Water System
Geochimica et Cosmochimica Acta, **72** (2008) 1281.

K.Tanaka, Y.Takahashi and H.Shimizu
Local Structure of Y and Ho in Calcite and its Relevance to Y Fractionation from Ho in Partitioning between Calcite and Aqueous Solution
Chemical Geology, **248** (2008) 104.

Y.S.Shimamoto and Y.Takahashi
Superiority of K-Edge XANES over L_{III}-Edge XANES in the Speciation of Iodine in Natural Soils
Analytical Sci., **24** (2008) 405.

H.Takano, K.Yano and I.Nakai
Phase Transition and Extended X-Ray Absorption Fine Structure of Melt-Spun Amorphous Fe_{100-x}Y_x Alloys
J. Magn. Magn. Mater., **320** (2008) 1503.

D.Moromachi, A.Kuno and M.Matsu
Influence of Reclamation on the Concentrations and Chemical States of Elements in Tideland Sediment
J. Radioanalytical and Nuclear Chemistry, **278** (2008) 495.

L.Yuliati, T.Hamajima, T.Hattori and H.Yoshida
Nonoxidative Coupling of Methane over Supported Ceria Photocatalysts
J. Phys. Chem. C, **112** (2008) 7223.

Y.F.Li, C.Chen, B.Li, W.Li, L.Qu, Z.Dong, M.Nomura, Y.Gao, J.Zhao, W.Hu, Y.Zhao and Z.Cha
Mercury in Human Hair and Blood Samples from People Living in Wanshan Mercury Mine Area, Guizhou, China: An XAS Study
J. Inorg. Biochem., **102** (2008) 500.

K.Hara, T.Tanigawa and S.Yoshioka
Effect of Organic Solvent Substitution on Nano-Scopic Structure of Poly(acrylamide-*co*-Sodium Acrylate) Gel
Trans. Mater. Res. Soc. Jpn., **33** (2008) 451.

M.Uo, K.Asakura, K.Tamura, Y.Totsuka, S.Abe, T.Akasaki and F.Watarai
XAES Analysis of Ti and Ni Dissolution from Pure Ti, Ni-Ti Alloy, and SUS304 in Soft Tissues
Chem. Lett., **37** (2008) 958.

Y.Eguchi, D.Abe and H.Yoshitake
Oxidation State of Ce and Ethanol-Oxygen Reaction of Mesoporous Titania-Supported Cerium Oxide
Microporous and Mesoporous Mater., **116** (2008) 44.

Y.Kuwahara, T.Kamegawa, K.Mori and H.Yamashita
Fabrication of Hydrophobic Zeolites using Triethoxyfluorosilane and their Application as Supports for TiO₂ Photocatalysts
Chem. Commun., (2008) 4783.

F.Zhu, M.Takaoka, K.Shiota, K.Oshita and Y.Kitajima
Chloride Chemical Form in Various Types of Fly Ash
Environ. Sci. Tech., **42** (2008) 3932.

F.Zhu, M.Takaoka, K.Oshita, Y.Kitajima, Y.Inada, S.Morisawa and H.Tsuno
The Study of Chloride Behavior in Raw Fly Ash by X-Ray Absorption Near Edge Structure and X-Ray Diffraction
The 14th Seminar of JSPS-MOE Core University Program on Urban Environment, (2008)

K.Nitta, Y.Omori, D.Kikuchi, T.Miyanga, K.Takegahara, H.Sugawara and H.Sato
Local Static Distortion of Rare Earth ions in RO₄Sb₁₂ (R=La,Ce,Pr,Nd,Sm) by Extended X-Ray Absorption Fine Structure
J. Phys. Soc. Jpn., **77** (2008) 063601.

9C

T.Sasaki, M.Tada, C.Zhong, T.Kume and Y.Iwasawa
Immobilized Metal Ion-Containing Ionic Liquids: Preparation, Structure and Catalytic Performances in Kharasch Addition Reaction and Suzuki Cross-Coupling Reactions
J. Mol. Catal. A: Chemical, **279** (2008) 200.

S.Kikkawa, T.Takeda, A.Yoshiasa, P.Maillard and F.Tessier
Crystal Structure and Optical Properties of Oxynitride Rare-Earth Tantalates RTa-(O,N) (R=Nd,Gd,Y)
Mater. Res. Bull., **91** (2008) 924.

H.Eba and K.Sakurai
Crystallinity Evaluation of Zinc-Gallate Nanoparticles using X-Ray Absorption Spectra
Adv. X-Ray Chem. Anal. Jpn., **39** (2008) 199.
(in Japanese).

H.Takano, K.Yano and I.Nakai
Phase Transition and Extended X-Ray Absorption Fine Structure of Melt-Spun Amorphous Fe_{100-x}Y_x Alloys
J. Magn. Magn. Mater., **320** (2008) 1503.

T.Nakamura, A.Tsuchiyama, T.Akaki, K.Uesugi, T.Nakano, A.Takeuchi, Y.Suzuki and T.Noguchi
Bulk Mineralogy and Three-Dimensional Structures of Individual Stardust Particles Deduced from Synchrotron X-Ray Diffraction and Microtomography Analysis
Meteoritics and Planetary Sciences, **43** (2008) 247.

H.Tanaka, M.Kuriyama, Y.Ishida, S.Ito, T.Kubota, T.Miyao, S.Naito, K.Tomishige and K.Kunimori
Preferential CO Oxidation in Hydrogen-Rich Stream over Pt Catalysts Modified with Alkali Metals Part II. Catalyst Characterization and Role of Alkali Metals
Appl. Catal. A: General, **343** (2008) 125.

M.Obata, A.Kitamura, A.Mori, C.Kameyama, J.A.Czaplewskia, R.Tanaka, I.Kinoshita, T.Kusumoto, H.Hashimoto, M.Harada, Y.Mikata, T.Funabiki and S.Yano
Syntheses, Structural Characterization and Photophysical Properties of 4-(2-Pyridyl)-1,2,3-Triazole Rhodium(I) Complexes
Dalton Trans., (2008) 3292.

T.Mori, A.Itadani, E.Tabuchi, Y.Sogo, R.Kumashiro, M.Nagao and Y.Kuroda
Identification of Two Types of Exchangeable Sites for Monovalent Copper Ions Exchanged in MFI-Type Zeolite
Phys. Chem. Chem. Phys., **10** (2008) 1203.

S.Takenaka, T.Arike, H.Matsune, E.Tanabe and M.Kishida
Preparation of Carbon Nanotube-Supported Metal Nanoparticles Coated with Silica Layers
J. Catal., **257** (2008) 345.

Y.Izumi, K.Konishi and H.Yoshitake
Specific Oxidative Dehydrogenation Reaction Mechanism over Vanadium(IV/III) Sites in TiO_2 with Uniform Mesopores under Visible Light
Bull. Chem. Soc. Jpn., **81** (2008) 1241.

D.Bizen, K.Nakatsuka, T.Murata, H.Nakao, Y.Murakami, S.Miyasaka and Y.Tokura
Orbital Ordering in RVO_3 ($R=Y,Tb$) Controlled by Hydrostatic Pressure
Phys. Rev. B, **78** (2008) 224104.

H.Tsunoyama, N.Ichikuni and T.Tsukuda
Microfluidic Synthesis and Catalytic Application of PVP-Stabilized, ~1 nm Gold Clusters
Langmuir, **24** (2008) 11327.

S.Dzwigaj and T.Shishido
State of Chromium in CrSiBEA Zeolite Prepared by the Two-Step Postsynthesis Method: XRD, FTIR, UV-Vis, EPR, TPR, and XAS Studies
J. Phys. Chem. C, **112** (2008) 5803.

10A

S.Sakurai, S.Sasaki, M.Okube, H.Obara and T.Toyoda
Cation Distribution and Valence State in Mn-Zn Ferrite Examined by Synchrotron X-Rays
Physica B, **403** (2008) 3589.

T.Kuribayashi, M.Tanaka and Y.Kudoh
Synchrotron X-Ray Analysis of Norbergite, $Mg_{2.98}Fe_{0.01}Ti_{0.22}Si_{0.99}O_4(OH_{0.31}F_{1.69})$ Structure at High Pressure up to 8.2 GPa
Phys. Chem. Minerals, **35** (2008) 559.

T.Hanashima and S.Sasaki
X-Ray Magnetic Circular Dichroism of $La_{1-x}Sr_xCoO_3$ and the First-Principles Calculations
J. Cryst. Soc. Jpn., **50** (2008) 269. (in Japanese).

10B

T.Sasaki, M.Tada, C.Zhong, T.Kume and Y.Iwasawa
Immobilized Metal Ion-Containing Ionic Liquids: Preparation, Structure and Catalytic Performances in Kharasch Addition Reaction and Suzuki Cross-Coupling Reactions
J. Mol. Catal. A: Chemical, **279** (2008) 200.

Y.Izumi, D.M.Obaid, K.Konishi, D.Masih, M.Takagaki, Y.Terada, H.Tanida and T.Uruga
State-Sensitive Monitoring of Gold Nanoparticle Sites on Titania and the Interaction of the Positive Au Site with O_2 by Au $L\alpha_1$ -Selecting X-Ray Absorption Fine Structure
Inorg. Chimica Acta, **361** (2008) 1149.

Y.Izumi
Development of Structural Analysis for Nano-Particles
Polyfile, **45(528)** (2008) 46. (in Japanese).

H.Yoshida, K.Hirao, J.Nishimoto, K.Shimura, S.Kato, H.Itoh and T.Hattori
Hydrogen Production from Methane and Water on Platinum Loaded Titanium Oxide Photocatalysts
J. Phys. Chem. C, **112** (2008) 5542.

L.Yuliati, T.Hattori, H.Itoh and H.Yoshida
Photocatalytic Non-Oxidative Coupling of Methane on Gallium Oxide and Silica-Supported Gallium Oxide
J. Catal., **257** (2008) 396.

M.Ogasawara, T.Akaogi, K.Abe, S.Kato, S.Nakata and M.Shirai
EXAFS and XRD Studies on Nb-Messtructured Materials Prepared from Layered-Perovskite Type Potassium Niobium Oxyfluoride
Int. J. Soc. Mater. Eng. Resour., **15** (2008) 23.

M.Tada, Y.Akatsuka, Y.Yang, T.Sasaki, M.Kinoshita and Y.Iwasawa
Photoinduced Reversible Structural Transformation and Selective Oxidation Catalysis of Unsaturated Ruthenium Complexes Supported on SiO_2
Angew. Chem. Int. Ed., **47** (2008) 9252.

T.Ohkubo
Structure of Electrolytic Solution under Nano-Restricted Condition
Newsletter (The Division of Colloid and Surface Science, The Chemistry of Japan), **33** (2008) 2. (in Japanese).

I.Yonenaga
Growth and Fundamental Properties of SiGe Bulk Crystals
Matera Japan, **47** (2008) 3. (in Japanese).

L.Nagy, A.Szorcsik, H.Jankovics, T.Yamaguchi, K.Yoshida, M.Scopelliti, L.Pellerito and L.Sletten
Preparation and XAFS Studies of Organotin(IV) Complexes with Adenosine and Related Compounds and Calf Thymus DNA
J. Radioanal. Nuclear Chem., **275** (2008) 193.

10C

Y.Tanaka, S.Sakamoto, M.Kuroda, S.Goda, Y.-G.Gao, K.Tsumoto, Y.Hiragi, M.Yao, N.Watanabe, T.Ohta and I.Tanaka
A Helical String of Alternately Connected Three-Helix Bundles for the Cell Wall-Associated Adhesion Protein Ebh from *Staphylococcus aureus*
Structure, **16** (2008) 488.

S.Nojima, Y.Ohguma, S.Namiki, T.Ishizone and K.Yamaguchi
Crystallization of Homopolymers Confined in Spherical or Cylindrical Nanodomains
Macromolecules, **41** (2008) 1915.

H.Ikeda, Y.Ohguma and S.Nojima
Composition Dependence of Crystallization Behavior Observed in Crystalline-Crystalline Diblock Copolymers
Polymer J., **40** (2008) 241.

Y.Watanabe and Y.Inoko
Structural Characterization of a Mucous Glycoprotein in Solution
Rep. Nat'l. Food Res. Inst., **72** (2008) 31. (in Japanese).

Y.Izumi, H.Watanabe, N.Watanabe, A.Aoyama, Y.Jinbo and N.Hayashi
Solution X-Ray Scattering Reveals a Novel Structure of Calmodulin Complexed with a Binding Domain Peptide from the HIV-1 Matrix Protein p17
Biochemistry, **47** (2008) 7158.

S.Kutsumizu, H.Mori, M.Fukatami, S.Naito, K.Sakajiri and K.Saito
Cubic Phase Formation and Interplay between Alkyl Chains and Hydrogen Bonds in 1,2-Bis(4'-n-alkoxybenzoyl)hydrazines (BABH-n)
Chem. Materials, **20** (2008) 3675.

M.S.Yousef, H.Kamikubo, M.Kataoka, R.Kato and S.Wakatsuki
Miranda Cargo-Binding Domain Forms an Elongated Coiled-Coil Homodimer in Solution: Implications for Asymmetric Cell Division in Drosophila
Protein Science, **17(5)** (2008) 908.

K.Hara, T.Tanigawa and S.Yoshioka
Effect of Organic Solvent Substitution on Nano-Scopic Structure of Poly(acrylamide-co-Sodium Acrylate) Gel
Trans. Mater. Res. Soc. Jpn., **33** (2008) 451.

T.Sakurai, Y.Ohguma and S.Nojima
Morphological Evolution during Isothermal Crystallization Observed in Crystalline-Crystalline Diblock Copolymers
Polymer J., **40** (2008) 971.

S.Nojima, D.Inokawa, T.Kawamura and K.Nitta
Dynamic Mechanical Study of Block Copolymer Crystallization Confined within Spherical Nanodomains
Polymer J., **40** (2008) 986.

M.Kikuchi, L.T.N.Lien, A.Narumi, Y.Jinbo, Y.Izumi, K.Nagai and S.Kawaguchi
Conformational Properties of Cylindrical Rod Brushes Consisting of a Polystyrene Main Chain and Poly(n-hexyl isocyanate) Side Chains
Macromolecules, **41** (2008) 6564.

K.Kubota, H.Kawai and K.Wakamatsu
Disc-Shaped Mixed Micelle Formation Constituted of Phospholipids with Different Acyl Groups
Trans. Mater. Res. Soc. Jpn., **33** (2008) 475.

S.Kado, K.Kubota, N.Nameki and K.Wakamatsu
Effect of NDSB on the Protein Aggregation
Trans. Mater. Res. Soc. Jpn., **33** (2008) 479.

L.Xiang, T.Ishii, K.Hosoda, A.Kamiya, M.Enomoto, N.Nameki, Y.Inoue, K.Kubota and K.Wakamatsu
Interaction of Anti-Aggregation Agent Dimethylethylammonium Propane Sulfonate with Acidic Fibroblast Growth Factor
J. Magnetic Resonance, **194** (2008) 147.

S.Goda, H.Sakuraba, Y.Hiragi and T.Ohshima
Structural Change in the Activation of Inactive Recombinant Glutamate Dehydrogenases from Thermophiles/Hyperthermophiles Produced in *Escherichia coli*
Vitamins, **82** (2008) 337. (in Japanese).

T.Onai and M.Hirai
Effect of Alcohols on Glycosphingolipid Aggregates
Trans. Mater. Res. Soc. Jpn., **33** (2008) 567.

K.Hisamatsu, N.Tsuda, S.Goda and T.Hatakeyama
Characterization of the α -Helix Region in Domain 3 of the Hemolytic Lectin CEL-III: Implications for Self-Oligomerization and Hemolytic Processes
J. Biochem., **143** (2008) 79.

S.Taniguchi, H.Takeshita, M.Arimoto, M.Miya, K.Takenaka and T.Shiomi
Phase Behavior in Liquid Crystallization for Diblock Copolymers Consisting of Rubbery Amorphous and Side-Chain Liquid Crystalline Components
Polymer, **49** (2008) 4889.

Y.-J.Gao, H.Takeshita, Y.Takata, K.Takenaka and T.Shiomi
Structure Formation and Crystallization Behavior of Ethylene-Isoprene Block Copolymers and their Blends with Corresponding Homopolymers
e-J. Soft Mater., (2008)

11A

Md.A.Mannan, M.Nagano, N.Hirao and Y.Baba
Hexagonal BCN Films Prepared by RF Plasma-enhanced CVD
Chem. Lett., **37** (2008) 96.

H.Abe, K.Amemiya, D.Matsumura, J.Miyawaki, E.O.Sako, T.Ohtsuki, E.Sakai and T.Ohta
Anomalous Magnetic Phases in Fe/Cu(001) Ultrathin Films Induced by CO Adsorption
Phys. Rev. B, **77** (2008) 054409.

K.Nakatsuiji, Y.Yoshimoto, D.Sekiba, S.Doi, T.Iimori, K.Yagyu, Y.Takagi, SOhno, H.Miyaoka, M.Yamada, F.Komori, K.Amemiya, D.Matsumura and T.Ohta
Electron Correlation Effects in Co Nano-Islands on a Nitrogen Covered Cu(001) Surface
Phys. Rev. B, **77** (2008) 235436.

Y.Nakayama, Y.Kudo, H.Oki, K.Yamamoto, Y.Kitajima and K.Noda
Complex Structures and Electrochemical Properties of Magnesium Electrolytes
J. Electrochim. Soc., **155** (2008) A754.

M.Ukibe, M.Ohkubo and Y.Kitajima
Cryogenic Detectors (Josephson Junction)
J. Jpn. Soc. Synchrotron. Rad. Res., **21** (2008) 279. (in Japanese).

H.Abe, K.Amemiya, J.Miyawaki, E.O.Sako, M.Sakamaki, D.Matsumura, T.Ohtsuki, E.Sakai and T.Ohta
CO Adsorption Effects on the Magnetism and Surface Structure of Fe/Cu(001)
e-J. Surf. Scie. Nanotech., **6** (2008) 233.

Md.A.Mannan, H.Noguchi, T.Kida, M.Nagano, N.Hirao and Y.Baba
Chemical Bonding States and Local Structures of the Oriented Hexagonal BCN Films Synthesized by Microwave Plasma CVD
Mater. Sci. Semiconductor Processing, **11** (2008) 100.

11B

Y.F.Li, C.Chen, B.Li, W.Li, L.Qu, Z.Dong, M.Nomura, Y.Gao, J.Zhao, W.Hu, Y.Zhao and Z.Cha
Mercury in Human Hair and Blood Samples from People Living in Wanshan Mercury Mine Area, Guizhou, China: An XAS Study
J. Inorg. Biochem., **102** (2008) 500.

F.Zhu, M.Takaoka, K.Shiota, K.Oshita and Y.Kitajima
Chloride Chemical Form in Various Types of Fly Ash
Environ. Sci. Tech., **42** (2008) 3932.

F.Zhu, M.Takaoka, K.Oshita, Y.Kitajima, Y.Inada, S.Morisawa and H.Tsuno
The Study of Chloride Behavior in Raw Fly Ash by X-Ray Absorption Near Edge Structure and X-Ray Diffraction
The 14th Seminar of JSPS-MOE Core University Program on Urban Environment, (2008)

K.Ikeue, S.Mizukami, A.Kuroda, S.Hamada, A.Hongo and M.Machida
Noble-Metal-Containing Nanoporous Carbon Synthesized within the Interlayer Space of Montmorillonite and its Catalytic Property
Appl. Catal. A: General, **351** (2008) 68.

D.J.Zhang, F.Yoshioka, K.Ikeue and M.Machida
Synthesis and Oxygen Release/Storage Properties of Ce-Substituted La-Oxsulfates, $(La_{1-x}Ce_x)_2O_2SO_4$
Chem. Mater., **20** (2008) 6697.

I.Yonenaga
Growth and Fundamental Properties of SiGe Bulk Crystals
Materia Japan, **47** (2008) 3. (in Japanese).

R.Onoki, G.Yoshikawa, Y.Tsuruma, S.Ikeda, K.Saiki and K.Ueno
Nanotransfer of the Polythiophene Molecular Alignment onto the Step-Bunched Vicinal Si(111) Substrate
Langmuir, **24** (2008) 11605.

11C

S.Toyoshima, T.Sakurai, T.Taima, K.Saito, H.Kato and K.Akimoto
Ultraviolet Photoemission Study of Interaction between Bathocuproine and Calcium
Jpn. J. Appl. Phys., **47** (2008) 1397.

11D

Y.Nakayama, S.Fujiki, Y.Hirado, H.Shiozawa, H.Ishii, T.Miyahara, Y.Maniwa, T.Kodama, Y.Achiba, H.Kataura, Y.Kubozono, M.Nakatake and T.saitoh
Photoemission Study of Electronic Structures of Fullerene and Metallofullerene Peapods
Phys. Stat. Sol. (b), **245** (2008) 2025.

12C

S.Kimura, S.Emura, Y.Yamauchi, Y.K.Zhou, S.Hasegawa, and H.Asahi
Low Temperature Molecular Beam Epitaxy Growth of Cubic GaCrN
J. Cryst. Growth, **310** (2008) 40.

T.Sasaki, M.Tada, C.Zhong, T.Kume and Y.Iwasawa
Immobilized Metal Ion-Containing Ionic Liquids: Preparation, Structure and Catalytic Performances in Kharasch Addition Reaction and Suzuki Cross-Coupling Reactions
J. Mol. Catal. A: Chemical, **279** (2008) 200.

X.Yang, K.Takada, M.Itose, Y.Ebina, R.Ma, K.Fukuda and T.Sasaki
Highly Swollen Layered Nickel Oxide with a Trilayer Hydrate Structure
Chem. Mater., **20** (2008) 479.

S.Mitsunobu, Y.Takahashi and Y.Sakai
Abiotic Reduction of Antimony(V) by Green Rust $(Fe_4(II)Fe_2(III)(OH)_{12}SO_4 \cdot 3H_2O)$
Chemosphere, **70** (2008) 942.

T.Harada and Y.Takahashi
Origin of the Difference in the Distribution Behavior of Tellurium and Selenium in a Soil-Water System
Geochimica et Cosmochimica Acta, **72** (2008) 1281.

K.Tanaka, Y.Takahashi and H.Shimizu
Local Structure of Y and Ho in Calcite and its Relevance to Y Fractionation from Ho in Partitioning between Calcite and Aqueous Solution
Chemical Geology, **248** (2008) 104.

Y.S.Shimamoto and Y.Takahashi
Superiority of K-Edge XANES over LIII-Edge XANES in the Speciation of Iodine in Natural Soils
Analytical Sci., **24** (2008) 405.

W.Wang, F.Takano, H.Ofuchi and H.Akinaga
Local Structural, Magnetic and Magneto-Optical Properties of Mn-Doped SiC Films Prepared on a 3C-SiC(001) Wafer
New J. Phys., **10** (2008) 055006.

D.Moromachi, A.Kuno and M.Matsuo
Influence of Reclamation on the Concentrations and Chemical States of Elements in Tideland Sediment
J. Radioanalytical and Nuclear Chemistry, **278** (2008) 495.

W.Li, G.Pan, M.Zhang, D.Zhao, Y.Yang, H.Chen and G.He
EXAFS Studies on Adsorption Irreversibility of Zn(II) on TiO₂: Temperature Dependence
J. Colloid and Interface Science, **319** (2008) 385.

L.Yuliati, T.Hamajima, T.Hattori and H.Yoshida
Nonoxidative Coupling of Methane over Supported Ceria Photocatalysts
J. Phys. Chem. C, **112** (2008) 7223.

H.Tanaka, M.Kuriyama, Y.Ishida, S.Ito, T.Kubota, T.Miyao, S.Naito, K.Tomishige and K.Kunimori
Preferential CO Oxidation in Hydrogen-Rich Stream over Pt Catalysts Modified with Alkali Metals Part II. Catalyst Characterization and Role of Alkali Metals
Appl. Catal. A: General, **343** (2008) 125.

A.Ohta, H.Kagi, H.Tsuno, M.Nomomura and I.Kawabe
Influence of Multi-Electron Excitation on EXAFS Spectroscopy of Trivalent Rare-Earth Ions and Elucidation of Change in Hydration Number through the Series
Am. Mineral., **93** (2008) 1384.

N.Sakai, K.Fukuda, Y.Omomo, Y.Ebina, K.Takada and T.Sasaki
Hetero-Nanostructured Films of Titanium and Manganese Oxide Nanosheets: Photoinduced Charge Transfer and Electrochemical Properties
J. Phys. Chem. C, **112** (2008) 5197.

M.Uo, K.Asakura, K.Tamura, Y.Totsuka, S.Abe, T.Akasaka and F.Watari
XAES Analysis of Ti and Ni Dissolution from Pure Ti, Ni-Ti Alloy, and SUS304 in Soft Tissues
Chem. Lett., **37** (2008) 958.

M.Tada, K.Motokura and Y.Iwasawa
Conceptual Integration of Homogeneous and Heterogeneous Catalysts
Topic Catal., **48** (2008) 32.

M.Okube, Y.Furukawa, A.Yoshiasa, T.Hashimoto, M.Sugahara and A.Nakatsuka
Oxidation State and Effective Pair Potential of Fe⁴⁺ Ions in Perovskite-Type SrFeO₃ Annealed under High Oxygen Pressure
J. Phys.: Conf. Ser., **121** (2008) 092004.

T.Hashimoto, A.Yoshiasa, M.Sugahara, H.Arima, H.Fukui, K.Murai and M.Okube
Temperature Dependence of EXAFS Debye-Waller Factor in the High Pressure Perovskite SrGeO₃
J. Phys.: Conf. Ser., **121** (2008) 102002.

K.Nitta, Y.Omori, D.Kikuchi, T.Miyanaga, K.Takegahara, H.Sugawara and H.Sato
Local Static Distortion of Rare Earth ions in ROs₄Sb₁₂ (R=La,Ce,Pr,Nd,Sm) by Extended X-Ray Absorption Fine Structure
J. Phys. Soc. Jpn., **77** (2008) 063601.

T.Kashiwabara, S.Mistunobu, A.Das, T.Itai, M.Tanimizu and Y.Takahashi
Oxidation States of Antimony and Arsenic in Marine Ferromanganese Oxides Related to Their Fractionation in Oxic Marine Environment
Chem. Lett., **37** (2008) 756.

13A

K.Takemura and A.Dewaele
Isothermal Equation of State for Gold with a He-Pressure Medium
Phys. Rev. B, **78** (2008) 104119.

S.Ono
Experimental Constraints on the Temperature Profile in the Lower Mantle
Phys. Earth and Planetary Interiors, **170** (2008) 267.

S.Ono, A.R.Oganov, J.P.Brodholt, L.Vocadlo, I.G.Wood, A.Lyakhov, C.W.Glass, A.S.Cote and G.D.Price
High-Pressure Phase Transformations of FeS: Novel Phases at Conditions of Planetary Cores
Earth and Planetary Sci. Lett., **272** (2008) 481.

A.R.Oganov, S.Ono, Y.Ma, C.W.Glass and A.Garcia
Novel Phases of MgCO₃, CaCO₃ and CO₂ at Megabar Pressures: Their Structure, Chemistry and Role in the Earth's Mantle
Earth and Planetary Sci. Lett., **273** (2008) 38.

S.Nakano, A.Nakayama and T.Kikegawa
High-Pressure X-Ray Diffraction Study on Lithium Borohydride using a Synchrotron Radiation
J. Phys.: Conf. Ser., **121** (2008) 022021.

T.Okada, T.Yagi and K.Niwa
Plastic Deformations and Lattice Preferred Orientations in Post-Perovskite-Type MgGeO₃ using a Diamond Anvil Cell
Review of High Pressure Science Technology, **18** (2008) 244. (in Japanese).

13B

C.J.Zhang, H.Oyanagi and C.H.Lee
Single Crystal Growth and Characterization of La_{2-x}Sr_xCuO₄ with Mn Doping
Physica C, **468** (2008) 898.

Z.Sun, W.Yan, G.Zhang, H.Oyanagi, Z.Wu, Q.Liu, W.Wu, T.Shi, Z.Pan, P.Xu and S.Wei
Evidence of Substitutional Co Ion Clusters in Zn_{1-x}Co_xO Dilute Magnetic Semiconductors
Phys. Rev. B, **77** (2008) 245208.

H.Oyanagi, A.Tsukada and M.Naito
Local Structure Study of T' Cuprate Superconductors
J. Phys. Chem. Solids, **69** (2008) 2307.

H.M.Tsai, S.C.Ray, C.W.Pao, J.W.Chiou, C.L.Huang, C.H.Du, W.F.Pong, M.-H.Tsai, A.Fukano, H.Oyanagi
Enhancement of Si-O Hybridization in Low-Temperature Grown Ultraviolet Photo-Oxidized SiO₂ Film Observed by X-Ray Absorption and Photoemission Spectroscopy
J. Appl. Phys., **103** (2008) 013704.

M.Ukibe, M.Ohkubo and Y.Kitajima
Cryogenic Detectors (Josephson Junction)
J. Jpn. Soc. Synchrotron. Rad. Res., **21** (2008) 279. (in Japanese).

C.J.Zhang, H.Oyanagi, Z.H.Sun, Y.Kamihara and H.Hosono
Low-Temperature Lattice Structure Anomaly in the LaFeAsO_{0.93}F_{0.07} Superconductor by X-Ray Absorption Spectroscopy: Evidence for a Strong Electron-Phonon Interaction
Phys. Rev. B, **78** (2008) 214513.

13C

T.Kakiuchi, E.Kobayashi, K.K.Okudaira, N.Fujita, M.Tanaka and K.Mase
Construction and Evaluation of a Miniature Electron Ion Coincidence Analyzer Mounted on a Conflat Flange with an Outer Diameter of 114 mm
Anal. Sci., **24** (2008) 87.

14A

S.Kishimoto, K.Shibuya, F.Nishikido, M.Koshimizu, R.Haruki and Y.Yoda
Subnanosecond Time-Resolved X-Ray Measurements using an Organic-Inorganic Perovskite Scintillator
Appl. Phys. Lett., **93** (2008) 261901.

14B

K.Hirano and H.Ohashi
Introduction to the Beamline Optics and Engineering of Synchrotron Radiation
JSSRR, (2008) (in Japanese).

14C1

K.Mori, N.Sekine, H.Sato, M.Monma and H.Oka
Depiction of a Knee Joint of Pig by Means of Synchrotron X-Ray Diffraction Enhanced Imaging with a Laue-Type Analyzer
J. Jpn. Health Sci., **10** (2008) 263.

A.Yoneyama, J.Wu, K.Hyodo and T.Takeda
Quantitative Comparison of Imaging Performance of X-Ray Interferometric Imaging and Diffraction Enhanced Imaging
Med. Phys., **35** (2008) 4724.

Y.Namito, S.Ban and H.Hirayama
Azimuthal-Angle Dependence of L X-Ray Intensity Following Photoionization of Pb, Au, and W Atoms by a Linearly Polarized Photon
Phys. Rev. A, **78** (2008) 033419.

A.Momose, W.Yashiro, Y.Takeda and N.Maikusa
Sensitivity of X-Ray Phase Tomography Based on Talbot and Talbot-Lau Interferometer
SPIE Proc., **7078** (2008)

A.Momose, W.Yashiro and Y.Takeda
Sensitivity of X-Ray Phase Imaging Based on Talbot Interferometry
Jpn. J. Appl. Phys., **47** (2008) 8077.

S.Ichihara, M.Ando, A.Maksimenko, T.Yuasa, H.Sugiyama, E.Hashimoto, K.Yamasaki, K.Mori, Y.Arai and T.Endo
3D Reconstruction and Virtual Ductoscopy of High-Grade Ductal Carcinoma In Situ of the Breast with Casting Type Calcifications Using Refraction-Based X-Ray CT
Virchows Archiv, **451** (2008) 41.

T.Kunisada, D.Shimao, H.Sugiyama, K.Takeda, T.Ozaki and M.Ando
X-Ray Dark Field Imaging of Human Articular Cartilage: Possible Clinical Application to Orthopedic Surgery
Euro. J. Radiology, **68S** (2008) S18.

D.Shimao, T.Kunisada, H.Sugiyama and M.Ando
Shift-and-add Tomosynthesis of a Finger Joint by X-Ray Dark-Field Imaging: Difference Due to Tomographic Angle
Euro. J. Radiology, **68S** (2008) S27.

14C2

T.Kubo, E.Ohtani, T.Kato, T.Kondo, T.Hosoya, A.Sano and T.Kikegawa
Kinetics of the Post-Garnet Transformation: Implications for Density and Rheology of Subducting Slabs
Phys. Earth and Planetary Interiors, **170** (2008) 181.

M.Nishi, T.Kato, T.Kubo and T.Kikegawa
Survival of Pyropic Garnet in Subducting Plates
Phys. Earth and Planetary Interiors, (2008) in press.

T.Sato and N.Funamori
Sixfold-Coordinated Amorphous Polymorph of SiO₂ under High Pressure
Phys. Rev. Lett., **101** (2008) 255502.

15A

M.Kinoshita, S.Kato and H.Takahashi
Effect of Bilayer Morphology on the Subgel Phase Formation
Chem. Phys. Lipids, **151** (2008) 30.

H.Onouchi, K.Okoshi, T.Kajitani, S.Sakurai, K.Nagai, J.Kumaki, K.Onitsuka and E.Yashima
Two- and Three-Dimensional Smectic Ordering of Single-Handed Helical Polymers
J. Am. Chem. Soc., **130** (2008) 229.

Y.Tanaka, Y.Takahashi, T.Morita and K.Nishikawa
Sample Holder for Small-Angle X-Ray Scattering Measurements and Density Fluctuation of Supercritical Xenon
Jpn. J. Appl. Phys., **47** (2008) 334.

M.Tashiro, M.Kojima, H.Kihara, K.Kasai, T.Kamiyoshihara, K.Ueda and S.Shimotakahara
Characterization of Fibrillation Process of α -Synuclein at the Initial Stage
Biochem. Biophys. Res. Commun., **369** (2008) 910.

Y.Sugimoto, Y.Takezawa, T.Matsuo, Y.Ueno, S.Minakata, H.Tanaka and K.Wakabayashi
Structural Changes of the Regulatory Proteins Bound to the Thin Filaments in Skeletal Muscle Cotraction by X-Ray Fiber Diffraction
Biochem. Biophys. Res. Commun., **369** (2008) 100.

M.Harada, K.Kuramitsu, Y.Kimura and K.Saijo
In Situ Observation of Formation of Silver Particles in Water-in-scCO₂ Emulsions
Colloids and Surfaces A, **327** (2008) 21.

D.A.Prokhorov, A.A.Timchenko, V.N.Uversky, V.S.Khrustoforov, H.Kihara, K.Kimura and V.P.Kutyshenko
Dynamics of Oligomer Formation by Denatured Carbonic Anhydrase II
Biochimica et Biophysica Acta, **1784** (2008) 834.

S.Kutsumizu, H.Mori, M.Fukatami, S.Naito, K.Sakajiri and K.Saito
Cubic Phase Formation and Interplay between Alkyl Chains and Hydrogen Bonds in 1,2-Bis(4'-*n*-alkoxybenzoyl)hydrazines (BABH-*n*)
Chem. Materials, **20** (2008) 3675.

M.Shioya, T.Kawazoe, R.Okazaki, T.Suei, S.Sakurai, K.Yamamoto, T.Kikutani
Small-Angle X-Ray Scattering Study on the Tensile Fracture Process of Poly(Ethylene Terephthalate) Fiber
Macromolecules, **41** (2008) 4758.

Y.Shinohara, T.Takamizawa, S.Ueno, K.Sato, I.Kobayashi, M.Nakajima and Y.Amemiya
Microbeam X-Ray Diffraction Analysis of Interfacial Heterogeneous Nucleation of *n*-Hexadecane inside Oil-in-Water Emulsion Droplets
Cryst. Growth Design, **8** (2008) 3123.

Y.Tajima, W.Takahashi and A.Ito
Small-Angle X-Ray Diffraction Studies of a Molluscan Smooth Muscle in the Catch State
J. Muscle Res. Cell Motility, **29** (2008) 57.

H.Yokoyama, L.Li, C.Dutriez, Y.Iwakura, K.Sugiyama, H.Masunaga, S.Sasaki and H.Okuda
Horizontally and Vertically Aligned Polymeric Nanosheets: CO₂-Induced Morphological Changes of Block Copolymer Thin Films
Macromolecules, **41** (2008) 8626.

M.I.Kim, T.Wakada, S.Akasaka, S.Nishitsuji, K.Saijo, H.Hasegawa, K.Ito and M.Takenaka
Stability of *Fddd* Phase in Diblock Copolymer Melt
Macromolecules, **41** (2008) 7667.

A.Noro, A.Tamura, S.Wakao, A.Takano and Y.Matsushita
Stoichiometric Effects on Nanostructures of Block- and Graft-Type Supramacromolecules via Acid-Base Complexation
Macromolecules, **41** (2008) 9277.

K.Mita, H.Tanaka, K.Saijo, M.Takenaka and T.Hashimoto
Macroscopically Oriented Lamellar Microdomains Created by "Cold Zone-Heating" Method Involving OOT
Polymer, **49** (2008) 5146.

S.Taniguchi, H.Takeshita, M.Arimoto, M.Miya, K.Takenaka and T.Shiomi
Phase Behavior in Liquid Crystallization for Diblock Copolymers Consisting of Rubbery Amorphous and Side-Chain Liquid Crystalline Components
Polymer, **49** (2008) 4889.

Y.Fujimori, Y.Gotoh, A.Kawaguchi, Y.Ohkoshi and M.Nagura
Conductivity and Structure of Polyamide/Silver Iodide Nanocomposite
J. Appl. Polym. Sci., **108** (2008) 2814.

Y.Iwasawa, W.Voegeli, T.Shirasawa, K.Sekiguchi, T.Nojima, R.Yoshida, T.Takahashi, M.Matsumoto, T.Okano, K.Akimoto, H.Kawata and H.Sugiyama
Study of Buried Si(111)-5×2-Au by Surface X-Ray Diffraction
Appl. Surf. Sci., **254** (2008) 7803.

W.Voegeli, T.Takayama, K.Kubo, M.Abe, Y.Iwasawa, T.Shirasawa, T.Takahashi, K.Akimoto, H.Sugiyama, H.Tajiri and O.Sakata
Surface X-Ray Diffraction Study of the Metal-Insulator Transition on the Si(553)-Au Surface
e-J. Surf. Sci. Nanotech., **6** (2008) 281.

15C

R.Negishi, T.Fukamachi, M.Yoshizawa, K.Hirano, K.Hirano and T.Kawamura
In-Phase and Anti-Phase Interference Fringes in Rocking Curves of Resonant X-Ray Dynamical Diffraction
J. Phys. Soc. Jpn., **77** (2008) 023709.

T.Shimura, T.Inoue, Y.Okamoto, T.Hosoi, A.Ogura, O.Sakata, S.Kimura, H.Edo, S.Iida and H.Watanabe
Application of Synchrotron X-Ray Diffraction Methods to Gate Stacks of Advanced MOS Devices
ECS Transactions, **13** (2008) 75.

K.Hirano and H.Ohashi
Introduction to the Beamline Optics and Engineering of Synchrotron Radiation
JSSRR, (2008) (*in Japanese*).

old 16A2

Y.Wakabayashi, Y.Kubo, D.Bizen, H.Nakao, Y.Murakami, M.Nakamura, Y.Ogimoto, K.Miyano and H.Sawa
Orbital Ordering Structures in (Nd,Pr)_{0.5}Sr_{0.5}MnO₃ Manganite Thin Films on Perovskite (011) Substrates
J. Phys. Soc. Jpn., **77** (2008) 014712.

Y.Yamasaki, H.Sagayama, N.Abe, T.Arima, K.Sasai, M.Matsuura, K.Hirota, D.Okuyama, Y.Noda and Y.Tokura
Cycloidal Spin Order in the *a*-Axis Polarized Ferroelectric Phase of Orthorhombic Perovskite Manganite
Phys. Rev. Lett., **101** (2008) 097204.

T.Arima
Magneto-Electric Optics in Non-Centrosymmetric Ferromagnets
J. Phys.: Condens. Matter, **20** (2008) 434211.

16B

M.Watanabe, T.Hatano, K.Saito, W.Hu, T.Ejima, T.Tsuru, M.Takahashi, H.Kimura, T.Hirono, Z.Wang, M.Cui, M.Yamamoto and M.Yanagihara
Multilayer Polarization Elements and their Applications to Polarimetric Studies in Vacuum Ultraviolet and Soft X-Ray Regions
Nucl. Sci. Tech., **19** (2008) 193.

15B2**17A**

M.Hiraki, S.Watanabe, N.pHonda, Y.Yamada, N.Matsugaki, N.Igarashi, Y.Gaponov and S.Wakatsuki
High-Throughput Operation of Sample-Exchange Robots with Double Tongs at the Photon Factory Beamlines
J. Synchrotron Rad., **15** (2008) 300.

Y.Yamada, N.pHonda, N.Matsugaki, N.Igarashi, M.Hiraki and S.Wakatsuki
Implementation of Remote Monitoring and Diffraction Evaluation Systems at the Photon Factory Macromolecular Crystallography Beamlines
J. Synchrotron Rad., **15** (2008) 296.

T.Miyoshi, N.Igarashi, N.Matsugaki, Y.Yamada, K.Hirano, K.Hyodo, K.Tanioka, N.Egami, M.Namba, M.Kubota, T.Kawai and S.Wakatsuki
Development of an X-Ray HARP-FEA Detector System for High-Throughput Protein Crystallography
J. Synchrotron Rad., **15** (2008) 281.

N.Igarashi, K.Ikuta, T.Miyoshi, N.Matsugaki, Y.Yamada, M.S.Yousef and S.Wakatsuki
X-Ray Beam Stabilization at BL-17A, the Protein Microcrystallography Beamline of the Photon Factory
J. Synchrotron Rad., **15** (2008) 292.

R.Suzuki, J.Wada, T.Katayama, S.Fushinobu, T.Wakagi, H.Shoun, H.Sugimoto, A.Tanaka, H.Kumagai, H.Ashida, M.Kitaoka and K.Yamamoto
Structural and Thermodynamic Analyses of Solute-Binding Protein from *Bifidobacterium longum* Specific for Core 1 Disaccharide and Lacto-*N*-Biose I
J. Biol. Chem., **238** (2008) 13165.

T.Kinoshita, N.Miyano, R.Nakai, K.Yokota, H.Ishiguro and T.Tada
Protein Purification and Preliminary Crystallographic Analysis of Human Lyn Tyrosine Kinase
Protein Expression and Purification, **58** (2008) 318.

Y.Toh, T.Numata, K.Watanabe, D.Takeshita, O.Nureki and K. Tomita
Molecular Basis for Maintenance of Fidelity during the CCA-Adding Reaction by a CCA-Adding Enzyme
EMBO J., **27** (2008) 1932.

Y.Kurakata, A.Uechi, H.Yoshida, S.Kamitori, Y.Sakano, A.Nishikawa and T.Tonozuka
Structural Insights into the Substrate Specificity and Function of *Escherichia coli* K12 YgiK, a Glucosidase Belonging to the Glycoside Hydrolase Family 63
J. Mol. Biol., **381** (2008) 116.

D.J.Kim, S.J.Lee, H.S.Kim, K.H.Kim, H.H.Lee, H.J.Yoon and S.W.Suh
Structural Basis of Octanoic Acid Recognition by Lipoate-Protein Ligase B
Proteins, **70** (2008) 1620.

H.J.Yoon, S.J.Lee, B.Mikami, H.J.Park, J.K.Yoo and S.W.Suh
Crystal Structure of UDP-*N*-acetylglucosamine Enolpyruvyl Transferase from *Haemophilus influenzae* in Complex with UDP-*N*-acetylglucosamine and Fosfomycin Proteins, **71** (2008) 1032.

T.Kawashima, H.Aramaki, T.Oyamada, K.Makino, M.Yamada, H.Okamura, K.Yokoyama and M.Suzuki
Transcription Regulation by Feast/Famine Regulatory Proteins, FFRPs, in Archaea and Eubacteria
Biol. Pharm. Bull., **31** (2008) 173.

M.Watanabe, Y.Mishima, I.Yamashita, S.-Y.Park, J.R.Tame and J.G.Heddle
Intersubunit Linker Length as a Modifier of Protein Stability: Crystal Structures and Thermostability of Mutant TRAP Protein Sci., **17**(3) (2008) 518.

Y.Peng, C.Zhong, W.Huang and J.Ding
Structural Studies of *Saccharomyces cerevisiae* Mitochondrial NADP-Dependent Isocitrate Dehydrogenase in Different Enzymatic States Reveal Substantial Conformational Changes during the Catalytic Reaction
Protein Sci., **17** (2008) 1542.

J.Ma, P.Zhang, Z.Zhang, M.Zha, H.Xu, G.Zhao and J.Ding
Molecular Basis of the Substrate Specificity and the Catalytic Mechanism of Citramalate Synthase from *Leptospira interrogans*
Biochem. J., **415** (2008) 45.

B.Sun, J.Hong, P.Zhang, X.Dong, X.Shen, D.Lin and J.Ding
Molecular Basis of the Interaction of *Saccharomyces cerevisiae* Eaf3 Chromo Domain with Methylated H3K36
J. Biol. Chem., **283** (2008) 36504.

X.Yu, T.Hu, J.Du, J.Ding, X.Yang, J.Zhang, B.Yang, X.Shen, Z.Zhang, W.Zhong, N.Wen, H.Jiang, P.Zhu and Z.Chen
Crystal Structure of HAB18G/CD147: Implications for Immunoglobulin Superfamily Homophilic Adhesion
J. Biol. Chem., **283** (2008) 18056.

D.Wu, L.Zhang, Y.Kong, J.Du, S.Chen, J.Chen, J.Ding, H.Jiang and X.Shen
Enzymatic Characterization and Crystal Structure Analysis of the D-Alanine-D-Alanine Ligase from *Helicobacter pylori*
Proteins, **72** (2008) 1148.

J.Du, J.Wu, H.Zhang, Y.Zhang, B.Qiu, F.Wu, Y.Chen, J.Li, F.Nan, J.Ding and J.Li
Isoquinoline-1,3,4-Trione Derivatives Inactivate Caspase-3 by Generation of Reactive Oxygen Species
J. Biol. Chem., **283** (2008) 30205.

H.Suzuki, M.Kawasaki, T.Inuzuka, M.Okumura, T.Kakiuchi, H.Shibata, S.Wakatsuki and M.Maki
Structural Basis for Ca²⁺-Dependent Formation of ALG-2/Alix Peptide Complex: Ca²⁺/EF3-Driven Arginine Switch Mechanism
Structure, **16** (2008) 1562.

K.Takeda, H.Yoshida, G.Takada, K.Izumori and S.Kamitori
Overexpression, Purification, Crystallization and Preliminary X-Ray Crystal Analysis of *Bacillus pallidus* D-Arabinose Isomerase
Acta Cryst. F, **64** (2008) 945.

X.Li, Z.Lou, X.Li, W.Zhou, M.Ma, Y.Cao, Y.Geng, M.Bartlam, X.C.Zhang and Z.Rao
Structure of Human Cytosolic X-Prolyl Aminopeptidase A Double Mn(II)-Dependent Dimeric Enzyme with a Novel Three-Domain Subunit
J. Biol. Chem., **283** (2008)

T.Umeda, J.Katsuki, Y.Usami, K.Inoue, H.Noguchi, Z.Fujimoto, Y.Ashikawa, H.Yamane and H.Nojiri
Crystallization and Preliminary X-Ray Diffraction Studies of a Novel Ferredoxin Involved in the Dioxygenation of Carbazole by *Novosphingobium* sp. KA1
Acta Cryst. F, **64** (2008) 632.

M.Senda, S.Kimura, M.Fukuda, T.Ishida and T.Senda
Molecular Mechanism of the Redox-Dependent Interaction between NADH-dependent Ferredoxin Reductase and Rieske-Type Ferredoxin
Kessyogakkaishi, **50** (2008) 341. (in Japanese).

M.Nagae, K.Nishikawa, N.Yasui, M.Yamasaki, T.Nogi and J.Takagi
Structure of the F-Spondin Reeler Domain Reveals a Unique β -Sandwich Fold with a Deformable Disulfide-Bonded Loop
Acta Cryst. D, **64** (2008) 1138.

M.Nakakido, Y.Tanaka, M.Mitsuhori, M.Kudou, D.Ejima, T.Arakawa and K.Tsumoto
Structure-Based Analysis Reveals Hydration Changes Induced by Arginine Hydrochloride
Biophys. Chem., **137** (2008) 105.

D.Sato, T.Karaki, A.Shimizu, K.Kamei, S.Harada and T.Nozaki
Crystallization and Preliminary X-Ray Analysis of L-methionine γ -Lyase 1 from *Entamoeba histolytica*
Acta Cryst. F, **64** (2008) 697.

D.K.Inaoka, K.Sakamoto, H.Shimizu, T.Shiba, G.Kurisu, T.Nara, T.Aoki, K.Kita, and S.Harada
Structures of *Trypanosoma cruzi* Dihydroorotate Dehydrogenase Complexed with Substrates and Products: Atomic Resolution Insights into Mechanisms of Dihydroorotate Oxidation and Fumarate Reduction
Biochemistry, **47** (2008) 10881.

H.Shimizu, C.Nihei, D.K.Inaoka, T.Mogi, K.Kita and S.Harada
Screening of Detergents for Solubilization, Purification and Crystallization of Membrane Proteins: a Case Study on Succinate:Ubiquinone Oxidoreductase from *Escherichia coli*
Acta Cryst. F, **64** (2008) 858.

S.Shimizu, E.C.M.Juan, Y.Miyashita, Y.Sato, K.Suzuki, M.Yogiashi, M.Tsunoda, A.-C.Dock-Bregeon, D.Moras, T.Sekiguchi and A.Takenaka Crystallization and Preliminary Crystallographic Studies of Putative Threonyl-tRNA Synthetases from *Aeropyrum Pernix* and *Sulfolobus tokodaii* Acta Cryst. F, **64** (2008) 903.

M.Akaboshi, H.Hashimoto, H.Ishida, S.Saijo, N.Koizumi, M.Sato and T.Shimizu The Crystal Structure of Plant-Specific Calcium-Binding Protein AtCBL2 in Complex with the Regulatory Domain of AtCIPK14 J. Mol. Biol., **377** (2008) 246.

18A

K.Kura, K.Takano, Y.Takeichi, A.Harasawa, T.Okuda, I.Matsuda and A.Kakizaki Weak Electron Correlation Effects Observed in Angle-Resolved Photoemission Spectra of MnSi(100) J. Phys. Soc. Jpn., **77** (2008) 024709.

Y.Ishida, M.Kobayashi, J.-I.Hwang, Y.Takeda, S.Fujimori, T.Okane, K.Terai, Y.Saitoh, Y.Muramatsu, A.Fujimori, A.Tanaka, H.Saito and K.Ando X-Ray Magnetic Circular Dichroism and Photoemission Study of the Diluted Ferromagnetic Semiconductor Zn_{1-x}Cr_xTe Appl. Phys. Express, **1** (2008) 041301.

S.Hatta, T.Aruga, C.Kato, S.Takahashi, H.Okuyama, A.Harasawa, T.Okuda and T.Kinoshita Band Structure of Tl/Ge(111)-(3 × 1): Angle-Resolved Photoemission and First-Principles Prediction of Giant Rashba Effect Phys. Rev. B, **77** (2008) 245436.

K.Nakatsuji, T.Iimori, Y.Takagi, D.Sekiba, S.Doi, M.Yamada, T.Okuda, A.Harasawa, T.Kinoshita and F.Komori Surface Restructuring Process on a Ag/Ge(001) Surface Studied by Photoelectron Spectroscopy Appl. Surf. Sci., **254** (2008) 7638.

K.Yaji, Y.Nara, K.Nakatsuji, T.Iimori, K.Yagyu, R.Nakayama, N.Nemoto and F.Komori Phase Transition and Electronic State Modification by Lattice Strain in 0.5-Monolayer Sn/Cu(001) Phys. Rev. B, **78** (2008) 035427.

Y.Osafune, G.S.Song, J.I.Hwang, Y.Ishida, M.Kobayashi, K.Ebata, Y.Ooki, A.Fujimori, J.Okabayashi, K.Kanai, K.Kubo and M.Oshima Depth Profil Photoemission Study of Thermally Diffused Mn/GaAs(001) Interfaces J. Appl. Phys., **103** (2008) 103717.

old 18B

M.Mizuno, A.Koide, A.Yamamura, H.Akeboshi, H.Yoshida, S.Kamitori, Y.Sakano, A.Nishikawa and T.Tonozuka Crystal Structure of *Aspergillus niger* Isopullulanase, a Member of Glycoside Hydrolase Family 49 J. Mol. Biol., **376** (2008) 210.

M.Senda, S.Muto, M.Horikoshi and T.Senda Effect of Leucine-to-Methionine Substitutions on the Diffraction Quality of Histone Chaperone SET/TAF-Iβ/INHAT Crystals Acta Cryst. F, **64** (2008) 960.

A.Nishizawa, DMuramatsu, S.Kimura, S.Kishigami, M.Senda, T.Senda and M.Fukuda Inversion of NADH/NADPH-Specificity of BphA4 from *Pseudomonas* Sp. Strain KKS102 by Substitutions of Glu¹⁷⁵ and Gln¹⁷⁷ Flavins and Flavoproteins 2008, (2008) 273.

M.Senda, S.Kimura, M.Fukuda, T.Ishida and T.Senda Molecular Mechanism of the Redox-Dependent Interaction between NADH-Dependent Ferredoxin Reductase and Rieske-Type [2Fe-2S] Ferredoxin Flavins and Flavoproteins 2008, (2008) 113.

M.Senda, S.Kimura, M.Fukuda, T.Ishida and T.Senda Molecular Mechanism of the Redox-Dependent Interaction between NADH-Dependent Ferredoxin Reductase and Rieske-Type [2Fe-2S] Ferredoxin Kagakutoseibutsu, **46** (2008) 689. (in Japanese).

K.Ito, M.Nakanishi, W.-C.Lee, Y.Zhi, H.Sasaki, S.Zenno, K.Saigo, Y.Kitade and M.Tanokura Expansion of Substrate Specificity and Catalytic Mechanism of Azoreductase by X-Ray Crystallography and Site-Directed Mutagenesis J. Biol. Chem., **283** (2008) 13889.

18C

A.Onodera, A.Ohtani, S.Tsuduki and O.Shimomura Synchrotron X-Ray Diffraction Study of ZnTe at High Pressure Solid State Commun., **145** (2008) 374.

H.Hisako, K.Konagai, T.Kawamura, Y.Yamamoto and T.Yagi Phase Changes of Solid Methane under High Pressure up to 86 GPa at Room Temperature Chem. Phys. Lett., **454** (2008) 212.

S.Nakano, A.Nakayama and T.Kikegawa High-Pressure X-Ray Diffraction Study on Lithium Borohydride using a Synchrotron Radiation J. Phys.: Conf. Ser., **121** (2008) 022021.

N.Funamori and T.Sato A Cubic Boron Nitride Gasket for Diamond-Anvil Experiments Rev. Sci. Instrum., **79** (2008) 053903.

T.Sato and N.Funamori High-Pressure *in situ* Density Measurement of Low-Z Noncrystalline Materials with a Diamond-Anvil Cell by an X-Ray Absorption Method Rev. Sci. Instrum., **79** (2008) 073906.

T.Sato and N.Funamori Sixfold-Coordinated Amorphous Polymorph of SiO₂ under High Pressure Phys. Rev. Lett., **101** (2008) 255502.

19A

K.Kura, K.Takano, Y.Takeichi, A.Harasawa, T.Okuda, I.Matsuda and A.Kakizaki Weak Electron Correlation Effects Observed in Angle-Resolved Photoemission Spectra of MnSi(100) J. Phys. Soc. Jpn., **77** (2008) 024709.

T.Okuda, Y.Takeichi, Y.Maeda, A.Harasawa, I.Matsuda, T.Kinoshita and A.Kakizaki A New Spin-Polarized Photoemission Spectrometer with Very High Efficiency and Energy Resolution Rev. Sci. Instrum., **79** (2008) 123117.

19B

T.Higuchi, W.Sakamoto, N.Itoh, T.Shimura, T.Hattori, and T.Yogo Valence State of Mn-Doped BiFeO₃-BaTiO₃ Ceramics Probed by Soft X-Ray Absorption Spectroscopy Appl. Phys. Express, **1** (2008) 11502.

E.Kabasawa, J.Nakamura, N.Yamada, K.Kuroki, H.Yamazaki, M.Watanabe, J.D.Denlinger, S.Shin and R.C.C.Perera Hole Distribution in (Sr,Ca,Y,La)₁₄Cu₂₄O₄₁ Compounds Studied by X-Ray Absorption and Emission Spectroscopy J. Phys. Soc. Jpn., **77** (2008) 034704.

K.Kaneda, K.Kitsuka, Y.Nowatari, M.Ikematsu, M.Iseki, T.Higuchi, T.Hattori and T.Tsukamoto A Tantalum Oxide Electrode for Electrochemical Ozone Generation ECS Trans., **6** (2008) 33.

T.Higuchi, T.Yamasaki, Y.Suzuki, T.Hattori and T.Tsukamoto Ferroelectric and Structural Properties of Ba_{2-x}Sr_xNaNb₅O₁₅ Thin Films Prepared on La_{0.05}Sr_{0.95}TiO₃ Substrates J. Appl. Phys., **103** (2008) 154.

T.Yamasaki, T.Higuchi, T.Hattori and T.Tsukamoto Effects of Processing Temperature on the Structure and Ferroelectric Properties of Ba_{2-x}Sr_xNaNb₅O₁₅ Thin Films Prepared by Pulsed Laser Deposition J. Alloys and Compounds, **449** (2008) 40.

H.Ogawa, T.Higuchi, A.Nakamura, S.Tokita, D.Miyazaki, T.Hattori and T.Tsukamoto Growth of TiO₂ Thin Film by Reactive RF Magnetron Sputtering using Oxygen Radical J. Alloys and Compounds, **449** (2008) 375.

T.Higuchi, T.Hattori, W.Sakamoto, N.Itoh, T.Shimura, T.Yogo, P.Yao, Y.Liu, P.Glans, C.Chang, Z.Wu and J.Guo Effect of Mn Substitution for Multiferroic BiFeO₃ Probed by High-Resolution Soft-X-Ray Spectroscopy Jpn. J. Appl. Phys., **47** (2008) 7570.

T.Higuchi, Y.Liu, P.Yao, P.Glans, J.Guo, C.Chang, Z.Wu, W.Sakamoto, N.Itoh, T.Shimura, T.Yogo and T.Hattori Electronic Structure of Multiferroic BiFeO₃ by Resonant Soft X-Ray Emission Spectroscopy Phys. Rev. B, **78** (2008) 85106.

T.Higuchi, Y.Nagao, J.Liu, F.Iguchi, N.Sata, T.Hattori and H.Yugami
Electronic Structure of $\text{La}_{1-x}\text{Sr}_x\text{ScO}_3$ Probed by Sofy-X-Ray Absorptin Spectroscopy
J. Appl. Phys., **104** (2008) 76110.

H.Hosono, T.Higuchi and T.Hattori
Electrical and Structural Properties of $\text{BaCe}_{0.90}\text{Y}_{0.10}\text{O}_{3-\delta}$ Thin Film on MgO (100) Substrate
J. Appl. Phys., **104** (2008) 113704.

20A

Y.Hikosaka, T.Aoto, K.Ito, Y.Terasaka, R.Hirayama and E.Miyoshi
Threshold Photoelectron Spectroscopy on Inner-Valence Ionic States of NO
J. Chem. Phys., **128** (2008) 044320.

L.Ishikawa, T.Odagiri, K.Yachi, T.Nakazato, M.Kurokawa, M.Kitajima and N.Kouchi
Doubly Excited States of Ammonia Produced by Photon and Electron Interactions
J. Phys. B, **41** (2008) 195204.

20B

C.S.Schnohr, L.L.Araujo, P.Kluth, D.J.Sprouter, G.J.Foran and M.C.Ridgway
Atomic-Scale Structure of $\text{Ga}_{1-x}\text{In}_x\text{P}$ Alloys Measured with Extended X-Ray Absorption Fine Structure Spectroscopy
Phys. Rev. B, **78** (2008) 115201.

E.D.Burton, R.T.Bush, L.A.Sullivan, S.G.Johnston and R.K.Hocking
Mobility of Arsenic and Selected Metals during Re-Flooding of Iron- and Organic-Rich Acid-Sulfate Soil
Chemical Geology, **253** (2008) 64.

K.L.Munro, A.Mariana, A.I.Klavins, A.J.Foster, B.Lai, S.Vogt, Z.Cai, H.H.Harris and C.T.Dillon
Microprobe XRF Mapping and XAS Investigations of the Intracellular Metabolism of Arsenic for Understanding Arsenic-Induced Toxicity
Chem. Res. Toxicol., **21** (2008) 1760.

J.L.Glover, C.T.Chantler, Z.Barnea, N.A.Rae, C.Q.Tran, D.C.Creagh, D.Paterson and B.B.Dhal
Measurements of the X-Ray Mass-Attenuation Coefficient and Imaginary Component of the Form Factor of Copper
Phys. Rev. A, **78** (2008) 052902.

P.W.Zhu, J.Tung, G.Edward and L.Nichols
Effects of Different Colorants on Morphological Development of Sheared Isotactic Polypropylene: a Study Using Synchrotron Wide-Angle X-Ray Scattering
J. Appl. Phys., **103** (2008) 124906.

P.Zhu and G.Edward
Oriental Distribution of Parent-Daughter Structure of Isotactic Polypropylene: a Study Using Simultaneous Synchrotron WAXS and SAXS
J. Mat. Sci., **43** (2008) 6459.

L.L.Araujo, R.Giulian, B.Johannessen, D.J.Llewellyn, P.Kluth, G.d.M.Azevedo, D.J.Cookson and M.C.Ridgway
Structural Characterization of Ge Nanocrystals in Silica Amorphised by Ion Irradiation
Nucl. Instrum. Meth. Phys. Res. B, **266** (2008) 3153.

L.L.Araujo, G.J.Foran and M.C.Ridgway
Multiple Scattering Effects on the EXAFS of Ge Nanocrystals
J. Phys.: Condens. Matter, **20** (2008) 165210.

G.J.Thorogood, P.J.Saines, B.J.Kennedy, R.L.Withers and M.M.Elcombe
Diffuse Scattering in the Cesium Pyrochlore $\text{CsTi}_{0.5}\text{W}_{1.5}\text{O}_6$
Material Res. Bull., **43** (2008) 787.

B.J.Kennedy and P.J.Saines
Phase Segregation in Mixed Nb-Sb Double Perovskites $\text{Ba}_2\text{LnNb}_{1-x}\text{Sb}_x\text{O}_6$
J. Solid State Chem., **181** (2008) 298.

G.J.Thorogood, B.J.Kennedy, V.Luca, M.Blackforda, S.K.v.d.Geest, K.S.Finnie, J.V.Hanna and K.J.Pike
Structure and Dehydration of the Pyrochlore System $\text{NaW}_{2-y}\text{Mo}_y\text{O}_{6+\delta}\text{nH}_{2-z}\text{O}$ between 10 and 675K
J. Phys. Chem. Solids, **69** (2008) 1632.

B.J.Kennedy and Q.Zhou
Sequential Jahn-Teller and Tilting Transitions in the Mixed Ru Mn Perovskite $\text{SrRu}_{0.5}\text{Mn}_{0.5}\text{O}_3$
Solid State Commun., **147** (2008) 208.

B.J.Kennedy and Q.Zhou
The Role of Orbital Ordering in the Tetragonal to Cubic Phase Transition in CuCr_2O_4
J. Solid State Chem., **181** (2008) 2227.

B.J.Kennedy, P.J.Saines, Q.Zhou, Z.Zhang, M.Matsuda and M.Miyake
Structural and Electronic Phase Transitions in $\text{Sr}_{1-x}\text{Ce}_x\text{MnO}_3$ Perovskites
J. Solid State Chem., **181** (2008) 2639.

Q.Zhou, P.J.Saines, N.Sharma, J.Ting, B.J.Kennedy, Z.Zhang, R.L.Withers and K.S.Wallwork
Crystal Structures and Phase Transitions in A-Site Deficient Perovskites $\text{Ln}_{1/3}\text{TaO}_3$
Chem. Mater., **20** (2008) 6666.

P.J.Saines, B.J.Kennedy, B.Johannessen and S.Poulton
Phase and Valence Transitions in $\text{Ba}_2\text{LnSn}_x\text{Nb}_{1-x}\text{O}_{6-d}$
J. Solid State Chem., **181** (2008) 2994.

P.J.Saines, B.J.Kennedy, M.M.Elcombe, H.H.Harris, L-Y.Jang and Z.Zhang
Phase and Valence Transitions in $\text{Ba}_2\text{LnSn}_x\text{Sb}_{1-x}\text{O}_{6-d}$ ($\text{Ln} = \text{Pr}$ and Tb)
J. Solid State Chem., **181** (2008) 2941.

L.L.Araujo, R.Giulian, D.J.Sprouter, C.S.Schnohr, D.J.Cookson, G.J.Foran and M.C.Ridgway
Size-Dependent Characterization of Embedded Ge Nanocrystals: Structural and Thermal Properties
Phys. Rev. B, **78** (2008) 094112.

A.Levina and P.A.Lay
Chemical Properties and Toxicity of Chromium(III) Nutritional Supplements
Chem. Res. Toxicol., **21** (2008) 563.

A.Nguyen, I.Mulyani, A.Levina and P.A.Lay
Reactivity of Chromium(III) Nutritional Supplements in Biological Media: an X-Ray Absorption Spectroscopic Study
Inorg. Chem., **47** (2008) 4299.

I.M.Low, N.Duraman and U.Mahmood
Mapping the Structure, Composition and Mechanical Properties of Human Teeth
Mater. Sci. Eng. C, **28** (2008) 243.

J.Ma, G.P.Simon and G.H.Edward
The Effect of Shear Deformation on Nylon-6 and Two Types of Nylon-6/Clay Nanocomposite Macromolecules, **41** (2008) 409.

27A

Md.A.Mannan, M.Nagano, N.Hirao and Y.Baba
Hexagonal BCN Films Prepared by RF Plasma-enhanced CVD
Chem. Lett., **37** (2008) 96.

N.Hirao, Y.Baba, T.Sekiguchi, I.Shimoyama and M.Honda
Chemical-State-Selective Mapping at Nanometer Scale Using Synchrotron Radiation and Photoelectron Emission Microscopy
Bunseki Kagaku, **57** (2008) 41. (in Japanese).

Y.Baba, T.Sekiguchi, I.Shimoyama, M.Honda, N.Hirao, J.Deng and A.Narita
Chemical-State-Selective Observations on Si-SiO_x at Nanometer Scale by Photoelectron Emission Microscopy Combined with Synchrotron Radiation
J. Phys. : Conf. Ser., **100** (2008) 012015.

H.Nagata, N.Hirao, T.Onoki, Y.Baba, Y.Yamasaki and A.Nakahira
Synthesis and Characterization of Bulky Mesoporous Silica Pd-MCM-41
J. Ceram. Soc. Jpn., **116** (2008) 216.

M.Nagoshi, T.Kawano, N.Makiishi, Y.Baba and K.Kobayashi
High-Energy Total Reflection X-Ray Photoelectron Spectroscopy for Polished Iron Surface
Surf. Interface Anal., **40** (2008) 738.

T.Matsui, R.Sato and H.Tsuda
Valence State and Spatial Distribution of Fe Ions in Ferromagnetic $\text{Ba}(\text{Fe}_{1-x}\text{Zr}_x)\text{O}_{3-\delta}$ Single-Crystal Films on SrTiO_3 Substrates
J. Appl. Phys., **103** (2008) 07E304.

H.Ikeura-Sekiguchi and T.Sekiguchi
Unoccupied Electronic states in Polythiophene as
Probed by XAS and RAS
Surf. Interface Anal., **40** (2008) 673.

H.Ohno, A.Iwase, D.Matsumura, Y.Nishihata,
J.Mizuki, N.Ishikawa, Y.Baba, N.Hirao,
T.Sonoda and M.Kinoshita
Study on Effects of Swift Heavy Ion Irradiation
in Cerium Dioxide using Synchrotron Radiation
X-Ray Spectroscopy
Nucl. Instr. Meth. Phys Res. B, **266** (2008) 3013.

M.Honda, Y.Baba, N.Hirao and T.Sekiguchi
Metal-Molecular Interface of Sulfur-Containing
Amino Acid and Thiophene on Gold Surface
J. Phys: Conf. Series, **100** (2008) 052071.

Y.Matsumoto, S.Sakai, H.Naramoto, N.Hirao,
Y.Baba, T.Shimada, I.Sugai, K.Takanashi and
Y.Maeda
The Electronic Structures of
Fullerene/Transition-Metal Hybrid Material
Mater. Res. Soc. Conf. Proc., **1081E** (2008)
1081-P07-0.

Md.A.Mannan, H.Noguchi, T.Kida, M.Nagano,
N.Hirao and Y.Baba
Chemical Bonding States and Local Structures
of the Oriented Hexagonal BCN Films
Synthesized by Microwave Plasma CVD
Mater. Sci. Semiconductor Processing, **11** (2008)
100.

27B

M.Maeda, N.Usami and K.Kobayashi
Low-Dose Hypersensitivity in Nucleus-
Irradiated V79 Cells Studied with Synchrotron
X-Ray Microbeam
J. Radiat. Res., **49** (2008) 171.

T.Nishi, M.Nakada, A.Itoh, C.Suzuki, M.Hirata
and M.Akabori
EXAFS and XANES Studies of Americium
Dioxide with Fluorite Structure
J. Nuclear Materials, **374** (2008) 339.

M.Tomita and K.Kobayashi
X-Ray Microbeam Irradiation System at CRIEPI
Houshasen Seibusu Kenkyu, **43** (2008) 191. (*in
Japanese*).

M.Maeda, K.Kobayashi and N.Usami
Radiobiological Research using Synchrotron
Radiation X-Ray Microbeam Irradiation System
Houshasen Seibusu Kenkyu, **43** (2008) 134. (*in
Japanese*).

P.Avramov, S.Sakai, H.Naramoto, K.Narumi,
Y.Matsumoto and Y.Maeda
Theoretical DFT Study of Atomic Structure and
Spin States of the $\text{Co}_x(\text{C}_{60})_n$ ($x=3-8$, $n=1,2$)
Complex Nanoclusters
J. Phys. Chem. C, **112** (2008) 13932.

T.Ohnuki, T.Ozaki, T.Yoshida, N.Kozai,
T.Nankawa, F.Sakamoto, T.Sakai, Y.Suzuki and
A.J.Francis
Concurrent Transformation of Ce(III) and
Formation of Biogenic Manganese Oxides
Chemical Geology, **253** (2008) 23.

Y.Okamoto, T.Yaita, H.Shiwaku and S.Suzuki
XAFS Study on Chlorination of Y_2O_3 in $\text{LiCl}-\text{KCl}-\text{ZrCl}_4$ Melt
Zeitschrift fur Naturforschung, **63a** (2008) 735.

N.Usami, Y.Furusawa, K.Kobayashi,
S.Lacombe, A.Reynaud-Angelin, E.Sage,
T.-D.Wu, A.Croisy, J-L.Guerquin-Kern and C.L
Sech
Mammalian Cells Loaded with Platinum-
Containing Molecules are Sensitized to Fast
Atomic Ions
Int. J. Radiat. Res., **84** (2008) 603.

28A

M.Ikeda, T.Yoshida, A.Fujimori, M.Kubota,
K.Ono, Y.Kaga, T.Sasagawa and H.Takagi
Effects of Annealing on the Electronic Structure
of the Electron-Doped High- T_c Superconductor
 $\text{Nd}_{1.85}\text{Ce}_{0.15}\text{CuO}_4$
J. Phys.: Conf. Ser., **108** (2008) 012016.

K.Terashima, T.Sato, K.Nakayama, T.Arakane,
T.Takahashi, M.Kofu and K.Hirota
Effect of Zn Impurities on the Electronic
Structure of $\text{La}_{1.85}\text{Sr}_{0.15}\text{CuO}_4$ Studied by
High-Resolution Angle-Resolved Photoemission
Spectroscopy
Phys. Rev. B, **77** (2008) 092501.

M.Hashimoto, T.Yoshida, H.Yagi, M.Takizawa,
A.Fujimori, M.Kubota, K.Ono, K.Tanaka,
D.H.Lu, Z.-X.Shen, S.Ono and Y.Ando
Doping Evolution of the Electronic Structure in
the Single-Layer Cuprate $\text{Bi}_2\text{Sr}_{2-x}\text{La}_x\text{CuO}_{6+\delta}$:
Comparison with other Single-Layer Cuprates
Phys. Rev. B, **77** (2008) 094516.

T.Arakane, T.Sato, T.Takahashi, H.Ding, T.Fujii
and A.Asamitsu
Universal Character of CoO_2 Plane Studied by
High-Resolution Angle-Resolved Photoemission
Physica B, **403** (2008) 1086.

S.Ideta, K.Takashima, M.Hashimoto, T.Yoshida,
A.Fujimori, M.Kubota, K.Ono, K.Kojima and
S.Uchida
Anisotropy of Gap and Kink Energies in
the Trilayer High- T_c Cuprate Superconductor
 $\text{Bi}_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_{10+\delta}$
J. Phys.: Conf. Ser., **108** (2008) 012015.

N.Kamakura, M.Kubota and K.Ono
Band Dispersion and Bonding Character of
Potassium on Graphite
Surf. Sci., **602** (2008) 95.

K.Ozawa, Y.Oba, K.Edamoto and M.Sogo
Angle-Resolved Photoemission Spectroscopy
Study of Metal/Oxide Interface –Valence Band
Structure of Cu Adsorbed Polar ZnO Surfaces–
Hyomen Kagaku, **29** (2008) 407. (*in Japanese*).

Y.Nakayama, S.Fujiki, Y.Hirado, H.Shiozawa,
H.Ishii, T.Miyahara, Y.Maniwa, T.Kodama,
Y.Achiba, H.Kataura, Y.Kubozeno, M.Nakatake
and T.saitoh
Photoemission Study of Electronic Structures of
Fullerene and Metallofullerene Peapods
Phys. Stat. Sol. (b), **245** (2008) 2025.

NE1A1

N.Tsuji, M.Ito, H.Sakurai, K.Suzuki, K.Tanaka,
K.Kitani, H.Adachi, H.Kawata, A.Koizumi,
H.Nakao, Y.Murakami, Y.Taguchi and Y.Tokura
Magnetic Compton Profile Study of Orbital
Ordering State of 3d Electrons in YTlO_3
J. Phys. Soc. Jpn., **77** (2008) 023705.

NE1B

M.Tanaka, T.Asahi, A.Agui, M.Mizumaki,
J.Sayama and T.Osaka
Existence and Origin of Compensation Layer
Thickness in $\text{Tb}_{20}\text{Co}_{80}/\text{Pd}$ Multilayered Films
J. Phys. D, **41** (2008) 055003.

NE3A

H.Kobayashi, J.Umemura, X.-W.Zhang and
Y.Uwatoko
Magnetic Properties of Fe_2P Single-Crystal
under Multi-Extreme Conditions
J. Phys.: Conf. Ser., **121** (2008) 032009.

NE5A

T.-T.-Lwin, T.Takeda, J.Wu, Q.Huo, T.Yuasa,
K.Hyodo and T.Akatsuka
Visualization of Age-Dependent Myocardial
Metabolic Impairment in Cardiomyopathic
Model Hamster Obtained by Fluorescent X-Ray
Computedtomography using I-127 BMIPP
J. Synchrotron Rad., **15** (2008) 528.

NE5C

K.Kusaba and T.Kikegawa
In situ X-Ray Observation of Phase Transitions in
 ZnF_2 under High Pressure and High Temperature
Solid State Commun., **145** (2008) 279.

K.Kusaba and T.Kikegawa
Phase Transitions of $\text{Zn}(\text{OH})_2$ under High
Pressure and High Temperature
Solid State Commun., **148** (2008) 382.

K.Kusaba and T.Kikegawa
Stable Phase with the $\alpha\text{-PbO}_2$ Type Structure
in MgF_2 under High Pressure and High
Temperature
Solid State Commun., **148** (2008) 440.

M.Imai and T.Kikegawa
In Situ Observation of the Formation of Si
Clathrate $\text{Ba}_8\text{Si}_{46}$ at High Pressures and High
Temperatures
Inorg. Chem., **47** (2008) 8881.

K.Arii, K.Igawa, H.Takahashi, M.Imai,
M.Akaishi and I.Shirotani
Pressure Studies in Filled Skutterudite
 $\text{La}_{0.8}\text{Rh}_4\text{P}_{12}$
J. Phys. Conf. Ser., **121** (2008) 052014.

A.Yamada and T.Inoue
Structural Change in Hydrous Mg-Silicate Melts
Under High Pressure and the Role of Water
The Review of High Pressure Science and
Technology, **18** (2008) 351. (*in Japanese*).

T.Higaki, M.Tomomasa, T.Hayakawa, A.Chiba
and K.Tsuji
Pressure Dependence of the Structure of Liquid
Copper Halides
J. Phys.: Condens. Matter, **20** (2008) 114106.

M.Tomomasa, T.Higaki, T.Hayakawa, A.Chiba and K.Tsuji
Pressure-Induced Structural Change in Liquid GeTe and Liquid GeSe
J. Phys. Conf. Ser., **121** (2008) 022007.

A.Chiba, M.Tomomasa, T.Higaki, T.Hayakawa and K.Tsuji
Pressure and Temperature Dependence of the Structure of Liquid Arsenic and Antimony
J. Phys. Conf. Ser., **98** (2008) 012011.

A.Chiba, M.Tomomasa, T.Higaki, T.Hayakawa, R.Takahashi and K.Tsuji
The Structure of Liquid Sb under Pressure
J. Phys. Conf. Ser., **121** (2008) 022019.

M.Matsushita, T.Inoue, I.Yoshimi, T.Kawamura, Y.Kono, T.Irifune, T.Kikegawa and F.Ono
Anomalous Variations in the Volume of Fe₆₉Ni₃₁ Invar Alloys under High Pressure and Temperature
Phys. Rev. B, **77** (2008) 064429.

NW2A

T.Matsushita, Y.Niwa, Y.Inada, M.Nomura, M.Ishii, K.Sakurai and E.Arakawa
High-Speed X-Ray Reflectometry in Multiwavelength-Dispersive Mode
Appl. Phys. Lett., **92** (2008) 024103.

T.Haneda, M.Kawano, T.Kawamichi and M.Fujita
Direct Observation of the Labile Imine Formation through Single-Crystal-to-Single-Crystal Reactions in the Pores of a Porous Coordination Network
J. Am. Chem. Soc., **130** (2008) 1578.

K.Nakabayashi, Y.Ozaki, M.Kawano and M.Fujita
A Self-Assembled Spin Cage
Angew. Chem. Int. Ed., **47** (2008) 2046.

S.Shishido and T.Ozeki
The pH Dependent Nuclearity Variation of {Mo_{154-x}}_x-type Polyoxomolybdates and Tectonic Effect on their Aggregations
J. Am. Chem. Soc., **130** (2008) 10588.

T.Kawamichi, T.Kodama, M.Kawano and M.Fujita
Single-Crystalline Molecular Flasks: Chemical Transformation with Bulky Reagents in the Pores of Porous Coordination Networks
Angew. Chem. Int. Ed., **47** (2008) 8030.

Z.W.Ouyang, Y.H.Matsuda, H.Nojiri, Y.Inada, Y.Niwa and T.Arima
Insulator-Metal Phase Transition of Pr_{0.6}Ca_{0.4}MnO₃ Studied by X-Ray Absorption Spectroscopy in Pulsed Magnetic Fields
J. Phys.: Condens. Matter, **21** (2008) 016006.

K.Suzuki, J.Iida, S.Sato, M.Kawano and M.Fujita
Discrete and Well-Defined Hydrophobic Phases Confined in Self-Assembled Spherical Complexes
Angew. Chem. Int. Ed., **47** (2008) 5780.

K.Dohmae, Y.Nagai, T.Tanabe, A.Suzuki, Y.Inada and M.Nomura
Real-Time XAFS Analysis of Rh/Alumina Catalyst
Surf. Interface Anal., **40** (2008) 1751.

NW10A

M.Harada, M.Ueji and Y.Kimura
Synthesis of Colloidal Particles of Poly(2-Vinylpyridine)-Coated Palladium and Platinum in Organic Solutions under the High Temperatures and High Pressures
Colloids and Surfaces A: Physicochem. Eng. Aspects, **315** (2008) 304.

T.Kawai, W.J.Chun, K.Asakura, Y.Koike, M.Nomura, K.K.Bando, S.T.Oyama and H.Sumiya
Design of a High-Temperature and High Pressure Liquid Flow Cell for XAFS Measurements under Catalytic Reaction Conditions
Rev. Sci. Instrum., **79** (2008) 014101.

Y.Izumi, D.M.Obaid, K.Konishi, D.Masih, M.Takagaki, Y.Terada, H.Tanida and T.Uruga
State-Sensitive Monitoring of Gold Nanoparticle Sites on Titania and the Interaction of the Positive Au Site with O₂ by Au L₃-Selecting X-Ray Absorption Fine Structure
Inorg. Chimica Acta, **361** (2008) 1149.

Y.Izumi
Development of Structural Analysis for Nanoparticles
Polyfile, **45(528)** (2008) 46. (in Japanese).

M.Ueji, M.Harada and Y.Kimura
Synthesis of Pt/Ru Bimetallic Nanoparticles in High-Temperature and High-Pressure Fluids
J. Colloid and Interface Science, **322** (2008) 358.
C.S.Schnohr, P.Kluth, A.P.Byrne, G.J.Foran and M.C.Ridgway
Comparison of the Atomic Structure of InP Amorphised by Electronic or Nuclear Ion-Energy-Loss Processes
Phys. Rev. B, **77** (2008) 073204.

M.Harada and S.Takahashi
Synthesis of Ruthenium Particles by Photoreduction in Polymer Solutions
J. Colloid and Interface Science, **325** (2008) 1.

A.Yamaguchi, N.Hiyoshi, O.Sato, M.Osada and M.Shirai
EXAFS Study on Structural Change of Charcoal-Supported Ruthenium Catalysts during Lignin Gasification in Supercritical Water
Catal. Lett., **122** (2008) 188.

A.Yamaguchi, N.Hiyoshi, O.Sato, M.Osada and M.Shirai
Lignin Gasification over Supported Ruthenium Trivalent Salts in Supercritical Water
Energy Fuels, **22** (2008) 1485.

L.Yuliati, H.Itoh and H.Yoshida
Photocatalytic Conversion of Methane and Carbon Dioxide over Gallium Oxide
Chem. Phys. Lett., **452** (2008) 178.

M.Harada, K.Kuramitsu, Y.Kimura and K.Saijo
In Situ Observation of Formation of Silver Particles in Water-in-scCO₂ Emulsions
Colloids and Surfaces A, **327** (2008) 21.

S.Kodama, N.Ichikuni, K.K.Bando, T.Hara and S.Shimazu
Preparation of Supported NbC Catalysts from Peroxoniobic Acid and *in situ* XAFS Characterization
Appl. Catal. A, **343** (2008) 25.

H.Tanaka, M.Kuriyama, Y.Ishida, S.Ito, T.Kubota, T.Miyao, S.Naito, K.Tomishige and K.Kunimori
Preferential CO Oxidation in Hydrogen-Rich Stream over Pt Catalysts Modified with Alkali Metals Part II. Catalyst Characterization and Role of Alkali Metals
Appl. Catal. A: General, **343** (2008) 125.

C.S.Schnohr, L.L.Araujo, P.Kluth, D.J.Sprouster, G.J.Foran and M.C.Ridgway
Atomic-Scale Structure of Ga_{1-x}In_xP Alloys Measured with Extended X-Ray Absorption Fine Structure Spectroscopy
Phys. Rev. B, **78** (2008) 115201.

S.Sugiyama, Y.Hirata, K.Nakagawa, K.-I.Sotowa, K.Maehara, Y.Himeno and W.Ninomiya
Application of the Unique Redox Properties of Magnesium *ortho*-Vanadate Incorporated with Palladium in the Unsteady-State Operation of the Oxidative Dehydrogenation of Propane
J. Catal., **260** (2008) 157.

S.Takenaka, T.Arike, H.Matsune, E.Tanabe and M.Kishida
Synthesis of Carbon Nanotube-Supported Pt Nanoparticles Covered with Silica Layers
Carbon, **46** (2008) 365.

S.Takenaka, T.Arike, H.Matsune, E.Tanabe and M.Kishida
Preparation of Carbon Nanotube-Supported Metal Nanoparticles Coated with Silica Layers
J. Catal., **257** (2008) 345.

M.Tada, Y.Akatsuka, Y.Yang, T.Sasaki, M.Kinoshita and Y.Iwasawa
Photoinduced Reversible Structural Transformation and Selective Oxidation Catalysis of Unsaturated Ruthenium Complexes Supported on SiO₂
Angew. Chem. Int. Ed., **47** (2008) 9252.

M.Tada, K.Motokura and Y.Iwasawa
Conceptual Integration of Homogeneous and Heterogeneous Catalysts
Topic Catal., **48** (2008) 32.

J.J.Bravo-Suarez, K.K.Bando, T.Fujitani and S.T.Oyama
Mechanistic Study of Propane Selective Oxidation with H₂ and O₂ on Au/TS-1
J. Catal., **257** (2008) 32.

- J.J.Bravo-Suarez, K.K.Bando, J.Lu, T.Fujitani and S.T.Oyama
Propane Reacts with O₂ and H₂ on Gold Supported TS-1 to Form Oxygenates with High Selectivity
Chem. Commun., (2008) 3272.
- J.J.Bravo-Suarez, K.K.Bando, J.Lu, T.Fujitani, T.J.Fuhrer and S.T.Oyama
Oxidation of Propane to Propylene Oxide on Gold Catalysts
J. Catal., **255** (2008) 114.
- J.J.Bravo-Suarez, K.K.Bando, J.Lu, M.Haruta, T.Fujitani and S.T.Oyama
Transient Technique for Identification of True Reaction Intermediates: Hydroperoxide Species in Propylene Epoxidation on Gold/Titanosilicate Catalysts by X-Ray Absorption Fine Structure Spectroscopy
J. Phys. Chem. C, **112** (2008) 1115.
- K.Ikeue, S.Mizukami, A.Kuroda, S.Hamada, A.Hongo and M.Machida
Noble-Metal-Containing Nanoporous Carbon Synthesized within the Interlayer Space of Montmorillonite and its Catalytic Property
Appl. Catal. A: General, **351** (2008) 68.
- K.Ikeue, T.Tanaka, N.Miyoshi and M.Machida
Synthesis and Characterization of Lanthanide-Incorporated FSM-16 Type Mesoporous Silica Solid State Sci., **10** (2008) 1584.
- T.Ohkubo
Structure of Electrolytic Solution under Nano-Restricted Condition
Newsletter (The Division of Colloid and Surface Science, The Chemistry of Japan), **33** (2008) 2. (in Japanese).
- Y.Okuno, Y.Hattori, T.Ohba, K.Kaneko and H.Kanoh
Mesoporous Ni-Fe Alloys
Adsorption Sci. and Tech., **26** (2008) 581.
- G.Hamasaka, S.Kawamorita, A.Ochida, R.Akiyama, K.Hara, A.Fukuoka, K.Asakura, W.J.Chun, H.Ohmiya and M.Sawamura
Synthesis of Silica-Supported Compact Phosphines and Their Application to Rhodium-Catalyzed Hydrosilylation of Hindered Ketones with Triorganosilanes
Organometallics, **27** (2008) 6495.
- NW12A**
- M.Nagae, N.Nishi, S.Nakamura-Tsuruta, J.Hirabayashi, S.Wakatsuki and R.Kato
Structural Analysis of the Human Galectin-9 N-Terminal Carbohydrate Recognition Domain Reveals Unexpected Properties that Differ from the Mouse Orthologue
J. Mol. Biol., **375** (2008) 119.
- Y.J.An, B.-E.Ahn, J.-H.Roe and S.-S.Cha
Crystallization and Preliminary X-Ray Crystallographic Analyses of Nur, a Nickel-Responsive Transcription Regulator from *Streptomyces coelicolor*
Acta Cryst. F, **64** (2008) 130.
- A.Yamamura, T.Ichimura, F.Mimoto, J.Ohtsuka, K.Miyazono, M.Okai, M.Kamo, W.C.Lee, K.Nagata and M.Tanokura
A Unique Catalytic Triad Revealed by the Crystal Structure of APE0912, a Short-Chain Dehydrogenase/Reductase Family Protein from *Aeropyrum pernix* K1
Proteins, **70** (2008) 1640.
- T.Yanagisawa, R.Ishii, R.Fukunaga, T.Kobayashi, K.Sakamoto, and S.Yokoyama
Crystallographic Studies on Multiple Conformational States of Active-Site Loops in Pyrrollysyl-tRNA Synthetase
J. Mol. Biol., **378** (2008) 634.
- M.Hiraki, S.Watanabe, N.pHonda, Y.Yamada, N.Matsugaki, N.Igarashi, Y.Gaponov and S.Wakatsuki
High-Throughput Operation of Sample-Exchange Robots with Double Tongs at the Photon Factory Beamlines
J. Synchrotron Rad., **15** (2008) 300.
- Y.Yamada, N.pHonda, N.Matsugaki, N.Igarashi, M.Hiraki and S.Wakatsuki
Implementation of Remote Monitoring and Diffraction Evaluation Systems at the Photon Factory Macromolecular Crystallography Beamlines
J. Synchrotron Rad., **15** (2008) 296.
- T.Miyoshi, N.Igarashi, N.Matsugaki, Y.Yamada, K.Hirano, K.Hyodo, K.Tanioka, N.Egami, M.Namba, M.Kubota, T.Kawai and S.Wakatsuki
Development of an X-Ray HARP-FEA Detector System for High-Throughput Protein Crystallography
J. Synchrotron Rad., **15** (2008) 281.
- R.Suzuki, J.Wada, T.Katayama, S.Fushinobu, T.Wakagi, H.Shoun, H.Sugimoto, A.Tanaka, H.Kumagai, H.Ashida, M.Kitaoka and K.Yamamoto
Structural and Thermodynamic Analyses of Solute-Binding Protein from *Bifidobacterium longum* Specific for Core 1 Disaccharide and Lacto-N-Biose I
J. Biol. Chem., **238** (2008) 13165.
- A.Ohtaki, H.Kida, Y.Miyata, N.Ide, A.Yonezawa, T.Arakawa, R.Iizuka, K.Noguchi, A.Kita, M.Odaka, K.Miki and M.Yohda
Structure and Molecular Dynamics Simulation of Archaeal Prefoldin: The Molecular Mechanism for Binding and Recognition of Nonnative Substrate Proteins
J. Mol. Biol., **376** (2008) 1130.
- K.Kajitani, M.Fujihashi, Y.Kobayashi, S.Shimizu, Y.Tsujimoto and K.Miki
Crystal Structure of Human Cyclophilin D in Complex with Its Inhibitor, Cyclosporin A at 0.96-Å Resolution
Proteins: Struct., Funct., Bioinfo., **70** (2008) 1635.
- R.Nitta, Y.Okada and N.Hirokawa
Structural Model for Strain-Dependent Microtubule Activation of Mg-ADP Release from Kinesin
Nature Structural Molecular Biology, **15** (2008) 1067.
- K.Suzuki, S.Ito, A.Shimizu-Ibuka and H.Sakai
Crystal Structure of Pyruvate Kinase from *Geobacillus stearothermophilus*
J. Biochem., **144** (2008) 305.
- D.J.Kim, S.J.Lee, H.S.Kim, K.H.Kim, H.H.Lee, H.J.Yoon and S.W.Suh
Structural Basis of Octanoic Acid Recognition by Lipoate-Protein Ligase B
Proteins, **70** (2008) 1620.
- H.J.Yoon, S.J.Lee, B.Mikami, H.J.Park, J.K.Yoo and S.W.Suh
Crystal Structure of UDP-N-acetylglucosamine Enolpyruvyl Transferase from *Haemophilus influenzae* in Complex with UDP-N-acetylglucosamine and Fosfomycin
Proteins, **71** (2008) 1032.
- M.Senda, S.Muto, M.Horikoshi and T.Senda
Effect of Leucine-to-Methionine Substitutions on the Diffraction Quality of Histone Chaperone SET/TAF- β /INHAT Crystals
Acta Cryst. F, **64** (2008) 960.
- A.Nishizawa, DMuramatsu, S.Kimura, S.Kishigami, M.Senda, T.Senda and M.Fukuda
Inversion of NADH/NADPH-Specificity of BphA4 from *Pseudomonas* Sp. Strain KKS102 by Substitutions of Glu¹⁷⁵ and Gln¹⁷⁷
Flavins and Flavoproteins 2008, (2008) 273.
- M.Senda, S.Kimura, M.Fukuda, T.Ishida and T.Senda
Molecular Mechanism of the Redox-Dependent Interaction between NADH-Dependent Ferredoxin Reductase and Rieske-Type [2Fe-2S] Ferredoxin
Flavins and Flavoproteins 2008, (2008) 113.
- R.Natsume, M.Eitoku, Y.Akai, N.Sano, M.Horikoshi and T.Senda
Molecular Mechanism of the Nucleosome Assembly/Disassembly Mediated by Histone Chaperone CIA; Implications for Epigenetic Information Inheritance
Seibutsubutsuri, **48** (2008) 108. (in Japanese).
- M.Senda, S.Kimura, M.Fukuda, T.Ishida and T.Senda
Molecular Mechanism of the Redox-Dependent Interaction between NADH-Dependent Ferredoxin Reductase and Rieske-Type [2Fe-2S] Ferredoxin
Kagakutoseibutsu, **46** (2008) 689. (in Japanese).
- Y.Sato, A.Yoshikawa, A.Yamagata, H.Mimura, M.Yamashita, K.Ookata, O.Nureki, K.Iwai, M.Komada and S.Fukai
Structural Basis for Specific Cleavage of Lys 63-Linked Polyubiquitin Chains
Nature, **448** (2008) 1072.
- T.Tsukazaki, H.Mori, S.Fukai, R.Ishitani, T.Mori, N.Dohmae, A.Perederina, Y.Sugita, D.G.Vassylyev, K.Ito and O.Nureki
Conformational Transition of Sec Machinery Inferred from Bacterial SecYE Structures
Nature, **455** (2008) 988.

- H.Unno, T.Yamashita, S.Ujita, N.Okumura, H.Otani, A.Okumura, K.Nagai and M.Kusunoki Structural Basis for Substrate Recognition and Hydrolysis by Mouse Carnosinase CN2 J. Biol. Chem., **283** (2008) 27289.
- J.Wada, Y.Honda, M.Nagae, R.Kato, S.Wakatsuki, T.Katayama, H.Taniguchi, H.Kumagai, M.Kitacka and K.Yamamoto 1,2- α -L-Fucosynthase: A Glycosynthase Derived from an Inverting α -Glycosidase with an Unusual Reaction Mechanism FEBS Lett., **582** (2008) 3739.
- A.Hishiki, T.Shimizu, T.Hanafusa, H.Ohmori, M.Sato and H.Hashimoto Initial Crystallographic Study of Human PCNA in Complex with a Peptide Containing the Noncanonical PIP-Box Sequence of Human DNA Polymerase Iota Act. Cryst. F, **64** (2008) 954.
- T.Hiraki, N.Shibayama, S.Akashi and S.-Y.Park. Crystal Structures of the Clock Protein EA4 from the Silkworm *Bombyx mori* J. Mol. Biol., **377** (2008) 630.
- M.Watanabe, Y.Mishima, I.Yamashita, S.-Y.Park, J.R.Tame and J.G.Heddle Intersubunit Linker Length as a Modifier of Protein Stability: Crystal Structures and Thermostability of Mutant TRAP Protein Sci., **17(3)** (2008) 518.
- Y.Itoh, S.Sekine, C.Kuroishi, T.Terada, M.Shiroyzu, S.Kuramitsu and S.Yokoyama Crystallographic and Mutational Studies of Seryl-tRNA Synthetase from the Archaeon *Pyrococcus horikoshii* RNA Biology, **5** (2008) 169.
- S.Goto-Ito, T.Ito, R.Ishii, Y.Muto, Y.Bessho and S.Yokoyama Crystal Structure of Archaeal tRNA(m¹G37)methyltransferase aTrm5 Proteins, **72** (2008) 1274.
- N.Tanaka, K.Aoki, S.Ishikura, M.Nagano, Y.Imamura, A.Hara and K.T.Nakamura Molecular Basis for Peroxisomal Localization of Tetrameric Carbonyl Reductase Structure, **16** (2008) 388.
- N.Tanaka, K.Aoki, S.Ishikura, M.Nagano, Y.Imamura, A.Hara and K.T.Nakamura Molecular Basis for Peroxisomal Localization of Tetrameric Carbonyl Reductase Structure, **16** (2008) 388.
- A.Hishiki, T.Shimizu, A.Serizawa, H.Ohmori, M.Sato and H.Hashimoto Crystallographic Study of G178S Mutant of Human Proliferating Cell Nuclear Antigen Acta Cryst. F, **64** (2008) 819.
- N.Numoto, T.Nakagawa, A.Kita, Y.Sasayama, Y.Fukumori and K.Miki Structure of the Partially Unliganded Met State of 400 kDa Hemoglobin: Insights into Ligand-Induced Structural Changes of Giant Hemoglobins Proteins, **73** (2008) 113.
- H.Kida, Y.Sugano, R.Iizuka, M.Fujihashi, M.Yohda and K.Miki Structural and Molecular Characterization of the Prefoldin beta Subunit from *Thermococcus* Strain KS-1 J. Mol. Biol., **383** (2008) 465.
- D.Sato, T.Karaki, A.Shimizu, K.Kamei, S.Harada and T.Nozaki Crystallization and Preliminary X-Ray Analysis of L-methionine γ -Lyase 1 from *Entamoeba histolytica* Acta Cryst. F, **64** (2008) 697.
- D.K.Inaoka, K.Sakamoto, H.Shimizu, T.Shiba, G.Kurisu, T.Nara, T.Aoki, K.Kita, and S.Harada Structures of *Trypanosoma cruzi* Dihydroorotate Dehydrogenase Complexed with Substrates and Products: Atomic Resolution Insights into Mechanisms of Dihydroorotate Oxidation and Fumarate Reduction Biochemistry, **47** (2008) 10881.
- H.Shimizu, C.Nihei, D.K.Inaoka, T.Mogi, K.Kita and S.Harada Screening of Detergents for Solubilization, Purification and Crystallization of Membrane Proteins: a Case Study on Succinate:Ubiquinone Oxidoreductase from *Escherichia coli* Acta Cryst. F, **64** (2008) 858.
- M.Kitamura, M.Okuyama, F.Tanzawa, H.Mori, Y.Kitago, N.Watanabe, A.Kimura, I.Tanaka and M.Yao Structural and Functional Analysis of a Glycoside Hydrolase Family 97 Enzyme from *Bacteroides thetaiotaomicron* J. Biol. Chem., **283** (2008) 36328.
- M.Akaboshi, H.Hashimoto, H.Ishida, S.Saijo, N.Koizumi, M.Sato and T.Shimizu The Crystal Structure of Plant-Specific Calcium-Binding Protein AtCBL2 in Complex with the Regulatory Domain of AtCIPK4 J. Mol. Biol., **377** (2008) 246.
- M.M.Islam, S.Sohya, K.Noguchi, M.Yohda and Y.Kuroda Crystal Structure of an Extensively Simplified Variant of Bovine Pancreatic Trypsin Inhibitor in which over One-Third of the Residues are Alanines Proc. Natl. Acad. Sci. USA, **105** (2008) 15334.
- N.Noda, Y.Fujioka, Y.Ohsumi and F.Inagaki Crystallization of the Atg12-Atg5 Conjugate bound to Atg16 by the Free-Interface Diffusion Method J. Synchrotron Rad., **15** (2008) 266.
- N.Noda, H.Kumeta, H.Nakatogawa, K.Satoo, W.Adachi, J.Ishii, Y.Fujioka, Y.Ohsumi and F.Inagaki Structural Basis of Target Recognition by Atg8/LC3 during Selective Autophagy Genes Cells, **13** (2008) 1211.
- T.Hashiguchi, M.Kajikawa, N.Maita, M.Takeda, K.Kuroki, K.Sasaki, D.Kohda, Y.Yanagi and K.Maenaka Homogeneous Sugar Modification Improves Crystallization of Measles Virus Hemagglutinin J. Virol. Methods, **149** (2008) 171.
- S.Tabata, K.Kuroki, N.Maita, J.Wang, I.Shiratori, H.Arase, D.Kohda and K.Maenaka Expression, Crystallization and Preliminary X-Ray Diffraction Analysis of Human Paired Ig-Like Type 2 Receptor α (PILR α) Acta Cryst. F, **64** (2008) 44.
- Y.Yamazaki, T.Tamada, N.Kasai, I.Urakawa, Y.Aono, H.Hasegawa, T.Fujita, R.Kuroki, T.Yamashita, S.Fukumoto and T.Shimada Anti-FGF23 Neutralizing Antibodies Show the Physiological Role and Structural Features of FGF23 J. Bone Miner. Res., **23** (2008) 1509.
- K.Miyazono, Y.Nishimura, Y.Sawano, T.Makino and M.Tanokura Crystal Structure of Hypothetical Protein PH0734.1 from Hyperthermophilic Archaea *Pyrococcus horikoshii* OT3 Proteins, **73** (2008) 1068.
- A.Yamamura, J.Ohtsuka, K.Kubota, Y.Agari, A.Ebihara, N.Nakagawa, K.Nagata and M.Tanokura Crystal Structure of TTHA1429, a Novel Metallo- β -Lactamase Superfamily Protein from *Thermus thermophilus* HB8 Proteins, **73** (2008) 1053.
- M.Okai, Y.Miyauchi, A.Ebihara, W.-C.Lee, K.Nagata and M.Tanokura Crystal Structure of the Proline Iminopeptidase-Related Protein TTHA1809 from *Thermus thermophilus* HB8 Proteins, **70** (2008) 1646.
- C.-I.Liu, G.Y.Liu, Y.Song, F.Yin, M.E.Hensler, W.-Y.Jeng, V.Nizet, A.H.-J.Wang and E.Oldfield A Cholesterol Biosynthesis Inhibitor Blocks *Staphylococcus aureus* Virulence Science, **319** (2008) 1391.
- W.-Y.Jeng, T.-P.Ko, C.-I.Liu, R.-T.Guo, C.-L.Liu, H.-L.Shr and A.H.-J.Wang Crystal Structure of IcaR, a Repressor of the TetR Family Implicated in Biofilm Formation in *Staphylococcus epidermidis* Nucleic Acids Res., **36** (2008) 1567.
- B.-C.Jeong, K.S.Yoo, K.W.Jung, J.S.Shin and H.K.Song Purification, Crystallization and Preliminary X-Ray Diffraction Analysis of a Cystathione β -Synthase Domain-Containing Protein, CDCP2, from *Arabidopsis Thaliana* Acta Cryst. F, **64** (2008) 825.
- K.Ida, M.Kurabayashi, M.Suguro, Y.Hiruma, T.Hikima, M.Yamamoto and H.Suzuki Structural Basis of Proteolytic Activation of L-Phenylalanine Oxidase from *Pseudomonas* sp. P-501 J. Biol. Chem., **283** (2008) 16584.
- M.Kuratani, Y.Bessho, M.Nishimoto, H.Grosjean and S.Yokoyama Crystal Structure and Mutational Study of a Unique SpoU Family Archaeal Methylase that Forms 2'-O-Methylcytidine at Position 56 of tRNA J. Mol. Biol., **375** (2008) 1064.

K.Tsumoto, A.Yokota, Y.Tanaka, M.Ui, T.Tsumuraya, I.Fujii, I.Kumagai, Y.Nagumo, H.Oguri, M.Inoue and M.Hirama
Critical Contribution of Aromatic Rings to Specific Recognition of Polyether Rings. The Case of Ciguatoxin CTX3C-ABC and its Specific Antibody IC49
J. Biol. Chem., **283** (2008) 12259.

NW14A

S.Adachi

Watching Photo-Induced Dynamics with Picosecond Time-Resolved X-Ray Diffraction
Acta Cryst. A, **64** (2008) C49.

T.Sato, S.Nozawa, K.Ichikyanagi, A.Tomita, H.Ichikawa, M.Chollet, H.Fujii, S.Adachi and S.Koshihara
100 ps Time-Resolved X-Ray Absorption Fine Structure of Fe^{II}(1,10-Phenanthroline)₃
Acta Cryst. A, **64** (2008) C204.

A.Tomita, T.Sato, K.Ichikyanagi, S.Nozawa, H.Ichikawa, M.Chollet, F.Kawai, S.-Y.Park, S.Koshihara and S.Adachi
Slow Ligand Migration Dynamics in Carbonmonoxy Myoglobin at Cryogenic Temperature
Acta Cryst. A, **64** (2008) C358.

Others

T.Tokushima, K.Sodeyama, Y.Harada, Y.Takata, M.Nagasono, Y.Kitajima, Y.Tamenori, H.Ohashi, S.Tsuneyuki, A.Hiraya and S.Shin
 σ -Bonding Contribution of a Strong π -Acceptor Molecule: Surface Chemical Bond of SO₂ on Ni(100)
Phys. Rev. B, **78** (2008) 085405.

Light Source Division

S.Sakanaka, T.Ago, A.Enomoto, S.Fukuda, K.Furukawa, T.Furuya, K.Haga, K.Harada, S.Hiramatsu, T.Honda, Y.Honda, K.Hosoyama, M.Izawa, E.Kako, T.Kasuga, H.Kawata, M.Kikuchi, H.Kobayakawa, Y.Kobayashi, T.Matsutomo, S.Michizono, T.Mitsuhashi, T.Miura, T.Miyajima, T.Muto, S.Nagahashi, T.Naito, T.Nogami, S.Noguchi, T.Obina, S.Ohsawa, T.Ozaki, H.Sasaki, S.Sasaki, K.Satoh, M.Satoh, M.Shimada, T.Shioya, T.Shishido, T.Suwada, T.Takahashi, Y.Tanimoto, M.Tawada, M.Tobiyama, K.Tsuchiya, T.Uchiyama, K.Umemori, S.Yamamoto, R.Hajima, H.Iijima, N.Kikuzawa, E.J.Minehara, R.Nagai, N.Nishimori, M.Sawamura, N.Nakamura, A.Ishii, I.Ito, T.Kawasaki, H.Kudoh, H.Sakai, T.Shibuya, K.Shinoe, T.Shiraga, H.Takaki, M.Katoh, M.Kuriki, D.Yoshitomi, Y.Kobayashi, K.Torizuka, H.Hanaki
Progress in R&D Efforts on the Energy Recovery Linac in Japan
Proc. 11th European Particle Accelerator Conference (EPAC'08), (2008) 205.

S.Sakanaka, T.Obina and T.Mitsuhashi
Measurement of Quadrupolar Tune Shifts Under Multibunch Operations of the Photon Factory Storage Ring
Proc. 11th European Particle Accelerator Conference (EPAC'08), (2008) 1269.

K.Umemori, T.Furuya, T.Takahashi, H.Sakai, K.Shinoe and M.Sawamura
Results of Vertical Tests for the KEK-ERL Single Cell Superconducting Cavities
Proc. 11th European Particle Accelerator Conference (EPAC'08), (2008)

H.Sakai, K.Shinoe, M.Sawamura, T.Furuya, T.Takahashi and K.Umemori
Cavity Diagnostics Using Rotating Mapping System for L-Band ERL Superconducting Cavity
Proc. 11th European Particle Accelerator Conference (EPAC'08), (2008)

R.Hajima, R.Nagai, H.Iijima, N.Nishimori, Y.Honda and T.Muto
R&D Status of a High-Brightness Electron Gun for Future ERL Light Sources
Proc. PASJ 2008, (2008) 607. (in Japanese).

H.Takaki, N.Nakamura, Y.Kobayashi, K.Harada, T.Miyajima, A.Ueda, S.Nagahashi, T.Obina, K.Umemori and M.Shimada
Status of a Pulsed Quadrupole Magnet Injection at the PF-AR
Proc. PASJ 2008, (2008) 728. (in Japanese).

H.Takaki, N.Nakamura, Y.Kobayashi, K.Harada, T.Miyajima, A.Ueda, S.Nagahashi, T.Honda and M.Shimada
Beam Injection Study by Using a Pulsed Sextupole Magnet at the PF-Ring
Proc. PASJ 2008, (2008) 725. (in Japanese).

Y.Hayashi, T.Hori and T.Mitsuhashi
Renovation of SR Monitor and Measurement of Emittance at the Photon Factory
Proc. PASJ 2008, (2008) 682.

T.Honda
Present Status of Synchrotron Radiation Sources in KEK
Proc. PASJ 2008, (2008) 631. (in Japanese).

N.Nishimori, R.Nagai, H.Iijima, R.Hajima, M.Sawamura, Y.Honda and T.Muto
Deflecting Cavity for Beam Diagnostics of an ERL Gun
Proc. PASJ 2008, (2008) 595. (in Japanese).

H.Sakai, K.Shinoe, A.Ishii, K.Umemori, S.Sakanaka, T.Takahashi, T.Furuya and M.Sawamura
Development of Input Power Coupler for ERL Main Linac
Proc. PASJ 2008, (2008) 592. (in Japanese).

M.Sawamura, K.Umemori, T.Furuya, S.Sakanaka, T.Takahashi, H.Sakai and K.Shinoe
Status of Superconducting Cavity Development for ERL Main Linac
Proc. PASJ, (2008) 610. (in Japanese).

S.Sakanaka, Y.Kobayashi, K.Satoh, T.Kasuga, H.Kawata, R.Hajima and N.Nakamura
Status of R&D Efforts toward the ERL-Based Light Source
Proc. PASJ 2008, (2008) 225. (in Japanese).

T.Kawasaki, N.Nakamura, Y.Kobayashi, D.Yoshitomi, K.Torizuka, M.Kuriki and H.Kawata
Development of a Yb-Doped Fiber Laser Oscillator for Driving an ERL Photocathode Gun
Proc. PASJ 2008, (2008) 586. (in Japanese).

K.Harada, Y.Kobayashi, T.Miyajima and S.Nagahashi
Epochal Injection System Using a Pulsed Quadrupole Magnet at the PF-AR
Proc. PASJ 2008, (2008) 197.

S.Yamamoto, K.Tsuchiya, H.Sasaki, T.Shioya, Y.Kobayashi, K.Harada, T.Honda and Y.Tanimoto
Development of a Polarization-Switching Source at the Photon Factory, KEK
Proc. PASJ 2008, (2008) 105. (in Japanese).

T.Shiraga, N.Nakamura, K.Harada, M.Shimada, S.Sakanaka, Y.Kobayashi and R.Hajima
Design Study of the Compact ERL Optics
Proc. PASJ 2008, (2008) 589. (in Japanese).

T.Ozaki
Adaptive Control of Active Filter Using DSP
Proc. PASJ 2008, (2008) 655. (in Japanese).

T.Obina, M.Tobiyama, J.W.Flanagan, M.Tadano, T.Mitsuhashi, W.X.Cheng and J.D.Fox
Suppression of Longitudinal Coupled-Bunch Instabilities at the KEK-PF
Proc. PASJ 2008, (2008) 679. (in Japanese).

Y.Tanimoto
Feasibility Study for High Performance Vacuum Chamber
Proc. 11th European Particle Accelerator Conference (EPAC'08), (2008) 3720.

S.Matsuba, K.Harada, Y.Kobayashi, T.Miyajima, S.Nagahashi and T.Obina
Fast Local Bump System for Helicity Switching at the Photon Factory
Proc. 11th European Particle Accelerator Conference (EPAC'08), (2008) 2356.

H.Takaki, N.Nakamura, Y.Kobayashi, K.Harada, T.Miyajima, A.Ueda, S.Nagahashi, T.Obina and K.Umemori
A Pulsed Quadrupole Magnet Injection at the PF-AR Storage Ring
Proc. 11th European Particle Accelerator Conference (EPAC'08), (2008) 2207.

H.Takaki, N.Nakamura, Y.Kobayashi, K.Harada, T.Miyajima, A.Ueda, S.Nagahashi, T.Honda and T.Obina
Beam Injection System by Use of a Pulsed Sextupole Magnet at the Photon Factory Storage Ring
Proc. 11th European Particle Accelerator Conference (EPAC'08), (2008) 2204.

The articles of the experiments utilizing multiple beamlines are simultaneously printed here in each section.