

## 1A

Y.Wakabayashi, H.Sawa, M.Nakamura, M.Izumi and K.Miyano

Lack of Influence of Anisotropic Electron Clouds on Resonant X-Ray Scattering from Manganite Thin Films

Phys. Rev. B, **69** (2004) 144414.

M.Kubota, T.Arima, Y.Kaneko, J.P.He, X.Z.Yu and Y.Tokura

X-Ray Directional Dichroism of Polar Ferrimagnet

Phys. Rev. Lett., **92** (2004) 137401.

D.Akahoshi, Y.Okimoto, M.Kubota, R.Kumai, T.Arima, Y.Tomioka and Y.Tokura

Charge-Orbital Ordering near the Multicritical Point in A-Site Ordered Perovskites  $\text{SmBaMn}_2\text{O}_6$  and  $\text{NdBaMn}_2\text{O}_6$

Phys. Rev. B, **70** (2004) 064418.

T.Arima, D.Higashiyama, Y.Kaneko, J.P.He, T.Goto, S.Miyasaka, T.Kimura, K.Oikawa, T.Kamiyama, R.Kumai and Y.Tokura

Structural and Magnetoelectric Properties of  $\text{Ga}_{2-x}\text{Fe}_x\text{O}_3$  Single Crystals Grown by a Floating-Zone Method

Phys. Rev. B, **70** (2004) 064426.

S.Horiuchi, F.Ishii, R.Kumai, Y.Okimoto, H.Tachibana, N.Nagaosa and Y.Tokura

Ferroelectricity near Room Temperature in Co-Crystals of Nonpolar Organic Molecules

Nature Materials, **4** (2005) 163.

T.Arima, J.-H.Jung, M.Matsubara, M.Kubota, J.-P.Je, Y.Kaneko and Y.Tokura

Resonant Magnetoelectric X-Ray Scattering in  $\text{GaFeO}_3$ : Observation of Ordering of Toroidal Moments

J. Phys. Soc. Jpn., **74** (2005) 1419.

## 1B

Y.Kubozono, Y.Rikiishi, K.Shibata,

T.Hosokawa, S.Fujiki and H.Kitagawa, Structural and Transport Properties of Isomer-Separated  $\text{C}_{82}$

Phys. Rev. B, **69** (2004) 165412.

Y.Rikiishi, Y.Kubozono, T.Hosokawa, K.Shibata, Y.Haruyama, Y.Takabayashi,

A.Fujiwara, S.Kobayashi, S.Mori and Y.Iwasa Structural and Electronic Characterizations of Two Isomers of  $\text{Ce@C}_{82}$

J. Phys. Chem. B, **108** (2004) 7580.

A.Yamamoto, H.Takakura and A.P.Tsai Refinement of i-Al-Cu-Fe and i-Al-Cu-Ru Quasicrystal Structures

Ferroelectrics, **305** (2004) 279.

H.Takakura, A.Yamamoto and A.P.Tsai Re-Refinement of the Basic Decagonal Al-Co-Ni Phase

Ferroelectrics, **305** (2004) 257.

A.Yamamoto and H.Takakura Structure Refinement of Quasicrystals

Ferroelectrics, **305** (2004) 223.

H.Nakao, M.Tsubota, F.Iga, K.Uchihira, T.Nakano, T.Takabatake, K.Kato and Y.Murakami

Orbitally Ordered State in  $\text{Y}_{1-x}\text{Ca}_x\text{TiO}_3$  ( $0 < x \leq 0.5$ )

J. Phys. Soc. Jpn., **73** (2004) 2620.

T.Hosokawa, S.Fujiki, E.Kuwahara, Y.Kubozono, H.Kitagawa, A.Fujiwara, T.Takenobu and Y.Iwasa

Electronic Properties for the  $\text{C}_{2v}$  and  $\text{C}_s$  Isomers of  $\text{Pr@C}_{82}$  Studied by Raman, Resistivity and Scanning Tunneling Microscopy/Spectroscopy

Chem. Phys. Lett., **395** (2004) 78.

Y.Ishida, S.Kohiki, S.Nogami, H.Shimooka, T.Tajiri, H.Deguchi, M.Mitome and Y.Bando

Suppression of Ferromagnetic Properties for  $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$  ( $x=0.15$ ) Nanoparticles

J. Ceramic Soc. Jpn., **112** (2004) S873.

Y.Maniwa, H.Kataura, M.Abe, A.Udaka, S.Suzuki, Y.Achiba, H.Kira, K.Matsuda,

H.Kadowaki and Y.Okabe Ordered Water Inside Carbon Nanotubes: Formation of Pentagonal to Actagonal Ice-Nanotubes

Chem. Phys. Lett., **401** (2005) 534.

Y.Rikiishi, Y.Kashino, H.Kusai, Y.Takabayashi, E.Kuwahara, Y.Kubozono, T.Kambe,

T.Takenobu, Y.Iwasa, N.Mizorogi, S.Nagase and S.Okada

Metallic Phase in the Metal-Intercalated Higher Fullerene  $\text{Rb}_{8.8(7)}\text{C}_{84}$

Phys. Rev. B, **71** (2005) 224118.

## 1C

M.Oshima, S.Toyoda, J.Okabayashi, H.Kumigashira, K.Ono, M.Niwa, K.Usuda and N.Hirashita

Chemical States and Band Offsets of  $\text{NH}_3$ -Treated Si Oxynitride Films Studied by High-Resolution Photoelectron Spectroscopy

J. Vac. Sci. Technol. A, **22** (2004) 176.

H.Kumigashira, K.Horiba, H.Ohguchi, D.Kobayashi, M.Oshima, N.Nakagawa,

T.Ohnishi, M.Lippmaa, K.Ono, M.Kawasaki and H.Koinuma

In situ Photoemission Spectroscopic Study on  $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$  Thin Films Grown by Combinatorial Laser-MBE

J. Elec. Spec. Relat. Phenom., **136** (2004) 31.

H.Kumigashira, K.Horiba, H.Ohguchi, M.Oshima, N.Nakagawa, M.Lippmaa, K.Ono,

M. Kawasaki and H.Koinuma Surface Electronic Structures of Terminating-Layer-Controlled  $\text{La}_{0.6}\text{Sr}_{0.4}\text{MnO}_3$  Thin Films Studied by in situ Synchrotron-Radiation Photoemission Spectroscopy

J. Magn. Magn. Mater., **272-276** (2004) 1120.

S.Toyoda, J.Okabayashi, H.Kumigashira, M.Oshima, K.Ono, M.Niwa, K.Usuda and G.L.Liu

Effects of Interlayer and Annealing on Chemical States of  $\text{HfO}_2$  Gate Insulators Studied by Photoemission Spectroscopy

Appl. Phys. Lett., **84** (2004) 2328.

S.Toyoda, J.Okabayashi, H.Kumigashira, M.Oshima, K.Ono, M.Niwa, K.Usuda and N.Hirashita

Chemistry and Band Offsets of  $\text{HfO}_2$  Thin Films on Si Revealed by Photoelectron Spectroscopy and X-Ray Absorption Spectroscopy

J. Elec. Spec. Relat. Phenom., **137-140** (2004) 141.

Y.Aiura, I.Hase, K.Yagi-Watanabe, H.Bando, K.Ozawa, K.Tanaka, R.Kitagawa, S.Maruyama,

T.Iwase, Y.Nishihara, K.Horiba, O.Shiino, M.Oshima, M.Nakatake, M.Kubota and K.Ono Increase in Charge-Density-Wave Potential of  $1T\text{-TaS}_2\text{Se}_{2-x}$

Phys. Rev. B, **69** (2004) 245123.

M.Oshima, D.Kobayashi, K.Horiba, H.Ohguchi, H.Kumigashira, K.Ono, N.Nakagawa,

M.Lippmaa, M.Kawasaki and H.Koinuma In-situ Photoelectron Spectroscopy of  $\text{LaMnO}_3$  and  $\text{La}_{0.6}\text{Sr}_{0.4}\text{MnO}_3$  Thin Films Grown by Laser Molecular Beam Epitaxy

J. Elec. Spec. Relat. Phenom., **137-140** (2004) 145.

H.Kumigashira, K.Horiba, H.Ohguchi, M.Oshima, N.Nakagawa, M.Lippmaa, K.Ono,

M.Kawasaki and H.Koinuma In situ Synchrotron-Radiation Angle-Resolved Photoemission Study on  $\text{La}_{0.6}\text{Sr}_{0.4}\text{MnO}_3$  Thin Films Grown by Laser Molecular Beam Epitaxy

J. Magn. Magn. Mater., **272-276** (2004) 434.

K.Horiba, H.Ohguchi, H.Kumigashira, M.Oshima, N.Nakagawa, M.Lippmaa, K.Ono,

M.Kawasaki and H.Koinuma In situ Synchrotron-Radiation Angle-Resolved Photoemission Study on  $\text{La}_{0.6}\text{Sr}_{0.4}\text{MnO}_3$  Thin Films Grown by Laser MBE

J. Magn. Magn. Mater., **272-276** (2004) 436.

K.Horiba, H.Ohguchi, H.Kumigashira, M.Oshima, N.Nakagawa, M.Lippmaa, K.Ono,

M.Kawasaki and H.Koinuma In situ Mn 2p-3d Resonant Photoemission Study on  $\text{La}_{0.6}\text{Sr}_{0.4}\text{MnO}_3$  Thin Films Grown by Laser MBE

J. Magn. Magn. Mater., **272-276** (2004) 436.

H.Kumigashira, D.Kobayashi, R.Hashimoto, A.Chikamatsu, M.Oshima, N.Nakagawa,

T.Ohnishi, M.Lippmaa, H.Wadati, A.Fujimori, K.Ono, M.Kawasaki and H.Koinuma

Inherent Charge Transfer Layer Formation at  $\text{La}_{0.6}\text{Sr}_{0.4}\text{FeO}_3/\text{La}_{0.6}\text{Sr}_{0.4}\text{MnO}_3$  Heterointerface

Appl. Phys. Lett., **84** (2004) 5353.

T.Ohnishi, K.Shibuya, M.Lippmaa, D.Kobayashi, H.Kumigashira, M.Oshima and H. Koinuma

Preparation of Thermally Stable  $\text{TiO}_2$ -Terminated  $\text{SrTiO}_3$  (100) Substrate Surfaces

Appl. Phys. Lett., **85** (2004) 272.

J.Okabayashi, M.Mizuguchi, K.Ono, M.Oshima, A.Fujimori, H.Kuramochi and H.Akinaga

Density-Dependent Electronic Structure of Zinc-Blende-Type MnAs Dots on  $\text{GaAs}(001)$  Studied by in situ Photoemission Spectroscopy

Phys. Rev. B, **70** (2004) 233305.

J.Okabayashi, S.Toyoda, H.Kumigashira, M.Oshima, K.Usuda, M.Niwa and G.L.Liu

Chemical Reaction and Metallic Cluster Formation by Annealing-Temperature Control in  $\text{ZrO}_2$  Gate Dielectrics on Si

Appl. Phys. Lett., **85** (2004) 5959.

D.Kondo, K.Sakamoto, M.Shima, W.Takeyama, K.Nakamura, K.Ono, Y.Kasukabe and M.Oshima

Growth of an  $\alpha$ -Sn Film on an InSb(111) A-(2×2) Surface

Phys. Rev. B, **70** (2004) 233314.

D.Kobayashi, H.Kumigashira, M.Oshima, T.Ohnishi, M.Lippmaa, K.Ono, M.Kawasaki and H.Koinuma

High-Resolution Synchrotron Radiation Photoemission Characterization for Atomically-Controlled SrTiO<sub>3</sub>(001) Substrate Surfaces Subjected to Various Surface Treatments

J. Appl. Phys., **96** (2004) 7183.

T.Naono, J.Okabayashi, S.Toyoda, H.Fujioka, M.Oshima and H.Hamamatsu

Photoemission Study on Interfacial Reaction of Ti/n-Type GaN

Appl. Surf. Sci., **244** (2005) 277.

A.Fujimori, J.Okabayashi, Y.Takeda, T.Mizokawa, J.Okamoto, K.Mamiya, Y.Saitoh, Y.Muramatsu, M.Oshima, S.Ohya and M.Tanaka

Photoemission and Core-Level Magnetic Circular Dichroism Studies of Diluted Magnetic Semiconductors

J. Elec. Spec. Relat. Phenom., **144-147** (2005) 701.

K.Horiba, A.Chikamatsu, H.Kumigashira, M.Oshima, N.Nakagawa, M.Lippmaa, K.Ono, M.Kawasaki and H.Koinuma

In *vacuo* Photoemission Study of Atomically Controlled La<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub> Thin Films: Composition Dependence of the Electronic Structure

Phys. Rev. B, **71** (2005) 155420.

D.Kobayashi, R.Hashimoto, A.Chikamatsu, H.Kumigashira, M.Oshima, T.Ohnishi, M.Lippmaa, K.Ono, M.Kawasaki and H.Koinuma

Sr Surface Segregation and Water Cleaning for Atomically Controlled SrTiO<sub>3</sub>(001) Substrates Studied by Photoemission Spectroscopy

J. Elec. Spec. Relat. Phenom., **144-147** (2005) 443.

R.Hashimoto, A.Chikamatsu, H.Kumigashira, M.Oshima, N.Nakagawa, T.Ohnishi, M.Lippmaa, H.Wadati, A.Fujimori, K.Ono, M.Kawasaki and H.Koinuma

Spectral Evidence for Inherent "dead layer" Formation at La<sub>1-y</sub>Sr<sub>y</sub>FeO<sub>3</sub>/La<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub> Heterointerface

J. Elec. Spec. Relat. Phenom., **144-147** (2005) 479.

A.Chikamatsu, H.Wadati, M.Takizawa, R.Hashimoto, H.Kumigashira, M.Oshima, A.Fujimori, N.Hamada, T.Ohnishi, M.Lippmaa, K.Ono, M.Kawasaki and H.Koinuma

In situ Angle-Resolved Photoemission Study on La<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub> Thin Films Grown by Laser MBE

J. Elec. Spec. Relat. Phenom., **144-147** (2005) 511.

K.Ozawa, T.Sato, M.Kato, K.Edamoto and Y.Aiura

Angle-Resolved Photoemission Spectroscopy Study of Adsorption Process and Electronic Structure of Silver on ZnO(1010)

J. Phys. Chem. B, **109** (2005) 14619.

## 2A

H.Yasufuku, Y.Ohminami, T.Tsutsumi, H.Niimi, N.Matsudaira, K.Asakura, M.Kato, Y.Sakai, Y.Kitajima and Y.Iwasawa

Observation of Element-Specific Energy-Filtered X-Ray Photoemission Electron Microscopy Images of Au on Ta using a Wien Filter Type Energy Analyzer

Jpn. J. Appl. Phys., **43** (2004) 7682.

H.Niimi, T.Tsutsumi, H.Matsudaira, T.Kawasaki, S.Suzuki, W.-J.Chun, M.Kato, Y.Kitajima, Y.Iwasawa and K.Asakura

Recent Progress in Energy-Filtered High Energy X-Ray Photoemission Electron Microscopy using a Wien Filter Type Energy Analyzer

Appl. Surf. Sci., **237** (2004) 637.

H.Niimi, M.Kato, T.Tsutsumi, T.Kawasaki, H.Matsudaira, S.Suzuki, W.-J.Chun, Y.Kitajima, M.Kudo and K. Asakura

Development of Imaging Energy Analyzer Using Multipole Wien Filter

Appl. Surf. Sci., **241** (2005) 131.

Y.Ohminami, S.Suzuki, N.Matsudaira, T.Nomura, W.-J.Chun, K.Ijima, K.Nakamura, K.Mukasa, M.Nagase and K.Asakura

Preparation and Characterization of a Microfabricated Oxide-on-Oxide Catalyst of  $\alpha$ -Sb<sub>2</sub>O<sub>4</sub>/VSbO<sub>4</sub>

Bull. Chem. Soc. Jpn., **78** (2005) 435.

## 2C

K.Hosaka, J.Adachi, M.Takahashi, A.Yagishita, P.Lin and R.R.Lucchese

Multiplet-Specific N 1s Photoelectron Angular Distributions from the Fixed-in-Space NO Molecules

J. Phys. B, **37** (2004) L49.

J.Adachi, K.Hosaka, S.Furuya, K.Soejima, M.Takahashi, A.Yagishita, S.K.Semenov and N.A.Cherepkov

Angular Distributions of Vibrationally-Resolved C 1s Photoelectrons from Fixed-in-Space CO Molecules: Vibrational Effect in the Shape-Resonant C 1s Photoionization of CO

J. Elec. Spec. Relat. Phenom., **137-140** (2004) 243.

M.Oshima, S.Toyoda, J.Okabayashi, H.Kumigashira, K.Ono, M.Niwa, K.Usuda and N.Hirashita

Chemical States and Band Offsets of NH<sub>3</sub>-Treated Si Oxynitride Films Studied by High-Resolution Photoelectron Spectroscopy

J. Vac. Sci. Technol. A, **22** (2004) 176.

H.Kumigashira, K.Horiba, H.Ohguchi, D.Kobayashi, M.Oshima, N.Nakagawa, T.Ohnishi, M.Lippmaa, K.Ono, M.Kawasaki and H.Koinuma

In situ Photoemission Spectroscopic Study on La<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub> Thin Films Grown by Combinatorial Laser-MBE

J. Elec. Spec. Relat. Phenom., **136** (2004) 31.

H.Kumigashira, K.Horiba, H.Ohguchi, M.Oshima, N.Nakagawa, M.Lippmaa, K.Ono, M. Kawasaki and H.Koinuma

Surface Electronic Structures of Terminating-Layer-Controlled La<sub>0.6</sub>Sr<sub>0.4</sub>MnO<sub>3</sub> Thin Films Studied by in situ Synchrotron-Radiation Photoemission Spectroscopy

J. Magn. Magn. Mater., **272-276** (2004) 1120.

S.Toyoda, J.Okabayashi, H.Kumigashira, M.Oshima, K.Ono, M.Niwa, K.Usuda and G.L.Liu

Effects of Interlayer and Annealing on Chemical States of HfO<sub>2</sub> Gate Insulators Studied by Photoemission Spectroscopy

Appl. Phys. Lett., **84** (2004) 2328.

S.Toyoda, J.Okabayashi, H.Kumigashira, M.Oshima, K.Ono, M.Niwa, K.Usuda and N.Hirashita

Chemistry and Band Offsets of HfO<sub>2</sub> Thin Films on Si Revealed by Photoelectron Spectroscopy and X-Ray Absorption Spectroscopy

J. Elec. Spec. Relat. Phenom., **137-140** (2004) 141.

M.Oshima, D.Kobayashi, K.Horiba, H.Ohguchi, H.Kumigashira, K.Ono, N.Nakagawa, M.Lippmaa, M.Kawasaki and H.Koinuma

In-situ Photoelectron Spectroscopy of LaMnO<sub>3</sub> and La<sub>0.6</sub>Sr<sub>0.4</sub>MnO<sub>3</sub> Thin Films Grown by Laser Molecular Beam Epitaxy

J. Elec. Spec. Relat. Phenom., **137-140** (2004) 145.

H.Kumigashira, K.Horiba, H.Ohguchi, M.Oshima, N.Nakagawa, M.Lippmaa, K.Ono, M.Kawasaki and H.Koinuma

In situ Synchrotron-Radiation Angle-Resolved Photoemission Study on La<sub>0.6</sub>Sr<sub>0.4</sub>MnO<sub>3</sub> Thin Films Grown by Laser Molecular Beam Epitaxy

J. Magn. Magn. Mater., **272-276** (2004) 434.

K.Horiba, H.Ohguchi, H.Kumigashira, M.Oshima, N.Nakagawa, M.Lippmaa, K.Ono, M.Kawasaki and H.Koinuma

In situ Mn 2p-3d Resonant Photoemission Study on La<sub>0.6</sub>Sr<sub>0.4</sub>MnO<sub>3</sub> Thin Films Grown by Laser MBE

J. Magn. Magn. Mater., **272-276** (2004) 436.

H.Kumigashira, D.Kobayashi, R.Hashimoto, A.Chikamatsu, M.Oshima, N.Nakagawa, T.Ohnishi, M.Lippmaa, H.Wadati, A.Fujimori, K.Ono, M.Kawasaki and H.Koinuma

Inherent Charge Transfer Layer Formation at La<sub>0.6</sub>Sr<sub>0.4</sub>FeO<sub>3</sub>/La<sub>0.6</sub>Sr<sub>0.4</sub>MnO<sub>3</sub> Heterointerface

Appl. Phys. Lett., **84** (2004) 5353.

- T.Ohnishi, K.Shibuya, M.Lippmaa, D.Kobayashi, H.Kumigashira, M.Oshima and H. Koinuma  
Preparation of Thermally Stable TiO<sub>2</sub>-Terminated SrTiO<sub>3</sub> (100) Substrate Surfaces  
*Appl. Phys. Lett.*, **85** (2004) 272.
- T.Kinoshita, T.Wakita, H.-L.Sun, T.Tohyama, A.Harasawa, H.Kiwata, F.U.Hillebrecht, K.Ono, T.Matsushima, M.Oshima, N.Ueno, Y.Saitoh and T.Okuda  
Antiferromagnetic Domain Structure Imaging of Cleaved NiO(100) Surface by using Nonmagnetic Linear Dichroism at O K Edge: Essential Effect of the Antiferromagnetic Crystal Distortion  
*J. Phys. Soc. Jpn.*, **73** (2004) 2932.
- J.Okabayashi, S.Toyoda, H.Kumigashira, M.Oshima, K.Usuda, M.Niwa and G.L.Liu  
Chemical Reaction and Metallic Cluster Formation by Annealing-Temperature Control in ZrO<sub>2</sub> Gate Dielectrics on Si  
*Appl. Phys. Lett.*, **85** (2004) 5959.
- T.Matsui, H.Yoshii, K.Tsukamoto, S.Kawakita, E.Murakami, J.Adachi, A.Yagishita, Y.Morioka and T.Hayashi  
Multiple Photoionization Following 3d<sub>5/2</sub>-Shell Threshold Ionization of Xe  
*J. Phys. B*, **37** (2004) 3745.
- Y.Harada and S.Shin  
Polarization Dependence in Resonant Soft X-Ray Emission Spectroscopy of 3d Transition Metal Compounds  
*J. Elec. Spec. Relat. Phenom.*, **136** (2004) 143.
- M.Kubota, K.Takada, T.Sasaki, H.Kumigashira, J.Okabayashi, M.Oshima, M.Suzuki, N.Kawamura, M.Takagaki, K.Fukuda and K.Ono  
Photoemission and X-Ray Absorption Study of the Two-Dimensional Triangular Lattice Superconductor Na<sub>0.35</sub>CoO<sub>2</sub>·1.3H<sub>2</sub>O  
*Phys. Rev. B*, **70** (2004) 12508.
- D.Kobayashi, H.Kumigashira, M.Oshima, T.Ohnishi, M.Lippmaa, K.Ono, M.Kawasaki and H.Koinuma  
High-Resolution Synchrotron Radiation Photoemission Characterization for Atomically-Controlled SrTiO<sub>3</sub>(001) Substrate Surfaces Subjected to Various Surface Treatments  
*J. Appl. Phys.*, **96** (2004) 7183.
- M.Matsubara, Y.Harada, S.Shin T.Uozumi and A.Kotani  
Resonant X-Ray Emission Spectroscopy in Scandium Halides  
*J. Phys. Soc. Jpn.*, **73** (2004) 711.
- H.Wadati, D.Kobayashi, A.Chikamatsu, R.Hashimoto, M.Takizawa, K.Horiba, H.Kumigashira, T.Mizokawa, A.Fujimori, M.Oshima, M.Lippmaa, M.Kawasaki and H.Koinuma  
In situ Photoemission Study of La<sub>1-x</sub>Sr<sub>x</sub>FeO<sub>3</sub> Epitaxial Thin Films  
*J. Elec. Spec. Relat. Phenom.*, **144-147** (2005) 877.
- M.Oura, M.Taguchi, T.Mukoyama, T.Takeuchi and S.Shin  
Contribution of Multielectron Excitation to F 1s Photoabsorption Process in CaF<sub>2</sub> Studied by Soft X-Ray Absorption and Emission Spectroscopy  
*J. Elec. Spec. Relat. Phenom.*, **144-147** (2005) 537.
- T.Okuda and T.Kinoshita  
Observation of Magnetic Domain Structure of Micro Magnetic Materials and Magnetic Thin Films by Photoemission Electron Microscope (PEEM)  
*J. Surf. Sci. Soc. Jpn.*, **26** (2005) 19. (*in Japanese*).
- S.Toyoda, J.Okabayashi, H.Kumigashira, M.Oshima, K.Ono, M.Niwa, K.Usuda and G.L.Liu  
Chemical Analysis of Hf-Silicide Clusters Studied by Photoemission Spectroscopy  
*J. Elec. Spec. Relat. Phenom.*, **144-147** (2005) 487.
- S.Toyoda, J.Okabayashi, H.Kumigashira, M.Oshima, K.Yamashita, M.Niwa, K.Usuda and G.L.Liu  
Crystallization in HfO<sub>2</sub> Gate Insulators with *in situ* Annealing Studied by Valence-Band Photoemission and X-Ray Absorption Spectroscopy  
*J. Appl. Phys.*, **97** (2005) 104507.
- H.-L.Sun, T.Tohyama, T.Okuda, A.Harasawa, N.Ueno and T.Kinoshita  
Antiferromagnetic Domain Modulation of NiO(100) Induced by Thickness-Dependent Interfacial Coupling with Cr Overlayer  
*J. Elec. Spec. Relat. Phenom.*, **144-147** (2005) 753.
- H.Wadati, D.Kobayashi, H.Kumigashira, K.Okazaki, T.Mizokawa, A.Fujimori, K.Horiba, M.Oshima, N.Hamada, M.Lippmaa, M.Kawasaki and H.Koinuma  
Hole-Doping-Induced Changes in the Electronic Structure of La<sub>1-x</sub>Sr<sub>x</sub>FeO<sub>3</sub>: Soft X-Ray Photoemission and Absorption Study of Epitaxial Thin Films  
*Phys. Rev. B*, **71** (2005) 035108.
- K.Horiba, A.Chikamatsu, H.Kumigashira, M.Oshima, N.Nakagawa, M.Lippmaa, K.Ono, M.Kawasaki and H.Koinuma  
In *vacuo* Photoemission Study of Atomically Controlled La<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub> Thin Films: Composition Dependence of the Electronic Structure  
*Phys. Rev. B*, **71** (2005) 155420.
- D.Kobayashi, R.Hashimoto, A.Chikamatsu, H.Kumigashira, M.Oshima, T.Ohnishi, M.Lippmaa, K.Ono, M.Kawasaki and H.Koinuma  
Sr Surface Segregation and Water Cleaning for Atomically Controlled SrTiO<sub>3</sub>(001) Substrates Studied by Photoemission Spectroscopy  
*J. Elec. Spec. Relat. Phenom.*, **144-147** (2005) 443.
- R.Hashimoto, A.Chikamatsu, H.Kumigashira, M.Oshima, N.Nakagawa, T.Ohnishi, M.Lippmaa, H.Wadati, A.Fujimori, K.Ono, M.Kawasaki and H.Koinuma  
Spectral Evidence for Inherent "dead layer" Formation at La<sub>1-y</sub>Sr<sub>y</sub>FeO<sub>3</sub>/La<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub> Heterointerface  
*J. Elec. Spec. Relat. Phenom.*, **144-147** (2005) 479.
- A.Chikamatsu, H.Wadati, M.Takizawa, R.Hashimoto, H.Kumigashira, M.Oshima, A.Fujimori, N.Hamada, T.Ohnishi, M.Lippmaa, K.Ono, M.Kawasaki and H.Koinuma  
In situ Angle-Resolved Photoemission Study on La<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub> Thin Films Grown by Laser MBE  
*J. Elec. Spec. Relat. Phenom.*, **144-147** (2005) 511.
- K.Horiba, M.Taguchi, N.Kamakura, K.Yamamoto, A.Chainani, Y.Takata, E.Ikenaga, H.Namatame, M.Taniguchi, M.Awaji, A.Takeuchi, D.Miwa, Y.Nishino, K.Tamasaku, T.Ishikawa, H.Kumigashira, M.Oshima, M.Lippmaa, M.Kawasaki, H.Koinuma, K.Kobayashi and S.Shin  
Hard X-Ray Photoemission Study of Mn 2p Core-Levels of La<sub>1-x</sub>Sr<sub>x</sub>MnO<sub>3</sub> Thin Films  
*J. Elec. Spec. Relat. Phenom.*, **144-147** (2005) 557.
- T.Kinoshita  
Photoemission Electron Microscope (PEEM) Solid State Physics, **40** (2005) 13. (*in Japanese*).
- Y.Ishiwata, T.Takeuchi, R.Eguchi, M.Watanabe, Y.Harada, K.Kanai, A.Chanani, M.Taguchi, S.Shin, M.C.Debnath, I.Souma, Y.Oka, T.Hayashi, Y.Hashimoto, S.Katsumoto and Y.Iye  
Direct Observation of a Neutral Mn Acceptor in Ga<sub>1-x</sub>Mn<sub>x</sub>As by Resonant X-Ray Emission Spectroscopy  
*Phys. Rev. B*, **71** (2005) 121202.
- H.Ishii, T.Miyahara, Y.Takayama, H.Shiozawa, K.Obu, T.D.Matsuda, Y.Aoki, H.Sugawara and H.Sato  
Resonant Photoemission Study of CeRu<sub>4</sub>Sb<sub>12</sub>  
*J. Elec. Spec. Relat. Phenom.*, **144-147** (2005) 643.

K.Akita and S.Tobe  
Effects of Residual Stress on Critical Strain for Macroscopic Crack Formation on Thermal Spray Coatings  
*J. Soc. Mat. Sci. Jpn.*, **53** (2004) 740. (*in Japanese*).

K.Akita, H.Tanaka, Y.Sano and S.Ohya  
Compressive Residual Stress Evolution Process by Laser Peening  
Proc. of the 7th Int. Conf. on Residual Stresses, (2004) CD-ROM.

H.Ohara, S.Sasaki, Y.Konoike, T.Toyoda, K.Yamawaki and M.Tanaka  
Charge Ordering in  $\text{Eu}_3\text{S}_4$  Determined by the Valence-Difference Contrast of Synchrotron X-Ray Diffraction  
*Physica B*, **350** (2004) 353.

T.Hanashima, S.Azuhata, K.Yamawaki, N.Shimizu, T.Mori, M.Tanaka and S.Sasaki  
Compositional Dependence of X-Ray Absorption Spectra on Magnetic Circular Dichroism and Near-Edge Structure at Co  $K$  Edge in  $\text{La}_{1-x}\text{Sr}_x\text{CoO}_3$  ( $0 \leq x \leq 0.6$ )  
*Jpn. J. Appl. Phys.*, **43** (2004) 4171.

M.Yashima and M.Tanaka  
Performance of a New Furnace for High-Resolution Synchrotron Powder Diffraction up to 1900 K: Application to Determine Electron Density Distribution of the Cubic  $\text{CaTiO}_3$  Perovskite at 1674 K  
*J. Appl. Cryst.*, **37** (2004) 786.

M.Yashima  
Characterization of Crystal Phases in Materials for Solid Oxide Fuel Cells: Fundamentals and Applications  
*Fuel Cells*, **4** (2004) 4. (*in Japanese*).

K.Okudaira, T.Noguchi, T.Nakamura, S.Sugita, Y.Sekine and H.Yano  
Evaluation of Mineralogical Alteration of Micrometeoroid Analog Materials Captured in Aerogel  
*Advanced Space Science*, **34** (2004) 2299.

K.Kawasaki  
Experimental Station for Research on Steel "Photon Factory BL-3A"  
*Bull. The Iron and Steel Institute of Japan*, **9** (2004) 613. (*in Japanese*).

M.Yashima, T.Hoshina, D.Ishimura, S.Kobayashi, W.Nakamura, T.Tsurumi and S.Wada  
Size Effect on the Crystal Structure of Barium Titanate Nanoparticles  
*J. Appl. Phys.*, **98** (2005) 014313.

### 3B

J.R.Harries, J.P.Sullivan and Y.Azuma  
Experimental Determination of the Lifetimes of the  $2(-1,0)_n^0$  '2pnd' ( $^1P^0$ ) Doubly Excited States of Helium by Detection of VUV Fluorescence.  
*J. Phys. B*, **37** (2004) L169.

T.Aoto, Y.Hikosaka, R.I.Hall, K.Ito, J.Fernandez and F.Martin  
Dissociative Photoionization of  $\text{H}_2$  at High Photon Energies: Uncovering New Series of Doubly Excited States  
*Chem. Phys. Lett.*, **389** (2004) 145.

Y.Hikosaka, T.Aoto, E.Shigemasa and K.Ito  
Autoionization Selectivity of  $\text{Ne}^+$  Rydberg States Converging to  $\text{Ne}^{2+}(^1S^e)$   
*J. Phys. B*, **37** (2004) 2823.

K.Edamoto, M.Sugihara, K.Ozawa and S.Otani  
Photoelectron Spectroscopy Study of Oxygen Adsorption on  $\text{Mo}_2\text{C}(0001)$   
*Surf. Sci.*, **561** (2004) 101.

M.Sugihara, K.Ozawa, K.Edamoto and S.Otani  
Electronic Structure of  $\text{Mo}_2\text{C}(0001)$  Studied by Resonant Photoemission Spectroscopy  
*Solid State Commun.*, **131** (2004) 245.

N.Nakajima, H.Kato, T.Okazaki and Y.Sakisaka  
Photoemission Study of the Modification of the Electronic Structure of Transition-Metal Overlayers on  $\text{TiO}_2$  Surfaces : I. Fe on  $\text{TiO}_2(110)$   
*Surf. Sci.*, **561** (2004) 79.

N.Nakajima, H.Kato, T.Okazaki and Y.Sakisaka  
Photoemission Study of the Modification of the Electronic Structure of Transition-Metal Overlayers on  $\text{TiO}_2$  Surfaces : II. Cr on  $\text{TiO}_2(001)$   
*Surf. Sci.*, **561** (2004) 87.

N.Nakajima, H.Kato, T.Okazaki and Y.Sakisaka  
Photoemission Study of the Modification of the Electronic Structure of Transition-Metal Overlayers on  $\text{TiO}_2$  Surfaces : III. Ni on  $\text{TiO}_2(001)$  and Cu on  $\text{TiO}_2(110)$   
*Surf. Sci.*, **561** (2004) 93.

T.Imazono, Y.Hirayama, S.Ichikura, O.Kitakami, M.Yanagihara and M.Watanabe  
Study of Interdiffused Layers near the Surface of Multilayers by Total-Reflection Soft-X-Ray Fluorescence Spectroscopy  
*Jpn. J. Appl. Phys.*, **43** (2004) 4334.

N.Nakajima, S.Hatta, J.Odagiri, H.Kato and Y.Sakisaka  
Valence-Band Satellites in Ni: A Photoelectron Spectroscopic Study  
*Phys. Rev. B*, **70** (2004) 233103.

M.Murata, T.Odagiri and N.Kouchi  
( $\gamma, 2\gamma$ ) Experiments for Studying the Multiply Excited States of  $\text{N}_2$   
*J. Elec. Spec. Relat. Phenom.*, **144-147** (2005) 147.

N.Nakajima, H.Kato and Y.Sakisaka  
Surface Metallic Nature Caused by an in-Gap State of Reduced  $\text{NiO}$ : A Photoemission Study  
*J. Elec. Spec. Relat. Phenom.*, **144-147** (2005) 873.

### 3C2

X.Zhang, H.Sugiyama and M.Ando  
Self Reference Type High Resolution Lattice Spacing Comparator  
*J. Jpn. Soc. Synchrotron Rad. Res.*, **17** (2004) 59. (*in Japanese*).

### 3C3

H.Adachi, H.Kawata and M.Ito  
Intra-Atomic Spin Asphericity of Pr and Dy in the Dialuminides Probed by X Rays  
*Phys. Rev. B*, **69** (2004) 212409.

M.Ito, N.Tuji, F.Itoh, H.Adachi, E.Arakawa, K.Namikawa, H.Nakao, Y.Murakami, Y.Taguchi and Y.Tokura  
Observation of Ordered Orbital of  $\text{YTiO}_3$  by the X-Ray Magnetic Diffraction Experiments  
*J. Phys. Chem. Solids*, **65** (2004) 1993.

### 4A

K.Sakurai  
Grazing-Incidence X-Ray Spectrometry  
*X-Ray Spectrometry: Recent Technological Advances*, (2004) 277.

K.Sakurai  
Quick Element Mapping by Projection-Type X-Ray Fluorescence Imaging  
*Oyo Butsuri*, **73** (2004) 754. (*in Japanese*).

Y.Nozone, S.Hirano, R.Kurita, N.Kawasaki, S.Ueno, A.Iida, T.Nishi and Y.Amamiya  
Co-Existing Handednesses of Lamella Twisting in One Spherulite Observed with Scanning Microbeam Wide-Angle X-Ray Scattering  
*Polymer*, **45** (2004) 8299.

Y.Takahashi, A.Iida, Y.Takanishi, M.Nakata, K.Ishikawa and H.Takezoe  
Temperature and Electric Field Dependences of the Local Layer Structure in Anti-Ferroelectric Liquid Crystals Measured by X-Ray Micro-Diffraction  
*Ferroelectrics*, **311** (2004) 41.

K.Takada, T.Noma, T.Togano, T.Mukaide and A.Iida  
X-Ray Microdiffraction Study of the Half-V Shaped Switching Liquid Crystal  
*Adv. in X-ray Analysis*, **47** (2004) 321.

H.Miyata, T.Suzuki, A.Fukuoka, T.Sawada, M.Watanabe, T.Noma, K.Takada, T.Mukaide and K.Kuroda  
Silica Films with a Single-Crystalline Mesoporous Structure  
*Nature Materials*, **3** (2004) 651.

Y.Kajiura, S.Watanabe, T.Itou, A.Iida, Y.Shinohara and Y.Amamiya  
Structural Analysis of Single Wool Fibre by Scanning Microbeam SAXS  
*J. Appl. Cryst.*, **38** (2005) 420.

H.Eba and K.Sakurai  
Enhancement of  $\text{CO}_2$  Absorbance for Lithium Ferrite - Combinatorial Application of X-Ray Absorption Fine Structure Imaging  
*Materials Trans.*, **46** (2005) 665.

H.Eba and K.Sakurai  
Combinatorial Fluorescence XAFS Imaging of Manganese Complex Oxides  
*Chem. Lett.*, **34** (2005) 872.

M.Nakata, D.R.Link, Y.Takanishi, Y.Takahashi, J.Thisayukta, H.Niwano, D.A.Coleman, J.Watanabe, A.Iida, N.A.Clark and H.Takezoe  
Electric-Field-Induced Transition between the Polarization-Modulated and Ferroelectric Smectic- $C_S P_F^*$  Liquid Crystalline States Studied using Microbeam X-Ray Diffraction  
*Phys. Rev. E*, **71** (2005) 011705.

### 4B1

K.Inoue, Y.Yamaguchi, K.Ohsumi, K.Kusaka and T.Nakagawa  
Martensitic Transformation of  $\text{Ni}_{2.18}\text{Mn}_{0.82}\text{Ga}$  Single Crystal Observed by Synchrotron Radiation White X-Ray Diffraction  
Materials Science Forum, **475-479** (2005) 2017.

#### 4B2

T.Shibasaki, T.Furuya, S.Wang and T.Hashimoto  
Crystal Structure and Phase Transition Behavior of  $\text{La}_{1-x}\text{Sr}_x\text{Ga}_{1-y}\text{Mg}_y\text{O}_{3-\delta}$   
Solid State Ionics, **174** (2004) 193.

K.Kakimoto, I.Masuda and H.Ohsato  
Ferroelectricity and Solid-Solution Structure of  $\text{KNbO}_3$  Ceramics Doped with La and Fe  
Key Eng. Mater., **269** (2004) 7.

K.Kakimoto, I.Masuda and H.Ohsato  
Solid-Solution Structure and Piezoelectric Property of  $\text{KNbO}_3$  Ceramics Doped with Small Amounts of Elements  
Jpn. J. Appl. Phys., **43** (2004) 6706.

H.Ohsato, N.Ozaki, K.Ohnuma, Y.Mizuno, T.Hagiwara, K.Kakimoto and H.Kishi  
Solubility of Ho Ions in Ho and Mg Co-Doped  $\text{BaTiO}_3$  Analyzed by Rietveld Method and EXAFS  
Ferroelectrics, **302** (2004) 265.

I.Masuda, K.Kakimoto and H.Ohsato  
Ferroelectric Property and Crystal Structure of  $\text{KNbO}_3$ -Based Ceramics  
J. Electroceramics, **13** (2004) 555.

T.Fukano, T.Motohiro, T.Ida and H.Hashizume  
Ionization Potentials of Transparent Conductive Indium Tin Oxide Films Covered with a Single Layer of Fluorine-Doped Tin Oxide Nanoparticles Grown by Spray Pyrolysis Deposition  
J. Appl. Phys., **97** (2005) 084314.

T.Ida and Y.Iwata  
Correction for Counting Losses in X-Ray Diffractometry  
J. Appl. Cryst., **38** (2005) 426.

#### 4C

K.Tatsumura, T.Watanabe, D.Yamasaki, T.Shimura, M.Umeno and I.Ohdomari  
Residual Order within Thermally Grown Amorphous  $\text{SiO}_2$  on Crystalline Silicon  
Phys. Rev. B, **69** (2004) 085212.

D.Okuyama, T.Matsumura, Y.Murakami, Y.Wakabayashi, H.Sawa and D.X.Li  
Resonant Magnetic X-Ray Scattering from Antiferromagnetic Order in  $\text{GdAs}$   
Physica B, **345** (2004) 63.

K.Ishizuka, T.Arima, Y.Murakami, R.Kajimoto, H.Yoshizawa, N.Nagaosa and Y.Tokura  
Commensurate-Incommensurate Crossover of Charge Stripe in  $\text{La}_{2-x}\text{Sr}_x\text{NiO}_4$  ( $x=1/3$ )  
Phys. Rev. Lett., **92** (2004) 196404.

H.Nakao, M.Tsubota, F.Iga, K.Uchihira, T.Nakano, T.Takabatake, K.Kato and Y.Murakami  
Orbitally Ordered State in  $\text{Y}_{1-x}\text{Ca}_x\text{TiO}_3$  ( $0 < x \leq 0.5$ )  
J. Phys. Soc. Jpn., **73** (2004) 2620.

M.Nakamura, M.Izumi, N.Ogawa, H.Ohsumi, Y.Wakabayashi and K.Miyano  
Relative Contributions of Lattice Distortion and Coulomb Interaction to Resonant X-Ray Scattering in Manganites  
J. Phys. Soc. Jpn., **73** (2004) 2802.

D.Higashiyama, S.Miyasaka, N.Kida, T.Arima and Y.Tokura  
Control of the Ferroelectric Properties of  $\text{DyMn}_2\text{O}_5$  by Magnetic Fields  
Phys. Rev. B, **70** (2004) 174405.

M.Kubota, H.Nakao, Y.Murakami, Y.Taguchi, M.Iwama and Y.Tokura  
Orbital Ordering near a Mott Transition: Resonant X-Ray Scattering Study of the Perovskite Ti Oxides  $\text{RTiO}_3$  and  $\text{LaTiO}_{3.02}$  ( $R=\text{Gd, Sm, Nd, and La}$ )  
Phys. Rev. B, **70** (2004) 245125.

J.Kokubun, K.Ishida, D.Cabaret, F.Mauri, R.V.Vedriniskii, V.L.Kraizman, A.A.Novakovich, E.V.Krivitskii and V.E.Dmitrienko  
Resonant Diffraction in  $\text{FeS}_2$ : Determination of the X-Ray Polarization Anisotropy of Iron Atoms  
Phys. Rev. B, **69** (2004) 245103.

A.Kitahara, I.Takahashi and S.Doi  
Melting Behavior of Polystyrene Surface Studied by X-Ray Reflectivity  
AIP Conf. Proc., **708** (2004) 255.

K.Ohwada, Y.Fujii, Y.Katsuki, J.Muraoka, H.Nakao, Y.Murakami, H.Sawa, E.Ninomiya, M.Isobe and Y.Ueda  
Charge-Order Pattern of the Low-Temperature Phase from a Monoclinic Single Domain of  $\text{NaV}_2\text{O}_5$  Uniquely Determined by Resonant X-Ray Scattering  
Phys. Rev. Lett., **94** (2005) 106401.

T.Shimura, K.Fukuda, K.Yasutake, T.Hosoi and M.Umeno  
Comparison of Ordered Structure in Buried Oxide Layers in High-Dose, Low-Dose, and Internal-Thermal-Oxidation Separation-by-Implanted-Oxygen Wafers  
Thin Solid Films, **476** (2005) 125.

J.Kokubun, K.Ishida, D.Cabaret, R.V.Vedriniskii, V.L.Kraizman, A.A.Novakovich, E.V.Krivitskii and V.E.Dmitrienko  
Real and Imaginary Parts of the Anisotropic Atomic Factor near the Fe K-Edge: Comparison between Two Theories and Experiment for Pyrite  
Physica Scripta, **T115** (2005) 1062.

T.Shimura, K.Yasutake, M.Umeno and M.Nagase  
X-Ray Diffraction Measurements of Internal Strain in Si Nanowires Fabricated using a Self-Limiting Oxidation Process  
Appl. Phys. Lett., **86** (2005) 071903.

K.Ohwada, K.Ishii, T.Inami, Y.Murakami, T.Shobu, H.Ohsumi, N.Ikeda and Y.Ohishi  
Structural Properties and Phase Transition of Hole-Orbital-Ordered ( $\text{C}_2\text{H}_5\text{NH}_3$ ) $_2\text{CuCl}_4$  Studied by Resonant and Non-Resonant X-Ray Scatterings under High Pressure  
Phys. Rev. B, **72** (2005) 014123.

#### 5A

S.Wakatsuki, M.Hiraki, Y.Gaponov, N.Matsugaki, N.Igarashi and M.Suzuki  
Automation for Protein Crystallographic Diffraction Experiments  
Genomics and Proteomics, (2004) 618. (in Japanese).

M.Suzuki, N.Igarashi, N.Matsugaki and S.Wakatsuki  
Protein Crystallographic Beam Lines (Photon Factory)  
Genomics and Proteomics, (2004) 612. (in Japanese).

Y.Gaponov, N.Igarashi, M.Hiraki, K.Sasajima, N.Matsugaki, M.Suzuki, T.Kosuge and S.Wakatsuki  
Integrated Controlling System and Unified Database for High Throughput Protein Crystallography Experiments  
AIP Conf. Proc., **705** (2004) 1213.

Y.Gaponov, N.Igarashi, M.Hiraki, K.Sasajima, N.Matsugaki, M.Suzuki, T.Kosuge and S.Wakatsuki  
Secure UNIX Socket Based Controlling System for High Throughput Protein Crystallography Experiments  
J. Synchrotron Rad., **11** (2004) 17.

M.Hidaka, M.Kitaoka, K.Hayashi, T.Wakagi, H.Shoun and S.Fushinobu  
Crystallization and Preliminary X-Ray Analysis of Cellulose Phosphorylase from *Cellvibrio gilvus*  
Acta Cryst. D, **60** (2004) 1877.

A.Saito, Z.Fujimoto, E.Minami, H.Mizuno, K.Miyashita, H.Schrempp and M.Momma  
Crystallization and Preliminary X-Ray Analysis of the *Streptomyces olivaceoviridis* NgcE Binding Protein of the ABC Transporter for *N*-Acetylglucosamine  
Acta Cryst. D, **60** (2004) 2358.

M.Unno, T.Matsui, G.C.Chu, M.Couture, T.Yoshida, D.L.Rousseau, J.S.Olson and M.Ikeda-Saito  
Crystal Structure of the Dioxygen-Bound Heme Oxygenase from *Corynebacterium diphtheriae*: Implications for Heme Oxygenase Function  
J. Biol. Chem., **279** (2004) 21055.

N.Adachi, R.Natsume, M.Senda, S.Muto, T.Senda and M.Horikoshi  
Purification, Crystallization and Preliminary X-Ray Analysis of *Methanococcus jannaschii* TATA Box-Binding Protein (TBP)  
Acta Cryst. D, **60** (2004) 2328.

- H.Akama, M.Kanemaki, M.Yoshimura, T.Tsukihara, H.Yoneyama, S.Narita, A.Nakagawa and T.Nakae  
Crystal Structure of the Drug-Discharge Outer Membrane Protein, OprM, of *Pseudomonas aeruginosa*: Dual Modes of Membrane Anchoring and Occluded Cavity End J. Biol. Chem., **279** (2004) 52816.
- K.Imamura, T.Matsuura, Z.Ye, T.Takaha, K.Fujii, M.Kusunoki and Y.Nitta  
Crystallization and Preliminary X-Ray Crystallographic Study of Disproportionating Enzyme from Potato Acta Cryst F, **61** (2005) 109.
- Y.Honda, S.Fushinobu, M.Hidaka, T.Wakagi, H.Shoun and M.Kitaoka  
Crystallization and Preliminary X-Ray Analysis of Reducing-End Xylose-Releasing Exo-Oligoxylanase from *Bacillus halodurans* C-125 Acta Cryst. F, **61** (2005) 291.
- S.Fushinobu, M.Hidaka, Y.Honda, T.Wakagi, H.Shoun and M.Kitaoka  
Structural Basis for the Specificity of the Reducing End Xylose-Releasing Exo-Oligoxylanase from *Bacillus halodurans* C-125 J. Biol. Chem., **280** (2005) 17180.
- B.R.Otto, R.Sijbrandi, J.Luirink, B.Oudega, J.G.Heddle, K.Mizutani, S.-Y.Park and J.R.H.Tame  
Crystal Structure of Hemoglobin Protease, a Heme Binding Autotransporter Protein from Pathogenic *Escherichia coli* J. Biol. Chem., **280** (2005) 17339.
- Y.Naoue, K.Arita, H.Hashimoto, H.Kanazawa, M.Sato and T.Shimizu  
Crystallization and Preliminary X-Ray Crystallographic Analysis of Rat Calcineurin B Homologous Protein 1 Acta Cryst. F, **61** (2005) 612.
- L.M.G.Chavas, C.Tringali, P.Fusi, B.Venerando, G.Tettamanti, R.Kato, E.Monti and S.Wakatsuki  
Crystal Structure of the Human Cytosolic Sialidase Neu2 J. Biol. Chem., **280** (2005) 469.
- H.Akama, M.Kanemaki, T.Tsukihara, A.Nakagawa and T.Nakae  
Preliminary Crystallographic Analysis of the Antibiotic Discharge Outer Membrane Lipoprotein OprM of *Pseudomonas aeruginosa* with an Exceptionally Long Unit Cell and Complex Lattice Structure Acta Cryst. F, **61** (2005) 131.
- K.Ida, T.Moriguchi and H.Suzuki  
Crystal Structure of Heterotetrameric Sarcosine Oxidase from *Corynebacterium* sp. U-96. Biochem. Biophys. Res. Commun., **333** (2005) 359.
- A.Kadowaki, I.Yoshizaki, L.Rong, H.Komatsu, O.Odawara and S.Yoda  
Improvement of Protein Crystal Quality by Forced Flow Solution J. Synchrotron Rad., **11** (2004) 38.
- Y.Shomura, T.Yoshida, R.Iizuka, T.Maruyama, M.Yohda and K.Miki  
Crystal Structures of the Group II Chaperonin from *Thermococcus* Strain KS-1: Steric Hindrance by the Substituted Amino Acid, and Inter-Subunit Rearrangement between Two Crystal Forms J. Mol. Biol., **335** (2004) 1265.
- A.Nakamura, H.Komori, G.Kobayashi, A.Kita, C.Wada and K.Miki  
The N-Terminal Domain of the Replication Initiator Protein RepE is a Dimerization Domain Forming a Stable Dimer Biochem. Biophys. Res. Commun., **315** (2004) 10.
- B.Padmanabhan, N.Adachi, K.Kitaoka and M.Horikoshi  
Crystal Structure of the Homolog of the Oncoprotein Gankyrin, an Interactor of Rb and CDK4/6. J. Biol. Chem., **279** (2004) 1546.
- Z.Fujimoto, S.Kaneko, A.Kuno, H.Kobayashi, I.Kusakabe and H.Mizuno  
Crystal Structures of Decorated Xylooligosaccharides bound to a Family 10 Xylanase from *Streptomyces olivaceoviridis* E-86 J. Biol. Chem., **279** (2004) 9606.
- W.-L.Lai, L.-Y.Chou, C.-Y.Ting, R.Kirby, Y.-C.Tsai, A.H.-J.Wang and S.-H.Liaw  
The Functional Role of the Binuclear Metal Center in D-Aminoacylase J. Biochem., **279** (2004) 13962.
- T.Shiba, S.Kametaka, M.Kawasaki, M.Shibata, S.Waguri, Y.Uchiyama and S.Wakatsuki  
Insights into the Phosphoregulation of  $\beta$ -Secretase Sorting Signal by the VHS Domain of GGA1 Traffic, **5** (2004) 437.
- S.Wakatsuki, M.Hiraki, Y.Gaponov, N.Matsugaki, N.Igarashi and M.Suzuki  
Automation for Protein Crystallographic Diffraction Experiments Genomics and Proteomics, (2004) 618. (in Japanese).
- M.Suzuki, N.Igarashi, N.Matsugaki and S.Wakatsuki  
Protein Crystallographic Beam Lines (Photon Factory) Genomics and Proteomics, (2004) 612. (in Japanese).
- Y.Gaponov, N.Igarashi, M.Hiraki, K.Sasajima, N.Matsugaki, M.Suzuki, T.Kosuge and S.Wakatsuki  
Integrated Controlling System and Unified Database for High Throughput Protein Crystallography Experiments AIP Conf. Proc., **705** (2004) 1213.
- Y.Gaponov, N.Igarashi, M.Hiraki, K.Sasajima, N.Matsugaki, M.Suzuki, T.Kosuge and S.Wakatsuki  
Secure UNIX Socket Based Controlling System for High Throughput Protein Crystallography Experiments J. Synchrotron Rad., **11** (2004) 17.
- A.Miyanaga, S.Fushinobu, K.Ito, H.Shoun and T.Wakagi  
Mutational and Structural Analysis of Cobalt-Containing Nitrile Hydratase on Substrate and Metal Binding Eur. J. Biochem., **271** (2004) 429.
- J.-J.Jeong, T.Sonoda, S.Fushinobu, H.Shoun and T.Wakagi  
Crystal Structure of Isocitrate Dehydrogenase from *Aeropyrum pernix* Proteins, **55** (2004) 1087.
- M.Hidaka, Y.Honda, M.Kitaoka, S.Nirasawa, K.Hayashi, T.Wakagi, H.Shoun and S.Fushinobu  
Chitobiose Phosphorylase from *Vibrio proteolyticus*, a Member of Glycosyl Transferase Family 36, Has a Clan GH-L-like ( $\alpha/\alpha$ )<sub>6</sub> Barrel Fold Structure, **12** (2004) 937.
- B.Padmanabhan, T.Kuzuhara, N.Adachi and M.Horikoshi  
The Crystal Structure of CCG1/TAF<sub>II</sub>250-Interacting Factor B (CIB) J. Biol. Chem., **279** (2004) 9615.
- W.Lai, L.Chou, C.Ting, R.Kirby, Y.Tsai, A.Wang and S.Liaw  
The Functional Role of the Binuclear Metal Center in D-Aminoacylase. One-Metal Activation and Second-Metal Inhibition. J. Biol. Chem., **279** (2004) 13692.
- Y.-J.Chang, C.-H.Huang, C.-Y.Hu and S.-H.Liaw  
Crystallization and Preliminary Crystallographic Analysis of *Bacillus subtilis* Guanine Deaminase. Acta Cryst. D, **60** (2004) 1152.
- S.Kaneko, H.Ichinose, Z.Fujimoto, A.Kuno, K.Yura, M.Go, H.Mizuno, I.Kusakabe and H.Kobayashi  
Structure and Function of a Family 10  $\beta$ -Xylanase Chimera of *Streptomyces olivaceoviridis* E-86 FXYN and *Cellulomonas fimi* Cex J. Biol. Chem., **279** (2004) 26619.
- T.S.Kumarevel, Z.Fujimoto, P.Karthe, M.Oda, H.Mizuno and P.K.R.Kumar  
Crystal Structure of Activated HutP: an RNA Binding Protein that Regulates the Transcription of the *hut* Operon in *Bacillus subtilis* Structure, **12** (2004) 1269.
- S.Muto, M.Senda, N.Adachi, T.Suzuki, R.Nagai, T.Senda and M.Horikoshi  
Purification, Crystallization and Preliminary X-Ray Diffraction Analysis of Human Oncoprotein SET/TAF-1 $\beta$ . Acta Cryst. D, **60** (2004) 712.

- S.Kakuda, T.Shiba, M.Ishiguro, H.Tagawa, S.Oka, Y.Kajihara, T.Kawasaki, S.Wakatsuki and R.Kato  
Structural Basis for Acceptor Substrate Recognition of a Human Glucuronyltransferase, GlcAT-P, an Enzyme Critical in the Biosynthesis of the Carbohydrate Epitope HNK-1  
*J. Biol. Chem.*, **279** (2004) 22693.
- Z.Fujimoto, Y.Fujii, S.Kaneko, H.Kobayashi and H.Mizuno  
Crystal Structure of Aspartic Proteinase from *Irpex lacteus* in Complex with Inhibitor Pepstatin  
*J. Mol. Biol.*, **341** (2004) 1227.
- T.S.Kumarevel, Z.Fujimoto, H.Mizuno and P.K.R.Kumar  
Crystallization and Preliminary X-Ray Diffraction Studies of the Metal-Ion-Mediated Ternary Complex of the HutP Protein with L-Histidine and its Cognate RNA  
*Biochim. Biophys. Acta*, **1702** (2004) 125.
- R.Oshima, S.Fushinobu, F.Su, L.Zhang, N.Takaya and H.Shoun  
Structural Evidence for Direct Hydride Transfer from NADH to Cytochrome P450nor  
*J. Mol. Biol.*, **342** (2004) 207.
- M.Momma and Z.Fujimoto  
Expression, Crystallization and Preliminary X-Ray Crystallographic Studies of *Klebsiella pneumoniae* Maltohexaose-Producing  $\alpha$ -Amylase  
*Acta Cryst. D*, **60** (2004) 2352.
- R.Kanai, K.Haga, T.Akiba, K.Yamane and K.Harata  
Biochemical and Crystallographic Analyses of Maltohexaose-Producing Amylase from Alkalophilic *Bacillus* sp. 707  
*Biochemistry*, **43** (2004) 14047.
- T.Akiba, M.Nishio, I.Matsui and K.Harata  
X-Ray Structure of a Membrane-Bound  $\beta$ -Glycosidase from the Hyperthermophilic Archaeon *Pyrococcus horikoshii*  
*Proteins*, **57** (2004) 422.
- M.Unno, T.Matsui, G.C.Chu, M.Couture, T.Yoshida, D.L.Rousseau, J.S.Olson and M.Ikeda-Saito  
Crystal Structure of the Dioxygen-Bound Heme Oxygenase from *Corynebacterium diphtheriae* : Implications for Heme Oxygenase Function  
*J. Biol. Chem.*, **279** (2004) 21055.
- T.Nonaka, M.Fujihashi, A.Kita, K.Saeki, S.Ito, K.Horikoshi and K.Miki  
The Crystal Structure of an Oxidatively Stable Subtilisin-Like Alkaline Serine Protease, KP-43, with a C-Terminal  $\beta$ -Barrel Domain  
*J. Biol. Chem.*, **279** (2004) 47344.
- R.Nitta, M.Kikkawa, Y.Okada and N.Hirokawa  
KIF1A Alternately Uses Two Loops to Bind Microtubules  
*Science*, **305** (2004) 678.
- M.Goto, R.Omi, I.Miyahara, A.Hosono, H.Mizuguchi, H.Hayashi, H.Kagamiyama and K.Hirotsu  
Crystal Structures of Glutamine:Phenylpyruvate Aminotransferase from *Thermus thermophilus* HB8: Induced Fit and Substrate Recognition  
*J. Biol. Chem.*, **279** (2004) 16518.
- A.Ohtaki, M.Mizuno, T.Tonozuka, Y.Sakano and S.Kamitori  
Complex Structures of *Thermoactinomyces vulgaris* R-47  $\alpha$ -Amylase 2 with Acarbose and Cyclodextrins Demonstrate the Multiple Substrate Recognition Mechanism  
*J. Biol. Chem.*, **279** (2004) 31033.
- M.Mizuno, T.Tonozuka, A.Uechi, A.Ohtaki, K.Ichikawa, S.Kamitori, A.Nishikawa and Y.Sakano  
The Crystal Structure of *Thermoactinomyces vulgaris* R-47  $\alpha$ -Amylase II (TVA II) Complexed with Transglycosylated Product.  
*Eur. J. Biochem.*, **271** (2004) 2530.
- M.Konno, Y.Sano, K.Okudaira, Y.Kawaguchi, Y.Yamagishi-Ohmori, S.Fushinobu and H.Matsuzawa  
*Escherichia coli* Cyclophilin B Binds a Highly Distorted Form of *Trans*-proline Isomer  
*Eur. J. Biochem.*, **271** (2004) 3794.
- T.Yoshimoto, N.Tanaka, N.Kanada, T.Inoue, Y.Nakajima, M.Haratake, K.T.Nakamura, Y.Xu and K.Ito  
Crystal Structures of Creatininase Reveal the Substrate Binding Site and Provide an Insight into the Catalytic Mechanism.  
*J. Mol. Biol.*, **337** (2004) 399.
- T.Uchida, T.Yamasaki, S.Eto, H.Sugawara, G.Kurisu, A.Nakagawa, M.Kusunoki and T.Hatakeyama  
Crystal Structure of the Hemolytic Lectin CEL-III Isolated from the Marine Invertebrate *Cucumaria echinata*: Implications of Domain Structure for its Membrane Pore-Formation Mechanism.  
*J. Biol. Chem.*, **279** (2004) 37133.
- T.Sunami, J.Kondo, I.Hirao, K.Watanabe, K.Miura and A.Takenaka  
Structure of d(GCGAAGC) and d(GCGAAAGC) (Tetragonal Form): Switching of Partners of the Sheared G-A Pairs to Form a Functional G·A×A·G Crossing. Erratum  
*Acta Cryst. D*, **60** (2004) 422.
- J.Kondo, S.Umeda, K.Fujita, T.Sunami and A.Takenaka  
X-Ray Analyses of d(GCGAXAGC) Containing G and T at X: the Base-Intercalated Duplex is Still Stable Even in Point Mutants at the Fifth Residue  
*J. Synchrotron Rad.*, **11** (2004) 117.
- Y.Sakihama, W.Adachi, S.Shimizu, T.Sunami, T.Fukazawa, M.Suzuki, R.Yatsunami, S.Nakamura and A.Takenaka  
Crystallization and Preliminary X-Ray Analyses of the Active and the Inactive Forms of Family GH-8 Chitosanase with Subclass II Specificity from *Bacillus* sp. Strain K17  
*Acta Cryst. D*, **60** (2004) 2081.
- H.Akama, T.Matsuura, S.Kashiwagi, H.Yoneyama, T.Tsukihara, A.Nakagawa and T.Nakae  
Crystal Structure of the Membrane Fusion Protein, MexA of the Multidrug Transporter in *Pseudomonas aeruginosa*  
*J. Biol. Chem.*, **279** (2004) 25939.
- K.Shiozawa, N.Maita, K.Tomii, A.Seto, N.Goda, Y.Akiyama, T.Shimizu, M.Shirakawa and H.Hiroaki  
Crystallographic Characterization of the N-Terminal Domain of PEX1  
*Acta Cryst. D*, **60** (2004) 2098.
- K.Shiozawa, N.Maita, K.Tomii, A.Seto, N.Goda, Y.Akiyama, T.Shimizu, M.Shirakawa and H.Hiroaki  
Structure of the N-Terminal Domain of PEX1 AAA-ATPase: Characterization of a Putative Adaptor-Binding Domain  
*J. Biol. Chem.*, **279** (2004) 50060.
- H.Akama, M.Kanemaki, M.Yoshimura, T.Tsukihara, H.Yoneyama, S.Narita, A.Nakagawa and T.Nakae  
Crystal Structure of the Drug-Discharge Outer Membrane Protein, OprM, of *Pseudomonas aeruginosa*: Dual Modes of Membrane Anchoring and Occluded Cavity End  
*J. Biol. Chem.*, **279** (2004) 52816.
- X.Dong, S.Fushinobu, E.Fukuda, T.Terada, S.Nakamura, K.Shimizu, H.Nojiri, T.Omori, H.Shoun and T.Wakagi  
Crystal Structure of the Terminal Oxygenase Component of Cumene Dioxygenase from *Pseudomonas fluorescens* IP01  
*J. Bacteriol.*, **187** (2005) 2483.
- S.Fushinobu, S.-Y.Jun, M.Hidaka, H.Nojiri, H.Yamane, H.Shoun, T.Omori and T.Wakagi  
A Series of Crystal Structures of a *meta*-Cleavage Product Hydrolase from *Pseudomonas fluorescens* IP01 (CumD) Complexed with Various Cleavage Products  
*Biosci. Biotechnol. Biochem.*, **69** (2005) 491.
- L.M.G.Chavas, C.Tringali, P.Fusi, B.Venerando, G.Tettamanti, R.Kato, E.Monti and S.Wakatsuki  
Crystal Structure of the Human Cytosolic Sialidase Neu2  
*J. Biol. Chem.*, **280** (2005) 469.
- Y.Nakajima, K.Ito, E.Ichihara, K.Ogawa, T.Egawa Y.Xu and T.Yoshimoto  
Crystallization and Preliminary X-Ray Characterization of D-3-hydroxybutyrate Dehydrogenase from *Pseudomonas fragi*  
*Acta Cryst. F*, **61** (2005) 36.

T.Matsui, M.Furukawa, M.Unno, T.Tomita and M.Ikeda-Saito

Roles of Distal Asp in Heme Oxygenase from *Corynebacterium diphtheriae*, HmuO : A Water-Driven Oxygen Activation Mechanism  
J. Biol. Chem., **280** (2005) 2981.

J.-W.Nam, H.Noguchi, Z.Fujimori, H.Mizuno, Y.Ashikawa, M.Abe, S.Fushinobu, N.Kobashi, T.Wakagi, K.Iwata, T.Yoshida, H.Habe, H.Yamane, T.Omori and H.Nojiri

Crystal Structure of the Ferredoxin Component of Carbazole 1,9a-Dioxygenase of *Pseudomonas resinovorans* Strain CA10, a Novel Rieske Non-Heme Iron Oxygenase System  
Proteins, **58** (2005) 779.

K.Ichikawa, T.Tonozuka, M.Mizuno, Y.Tanabe, S.Kamitori, A.Nishikawa and Y.Sakano

Crystallization and Preliminary X-Ray Analysis of *Thermoactinomyces vulgaris* R-47 Maltooligosaccharide-Metabolizing Enzyme Homologous to Glucoamylase  
Acta Cryst. F, **61** (2005) 302.

S.Liu, G.Wu, Q.Huang, L.L.Luhua, Y.Tang, H.Unno and M.Kusunoki

Expression, Purification, Crystallization and Preliminary Crystallographic Study of a Potential Metal-Dependent Hydrolase with Cyclase Activity from *Thermoanaerobacter tengcongensis*  
Acta Cryst. F, **61** (2005) 90.

Y.Iimura, I.Yoshizaki, L.Rong, S.Adachi, S.Yoda and H.Komatsu

Development of a Reusable Protein Seed Crystal Processed by Chemical Cross-Linking  
J. Cryst. Growth, **275** (2005) 554.

D.Baba, N.Maita, J-G.Jee, Y.Uchimura, H.Saitoh, K.Sugasawa, F.Hanaoka, H.Tochio, H.Hiroaki and M.Shirakawa

Crystal Structure of Thymine DNA Glycosylase Conjugated to SUMO-1  
Nature, **435** (2005) 979.

G.Wu, Q.Huang, Y.Tang, H.Unno and M.Kusunoki

Crystallization and Preliminary Crystallographic Study of a Recombinant Predicted Acetamidase/Formamidase from the Thermophile *Thermoanaerobacter tengcongensis*  
Acta Cryst. F, **61** (2005) 106.

H.Akama, M.Kanemaki, T.Tsukihara, A.Nakagawa and T.Nakae

Preliminary Crystallographic Analysis of the Antibiotic Discharge Outer Membrane Lipoprotein OprM of *Pseudomonas aeruginosa* with an Exceptionally Long Unit Cell and Complex Lattice Structure  
Acta Cryst. F, **61** (2005) 131.

T.Akiba, N.Ishii, N.Rashid, M.Morikawa, T.Imanaka and K.Harata

Structure of RadB Recombinase from a Hyperthermophilic Archaeon, *Thermococcus kodakaraensis* KOD1: An Implication for the Formation of a Near-7-fold Helical Assembly  
Nucleic Acids Res., **33** (2005) 3412.

Y.Shomura, T.Yoshida, R.Iizuka, T.Maruyama, M.Yohda and K.Miki

Crystal Structures of the Group II Chaperonin from *Thermococcus* Strain KS-1: Steric Hindrance by the Substituted Amino Acid, and Inter-Subunit Rearrangement between Two Crystal Forms  
J. Mol. Biol., **335** (2004) 1265.

Z.Fujimoto, S.Kaneko, A.Kuno, H.Kobayashi, I.Kusakabe and H.Mizuno

Crystal Structures of Decorated Xylooligosaccharides bound to a Family 10 Xylanase from *Streptomyces olivaceoviridis* E-86  
J. Biol. Chem., **279** (2004) 9606.

W.-L.Lai, L.-Y.Chou, C.-Y.Ting, R.Kirby, Y.-C.Tsai, A.H.-J.Wang and S.-H.Liaw

The Functional Role of the Binuclear Metal Center in D-Aminoacylase  
J. Biochem., **279** (2004) 13962.

Z.Liu, H.Yan, K.Wang, T.Kuang, J.Zhang, L.Gui, X.An and W.Chang

Crystal Structure of Spinach Major Light-Harvesting Complex at 2.72Å Resolution  
Nature, **428** (2004) 287.

H.-T.Li, C.Wang, T.Chang, W.-C.Chang, M.-Y.Liu, J.L.Gall, L.-I.Gui, J.-P.Zhang, X.-M.An and W.-R.Chang

pH-Profile Crystal Structure Studies of C-Terminal Despentapeptide nitrite reductase from *Achromobacter cycloclastes*  
Biochem. Biophys. Res. Comm., **316** (2004) 107.

W.Lai, L.Chou, C.Ting, R.Kirby, Y.Tsai, A.Wang and S.Liaw

The Functional Role of the Binuclear Metal Center in D-Aminoacylase. One-Metal Activation and Second-Metal Inhibition.  
J. Biol. Chem., **279** (2004) 13692.

T.Kinoshita, I.Nakanishi, M.Warizaya, A.Iwashita, Y.Kido, K.Hattori and T.Fujii

Inhibitor-Induced Structural Change of the Active Site of Human Poly(ADP-ribose) Polymerase  
FEBS Lett., **556** (2004) 43.

T.Kinoshita, T.Tsutsumi, R.Maruki, M.Warizaya, Y.Ishii and T.Fujii

Cloning, Expression, Purification, Crystallization and Preliminary Diffraction Analysis of the C-Terminal Catalytic Domain of Human Poly(ADP-ribose) Polymerase  
Acta Cryst. D, **60** (2004) 109.

K.Kamata, M.Mitsuya, T.Nishimura, J.Eiki and Y.Nagata

Structural Basis for Allosteric Regulation of the Monomeric Allosteric Enzyme Human Glucokinase  
Structure, **12** (2004) 429.

T.Sunami, J.Kondo, I.Hirao, K.Watanabe, K.Miura and A.Takenaka

Structure of d(GCGAAGC) and d(GCGAAAGC) (Tetragonal Form): Switching of Partners of the Sheared G-A Pairs to Form a Functional G-A×A-G Crossing. Erratum  
Acta Cryst. D, **60** (2004) 422.

J.Kondo, S.Umeda, K.Fujita, T.Sunami and A.Takenaka

X-Ray Analyses of d(GCGAXAGC) Containing G and T at X: the Base-Intercalated Duplex is Still Stable Even in Point Mutants at the Fifth Residue  
J. Synchrotron Rad., **11** (2004) 117.

Y.Sakihama, W.Adachi, S.Shimizu, T.Sunami, T.Fukazawa, M.Suzuki, R.Yatsunami, S.Nakamura and A.Takenaka

Crystallization and Preliminary X-Ray Analyses of the Active and the Inactive Forms of Family GH-8 Chitosanase with Subclass II Specificity from *Bacillus* sp. Strain K17  
Acta Cryst. D, **60** (2004) 2081.

## 6C

Z.Liu, H.Yan, K.Wang, T.Kuang, J.Zhang, L.Gui, X.An and W.Chang

Crystal Structure of Spinach Major Light-Harvesting Complex at 2.72Å Resolution  
Nature, **428** (2004) 287.

H.-T.Li, C.Wang, T.Chang, W.-C.Chang, M.-Y.Liu, J.L.Gall, L.-I.Gui, J.-P.Zhang, X.-M.An and W.-R.Chang

pH-Profile Crystal Structure Studies of C-Terminal Despentapeptide nitrite reductase from *Achromobacter cycloclastes*  
Biochem. Biophys. Res. Comm., **316** (2004) 107.

N.Sakabe, K.Sakabe and K.Sasaki

Conceptual Design of Novel IP-Conveyor-Belt Weissenberg-Mode Data-Collection System with Multi-Readers for Macromolecular Crystallography. A Comparison between Galaxy and Super Galaxy  
J. Synchrotron Rad., **11** (2004) 12.

## 7A

A.Fujimori, M.Ishitsuka, H.Nakahara, E.Ito, M.Hara, K.Kanai, H.Ishii, Y.Ouchi and K.Seki

Change in the Near-Edge X-Ray Absorption Fine Structure Spectra of Long-Chain Diacetylene Derivatives through Photopolymerization in Langmuir-Blodgett Films  
J. Polym. Sci. Part B, **42** (2004) 2329.

A.Fujimori, Y.Sugita, H.Nakahara, E.Ito, M.Hara, N.Matsue, K.Kanai, Y.Ouchi and K.Seki

Change of Molecular Packing and Orientation from Monolayer to Multilayers of Hydrogenated and Fluorinated Carboxylate Studied by In-Plane X-Ray Diffraction Together with NEXAFS Spectroscopy at C K-Edge  
Chem. Phys. Lett., **387** (2004) 345.



- A.Fujimori, M.Ishitsuka, H.Nakahara, E.Ito, M.Hara, K.Kanai, Y.Ouchi and K.Seki  
Formation of the Newly Greenish Organized Molecular Film of Long-Chain Diynoic Acid Derivatives by Photopolymerization and its Structural Study Using Near-Edge X-Ray Absorption Fine Structure (NEXAFS) Spectroscopy  
*Phys. Chem.*, **B108** (2004) 13153.
- P.Zhu, T.Shimada, H.Kondoh, I.Nakai, M.Nagasaka and T.Ohta  
Adsorption Structures of NO on Pt(111) Studied by the Near Edge X-Ray Absorption Fine Structure Spectroscopy  
*Surf. Sci.*, **565** (2004) 232.
- K.Amemiya, S.Kitagawa, D.Matsumura, H.Abe, T.Ohta and T.Yokoyama  
Direct Observation of Magnetic Depth Profiles of Thin Films on Cu(100) and Ni/Cu(100) with the Depth-Resolved X-Ray Magnetic Circular Dichroism  
*Appl. Phys. Lett.*, **84** (2004) 936.
- H.Kondoh, A.Nambu, Y.Ehara, F.Matsui, T.Yokoyama and T.Ohta  
Substrate Dependence of Self-Assembly of Alkanethiol: X-Ray Absorption Fine Structure Study  
*J. Phys. Chem. B*, **108** (2004) 12946.
- S.Wada, Y.Matsumoto, M.Kohno, T.Sekitani and K.Tanaka  
Study of Neutral Desorption Reaction of Core-Excited PMMA Thin Film by Femtosecond Laser Ionization  
*J. Elec. Spec. Relat. Phenom.*, **137-140** (2004) 211.
- K.Amemiya, D.Matsumura, H.Abe, S.Kitagawa, T.Ohta and T.Yokoyama  
Direct Observation of Oscillatory Behavior in the Surface Magnetization of Fe Thin Films Grown on a Ni/Cu(100) Film  
*Phys. Rev. B*, **70** (2004) 195405.
- I.Nakai, H.Kondo, K.Amemiya, M.Nagasaka, A.Nambu, T.Shimada and T.Ohta  
Reaction-Path Switching Induced by Spatial-Distribution Change of Reactants: CO Oxidation on Pt(111)  
*J. Chem. Phys.*, **121** (2004) 5035.
- F.Kitajima, Y.Kitajima, T.Nakamura and K.Mase  
A XAFS Study of Carbonaceous Macromolecular Matter in Carbonaceous Chondrites  
*Geochim. Cosmochim. Acta*, **68** (2004) A767.
- K.Amemiya, S.Kitagawa, T.Yokoyama, D.Matsumura, H.Abe, H.Watanabe and T.Ohta  
Direct Observation of Magnetic Depth Profile with A Depth-Resolved X-Ray Magnetic Circular Dichroism Technique  
*Physica Scripta*, **T115** (2005) 1035.
- D.Matsumura, K.Amemiya, S.Kitagawa, T.Ohta and T.Yokoyama  
CO Induced Spin Reorientation Transition of Co/Pd(111) Studied by XMCD and XPS  
*Physica Scripta*, **T115** (2005) 583.
- K.Amemiya, D.Matsumura, H.Abe, S.Kitagawa, T.Yokoyama and T.Ohta  
Direct Observation of Surface and Interface Magnetism with the Probing Depth-Dependent X-Ray Magnetic Circular Dichroism Technique  
*J. Elec. Spec. Relat. Phenom.*, **144-147** (2005) 689.
- K.Amemiya, E.Sakai, D.Matsumura, H.Abe, T.Ohta and T.Yokoyama  
Spin-Reorientation Transition of Ni/Cu(100) and CO/Ni/Cu(100): Separation of the Surface and Bulk Components of the X-Ray Magnetic Circular Dichroism Spectrum  
*Phys. Rev. B*, **71** (2005) 214420.
- I.Nakai, H.Kondoh, K.Amemiya, M.Nagasaka, T.Shimada, R.Yokota, A.Nambu and T.Ohta  
Mechanism of the CO Oxidation Reaction on O-Precovered Pt(111) Surfaces Studied with Near-Edge X-Ray Absorption Fine Structure Spectroscopy  
*J. Chem. Phys.*, **122** (2005) 134709.
- T.Shimada, H.Kondoh, I.Nakai, M.Nagasaka, R.Yokota, K.Amemiya and T.Ohta  
Structural Study of Hexanethiolate on Au(111) in the 'striped' Phase  
*Chem. Phys. Lett.*, **406** (2005) 232.
- 7B**
- R.Negishi, M.Suzuki and Y.Shigeta  
Study of Photoelectron Spectroscopy from Extremely Uniform Si Nanoislands on Si(111) 7×7 Substrate  
*J. Appl. Phys.*, **96** (2004) 5013.
- 7C**
- K.Ebitani, H.-B.Ji, T.Mizugaki and K.Kaneda  
Highly Active Trimetallic Ru/CeO<sub>2</sub>/CoO(OH) Catalyst for Oxidation of Alcohols in the Presence of Molecular Oxygen  
*J. Mol. Catal. A: Chem.*, **212** (2004) 161.
- M.Harada and H.Einaga  
Photochemical Deposition of Platinum on TiO<sub>2</sub> by using Poly(Vinyl Alcohol) as an Electron Donor and a Protecting Polymer  
*Catal. Commun.*, **5** (2004) 63.
- S.Suzuki, Y.Koike, K.Fujikawa, W.-J.Chun, M.Nomura and K.Asakura  
A Possibility of XANAM (X-Ray Aided Non-Contact Atomic Force Microscopy)  
*Chem. Lett.*, **33** (2004) 636.
- J.Kawai, S.Harada, S.Masaoka, S.Kitagawa, T.Iwazumi, Y.Isozumi, H.Shoji and S.Nanao  
Threshold Excitation of Co K $\beta$   
*Adv. X-Ray Chem. Anal. Jpn.*, **35** (2004) 93. (*in Japanese*).
- M.Nomura  
XAFS  
*Bouseikanri*, **48** (2004) 258. (*in Japanese*).
- K.Takehira, Y.Ohishi, T.Shishido, T.Kawabata, K.Takaki, Q.Zhang and Y.Wang  
Behavior of Active Sites on Cr-MCM-41 Catalysts during the Dehydrogenation of Propane with CO<sub>2</sub>  
*J. Catal.*, **224** (2004) 404.
- T.Ohkubo  
Structural Anomaly of Molecules and Ions Restricted in Nanoscale Solid Spaces  
*Adsorption News*, **18** (2004) 13. (*in Japanese*).
- S.Takenaka, Y.Shigeta, E.Tanabe and K.Otsuka  
Methane Decomposition into Hydrogen and Carbon Nanofibers over Supported Pd-Ni Catalysts: Characterization of the Catalysts during the Reaction  
*J. Phys. Chem. B*, **108** (2004) 7656.
- S.Takenaka, M.Serizawa and K.Otsuka  
Formation of Filamentous Carbons over Supported Fe Catalysts through Methane Decomposition  
*J. Catal.*, **222** (2004) 520.
- Y.Okamoto, K.Ochiai, M.Kawano and T.Kubota  
Evaluation of the Maximum Potential Activity of Co-Mo/Al<sub>2</sub>O<sub>3</sub> Catalysts for Hydrodesulfurization  
*J. Catal.*, **222** (2004) 143.
- K.Kakimoto, I.Masuda and H.Ohsato  
Ferroelectricity and Solid-Solution Structure of KNbO<sub>3</sub> Ceramics Doped with La and Fe  
*Key Eng. Mater.*, **269** (2004) 7.
- K.Kakimoto, I.Masuda and H.Ohsato  
Solid-Solution Structure and Piezoelectric Property of KNbO<sub>3</sub> Ceramics Doped with Small Amounts of Elements  
*Jpn. J. Appl. Phys.*, **43** (2004) 6706.
- H.Ohsato, N.Ozaki, K.Ohnuma, Y.Mizuno, T.Hagiwara, K.Kakimoto and H.Kishi  
Solubility of Ho Ions in Ho and Mg Co-Doped BaTiO<sub>3</sub> Analyzed by Rietvelt Method and EXAFS  
*Ferroelectrics*, **302** (2004) 265.
- I.Masuda, K.Kakimoto and H.Ohsato  
Ferroelectric Property and Crystal Structure of KNbO<sub>3</sub>-Based Ceramics  
*J. Electroceramics*, **13** (2004) 555.
- K.Fukumi, A.Chayahara, H.Kageyama, N.Kitamura, K.Kadono, A.Kinomura, Y.Mokuno, Y.Horino and J.Nishii  
Structure of Cu Ions in (Cu + Halogen or Chalcogen)-Ion Implanted Silica Glasses  
*Mat. Res. Soc. Symp. Proc.*, **792** (2004) 99.
- Y.Okamoto, M.Kawano, T.Kawabata, T.Kubota and I.Hiromitsu  
Structure of the Active Sites of Co-Mo Hydrodesulfurization Catalysts as Studied by Magnetic Susceptibility Measurement and NO Adsorption  
*J. Phys. Chem. B*, **109** (2005) 288.

K.Shimizu, M.Miyagi, T.Kan-no, T.Hatamachi, T.Kodama and Y.Kitayama  
Michael Reaction of  $\beta$ -Ketoesters with Vinyl Ketones by Iron(III)-Exchanged Fluorotetrasilicic Mica: Catalytic and Spectroscopic Studies  
*J. Catal.*, **229** (2005) 470.

T.Ohkubo, H.Kanoh and K.Kaneko  
Discovery of Real Nature of Nanosolution  
*Kagaku*, **60** (2005) 20. (*in Japanese*).

H.Einaga and M.Harada  
Photochemical Preparation of Poly (*N*-Vinyl-2-Pyrrolidone)-Stabilized Platinum Colloids and their Deposition on Titanium Dioxide  
*Langmuir*, **21** (2005) 2578.

K.K.Bando, T.Matsui, Y.Ichihashi, K.Sato, T.Tanaka, M.Imamura, N.Matsubayashi and Y.Yoshimura  
*In-situ* XAFS Analysis of Dynamic Structural Change of Pd-Pt Nano-Particles Supported on Catalyst Surface under Sulfidation Conditions  
*Physica Scripta*, **T115** (2005) 828.

K.Murai, A.Yoshiasa, T.Yamanaka and I.Nakabayashi  
Thermal Vibration of the Rutile-Type Difluorides of First-Row Transition Metals  
*Physica Scripta*, **T115** (2005) 267.

K.Asakura, W.J.Chun, K.Tohtji, Y.Sato and F.Watari,  
X-Ray Absorption Fine Structure Studies on the Local Structures of Ni Impurities in a Carbon Nanotube  
*Chem. Lett.*, **34** (2005) 382.

T.Kawai, S.Sato, W.J.Chun, K.Asakura, K.K.Bando, T.Matsui, Y.Yoshimura, T.Kubota, Y.Okamoto, Y.K.Lee and S.T.Oyama  
*In situ* X-Ray Absorption Fine Structure Studies on the Structure of Ni<sub>2</sub>P Supported on SiO<sub>2</sub>  
*Physica Scripta*, **T115** (2005) 822.

M.Nakayama, S.Goto, Y.Uchimoto, M.Wakihara, Y.Kitajima, T.Miyanaga and I.Watanabe  
X-Ray Absorption Spectroscopic Study on the Electronic Structure of Li<sub>1-x</sub>CoPO<sub>4</sub> Electrodes as 4.8 V Positive Electrodes for Rechargeable Lithium Ion Batteries  
*J. Phys. Chem. B*, **109** (2005) 11197.

T.Kubota, M.Kawano and Y.Okamoto  
Study of the Probe Molecule Adsorption on Co-Mo Sulfide Catalysts by Means of XAFS  
*Physica Scripta*, **T115** (2005) 667.

H.Einaga, M.Harada and S.Futamura  
Structural Changes in Alumina-Supported Manganese Oxides during Ozone Decomposition  
*Chem. Phys. Lett.*, **408** (2005) 377.

M.Harada, N.Toshima, K.Yoshida and S.Isoda  
Aggregated Structure Analysis of Polymer-Protected Platinum/Ruthenium Colloidal Dispersions using EXAFS, HRTEM, and Electron Diffraction Measurements  
*J. Colloid Interface Sci.*, **283** (2005) 64.

Y.Izumi, F.Kiyotaki, N.Yagi, A.Vlaicu, A.Nisawa, S.Fukushima, H.Yoshitake and Y.Iwasawa  
X-Ray Absorption Fine Structure Combined with X-Ray Fluorescence Spectrometry. Monitoring of Vanadium Site Transformations on Titania and in Mesoporous Titania by Selective Detection of the Vanadium K <sub>$\alpha$ 1</sub> Fluorescence  
*J. Phys. Chem. B*, **109** (2005) 14884.

Y.Kimura, D.Abe, E.Maru, M.Ueji and M.Harada  
Synthesis of Pt/Rh and Pt/Pd Bimetallic Particles under High-Temperatures and High Pressures and the Analysis of the Structure Water, Steam, and Aqueous Solutions for Electric Power, (2005) 345.

M.Ueji, M.Harada and Y.Kimura  
Au/Rh Nanoparticles Synthesized under High-Pressures and High-Temperatures  
*Chem. Lett.*, **34** (2005) 200.

T.Kawabata, M.Kato, T.Mizugaki, K.Ebitani and K.Kaneda  
Monomeric Metal Aqua Complexes in the Interlayer Space of Montmorillonites as Strong Lewis Acid Catalysts for Heterogeneous Carbon-Carbon Bond-Forming Reactions  
*Chemistry A Euro. J.*, **11** (2005) 288.

#### 8A

F.Kitajima, Y.Kitajima, T.Nakamura and K.Mase  
A XAFS Study of Carbonaceous Macromolecular Matter in Carbonaceous Chondrites  
*Geochim. Cosmochim. Acta*, **68** (2004) A767.

K.Mase, T.Tachibana, E.Kobayashi, M.Mori, H.Yagi, K.K.Okudaira, N.Ueno and I.Arakawa  
Measurements of Ion Kinetic Energy Distribution using a Miniature Cylindrical Mirror Analyzer (CMA) -Application for H<sup>+</sup> Desorption Induced by Core-Level Excitations of Condensed Water  
*J. Vac. Soc. Jpn.*, **48** (2005) 286. (*in Japanese*).

#### 8C2

K.Ueda, T.Hirano, Y.Hirai and T.Imagawa  
Peak Separation of X-Ray Diffraction Profiles from a Cu/Ni<sub>0.8</sub>Fe<sub>0.2</sub> Thin-Film Stack using the Anomalous Dispersion Effect  
*J. Magnetism Soc. Jpn.*, **29** (2005) 809. (*in Japanese*).

#### 9A

M.Nomura  
XAFS  
*Bouseikanri*, **48** (2004) 258. (*in Japanese*).

Y.Takahashi, N.Sakakibara and M.Nomura  
Direct Determination of the "Organic Extent" of Tin Species in Environmental Samples by X-Ray Absorption Near-Edge Structure Spectroscopy  
*Anal. Chem.*, **76** (2004) 4307.

S.Takenaka, M.Ishida, M.Serizawa and K.Otsuka  
Formation of Carbon Nanofibers and Carbon Nanotubes through Methane Decomposition over Supported Cobalt Catalysts  
*J. Phys. Chem. B*, **108** (2004) 11464.

S.Takenaka, V.T.D.Son and K.Otsuka  
Storage and Supply of Pure Hydrogen from Methane Mediated by Modified Iron Oxides  
*Energy Fuels*, **18** (2004) 820.

H.Hachisuka, K.Awaga, T.Yokoyama, T.Kubo, T.Goto and H.Nojiri  
Structure and Magnetic Properties of the Single-Molecule Magnet [Mn<sub>11</sub>CrO<sub>12</sub>(O<sub>2</sub>CCH<sub>3</sub>)<sub>16</sub>(H<sub>2</sub>O)<sub>4</sub>]-2CH<sub>3</sub>COOH-4H<sub>2</sub>O: Magnetization Manipulation and Dipolar-Biased Tunneling in a Mn<sub>11</sub>Cr/Mn<sub>12</sub> Mixed Crystal  
*Phys. Rev. B*, **70** (2004) 104427.

Y.Okamoto, K.Ochiai, M.Kawano and T.Kubota  
Evaluation of the Maximum Potential Activity of Co-Mo/Al<sub>2</sub>O<sub>3</sub> Catalysts for Hydrodesulfurization  
*J. Catal.*, **222** (2004) 143.

A.Kuno, M.Matsuo, A.Pascual Soto and K.Tsukamoto  
Mössbauer Spectroscopic Study of a Mural Painting from Morgadal Grande, Mexico  
*Hyperfine Interact.*, **156-157** (2004) 431.

M.Tada, T.Taniike, L.M.Kantam and Y.Iwasawa  
Chiral Self-Dimerization of Vanadium Complexes on a SiO<sub>2</sub> Surface: The First Heterogeneous Catalyst for Asymmetric 2-Naphthol Coupling  
*Chem. Commun.*, (2004) 2542.

K.Shimizu, R.Maruyama, S.Komai, T.Kodama and Y.Kitayama  
Pd-Sepiolite Catalyst for Suzuki Coupling Reaction in Water: Structural and Catalytic Investigations  
*J. Catal.*, **227** (2004) 202.

K.Shimizu, S.Koizumi, T.Hatamachi, H.Yoshida, S.Komai, T.Kodama and Y.Kitayama  
Structural Investigations of Functionalized Mesoporous Silica-Supported Palladium Catalyst for Heck and Suzuki Coupling Reactions  
*J. Catal.*, **228** (2004) 141.

M.Tada, T.Taniike, L.M.Kantam, T.Sasaki and Y.Iwasawa  
Design of SiO<sub>2</sub>-Supported Chiral V-Complex Catalysts for Asymmetric 2-Naphthol Coupling  
*Catalysis and Catalysis*, **46** (2004) 75. (*in Japanese*).

K.Fukumi, A.Chayahara, H.Kageyama, N.Kitamura, K.Kadono, A.Kinomura, Y.Mokuno, Y.Horino and J.Nishii  
Structure of Cu Ions in (Cu + Halogen or Chalcogen)-Ion Implanted Silica Glasses  
*Mat. Res. Soc. Symp. Proc.*, **792** (2004) 99.

K.Ikeue, S.Ikeda, A.Watanabe and B.Ohtani  
Elucidation of the Local Structure of Active Titanium(IV) Sites on Silica-Based Phase-Boundary Catalysts for Alkene Epoxidation with Aqueous Hydrogen Peroxide  
*Phys. Chem. Chem. Phys.*, **6** (2004) 2523.

T.Ohkubo, H.Kanoh and K.Kaneko  
Discovery of Real Nature of Nanosolution  
*Kagaku*, **60** (2005) 20. (*in Japanese*).

- H.Konishi, M.Yamashita, H.Uchida and J.Mizuki  
Characterization of Rust Layer Formed on Fe,  
Fe-Ni and Fe-Cr Alloys Exposed to Cl-Rich  
Environment by Cl and Fe K-Edge XANES  
Measurements  
*Mater. Trans.*, **46** (2005) 329.
- T.Kawabata, M.Kato, T.Mizugaki, K.Ebitani and  
K.Kaneda  
Monomeric Metal Aqua Complexes in the  
Interlayer Space of Montmorillonites as Strong  
Lewis Acid Catalysts for Heterogeneous Carbon-  
Carbon Bond-Forming Reactions  
*Chemistry A Euro. J.*, **11** (2005) 288.
- R.Bal, M.Tada, T.Kusakari, T.Sasaki and  
Y.Iwasawa  
Direct Phenol Synthesis from Benzene with  
Molecular Oxygen on Rhenium/Zeolite Catalysts  
*Catalysts and Catalysis*, **47** (2005) 72.
- A.Yoshiasa, M.Okube, H.Okudera, A.Nakatsuka,  
M.Yashima, A.Sakai, M.Mori and R.Ali  
XAFS Study of A-Site Deficient  
 $\text{La}_{0.63}\text{Ti}_{0.92}\text{Nb}_{0.08}\text{O}_3$  Perovskite  
*Physica Scripta*, **T115** (2005) 372.
- M.Uo, K.Asakura, A.Yokoyama, K.Tamura,  
Y.Totsuka, T.Akasaka and F.Watari  
Analysis of Titanium Dental Implants  
Surrounding Soft Tissue using X-Ray Absorption  
Fine Structure (XAFS) Analysis  
*Chem. Lett.*, **34** (2005) 776.
- K.K.Bando, T.Matsui, Y.Ichihashi, K.Sato,  
T.Tanaka, M.Imamura, N.Matsubayashi and  
Y.Yoshimura  
*In-situ* XAFS Analysis of Dynamic Structural  
Change of Pd-Pt Nano-Particles Supported on  
Catalyst Surface under Sulfidation Conditions  
*Physica Scripta*, **T115** (2005) 828.
- A.V.Kolobov, P.Fons, J.Tominaga, A.I.Frenkel,  
A.L.Ankudinov, S.N.Yannopoulos,  
K.S.Andrikopoulos and T.Uruga  
Why Phase-Change Media are Fast and Stable: A  
New Approach to an Old Problem  
*Jpn. J. Appl. Phys.*, **44** (2005) 3345.
- K.Asakura, C.R.Bian, S.Suzuki., W.J.Chun,  
N.Watari, S.Ohnishi, P.Lu and N.Toshima  
XAFS Study on the Polymer Protected CuPd  
Bimetallic Nanoparticles – A Novel Heterobond-  
Philic Structure  
*Physica Scripta*, **T115** (2005) 781.
- K.Asakura, W.J.Chun, K.Tohji, Y.Sato and  
F.Watari,  
X-Ray Absorption Fine Structure Studies on the  
Local Structures of Ni Impurities in a Carbon  
Nanotube  
*Chem. Lett.*, **34** (2005) 382.
- T.Kawai, S.Sato, W.J.Chun, K.Asakura,  
K.K.Bando, T.Matsui, Y.Yoshimura, T.Kubota,  
Y.Okamoto, Y.K.Lee and S.T.Oyama  
*In situ* X-Ray Absorption Fine Structure Studies  
on the Structure of  $\text{Ni}_2\text{P}$  Supported on  $\text{SiO}_2$   
*Physica Scripta*, **T115** (2005) 822.
- Y.Takahashi, G.R.Kolonin, G.P.Shironosova,  
I.I.Kupriyanova, T.Uruga and H.Shimizu  
Determination of the Eu(II)/Eu(III) Ratios in  
Minerals by X-Ray Absorption Near-Edge  
Structure (XANES) and its Application to  
Hydrothermal Deposits  
*Mineralogical Magazine*, **69** (2005) 177.
- N.Sakakibara, Y.Takahashi, Y.Yamaguchi and  
M.Nomura  
A Preliminary Study on the Speciation of  
Inorganic and Organic Tin Compounds using  
XAFS  
*Physica Scripta*, **T115** (2005) 901.
- Y.Kimura, D.Abe, E.Maru, M.Ueji and  
M.Harada  
Synthesis of Pt/Rh and Pt/Pd Bimetallic Particles  
under High-Temperatures and High Pressures  
and the Analysis of the Structure  
Water, Steam, and Aqueous Solutions for Electric  
Power, (2005) 345.
- M.Ueji, M.Harada and Y.Kimura  
Au/Rh Nanoparticles Synthesized under High-  
Pressures and High-Temperatures  
*Chem. Lett.*, **34** (2005) 200.
- M.Matsuura, K.Asada, K.Konno and M.Sakurai  
EXAFS Debye-Waller Factors of La and Ni in  
 $\text{LaNi}_5$   
*J. Alloys and Compounds*, **390** (2005) 31.
- K.Shimizu, M.Miyagi, T.Kan-no, T.Hatamachi,  
T.Kodama and Y.Kitayama  
Michael Reaction of  $\beta$ -Ketoesters with  
Vinyl Ketones by Iron(III)-Exchanged  
Fluorotetrasilicic Mica: Catalytic and  
Spectroscopic Studies  
*J. Catal.*, **229** (2005) 470.
- 9C**
- Y.Miwa, K.Yamamoto, M.Sakaguchi, M.Sakai,  
K.Tanida, S.Hara, S.Okamoto and S.Shimada  
A Site-Specific ESR Spin-Labeling Study of  
Molecular Motion in Microphase-Separated  
Polystyrene-*block*-poly(methyl acrylate) with  
Lamellar Morphology  
*Macromolecules*, **37** (2004) 831.
- I.Akiba, H.Masunaga, K.Sasaki, Y.Jeong,  
K.Sakurai, S.Hara and K.Yamamoto  
Self-Organization and Phase Behavior of  
Hydrogen-Bonded Mixtures of End-Functional  
Polymer with Surfactant  
*Macromolecules*, **37** (2004) 1152.
- S.Okamoto, K.Yamamoto, K.Nomura, S.Hara,  
I.Akiba, K.Sakurai, A.Koyama, M.Nomura and  
S.Sakurai  
Crystallization in Microdomains of a Block  
Copolymer Comprising Semicrystalline Block  
Observed by Simultaneous Measurement of  
SAXS and WAXS with *Hv*-SALS or DSC  
*J. Macromolecular Sci., B, Physics*, **43** (2004)  
279.
- Y.Miwa, K.Tanida, K.Yamamoto, S.Okamoto,  
M.Sakaguchi, M.Sakai, S.Makita, S.Sakurai and  
S.Shimada  
Dynamic Heterogeneity in Interfacial Region  
of Microphase-Separated Polystyrene-*block*-  
poly(methyl acrylate) Studied by the ESR  
Spin-Label Technique  
*Macromolecules*, **37** (2004) 3707.
- Y.Wakabayashi, H.Sawa, M.Nakamura, M.Izumi  
and K.Miyano  
Lack of Influence of Anisotropic Electron Clouds  
on Resonant X-Ray Scattering from Manganite  
Thin Films  
*Phys. Rev. B*, **69** (2004) 144414.
- Y.Iwasawa, M.Nomura and J.Mizuki  
Energy Dispersive XAFS (DXAFS)  
*Kagaku*, **59** (7) (2004) 32. (*in Japanese*).
- S.Hara, K.Yamamoto, S.Okamoto, S.Shimada  
and M.Sakaguchi  
Molecular Mobility of an Amorphous Chain  
in the Crystallization Process of Poly( $\epsilon$ -  
caprolactone)  
*Macromolecules*, **37** (2004) 5323.
- Y.Yoshida, K.Akimoto, T.Emoto, S.Kikuchi,  
K.Itagaki and H.Namita  
Lattice Distortion due to Surface Treatment  
of Bias Sputtering Revealed by Extremely  
Asymmetric X-Ray Diffraction  
*Appl. Surf. Sci.*, **234** (2004) 409.
- M.Nakamura, M.Izumi, N.Ogawa, H.Ohsumi,  
Y.Wakabayashi and K.Miyano  
Relative Contributions of Lattice Distortion  
and Coulomb Interaction to Resonant X-Ray  
Scattering in Manganites  
*J. Phys. Soc. Jpn.*, **73** (2004) 2802.
- A.Suzuki, A.Yamaguchi, T.Chihara, Y.Inada,  
M.Yuasa, M.Abe, M.Nomura and Y.Iwasawa  
Time-Scale and Sequence of Dynamic Structural  
Changes in a MgO-Attached Ruthenium Cluster  
Catalyst Observed by *in situ* Time-Resolved  
DXAFS  
*J. Phys. Chem. B*, **108** (2004) 5609.
- M.Tada, T.Taniike, L.M.Kantam and Y.Iwasawa  
Chiral Self-Dimerization of Vanadium  
Complexes on a  $\text{SiO}_2$  Surface : The First  
Heterogeneous Catalyst for Asymmetric 2-  
Naphthol Coupling  
*Chem. Commun.*, (2004) 2542.
- A.Suzuki, Y.Iwasawa and M.Nomura  
Time-Resolved Analysis of Catalytic Active  
Sites by Means of *in-situ* DXAFS  
*Hyomen*, **42** (2004) 255. (*in Japanese*).
- S.Sakurai, T.Kota, D.Isobe, S.Okamoto,  
K.Sakurai, T.Ono, K.Imaizumi and S.Nomura  
Synchrotron Small-Angle X-Ray Scattering  
Studies on Flow-Induced Gyroid to Cylinder  
Transition in an Elastomeric SBS Triblock  
Copolymer  
*J. Macromol. Sci.*, **B43** (2004) 1.

K.Hayashi, Y.Ejima, T.Shimizu, S.Kizaki, S.Hara, K.Yamamoto, S.Okamoto and S.Sakurai  
Crystallization Behavior of Linear Low Density Polyethylene in its Blend with a Rubber Polymer as Revealed by Synchrotron SAXS / WAXS / Hv-SALS Simultaneous Measurements  
*Nihon Reorji Gakkaishi*, **32** (2004) 179. (*in Japanese*).

K.K.Bando, T.Matsui, Y.Ichihashi, K.Sato, T.Tanaka, M.Imamura, N.Matsubayashi and Y.Yoshimura  
*In-situ* XAFS Analysis of Dynamic Structural Change of Pd-Pt Nano-Particles Supported on Catalyst Surface under Sulfidation Conditions  
*Physica Scripta*, **T115** (2005) 828.

K.Yamamoto, K.Kato, Y.Sugino, S.Hara, Y.Miwa, M.Sakaguchi and S.Shimada  
ESR Study on Segmental Motion of Polyethylene in Amorphous Region, Dependent on Crystallinity, Molecular Weight, and Labeled Site  
*Macromolecules*, **38** (2005) 4737.

K.Ohwada, Y.Fujii, Y.Katsuki, J.Muraoka, H.Nakao, Y.Murakami, H.Sawa, E.Ninomiya, M.Isobe and Y.Ueda  
Charge-Order Pattern of the Low-Temperature Phase from a Monoclinic Single Domain of  $\text{NaV}_2\text{O}_5$  Uniquely Determined by Resonant X-Ray Scattering  
*Phys. Rev. Lett.*, **94** (2005) 106401.

I.Murase, R.Kurosaki, H.Okuda, S.Ochiai, Y.Yokoyama, A.Inoue and K.Inoue  
Scanning Anomalous Small-Angle Scattering as a Tool to Examine Welded Bulk Glass  
*Mater. Sci. Forum*, **475-479** (2005) 3401.

Y.Miwa, K.Usami, K.Yamamoto, M.Sakaguchi, M.Sakai and S.Shimada  
Direct Detection of Effective Glass Transitions in Miscible Polymer Blends by Temperature Modulated Differential Scanning Calorimetry  
*Macromolecules*, **38** (2005) 2355.

Y.Okamoto, M.Kawano, T.Kawabata, T.Kubota and I.Hiromitsu  
Structure of the Active Sites of Co-Mo Hydrodesulfurization Catalysts as Studied by Magnetic Susceptibility Measurement and NO Adsorption  
*J. Phys. Chem. B*, **109** (2005) 288.

H.Takahashi, Y.Okumura and J.Sunamoto  
Structure and Thermal History Dependent Phase Behavior of Hydrated Synthetic Sphingomyelin Analogue: 1,2-Dimyristamido-1,2-deoxyphosphatidylcholine  
*Biochem. Biophys. Acta*, **1713** (2005) 40.

## 10A

H.Ohara, S.Sasaki, Y.Konoike, T.Toyoda, K.Yamawaki and M.Tanaka  
Charge Ordering in  $\text{Eu}_3\text{S}_4$  Determined by the Valence-Difference Contrast of Synchrotron X-Ray Diffraction  
*Physica B*, **350** (2004) 353.

Y.Matsuura, I.Yoshizaki and M.Tanaka  
X-Ray Diffuser  
*J. Appl. Cryst.*, **37** (2004) 841.

T.Kuribayashi, H.Kagi, M.Tanaka, M.Akizuki and Y.Kudoh  
High-Pressure Single Crystal X-Ray Diffraction and FT-IR Observation of Natural Chondrodite and Synthetic OH-Chondrodite  
*J. Mineralogical Petrological Sciences*, **99** (2004) 118.

Y.Machida, T.Hanashima, K.Ohkubo, K.Yamawaki, M.Tanaka and S.Sasaki  
Observation of Soft Phonon Modes in 1T-TaS<sub>2</sub> by Means of X-Ray Thermal Diffuse Scattering  
*J. Phys. Soc. Jpn.*, **73** (2004) 3064.

Y.Machida and S.Sasaki  
Soft Phonon Mode: X-Ray Thermal Diffuse Scattering for 1T-TaS<sub>2</sub>  
*Ceramics and Architectural Materials*, (2004) 83. (*in Japanese*).

Y.Kudoh  
Structural Relation of Phase A to Ringwoodite: Predicted Possible Low-Pressure Polymorph of  $\text{Mg}_7\text{Si}_2\text{H}_6\text{O}_{14}$  (Phase AII) Derived as Recombination Structure from Forsterite  
*Phys. Earth Planet. Int.*, **143-144** (2004) 305.

## 10B

I.Yonenaga, M.Sakurai, M.H.F.Sluiser and Y.Kawazoe  
Local Atomic Structure in Czochralski-Grown  $\text{Ge}_{1-x}\text{Si}_x$  Bulk Alloys  
*Appl. Surf. Sci.*, **224** (2004) 193.

M.Harada and H.Einaga  
Photochemical Deposition of Platinum on TiO<sub>2</sub> by using Poly(Vinyl Alcohol) as an Electron Donor and a Protecting Polymer  
*Catal. Commun.*, **5** (2004) 63.

K.Sakurai  
X-Ray Absorption Fine Structure (XAFS)  
*Kinzoku*, **74** (2004) 185. (*in Japanese*).

C.Shinohara, S.Kawakami, T.Moriga, H.Hayashi, S.Hodoshima, Y.Saito and S.Sugiyama  
Local Structure around Platinum in Pt/C Catalysts Employed for Liquid-Phase Dehydrogenation of Decalin in the Liquid-Film State under Reactive Distillation Conditions  
*Appl. Catal. A: General*, **266** (2004) 251.

M.Nomura  
XAFS  
*Bouseikanri*, **48** (2004) 258. (*in Japanese*).

Y.Sakamoto, A.Fukuoka, T.Higuchi, N.Shimomura, S.Inagaki and M.Ichikawa  
Synthesis of Platinum Nanowires in Organic-Inorganic Mesoporous Silica Templates by Photoreduction: Formation Mechanism and Isolation  
*J. Phys. Chem. B*, **108** (2004) 853.

T.Ohkubo  
Structural Anomaly of Molecules and Ions Restricted in Nanoscale Solid Spaces  
*Adsorption News*, **18** (2004) 13. (*in Japanese*).

H.Narita, M.Tanaka, T.Yaita and Y.Okamoto  
Extraction and Structural Properties of Rhodium-Tin Complexes in Solution  
*Solvent Extraction and Ion Exchange*, **22** (2004) 853.

S.Takenaka, T.Kaburagi, C.Yamada, K.Nomura and K.Otsuka  
Storage and Supply of Hydrogen by Means of the Redox of the Iron Oxides Modified with Mo and Rh Species  
*J. Catal.*, **228** (2004) 66.

S.Takenaka, Y.Shigeta, E.Tanabe and K.Otsuka  
Methane Decomposition into Hydrogen and Carbon Nanofibers over Supported Pd-Ni Catalysts: Characterization of the Catalysts during the Reaction  
*J. Phys. Chem. B*, **108** (2004) 7656.

Y.Oda, K.Fukuyama, K.Nishikawa, S.Namba, H.Yoshitake and T.Tatsumi  
Mesocellular Foam Carbons: Aggregates of Hollow Carbon Spheres with Open and Closed Wall Structures  
*Chem. Mater.*, **16** (2004) 3860.

H.Tsunoyama, H.Sakurai, N.Ichikuni, Y.Negishi and T.Tsukuda  
Colloidal Gold Nanoparticles as Catalyst for Carbon-Carbon Bond Formation: Application to Aerobic Homocoupling of Phenylboronic Acid in Water  
*Langmuir*, **20** (2004) 11293.

Y.Okamoto, K.Ochiai, M.Kawano and T.Kubota  
Evaluation of the Maximum Potential Activity of Co-Mo/Al<sub>2</sub>O<sub>3</sub> Catalysts for Hydrodesulfurization  
*J. Catal.*, **222** (2004) 143.

J.Shibata, H.Yoshida, A.Satsuma and T.Hattori  
Drastic Enhancement of SCR of NO over Ir Catalyst through Formation of Metallic Iridium on Na-Zeolite  
*Chem. Lett.*, **33** (2004) 800.

Y.Kuroda, A.Itadani, R.Kumashiro, T.Fujimoto and M.Nagao  
Anomalous Valence Changes and Specific Dinitrogen Adsorption Features of Copper Ion Exchanged in ZSM-5 Zeolite Prepared from an Aqueous Solution of  $[\text{Cu}(\text{NH}_3)_2]^+$   
*Phys. Chem. Chem. Phys.*, **6** (2004) 2534.

Y.Kuroda and M.Iwamoto  
Characterization of Cuprous Ion in High Silica Zeolites and Reaction Mechanism of Catalytic NO Decomposition and Specific N<sub>2</sub> Adsorption  
*Topics in Catalysis*, **28** (2004) 111.

M.Tada, T.Sasaki and Y.Iwasawa  
Design of a Novel Molecular-Imprinted Rh-Amine Complex on SiO<sub>2</sub> and its Shape-Selective Catalysis for  $\alpha$ -Methylstyrene Hydrogenation  
*J. Phys. Chem. B*, **108** (2004) 2918.

- M.Tada, M.Shimamoto, T.Sasaki and Y.Iwasawa  
Oxide Surface-Promoted Pd-Complex  
Catalysis for Intramolecular O-Activated  
Alkene Hydroamination: Catalyst Preparation,  
Characterization, and Performance  
Chem. Commun., (2004) 2562.
- K.Shimizu, R.Maruyama, S.Komai, T.Kodama  
and Y.Kitayama  
Pd-Sepiolite Catalyst for Suzuki Coupling  
Reaction in Water: Structural and Catalytic  
Investigations  
J. Catal., **227** (2004) 202.
- K.Shimizu, S.Koizumi, T.Hatamachi, H.Yoshida,  
S.Komai, T.Kodama and Y.Kitayama  
Structural Investigations of Functionalized  
Mesoporous Silica-Supported Palladium Catalyst  
for Heck and Suzuki Coupling Reactions  
J. Catal., **228** (2004) 141.
- J.Shibata, M.Hashimoto, K.Shimizu, H.Yoshida,  
T.Hattori and A.Satsuma  
Factors Controlling Activity and Selectivity for  
SCR of NO by Hydrogen over Supported  
Platinum Catalysts  
J. Phys. Chem. B, **108** (2004) 18327.
- A.Satsuma, Y.Segawa, H.Yoshida and T.Hattori  
Involvement of Solid Acid on Al- and Ga-Doped  
Porous Silica in Diels-Alder Reaction  
Appl. Catal. A, **264** (2004) 229.
- J.Shibata, K.Shimizu, Y.Takada, A.Shichi,  
H.Yoshida, S.Satokawa, A.Satsuma and  
T.Hattori  
Structure of Active Ag Clusters in Ag Zeolites  
for SCR of NO by Propane in the Presence of  
Hydrogen  
J. Catal., **227** (2004) 367.
- K.Iwanaga, K.Seki, T.Hibi, H.Issoh, T.Suzuta,  
M.Nakada, Y.Mori and T.Abe  
The Development of Improved Hydrogen  
Chloride Oxidation Process  
Sumitomokagaku, **2004-I** (2004) 4. (*in  
Japanese*).
- A.Suzuki, Y.Iwasawa and M.Nomura  
Time-Resolved Analysis of Catalytic Active  
Sites by Means of in-situ DXAFS  
Hyomen, **42** (2004) 255. (*in Japanese*).
- H.Oguchi, T.Nishiguchi, T.Matsumoto, H.Kanai,  
K.Utani, Y.Matsumura and S.Imamura  
Steam Reforming of Methanol over  
Cu/CeO<sub>2</sub>/ZrO<sub>2</sub> Catalysts  
Appl. Catal. A: General, **281** (2005) 69.
- K.Okumura, R.Yoshimoto, K.Suzuki and  
M.Niwa  
Selective Catalytic Reduction of NO by Methane  
over Pd Loaded on Heteropolyacids/SiO<sub>2</sub> at Low  
Temperature  
Bull. Chem. Soc. Jpn., **78** (2005) 361.
- K.Shimura, H.Kanai, K.Utani, K.Matsuyama and  
S.Imamura  
Selective Epoxidation of Allyl Acetate with *tert*-  
Butyl Hydroperoxide over MoO<sub>3</sub>/MgO  
Appl. Catal. A: General, **283** (2005) 117.
- Y.Izumi, D.Masih, K.Aika and Y.Seida  
Characterization of Intercalated Iron(III)  
Nanoparticles and Oxidative Adsorption  
of Arsenite on them Monitored by X-Ray  
Absorption Fine Structure Combined with  
Fluorescence Spectrometry  
J. Phys. Chem. B, **109** (2005) 3227.
- T.Ohkubo, H.Kanoh and K.Kaneko  
Discovery of Real Nature of Nanosolution  
Kagaku, **60** (2005) 20. (*in Japanese*).
- A.Yamaguchi, T.Hayashi, K.Oyaizu and M.  
Yuasa  
Formation of Active Sites for the NO + CO  
Reaction over Palladium Catalysts Supported on  
Mesoporous Silica  
Bull. Chem. Soc. Jpn., **78** (2005) 192.
- S.Watanabe, R.Toyoyoshi, T.Sakamoto,  
Y.Okamoto, Y.Iwade, H.Akatsuka and  
H.Matsuura  
Temperature Dependence of Short-Range  
Structural Property in Lithium-Lead Fluoride  
J. Phys. Chem. Solids, **66** (2005) 402.
- H.Einaga and M.Harada  
Photochemical Preparation of Poly (*N*-Vinyl-2-  
Pyrrolidone)-Stabilized Platinum Colloids and  
their Deposition on Titanium Dioxide  
Langmuir, **21** (2005) 2578.
- S.Watanabe, R.Toyoyoshi, T.Sakamoto,  
Y.Okamoto, Y.Iwade, H.Akatsuka and  
H.Matsuura  
Short Range Structure of Lead-Lithium Fluoride  
Obtained by XAFS Analysis  
Physica Scripta, **T115** (2005) 297.
- S.Kamiguchi, A.Nakamura, A.Suzuki,  
M.Kodomari, M.Nomura, Y.Iwasawa and  
T.Chihara  
Catalytic Dehydrogenation of Aliphatic Amines  
to Nitriles, Imines, or Vinylamines and  
Dealkylation of Tertiary Aliphatic Amines  
over Halide Cluster Catalysts of Group 5 and 6  
Transition Metals  
J. Catal., **230** (2005) 204.
- Y.Izumi, F.Kiyotaki, T.Minato, D.Masih and  
Y.Seida  
Monitoring Trace Amounts of Lead and Arsenic  
Adsorption by X-Ray Absorption Fine Structure  
Combined with Fluorescence Spectrometry  
Physica Scripta, **T115** (2005) 933.
- T.Sasaki, F.Nakagawa and Y.Iwasawa  
Bound Site of Mo Atoms and its Local Structure  
in a Mo/HY Catalyst Characterized by Extended  
X-Ray Absorption Fine Structure and Density  
Functional Calculation  
J. Phys. Chem. B, **109** (2005) 2128.
- N.Ichikuni, H.Hachiya, K.K.Bando, S.Shimazu  
and T.Uematsu  
Preparation of Mesoporous Silica Supported Nb  
Catalysts and *in-situ* XAFS Characterization  
During Carburization Process  
Physica Scripta, **T115** (2005) 807.
- H.Murayama, N.Ichikuni, K.K.Bando,  
S.Shimazu and T.Uematsu  
Structural Analysis of Photo-Chemically  
Anchored Molybdenum Oxide Catalysts by  
EXAFS  
Physica Scripta, **T115** (2005) 825.
- A.Yoshiasa, M.Okube, H.Okudera, A.Nakatsuka,  
M.Yashima, A.Sakai, M.Mori and R.Ali  
XAFS Study of A-Site Deficient  
La<sub>0.63</sub>Ti<sub>0.92</sub>Nb<sub>0.08</sub>O<sub>3</sub> Perovskite  
Physica Scripta, **T115** (2005) 372.
- M.Okube, A.Yoshiasa, M.Yashima, K.Ohuchi,  
T.Ishimura, C.Numako and K.Koto  
XAFS Study of the Perovskite-Type Proton  
Conductor SrZr<sub>0.9</sub>Yb<sub>0.1</sub>O<sub>3-δ</sub>  
Physica Scripta, **T115** (2005) 375.
- Y.Okamoto, M.Kawano, T.Kawabata, T.Kubota  
and I.Hiromitsu  
Structure of the Active Sites of Co-Mo  
Hydrodesulfurization Catalysts as Studied  
by Magnetic Susceptibility Measurement and  
NO Adsorption  
J. Phys. Chem. B, **109** (2005) 288.
- K.K.Bando, T.Matsui, Y.Ichihashi, K.Sato,  
T.Tanaka, M.Imamura, N.Matsubayashi and  
Y.Yoshimura  
*In-situ* XAFS Analysis of Dynamic Structural  
Change of Pd-Pt Nano-Particles Supported on  
Catalyst Surface under Sulfidation Conditions  
Physica Scripta, **T115** (2005) 828.
- K.Ebitani, K.Motokura, T.Mizugaki and  
K.Kaneda  
Heterometallic RuMnMn Species on a  
Hydrotalcite Surface as Highly Efficient  
Heterogeneous Catalysts for Liquid-Phase  
Oxidation of Alcohols with Molecular Oxygen  
Angew. Chem. Int. Ed., **44** (2005) 3423.
- T.Kubota, M.Kawano and Y.Okamoto  
Study of the Probe Molecule Adsorption on Co-  
Mo Sulfide Catalysts by Means of XAFS  
Physica Scripta, **T115** (2005) 667.
- Y.Okamoto, A.Kato, Usman, K.Sato, I.Hiromitsu  
and T.Kubota  
Intrinsic Catalytic Activity of SiO<sub>2</sub>-Supported  
Co-Mo and Co-W Sulfide Catalysts for the  
Hydrodesulfurization of Thiophene  
J. Catal., **233** (2005) 16.
- M.Harada, N.Toshima, K.Yoshida and S.Isoda  
Aggregated Structure Analysis of Polymer-  
Protected Platinum/Ruthenium Colloidal  
Dispersions using EXAFS, HRTEM, and  
Electron Diffraction Measurements  
J. Colloid Interface Sci., **283** (2005) 64.
- Y.Kimura, D.Abe, E.Maru, M.Ueji and  
M.Harada  
Synthesis of Pt/Rh and Pt/Pd Bimetallic Particles  
under High-Temperatures and High Pressures  
and the Analysis of the Structure  
Water, Steam, and Aqueous Solutions for Electric  
Power, (2005) 345.

- M.Ueji, M.Harada and Y.Kimura  
Au/Rh Nanoparticles Synthesized under High-Pressures and High-Temperatures  
*Chem. Lett.*, **34** (2005) 200.
- K.Okumura, K.Nota, K.Yoshida and M.Niwa  
Catalytic Performance and Elution of Pd in the Heck Reaction over Zeolite-Supported Pd Cluster Catalyst  
*J. Catal.*, **231** (2005) 245.
- S.Hosokawa, S.Nogawa, M.Taniguchi, K.Utani, H.Kanai and S.Imamura  
Oxidation Characteristics of Ru/CeO<sub>2</sub> Catalyst  
*Appl. Catal. A*, **288** (2005) 67.
- K.Sato, N.Matsubayashi, M.Imamura, K.K.Bando and H.Shimada  
Mo K-Edge EXAFS Analysis of Mo/USY Zeolite - Effects of Extra-Framework Aluminum on the Location and Dispersion of Mo Sulfide Catalysts  
*Physica Scripta*, **T115** (2005) 787.
- T.Ohkubo, Y.Hattori, H.Kanoh, T.Konishi, H.Sakai, M.Abe, D.Kasuya, M.Yudasaka, S.Iijima, T.Fujikawa and K.Kaneko  
EXAFS Study of Electrolytic Nanosolution Confined in Interstitial Nanospaces of Single-Wall Carbon Nanohorn Colloids  
*Phys. Scr.*, **T115** (2005) 685.
- S.Hosokawa, M.Taniguchi, K.Utani, H.Kanai and S.Imamura  
Affinity Order among Noble Metals and CeO<sub>2</sub>  
*Appl. Catal. A*, **289** (2005) 115.
- 10C**
- N.Hayashi, C.Nakagawa, Y.Ito, A.Takasaki, Y.Jinbo, Y.Yamakawa, K.Titani, K.Hashimoto, Y.Izumi and N.Matsushima  
Myristoylation-Regulated Direct Interaction between Calcium-Bound Calmodulin and N-Terminal Region of pp60<sup>v-src</sup>  
*J. Mol. Biol.*, **338** (2004) 169.
- M.Tokita and J.Watanabe  
Shear Flow Orientation and Chain Folded Lamella in Smectic Liquid Crystal of Main-Chain Polymer  
*Kobunshi Kako*, **53** (2004) 152. (*in Japanese*).
- M.Tokita, K.Tokunaga, S.Funaoka, K.Osada and J.Watanabe  
Parallel and Perpendicular Orientations Observed in Shear Aligned S<sub>CA</sub> Liquid Crystal of Main-Chain Polyester  
*Macromolecules*, **37** (2004) 2527.
- K.Okoshi, A.Saxena, M.Naito, G.Suzaki, M.Tokita, J.Watanabe and M.Fujiki  
First Observation of a Smectic A-Cholesteric Phase Transition in a Thermotropic Liquid Crystal Consisting of a Rigid-Rod Helical Polysilane  
*Liquid Crystals*, **31** (2004) 279.
- S.Noijima, Y.Akutsu, A.Washino and S.Tanimoto  
Morphology of Melt-Quenched Poly( $\epsilon$ -caprolactone)-*block*-polyethylene Copolymers  
*Polymer*, **45** (2004) 7317.
- S.Noijima and Y.Akutsu  
Morphology Formation in Crystalline Block Copolymers  
*Polymer Processing*, **53** (2004) 259. (*in Japanese*).
- M.Noguchi, Y.Izumi and H.Yoshino  
Target Recognition by Calmodulin: the Role of Acid Region Contiguous to the Calmodulin-Binding Domain of Calcineurin A  
*FEBS Lett.*, **573** (2004) 121.
- Y.Muroga, S.Iida, S.Shimizu, H.Ikake and K.Kurita  
Conformation of Poly(Sodium Ethacrylate) in Solution Studied by Small-Angle X-Ray Scattering  
*Biophys. Chem.*, **110** (2004) 49.
- I.Yamashita, Y.Kawabata, T.Kato, M.Hato and H.Minamikawa  
Small Angle X-Ray Scattering from Lamellar Phase for  $\beta$ -3,7-Dimethyloctylglucoside/Water System. Comparison with  $\beta$ -*n*-Alkylglucosides.  
*Colloids and Surfaces A*, **250** (2004) 485.
- K.Hara, M.Sugiyama, M.Annaka and Y.Soejima  
Nanostructural Characterization of the Dehydrated (NIPA/SA + Additive Ion) Gels  
*Colloids and Surfaces B*, **38** (2004) 197.
- M.Annaka, T.Matsuura, E.Yoshimoto, H.Taguchi, S.Sasaki, M.Sugiyama, Y.Hara and T.Okano  
Study on the Rapid Deswelling Mechanism of Comb-Type N-Isopropylacrylamide Gels  
*Colloids and Surfaces B*, **38** (2004) 201.
- S.Sakurai, T.Kota, D.Isobe, S.Okamoto, K.Sakurai, T.Ono, K.Imaizumi and S.Nomura  
Synchrotron Small-Angle X-Ray Scattering Studies on Flow-Induced Gyroid to Cylinder Transition in an Elastomeric SBS Triblock Copolymer  
*J. Macromol. Sci.*, **B43** (2004) 1.
- S.Hirano, H.Kamikubo, Y.Yamazaki and M.Kataoka  
Elucidation of Information Encoded in Tryptophan 140 of Staphylococcal Nuclease Proteins, **58** (2005) 271.
- S.Noijima, Y.Akutsu, M.Akaba and S.Tanimoto  
Crystallization Behavior of Poly( $\epsilon$ -caprolactone) Blocks Starting from Polyethylene Lamellar Morphology in Poly( $\epsilon$ -caprolactone)-*block*-polyethylene Copolymers  
*Polymer*, **46** (2005) 4060.
- M.Akaba and S.Noijima  
Synchrotron SAXS Studies on Morphology Formation in a Binary Blend of Poly( $\epsilon$ -caprolactone) Homopolymer and Poly( $\epsilon$ -caprolactone)-*block*-Polybutadiene Copolymer  
*Polymer Journal*, **37** (2005) 464.
- M.Akaba and S.Noijima  
Effects of Phase Separation on the Crystallization Behavior in a Binary Blend of Poly( $\epsilon$ -caprolactone) Homopolymer and Poly( $\epsilon$ -caprolactone)-*block*-Polybutadiene Copolymer  
*Polymer Journal*, **37** (2005) 584.
- M.Ohkubo, M.Ukibe, T.Zama, T.Ikeuchi, M.Katagiri and S.Ichimura  
Photon Energy Dependence of Spatial Non-Uniformity in Super-Conducting Tunnel Junction Detectors between 200 eV and 10 keV  
*Nucl. Instrum. Meth. Phys. Res. A*, **520** (2004) 231.
- M.Ohkubo and M.Ukibe  
Superconducting Detectors for Energy-Dispersive Spectroscopy  
*Genshiryokugakkaishi*, **46** (2004) 121. (*in Japanese*).
- T.Okuda, H.Kiwata, T.Matsushima, T.Wakita, A.Harasawa, K.Ono, T.Kihara, M.Oshima, A.Yokoo and T.Kinoshita  
Magnetic Domain Imaging of Ni Micro Ring and Micro Dot Array by Photoelectron Emission Microscopy  
*Jpn. J. Appl. Phys.*, **43** (2004) 4179.
- T.Kinoshita, T.Wakita, H.-L.Sun, T.Tohyama, A.Harasawa, H.Kiwata, F.U.Hillebrecht, K.Ono, T.Matsushima, M.Oshima, N.Ueno, Y.Saitoh and T.Okuda  
Antiferromagnetic Domain Structure Imaging of Cleaved NiO(100) Surface by using Nonmagnetic Linear Dichroism at O K Edge: Essential Effect of the Antiferromagnetic Crystal Distortion  
*J. Phys. Soc. Jpn.*, **73** (2004) 2932.
- T.Saito, T.Katayama, Y.Kurosaki, M.Endo, S.Saito, T.Kamino, K.Kobayashi, Y.Suzuki, T.Nagahama, S.Yuasa, T.Koide, T.Shidara, H.Manaka and H.Tokano  
X-Ray Absorption and X-Ray Magnetic Circular Dichroism Studies of a Co(001) Monoatomic Layer at the Interface with Al<sub>2</sub>O<sub>3</sub>  
*J. Magn. Magn. Mat.*, **272-276 suppl.** (2004) e1489.
- T.Koide, H.Miyauchi, J.Okamoto, T.Shidara, A.Fujimori, H.Fukutani, K.Amemiya, H.Takeshita, S.Yuasa, T.Katayama and Y.Yuasa  
Angle-, Field-, Temperature-, and Size-Dependent Magnetic Circular X-Ray Dichroism in Au/Co Nanoclusters/Au(111)  
*J. Elec. Spec. Relat. Phenom.*, **136** (2004) 107.
- K.Hayashi, M.Sawada, H.Yamagami, A.Kimura and A.Kakizaki  
Magnetic Dead Layers Induced by Strain at fct Fe/Rh(001) Interface  
*J. Phys. Soc. Jpn.*, **73** (2004) 2550.
- S.Saito, K.Miyokawa, T.Katayama, S.Yuasa, T.Kamino, K.Hanashima, T.Saito, Y.Suzuki, K.Mamiya and T.Koide  
Magnetic State of Fe(001) Monoatomic Layer Facing Single-Crystalline MgO(001) Tunneling Barrier: X-Ray Absorption Spectroscopy and X-Ray Magnetic Circular Dichroism Study  
*J. Magn. Soc. Jpn.*, **29** (2005) 463. (*in Japanese*).

T.Okuda and T.Kinoshita  
Observation of Magnetic Domain Structure of Micro Magnetic Materials and Magnetic Thin Films by Photoemission Electron Microscope (PEEM)  
J. Surf. Sci. Soc. Jpn., **26** (2005) 19. (*in Japanese*).

H.-L.Sun, T.Tohyama, T.Okuda, A.Harasawa, N.Ueno and T.Kinoshita  
Antiferromagnetic Domain Modulation of NiO(100) Induced by Thickness-Dependent Interfacial Coupling with Cr Overlayer  
J. Elec. Spec. Relat. Phenom., **144-147** (2005) 753.

M.Nakayama, S.Goto, Y.Uchimoto, M.Wakihara, Y.Kitajima, T.Miyanaga and I.Watanabe  
X-Ray Absorption Spectroscopic Study on the Electronic Structure of  $\text{Li}_{1-x}\text{CoPO}_4$  Electrodes as 4.8 V Positive Electrodes for Rechargeable Lithium Ion Batteries  
J. Phys. Chem. B, **109** (2005) 11197.

H.Kizaki, S.Wada, E.O.Sako, R.Sumii, S.Waki, K.Isari, T.Sekitani, T.Sekiguchi and K.Tanaka  
Polarization-Dependent Dissociation Selectively Induced by Core-Electron Excitation in Methyl Ester Terminated Self-Assembled Monolayer  
J. Elec. Spec. Relat. Phenom., **144-147** (2005) 447.

T.Kinoshita  
Photoemission Electron Microscope (PEEM)  
Solid State Physics, **40** (2005) 13. (*in Japanese*).

T.Suga, S.Kameyama, S.Yoshioka, T.Yamamoto, I.Tanaka and T.Mizoguchi  
Characterization of Nanotextured AlN Thin Films by X-Ray Absorption Near-Edge Structures  
Appl. Phys. Lett., **86** (2005) 163113.

K.Miyokawa, S.Saito, T.Katayama, T.Saito, T.Kamino, K.Hanashima, Y.Suzuki, K.Mamiya, T.Koide and S.Yuasa  
X-Ray Absorption and X-Ray Magnetic Circular Dichroism Studies of a Monoatomic Fe(001) Layer Facing a Single-Crystalline MgO(001) Tunnel Barrier  
Jpn. J. Appl. Phys., **44** (2005) L9.

K.Amemiya, E.Sakai, D.Matsumura, H.Abe, T.Ohta and T.Yokoyama  
Spin-Reorientation Transition of Ni/Cu(100) and CO/Ni/Cu(100): Separation of the Surface and Bulk Components of the X-Ray Magnetic Circular Dichroism Spectrum  
Phys. Rev. B, **71** (2005) 214420.

I.Tanaka, T.Mizoguchi and T.Yamamoto  
XANES and ELNES in Ceramic Science  
J. American Ceramic Society, **88** (2005) 2013.

## 11B

I.Yonenaga, M.Sakurai, M.H.F.Sluiser and Y.Kawazoe  
Local Atomic Structure in Czochralski-Grown  $\text{Ge}_{1-x}\text{Si}_x$  Bulk Alloys  
Appl. Surf. Sci., **224** (2004) 193.

G.Yoshikawa, M.Kiguchi, S.Ikeda and K.Saiki  
Molecular Orientations and Adsorption Structures of  $\alpha$ -Sexithienyl Thin Films Grown on Ag(110) and Ag(111) Surfaces  
Surf. Sci., **559** (2004) 77.

M.Kiguchi, S.Entani, K.Saiki and G.Yoshikawa  
One-Dimensional Ordered Structure of  $\alpha$ -Sexithienyl on Cu(110)  
Appl. Phys. Lett., **84** (2004) 3444.

M.Kiguchi, G.Yoshikawa, S.Ikeda and K.Saiki  
Metal Induced Gap States at Alkali Halide/Metal Interface  
Appl. Surf. Sci., **237** (2004) 495.

M.Kiguchi, G.Yoshikawa, S.Ikeda and K.Saiki  
Molecular Orientation Control of Sexithienyl Thin Film on Cu Substrates  
Surf. Sci., **566-568** (2004) 603.

M.Kiguchi and K.Saiki  
Metal-Induced Gap States at Insulator/Metal Interfaces  
e-J. Surf. Sci. Nanotech., **2** (2004) 191.

H.Yasufuku, Y.Ohminami, T.Tsutsumi, H.Niimi, N.Matsudaira, K.Asakura, M.Kato, Y.Sakai, Y.Kitajima and Y.Iwasawa  
Observation of Element-Specific Energy-Filtered X-Ray Photoemission Electron Microscopy Images of Au on Ta using a Wien Filter Type Energy Analyzer  
Jpn. J. Appl. Phys., **43** (2004) 7682.

T.Tanabe, Y.Tanaka, D.Tanaka, Y.Taniguchi, M.Toyoda, J.Kawai, H.Ishii, C.Riu, Y.Yilixiati, S.Hayakawa, Y.Kitajima and Y.Terada  
Distribution of Chemical Elements and Chemical States of Sulfur on Kosa Particles Fallen in Asian Industrialized Cities  
Bunseki Kagaku, **53** (2004) 1411. (*in Japanese*).

H.Niimi, T.Tsutsumi, H.Matsudaira, T.Kawasaki, S.Suzuki, W.-J.Chun, M.Kato, Y.Kitajima, Y.Iwasawa and K.Asakura  
Recent Progress in Energy-Filtered High Energy X-Ray Photoemission Electron Microscopy using a Wien Filter Type Energy Analyzer  
Appl. Surf. Sci., **237** (2004) 637.

F.Kitajima, Y.Kitajima, T.Nakamura and K.Mase  
A XAFS Study of Carbonaceous Macromolecular Matter in Carbonaceous Chondrites  
Geochim. Cosmochim. Acta, **68** (2004) A767.

M.Kiguchi, G.Yoshikawa, S.Ikeda, and K.Saiki  
Electronic Properties of Metal-Induced Gap States Formed at Alkali-Halide/Metal Interfaces  
Phys. Rev. B, **71** (2005) 153401.

M.Nakayama, S.Goto, Y.Uchimoto, M.Wakihara, Y.Kitajima, T.Miyanaga and I.Watanabe  
X-Ray Absorption Spectroscopic Study on the Electronic Structure of  $\text{Li}_{1-x}\text{CoPO}_4$  Electrodes as 4.8 V Positive Electrodes for Rechargeable Lithium Ion Batteries  
J. Phys. Chem. B, **109** (2005) 11197.

H.Niimi, M.Kato, T.Tsutsumi, T.Kawasaki, H.Matsudaira, S.Suzuki, W.-J.Chun, Y.Kitajima, M.Kudo and K. Asakura  
Development of Imaging Energy Analyzer Using Multipole Wien Filter  
Appl. Surf. Sci., **241** (2005) 131.

## 11C

Y.Shirotori, K.Sawada, K.Ozawa and K.Edamoto  
Electronic Structure and Reactivity of the TiO Thin Film Formed on a TiC(100) Surface  
Thin Solid Films, **464-465** (2004) 76.

K.Sawada, Y.Shirotori, K.Ozawa, K.Edamoto and M.Nakatake  
Valence Band Structure of the  $\text{ZnO}(10\bar{1}0)$  Surface Studied by Angle-Resolved Photoemission Spectroscopy  
Appl. Surf. Sci., **237** (2004) 343.

K.Ozawa, K.Sawada, Y.Shirotori and K.Edamoto  
Angle-Resolved Photoemission Study of the Valence Band Structure of  $\text{ZnO}(10\bar{1}0)$   
J. Phys.: Condens. Matter, **17** (2005) 1271.

Y.Shirotori, K.Sawada, K.Ozawa, K.Edamoto and S.Otani  
Electronic Structure of the Ti Suboxide Layer Formed on a TiC(100) Surface: Angle-Resolved Photoemission Study  
Surf. Sci., **584** (2005) 237.

K.Ozawa, T.Sato, M.Kato, K.Edamoto and Y.Aiura  
Angle-Resolved Photoemission Spectroscopy Study of Adsorption Process and Electronic Structure of Silver on  $\text{ZnO}(10\bar{1}0)$   
J. Phys. Chem. B, **109** (2005) 14619.

## 11D

H.Ishii  
Direct Observation of Tomonaga-Luttinger Liquid Behavior in Carbon Nanotubes  
Kotai Butsuri, **39** (2004) 45. (*in Japanese*).

K.Mimura, Y.Watanabe, H.Mizohata, K.Ichikawa, Y.Taguchi, O.Aita, A.Yamasaki, A.Sekiyama, S.Suga, T.Oguchi, S.Noguchi, O.Sakai and T.Muro  
High-Resolution Resonant Photoemission Study of CeSi  
Physica B, **351** (2004) 295.

H.Ishii  
Electronic States of Carbon Nanotubes Studied by High-Resolution Photoemission Spectroscopy using Synchrotron Radiation  
J. Jpn. Soc. Synchrotron Rad. Res., **17** (2004) 194. (*in Japanese*).

H.Ishii and H.Kataura  
Direct Observation of One-Dimensional Electronic States in Carbon Nanotubes  
Nihon Butsuri Gakkaishi, **59** (2004) 703. (*in Japanese*).

H.Shiozawa, H.Ishii, H.Kataura, H.Yoshioka, H.Kihara, Y.Takayama, T.Miyahara, S.Suzuki, Y.Achiba, T.Kodama, M.Nakatake, T.Narimura, M.Higashiguchi, K.Shimada, H.Namatame and M.Taniguchi  
Photoemission Spectroscopy on Single-Wall Carbon Nanotubes  
Physica B, **351** (2004) 259.

H.Iwasawa, T.Saitoh, Y.Yamashita, D.Ishii, H.Kato, N.Hamada, Y.Tokura and D.D.Sarma  
Strong Correlation Effects of the Re 5d Electrons on the Metal-Insulator Transition in  $\text{Ca}_2\text{FeReO}_6$   
Phys. Rev. B, **71** (2005) 075106.

H.Ishii, T.Miyahara, Y.Takayama, H.Shiozawa, K.Obu, T.D.Matsuda, Y.Aoki, H.Sugawara and H.Sato  
Resonant Photoemission Study of  $\text{CeRu}_4\text{Sb}_{12}$   
J. Elec. Spec. Relat. Phenom., **144-147** (2005) 643.

T.Saitoh, H.Iwasawa, H.Kato, Y.Tokura, N.Hamada, and D.D.Sarma  
Strong Electron Correlation of Re 5d Electrons in  $\text{Ca}_2\text{FeReO}_6$   
J. Elec. Spec. Relat. Phenom., **144-147** (2005) 337.

T.Saitoh, M.Nakatake, H.Nakajima, O.Morimoto, A.Kakizaki, Sh.Xu, Y.Moritomo, N.Hamada and Y.Aiura  
Electronic Structure of  $\text{Sr}_{2-x}\text{La}_x\text{FeMoO}_6$   
J. Elec. Spec. Relat. Phenom., **144-147** (2005) 601.

T.Saitoh, M.Nakatake, H.Nakajima, O.Morimoto, A.Kakizaki, Sh.Xu, Y.Moritomo, N.Hamada and Y.Aiura  
Unusual Electron-Doping Effects in  $\text{Sr}_{2-x}\text{La}_x\text{FeMoO}_6$  Observed by Photoemission Spectroscopy  
Phys. Rev. B, **72** (2005) 045107.

## 12A

K.Mase, E.Kobayashi, M.Mori, Y.Kobayashi, S.Terashima, K.Okudaira and N.Ueno  
Construction and Evaluation of Miniature Cylindrical Mirror Electron Energy Analyzer (CMA), and its Application for Auger-Photoelectron Coincidence Spectroscopy  
J. Vac. Soc. Jpn., **47** (2004) 334. (*in Japanese*).

K.Mase, E.Kobayashi and K.Isari  
Development of New Apparatus for Electron - Polar-Angle-Resolved-Ion Coincidence Spectroscopy and Auger-Photoelectron Coincidence Spectroscopy  
Correlation Spectroscopy of Surfaces, Thin Films and Nanostructures (WILEY-VCH), (2004) 206.

## 12B

M.Eidelsberg, F.Launay, K.Ito, T.Matsui, P.C.Hinnen, E.Reinhold, W.Ubachs and K.P.Huber  
Rydberg-Valence Interactions of CO, and Spectroscopic Evidence Characterizing the  $C' \ ^1\Sigma^+$  Valence State  
J. Chem. Phys., **121** (2004) 292.

K.Yoshino, W.H.Parkinson, K.Ito and T.Matsui  
Absolute Absorption Cross-Section Measurements of Schumann-Runge Continuum  $\text{O}_2$  at 90 and 295 K  
J. Mol. Spec., **229** (2005) 238.

## 12C

A.Yamaguchi, M.Yokoyama, A.Suzuki, Y.Iwasawa, M.Yuasa and M.Abe  
Preparation, Characterization, and Catalytic Properties of Zirconium Containing Mesoporous Silicas, Zr-MCM-41  
J. Jpn. Soc. Colour Mater., **77** (2004) 57.

M.Nomura  
XAFS  
Bouseikanri, **48** (2004) 258. (*in Japanese*).

M.Sakurai, M.Matsuura, K.Kita, H.Sasaki, J.Nagahora, T.Kamiyama and E.Matsubara  
XAFS and SAXS Analysis for Nano-Structural Origin of High Strength for Supersaturated  $\text{Al}_{100-x}\text{Fe}_x$  ( $x=1, 2.5$ ) Alloys  
Mater. Sci. Eng. A, **375-377** (2004) 1224.

M.Sakurai, T.Nasu, Y.Nomura, T.Usuki and E.Matsubara  
Local Structure Change around Ni Atoms in MgNi Alloys during Mechanical Alloying Process  
J. Metastable and Nanocrystalline Materials, **20-21** (2004) 635.

M.Matsuura, M.Sakurai, K.Konno and K.Asada  
Nano Size Clusters Indicating Precursor of Intermetallic Compounds in the Supersaturated  $\text{Fe}_{99}\text{Y}_1$  and  $\text{Fe}_{99}\text{Zr}_1$  Melt-Quenched Alloys  
Mater. Sci. Eng. A, **357-377** (2004) 693.

Y.Takahashi, R.Minamikawa, K.H.Hattori, K.Kurishima, N.Kihou and K.Yuita  
Arsenic Behavior in Paddy Fields during the Cycle of Flooded and Non-Flooded Periods  
Environ. Sci. Technol., **38** (2004) 1038.

Y.Takahashi, N.Sakakibara and M.Nomura  
Direct Determination of the "Organic Extent" of Tin Species in Environmental Samples by X-Ray Absorption Near-Edge Structure Spectroscopy  
Anal. Chem., **76** (2004) 4307.

M.Fukukawa, Y.Takahashi, Y.Hayasaka, Y.Sakai and H.Shimizu  
Geochemical Study of ODP Leg 191 Site 1179 Sediments: Direct Observation of Mn and Ce Oxidation States  
Proc. of the Ocean Drilling Program, Scientific Results, **191** (2004) 191SR-007.

Y.Takabayashi, Y.Haruyama, Y.Rikiishi, T.Hosokawa, K.Shibata and Y.Kubozono  
Preferred Location of the Dy Ion in the Minor Isomer of  $\text{Dy}@C_{82}$  Determined by Dy  $L_{III}$ -Edge EXAFS  
Chem. Phys. Lett., **388** (2004) 23.

M.Murakami, Y.Matsumoto, T.Hasegawa, P.Ahmet, K.Nakajima, T.Chikyow, H.Ofuchi, I.Nakai and H.Koinuma  
Cobalt Valence States and Origins of Ferromagnetism in Co Soped  $\text{TiO}_2$  Rutile Thin Films  
J. Appl. Phys., **95** (2004) 5330.

M.Yuasa, K.Oyaizu, A.Yamaguchi and M.Kuwakado  
Micellar Cobaltporphyrin Nanorods in Alcohols  
J. Am. Chem. Soc., **126** (2004) 11128.

A.V.Kolobov, P.Fons, A.Frenkel, A.L.Ankudinov, J.Tominaga and T.Uruga  
Understanding the Phase-Change Mechanism of Rewritable Optical Media  
Nature Materials, **3** (2004) 703.

B.R.Dempsey, M.Wrona, J.M.Moulin, G.B.Gloor, F.Jalilehvand, G.Lajoie, G.S.Shaw and B.H.Shilton  
Solution NMR Structure and X-Ray Absorption Analysis of the C-Terminal Zinc-Binding Domain of the SecA ATPase  
Biochemistry, **43** (2004) 9361.

Y.Okamoto, K.Ochiai, M.Kawano and T.Kubota  
Evaluation of the Maximum Potential Activity of Co-Mo/ $\text{Al}_2\text{O}_3$  Catalysts for Hydrodesulfurization  
J. Catal., **222** (2004) 143.

T.Kusakari, T.Sasaki and Y.Iwasawa  
Selective Oxidation of Benzene to Phenol with Molecular Oxygen on Rhenium/Zelite Catalysts  
Chem. Commun., (2004) 992.

M.Tada, T.Taniike, L.M.Kantam and Y.Iwasawa  
Chiral Self-Dimerization of Vanadium Complexes on a  $\text{SiO}_2$  Surface : The First Heterogeneous Catalyst for Asymmetric 2-Naphthol Coupling  
Chem. Commun., (2004) 2542.

T.Nobukawa, M.Yoshida, K.Okumura, S.Kameoka, S.Ito, K.Tomishige and K.Kunimori  
Selective Catalytic Reduction of  $\text{N}_2\text{O}$  with  $\text{CH}_4$  over Fe-BEA Catalysts -Reaction Intermediate and Reaction Mechanism-  
Hyomen Kagaku, **25** (2004) 505. (*in Japanese*).

K.Fukuda, I.Nakai, C.Oishi, M.Nomura, M.Harada, Y.Ebina and T.Sasaki  
Nanoarchitecture of Semiconductor Titania Nanosheets Revealed by Polarization-Dependent Total Reflection Fluorescence X-Ray Absorption Fine Structure  
J. Phys. Chem. B, **108** (2004) 13088.

K.Kakimoto, I.Masuda and H.Ohsato  
Ferroelectricity and Solid-Solution Structure of  $\text{KNbO}_3$  Ceramics Doped with La and Fe  
Key Eng. Mater., **269** (2004) 7.

K.Kakimoto, I.Masuda and H.Ohsato  
Solid-Solution Structure and Piezoelectric Property of  $\text{KNbO}_3$  Ceramics Doped with Small Amounts of Elements  
Jpn. J. Appl. Phys., **43** (2004) 6706.



- H.Ohsato, N.Ozaki, K.Ohnuma, Y.Mizuno, T.Hagiwara, K.Kakimoto and H.Kishi  
Solubility of Ho Ions in Ho and Mg Co-Doped BaTiO<sub>3</sub> Analyzed by Rietvelt Method and EXAFS  
*Ferroelectrics*, **302** (2004) 265.
- I.Masuda, K.Kakimoto and H.Ohsato  
Ferroelectric Property and Crystal Structure of KNbO<sub>3</sub>-Based Ceramics  
*J. Electroceramics*, **13** (2004) 555.
- M.Tada, T.Taniike, L.M.Kantam, T.Sasaki and Y.Iwasawa  
Design of SiO<sub>2</sub>-Supported Chiral V-Complex Catalysts for Asymmetric 2-Naphthol Coupling Catalysts and Catalysis, **46** (2004) 75. (*in Japanese*).
- T.Mizoguchi, M.Sakurai, A.Nakamura, K.Matsunaga, I.Tanaka, T.Yamamoto and Y.Ikuhara  
Valence State of Ti in Conductive Nanowires in Sapphire  
*Phys. Rev. B*, **70** (2004) 153101.
- K.Fukumi, A.Chayahara, H.Kageyama, N.Kitamura, K.Kadono, A.Kinomura, Y.Mokuno, Y.Horino and J.Nishii  
Structure of Cu Ions in (Cu + Halogen or Chalcogen)-Ion Implanted Silica Glasses  
*Mat. Res. Soc. Symp. Proc.*, **792** (2004) 99.
- M.Matsuura, K.Asada, K.Konno and M.Sakurai  
EXAFS Debye-Waller Factors of La and Ni in LaNi<sub>5</sub>  
*J. Alloys and Compounds*, **390** (2005) 31.
- R.Bal, M.Tada, T.Kusakari, T.Sasaki and Y.Iwasawa  
Direct Phenol Synthesis from Benzene with Molecular Oxygen on Rhenium/Zelite Catalysts  
*Catalysts and Catalysis*, **47** (2005) 72.
- A.Yamaguchi, M.Yokoyama, A.Suzuki, Y.Iwasawa, H.Sakai, M.Yuasa and M.Abe  
XAFS Study on the Local Structure of Zirconium Containing Mesoporous Silicas, Zr-MCM-41 and their Catalytic Properties  
*Physica Scripta*, **T115** (2005) 834.
- A.V.Kolobov, P.Fons, J.Tominaga, A.L.Ankudinov, S.N.Yannopoulos and K.S.Andrikopoulos  
Crystallization-Induced Short-Range Order Changes in Amorphous GeTe  
*J. Phys.: Condens. Matter*, **16** (2005) S5103.
- H.Ofuchi, Z.W.Jin, T.Fukumura, M.Kawasaki, Y.Matsumoto, T.Hasegawa, H.Fujioka, M.Oshima and H.Koinuma  
Fluorescence EXAFS Study on Local Structures around Mn and Fe Atoms Doped in ZnO  
*Physica Scripta*, **T115** (2005) 614.
- H.Ofuchi, J.Okabayashi, M.Mizuguchi, M.Yamada, K.Ono, Y.Takeda, M.Oshima and H.Akinaga  
Fluorescence EXAFS Analysis of Nanoscale Zinc-Blende MnAs Dots Grown on GaAs(001) by Molecular Beam Epitaxy  
*Physica Scripta*, **T115** (2005) 431.
- T.Nobukawa, M.Yoshida, K.Okumura, K.Tomishige and K.Kunimori  
Effect of Reductants in N<sub>2</sub>O Reduction Over Fe-MFI Catalysts  
*J. Catal.*, **229** (2005) 374.
- R.Ma, K.Fukuda, M.Osada, T.Sasaki and Y.Bando  
Structural Features of Titanate Nanotubes/Nanobelts Revealed by Raman, X-Ray Absorption Fine Structure and Electron Diffraction Characterizations  
*J. Phys. Chem. B*, **109** (2005) 6210.
- T.Sasaki, C.Zhong, M.Tada and Y.Iwasawa  
Immobilized Metal Ion-Containing Ionic Liquids: Preparation, Structure and Catalytic Performance in Kharasch Addition Reaction  
*Chem. Comm.*, (2005) 2506.
- A.V.Kolobov, P.Fons, J.Tominaga, A.I.Frenkel, A.L.Ankudinov, S.N.Yannopoulos, K.S.Andrikopoulos and T.Uruga  
Why Phase-Change Media are Fast and Stable: A New Approach to an Old Problem  
*Jpn. J. Appl. Phys.*, **44** (2005) 3345.
- K.Asakura, C.R.Bian, S.Suzuki, W.J.Chun, N.Watari, S.Ohnishi, P.Lu and N.Toshima  
XAFS Study on the Polymer Protected CuPd Bimetallic Nanoparticles – A Novel Heterobond-Philic Structure  
*Physica Scripta*, **T115** (2005) 781.
- Y.Takahashi, G.R.Kolonin, G.P.Shironosova, I.I.Kupriyanova, T.Uruga and H.Shimizu  
Determination of the Eu(II)/Eu(III) Ratios in Minerals by X-Ray Absorption Near-Edge Structure (XANES) and its Application to Hydrothermal Deposits  
*Mineralogical Magazine*, **69** (2005) 177.
- Y.Takahashi, K.Yuita, N.Kihou, H.Shimizu and M.Nomura  
Determination of the Ce(IV)/Ce(III) Ratio by XANES in Soil Horizons and its Comparison with the Degree of the Ce Anomaly  
*Physica Scripta*, **T115** (2005) 936.
- H.Tsuno, H.Kagi, Y.Takahashi, T.Akagi and M.Nomura  
XAFS Study on the Trace Amounts of Ytterbium Ions Incorporated in Calcium Carbonate Crystal  
*Physica Scripta*, **T115** (2005) 897.
- M.Harada, N.Toshima, K.Yoshida and S.Isoda  
Aggregated Structure Analysis of Polymer-Protected Platinum/Ruthenium Colloidal Dispersions using EXAFS, HRTEM, and Electron Diffraction Measurements  
*J. Colloid Interface Sci.*, **283** (2005) 64.
- T.Mizoguchi, M.Sakurai, A.Nakamura, T.Sasaki, Y.Sato, K.Matsunaga, T.Yamamoto and Y.Ikuhara  
Theoretical and Experimental Ti-K NEXAFS of Various Ti-Oxides  
*Mater. Sci. Forum*, **475-479** (2005) 3119.
- A.Yamaguchi, T.Hayashi, K.Oyaizu and M.Yuasa  
Formation of Active Sites for the NO + CO Reaction over Palladium Catalysts Supported on Mesoporous Silica  
*Bull. Chem. Soc. Jpn.*, **78** (2005) 192.
- P.Fons, K.Nakahara, A.Yamada, K.Matsubara, K.Iwata, H.Takasu and S.Niki  
XAFS Observations of Initial Growth of (0001) ZnO on {11 $\bar{2}$ 0} Sapphire Substrates  
*Physica Scripta*, **T115** (2005) 523.
- T.Yamamoto, T.Mizoguchi and I.Tanaka  
Core-Hole Effect on Dipolar and Quadrupolar Transitions of SrTiO<sub>3</sub> and BaTiO<sub>3</sub> at Ti K Edge  
*Phys. Rev. B*, **71** (2005) 245113.
- I.Tanaka, T.Mizoguchi and T.Yamamoto  
XANES and ELNES in Ceramic Science  
*J. American Ceramic Society*, **88** (2005) 2013.
- K.Sugawara, T.Nobukawa, Y.Noguchi, K.Okumura, S.Ito, K.Tomishige and K.Kunimori  
Effect of Reductants in N<sub>2</sub>O Reduction and Analysis of Active Sites over Fe-MFI Catalysts  
*Hyomenkagaku*, **26** (2005) 385. (*in Japanese*).
- M.Yuasa, A.Yamaguchi, H.Itsuki, K.Tanaka, M.Yamamoto and K.Oyaizu  
Modifying Carbon Particles with Polypyrrole for Adsorption of Cobalt Ions as Electrocatalytic Site for Oxygen Reduction  
*Chem. Mater.*, **17** (2005) 4278.

### 13A

S.Ono, Y.Tange, I.Katayama and T.Kikegawa  
Equations of State of ZrSiO<sub>4</sub> Phases in the Upper Mantle  
*American Mineralogist*, **89** (2004) 185.

K.Takemura  
Structural Change of Solid Iodine from Molecular to Atomic States under High Pressure - Investigation by X-Ray Diffraction Isotope News, **598** (2004) 8. (*in Japanese*).

H.Hirai, K.Wanme, T.Yagi, A.Ikeda and T.Abe  
High-Pressure Synthesis of a Novel Form of Endohedral Li Diamond from Li Graphite Intercalation Compound  
*J. Phys. Chem. Solid*, **65** (2004) 933.

S.Ono, T.Kikegawa and Y.Ohishi  
High-Pressure Phase Transition of Hematite, Fe<sub>2</sub>O<sub>3</sub>  
*J. Phys. Chem. Solids*, **65** (2004) 1527.

S.Ono, T.Kikegawa and T.Iizuka  
The Equation of State of Orthorhombic Perovskite in a Peridotite Mantle Composition to 80 GPa: Implications for Chemical Composition of the Lower Mantle  
*Phys. Earth Planet. Inter.*, **145** (2004) 9.

K.Takemura  
Bulk Modulus of Osmium: High-Pressure Powder X-Ray Diffraction Experiments under Quasihydrostatic Conditions  
*Phys. Rev. B*, **70** (2004) 012101.

K.Takemura, K.Sato, H.Fujihisa and M.Onoda  
Incommensurately Modulated Phase of Iodine  
under High Pressure  
*Ferroelectrics*, **305** (2004) 103.

K.Takemura, K.Sato, H.Fujihisa and M.Onoda  
Incommensurately Modulated Structure of Solid  
Iodine near the Pressure-Induced Molecular  
Dissociation  
*J. Jpn. Soc. Synchrotron Rad. Res.*, **17** (2004)  
290. (*in Japanese*).

K.Takemura, K.Sato, H.Fujihisa and M.Onoda  
Structural Phase Transitions in Iodine under High  
Pressure  
*Zeitschrift fur Kristallographie*, **219** (2004) 749.

K.Fujino, Y.Sasaki, T.Komori, H.Ogawa,  
N.Miyajima, N.Sata and T.Yagi  
Approach to the Mineralogy of the Lower Mantle  
by a Combined Method of a Laser-Heated  
Diamond Anvil Cell Experiment and Analytical  
Electron Microscopy  
*Phys. Earth Planet. Interiors*, **143-144** (2004)  
215.

A.K.Arora, R.Nithya, T.Yagi, N.Miyajima and  
T.A.Mary  
Two-Stage Amorphization of Scandium  
Molybdate at High Pressure  
*Solid State Commun.*, **129** (2004) 9.

H.Hirai, T.Tanaka, T.Kawamura, Y.Yamamoto  
and T.Yagi  
Structural Changes in Gas Hydrates and  
Existence of a Filled Ice Structure of Methane  
Hydrate above 40 GPa  
*J. Phys. Chem. Solids*, **65** (2004) 1555.

T.Yagi, K.Okabe, N.Nishiyama, A.Kubo and  
T.Kikegawa  
Complicated Effects of Aluminum on the  
Compressibility of Silicate Perovskite  
*Phys. Earth Planet. Interiors*, **143-144** (2004) 81.

T.Kondo, E.Ohtani, N.Hirao, T.Yagi and  
T.Kikegawa  
Phase Transitions of (Mg, Fe)O at Megabar  
Pressures  
*Phys. Earth Planet. Interiors*, **143-144** (2004)  
201.

S.Ono, T.Iizuka and T.Kikegawa  
Compressibility of the Calcium Aluminosilicate,  
CAS, Phase to 44 GPa  
*Phys. Earth Planet. Interiors*, **150** (2005) 331.

S.Ono, M.Shirasaka, T.Kikegawa and Y.Ohishi  
A New High-Pressure Phase of Strontium  
Carbonate  
*Physics and Chemistry of Minerals*, **32** (2005) 8.

S.Ono, Y.Ohishi, M.Isshiki and T.Watanuki  
In situ X-Ray Observations of Phase  
Assemblages in Peridotite and Basalt  
Compositions at Lower Mantle Conditions:  
Implications for Density of Subducted Oceanic  
Plate  
*J. Geophys. Res.*, **110** (2005) B02208.

S.Ono, T.Kikegawa, Y.Ohishi and J.Tsuchiya  
Post-Aragonite Phase Transformation in CaCO<sub>3</sub>  
at 40 GPa  
*American Mineralogist*, **90** (2005) 667.

A.K.Arora, T.Yagi, N.Miyajima and T.A.Mary  
Amorphization and Decomposition of Scandium  
Molybdate at High Pressure  
*J. Appl. Phys.*, **97** (2005) 013508.

S.Merkel and T.Yagi  
X-Ray Transparent Gasket for Diamond Anvil  
Cell High Pressure Experiments  
*Rev. Sci. Instrum.*, **76** (2005) 046109.

S.Ono, T.Kikegawa and Y.Ohishi  
High-Pressure and High-Temperature Synthesis  
of a Cubic IrO<sub>2</sub> Polymorph  
*Physica B*, **363** (2005) 140.

S.Ono, K.Funakoshi, A.Nozaawa and T.Kikegawa  
High-Pressure Phase Transitions in SnO<sub>2</sub>  
*J. Appl. Phys.*, **97** (2005) 073523.

S.Ono, T.Kikegawa and Y.Ohishi  
A High-Pressure and High-Temperature  
Synthesis of Platinum Carbide  
*Solid State Commun.*, **133** (2005) 55.

### 13B1

N.L.Saini, H.Oyanagi and A.Bianconi  
Temperature-Dependent Local Distortions and  
the Inhomogeneous CuO<sub>2</sub> Plane of La-Based  
Superconducting Oxides  
*J. Superconductivity: Incorporating Novel  
Magnetism*, **17** (2004) 103.

### 13B2

M.Ohkubo, M.Ukibe, T.Zama, T.Ikeuchi,  
M.Katagiri and S.Ichimura  
Photon Energy Dependence of Spatial Non-  
Uniformity in Super-Conducting Tunnel Junction  
Detectors between 200 eV and 10 keV  
*Nucl. Instrum. Meth. Phys. Res. A*, **520** (2004)  
231.

M.Ukibe, T.Ikeuchi, T.Zama and M.Ohkubo  
Aluminum Thickness Dependence of Spatial  
Profile in Niobium-Based Superconducting  
Tunnel Junctions  
*Nucl. Instrum. Meth. Phys. Res. A*, **520** (2004)  
260.

M.Ohkubo and M.Ukibe  
Superconducting Detectors for Energy-  
Dispersive Spectroscopy  
*Genshiryokugakkaishi*, **46** (2004) 121. (*in  
Japanese*).

### 13C

N.Matsubayashi, B.P.Singh, M.Imamura,  
T.Tanaka, Y.Sato, T.Ogiwara, M.Suzuki and  
S.Kiyota  
Surface Characterization of Tungsten and  
Tungsten Carbide-Cobalt Probe Materials for  
a Fine-Pitch Four-Point Probe by Variable  
Excitation XPS using Synchrotron Radiation  
*Surf. Interface Anal.*, **36** (2004) 853.

K.K.Okudaira, H.Setoyama, H.Yagi, K.Mase,  
S.Kera, A.Kahn and N.Ueno  
Study of Excited States of Fluorinated Copper  
Phthalocyanine by Inner Shell Excitation  
*J. Elec. Spec. Relat. Phenom.*, **137-140** (2004)  
137.

T.Sekiguchi, Y.Baba, I.Shimoyama, and  
K.G.Nath  
Fragmentation Pathways Caused by Soft X-  
Ray Irradiation: The Detection of Desorption  
Products using a Rotatable Time-of-Flight  
Mass-Spectrometer Combined with Pulsed  
Synchrotron Radiation  
*Proc. of the 25th International Free Electron  
Laser Conf.*, **II** (2004) 69.

T.Sekiguchi, Y.Baba, I.Shimoyama and  
K.G.Nath  
Local Bonding States of Ion-Irradiated Graphite  
Characterized by Photon-Stimulated Desorption  
(PSD) Spectroscopy  
*J. Elec. Spec. Relat. Phenom.*, **144-147** (2005)  
437.

### 14A

K.Sakurai  
X-Ray Reflectometry  
*Kinzoku*, **74** (2004) 305. (*in Japanese*).

S.Kishimoto  
An Avalanche Diode Electron Detector for  
Observing NEET  
*AIP Conf. Proc.*, **705** (2004) 881.

F.Tokanai, H.Sakurai, S.Gunji, S.Motegi,  
H.Toyokawa, M.Suzuki, K.Hirota, S.Kishimoto  
and K.Hayashida  
Hard X-Ray Polarization Measured with a  
Compton Polarimeter at Synchrotron Radiation  
Facility  
*Nucl. Instrum. Meth. Phys. Res. A*, **530** (2004)  
446.

S.Kuze, D.du Boulay, N.Ishizawa, A.Saiki and  
A.Pring  
X-Ray Diffraction Evidence for a Monoclinic  
Form of Stibnite, Sb<sub>2</sub>S<sub>3</sub>, below 290K.  
*Am. Mineral.*, **89** (2004) 1022.

K.Tateishi, K.Suda, D.du Boulay, N.Ishizawa  
and S.Oishi  
LiMn<sub>2</sub>O<sub>4</sub>: A Spinel-Related Low Temperature  
Modification  
*Acta Cryst. E*, **60** (2004) i18.

S.Kuze, D.du Boulay, N.Ishizawa, N.Kodama,  
M.Yamaga and B.Henderso  
Structures of LiCaAlF<sub>6</sub> and LiSrAlF<sub>6</sub> at 120  
and 300K by Synchrotron X-Ray Single-Crystal  
Diffraction  
*J. Solid State Chemistry*, **177** (2004) 3505.

D.du Boulay, N.Ishizawa, T.Atake, V.Streltsov,  
K.Furuya and F.Munakata  
Synchrotron X-Ray and *ab initio* Studies of β-  
Si<sub>3</sub>N<sub>4</sub>  
*Acta Cryst. B*, **60** (2004) 388.

D.du Boulay, N.Ishizawa and E.N.Maslen  
GdAlO<sub>3</sub> Perovskite  
*Acta Cryst. C*, **60** (2004) i120.

S.Kishimoto, Y.Yoda, Y.Kobayashi, S.Kitao, R.Haruki and M.Seto  
Evidence for Nuclear Excitation by Electron Transition on  $^{193}\text{Ir}$  and its Probability  
Nuclear Physics, A, **748** (2005) 3.

T.Ikagawa, J.Kataoka, Y.Yatsu, T.Saito, Y.Kuramoto, N.Kawai, M.Kokubun, T.Kamae, Y.Ishikawa and N.Kawabata  
Study of Large Area Hamamatsu Avalanche Photodiode in a  $\gamma$ -Ray Scintillation Detector  
Nucl. Instrum. Meth. Phys. Res. A, **538** (2005) 640.

#### 14B

K.Hirano  
Resolution-Tunable Angle-Resolved X-Ray Imaging  
AIP Conf. Proc., **705** (2004) 1267.

M.Ando, H.Sugiyama and X.Dingchang  
Development of a Novel Medical Imaging-What Can One See with This Method?  
Radioisotope, **53** (2004) 35. (*in Japanese*).

M.Ando, H.Sugiyama, T.Kunisada, D.Shimao, K.Takeda, H.Hashizume and H.Inoue  
Construction of X-Ray Dark-Field Imaging with a View Size of 80mm Square and First Visualization of Human Articular Cartilage of Femoral Head under a Nearly Clinical Condition  
Jpn. J. Appl. Phys., **43** (2004) L1175.

M.Ando, H.Sugiyama, A.Maksimenko, E.Rubenstein, J.Roberson, D.Shimao, E.Hashimoto and K.Mori  
X-Ray Dark-Field Imaging and its Application to Medicine  
Radiation Physics and Chemistry, **71** (2004) 899.

X.Zhang, Y.Okada, H.Sugiyama and M.Ando  
A Novel High-Resolution Mapping Method of d-Spacing and Lattice Plane Orientation  
AIP Conf. Proc., **705** (2004) 1106.

E.Hashimoto, H.Sugiyama, A.Maksimenko, K.Hyodo, T.Yuasa, W.Pattanasiriwisawa, E.Rubenstein, J.Roberson and M.Ando  
A Novel and Simple X-Ray Dark Field Imaging  
AIP Conf. Proc., **705** (2004) 1247.

A.Maksimenko, H.Sugiyama, K.Hirano, T.Yuasa and M.Ando  
Dark-Field Imaging using an Asymmetric Bragg Case Transmission Analyser  
Meas. Sci. Technol., **15** (2004) 1251.

M.Ando and H.Sugiyama  
Development of X-Ray Dark-Field Imaging and its Approach to Clinical Application  
Oyo Butsuri, **74** (2005) 446. (*in Japanese*).

M.Ando, K.Yamasaki, F.Toyofuku, H.Sugiyama, C.Ohbayashi, G.Li, L.Pan, X.Jiang, W.Pattanasiriwisana, D.Shimao, E.Hashimoto, T.Kimura, M.Tsuneyoshi, E.Ueno, K.Tokumori, A.Maksimenko, Y.Higashijoda and M.Hirano  
Attempt at Visualizing Breast Cancer with X-Ray Dark Field Imaging  
Jpn. J. Appl. Phys., **44** (2005) L528.

T.Mitsui, H.Takei, S.Kitao, M.Seto, T.Harami, X.Zhang, Y.Yoda and S.Kikuta  
Flux Growth of  $^{57}\text{Fe}$ -Enriched Very High Quality Iron Borate Single Crystal and Observation of Magnetic Domain Structure using X-Ray Double Crystal Topography  
Trans. Mater. Res. Soc. Jpn., **30** (2005) 7.

L.Gang, K.Hirano, J.Xiaoming, C.Zhihua, W.Ziyu, M.Ando, P.Lin, T.Jintian, Z.Peiping and N.Ruola  
Improvement the Contrast Resolution of DEI Image Using the Resolution-Tunable Double-Crystal Analyzer  
SPIE Proc., **5745** (2005) 1247.

#### 14C1

A.Yoneyama, T.Takeda, Y.Tsuchiya, J.Wu, T.T.Lwin, A.Koizumi, K.Hyodo and Y.Itai  
A Phase-Contrast X-Ray Imaging System –with a 60×30 mm Field of View– Based on a Skew-Symmetric Two-Crystal X-Ray Interferometer  
Nucl. Instrum. Meth. Phys. Res. A, **523** (2004) 217.

A.Yoneyama, T.Takeda, Y.Tsuchiya, J.Wu, T.T.Lwin and K.Hyodo  
Large-Area Phase-Contrast X-Ray Imaging System using a Two-Crystal X-Ray Interferometer  
AIP Conf. Proc., **705** (2004) 1299.

T.Takeda, J.Wu, Y.Tsuchiya, A.Yoneyama, T.T.Lwin, K.Hyodo and Y.Itai  
Interferometric Phase-Contrast X-Ray CT Image of VX2 Rabbit Cancer at 35keV X-Ray Energy  
AIP Conf. Proc., **705** (2004) 1328.

D.Shimao, K.Mori, K.Hyodo, H.Sugiyama and M.Ando  
Application of X-Ray Refraction-Contrast to Medical Joint Imaging  
AIP Conf. Proc., **705** (2004) 1324.

T.Takeda, J.Wu, Y.Tsuchiya, A.Yoneyama, T.T.Lwin, Y.Aiyoshi, T.Zeniya, K.Hyodo and E.Ueno  
Interferometric X-Ray Imaging of Breast Cancer Specimens at 51 keV X-Ray Energy  
Jpn. J. Appl. Phys., **43** (2004) 5652.

T.Takeda, A.Yoneyama, J.Wu, T.T.Lwin, Y.Tsuchiya and K.Hyodo  
In-vivo Imaging of Cancer Implanted in Nude Mice by Two-Crystal Interferometer-Based Phase-Contrast X-Ray Computed Tomography  
Jpn. J. Appl. Phys., **43** (2004) L1144.

T.Takeda, J.Wu, Y.Tsuchiya, T.T.Lwin, A.Yoneyama, Y.Hirai and Y.Itai  
Vessel Imaging by Interferometric Phase-Contrast X-Ray Technique  
Proc. 3rd Congress on Heart Disease, (2004) 143.

T.Takeda, J.Wu, A.Yoneyama, Y.Tsuchiya, T.T.Lwin, Y.Hirai, T.Kuroe, T.Yuasa, K.Hyodo, F.A.Dilmanian and T.Akatsuka  
SR Biomedical Imaging with Phase-Contrast and Fluorescent X-Ray CT  
SPIE Proc., **5535** (2004) 380.

A.Yoneyama, T.Takeda, Y.Tsuchiya, J.Wu, T.T.Lwin and K.Hyodo  
Large-Area Phase-Contrast X-Ray Imaging System Based on a Two-Crystal X-Ray Interferometer  
AIP Conf. Proc., **716** (2004) 22.

J.Wu, T.Takeda, T.T.Lwin, Y.Tsuchiya, N.Sunaguchi, T.Kuroe, A.Yoneyama, T.Yuasa, K.Hyodo, H.Hontani, M.Minami and T.Akatsuka  
Integrated Imaging of Mouse Brain with Fluorescent and Phase-Contrast X-Ray CT  
Proc. 6th Asian-Pacific Conf. Medical and Biol. Eng., **PA-3-37** (2005) 1.

A.Yoneyama, T.Takeda, Y.Tsuchiya, J.Wu, T.T.Lwin, K.Hyodo and Y.Hirai  
High-Energy Phase-Contrast X-Ray Imaging using a Two-Crystal X-Ray Interferometer  
J. Synchrotron Rad., **12** (2005) 534.

#### 14C2

O.Ohtaka, M.Shimono, N.Ohnishi, H.Fukui, H.Takebe, H.Arima, T.Yamanaka, T.Kikegawa and S.Kume  
HIP Production of a Diamond/SiC Composite and Application to High-Pressure Anvils  
Phys. Earth Planet. Inter., **143-144** (2004) 587.

N.Funamori, S.Yamamoto, T.Yagi and T.Kikegawa  
Exploratory Studies of Silicate Melt Structure at High Pressures and Temperatures by in situ X-Ray Diffraction  
J. Geophys. Res., **109** (2004) B03203.

#### 15A

M.Kojima, A.A.Timchenko, J.Higo, K.Ito, H.Kihara and K.Takahashi  
Structural Refinement by Restrained Molecular-Dynamics Algorithm with Small-Angle X-Ray Scattering Constraints for a Biomolecule  
J. Appl. Cryst., **37** (2004) 103.

Y.Miwa, K.Yamamoto, M.Sakaguchi, M.Sakai, K.Tanida, S.Hara, S.Okamoto and S.Shimada  
A Site-Specific ESR Spin-Labeling Study of Molecular Motion in Microphase-Separated Polystyrene-*block*-poly(methyl acrylate) with Lamellar Morphology  
Macromolecules, **37** (2004) 831.

H.Adachi, K.Osamura and J.Kusui  
Relationship between Stress Corrosion Resistance and Microstructure of Rapidly Solidified Al-Zn-Mg Alloys  
J. Jpn. Inst. Light Metals, **54** (2004) 69. (*in Japanese*).

H.Adachi, J.Isogai and K.Osamura  
Investigation of Phase Decomposition Process in Mg-Y-Nd Alloys by Small Angle Scattering  
Trans. Mater. Res. Soc. J., **29** (2004) 97.

- Y.Miwa, K.Tanida, K.Yamamoto, S.Okamoto, M.Sakaguchi, M.Sakai, S.Makita, S.Sakurai and S.Shimada  
Dynamic Heterogeneity in Interfacial Region of Microphase-Separated Polystyrene-*block*-poly(methyl acrylate) Studied by the ESR Spin-Label Technique  
*Macromolecules*, **37** (2004) 3707.
- S.Shimada, Y.Takahashi, Y.Sugino, S.Hara and K.Yamamoto  
Autonomic Healing of a Pinhole in Polyethylene and Photografted Polyethylene-*g*-Poly(hexyl methacrylate) Films  
*J. Polymer Sci., B, Polymer Physics*, **42** (2004) 1705.
- T.Morita and K.Nishikawa  
Fluctuations in Density and Concentration of Methanol-Water Mixtures at 7 MPa and 373, 423 K Studied by Small-Angle X-Ray Scattering  
*Chem. Phys. Lett.*, **389** (2004) 29.
- L.Zhu, Z.-J.Qin, J.-M.Zhou and H.Kihara  
Unfolding Kinetics of Dimeric Creatine Kinase Measured by Stopped-Flow Small Angle X-Ray Scattering  
*Biochimie*, **86** (2004) 127.
- Y.Noze, S.Hirano, N.Kawasaki, S.Ueno, N.Yagi, T.Nishi and Y.Amemiya  
Penetration of PBSU Spherulite into P(VDC-VC) Spherulite Observed with Microbeam- and Macrobeam-SAXS/WAXS Measurements  
*Polymer*, **45** (2004) 8593.
- T.Iiyama, Y.Kobayashi, K.Kaneko and S.Ozeki  
In situ Small-Angle X-Ray Scattering Study of Cluster Formation in Carbon Micropores  
*Colloids and Surfaces A*, **241** (2004) 207.
- M.W.Akhtar, V.Srinivas, B.Raman, T.Ramakrishna, T.Inobe, K.Maki, M.Arai, K.Kuwajima and Ch.M.Rao  
Oligomeric Hsp33 with Enhanced Chaperone Activity: Gel Filtration, Cross-Linking, and Small Angle X-Ray Scattering (SAXS) Analysis  
*J. Biol. Chem.*, **279** (2004) 55760.
- R.Iizuka, S.So, T.Inobe, T.Yoshida, T.Zako, K.Kuwajima and M.Yohda  
Role of the Helical Protrusion in the Conformational Change and Molecular Chaperone Activity of the Archaeal Group II Chaperonin  
*J. Biol. Chem.*, **279** (2004) 18834.
- K.Nishikawa, A.A.Arai and T.Morita  
Density Fluctuation of Supercritical Fluids Obtained from Small-Angle X-Ray Scattering Experiment and Thermodynamic Calculation  
*J. Supercritical Fluids*, **30** (2004) 249.
- I.Yamashita, Y.Kawabata, T.Kato, M.Hato and H.Minamikawa  
Small Angle X-Ray Scattering from Lamellar Phase for  $\beta$ -3,7-Dimethyloctylglucoside/Water System. Comparison with  $\beta$ -*n*-Alkylglucosides.  
*Colloids and Surfaces A*, **250** (2004) 485.
- K.Hara, M.Sugiyama, M.Annaka and Y.Soejima  
Nanostructural Characterization of the Dehydrated (NIPA/SA + Additive Ion) Gels  
*Colloids and Surfaces B*, **38** (2004) 197.
- M.Imai, R.Mawatari, K.Nakaya and S.Komura  
Inter-Lamellar Interactions Modulated by Addition of Guest Components  
*Eur. Phys. J. E*, **13** (2004) 391.
- K.Kanie and T.Sugimoto  
Development of Organic-Inorganic Hybrid Liquid Crystals  
*Kinou Zairyuu*, **24** (2004) 5. (*in Japanese*).
- K.Kanie and T.Sugimoto  
Organic-Inorganic Hybrid Liquid Crystals: Induction of Thermotropic Liquid Crystallinity to Monodispersed TiO<sub>2</sub> Nanoparticles  
Yuukimuki nano fukugouzairyuu no sinkyokumen, (2004) 175. (*in Japanese*).
- M.Annaka, T.Matsuura, E.Yoshimoto, H.Taguchi, S.Sasaki, M.Sugiyama, Y.Hara and T.Okano  
Study on the Rapid Deswelling Mechanism of Comb-Type N-Isopropylacrylamide Gels  
*Colloids and Surfaces B*, **38** (2004) 201.
- K.Hayashi, Y.Ejima, T.Shimizu, S.Kizaki, S.Hara, K.Yamamoto, S.Okamoto and S.Sakurai  
Crystallization Behavior of Linear Low Density Polyethylene in its Blend with a Rubber Polymer as Revealed by Synchrotron SAXS / WAXS / Hv-SALS Simultaneous Measurements  
*Nihon Reoroji Gakkaishi*, **32** (2004) 179. (*in Japanese*).
- Y.Yamada, T.Yajima, K.Fujiwara, M.Arai, K.Ito, A.Shimizu, H.Kihara, K.Kuwajima, Y.Amemiya and M.Ikeguchi  
Helical and Expanded Conformation of Equine  $\beta$ -Lactoglobulin in the Cold-Denatured State  
*J. Mol. Biol.*, **350** (2005) 338.
- Y.Miwa, K.Usami, K.Yamamoto, M.Sakaguchi, M.Sakai and S.Shimada  
Direct Detection of Effective Glass Transitions in Miscible Polymer Blends by Temperature Modulated Differential Scanning Calorimetry  
*Macromolecules*, **38** (2005) 2355.
- M.Imai, I.Yoshida, T.Iwaki and K.Nakaya  
Static and Dynamic Structures of Spherical Nonionic Surfactant Micelles during the Disorder-Order Transition  
*J. Chem. Phys.*, **122** (2005) 044906.
- Y.Shinohara, N.Kawasaki, S.Ueno, I.Kobayashi, M.Nakajima and Y.Amemiya  
Observation of the Transient Rotator Phase of *n*-Hexadecane in Emulsified Droplets with Time-Resolved Two-Dimensional Small- and Wide-Angle X-Ray Scattering  
*Phys. Rev. Lett.*, **94** (2005) 097801.
- M.Imai, K.Sakai, M.Kikuchi, K.Nakaya, A.Saeki and T.Teramoto  
Kinetic Pathway to Double-Gyroid Structure  
*J. Chem. Phys.*, **122** (2005) 214906.
- T.Morita, T.Masakawa, A.A.Arai, M.Nakagawa and K.Nishikawa  
Volume-Variable Sample Holder for Small-Angle X-Ray Scattering Measurements of Supercritical Solutions and Application to the CHF<sub>3</sub>-CO<sub>2</sub> Mixture  
*Rev. Sci. Instrum.*, **76** (2005) 033902.
- A.A.Arai, Y.Morita and K.Nishikawa  
Analysis to Obtain Density Fluctuation of Supercritical Fluids by Small-Angle X-Ray Scattering  
*Chem. Phys.*, **310** (2005) 123.
- K.Yamamoto, K.Kato, Y.Sugino, S.Hara, Y.Miwa, M.Sakaguchi and S.Shimada  
ESR Study on Segmental Motion of Polyethylene in Amorphous Region, Dependent on Crystallinity, Molecular Weight, and Labeled Site  
*Macromolecules*, **38** (2005) 4737.
- T.Ogawa, H.Niwa, H.Okuda and S.Ochiai  
Application of Grazing-Incidence Small-Angle X-Ray Scattering Technique to Semiconducting Composite Material  
*Mater. Sci. Forum*, **475-479** (2005) 1097.
- I.Murase, R.Kurosaki, H.Okuda, S.Ochiai, Y.Yokoyama, A.Inoue and K.Inoue  
Scanning Anomalous Small-Angle Scattering as a Tool to Examine Welded Bulk Glass  
*Mater. Sci. Forum*, **475-479** (2005) 3401.
- Y.Kajjura, S.Watanabe, T.Itou, A.Iida, Y.Shinohara and Y.Amemiya  
Structural Analysis of Single Wool Fibre by Scanning Microbeam SAXS  
*J. Appl. Cryst.*, **38** (2005) 420.
- H.Takahashi, Y.Okumura and J.Sunamoto  
Structure and Thermal History Dependant Phase Behavior of Hydrated Synthetic Sphingomyelin Analogue: 1,2-Dimyristamido-1,2-deoxyphosphatidylcholine  
*Biochem. Biophys. Acta*, **1713** (2005) 40.

## 15B1

K.Mizuno, K.Morikawa, S.Yamamoto, M.Kuga, H.Okamoto and E.Hashimoto  
New Vacancy Source in Ultrahigh-Purity Aluminum Single Crystals with a Low Dislocation Density  
*J. Phys. Soc. Jpn.*, **73** (2004) 1101.

K.Mizuno, S.Yamamoto, K.Morikawa, M.Kuga, H.Okamoto and E.Hashimoto  
Vacancy Generation Mechanism at High Temperature in Ultrahigh-Purity Aluminum Single Crystals with a Low Dislocation Density  
*J. Cryst. Growth*, **271** (2005) e1697.

## 15B2

H.Tajiri, K.Sumitani, S.Nakatani, T.Takahashi, K.Akimoto, H.Sugiyama, X.Zhang and H.Kawata  
Sample Holder Assembly Covering a Wide Range of Temperatures for Surface X-Ray Diffraction  
*Appl. Surf. Sci.*, **237** (2004) 645.

Y.Mizuno, K.Akimoto, T.Aoyama, H.Suzuki, H.Nakahara, A.Ichimiya, K.Sumitani, T.Takahashi, X.Zhang, H.Sugiyama, and H.Kawata  
Structure of the Si(113) Surface Studied by Surface X-Ray Diffraction  
Appl. Surf. Sci., **237** (2004) 40.

H.Tajiri, K.Sumitani and T.Takahashi  
Phase Transitions and Crystal Structure of the Si(111)- $\sqrt{3} \times \sqrt{3}$ -Ag Surface Studied by X-Ray Diffraction  
J. Surf. Sci. Soc. Jpn, **26** (2005) 322. (*in Japanese*).

## 15C

T.Ohno, H.Yamaguchi, S.Kuroda, K.Kojima, T.Suzuki and K.Arai  
Direct Observation of Dislocations Propagated from 4H-SiC Substrate to Epitaxial Layer by X-Ray Topography  
J. Cryst. Growth, **260** (2004) 209.

K.Mizuno, F.Fujiki, H.Okamoto, P.Prete and N.Lovergine  
Grazing Incident X-Ray Topographs of Heteroepitaxial ZnSe Films on GaAs Substrate  
Jpn. J. Appl. Phys., **43** (2004) L321.

K.Fukuda, T.Yoshida, T.Shimura, K.Yasutake and M.Umeno  
Synchrotron X-Ray Topography of Lattice Undulation of Bonded Silicon-on-Insulator Wafers  
Jpn. J. Appl. Phys., **43** (2004) 1081.

K.Hirano  
Resolution-Tunable Angle-Resolved X-Ray Imaging  
AIP Conf. Proc., **705** (2004) 1267.

T.Fukamachi, R.Negishi, M.Yoshizawa, T.Sakamaki and T.Kawamura  
X-Rays Beam Condensation by Confinement in a Thin Crystal  
Jpn. J. Appl. Phys., **43** (2004) L865.

R.Negishi, M.Yoshizawa, S.Zhou, I.Matsumoto, T.Fukamachi and T.Kawamura  
Change of Lattice Distortion Images in X-Ray Topography with Resonant Scattering in the Laue Case  
J. Synchrotron Rad., **11** (2004) 266.

T.Ohno, H.Yamaguchi, S.Kuroda, K.Kojima, T.Suzuki and K.Arai  
Influence of Growth Conditions on Basal Plane Dislocation in 4H-SiC Epitaxial Layer  
J. Cryst. Growth, **271** (2004) 1.

Y.Yoshida, K.Akimoto, T.Emoto, S.Kikuchi, K.Itagaki and H.Namita  
Lattice Distortion due to Surface Treatment of Bias Sputtering Revealed by Extremely Asymmetric X-Ray Diffraction  
Appl. Surf. Sci., **234** (2004) 409.

T.Shimura, E.Mishima, K.Fukuda, K.Yasutake and M.Umeno  
Development of Characterization Technique of SOI Wafers by Synchrotron X-Ray Topography  
Proc. of the 4th Internal. Symp. on Advanced Science and Technology of Silicon Materials, (2004) 337.

J.Yoshimura  
Reciprocal Correlation between Fringe Contrast and Amplitude of an Anomalous Oscillation of X-Ray Pendellösung Fringes  
J. Synchrotron Rad., **11** (2004) 439.

J.Kohagura, T.Cho, T.Numakura, M.Hirata, N.Yokoyama, T.Fukai, Y.Tomii, S.Tokioka, Y.Miyake, S.Kiminami, K.Shimizu and S.Miyoshi  
X-Ray Tomography Systems for Observations of the Effects of Radially Sheared Electric Fields on Fluctuations in Plasmas  
Rev. Sci. Instrum., **75** (2004) 3992.

T.Mitsui, H.Takei, S.Kitao, M.Seto, T.Harami, X.Zhang, Y.Yoda and S.Kikuta  
Flux Growth of  $^{57}\text{Fe}$ -Enriched Very High Quality Iron Borate Single Crystal and Observation of Magnetic Domain Structure using X-Ray Double Crystal Topography  
Trans. Mater. Res. Soc. Jpn., **30** (2005) 7.

J.Kohagura, T.Cho, M.Hirata, T.Numakura, N.Yokoyama, T.Fukai, Y.Tomii, S.Tokioka, Y.Miyake, S.Kiminami, K.Shimizu, S.Miyoshi, K.Hirano, M.Yoshida, M.Yamauchi, T.Kondoh and T.Nishitani  
X-Ray Energy Responses of Silicon Tomography Detectors Irradiated with Fusion Produced Neutrons  
Transactions of Fusion Science and Technology, **47** (2005) 303.

T.Yamada, K.Mizuno, K.Kitahara and A.Moritani  
Investigation of Surface Damage in Si Exposed to Ar Plasma by Spectroscopic Ellipsometry and Grazing X-Ray Diffraction  
Jpn. J. Appl. Phys., **44** (2005) 67.

L.Gang, K.Hirano, J.Xiaoming, C.Zhihua, W.Ziyu, M.Ando, P.Lin, T.Jintian, Z.Peiping and N.Ruola  
Improvement the Contrast Resolution of DEI Image Using the Resolution-Tunable Double-Crystal Analyzer  
SPIE Proc., **5745** (2005) 1247.

## 16A1

M.Mizusawa and K.Sakurai  
XAFS Imaging of Tsukuba Gabbroic Rocks: Area Analysis of Chemical Composition and Local Structure  
J. Synchrotron Rad., **11** (2004) 209.

K.Sakurai  
X-Ray Absorption Fine Structure (XAFS)  
Kinzoiku, **74** (2004) 185. (*in Japanese*).

K.Sakurai and M.Mizusawa  
Quick Atomic-Scale Structure Imaging by Synchrotron X-Rays: A New Tool for Probing Realistic Inhomogeneous Systems  
Nanotechnology, **15** (2004) S428.

K.Sakurai and M.Mizusawa  
Fast X-Ray Fluorescence Camera Combined with Wide Band Pass Monochromatic Synchrotron Beam  
AIP Conf. Proc., **705** (2004) 889.

H.Eba and K.Sakurai  
Pattern Transition in Cu-Zn Binary Electrochemical Deposition  
J. Electroanalytical Chem., **571** (2004) 149.

K.Sakurai  
Quick Element Mapping by Projection-Type X-Ray Fluorescence Imaging  
Oyo Butsuri, **73** (2004) 754. (*in Japanese*).

H.Eba and K.Sakurai  
Enhancement of  $\text{CO}_2$  Absorbance for Lithium Ferrite - Combinatorial Application of X-Ray Absorption Fine Structure Imaging  
Materials Trans., **46** (2005) 665.

H.Eba and K.Sakurai  
Combinatorial Fluorescence XAFS Imaging of Manganese Complex Oxides  
Chem. Lett., **34** (2005) 872.

## 16A2

K.Ishizuka, T.Arima, Y.Murakami, R.Kajimoto, H.Yoshizawa, N.Nagaosa and Y.Tokura  
Commensurate-Incommensurate Crossover of Charge Stripe in  $\text{La}_{2-x}\text{Sr}_x\text{NiO}_4$  ( $x=1/3$ )  
Phys. Rev. Lett., **92** (2004) 196404.

H.Nakao, M.Tsubota, F.Iga, K.Uchihira, T.Nakano, T.Takabatake, K.Kato and Y.Murakami  
Orbitally Ordered State in  $\text{Y}_{1-x}\text{Ca}_x\text{TiO}_3$  ( $0 < x \leq 0.5$ )  
J. Phys. Soc. Jpn., **73** (2004) 2620.

M.Kubota, H.Nakao, Y.Murakami, Y.Taguchi, M.Iwama and Y.Tokura  
Orbital Ordering near a Mott Transition: Resonant X-Ray Scattering Study of the Perovskite Ti Oxides  $\text{RTiO}_3$  and  $\text{LaTiO}_{3.02}$  ( $R=\text{Gd, Sm, Nd, and La}$ )  
Phys. Rev. B, **70** (2004) 245125.

T.Matsumura, D.Okuyama, N.Oumi, K.Hirota, H.Nakao, Y.Murakami and Y.Wakabayashi  
 $d-f$  Coulomb and Quadrupole-Strain Interactions in  $\text{DyB}_2\text{C}_2$  Observed by Resonant X-Ray Scattering  
Phys. Rev. B, **71** (2005) 012405.

T.Matsumura, D.Okuyama, N.Oumi, K.Hirota, H.Nakao, Y.Murakami and Y.Wakabayashi  
Multipole Tensor Analysis of the Resonant X-Ray Scattering by Quadrupolar and Magnetic Order in  $\text{DyB}_2\text{C}_2$   
J. Phys. Soc. Jpn., **74** (2005) 1500.

D.Okuyama, T.Matsumura, H.Nakao, Y.Murakami, H.Onodera, A.Tobo, Y.Wakabayashi and H.Sawa  
Periodic Arrangement of Quadrupolar Moments Induced by the Antiferromagnetic Order in TB<sub>2</sub>C<sub>2</sub>: Observation by Resonant X-Ray Scattering  
J. Phys. Soc. Jpn., **74** (2005) 1566.

T.Arima, J.-H.Jung, M.Matsubara, M.Kubota, J.-P.Je, Y.Kaneko and Y.Tokura  
Resonant Magnetolectric X-Ray Scattering in GaFeO<sub>3</sub>: Observation of Ordering of Toroidal Moments  
J. Phys. Soc. Jpn., **74** (2005) 1419.

M.Sakata, A.Tobo, T.Matsumura, D.Okuyama, Y.Murakami, Y.Wakabayashi, H.Sawa, K.Okuyama and H.Onodera  
Resonant X-Ray Scattering on Antiferroquadrupolar Ordering Compound Dy<sub>0.8</sub>Gd<sub>0.2</sub>B<sub>2</sub>C<sub>2</sub>  
Physica B, **359-361** (2005) 950.

## 16B

J.R.Harries, J.P.Sullivan and Y.Azuma  
Experimental Determination of the Lifetimes of the  $2(-1,0)_n^0$  '2pnd' ( $^1P^o$ ) Doubly Excited States of Helium by Detection of VUV Fluorescence.  
J. Phys. B, **37** (2004) L169.

M.Z.Hossain, S.Machida, M.Nagao, Y.Yamashita, K.Mukai and J.Yoshinobu  
Highly Selective Surface Lewis Acid-Base Reaction: Trimethylamine on Si(100)c(4×2)  
J. Phys. Chem. B, **108** (2004) 4737.

Y.Hikosaka, P.Lablanquie, F.Penent, J.G.Lambourne, R.I.Hall, T.Aoto and K.Ito  
Sub-Natural Linewidth Auger Electron Spectroscopy of the 2s Hole Decay in H<sub>2</sub>S  
J. Elec. Spec. Relat. Phenom., **137-140** (2004) 287.

S.Ozawa, M.Wakasugi, M.Okamura, T.Katayama, T.Koizumi and M.Serata  
X-Ray-Induced Fluorescence Spectroscopy with Highly Charged Ion Beam Produced by a Laser Ion Source  
Rev. Sci. Instrum., **75** (2004) 1579.

S.Ozawa, M.Wakasugi, M.Okamura, M.Serata, T.Koizumi and T.Katayama  
Experimental Apparatus for X-Ray Spectroscopy with Highly Charged Ion Beam Produced by Laser Ion Source  
RIKEN Accelerator Progress Report, **37** (2004) 107.

T.Imazono, Y.Hirayama, S.Ichikura, O.Kitakami, M.Yanagihara and M.Watanabe  
Interdiffused Layers in Antiferromagnetically Coupled Fe/Si Multilayers Studied by Soft-X-Ray Fluorescence Spectroscopy  
Jpn. J. Appl. Phys., **43** (2004) 4327.

S.Ozawa, M.Wakasugi, M.Okamura, M.Fukuda, T.Koizumi and T.Katayama  
X-Ray-Induced Fluorescence Spectroscopy with EBIT  
J. Phys.: Conference Series, **2** (2004) 134.

P.Lablanquie, S.Sheinerman, F.Penent, T.Aoto, Y.Hikosaka and K.Ito  
Dynamics of Double Photoionization near the Ar 2p Threshold Investigated by Threshold Electron-Auger Electron Coincidence Spectroscopy  
J. Phys. B, **38** (2005) L9.

T.Aoto, Y.Hikosaka, R.Hall, F.Penent, P.Lablanquie and K.Ito  
Origin of Threshold Electrons Produced in Decay of the Xe 4d<sup>-1</sup>np Resonance  
J. Elec. Spec. Relat. Phenom., **142** (2005) 319.

F.Penent, P.Lablanquie, R.I.Hall, J.Palaudoux, K.Ito, Y.Hikosaka, T.Aoto and J.H.D.Eland  
Coincidence Auger Spectroscopy  
J. Elec. Spec. Relat. Phenom., **144-147** (2005) 7.

T.M.Kojima, F.Chen, M.Kitajima, T.Koizumi, Y.Nakai, H.Yamaoka and N.Watanabe  
Observation of Resonance Structures in 4d Photoionization of Eu<sup>+</sup>  
J. Elec. Spec. Relat. Phenom., **144-147** (2005) 71.

## 17A

A.Kitahara, I.Takahashi and S.Doï  
Melting Behavior of Polystyrene Surface Studied by X-Ray Reflectivity  
AIP Conf. Proc., **708** (2004) 255.

## 18A

T.Okuda, T.Tohyama, X.-D.Ma, T.Wakita, A.Harasawa and T.Kinoshita  
Surface States Band Structure of Gd-Induced One-Dimensional Chain Structure on Si(111) Surface Measured by Angle-Resolved Photoelectron Spectroscopy  
J. Elec. Spec. Relat. Phenom., **137-140** (2004) 125.

Y.Ishida, J.I.Hwang, M.Kobayashi, A.Fujimori, H.Saeki, H.Tabata and T.Kawai  
High-Energy Spectroscopy Study of the Ferromagnetic Diluted Magnetic Semiconductor Zn<sub>1-x</sub>V<sub>x</sub>O  
Physica B, **351** (2004) 304.

K.Hayashi, M.Sawada, H.Yamagami, A.Kimura and A.Kakizaki  
Magnetic Dead Layers in Fe Films Induced by a Lattice Mismatch at an Interface  
Physica B, **351** (2004) 324.

K.Hayashi, M.Sawada, H.Yamagami, A.Kimura and A.Kakizaki  
Magnetic Dead Layers Induced by Strain at fct Fe/Rh(001) Interface  
J. Phys. Soc. Jpn., **73** (2004) 2550.

W.Suraban, H.Nakajima, A.Kakizaki and T.Ishii  
Angle-Resolved Photoemission Spectroscopy Measurements on (1×1) and (5×1) Pt(100)  
J. Elec. Spec. Relat. Phenom., **144-147** (2005) 613.

## 18B

A.Abe, T.Tonozuka, Y.Sakano and S.Kamitori  
Complex Structures of *Thermoactinomyces vulgaris* R-47  $\alpha$ -Amylase 1 with Malto-oligosaccharides Demonstrate the Role of Domain N Acting as a Starch Binding Domain  
J. Mol. Biol., **335** (2004) 811.

B.Padmanabhan, N.Adachi, K.Kataoka and M.Horikoshi  
Crystal Structure of the Homolog of the Oncoprotein Gankyrin, an Interactor of Rb and CDK4/6.  
J. Biol. Chem., **279** (2004) 1546.

K.Tatsumura, T.Watanabe, D.Yamasaki, T.Shimura, M.Umeno and I.Ohdomari  
Residual Order within Thermally Grown Amorphous SiO<sub>2</sub> on Crystalline Silicon  
Phys. Rev. B, **69** (2004) 085212.

S.Wakatsuki, M.Hiraki, Y.Gaponov, N.Matsugaki, N.Igarashi and M.Suzuki  
Automation for Protein Crystallographic Diffraction Experiments  
Genomics and Proteomics, (2004) 618. (*in Japanese*).

M.Suzuki, N.Igarashi, N.Matsugaki and S.Wakatsuki  
Protein Crystallographic Beam Lines (Photon Factory)  
Genomics and Proteomics, (2004) 612. (*in Japanese*).

B.Padmanabhan, T.Kuzuhara, N.Adachi and M.Horikoshi  
The Crystal Structure of CCG1/TAF<sub>II</sub>250-Interacting Factor B (CIB)  
J. Biol. Chem., **279** (2004) 9615.

T.S.Kumarevel, Z.Fujimoto, P.Karthe, M.Oda, H.Mizuno and P.K.R.Kumar  
Crystal Structure of Activated HutP: an RNA Binding Protein that Regulates the Transcription of the *hut* Operon in *Bacillus subtilis*  
Structure, **12** (2004) 1269.

B.I.Lee and S.W.Suh  
Crystal Structure of the Schiff Base Intermediate Prior to Decarboxylation in the Catalytic Cycle of Aspartate  $\alpha$ -Decarboxylase  
J. Mol. Biol., **340** (2004) 1.

H.J.Ahn, H.-J.Yoon, B.I.Lee and S.W.Suh  
Crystal Structure of Chorismate Synthase: A Novel FMN-Binding Protein Fold and Functional Insights  
J. Mol. Biol., **336** (2004) 903.

J.K.Yang, H.J.Yoon, H.J.Ahn, B.I.Lee, J.-D.Pedelacq, E.C.Liong, J.Berendzen, M.Laivenieks, C.Vieille, G.J.Zeikus, D.J.Vocadlo, S.G.Withers and S.W.Suh  
Crystal Structure of  $\beta$ -D-Xylosidase from *Thermoanaerobacterium saccharolyticum*, a Family 39 Glycoside Hydrolase  
J. Mol. Biol., **335** (2004) 155.

- B.I.Lee, K.H.Kim, S.J.Park, S.H.Eom, H.K.Song, and S.W.Suh  
Ring-Shaped Architecture of RecR: Implications for its Role in Homologous Recombinational DNA Repair  
*EMBO J.*, **23** (2004) 2029.
- B.I.Byung, K.H.Kim, S.M.Shim, K.S.Ha, J.K.Yang, H.J.Yoon, J.Y.Ha and S.W.Suh  
Crystallization and Preliminary X-Ray Crystallographic Analysis of the RecR Protein from *Deinococcus radiodurans*, a Member of the RecFOR DNA-Repair Pathway  
*Acta Cryst. D*, **60** (2004) 379.
- J.Y.Lee, H.J.Ahn, K.S.Ha and S.W.Suh  
Crystal Structure of the TM1442 Protein from *Thermotoga maritima*, a Homolog of the *Bacillus subtilis* General Stress Response Anti-Anti-Sigma Factor RsbV  
*Proteins*, **56** (2004) 176.
- Y.Matsuura, I.Yoshizaki and M.Tanaka  
X-Ray Diffuser  
*J. Appl. Cryst.*, **37** (2004) 841.
- S.Kakuda, T.Shiba, M.Ishiguro, H.Tagawa, S.Oka, Y.Kajihara, T.Kawasaki, S.Wakatsuki and R.Kato  
Structural Basis for Acceptor Substrate Recognition of a Human Glucuronyltransferase, GlcAT-P, an Enzyme Critical in the Biosynthesis of the Carbohydrate Epitope HNK-1  
*J. Biol. Chem.*, **279** (2004) 22693.
- Z.Fujimoto, Y.Fujii, S.Kaneko, H.Kobayashi and H.Mizuno  
Crystal Structure of Aspartic Proteinase from *Irpex lacteus* in Complex with Inhibitor Pepstatin  
*J. Mol. Biol.*, **341** (2004) 1227.
- S.Yajima, K.Nakanishi, K.Takahashi, T.Ogawa, M.Hidaka, Y.Kezuka, T.Nonaka, K.Ohsawa and H.Masaki  
Relation between tRNase Activity and the Structure of Colicin D According to X-Ray Crystallography  
*Biochem. Biophys. Res. Commun.*, **322** (2004) 966.
- N.Sakai, Y.Tajika, M.Yao, N.Watanabe and I.Tanaka  
Crystal Structure of Hypothetical Protein PH0642 from *Pyrococcus horikoshii* at 1.6Å Resolution  
*Proteins*, **57** (2004) 869.
- Y.J.Im, Y.Na, G.B.Kang, S.H.Rho, M.K.Kim, J.H.Lee, C.H.Chung and S.H.Eom  
The Active Site of a Lon Protease from *Methanococcus jannaschii* Distinctly Differs from the Canonical Catalytic Dyad of Lon Proteases  
*J. Biol. Chem.*, **279** (2004) 53451.
- M.-H.Lee, C.-H.Leng, Y.-C.Chang, C.-C.Chou, Y.-K.Chen, F.-F.Hsu, C.-S.Chang, A.H.-J.Wang and T.-F.Wang  
Self-Polymerization of Archaeal RadA Protein into Long and Fine Helical Filaments  
*Biochem. Biophys. Res. Commun.*, **323** (2004) 845.
- M.Goto, R.Omi, I.Miyahara, A.Hosono, H.Mizuguchi, H.Hayashi, H.Kagamiyama and K.Hirotsu  
Crystal Structures of Glutamine:Phenylpyruvate Aminotransferase from *Thermus thermophilus* HB8: Induced Fit and Substrate Recognition  
*J. Biol. Chem.*, **279** (2004) 16518.
- T.Ose, K.Watanabe, M.Yao, M.Honma, H.Oikawa and I.Tanaka  
Structure of Macrophomate Synthase  
*Acta Cryst. D*, **60** (2004) 1187.
- A.Ohtaki, M.Mizuno, T.Tonozuka, Y.Sakano and S.Kamitori  
Complex Structures of *Thermoactinomyces vulgaris* R-47  $\alpha$ -Amylase 2 with Acarbose and Cyclodextrins Demonstrate the Multiple Substrate Recognition Mechanism  
*J. Biol. Chem.*, **279** (2004) 31033.
- M.Mizuno, T.Tonozuka, A.Uechi, A.Ohtaki, K.Ichikawa, S.Kamitori, A.Nishikawa and Y.Sakano  
The Crystal Structure of *Thermoactinomyces vulgaris* R-47  $\alpha$ -Amylase II (TVA II) Complexed with Transglycosylated Product.  
*Eur. J. Biochem.*, **271** (2004) 2530.
- Y.Oku, A.Ohtaki, S.Kamitori, N.Nakamura, M.Yohda, H.Ohno and Y.Kawarabayasi  
Structure and Direct Electrochemistry of Cytochrome P450 from the Thermoacidophilic Crenarchaeon, *Sulfolobus tokodaii* Strain 7  
*J. Inorg. Biochem.*, **98** (2004) 1194.
- T.Yoshimoto, N.Tanaka, N.Kanada, T.Inoue, Y.Nakajima, M.Haratake, K.T.Nakamura, Y.Xu and K.Ito  
Crystal Structures of Creatininase Reveal the Substrate Binding Site and Provide an Insight into the Catalytic Mechanism.  
*J. Mol. Biol.*, **337** (2004) 399.
- H.Sugawara, M.Kusunoki, G.Kurusu, T.Fujimoto, H.Aoyagi and T.Hatakeyama  
Characteristic Recognition of *N*-Acetylgalactosamine by an Invertebrate C-Type Lectin, CEL-I, Revealed by X-Ray Crystallographic Analysis.  
*J. Biol. Chem.*, **279** (2004) 45219.
- G.Hanke, G.Kurusu, M.Kusunoki and T.Hase  
FNR Electron Transfer Complexes: Evolutionary Refinement of Structural Interactions  
*Photosynthesis Research*, **81** (2004) 317.
- T.Sunami, J.Kondo, I.Hirao, K.Watanabe, K.Miura and A.Takenaka  
Structure of d(GCGAAGC) and d(GCGAAAGC) (Tetragonal Form): Switching of Partners of the Sheared G-A Pairs to Form a Functional G·A×A·G Crossing. Erratum  
*Acta Cryst. D*, **60** (2004) 422.
- J.Kondo, S.Umeda, K.Fujita, T.Sunami and A.Takenaka  
X-Ray Analyses of d(GCGAXAGC) Containing G and T at X: the Base-Intercalated Duplex is Still Stable Even in Point Mutants at the Fifth Residue  
*J. Synchrotron Rad.*, **11** (2004) 117.
- Y.Sakihama, W.Adachi, S.Shimizu, T.Sunami, T.Fukazawa, M.Suzuki, R.Yatsunami, S.Nakamura and A.Takenaka  
Crystallization and Preliminary X-Ray Analyses of the Active and the Inactive Forms of Family GH-8 Chitosanase with Subclass II Specificity from *Bacillus* sp. Strain K17  
*Acta Cryst. D*, **60** (2004) 2081.
- H.Akama, T.Matsuura, S.Kashiwagi, H.Yoneyama, T.Tsukihara, A.Nakagawa and T.Nakae  
Crystal Structure of the Membrane Fusion Protein, MexA of the Multidrug Transporter in *Pseudomonas aeruginosa*  
*J. Biol. Chem.*, **279** (2004) 25939.
- H.Akama, M.Kanemaki, M.Yoshimura, T.Tsukihara, H.Yoneyama, S.Narita, A.Nakagawa and T.Nakae  
Crystal Structure of the Drug-Discharge Outer Membrane Protein, OprM, of *Pseudomonas aeruginosa*: Dual Modes of Membrane Anchoring and Occluded Cavity End  
*J. Biol. Chem.*, **279** (2004) 52816.
- L.M.G.Chavas, C.Tringali, P.Fusi, B.Venerando, G.Tettamanti, R.Kato, E.Monti and S.Wakatsuki  
Crystal Structure of the Human Cytosolic Sialidase Neu2  
*J. Biol. Chem.*, **280** (2005) 469.
- C.-Y.Chen, T.-P.Ko, T.-W.Lin, C.-C.Chou, C.-J.Chen and A.H.-J.Wang  
Probing the DNA Kink Structure Induced by the Hyperthermophilic Chromosomal Protein Sac7d  
*Nucleic Acid Research*, **33** (2005) 430.
- Y.Iimura, I.Yoshizaki, L.Rong, S.Adachi, S.Yoda and H.Komatsu  
Development of a Reusable Protein Seed Crystal Processed by Chemical Cross-Linking  
*J. Cryst. Growth*, **275** (2005) 554.
- X.Dong, S.Fushinobu, E.Fukuda, T.Terada, S.Nakamura, K.Shimizu, H.Nojiri, T.Omori, H.Shoun and T.Wakagi  
Crystal Structure of the Terminal Oxygenase Component of Cumene Dioxygenase from *Pseudomonas fluorescens* IP01  
*J. Bacteriol.*, **187** (2005) 2483.
- K.Ichikawa, T.Tonozuka, M.Mizuno, Y.Tanabe, S.Kamitori, A.Nishikawa and Y.Sakano  
Crystallization and Preliminary X-Ray Analysis of *Thermoactinomyces vulgaris* R-47 Maltotriooligosaccharide-Metabolizing Enzyme Homologous to Glucoamylase  
*Acta Cryst. F*, **61** (2005) 302.
- S.Fushinobu, S.-Y.Jun, M.Hidaka, H.Nojiri, H.Yamane, H.Shoun, T.Omori and T.Wakagi  
A Series of Crystal Structures of a *meta*-Cleavage Product Hydrolase from *Pseudomonas fluorescens* IP01 (CumD) Complexed with Various Cleavage Products  
*Biosci. Biotechnol. Biochem.*, **69** (2005) 491.

H.Akama, M.Kanemaki, T.Tsukihara, A.Nakagawa and T.Nakae  
Preliminary Crystallographic Analysis of the Antibiotic Discharge Outer Membrane Lipoprotein OprM of *Pseudomonas aeruginosa* with an Exceptionally Long Unit Cell and Complex Lattice Structure  
*Acta Cryst. F*, **61** (2005) 131.

### 18C

H.Yamawaki, H.Fujihisa, M.Sakashita, A.Nakayama and K.Aoki  
Powder X-Ray Diffraction Study of the Volume Change of Ice VIII under High Pressure  
*Physica B*, **344** (2004) 260.

R.Resel, M.Oehzelt, K.Shimizu, A.Nakayama and K.Takemura  
On the Phase-Transition in Anthracene Induced by High Pressure  
*Solid State Commun.*, **129** (2004) 103.

H.Hirai, K.Wanne, T.Yagi, A.Ikeda and T.Abe  
High-Pressure Synthesis of a Novel Form of Endohedral Li Diamond from Li Graphite Intercalation Compound  
*J. Phys. Chem. Solid*, **65** (2004) 933.

N.Murase, S.Abe, H.Takahashi, C.Katagiri and T.Kikegawa  
Two-Dimensional Diffraction Study of Ice Crystallisation in Polymer Gels  
*CryoLetters*, **25** (2004) 227.

K.Takemura, K.Sato, H.Fujihisa and M.Onoda  
Incommensurately Modulated Phase of Iodine under High Pressure  
*Ferroelectrics*, **305** (2004) 103.

K.Takemura, K.Sato, H.Fujihisa and M.Onoda  
Incommensurately Modulated Structure of Solid Iodine near the Pressure-Induced Molecular Dissociation  
*J. Jpn. Soc. Synchrotron Rad. Res.*, **17** (2004) 290. (*in Japanese*).

K.Takemura, K.Sato, H.Fujihisa and M.Onoda  
Structural Phase Transitions in Iodine under High Pressure  
*Zeitschrift fur Kristallographie*, **219** (2004) 749.

J.Hayashi, I.Shitotani, T.Adachi, O.Shimomura and T.Kikegawa  
Phase Transitions of YbX (X = P, As and Sb) with a NaCl-type Structure at High Pressures  
*Philosophical Magazine*, **84** (2004) 3663.

K.Fujino, Y.Sasaki, T.Komori, H.Ogawa, N.Miyajima, N.Sata and T.Yagi  
Approach to the Mineralogy of the Lower Mantle by a Combined Method of a Laser-Heated Diamond Anvil Cell Experiment and Analytical Electron Microscopy  
*Phys. Earth Planet. Interiors*, **143-144** (2004) 215.

S.Tsuduku, A.Onodera, K.Ishida, Y.Kitaoka, A.Onuki, N.Shimatsu and O.Shimomura  
Synchrotron X-Ray Diffraction and Absorption Studies of CeM<sub>2</sub>X<sub>2</sub> (M=Cu, Ni and X=Si, Ge) at High Pressure  
*Solid State Commun.*, **134** (2005) 747.

### 19A

T.Matsushima, T.Okuda, T.Eguchi, M.Ono, A.Harasawa, T.Wakita, A.Kataoka, M.Hamada, A.Kamoshida, Y.Hasegawa and T.Kinoshita  
Development and Trial Measurement of Synchrotron-Radiation-Light-Illuminated Scanning Tunneling Microscope  
*Rev. Sci. Instrum.*, **75** (2004) 2149.

K.Hayashi, M.Sawada, H.Yamagami, A.Kimura and A.Kakizaki  
Magnetic Dead Layers in Fe Films Induced by a Lattice Mismatch at an Interface  
*Physica B*, **351** (2004) 324.

K.Hayashi, M.Sawada, H.Yamagami, A.Kimura and A.Kakizaki  
Magnetic Dead Layers Induced by Strain at fct Fe/Rh(001) Interface  
*J. Phys. Soc. Jpn.*, **73** (2004) 2550.

T.Okuda, T.Eguchi, T.Matsushima, M.Hamada, X.-D.Ma, A.Kataoka, A.Harasawa, T.Kinoshita and Y.Hasegawa  
Scanning Tunneling Microscope Combined with Synchrotron Radiation for Element Specific Analysis  
*J. Elec. Spec. Relat. Phenom.*, **144/147** (2005) 1157.

### 19B

M.Hirai, C.Kamezawa, S.Azatyany, Z.An, T.Shinagawa, T.Fujisawa, M.Kusaka and M.Iwami  
Interface Electronic Structures of Transition Metal (Cr, Fe) on 6H(4H)-SiC(0001)Si Face by Soft X-Ray Fluorescence Spectroscopy  
*Materials Science Forum*, **457-460** (2004) 427.

S.Hosokawa, H.Sato, Y.Wang, E.Ohata and A.Fukushima  
Soft X-Ray Emission Study of Nano-Structured Carbon  
*J. Elec. Spec. Relat. Phenom.*, **137-140** (2004) 235.

Y.Harada and S.Shin  
Polarization Dependence in Resonant Soft X-Ray Emission Spectroscopy of 3d Transition Metal Compounds  
*J. Elec. Spec. Relat. Phenom.*, **136** (2004) 143.

K.Kitamoto, Y.Taguchi, K.Mimura, K.Ichikawa, S.Kawamata, T.Ishida and O.Aita  
Valence State of Mn in Charge-Ordering Pr<sub>0.5</sub>Ca<sub>0.5</sub>MnO<sub>3-δ</sub> Studied by Mn 3s Photoemission Spectroscopy  
*J. Elec. Spec. Relat. Phenom.*, **137-140** (2004) 747.

T.Higuchi, H.Matsumoto, T.Shimura, K.Yashiro, T.Kawada, J.Mizusaki, S.Shin and T.Tsukamoto  
Electronic Structure of Protonic Conductor BaCe<sub>0.90</sub>Y<sub>0.10</sub>O<sub>3-δ</sub> Probed by Soft-X-Ray Spectroscopy  
*Jpn. J. Appl. Phys.*, **43** (2004) L731.

N.Ohtake, T.Higuchi, K.Ando, A.Fukushima, S.Shin and T.Tsukamoto  
Band Structure of Sr<sub>0.5</sub>Ba<sub>0.5</sub>Nb<sub>2</sub>O<sub>6</sub> Thin Film Probed by Soft X-Ray Emission Spectroscopy  
*Jpn. J. Appl. Phys.*, **43** (2004) 7627.

T.Yokoya, T.Takeuchi, S.Tsuda, T.Kiss, T.Higuchi, S.Shin, K.Iizawa, S.Shamoto, T.Kajitani and T.Takahashi  
Valence-Band Photoemission Study of β-ZrNCl and the Quasi-Two-Dimensional Superconductor Na<sub>x</sub>ZrNCl  
*Phys. Rev. B*, **70** (2004) 193103.

K.Kaibuchi, M.Nagasono, Z.Liu, Y.Koja, A.Fukushima, S.Shin, H.Takahashi and J.Kawai  
Fluorine Kα X-Ray Fluorescence Spectra of LuF<sub>3</sub> and NaF using Synchrotron Radiation  
*Surf. Interface Anal.*, **37** (2005) 194.

T.Higuchi, S.Yamaguchi, S.Shin, T.Hattori and T.Tsukamoto  
Electronic Structure of Protonic Conductor SrTi<sub>0.98</sub>Sc<sub>0.02</sub>O<sub>3</sub> Probed by Soft X-Ray Spectroscopy  
*Jpn. J. Appl. Phys.*, **44** (2005) 285.

### 20A

M.Kato, T.Odagiri, K.Kodama, M.Murata, K.Kameta and N.Kouchi  
Doubly Excited States of Water in the Inner Valence Range  
*J. Phys. B*, **37** (2004) 3127.

T.Odagiri, M.Murata, M.Kato and N.Kouchi  
(γ, 2γ) Studies on Doubly Excited States of Molecular Hydrogen  
*J. Phys. B*, **37** (2004) 3909.

M.Murata, T.Odagiri and N.Kouchi  
(γ, 2γ) Experiments for Studying the Multiply Excited States of N<sub>2</sub>  
*J. Elec. Spec. Relat. Phenom.*, **144-147** (2005) 147.

H.Fukuzawa, T.Odagiri, T.Nakazato, M.Murata, H.Miyagi and N.Kouchi  
Doubly Excited States of Methane Produced by Photon and Electron Interactions  
*J. Phys. B*, **38** (2005) 565.

### 20B

M.L.Carter  
Tetragonal to Monoclinic Phase Transformation at Room Temperature in Ba<sub>x</sub>Fe<sub>2x</sub>Ti<sub>8-2x</sub>O<sub>16</sub> Hollandite due to Increased Ba Occupancy  
*Mater. Res. Bulletin*, **39** (2004) 1075.

A.Cheung, G.de M.Azevedo, C.J.Glover, D.J.Llewellyn, R.G.Elliman, G.J.Foran and M.C.Ridgway  
Structural Perturbations within Ge Nanocrystals in Silica  
*Appl. Phys. Lett.*, **84** (2004) 278.

E.-C.Cho, M.A.Green, J.Xia, R.Corkish and A.Nikulin  
Atomistic Structure of SiO<sub>2</sub>/Si/SiO<sub>2</sub> Quantum Wells with an Apparently Crystalline Silicon Oxide  
*J. Appl. Phys.*, **96** (2004) 3211.



B.J.Kennedy and C.J.Howard  
Synchrotron X-Ray Powder Diffraction Study of the Structural Phase Transition in CaBr<sub>2</sub>  
Phys. Rev. B, **70** (2004) 144102.

M.C.Ridgway, G.de M.Azevedo, C.J.Glover, R.G.Elliman, D.J.Llewellyn, A.Cheung, B.Johannessen, D.A.Brett and G.J.Foran  
EXAFS Characterisation of Ge Nanocrystals in Silica  
Nucl. Instrum. Meth. Phys. Res. B, **218** (2004) 421.

Q.Zhou and B.J.Kennedy  
High-Temperature Powder Synchrotron Diffraction Studies of Synthetic Cryolite Na<sub>3</sub>AlF<sub>6</sub>  
J. Solid State Chem., **177** (2004) 654.

J.R.Twining, M.Zaw, R.Russell and K.Wilde  
Seasonal Changes of Redox Potential and Microbial Activity in Two Agricultural Soils of Tropical Australia: Some Implications for Soil-to-Plant Transfer of Radionuclides  
J. Environmental Radioactivity, **76** (2004) 265.

I.M.Low  
Depth Profiling of Phase Composition in a Novel Ti<sub>3</sub>SiC<sub>2</sub>-TiC System with Graded Interfaces  
Mater. Lett., **58** (2004) 927.

S.Schmid and A.Binder  
Modulated Structures in the Ta<sub>2</sub>O<sub>5</sub>-WO<sub>3</sub> System  
Australian Inst. Phys., (2004) online pub.

## 27A

Y.Baba  
Photon-Stimulated Desorption  
Hyoumen Kagaku no Kiso to Ouyou (ed. The Surface Science Society of Japan, NTS), (2004) 751. (*in Japanese*).

K.G.Nath, I.Shimoyama, T.Sekiguchi and Y.Baba  
Study of the Oxidation for Si Nanostructures using Synchrotron Radiation Photoemission Spectroscopy  
Appl. Surf. Sci., **234** (2004) 234.

Y.Baba, T.Sekiguchi, I.Shimoyama and K.G.Nath  
Electronic Structures of Ultra-Thin Silicon Carbides Deposited on Graphite  
Appl. Surf. Sci., **234** (2004) 246.

Y.Baba, T.Sekiguchi, I.Shimoyama and K.G.Nath  
Structures of Sub-Monolayered Silicon Carbide Films  
Appl. Surf. Sci., **237** (2004) 176.

M.Maeda, K.Kobayashi and K.Hieda  
Efficiencies of Induction of DNA Double Strand Breaks in Solution by Photoabsorption at Phosphorus and Platinum  
Int. J. Radiat. Biol., **80** (2004) 841.

H.Konishi, M.Yamashita, H.Uchida and J.Mizuki  
Cl K-Edge XANES Spectra of Atmospheric Rust on Fe, Fe-Cr and Fe-Ni Alloys Exposed to Saline Environment  
Mater. Trans., **45** (2004) 3356.

## 27B

Y.Okamoto, T.Yaita and K.Minato  
High-Temperature XAFS Study of Solid and Molten SrCl<sub>2</sub>  
J. Non-Cryst. Solids, **333** (2004) 182.

Y.Nagame, H.Haba, K.Tsukada, M.Asai, A.Toyoshima, S.Goto, K.Akiyama, T.Kaneko, M.Sakama, H.Hirata, T.Yaita, I.Nishinaka, S.Ichikawa and H.Nakahara  
Chemical Studies of the Heaviest Elements  
Nucl. Phys. A, **734** (2004) 124.

Y.Okamoto  
XAFS Simulation of Highly-Disordered Materials  
Nucl. Instrum. Meth. Phys. Res. A, **526** (2004) 572.

A.Yokoya, K.Takakura, R.Watanabe, K.Akamatsu and T.Ito  
EPR Studies of 5-Bromouracil Crystal after Irradiation with X Rays in the Bromine K-Edge Region  
Radiation Research, **162** (2004) 469.

T.Ohnuki, F.Sakamoto, N.Kozai, T.Ozaki, T.Yoshida, I.Narumi, E.Wakai, T.Sakai and A.J.Francis  
Mechanisms of Arsenic Immobilization in a Biomat from Mine Discharge Water  
Chemical Geology, **212** (2004) 279.

T.Yoshida, T.Ozaki, T.Ohnuki and A.J.Francis  
Adsorption of Rare Earth Elements by  $\gamma$ -Al<sub>2</sub>O<sub>3</sub> and *Pseudomonas fluorescens* Cells in the Presence of Desferrioxamine B: Implication of Siderophores for the Ce Anomaly  
Chemical Geology, **212** (2004) 239.

T.Ohnuki, N.Kozai, T.Ozaki, T.Yoshida, A.J.Francis, H.Iefuji and T.Sakai  
Accumulation of Co by *Saccharomyces cerevisiae*  
Geochemical et Cosmochemical Acta, **Suppl. 67** (2004) 18SA352.

Y.Tani, N.Miyata, M.Ohashi, T.Ohnuki, H.Seyama, K.Iwahori and M.Soma  
Interaction of Inorganic Arsenic with Biogenic Manganese Oxide Produced by a Mn-Oxidizing Fungus, Strain KR21-2  
Environ. Sci. & Technol., **38** (2004) 6618.

M.Maeda, K.Kobayashi and K.Hieda  
Efficiencies of Induction of DNA Double Strand Breaks in Solution by Photoabsorption at Phosphorus and Platinum  
Int. J. Radiat. Biol., **80** (2004) 841.

Y.Okamoto, Y.Iwadate, K.Fukushima, H.Matsuura and K.Minato  
X-Ray Structural Analysis of Molten PbCl<sub>2</sub>  
J. Phys. Chem. Solids, **66** (2005) 452.

H.Konishi, M.Yamashita, H.Uchida and J.Mizuki  
Difference between Cr and Ni K-Edge XANES Spectra of Rust Layers Formed on Fe-Based Binary Alloys Exposed to Cl-Rich Environment  
Mater. Trans., **46** (2005) 136.

H.Konishi, M.Yamashita, H.Uchida and J.Mizuki  
Characterization of Rust Layer Formed on Fe, Fe-Ni and Fe-Cr Alloys Exposed to Cl-Rich Environment by Cl and Fe K-Edge XANES Measurements  
Mater. Trans., **46** (2005) 329.

H.Konishi, M.Yamashita, H.Uchida and J.Mizuki  
Structure Analysis of Cation Selective Cr-Goethite as Protective Rust of Weathering Steel  
Mater. Trans., **46** (2005) 337.

Y.Okamoto, T.Yaita and K.Minato  
Molecular to Ionic Transition of BiCl<sub>3</sub> in LiCl-KCl Eutectic Melt  
J. Molecular Structure, **749** (2005) 70.

## 28A

T.Koide, H.Miyauchi, J.Okamoto, T.Shidara, A.Fujimori, H.Fukutani, K.Amemiya, H.Takeshita, S.Yuasa, T.Katayama and Y.Yuasa  
Angle-, Field-, Temperature-, and Size-Dependent Magnetic Circular X-Ray Dichroism in Au/Co Nanoclusters/Au(111)  
J. Elec. Spec. Relat. Phenom., **136** (2004) 107.

T.Okuda and T.Kinoshita  
Observation of Magnetic Domain Structure of Micro Magnetic Materials and Magnetic Thin Films by Photoemission Electron Microscope (PEEM)  
J. Surf. Sci. Soc. Jpn., **26** (2005) 19. (*in Japanese*).

## 28B

K.Takano, K.Ikeuchi, H.Sakurai, H.Oike and F.Itoh  
Magnetic Twisted State of Fe/Tb Multilayers  
J. Phys. and Chem. of Solids, **65** (2004) 1985.

T.Shinohara, M.Shigemune, T.Sato, T.Taniyama and H.Sakurai  
XMCD Study of Diluted Fe Doped Pd Fine Particles  
J. Phys. Soc. Jpn., **74** (2005) 1044.

## NE1A1

N.Shiotani, I.Matsumoto, H.Kawata, J.Katsuyama, M.Mizuno, H.Araki and Y.Shirai  
Fermi Surface of a Shape Memory Alloy of TiNi  
J. Phys. Soc. Jpn., **73** (2004) 1627.

H.Kawata, H.Adachi and I.Matsumoto  
A Real-Time Circular-Polarization Monitor for Magnetic Compton-Scattering Beamline  
AIP Conf. Proc., **705** (2004) 549.

H.Uchiyama, H.Adachi, S.Kishimoto, M.Itou, H.Sakurai, F.Itoh and H.Kawata  
An Improvement of (X, eX) Spectrometer for Coincident Measurement of Compton Scattered Photon and Recoiled Electron  
AIP Conf. Proc., **705** (2004) 1001.

H.Sakurai, F.Itoh, M.Ota, K.Takano, X.Liu, H.Oike and H.Kawata  
Development of Measuring Magnetic Compton Profiles by Grazing Incidence Geometry  
J. Phys. and Chem. of Solids, **65** (2004) 2083.

H.Sakurai, F.Itoh, M.Ota, H.Oike, K.Takano, X.Liu and H.Kawata  
Magnetic Compton Profiles of Pd/Fe Multilayers  
*J. Magn. Magn. Mater.*, **286** (2005) 410.

### NE1B

K.Miyokawa, S.Saito, T.Katayama, T.Saito, T.Kamino, K.Hanashima, Y.Suzuki, K.Mamiya, T.Koide and S.Yuasa  
X-Ray Absorption and X-Ray Magnetic Circular Dichroism Studies of a Monoatomic Fe(001) Layer Facing a Single-Crystalline MgO(001) Tunnel Barrier  
*Jpn. J. Appl. Phys.*, **44** (2005) L9.

S.Saito, K.Miyokawa, T.Katayama, S.Yuasa, T.Kamino, K.Hanashima, T.Saito, Y.Suzuki, K.Mamiya and T.Koide  
Magnetic State of Fe(001) Monatomic Layer Facing Single-Crystalline MgO(001) Tunneling Barrier: X-Ray Absorption Spectroscopy and X-Ray Magnetic Circular Dichroism Study  
*J. Magn. Soc. Jpn.*, **29** (2005) 463. (*in Japanese*).

### NE3A

K.Okitsu  
Genealogy of X-Ray Diffraction Theories and Crystal Structure Analysis and Derivation and Verification of a Takagi-Taupin-Type X-Ray *n*-Beam Dynamical Diffraction Theory  
*Adv. X-Ray Chem. Anal. Jpn.*, **36** (2005) 95. (*in Japanese*).

T.Mitsui, H.Takei, S.Kitao, M.Seto, T.Harami, X.Zhang, Y.Yoda and S.Kikuta  
Flux Growth of <sup>57</sup>Fe-Enriched Very High Quality Iron Borate Single Crystal and Observation of Magnetic Domain Structure using X-Ray Double Crystal Topography  
*Trans. Mater. Res. Soc. Jpn.*, **30** (2005) 7.

### NE5A

T.Takeda, Y.Tsuchiya, T.Kuroe, T.Zeniya, J.Wu, T.T.Lwin, T.Yashiro, T.Yuasa, K.Hyodo, F.A.Dilmanian, Y.Itai and T.Akatsuka  
Development of High-Speed Fluorescent X-Ray Micro-Computed Tomography.  
*AIP Conf. Proc.*, **705** (2004) 1320.

T.Takeda, J.Wu, A.Yoneyama, Y.Tsuchiya, T.T.Lwin, Y.Hirai, T.Kuroe, T.Yuasa, K.Hyodo, F.A.Dilmanian and T.Akatsuka  
SR Biomedical Imaging with Phase-Contrast and Fluorescent X-Ray CT  
*SPIE Proc.*, **5535** (2004) 380.

J.Wu, T.Takeda, T.T.Lwin, Y.Tsuchiya, N.Sunaguchi, T.Kuroe, A.Yoneyama, T.Yuasa, K.Hyodo, H.Hontani, M.Minami and T.Akatsuka  
Integrated Imaging of Mouse Brain with Fluorescent and Phase-Contrast X-Ray CT  
*Proc. 6th Asian-Pacific Conf. Medical and Biol. Eng.*, **PA-3-37** (2005) 1.

T.T.Lwin, T.Takeda, J.Wu, N.Sunaguchi, Y.Tsuchiya, T.Yuasa, F.A.Dilmanian, M.Minami and T.Akatsuka  
Preliminary Evaluating of Metabolic Abnormality in Cardiomyopathy by Fluorescent X-Ray CT  
*Proc. 6th Asian-Pacific Conf. Medical and Biol. Eng.*, **PA-3-34** (2005) 1.

T.Takeda, J.Wu, T.T.Lwin, Y.Tsuchiya, T.Yuasa, K.Hyodo, F.A.Dilmanian, M.Minami and T.Akatsuka  
In-vivo Imaging of Tracer Element with Fluorescent X-Ray Computed Tomography  
*Proc. 6th Asian-Pacific Conference on Medical and Biological Engineering*, **PA-3-33** (2005) 1.

### NE5C

O.Ohtaka, M.Shimono, N.Ohnishi, H.Fukui, H.Takebe, H.Arima, T.Yamanaka, T.Kikegawa and S.Kume  
HIP Production of a Diamond/SiC Composite and Application to High-Pressure Anvils  
*Phys. Earth Planet. Inter.*, **143-144** (2004) 587.

N.Funamori, S.Yamamoto, T.Yagi and T.Kikegawa  
Exploratory Studies of Silicate Melt Structure at High Pressures and Temperatures by in situ X-Ray Diffraction  
*J. Geophys. Res.*, **109** (2004) B03203.

S.Kawasaki, Y.Matsuoka, T.Yokomae, Y.Nojima, F.Okino, H.Touhara and H.Kataura  
Effect of a Liquid Pressure-Transmitting Medium on the High Pressure Behavior of Open- and Closed-End Single-Walled Carbon Nanotubes and C<sub>60</sub>-Peapods  
*Phys. Stat. Sol. (b)*, **241** (2004) 3512.

T.Hattori, K.Tsuji, T.Kinoshita and T.Narushima  
Pressure Dependence of the Structure of Liquid InAs up to 13 GPa  
*J. Phys.: Condens. Matter*, **16** (2004) S997.

K.Tsuji, T.Hattori, T.Mori, T.Kinoshita, T.Narushima and N. Funamori  
Pressure-Dependence of the Structure of Liquid Group 14 Elements  
*J. Phys.: Condens. Matter*, **16** (2004) S989.

S.Kawasaki, Y.Matsuoka, T.Yokomae, Y.Nojima, F.Okino, H.Touhara and H.Kataura  
XRD and TEM Study of High Pressure Treated Single-Walled Carbon Nanotubes and C<sub>60</sub>-Peapods  
*Carbon*, **43** (2005) 37.

Y.Nishihara, I.Aoki, E.Takahashi, K.Matsukage and K.Funakoshi  
Thermal Equation of State of Majorite with MORB Composition  
*Phys. Earth Planet. Inter.*, **148** (2005) 73.

### NW2A

Y.Iwasawa, M.Nomura and J.Mizuki  
Energy Dispersive XAFS (DXAFS)  
*Kagaku*, **59** (7) (2004) 32. (*in Japanese*).

T.Mori, M.Nomura, M.Sato, H.Adachi, Y.Uchida, A.Toyoshima, S.Yamamoto, K.Tsuchiya, T.Shioya and H.Kawata  
Design and Performance of an X-Ray Undulator Beamline PF-AR-NW2  
*AIP Conf. Proc.*, **705** (2004) 255.

H.Kawata, T.Mori, H.Adachi, N.Matsugaki, A.Koyama and M.Nomura  
Double Crystal Monochromator for X-Ray Undulator Beamline at the PF-AR  
*AIP Conf. Proc.*, **705** (2004) 663.

T.Yamaguchi, S.Tashiro, M.Tominaga, M.Kawano, T.Ozeki and M.Fujita  
A 3.5-nm Coordination Nanotube  
*J. Am. Chem. Soc.*, **126** (2004) 10818.

M.Tominaga, K.Suzuki, M.Kawano, T.Kusukawa, T.Ozeki, S.Sakamoto, K.Yamaguchi and M.Fujita  
Finite, Spherical Coordination Networks that Self-Organize from 36 Small Components  
*Angew. Chem. Int. Ed.*, **43** (2004) 5621.

D.Honda, T.Ozeki and A.Yagasaki  
[(IMo<sub>7</sub>O<sub>26</sub>)<sub>2</sub>]<sup>6-</sup>: A Missing Link between Molecular and Solid Oxides  
*Inorg. Chem.*, **43** (2004) 6893.

A.Suzuki, Y.Iwasawa and M.Nomura  
Time-Resolved Analysis of Catalytic Active Sites by Means of in-situ DXAFS  
*Hyomen*, **42** (2004) 255. (*in Japanese*).

S.Tashiro, M.Tominaga, M.Kawano, B.Therrien, T.Ozeki and M.Fujita  
Sequence-Selective Recognition of Peptides within the Single Binding Pocket of a Self-Assembled Coordination Cage  
*J. Am. Chem. Soc.*, **127** (2005) 4546.

A.V.Kolobov, P.Fons, J.Tominaga, A.L.Ankudinov, S.N.Yannopoulos and K.S.Andrikopoulos  
Crystallization-Induced Short-Range Order Changes in Amorphous GeTe  
*J. Phys.: Condens. Matter*, **16** (2005) S5103.

M.Yoshizawa, J.Nakagawa, K.Kumazawa, M.Nagao, M.Kawano, T.Ozeki and M.Fujita  
Discrete Stacking of Large Aromatic Molecules within Organic-Pillared Coordination Cages  
*Angewandte Chemie Int. Ed.*, **44** (2005) 1810.

### NW12A

M.W.Bhuiya, H.Sakuraba, K.Yoneda, T.Ohshima, T.Imagawa, N.Katunuma and H.Tsuge  
Crystallization and Preliminary X-Ray Diffraction Analysis of the Hyperthermostable NAD-Dependent Glutamate Dehydrogenase from *Pyrobaculum islandicum*  
*Acta Cryst. D*, **60** (2004) 715.

A.Nakamura, H.Komori, G.Kobayashi, A.Kita, C.Wada and K.Miki  
The N-Terminal Domain of the Replication Initiator Protein RepE is a Dimerization Domain Forming a Stable Dimer  
*Biochem. Biophys. Res. Commun.*, **315** (2004) 10.

- T.Shiba, S.Kametaka, M.Kawasaki, M.Shibata, S.Waguri, Y.Uchiyama and S.Wakatsuki  
Insights into the Phosphoregulation of  $\beta$ -Secretase Sorting Signal by the VHS Domain of GGA1  
*Traffic*, **5** (2004) 437.
- S.Wakatsuki, M.Hiraki, Y.Gaponov, N.Matsugaki, N.Igarashi and M.Suzuki  
Automation for Protein Crystallographic Diffraction Experiments  
*Genomics and Proteomics*, (2004) 618. (*in Japanese*).
- M.Suzuki, N.Igarashi, N.Matsugaki and S.Wakatsuki  
Protein Crystallographic Beam Lines (Photon Factory)  
*Genomics and Proteomics*, (2004) 612. (*in Japanese*).
- Y.Gaponov, N.Igarashi, M.Hiraki, K.Sasajima, N.Matsugaki, M.Suzuki, T.Kosuge and S.Wakatsuki  
Integrated Controlling System and Unified Database for High Throughput Protein Crystallography Experiments  
*AIP Conf. Proc.*, **705** (2004) 1213.
- Y.Gaponov, N.Igarashi, M.Hiraki, K.Sasajima, N.Matsugaki, M.Suzuki, T.Kosuge and S.Wakatsuki  
Secure UNIX Socket Based Controlling System for High Throughput Protein Crystallography Experiments  
*J. Synchrotron Rad.*, **11** (2004) 17.
- M.Mizuno, T.Tonozuka, S.Suzuki, R.Uotsu-Tomita, S.Kamitori, A.Nishikawa and Y.Sakano  
Structural Insights into Substrate Specificity and Function of Glucodextranase  
*J. Biol. Chem.*, **279** (2004) 10575.
- M.Hidaka, Y.Honda, M.Kitaoka, S.Nirasawa, K.Hayashi, T.Wakagi, H.Shoun and S.Fushinobu  
Chitobiose Phosphorylase from *Vibrio proteolyticus*, a Member of Glycosyl Transferase Family 36, Has a Clan GH-L-like ( $\alpha/\alpha$ )<sub>6</sub> Barrel Fold  
*Structure*, **12** (2004) 937.
- T.Ogawa, R.Nitta, Y.Okada and N.Hirokawa  
A Common Mechanism for Microtubule Xestabilizers-M Type Kinesins Stabilize Curling of the Protofilament Using the Class-Specific Neck and Loops.  
*Cell*, **116** (2004) 591.
- A.Miyana, T.Koseki, H.Matsuzawa, T.Wakagi, H.Shoun and S.Fushinobu  
Expression, Purification, Crystallization and Preliminary X-Ray Analysis of  $\alpha$ -L-arabinofuranosidase B from *Aspergillus kawachii*  
*Acta Cryst. D*, **60** (2004) 1286.
- K.Arata, H.Hashimoto, T.Shimizu, K.Nakashima, M.Yamada and M.Sato  
Structural Basis for Ca<sup>2+</sup>-Induced Activation of Human PAD4  
*Nature Struct. Mol. Biol.*, **11** (2004) 777.
- W.Lai, L.Chou, C.Ting, R.Kirby, Y.Tsai, A.Wang and S.Liaw  
The Functional Role of the Binuclear Metal Center in D-Aminoacylase. One-Metal Activation and Second-Metal Inhibition.  
*J. Biol. Chem.*, **279** (2004) 13692.
- Y.-J.Chang, C.-H.Huang, C.-Y.Hu and S.-H.Liaw  
Crystallization and Preliminary Crystallographic Analysis of *Bacillus subtilis* Guanine Deaminase.  
*Acta Cryst. D*, **60** (2004) 1152.
- H.Kawata, T.Mori, H.Adachi, N.Matsugaki, A.Koyama and M.Nomura  
Double Crystal Monochromator for X-Ray Undulator Beamline at the PF-AR  
*AIP Conf. Proc.*, **705** (2004) 663.
- S.Muto, M.Senda, N.Adachi, T.Suzuki, R.Nagai, T.Senda and M.Horikoshi  
Purification, Crystallization and Preliminary X-Ray Diffraction Analysis of Human Oncoprotein SET/TAF-1 $\beta$ .  
*Acta Cryst. D*, **60** (2004) 712.
- S.Kakuda, T.Shiba, M.Ishiguro, H.Tagawa, S.Oka, Y.Kajihara, T.Kawasaki, S.Wakatsuki and R.Kato  
Structural Basis for Acceptor Substrate Recognition of a Human Glucuronyltransferase, GlcAT-P, an Enzyme Critical in the Biosynthesis of the Carbohydrate Epitope HNK-1  
*J. Biol. Chem.*, **279** (2004) 22693.
- T.S.Kumarevel, Z.Fujimoto, H.Mizuno and P.K.R.Kumar  
Crystallization and Preliminary X-Ray Diffraction Studies of the Metal-Ion-Mediated Ternary Complex of the HutP Protein with L-Histidine and its Cognate RNA  
*Biochim. Biophys. Acta*, **1702** (2004) 125.
- R.Suzuki, Z.Fujimoto, A.Kuno, J.Hirabayashi, K.Kasai and T.Hasegawa  
Crystallization and Preliminary X-Ray Crystallographic Studies of the C-Terminal Domain of Galactose-Binding Lectin EW29 from the Earthworm *Lumbricus terrestris*  
*Acta Cryst. D*, **60** (2004) 1895.
- A.Miyana, T.Koseki, H.Matsuzawa, T.Wakagi, H.Shoun and S.Fushinobu  
Crystal Structure of a Family 54  $\alpha$ -L-Arabinofuranosidase Reveals a Novel Carbohydrate-Binding Module that can Bind Arabinose  
*J. Biol. Chem.*, **279** (2004) 44907.
- Y.J.Im, J.I.Kim, Y.Shen, Y.Na, Y.J.Han, S.H.Kim, P.S.Song and S.H.Eom  
Structural Analysis of *Arabidopsis thaliana* Nucleoside Diphosphate Kinase-2 for Phytochrome-Mediated Light Signaling  
*J. Biochem.*, **343** (2004) 659.
- S.Yajima, K.Nakanishi, K.Takahashi, T.Ogawa, M.Hidaka, Y.Kezuka, T.Nonaka, K.Ohsawa and H.Masaki  
Relation between tRNase Activity and the Structure of Colicin D According to X-Ray Crystallography  
*Biochem. Biophys. Res. Commun.*, **322** (2004) 966.
- S.Yajima, K.Hara, J.M.Sanders, F.Yin, K.Ohsawa, J.Wiesner, H.Jomaa and E.Oldfield  
Crystallographic Structures of Two Bisphosphonate: 1-Deoxyxylulose-5-phosphate Reductoisomerase Complexes  
*J. Am. Chem. Soc.*, **126** (2004) 10824.
- T.Tonozuka, A.Uechi, M.Mizuno, K.Ichikawa, A.Nishikawa and Y.Sakano  
Crystallization and Preliminary X-Ray Analysis of *Escherichia coli* K12 YgjK Protein, a Member of Glycosyl Hydrolase Family 63  
*Acta Cryst. D*, **60** (2004) 1284.
- M.Momma and Z.Fujimoto  
Expression, Crystallization and Preliminary X-Ray Crystallographic Studies of *Klebsiella pneumoniae* Maltohexaose-Producing  $\alpha$ -Amylase  
*Acta Cryst. D*, **60** (2004) 2352.
- A.Saito, Z.Fujimoto, E.Minami, H.Mizuno, K.Miyashita, H.Schrempf and M.Momma  
Crystallization and Preliminary X-Ray Analysis of the *Streptomyces olivaceoviridis* NgcE Binding Protein of the ABC Transporter for N-Acetylglucosamine  
*Acta Cryst. D*, **60** (2004) 2358.
- Y.J.Im, Y.Na, G.B.Kang, S.H.Rho, M.K.Kim, J.H.Lee, C.H.Chung and S.H.Eom  
The Active Site of a Lon Protease from *Methanococcus jannaschii* Distinctly Differs from the Canonical Catalytic Dyad of Lon Proteases  
*J. Biol. Chem.*, **279** (2004) 53451.
- R.Kanai, K.Haga, T.Akiba, K.Yamane and K.Harata  
Biochemical and Crystallographic Analyses of Maltohexaose-Producing Amylase from Alkalophilic *Bacillus* sp. 707  
*Biochemistry*, **43** (2004) 14047.
- T.Akiba, Y.Abe, S.Kitada, Y.Kusaka, A.Ito, T.Ichimatsu, H.Katayama, T.Akao, K.Higuchi, E.Mizuki, M.Ohba, R.Kanai and K.Harata  
Crystallization of Parasporin-2, a *Bacillus thuringiensis* Crystal Protein with Selective Cytocidal Activity Against Human Cells  
*Acta Cryst. D*, **60** (2004) 2355.
- M.Unno, T.Matsui, G.C.Chu, M.Couture, T.Yoshida, D.L.Rousseau, J.S.Olson and M.Ikeda-Saito  
Crystal Structure of the Dioxygen-Bound Heme Oxygenase from *Corynebacterium diphtheriae* : Implications for Heme Oxygenase Function  
*J. Biol. Chem.*, **279** (2004) 21055.
- Y.Tajika, N.Sakai, T.Tamura, M.Yao, N.Watanabe and I.Tanaka  
Crystal Structure of Hypothetical Protein PH0828 from *Pyrococcus horikoshii*  
*Proteins*, **57** (2004) 862.
- A.Ohtaki, M.Mizuno, T.Tonozuka, Y.Sakano and S.Kamitori  
Complex Structures of *Thermoactinomyces vulgaris* R-47  $\alpha$ -Amylase 2 with Acarbose and Cyclodextrins Demonstrate the Multiple Substrate Recognition Mechanism  
*J. Biol. Chem.*, **279** (2004) 31033.

M.Mizuno, T.Tonozuka, A.Uechi, A.Ohtaki, K.Ichikawa, S.Kamitori, A.Nishikawa and Y.Sakano

The Crystal Structure of *Thermoactinomyces vulgaris* R-47  $\alpha$ -Amylase II (TVA II) Complexed with Transglycosylated Product.

Eur. J. Biochem., **271** (2004) 2530.

K.Mizutani, Y.Machida, S.Unzai, S.-Y.Park and J.R.H.Tame

Crystal Structures of the Catalytic Domains of Pseudouridine Synthases RluC and RluD from *Escherichia coli*

Biochemistry, **43** (2004) 4454.

T.Yoshimoto, N.Tanaka, N.Kanada, T.Inoue, Y.Nakajima, M.Haratake, K.T.Nakamura, Y.Xu and K.Ito

Crystal Structures of Creatininase Reveal the Substrate Binding Site and Provide an Insight into the Catalytic Mechanism.

J. Mol. Biol., **337** (2004) 399.

H.Akama, T.Matsuura, S.Kashiwagi, H.Yoneyama, T.Tsukihara, A.Nakagawa and T.Nakae

Crystal Structure of the Membrane Fusion Protein, MexA of the Multidrug Transporter in *Pseudomonas aeruginosa*

J. Biol. Chem., **279** (2004) 25939.

H.Akama, M.Kanemaki, M.Yoshimura, T.Tsukihara, H.Yoneyama, S.Narita, A.Nakagawa and T.Nakae

Crystal Structure of the Drug-Discharge Outer Membrane Protein, OprM, of *Pseudomonas aeruginosa*: Dual Modes of Membrane Anchoring and Occluded Cavity End

J. Biol. Chem., **279** (2004) 52816.

Y.Tajika, N.Sakai, T.Tamura, M.Yao, N.Watanabe and I.Tanaka

Crystal Structure of PH0010 from *Pyrococcus horikoshii*, Which is Highly Homologous to Human AMMECR1 C-terminal Region

Proteins, **58** (2005) 501.

X.Dong, S.Fushinobu, E.Fukuda, T.Terada, S.Nakamura, K.Shimizu, H.Nojiri, T.Omori, H.Shoun and T.Wakagi

Crystal Structure of the Terminal Oxygenase Component of Cumene Dioxygenase from *Pseudomonas fluorescens* IP01

J. Bacteriol., **187** (2005) 2483.

S.Fushinobu, M.Hidaka, Y.Honda, T.Wakagi, H.Shoun and M.Kitaoka

Structural Basis for the Specificity of the Reducing End Xylose-Releasing Exo-Oligoxylanase from *Bacillus halodurans* C-125

J. Biol. Chem., **280** (2005) 17180.

L.M.G.Chavas, C.Tringali, P.Fusi, B.Venerando, G.Tettamanti, R.Kato, E.Monti and S.Wakatsuki

Crystal Structure of the Human Cytosolic Sialidase Neu2

J. Biol. Chem., **280** (2005) 469.

M.Mizuno, T.Tonozuka, K.Ichikawa, S.Kamitori, A.Nishikawa and Y.Sakano

X-Ray Crystallographic Study of Glucodextranase from a Gram-Positive Bacterium, *Arthrobacter globiformis* 142

J. Appl. Glycosci., **52** (2005) 145.

K.Ichikawa, T.Tonozuka, M.Mizuno, Y.Tanabe, S.Kamitori, A.Nishikawa and Y.Sakano

Crystallization and Preliminary X-Ray Analysis of *Thermoactinomyces vulgaris* R-47 Maltooligosaccharide-Metabolizing Enzyme Homologous to Glucoamylase

Acta Cryst. F, **61** (2005) 302.

T.Matsui, M.Furukawa, M.Unno, T.Tomita and M.Ikeda-Saito

Roles of Distal Asp in Heme Oxygenase from *Corynebacterium diphtheriae*, HmuO : A Water-Driven Oxygen Activation Mechanism

J. Biol. Chem., **280** (2005) 2981.

H.Akama, M.Kanemaki, T.Tsukihara, A.Nakagawa and T.Nakae

Preliminary Crystallographic Analysis of the Antibiotic Discharge Outer Membrane Lipoprotein OprM of *Pseudomonas aeruginosa* with an Exceptionally Long Unit Cell and Complex Lattice Structure

Acta Cryst. F, **61** (2005) 131.

K.Ida, T.Moriguchi and H.Suzuki

Crystal Structure of Heterotetrameric Sarcosine Oxidase from *Corynebacterium* sp. U-96.

Biochem. Biophys. Res. Commun., **333** (2005) 359.

#### Others

E.Kobayashi, K.Isari, M.Mori, K.Mase, K.Tanaka, K.Okudaira and N.Ueno

Construction and Evaluation of Polar-Angle-Resolved Miniature Time-of-Flight Ion Mass Spectrometer, and its Application for Electron-Ion Coincidence Spectroscopy

J. Vac. Soc. Jpn., **47** (2004) 14. (in Japanese).

Y.Shiba, Y.Katoh, T.Shiba, K.Yoshino, H.Takatsu, H.Kobayashi, H.-W.Shin, S.Wakatsuki and K.Nakayama

GAT (GGA and Tom1) Domain Responsible for Ubiquitin Binding and Ubiquitination

J. Biol. Chem., **279** (2004) 7105.

Y.Harada, T.Tokushima, Y.Takata, T.Takeuchi, Y.Kitajima, S.Tanaka, Y.Kayanuma and S.Shin

Dynamical Symmetry Breaking under Core Excitation in Graphite: Polarization Correlation in Soft X-Ray Recombination Emission

Phys. Rev. Lett., **93** (2004) 017401.

Y.Takata, T.Tokushima, Y.Harada, N.Kamakura, Y.Kitajima, M.Nagasono, Y.Tamenori, H.Ohashi, A.Hiraya, E.Ishiguro and S.Shin

A UHV Apparatus for Soft X-Ray Spectroscopy with Symmetry Selection for Solids and Surfaces

AIP Conf. Proc., **705** (2004) 1186.

M.Takata, S.Wakatsuki, K.Ono, K.Harada, K.Hirano, H.Sawa and Y.Kitajima etc.

A Thirty-Year Perspective on Science - A Role of Synchrotron Radiation

Housyaku, **17** (2004) 257. (in Japanese).

S.Tanaka, K.Mase and S.Nagaoka

Photostimulated Ion Desorption from the TiO<sub>2</sub>(110) and ZnO(10 $\bar{1}$ 0) Surfaces

Surf. Sci., **572** (2004) 43.

N.Tomita

Many-Body Wave Functions Approximated by the Superposition of Spin-Projected Nonorthogonal Slater Determinants in the Resonating Hartree-Fock Method

Phys. Rev. B, **69** (2004) 045110.

N.Tomita, M.Yamazaki and K.Nasu

Metal-Insulator Transition in the Three-Dimensional Hubbard Model

J. Elec. Spec. Relat. Phenom., **137-140** (2004) 613.

K.Nasu, M.Yamazaki, N.Tomita, H.Zhao and C.Wu

Coexistence of Both Coherent and Incoherent Peaks in Photoemission Spectra of Intermediately Correlated Many-Electron Systems

J. Elec. Spec. Relat. Phenom., **136** (2004) 49.

M.Yamazaki, N.Tomita and K.Nasu

New Aspects of Mott Transition in Intermediately Correlated One-Dimensional Hubbard Systems

J. Elec. Spec. Relat. Phenom., **137-140** (2004) 647.

N.Tomita, M.Yamazaki and K.Nasu

Theoretical Aspects of Photoemission Spectroscopy on Strongly Correlated Electron Systems

J. Elec. Spec. Relat. Phenom., **144-147C** (2005) 1237.

#### Slow Positron

T.Kurihara, Y.Nagashima, T.Shidara, H.Nakajima, S.Osawa, M.Ikeda, T.Oogoe, K.Kakihara, Y.Ogawa, A.Shirakawa, K.Furukawa, T.Sanami and A.Enomoto

Present Status of the Slow Positron Facility at KEK

Materials Science Forum, **445-446** (2004) 486.

#### Light Source Devison

T.Abe, K.Ebihara, E.Ezura, K.Haga, K.Harada, Y.Hori, T.Ieiri, S.Isagawa, T.Kageyama, T.Kasuga, T.Katoh, H.Kawata, M.Kikuchi, M.Kobayashi, Y.Kobayashi, K.Kubo, Y.Minagawa, T.Mitsuhashi, T.Miyajima, S.Nagahashi, T.T.Nakamura, H.Nakanishi, T.Nogami, T.Obina, Y.Ohsawa, Y.Ohnishi, M.Ono, T.Ozaki, H.Sakai, Y.Sakamoto, S.Sakanaka, M.Sato, M.Satoh, T.Shioya, M.Suetake, R.Sugahara, M.Tadano, T.Takahashi, S.Takasaki, Y.Takeuchi, Y.Tanimoto, M.Teijima, K.Tsuchiya, T.Uchiyama, A.Ueda, K.Umemori, N.Yamamoto, S.Yamamoto, S.Yoshimoto, M.Yoshioka and T.Fujita

Status of PF-AR

AIP Conf. Proc., **705** (2004) 33.

Y.Tanimoto, T.Uchiyama and Y.Hori  
Current Status of the PF and the PF-AR Vacuum Systems  
Proc. The 10th Ultra High Vacuum Technology for Accelerator Science and Storage Rings, (2004) 14.

K.Harada, Y.Kobayashi, T.Miyajima and S.Nagahashi  
PF-AR Injection System with Pulsed Quadrupole Magnet  
APAC 2004, (2004) CD-ROM.

S.Asaoka, K.Haga, K.Harada, T.Honda, Y.Hori, M.Izawa, T.Kasuga, M.Kobayashi, Y.Kobayashi, H.Maezawa, Y.Minagawa, A.Mishina, T.Mitsuhashi, T.Miyajima, H.Miyauchi, S.Nagahashi, T.Nogami, T.Obina, C.O.Pak, S.Sakanaka, Y.Sato, T.Shioya, M.Tadano, T.Takahashi, Y.Tanimoto, K.Tsuchiya, T.Uchiyama, A.Ueda, K.Umemori, S.Yamamoto  
New Upgrade Project for the Photon Factory Storage Ring  
AIP Conf. Proc., **705** (2004) 161.

S.Sakanaka  
Production of Short-Pulse Synchrotron Radiation using a Head-Tail Bunch Oscillation in the Electron Storage Ring  
Jpn. J. Appl. Phys., **43** (2004) 6457.

S.Sakanaka, M.Izawa, T.Takahashi and K.Umemori  
Installation and Operation of New Klystron Power Supply with Fast Solid-State Switch for Klystron Protection at the Photon Factory Storage Ring  
Proc. 9th European Particle Accelerator Conference (EPAC'04), (2004) 1699.

T.Miyajima and Y.Kobayashi  
Measurement of the Betatron Oscillation in a Phase Space near the Vertical Third-Order Resonance  
J. Particle Accelerator Soc. Jpn., **1** (2004) 98. (*in Japanese*).

T.Miyajima and Y.Kobayashi  
Determination of Nonlinear Resonance Parameters in Electron Storage Rings  
Jpn. J. Appl. Phys., **44** (2005) 2006.

S.Sakanaka, T.Mitsuhashi and T.Obina  
Observation of Transverse Quadrupolar Tune Shifts in the Photon Factory Storage Ring  
Phys. Rev. ST- Accel. Beams, **8** (2005) 042801.

S.Sakanaka  
Classification of Eigenmodes in RF Cavities using the Group Theory  
Phys. Rev. ST Accel. Beams, **8** (2005) 072002.