

2. List of Publications

1A

T.Arima, D.Akahoshi, K.Oikawa, T.Kamiyama, M.Uchida, Y.Matsui and Y.Tokura

Change in Charge and Orbital Alignment upon Antiferromagnetic Transition in the A-Site-Ordered Perovskite Manganese Oxide $R\text{BaMn}_2\text{O}_6$ ($R=\text{Tb}$ and Sm)
Phys. Rev. B, **66** (2002) 140408.

M.Uchida, D.Akahoshi, R.Kumai, Y.Tomioka, T.Arima, Y.Tokura and Y.Matsui

Charge/Orbital Ordering Structure in Ordered Perovskite $\text{Sm}_{1/2}\text{Ba}_{1/2}\text{MnO}_3$
J. Phys. Soc. Jpn., **71** (2002) 2605.

S.Horiuchi, Y.Okimoto, R.Kumai and Y.Tokura
Quantum Phase Transition in Organic Charge-Transfer Complexes
Science, **299** (2003) 229.

1B

K.Ishii, A.Fujiwara, H.Suematsu and Y.Kubozono
Ferromagnetism and Giant Magnetoresistance in the Rare-Earth Fullerides $\text{Eu}_{6-x}\text{Sr}_x\text{C}_{60}$
Phys. Rev. B, **65** (2002) 134431.

H.Sawa, E.Ninomiya, T.Ohama, H.Nakao, K.Ohwada, Y.Murakami, Y.Fujii, Y.Noda, M.Isobe and Y.Ueda
Low-Temperature Structure of the Quarter-Filled Ladder Compound $\alpha'\text{-NaV}_2\text{O}_5$
J. Phys. Soc. Jpn., **71** (2002) 385.

S.Fujiki, Y.Kubozono, M.Kobayashi, T.Kambe, Y.Rikiishi, S.Kashino, K.Ishii, H.Suematsu and A.Fujiwara
Structure and Physical Properties of $\text{Cs}_{3+\alpha}\text{C}_{60}$ ($\alpha = 0.0 - 1.0$) under Ambient and High Pressures
Phys. Rev. B, **65** (2002) 235425.

Y.Takabayashi, Y.Kubozono, T.Kanbara, S.Fujiki, K.Shibata, Y.Haruyama, T.Hosokawa, Y.Rikiishi and S.Kashino
Pressure and Temperature Dependences of the Structural Properties of Dy@C_{82} Isomer I
Phys. Rev. B, **65** (2002) 073405.

Y.Maniwa, H.Kataura, M.Abe, S.Suzuki, Y.Achiba, H.Kira and K.Matsuda
Phase Transition in Confined Water Inside Carbon Nanotubes
J. Phys. Soc. Jpn., **71** (2002) 2863.

H.Kira, H.Tou, Y.Maniwa and Y.Murakami
Magnetic Interaction in K-Adsorbing Zeolite LTA
Physica B, **312-313** (2002) 789.

D.H.Chi, Y.Iwasa, X.H.Chen, T.Takenobu, T.Ito, T.Mitani, E.Nishibori, M.Takata, M.Sakata and Y.Kubozono
Bridging Fullerenes with Metals
Chem. Phys. Lett., **359** (2002) 177.

Y.Fujii, K.Ohwada, Y.Katsuki, N.Takesue, T.Yoshihama, K.Nakajima, N.Aso, M.Nishi, K.Kakurai, M.Isobe, Y.Ueda, H.Nakao, Y.Murakami, E.Ninomiya, H.Sawa and Y.Noda
Synchrotron X-Ray and Neutron Scattering Study on the Spin-Charge-Lattice Coupled System of NaV_2O_5
Solid State Physics, **37** (2002) 627. (*in Japanese*).

S.Shimomura, J.Mizuki, H.Sawa and Y.Murakami
Invitation to Experiments of Structural Materials Science using Synchrotron X-Rays
Solid State Physics, **37** (2002) 711. (*in Japanese*).

T.Tajiri, S.Maruoka, H.Deguchi, S.Takagi, M.Mito, Y.Ishida and S.Kohiki
Superparamagnetic Behavior of $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$ Nanoparticles in the MCM-41 Molecular Sieve
Physica B, **329-333** (2002) 860.

Y.Wakabayashi, Y.Murakami, I.Koyama, T.Kimura, Y.Tokura, Y.Moritomo, Y.Endoh and K.Hirota
Resonant X-Ray Study on the Bi-Layered Perovskite Mn Oxide $\text{LaSr}_2\text{Mn}_2\text{O}_7$
J. Phys. Soc. Jpn., **72** (2003) 618.

Y.Kubozono, Y.Takabayashi, K.Shibata, T.Kanbara, S.Fujiki, S.Kashino, A.Fujiwara and S.Emura
Crystal Structure and Electronic Transport of Dy@C_{82}
Phys. Rev. B, **67** (2003) 115410.

M.Mito, H.Deguchi, T.Tanimoto, T.Kawae, S.Nakatsuji, H.Morimoto, H.Anzai, H.Nakao, Y.Murakami and K.Takeda
Pressure Effects on an Organic Radical Ferromagnet: 2,5-Difluorophenyl- α -Nitronyl Nitroxide
Phys. Rev. B, **67** (2003) 024427.

K.Ejima, T.Tajiri, H.Deguchi, M.Mito, S.Takagi, K.Ohwada, H.Nakao and Y.Murakami
Pressure Effect on the Magnetism and Structure of a Spin-Peierls Substance: $\text{MEM}[\text{TCNQ}]_2$
Physica B, **329-333** (2003) 1195.

M.Mito, H.Akama, H.Deguchi, S.Takagi, T.Kawae, K.Takeda, T.Ishii, M.Yamashita, H.Nakao, Y.Murakami and S.Yamamoto
Pressure Effects on an $S = 1$ Haldane Compound $\text{Ni}(\text{C}_5\text{H}_{14}\text{N}_2)_2\text{N}_3(\text{PF}_6)$
J. Phys. Soc. Jpn., **72** (2003) 399.

1C

J.Okabayashi, K.Ono, T.Mano, M.Mizuguchi, K.Horiba, K.Nakamura, A.Fujimori and M.Oshima
Band Discontinuity in the GaAs/AlAs Interface Studied by *in situ* Photoemission Spectroscopy
Appl. Phys. Lett., **80** (2002) 1764.

2A

K.Sugawara, Y.Enda, T.Kato, T.Sugawara and M.Shirai
Effect of Hydrogen Sulfide on Organic Sulfur Behavior in Coal and Char during Heat Treatments
Energy and Fuels, **17** (2003) 204.

J.Nakamura, M.Watanabe, T.Oguchi, S.Nasubida, E.Kabasawa, N.Yamada, K.Kuroki, H.Yamazaki, S.Shin, Y.Umeda, S.Minakawa, N.Kimura and H.Aoki
Electric Structure of B-2p State in AlB₂ Single Crystal: Direct Observation of $p\sigma$ and $p\pi$ Density of State
J. Phys. Soc. Jpn., **71** (2002) 408.

N.Miyata, M.Yanagihara, M.Watanabe, Y.Harada, and S.Shin
 π Emission Anomaly in the N 1s Resonance Emission from Hexagonal BN: Effects of the Core Hole Potential
J. Phys. Soc. Jpn., **71** (2002) 1761.

Y.Taguchi, Y.Okabayashi, T.Uozumi, K.Mimura, K.Ichikawa, S.Kawamata, K.Okuda and O.Aita
Co L Emission Spectra of LaCoO₃ at Low Temperature
Surf. Rev. Lett., **9** (2002) 871.

J.Adachi, S.Motoki, N.A.Cherepkov and A.Yagishita
Characterization of σ_u Shape Resonance in the C 1s Ionization Continuum of CO₂ Molecules
J. Phys. B, **35** (2002) 5023.

Y.Harada, K.Okada, R.Eguchi, A.Kotani, H.Takagi, T.Takeuchi and S.Shin
Unique Identification of Zhang-Rice Singlet Excitation in Sr₂CuO₂Cl₂ Mediated by O 1s Core Hole; Symmetry Selective Resonant Soft X-Ray Raman Scattering Study
Phys. Rev. B, **66** (2002) 165104.

Y.Harada, M.Oura, M.Watanabe, T.Tokushima, K.Kobayashi, T.Takeuchi and S.Shin
Soft X-Ray Emission Spectroscopy at the L-Edge of Transition Metals in Metalloproteins
RIKEN Review, **46** (2002) 45.

M.Oura, T.Mukoyama, M.Taguchi, T.Takeuchi, T.Haruna and S.Shin
Resonant Double Excitation Observed in the Near-Threshold Evolution of the Photoexcited F K _{α} Satellite Intensity in NaF
Phys. Rev. Lett., **90** (2003) 173002.

3A

P.G.Radaelli, Y.Horibe, M.J.Gutmann, H.Ishibashi, C.H.Chen, R.M.Ibberson, Y.Koyama, Y.S.Hor, V.Kiryukhin and S.-W.Cheong
Formation of Isomorphous Ir³⁺ and Ir⁴⁺ Octamers and Spin Dimerization in the Spinel CuIr₂S₄
Nature, **416** (2002) 155.

R.Ali, M.Yashima, M.Tanaka, H.Yoshioka, T.Mori and S.Sasaki
High-Temperature Synchrotron X-Ray Powder Diffraction Study of the Orthorhombic-Tetragonal Phase Transition in Lanthanum Titanate La_{0.63}(Ti_{0.92}Nb_{0.08})O₃
J. Solid State Chem., **164** (2002) 51.

S.Sasaki
Synchrotron X-Ray Study on the Charge Density and Mixed-Valence State for Transition-Metal Oxides
J. Cryst. Soc. Jpn., **44** (2002) 104. (*in Japanese*).

M.Kimura and A.Ikari
In situ Observation of Surface Melting of Si(001) Surface
Adv. X-Ray Chem. Anal. Jpn., **33** (2002) 197. (*in Japanese*).

K.Hayashi
X-Ray Fluorescence Holography –Atomic Imaging of Local Environment around Impurity in Single Crystal
Chemistry and Chemical Industry, **55-2** (2002) 113. (*in Japanese*).

M.Kanazawa, K.Hagiwara, J.Kokubun and K.Ishida
ATS Scattering from the Tetrahedral and Octahedral Site in Magnetite and Franklinite
J. Phys. Soc. Jpn., **71** (2002) 1765.

M.Yashima, R.Ali, M.Tanaka and T.Mori
High-Temperature Synchrotron X-Ray Powder Diffraction Study of the Orthorhombic-Tetragonal Phase Transition in Lanthanum Titanate Perovskite La_{0.68}(Ti_{0.95}Al_{0.05})O₃
Chem. Phys. Lett., **363** (2002) 129.

M.Yashima
In Situ Observations of Phase Transition Using High-Temperature Neutron and Synchrotron X-Ray Powder Diffraction
J. Amer. Ceram. Soc., **85** (2002) 2925.

R.Ali and M.Yashima
Lattice Parameters and Structural Phase Transition of Lanthanum Titanate Perovskite La_{0.68}(Ti_{0.95}Al_{0.05})O₃
J. Synchrotron Rad., **10** (2003) 228.

M.Yashima, M.Mori, R.Ali, M.Tanaka and T.Mori
Dependence of the Accuracy of a Continuous Phase Transition Temperature on Angular Resolution in Powder Diffraction
Chem. Phys. Lett., **371** (2003) 582.

3B

K.Edamoto, M.Yamazaki, T.Noda, K.Ozawa and S.Otani
Surface Electronic Structure of HfC(111)
Surf. Sci., **498** (2002) 343.

M.Sugihara, K.Ozawa, K.Edamoto and S.Otani
Photoelectron Spectroscopy Study of Mo₂C(0001)
Solid State Commun., **121** (2002) 1.

M.Koide, F.Koike, R.Wehlitz, M.-T.Huang, T.Nagata, J.C.Levin, S.Fritsche, B.D.DePaola, S.Ohtani and Y.Azuma
New Window Resonances in the Potassium 3s Photoabsorption Spectrum
J. Phys. Soc. Jpn., **71** (2002) 1676.

J.R.Harries, J.P.Sullivan, S.Obara, T.Suzuki, P.Hammond, J.Bozek, N.Berrah, M.Halka and Y.Azuma
Double Photoexcitation of Helium in a Strong dc Electric Field
Phys. Rev. Lett., **90** (2003) 133002.

K.Edamoto, K.Ozawa and S.Otani
Interaction of Oxygen with the Polar HfC(111) Surface: Angle-Resolved Photoemission Study
e-J. Surf. Sci. Nanotech., **1** (2003) 20.

N.Nakajima, O.Morimoto, H.Kato and Y.Sakisaka
Angle-Resolved Photoemission Study of the Near-Surface
Electronic Structure of Clean Cr(001)
Phys. Rev. B, **67** (2003) 041402.

T.Mikami, H.Nakazawa, Y.Enta, M.Suemitsu and M.Mashita
Structure and Thermal Stability of the Chemical Bondings of
Diamond-Like Carbon (DLC) Films Prepared by RF Magnetron
Sputtering
J. Surf. Sci. Soc. Jpn., **24** (2003) 411. (*in Japanese*).

H.Nakazawa, T.Mikami, Y.Enta, M.Suemitsu and M.Mashita
Structure, Chemical Bonding and these Thermal Stabilities
of Diamond-Like Carbon (DLC) Films by RF Magnetron
Sputtering
Jpn. J. Appl. Phys., **42** (2003) L676.

3C3

H.Miyagawa, T.Nakamura, Y.Watanabe, M.Ito, H.Adachi,
H.Kawata and S.Nanao
Orbital and Spin Moments in SmFe₂ Studied by Means of
White-X-Ray Magnetic Diffraction
J. Phys.: Condens. Matter, **14** (2002) 9525.

4A

A.Ide-Ektessabi, S.Fujisawa, K.Sugimura, Y.Kitamura and
A.Gotoh
Quantitative Analysis of Zinc in the Prostate Cancer Tissues
Using Synchrotron Radiation Micro Beams
X-Ray Spectrom., **31** (2002) 7.

K.Sato, Y.Ueji, K.Okitsu, T.Matsushita, J.Saito, T.Takayama,
and Y.Amemiya
Imaging Based on Hard X-Ray Magnetic Linear Dichroism by
Means of Polarization Switching
Phys. Rev. B, **65** (2002) 134408.

K.Sato, Y.Ueji, K.Okitsu, T.Matsushita, J.Saito, T.Takayama
and Y.Amemiya
Hard X-Ray Magnetic Linear Dichroism Imaging
Trans. Magn. Soc. Jpn., **2** (2002) 238.

K.Okitsu, Y.Ueji, K.Sato and Y.Amemiya
X-Ray Four-Quadrant Diamond Phase-Retarder System to
Compensate for Off-Axis and Chromatic Aberrations
Acta Cryst. A, **58** (2002) 146.

4B1

K.Koto, Y.Nakakita, C.Numako and K.Ohsumi
Crystallographic Study of γ -Al₂O₃ Single Crystal
Nature Science Research (The Univ. of Tokushima), **15** (2002)
107.

4B2

H.Toraya and S.Yamazaki
Simulated Annealing Structure Solution of a New Phase of
Dicalcium Silicate Ca₂SiO₄ and the Mechanism of Structural
Changes from α -Dicalcium Silicate Hydrate to α'_L -Dicalcium
Silicate *via* the New Phase
Acta Cryst. B, **58** (2002) 613.

H.Irie, M.Miyayama and T.Kudo
Effects of Ta, Nb and V Substitution at Ti Site on Ferroelectric
Properties in BaBi₄Ti₄O₁₅ Single Crystal
Key Engineering Materials, **214-215** (2002) 31.

T.Ida, H.Hibino and H.Toraya
Deconvolution of Instrumental Aberrations for Synchrotron
Powder X-Ray Diffractometry
J. Appl. Cryst., **36** (2003) 181.

4C

H.Nakao, K.Magishi, Y.Wakabayashi, Y.Murakami,
K.Koyama, K.Hirota, Y.Endoh and S.Kunii
Observation of Antiferroquadrupole Ordering in CeB₆ by Using
Resonant X-Ray Scattering Technique
J. Phys. Soc. Jpn., **71 Suppl.** (2002) 103.

H.Sawa, E.Ninomiya, T.Ohama, H.Nakao, K.Ohwada,
Y.Murakami, Y.Fujii, Y.Noda, M.Isobe and Y.Ueda
Low-Temperature Structure of the Quarter-Filled Ladder
Compound α' -NaV₂O₅
J. Phys. Soc. Jpn., **71** (2002) 385.

T.Matsumura, N.Oumi, K.Hirota, H.Nakao, Y.Murakami,
Y.Wakabayashi, T.Arima, S.Ishihara and Y.Endoh
Observation of the Antiferroquadrupolar Order in DyB₂C₂ by
Resonant X-Ray Scattering
Phys. Rev. B, **65** (2002) 094420.

T.Matsumura, N.Oumi, K.Hirota, H.Nakao, Y.Wakabayashi
and Y.Murakami
Resonant X-Ray Study of the Quadrupolar Orderings in RB₂C₂
(R=Dy, Ho)
J. Phys. Soc. Jpn., **71 Suppl.** (2002) 91.

T.Matsumura
Observation of the Antiferroquadrupolar Order in DyB₂C₂ by
Resonant X-Ray Scattering
J. Jpn. Soc. Synchrotron Rad. Res., **15** (2002) 3. (*in Japanese*).

M.Kanazawa, K.Hagiwara, J.Kokubun and K.Ishida
ATS Scattering from the Tetrahedral and Octahedral Site in
Magnetite and Franklinite
J. Phys. Soc. Jpn., **71** (2002) 1765.

T.Kondo, J.Morita, M.Okamura, T.Saito and K.Uosaki
In Situ Structural Study on Underpotential Deposition of Ag on
Au(111) Electrode Using Surface X-Ray Scattering Technique
J. Electroanalytical Chem., **532** (2002) 201.

N.Ogawa, Y.Murakami and K.Miyano
Charge-Density-Wave Phase Reconstruction in the
Photoinduced Dynamic Phase Transition in K_{0.3}MoO₃
Phys. Rev. B, **65** (2002) 155107.

H.Abe, H.Saitoh, T.Kusawake, H.Nakao, Y.Matsuo,
K.Ohshima, Y.Morikawa and H.Matsumoto
An Order-Disorder Transformation in Al₇₂Ni₂₀Co₈ Decagonal
Quasicrystals
J. Alloys and Comp., **342** (2002) 241.

- T.Shimura, T.Hosoi, K.Fukuda and M.Umeno
Existence of an Epitaxially Ordered Phase in the Buried Oxide SIMOX Wafers
Solid State Phenom., **82-84** (2002) 485.
- T.Shimura, T.Hosoi, K.Fukuda, M.Umeno and A.Ogura
Formation of Epitaxially Ordered SiO₂ in Oxygen-Implanted Silicon during Thermal Annealing
J. Cryst. Growth, **236** (2002) 37.
- H.Nakao
Charge and Orbital Ordered States Studied by Using X-Ray Anomalous Scattering Terms
J. Jpn. Soc. Synchrotron Rad. Res., **15** (2002) 276. (*in Japanese*).
- Y.Murakami
Resonant X-Ray Scattering from Orbitally Ordered Systems
Acta Cryst. A, **58** (2002) 244.
- Y.Fujii, K.Ohwada, Y.Katsuki, N.Takesue, T.Yoshihama, K.Nakajima, N.Aso, M.Nishi, K.Kakurai, M.Isobe, Y.Ueda, H.Nakao, Y.Murakami, E.Ninomiya, H.Sawa and Y.Noda
Synchrotron X-Ray and Neutron Scattering Study on the Spin-Charge-Lattice Coupled System of NaV₂O₅
Solid State Physics, **37** (2002) 627. (*in Japanese*).
- S.Shimomura, J.Mizuki, H.Sawa and Y.Murakami
Invitation to Experiments of Structural Materials Science using Synchrotron X-Rays
Solid State Physics, **37** (2002) 711. (*in Japanese*).
- T.Masuda, D.Yano, R.Kuroda, K.Uchinokura, H.Kuroe, T.Sekine, Y.Katsuki, K.Ohwada, Y.Fujii, H.Nakao and Y.Murakami
Appearance of the Spin-Peierls Phase under Pressure in Cu_{1-x}Mg_xGeO₃
Phys. Rev. B, **67** (2003) 024423.
- T.Kiyama, Y.Wakabayashi, H.Nakao, H.Ohsumi, Y.Murakami, M.Izumi, M.Kawasaki and Y.Tokura
Resonant X-Ray Scattering in Perovskite Manganite Superlattice – Observation of “Orbital Superlattice” –
J. Phys. Soc. Jpn., **72** (2003) 785.
- H.Abe, H.Saitoh, T.Ueno, H.Nakao, Y.Matsuo, K.Ohshima and H.Matsumoto
Diffuse Scattering from an Al₇₂Ni₂₀Co₈ Decagonal Quasicrystal on an Order-Disorder Transformation
J. Phys.: Condens. Matter, **15** (2003) 1665.
- H.Ohsumi, Y.Murakami, T.Kiyama, H.Nakao, M.Kubota, Y.Wakabayashi, Y.Konishi, M.Izumi, M.Kawasaki and Y.Tokura
Experimental Elucidation: Microscopic Mechanism of Resonant X-Ray Scattering in Manganite Films
J. Phys. Soc. Jpn., **72** (2003) 1006.
- H.Nakao, T.Satoh, J.Satoh, Y.Murakami, M.Kubota, Y.Wakabayashi, H.Sawa, T.Kimura and Y.Tokura
Charge and Orbital Orderd States in Nd_{1-x}Sr_{1+x}MnO₄ (x=0.67, 0.75)
Physica B, **329-333** (2003) 809.
- Y.J.Sun, F.Forouhar, H.M.Li, S.L.Tu, Y.H.Yeh, S.Kao, H.L.Shr, C.C.Chou, C.Chen and C.D.Hsiao
Crystal Structure of Pea Toc34, a Novel GTPase of the Chloroplast Protein Translocon
Nature Structural Biology, **9** (2002) 95.
- H.Uchikoba, S.Fushinobu, T.Wakagi, M.Konno, H.Taguchi and H.Matsuzawa
Crystal Structure of Non-Allosteric L-Lactate Dehydrogenase from *Lactobacillus pentosus* at 2.3 Å Resolution: Specific Interactions at Subunit Interfaces
Proteins: Structure, Function, and Genetics, **46** (2002) 206.
- M.Unno, T.Mizushima, Y.Morimoto, Y.Tomisugi, K.Tanaka, N.Yasuoka and T.Tsukihara
The Structure of the Mammalian 20S Proteasome at 2.75 Å Resolution
Structure, **10** (2002) 609.
- T.Shiba, H.Takatsu, T.Nogi, N.Matsugaki, M.Kawasaki, N.Igarashi, M.Suzuki, R.Kato, T.Earnest, K.Nakayama and S.Wakatsuki
Structural Basis for Recognition of Acidic-Cluster Dileucine Sequence by GGA1.
Nature, **415** (2002) 937.
- A.Kita, S.Matsunaga, A.Takai, H.Kataiwa, T.Wakimoto, N.Fusetani, M.Isobe and K.Miki
Crystal Structure of the Complex between Calyculin A and the Catalytic Subunit of Protein Phosphatase 1
Structure, **10** (2002) 715.
- M.Hidaka, S.Fushinobu, N.Ohtsu, H.Motoshima, H.Matsuzawa, H.Shoun and T.Wakagi
X-Ray Crystallography of a Novel Thermostable β-Galactosidase from *Thermus thermophilus* A4, and its Complex Structure with Galactose
J. Appl. Glycosci., **49** (2002) 175. (*in Japanese*).
- L.Liu, K.Iwata, A.Kita, Y.Kawarabayasi, M.Yohda, and K.Miki
Crystal Structure of Aspartate Racemase from *Pyrococcus horikoshii* OT3 and its Implication for Molecular Mechanism of PLP-Independent Racemization
J. Mol. Biol., **319** (2002) 479.
- T.Nogi, Y.Shiba, M.Kawasaki, T.Shiba, N.Matsugaki, N.Igarashi, M.Suzuki, R.Kato, H.Takatsu, K.Nakayama and S.Wakatsuki
Structural Basis for the Accessory Protein Recruitment by the Gamma-Adaptin Ear Domain
Nature Structural Biology, **9** (2002) 527.
- Z.Fujimoto, O.Kobayashi, S.Kaneko, M.Momma, H.Kobayashi and H.Mizuno
Crystallization and Preliminary X-Ray Crystallographic Studies of Rice α-Galactosidase
Acta Cryst. D, **58** (2002) 1374.

- N.Sato, Y.Uragami, T.Nishizaki, Y.Takahashi, G.Sazaki, K.Sugimoto, T.Nonaka, E.Masai, M.Fukuda and T.Senda
Crystal Structures of the Reaction Intermediate and its Homologue of an Extradiol-Cleaving Catecholic Dioxygenase.
J. Mol. Biol., **321** (2002) 621.
- T.Shimamura, A.Ibuka, S.Fushinobu, T.Wakagi, M.Ishiguro, Y.Ishii and H.Matsuzawa
Acyl-Intermediate Structures of the Extended-Spectrum Class A β -Lactamase, Toho-1, in Complex with Cefotaxime, Cephalothin, and Benzylpenicillin
J. Biol. Chem., **277** (2002) 46601.
- S.Kamitori, A.Abe, A.Ohtaki, A.Kaji, T.Tonozuka and Y.Sakano
Crystal Structure and Structure Comparison of *Thermoactinomyces vulgaris* R-47 α -Amylase 1 (TVAI) at 1.6 Å Resolution and α -Amylase 2 (TVAI) at 2.3 Å Resolution
J. Mol. Biol., **318** (2002) 443.
- C.-S.Hsu, S.-J.Chen, Y.-C.Tsai, T.-W.Lin, S.-H.Liaw and A.H.-J.Wang
Crystallization and Preliminary Crystallographic Analysis of a D-Aminoacylase from *Alcaligenes faecalis* DA1
Acta Cryst. D, **58** (2002) 1482.
- T.Tonozuka, T.Yokota, K.Ichikawa, M.Mizuno, S.Kondo, A.Nishikawa, S.Kamitori and Y.Sakano
Crystal Structures and Substrate Specificities of Two α -Amylase Hydrolyzing Cyclodextrins and Pullulan from *Thermoactinomyces vulgaris* R-47
Biologia, Bratislava, **57/Suppl. 11** (2002) 71.
- M.Hidaka, S.Fushinobu, N.Ohtsu, H.Motoshima, H.Shoun and T.Wakagi
Trimeric Crystal Structure of the Glycoside Hydrolase Family 42 β -Galactosidase from *Thermus thermophilus* A4 and the Structure of its Complex with Galactose
J. Mol. Biol., **322** (2002) 79.
- S.Fushinobu, T.Saku, M.Hidaka, S.-T.Jun, H.Nojiri, H.Yamane, H.Shoun, T.Omori and T.Wakagi
Crystal Structures of a *meta*-Cleavage Product Hydrolase from *Pseudomonas fluorescens* IP01 (CumD) Complexed with Cleavage Products
Protein Science, **11** (2002) 2184.
- H.Tsuge, H.Sakuraba, T.Kobe, A.Kujime, N.Katunuma and T.Ohshima
Crystal Structure of the ADP-Dependent Glucokinase from *Pyrococcus horikoshii* at 2.0-Å Resolution: A Large Conformational Change in ADP-Dependent Glucokinase
Protein Science, **11** (2002) 2456.
- N.Tanaka, Y.Kusakabe, K.Ito, T.Yoshimoto and K.T.Nakamura
Crystal Structure of Formaldehyde Dehydrogenase from *Pseudomonas putida*: the Structural Origin of Tightly Bound Cofactor in the Nicotinoprotein Dehydrogenases.
J. Mol. Biol., **324** (2002) 519.
- N.Tanaka, A.Haga, H.Uemura, H.Akiyama, T.Funasaka, H.Nagase, A.Raz and K.T.Nakamura
Inhibition Mechanism of Cytokine Activity of Human Autocrine Motility Factor Examined by Crystal Structure Analyses and Site-Directed Mutagenesis Studies.
J. Mol. Biol., **318** (2002) 985.
- Y.Shomura, T.Yoshida, T.Maruyama, M.Yohda and K.Miki
Crystallization and Preliminary X-Ray Characterization of Archaeal Group II Chaperonin α Subunit from *Thermococcus* Strain KS-1
Acta Cryst. D, **58** (2002) 1830.
- J.-W.Nam, Z.Fujimoto, H.Mizuno, H.Yamane, T.Yoshida, H.Habe, H.Nojiri and T.Omori
Crystallization and Preliminary Crystallographic Analysis of the Terminal Oxygenase Component of Carbazole 1,9a-Dioxygenase of *Pseudomonas resinovorans* Strain CA10
Acta Cryst. D, **58** (2002) 1350.
- Y.Yamada, T.Fujiwara, T.Sato, N.Igarashi and N.Tanaka
The 2.0 Å Crystal Structure of Catalase-Peroxidase from *Haloarcula marismortui*
Nature Structural Biology, **9** (2002) 691.
- K.Yoneda, T.Nishimura, N.Katunuma, S.Imamura, K.Nitta and H.Tsuge
Crystallization and Preliminary X-Ray Crystallographic Studies of Monoacylglycerol Lipase of the Moderately Thermophilic *Bacillus* sp. H-257
Acta Cryst. D, **58** (2002) 1232.
- M.W.Bhuiya, H.Tsuge, H.Sakuraba, K.Yoneda, N.Katunuma and T.Ohshima
Crystallization and Preliminary X-Ray Diffraction Analysis of Glutamate Dehydrogenase from an Aerobic Hyperthermophilic Archaeon, *Aeropyrum pernix* K1
Acta Cryst. D, **58** (2002) 1338.
- B.Padmanabhan, A.Paehler and M.Horikoshi
Structure of Creatine Amidinohydrolase from *Actinobacillus*
Acta Cryst. D, **58** (2002) 1322.
- B.Padmanabhan, K.Kataoka, N.Adachi and M.Horikoshi
Purification, Crystallization and Preliminary X-Ray Diffraction Analysis of Yeast Nucleosome-Assembly Factor Cia1p
Acta Cryst. D, **58** (2002) 1876.
- N.Adachi, B.Padmanabhan, K.Kataoka, K.Kijima, M.Yamaki and M.Horikoshi
Purification, Crystallization and Preliminary X-Ray Diffraction Analysis of Yeast Regulatory Particle Non-ATPase Subunit 6 (Nas6p)
Acta Cryst. D, **58** (2002) 859.
- M.Fujihashi, D.H.Peapus, E.Nakajima, T.Yamada, J.Saito, A.Kita, Y.Higuchi, Y.Sugawara, A.Ando, N.Kamiya, Y.Nagata and K.Miki
X-Ray Crystallographic Characterization and Phasing of a Fucose-Specific Lectin from *Aleuria Aurantia*
Acta Cryst. D, **59** (2003) 378.

H.Tsuge, M.Nagahama, H.Nishimura, J.Hisatsune, Y.Sakaguchi, Y.Itogawa, N.Katunuma and J.Sakurai
Crystal Structure and Site-Directed Mutagenesis of Enzymatic Components from *Clostridium perfringens* Leta-Toxin
J. Mol. Biol., **325** (2003) 471.

H.Sakuraba, H.Tsuge, I.Shimoya, R.Kawakami, S.Goda, Y.Kawarabayasi, N.Katunuma, H.Ago, M.Miyano and T.Ohshima
The First Crystal Structure of Archaeal Aldolase.
J. Biol. Chem., **278** (2003) 10799.

N.Tanaka, Y.Kusakabe, K.Ito, T.Yoshimoto and K.T.Nakamura
Crystal Structure of Glutathione-Independent Formaldehyde Dehydrogenase.
Chem. Biol. Interact., **143-144** (2003) 211.

K.Shiba, T.Shirai, T.Homma and T.Noda
Translated Products of Tandem Microgene Repeats Exhibit Diverse Properties Also Seen in Natural Proteins.
Protein Engineering, **16** (2003) 57.

Z.Fujimoto, S.Kaneko, M.Momma, H.Kobayashi and H.Mizuno
Crystal Structure of Rice α -Galactosidase Complexed with D-Galactose
J. Biol. Chem., **278** (2003) 20313.

6B

M.Unno, T.Mizushima, Y.Morimoto, Y.Tomisugi, K.Tanaka, N.Yasuoka and T.Tsukihara
The Structure of the Mammalian 20S Proteasome at 2.75 Å Resolution
Structure, **10** (2002) 609.

T.Shiba, H.Takatsu, T.Nogi, N.Matsugaki, M.Kawasaki, N.Igarashi, M.Suzuki, R.Kato, T.Earnest, K.Nakayama and S.Wakatsuki
Structural Basis for Recognition of Acidic-Cluster Dileucine Sequence by GGA1.
Nature, **415** (2002) 937.

K.Fukuyama, T.Okada, Y.Kakuta and Y.Takahashi
Atomic Resolution Structures of Oxidized [4Fe-4S] Ferredoxin from *Bacillus thermoproteolyticus* in Two Crystal Forms: Systematic Distortion of [4Fe-4S] Cluster in the Protein
J. Mol. Biol., **315** (2002) 1155.

S.Goda, K.Takano, Y.Yamagata, S.Maki, K.Namba and K.Yutani
Elongation in a β -Structure Promotes Amyloid-Like Fibril Formation of Human Lysozyme
J. Biochem., **132** (2002) 655.

T.Shimamura, A.Ibuka, S.Fushinobu, T.Wakagi, M.Ishiguro, Y.Ishii and H.Matsuzawa
Acyl-Intermediate Structures of the Extended-Spectrum Class A β -Lactamase, Toho-1, in Complex with Cefotaxime, Cephalothin, and Benzylpenicillin
J. Biol. Chem., **277** (2002) 46601.

Y.Shomura, T.Yoshida, T.Maruyama, M.Yohda and K.Miki
Crystallization and Preliminary X-Ray Characterization of Archaeal Group II Chaperonin α Subunit from *Thermococcus* Strain KS-1
Acta Cryst. D, **58** (2002) 1830.

S.Sogabe, M.Masubuchi, K.Sakata, T.A.Fukami, K.Morikami, Y.Shiratori, H.Ebiike, K.Kawasaki, Y.Aoki, N.Shimma, A.D'Arcy, F.K.Winkler, D.W.Banner and T.Ohtsuka
Crystal Structures of *Candida albicans* N-Myristoyltransferase with Two Distinct Inhibitors
Chemistry & Biology, **9** (2002) 1119.

T.Kinoshita, H.Miyake, T.Fujii, S.Takakura and T.Goto
The Structure of Human Recombinant Aldose Reductase Complexed with the Potent Inhibitor Zenarestat
Acta Cryst. D, **58** (2002) 622.

T.Kashiwagi, K.Yokoyama, K.Ishikawa, K.Ono, D.Ejima, H.Matsui and E.Suzuki
Crystal Structure of Microbial Transglutaminase from *Streptovorticillium mobaraense*
J. Biochem., **277** (2002) 44252.

K.Ishikawa, Y.Mihara, N.Shimba, N.Ohtsu, H.Kawasaki, E.Suzuki and Y.Asano
Enhancement of Nucleoside Phosphorylation Activity in an Acid Phosphatase
Protein Engineering, **15** (2002) 539.

H.Haruyama, S.Ito, K.Miyadai, T.Takahashi, R.Kwaida, T.Takayama, H.Hanzawa, T.Hata, J.Yamaduchi, H.Y.Kato, K.Ichikawa, J.Ohsumi, S.Yonehara and N.Serizawa
Humanization of the Mouse Anti-Fas Antibody HFE7A and Crystal Structure of the Humanized HFE7A Fab Fragment
Biol. Pharm. Bull., **25** (2002) 1537.

M.Fujihashi, D.H.Peapus, E.Nakajima, T.Yamada, J.Saito, A.Kita, Y.Higuchi, Y.Sugawara, A.Ando, N.Kamiya, Y.Nagata and K.Miki
X-Ray Crystallographic Characterization and Phasing of a Fucose-Specific Lectin from *Aleuria Aurantia*
Acta Cryst. D, **59** (2003) 378.

7A

D.Matsumura, T.Yokoyama, K.Amemiya, S.Kitagawa and T.Ohta
X-Ray Magnetic Circular Dichroism Study on Spin Reorientation Transition of Magnetic Thin Films Induced by Surface Chemisorption
Phys. Rev. B, **66** (2002) 024402.

K.Amemiya, H.Kondoh, T.Yokoyama and T.Ohta
A Soft X-Ray Beamline for Surface Chemistry in the Photon Factory
J. Elec. Spec. Relat. Phenom., **124** (2002) 151.

Y.Baba
X-Ray-Induced Ion Desorption from Solid Surfaces
Trends in Vac. Sci. Technol., **5** (2002) 45.

- D.Kondo, K.Sakamoto, H.Takeda, F.Matsui, K.Amemiya, T.Ohta, W.Uchida and A.Kasuya
Unoccupied Molecular Orbitals of C₆₀ Molecules Adsorbed on Si(001)-(2×1) and Si(111)-(7×7) Surfaces Studied by NEXAFS
Surf. Sci., **514** (2002) 337.
- H.Kondoh, T.Nakamura, F.Matsui, T.Yokoyama, T.Ohta and M.Matsumoto
Structure of 2-Mercaptomethylthiophene Monolayers on Au(111)
Mol. Cryst. Liq. Cryst., **377** (2002) 45.
- A.Y.Matsuura, T.Obayashi, H.Kondoh, T.Ohta, H.Oji, N.Kosugi, K.Sayama and H.Arakawa
Adsorption of Merocyanine Dye on Rutile TiO₂(110)
Chem. Phys. Lett., **360** (2002) 133.
- T.Nakamura, S.Yasuda, T.Miyamae, H.Nozye, N.Kobayashi, H.Kondoh, I.Nakai, T.Ohta, D.Yoshimura and M.Matsumoto
Effective Insulating Properties of Autoxidized Monolayers Using Organic Ditellurides
J. Am. Chem. Soc., **124** (2002) 12642.
- H.Kondoh, M.Iwasaki, T.Shimada, K.Amemiya, T.Yokoyama, T.Ohta, M.Shimomura and S.Kono
Adsorption of Thiolates to Singly Coordinated Sites on Au(111) Evidenced by Photoelectron Diffraction
Phys. Rev. Lett., **90** (2003) 066102.
- T.Yokoyama, D.Matsumura, K.Amemiya, S.Kitagawa, N.Suzuki and T.Ohta
Spin Reorientation Transitions of Ultrathin Co/Pd(111) Films Induced by Chemisorption: X-Ray Magnetic Circular Dichroism Study
J. Phys.: Condens. Matter, **15** (2003) S537.
- K.Amemiya, S.Kitagawa, D.Matsumura, T.Yokoyama and T.Ohta
Development of a Depth-Resolved X-Ray Magnetic Circular Dichroism: Application to Fe/Cu(100) Ultrathin Films
J. Phys.: Condens. Matter, **15** (2003) S561.
- 7B**
- K.S.An, C.C.Hwang, Y.K.Kim, E.S.Cho, C.-Y.Park, S.Pukird, A.Kakizaki, T.Okuda and T.Kinoshita
Atomic and Electronic Wstructure of Si(113)1×1-Sb Surface: Core-Level Shifts and Surface States
Surf. Sci., **513** (2002) 49.
- 7C**
- H.Aritani, S.Nishimura, M.Tamai, T.Yamamoto, T.Tanaka and A.Nakahira
Local Structure of Framework Iron in Fe-Substituted Al-Mordenites by Fe K Edge XAFS
Chem. Mater., **14**(2) (2002) 562.
- M.Kimura, T.Suzuki, G.Sigesato, M.Saito, S.Suzuki, H.Kihira, K.Tanabe and Y.Waseda
Fe(O,OH)₆ Network Structure of Rusts Formed on Weathering Steel Surfaces
J. Jpn. Inst. Metals, **66** (2002) 166. (*in Japanese*).
- Y.Izumi, F.Kiyotaki, H.Yoshitake, K.Aika, T.Sugihara, T.Tatsumi, Y.Tanizawa, T.Shido and Y.Iwasawa
Structure of Low Concentrations of Vanadium on TiO₂ Determined by XANES and *ab initio* Calculations
Chem. Commun., **20** (2002) 2402.
- C.-R.Bian, S.Suzuki, K.Asakura, L.Ping and N.Toshima
Extended X-Ray Absorption Fine Structure Studies on the Structure of the Poly(vinylpyrrolidone)-Stabilized Cu/Pd Nanoclusters Colloidally Dispersed in Solution
J. Phys. Chem. B, **106** (2002) 8587.
- M.Sakurai
XAFS Study on Non-Crystalline Materials
J. Jpn. Soc. Synchrotron Rad. Res., **15** (2002) 167. (*in Japanese*).
- Y.Izumi, F.Kiyotaki, H.Yoshitake, K.Aika, T.Sugihara, T.Tatsumi, Y.Tanizawa, T.Shido and Y.Iwasawa
0.6-3.0 wt% of Vanadium on/in Titania Monitored by X-Ray Absorption Fine Structure Combined with Fluorescence Spectrometry
Chem. Lett., **11** (2002) 1154.
- Y.Wang, Q.Zhang, T.Shishido and K.Takehira,
Characterization of Iron-Containing MCM-41 and its Catalytic Properties in Epoxidation of Alkene with Hydrogen Peroxide
J. Catal., **209** (2002) 186.
- Q.Zhang, Y.Wang, S.Itsuki, T.Shishido and K.Takehira,
Manganese-Containing MCM-41 for Epoxidation of Styrene and Stilbene
J. Mol. Catal. A, **188** (2002) 189.
- H.Kanai, T.Yoshikawa, T.Sone and Y.Nishimura
Preparation and Characterization of Highly Dispersed V₂O₅/SiO₂ Prepared by a CVD Method
React. Kinet. Catal. Lett., **75** (2002) 213.
- S.Imamura, H.Yamane, H.Kanai, Y.Saito and K.Utani
Promotion Effect of Ceria on Pd/Al₂O₃ Catalyst for the Hydrogenation of Carbon Monoxide to Dimethyl Ether
J. Jpn. Petroleum Institute, **45** (2002) 222.
- Y.Watanabe, J.T.Okada, H.Shoji and S.Nanao
Resonant Fluorescence Emission of Mn K β in Quasicrystals
J. Alloys and Compounds, **342** (2002) 422.
- H.Yamashita, K.Ikeue, T.Takewaki and M.Anpo
In situ XAFS Studies on the Effects of the Hydrophobic-Hydrophilic Properties of Ti-Beta Zeolites in the Photocatalytic Reduction of CO₂ with H₂O
Topics in Catal., **18** (2002) 95.
- H.Yamashita, K.Yoshizawa, M.Ariyuki, S.Higashimoto and M.Anpo
Photocatalytic Ethylene Polymerization over Chromium Containing Mesoporous Molecular Sieves
Studies Surf. Sci. Catal., **141** (2002) 495.

- K.Ikeue, H.Yamashita and M.Anpo
Photocatalytic Reduction of CO₂ with H₂O on Titanium Oxides Prepared within Zeolite and Mesoporous Molecular Sieves
Electrochemistry, **70** (2002) 402.
- H.Yamashita, M.Harada, J.Misaka, M.Takeuchi, K.Ikeue and M.Anpo
Degradation of Propanol Diluted in Water under Visible Light Irradiation Using Metal Ion-Implanted Titanium Dioxide Photocatalysts
J. Photochem. Photobio. A. Chem., **148** (2002) 257.
- H.Yamashita, K.Ikeue and M.Anpo
Photocatalytic Reduction of CO₂ with H₂O on Various Titanium Oxide Catalysts
ACS Symposium Series, **809** (2002) 330.
- H.Yamashita, M.Harada, A.Tanii, J.Misaka, H.Nakao and M.Anpo
Design of TiO₂/Activated Carbon Fiber Systems by an Ionized Cluster Beam Method and their Application for the Photocatalytic Water Purification
Mol. Cryst. Liq. Cryst., **388** (2002) 39.
- M.Sakurai, F.Kakinuma, E.Matsubara and K.Suzuki
Partial Structure Analysis of Amorphous Ge₁₅Te₈₀M₅ (M=Cu, Ag and In)
J. Non-Cryst. Solid, **312-314** (2002) 585.
- S.Yamazaki, T.Matsui, T.Sato, Y.Arita and T.Nagasaki
EXAFS Study of Reduced Ceria Doped with Lanthanide Oxides
Solid State Ionics, **154-155** (2002) 113.
- M.P.Kapoor, A.K.Sinha, S.Seelan, S.Inagaki, S.Tsubota, H.Yoshida and M.Haruta
Hydrophobicity Induced Vapor-Phase Oxidation of Propene over Gold Supported on Titanium Incorporated Hybrid Mesoporous Silsesquioxane
Chem. Commun., (2002) 2902.
- H.Shigemura, M.Tabuchi, H.Kobayashi, H.Sakaebe, A.Hirano and H.Kageyama
Structural and Electrochemical Properties of Li(Fe,Co)_xMn_{2-x}O₄ Solid Solution as 5 V Positive Electrode Materials for Li Secondary Batteries
J. Mater. Chem, **12** (2002) 1882.
- H.Yamashita
XAFS Analysis and Applications to Carbons and Catalysts
Carbon Alloys, Ed. by E.Yamashita et al., Elsevier, (2003) 189.
- H.Yoshitake, T.Sugihara and T.Tatsumi
XAFS Study on the Local Structure of Ti in Amorphous Mesoporous Titania
Phys. Chem. Chem. Phys., **5** (2003) 767.
- Y.Izumi, F.Kiyotaki, H.Nagamori and T.Minato
X-Ray Absorption Fine Structure Utilizing a Fluorescence Spectrometer: Site Selective Structure Determination of Environmental Catalysts and Adsorbents
Studies Surf. Sci. Catal., **145** (2003) 177.
- K.Fukumi, A.Chayahara, H.Kageyama, A.Kinomura, Y.Mokuno, N.Kitamura, K.Kadono, Y.Horino and J.Nishii
Sequential Implantation of Halogen and Copper Ions in Silica Glass
Nucl. Instrum. Meth. Phys. Res. B, **206** (2003) 353.
- 8C2**
- K.Hoshino, T.Imagawa, S.Sigematsu, K.Ueda and T.Hirano
Magnetoresistance and Magnetic Properties of Free Layer in a Bottom-Type Spin-Valve with an Fe-Ox Layer Inserted into the Synthetic Ferrimagnet Pinned Layer
J. Magn. Soc. Jpn., **27** (2003) 311. (*in Japanese*).
- 9A**
- T.Shido, A.Yamaguchi, Y.Inada, K.Asakura, M.Nomura and Y.Iwasawa
Dispersive XAFS Study on Cu and Mo Species in Zeolite during the Catalyst Preparation
Topics in Catal., **18** (2002) 53.
- H.Yoshitake, T.Sugihara and T.Tatsumi
Preparation of Wormhole-like Mesoporous TiO₂ with an Extremely Large Surface Area and Stabilization of its Surface by Chemical Vapor Deposition
Chem. Mater., **14** (2002) 1023.
- M.Kimura, T.Suzuki, G.Sigesato, M.Saito, S.Suzuki, H.Kihira, K.Tanabe and Y.Waseda
Fe(O,OH)₆ Network Structure of Rusts Formed on Weathering Steel Surfaces
J. Jpn. Inst. Metals, **66** (2002) 166. (*in Japanese*).
- Y.Izumi, T.Minato, K.Aika, A.Ishiguro, T.Nakajima Y.Wakatsuki
Supported Ruthenium Carbido-Cluster Catalysts for the Catalytic Removal of Nitrogen Monoxide and Sulfur Dioxide: the Preparation Process Monitored by Sulfur K-Edge X-Ray Absorption Near-Edge Structure
Studies in Surf. Sci. Catal., **143** (2002) 361.
- K.Shimizu, T.Kaneko, T.Fujishima, T.Kodama, H.Yoshida and Y.Kitayama
Selective Oxidation of Liquid Hydrocarbons over Photoirradiated TiO₂ Pillared Clays
Appl. Catal. A, **225** (2002) 185.
- N.Viswanadham, T.Shido, T.Sasaki and Y.Iwasawa
Ammonia-Promoted Rhenium-Cluster Formation in CH₃ReO₃-Encapsulated H-ZSM-5 Relevant to the Performance of the Catalytically Selective Oxidation/Ammonoxidation of Propene
J. Phys. Chem. B, **106** (2002) 10955.
- K.K.Bando, L.L.Bihan, H.Yasuda, K.Sato, T.Tanaka, F.Dumeignil, M.Imamura, N.Matsubayashi and Y.Yoshimura
In-situ XAFS Analysis of Pd-Pt Bimetallic Nano-particles on Silica and Alumina Supports
Anal. Sci., **17** (2002) 127.

- D.Hara, J.Shirakawa, H.Ikuta, Y.Uchimoto, M.Wakihara, T.Miyanaga and I.Watanabe
Charge-Discharge Reaction Mechanism of Manganese Vanadium Oxide as a High Capacity Anode Material for Li Secondary Battery
J. Mater. Chemistry, **12** (2002) 3717.
- H.Yoshitake, T.Sugihara and T.Tatsumi
Preparation and XAFS Spectroscopic Characterization of Mesoporous Titania with Surface Area More than 1200 m²/g
Studies Surf. Sci. Catal., **141** (2002) 251.
- H.Yoshitake, T.Yokoi and T.Tatsumi
Structural Analysis of Oxyanion-Cation Complexes Anchored by Organic Group in Mesoporous Silicas
Studies Surf. Sci. Catal., **144** (2002) 677.
- D.Hara, H.Ikuta, Y.Uchimoto and M.Wakihara
Electrochemical Properties of Manganese Vanadium Molybdenum Oxide as the Anode for Li Secondary Batteries
J. Mater. Chem., **12** (2002) 2507.
- A.Kuno, G.D.Zheng, M.Matsuo, B.Takano, J.A.Shi and Q.Wang
Mössbauer Spectroscopic Study on Vertical Distribution of Iron Species in Sediments from Qinghai Lake, China
Hyperfine Interact., **141** (2002) 321.
- H.Yamashita, K.Ikeue, T.Takewaki and M.Anpo
In situ XAFS Studies on the Effects of the Hydrophobic-Hydrophilic Properties of Ti-Beta Zeolites in the Photocatalytic Reduction of CO₂ with H₂O
Topics in Catal., **18** (2002) 95.
- H.Yamashita, K.Yoshizawa, M.Ariyuki, S.Higashimoto and M.Anpo
Photocatalytic Ethylene Polymerization over Chromium Containing Mesoporous Molecular Sieves
Studies Surf. Sci. Catal., **141** (2002) 495.
- K.Ikeue, H.Yamashita and M.Anpo
Photocatalytic Reduction of CO₂ with H₂O on Titanium Oxides Prepared within Zeolite and Mesoporous Molecular Sieves
Electrochemistry, **70** (2002) 402.
- H.Yamashita, M.Harada, J.Misaka, M.Takeuchi, K.Ikeue and M.Anpo
Degradation of Propanol Diluted in Water under Visible Light Irradiation Using Metal Ion-Implanted Titanium Dioxide Photocatalysts
J. Photochem. Photobio. A. Chem., **148** (2002) 257.
- H.Yamashita, K.Ikeue and M.Anpo
Photocatalytic Reduction of CO₂ with H₂O on Various Titanium Oxide Catalysts
ACS Symposium Series, **809** (2002) 330.
- H.Yamashita, M.Harada, A.Tanii, J.Misaka, H.Nakao and M.Anpo
Design of TiO₂/Activated Carbon Fiber Systems by an Ionized Cluster Beam Method and their Application for the Photocatalytic Water Purification
Mol. Cryst. Liq. Cryst., **388** (2002) 39.
- H.Kato and A.Kudo
Production of Hydrogen and Oxygen from Water Using Photocatalysts
Chemistry and Chemical Industry, **55** (2002) 1131. (*in Japanese*).
- S.Yamazaki, T.Matsui, T.Sato, Y.Arita and T.Nagasaki
EXAFS Study of Reduced Ceria Doped with Lanthanide Oxides
Solid State Ionics, **154-155** (2002) 113.
- S.Takenaka, H.Ogihara and K.Otsuka
Structural Change of Ni Species in Ni/SiO₂ Catalyst During Decomposition of Methane
J. Catal., **208** (2002) 54.
- S.Sugiyama, H.Mitsuoka, T.Shono, T.Moriga and H.Hayashi
Effects of Redox of Cu-Species in Copper-Strontium Hydroxyapatites on the Oxidative Dehydrogenation of Propane
J. Chemical Engineering of Jpn., **36** (2003) 210.
- H.Kato, K.Asakura and A.Kudo
Highly Efficient Water Splitting into H₂ and O₂ over Lanthanum-Doped NaTaO₃ Photocatalysts with High Crystallinity and Surface Nanostructure
J. Am. Chem. Soc., **125** (2003) 3082.
- Y.Shimizugawa, K.Handa and J.R.Qiu
X-Ray and UV Irradiation Effects on Ce³⁺ Ion Doped in UV Sensitive Glass
J. Mater. Sci. Lett., **22** (2003) 15.
- H.Yoshitake, T.Sugihara and T.Tatsumi
XAFS Study on the Local Structure of Ti in Amorphous Mesoporous Titania
Phys. Chem. Chem. Phys., **5** (2003) 767.
- M.Kaneko, S.Matsuno, T.Miki, M.Nakayama, H.Ikuta, Y.Uchimoto, M.Wakihara and K.Kawamura
Local Structural Studies of LiCr_yMn_{2-y}O₄ Cathode Materials for Li-Ion Batteries
J. Phys. Chem. B, **107** (2003) 1727.
- H.Yamashita
XAFS Analysis and Applications to Carbons and Catalysts Carbon Alloys, Ed. by E.Yamashita et al., Elsevier, (2003) 189.
- S.Sugiyama, T.Shono, D.Makino, T.Moriga and H.Hayashi
Enhancement of the Catalytic Activities in Propane Oxidation and H-D Exchangeability of Hydroxyl Groups by the Incorporation with Cobalt into Strontium Hydroxyapatites
J. Catal., **214** (2003) 8.
- M.Kataoka, A.Kuno and M.Matsuo
A Study on Vertical Distribution of Elements and their Chemical States in Yatsu Tideland Sediments
J. Radioanal. Nucl. Chem., Articles, **255** (2003) 283.

D.Hara, J.Shirakawa, H.Ikuta, Y.Uchimoto, M.Wakihara, T.Miyanaga and I.Watanabe
Charge-Discharge Reaction Mechanism of Manganese Molybdenum Vanadium Oxide as a High Capacity Anode Material for Li Secondary Battery
J. Mater. Chem., **13** (2003) 897.

H.Kato and A.Kudo
Development of Photocatalysts for Production of Hydrogen from Water
Function and Materials, **23** (2003) 17. (*in Japanese*).

A.Kuno, G.D.Zheng, M.Matsuo, B.Takano, J.A.Shi and Q.Wang
Characterization of Ultramafic Rocks from the Jinchuan Nickel Deposit in China by ^{57}Fe Mössbauer Spectroscopy
J. Radioanal. Nucl. Chem., **255** (2003) 279.

K.Okamoto, K.Nagai, J.Miyawaki, H.Kondoh and T.Ohta
XAFS Study on the Photoinduced Spin Transition of $[\text{Fe}(\text{2-pic})_3]\text{Cl}_2\text{-C}_2\text{H}_5\text{OH}$
Chem. Phys. Lett., **371** (2003) 707.

K.Okamoto, K.Kohdate, K.Nagai, J.Miyawaki, H.Kondoh, T.Yokoyama, A.Nojima and T.Ohta
Development of Light-Modulated XAFS Spectroscopy
J. Synchrotron Rad., **10** (2003) 242.

M.Nakayama, K.Imaki, W.Ra, H.Ikuta, Y.Uchimoto and M.Wakihara
Using X-Ray Absorption Spectroscopy to Measure Changes of Electronic Structure Accompanying Lithium Insertion into the Perovskite Type Oxides
Chem. Matter., **15** (2003) 1728.

S.Takenaka, S.Kobayashi, H.Ogihara and K.Otsuka
 Ni/SiO_2 Catalyst Effective for Methane Decomposition into Hydrogen and Carbon Nanofiber
J. Catal., **217** (2003) 79.

H.Yoshitake and T.Tatsumi
Vanadium Oxide Incorporated into Mesoporous Titania with a BET Surface Area above $1000 \text{ m}^2\text{g}^{-1}$: Preparation, Spectroscopic Characterization and Catalytic Oxidation
Chemistry of Materials, **15** (2003) 1695.

9C

A.Yamaguchi, A.Suzuki, T.Shido, Y.Inada, K.Asakura, M.Nomura and Y.Iwasawa
In situ Time-Resolved Energy-Dispersive X-Ray Absorption Fine Structure Study on the Decarbonylation Processes of $\text{Mo}(\text{CO})_6$ Entrapped in NaY and HY Zeolites
J. Phys. Chem. B, **106** (2002) 2415.

H.Sawa, E.Ninomiya, T.Ohama, H.Nakao, K.Ohwada, Y.Murakami, Y.Fujii, Y.Noda, M.Isobe and Y.Ueda
Low-Temperature Structure of the Quarter-Filled Ladder Compound α' - NaV_2O_5
J. Phys. Soc. Jpn., **71** (2002) 385.

T.Emoto, K.Akimoto, A.Ichimiya and K.Hirose
Strain Due to Nickel Diffusion Beneath Hydrogen-Terminated Si(111) Surface
Appl. Surf. Sci., **190** (2002) 113.

S.Abe and H.Takahashi
Simultaneous Small-Angle/Wide-Angle X-Ray Scattering and Differential Scanning Calorimetry Study of the Effects of Glycerol on Hydrated Monoolein
J. Appl. Cryst., **36** (2003) 515.

10A

S.Sasaki
Synchrotron X-Ray Study on the Charge Density and Mixed-Valence State for Transition-Metal Oxides
J. Cryst. Soc. Jpn., **44** (2002) 104. (*in Japanese*).

T.Hattori, M.Mimaki and T.Yamanaka
Molecular Orbital Study on the Onset of the Pressure-Induced Transformations of the Metastably Compressed Germanates
Phys. Chem. Minerals, **29** (2002) 261.

Y.Kudoh, T.Kuribayashi, H.Kagi, S.Sasaki and M.Tanaka
High-Pressure Structural Study of Phase-A, $\text{Mg}_7\text{Si}_2\text{H}_6\text{O}_{14}$ using Synchrotron Radiation
J. Phys.: Condens. Matter, **14** (2002) 10491.

Y.Kudoh
Predicted Model for Hydrous Modified Olivine ($\text{HyM-}\alpha$)
Phys. Chem. Minerals, **29** (2002) 387.

10B

Y.Izumi, F.Kiyotaki and Y.Seida
Monitoring of Trace Amounts of Lead on an Adsorbent by X-Ray Absorption Spectroscopy Combined with a Fluorescence Spectrometer
J. Phys. Chem. B, **106** (2002) 1518.

A.Yamaguchi, A.Suzuki, T.Shido, Y.Inada, K.Asakura, M.Nomura and Y.Iwasawa
In situ Time-Resolved Energy-Dispersive X-Ray Absorption Fine Structure Study on the Decarbonylation Processes of $\text{Mo}(\text{CO})_6$ Entrapped in NaY and HY Zeolites
J. Phys. Chem. B, **106** (2002) 2415.

T.Minato, Y.Izumi, K.Aika, H.Yoshitake, A.Ishiguro, T.Nakajima and Y.Wakatsuki
Preparation of Supported Ruthenium Cluster Catalysts and the NO Reduction Reactions
Syokubai (Catalysts), **44** (2002) 95. (*in Japanese*).

T.Shido, A.Yamaguchi, Y.Inada, K.Asakura, M.Nomura and Y.Iwasawa
Dispersive XAFS Study on Cu and Mo Species in Zeolite during the Catalyst Preparation
Topics in Catal., **18** (2002) 53.

T.Yokoyama, K.Okamoto, T.Ohta, S.Ohkoshi and K.Hashimoto
Local Structure and Electronic State of the Photomagnetic Material CoW Cyanide Studied by X-Ray-Absorption Fine-Structure Spectroscopy
Phys. Rev. B, **65** (2002) 064438.

- K.Ebitani, K.-M.Choi, T.Mizugaki and K.Kaneda
Novel Preparation of Palladium Nanoclusters Using Metal Nitrates and their Catalysis of Oxidative Acetoxylation of Toluene in the Presence of Molecular Oxygen
Langmuir, **18** (2002) 1849.
- H.Oyanagi
Frontiers of X-Ray Absorption Spectroscopy(XAS)
Rigaku Denki J., **33**(1) (2002) 32. (*in Japanese*).
- R.Ohnishi and M.Ichikawa
Effect of CO₂/CO Addition in Dehydrocondensation of Methane on Zeolite-Supported Mo and Re Catalysts towards Hydrogen, Benzene and Naphthalene
Catal. Surv. Jpn., **5** (2002) 103.
- K.Ijima, Y.Ohminami, S.Suzuki and K.Asakura
Polarization-Dependent EXAFS Measurements of an α -Molybdenum Trioxide Single Crystal
Topics in Catal., **18** (2002) 125.
- N.Ichikuni, F.Sato, S.Shimazu and T.Uematsu
XAFS Analysis for Niobium Carbide Particle Growth on Silica Support during Preparation Process
Topics in Catalysis, **18** (2002) 101.
- K.K.Bando, T.Saito, K.Sato, T.Tanaka, F.Dumeignil, M.Imamura, N.Matsubayashi and H.Shimada
In-situ XAFS Analysis of Rh Nano-Particles Supported on Zeolite during High-Pressure Hydrogenation of CO₂
Topics in Catalysis, **18** (2002) 59.
- K.K.Bando
In-situ XAFS Analysis of Catalysts Under Reaction Conditions
J. Surf. Sci. Soc. Jpn., **23** (2002) 215. (*in Japanese*).
- Y.Notoya, K.Hayakawa, T.Fujikawa, T.Kubota, T.Shido, K.Asakura and Y.Iwasawa
Multiple Scattering Approach to the Pt L₂-Edge XANES of CO Adsorption on Small Pt Particles
Chem. Phys. Lett., **357** (2002) 365.
- A.Ishiguro, T.Nakajima, T.Iwata, M.Fujita, T.Minato, F.Kiyotaki, Y.Izumi, K.Aika, M.Uchida, K.Kimoto, Y.Matsui and Y.Wakatsuki
Nanoparticles of Amorphous Ruthenium Sulfide Easily Obtainable from a TiO₂-Supported Hexanuclear Cluster Complex [Ru₆C(CO)₁₆]²⁻: A Highly Active Catalyst for the Reduction of SO₂ with H₂
Chemistry - A European J., **8** (2002) 3260.
- T.Ohkubo, T.Konishi, Y.Hattori, H.Kanoh, T.Fujikawa and K.Kaneko
Restricted Hydration Structures of Rb and Br Ions Confined in Slit-Shaped Carbon Nanospace
J. Am. Chem. Soc., **124** (2002) 11860.
- C.-R.Bian, S.Suzuki, K.Asakura, L.Ping and N.Toshima
Extended X-Ray Absorption Fine Structure Studies on the Structure of the Poly(vinylpyrrolidone)-Stabilized Cu/Pd Nanoclusters Colloidally Dispersed in Solution
J. Phys. Chem. B, **106** (2002) 8587.
- M.Sakurai
XAFS Study on Non-Crystalline Materials
J. Jpn. Soc. Synchrotron Rad. Res., **15** (2002) 167. (*in Japanese*).
- Y.Yazawa, N.Takagi, H.Yoshida, S.Komai, A.Satsuma, T.Tanaka, S.Yoshida and T.Hattori
The Support Effect on Propane Combustion over Platinum Catalyst: Control of the Oxidation-Resistance of Platinum by the Acid Strength of Support Materials
Appl. Catal. A, **233** (2002) 103.
- Y.Yazawa, H.Yoshida, S.Komai and T.Hattori
The Additive Effect on Propane Combustion over Platinum Catalyst: Control of the Oxidation-Resistance of Platinum by the Electronegativity of Additives
Appl. Catal. A, **233** (2002) 113.
- Y.Yazawa, H.Yoshida and T.Hattori
The Support Effect on Platinum Catalyst under Oxidizing Atmosphere: Improvement in the Oxidation-Resistance of Platinum by the Electrophilic Property of Support Materials
Appl. Catal. A, **237** (2002) 139.
- Y.Izumi, F.Kiyotaki, T.Minato and Y.Seida
X-Ray Absorption Fine Structure Combined with Fluorescence Spectrometry for Monitoring Trace Amounts of Lead Adsorption in the Environmental Conditions
Anal. Chem., **74** (2002) 3819.
- M.Tada, T.Sasaki and Y.Iwasawa
Performance and Kinetic Behavior of a New SiO₂-Attached Molecular-Imprinting Rh-Dimer Catalyst in Size- and Shape-Selective Hydrogenation of Alkenes
J. Catal., **211** (2002) 496.
- M.Tada, T.Sasaki and Y.Iwasawa
Novel SiO₂-Attached Molecular-Imprinting Rh-Monomer Catalysts for Shape-Selective Hydrogenation of Alkenes; Preparation, Characterization and Performance
Phys. Chem. Chem. Phys., **4** (2002) 4561.
- R.S.Mulukutla, T.Shido, K.Asakura, T.Kogure and Y.Iwasawa
Characterization of Rhodium Oxide Nanoparticles in MCM-41 and their Catalytic Performances for NO-CO Reactions in Excess O₂
Appl. Catal. A: General, **228** (2002) 305.
- S.Imamura, H.Yamane, H.Kanai, T.Shibata, K.Utani and K.Hamada
Promotion Effect of Ceria on Pd/SiO₂ Catalysts for Methanol Decomposition
J. Jpn. Petroleum Institute, **45** (2002) 187.
- S.Imamura, H.Yamane, H.Kanai, Y.Saito and K.Utani
Promotion Effect of Ceria on Pd/Al₂O₃ Catalyst for the Hydrogenation of Carbon Monoxide to Dimethyl Ether
J. Jpn. Petroleum Institute, **45** (2002) 222.

- M.Nakayama, H.Ikuta, Y.Uchimoto, M.Wakihara and Y.Terada
Relationship between the Li Ionic Conduction and the Local Structures in B-Site Substituted Perovskite Compounds, $(\text{Li}_{0.1}\text{La}_{0.3})_{1+x}\text{M}_x\text{Nb}_{1-x}\text{O}_3$ ($\text{M}=\text{Zr}, \text{Ti}; x=0, 0.05$)
Appl. Phys. Lett., **81** (2002) 2977.
- A.V.Kolobov, J.Tominaga, T.K.Zvonareva, V.I.Ivanov Omskii and H.Oyanagi
Local Structure of Co Nanocrystals Embedded in Hydrogenated Amorphous Carbon: An X-Ray Absorption Study
J. Appl. Phys., **92** (2002) 6195.
- K.K.Bando, L.L.Bihan, H.Yasuda, K.Sato, T.Tanaka, F.Dumeignil, M.Imamura, N.Matsubayashi and Y.Yoshimura
In-situ XAFS Analysis of Pd-Pt Bimetallic Nano-particles on Silica and Alumina Supports
Anal. Sci., **17** (2002) 127.
- Y.Kuroda, R.Kumashiro and M.Nagao
Prominent Redox Feature of Copper Ion Exchanged in ZSM-5-Type Zeolite
Appl. Surf. Sci., **196** (2002) 408.
- H.Yoshitake, T.Yokoi and T.Tatsumi
Structural Analysis of Oxyanion-Cation Complexes Anchored by Organic Group in Mesoporous Silicas
Studies Surf. Sci. Catal., **144** (2002) 677.
- D.Hara, H.Ikuta, Y.Uchimoto and M.Wakihara
Electrochemical Properties of Manganese Vanadium Molybdenum Oxide as the Anode for Li Secondary Batteries
J. Mater. Chem., **12** (2002) 2507.
- Y.Kuroda, T.Okamoto, R.Kumashiro, Y.Yoshikawa and M.Nagao
Microwave-Assisted Simple Ion-Exchange of ZSM-5-Type Zeolites with Copper Ions and their Specific Adsorption Properties for N_2 Molecules at Room Temperature
Chem. Commun., **2002** (2002) 1758.
- Y.Kuroda, H.Onishi, T.Mori, Y.Yoshikawa, R.Kumashiro, M.Nagao and H.Kobayashi
Characteristics of Silver Ions Exchanged in ZSM-5-Type Zeolite, Aluminosilicate, and SiO_2 Samples: In Comparison with the Properties of Copper Ions Exchanged in these Materials
J. Phys. Chem. B, **106** (2002) 8976.
- A.Suzuki, M.Tada, T.Sasaki, T.Shido and Y.Iwasawa
Design of Catalytic Sites at Oxide Surfaces by Metal-Complex Attaching and Molecular Imprinting Techniques
J. Mol. Catal. A: Chem., **182-183** (2002) 125.
- M.Sakurai, F.Kakinuma, E.Matsubara and K.Suzuki
Partial Structure Analysis of Amorphous $\text{Ge}_{15}\text{Te}_{80}\text{M}_5$ ($\text{M}=\text{Cu}, \text{Ag}$ and In)
J. Non-Cryst. Solid, **312-314** (2002) 585.
- H.Shigemura, M.Tabuchi, H.Kobayashi, H.Sakaebe, A.Hirano and H.Kageyama
Structural and Electrochemical Properties of $\text{Li}(\text{Fe},\text{Co})_x\text{Mn}_{2-x}\text{O}_4$ Solid Solution as 5 V Positive Electrode Materials for Li Secondary Batteries
J. Mater. Chem., **12** (2002) 1882.
- A.Fukuoka, N.Higashimoto, Y.Sakamoto, S.Inagaki, Y.Fukushima and M.Ichikawa
Preparation, XAFS Characterization, and Catalysis of Platinum Nanowires and Nanoparticles in Mesoporous Silica FSM-16
Topics in Catalysis, **18** (2002) 73.
- S.Sugiyama, H.Mitsuoka, T.Shono, T.Moriga and H.Hayashi
Effects of Redox of Cu-Species in Copper-Strontium Hydroxyapatites on the Oxidative Dehydrogenation of Propane
J. Chemical Engineering of Jpn., **36** (2003) 210.
- S.Sugiyama, T.Shono, D.Makino, T.Moriga and H.Hayashi
Enhancement of the Catalytic Activities in Propane Oxidation and H-D Exchangeability of Hydroxyl Groups by the Incorporation with Cobalt into Strontium Hydroxyapatites
J. Catal., **214** (2003) 8.
- D.Hara, J.Shirakawa, H.Ikuta, Y.Uchimoto, M.Wakihara, T.Miyana and I.Watanabe
Charge-Discharge Reaction Mechanism of Manganese Molybdenum Vanadium Oxide as a High Capacity Anode Material for Li Secondary Battery
J. Mater. Chem., **13** (2003) 897.
- S.Sugiyama and H.Hayashi
Role of Hydroxide Groups in Hydroxyapatite Catalysts for the Oxidative Dehydrogenation of Alkanes
Int. J. Mod. Phys. B, **17** (2003) 1476.
- I.Yamanaka, K.Nishikawa, S.Takenaka and K.Otsuka
Complete Hydrodechlorination of Chloro-Aromatics Catalyzed by Pd/TiO_2 with H_2
Studies Surf. Sci. Catal., **145** (2003) 383.
- K.Asakura, C.R.Bing, P.Lu, N.Toshima, N.Watari and S.Ohnishi
Characterization and Catalysis of a CuPd Nanocluster with a Heteroendophilic Structure
Shokubai, **45** (2003) 184. (*in Japanese*).
- S.T.Oyama, R.Radhakrishnan, M.Seman, J.N.Kondo, K.Domen and K.Asakura
Control of Reactivity in C-H Bond Breaking Reactions on Oxide Catalysts: Methanol Oxidation on Supported Molybdenum Oxide
J. Phys. Chem. B, **107** (2003) 1845.
- H.Yoshitake, T.Yokoi and T.Tatsumi
Adsorption Behaviour of Arsenate at Transition Metal Cations Captured by Amino-Functionalized Mesoporous Silicas
Chem. Mater., **15** (2003) 1713.
- H.Araki, A.Fukuoka, Y.Sakamoto, S.Inagaki, N.Sugimoto, Y.Fukushima and M.Ichikawa
Template Synthesis and Characterization of Gold Nano-Wires and -Particles in Mesoporous Channels of FSM-16
J. Mol. Catal. A: Chem., **199** (2003) 95.

A.Fukuoka, H.Araki, Y.Sakamoto, S.Inagaki, Y.Fukushima and M.Ichikawa
Palladium Nanowires and Nanoparticles in Mesoporous Silica Templates
Inorg. Chim. Acta, **350** (2003) 371.

10C

Y.Hiragi, Y.Seki, K.Ichimura and K.Soda
Direct Detection of the Protein Quaternary Structure and Denatured Entity by Small-Angle Scattering: Guanidine Hydrochloride Denaturation of Chaperonin Protein GroEL.
J. Appl. Cryst., **35** (2002) 1.

N.Hayashi, M.Matsubara, Y.Jinbo, K.Titani, Y.Izumi and N.Matsushima
Nef of HIV-1 Interacts Directly with Calcium-Bound Calmodulin
Protein Science, **11** (2002) 529.

T.Hayakawa and M.Hirai
Hydration and Thermal Reversibility of Glycolipids Depending on Sugar Chains.
Eur. Biophys. J., **31** (2002) 62.

Y.Izumi
Molecular Recognition of Calmodulin in the Absence of Ca^{2+}
Seibutsu, **42(2)** (2002) 60. (*in Japanese*).

S.Aida, S.Sakurai and S.Nomura
Strain-Induced Ordering of Microdomain Structures in Polystyrene-*block*-polybutadiene-*block*-polystyrene Triblock Copolymers Cross-Linked in the Disordered State
Polymer, **43** (2002) 2881.

S.Sakurai, D.Isobe, S.Okamoto and S.Nomura
Control of Morphologies and Mechanical Properties in Binary Blends of Elastomeric Polystyrene-*block*-polybutadiene-*block*-polystyrene Triblock Copolymers
J. Macromol. Sci., Phys., **B41** (2002) 387.

M.Sugiyama, M.Annaka and K.Hara
Heat-Induced Evolution of the Mesoscopic Structure of Dehydrated Poly(vinyl alcohol) Gel
J. Phys. Soc. Jpn., **71** (2002) 1035.

M.Sugiyama, M.Annaka, R.Motokawa, S.Kuwajima and K.Hara
Comparative SANS and SAXS Studies on a Mesoscopically Heterogeneous Structure in the Dehydrated NIPA/SA Gel
Physica B, **311** (2002) 90.

S.Tanimoto, K.Ito, S.Sasaki, H.Takeshita and S.Nojima
Crystallization Process in Binary Blends of Poly(ϵ -Caprolactone)-*block*-Polybutadiene Copolymers
Polymer J., **33** (2002) 593.

S.Tanimoto and S.Nojima
Morphology Formation and Final Morphology in Crystalline Block Copolymers
Polymer Appl., **51** (2002) 290. (*in Japanese*).

M.Hirai, R.Kawai-Hirai, H.Iwase, T.Hayakawa, Y.Kawabata and T.Takeda.
Effect of Proteins on Dynamics of Water-in-Oil AOT Microemulsions.
Appl. Phys. A, **74** (2002) S1254.

S.Sakurai
Synchrotron Small-Angle X-Ray Scattering Studies on Changes in Microdomain Structures upon Uniaxial Stretching of Thermoplastic Elastomers
Nihon Gomu Kyokaishi, **75** (2002) 373. (*in Japanese*).

T.Kota, D.Isobe, S.Okamoto, K.Sakurai, T.Ono, K.Imaizumi, S.Nomura and S.Sakurai
Elongational Flow-Induced Morphological Transition from Double Gyroid to Hexagonal Cylinders in SBS Triblock Copolymers
Proc. International Conference on Advanced Polymers and Processing, (2002) 82.

K.Taya, K.Kubota, K.Ochiai and K.Wakamatsu
Scattering Study of Assembled Structure of Phospholipid and Detergent Mixture
Trans. Mater. Res. Soc. Jpn., **27** (2002) 605.

K.Okoshi, H.Kamee, G.Suzaki, M.Tokita, M.Fujiki and J.Watanabe
Well-Defined Phase Sequence Including Cholesteric, Smectic A, and Columnar Phases Observed in a Thermotropic LC System of Simple Rigid-Rod Helical Polysilane
Macromolecules, **35** (2002) 4556.

Y.Hiragi, Y.Sano and T.Matsumoto
SAXSANA: An Interactive Program for the Analysis and Monitoring of Static and Time-Resolved Small-Angle X-Ray Solution Scattering Measurements
J. Synchrotron Rad., **10** (2003) 193.

R.Kawai-Hirai and M.Hirai.
Essential Role of w/o Microemulsion Structure on Catalytic Activity of Entrapped Proteins Studied by SAXS and Circular Dichroism.
J. Appl. Cryst., **36** (2003) 530.

T.Hayakawa and M.Hirai.
Bilayer Structure of Ganglioside/Cholesterol Mixed System in the Presence of Ca^{2+}
J. Appl. Cryst., **36** (2003) 489.

H.Hama and K.Tashiro
Structural Changes in Non-Isothermal Crystallization Process of Melt-Cooled Polyoxymethylene[II] Evolution of Lamellar Stacking Structure Derived from SAXS and WAXS Data Analysis
Polymer, **44** (2003) 2159.

T.Yokouchi, H.Nogami, Y.Izumi, H.Yoshino, K.Nakashima and M.Yazawa
Solution X-Ray Scattering Data Show Structural Differences among Chimeras of Yeast and Chicken Calmodulin: Implications for Structure and Function
Biochemistry, **42** (2003) 2195.

11A

Y.Yonamoto, T.Yokoyama, K.Amemiya, D.Matsumura, S.Kitagawa, Y.Hamada, T.Koide and T.Ohta
Magnetic Interaction between Adsorbed NO and *fcc* Co(001) Thin Films Studied by X-Ray Magnetic Circular Dichroism
J. Phys. Soc. Jpn., **71** (2002) 607.

T.Yokoyama and T.Ohta
Structural, Thermal and Magnetic Properties of Thin Metal Films and Adsorbate-Substrate Systems Studied by XAFS and XMCD
Topics in Catal., **18** (2002) 9.

H.Kiwata, T.Kihara, K.Ono, M.Oshima, T.Okuda, A.Harasawa, T.Kinoshita and A.Yokoo
Domain Imaging of Mesoscopic Magnetic Structures by Photoelectron Emission Microscopy
Surf. Rev. Lett., **9** (2002) 365.

T.Kinoshita
Application and Future of Photoelectron Spectromicroscopy
J. Elec. Spec. Relat. Phenom., **124** (2002) 175.

S.Kitamoto, T.Kohmura, N.Yamamoto, H.Saito, H.Takano, K.Suga, E.Ozawa, K.Suzuki, R.Kato, Y.Tachibana, Y.Tsuji, K.Koganei, K.Hayashida, H.Katayama, H.Enoguchi, Y.Nakashima and T.Shiroshoji
Soft X-Ray Transmission of Optical Blocking Filters for the X-Ray CCD Cameras Onboard Astro-E 2
Nucl. Instrum. Meth. Phys. Res. A, **505** (2003) 683.

11B

T.Yokoyama and T.Ohta
Structural, Thermal and Magnetic Properties of Thin Metal Films and Adsorbate-Substrate Systems Studied by XAFS and XMCD
Topics in Catal., **18** (2002) 9.

H.Yasufuku, Y.Ohminami, T.Tsutsumi, K.Asakura, M.Kato, Y.Sakai, Y.Kitajima and Y.Iwasawa
Observation of Energy-Filtered Image for X-Ray Photoemission Electron Microscopy(XPEEM) Using a Retarding Wien-Filter Energy Analyzer
Chem. Lett., (2002) 842.

J.Kawai, S.Tohno, Y.Kitajima, O.E.Raola and M.Takaoka
Depth Selective Chemical State Analysis of Pb and S in Fly Ash in Municipal Solid Waste Incinerators Using X-Ray Absorption Spectroscopy
Spectrochim. Acta B, **58** (2003) 635.

11C

K.Edamoto, M.Yamazaki, T.Noda, K.Ozawa and S.Otani
Surface Electronic Structure of HfC(111)
Surf. Sci., **498** (2002) 343.

H.Kitaoka, K.Ozawa, K.Edamoto and S.Otani
Electronic Structure of the Zr Suboxide Layer Formed on a ZrC(100) Surface
Surf. Sci., **511** (2002) 359.

M.Yoshikawa, Y.Okamoto, E.Kawamori, Y.Watanabe, C.Watabe, T.Furukawa, Y.Kubota, K.Sedo, T.Cho, K.Yatsu and N.Yamaguchi
Space-Resolving VUV and Soft X-Ray Spectroscopy in the Tandem Mirror Gamma 10 Plasma
Surf. Rev. Lett., **9** (2002) 555.

Y.Watamabe, J.T.Okada, H.Shoji and S.Nanao
Resonant Fluorescence Emission of Mn K β in Quasicrystals
J. Alloys and Compounds, **342** (2002) 422.

H.Kitaoka, K.Ozawa, K.Edamoto and S.Otani
Interaction of Water and Methanol with Oxygen-Modified ZrC(100) surfaces
Surf. Sci., **518** (2002) 225.

Y.Shirotori, K.Sawada, K.Ozawa, K.Edamoto and S.Otani
Photoelectron Spectroscopy Study of the Oxidation of TiC(100)
Jpn. J. Appl. Phys., **42** (2003) 1725.

K.Edamoto, K.Ozawa and S.Otani
Interaction of Oxygen with the Polar HfC(111) Surface: Angle-Resolved Photoemission Study
e-J. Surf. Sci. Nanotech., **1** (2003) 20.

11D

T.Saitoh, M.Nakatake, A.Kakizaki, H.Nakajima, O.Morimoto, S.Xu, Y.Moritomo, N.Hamada and Y.Aiura
Half-Metallic Density of States in Sr₂FeMoO₆ Due to Hund's Rule Coupling
Phys. Rev. B, **66** (2002) 035112.

H.Ishii, K.Obu, M.Shinoda, C.Lee, Y.Takayama, T.Miyahara, T.D.Matsuda, H.Sugawara and H.Sato
Photoemission Study of 4*f* Electronic States in PrFe₄P₁₂ and Related Pr Compounds
J. Phys. Soc. Jpn., **71** (2002) 156.

H.Ishii, T.Miyahara, Y.Takayama, K.Obu, M.Shinoda, C.Lee, H.Shiozawa, S.Yuasa, T.D.Matsuda, H.Sugawara and H.Sato
Resonant Photoemission Study of RFe₄P₁₂ (R=La, Ce, Pr)
Surf. Rev. Lett., **9** (2002) 1257.

S.Kimura, M.Okuno, H.Iwata, T.Saitoh, T.Okuda, A.Harasawa, T.Kinoshita, A.Mitsuda, H.Wada and M.Shiga
Temperature-Induced Valence Transition of EuNi₂(Si_{0.25}Ge_{0.75})₂ Studied by Eu 4*d*-4*f* Resonant Photoemission and Optical Conductivity
J. Phys. Soc. Jpn., **71 Suppl.** (2002) 255.

K.Mimura, Y.Okabayashi, H.Mizohata, D.Sakiyama, O.Sakai, D.Huo, J.Sakurai, Y.Taguchi, K.Ichikawa and O.Aita
Ce 4*f* States in CePd₂Si₂ and CeNi₂Si₂ Investigated by Resonant Photoemission Spectroscopy
Surf. Rev. Lett., **9** (2002) 1035.

12A

H.Sato, T.Ikeda, T.Oku, C.Otani, K.Kawai, H.M.Shimizu, Y.Takizawa, H.Miyasaka and H.Watanabe
Development of Superconducting Tunnel Junctions as Energy-Dispersive Detectors for EUV Radiation
AIP Conf. Proc., **605** (2002) 165.

M.Yoshikawa, Y.Okamoto, E.Kawamori, Y.Watanabe, C.Watabe, T.Furukawa, Y.Kubota, K.Sedo, T.Cho, K.Yatsu and N.Yamaguchi
Space-Resolving VUV and Soft X-Ray Spectroscopy in the Tandem Mirror Gamma 10 Plasma
Surf. Rev. Lett., **9** (2002) 555.

S.Ishikawa, T.Imazono, T.Hatano, M.Yanagihara and M.Watanabe
Efficiency and Polarization Performance of a Multilayer-Coated Lamellar Grating in the 6.5-6.9-nm Wavelength Region
Appl. Opt., **41** (2002) 763.

E.Z.Kurmaev, I.I.Lyakhovskaya, J.Kortus, A.Moewes, N.Miyata, M.Demeter, M.Neumann, M.Yanagihara, M.Watanabe, T.Muranaka, and J.Akimitsu
Electronic Structure of MgB₂: X-Ray Emission and Absorption Studies
Phys. Rev. B, **65** (2002) 134509.

N.Miyata, T.Imazono, S.Ishikawa, A.Arai, M.Yanagihara and M.Watanabe
Buried Interfaces of Heat-Loaded Mo/Si Multilayers Studied by Soft-X-Ray Emission Spectroscopy
Surf. Rev. Lett., **9** (2002) 663.

T.Imazono, N.Miyata, O.Kitakami and M.Yanagihara
Si L_{2,3} Emission Spectra from the Interfaces in Antiferromagnetically Coupled Fe/Si Multilayers
Surf. Rev. Lett., **9** (2002) 669.

E.Z.Kurmaev, I.I.Lyakhovskaya, J.Kortus, M.Demeter, T.Imazono, N.Miyata, M.Yanagihara, M.Watanabe, M.Neumann, T.Muranaka and J.Akimitsu
X-Ray Emission and Absorption Spectra and Electronic Structure of MgB₂
Surf. Rev. Lett., **9** (2002) 1097.

12B

A.S.-C.Cheung, D.H.-Y.Lo, K.W.-S.Leung, K.Yoshino, A.P.Thorne, J.E.Murray, K.Ito, T.Matsui and T.Imajo
The Application of a VUV Fourier Transform Spectrometer and Synchrotron Radiation Source to Measurements of: IV. The $\beta(6,0)$ and $\gamma(3,0)$ bands of NO
J. Chem. Phys., **116** (2002) 155.

G.Stark, P.L.Smith, K.Yoshino, J.R.Esmond, T.Matsui and K.Ito
Line Oscillator Strength Measurements in the $d(7)-X(0)$ and $e(4)-X(0)$ Bands of CO
Astrophys. J. Suppl. Series, **138** (2002) 305.

J.Rufus, K.Yoshino, A.P.Thorne, J.E.Murray, K.Ito and T.Matsui
The Application of a VUV Fourier Transform Spectrometer and Synchrotron Radiation Source to Measurements of: V. The $\beta(11,0)$ band of NO
J. Chem. Phys., **117** (2002) 10621.

W.H.Parkinson, J.Rufus and K.Yoshino
Absolute Absorption Cross Section Measurements of CO₂ in the Wavelength Region 163-200 nm and the Temperature Dependence
Chem. Phys., **290** (2003) 251.

T.Matsui, A.S.-C.Cheung, K.W.-S.Leung, K.Yoshino, W.H.Parkinson, A.P.Thorne, J.E.Murray, K.Ito and T.Imajo
High Resolution Absorption Cross Section Measurements of the Schumann-Runge Bands of O₂ by VUV Fourier Transform Spectroscopy
J. Mol. Spectrosc., **219** (2003) 45.

12C

T.Yokoyama, K.Okamoto, T.Ohta, S.Ohkoshi and K.Hashimoto
Local Structure and Electronic State of the Photomagnetic Material CoW Cyanide Studied by X-Ray-Absorption Fine-Structure Spectroscopy
Phys. Rev. B, **65** (2002) 064438.

Y.Takahashi, A.Usui, K.Okumura, T.Uruga, M.Nomura, M.Murakami and H.Shimizu
Application of XANES for the Determination of Oxidation States of Co and Pb in Natural Ferromanganese Nodules
Chem. Lett., **3** (2002) 366.

Y.Takahashi
Oxidation State of Cerium in Rocks and its Geochemical Implications
J. Jpn. Soc. Synchrotron Rad. Res., **15** (2002) 86. (*in Japanese*).

M.Kimura, T.Suzuki, G.Sigesato, M.Saito, S.Suzuki, H.Kihira, K.Tanabe and Y.Waseda
Fe(O,OH)₆ Network Structure of Rusts Formed on Weathering Steel Surfaces
J. Jpn. Inst. Metals, **66** (2002) 166. (*in Japanese*).

M.Kiguchi, K.Saiki and A.Koma
Dynamic and Static Disorder of Alkali Halide Solid Solutions Studied by Temperature-Dependent Extended X-Ray-Absorption Fine Structure
J. Phys. Soc. Jpn., **71** (2002) 1076.

C.-R.Bian, S.Suzuki, K.Asakura, L.Ping and N.Toshima
Extended X-Ray Absorption Fine Structure Studies on the Structure of the Poly(vinylpyrrolidone)-Stabilized Cu/Pd Nanoclusters Colloidally Dispersed in Solution
J. Phys. Chem. B, **106** (2002) 8587.

K.Konno, M.Matsuura, N.Ikuta, M.Sakurai and C.Mishima
Site Occupancy of Ga and Nb in Nd_{12.5}Fe_{ba1}Ga_{0.3}Nb_{0.2}B_{6.2} during the Hydrogenation, Disproportionation, Desorption and Recombination Process
J. Appl. Phys., **91** (2002) 7875.

M.Sakurai
XAFS Study on Non-Crystalline Materials
J. Jpn. Soc. Synchrotron Rad. Res., **15** (2002) 167. (*in Japanese*).

- N.Viswanadham, T.Shido, T.Sasaki and Y.Iwasawa
Ammonia-Promoted Rhenium-Cluster Formation in CH_3ReO_3 -
Encapsulated H-ZSM-5 Relevant to the Performance of the
Catalytically Selective Oxidation/Ammoxidation of Propene
J. Phys. Chem. B, **106** (2002) 10955.
- Y.Takahashi, H.Sakami and M.Nomura
Determination of the Oxidation State of Cerium in Rocks
by Ce L_{III}-Edge X-Ray Absorption Near-Edge Structure
Spectroscopy
Anal. Chim. Acta, **468** (2002) 345.
- T.Yokoyama, H.Tokoro, S.Ohkoshi, K.Hashimoto, K.Okamoto
and T.Ohta
Photoinduced Phase Transition of $\text{RbMnFe}(\text{CN})_6$ Studied by X-
Ray-Absorption Fine Structure Spectroscopy
Phys. Rev. B, **66** (2002) 184111.
- M.Sakurai, F.Kakinuma, E.Matsubara and K.Suzuki
Partial Structure Analysis of Amorphous $\text{Ge}_{15}\text{Te}_{80}\text{M}_5$ ($M=\text{Cu}$,
Ag and In)
J. Non-Cryst. Solid, **312-314** (2002) 585.
- H.Shigemura, M.Tabuchi, H.Kobayashi, H.Sakaebe, A.Hirano
and H.Kageyama
Structural and Electrochemical Properties of
 $\text{Li}(\text{Fe},\text{Co})_x\text{Mn}_{2-x}\text{O}_4$ Solid Solution as 5 V Positive Electrode
Materials for Li Secondary Batteries
J. Mater. Chem., **12** (2002) 1882.
- Y.Yamada, Y.Ichihashi, H.Ando, A.Ueda, H.Shioyama and
T.Kobayashi
Simple Preparation Method of Isolated Iron(III) Species on
Silica Surface
Chem. Lett., **32** (2003) 208.
- K.Asakura, C.R.Bing, P.Lu, N.Toshima, N.Watari and
S.Ohnishi
Characterization and Catalysis of a CuPd Nanocluster with a
Heteroendophilic Structure
Shokubai, **45** (2003) 184. (*in Japanese*).
- M.Kataoka, A.Kuno and M.Matsuo
A Study on Vertical Distribution of Elements and their
Chemical States in Yatsu Tideland Sediments
J. Radioanal. Nucl. Chem., Articles, **255** (2003) 283.
- T.Usuki, F.Araki, O.Uemura, Y.Kameda, T.Nasu and M.Sakurai
Structure Changes during Amorphization of Ge-Se Alloys by
Mechanical Milling
Materials Transactions, **44** (2003) 344.
- H.Ofuchi, M.Mizuguchi, K.Ono, M.Oshima, H.Akinaga and
T.Manago
Fluorescence Extended X-Ray Absorption Fine Structure
Analysis of Half-Metallic Ferromagnet "Zinc-Blende CrAs"
Grown on GaAs by Molecular Beam Epitaxy
Nucl. Instrum. Meth. Phys. Res. B, **199** (2003) 227.
- K.Okamoto, K.Nagai, J.Miyawaki, H.Kondoh and T.Ohta
XAFS Study on the Photoinduced Spin Transition of $[\text{Fe}(\text{2-}$
 $\text{pic})_3]\text{Cl}_2\text{-C}_2\text{H}_5\text{OH}$
Chem. Phys. Lett., **371** (2003) 707.
- K.Okamoto, K.Kohdate, K.Nagai, J.Miyawaki, H.Kondoh,
T.Yokoyama, A.Nojima and T.Ohta
Development of Light-Modulated XAFS Spectroscopy
J. Synchrotron Rad., **10** (2003) 242.
- H.Ofuchi, Y.Imaizumi, H.Sugawara, H.Fujioka, M.Oshima and
Y.Takeda
Fluorescence XAFS Study on Local Structures Around Tb Ions
Implanted in SiO_2 on Si
Nucl. Instrum. Meth. Phys. Res. B, **199** (2003) 231.
- H.Tsuno, H.Kagi, Y.Takahashi, T.Akagi and M.Nomura
Spontaneously Induced Reduction of Trivalent Ytterbium in
Synthesized Crystal of Calcite.
Chem. Lett., **32** (2003) 500.
- K.Fukumi, A.Chayahara, A.Kinomura, H.Kageyama,
K.Kadono, N.Kitamura, J.Nishii and Y.Horino
X-Ray Absorption Fine Structure Study on the Formation of
Cu-Br Bonds in (Br + Cu) Ion Implanted Silica Glass
J. Mater. Res., **18** (2003) 885.
- K.Fukumi, A.Chayahara, H.Kageyama, A.Kinomura,
Y.Mokuno, N.Kitamura, K.Kadono, Y.Horino and J.Nishii
Sequential Implantation of Halogen and Copper Ions in Silica
Glass
Nucl. Instrum. Meth. Phys. Res. B, **206** (2003) 353.

13A

- S.Ono, K.Hirose, T.Kikegawa and Y.Saito
The Compressibility of Natural Composition Calcium Ferrite-
Type Aluminous Phase to 70 GPa
Phys. Earth Planet. Inter., **131** (2002) 311.
- H.Hirai, Y.Uchihara, T.Kawamura, Y.Yamamoto and T.Yagi
Pressure-Induced Phase Changes of Argon Hydrate and Methane
Hydrate at Room Temperature
Proc. Jpn. Acad. B, **78** (2002) 39.
- S.Ono, T.Suto, K.Hirose, Y.Kuwayama, T.Komabayashi and
T.Kikegawa
Equation of State of Al-Bearing Stishovite to 40 GPa at 300 K
Am. Mineral., **87** (2002) 1486.
- M.Hasegawa, R.Tamura, T.Asao, T.Yagi, S.Takeuchi and
A.Inoue
Stability and Compression Behavior of Approximants in Al-Pd-
Os System under High Pressures up to 70 GPa
J. Alloys and Compounds, **342** (2002) 232.
- T.Yagi
Behavior of Earth Materials under Deep Mantle Conditions
*Proc. of the International School of Physics "Enrico Fermi"
Course CXLVII*, (2002) 643.
- H.Hirai, Y.Uchihara, Y.Nishimura, T.Kawamura, Y.Yamamoto
and T.Yagi
Structural Changes of Argon Hydrate under High Pressure
J. Phys. Chem. B, **106** (2002) 11089.

T.Mukaide, T.Yagi, N.Miyajima, T.Kondo, N.Sata and T.Kikegawa
High Pressure and High Temperature Phase Transformations in LiNbO₃
J. Appl. Phys., **93** (2003) 3852.

K.Takemura, K.Sato, H.Fujihisa and M.Onoda
Modulated Structure of Solid Iodine during its Molecular Dissociation under High Pressure
Nature, **423** (2003) 971.

13B1

A.V.Kolobov, H.Oyanagi, S.Wei, K.Brunner, G.Abstreier and K.Tanaka
Local Structure of Ge Quantum Dots Self-Assembled on Si(100) Probed by X-Ray Absorption Fine-Structure Spectroscopy
Phys. Rev. B, **66** (2002) 075319.

M.Filippi, N.L.Saini, H.Oyanagi and A.Bianconi
Signature of Local Structure Anomaly at T_c in the Nb₃Ge Superconductor
Int. J. Mod. Phys. B, **16** (2002) 1713.

H.Oyanagi, A.Kolobov and K.Tanaka
Local Structure of Photo-Induced Phases Probed by X-Ray Absorption Spectroscopy: Photo-Induced Anisotropy in Chalcogenide Glasses
Int. J. Mod. Phys. B, **16** (2002) 1721.

N.L.Saini, H.Oyanagi, Z.Wu and A.Bianconi
Lattice Fluctuations and Inhomogeneous Charge States of High- T_c Superconductors
Superconductor Science and Technology, **15** (2002) 439.

H.Oyanagi, N.L.Saini and A.Bianconi
Charge and Lattice Stripes Studied by X-Ray Absorption Spectroscopy
J. Jpn. Soc. Synchrotron Rad. Res., **15** (2002) 26. (*in Japanese*).

H.Oyanagi, T.Tayagaki and K.Tanaka
Non-Equilibrium-State X-Ray Absorption Spectroscopy: a Local Structure Study of Photo-Induced Phase Transition
AIP Conf. Proc., **652** (2003) 438.

N.L.Saini, H.Oyanagi and A.Bianconi
Probing Physics in Local Lattice Displacements: the Case of Inhomogeneous State and Superconductivity in the Copper Oxides
AIP Conf. Proc., **652** (2003) 462.

N.L.Saini, H.Oyanagi, V.Scagnoli, T.Ito, K.Oka and A.Bianconi
Study of Temperature Dependent Local Structure by Polarized Cu K-Edge EXAFS Measurements on La_{2-x}Sr_xCuO₄ (x=0.105, 0.13, 0.20)
J. Phys. Soc. Jpn., **72** (2003) 829.

N.L.Saini, H.Oyanagi, V.Scagnoli, T.Ito, K.Oka, and A.Bianconi
Different Temperature-Dependent Local Displacements in the Underdoped and Overdoped La_{2-x}Sr_xCuO₄ System
Europhys. Lett., **63**(1) (2003) 125.

13B2

T.Yagi
Behavior of Earth Materials under Deep Mantle Conditions
Proc.of the International School of Physics“Enrico Fermi” Course CXLVII, (2002) 643.

T.Mukaide, T.Yagi, N.Miyajima, T.Kondo, N.Sata and T.Kikegawa
High Pressure and High Temperature Phase Transformations in LiNbO₃
J. Appl. Phys., **93** (2003) 3852.

13C

K.K.Okudaira, H.Yamane, K.Ito, M.Imamura, S.Hasegawa and N.Ueno
Photodegradation of Poly(Tetrafluoroethylene) and Poly(Vinylidene Fluoride) Thin Films by Inner Shell Excitation
Surf. Rev. Lett., **9** (2002) 335.

M.Shimomura, M.Munakata, A.Iwasaki, M.Ikeda, T.Abukawa, K.Sato, T.Kawawa, H.Shimizu, N.Nagashima and S.Kono
Atomistic Morphology and Structure of Ethylene-Chemisorbed Si(001)2×1 Surface
Surf. Sci., **504** (2002) 19.

H.Setoyama, S.Kera, T.Murase, M.Imamura, K.Mase, K.K.Okudaira, M.Hara and N.Ueno
Partial Ion Yield and NEXAFS of 2-(Perfluorooctyl)Ethaneethiol Self-Assembled Monolayer: Comparison with PTFE Results
Nucl. Instrum. Meth. Phys. Res. B, **199** (2003) 275.

14A

D.Boulay, R.Yamashita and N.Ishizawa
Synchrotron X-Ray Study of Orthorhombic Rb₃Ta₅O₁₄ with Modified Pyrochlore Structure
Acta Cryst. C, **58** (2002) i40.

K.Yano, H.Takahashi, C.Hagai, D.Fukuda, M.Nakazawa, Y.Yonezawa, S.Kishimoto, T.Ino and M.Furusaka
Development of ³He MSGC for Neutron Scattering Experiment
IEEE Transactions on Nuclear Science, **49** (2002) 1634.

H.Takahashi, K.Mori, K.Yokoi, D.Fukuda, M.Nakazawa, N.Yasuda, M.Yamamoto and K.Hasegawa
Development of a New Multi-Grid-Type Microstrip Gas Chamber
Nucl. Instrum. Meth. Phys. Res. A, **477** (2002) 13.

14B

K.Hirano, K.Okitsu, A.Momose and Y.Amemiya
Recent Research Related to the Polarization and/or Phase of SR
Adv. X-Ray Chem. Anal. Jpn., **33** (2002) 25. (*in Japanese*).

K.Hirano, A.Maksimenko, H.Sugiyama and M.Ando
X-Ray Optics for Observing Dark-Field and Bright-Field
Refraction-Contrast Images
Jpn. J. Appl. Phys., **41** (2002) L595.

W.Yashiro, K.Shimizu, K.Hirano and T.Takahashi
Direct Phase Measurement of the X-Ray Specular Reflection
Using Modulation under the Bragg Condition
Jpn. J. Appl. Phys., **41** (2002) L592.

T.Takahashi
X-Ray Diffraction Studies on Surfaces and Interfaces
Adv. X-Ray Chem. Anal. Jpn., **33** (2002) 55. (*in Japanese*).

A.Saito, K.Matoba, J.Maruyama, Y.Kuwahara and K.Miki
Structural Analysis of Bismuth Nanowire by X-Ray Standing
Wave Method
The 2002 International Conf. on Solid State Devices and
Materials, (2002) 262.

A.Saito, K.Matoba, T.Kurata, J.Maruyama, Y.Kuwahara,
K.Miki and M.Aono
Structural Analysis of Bismuth Nanowire by X-Ray Standing
Wave Method
Jpn. J. Appl. Phys., **42** (2003) 2408.

14C1

A.Momose, T.Takeda, A.Yoneyama, I.Koyama and Y.Itai
Phase-Contrast X-Ray Imaging Using an X-Ray Interferometer
for Biological Imaging
Anal. Sci., **17 suppl.** (2002) i527.

K.Hirano, K.Okitsu, A.Momose and Y.Amemiya
Recent Research Related to the Polarization and/or Phase of SR
Adv. X-Ray Chem. Anal. Jpn., **33** (2002) 25. (*in Japanese*).

T.Takeda, A.Momose, J.Wu, Q.Yu, T.Zeniya, T.-T.-Lwin,
A.Yoneyama and Y.Itai
Vessel Imaging by Interferometric Phase-Contrast X-Ray
Technique
Circulation, **105** (2002) 1708.

T.Takeda, A.Yoneyama, A.Momose, J.Wu, T.Zeniya, T.-
T.Lwin, Y.Tsuchiya, D.V.Rao, K.Hyodo, K.Hirano, Y.Aiyoshi
and Y.Itai
Phase-Contrast X-Ray Imaging with X-Ray Interferometer for
Medical Applications
Jpn. J. Med. Phys., **22** (2002) 30. (*in Japanese*).

14C2

K.Kusaba and T.Kikegawa
A New High-Pressure Phase of ZnSe with B9-Type Structure
J. Phys. Chem. Solids, **63** (2002) 651.

K.Suito, M.Miyoshi, A.Onodera, O.Shimomura and
T.Kikegawa
Synchrotron X-Ray Diffraction Study of the Crystallisation
Kinetics of Silica Glass at High Pressure and High Temperature
High Temperatures-High Pressures, **34** (2002) 243.

T.Kubo, E.Ohtani, T.Kato, S.Urakawa, A.Suzuki, Y.Kanbe,
K.Funakoshi, W.Utsumi, T.Kikegawa and K.Fujino
Mechanisms and Kinetics of the Post-Spinel Transformation in
Mg₂SiO₄
Phys. Earth Planet. Inter., **129** (2002) 153.

S.Ono, K.Hirose, N.Nishiyama and M.Isshiki
Phase Boundary between Rutile-Type and CaCl₂-Type
Germanium Dioxide Determined by in situ X-Ray Observations
American Mineralogist, **87** (2002) 99.

H.Takebe, D.Sakamoto, O.Ohtaka, H.Fukui, A.Yoshiasa,
T.Yamanaka, K.Ota and T.Kikegawa
Ionic Conductivity Measurements of Zirconia under Pressure
Using Impedance Spectroscopy
J. Phys.: Condens. Matter, **14** (2002) 11507.

T.Tsuchiya, K.Kawamura, O.Ohtaka, H.Fukui and T.Kikegawa
Precise Measurement of Equation-of-State and Elastic
Properties for GaN up to 16 GPa
Solid State Commun., **121** (2002) 555.

O.Ohtaka, H.Fukui, K.Funakoshi, W.Utsumi, T.Irifune and
T.Kikegawa
Phase Relations and EOS of ZrO₂ and HfO₂ under High-
Temperature and High-Pressure
High Pressure Res., **22** (2002) 221.

N.Takafuji, T.Yagi, N.Miyajima and T.Sumita
Study on Al₂O₃ Content and Phase Stability of Aluminous-
CaSiO₃ Perovskite at High Pressure and Temperature
Phys. Chem. Minerals, **29** (2002) 532.

T.Yagi
Experimental Overview of Large-Volume Techniques
Proc. of the International School of Physics "Enrico Fermi"
Course CXLVII, (2002) 41.

T.Kubo, E.Ohtani, T.Kondo, T.Kato, M.Toma, T.Hosoya,
A.Sano, T.Kikegawa and T.Nagase
Metastable Garnet in Oceanic Crust at the Top of the Lower
Mantle
Nature, **420** (2002) 803.

D.Sakamoto, A.Yoshiasa, T.Yamanaka, O.Ohtaka and K.Ota
Electric Conductivity of Olivine under Pressure Investigated
Using Impedance Spectroscopy
J. Phys.: Condens. Matter, **14** (2002) 11375.

15A

T.Asano
Crystallization of Polymers and Paraffins under a Temperature
Gradient
Koubunshikakou, **51** (2002) 122. (*in Japanese*).

N.Yagi, Y.Saeki, H.Kiyota and S.Kurihara
Radial Mass Transfer of Cross-Bridges in a Tetanized Ferret
Heart Muscle
Euro. J. Physiol., **444** (2002) 38.

N.Ohta, S.Ban, H.Tanaka, S.Nakata and I.Hatta
Swelling of Intercellular Lipid Lamellar Structure with Short Repeat Distance in Hairless Mouse Stratum Corneum as Studied by X-Ray Diffraction
Chem. Phys. Lipids, **123** (2003) 1.

H.Hama and K.Tashiro
Structural Changes in Non-Isothermal Crystallization Process of Melt-Cooled Polyoxymethylene[III] Evolution of Lamellar Stacking Structure Derived from SAXS and WAXS Data Analysis
Polymer, **44** (2003) 2159.

S.Matuoka, M.Akiyama, H.Yamada, K.Tsuchihashi and S.Gasa
Phase Behavior in Multilamellar Vesicles of DPPC Containing Ganglioside GM3 with a C18:1 Sphingoid Base and a 24:0 Acyl Chain (GM3(18,24)) Observed by X-Ray Diffraction.
Chem. Phys. Lipids, **123** (2003) 19.

15B1

K.Sato, Y.Ueji, K.Okitsu, T.Matsushita, J.Saito, T.Takayama, and Y.Amemiya
Imaging Based on Hard X-Ray Magnetic Linear Dichroism by Means of Polarization Switching
Phys. Rev. B, **65** (2002) 134408.

K.Sato, Y.Ueji, K.Okitsu, T.Matsushita, J.Saito, T.Takayama and Y.Amemiya
Hard X-Ray Magnetic Linear Dichroism Imaging
Trans. Magn. Soc. Jpn., **2** (2002) 238.

K.Mizuno, S.Yamamoto, H.Okamoto, M.Kuga and E.Hashimoto
Ultrahigh-Purity Aluminum Single Crystals with a Low Dislocation Density Grown by Strain-Annealing Method
J. Cryst. Growth, **237-239** (2002) 367.

15B2

W.Yashiro, K.Shimizu, K.Hirano and T.Takahashi
Direct Phase Measurement of the X-Ray Specular Reflection Using Modulation under the Bragg Condition
Jpn. J. Appl. Phys., **41** (2002) L592.

T.Takahashi
X-Ray Diffraction Studies on Surfaces and Interfaces
Adv. X-Ray Chem. Anal. Jpn., **33** (2002) 55. (*in Japanese*).

15C

K.Hirano, K.Okitsu, A.Momose and Y.Amemiya
Recent Research Related to the Polarization and/or Phase of SR
Adv. X-Ray Chem. Anal. Jpn., **33** (2002) 25. (*in Japanese*).

K.Hirano, A.Maksimenco, H.Sugiyama and M.Ando
X-Ray Optics for Observing Dark-Field and Bright-Field Refraction-Contrast Images
Jpn. J. Appl. Phys., **41** (2002) L595.

K.Sato, Y.Ueji, K.Okitsu, T.Matsushita, J.Saito, T.Takayama, and Y.Amemiya
Imaging Based on Hard X-Ray Magnetic Linear Dichroism by Means of Polarization Switching
Phys. Rev. B, **65** (2002) 134408.

K.Sato, Y.Ueji, K.Okitsu, T.Matsushita, J.Saito, T.Takayama and Y.Amemiya
Hard X-Ray Magnetic Linear Dichroism Imaging
Trans. Magn. Soc. Jpn., **2** (2002) 238.

K.Fukuda, T.Yoshida, T.Shimura, K.Yasutake and M.Umeno
Observation of Lattice Undulation of Commercial Bonded Silicon-on-Insulator Wafers by Synchrotron X-Ray Topography
Jpn. J. Appl. Phys., **41** (2002) L1325.

T.Emoto and K.Akimoto
Strain Relaxation at Semiconductor Surface Revealed by Extremely Asymmetric X-Ray Diffraction
J. Surf. Sci. Soc. Jpn., **23** (2002) 239. (*in Japanese*).

T.Emoto, K.Akimoto, A.Ichimiya and K.Hirose
Strain Due to Nickel Diffusion Beneath Hydrogen-Terminated Si(111) Surface
Appl. Surf. Sci., **190** (2002) 113.

16A1

N.Yagi, K.Horiuti and S.Takemori
Effects of Inorganic Phosphate on Cross-Bridge Behavior after Photorelease of ATP in Permeabilized Cells of Rat Skeletal Muscle
Euro. J. Physiol., **445** (2002) 238.

16A2

H.Nakao, K.Magishi, Y.Wakabayashi, Y.Murakami, K.Koyama, K.Hirota, Y.Endoh and S.Kunii
Observation of Antiferroquadrupole Ordering in CeB₆ by Using Resonant X-Ray Scattering Technique
J. Phys. Soc. Jpn., **71 Suppl.** (2002) 103.

T.Matsumura, N.Oumi, K.Hirota, H.Nakao, Y.Murakami, Y.Wakabayashi, T.Arima, S.Ishihara and Y.Endoh
Observation of the Antiferroquadrupolar Order in DyB₂C₂ by Resonant X-Ray Scattering
Phys. Rev. B, **65** (2002) 094420.

T.Matsumura, N.Oumi, K.Hirota, H.Nakao, Y.Wakabayashi and Y.Murakami
Resonant X-Ray Study of the Quadrupolar Orderings in RB₂C₂ (R=Dy, Ho)
J. Phys. Soc. Jpn., **71 Suppl.** (2002) 91.

T.Matsumura
Observation of the Antiferroquadrupolar Order in DyB₂C₂ by Resonant X-Ray Scattering
J. Jpn. Soc. Synchrotron Rad. Res., **15** (2002) 3. (*in Japanese*).

H.Nakao
Charge and Orbital Ordered States Studied by Using X-Ray Anomalous Scattering Terms
J. Jpn. Soc. Synchrotron Rad. Res., **15** (2002) 276. (*in Japanese*).

K.Ishiji, H.Okuda, H.Hashizume, M.Almokhtar and N.Hosoito
Structures of Submonatomic Sn Layers in Fe/Cr(Sn)Cr
Magnetic Multilayers Determined by Anomalous X-Ray
Scattering Measurements
Phys. Rev. B, **66** (2002) 014443.

Y.Murakami
Resonant X-Ray Scattering from Orbitally Ordered Systems
Acta Cryst. A, **58** (2002) 244.

Y.Fujii, K.Ohwada, Y.Katsuki, N.Takesue, T.Yoshihama,
K.Nakajima, N.Aso, M.Nishi, K.Kakurai, M.Isobe, Y.Ueda,
H.Nakao, Y.Murakami, E.Ninomiya, H.Sawa and Y.Noda
Synchrotron X-Ray and Neutron Scattering Study on the Spin-
Charge-Lattice Coupled System of NaV_2O_5
Solid State Physics, **37** (2002) 627. (*in Japanese*).

S.Shimomura, J.Mizuki, H.Sawa and Y.Murakami
Invitation to Experiments of Structural Materials Science using
Synchrotron X-Rays
Solid State Physics, **37** (2002) 711. (*in Japanese*).

T.Masuda, D.Yano, R.Kuroda, K.Uchinokura, H.Kuroe,
T.Sekine, Y.Katsuki, K.Ohwada, Y.Fujii, H.Nakao and
Y.Murakami
Appearance of the Spin-Peierls Phase under Pressure in
 $\text{Cu}_{1-x}\text{Mg}_x\text{GeO}_3$
Phys. Rev. B, **67** (2003) 024423.

Y.Wakabayashi, Y.Murakami, I.Koyama, T.Kimura, Y.Tokura,
Y.Moritomo, Y.Endoh and K.Hirota
Resonant X-Ray Study on the Bi-Layered Perovskite Mn Oxide
 $\text{LaSr}_2\text{Mn}_2\text{O}_7$
J. Phys. Soc. Jpn., **72** (2003) 618.

T.Kiyama, Y.Wakabayashi, H.Nakao, H.Ohsumi, Y.Murakami,
M.Izumi, M.Kawasaki and Y.Tokura
Resonant X-Ray Scattering in Perovskite Manganite
Superlattice – Observation of “Orbital Superlattice” –
J. Phys. Soc. Jpn., **72** (2003) 785.

16B

T.Hayaishi, T.Matsui, H.Yoshii, A.Higurashi, E.Murakami,
A.Yagishita, T.Aoto, T.Onuma and Y.Morioka
Post-Collision Interaction Effects Following 4p-Shell
Ionization of Xe
J. Phys. B, **35** (2002) 141.

P.Labalanquie, S.Sheinerman, F.Penent, R.I.Hall, M.A.Ahmad,
T.Aoto, Y.Hikosaka and K.Ito
Photoemission of Threshold Electrons in the Vicinity of the
Xenon 4d Hole: Dynamics of Auger Decay
J. Phys. B, **35** (2002) 3265.

M.Nagao, Y.Yamashita, S.Machida, K.Hamaguchi, F.Yasui,
K.Mukai and J.Yoshinobu
Nature of Interface Bonding of Ethylene and Benzene with
 $\text{Si}(100)c(4\times 2)$ by Means of Angle-Dependent Si2p High
Resolution Photoelectron Spectroscopy
Surf. Sci, **513** (2002) 413.

Y.Yamashita, S.Machida, M.Nagao, S.Yamamoto, Y.Kakefuda,
K.Mukai and J.Yoshinobu
Direct Evidence for Asymmetric Dimer on Si(100) at Low
Temperature by Means of High Resolution Si 2p Photoelectron
Spectroscopy
Jpn. J. Appl. Phys., **41** (2002) L272.

S.Machida, K.Hamaguchi, M.Nagao, F.Yasui, K.Mukai,
Y.Yamashita, J.Yoshinobu, H.Kato, H.Okuyama and M.Kawai
Electronic and Vibrational States of Cyclopentene on
 $\text{Si}(100)(2\times 1)$
J. Phys. Chem. B, **106** (2002) 1691.

Y.Haruyama, S.Matsui, T.Okuda, A.Harasawa, T.Kinoshita,
S.Tanaka, H.Makino and K.Wada
Temperature Evolution of the Photoemission Spectra for the
 $\text{Si}(111)$ Surface Using the Laser Annealing Method
Surf. Rev. Lett., **9** (2002) 769.

H.Shiozawa, K.Obu, C.Lee, Y.Takayama, T.Miyahara, R.Z.Tai,
K.Namikawa, M.Ando, S.Yamamoto, J.Urakawa and H.Hayano
Measurement of the Second-Order Coherence of Synchrotron
Radiation in the VUV Region
Surf. Rev. Lett., **9** (2002) 631.

M.Kitajima, M.Okamoto, M.Hoshino, H.Tanaka, S.Fritzsche,
N.M.Kabachnik, I.P.Sazhina, Y.Shimizu and K.Ueda
Experimental and Theoretical Study of the Auger Cascade
Following $4d \rightarrow 6p$ Photoexcitation in Xe
J. Phys. B, **35** (2002) 3327.

S.Ishikawa, S.Ichikura, T.Imazono, S.Otani, T.Oguchi and
M.Yanagihara
Polarization Performance of a New Spectrometer Based on a
Multilayer-Coated Laminate Grating in the 150 - 190-eV Region
Opt. Rev., **10** (2003) 58.

J.R.Harries, J.P.Sullivan, S.Obara, T.Suzuki, P.Hammond,
J.Bozek, N.Berrah, M.Halka and Y.Azuma
Double Photoexcitation of Helium in a Strong dc Electric Field
Phys. Rev. Lett., **90** (2003) 133002.

K.Ueda, Y.Shimizu, H.Chiba, M.Kitajima, M.Okamoto,
M.Hoshino, H.Tanaka, T.Hayaishi, S.Fritzsche, I.P.Sazhina and
N.M.Kabachnik
Angular Correlation between Auger Electrons Successively
Emitted from Photoexcited Resonances in Kr and Xe
J. Phys. B, **36** (2003) 319.

18A

T.Yamamoto, N.Itoh, Y.Isawa, M.Tanaka, S.Ohnishi, T.Okuda,
A.Harasawa and T.Kinoshita
Determining the Surface Atomic Structure of an Oxygen-
Covered W(001) Surface by Solving the Inverse Band-Structure
Problem
Jpn. J. Appl. Phys., **41** (2002) L527.

- T.Kinoshita, H.P.N.J.Gunasekara, Y.Takata, S.Kimura, M.Okuno, Y.Haruyama, N.Kosugi, K.G.Nath, H.Wada, A.Mitsuda, M.Shiga, T.Okuda, A.Harasawa, H.Ogasawara and A.Kotani
Spectroscopy Studies of Temperature-Induced Valence Transition on $\text{EuNi}_2(\text{Si}_{1-x}\text{Ge}_x)_2$ around Eu $3d-4f$, $4d-4f$ and Ni $2p-3d$ Excitation Regions
J. Phys. Soc. Jpn., **71** (2002) 148.
- X.Tong, S.Ohuchi, T.Tanikawa, A.Harasawa, T.Okuda, Y.Aoyagi, T.Kinoshita and S.Hasegawa
Core-Level Photoemission of the $\text{Si}(111)-\sqrt{21}\times\sqrt{21}$ -Ag Surface Using Synchrotron Radiation
Appl. Surf. Sci., **190** (2002) 121.
- J.Okabayashi, T.Mizokawa, D.D.Sarma, A.Fujimori, T.Slupinski, A.Oiwa and H.Munekata
Electronic Structure of $\text{In}_{1-x}\text{Mn}_x\text{As}$ Studied by Photoemission Spectroscopy: Comparison with $\text{Ga}_{1-x}\text{Mn}_x\text{As}$
Phys. Rev. B, **65** (2002) 161203.
- K.Nakatsuji, M.Yamada, S.Ohno, Y.Naitoh, T.Iimori, T.Okuda, A.Harasawa, T.Kinoshita and F.Komori
Electronic Structure of Ag Thin Films on a Ge(001) Surface
Surf. Rev. Lett., **9** (2002) 681.
- Y.Haruyama, S.Matsui, T.Okuda, A.Harasawa, T.Kinoshita, S.Tanaka, H.Makino and K.Wada
Temperature Evolution of the Photoemission Spectra for the Si(111) Surface Using the Laser Annealing Method
Surf. Rev. Lett., **9** (2002) 769.
- S.Kimura, M.Okuno, H.Iwata, T.Saitoh, T.Okuda, A.Harasawa, T.Kinoshita, A.Mitsuda, H.Wada and M.Shiga
Temperature-Induced Valence Transition of $\text{EuNi}_2(\text{Si}_{0.25}\text{Ge}_{0.75})_2$ Studied by Eu $4d-4f$ Resonant Photoemission and Optical Conductivity
J. Phys. Soc. Jpn., **71 Suppl.** (2002) 255.
- T.Kinoshita
Application and Future of Photoelectron Spectromicroscopy
J. Elec. Spec. Relat. Phenom., **124** (2002) 175.
- K.S.An, C.C.Hwang, Y.K.Kim, E.S.Cho, C.-Y.Park, S.Pukird, A.Kakizaki, T.Okuda and T.Kinoshita
Atomic and Electronic Wstructure of $\text{Si}(113)1\times 1\text{-Sb}$ Surface: Core-Level Shifts and Surface States
Surf. Sci., **513** (2002) 49.
- K.Sakamoto, T.Wakita, D.Kondo, A.Harasawa, T.Kinoshita, W.Uchida and A.Kasuya
Electronic Structure of K-Doped C_{60} Monolayer Films Adsorbed on $\text{Si}(001)-(2\times 1)$ and $\text{Si}(111)-(7\times 7)$ Surfaces
Surf. Sci., **499** (2002) 63.
- D.Sekiba, D.Ogarane, S.Tawara and K.Yagi-Watanabe
Electronic Structure of the $\text{Cu-O}/\text{Ag}(110)(2\times 2)p2mg$ Surface
Phys. Rev. B, **67** (2003) 035411.
- M.Sawada, K.Hayashi and A.Kakizaki
Perpendicular Magnetic Anisotropy of $\text{Co}/\text{Pd}(111)$ Studied by Spin-Resolved Photoelectron Spectroscopy
J. Phys. Soc. Jpn., **72** (2003) 1161.
- B.Padmanabhan and M.Horikoshi
Crystallization and Preliminary X-Ray Diffraction Analysis of Creatine Amidinohydrolase from *Actinobacillus*
Acta Cryst. D, **58** (2002) 322.
- T.Shiba, H.Takatsu, T.Nogi, N.Matsugaki, M.Kawasaki, N.Igarashi, M.Suzuki, R.Kato, T.Earnest, K.Nakayama and S.Wakatsuki
Structural Basis for Recognition of Acidic-Cluster Dileucine Sequence by GGA1.
Nature, **415** (2002) 937.
- T.Murata, S.Fushinobu, M.Nakajima, O.Asami, T.Sassa, T.Wakagi and I.Yamaguchi
Crystal Structure of the Liganded Anti-Gibberellin A_4 Antibody 4-B8(8)/E9 Fab Fragment
Biochem. Biophys. Res. Commun., **293** (2002) 489.
- M.Hidaka, S.Fushinobu, N.Ohtsu, H.Motoshima, H.Matsuzawa, H.Shoun and T.Wakagi
X-Ray Crystallography of a Novel Thermostable β -Galactosidase from *Thermus thermophilus* A4, and its Complex Structure with Galactose
J. Appl. Glycosci., **49** (2002) 175. (*in Japanese*).
- T.Nogi, Y.Shiba, M.Kawasaki, T.Shiba, N.Matsugaki, N.Igarashi, M.Suzuki, R.Kato, H.Takatsu, K.Nakayama and S.Wakatsuki
Structural Basis for the Accessory Protein Recruitment by the Gamma-Adaptin Ear Domain
Nature Structural Biology, **9** (2002) 527.
- Z.Fujimoto, O.Kobayashi, S.Kaneko, M.Momma, H.Kobayashi and H.Mizuno
Crystallization and Preliminary X-Ray Crystallographic Studies of Rice α -Galactosidase
Acta Cryst. D, **58** (2002) 1374.
- S.Goda, K.Takano, Y.Yamagata, S.Maki, K.Namba and K.Yutani
Elongation in a β -Structure Promotes Amyloid-Like Fibril Formation of Human Lysozyme
J. Biochem., **132** (2002) 655.
- H.Ohishi, K.Suzuki, M.Ohtsuchi, T.Hakoshima and A.Rich
The Crystal Structure of N^1 -[2-(2-Amino-Ethylamino)-Ethyl]-Ethane-1,2-Diamine (Polyamines) Binding to the Minor Groove of $\text{d}(\text{CGCGCG})_2$, Hexamer at Room Temperature
FEBS Lett., **523** (2002) 29.
- H.H.Lee, J.Yun, J.Moon, B.W.Han, B.I.Lee, J.Y.Lee, and S.W.Suh
Crystallization and Preliminary X-Ray Crystallographic Analysis of Enoyl-Acyl Carrier Protein Reductase from *Helicobacter pylori*
Acta Cryst. D, **58** (2002) 1071.

- J.K.Yang, H.J.Yoon, H.J.Ahn, B.I.Lee, S.H.Cho, G.S.Waldo, M.S.Park and S.W.Suh
Crystallization and Preliminary X-Ray Crystallographic Analysis of the Rv2002 Gene Product from *Mycobacterium tuberculosis*, a β -Ketoacyl Carrier Protein Reductase Homologue
Acta Cryst. D, **58** (2002) 303.
- B.I.Lee, J.Y.Lee, J.Moon, B.W.Han and S.W.Suh
Crystallization and Preliminary X-Ray Crystallographic Analysis of UDP-*N*-Acetylglucosamine Acyltransferase from *Helicobacter pylori*
Acta Cryst. D, **58** (2002) 864.
- Y.J.Im, S.H.Rho, C.M.Park, S.S.Yang, J.G.Kang, J.Y.Lee, P.S.Song and S.H.Eom
Crystal Structure of a Cyanobacterial Phytochrome Response Regulator
Protein Science, **11** (2002) 614.
- S.H.Park, Y.J.Im, S.H.Rho, J.H.Lee, S.Yang, E.Kim and S.H.Eom
Crystallization and Preliminary X-Ray Crystallographic Studies of the Sixth PDZ Domain of Glutamate-Receptor Interacting Protein 1 (GRIP1) from *Rattus norvegicus*
Acta Cryst. D, **58** (2002) 1063.
- S.H.Park, Y.J.Im, S.H.Rho, J.H.Lee, S.Yang, E.Kim and S.H.Eom
Crystallization and Preliminary X-Ray Crystallographic Studies of the PDZ Domain of Shank1 from *Rattus norvegicus*
Acta Cryst. D, **58** (2002) 1353.
- T.Shimamura, A.Ibuka, S.Fushinobu, T.Wakagi, M.Ishiguro, Y.Ishii and H.Matsuzawa
Acyl-Intermediate Structures of the Extended-Spectrum Class A β -Lactamase, Toho-1, in Complex with Cefotaxime, Cephalothin, and Benzylpenicillin
J. Biol. Chem., **277** (2002) 46601.
- C.-S.Hsu, S.-J.Chen, Y.-C.Tsai, T.-W.Lin, S.-H.Liaw and A.H.-J.Wang
Crystallization and Preliminary Crystallographic Analysis of a D-Aminoacylase from *Alcaligenes faecalis* DA1
Acta Cryst. D, **58** (2002) 1482.
- T.Shimura, T.Hosoi, K.Fukuda and M.Umeno
Existence of an Epitaxially Ordered Phase in the Buried Oxide SIMOX Wafers
Solid State Phenom., **82-84** (2002) 485.
- T.Shimura, T.Hosoi, K.Fukuda, M.Umeno and A.Ogura
Formation of Epitaxially Ordered SiO₂ in Oxygen-Implanted Silicon during Thermal Annealing
J. Cryst. Growth, **236** (2002) 37.
- M.Hidaka, S.Fushinobu, N.Ohtsu, H.Motoshima, H.Shoun and T.Wakagi
Trimeric Crystal Structure of the Glycoside Hydrolase Family 42 β -Galactosidase from *Thermus thermophilus* A4 and the Structure of its Complex with Galactose
J. Mol. Biol., **322** (2002) 79.
- S.Fushinobu, T.Saku, M.Hidaka, S.-T.Jun, H.Nojiri, H.Yamane, H.Shoun, T.Omori and T.Wakagi
Crystal Structures of a *meta*-Cleavage Product Hydrolase from *Pseudomonas fluorescens* IP01 (CumD) Complexed with Cleavage Products
Protein Science, **11** (2002) 2184.
- C.-N.Ji, Z.-L.Cai, G.-T.Cao, G.Yin, B.-H.Jiao, T.Jiang, G.Shu, J.-F.Mao, Y.Xie and Y.-M.Mao
Purification, Crystallization and Preliminary X-Ray Studies of Human Augmenter of Liver Regeneration
Protein Peptide Lett., **9** (2002) 553.
- T.Jiang, C.Ji, X.Sheng, M.Chen, Y.Xie, W.Gong and Y.Mao
Crystal Structure of Thermostable Catechol 2,3-Dioxygenase Determined by Multiwavelength Anomalous Dispersion Method
Chinese Science Bulletin, **47** (2002) 307.
- H.Tsuge, H.Sakuraba, T.Kobe, A.Kujime, N.Katunuma and T.Ohshima
Crystal Structure of the ADP-Dependent Glucokinase from *Pyrococcus horikoshii* at 2.0-Å Resolution: A Large Conformational Change in ADP-Dependent Glucokinase
Protein Science, **11** (2002) 2456.
- N.Tanaka, Y.Kusakabe, K.Ito, T.Yoshimoto and K.T.Nakamura
Crystal Structure of Formaldehyde Dehydrogenase from *Pseudomonas putida*: the Structural Origin of Tightly Bound Cofactor in the Nicotinoprotein Dehydrogenases.
J. Mol. Biol., **324** (2002) 519.
- N.Tanaka, A.Haga, H.Uemura, H.Akiyama, T.Funasaka, H.Nagase, A.Raz and K.T.Nakamura
Inhibition Mechanism of Cytokine Activity of Human Autocrine Motility Factor Examined by Crystal Structure Analyses and Site-Directed Mutagenesis Studies.
J. Mol. Biol., **318** (2002) 985.
- Y.Shomura, T.Yoshida, T.Maruyama, M.Yohda and K.Miki
Crystallization and Preliminary X-Ray Characterization of Archaeal Group II Chaperonin α Subunit from *Thermococcus* Strain KS-1
Acta Cryst. D, **58** (2002) 1830.
- Y.Yamada, T.Fujiwara, T.Sato, N.Igarashi and N.Tanaka
The 2.0 Å Crystal Structure of Catalase-Peroxidase from *Haloarcula marismortui*
Nature Structural Biology, **9** (2002) 691.
- H.Matsumura, Y.Xie, S.Shirakata, T.Inoue, T.Yoshinaga, Y.Ueno, K.Izui and Y.Kai
Crystal Structures of C₄ Form Maize and Quaternary Complex of *E. coli* Phosphoenolpyruvate Carboxylases
Structure, **10** (2002) 1721.
- Y.Okano, E.Mizohata, Y.Xie, H.Matsumura, H.Sugawara, T.Inoue, A.Yokota and Y.Kai
X-Ray Structure of *Galdieria* Rubisco Complexed with One Sulfate Ion Per Active Site
FEBS Lett., **527** (2002) 33.

- E.Mizohata, H.Matsumura, Y.Okano, M.Kumei, H.Takuma, J.Onodera, K.Kato, N.Shibata, T.Inoue, A.Yokota and Y.Kai
Crystal Structure of Activated Ribulose-1,5-Biphosphate Carboxylase/Oxygenase from Green Alga *Chlamydomonas reinhardtii* Complexed with 2-Carboxyarabinitol-1,5-Biphosphate.
J. Mol. Biol., **316** (2002) 179.
- B.Padmanabhan, A.Paehler and M.Horikoshi
Structure of Creatine Amidinohydrolase from *Actinobacillus*
Acta Cryst. D, **58** (2002) 1322.
- B.Padmanabhan, K.Kataoka, N.Adachi and M.Horikoshi
Purification, Crystallization and Preliminary X-Ray Diffraction Analysis of Yeast Nucleosome-Assembly Factor Cia1p
Acta Cryst. D, **58** (2002) 1876.
- N.Adachi, B.Padmanabhan, K.Kataoka, K.Kijima, M.Yamaki and M.Horikoshi
Purification, Crystallization and Preliminary X-Ray Diffraction Analysis of Yeast Regulatory Particle Non-ATPase Subunit 6 (Nas6p)
Acta Cryst. D, **58** (2002) 859.
- T.Inoue, D.Irikura, N.Okazaki, S.Kinugasa, H.Matsumura, N.Uodome, M.Yamamoto, T.Kumasaka, M.Miyano, Y.Kai and Y.Urade
Mechanism of Metal Activation of Human Hematopoietic Prostaglandin D Synthase
Nature Structural Biology, **10** (2003) 291.
- K.Shiba, T.Shirai, T.Homma and T.Noda
Translated Products of Tandem Microgene Repeats Exhibit Diverse Properties Also Seen in Natural Proteins.
Protein Engineering, **16** (2003) 57.
- H.Imamura, S.Fushinobu, M.Yamamoto, T.Kumasaka, B.-S.Jeon, T.Wakagi and H.Matsuzawa
Crystal Structures of 4- α -Glucanotransferase from *Thermococcus litoralis* and its Complex with an Inhibitor
J. Biol. Chem., **278** (2003) 19378.
- J.-J.Jeong, S.Fushinobu, S.Ito, H.Shoun and T.Wakagi
Archaeal ADP-Dependent Phosphofructokinase: Expression, Purification, Crystallization and Preliminary Crystallographic Analysis
Acta Cryst. D, **59** (2003) 1327.
- N.Tanaka, Y.Kusakabe, K.Ito, T.Yoshimoto and K.T.Nakamura
Crystal Structure of Glutathione-Independent Formaldehyde Dehydrogenase.
Chem. Biol. Interact., **143-144** (2003) 211.
- M.Fujihashi, D.H.Peapus, E.Nakajima, T.Yamada, J.Saito, A.Kita, Y.Higuchi, Y.Sugawara, A.Ando, N.Kamiya, Y.Nagata and K.Miki
X-Ray Crystallographic Characterization and Phasing of a Fucose-Specific Lectin from *Aleuria Aurantia*
Acta Cryst. D, **59** (2003) 378.
- H.Tsuge, M.Nagahama, H.Nishimura, J.Hisatsune, Y.Sakaguchi, Y.Itogawa, N.Katunuma and J.Sakurai
Crystal Structure and Site-Directed Mutagenesis of Enzymatic Components from *Clostridium perfringens* Lota-Toxin
J. Mol. Biol., **325** (2003) 471.

18C

- K.Takemura, H.Yamawaki, H.Fujihisa and T.Kikegawa
Axial Ratio of Zn at High Pressure and Low Temperature
Phys. Rev. B, **65** (2002) 132107.
- K.Takemura, H.Yamawaki, H.Fujihisa and T.Kikegawa
High-Pressure X-Ray Studies of Zn at Room and Low Temperatures with a He-Pressure Medium
High Pressure Res., **22** (2002) 337.
- A.Nakayama, H.Fujihisa, K.Takemura, K.Aoki and R.P.Carlson
Comparative Study on Pressure-Induced Structural Changes between $C_6O_2I_4$ and C_6I_6
High Pressure Res., **22** (2002) 415.
- M.Oehtzelt, G.Heimel, R.Resel, K.Weinmeier, P.Puschig, C.Ambrosch-Draxl and A.Nakayama
Structural Properties of Polyaromatic Molecular Crystals under High Pressure
High Pressure Res., **22** (2002) 343.
- A.Nakayama, H.Fujihisa, K.Takemura, K.Aoki and R.P.Carlson
Pressure-Induced Phase Transition in $C_6O_2I_4$
J. Phys.: Condens. Matter, **14** (2002) 1.
- H.Hirai, Y.Uchihara, T.Kawamura, Y.Yamamoto and T.Yagi
Pressure-Induced Phase Changes of Argon Hydrate and Methane Hydrate at Room Temperature
Proc. Jpn. Acad. B, **78** (2002) 39.
- K.Takemura, H.Yamawaki, H.Fujihisa and T.Kikegawa
High-Pressure Powder X-Ray Diffraction Experiments on Zn at Low Temperature
J. Phys.: Condens. Matter, **14** (2002) 10563.
- M.Takumi, T.Masamitsu and K.Nagata
X-Ray Structural Analysis of the High-Pressure Phase III of Tellurium
J. Phys.: Condens. Matter, **14** (2002) 10609.
- N.Murase, S.Abe, H.Takahashi, C.Katagiri and T.Kikegawa
Ice Crystallisation in Polymer Gels Studied by the Two-Dimensional WRD-DSC Simultaneous Measurement
Cryobiology and Cryotechnology, **48**. (2002) 91.
- H.Hirai, Y.Uchihara, Y.Nishimura, T.Kawamura, Y.Yamamoto and T.Yagi
Structural Changes of Argon Hydrate under High Pressure
J. Phys. Chem. B, **106** (2002) 11089.
- K.Takemura and S.Nakano
Performance of a Synthetic Diamond Backing-Plate for the Diamond-Anvil Cell at Ultrahigh Pressures
Rev. Sci. Instrum., **74** (2003) 3017.

19A

Y.Q.Cai, K.Nakatsuji, S.Ohno, T.Imori, M.Yamada and F.Komori

Direct Evidence for Itinerant Magnetite above and below the Verwey Transition Temperature
Surf. Rev. Lett., **9** (2002) 907.

H.Nakajima, S.Pukird, W.Suraban, T.Saitoh and A.Kakizaki
Reinvestigation of Electronic Structure and Ferromagnetism of the Nonreconstructed Cr(001) 1×1 Surface
Surf. Rev. Lett., **9** (2002) 861.

M.Sawada, K.Hayashi and A.Kakizaki
Electronic Structure and Re-Orientation of Perpendicular Magnetic Anisotropy of Co/Au(111) and Co/Pd(111)
Surf. Rev. Lett., **9** (2002) 865.

A.Kakizaki, M.Sawada and K.Hayashi
Spin-Resolved Photoemission and Electronic Structures of Magnetic Thin Films: Perpendicular Magnetic Anisotropy of Co Films
J. Elec. Spec. Relat. Phenom., **124** (2002) 281.

S.Qiao, A.Kimura, H.Narita, K.Yaji, E.Kotani, K.Shimada, H.Namatame, M.Taniguchi, A.Harasawa, T.Kinoshita and A.Kakizaki
A Negative Spin-Polarization Structure of Ni(110): Probed by Spin- and Angle-Resolved Photoelectron Spectroscopy
Surf. Rev. Lett., **9** (2002) 1287.

T.Okuda, A.Harasawa, T.Kinoshita, K.Nakayama, T.Fujikawa and A.Chasse
Spin Arrangement of the Mn/Fe(001) System Investigated by Spin-Polarized Photoelectron Diffraction
Surf. Rev. Lett., **9** (2002) 901.

M.Sawada, K.Hayashi and A.Kakizaki
Perpendicular Magnetic Anisotropy of Co/Pd(111) Studied by Spin-Resolved Photoelectron Spectroscopy
J. Phys. Soc. Jpn., **72** (2003) 1161.

19B

J.Nakamura, M.Watanabe, T.Oguchi, S.Nasubida, E.Kabasawa, N.Yamada, K.Kuroki, H.Yamazaki, S.Shin, Y.Umeda, S.Minakawa, N.Kimura and H.Aoki
Electric Structure of B-2p State in AlB₂ Single Crystal: Direct Observation of $p\sigma$ and $p\pi$ Density of State
J. Phys. Soc. Jpn., **71** (2002) 408.

J.Labis, A.Ohi, C.Kamezawa, T.Fujiki, K.Yoshida, M.Hirai, M.Kusaka and M.Iwami
PEEM and SXES Characterization on the Surface and Interface of the Transition-Metal/SiC System
Surf. Rev. Lett., **9** (2002) 313.

A.Ohi, J.Labis, Y.Morikawa, T.Fujiki, M.Hirai, M.Kusaka and M.Iwami
Soft X-Ray Emission Study of Thermally Treated Ni(Film)/4H-SiC(Substrate) Interface
Appl. Surf. Sci., **190** (2002) 366.

J.Labis, A.Ohi, C.Kamezawa, K.Yoshida, M.Hirai, M.Kusaka and M.Iwami

Surface and Interface of Ti(Film)/SiC(Substrate) System: a Soft X-Ray Emission and Photoemission Electron Microscopy Study
Appl. Surf. Sci., **190** (2002) 521.

M.Oura, K.Kobayashi, M.Watanabe, Y.Harada, T.Suzuki, S.Shin and O.Jagutzki
Feasibility Studies of the Three-Dimensional Detector for Soft X-Ray Emission Spectroscopy
Surf. Rev. Lett., **9** (2002) 515.

Y.Harada, M.Oura, M.Watanabe, T.Tokushima, K.Kobayashi, T.Takeuchi and S.Shin
Soft X-Ray Emission Spectroscopy at the L-Edge of Transition Metals in Metalloproteins
RIKEN Review, **46** (2002) 45.

K.Kaibuchi, J.Kawai, M.Nagasono, A.Fukushima and S.Shin
X-Ray Absorption Spectra of Rare Earth Fluorides
Adv. X-Ray Chem. Anal. Jpn., **34** (2003) 253. (*in Japanese*).

20A

K.Kameta, N.Kouchi, M.Ukai and Y.Hatano
Photoabsorption, Photoionization, and Neutral-Dissociation Cross Sections of Simple Hydrocarbons in the Vacuum Ultraviolet Range
J. Elec. Spec. Relat. Phenom., **123** (2002) 225.

H.Yoshii, T.Hayaishi, T.Onuma, T.Aoto, Y.Morioka and K.Ito
Vibrationally Resolved Threshold Photoelectron-Photoion Coincidence Spectra of ArXe
J. Chem. Phys., **116** (2002) 7468.

H.Yoshii, T.Hayaishi, T.Onuma, T.Aoto, Y.Morioka and K.Ito
Decay Processes of the $C_2^2\Pi_{1/2u}$ States of Ar_2^+ , Kr_2^+ , and Xe_2^+
J. Chem. Phys., **117** (2002) 1517.

T.Aoto, H.Yoshii, T.Hayaishi and Y.Morioka
Rotationally Resolved ZEKE Spectra of the X $^2\Sigma_g^+$ ($v^+=0$ to 3), B $^2\Sigma_u^+$ ($v^+=0$) and C $^2\Sigma_u^+$ ($v^+=0$) States of N_2^+ .
Physica Scripta, **65** (2002) 139.

M.Kato, K.Kameta, T.Odagiri, N.Kouchi and Y.Hatano
Single-Hole One-Electron Superexcited States and Doubly Excited States of Methane in the Vacuum Ultraviolet Range as Studied by Dispersed Fluorescence Spectroscopy
J. Phys. B, **35** (2002) 4383.

T.Aoto, H.Tokunaga, H.Morioka, H.Yoshii and T.Hayaishi
The Stark Quantum Beat of Ne Fluorescence in the Vacuum Ultra Violet Region
Physica Scripta, **67** (2003) 282.

Y.Hikosaka, T.Aoto, R.I.Hall and K.Ito
Fragment Emission Anisotropy in the Dissociative Photoionization of O₂ Investigated by Two-Dimensional Photoion Spectroscopy
J. Phys. B, **36** (2003) 1423.

27A

Y.Baba, T.Sekiguchi and I.Shimoyama
Local Electronic and Geometric Structures of Silicon Implanted in Graphite
Nucl. Instrum. Meth. Phys. Res. B, **194** (2002) 41.

Y.Baba
X-Ray-Induced Ion Desorption from Solid Surfaces
Trends in Vac. Sci. Technol., **5** (2002) 45.

T.Saito, H.Yamamoto, M.Sasase, T.Nakanoya, K.Yamaguchi, M.Haraguchi and K.Hojou
Surface Chemical States and Oxidation Resistivity of "Ecologically Friendly" Semiconductor (β -FeSi₂) Thin Films
Thin Solid Films, **415** (2002) 138.

Y.Baba, T.Sekiguchi and I.Shimoyama
Fragment-Ion Desorption from Sulfur-Containing Amino Acid by Localized Core-Level Excitation
Surf. Rev. Lett., **9** (2002) 77.

Y.Baba, I.Shimoyama and T.Sekiguchi
Local Structure of the Silicon Implanted in a Graphite Single Crystal
J. Surf. Sci. Soc. Jpn., **23** (2002) 417.

27B

Y.Okamoto and H.Motohashi
XAFS Study of Molten ZrCl₄ in LiCl-KCl Eutectic
Zeitschrift für Naturforschung, **57a** (2002) 277.

Y.Okamoto, M.Akabori, H.Motohashi, A.Itoh and T.Ogawa
High-Temperature XAFS Measurement of Molten Salt Systems
Nucl. Instrum. Meth. Phys. Res. A, **487** (2002) 232.

K.Kobayashi, H.Frohlich, N.Usami, K.Takakura and C.L.Sech
Enhancement of X-Ray-Induced Breaks of DNA Bound to Molecules Containing Platinum: A Possible Application to Hadrontherapy
Radiat. Res., **157** (2002) 32.

Y.Okamoto, K.Fukushima and Y.Iwamoto
XAFS Study of Molten Zinc Dibromide
J. Non-Cryst. Solids, **312-314** (2002) 450.

Y.Okamoto, M.Akabori, A.Itoh and T.Ogawa
X-Ray Absorption Study of Molten Uranium Chloride System
J. Nucl. Sci. Tech., **Suppl.3** (2002) 638.

S.Yamazaki, T.Matsui, T.Sato, Y.Arita and T.Nagasaki
EXAFS Study of Reduced Ceria Doped with Lanthanide Oxides
Solid State Ionics, **154-155** (2002) 113.

M.Yamashita, T.Shimizu, H.Konishi, J.Mizuki and H.Uchida
Structure and Protective Performance of Atmospheric Corrosion Product of Fe-Cr Alloy Film Analyzed by Mössbauer Spectroscopy and with Synchrotron Radiation X-Rays
Corrosion Science, **45** (2003) 381.

28A

S.Motoki, J.Adachi, K.Ito, K.Ishii, K.Soejima, A.Yagishita, S.K.Semenov and N.A.Cherepkov
Complete Photoionization Experiment in the Region of the $2\sigma_g \rightarrow \sigma_u$ Shape Resonance of the N₂ Molecule
J. Phys. B, **35** (2002) 3801.

S.Motoki, J.Adachi, K.Ito, K.Ishii, K.Soejima, A.Yagishita, S.K.Semenov and N.A.Cherepkov
Direct Probe of the Shape Resonance Mechanism in $2\sigma_g$ -Shell Photoionization of the N₂ Molecule
Phys. Rev. Lett., **88** (2002) 063003.

Y.Takayama, M.Shinoda, K.Obu, C.Lee, H.Shiozawa, M.Hirose, H.Ishii, T.Miyahara and J.Okamoto
Magnetic Circular Dichroism of X-Ray Emission for Gadolinium in $4d$ - $4f$ Excitation Region
J. Phys. Soc. Jpn., **71** (2002) 340.

Y.Takayama, H.Ohtsubo, M.Shinoda, K.Obu, C.Lee, H.Shiozawa, H.Ishii, T.Miyahara and J.Okamoto
Magnetic Circular Dichroism of $4d$ - $4f$ Resonant X-ray Emission for Gadolinium and Terbium
Surf. Rev. Lett., **9** (2002) 837.

28B

Y.Watanabe, J.T.Okada, H.Shoji and S.Nanao
Resonant Fluorescence Emission of Mn K β in Quasicrystals
J. Alloys and Compounds, **342** (2002) 422.

I.Yamamoto, S.Nagamatsu, T.Nakamura, T.Fujikawa and S.Nanao
Multiple Scattering Approach to Co K-Edge XMCD and XANES Spectra in Gd-Co Alloys
J. Elec. Spec. Relat. Phenom., **125** (2002) 89.

K.Takano, M.Furuhata, S.Kobayashi, H.Sakurai and F.Itoh
Perpendicular Magnetic Properties of Fe/Tb Multilayered Films.
J. Magn. Magn. Mater., **240** (2002) 565.

T.Nakamura, H.Shoji, E.Hirai, S.Nanao, K.Fukui, H.Ogasawara, A.Kotani, I.Harada, R.Katano and Y.Isozumi
Magnetic Circular Dichroism of Resonant X-Ray Emission Spectroscopy for Sm $L_{3,4,5}$ and $L_{2,3}$ in Sm₂₁Co₇₉ Amorphous Alloy
J. Phys. B, **67** (2003) 94439.

NE5A

T.Takeda and Y.Itai
X-Ray Imaging with Monochromatic Synchrotron Radiation: Fluorescent and Phase-Contrast Method
Medical Imaging Technology, **20** (2002) 184. (*in Japanese*).

NE5C

K.Kusaba and T.Kikegawa
A New High-Pressure Phase of ZnSe with B9-Type Structure
J. Phys. Chem. Solids, **63** (2002) 651.

H.Takebe, D.Sakamoto, O.Ohtaka, H.Fukui, A.Yoshiasa, T.Yamanaka, K.Ota and T.Kikegawa
Ionic Conductivity Measurements of Zirconia under Pressure Using Impedance Spectroscopy
J. Phys.: Condens. Matter, **14** (2002) 11507.

T.Tsuchiya, K.Kawamura, O.Ohtaka, H.Fukui and T.Kikegawa
Precise Measurement of Equation-of-State and Elastic Properties for GaN up to 16 GPa
Solid State Commun., **121** (2002) 555.

O.Ohtaka, H.Fukui, K.Funakoshi, W.Utsumi, T.Irifune and T.Kikegawa
Phase Relations and EOS of ZrO₂ and HfO₂ under High-Temperature and High-Pressure
High Pressure Res., **22** (2002) 221.

Y.Fukai, T.Haraguchi, H.Shinomiya and K.Mori
Constitution of the Mn-H System at High Hydrogen Pressures
Scripta Materialia, **46** (2002) 679.

Y.Shizuku, S.Yamamoto and Y.Fukai
Phase Diagram of the Ni-H System at High Hydrogen Pressures
J. Alloys Compounds, **336** (2002) 159.

Y.Fukai and M.Mizutani
Phase Diagram and Superabundant Vacancy Formation in Cr-H Alloys
Mater. Trans., **43** (2002) 1079.

D.Sakamoto, A.Yoshiasa, T.Yamanaka, O.Ohtaka and K.Ota
Electric Conductivity of Olivine under Pressure Investigated Using Impedance Spectroscopy
J. Phys.: Condens. Matter, **14** (2002) 11375.

T.Horikawa, K.Suito, M.Kobayashi and A.Onodera
Time-Resolved X-Ray Diffraction Measurement of C₆₀ under High Pressure and Temperature using Synchrotron Radiation.
J. Phys.: Condens. Matter, **14** (2002) 10483.

Others

K.Iwano
A New State Realized by Mixing of Ni and Pd as the Metal Ions in MX-Chains: Effects of Electron Correlation and Interpretation of Raman Data
J. Phys. Soc. Jpn., **71** (2002) 174.

K.Iwano
Precursor of Photoinduced Structural Phase Transitions in a Coupled-Chain System with an Electron-Lattice Interaction
Phys. Rev. B, **65** (2002) 024302.

S.Nagaoka, K.Mase, A.Nakamura, M.Nagao, J.Yoshinobu and S.Tanaka
Site-Specific Fragmentation Caused by Core-Level Photoionization: Effect of Chemisorption
J. Chem. Phys., **117** (2002) 3961.

S.Tanaka, K.Mase, S.Nagaoka, M.Nagasono and K.Kamada
Ion Desorption Induced by Core-Level Excitation of H₂O/Si(100): Evidence of Desorption Due to the Multielectron Excitation/Decay
J. Chem. Phys., **117** (2002) 4479.

S.Tanaka and K.Mase
Studies on the Core-Level-Excitation-Induced Ion Desorption from Solid Surfaces
J. Surf. Sci. Soc. Jpn, **23** (2002) 753. (*in Japanese*).

K.Nasu and N.Tomita
Non-Grassmann Path Integral Theory for Momentum Specified Photoemission and Light Absorption Spectra of Many-Electron System with Strong Long Range Coulomb Repulsion
J. Elec. Spec. Relat. Phenom., **123** (2002) 317.

K.Nasu and N.Tomita
Unified Theory on Angle-Resolved Photoemission and Light Absorption Spectra of Strongly Correlated Electron Systems
Surf. Rev. Lett., **9** (2002) 1017.

K.Nasu and N.Tomita
Unified Theory on the Angle-Resolved Photoemission and Light Absorption Spectra of Strongly Correlated Electron Systems
J. Phys. Chem. Solids, **63** (2002) 1583.

K.Nasu and N.Tomita
Exciton Effects on the Light Absorption and Photoemission Spectra of the One-Dimensional Mott Insulator [Ni(chxn)₂Br]Br₂(chxn=1R, 2R- Cyclohexanediamine)
Nonlinear Optics, **29** (2002) 247.

R.Kato, T.Imakubo, H.Yamamoto, R.Maeda, M.Fujiwara, J.Yamaura and H.Sawa
An Application of Supramolecular Chemistry to Molecular Conductors
Mol. Cryst. Liq. Cryst., **380** (2002) 61.

H.Nakao, Y. Wakabayashi, T.Kiyama, Y.Murakami, M.v.Zimmermann, J.P.Hill, D.Gibbs, S.Ishihara, Y.Taguchi, and Y.Tokura
Quantitative Determination of the Atomic Scattering Tensor in Orbitally Ordered YTiO₃
Phys. Rev. B, **66** (2002) 184419.

M.Tamura, Y.Hosokoshi, D.Shioimi, M.Kinoshita, Y.Nakasawa, M.Ishikawa, H.Sawa, T.Kitazawa, A.Eguchi, Y.Nishio and K.Kajita
Magnetic Properties and Structures of the α - and δ -Phases of *p*-NPNN
J. Phys. Soc. Jpn., **72** (2003) 1735.

K.Mase, M.Nagasono, S.Tanaka, T.Sekitani and S.Nagaoka
Ion Desorption from Molecules Condensed at Low Temperature: A Study with Electron-Ion Coincidence Spectroscopy Combined with Synchrotron Radiation
Fizika Nizkikh Temperatur, **29** (2003) 321.

T.Imakubo, N.Tajima, T.Shirahata, A.Miyake, H.Sawa,
T.Nakamura, H.Ohnuki, M.Tamura, R.Kato, M.Izumi,
Y.Nishio and K.Kajita
Crystal Design of Organic Conductors Using the Iodine Bond
Synthetic Metals, **135-136** (2003) 601.

Light Source Dept.

S.Sakanaka, T.Obina and T.Mitsubishi
Study on a Longitudinal Quadrupole-Mode Bunch Oscillation
in the KEK Photon Factory Storage Ring
Proc. 2001 Particle Accelerator Conference, (2002) 1936.

S.Sakanaka, Y.Kobayashi, T.Mitsubishi and T.Obina
Excitation and Detection of a Transverse Quadrupole-Mode
Bunch Oscillation in the KEK Photon Factory Storage Ring
Jpn. J. Appl. Phys., **42** (2003) 1757.