

8A(1A)

1A

2002

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.

2003

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

T.Arima
Non-Reciprocal Directional Dichroism as an Extension of the Magneto-Electric Effect
Nihon Oyo Jiki Gakkaishi, **27** (2003) 1111. (*in Japanese*).

2004

Y.Wakabayashi, H.Sawa, M.Nakamura, M.Izumi and K.Miyano
Lack of Influence of Anisotropic Electron Clouds on Resonant X-Ray Scattering from Manganite Thin Films
Phys. Rev. B, **69** (2004) 144414.

M.Kubota, T.Arima, Y.Kaneko, J.P.He, X.Z.Yu and Y.Tokura
X-Ray Directional Dichroism of Polar Ferrimagnet
Phys. Rev. Lett., **92** (2004) 137401.

D.Akahoshi, Y.Okimoto, M.Kubota, R.Kumai, T.Arima, Y.Tomioka and Y.Tokura
Charge-Orbital Ordering near the Multicritical Point in A-Site Ordered Perovskites $\text{SmBaMn}_2\text{O}_6$ and $\text{NdBaMn}_2\text{O}_6$
Phys. Rev. B, **70** (2004) 064418.

T.Arima, D.Higashiyama, Y.Kaneko, J.P.He, T.Goto, S.Miyasaka, T.Kimura, K.Oikawa, T.Kamiyama, R.Kumai and Y.Tokura
Structural and Magnetoelectric Properties of $\text{Ga}_{2-x}\text{Fe}_x\text{O}_3$ Single Crystals Grown by a Floating-Zone Method
Phys. Rev. B, **70** (2004) 064426.

S.Horiuchi, F.Ishii, R.Kumai, Y.Okimoto, H.Tachibana, N.Nagaosa and Y.Tokura
Ferroelectricity near Room Temperature in Co-Crystals of Nonpolar Organic Molecules
Nature Materials, **4** (2005) 163.

T.Arima, J.-H.Jung, M.Matsubara, M.Kubota, J.-P.He, Y.Kaneko and Y.Tokura
Resonant Magnetoelectric X-Ray Scattering in GaFeO_3 : Observation of Ordering of Toroidal Moments
J. Phys. Soc. Jpn., **74** (2005) 1419.

Y.Okimoto, R.Kumai, S.Horiuchi, H.Okamoto and Y.Tokura
Quantum Neutral-Ionic Phase Transition as Investigated by Raman Scattering and X-Ray Diffraction
J. Phys. Soc. Jpn., **74** (2005) 2165.

R.Mathieu, A.Asamitsu, Y.Kaneko, J.-P.He, X.Z.Yu, R.Kumai, Y.Onose, N.Takeshita, T.Arima, H.Takagi and Y.Tokura
Impurity-Induced Transition to a Mott Insulator in $\text{Sr}_3\text{Ru}_2\text{O}_7$
Phys. Rev. B, **72** (2005) 092404.

T.Arima
Probing Toroidal Moments Using X-Ray
Solid State Physics, **40** (2005) 891. (*in Japanese*).

H.Sawa, Y.Wakabayashi, Y.Murata, M.Murata and K.Komatsu
Floating Single Hydrogen Molecule in an Open-Cage Fullerene
Angew. Chem. Int. Ed., **44** (2005) 1981.

T.Hasegawa, R.Kumai, Y.Takahashi, Y.Tokura and H.Sawa
Clamp-Type Pressure Cell for Full Structure Determination of Molecular Single Crystals up to 1.5 GPa
Rev. Sci. Instrum., **76** (2005) 073903.

2006

S.Kimura, H.Suzuki, T.Maejima, H.Mori, J.Yamaura, T.Kakiuchi, H.Sawa and H.Moriyama
Checkerboard-Type Charge-Ordered State of a Pressure-Induced Superconductor, β -(meso-DMBEDT-TTF) $_2$ PF $_6$
J. Am. Chem. Soc., **128** (2006) 1456.

Y.Shimada, S.Miyasaka, R.Kumai and Y.Tokura
Semiconducting Ferromagnetic States in $\text{La}_{1-x}\text{Sr}_{1+x}\text{CoO}_4$
Phys. Rev. B, **73** (2006) 134424.

H.Sagayama, Y.Wakabayashi, H.Sawa, T.Kamiyama, A.Hoshikawa, S.Haryo, K.Uozato, A.K.Ghosh, M.Tokunaga and T.Tamegai
Two Types of Multistack Structures in MgB_2 -Type Superconductor CaAlSi
J. Phys. Soc. Jpn., **75** (2006) 043713.

Y.Wakabayashi, A.Kobayashi, H.Sawa, H.Ohsumi, N.Ikeda and H.Kitagawa
Direct Determination of Low-Dimensional Structures: Synchrotron X-Ray Scattering on One-Dimensional Charge-Ordered MMX-Chain Complexes
J. Am. Chem. Soc., **128** (2006) 6676.

S.Kuroiwa, H.Sagayama, T.Kakiuchi, H.Sawa, Y.Noda and J.Akimitsu
Correlation between Crystal Structures of CaAlSi with and without Superlattice and Superconducting Properties
Phys. Rev. B, **74** (2006) 014517.

R.Kumai, S.Horiuchi, Y.Okimoto and Y.Tokura
Large Dielectric Susceptibility Associated with Proton Transfer in a Supramolecular Structure of Chloranilic Acid and 5,5'-Dimethyl-2,2'-Bipyridine
J. Chem. Phys., **125** (2006) 084715.

Y.Tokunaga, T.Lottermoser, Y.Lee, R.Kumai, M.Uchida, T.Arima and Y.Tokura
Rotation of Orbital Stripes and the Consequent Charge-Polarized State in Bilayer Manganites
Nature Materials, **5** (2006) 937.

S.Horiuchi, R.Kumai, Y.Okimoto and Y.Tokura
Chemical Approach to Neutral-Ionic Valence Instability, Quantum Phase Transition, and Relaxor Ferroelectricity in Organic Charge-Transfer Complexes
Chem. Phys., **325** (2006) 78.

2007

H.Sawa, T.Kakiuchi, Y.Wakabayashi, Y.Murata, M.Murata, K.Komatsu, K.Yakigaya, H.Takagi and N.Dragoe
Direct Observation of a Gas Molecule(H₂,Ar) Swallowed by C₆₀
AIP Conf. Proc., **879** (2007) 1419.

T.Kakiuchi, Y.Wakabayashi, H.Sawa, T.Itou and K.Kanoda
Wigner Crystallization in (DI-DCNQI)₂Ag Detected by Synchrotron Radiation X-Ray Diffraction
Phys. Rev. Lett., **98** (2007) 066402.

K.Yakigaya, A.Takeda, Y.Yokoyama, S.Ito, T.Miyazaki, T.Suetsuna, H.Shimotani, T.Kakiuchi, H.Sawa, H.Takagi, K.Kitazawa and N.Dragoe
Superconductivity of Doped Ar@C₆₀
New J. Chem., **31** (2007) 973.

H.Sakai, K.Ito, R.Kumai and Y.Tokura
Fe-Doping-Induced Evolution of Charge-Orbital Ordering in a Bicritical-State Manganite
Phys. Rev. B, **76** (2007) 155112.

T.Kakiuchi, Y.Wakabayashi, H.Sawa, T.Takahashi and T.Nakamura
Charge Ordering in α -(BEDT-TTF)₂I₃ by Synchrotron X-Ray Diffraction
J. Phys. Soc. Jpn., **76** (2007) 113702.

R.Kumai, S.Horiuchi, H.Sagayama, T.Arima, M.Watanabe, Y.Noda and Y.Tokura
Structural Assignment of Polarization in Hydrogen-Bonded Supramolecular Ferroelectrics
J. Am. Chem. Soc., **129** (2007) 12920.

S.Horiuchi, R.Kumai and Y.Tokura
A Supramolecular Ferroelectric Realized by Collective Proton Transfer
Angew. Chem. Int. Edit., **46** (2007) 3497.

S.Horiuchi, R.Kumai and Y.Tokura
Hydrogen-Bonded Donor-Acceptor Compounds for Organic Ferroelectric Materials
Chem. Commun., **2007** (2007) 2321.

Y.Wakabayashi
Observation of a Low-Dimensional Structure –Utilization of Anomalous Scattering in Analysis of X-Ray Diffuse Scattering
J. Jpn. Soc. Synchrotron Rad. Res., **20** (2007) 26. (*in Japanese*).

T.Matsumura, D.Okuyama, S.Niioka, H.Ishida, T.Satoh, Y.Murakami, H.Toyosaki, Y.Yamada, T.Fukumura and M.Kawasaki
X-Ray Anomalous Scattering of Diluted Magnetic Oxide Semiconductors: Possible Evidence of Lattice Deformation for High Temperature Ferromagnetism
Phys. Rev. B, **76** (2007) 115320.

S.Horiuchi, R.Kumai and Y.Tokura
Organic Ferroelectrics Based on Hydrogen-bonded Supramolecules
Solid State Physics, **42** (2007) 283. (*in Japanese*).

2008

Y.Tokunaga, R.Kumai, N.Takeshita, Y.Kaneko, J.P.He, T.Arima and Y.Tokura
Effects of Uniaxial Stress on Orbital Stripe Direction in Half-Doped Layered Manganites: Eu_{0.5}Ca_{1.5}MnO₄ and Pr(Sr, Ca)₂Mn₂O₇
Phys. Rev. B, **78** (2008) 155105.

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

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

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

2009

H.Nakao, J.Nishimura, Y.Murakami, A.Ohtomo,
T.Fukumura, M.Kawasaki, T.Koida, Y.Wakabayashi
and H.Sawa
Crystal Structure and Valence Distribution of
[(LaMnO₃)_m(SrMnO₃)_m]_n Artificial Superlattices
J. Phys. Soc. Jpn., **78** (2009) 024602.

S.Konno, K.Taniguchi, H.Sagayama and T.Arima
Electrical Control of In-Plane Anisotropy in Charge-
Orbital Ordered State of Single-Layered Manganite
La_{1/2}Sr_{3/2}MnO₄
Appl. Phys. Express, **2** (2009) 033004.

D.Okuyama, Y.Tokunaga, R.Kumai, Y.Taguchi,
T.Arima, and Y.Tokura
Lattice-Form-Dependent Orbital Shape and Charge
Disproportionation in Charge- and Orbital-Ordered
Manganites
Phys. Rev. B, **80** (2009) 064402.

2010

S.Ohtani, Y.Watanabe, M.Saito, N.Abe, K.Taniguchi,
H.Sagayama, T.Arima, M.Watanabe and Y.Noda
Orbital Dilution Effect in Ferrimagnetic
Fe_{1-x}Mn_xCr₂O₄: Competition between Anharmonic
Lattice Potential and Spin-Orbit Coupling
J. Phys.: Condens. Matter, **22** (2010) 176003.

8A

2010

H.Sakai, S.Ishiwata, D.Okuyama, A.Nakao, H.Nakao,
Y.Murakami, Y.Taguchi and Y.Tokura
Electron Doping in the Cubic Perovskite SrMnO₃:
Isotropic Metal Versus Chainlike Ordering of Jahn-Teller
Polarons
Phys. Rev. B, **82** (2010) 180409.