

- [42] "Imaging of the Pulmonary Circulation in the Closed-Chest Rat using Synchrotron Radiation Microangiography"
D. Schwenke, J. Pearson, K. Umetani, K. Kangawa, M. Shirai
Journal of Applied Physiology, **102**, (2007), 787-793
- [43] "Structural Instability and the Metal-non-metal Transition in Expanded Fluid Metals"
K. Tamura, M. Inui, K. Matsuda, D. Ishikawa
Journal of Non-Crystalline Solids, **353**, (2007), 3348-3357
[2008]
- [44] "Structural Study of Expanded Fluid Cesium"
K. Matsuda, S. Naruse, K. Hayashi, K. Tamura, M. Inui, Y. Kajihara
Journal of Physics: Conference Series, **98**, (2008), 012003
- [45] "Direct Determination of Burgers Vector Sense and Magnitude of Elementary Dislocations by Synchrotron White X-ray Topography"
D. Nakamura, S. Yamaguchi, Y. Hirose, T. Tani, K. Takatori, K. Kajiwara, T. Kimoto
Journal of Applied Physics, **103**, (2008), 013510
- [46] "Structural and Electronic Properties of Expanding Fluid Metals"
K. Tamura, K. Matsuda, M. Inui
Journal of Physics: Condensed Matter, **20**, (2008), 114102

BL35XU

Refereed Journals

- [2000]
- [1] "An X-Ray Scattering Beamline for Studying Dynamics"
Alfred Q. R. Baron, Y. Tanaka, S. Goto, K. Takeshita, T. Matsushita, T. Ishikawa
Journal of Physics and Chemistry of Solids, **61**, (2000), 461-465
[2001]
- [2] "Early Commissioning of the SPring-8 Beamline for High Resolution Inelastic X-Ray Scattering"
Alfred Q. R. Baron, Y. Tanaka, D. Miwa, D. Ishikawa, T. Mochizuki, K. Takeshita, S. Goto, T. Matsushita, H. Kimura, F. Yamamoto, T. Ishikawa
Nuclear Instruments and Methods in Physics Research Section A, **467-468**, (2001), 627-630
- [3] "A Compact Optical Design for Bragg Reflections Near Backscattering"
Alfred Q. R. Baron, Y. Tanaka, D. Ishikawa, D. Miwa, M. Yabashi, T. Ishikawa
Journal of Synchrotron Radiation, **8**, (2001), 1127-1130
[2002]
- [4] "Sub-Picosecond Dynamics in Liquid Si"
S. Hosokawa, W. Pilgrim, Y. Kawakita, S. Takeda, D. Ishikawa, S. Tsutsui, Y. Tanaka, Alfred Q. R. Baron
Journal of Physics: Condensed Matter, **15**, (2003), L623-L629
- [5] "Static and Dynamic Structures of Expanded Fluid Mercury"
M. Inui, K. Tamura
Zeitschrift Physikalische Chemie, **217**, (2003), 1045-1063
- [6] "Coherent Dynamic Scattering Law of Divalent Liquid Mg"
Y. Kawakita, S. Hosokawa, T. Enosaki, K. Ohshima, S. Takeda, W. Pilgrim, S. Tsutsui, Y. Tanaka, Alfred Q. R. Baron
Journal of the Physical Society of Japan, **72**, (2003), 1603-1606
- [7] "High Frequency Dynamics of a Monatomic Glass"
T. Scopigno, R. Di Leonardo, G. Ruocco, Alfred Q. R. Baron, S. Tsutsui, F. Bossard, Spyros N. Yannopoulos
Physical Review Letters, **92**, (2003), 025503
- [8] "Self-Diffusion of Sn Atoms in Cu₃Sn Probed by Quasielastic Nuclear Resonant Scattering of Synchrotron Radiation"
H. Thiess, A. Baron, D. Ishikawa, T. Ishikawa, D. Miwa, B. Sepiol, S. Tsutsui
Physical Review B, **67**, (2003), 184302
[2004]
- [9] "Kohn Anomaly in MgB₂ by Inelastic X-ray Scattering"
A. Baron, H. Uchiyama, Y. Tanaka, S. Tsutsui, D. Ishikawa, S. Lee, R. Heid, K. Bohnen, S. Tajima, T. Ishikawa
Physical Review Letters, **92**, (2004), 197004
- [10] "Localized Dynamics in Network Glasses"
C. Halcoussis, E. Burkel, R. Nicula, G. Walter, Alfred Q. R. Baron
Physica Status Solidi C, **1**, (2004), 2871-2874

- [11] "Collective Dynamics in Dense Hg Vapour"
D. Ishikawa, M. Inui, K. Matsuda, K. Tamura, Alfred Q. R. Baron, S. Tsutsui, Y. Tanaka, T. Ishikawa
Journal of Physics: Condensed Matter, **16**, (2004), L40-L50
- [12] "Fast Sound in Expanded Fluid Hg Accompanying the Metal-Nonmetal Transition"
D. Ishikawa, M. Inui, K. Matsuda, K. Tamura, S. Tsutsui, A. Baron
Physical Review Letters, **93**, (2004), 097801
- [13] "Acoustic Phonon Dynamics in Liquid CCl₄"
T. Kamiyama, S. Hosokawa, Alfred Q. R. Baron, S. Tsutsui, K. Yoshida, W. Pilgrim, Y. Kiyanagi, T. Yamaguchi
Journal of the Physical Society of Japan, **73**, (2004), 1615-1618
- [14] "Search for Orbitons in LaMnO₃, YTiO₃ and KCuF₃ using High-Resolution Inelastic X-ray Scattering"
Y. Tanaka, Alfred Q. R. Baron, Y. Kim, K. J. Thomas, J. P. Hill, Z. Honda, F. Iga, S. Tsutsui, D. Ishikawa, C. S. Nelson
New Journal of Physics, **6**, (2004), 161
- [15] "Softening of Cu-O Bond Stretching Phonons in Tetragonal HgBa₂CuO_{4+δ}"
H. Uchiyama, A. Baron, S. Tsutsui, Y. Tanaka, W.-Z. Hu, A. Yamamoto, S. Tajima, Y. Endoh
Physical Review Letters, **92**, (2004), 197005
- [16] "Phonon Softening in HgBa₂CuO_{4+δ} Observed by Inelastic X-ray Scattering"
H. Uchiyama, Alfred Q. R. Baron, S. Tsutsui, Y. Tanaka, W.-Z. Hu, A. Yamamoto, S. Tajima, Y. Endoh
Physica Status Solidi C, **1**, (2004), 3130-3133
[2005]
- [17] "Doping Dependence of Softening in the Bond-Stretching Phonon Mode of La_{2-x}Sr_xCuO₄ (0<0.29)"
T. Fukuda, J. Mizuki, K. Ikeuchi, K. Yamada, A. Baron, S. Tsutsui
Physical Review B, **71**, (2005), 060501(R)
- [18] "Phonon Density of States on DyB₆ Determined by ¹⁶¹Dy Nuclear Resonant Inelastic Scattering"
H. Kobayashi, S. Tsutsui, A. Baron, S. Kunii
Physica B, **359-361**, (2005), 974-976
- [19] "Hard-Sphere-Like Dynamics in a Non-Hard-Sphere Liquid"
T. Scopigno, R. Di Leonardo, L. Comez, A. Baron, D. Fioretto, G. Ruocco
Physical Review Letters, **94**, (2005), 155301
- [20] "Collective Dynamics of Supercritical Water Probed by Inelastic X-ray Scattering"
T. Yamaguchi, K. Yoshida, N. Yamamoto, S. Hosokawa, M. Inui, Alfred Q. R. Baron, S. Tsutsui
Nuclear Instruments and Methods in Physics Research Section B, **238**, (2005), 146-149
- [21] "Collective Dynamics of Supercritical Water"
T. Yamaguchi, K. Yoshida, N. Yamamoto, S. Hosokawa, M. Inui, A. Baron, S. Tsutsui
Journal of Physics and Chemistry of Solids, **66**, (2005), 2246-2249
[2006]
- [22] "Growth, Characterization and Application of Single-Crystal La_{2-x}Sr_xCuO₄ Having a Gradient in Sr Concentration"
K. Ikeuchi, K. Isawa, K. Yamada, T. Fukuda, J. Mizuki, S. Tsutsui, Alfred Q. R. Baron
Japanese Journal of Applied Physics, **45**, (2006), 1594-1601
- [23] "Dynamics in the Melt of Icosahedral Al₇₂Pd₂₀Mn₈ Quasicrystal"
J. Okada, M. Inui, D. Ishikawa, Alfred Q. R. Baron, K. Matsuda, S. Tsutsui, Y. Watanabe, S. Nanao, T. Ishikawa
Journal of Physics: Condensed Matter, **18**, (2006), L613-L618
- [24] "Phonon Softening in HgBa₂CuO_{4+δ} and MgB₂"
H. Uchiyama, A. Baron, S. Tsutsui, Y. Tanaka, D. Ishikawa, S. Lee, W.-Z. Hu, A. Yamamoto, R. Heid, K. Bohnen, T. Ishikawa, S. Tajima, Y. Endoh
Journal of Physics and Chemistry of Solids, **67**, (2006), 294-297
[2007]
- [25] "Two-Phonon Contributions to the Inelastic X-ray Scattering Spectra of MgB₂"
A. Baron, H. Uchiyama, R. Heid, K. Bohnen, Y. Tanaka, D. Ishikawa, S. Lee, S. Tajima
Physical Review B, **75**, (2007), 020505(R)
- [26] "Phonon Spectra in Pure and Carbon Doped MgB₂ by Inelastic X-ray Scattering"
A. Baron, H. Uchiyama, S. Tsutsui, Y. Tanaka, D. Ishikawa, J. Sutter, S. Tajima, R. Heid, K. Bohnen
Physica C, **456**, (2007), 83-91
- [27] "Lattice Dynamics of the Zn-Mg-Sc Icosahedral Quasicrystal and its Zn-Sc Periodic 1/1 Approximant"
M. De Boissieu, S. Francoual, M. Mihalkovic, K. Shibata, A. Baron, Y. Sidis, T. Ishimasa, D. Wu, T. Lograsso, L. Regnault, F. Gähler, S. Tsutsui, B. Hennion, P. Bastie, J. Taku Sato, H. Takakura, R. Currat, A. Tsai
Nature Materials, **6**, (2007), 977-984

- [28] "Nanoscale Elastic Inhomogeneity of a Pd-based Metallic Glass: Sound Velocity from Ultrasonic and Inelastic X-ray Scattering Experiments"
T. Ichitsubo, S. Hosokawa, K. Matsuda, E. Matsubara, N. Nishiyama, S. Tsutsui, A. Baron
Physical Review B, **76**, (2007), 140201(R)
- [29] "Heavy Particle Dynamics in Liquid Se: Inelastic X-ray Scattering"
M. Inui, S. Hosokawa, K. Matsuda, S. Tsutsui, A. Baron
Journal of the Physical Society of Japan, **76**, (2007), 053601
- [30] "Viscoelastic Narrowing of a Collective Mode in Molten CsCl Observed by Inelastic X-ray Scattering"
M. Inui, S. Hosokawa, Y. Kajihara, K. Matsuda, S. Tsutsui, A. Baron
Journal of Physics: Condensed Matter, **19**, (2007), 466110
- [31] "Phonon Dispersion of Metallic Glass CuZr₂"
S. Nakashima, Y. Kawakita, T. Otomo, R. Suenaga, A. Baron, S. Tsutsui, S. Kohara, S. Takeda, K. Itoh, H. Kato, T. Fukunaga, M. Hasegawa
Journal of Physics: Conference Series, **92**, (2007), 012136
- [32] "High-resolution Inelastic X-ray Scattering Measurements of an Al₇₂Pd₂₀Mn₈ Alloy above the Melting Point"
J. Okada, M. Inui, D. Ishikawa, S. Tsutsui, A. Baron, K. Matsuda, Y. Yokoyama, Y. Watanabe, T. Ishikawa, S. Nanao
Journal of Non-Crystalline Solids, **353**, (2007), 3174-3176
- [33] "Relaxation in the Spin Ice Dy₂Ti₂O₇ Studied using Nuclear forward Scattering"
J. Sutter, S. Tsutsui, R. Higashinaka, Y. Maeno, O. Leupold, A. Baron
Physical Review B, **75**, (2007), 140402(R)
- [34] "Inelastic X-ray Scattering of Sm-filled Skutterudite Compounds"
S. Tsutsui, H. Kobayashi, A. Baron, J. Sutter, Y. Yoda, H. Onodera, D. Kikuchi, H. Sugawara, H. Sato, C. Sekine, I. Shirovani
Journal of Magnetism and Magnetic Materials, **310**, (2007), 241-242
- [35] "Low-lying Optical Modes in Filled Skutterudites using Inelastic X-ray Scattering Techniques"
S. Tsutsui, H. Kobayashi, J. Sutter, A. Baron, T. Hasegawa, N. Ogita, M. Udagawa, Y. Yoda, C. Sekine, I. Shirovani, D. Kikuchi, H. Sugawara, H. Sato
Journal of Physics: Conference Series, **92**, (2007), 012171
- [36] "Collective Dynamics of Sub- and Supercritical Methanol by Inelastic X-ray Scattering"
K. Yoshida, A. Baron, N. Yamamoto, S. Hosokawa, T. Yamaguchi
Chemical Physics Letters, **440**, (2007), 210-224
- [37] "Inelastic X-ray Scattering of Sub- and Supercritical Methanol"
K. Yoshida, S. Hosokawa, A. Baron, T. Yamaguchi
Journal of the Physical Society of Japan, **76**, (2007), 11-12
[2008]
- [38] "Inelastic X-ray Scattering Experiments at Extreme Conditions: High Temperatures and High Pressures"
S. Hosokawa
Condensed Matter Physics, **11**, (2008), 71-81
- [39] "Collective Dynamics of As₂S₃ Glass Investigated by Inelastic X-ray Scattering"
S. Hosokawa, K. Matsuiishi, M. Inui, Y. Kajihara, S. Tsutsui, A. Baron
Journal of Non-Crystalline Solids, **354**, (2008), 2715-2718
- [40] "Damping of the Collective Modes in Liquid Fe"
S. Hosokawa, M. Inui, K. Matsuda, D. Ishikawa, A. Baron
Physical Review B, **77**, (2008), 174203
- [41] "Experimental Techniques of High-Resolution Inelastic X-ray Scattering Measurements for Supercritical Metallic Fluids at High Temperature and High Pressure using Synchrotron Radiation at SPring-8"
M. Inui, D. Ishikawa, K. Matsuda, K. Tamura, A. Baron
Condensed Matter Physics, **11**, (2008), 83-93
- [42] "Soft-Phonon-Driven Superconductivity in CaAlSi as Seen by Inelastic X-ray Scattering"
S. Kuroiwa, A. Baron, T. Muranaka, R. Heid, K.-P. Bohnen, J. Akimitsu
Physical Review B, **77**, (2008), 140503
- [43] "Low-energy Excitation in As₂S₃ Glass Studied by Inelastic X-ray Scattering"
K. Matsuiishi, S. Hosokawa, S. Tsutsui, A. Baron
Journal of Non-Crystalline Solids, **354**, (2008), 2669-2672
- [44] "Intrinsic Ferroelectric Instability in Pb(In_{1/2}Nb_{1/2})O₃ Revealed by Changing B-site Randomness : Inelastic X-ray Scattering Study"
K. Ohwada, K. Hirota, H. Terauchi, T. Fukuda, S. Tsutsui, A. Baron, J. Mizuki, H. Ohwa, N. Yasuda
Physical Review B, **77**, (2008), 094136

- [45] "Direct Observation of Low-Energy Sm Phonon in SmRu₄P₁₂"
S. Tsutsui, H. Kobayashi, D. Ishikawa, J. Sutter, A. Baron, T. Hasegawa, N. Ogita, M. Udagawa, Y. Yoda, H. Onodera, D. Kikuchi, H. Sugawara, C. Sekine, I. Shirotnani, H. Sato
Journal of the Physical Society of Japan, **77**, (2008), 033601
- [46] "Investigation of the Anharmonic Guest Modes in Filled Skutterudites Using Inelastic X-ray Scattering Techniques"
S. Tsutsui, H. Kobayashi, J. Sutter, H. Uchiyama, A. Baron, Y. Yoda, D. Kikuchi, H. Sugawara, C. Sekine, I. Shirotnani, A. Ochiai, H. Sato
Journal of the Physical Society of Japan, **77**, (2008), 275-259

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Refereed Journals

- [2003]
- [1] "Development of a New Holographic Method with Resonant X-ray Scattering"
Y. Takahashi, K. Hayashi, E. Matsubara
Science and Technology of Advanced Materials, **4**, (2003), 409-414
- [2004]
- [2] "Quadrupole Transition in the Dy L_3 Edge Observed by Lifetime-Broadening-Suppressed XANES Spectroscopy"
H. Hayashi, R. Takeda, M. Kawata, Y. Udagawa, N. Kawamura, Y. Watanabe, S. Nanao
Physical Review B, **70**, (2004), 155113
- [3] "X-ray Fluorescence Holography Study on Si_{1-x}Ge_x Single Crystal"
K. Hayashi, Y. Takahashi, I. Yonenaga, E. Matsubara
Materials Transactions, **45**, (2004), 1994-1997
- [4] "Properties of Individual Asian Dust Storm Particles Collected at Kosan, Korea during ACE-Asia"
C. Ma, S. Tohno, M. Kasahara, S. Hayakawa
Atmospheric Environment, **38**, (2004), 1133-1143
- [5] "Determination of the Chemical Properties of Residues Retained in Individual Cloud Droplets by XRF Microprobe at SPring-8"
C. Ma, S. Tohno, M. Kasahara, S. Hayakawa
Nuclear Instruments and Methods in Physics Research Section B, **217**, (2004), 657-665
- [6] "The Nature of Individual Solid Particles Retained in Size-Resolved Raindrops Fallen in Asian Dust Storm Event during ACE-Asia"
C. Ma, S. Tohno, M. Kasahara, S. Hayakawa
Atmospheric Environment, **38**, (2004), 2951-2964
- [7] "Properties of the Size-Resolved and Individual Cloud Droplets Collected in the Western Japan during Asian Dust Storm Event"
C. Ma, S. Tohno, M. Kasahara, S. Hayakawa
Atmospheric Environment, **38**, (2004), 4519-4529
- [8] "Direct Speciation of Tin Compounds in Environmental Samples using Sn K-edge XANES"
N. Sakakibara, Y. Takahashi, Y. Yamagushi, K. Shibata, T. Uruga
Chemistry Letters, **33**, (2004), 264-265
- [9] "Surface X-ray Diffraction in Transmission Geometry"
H. Tajiri, O. Sakata, T. Takahashi
Applied Surface Science, **234**, (2004), 403-408
- [10] "Study of Advanced X-ray Fluorescence Holography Method"
Y. Takahashi
Doctor Thesis (Tohoku University), (2004), 1-157
- [11] "Development and Application of Laboratory X-ray Fluorescence Holography Equipment"
Y. Takahashi, K. Hayashi, E. Matsubara
Powder Diffraction, **19**, (2004), 77-80
- [12] "Distribution of Chemical Elements and Chemical States of Sulfur on Kosa Particles Fallen in Asian Industrialized Cities"
T. Tanabe, Y. Tanaka, D. Tanaka, Y. Taniguchi, M. Toyoda, J. Kawai, H. Ishii, C. Riu, Y. Yilixiati, S. Hayakawa, Y. Kitajima, Y. Terada
分析化学 (Bunseki Kagaku), **53**, (2004), 1411-1418
- [13] "X-ray Analysis of a Single Aerosol Particle with Combination of Scanning Electron Microscope and Synchrotron Radiation X-ray Microscope"
M. Toyoda, K. Kaibuchi, M. Nagasono, Y. Terada, T. Tanabe, S. Hayakawa, J. Kawai
Spectrochimica Acta Part B, **59**, (2004), 1311-1315