

Invited Talks at International Conferences

1. "Nanoporous Ptⁿ⁺-CeO_x catalyst films grown on carbon substrates," V. Matolín, 62nd IUVTSA workshop, Surface treatment and plasma processing, Hotel and Villa Zlatorog , Krvavec, Slovenia, Mar. 2-5 (2011).
2. "Digging deeper: Looking below the surface to buried layers and interfaces with hard x-ray and standing wave photoemission ," C. S. Fadley, Pittcon 2011, Georgia World Congress Center, Atlanta, Georgia, USA, Mar. 13-18 (2011).
3. "High-pressure synthesis and characterization of new multiferroic indium-based perovskites," A. A. Belik, T. Furubayashi, Y. Matsushita, M. Tanaka, S. Hishita, H. Yusa, and E. Takayama-Muromachi, Study of Matter at Extreme Conditions 2011 (SMEC2011), Royal Caribbean's Liberty of the Seas, Miami-Belize-Mexico-Miami, USA, Mar. 27-Apr. 2 (2011).
4. "Evaluation of the change of the residual stress in nano-scale transistors during the deposition and fine patterning processes of thin flms," H. Miura, 12th IEEE International Conference on Thermal, Mechanical and Multi-Physics Simulation and Experiments in Microelectronics and Microsystems, Hotel Miragem, Linz, Austria, Apr. 16-18 (2011).
5. "Probing buried magnetic and oxide layers and interfaces with standing-wave and hard x-ray photoemission," C. S. Fadley, The 2011 Villa Conference on Complex Oxide Heterostructures (VCOOH 2011), Red Rock Casino, Resort and Spa, Las Vegas, USA, Apr. 21-25 (2011).
6. "Disecting complex oxide heterostructures with standing-wave and hard x-ray photoemission," C. S. Fadley, The 2011 Villa Conference on Complex Oxide Heterostructures (VCCOH 2011) , Red Rock Casino, Resort and Spa, Las Vegas, USA, Apr. 21-25 (2011).
7. "Non-thermal photo-induced phenomena in chalcogenide alloys," A. Kolobov, P. J. Fons, and J. Tominaga, The 2011 Spring Materials Research Society Meeting, Moscone Center, San Francisco, USA, Apr. 25-28 (2011).
8. "Coherent phase-change memory intercalated by Sb₂Te₃ host layers," J. Tominaga, R. Simpson, P. J. Fons, and A. Kolobov, The 2011 Spring Materials Research Society Meeting, Moscone Center, San Francisco, USA, Apr. 25-28 (2011).
9. "Probing buried magnetic layers and interfaces with standing-wave and hard x-ray photoemission," C. S. Fadley, IEEE International Magnetics Conference (Intermag 2011), Taipei International Convention Center, Taipei, Taiwan, Apr. 25-29 (2011).
10. "Surface physics and photoelectron spectroscopy," C. S. Fadley, 8th International Symposium on Atomic Level Characterizations for New Materials and Devices '11 (c), Olympic Parktel, Seoul, Korea, May 22-27 (2011).
11. "Electronic structure of complex materials and nanostructures from core and valence photoemission with standing-wave and hard x-ray excitation," C. S. Fadley, Summer School on Complex Oxides and Strongly Correlated Materials, Venice, Italy, May 29-Jun. 4 (2011).
12. "Solidification of tin on quasicrystal surfaces," A. Singh, H. Somekawa, Y. Matsushita, and A. P. Tsai, The 6th Asian International Workshop on Quasicrystals (AIWQ6), Seoul National University, Seoul, Korea, May 30-Jun. 2 (2011).
13. "STM and HX-PES studies of In-Ag-Yb quasicrystal and approximants," M. Shimoda, C. Cui, H. R. Sharma, P. J. Nugent, J. A. Smerdon, R. McGrath, K. Sagisaka, H. Yoshikawa, N. Tanaka, A. Agehara, Y. Ishii, C. P. Gómez, H. Takakura, S. Ohhashi, and A. P. Tsai, The 6th Asian International Workshop on Quasicrystals (AIWQ6), Seoul National University, Seoul, Korea, May 30-Jun. 2 (2011).
14. "Basic concepts and new directions in photoelectron spectroscopy," C. S. Fadley, University of Rome Three, Rome, Italy, Jun. 20-Jul. 1 (2011).
15. "Characterization and management of defects in oxides," N. Ohashi, I. Sakaguchi, Y. Adachi, Y.

- Wada, J. Williams, T. Ohgaki, and H. Haneda, International Conference on Materials for Advanced Technologies (ICMAT2011), Suntec, Singapore, Jun. 26- Jul. 1 (2011).
16. "Polarization of oxide amorphous films under intense electrical field probed by in-situ hard x-ray PES measurements," S. Yamaguchi, T. Tsuchiya, S. Miyoshi, K. Terabe, T. Hasegawa, Y. Yamashita, H. Yoshikawa, and K. Kobayashi, 18th International Conference on Solid State Ionics (SSI-18), Warsaw, Poland, Jul. 3-8 (2011).
 17. "Electronic structure of the Heusler-type ferromagnetic shape memory alloys studied by photoemission and ab initio calculation," A. Kimura, Moscow International Symposium on Magnetism (MISM2011), Moscow State University, Moscow, Russia, Aug. 21-25 (2011).
 18. "Crystal structures of new superconducting compounds, $\text{LnT}_2\text{Zn}_2\text{O}$ (Ln = La, Pr, T = Ru, Ir)," Y. Matsushita, T. Onimaru, K. T. Matsumoto, A. Sato, and T. Takabatake, IUCr2011 - XXII International Congress, Palacio Municipal de Congresos de Madrid, Madrid, Spain, Aug. 22-30 (2011).
 19. "Probing buried oxide layers and interfaces with standing-wave and soft and hard x-ray photoemission," C. S. Fadley, Workshop on Oxide Interfaces, IBM Almaden Laboratory, San Jose, USA, Aug. 29-31 (2011).
 20. "Hard x-ray photoelectron spectroscopy of crystalline and amorphous GeCu_2Te_3 ," K. Kobayashi, M. Kobata, I. Pis, S. Ueda, Y. Sutou, Y. Saitou, and J. Koike, E/PCOS 2011, Hilton Zurich Airport Hotel, Zurich, Switzerland, Sep. 4-6 (2011).
 21. "Organopalladium catalyst on S-terminated GaAs(001) and GaN(0001) surfaces," T. Konishi, N. Nishiwaki, T. Toujyou, M. Hirayama, Y. Ueta, T. Tada, H. Moritoki, Y. Kihara, T. Tono, M. Tateishi, T. Ishikawa, S. Morimoto, T. Minami, S. Fujikawa, M. Takahashi, G. Bell, H. Yoshikawa, M. Shimoda, Y. Oda, M. Yokoyama, A. Ishii, S. Tsukamoto, VII International Workshop on Semiconductor Surface Passivation (SSP'2011), Hotel City, Kraków, Poland, Sep 11-15 (2011).
 22. "Band gap states and magnetism studied by photoelectron diffraction and HAXPES," P. Kruger, A. X. Gray, and C. S. Fadley, 4th International Workshop on Hard X-ray Photoelectron Spectroscopy (HAXPES2011), DESY, Hamburg, Germany, Sep. 14-16 (2011).
 23. "One step model description of HAXPES: Correlation, matrix elements, and temperature effects," J. Minar, 4th International Workshop on Hard X-ray Photoelectron Spectroscopy (HAXPES2011), DESY, Hamburg, Germany, Sep. 14-16 (2011).
 24. "Hard x-ray photoemission: A brief status report, some recent applications, and some future directions," C. S. Fadley, 4th International Workshop on Hard X-ray Photoelectron Spectroscopy (HAXPES2011), DESY, Hamburg, Germany, Sep. 14-16 (2011).
 25. "Hard x-ray photoemission: current status and future prospects," C. S. Fadley, 4th International Workshop on Hard X-ray Photoelectron Spectroscopy (HAXPES2011), DESY, Hamburg, Germany, Sep. 14-16 (2011).
 26. "HAXPES investigation of nanostructured PEM fuel cell catalysts," V. Matolin, I. Matolinova, H. Yoshikawa, K. Kobayashi, B. Detlefs, 4th International Workshop on Hard X-ray Photoelectron Spectroscopy (HAXPES2011), DESY, Hamburg, Germany, Sep. 14-16 (2011).
 27. "Electronic structure of oxide semiconductors and their related junction structures," N. Ohashi, lateral cooperations between NIMS-MFA and LIOS-MFA, Hungarian Academy of Sciences, Budapest, Hungary, Sep. 19-20 (2011).
 28. "Direct observation of electronic states in gate stack structures: XPS under device operation," Y. Yamashita, H. Yoshikawa, T. Chikyow, and K. Kobayashi, 220th The Electrochemical Society meeting (ECS220), the Boston Convention and Exhibition Center, Boston, USA, Oct. 9-14 (2011).
 29. "In-situ polarization of oxide electrolyte by photoemission electron spectroscopy using synchrotron radiation," S. Yamaguchi, T. Tsuchiya, S. Miyoshi, K. Terabe, T. Hasegawa, Y. Yamashita, H. Yoshikawa, and K. Kobayashi, MS&T'11, Columbus OH, USA, Oct. 16-20 (2011).

- 30 "Polarization of oxide amorphous films under intense electrical field probed by in-situ hard x-ray PES measurements," S. Yamaguchi, T. Tsuchiya, S. Miyoshi, K. Terabe, T. Hasegawa, Y. Yamashita, H. Yoshikawa, and K. Kobayashi, NIMS Symposium, Tsukuba, Japan, Nov. 10-11 (2011).
- 31 "Soft and hard x-ray photoemission: Some new directions," C. S. Fadley, Helmholtz Zentrum Berlin/BESSY, Annual Users Meeting, Bessy, Berlin, Germany, Nov. 30-Dec. 2 (2011).

Invited Talks at Domestic Conferences

1. "レアメタルの大幅削減への道を開く熱凝集耐性排ガス触媒の開発," 阿部英樹, G. Saravanan, Y. Xu, 吉川英樹, 山下良之, 上田茂典, 小林啓介, 関戸信彰, 御手洗容子, 有賀克彦, 平成 22 年度 SAITEC セミナー, 新都心ビジネス交流プラザ, さいたま市, 2011 年 3 月 11 日.
2. "硬 X 線光電子分光による薄膜・界面評価," 小林啓介, 第 58 回応用物理学関係連合講演会, 神奈川工科大学, 厚木市, 2011 年 3 月 24-27 日.
3. "in-situ 硬 X 線光電子分光法を利用した酸化物系レジスタンスメモリーのスイッチング過程の観察," 山口 周, 土屋敬志, 三好正悟, 山下良之, 吉川英樹, 寺部一弥, 小林啓介, 第 58 回応用物理学関係連合講演会, 神奈川工科大学, 厚木市, 2011 年 3 月 24-27 日.
4. "熱凝集耐性排ガス触媒の開発とレアメタル削減技術," 阿部英樹, G. Saravanan, Y. Xu, 吉川英樹, 山下良之, 上田茂典, 小林啓介, 関戸信彰, 御手洗容子, 有賀克彦, NTS セミナー, 機山館, 東京都, 2011 年 5 月 17 日.
5. "排ガス清浄化触媒の現状と課題、および白金族元素の需要動向," 阿部英樹, G. Saravanan, Y. Xu, 吉川英樹, 山下良之, 上田茂典, 小林啓介, 関戸信彰, 御手洗容子, 有賀克彦, サイエンス & テクノロジーセミナー, 総評会館, 東京都, 2011 年 5 月 30 日.
6. "ナノ・スケールでの材料力学と新材料・最先端デバイスの創成," 三浦英生, 日本機械学会材料力学カンファレンス, 九州工業大学, 福岡, 2011 年 7 月 16-18 日.
7. "抵抗変化型スイッチング素子における電解質の局所的電気化学分極現象," 山口 周, 土屋敬志, 三好 正悟, 山下 良之, 吉川 英樹, 寺部 一弥, 小林 啓介, 長谷川 剛, 第 59 回応用物理学関係連合講演会, 山形大学, 山形市, 2011 年 8 月 29 日-9 月 1 日.
8. "強相関 Co 酸化物の軟 X 線分光," 齋藤智彦, フォトンファクトリー研究会「軟 X 線分光・散乱測定を用いた物性研究の現状と展望」, 高エネルギー加速器研究機構, 2011 年 9 月 13-14 日.
9. "電子分光を用いた Co 酸化物の磁性状態研究," 齋藤智彦, 磁性分光研究会 ~X 線分光学による物質科学へのアプローチ~, 京都大学化学研究所・宇治黄檗プラザ, 2011 年 12 月 2-3 日.

Presentations at International Conferences

1. "Ni-Al intermetallic nanoparticle catalysts synthesized by vacuum arc plasma evaporation," Y. Xu, J. Yang, M. Demura, T. Hara, Y. Matsushita, M. Tanaka, and T. Hirano, NIMS International Workshop on Photocatalysis and Environmental Remediation materials 2011, NIMS, Tsukuba, Japan, Jan. 17-19 (2011).
2. "Electronic structure of W-doped VO₂ correlated oxide semiconductor and their nanoscopic physical property," H. Tanaka, H. Takami, K. Kawatani, and T. Kanki, The 4th Indo-Japan Seminar "Electronic Structure of Novel Magnetic and Superconducting Materials", University of Tokyo, Japan, Feb. 1-2 (2011).
3. "Metallic vs. semiconducting behavior in (GaMn)As and magnetic coupling in (GaMn)As based heterostructures," P. Torelli, J. Fujii, M. Soda, M. Sperl, C. H. Bach, and G. Panaccione, MAGNET 2011, Torino Incontra Convention Center, Turin, Italy, Feb. 23-25 (2011).
4. "Negative thermal expansion in the infinite layer (Sr,Ca)FeO₂," C. Tassel, H. Kageyama, Y. Matsushita, M. Tanaka, and Y. Katsuya, International Workshop on Novel Superconductors and Super Materials 2011 (NS22011), National Museum of Emerging Future and Innovation(Miraikan), Tokyo,

- Japan, Mar. 6-8 (2011).
5. "A soft chemical route to novel iron oxides," H. Kageyama, International Workshop on Novel Superconductors and Super Materials 2011 (NS22011), National Museum of Emerging Future and Innovation(Miraikan), Tokyo, Japan, Mar. 6-8 (2011).
 6. "Synthesis of Ni-Al intermetallic nanoparticle catalysts by thermal plasma," Y. Xu, J. Yang, M. Demura, T. Hara, Y. Matsushita, M. Tanaka, and T. Hirano, 3rd International Symposium on Plasma Science (ISPlasma2011), Nagoya Institute of Technology, Nagoya, Japan, Mar. 6-9 (2011).
 7. "Electronic structure, magnetic and transport properties of the Heusler shape memory alloy Mn_2NiGa ," C. C. Blum, S. Ouardi, G.H. Fecher, S. Wurmehl, B. Buechner, B. Balke, S. Ueda, K. Kobayashi, C. Felser, DPG Spring Meeting, Dresden, Germany, Mar. 13-18 (2011).
 8. "Probing the electronic origin of a martensitic transformation in frozen intermediate stages," X. Kozina, S. Weiss, L. Schultz, S. Faehler, G. Stryganyuk, S. Ouardi, G. H. Fecher, C. Felser, S. Ueda, K. Kobayashi, DPG Spring Meeting, Dresden, Germany, Mar. 13-18 (2011).
 9. "Electronic structure and thermoelectric properties of doped Heusler compounds," S. Ouardi, G. H. Fecher, B. Balke, X. Kozina, M. Schwall, G. Stryganyuk, S. Ueda, K. Kobayashi, C. Felser, DPG Spring Meeting, Dresden, Germany, Mar. 13-18 (2011).
 10. "Electronic structure of the topological semiconductors PtYSb, PtLaBi, and PtGdBi explored by hard x-ray photoelectron spectroscopy," S. Ouardi, C. Shekar, G. H. Fecher, S. Chadov, X. Kozina, G. Stryganyuk, C. Felser, S. Ueda, K. Kobayashi, DPG Spring Meeting, Dresden, Germany, Mar. 13-18 (2011).
 11. "An insight of phase change materials on the atomic scale: Monolithic versus superlattice structures," M. Krbal, A. V. Kolobov, P. J. Fons, R. E. Simpson, J. Tominaga, S. Elliott, and J. Hegedus, The 2011 Spring Materials Research Society Meeting, Moscone Center, San Francisco, USA, Apr. 25-28 (2011).
 12. "High-energy photoelectron measurements of the laser-amorphized phase of the phase-change memory alloy $Ge_2Sb_2Te_5$," P. J. Fons, A. V. Kolobov, K. Kobayashi, M. Krbal, R. Simpson, J. Tominaga, and S. Elliot, The 2011 Spring Materials Research Society Meeting, Moscone Center, San Francisco, USA, Apr. 25-28 (2011).
 13. "A local versus average structure in the Sb-doped GeTe phase change alloy," M. Krbal, A. V. Kolobov, P. J. Fons, R. E. Simpson, J. Tominaga, T. Matsunaga, and N. Yamada, The 2011 Spring Materials Research Society Meeting, Moscone Center, San Francisco, USA, Apr. 25-28 (2011).
 14. "Oxygen migration at Pt or Cu/HfO₂ interface under bias operation: oxide based ReRAM application," T. Nagata, M. Haemori, Y. Yamashita, H. Yoshikawa, K. Kobayashi, Y. Iwashita, and T. Chikyow, 2011 MRS Spring Meeting and Exhibit, Moscone West Convention Center, San Francisco, California, Apr. 25-29 (2011).
 15. "Mott insulating state of ultrathin epitaxial $LaNiO_3$ films via hard x-ray photoemission," A. X. Gray, A. Janotti, J. Son, J. Le Beau, S. Ueda, Y. Yamashita, K. Kobayashi, A. Kaiser, C. Van de Walle, S. Stemmer, and C. Fadley, IEEE International Magnetism Conference (Intermag 2011), Taipei International Convention Center, Taipei, Taiwan, Apr. 25-29 (2011).
 16. "Probing bulk electronic structure of (Ga,Mn)As via hard x-ray angle-resolved photoemission: Valence-band and core-level study," A. X. Gray, J. Minar, S. Ueda, P. Stone, Y. Yamashita, J. Fujii, J. Braun, L. Plucinski, C. Schneider, G. Panaccione, H. Elbert, O. Dubon, K. Kobayashi, and C. Fadley, IEEE International Magnetism Conference (Intermag 2011), Taipei International Convention Center, Taipei, Taiwan, Apr. 25-29 (2011).
 17. "Study on oxygen and metal migration at Pt or Cu/HfO₂ interfaces under bias operation for oxide based ReRAM application," T. Nagata, M. Haemori, Y. Yamashita, H. Yoshikawa, K. Kobayashi, and T. Chikyow, The Seventh International Nanotechnology Conference on Communication and Cooperation (INCT), College of Nanoscale Science and Engineering (CNSE), Albany, USA, May 16-19 (2011).
 18. "Nanoporous Pt^{n+} -CeO_x catalysts films for planar micro-fuel cells grown on carbon substrates," V. Matolin, 7th International Conference on low dimensional structures and devices (LDS 2011),

Telchac, Mexico, May 22-27 (2011).

19. "X-ray photoemission spectroscopy of wurtzite-type semiconductors in terms of crystalline polarity," J. Williams, H. Yoshikawa, Y. Yamashita, S. Ueda, Y. Adachi, K. Kobayashi, and N. Ohashi, The 5th International Conference on the Science and Technology of Advanced Ceramics (STAC-5), Mielparque, Yokohama, Japan, Jun. 22-24 (2011).
20. "Electrical conductivity and x-ray diffraction analysis of oxyapatite-type lanthanum silicate and neodymium silicate solid solution," K. Kobayashi, Y. Matsushita, M. Tanaka, Y. Katsuya, and C. Nishimura, 18th International Conference on Solid State Ionics (SSI-18), Warsaw, Poland, Jul. 3-8 (2011).
21. "In-situ observation of metal/amorphous tantalum oxide hetero-interface using hard x-ray photoemission spectroscopy," T. Tsuchiya, S. Miyoshi, Y. Yamashita, H. Yoshikawa, K. Terabe, K. Kobayashi, and S. Yamaguchi, 18th International Conference on Solid State Ionics (SSI-18), Warsaw, Poland, Jul. 3-8 (2011).
22. "Evaluation of $\text{In}_x\text{Ga}_{1-x}\text{N}$ films by hard x-ray photoemission spectroscopy," M. Sumiya, M. Lozac'h, H. Yoshikawa, S. Liwen, X. Wang, S. Lau S. Ueda, K. Sakota, and K. Kobayashi, 9th International conference on nitride semiconductor (ICNS-9), Glasgow, England, Jul. 10-15 (2011).
23. "Modulation of metal-insulator transition temperature in W-doped VO_2 thin films: toward Mott devices," H. Takami, K. Kawatani, T. Kanki, S. Ueda, K. Kobayashi, and H. Tanaka, The Nineteenth Annual International Conference on Composites/Nano Engineering (ICCE-19), Wyndham Bund East Hotel, Shanghai, China, Jul. 24-30 (2011).
24. "Electronic properties of polar-metallic iridium oxides," Y. Hirata, M. Nakajima, T. Suemoto, H. Tajima, Y. Kiuchi, Y. Matsushita, and K. Ohgushi, 26th International Conference on Low Temperature Physics (LT26), Beijing International Convention Center, Beijing, China, Aug. 10-17 (2011).
25. "Bias-application in hard x-ray photoelectron spectroscopy for characterization of advanced materials," Y. Yamashita, T. Nagata, H. Yoshikawa, T. Chikyow, and K. Kobayashi, European Conference on Surface Science (ECOSS28), University of Wroclaw, Wroclaw, Poland, Aug. 28-Sep. 2 (2011).
26. "Immobilized palladium catalysts on sulfur-terminated substrate studied by hard x-ray photoemission," H. Yoshikawa, M. Shimoda, M. Arisawa, S. Satoshi, T. Konishi, S. Tsukamoto, Y. Yamashita, S. Ueda, and K. Kobayashi, 4th International Workshop on Hard X-ray Photoelectron Spectroscopy (HAXPES2011), DESY, Hamburg, Germany, Sep. 14-16 (2011).
27. "Determination of band offsets in complex oxide thin-film heterostructures by hard x-ray photoelectron spectroscopy," G. Conti, A. X. Gray, A. M. Kaiser, A. Greer, J. Karel, S. Ueda, Y. Yamashita, A. Gloskovskii, A. Jannotti, C. G. Van de Walle, K. Kobayashi, W. Drube, S. Stemmer, and C. S. Fadley, 4th International Workshop on Hard X-ray Photoelectron Spectroscopy (HAXPES2011), DESY, Hamburg, Germany, Sep. 14-16 (2011).
28. "Free-electron final-state calculations for the interpretation of hard x-ray angle resolved photoemission," L. Plucinski, J. Minar, J. Braun, A. X. Gray, S. Ueda, Y. Yamashita, K. Kobayashi, H. Ebert, C. S. Fadley, and C. M. Schneider, 4th International Workshop on Hard X-ray Photoelectron Spectroscopy (HAXPES2011), DESY, Hamburg, Germany, Sep. 14-16 (2011).
29. "Exploration of "in gap" states of thermoelectric Heusler compounds by means of hard x-ray photoelectron spectroscopy," B. Balke, S. Ouardi, G. H. Fecher, C. Felser, E. Ikenaga, S. Ueda, and K. Kobayashi, 4th International Workshop on Hard X-ray Photoelectron Spectroscopy (HAXPES2011), DESY, Hamburg, Germany, Sep. 14-16 (2011).
30. "Valence states of off-stoichiometric thin films based on the Heusler compound Co_2MnSi ," X. Kozina, S. Ouardi, G. Stryganyuk, B. Balke, S. Chadov, G. H. Fecher, C. Felser, T. Ishikawa, T. Uemura, M. Yamamoto, E. Ikenaga, Y. Yamashita, S. Ueda, and K. Kobayashi, 4th International Workshop on Hard X-ray Photoelectron Spectroscopy (HAXPES2011), DESY, Hamburg, Germany, Sep. 14-16 (2011).
31. "Electronic structure of newly discovered Yb-compounds YbNi_3X (X= Al, Ga) studied by hard x-ray

- photoemission spectroscopy," Y. Utsumi, H. Sato, T. Yamashita, S. Ohara, K. Mimura, S. Motonami, K. Shimada, M. Arita, S. Ueda, Y. Yamashita, K. Kobayashi, H. Namatame, and M. Taniguchi, 4th International Workshop on Hard X-ray Photoelectron Spectroscopy (HAXPES2011), DESY, Hamburg, Germany, Sep. 14-16 (2011).
32. "Mott insulating state of ultrathin epitaxial LaNiO_3 thin films detected by hard x-ray photoemission," A. X. Gray, A. Janotti, J. Son, J. M. LeBeau, S. Ueda, Y. Yamashita, K. Kobayashi, A. M. Kaiser, R. Sutarto, H. Wadati, G. A. Sawatzky, S. Stemmer, and C. S. Fadley, 4th International Workshop on Hard X-ray Photoelectron Spectroscopy (HAXPES2011), DESY, Hamburg, Germany, Sep. 14-16 (2011).
 33. "Electronic structure of Pt based topological Heusler compounds with C1B structure explored by hard x-ray photoelectron spectroscopy," S. Ouardi, G. H. Fecher, C. Shekhar, X. Kozina, G. Stryganyuk, C. Felser, E. Ikenaga, S. Ueda, and K. Kobayashi, 4th International Workshop on Hard X-ray Photoelectron Spectroscopy (HAXPES2011), DESY, Hamburg, Germany, Sep. 14-16 (2011).
 34. "Coherent Metallic Screening in Strongly Correlated Oxides: Experiment and Theory," S. Ueda, H. Takami, T. Kanki, K. Kobayashi, and H. Tanaka, 4th International Workshop on Hard X-ray Photoelectron Spectroscopy (HAXPES2011), DESY, Hamburg, Germany, Sep. 14-16 (2011).
 35. "Development of ambient pressure hard x-ray photoelectron spectroscopy," M. Kobata, T. Masuda, H. Yoshikawa, T. Miura, T. Kawasaki, K. Uosaki, and K. Kobayashi, 4th International Workshop on Hard X-ray Photoelectron Spectroscopy (HAXPES2011), DESY, Hamburg, Germany, Sep. 14-16 (2011).
 36. "Bias application HX-PES study of metal/oxide interface: Oxide based ReRAM application," T. Nagata, Y. Yamashita, H. Yoshikawa, M. Haemori, K. Kobayashi, and T. Chikyow, The 4th International Workshop on Hard X-ray Photoelectron Spectroscopy (HAXPES2011), DESY, Hamburg, Germany, Sep. 14-16 (2011).
 37. "Electronic structure and transport properties of Pt based Heusler compounds with C1b structure for topological quantum phenomena," S. Ouardi, G. H. Fecher, C. Shekhar, S. Chadov, A. Gloskovskii, C. Felser, S. Ueda, and K. Kobayashi, E-MRS Fall Meeting, Warsaw, Poland, Sep. 19-23 (2011).
 38. "Heusler compounds with zero bandgap: From topological insulators to spin gapless antiferromagnets," G. H. Fecher, C. Felser, E-MRS Fall Meeting, Warsaw, Poland, Sep. 19-23 (2011).
 39. "Probing bulk electronic structure of magnetic semiconductors with hard x-ray angle resolved photoemission," A. X. Gray, 2011 X-Ray Spectroscopy of Magnetic Solids (XRMS) Workshop, SLAC National Accelerator Laboratory, California, USA, Oct. 22-23 (2011).
 40. "Electronic structural changes across the metamagnetic transition in FeRh via hard x-ray photoemission," A. X. Gray, D. Cooke, P. Kruger, C. Bordel, A. Kaiser, S. Moyerman, E. Fullerton, S. Ueda, Y. Yamashita, A. Gloskovskii, C.M. Schneider, W. Drube, K. Kobayashi, F. Hellman and C.S. Fadley, 56th Annual Conference on Magnetism and Magnetic Materials (MMM 2011), JW Marriott Desert Ridge Resort & Spa, Scottsdale, USA, Oct. 30-Nov. 3 (2011).
 41. "Probing bulk electronic structure with hard x-ray angle-resolved photoemission," A. X. Gray, J. Minar, S. Ueda, J. Braun, H. Ebert, O. Dubon, K. Kobayashi, and C. S. Fadley, 2011 Annual Meeting of the California-Nevada Section of the American Physical Society, SLAC National Accelerator Laboratory (SLAC) Menlo Park, USA, Nov. 11-12 (2011).
 42. "Identifying valence band structure of M2 phase from mixed phases in VO_2 thin film," T. Kanki, H. Takami, S. Ueda, A. N. Hattori, K. Hattori, H. Daimon, K. Kobayashi, and H. Tanaka, 2011 MRS Fall Meeting, Hynes Convention Center, Boston, USA, Nov. 28-Dec. 2 (2011).

Presentations at Domestic Conferences

1. "硬 X 線光電子分光法による $\text{Sr}_{1-(x+y)}\text{La}_{x+y}\text{Ti}_{1-x}\text{Cr}_x\text{O}_3$ の電子構造," 中野裕太, 内藤理恵, 倉橋健一郎, 岩澤英明, 斎藤智彦, 勝藤拓郎, 上田茂典, 山下良之, 吉川英樹, 小林啓介, 島田賢也, 生天目博文, 谷口雅樹, 第 24 回日本放射光学会年会・放射光科学合同シンポジウム, つくば国

際会議, つくば市, 2011年1月7-10日.

2. "硬 X 線光電子分光を用いた YbInCu_4 の電子状態に対する元素置換効果の研究," 佐藤仁, 内海有希, 飛松浩明, 平岡耕一, 小島健一, 三村功次郎, 上田茂典, 山下良之, 吉川英樹, 小林啓介, 島田賢也, 生天目博文, 谷口雅樹, 第 24 回日本放射光学会年会・放射光科学合同シンポジウム, つくば国際会議, つくば市, 2011年1月7-10日.
3. "2 段の一次価数相転移を示す EuPtP における硬 X 線光電子スペクトルの温度依存性," 川田翔, 三村功次郎, 魚住孝幸, 佐藤仁, 内海有希, 上田茂典, 光田暁弘, 和田裕文, 島田賢也, 田口幸広, 山下良之, 吉川英樹, 生天目博文, 谷口雅樹, 小林啓介, 第 24 回日本放射光学会年会・放射光科学合同シンポジウム, つくば国際会議, つくば市, 2011年1月7-10日.
4. "硬 X 線光電子分光による EuPd_2Si_2 の温度誘起価数転移の研究," 三村功次郎, 魚住孝幸, 石津貴彦, 本並哲, 佐藤仁, 内海有希, 上田茂典, 光田暁弘, 島田賢也, 田口幸広, 山下良之, 吉川英樹, 生天目博文, 谷口雅樹, 小林啓介, 第 24 回日本放射光学会年会・放射光科学合同シンポジウム, つくば国際会議, つくば市, 2011年1月7-10日.
5. "Spring-8 BL15XU 粉末回折計の現状," 勝矢良雄, 田中雅彦, 松下能孝, 吉川英樹, 小林啓介, 第 24 回日本放射光学会年会・放射光科学合同シンポジウム, つくば国際会議, つくば市, 2011年1月7-10日.
6. "低担持量 Pt-CeOX/Carbon black 複合アノードの CeO_2/Pt 比が CO 耐性に与える影響," 戸ヶ崎寛孝, 森利之, 鈴木彰, 区定容, Z. Li, 吉川英樹, 上田茂典, 山下良之, 小林啓介, V. Matolin, J. Drennan, 第 49 回セラミックス基礎科学討論会, 岡山コンベンションセンター, 岡山市, 2011年1月11-12日.
7. "Ultrahigh dispersion of catalytic centers with drug-delivery macromolecules: dendrimer-encapsulated Pt_3Ti nanoparticles," G. Saravanan, H. Abe, T. Hara, H. Yoshikawa, Y. Yamashita, S. Ueda, and K. Kobayashi, NIMS 国際シンポジウム "光触媒と環境再生材料 2011" (NISP/ERM2011), 物質・材料研究機構, つくば市, 2011年1月17日.
8. "新奇層状鉄酸フッ化物の合成・構造・磁性," 辻本吉廣, 松下能孝, 山浦一成, 室町英治, 樹神克明, 井川直樹, JRR-3 改造 20 周年記念シンポジウム—研究用原子炉 JRR-3 の利用成果と今後の展開—, 日本科学未来館, 東京, 2011年2月28日.
9. "遷移金属添加ランタンシリケートの構造と物性," 船橋昂広, 嶺重温, 大幸裕介, 小舟正文, 矢澤哲夫, 吉岡秀樹, 小林清, 勝矢良雄, 松下能孝, 田中雅彦, 日本セラミックス協会・2011 年会, 静岡大学工学部, 浜松市, 2011年3月16-18日.
10. "La ドープされた A サイト終端面の SrTiO_3 電界効果トランジスタ," 西尾和記, 大塚怜奈, M. Matvejeff, 高橋竜太, M. Lippmaa, 第 57 回応用物理学関係連合講演会, 東海大学, 平塚市, 2011年3月17-20日.
11. "導電性イリジウム酸化物の電子物性," 平田靖透, 大串研也, 田島裕之, 中嶋誠, 末元徹, 木内陽子, 松下能孝, 日本物理学会春季年会, 新潟大学, 新潟市, 2011年3月25-28日.
12. "KDP の強誘電相転移での電子密度と核密度," 河村幸彦, 松下能孝, 田中雅彦, 三好烈麗, 増山博行, 日本物理学会第 66 回年次大会, 新潟大学, 新潟市, 2011年3月25-28日.
13. "自己ナノ組織化複相合金触媒の調製と CO 酸化特性," 亀岡聡, 宮本勘史, 田邊豊和, 蔡安邦, 第 107 回触媒討論会, 首都大学東京南大沢キャンパス, 八王子市, 2011年3月29-30日.
14. "Noncentrosymmetric conductive iridium oxides," Y. Hirata, M. Nakajima, T. Suemoto, H. Tajima, K. Asoh, Y. Kiuchi, Y. Matsushita, and K. Ohgushi, 「重い電子系の形成と秩序化」第 3 回研究会, 東京大学柏キャンパス, 柏市, 2011年6月23-25日.
15. "ウルツ鉱型結晶の自発分極と電子状態," 大橋直樹, Jesse Williams, 吉川英樹, 上田茂典, 山下良之, 小林啓介, 第 72 回応用物理学学会学術講演会, 山形大学小白川キャンパス, 山形市, 2011年8月29日-9月2日.
16. "硬 X 線光電子分光による相変化記録材料の電子構造," 小林啓介, 第 72 回応用物理学学会学術講演会, 山形大学小白川キャンパス, 山形市, 2011年8月29日-9月2日.

17. "VO₂ 薄膜の混合電子相における M2 価電子帯スペクトルの分離," 神吉輝夫, 高見英史, 上田茂典, 服部梓, 服部賢, 大門寛, 小林啓介, 田中秀和, 第 72 回応用物理学会学術講演会, 山形大学小白川キャンパス, 山形市, 2011 年 8 月 29 日-9 月 2 日.
18. "ランタン過剰型ランタンシリケートの構造と物性," 船橋昂広, 嶺重温, 大幸裕介, 吉岡秀樹, 小林清, 勝矢良雄, 松下能孝, 田中雅彦, 矢澤哲夫, 日本セラミックス協会秋季年会, 北海道大学札幌キャンパス, 札幌市, 2011 年 9 月 7-9 日.
19. "シンクロトロンガンダルフカメラの評価と鉱物科学への応用," 田中雅彦, 中村智樹, 野口高明, 勝矢良雄, 松下能孝, 日本鉱物科学会 2011 年年会, 茨城大学, 水戸市, 2011 年 9 月 9-11 日.
20. "表面薄膜結晶の構造解析法の開発と白金混合原子価錯体の薄膜単結晶の作製," 鳥海幸四郎, 山中宏晃, 高崎亜希, 山下大輔, 満身稔, 小澤芳樹, 坂田修身, 錯体化学会第 61 回討論会, 岡山理科大学, 岡山市, 2011 年 9 月 17-19 日.
21. "自己ナノ組織化複相合金の調製と触媒特性," 亀岡聡, 若林慧, 宮本勘史, 田邊豊和, 蔡安邦, 第 108 回触媒討論会, 北見工業大学, 北見市, 2011 年 9 月 19-21 日.
22. "硬 X 線光電子分光による YbNi₃X₉ (X=Al, Ga)の電子状態の研究," 内海有希, 佐藤仁, 山下哲朗, 大原繁男, 三村功次郎, 本並哲, 島田賢也, 有田将司, 上田茂典, 山下良之, 吉川英樹, 小林啓介, 生天目博文, 谷口雅, 日本物理学会 2011 年秋季大会, 富山大学五福キャンパス, 富山市, 2011 年 9 月 21-24 日.
23. "EuNi₂X₂ (X=Si, P, Ge)の硬 X 線光電子分光," 三村功次郎, 川田翔, 魚住孝幸, 本並哲, 佐藤仁, 内海有希, 上田茂典, 光田昶弘, 和田裕文, 島田賢也, 田口幸広, 山下良之, 吉川英樹, 生天目博文, 谷口雅樹, 小林啓介, 日本物理学会 2011 年秋季大会, 富山大学五福キャンパス, 富山市, 2011 年 9 月 21-24 日.
24. "反転対称性の破れた導電性イリジウム酸化物 Pb₂Ir₂O₇ の電子物性," 平田靖透, 中嶋誠, 末元徹, 田島裕之, 麻生佳子, 木内陽子, 松下能孝, 大串研也, 日本物理学会 2011 年秋季大会, 富山大学五福キャンパス, 富山市, 2011 年 9 月 21-24 日.
25. "フェニル基終端 Si ナノクラスターの電子構造," 今村真幸, 藤正修司, 保田英洋, 上田茂典, 小林啓介, 高橋和敏, 鎌田雅夫, 小林宏成, 根岸雄一, 日本物理学会 2011 年秋季大会, 富山大学五福キャンパス, 富山市, 2011 年 9 月 21-24 日.
26. "FeSr₂YCu₂O₆₊ 磁性超伝導体の規則・不規則構造," 茂筑高士, 畑慶明, 松下能孝, 勝矢良雄, 星川晃範, 岩瀬謙二, Dyah Sulistyanintyas, 小黒英俊, 石垣徹, 土屋佳則, 岩井秀夫, 安岡宏, 平田和人, 日本物理学会 2011 年秋季大会, 富山大学, 富山市, 2011 年 9 月 21-24 日.
27. "光電子分光法による二重ペロブスカイト型 Co 酸化物の電子構造," 長谷川敦, 西村淳一, 齋藤智彦, 大川万里生, 小林義彦, 寺門悠樹, 新井伸英, 浅井吉蔵, 浜田典昭, 仲武昌史, 姜健, 島田賢也, 生天目博文, 谷口雅樹, 上田茂典, 山下良之, 吉川英樹, 小林啓介, 和達大樹, 田久保耕, 溝川貴司, Tom Regier, 日本物理学会 2011 年秋季大会, 富山大学五福キャンパス, 富山市, 2011 年 9 月 21-24 日.
28. "KH₂AsO₄ と KH₂PO₄ の構造の相違点と相転移," 増山博行, 秋本知志, 三好烈麗, 河村幸彦, 松下能孝, 田中雅彦, 日本物理学会 2011 年秋季大会, 富山大学, 富山市, 2011 年 9 月 21-24 日.
29. "物質・材料研究機構ビームライン BL15XU の現状," 坂田修身, 上田茂典, 勝矢良雄, 石丸哲, 小島雅明, 吉川英樹, 山下良之, A. Yang, 松下能孝, 田中雅彦, 小林啓介, SPring-8 コンファレンス 2011, 東京ステーションコンファレンス, 東京都千代田区, 2011 年 11 月 1-2 日.
30. "Ni-Cu 合金と Ni-Co 合金の内殻準位の理論的解析," 揚原旭生, 野澤和生, 石井靖, 下田正彦, 日本金属学会 2011 年秋期大会, 沖縄コンベンションセンター, 宜野湾市, 2011 年 11 月 7-9 日.
31. "ウルツ鉱型半導体薄膜の極性判定とその制御," 大橋直樹, Jesse Williams 安達裕 吉川英樹 山下良之 上田茂典 大垣武 坂口勲 菱田俊一 小林啓介, 日本金属学会 2011 年度秋期講演大会, 沖縄コンベンションセンターおよびカルチャーリゾートフェストーネ, 宜野湾市, 2011 年 11 月 7-9 日.

32. "硬 X 線光電子分光によるフィリング制御 VO₂ の電子状態解析," 田中秀和, 高見英史, 神吉輝夫, 上田茂典, 小林啓介, ナノテクノロジー・ネットワーク H23 年度成果報告会, 東工大蔵前会館, 東京, 2011 年 11 月 8 日.
33. "グリシル-L-チロシン三水和物の結晶構造および温湿度依存相転移の解析," 清谷多美子, 松下能孝, 田中雅彦, 勝矢良雄, 山村滋典, 菅原洋子, 平成 23 年度日本結晶学会年会及び総会, 北海道大学学術交流会館, 札幌市, 2011 年 11 月 24-25 日.
34. "放射光粉末 X 線回折-集光平板法の異常分散回折への応用の試み," 田中雅彦, 勝矢良雄, 松下能孝, 平成 23 年度日本結晶学会年会及び総会, 北海道大学 学術交流会館, 札幌, 2011 年 11 月 24-25 日.
35. "HX-PES 及び XAS を用いたカーボン/GDC ヘテロ接触界面における酸化還元挙動の in-situ 観察," 土屋敬志, 三好正悟, 山下良之, 吉川英樹, 寺部一弥, 小林啓介, 山口周, 第 37 回固体イオニクス討論会, 白兔会館, 鳥取市, 2011 年 12 月 7 日-9 日.
36. "Al-Pd-TM (TM=遷移金属) 系準結晶及び近似結晶におけるクラスタ配列," 藤田伸尚, 高野光, 蔡安邦, 第 11 回多元物質科学研究所研究発表会, 仙台市, 2011 年 12 月 8 日.
37. "オキシアパタイトを電解質に用いる高信頼性燃料電池の開発," 嶺重温, 船橋昂広, 三枝弘幸, 大幸裕介, 吉岡秀樹, 矢澤哲夫, 第 21 回日本 MRS 学術シンポジウム, 横浜市開港記念会館他, 横浜, 2011 年 12 月 19-21 日.
38. "オキシアパタイト型ランタンシリケートのイオン伝導性と結晶構造の相関," 船橋昂広, 嶺重温, 三枝弘幸, 大幸裕介, 吉岡秀樹, 矢澤哲夫, 第 21 回日本 MRS 学術シンポジウム, 横浜市開港記念会館他, 横浜, 2011 年 12 月 19-21 日.

Doctoral Dissertations

1. "Depth-resolved electronic structure of spintronic nanostructures and complex materials with soft and hard x-ray photoemission," A. X. Gray, Doctor Thesis (University of California, Davis), 2011 年 10 月取得.
2. "Effects of nanoscale structure on the magnetism and transport properties of chromium and chromium-aluminum alloys," Z. Boekelheide, Doctor Thesis (University of California, Berkeley), 2011 年秋取得.

Awards

1. "Oxygen migration at Pt or Cu/HfO₂ interface under bias operation: oxide based ReRAM application," T. Nagata, M. Haemori, Y. Yamashita, H. Yoshikawa, K. Kobayashi, Y. Iwashita, and T. Chikyow, 2011 MRS Spring Meeting and Exhibit, Outstanding Poster Award, Moscone West Convention Center, San Francisco, California, Apr. 25-29 (2011).

Patents

1. "帯電中和電子の斜め照射法を用いた絶縁物試料観察用放射電子顕微鏡," 安福秀幸, 吉川英樹, 出願番号:特願 2005-360977, 特許第 4831604 号, 出願日:2005 年 12 月 14 日, 登録日:2011 年 9 月 30 日