

Reviewed publications as of April 22nd, 2016

Graduate students of the group are underlined. Journal impact factors are in [brackets] and very high impact publications are **highlighted**.

1. *Band Gap and electronic structure of cubic, rhombohedral, and orthorhombic In_2O_3 polymorphs: Experiment and theory*
T. de Boer, M.F. Bekheet, A. Gurlo, R. Riedel, and A. Moewes, Phys. Rev. B 93, 155205 (2016). [3.7]
2. *Electronic structure, Band gap and thermal quenching of $Sr[Mg_3SiN_4]:Eu^{2+}$ and $Sr[LiAl_3N_4]:Eu^{2+}$*
T. Tolhurst, S. Schmiechen, P. Pust, P.J. Schmidt, W. Schnick, and A. Moewes, Adv. Opt. Mat. 4, 584-591 (2016). [4.1]
3. *Transition from Reconstruction toward Thin Film on the (110) Surface of Strontium Titanate*
Z. Wang, A. Loon, A. Subramanian, S. Gerhold, E. McDermott, J.A. Enterkin, M. Hieckel, B.C. Russell, R.J. Green, A. Moewes, J. Guo, P. Blaha, M.R. Castell, U. Diebold, and L.D. Marks, Nano Letters 16, 2407-12 (2016). [13.6]
4. *Oxidized Monolayers of Epitaxial Silicene on Ag(111)*
N.W. Johnson, D. Muir and A. Moewes, Scientific Reports 6, 22510 (2016). [5.6]
5. *Linking the HOMO-LUMO Gap to Torsional Disorder in P3HT/PCBM Blends*
J.A. McLeod, A.L. Pitman, E.Z. Kurmaev, L.D. Finkelstein, I.S. Zhidkov, A. Savva, and A. Moewes, J. Chem. Phys. 143, 224704 (2015). [3.0]
6. *Selective Area Band Engineering of Graphene using Cobalt-Mediated Oxidation*
P. Bazylewski, V.L. Nguyen, R.P.J. Bauer, A.H. Hunt, E.J.G. McDermott, B.D. Leedahl, A.I. Kukharenko, S.O. Cholakh, E.Z. Kurmaev, P. Blaha, A. Moewes, Y.H. Lee, G.S. Chang, Sci. Reports 5, 15380 (2015). [5.6]
7. *Adjacent Fe-Vacancy Interactions as the Origin of Room Temperature Ferromagnetism in $(In_{1-x}Fe_x)_2O_3$*
R.J. Green, T.Z. Regier, B. Leedahl, J.A. McLeod, X.H. Xu, G.S. Chang, E.Z. Kurmaev, and A. Moewes, Phys. Rev. Lett. 115, 167401 (2015). [7.7]
8. *The characterization of Co-nanoparticles supported on graphene*
P. Bazylewski, D. Boukhvalov, A.I. Kukharenko, E.Z. Kurmaev, A. Hunt, A. Moewes, Y.H. Lee, S.O. Cholakh, and G.S. Chang, RSC Advances 5, 75600-75606 (2015). [3.8]
9. *Pronounced, reversible, and in situ modification of the electronic structure of graphene oxide via cooling below 160 K*
A. Hunt, E. McDermott, E.Z. Kurmaev and A. Moewes, J. Phys. Chem. Letters 6, 3163-3169 (2015). [7.5]
10. *Stability and Electronic Characteristics of Epitaxial Silicene Multilayers on Ag(111)*
N.W. Johnson, D. Muir, E.Z. Kurmaev, and A. Moewes, Adv. Func. Mat. 25, 4083-4090 (2015). [10.4]
11. *Band Gap and Electronic Structure of $MgSiN_2$ Determined Using soft X-ray Spectroscopy*
T. de Boer, T.D. Boyko, C. Braun, W. Schnick, and A. Moewes, physica status solidi – Rapid Research Letters 9 (4), 250-254 (2015). [2.4]

12. *Investigations of the Electronic Structure and Bandgap of the Next-generation LED-phosphor Sr[LiAl₃N₄]:Eu²⁺ – Experiments and calculations*
T.M. Tolhurst, T.D. Boyko, P. Pust, N.W. Johnson, W. Schnick, and A. Moewes, Advanced Optical Materials 3, 546-550 (2015). [4.1]
13. *Electronic structure of Li₂RuO₃ studied by LDA+DMFT calculations and X-ray spectroscopy*
Z.V. Pchelkina, A.L. Pitman, A. Moewes, E.Z. Kurmaev, Teck-Yee Tan, J.-G. Park, and S.V. Streltsov, Phys. Rev. B 91, 115138 (2015). [3.7]
14. *Determination of the Critical Current Density in YBa₂Cu₃O_{7-δ} Thin Films Measured by the Screening Technique Under Two Criteria*
F. Gamboa, I. Perez, J.A. Matutes-Aquino, A. Moewes, and V. Sosa, IEEE Transactions on Applied Superconductivity 25 (1), 8000105 (2015). [1.2]
15. *Study of the Structural Characteristics of 3d metals Cr, Mn, Fe, Co, Ni, and Cu Implanted in ZnO and TiO₂ – Experiment and Theory*
B. Leedahl, D.Z. Zatsepin, D.W. Boukhvalov, E.Z. Kurmaev, R.J. Green, I.S. Zhidkov, S.S. Kim, N.V. Gavrilov, S.O. Cholak, and A. Moewes, J. Phys. Chem. C 118, 28143-28151 (2014). [4.8]
16. *Electronic structure and spin trapping in LiMnAs and LiFeAs:Mn*
J.A. McLeod, E.Z. Kurmaev, I. Perez, R.J. Green, L.Y. Xing, X.C. Wang, C.-Q. Jin, and A. Moewes, J. Phys. Cond. Matt. 27, 015504 (2015). [2.2]
17. *Asymmetric pathways in the electrochemical conversion reaction of NiO as battery electrode with high storage capacity*
U. Boesenberg, M.A. Marcus, A.K. Shukla, T. Yi, E. McDermott, P.F. Teh, M. Srinivasan, A. Moewes, J. Cabana, Scientific Reports 4, 7133-7142 (2014). [5.1]
18. *The electronic structure of Zirconium in hydrided and oxidized states*
H. Akhiani, A. Hunt, X. Cui, A. Moewes, and J. Szpunar, J. Alloys & Compounds 622, 463-470 (2015). [2.7]
19. *Electronic Structure of FeSe_{1-x}Te_x Studied by X-ray Spectroscopy and Density Functional Theory*
I. Pérez, J.A. McLeod, R.J. Green, R. Escamilla, V. Ortiz, and A. Moewes, J. Phys. Chem. C 118, 25150-25157 (2014). [4.8]
20. *Electronic structure of Co-substituted FeSe superconductor probed by soft X-ray spectroscopy and density functional theory*
I. Perez, J.A. McLeod, R.J. Green, R. Escamilla, V. Ortiz, and A. Moewes, Phys. Rev. B 90, 014510 (2014). [3.7]
21. *The Metallic Nature of Epitaxial Silicene Monolayers on Ag(111)*
N.W. Johnson, P. Vogt, A. Resta, P. De Padova, I. Perez, D. Muir, E.Z. Kurmaev, G. Le Lay, and A. Moewes, Adv. Func. Mat. 24, 5253-5259 (2014). [10.4]
22. *A Reevaluation of the Role of Functional Groups in Modifying the Electronic Structure of Graphene Oxide*
A. Hunt, E.Z. Kurmaev, and A. Moewes, Advanced Materials 26, 4870-4874 (2014). [15.4]
23. *Measuring Partial Fluorescence Yield using Filtered Detectors*
T.D. Boyko, R.J. Green, A. Moewes, T.Z. Regier, J. Synchr. Rad. 21, 716-721 (2014). [3.0]
24. *Band gap engineering of graphene oxide by chemical modification*

- A. Hunt, E.Z. Kurmaev, and A. Moewes, Carbon 75, 366-371 (2014).
25. *Comment on “State-Dependent Electron Delocalization Dynamics at the Solute-Solvent Interface: Soft X-ray Absorption Spectroscopy and Ab Initio Calculations”*
R.J. Green, D. Peak, A.J. Achkar, J.S. Tse, A. Moewes, D.G. Hawthorn, and T.Z. Regier, Phys. Rev. Lett. 112, 129301-1-2 (2014).
26. *Local Structure of Fe Impurity Atoms in ZnO: Bulk versus Surface*
J.A. McLeod, D.W. Boukhvalov, D.Z. Zatsepин, R.J. Green, B. Leedahl, L. Chui, E.Z. Kurmaev, I.S. Zhidkov, L.D. Finkelstein, N.V. Gavrilov, S.O. Cholakh, and A. Moewes, J. Phys. Chem. C 118, 5336-5345 (2014). [4.8]
27. *Electronic Band gap reduction and intense luminescence in Co and Mn ion-implanted SiO₂*
R.J. Green, D.A. Zatsepин, D.J. St. Onge, E.Z. Kurmaev, N.V. Gavrilov, and A. Moewes, J. Appl. Phys. 115, 103708-1-7 (2014). [2.2]
28. *Structural defects induced by Fe-ion implantation in TiO₂*
B. Leedahl, D.A. Zatsepин, D.W. Boukhvalov, R.J. Green, J.A. McLeod, S.S. Kim, E.Z. Kurmaev, I.S. Zhidkov, N.V. Gavrilov, S.O. Cholakh, and A. Moewes, J. Appl. Physics 115, 053711-1-7 (2014). [2.2]
29. *The local crystal structure and electronic band gap of β-SiAlON*
T.D. Boyko, T. Groß, M. Schwarz, H. Fueß, and A. Moewes, J. Materials Science 49, 3242-3252 (2014). [2.2]
30. *Finite temperature effects on the X-ray absorption spectra of lithium compounds: first-principles interpretation of X-ray Raman measurements*
T.A. Pascal, U. Boesenberg, R. Kostecki, T.J. Richardson, T.-C. Weng, D. Sokaras, D. Nordlund, E. McDermott, A. Moewes, J. Cabana, and D. Prendergast, J. Chem. Phys. 140, 034107-1-13 (2014). [3.2]
31. *Modulation of the Band Gap of Graphene Oxide: The Role of AA-stacking*
A. Hunt, D.A. Dikin, E.Z. Kurmaev, Y.H. Lee, N.V. Luan, G.S. Chang, and A. Moewes, Carbon 66, 539-545 (2014). [5.9]
32. *Reduction of conductivity and ferromagnetism induced by Ag doping in ZnO:Co*
H. Bieber, S. Colis, G. Schmerber, V. Pierron-Bohnes, D.W. Boukhvalov, E.Z. Kurmaev, L.D. Finkelstein, P. Bazylewski, A. Moewes, G.S. Chang, A. Dinai, Thin Solid Films 545, 488-495 (2013). [1.6]
33. *Magnesium Double Nitride Mg₃GaN₃ and Binary Nitride Mg₃N₂ as New Host Lattices for Eu²⁺-Doping – Synthesis, Structural Studies, Luminescence and Band Gap Determination*
F. Hintze, N.W. Johnson, M. Seibald, D. Muir, A. Moewes, and W. Schnick, Chem. Mat. 25, 4044-4052 (2013). [8.2]
34. *Electronic structure of pure, oxidized and alkali-metal doped anthracene using X-ray absorption spectroscopy*
A. Pitman, J.A. McLeod, E. Khozmeni Sarbisheh, E.Z. Kurmaev, J. Müller, and A. Moewes, J. Phys. Chem. 117, 1916-1921 (2013). [4.8]
35. *Electronic Structure of Spinel Nitride Compounds Si₃N₄, Ge₃N₄ and Sn₃N₄ with Tunable Band Gaps: Application to Light Emitting Diodes*
T.D. Boyko, A. Hunt, A. Zerr, and A. Moewes, Phys. Rev. Lett. 111, 097402-1-5 (2013). [7.9]

36. *Electronic structure of Copper Pnictides: Influence of Different Cations and Pnictogens*
J.A. McLeod, E.Z. Kurmaev, I. Perez, V.K. Anand, P. Kanchana Perera, D.C. Johnston, and A. Moewes, Phys. Rev. B 88, 014508-1-10 (2013). [3.8]
37. *Fast electron dynamics in vanadates measured by resonant inelastic x-ray scattering*
G. Herrera, J. Jimenez-Mier, R.G. Wilks, A. Moewes, W. Yang, J. Denlinger, Materials Letters. 107, 144-146 (2013). [2.2]
38. *Excited states in yttrium orthovanadate YVO_4 measured by soft X-ray absorption spectroscopy*
G. Herrera, J. Jimenez-Mier, R.G. Wilks, A. Moewes, W. Yang, J. Denlinger, J. Mat. Sci. 48, 6437-6444 (2013). [2.2]
39. *Electronic band gap reduction in Manganese Carbodiimide: $MnNCN$*
T.D. Boyko, R.J. Green, R. Dronskowski, and A. Moewes, J. Phys. Chem. C 117, 12754-12761 (2013). [4.8]
40. *Band gap tuning in ZnO Through Ni doping via spray pyrolysis*
S.C. Das, R.J. Green, J. Podder, G.S. Chang, and A. Moewes, J. Phys. Chem. C 117, 12745-12753 (2013). [4.8]
41. *Band gap tuning in Poly(triazine imide), a Non-metallic Photocatalyst*
E.J. McDermott, E. Wirnhier, W. Schnick, K.S. Virdi, C. Scheu, and A.Y. Kauffmann, W.D. Kaplan, E.Z. Kurmaev, and Moewes, J. Phys. Chem. C 117, 8806-8812 (2013). [4.8]
42. *The formation of Ti-O tetrahedra and band gap reduction in SiO_2 via pulsed ion implantation*
R.J. Green, D.A. Zatsepин, A. Hunt, E.Z. Kurmaev, N.V. Gavrilov, and A. Moewes, J. Appl. Physics 113, 103704-1-4). [2.2]
43. *Optimizing and characterizing grating efficiency for a soft X-ray spectrometer*
M. Boots, D. Muir and A. Moewes, J. Synchr. Rad. 20, 272-285 (2013). [2.2]
44. *Predicting the band gap of ternary oxides containing $3d^{10}$, $3d^0$ metals*
J.A. McLeod, D.A. Zatsepин, E.Z. Kurmaev, A. Wypych, I. Bobovska, A. Opasinka, S.O. Cholakh, and A. Moewes, Phys. Rev. B 86, 195207-1-7 (2012). [3.8]
45. *Chemical bonding and hybridization in 5p binary oxide*
J.A. McLeod, N.A. Skorikov, L.D. Finkelstein, E.Z. Kurmaev, and A. Moewes, J. Phys. Chem. C 116, 24248-24254 (2012). [4.8]
46. *Interplay of ballistic and chemical effects in the formation of structural defects for Sn and Pb implanted silica*
R.J. Green, A. Hunt, D.A. Zatsepин, D.W. Boukhvalov, J.A. McLeod, E.Z. Kurmaev, N.A. Skorikov, N.V. Gavrilov, and A. Moewes, J. non-cryst. Solids 358, 3187-3192 (2012). [1.6]
47. *Room Temperature Ferromagnetism via unpaired dopant electrons and $p - p$ coupling in carbon-doped In_2O_3 : Experiment and Theory*
R.J. Green, D.W. Boukhvalov, E.Z. Kurmaev, L.D. Finkelstein, H.W. Ho, K.B. Ruan, L. Wang, and A. Moewes, Phys. Rev. B 86, 115212-1-8 (2012). [3.8]
48. *Electronic Structure of Titanium monoxide with randomly distributed vacancies*
M.A. Korotin, A.V. Efremov, E.Z. Kurmaev and A. Moewes, JETP letters 95, 641-646 (2012). [1.5]

- 49. Epoxide Speciation and Functional Group Distribution in Graphene Oxide Paper-like Materials**
A. Hunt, D.A. Dikin, E.Z. Kurmaev, T.D. Boyko, P. Bazylewski, G.S. Chang, and A. Moewes, Advanced Functional Materials 22, 3950-3957 (2012). [10.2]
- 50. Formation of Mn-oxide clusters in Mn^+ -implanted SiO_2 probed by soft X-ray emission and absorption spectroscopy**
D.A. Zatsepин, A. Moewes, A. Hunt, N.V. Gavrilov, E.Z. Kurmaev, and S.O. Cholakh, Vacuum 86, 1615-1617 (2012). [1.3]
- 51. Band gap Engineering in TiO_2 -based Ternary Oxides**
J.A. McLeod, R.J. Green, E.Z. Kurmaev, N. Kumada, A.A. Belik, and A. Moewes, Phys. Rev. B 85 195201-1-8 (2012). [3.7]
- 52. Effect of 3d-doping on the electronic structure of $BaFe_2As_2$**
J.A. McLeod, A. Buling, R.J. Green, T.D. Boyko, N.A. Skorikov, E.Z. Kurmaev, M. Neumann, L.D. Finkelstein, N. Ni, A. Thaler, S.L. Bud'ko, P.C. Canfield, and A. Moewes, J. Phys.: Cond. Matt. 24, 215501-1-11 (2012). [2.6]
- 53. Oxygen-vacancy-induced ferromagnetism in undoped SnO_2 thin films**
G.S. Chang, J. Forrest, E.Z. Kurmaev, A.N. Morozovska, M.D. Glinchuk, J.A. McLeod, A. Moewes, T.P. Surkova, and N.H. Hong, Phys. Rev. B 85, 165319-1-4 (2012). [3.7]
- 54. Structural and band gap investigation of $GaN:ZnO$ heterojunction solid solution photocatalyst probed by soft X-ray spectroscopy**
E.J. McDermott, E.Z. Kurmaev, T.D. Boyko, L.D. Finkelstein, R.J. Green, K. Maeda, K. Domen, and A. Moewes, J. Phys. Chem. C 116, 7694-7700 (2012). [4.8]
- 55. Structural ordering in a silica glass matrix under Mn ion implantation**
D.A. Zatsepин, R.J. Green, A. Hunt, E.Z. Kurmaev, N.V. Gavrilov, and A. Moewes, J. Phys.: Cond. Matt. 24, 185402-1-7 (2012). [2.6]
- 56. Selective response of Mesoporous Silicon to Adsorbants with Nitro Groups**
J.A. McLeod, E.Z. Kurmaev, P.V. Sushko, T.D. Boyko, I.A. Levitsky, and A. Moewes, Chemistry – A European Journal 18, 2912-2922 (2012). [5.9]
- 57. Spectroscopic Characterization of a Multi-Band Complex Oxide: Insulating and Conducting Cement $12CaO\cdot7Al_2O_3$**
J.A. McLeod, A. Buling, E.Z. Kurmaev, P.V. Sushko, M. Neumann, L.D. Finkelstein, S.-W. Kim, H. Hosono, and A. Moewes, Phys. Rev. B 85, 045204-1-8 (2012). [3.7]
- 58. X-ray absorption and emission spectroscopic investigation of Mn doped ZnO films**
J. Jin, G.S. Chang, Y.X. Zhou, X.Y. Zhang, D.W. Boukhvalov, E.Z. Kurmaev, and A. Moewes, Appl. Surf. Science 257, 10748-10751 (2011). [2.1]
- 59. Electronic structure of Lithium metagallate**
N. Johnson, J.A. McLeod and A. Moewes, J. Phys. Cond. Matt. 23, 445501-6 (2011). [2.6]
- 60. Anion bond ordering in spinel-type gallium oxonitride**
T.D. Boyko, C.E. Zvoriste, I. Kinski, R. Riedel, S. Hering, H. Huppertz, and A. Moewes, Phys. Rev. B 84, 085203-1-6 (2011). [3.7]
- 61. Boron enhanced synthesis of Ti-hydride nanoparticles by milling Ti/B in hydrogen flow**

- C. Borchers, T.I. Khomenko, A.V. Leonov, O.S. Morozova, J. Cizek, I. Prochazka, A.S. Shkvarin, E.Z. Kurmaev, and A. Moewes, Current Nanoscience 7, 757-769 (2011). [1.9]
62. *Pb⁺ implanted SiO₂ probed by soft X-ray emission and absorption spectroscopy*
D.Z. Zatsepin, A. Hunt, A. Moewes, E.Z. Kurmaev, N.V. Gavrilov, I.S. Zhidkov, and S.O. Cholakh, Journal of Non-crystalline solids 357, 3381-3384 (2011). [1.5]
63. *Electronic Structure of the Si-C-N Amorphous Films*
D.A. Zatsepin, E.Z. Kurmaev, A. Moewes, and S.O. Cholakh, Physics of the Solid State 53, 1806-1810 (2011). [0.73]
64. *Nature of the electronic states involved in the chemical bonding and superconductivity at high pressure in SnO*
J.A. McLeod, A.V. Lukyanov, E.Z. Kurmaev, L.D. Finkelstein, and A. Moewes, JETP Letters 94, 146-150 (2011). [1.6]
65. *Molecular orientation and optical luminescence properties of soluble star-shaped oligothiophene molecules for organic electronics applications*
R.G. Wilks, G.S. Chang, K.H. Kim, D.H. Choi, and A. Moewes, J. Electr. Spectr. Rel. Phen. 184, 355-359 (2011). [1.8]
66. *Electron dynamics of transition metal compounds studied with resonant soft x-ray scattering*
J. Jimenez-Mier, G. Herrera-Perez, P. Olalde-Velasco, G. Carabali, E. Chavira, P. de la Mora, W.L. Yang, J. Denlinger, A. Moewes, R. Wilks, Proceedings of 6th International Symposium on Radiation Physics, March 7-10, 2010 Zacatecas, Mexico) – Revista Mexicana de la Fisica 57, 6-13 (2011). [0.3]
67. *Identifying Local Dopant Structures and their Impact on Magnetic Properties in Spintronic Materials*
R.J. Green, G.S. Chang, X.Y. Zhang, A. Dinia, E.Z. Kurmaev, and A. Moewes, Phys. Rev. B 83, 115207-1-6 (2011). [3.8]
68. *Ca₃N₂ and Mg₃N₂: unpredicted high-pressure behaviour of binary nitrides*
Cordula Braun, Saskia Börger, Teak Boyko, Gerhard Miehe, Helmut Ehrenberg, Peter Höhn, Alexander Moewes, and Wolfgang Schnick, Journal of the American Chemical Society 133, 4307-4315 (2011). [10.7]
69. *Valence Structure of Alkaline and Post-Transition Metal Oxides*
J.A. McLeod, R.J. Green, N.A. Skorikov, L.D. Finkelstein, M. Abu-Samak, E.Z. Kurmaev, and A. Moewes (proceedings of the SPIE2011 Photonics West conference).
70. *Appearance of Ferromagnetism in Co-Doped CeO₂ Diluted Magnetic Semiconductors Prepared by Solid State Reaction*
A. Bouaine, R.J. Green, S. Colis, P. Bazylewski, G.S. Chang, A. Moewes, E.Z. Kurmaev, and A. Dinia, Journal of Physical Chemistry C 115, 1566-1560 (2011). [4.5]
71. *Evaluation of Antioxidant Activity and Electronic Structure of Aspirin and Paracetamol*
W. Motozaki, Y. Nagatani, Y. Kimura, K. Endo, T. Takemura, E. Z. Kurmaev, A. Moewes. J. Mol. Struct. 985, 63-69 (2011). [1.6]
72. *Charge transfer and band gap of ferrocene intercalated into TiSe₂*

- A.N. Titov, Y.M. Yarmoshenko, P. Bazylewski, M.V. Yablonskikh, E.Z. Kurmaev, R. Wilks, A. Moewes, V.A. Tsurin, V.V. Fedorenko, O.N. Suvorova, S.Yu. Ketkov, M. Neumann, and G.S. Chang, Chem. Phys. Lett. 497, 187-190 (2010). [2.3]
73. *RIXS approach to local environment around impurity atoms in diluted magnetic semiconductors and dielectrics*
G.S. Chang, E.Z. Kurmaev, L.D. Finkelstein, A. Moewes, and A. Dinia, J. Electr. Spectr. Rel. Phen. 181, 202-205 (2010) [0.9]. (ICESS-11 conference)
74. *Material Properties and Structural Characterization of $M_3Si_6O_{12}N_2:Eu^{2+}$ ($N= Ba, Sr$) – A Comprehensive Study on a promising green phosphor for pc-LEDs*
C. Braun, S.L. Börger, M. Seibald, G. Miehe, P.J. Schmidt, T.D. Boyko, O. Oeckler, A. Moewes, and W. Schnick, Chemistry – A European Journal 16, 9646-9657 (2010). [5.4].
75. *Correlation effects in Ni 3d states of LaNiPO*
A.V. Lukyanov, S.L. Skornyakov, J.A. McLeod, M. Abu-Samak, R.G. Wilks, E.Z. Kurmaev, and A. Moewes, N.A. Skorikov, Yu.A. Izyumov, L.D. Finkelstein, V.I. Anisimov, and D. Johrendt, Phys. Rev. B 81, 235121-1-5 (2010). [3.5]
76. *Band gaps and Electronic structure of alkaline-earth and post-transition metal oxides*
J.A. McLeod, R.G. Wilks, N.A. Skorikov, L.D. Finkelstein, M. Abu-Samak, E.Z. Kurmaev, and A. Moewes, Phys. Rev. B 81, 245123-1-9 (2010). [3.5]
77. *Electronic structure of Mn in $(Zn,Mn)O$ probed by resonant X-ray emission spectroscopy*
J. Jin, G.S. Chang, W. Xu, Y.X. Xu, W.W. Boukhvalov, L.D. Finkelstein, E.Z. Kurmaev, X.Y. Zhang, and A. Moewes, Sol. State Comm. 150, 1065-68 (2010). [1.8]
78. *Class of tunable wide band gap semiconductors $\gamma-(Ge_xSi_{1-x})_3N_4$*
T.D. Boyko, E. Bailey, A. Moewes, and P.F. McMillan, Phys. Rev. B 81, 155207-1-8 (2010). [3.5]
79. *Interfacial Properties and Characterization of Sc/Si Multilayers*
T. Shendruk, A. Moewes, E.Z. Kurmaev, P. Ochin, H. Maury, J.-M. Andre, K. Le Gruen, and P. Jonnard, Thin Solid Films 518, 3808-3812 (2010). [1.7]
80. *Electronic structure of $BiMeO_3$ multiferroics and related oxides*
J.A. McLeod, Z.V. Pchelkina, L.D. Finkelstein, E.Z. Kurmaev, R.G. Wilks, A. Moewes, I.V. Solovyev, A.A. Belik, and E. Takayama-Muromachi, Phys. Rev. B 81, 144103-1-10 (2010). [3.5]
81. *Valence band structure and X-ray spectra of oxygen deficient ferrites $SrFeO_x$*
V.R. Galakhov, E.Z. Kurmaev, M. Neumann, J.A. McLeod, A. Moewes, I.A. Leonidov, V.L. Kozhevnikov, and K. Kuepper, J. Phys. Chem. C 110, 5154-5159 (2010). [4.2]
82. *Element-specific electronic structure of Mn dopants and ferromagnetism of $(Zn,Mn)O$ thin film*
J. Jin, G.S. Chang, D.W. Boukhvalov, X.Y. Zhang, L.D. Finkelstein, W. Xu, Y.X. Zhou, E.Z. Kurmaev, and A. Moewes, Thin Solid Films 518, 2825-2829 (2010). [1.7]
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Patents

1. *Methods of Selectively detecting the presence of a compound in a gaseous medium*
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