

Reviewed publications

Our graduate students are underlined and the journal impact factor (at the time of publication) is given in [brackets].

1. *Unraveling e_g Orbital Splitting in TiO_2 : The Role of Local Distortion in Ligand Field Multiplet Theory*
P. Ufodu, T.D. Boyko, Saloni, O. Daudu, A. Moewes, J. Phys. Chem. C 129, 14524-14529 (2025) [3.7]
2. *Bonding Profiling of Gapless Ceramic $\text{V}_2\text{GaC/N}$ MAX Phases: A Spectroscopic and Dual Theoretical Approach*
P. Ufodu, Sakshi, T.D. Boyko, N. Kubitza, C.S. Birkel, A. Moewes, Materials Advances 6, 5568-5575 (2025). [5.2]
3. *The interplay of selective occupation and magnetic properties of high entropy spinel oxides*
C.M. Meier, T.D. Boyko, D.T. Teppala, P. Ufodu, E. Ionescu, A. Moewes, J. Alloys & Comp. 1037, 181224 (2025). [6.4]
4. *Lone Pair, Unique N-bridging and Photovoltaic Potential of Novel Titanium Nitridophosphate*
P. Ufodu, Sakshi, T.D. Boyko, M.M. Pointner, W. Schnick, A. Moewes. accepted Advanced Science 12, 2412830 (2025). [15.1]
5. *Scalable Bulk Synthesis of Pure $\gamma\text{-Sn}_3\text{N}_4$ as a Model for an Argon-Flow-Mediated Metathesis Reaction*
M. Zipkat, A. Koldemir, T. Block, C. Ceniza, T.D. Boyko, S. Kläger, R.M. Pritzl, A. Moewes, R. Pöttgen, S.S. Rudel, W. Schnick, Chem. – A Europ. J. 31, e202403745, (1 to 11) (2025) [5.0]
6. *$\text{P}_{1-x}\text{Ta}_{8+x}\text{N}_{13}$ ($x = 0.1\text{--}0.15$): A Phosphorus Tantalum Nitride Featuring Mixed-Valent Tantalum and P/Ta Disorder Visualized by Scanning Transmission Electron Microscopy*
M.M. Pointner, C. Ceniza, L. Nusser, K. Witthaut, F. Wolf, M. Weidemann, L. Eisenburger, A. Moewes, O. Oeckler, W. Schnick, Angewandte Chemie 63, e202411441 (2024). [16.6]
7. *Investigating the electronic properties of novel titanium oxonitridophosphate, $\text{Ti}_5\text{P}_{12}\text{N}_{24}\text{O}_2$, through structural distortions at the titanium sites*
P. Ufodu, T.D. Boyko, M.M. Pointner, L. Eisenburger, W. Schnick, A. Moewes, J. Mat. Chem. C 12, 4392-4398 (2024). [8.1]
8. *Analysis of State-Dependent Fluorescence Effects in Multivalent Manganese Oxides and Determination of Electronic Structure*
P.M. Braun, R.J. Green, A. Moewes, Phys. Rev. Materials 7, 084603 (2023). [4.0]
9. *Determination of Electronic Structure in novel High-Pressure and High-Temperature Phases of Mn_2O_3 : Exploring Perovskite and Ilmenite Structures*
P.M. Braun, R.J. Green, S.V. Ovsyannikov, L. Dubrovinsky, A. Moewes, accepted for J. Mat. Chem. C 11, 10864-10871 (2023). [8.1]
10. *Thermally stable red-emitting oxide ceramics for laser lighting*
Z. Yang, T. de Boer, P.M. Braun, B. Su, Q. Zhang, A. Moewes, Z. Xia, Advanced Materials 35, 2301837 (2023). [32.1]

11. *The Importance of Lone Pairs to Structure and Bonding of the novel Nitridophosphate GeP_2N_4*
T. de Boer, C. Somers, T.D. Boyko, S.J. Ambach, L. Eisenburger, W. Schnick, A. Moewes, J. Mat. Chem. A 11, 6198-6204 (2023). [14.5]
12. *Structural influence of Lone Pairs: GeP_2N_4 , Representing Germanium(II) Nitridophosphates*
S.J. Ambach, C. Somers, T. de Boer, L. Eisenburger, A. Moewes, W. Schnick, Angewandte Chemie (Int. Ed.) 135, e202215393 (1 to 5) (2023). [16.8]
13. *Band Gap and Electronic Structure of CaSiN_2 – Experiment and Theory*
T. de Boer, T.D. Boyko, C. Braun, W. Schnick, A. Moewes, J. Applied Ceramic Technology 20, 197-203 (2023). [2.3]
14. *Structure and Band Gap Determination of InN grown by RP-MOCVD*
R. Dubreuil, M.R. Amin, J. Tot, M. Nagorski, B. Kadikoff, A. Moewes, D. Alexandrov, J. Materials Science: Materials in Electronics 22, 17668-17677 (2022). [2.8]
15. *Energy Levels of Eu^{2+} States in the Next-Generation LED-Phosphor $\text{SrLi}_2\text{Al}_2\text{O}_2\text{N}_2:\text{Eu}^{2+}$*
M.R. Amin, P. Strobel, W. Schnick, P.J. Schmidt, A. Moewes, J. Mat. Chem. C 10, 9740-9747 (2022). [8.1]
16. *Experimental and theoretical characterization of x-ray induced excitons, magnons and dd transitions in MoO_3 nanosheets*
A. Qamar, P.M. Braun, S. Walia, S. Balendhran, F. Rahman, E.Z. Kurmaev, A. Moewes, Phys. Rev. Materials 6, 074003 (2022). [4.0]
17. *Band Gap and Electronic Structure of Defects in the Ternary Nitride BP_3N_6 : Experiment and Theory*
T. de Boer, Md.F. Al Fattah, M.R. Amin, S. Ambach, S. Vogel, W. Schnick, A. Moewes, J. Mat. Chem. C 10, 6429-6434 (2022). [8.1]
18. *Inverse-tunable Red Luminescence and Electronic Properties of Nitridoberylloaluminates $\text{Sr}_{2-x}\text{Ba}_x[\text{BeAl}_3\text{N}_5]:\text{Eu}^{2+}$ ($x=0-2$)*
E. Elzer, P. Strobel, V. Weiler, M.R. Amin, P.J. Schmidt, A. Moewes, W. Schnick, Chem. – Europ. J. 28, e202104121 (1 to 8) (2022) [5.0]
19. *Detecting a Hierarchy of Deep level defects in the model semiconductor ZnSiN_2*
T. de Boer, J. Häusler, P. Strobel, T.D. Boyko, S.S. Rudel, W. Schnick, A. Moewes, J. Phys. Chem. C 1125, 27959-27965 (2021). [4.1]
20. *Tuning the Electronic Bandgap of Oxygen Bearing Cubic Zirconium Nitride: $c\text{-Zr}_{3-x}(\text{N}_{1-x}\text{O}_x)_4$*
T.D. Boyko, A. Zerr and A. Moewes, ACS Appl. Electr. Mat. 3, 4768-4773 (2021). [new journal]
21. *Comprehensive Band Gap and Electronic Structure Investigations of the Prominent Phosphors $\text{M}_2\text{Si}_5\text{N}_8$ ($M=\text{Ca}, \text{Sr}, \text{Ba}$) Determined Using Soft X-ray Spectroscopy and Density Functional Theory*
T.M. Tolhurst, C. Braun, W. Schnick, A. Moewes, J. Phys. Chem. C 125, 25799-25806 (2021). [4.1]
22. *Unraveling the Energy Levels of Eu^{2+} ions in $\text{MBe}_{20}\text{N}_{14}:\text{Eu}^{2+}$ ($M=\text{Sr}, \text{Ba}$) Phosphors*
M.R. Amin, E. Elzer, W. Schnick, and A. Moewes, J. Phys. Chem. C 125, 11828-11837 (2021). [4.1]
23. *Electronic Properties of Carbyne Chains: Experiment and theory*
T. de Boer, D. Zatsepin, D. Raikov, E.Z. Kurmaev, A.F. Zatsepin, A. Moewes, J. Phys.

- Chem. C 125, 8268-8273 (2021). [4.1]
24. *Understanding of luminescence properties using direct measurements on Eu²⁺-doped wide band gap phosphors*
M.R. Amin, P. Strobel, A. Qamar, T. Giftthaler, W. Schnick, and A. Moewes, Adv. Opt. Mat. 8, 2000504 (2020). [8.3]
25. *Electronic Structure of Wide Band Gap Semiconductors Mg₂PN₃ and Zn₂PN₃*
Md.F. Al Fattah, M.R. Amin, M. Mallmann S. Kasap, W. Schnick, and A. Moewes J. Phys.: Cond. Matter 32, 405504 (2020). [2.7]
26. *Origin and control of room temperature ferromagnetism in Co,Zn-doped SnO₂: oxygen vacancies and their local environment*
J. Ho, T. de Boer, B. Leedahl, D. Manikandan, R. Murugan, and A. Moewes, J. Mat. Chem. C 8, 4902-4908 (2020). [6.6]
27. *Direct Evidence of Charge Transfer upon Anion Intercalation in Graphite Cathodes through New Electronic Graphite States: An Experimental and Theoretical Study of Hexafluorophosphate*
T. de Boer, J. Lapping, J. Read, T. Fister, M. Balasubramanian, J. Cabana, and A. Moewes, Chemistry of Materials 32, 2036-2042 (2020). [10.2]
28. *A probe of Valence and Conduction Band Electronic Structure of Lead Oxide Films for Photodetectors*
A. Qamar, M. Amin, O. Grynko, O. Semeniuk, A. Reznik, and A. Moewes, ChemPhysChem 20, 3328-3335 (2019). [3.1]
29. *Energy band gaps and excited states in Si-QD/SiO_xR_yO_z (R= Si, Al, Zr) suboxide superlattices*
A.F. Zatsepin, E.A. Buntov, D.A. Zatsepin, E.Z. Kurmaev, V.A. Pustovarov, A.V. Ershov, N.W. Johnson, and A. Moewes, J. Phys.: Cond. Mat. 31, 415301-1-9 (2019). [2.7]
30. *Electronic Structure and Structural Defects in 3d-Metal doped In₂O₃*
J. Ho, J. Becker, B. Leedahl, D.W. Boukhvalov, I.S. Zhidkov, A.I. Khukhareenko, E.Z. Kurmaev, S.O. Cholakh, N.V. Gavrilov, V.I. Brinzari, and A. Moewes, J. Mat. Sci.: Mat. in Electronics 30, 14091-14098 (2019). [2.2]
31. *Paving the way towards green catalytic materials for green fuels: impact of chemical species on Mo-based catalysts for hydrodeoxygenation*
D. Valencia, L. Díaz-García, L.F. Ramírez-Verduzco, A. Qamar, A. Moewes, and J. Aburto, RSC Advances 9, 18292-18301 (2019). [3.0]
32. *Fundamental Crystal Field Excitations in magnetic semiconductor SnO₂:Mn,Fe,Co,Ni*
B. Leedahl, D. McClosky, D.W. Boukhvalov, I.S. Zhidkov, A.I. Khukhareenko, E.Z. Kurmaev, S.O. Cholakh, N.V. Gavrilov, V.I. Brinzari, and A. Moewes, Phys. Chem. Chem. Phys. 21, 11992-11998 (2019). [3.6]
33. *Bandgap and Electronic Structure Determination of Oxygen-Containing Ammonothermal InN: Experiment and Theory*
M.R. Amin, T. de Boer, P. Becker, J. Hertrampf, R. Niewa, and A. Moewes, J. Phys. Chem. C 123, 8943-8950 (2019). [4.3]
34. *Oxygen Vacancy Induced Structural Distortions in Black Titania: A unique Approach using Soft X-ray EXAFS at the O-K Edge*
B. Leedahl, T. de Boer, Y. Yuan, and A. Moewes, Chem. – A Europ. J. 25, 3272-3278 (2019). [5.2]

35. *Ultrasmall Au nanocatalysts supported on nitride carbon for electrocatalytic CO₂ reduction: the role of the carbon support in high selectivity*
L. Jin, B. Liu, P. Wang, H. Yao, L.A. Achola, P. Kerns, A. Lopes, Y. Yang, J. Ho, A. Moewes, Y. Pei, and J. He, *Nanoscale* 10, 14678-14686 (2018). [7.0]
36. *Luminescence of an Oxonitridoberyllate: A Study of Narrow-band Cyan Emitting Sr[Be₆ON₄]:Eu²⁺*
P. Strobel, T. de Boer, V. Weiler, P.J. Schmidt, A. Moewes, and W. Schnick, *Chemistry of Materials* 30, 3122-3130 (2018). [10.2]
37. *The Electronic structure of ε'-V₂O₅: an expanded band gap in a double-layered polymorph with increased interlayer separation*
T.M. Tolhurst, B. Leedahl, J.L. Andrews, S. Banerjee, A. Moewes, *J. Mat. Chem. A* 5, 23694-23703 (2017). [10.7]
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A. Qamar, K. LeBlanc, J. Lin, Y. Pan, A. Reznik, A. Moewes, *Scientific reports* 7, 13159 1-10 (2017). [4.0]
39. *Direct measurements of Energy Levels and Correlation with Thermal Quenching behavior in Nitrides Phospors*
T.M. Tolhurst, P. Strobel, P.J. Schmidt, W. Schnick, A. Moewes, *Chem. Mat.* 29, 7976-7983 (2017). [10.2]
40. *How functional groups change the electronic structure of graphdiyne: Theory and Experiment*
N. Ketabi, T.M. Tolhurst, B. Leedahl, H. Liu, Y. Li, A. Moewes, *Carbon* 123, 1-7 (2017). [7.5]
41. *Recent Advances with Soft X-ray Absorption Spectroscopy*
A. Moewes, *Handbook of Solid State Chemistry*, 1st edition, 2017, Chapter 11 (pages 361-391) Wiley.
42. *Bulk vs. Surface Structure of 3d Metal impurities in Topological Insulator Bi₂Te₃*
B. Leedahl, D.W. Boukhvalov, E.Z. Kurmaev, A. Kukhareenko, I.S. Zhidkov, N.V. Gavrilov, S.O. Cholakh, P. Huu Le, C. Wei Luo, and A. Moewes, *Scientific Reports* 7, 5758 (2017). [5.2]
43. *Tunability of room-temperature ferromagnetism in Spintronic semiconductors through nonmagnetic atoms*
B. Leedahl, Z. Talizadeh, K. LeBlanc, A. Moewes, *Phys. Rev. B* 96, 045202-1-5 (2017). [3.7]
44. *Designing Luminescence Materials and Band Gaps: A Soft X-ray spectroscopy and Density Functional Theory Study of Li₂Ca₂[Mg₂Si₂N₆]:Eu²⁺ and Ba[Li₂(Al₂Si₂)N₆]:Eu²⁺*
T.M. Tolhurst, P. Strobel, W. Schnick, A. Moewes, *J. Phys. Chem. C* 121, 14296-14301 (2017). [4.5]
45. *Structure-Induced Switching of the Band Gap, Charge Order and Correlation Strength in Ternary Vanadium Bronzes*
T.M. Tolhurst, J.L. Andrews, B. Leedahl, P.M. Marley, S. Banerjee, and A. Moewes, *Chemistry – A European Journal* 23, 9846-9856 (2017). [5.8]
46. *Intercalation-induced dimensional reduction and thickness-modulated electronic structure of a layered ternary vanadium oxide*

- J.L. Andrews, L.R. De Jesus, T.M. Tolhurst, P. Marley, A. Moewes, S. Banerjee, *Chemistry of Materials* 29, 3285-3294 (2017). [9.4]
47. *The hardness of group 14 spinel nitrides revisited*
T.D. Boyko and A. Moewes, *Journal of the Ceramic Society of Japan* 124, 1063-1066 (2016). [0.83]
48. *Searching for pure iron in nature: magnetic and spectroscopy study of the Chelyabinsk meteorite*
B. Leedahl, A.V. Korolev, I.S. Zhidkov, S.L. Skorniyakov, V.I. Anisimov, A.S. Belozеров, A.I. Kukhareenko, E.Z. Kurmaev, V.I. Grokhovskii, S.O. Cholakh, and A. Moewes, *RSC Advances* 6, 85844-85851 (2016). [3.3]
49. *Experiment-driven modeling of crystalline phosphorus nitride: wide ranging implications from a unique structure*
T.M. Tolhurst, C. Braun, T.D. Boyko, W. Schnick, A. Moewes, *Chemistry – A European Journal* 22, 10475-10483 (2016). [5.8]
50. *Tuning the electronic structure of graphene through nitrogen doping: Experiment and theory*
N. Ketabi, T. de Boer, M. Karakay, J. Zhu, A. Podila, A.M. Rao, E.Z. Kurmaev, and A. Moewes, *RSC Advances* 6, 56721-56727 (2016). [3.3]
51. *Contrasting 1D Tunnel Structured and 2D Layered Polymorphs of V₂O₅: Relating Structure and Bonding to Band Gaps and Electronic Structure*
T.M. Tolhurst, B. Leedahl, J.L. Andrews, P.M. Marley, S. Banerjee, and A. Moewes, *Phys. Chem. Chem. Phys.* 18, 15798-15806 (2016). [4.5]
52. *Band Gap and electronic structure of cubic, rhombohedral, and orthorhombic In₂O₃ 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]
53. *Electronic structure, Band gap and thermal quenching of Sr[Mg₃SiN₄]:Eu²⁺ and Sr[LiAl₃N₄]:Eu²⁺*
T.M. Tolhurst, S. Schmiechen, P. Pust, P.J. Schmidt, W. Schnick, and A. Moewes, *Adv. Opt. Mat.* 4, 584-591 (2016). [7.2]
54. *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, 2407-2412 (2016). [13.8]
55. *Oxidized Monolayers of Exptaxial Silicene on Ag(111)*
N.W. Johnson, D. Muir and A. Moewes, *Scientific Reports* 6, 22510 (2016). [5.6]
56. *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). [2.9]
57. *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. Kukhareenko, S.O. Cholakh, E.Z. Kurmaev, P. Blaha, A. Moewes, Y.H. Lee, G.S. Chang, *Sci. Reports* 5, 15380 (2015). [5.6]

58. *Adjacent Fe-Vacancy Interactions as the Origin of Room Temperature Ferromagnetism in $(\text{In}_{1-x}\text{Fe}_x)_2\text{O}_3$*
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]
59. *The characterization of Co-nanoparticles supported on graphene*
P. Bazylewski, D. Boukhvalov, A.I. Kukhareno, 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]
60. *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]
61. *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]
62. *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]
63. *Investigations of the Electronic Structure and Bandgap of the Next-generation LED-phosphor $\text{Sr}[\text{LiAl}_3\text{N}_4]:\text{Eu}^{2+}$ – 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). [7.2]
64. *Electronic structure of Li_2RuO_3 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]
65. *Determination of the Critical Current Density in $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta\delta}$ 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]
66. *Study of the Structural Characteristics of 3d metals Cr, Mn, Fe, Co, Ni, and Cu Implanted in ZnO and TiO_2 – 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. Cholakh, and A. Moewes, J. Phys. Chem. C 118, 28143-28151 (2014). [4.8]
67. *Electronic structure and spin trapping in LiMnAs and $\text{LiFeAs}:\text{Mn}$*
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]
68. *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]
69. *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]
70. *Electronic Structure of $\text{FeSe}_{1-x}\text{Te}_x$ Studied by X-ray Spectroscopy and Density*

Functional Theory

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71. *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]
72. *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]
73. *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]
74. *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]
75. *Band gap engineering of graphene oxide by chemical modification*
A. Hunt, E.Z. Kurmaev, and A. Moewes, Carbon 75, 366-371 (2014). [6.2]
76. *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). [7.7]
77. *Local Structure of Fe Impurity Atoms in ZnO: Bulk versus Surface*
J.A. McLeod, D.W. Boukhvalov, D.Z. Zatsepin, 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]
78. *Electronic Band gap reduction and intense luminescence in Co and Mn ion-implanted SiO₂*
R.J. Green, D.A. Zatssepin, D.J. St. Onge, E.Z. Kurmaev, N.V. Gavrilov, and A. Moewes, J. Appl. Phys. 115, 103708-1-7 (2014). [2.2]
79. *Structural defects induced by Fe-ion implantation in TiO₂*
B. Leedahl, D.A. Zatssepin, 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]
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T.D. Boyko, T. Groß, M. Schwarz, H. Fueß, and A. Moewes, J. Materials Science 49, 3242-3252 (2014). [2.3]
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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). [3.1]
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