

# Raphael Hermann

## List of Publications by Year in descending order

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193  
papers

5,893  
citations

76196

40  
h-index

102304

66  
g-index

207  
all docs

207  
docs citations

207  
times ranked

7924  
citing authors

#	ARTICLE	IF	CITATIONS
1	Tuning the room temperature ferromagnetism in Fe <sub>5</sub> GeTe <sub>2</sub> by arsenic substitution. 2D Materials, 2022, 9, 015013.	2.0	14
2	Giant doping response of magnetic anisotropy in MnTe. Physical Review Materials, 2022, 6, .	0.9	8
3	Real-space visualization of short-range antiferromagnetic correlations in a magnetically enhanced thermoelectric. Matter, 2022, 5, 1853-1864.	5.0	11
4	Eu <sub>5</sub> Al <sub>3</sub> Sb <sub>6</sub> : Al <sub>4</sub> Tetrahedra Embedded in a Rock-Salt-Like Structure. Chemistry of Materials, 2022, 34, 5009-5019.	3.2	0
5	<i>RUScal</i> : Software for the analysis of resonant ultrasound spectroscopy measurements. Journal of the Acoustical Society of America, 2022, 151, 3547-3563.	0.5	6
6	CHES: The future direct geometry spectrometer at the second target station. Review of Scientific Instruments, 2022, 93, .	0.6	9
7	Oxidation and associated pore structure modification during experimental alteration of granite. Geochimica Et Cosmochimica Acta, 2021, 292, 532-556.	1.6	15
8	Resonant ultrasound spectroscopy probe for in-situ neutron scattering measurements. Proceedings of Meetings on Acoustics, 2021, , .	0.3	3
9	A Catastrophic Charge Density Wave in BaFe <sub>2</sub> Al <sub>9</sub> . Chemistry of Materials, 2021, 33, 2855-2863.	3.2	9
10	Deconvoluting the Magnetic Structure of the Commensurately Modulated Quinary Zintl Phase Eu <sub>11</sub> X <sub>1</sub> Sr <sub>1</sub> Zn <sub>4</sub> Sn <sub>2</sub> As <sub>12</sub> . Inorganic Chemistry, 2021, 60, 5711-5723.	1.9	6
11	Uncovering design principles for amorphous-like heat conduction using two-channel lattice dynamics. Materials Today Physics, 2021, 18, 100344.	2.9	42
12	Thermal Evolution of Internal Strain in Doped PbTe. Chemistry of Materials, 2021, 33, 4765-4772.	3.2	11
13	Evaluation of electrochemical performance and redox activity of Fe in Ti doped layered P2-Na <sub>0.67</sub> Mn <sub>0.5</sub> Fe <sub>0.5</sub> O <sub>2</sub> cathode for sodium ion batteries. Electrochimica Acta, 2021, 380, 138156.	2.6	20
14	Quasiparticle twist dynamics in non-symmorphic materials. Materials Today Physics, 2021, 21, 100548.	2.9	8
15	Simulating spin waves in entropy stabilized oxides. Physical Review Research, 2021, 3, .	1.3	1
16	Understanding and design of spin-driven thermoelectrics. Cell Reports Physical Science, 2021, 2, 100614.	2.8	12
17	Deep Bayesian local crystallography. Npj Computational Materials, 2021, 7, .	3.5	15
18	Self-Assembled Room Temperature Multiferroic BiFeO <sub>3</sub> -LiFe <sub>5</sub> O <sub>8</sub> Nanocomposites. Advanced Functional Materials, 2020, 30, 1906849.	7.8	14

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19	Lithium Iron Aluminum Nickelate, $\text{LiNi}_x\text{Fe}_y\text{Al}_z\text{O}_2$ "New Sustainable Cathodes for Next-Generation Cobalt-Free Li-Ion Batteries. <i>Advanced Materials</i> , 2020, 32, e2002960.	11.1	77
20	High frequency atomic tunneling yields ultralow and glass-like thermal conductivity in chalcogenide single crystals. <i>Nature Communications</i> , 2020, 11, 6039.	5.8	36
21	Structure and electronic properties of $\text{CaAl}_{12}\text{FeO}_{19}$ hibonites. <i>Journal of Solid State Chemistry</i> , 2020, 291, 121650.	1.4	6
22	The $\text{Fe}^{4+/3+}$ Redox Mechanism in $\text{NaFeO}_2$ : A Simultaneous Operando Nuclear Resonance and X-Ray Scattering Study. <i>Batteries and Supercaps</i> , 2020, 3, 1341-1349.	2.4	10
23	Giant isotope effect on phonon dispersion and thermal conductivity in methylammonium lead iodide. <i>Science Advances</i> , 2020, 6, eaaz1842.	4.7	17
24	Phonon Spectroscopy in Antimony and Tellurium Oxides. <i>Journal of Physical Chemistry A</i> , 2020, 124, 7869-7880.	1.1	6
25	$\text{LiNi}_x\text{Fe}_y\text{Al}_z\text{O}_2$ , a new cobalt-free layered cathode material for advanced Li-ion batteries. <i>Journal of Power Sources</i> , 2020, 471, 228389.	4.0	52
26	Lattice Dynamics of $\text{Sb}_2\text{Se}_3$ from Inelastic Neutron and X-Ray Scattering. <i>Physica Status Solidi (B): Basic Research</i> , 2020, 257, 2000063.	0.7	6
27	Spin dynamics and a nearly continuous magnetic phase transition in an entropy-stabilized oxide antiferromagnet. <i>Physical Review Materials</i> , 2020, 4, .	0.9	11
28	Temperature-dependent lattice dynamics in iridium. <i>Physical Review Materials</i> , 2020, 4, .	0.9	8
29	Paramagnon drag in high thermoelectric figure of merit Li-doped $\text{MnTe}$ . <i>Science Advances</i> , 2019, 5, eaat9461.	4.7	90
30	Operando X-ray absorption spectroscopy applied to battery materials at ICGM: The challenging case of $\text{BiSb}$ 's sodiation. <i>Energy Storage Materials</i> , 2019, 21, 1-13.	9.5	12
31	Long-Range Antiferromagnetic Order in a Rocksalt High Entropy Oxide. <i>Chemistry of Materials</i> , 2019, 31, 3705-3711.	3.2	112
32	Intrinsic anharmonic localization in thermoelectric $\text{PbSe}$ . <i>Nature Communications</i> , 2019, 10, 1928.	5.8	51
33	Thermoelectric Figure-of-Merit of Fully Dense Single-Crystalline $\text{SnSe}$ . <i>ACS Omega</i> , 2019, 4, 5442-5450.	1.6	40
34	Ferromagnetism Near Room Temperature in the Cleavable van der Waals Crystal $\text{Fe}_5\text{GeTe}_2$ . <i>ACS Nano</i> , 2019, 13, 4436-4442.	7.3	266
35	Structural, Chemical, Electrical, and Thermal Properties of $n$ -Type $\text{NbFeSb}$ . <i>Inorganic Chemistry</i> , 2019, 58, 1826-1833.	1.9	8
36	The Electrochemical Sodiation of $\text{FeSb}_2$ : New Insights from Operando $^{57}\text{Fe}$ Synchrotron Mössbauer and X-Ray Absorption Spectroscopy. <i>Batteries and Supercaps</i> , 2019, 2, 66-73.	2.4	18

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37	Phonons, magnons, and lattice thermal transport in antiferromagnetic semiconductor MnTe. <i>Physical Review Materials</i> , 2019, 3, .	0.9	25
38	Lattice dynamics and elasticity in thermoelectric $\text{Mg}_{0.2}\text{Mn}_{0.8}\text{Sb}$ . <i>Physical Review Materials</i> , 2019, 3, .	0.9	25
39	Thermal acoustic excitations with atomic-scale wavelengths in amorphous silicon. <i>Physical Review Materials</i> , 2019, 3, .	0.9	18
40	High-pressure nuclear inelastic scattering with backscattering monochromatization. <i>Journal of Synchrotron Radiation</i> , 2019, 26, 1592-1599.	1.0	4
41	Spray-drying as a tool to disperse conductive carbon inside $\text{Na}_2\text{FePO}_4\text{F}$ particles by addition of carbon black or carbon nanotubes to the precursor solution. <i>Journal of Solid State Electrochemistry</i> , 2018, 22, 103-112.	1.2	24
42	Crystal Structure and Coordination of B-Cations in the Ruddlesden-Popper Phases $\text{Sr}_{3-x}\text{Pr}_x(\text{Fe}_{1.25}\text{Ni}_{0.75})\text{O}_{7-y}$ ( $0 \leq x \leq 0.4$ ). <i>Inorganics</i> , 2018, 6, 89.	1.2	3
43	The Electrochemical Sodiation of Sb Investigated by Operando X-ray Absorption and $^{121}\text{Sb}$ Mössbauer Spectroscopy: What Does One Really Learn?. <i>Batteries</i> , 2018, 4, 25.	2.1	20
44	Tuning color through sulfur and fluorine substitutions in the defect tin(II, IV) niobate pyrochlores. <i>Solid State Sciences</i> , 2018, 81, 32-42.	1.5	11
45	Supersonic propagation of lattice energy by phasons in fersnoite. <i>Nature Communications</i> , 2018, 9, 1823.	5.8	14
46	Pressure-mediated structural transitions in bulk $\text{EuTiO}_3$ . <i>Physical Review B</i> , 2018, 98, .	1.1	11
47	Rocking curve imaging of high quality sapphire crystals in backscattering geometry. <i>Journal of Applied Physics</i> , 2017, 121, .	1.1	11
48	A Mössbauer spectral study of degradation in $\text{La}_{0.58}\text{Sr}_{0.4}\text{Fe}_{0.5}\text{Co}_{0.5}\text{O}_{3-\delta}$ after long-term operation in solid oxide electrolysis cells. <i>Solid State Ionics</i> , 2017, 312, 38-43.	1.3	19
49	One-step hydrothermal synthesis and electrochemical performance of sodium-manganese-iron phosphate as cathode material for Li-ion batteries. <i>Journal of Solid State Chemistry</i> , 2017, 253, 389-397.	1.4	14
50	Study of the photocatalytic activity of $\text{Fe}^{3+}$ , $\text{Cr}^{3+}$ , $\text{La}^{3+}$ and $\text{Eu}^{3+}$ single-doped and co-doped $\text{TiO}_2$ catalysts produced by aqueous sol-gel processing. <i>Journal of Alloys and Compounds</i> , 2017, 691, 726-738.	2.8	52
51	Spin disorder in maghemite nanoparticles investigated using polarized neutrons and nuclear resonant scattering. <i>Journal of Physics: Conference Series</i> , 2016, 711, 012002.	0.3	15
52	Single-crystal sapphire microstructure for high-resolution synchrotron X-ray monochromators. <i>Crystal Research and Technology</i> , 2016, 51, 290-298.	0.6	9
53	Ba-filled $\text{NiSbSn}$ based skutterudites with anomalously high lattice thermal conductivity. <i>Dalton Transactions</i> , 2016, 45, 11071-11100.	1.6	13
54	Transition-Metal Carbodiimides as Molecular Negative Electrode Materials for Lithium- and Sodium-Ion Batteries with Excellent Cycling Properties. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 5090-5095.	7.2	86

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55	Äœbergangsmetalcarbodiimide als molekulare negative Elektrodenmaterialien für Li- und Na-Ionenbatterien mit hervorragendem Zyklisierungsverhalten. <i>Angewandte Chemie</i> , 2016, 128, 5174-5179.	1.6	11
56	Quadrupole splitting and Eu partial lattice dynamics in europium orthophosphate EuPO 4. <i>Hyperfine Interactions</i> , 2016, 237, 1.	0.2	2
57	Electronegative guests in CoSb <sub>3</sub> . <i>Energy and Environmental Science</i> , 2016, 9, 2090-2098.	15.6	93
58	Calcium-Iron Oxide as Energy Storage Medium in Rechargeable Oxide Batteries. <i>Journal of the American Ceramic Society</i> , 2016, 99, 4083-4092.	1.9	13
59	Lattice dynamics in elemental modulated Sb <sub>2</sub> Te <sub>3</sub> films. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016, 213, 694-698.	0.8	1
60	Lattice dynamics and thermoelectric properties of nanocrystalline silicon-germanium alloys. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016, 213, 515-523.	0.8	8
61	Neutron diffraction and thermoelectric properties of indium filled In <sub>x</sub> Co <sub>4</sub> Sb <sub>12</sub> (x = 0.05, 0.2) and indium cerium filled Ce <sub>0.05</sub> In <sub>0.1</sub> Co <sub>4</sub> Sb <sub>12</sub> skutterudites. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016, 213, 766-773.	0.8	8
62	From thermoelectric bulk to nanomaterials: Current progress for Bi <sub>2</sub> Te <sub>3</sub> and CoSb <sub>3</sub> . <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016, 213, 739-749.	0.8	18
63	A chemists view: Metal oxides with adaptive structures for thermoelectric applications. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016, 213, 808-823.	0.8	54
64	Magnetic interactions in NiO at ultrahigh pressure. <i>Physical Review B</i> , 2016, 93, .	1.1	15
65	Tuning the structure and habit of iron oxide mesocrystals. <i>Nanoscale</i> , 2016, 8, 15571-15580.	2.8	29
66	Elasticity and magnetocaloric effect in $MnFe_{1-x}Mn_x$ . <i>Physical Review B</i> , 2016, 93, .		
67	Europium mixed-valence, long-range magnetic order, and dynamic magnetic response in $EuCu_{1-x}Mn_x$ . <i>Physical Review B</i> , 2016, 94, .		
68	The sapphire backscattering monochromator at the Dynamics beamline P01 of PETRA III. <i>Hyperfine Interactions</i> , 2016, 237, 1.	0.2	7
69	Structure Characterization and Properties of K-Containing Copper Hexacyanoferrate. <i>Inorganic Chemistry</i> , 2016, 55, 5924-5934.	1.9	95
70	Confined lattice dynamics of single and quadruple SnSe bilayers in [(SnSe) <sub>1.04</sub> ] <sub>m</sub> [MoSe <sub>2</sub> ] <sub>n</sub> ferecrystals. <i>Nanoscale</i> , 2016, 8, 856-861.	2.8	2
71	Na <sub>2</sub> FePO <sub>4</sub> F/multi-walled carbon nanotubes for lithium-ion batteries: Operando Mössbauer study of spray-dried composites. <i>Solar Energy Materials and Solar Cells</i> , 2016, 148, 67-72.	3.0	27
72	Material properties of perovskites in the quasi-ternary system LaFeO <sub>3</sub> -LaCoO <sub>3</sub> -LaNiO <sub>3</sub> . <i>Journal of Solid State Chemistry</i> , 2016, 237, 183-191.	1.4	18

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73	Fe <sub>3+</sub> /Iron Oxide/SiO <sub>2</sub> Xerogel Catalysts for p-nitrophenol Degradation by Photo-Fenton Effects: Influence of Thermal Treatment on Catalysts Texture. <i>Materials Today: Proceedings</i> , 2016, 3, 464-469.	0.9	7
74	Toward understanding the lithiation/delithiation process in Fe <sub>0.5</sub> TiOPO <sub>4</sub> /C electrode material for lithium-ion batteries. <i>Solar Energy Materials and Solar Cells</i> , 2016, 148, 11-19.	3.0	12
75	Spin glass in semiconducting $KFe_{1.05}Ag_{0.88}Te_2$ single crystals. <i>Physical Review B</i> , 2015, 91, .		
76	Nuclear resonant scattering of synchrotron radiation by Os <sup>187</sup> . <i>Physical Review B</i> , 2015, 91, .	1.1	6
77	Anisotropic lattice dynamics and intermediate-phase magnetism in delafossite $CuFeO_2$ . <i>Physical Review B</i> , 2015, 92, .		
78	Thermoelectric properties of the unfilled skutterudite $FeSb_3$ : first principles and Seebeck local probes. <i>Physical Review B</i> , 2015, 92, .		
79	A general and Eu specific perspective on lattice dynamics in pyrochlore and defect fluorite (EuNd)ZrO <sub>2</sub> . <i>Physica Status Solidi (B): Basic Research</i> , 2015, 252, 1940-1645.	0.7	1
80	A density-functional study on the electronic and vibrational properties of layered antimony telluride. <i>Journal of Physics Condensed Matter</i> , 2015, 27, 085402.	0.7	18
81	Novel Complex Stacking of Fully-Ordered Transition Metal Layers in $Li_4FeSbO_6$ . <i>Materials. Chemistry of Materials</i> , 2015, 27, 1699-1708.	3.2	40
82	Quenching rattling modes in skutterudites with pressure. <i>Physical Review B</i> , 2015, 91, .	1.1	15
83	Reversible Li-Intercalation through Oxygen Reactivity in Li-Rich Li-Fe-Te Oxide Materials. <i>Journal of the Electrochemical Society</i> , 2015, 162, A1341-A1351.	1.3	47
84	Crystal structure and high-temperature properties of the Ruddlesden-Popper phases $Sr_3Y(Fe_{1.25}Ni_{0.75})O_7$ ( $0 \leq x \leq 0.75$ ). <i>Journal of Solid State Chemistry</i> , 2015, 227, 45-54.	1.4	13
85	On the True Indium Content of In-Filled Skutterudites. <i>Inorganic Chemistry</i> , 2015, 54, 7818-7827.	1.9	40
86	$Eu_9Cd_4CM_{2+} \hat{A} \hat{C} \hat{Y} \hat{A} \hat{J} \hat{Sb}_9$ : Ca <sub>9</sub> Mn <sub>4</sub> Bi <sub>9</sub> -Type Structure Stuffed with Coinage Metals (Cu, Ag, Tl) <i>Inorganic Chemistry</i> , 2015, 54, 850-859.	1.9	18
87	Hyperfine interactions in and lattice parameters of pyrochlore and defect fluorite $Eu_9Cd_4CM_{2+} \hat{A} \hat{C} \hat{Y} \hat{A} \hat{J} \hat{Sb}_9$ . <i>Inorganic Chemistry</i> , 2015, 54, 850-859.	1.9	4
88	Effect of nanocrystallinity on lattice dynamics in Bi <sub>2</sub> Te <sub>3</sub> -based thermoelectrics. <i>Physica Status Solidi - Rapid Research Letters</i> , 2015, 9, 57-61.	1.2	5
89	Thermal transport in nanoscale semiconductors. <i>Semiconductor Science and Technology</i> , 2014, 29, 120301.	1.0	1
90	Nuclear probes for battery materials investigations: Mössbauer spectroscopy, nuclear scattering, and neutron scattering. , 2014, , .		0

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91	Enhanced Debye level in nano , , and NiSb: Nuclear inelastic spectroscopy on <sup>121</sup> Sb. Physica Status Solidi (B): Basic Research, 2014, 251, 919-923.	0.7	3
92	Lattice dynamics in intermetallic Mg <sub>2</sub> Ge and Mg <sub>2</sub> Si. Journal of Physics Condensed Matter, 2014, 26, 485401.	0.7	15
93	Nuclear Forward Scattering of Synchrotron Radiation by $\text{Ru}$ . Physical Review Letters, 2014, 113, 147601.	2.9	8
94	Evolution of phase segregation and eutectic structures in AgPb <sub>18</sub> SbTe <sub>20</sub> . Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 1276-1281.	0.8	4
95	<sup>121</sup> Sb and <sup>125</sup> Te nuclear inelastic scattering in Sb <sub>2</sub> Te <sub>3</sub> under high pressure. Semiconductor Science and Technology, 2014, 29, 124001.	1.0	5
96	Quadrupole splitting and isomer shifts in Te oxides investigated using nuclear forward scattering. Hyperfine Interactions, 2014, 226, 713-719.	0.2	5
97	Role of Disorder in the Thermodynamics and Atomic Dynamics of Glasses. Physical Review Letters, 2014, 112, 025502.	2.9	125
98	Spin excitations in cubic maghemite nanoparticles studied by time-of-flight neutron spectroscopy. Physical Review B, 2014, 89, .	1.1	9
99	Nanocrystalline silicon: lattice dynamics and enhanced thermoelectric properties. Physical Chemistry Chemical Physics, 2014, 16, 25701-25709.	1.3	49
100	Magnetism and lattice dynamics of FeNCN compared to FeO. New Journal of Chemistry, 2014, 38, 4670-4677.	1.4	14
101	Interpenetrated (8,3)-c and (10,3)-b Metal-Organic Frameworks Based on {Fe <sup>III</sup> }_3 and {Fe <sup>III</sup> }_2Co <sup>II</sup> Pivalate Spin Clusters. Crystal Growth and Design, 2014, 14, 4721-4728.	1.4	19
102	Highly dispersed iron xerogel catalysts for p-nitrophenol degradation by photo-Fenton effects. Microporous and Mesoporous Materials, 2014, 197, 164-173.	2.2	36
103	Coexistence of long range magnetic order and intervalent state of Eu in EuCu <sub>2</sub> (Si <sub>x</sub> Ge <sub>1-x</sub> ) <sub>2</sub> : Evidence from neutron diffraction and spectroscopic studies. JETP Letters, 2014, 99, 164-168.	0.4	10
104	Spray-drying synthesis of Na <sub>2</sub> FePO <sub>4</sub> F/carbon powders for lithium-ion batteries. Materials Letters, 2014, 130, 263-266.	1.3	28
105	Lattice dynamics and structure of GeTe, SnTe and PbTe. Physica Status Solidi (B): Basic Research, 2013, 250, 1300-1307.	0.7	145
106	Structural diversity in iron oxide nanoparticle assemblies as directed by particle morphology and orientation. Nanoscale, 2013, 5, 3969.	2.8	52
107	Lattice instabilities in bulk EuTiO <sub>3</sub> . Physical Review B, 2013, 88, .	1.1	31
108	Phonon spectroscopy in a Bi <sub>2</sub> Te <sub>3</sub> nanowire array. Nanoscale, 2013, 5, 10629.	2.8	15

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109	Comparison of functionalized carbon nanofibers and multi-walled carbon nanotubes as supports for Fe <sup>2+</sup> Co nanoparticles. Journal of Materials Chemistry A, 2013, 1, 2050-2063.	5.2	26
110	Effects of impurities on the lattice dynamics of nanocrystalline silicon for thermoelectric application. Journal of Materials Science, 2013, 48, 2836-2845.	1.7	23
111	2D to 3D crossover of the magnetic properties in ordered arrays of iron oxide nanocrystals. Nanoscale, 2013, 5, 953-960.	2.8	43
112	<sup>129</sup> Xe nuclear resonance scattering on solid Xe and <sup>129</sup> Xe clathrate hydrate. Europhysics Letters, 2013, 103, 36001.	0.7	14
113	Nuclear forward scattering by the 68.7 keV state of <sup>73</sup> Ge in CaGeO <sub>3</sub> and GeO <sub>2</sub> . Europhysics Letters, 2013, 104, 17006.	0.7	6
114	Effect of pressure, temperature, fluorine doping, and rare earth elements on the phonon density of states of $L$ FeAsO studied by nuclear inelastic scattering. Physical Review B, 2013, 87, .	1.1	9
115	Quantitative spatial magnetization distribution in iron oxide nanocubes and nanospheres by polarized small-angle neutron scattering. New Journal of Physics, 2012, 14, 013025.	1.2	100
116	Correlation between microstructure and thermoelectric properties of AgPb <sub>18</sub> SbTe <sub>20</sub> (LAST-18)., 2012, , <a href="#">Lattice dynamics in Bi<sub>2</sub>Te<sub>3</sub> and Sb<sub>2</sub>Te<sub>3</sub> thin films</a>		4
117	Microstructure analyses and thermoelectric properties of $Bi_{2-x}Sb_xTe_3$ and $Sb_2Te_3$ thin films. Journal of Alloys and Compounds, 2012, 521, 163-173.	1.1	114
118	Room-temperature MBE deposition, thermoelectric properties, and advanced structural characterization of binary Bi <sub>2</sub> Te <sub>3</sub> and Sb <sub>2</sub> Te <sub>3</sub> thin films. Journal of Alloys and Compounds, 2012, 521, 163-173.	1.4	19
119	Paramagnetic nanoparticles as potential MRI contrast agents: characterization, NMR relaxation, simulations and theory. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2012, 25, 467-478.	1.1	42
120	Sb <sub>2</sub> Te <sub>3</sub> and Bi <sub>2</sub> Te <sub>3</sub> Thin Films Grown by Room-Temperature MBE. Journal of Electronic Materials, 2012, 41, 1493-1497.	1.0	27
121	Nanostructure, Excitations, and Thermoelectric Properties of Bi <sub>2</sub> Te <sub>3</sub> -Based Nanomaterials. Journal of Electronic Materials, 2012, 41, 1792-1798.	1.0	19
122	Electronic Properties as a Function of Ag/Sb Ratio in Ag <sub>1-y</sub> Pb <sub>18</sub> Sb <sub>1+z</sub> Te <sub>20</sub> Compounds. Journal of Electronic Materials, 2012, 41, 2065-2072.	1.0	8
123	Lattice dynamics in the FeSb <sub>3</sub> skutterudite. Physical Review B, 2011, 84, .	1.1	39
124	Sb <sub>2</sub> Te <sub>3</sub> and Bi <sub>2</sub> Te <sub>3</sub> Thin Films Grown by Molecular Beam Epitaxy at Room Temperature. Materials Research Society Symposia Proceedings, 2011, 1329, 1.	0.1	2
125	Thermodynamic, thermoelectric, and magnetic properties of FeSb <sub>2</sub> : A combined first-principles and experimental study. Physical Review B, 2011, 84, .	1.1	30



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127	Shape Induced Symmetry in Self-Assembled Mesocrystals of Iron Oxide Nanocubes. Nano Letters, 2011, 11, 1651-1656.	4.5	147
128	Lattice dynamics and anomalous softening in the YbFe $\text{Sb}_4$ skutterudite. Physical Review B, 2011, 84, .	1.1	10
129	Wet Chemical Synthesis and a Combined X-ray and Mössbauer Study of the Formation of FeSb $\text{S}_2$ Nanoparticles. Inorganic Chemistry, 2011, 50, 11807-11812.	1.9	8
130	Fading of modern Prussian blue pigments in linseed oil medium. Journal of Analytical Atomic Spectrometry, 2011, 26, 930.	1.6	43
131	Local ordering and magnetism in Ga $\text{O}_9\text{Fe}_3\text{In}$ . Journal of Solid State Chemistry, 2011, 184, 2315-2321.	1.4	22
132	Milli-electronvolt monochromatization of hard X-rays with a sapphire backscattering monochromator. Journal of Synchrotron Radiation, 2011, 18, 802-810.	1.0	52
133	Properties of spark plasma sintered nanostructured Zn $\text{Sb}_{1+x}$ . Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1913-1919.	0.8	6
134	Phase Change Materials: Vibrational Softening upon Crystallization and Its Impact on Thermal Properties. Advanced Functional Materials, 2011, 21, 2232-2239.	7.8	120
135	Lattice dynamics in the thermoelectric Zintl compound Yb $\text{MnSb}_{14}$ . Physical Review B, 2011, 84, .	1.1	30
136	Spin correlations in the extended Kagome system YBaCo $\text{Fe}_3\text{O}_7$ . Physical Review B, 2011, 84, .	1.1	18
137	Microstructures and nanostructures in long-term annealed AgPb $\text{SbTe}_{20}$ (LAST-18) compounds and their influence on the thermoelectric properties. Journal of Materials Research, 2011, 26, 1800-1812.	1.2	18
138	Thermal and elastic properties of Ge-Sb-Te based phase-change materials. Materials Research Society Symposia Proceedings, 2011, 1338, 301.	0.1	2
139	Nuclear forward and inelastic spectroscopy on $^{125}\text{Te}$ and $^{125}\text{Te}_3$ . Europhysics Letters, 2010, 91, 62001.	0.7	19
140	NMR relaxation and magnetic properties of superparamagnetic nanoworms. Contrast Media and Molecular Imaging, 2010, 5, 318-322.	0.4	24
141	PNSXM 2009: Workshop on Polarized Neutrons and Synchrotron X-rays for Magnetism. Synchrotron Radiation News, 2010, 23, 16-17.	0.2	0
142	Nanocrystalline silicon compacted by spark-plasma sintering: Microstructure and thermoelectric properties. Materials Research Society Symposia Proceedings, 2010, 1267, 1.	0.1	6
143	A study of low-energy guest phonon modes in clathrate-II Na $\text{Si}_{136}$ ( $x = 3, 23, \text{ and } 24$ ). Journal of Physics Condensed Matter, 2010, 22, 355401.	0.7	15
144	Electronic Control of Spin Coupling in Keplera $\text{Fe}$ -Type Polyoxomolybdates. Angewandte Chemie - International Edition, 2009, 48, 9080-9083.	7.2	50

#	ARTICLE	IF	CITATIONS
145	Influence of the rare-earth element on the effects of the structural and magnetic phase transitions in CeFeAsO, PrFeAsO and NdFeAsO. <i>New Journal of Physics</i> , 2009, 11, 025011.	1.2	109
146	Phase transitions in LaFeAsO: Structural, magnetic, elastic, and transport properties, heat capacity and Mössbauer spectra. <i>Physical Review B</i> , 2008, 78, .	1.1	284
147	Syntheses, Structure, and a Mössbauer and Magnetic Study of Ba <sub>4</sub> Fe <sub>2</sub> I <sub>5</sub> S <sub>4</sub> . <i>Inorganic Chemistry</i> , 2008, 47, 94-100.	1.9	11
148	Physico-chemical and NMR relaxometric characterization of gadolinium hydroxide and dysprosium oxide nanoparticles. <i>Nanotechnology</i> , 2008, 19, 475102.	1.3	42
149	A structural, magnetic and Mössbauer spectral study of the magnetocaloric Mn <sub>1.1</sub> Fe <sub>0.9</sub> P <sub>1-x</sub> Ge <sub>x</sub> compounds. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 475206.	0.7	23
150	Charge Order, Dynamics, and Magnetostructural Transition in Multiferroic $\text{LuFe}_2\text{O}_4$ . <i>Physical Review Letters</i> , 2008, 101, 227602.	2.9	141
151	Charge Order in $\text{LuFe}_2\text{O}_4$ : Antiferroelectric Ground State and Coupling to Magnetism. <i>Physical Review Letters</i> , 2008, 101, 227601.	2.9	120
152	Colossal positive magnetoresistance in a doped nearly magnetic semiconductor. <i>Physical Review B</i> , 2008, 77, .	1.1	24
153	Weak ferromagnetism in $\text{Fe}_{1-x}\text{M}_x$ . <i>Physical Review B</i> , 2007, 76, .		
154	Antimony vibrations in skutterudites probed by Sb121 nuclear inelastic scattering. <i>Physical Review B</i> , 2007, 76, .	1.1	37
155	Dumbbell Rattling in Thermoelectric Zinc Antimony. <i>Physical Review Letters</i> , 2007, 99, 125501.	2.9	96
156	Mössbauer spectral and muon spin relaxation study of the magnetodynamics of monodispersed $\text{Fe}_{57}$ . <i>Physical Review Letters</i> , 2007, 99, 086403.	1.1	40
157	Studying fatigue behavior and Poisson's ratio of bulk-metallic glasses. <i>Intermetallics</i> , 2007, 15, 663-667.	1.8	26
158	A Mössbauer spectral study of the GdCo <sub>4-x</sub> Fe <sub>x</sub> B compounds. <i>Journal of Applied Physics</i> , 2007, 101, 023917.	1.1	9
159	Charge Order Superstructure with Integer Iron Valence in $\text{Fe}_2\text{O}_3$ . <i>Physical Review Letters</i> , 2007, 99, 086403.	2.9	30
160	Incommensurate Charge Order Phase in $\text{Fe}_2\text{O}_3$ to Geometrical Frustration. <i>Physical Review Letters</i> , 2007, 99, 256402.	2.9	30
161	Antimony-121 Mössbauer Spectral Study of the Eu <sub>14</sub> MnSb <sub>11</sub> and Yb <sub>14</sub> MnSb <sub>11</sub> Zintl Compounds. <i>Inorganic Chemistry</i> , 2007, 46, 10736-10740.	1.9	11
162	Antimony-121 Mössbauer Spectral Study of $\text{Zn}_4\text{Sb}_3$ . <i>Inorganic Chemistry</i> , 2007, 46, 767-770.	1.9	8

#	ARTICLE	IF	CITATIONS
163	Effect of disorder on the thermal transport and elastic properties in thermoelectric Zn <sub>4</sub> Sb <sub>3</sub> . Physical Review B, 2006, 74, .	1.1	66
164	A structural, infrared, and Mossbauer spectral study of rosemaryite, NaMnFe <sub>3</sub> +Al(PO <sub>4</sub> ) <sub>3</sub> . European Journal of Mineralogy, 2006, 18, 775-785.	0.4	12
165	A Mössbauer spectral study of the YCo <sub>4</sub> ~xFe <sub>x</sub> B compounds. Journal of Physics Condensed Matter, 2006, 18, 10765-10773.	0.7	8
166	Magnetic and electronic properties of Eu <sub>4</sub> Sr <sub>4</sub> Ga <sub>16</sub> Ge <sub>30</sub> . Physical Review B, 2006, 73, .	1.1	24
167	Direct Experimental Evidence for Atomic Tunneling of Europium in Crystalline Eu <sub>8</sub> Ga <sub>16</sub> Ge <sub>30</sub> . Physical Review Letters, 2006, 97, 017401.	2.9	70
168	A Mössbauer spectral study of some iron nitride-based nanocomposites prepared by ball milling. Journal of Magnetism and Magnetic Materials, 2005, 292, 215-226.	1.0	1
169	A Europium-151 Moessbauer Spectral Study of Eu <sub>14</sub> MnP <sub>11</sub> , Eu <sub>14</sub> MnAs <sub>11</sub> , and Eu <sub>14</sub> MnSb <sub>11</sub> .. ChemInform, 2005, 36, no.	0.1	1
170	Neutron and nuclear inelastic scattering study of the Einstein oscillators in Ba-, Sr-, and Eu-filled germanium clathrates. Physical Review B, 2005, 72, .	1.1	63
171	Einstein oscillators that impede thermal transport. American Journal of Physics, 2005, 73, 110-118.	0.3	48
172	The Dynamics of the Guests in Filled Germanium Clathrates. Materials Research Society Symposia Proceedings, 2005, 886, 1.	0.1	10
173	Crystal chemistry of the hydrothermally synthesized Na <sub>2</sub> (Mn <sub>1-x</sub> Fe <sub>x</sub> ) <sub>2</sub> Fe <sub>3</sub> (PO <sub>4</sub> ) <sub>3</sub> alluaudite-type solid solution. American Mineralogist, 2005, 90, 653-662.	0.9	43
174	Strongly decoupled europium and iron vibrational modes in filled skutterudites. Physical Review B, 2005, 71, .	1.1	84
175	Complex Magnetic Ordering in Eu <sub>3</sub> InP <sub>3</sub> : A New Rare Earth Metal Zintl Compound. Inorganic Chemistry, 2005, 44, 2189-2197.	1.9	36
176	Mössbauer spectral study of the magnetocaloric FeMnP <sub>1-x</sub> As <sub>x</sub> compounds. Physical Review B, 2004, 70, .	1.1	35
177	Determination of the Antimony Valence State in Eu <sub>10</sub> Mn <sub>6</sub> Sb <sub>13</sub> .. ChemInform, 2004, 35, no.	0.1	0
178	Determination of the Antimony Valence State in Eu <sub>10</sub> Mn <sub>6</sub> Sb <sub>13</sub> . Inorganic Chemistry, 2004, 43, 1229-1234.	1.9	10
179	A Europium-151 Mössbauer Spectral Study of Eu <sub>14</sub> MnP <sub>11</sub> , Eu <sub>14</sub> MnAs <sub>11</sub> , and Eu <sub>14</sub> MnSb <sub>11</sub> . Inorganic Chemistry, 2004, 43, 7005-7013.	1.9	13
180	Magnetic susceptibility applied as an age-“depth”-climate relative dating technique using sediments from Scladina Cave, a Late Pleistocene cave site in Belgium. Journal of Archaeological Science, 2004, 31, 283-293.	1.2	43

#	ARTICLE	IF	CITATIONS
181	Magnetic properties of iron nitride-alumina nanocomposite materials prepared by high-energy ball milling. <i>European Physical Journal D</i> , 2003, 24, 93-96.	0.6	3
182	Einstein Oscillators in Thallium Filled Antimony Skutterudites. <i>Physical Review Letters</i> , 2003, 90, 135505.	2.9	179
183	$\text{Eu}_{10}\text{Mn}_6\text{Sb}_{13}$ : A New Ternary Rare-Earth Transition-Metal Zintl Phase. <i>Inorganic Chemistry</i> , 2003, 42, 4660-4667.	1.9	41
184	Magnetic and Mössbauer spectral study of $\text{ErFe}_{11}\text{Ti}$ and $\text{ErFe}_{11}\text{TiH}$ . <i>Journal of Applied Physics</i> , 2003, 93, 3414-3421.	1.1	15
185	An X-ray Rietveld, infrared, and Mössbauer spectral study of the $\text{NaMn}(\text{Fe}_{1-x}\text{In}_x)_2(\text{PO}_4)_3$ alluaudite-type solid solution. <i>American Mineralogist</i> , 2003, 88, 211-222.	0.7	32
186	A magnetic and Mössbauer spectral study of $\text{TbFe}_{11}\text{Ti}$ and $\text{TbFe}_{11}\text{TiH}$ . <i>Journal of Physics Condensed Matter</i> , 2003, 15, 7395-7409.	0.7	11
187	Electronic structure of thallium filled skutterudites studied by x-ray absorption and Mössbauer spectroscopy. <i>Journal of Applied Physics</i> , 2002, 92, 7236-7241.	1.1	12
188	Study of the Structural, Electronic, and Magnetic Properties of the Barium-Rich Iron(IV) Oxides, $\text{Ba}_2\text{FeO}_4$ and $\text{Ba}_3\text{FeO}_5$ . <i>Inorganic Chemistry</i> , 2002, 41, 2834-2838.	1.9	31
189	Mössbauer spectral evidence for next-nearest neighbor interactions within the alluaudite structure of $\text{Na}_{1-x}\text{Li}_x\text{MnFe}_2(\text{PO}_4)_3$ . <i>Solid State Sciences</i> , 2002, 4, 507-513.	1.5	19
190	Synthetic, Structural, Magnetic, and Mössbauer Spectral Study of $\{\text{Fe}[\text{HC}(3,5\text{-Me}_2\text{pz})_3]_2\}_2$ and Its Spin-State Crossover Behavior. <i>European Journal of Inorganic Chemistry</i> , 2002, 2002, 1190-1197.	1.0	53
191	Numerical simulation of a quantum particle in a box. <i>Journal of Physics A</i> , 1997, 30, 3967-3975.	1.6	33
192	High Energy X-ray and Neutron Scattering on $\text{Bi}_2\text{Te}_3$ Nanowires, Nanocomposites, and Bulk Materials. , 0, , 119-139.		0
193	Generalized Ellipsometry Measurements of Crystalline Thin Film and Bulk Tin Oxide. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 0, , 2100378.	0.8	1