Peter Franz Rogl

List of Publications by Year in descending order

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216 papers	5,420 citations	87723 38 h-index	114278 63 g-index
221 all docs	221 docs citations	221 times ranked	3507 citing authors

#	Article	IF	Citations
1	n-Type skutterudites (R,Ba,Yb)yCo4Sb12 (R=Sr, La, Mm, DD, SrMm, SrDD) approaching ZTâ‰ˆ2.0. Acta Materialia, 2014, 63, 30-43.	3.8	254
2	Mechanical properties of half-Heusler alloys. Acta Materialia, 2016, 107, 178-195.	3.8	235
3	Thermoelectric high ZT half-Heusler alloys Ti1âˆ’xâˆ’yZrxHfyNiSn (0Ââ‰ÂxÂâ‰Â1; 0Ââ‰ÂyÂâ‰Â1). Acta Materialia, 2016, 104, 210-222.	3.8	166
4	In-doped multifilled n-type skutterudites with ZT= 1.8. Acta Materialia, 2015, 95, 201-211.	3.8	146
5	Unconventional superconducting phase in the weakly correlated noncentrosymmetric<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Mo</mml:mtext></mml:mrow><mml:mn>3</mml:mn></mml:msub> Physical Review B, 2010, 82, .	1.1	121
6	Thermoelectric properties of novel skutterudites with didymium: DDy(Fe1âˆ’xCox)4Sb12 and DDy(Fe1âˆ’xNix)4Sb12. Intermetallics, 2010, 18, 57-64.	1.8	119
7	(V,Nb)-doped half Heusler alloys based on {Ti,Zr,Hf}NiSn with high ZT. Acta Materialia, 2017, 131, 336-348.	3.8	119
8	High-pressure torsion, a new processing route for thermoelectrics of high ZTs by means of severe plastic deformation. Acta Materialia, 2012, 60, 2146-2157.	3.8	117
9	A new generation of p-type didymium skutterudites with high ZT. Intermetallics, 2011, 19, 546-555.	1.8	115
10	Nanostructuring of p- and n-type skutterudites reaching figures of merit of approximately 1.3 and 1.6, respectively. Acta Materialia, 2014, 76, 434-448.	3.8	102
11	Mechanical Properties of Skutterudites. Science of Advanced Materials, 2011, 3, 517-538.	0.1	102
12	New bulk p-type skutterudites DD0.7Fe2.7Co1.3Sb12âˆ’X (X = Ge, Sn) reaching ZT > 1.3. Acta Materialia, 2015, 91, 227-238.	3.8	98
13	Multifilled nanocrystalline p-type didymium â€“ Skutterudites with ZT>1.2. Intermetallics, 2010, 18, 2435-2444.	1.8	93
14	Concepts for medium-high to high temperature thermoelectric heat-to-electricity conversion: a review of selected materials and basic considerations of module design. Translational Materials Research, 2015, 2, 025001.	1.2	93
15	Mechanical properties of filled antimonide skutterudites. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2010, 170, 26-31.	1.7	92
16	The ternary system Alâ€“Niâ€“Ti Part I: Isothermal section at 900Â°C; Experimental investigation and thermodynamic calculation. Intermetallics, 1999, 7, 1337-1345.	1.8	83
17	How nanoparticles can change the figure of merit, ZT, and mechanical properties of skutterudites. Materials Today Physics, 2017, 3, 48-69.	2.9	80
18	Thermal expansion of skutterudites. Journal of Applied Physics, 2010, 107, .	1.1	74

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19	Effect of HPT processing on the structure, thermoelectric and mechanical properties of Sr0.07Ba0.07Yb0.07Co4Sb12. Journal of Alloys and Compounds, 2012, 537, 183-189.	2.8	71
20	MmFe4Sb12- and CoSb3-based nano-skutterudites prepared by ball milling: Kinetics of formation and transport properties. Journal of Alloys and Compounds, 2009, 481, 106-115.	2.8	64
21	Bulk Nanostructured Functional Materials By Severe Plastic Deformation. Advanced Engineering Materials, 2010, 12, 692-700.	1.6	64
22	On the Half-Heusler compounds Nb1-x{Ti,Zr,Hf}xFeSb: Phase relations, thermoelectric properties at low and high temperature, and mechanical properties. Acta Materialia, 2017, 135, 263-276.	3.8	61
23	Dependence of thermoelectric behaviour on severe plastic deformation parameters: A case study on p-type skutterudite DD0.60Fe3CoSb12. Acta Materialia, 2013, 61, 6778-6789.	3.8	59
24	Computational and experimental study of phase stability, cohesive properties, magnetism and electronic structure of TiMn2. Acta Materialia, 2003, 51, 1239-1247.	3.8	55
25	Phase equilibria, formation, crystal and electronic structure of ternary compounds in Tiâ€“Niâ€“Sn and Tiâ€“Niâ€“Sb ternary systems. Journal of Solid State Chemistry, 2013, 197, 103-112.	1.4	53
26	Thermoelectric properties of p-type didymium (DD) based skutterudites DDy(Fe1â^'xNix)4Sb12 (0.13â©½xâ©½0.25.) Tj ETQq0 0 0 rg	2.8	52
27	Impact of high pressure torsion on the microstructure and physical properties of Pr0.67Fe3CoSb12, Pr0.71Fe3.5Ni0.5Sb12, and Ba0.06Co4Sb12. Journal of Alloys and Compounds, 2010, 494, 78-83.	2.8	50
28	Thermoelectric performance of mischmetal skutterudites MmyFe4â^'xCoxSb12 at elevated temperatures. Journal of Alloys and Compounds, 2010, 490, 19-25.	2.8	49
29	Peculiarities of structural disorder in Zr- and Hf-containing Heusler and half-Heusler stannides. Intermetallics, 2013, 35, 45-52.	1.8	48
30	Studies of the (Sc, Zr, Hf)-(Rh, Ir)-b systems. Journal of the Less Common Metals, 1979, 67, 41-50.	0.9	47
31	Thermoelectric properties of Fe0.2Co3.8Sb12â^'xTex skutterudites. Acta Materialia, 2013, 61, 6698-6711.	3.8	47
32	Thermoelectric properties of ternary transition metal antimonides. Journal of Alloys and Compounds, 2000, 296, 235-242.	2.8	44
33	Half-Heusler alloys: Enhancement of ZT after severe plastic deformation (ultra-low thermal) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	3.8	44
34	Thermal expansion of thermoelectric type-I-clathrates. Journal of Applied Physics, 2010, 108, .	1.1	43
35	On the constitution and thermodynamic modelling of the system Tiâ€“Niâ€“Sn. RSC Advances, 2015, 5, 92270-92291.	1.7	43
36	Lattice dynamics of skutterudites: Inelastic x-ray scattering on<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">Co</mml:mi><mml:msub><mml:mi mathvariant="normal">Sb</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2008, 77, .	1.1	41

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37	In y Co4Sb12 Skutterudite: Phase Equilibria and Crystal Structure. Journal of Electronic Materials, 2013, 42, 2940-2952.	1.0	41
38	The clathrate Ba8CuxGe46â^'xâ^'yâ–¡y: Phase equilibria and crystal structure. Journal of Solid State Chemistry, 2009, 182, 1754-1760.	1.4	39
39	Skutterudites: Thermoelectric Materials for Automotive Applications?. Journal of Electronic Materials, 2010, 39, 2074-2078.	1.0	39
40	Superconductivity and spin fluctuations in{Th,U}Pt4Ge12skutterudites. Physical Review B, 2008, 78, .	1.1	38
41	Thermoelectric properties of chalcogenide based Cu2+xZnSn1â^'xSe4. AIP Advances, 2013, 3, .	0.6	38
42	Crystal chemistry and thermoelectric properties of clathrates with rare-earth substitution. Physica B: Condensed Matter, 2003, 328, 44-48.	1.3	37
43	Phase equilibria, crystal chemistry, electronic structure and physical properties of Agâ€“Baâ€“Ge clathrates. Acta Materialia, 2011, 59, 2368-2384.	3.8	37
44	Structural and physical properties of n-type skutterudite Ca0.07Ba0.23Co3.95Ni0.05Sb12. Intermetallics, 2010, 18, 394-398.	1.8	36
45	The half Heusler system Ti_{1+x}Fe_{1.33â^'x}Sbâ€“TiCoSb with Sb/Sn substitution: phase relations, crystal structures and thermoelectric properties. Dalton Transactions, 2018, 47, 879-897.	1.6	36
46	Thermoelectric properties of Ba-Cu-Si clathrates. Physical Review B, 2012, 85, .	1.1	35
47	Formation and crystal chemistry of cubic ternary phases with filled Th6Mn23-type and AuCu3-type in the systems Tiâ€“MVIIIâ€“Al. Intermetallics, 2004, 12, 563-577.	1.8	34
48	Structural chemistry of ternary metal borides. Journal of the Less Common Metals, 1978, 61, 39-45.	0.9	32
49	Structure and Physical Properties of Clathrate I Systems Ba₈Pd_xSi_{46-x}and Ba₈Pt_xSi_{46-x}. Journal of the Physical Society of Japan, 2008, 77, 54-60.	0.7	32
50	Ba-Cu-Si Clathrates: Phase Equilibria and Crystal Chemistry. Journal of Electronic Materials, 2010, 39, 1634-1639.	1.0	29
51	Structure and thermoelectric properties of Ba<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>8</mml:mn></mml:msub></mml:math>Cu<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>5</mml:mn></mml:msub></mml:math>Si<mml:math	1.1	29
52	Absence of time-reversal symmetry breaking in the noncentrosymmetric superconductor<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">Mo</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">Al</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">C</mml:mi></mml:math>. Physical Review B, 2014, 90, .	1.1	29
53	Changes in microstructure and physical properties of skutterudites after severe plastic deformation. Physical Chemistry Chemical Physics, 2015, 17, 3715-3722.	1.3	29
54	Magnetism and crystal chemistry in REFe12â^'xGax(RE=Y,Ce,Pr,Nd,Sm,Gd,Tb,Dy,Ho,Er,Tm,Yb,Lu and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.1	27

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55	Crystal Structure of W1â^'x B3 and Phase Equilibria in the Boron-Rich Part of the Systems Mo-Rh-B and W-{Ru,Os,Rh,Ir,Ni,Pd,Pt}-B. Journal of Phase Equilibria and Diffusion, 2014, 35, 384-395.	0.5	27
56	Direct SPD-processing to achieve high-ZT skutterudites. Acta Materialia, 2018, 159, 352-363.	3.8	27
57	Suppression of vacancies boosts thermoelectric performance in type-I clathrates. Journal of Materials Chemistry A, 2018, 6, 1727-1735.	5.2	26
58	Ternary metal boron carbides. International Journal of Refractory Metals and Hard Materials, 1999, 17, 27-32.	1.7	25
59	Critical assessment and thermodynamic calculation of the ternary system C-Hf-Zr (Carbon-Zirconium-Hafnium). Journal of Phase Equilibria and Diffusion, 2002, 23, 218-235.	0.3	25
60	Constitution of the ternary system Al-Ru-Ti (Aluminum-Ruthenium-Titanium). Journal of Phase Equilibria and Diffusion, 2003, 24, 511-527.	0.3	25
61	Peculiarities of thermoelectric half-Heusler phase formation in Gd-Ni-Sb and Lu-Ni-Sb ternary systems. Journal of Solid State Chemistry, 2016, 239, 145-152.	1.4	25
62	Existence and Crystal Chemistry of Borides. Inorganic Reactions and Methods, 0, , 85-98.	0.0	25
63	The ternary system Auâ€“Baâ€“Si: Clathrate solution, electronic structure, physical properties, phase equilibria and crystal structures. Acta Materialia, 2012, 60, 2324-2336.	3.8	24
64	Thermoelectric properties of PbTe with encapsulated bismuth secondary phase. Journal of Applied Physics, 2013, 113, .	1.1	24
65	Effect of Fe alloying on the thermoelectric performance of Cu2Te. Journal of Alloys and Compounds, 2020, 817, 152729.	2.8	24
66	Phase relations in the Al-rich corner of the Tiâ€“Niâ€“Al system. Journal of Alloys and Compounds, 2001, 317-318, 379-384.	2.8	23
67	Phase Equilibria, Crystal Chemistry and Physical Properties of Au-Ba-Ge Clathrates. Journal of Phase Equilibria and Diffusion, 2011, 32, 115-127.	0.5	23
68	The effect of multisubstitution on the thermoelectric properties of chalcogenide-based Cu_{2.1}Zn_{0.9}Sn_{1â^'x}In_xSe₄(0â€‰â‰¤â€‰xâ€‰ Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 2471-2478.	2.8	23
69	Constitution of the systems {V,Nb,Ta}-Sb and physical properties ofÂdi-antimonides {V,Nb,Ta}Sb2. Intermetallics, 2015, 65, 94-110.	1.8	23
70	Phase equilibria and magnetism in the Moâ€“Siâ€“U system. Journal of Nuclear Materials, 2001, 288, 66-75.	1.3	22
71	Crystal Structure of Novel Niâ€“Zn Borides: First Observation of a Boronâ€“Metal Nested Cage Unit: B₂₀Ni₆. Inorganic Chemistry, 2011, 50, 7669-7675.	1.9	22
72	Crystal structures and constitution of the binary system iridium-boron. Science China Materials, 2015, 58, 649-668.	3.5	22

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73	Sustainable and simple processing technique for n-type skutterudites with high ZT and their analysis. Acta Materialia, 2019, 173, 9-19.	3.8	22
74	Enhanced Thermoelectric Figure of Merit in P-Type DD_y(Fe_{1-X}Co_x)₄Sb₁₂ Solid State Phenomena, 0, 170, 240-243.	0.3	21
75	The Effect of Severe Plastic Deformation on Thermoelectric Performance of Skutterudites, Half-Heuslers and Bi-Tellurides. Materials Transactions, 2019, 60, 2071-2085.	0.4	21
76	On the constitution and thermodynamic modelling of the system Zr-Ni-Sn. Journal of Alloys and Compounds, 2018, 742, 1058-1082.	2.8	20
77	The Heusler Phase Ti25(Fe50Ââ^'Âx Ni x)Al25 (0Ââ‰ÂxÂâ‰Â50); Structure and Constitution. Journal of Phase Equilibria and Diffusion, 2008, 29, 500-508.	0.5	19
78	Crystal structure, phase stability and elastic properties of the Laves phase ZrTiCu2. Intermetallics, 2008, 16, 651-657.	1.8	19
79	Formation of clathrates Baâ€“Mâ€“Ge(M = Mn, Fe, Co). International Journal of Materials Research, 2009, 100, 189-202.	0.1	19
80	Laves phases in the ternary systems Tiâ€“{Pd, Pt}â€“Al. Intermetallics, 2009, 17, 336-342.	1.8	18
81	Influence of filler element and Ni-substitution on thermoelectric properties of multi-filled skutterudites. Journal of Alloys and Compounds, 2010, 504, 53-59.	2.8	18
82	Tuning of band gap and thermoelectric properties of type-I clathrate Ba8NixZnyGe46â^'xâ^'yâ^'zSnz. Journal of Alloys and Compounds, 2013, 567, 65-72.	2.8	18
83	Study of thermal stability of CoSb3 skutterudite by Knudsen effusion mass spectrometry. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2019, 65, 1-7.	0.7	18
84	Superconductivity and Magnetism in MPt₄Ge₁₂, M = Ca, Ba, Sr, Eu. Journal of the Physical Society of Japan, 2008, 77, 121-127.	0.7	17
85	On phase equilibria and crystal structures in the systems Ceâ€“Pdâ€“B and Ybâ€“Pdâ€“B. Physical properties of R2Pd13.6B5 (R=Yb, Lu). Journal of Solid State Chemistry, 2010, 183, 1013-1037.	1.4	17
86	Influence of shear strain on HPT-processed n-type skutterudites yielding ZT=2.1. Journal of Alloys and Compounds, 2021, 855, 157409.	2.8	17
87	Magnetism and structural chemistry of ternary borides RE2MB6 (RE = rare earth, M = Ru, Os). Journal of Solid State Chemistry, 1984, 54, 414-420.	1.4	16
88	The crystal structure of Sc2Ru5B4. Journal of Solid State Chemistry, 1984, 55, 262-269.	1.4	16
89	Phase equilibria in systems Ceâ€“Mâ€“Sb (M=Si, Ge, Sn) and superstructure Ce12Ge9â^'xSb23+x (x=3.8Â±0.1). Journal of Solid State Chemistry, 2009, 182, 645-656.	1.4	16
90	Thermoelectric and magnetic properties of nanocrystalline La0.7Sr0.3CoO3. Journal of Applied Physics, 2012, 111, .	1.1	16

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91	The Tiâ€“Mn system revisited: experimental investigation and thermodynamic modelling. Physical Chemistry Chemical Physics, 2016, 18, 23326-23339.	1.3	16
92	Constitution, structural chemistry, and magnetism of the ternary system Ce-Ag-Ge. Journal of Phase Equilibria and Diffusion, 1999, 20, 407-422.	0.3	15
93	The niobiumâ€“siliconâ€“uranium system. Journal of Nuclear Materials, 2000, 277, 82-90.	1.3	15
94	The ternary system ceriumâ€“palladiumâ€“silicon. Journal of Solid State Chemistry, 2009, 182, 2497-2509.	1.4	15
95	Crystal structure and physical properties of quaternary clathrates Ba8ZnxGe46â^'xâ^'ySiy, Ba8(Zn,Cu)xGe46â^'x and Ba8(Zn,Pd)xGe46â^'x. Journal of Solid State Chemistry, 2010, 183, 2329-2342.	1.4	15
96	Single-Crystal Investigations on Quaternary Clathrates Ba8Cu5Si x Ge41â^'x (xÂ=Â6, 18, 41). Journal of Electronic Materials, 2011, 40, 589-596.	1.0	15
97	High-Pressure Torsion to Improve Thermoelectric Efficiency of Clathrates?. Journal of Electronic Materials, 2013, 42, 1330-1334.	1.0	15
98	Clathrate formation in the systems Baâ€“Irâ€“Ge and Ba-{Rh, Ir}-Si: Crystal chemistry and phase relations. Intermetallics, 2013, 36, 61-72.	1.8	15
99	Thermoelectric properties of Co4Sb12with Bi2Te3nanoinclusions. Journal of Physics Condensed Matter, 2018, 30, 095701.	0.7	15
100	REPt3Si (RE = La, Pr, Nd, Sm and Gd): isotypes of the heavy fermion superconductor CePt3Si. Journal of Physics Condensed Matter, 2005, 17, 1877-1888.	0.7	14
101	Severe Plastic Deformation, A Tool to Enhance Thermoelectric Performance. Springer Series in Materials Science, 2013, , 193-254.	0.4	14
102	Constitution, structural chemistry and magnetism in the ternary system Ceâ€“Agâ€“Si. Journal of Alloys and Compounds, 2001, 320, 308-319.	2.8	13
103	The ternary system: siliconâ€“titaniumâ€“uranium. Journal of Alloys and Compounds, 2003, 350, 155-159.	2.8	13
104	The ternary system: hafniumâ€“siliconâ€“uranium. Journal of Alloys and Compounds, 2005, 387, 246-250.	2.8	13
105	Structural, thermodynamic, and transport properties of Laves-phaseZrMn2from x-ray and neutron diffraction and first principles. Physical Review B, 2006, 74, .	1.1	13
106	Structural transition with loss of symmetry in Tiâ€“Mâ€“Al based G-phases (MFe and Co). Intermetallics, 2006, 14, 784-791.	1.8	13
107	Ab initiostudy of structural stability, elastic, vibrational, and electronic properties of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">Ti</mml:mi><mml:msub><mml:mi mathvariant="normal">Pd</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2007, 76, .	1.1	13
108	Features of a priori heavy doping of the n-TiNiSn intermetallic semiconductor. Semiconductors, 2011, 45, 850-856.	0.2	13

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109	Effect of High-Pressure Torsion on Texture, Microstructure, and Raman Spectroscopy: Case Study of Fe- and Te-Substituted CoSb3. Journal of Electronic Materials, 2014, 43, 3817-3823.	1.0	13
110	Enhanced Thermoelectric Performance in the Ba_{0.3}Co₄Sb₁₂/InSb Nanocomposite Originating from the Minimum Possible Lattice Thermal Conductivity. ACS Applied Materials & Interfaces, 2020, 12, 48729-48740.	4.0	13
111	The antimony-iron-zirconium (Sb-Fe-Zr) system. Journal of Phase Equilibria and Diffusion, 1999, 20, 497-507.	0.3	12
112	The antimony-iron-niobium (Sb-Fe-Nb) system. Journal of Phase Equilibria and Diffusion, 1999, 20, 113-118.	0.3	12
113	Magnetic structures of U3M2M3â€², M=Al, Ga; Mâ€²=Si, Ge: a neutron powder diffraction study. Journal of Magnetism and Magnetic Materials, 1999, 191, 291-300.	1.0	12
114	Crystal chemistry of the G-phase region in the Tiâ€“Coâ€“Al system. Intermetallics, 2005, 13, 497-509.	1.8	12
115	Crystal chemistry of the G-phases in the {Ti, Zr, Hf}â€“Niâ€“Si systems. Journal of Solid State Chemistry, 2007, 180, 733-741.	1.4	12
116	The system Ceâ€“Znâ€“B at 800Â°C. Journal of Solid State Chemistry, 2011, 184, 2840-2848.	1.4	12
117	Thermoelectric Properties of Two-Phase PbTe with Indium Inclusions. Journal of Electronic Materials, 2014, 43, 1630-1638.	1.0	12
118	Ptâ€“B System Revisited: Pt₂B, a New Structure Type of Binary Borides. Ternary WAl₁₂-Type Derivative Borides. Inorganic Chemistry, 2015, 54, 10958-10965.	1.9	12
119	Determination of structural disorder in Heusler-type phases. Computational Materials Science, 2020, 172, 109307.	1.4	12
120	HPT production of large bulk skutterudites. Journal of Alloys and Compounds, 2021, 854, 156678.	2.8	12
121	The B-Pu (boron-plutonium) system. Journal of Phase Equilibria and Diffusion, 1997, 18, 467-473.	0.3	11
122	Ab initiostudy of structural, magnetic, vibrational, and thermodynamic properties of the Laves-phase compoundHfMn2. Physical Review B, 2007, 76, .	1.1	11
123	Structural and Physical Properties Diversity of New CaCu5-Type Related Europium Platinum Borides. Inorganic Chemistry, 2013, 52, 4185-4197.	1.9	11
124	La₂Pd₃Ge₅ and Nd₂Pd₃Ge₅ Compounds: Chemical Bonding and Physical Properties. Inorganic Chemistry, 2021, 60, 3345-3354.	1.9	11
125	A MÃ¶ssbauer study of R6Fe13X (R=Pr, Nd; X=In, Sn, Tl, Pb, Cu, Ag, Au). Hyperfine Interactions, 1994, 94, 1915-1920.	0.2	10
126	On the four-phase reactions in the Tiâ€“Niâ€“Al system. Intermetallics, 2009, 17, 1000-1006.	1.8	9

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127	The tau-borides Ï„-(Fe0.54Ir0.46)20Fe3B6 and Ï„-(Co0.64Ir0.36)21Co0.16B4B6. Intermetallics, 2010, 18, 694-701.	1.8	9
128	Structural and Thermoelectric Properties of Ba8Cu x Si23-x Ge23 (4.5Ââ‰ÂxÂâ‰Â7). Journal of Electronic Materials, 2012, 41, 1159-1164.	1.0	9
129	Phase relations and structural features in the system Niâ€“Znâ€“B. Journal of Solid State Chemistry, 2013, 198, 150-161.	1.4	9
130	DFT Calculations: A Powerful Tool for Materials Design. Journal of Phase Equilibria and Diffusion, 2014, 35, 221-222.	0.5	9
131	Thermoelectric properties of Al substituted tetrahedrite. Journal of Applied Physics, 2020, 127, .	1.1	9
132	Thermal and electronic properties of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>CePd</mml:mtext></mml:mrow><mml:mn>1</mml:mn></mml:msub></mml:m Physical Review B, 2009, 79, .	3.7	8
133	The system Ndâ€“Feâ€“Sb: Phase equilibria, crystal structures and physical properties. Intermetallics, 2010, 18, 2361-2376.	1.8	8
134	Physical properties of the ternary borides Ni21Zn2B20 and Ni3ZnB2. Journal of Alloys and Compounds, 2013, 550, 302-307.	2.8	8
135	Physical properties of non-centrosymmetric Ni2Zn11. Intermetallics, 2013, 38, 88-91.	1.8	8
136	Ba₅{V,Nb}₁₂Sb_{19+x}, novel variants of the Ba₅Ti₁₂Sb_{19+x}-type: crystal structure and physical properties. Physical Chemistry Chemical Physics, 2015, 17, 24248-24261.	1.3	8
137	Incorporation of platinum atoms in a silicon-free boride of the YB50-type structure. Journal of Alloys and Compounds, 2016, 675, 99-103.	2.8	8
138	Boron-phil and boron-phob structure units in novel borides Ni3Zn2B and Ni2ZnB: experiment and first principles calculations. Dalton Transactions, 2018, 47, 3303-3320.	1.6	8
139	How Severe Plastic Deformation Changes the Mechanical Properties of Thermoelectric Skutterudites and Half Heusler Alloys. Frontiers in Materials, 2020, 7, .	1.2	8
140	Preferential phonon scattering and low energy carrier filtering by interfaces of in situ formed InSb nanoprecipitates and GaSb nanoinclusions for enhanced thermoelectric performance of In_{0.2}Co₄Sb₁₂. Dalton Transactions, 2020, 49, 15883-15894.	1.6	8
141	Properties of HPT-Processed Large Bulks of p-Type Skutterudite DD_{0.7}Fe₃CoSb₁₂ with ZT > 1.3. ACS Applied Energy Materials, 2021, 4, 4831-4844.	2.5	8
142	The antimony-niobium (Sb-Nb) system. Journal of Phase Equilibria and Diffusion, 1999, 20, 475-478.	0.3	7
143	BaPt₄Ge₁₂: A Skutterudite Based Entirely on a Ge Framework. Advanced Materials, 2008, 20, 1325-1328.	11.1	7
144	The formation, structure and physical properties of M2Pd14+xB5â^'ycompounds, with M = La, Ce, Pr, Nd, Sm, Eu, Gd, Lu and Th. Journal of Physics Condensed Matter, 2009, 21, 305401.	0.7	7

#	Article	IF	Citations
145	Spinodal decomposition in (CaxBa1â^'x)yFe4Sb12. Acta Materialia, 2012, 60, 4487-4495.	3.8	7
146	Boron site preference in ternary Ta and Nb boron silicides. Journal of Solid State Chemistry, 2012, 190, 1-7.	1.4	7
147	Phase equilibria and crystal structures in the system Ceâ€"Znâ€"Si. Intermetallics, 2013, 36, 118-126.	1.8	7
148	Phase Relations and Crystal Structures in the Ternary Systems Srâ€{Ag, Au}â€{Si, Ge}. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2015, 641, 1404-1421.	0.6	7
149	High Temperature FeB-type Phases in the Systems Ta-{Ti,Zr,Hf}-B. Journal of Phase Equilibria and Diffusion, 2015, 36, 620-631.	0.5	7
150	Yb_{9+x}CuMg_{4â€"x} (x = 0.034): A Îº-Phase Formed by Lanthanoids. Inorganic Chemistry, 2016, 55, 8174-8183.	1.9	7
151	InSb nanoparticles dispersion in Yb-filled Co4Sb12 improves the thermoelectric performance. Journal of Alloys and Compounds, 2021, 880, 160532.	2.8	7
152	New ternary borides with LuRuB2-type. Materials Research Bulletin, 1985, 20, 1273-1278.	2.7	6
153	On the Quaternary System Ti-Fe-Ni-Al. Journal of Phase Equilibria and Diffusion, 2008, 29, 414-428.	0.5	6
154	The ternary Laves phase Nb(Ni1â^'xAlx)2 with MgZn2 -type. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2009, 33, 11-16.	0.7	6
155	The ternary system: Siliconâ€"tantalumâ€"uranium. Journal of Nuclear Materials, 2010, 404, 55-59.	1.3	6
156	The Systems Tantalum (Niobium)-Cobalt-Boron. Journal of Phase Equilibria and Diffusion, 2014, 35, 43-85.	0.5	6
157	ScRu2B3 and Sc2RuB6: Borides Featuring a 2D Infinite Boron Clustering. Inorganic Chemistry, 2017, 56, 10549-10558.	1.9	6
158	Structural, thermodynamic, and electronic properties of Laves-phase <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>NbMn</mml:mi><mml:mn>2</mml:mn></mml:msub></m from first principles, x-ray diffraction, and calorimetric experiments. Physical Review B, 2018, 97, .	1.1	6
159	Physical properties of TiMn2 and interaction with refractory TiN (system Ti-Mn-N). Journal of Alloys and Compounds, 2018, 740, 647-659.	2.8	6
160	Structural and Thermoelectric Properties of Cu Substituted Type I Clathrates Ba8CuxSi~32â^'xGa~14. Materials, 2019, 12, 237.	1.3	6
161	Skutterudites: Progress and Challenges. , 2019, , 177-201.		6
162	Pressure Response of Novel Superconducting {Sr,Ba}Pt4Ge12. Journal of the Physical Society of Japan, 2008, 77, 350-352.	0.7	5

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163	On the Thermoelectric Potential of Inverse Clathrates. Materials Research Society Symposia Proceedings, 2009, 1166, 3.	0.1	5
164	Impact of Ball Milling and High-Pressure Torsion on the Microstructure and Thermoelectric Properties of p- and n-Type Sb-Based Skutterudites. Materials Science Forum, 0, 667-669, 1089-1094.	0.3	5
165	Phase equilibria and crystal structures in the system Euâ€“Pdâ€“B. Intermetallics, 2010, 18, 1642-1647.	1.8	5
166	Dependence of the Elastic Moduli of Skutterudites on Density and Temperature. Materials Research Society Symposia Proceedings, 2011, 1325, 29.	0.1	5
167	The system Taâ€“Vâ€“Si: Thermodynamic modeling. Journal of Solid State Chemistry, 2013, 199, 171-180.	1.4	5
168	Crystal structure and physical properties of UMo3B7. Intermetallics, 2017, 85, 180-186.	1.8	5
169	Study of thermal stability of p-type skutterudites DD_{0.7}Fe₃CoSb₁₂ by Knudsen effusion mass spectrometry. RSC Advances, 2019, 9, 21451-21459.	1.7	5
170	Resistivity and Thermal Expansion (4.2â€“820 K) of Skutterudites after Severe Plastic Deformation via HPT. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2020, 646, 1267-1272.	0.6	5
171	High pressure torsion, a largeâ€scale manufacturing tool for high ZT skutterudite thermoelectrics. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2022, 648, .	0.6	5
172	Understanding thermal and electronic transport in high-performance thermoelectric skutterudites. Intermetallics, 2022, 146, 107567.	1.8	5
173	MÃ¶ssbauer Effect Study of Eu0.88Fe4Sb12 Skutterudite. Hyperfine Interactions, 2004, 158, 211-215.	0.2	4
174	ON THE SKUTTERUDITE Pt₄Sn_{4.4}Sb_{7.6}. International Journal of Modern Physics B, 2010, 24, 711-721.	1.0	4
175	First-Order Phase Transition in a New CaCu₅-Related Antimonide, CePt₅Sb. Chemistry of Materials, 2011, 23, 4016-4024.	3.2	4
176	Crystal structure, and physical properties of the novel compounds EuRh3Ge7 and EuIr3Ge7. Intermetallics, 2013, 42, 45-51.	1.8	4
177	Phase relations, crystal chemistry, and physical properties of MgZn<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>-type Laves phases in the Mn-Cu-Si and Mn-Ni-Si systems. Physical Review B, 2013, 88, .	1.1	4
178	From Occupied Voids to Nanoprecipitates: Synthesis of Skutterudite Nanocomposites in situ. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2015, 641, 1495-1502.	0.6	4
179	Novel ternary compound Ce4Pt9Al13: Crystal structure, physical properties. Journal of Alloys and Compounds, 2018, 767, 496-503.	2.8	4
180	On the constitution and thermodynamic modeling of the phase diagrams Nb-Mn and Ta-Mn. Journal of Alloys and Compounds, 2021, 865, 158715.	2.8	4

#	Article	IF	Citations
181	Study of thermal stability of half-Heusler alloys TiFe1.33Sb and TixNb1-xFeSb (x = 0, 0.15) by differential thermal analysis and Knudsen effusion method. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2021, 74, 102292.	0.7	4
182	Influence of 2 at.% Ruthenium Addition on the Oxidation of Â-TiAl at 900Â°C in Air. Oxidation of Metals, 2004, 62, 15-28.	1.0	3
183	Crystal structure and physical properties of EPCo4.7Ge9 (EP=Sr, Ba, Eu). Intermetallics, 2009, 17, 471-476.	1.8	3
184	Influence of hot pressing temperature on thermoelectric properties of typeâ€I clathrates. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 1282-1287.	0.8	3
185	The system Ceâ€“Znâ€“Si for <33.3 at.% Ce: phase relations, crystal structures and physical properties. RSC Advances, 2015, 5, 36480-36497.	1.7	3
186	Nanostructured clathrates and clathrateâ€based nanocomposites. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 784-801.	0.8	3
187	Structure and properties of a novel boride (V0.92Fe0.08)2FeB2 with partially ordered U3Si2-type. Journal of Alloys and Compounds, 2018, 746, 638-647.	2.8	3
188	Origin of Band Modulation in GeTe-Rich Geâ€“Sbâ€“Te Thin Film. ACS Applied Electronic Materials, 2019, 1, 2619-2625.	2.0	3
189	Thermoelectric Properties and Stability of Nanocomposites Type I Clathrate Baâ€Cuâ€Si with SiC. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2020, 646, 1055-1061.	0.6	3
190	X-ray investigation of alloys with composition Th37.5M25Mâ€²37.5; M=Al,Ga, Mâ€²=Si,Ge. Journal of Alloys and Compounds, 2004, 365, 173-177.	2.8	2
191	The system uraniumâ€“palladiumâ€“boron with U2.5Pd20.5B6, a new heavy fermion compound. Journal of Physics Condensed Matter, 2010, 22, 125601.	0.7	2
192	On the physical properties of RPd₈B_{2 â^’x}and R₃Pd_{25 â^’x}B_{8 â^’y}(R = La, Ce). Journal of Physics Condensed Matter, 2010, 22, 425603.	0.7	2
193	Novel silicide BaPt5Si12: Crystal structure and physical properties. Intermetallics, 2010, 18, 173-178.	1.8	2
194	The crystal structure of Niâ€“Zn co-doped Î² boron, Ni0.18Zn1.21B34.94. Journal of Alloys and Compounds, 2013, 561, 276-283.	2.8	2
195	Influence of Sn on the structural and thermoelectric properties of the type-I clathrates Ba8Cu5Si6Ge35-xSnx (0 â‰¤ x â‰¤ 0.6). Materials Research Society Symposia Proceedings, 2013, 1490, 19-26.	0.1	2
196	Superconductivity and spin fluctuations in the actinoidâ€“platinum metal borides{Th,U}Pt3B. Physical Review B, 2015, 92, .	1.1	2
197	BaAl₄ derivative phases in the sections {La,Ce}Ni₂Si₂â€“{La,Ce}Zn₂Si₂: phase relations, crystal structures and physical properties. Dalton Transactions, 2016, 45, 5262-5273.	1.6	2
198	Th₇Fe₃â€Type Related Structures in Pd(Pt)â€Cuâ€B Systems: Pd₆CuB₃â€”A New Structure Type for Borides. Chemistry - A European Journal, 2017, 23, 4810-4817.	1.7	2

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199	Crystal Chemistry and Thermoelectric Properties of Type-I Clathrate Ba8Niâˆ¼3.8SixGe42.2âˆ’x (x = 0, 10, 20,) Tj ETQq1 1 0.784314 rgB	1.3	2
200	Interaction of Skutterudites with Contact Materials: A Metallurgical Analysis. Journal of Phase Equilibria and Diffusion, 2020, 41, 365-377.	0.5	2
201	Thermoelectric properties enhancement of Ba0Â·2Co4Sb12 through dispersion of GaSb inclusions. Physica B: Condensed Matter, 2021, 606, 412440.	1.3	2
202	Study of thermal stability of n-type skutterudites Sr0.07Ba0.07Yb0.07Co4Sb12 by differential thermal analysis and Knudsen effusion method. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2021, 73, 102258.	0.7	2
203	Anisotropy of Microstructure and Its Influence on Thermoelectricity: The Case of Cu₂Teâ€“Sb₂Te₃ Eutectic. ACS Applied Energy Materials, 2021, 4, 11867-11877.	2.5	2
204	Syntheses and Properties of Yb(Al_{1âˆ’x}T_x)B₄ (T = Cr,) Tj ETQq0 0 0 rgBT /Overlock Metallurgy, 2019, 66, 525-529.	0.1	2
205	Thermodynamic properties of Ce(RuxRh1âˆ’x)3B2. Physica B: Condensed Matter, 1999, 259-261, 116-117.	1.3	1
206	Giant Thermopower at Low Temperatures in Novel Clathrates Ba8{Cu,Zn} x Ge46âˆ’x. Journal of Electronic Materials, 2010, 39, 1687-1691.	1.0	1
207	Ti8(TixMn1âˆ’x)6Mn39(â€¯TiMnâˆ¼4â€™): a metallic spin fluctuation system. Journal of Physics Condensed Matter, 2013, 25, 106002.	0.7	1
208	Chemical and Thermoelectric Properties of Hot Pressed and Spark Plasma Sintered Type-I Clathrate Ba8Cu4.8Si41.2. Journal of Electronic Materials, 2016, 45, 1840-1845.	1.0	1
209	Structure and properties of a novel boride: ThNi₁₂B₆. Dalton Transactions, 2018, 47, 12933-12943.	1.6	1
210	The system thorium-palladium-boron: A DFT study on the stability and properties of Th2Pd15B5. Journal of Alloys and Compounds, 2019, 811, 151578.	2.8	1
211	Evidence of multiband behavior in a new superconductor Ta0.8Zr0.2B with FeB-prototype structure. Journal of Alloys and Compounds, 2019, 803, 597-600.	2.8	1
212	Carbonâ€“vacancy ordering in subcarbide (Cr0.7Re0.3)2C0.9; a combined X-ray and neutron diffraction study. Journal of Alloys and Compounds, 2003, 350, L1-L3.	2.8	0
213	The influence of substitution and doping on the thermoelectric properties of CePd<inf>3</inf>. , 2007, , .		0
214	Crystal structures and hardness of novel compounds: Hexagonal Mo(CuxAl1âˆ’x)6Al4, MoCu2Al8âˆ’x and orthorhombic {Mo,W,Re}Ni2âˆ’xAl8+x. Intermetallics, 2012, 23, 187-198.	1.8	0
215	Physical properties of {Ti,Zr,Hf}2Ni2Sn compounds. Dalton Transactions, 2021, 51, 361-374.	1.6	0
216	Site preference, thermodynamic, and magnetic properties of the ternary Laves phase Ti(Fe<sub>1 â€“) Tj ETQq0 0 0 rgBT /Overlock 10 T MgZn₂-type. International Journal of Materials Research, 2022, 97, 450-460.	0.1	0