Klaus W Richter

List of Publications by Year in Descending Order

123 papers	1,458 citations	19 h-index	32 g-index
153 ext. papers	1,642 ext. citations	3.5 avg, IF	4.69 L-index

#	Paper	IF	Citations
123	Experimental Phase Diagram of the Ag-Se-Sn System at 250, 400 and 550 °C. *Journal of Phase Equilibria and Diffusion*, **2022**, 43, 32	1	
122	Al-Fe-Ge: Phase equilibria and new ternary compounds at 400 °C. *Journal of Alloys and Compounds*, **2022**, 905, 164178	5.7	1
121	Review of vanadium-based layered compounds. *Journal of Alloys and Compounds*, **2022**, 891, 161976	5.7	1
120	Thermodynamic properties and phase relations of Zn-rich alloys in the system Pt-Zn. *International Journal of Materials Research*, **2022**, 97, 429-433	0.5	2
119	Binding Mode Characterization of Osteopontin on Hydroxyapatite by Solution NMR Spectroscopy. *ChemBioChem*, **2021**, 22, 2300-2305	3.8	2
118	The thermodynamic reassessment of the binary Al-Cu system. *Journal of Materials Science*, **2021**, 56, 3430-3443	4.3	1
117	The 550 °C and 700 °C isothermal sections and new misfit layer compounds in the Se-Sn-V system. *Journal of Alloys and Compounds*, **2021**, 871, 159573	5.7	2
116	Phase transformations and phase equilibria in the La-Ni and La-Ni-Fe systems. Part 2: Isothermal sections at 750, 600 and 500 °C. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **2021**, 74, 102297	1.9	0
115	Vanadium-selenium-based misfit layer compounds – Insights into synthesis, morphology, and structure. *Journal of Alloys and Compounds*, **2021**, 881, 160578	5.7	1
114	Phase equilibria and new misfit layer compound in the ternary system of PbSe-V. *Journal of Alloys and Compounds*, **2020**, 831, 154730	5.7	5
113	Experimental study of the Al-Cu-Zn ternary phase diagram. *Journal of Materials Science*, **2020**, 55, 10796-10810	4.3	3
112	Reassessment of the Binary Mn-Rh Phase Diagram and Experimental Investigations of the Ternary Bi-Mn-Rh System. *Journal of Phase Equilibria and Diffusion*, **2020**, 41, 282-298	1	
111	Experimental investigation of phase equilibria in the Nb-Ni-Si refractory alloy system at 1323 K. *Journal of Alloys and Compounds*, **2020**, 842, 155373	5.7	1
110	Phase Equilibria in the System Ag-Cu-Si. *Journal of Phase Equilibria and Diffusion*, **2020**, 41, 79-92	1	3
109	Phase transformations and phase equilibria in the La-Ni and La-Ni-Fe systems. Part 1: Liquidus & solidus projections. *Journal of Alloys and Compounds*, **2020**, 845, 156356	5.7	2
108	Experimental isothermal sections of the ternary phase diagram Al-Cu-Si at 600 °C and 800 °C. *Journal of Materials Science*, **2020**, 55, 15322-15333	4.3	
107	The Ternary Bi-Mn-Sb Phase Diagram and the Crystal Structure of the Ternary ε-Phase Bi0.8MnSb0.2. *Journal of Phase Equilibria and Diffusion*, **2019**, 40, 462-481	1	2

106	Experimental investigation of phase equilibria in the Nb□Ni□Si refractory alloy system at 1073 K. *Scripta Materialia*, **2019**, 164, 96-100	5.6	4
105	The ternary phase diagram of Sb□Se□ and its subsystems. *Journal of Alloys and Compounds*, **2019**, 810, 151671	5.7	4
104	Experimental Description of the Al-Cu Binary Phase Diagram. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2019**, 50, 3805-3815	2.3	40
103	The phase diagram Au-Ni-Si. *Journal of Alloys and Compounds*, **2019**, 776, 858-864	5.7	1
102	BiMn: Synthesis, separation by centrifugation, and characterization. *Journal of Alloys and Compounds*, **2018**, 741, 682-688	5.7	13
101	Simple vapor-solid synthesis of Zn-based intermetallic compounds. *Journal of Alloys and Compounds* , **2018**, 743, 155-162	5.7	4
100	The Binary Bi-Rh Phase Diagram: Stable and Metastable Phases. *Journal of Phase Equilibria and Diffusion*, **2018**, 39, 17-34	1	6
99	Single-crystal structure determination of two new ternary bismuthides: RhMnBi and RhMnBi. *Acta Crystallographica Section C, Structural Chemistry*, **2018**, 74, 863-869	0.8	3
98	Al□□Ge: New ternary compounds and phase equilibria at 800 °C. *Journal of Alloys and Compounds*, **2018**, 762, 849-857	5.7	5
97	New Iminodiacetate-Thiosemicarbazone Hybrids and Their Copper(II) Complexes Are Potential Ribonucleotide Reductase R2 Inhibitors with High Antiproliferative Activity. *Inorganic Chemistry*, **2017**, 56, 3532-3549	5.1	34
96	The Sn-rich corner of the system Ni-Pd-Sn: A phase diagram study. *Journal of Alloys and Compounds*, **2017**, 697, 310-317	5.7	
95	The reassessment of the Al-V system and new assessment of the Al-Si-V system. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **2017**, 59, 47-60	1.9	6
94	Al7+xFe23Ge14□ and Al7+xFe9Ge5□: Two new ternary compounds related to Fe6Ge5. *Journal of Alloys and Compounds*, **2017**, 693, 692-699	5.7	5
93	Experimental Investigation of the Binary Mn-Sb Phase Diagram. *Journal of Phase Equilibria and Diffusion*, **2016**, 37, 459-468	1	10
92	Reactive phase formation and isothermal solidification in the Ni/Au-18.6Si/Ni layer system. *Journal of Alloys and Compounds*, **2016**, 687, 7-16	5.7	5
91	Liquid Co□Sn alloys at high temperatures: structure and physical properties. *Physics and Chemistry of Liquids*, **2016**, 54, 440-453	1.5	3
90	Thermodynamic modelling of the general NiAs-type structure: A study of first principle energies of formation for binary Ni-containing B8 compounds. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **2015**, 50, 174-181	1.9	6
89	Experimental investigation of the ternary system Ni□Pd□Sn with special focus on the B8-type phase. *Journal of Alloys and Compounds*, **2015**, 649, 297-306	5.7	1

88	Al15Ge4Ni3: A new intergrowth structure with Cu3Au- and CaF2-type building blocks. *Journal of Solid State Chemistry*, **2015**, 225, 240-248	3.3	3
87	Sn-Ag-Cu nanosolders: Melting behavior and phase diagram prediction in the Sn-rich corner of the ternary system. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **2015**, 49, 101-109	1.9	22
86	Phase equilibria and structural investigations of the general NiAs-type in the ternary system NiPtSn. *Journal of Alloys and Compounds*, **2015**, 618, 803-814	5.7	4
85	AuNi3Si6 and Au2Ni4Si7: Two New Structure Types Related to the CaF2-Type Structure. *Zeitschrift Fur Anorganische Und Allgemeine Chemie*, **2015**, 641, 1428-1434	1.3	2
84	Comment on "Thermodynamic optimization of Co–Ge binary system" by S.S. Dong, S.G. Liu, X.M. Tao, F.H. Xiao, L.H. Huang, F. Yang, Y. He, Q. Chen, H.S. Liu, Z.P. Jin [Thermochim. Acta 572 (2013) 94–100]. *Thermochimica Acta*, **2014**, 588, 57-58	2.9	1
83	Partial liquidus projection and vertical sections in the system Al–Fe–Si–Ti. *Intermetallics*, **2014**, 44, 77-87	3.5	2
82	Phase equilibria in the system Au–Cu–Si and structural characterization of the new compound Au5−xCu2−xSi. *Intermetallics*, **2014**, 46, 190-198	3.5	4
81	Phase equilibria and structural investigations of the general NiAs-type in the ternary system NiSnTe. *Intermetallics*, **2014**, 46, 199-210	3.5	11
80	Enthalpies of formation of Cd-Pr intermetallic compounds and thermodynamic assessment of the Cd-Pr system. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **2014**, 47, 56-62	1.9	9
79	Al–Ge–Ti: Phase equilibria and structural characterization of new ternary compounds. *Intermetallics*, **2014**, 53, 157-168	3.5	4
78	Characterization of the Fe-rich corner of Al-Fe-Si-Ti. *Intermetallics*, **2013**, 39, 38-49	3.5	10
77	The Ni-rich part of the Al-Ge-Ni phase diagram. *Intermetallics*, **2013**, 32, 200-208	3.5	9
76	Revision of the Ge–Ti phase diagram and structural stability of the new phase Ge4Ti5. *Journal of Alloys and Compounds*, **2013**, 577, 211-216	5.7	11
75	New compounds and phase equilibria in the system Hf–Nb–As. *Monatshefte Für Chemie*, **2012**, 143, 1289-1297	1.4	3
74	Experimental study of the Fe–Al–Ni–Al–Ti–Al section. *Intermetallics*, **2012**, 23, 80-90	3.5	4
73	New investigation of phase equilibria in the system Al-Cu-Si. *Journal of Alloys and Compounds*, **2012**, 512, 252-263	5.7	39
72	Phase equilibria and structural investigations in the Ni-poor part of the system Al-Ge-Ni. *Intermetallics*, **2012**, 28, 84-91	3.5	11
71	Phase equilibria in the Al–Si–V system: The vanadium rich part. *Intermetallics*, **2011**, 19, 369-375	3.5	5

70	Phase equilibria in the Al-Mo-Si system. *Intermetallics*, **2011**, 19, 409-418	3.5	13
69	Experimental investigation of the Cu-Si phase diagram at (Cu)>0.72. *Intermetallics*, **2011**, 19, 1479-1488	3.5	33
68	Re-investigation of phase equilibria in the system Al-Cu and structural analysis of the high-temperature phase θ-AlCu. *Intermetallics*, **2011**, 19, 1737-1746	3.5	72
67	Incongruent, time-dependent chemical vapour transport in multi-component systems: A case study in Cr-Ge-Si. *Solid State Sciences*, **2011**, 13, 1108-1114	3.4	1
66	The Al-Co-Si phase diagram. *Intermetallics*, **2011**, 19, 307-320	3.5	9
65	Phase equilibria and structural investigations in the system Al-Fe-Si. *Intermetallics*, **2011**, 19, 1919-1929	3.5	82
64	Phase equilibria in the Al-Si-V system. *Intermetallics*, **2010**, 18, 606-615	3.5	20
63	Observation of the new binary low temperatures compound AlV. *Journal of Alloys and Compounds*, **2010**, 493, L33-L35	5.7	7
62	A revision of the central part of the Cr-Ge phase diagram. *Journal of Alloys and Compounds*, **2010**, 500, L6-L8	5.7	5
61	The crystal structures of Hf3-xNb4+xAs3 and Hf7.2Nb3.8As4: Members of a homologous series combining W-type, Mg-type and AlB2-type building blocks. *Journal of Solid State Chemistry*, **2010**, 183, 557-564	3.3	1
60	Redetermination of iron dialuminide, FeAl(2). *Acta Crystallographica Section C: Crystal Structure Communications*, **2010**, 66, i87-8		29
59	Partial ordering in the section Hf5Ge4-Zr5Ge4: Crystallographic investigation and modeling based on ab initio calculations. *Solid State Sciences*, **2009**, 11, 395-401	3.4	10
58	Crystal structures, site occupations and phase equilibria in the system V-Zr-Ge. *Solid State Sciences*, **2009**, 11, 1475-1483	3.4	4
57	The Crystal Structure of Ni21Sn2P6. *Zeitschrift Fur Anorganische Und Allgemeine Chemie*, **2009**, 635, 301-306	1.3	10
56	Synthesis and Structural Characterization of Ternary Compounds Belonging to the Series RE2+mNi4+mAl15+4m (RE = rare earth metal). *Zeitschrift Fur Anorganische Und Allgemeine Chemie*, **2009**, 635, 365-368	1.3	7
55	The crystal structure of Hf1.5+xNb1.5-xAs and structure-composition relations in the section Hf3As-Nb3As. *Journal of Solid State Chemistry*, **2009**, 182, 896-904	3.3	5
54	Phase equilibria and chemical vapor transport in the system Mo-Ta-As. *Journal of Alloys and Compounds*, **2009**, 480, 397-402	5.7	2
53	Synthesis of Single-Phase Sn3P4 by an Isopiestic Method. *Chemistry of Materials*, **2009**, 21, 4108-4110	9.6	15

52	Phase equilibria in the system Hf–Zr–Ge at 1350°C. *Journal of Alloys and Compounds*, **2008**, 452, 80-84	5.7	5
51	Comment on the paper "Experimental determination of phase equilibrium in the Fe–Co–Sb ternary system" by Pongsaton Amornpitoksuk, Hongxiao Li, Jean-Claude Tedenac, Suzana G. Fries, Didier Ravot (Intermetallics 15 (2007) 475–478). *Intermetallics*, **2008**, 16, 119-120	3.5	3
50	Isothermal Sections in the (Fe, Ni)-Rich Part of the Fe-Ni-Al Phase Diagram. *Journal of Phase Equilibria and Diffusion*, **2008**, 29, 300-304	1	17
49	Thermodynamic characterization of liquid alloys with demixing tendency: Bi–Ga. *International Journal of Materials Research*, **2008**, 99, 18-23	0.5	2
48	Crystal structure and local order in Co(6)Al(11-x)Si(6+x). *Acta Crystallographica Section B: Structural Science*, **2007**, 63, 551-60		2
47	Thermodynamic modelling of the partially ordered solid solution Hf5–xNbxGe4 supported by ab initio calculations. *Solid State Sciences*, **2007**, 9, 159-165	3.4	8
46	Phase Equilibria in the Ag-Ni-Sn System: Isothermal Sections. *Journal of Electronic Materials*, **2007**, 36, 1415-1428	1.9	11
45	Experimental Phase Diagram Investigations in the Ni-Rich Part of Al-Fe-Ni and Comparison with Calculated Phase Equilibria. *Journal of Phase Equilibria and Diffusion*, **2007**, 28, 417-421	1	7
44	Thermodynamic assessment of the Bi–Sn–Zn System. *Calphad: Computer Coupling of Phase Diagrams and Thermochemistry*, **2007**, 31, 438-448	1.9	62
43	Preparation and crystal structure of nanocrystalline RuZn3. *Journal of Alloys and Compounds*, **2007**, 427, 300-304	5.7	2
42	Assessment of thermodynamic properties and phase diagram in the Ag–In–Pd system. *Intermetallics*, **2007**, 15, 77-84	3.5	4
41	A new investigation of the system Ni–Sn. *Intermetallics*, **2007**, 15, 869-884	3.5	158
40	Thermodynamics and nonstoichiometry in the D03 compound Ni3Sb. *Intermetallics*, **2007**, 15, 862-868	3.5	11
39	The Fe–Ni–Al phase diagram in the Al-rich (>50at.% Al) corner. *Intermetallics*, **2007**, 15, 1416-1424	3.5	46
38	The In–Pt–Sb phase diagram. *International Journal of Materials Research*, **2006**, 97, 533-538	0.5	3
37	The Al–Ni–Si phase diagram: Part III: Phase equilibria in the nickel rich part. *Intermetallics*, **2006**, 14, 491-497	3.5	23
36	Crystal structures of cobalt aluminum silicide, Co19+x Al43+y (x = -0.14, y = 0.14; x = 0.49, y = -0.49), the τ phase in the Co-Al-Si system. *Zeitschrift Fur Kristallographie - New Crystal Structures*, **2006**, 221, 115-118	0.2	
35	Crystal structures of cobalt aluminum silicide, Co19+xAl43+ySi12-y (x = -0.14, y = 0.14; x = 0.49, y = -0.49), the ? phase in the Co-Al-Si system. *Zeitschrift Fur Kristallographie - New Crystal Structures*, **2006**, 221, 115-118	0.2	

34	Crystal structure of cobalt aluminum silicide, Co10+xAl23Si9-2x (x = 0.14), the ϕ phase in the Co-Al-Si system. *Zeitschrift Fur Kristallographie - New Crystal Structures*, **2006**, 221, 112-114	0.2	
33	Thermodynamic properties and phase relations of Zn-rich alloys in the system Pt–Zn. *International Journal of Materials Research*, **2006**, 97, 429-433	0.5	2
32	Phase equilibria in the system Al–Co–Si. *Intermetallics*, **2005**, 13, 848-856	3.5	19
31	Crystal structure, chemical bonding, and phase relations of the novel compound Co4Al(7+x)Si(2-x) (0.27 Inorganic Chemistry, **2005**, 44, 4576-85	5.1	15
30	Phase Equilibria in the Ag–In–Pd System at 700°C. *Monatshefte Für Chemie*, **2005**, 136, 1931-1937	1.4	5
29	Fractional Site Occupation in Ternary Metal Compounds: Structure, Bonding, and Thermodynamics. *Monatshefte Für Chemie*, **2005**, 136, 1885-1897	1.4	6
28	Preparation and Crystal Structure of Ni16Si9Al. *Zeitschrift Fur Anorganische Und Allgemeine Chemie*, **2004**, 630, 417-422	1.3	8
27	The Al–Ni–Si phase diagram. Part II. *Intermetallics*, **2004**, 12, 545-554	3.5	42
26	On the low temperature stability of In2Pt. *Journal of Alloys and Compounds*, **2004**, 365, L4-L6	5.7	3
25	Thermodynamic investigations in the lanthanum–cadmium system. *Journal of Alloys and Compounds* , **2004**, 365, 181-187	5.7	8
24	Ni, Pd, or Pt as contact materials for GaSb and InSb semiconductors: Phase diagrams. *Journal of Electronic Materials*, **2003**, 32, 1136-1140	1.9	8
23	Palladium as a contact material for InSb semiconductors—The In-Pd-Sb phase diagram. *Journal of Electronic Materials*, **2003**, 32, 43-51	1.9	6
22	Fractional site occupation of Hf5–xNbxGe4: crystallographic investigation and thermodynamic modeling. *Solid State Sciences*, **2003**, 5, 653-662	3.4	8
21	ζ-Pt5Zn21—a reappraisal of a γ-brass type complex alloy phase. *Solid State Sciences*, **2003**, 5, 1309-1317	3.4	46
20	The Al–Ni–Si phase diagram between 0 and 33.3 at.% Ni. *Intermetallics*, **2003**, 11, 101-109	3.5	37
19	NiAi1.74Al0.26 and NiSi1.83Ga0.17: Two materials with perfect lattice match to Si. *Applied Physics Letters*, **2003**, 83, 497-499	3.4	14
18	The Ternary Compounds Pd13In5.25Sb3.75 and PdIn1.26Sb0.74: Crystal Structure and Electronic Structure Calculations. *Journal of Solid State Chemistry*, **2002**, 164, 110-118	3.3	5
17	New Ternary Compounds MxTa11–xGe8 (M=Ti, Zr, Hf): Structure and Stabilization. *Journal of Solid State Chemistry*, **2002**, 167, 517-524	3.3	5

16	New Ternary Compounds MxTa11−xGe8 (M=Ti, Zr, Hf): Structure and Stabilization. *Journal of Solid State Chemistry*, **2002**, 167, 517-524	3.3	9
15	Crystal structure and phase relations of Ni13−xAlySi9−y. *Journal of Alloys and Compounds*, **2002**, 338, 43-50	5.7	11
14	The binary system In–Ir: a new investigation of phase relationships, crystal structures, and enthalpies of mixing. *Journal of Alloys and Compounds*, **2002**, 345, 130-139	5.7	9
13	The binary system Re–Al. *Journal of Alloys and Compounds*, **2001**, 320, 224-227	5.7	22
12	On the stability of hexagonal Ge7Nb10. *Journal of Alloys and Compounds*, **2001**, 320, 87-92	5.7	8
11	Structure–Composition Relations and Fractional Site Occupancy of New M5Ge4 Compounds in the System Ge–Ta–Zr. *Journal of Solid State Chemistry*, **2000**, 150, 347-355	3.3	18
10	Thermodynamics of the [Ir–In] system. *Journal of Alloys and Compounds*, **2000**, 296, 119-127	5.7	9
9	Phase relationships in the ternary Ga–Ni–Sb system. *Journal of Alloys and Compounds*, **2000**, 302, 128-136	5.7	10
8	The ternary In-Ni-Sb phase diagram in the vicinity of the binary In-Ni system. *Journal of Phase Equilibria and Diffusion*, **1998**, 19, 455-465		8
7	The ternary Ga-Pd-Sb phase diagram: A system relevant to contact materials for GaSb. *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1998**, 102, 1245-1251		9
6	Antimony activities in the ternary NiAs-phase of the In–Ni–Sb system. *Thermochimica Acta*, **1998**, 314, 137-144	2.9	5
5	Contact materials for III/V semiconductors: phase equilibria of InSb in the ternary system In–Ni–Sb. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **1998**, 55, 44-52	3.1	13
4	Phase equilibria in the ternary Ga–Pt–Sb system. *Journal of Alloys and Compounds*, **1998**, 281, 241-248	5.7	8
3	Reinvestigation of the binary Fe-Sb phase diagram. *Journal of Alloys and Compounds*, **1997**, 247, 247-249	5.7	36
2	An experimental investigation of the Fe-Ni-Sb ternary phase diagram. *Journal of Phase Equilibria and Diffusion*, **1997**, 18, 235-244		14
1	Transition metal- chalcogen systems XI: the platinum- selenium phase diagram. *Journal of Phase Equilibria and Diffusion*, **1994**, 15, 165-170		11