Honghui Xu

List of Publications by Year
in descending order

99 papers	2,422 citations	279798 23 h-index	233421 45 g-index
107 all docs	107 docs citations	107 times ranked	1732 citing authors

#	Article	IF	Citations
1	Diffusion coefficients of some solutes in fcc and liquid Al: critical evaluation and correlation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 363, 140-151.	5.6	712
2	Reassessment of the Alâ€“Mn system and a thermodynamic description of the Alâ€“Mgâ€“Mn system. International Journal of Materials Research, 2007, 98, 855-871.	0.3	106
3	An overview on phase equilibria and thermodynamic modeling in multicomponent Al alloys: Focusing on the Alâ€“Cuâ€“Feâ€“Mgâ€“Mnâ€“Niâ€“Siâ€“Zn system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2011, 35, 427-445.	1.6	90
4	Atomic mobilities, diffusivities and simulation of diffusion growth in the Coâ€“Si system. Acta Materialia, 2008, 56, 3940-3950.	7.9	69
5	Experimental investigation and thermodynamic description of the Coâ€“Si system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2006, 30, 470-481.	1.6	50
6	Phase equilibria of the Alâ€“Feâ€“Ni system at 850Â°C and 627Â°C. Journal of Alloys and Compounds, 2008, 454, 129-135.	5.5	49
7	Experimental investigation of the Alâ€“Y phase diagram. Journal of Alloys and Compounds, 2006, 414, 60-65.	5.5	48
8	Experimental investigation and thermodynamic modeling of the ternary Alâ€“Cuâ€“Fe system. Journal of Materials Research, 2009, 24, 3154-3164.	2.6	45
9	Assessment of atomic mobilities of Al and Cu in fcc Alâ€“Cu alloys. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2009, 33, 761-768.	1.6	43
10	A thermodynamic description of the Al-Mn-Si system over the entire composition and temperature ranges. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2004, 35, 1613-1628.	2.2	41
11	Experimental investigation and thermodynamic modeling of the Alâ€“Cuâ€“Si system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2009, 33, 200-210.	1.6	41
12	Atomic mobility, diffusivity and diffusion growth simulation for fcc Cuâ€“Mnâ€“Ni alloys. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2011, 35, 367-375.	1.6	41
13	Thermodynamic modeling of the Vâ€“Si system supported by key experiments. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2008, 32, 320-325.	1.6	40
14	Phase equilibria of the Cuâ€“Niâ€“Si system at 700Â°C. Journal of Alloys and Compounds, 2011, 509, 9776-9781.	5.5	33
15	Thermodynamic properties of the Alâ€“Nbâ€“Ni system. Intermetallics, 2003, 11, 995-1013.	3.9	32
16	Experimental identification of the degenerated equilibrium and thermodynamic modeling in the Alâ€“Nb system. Journal of Alloys and Compounds, 2008, 460, 632-638.	5.5	32
17	Thermodynamic reassessment of the Al â€“ V system. International Journal of Materials Research, 2004, 95, 978-986.	0.8	31
18	Experimental investigation of the Nb-Ni phase diagram. Journal of Materials Science, 2005, 40, 6019-6022.	3.7	30

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19	Phase equilibria of the Coâ€“Niâ€“Ta system at 1100Â°C. Journal of Alloys and Compounds, 2006, 425, 153-158.	5.5	28
20	Experimental investigation and thermodynamic modeling of the Cuâ€“Mnâ€“Ni system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2009, 33, 642-649.	1.6	28
21	Thermodynamic modeling of the Cuâ€“Mn system supported by key experiments. Journal of Alloys and Compounds, 2008, 457, 233-238.	5.5	27
22	Experimental determination of the phase equilibria of the Mgâ€“Ndâ€“Zn system at 320Â°C. Journal of Alloys and Compounds, 2014, 603, 100-110.	5.5	26
23	Isothermal section at 1000Â°C of the Nbâ€“Tiâ€“Si system. Journal of Alloys and Compounds, 2005, 394, 235-239.	5.5	24
24	Ternary diffusion in Cu-rich fcc Cuâ€“Alâ€“Si alloys at 1073 K. Journal of Alloys and Compounds, 2013, 566, 156-163.	5.5	24
25	Experimental investigation and thermodynamic calculation of the Feâ€“Mgâ€“Mn and Feâ€“Mgâ€“Ni systems. International Journal of Materials Research, 2011, 102, 6-16.	0.3	23
26	The isothermal section of the Alâ€“Crâ€“Si system at 800Â°C and the crystal structure of Ï„2 (Cr3Al9Si). Journal of Alloys and Compounds, 2007, 436, 313-318.	5.5	21
27	Thermodynamic description of the Niâ€“Siâ€“Ti ternary system. International Journal of Materials Research, 2006, 97, 543-555.	0.3	20
28	Experimental Investigation and Thermodynamic Reassessment of the Cu-Fe-Si System. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2009, 40, 1811-1825.	2.2	20
29	Experimental investigation and thermodynamic modeling of the Mnâ€“Niâ€“Si system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2011, 35, 346-354.	1.6	20
30	Thermodynamic optimization of the Cuâ€“Nd system. Journal of Alloys and Compounds, 2011, 509, 2679-2683.	5.5	20
31	Thermodynamic modeling of the Geâ€“Ti system supported by key experiment. Thermochimica Acta, 2011, 521, 148-154.	2.7	20
32	Diffusivities and atomic mobilities in fcc_A1 Niâ€“X (X=Ge, Ti and V) alloys. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2013, 41, 108-118.	1.6	20
33	Assessment of the atomic mobility in fcc Alâ€“Cuâ€“Mg alloys. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2010, 34, 286-293.	1.6	19
34	Native defects in LiNH<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>: A first-principles study. Physical Review B, 2011, 84, .	3.2	19
35	Phase equilibria and thermal analysis in the Feâ€“Mnâ€“Ni system. International Journal of Materials Research, 2009, 100, 160-175.	0.3	18
36	The effect of Ti atom on hydrogenation of Al(111) surface: First-principles studies. International Journal of Hydrogen Energy, 2010, 35, 609-613.	7.1	18

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37	Experimental investigation and thermodynamic reassessment of the Feâ€“Siâ€“Zn system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2010, 34, 405-414.	1.6	18
38	Phase equilibria of the Mgâ€“Mnâ€“Zn system at 593ÂK (320ÂÂ°C). Journal of Alloys and Compounds, 2016, 688, 1115-1124.	5.5	18
39	Thermodynamic investigation of the galvanizing systems, II: Thermodynamic evaluation of the Niâ€“Zn system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2011, 35, 276-283.	1.6	17
40	A thermodynamic modeling of the Câ€“Crâ€“Ta ternary system. Journal of Alloys and Compounds, 2011, 509, 5996-6003.	5.5	16
41	Phase equilibria of the Feâ€“Nbâ€“Ti system at 900Â°C. Journal of Alloys and Compounds, 2005, 396, 151-155.	5.5	15
42	Experimental study of Alâ€“Zrâ€“Y system phase equilibria at 773K. Journal of Alloys and Compounds, 2010, 497, 118-120.	5.5	14
43	Phase equilibria of the Cuâ€“Nbâ€“Ti system at 850Â°C. Journal of Alloys and Compounds, 2005, 399, 92-95.	5.5	13
44	Phase equilibria of the Niâ€“Tiâ€“Ta system at 927Â°C. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 448, 210-215.	5.6	13
45	Thermodynamic assessment of the Vâ€“Zn system supported by key experiments and first-principles calculations. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2010, 34, 75-80.	1.6	13
46	Assessment of atomic mobilities in fcc Cuâ€“Niâ€“Zn alloys. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2011, 35, 231-241.	1.6	13
47	Study on the phase equilibria of the Al-Cr-Ti system at 1050 Â°C. Scripta Materialia, 1997, 37, 1469-1473.	5.2	12
48	Thermodynamic description of the C-Fe-Mn system with key experiments and its practical applications. International Journal of Materials Research, 2008, 99, 1306-1318.	0.3	12
49	Phase Equilibria of the Mn-Si-Zn System at 600ÂÂ°C. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2009, 40, 2042-2047.	2.2	12
50	Experimental study of the Beâ€“Si phase diagram. Journal of Materials Science, 2006, 41, 2525-2528.	3.7	11
51	Phase equilibria of the Alâ€“Niâ€“Zn system at 340Â°C. International Journal of Materials Research, 2008, 99, 644-649.	0.3	11
52	Phase equilibria in the Alâ€“Zrâ€“Ce system at 773K. Journal of Alloys and Compounds, 2010, 491, 200-202.	5.5	11
53	Assessment of atomic mobilities in fcc Al-Zn and Ni-Zn alloys. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2010, 34, 446-451.	1.6	11
54	Experimental investigation and thermodynamic modeling of the Cuâ€“Siâ€“Zn system with the refined description for the Cuâ€“Zn system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2011, 35, 191-203.	1.6	11

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55	Thermodynamic modeling of the Geâ€“Sc system supported by key experiments and first-principles calculation. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2012, 37, 18-24.	1.6	11
56	Thermodynamic description of the Geâ€“Na and Geâ€“K systems using the CALPHAD approach supported by first-principles calculations. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2012, 37, 72-76.	1.6	11
57	Isothermal section at 950Â°C of the Coâ€“Nbâ€“Ti system. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 412, 336-341.	5.6	10
58	Thermodynamic assessment of the Ceâ€“Mn system. Journal of Alloys and Compounds, 2007, 437, 102-106.	5.5	10
59	Diffusion of hydrogen vacancy in Na3AlH6. Applied Physics Letters, 2009, 95, 111910.	3.3	10
60	Atomic mobility and diffusivity of bcc_A2 phase in the Feâ€“X (X=Cu,Si,Zn) systems. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2012, 36, 127-134.	1.6	10
61	Thermodynamic Modeling of the Li-H and Ca-H Systems. Journal of Phase Equilibria and Diffusion, 2012, 33, 89-96.	1.4	10
62	Phase equilibria of the Mgâ€“Laâ€“Nd system at 500Â°C. Journal of Alloys and Compounds, 2014, 585, 384-392.	5.5	10
63	Solid-State Phase Equilibria of the Mg-Gd-Nd System at 500ÂÂ°C. Journal of Phase Equilibria and Diffusion, 2015, 36, 110-119.	1.4	10
64	Isothermal section of the Cuâ€“Mnâ€“Si ternary system at 700 Â°C. Journal of Alloys and Compounds, 2010, 492, 190-195.	5.5	9
65	Experimental investigation and thermodynamic modeling of the Mgâ€“Siâ€“Zn system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2011, 35, 183-190.	1.6	9
66	Phase equilibria of the Coâ€“Taâ€“Ti system at 950Â°C. Journal of Alloys and Compounds, 2009, 485, 249-254.	5.5	8
67	Reassessment of the Mgâ€“Ge binary system using CALPHAD supported by first-principles calculation. International Journal of Materials Research, 2010, 101, 1489-1496.	0.3	8
68	Determination of the phase equilibria in the Alâ€“Erâ€“V ternary system at 773K. Journal of Alloys and Compounds, 2010, 503, 61-64.	5.5	8
69	Interdiffusivities and atomic mobilities in fcc Cuâ€“Alâ€“Fe alloys. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2011, 35, 556-561.	1.6	8
70	Phase equilibria of the Niâ€“Siâ€“Zn system at 600ÂÂ°C. Intermetallics, 2011, 19, 1089-1095.	3.9	8
71	Thermodynamic reassessment of the Cuâ€“V system supported by key experiments. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2008, 32, 252-255.	1.6	7
72	Thermodynamic Assessment of the Cu-B System Supported by Key Experiment and First-Principles Calculations. Journal of Phase Equilibria and Diffusion, 2009, 30, 480-486.	1.4	7

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73	Phase equilibria of the Alâ€“Prâ€“Zr ternary system at 773K. Journal of Alloys and Compounds, 2010, 503, 57-60.	5.5	7
74	Diffusivities and atomic mobilities in Cu-rich fcc Alâ€“Cuâ€“Mn alloys. International Journal of Materials Research, 2012, 103, 807-813.	0.3	7
75	Interdiffusivities and Atomic Mobilities in fcc Ni-Cu-Si Alloys. Journal of Phase Equilibria and Diffusion, 2013, 34, 484-492.	1.4	7
76	Experimental Investigation and Thermodynamic Modeling of the Nd-Zr and the Mg-Nd-Zr Systems. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 2708-2718.	2.2	6
77	Phase equilibria of the Coâ€“Moâ€“Ti system at 950Â°C. Journal of Alloys and Compounds, 2008, 457, 259-264.	5.5	5
78	Heat contents of the intermetallics V3Ge and V5Ge3 and thermodynamic modeling of the Geâ€“V system. Thermochimica Acta, 2011, 513, 100-105.	2.7	5
79	Experimental Investigation and Thermodynamic Assessment of the Hf-Mn System. Journal of Phase Equilibria and Diffusion, 2012, 33, 20-28.	1.4	5
80	Experimental investigation and thermodynamic description of the Mgâ€“Yâ€“Zr system. Journal of Materials Science, 2014, 49, 7124-7132.	3.7	5
81	Phase Equilibria of the Mg-Y-Zn System at 500ÂÂ°C in the Mg-Rich Region. Journal of Phase Equilibria and Diffusion, 2020, 41, 672-680.	1.4	5
82	Phase equilibria of the Mgâ€“Gdâ€“Zn system at 500ÂÂ°C. Journal of Alloys and Compounds, 2021, 884, 161048.	5.5	5
83	Phase diagram of the Coâ€“Cuâ€“Ti system at 850Â°C. International Journal of Materials Research, 2006, 97, 140-144.	0.3	4
84	Assessment of Atomic Mobilities in fcc Al-Ag-Zn Alloys. Journal of Phase Equilibria and Diffusion, 2011, 32, 512-524.	1.4	4
85	Isothermal section at 1100Â°C of the Feâ€“Niâ€“Ta system. Journal of Alloys and Compounds, 2010, 504, 181-185.	5.5	3
86	Phase equilibria and thermodynamic modeling in the Geâ€“Zr binary system. Journal of Materials Science, 2011, 46, 1405-1413.	3.7	3
87	Thermodynamic description of the Mn-Si-Zn system. Science China Technological Sciences, 2012, 55, 475-483.	4.0	3
88	Phase Equilibria at 500ÂÂ°C of the Mg-Gd-La System. Journal of Phase Equilibria and Diffusion, 2015, 36, 445-452.	1.4	3
89	Experimental Investigation and Thermodynamic Calculation of the Phase Equilibria in the Mg-Gd-Mn Ternary System. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 4804-4811.	2.2	3
90	Phase Equilibria of the Mg-Y-Zn System at 500ÂÂ°C in the Region ofâ€‰<â€‰50 at.% Mg andâ€‰<â€‰50 at.% Y. Journal of Phase Equilibria and Diffusion, 2018, 39, 778-788.	1.4	3

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91	Microstructure and Mechanical Properties of Magnetron Sputtered (Ti, Al)N Coatings with fcc Structure. Journal of the Ceramic Society of Japan, 2006, 114, 1081-1084.	1.3	2
92	Phase equilibria of the Alâ€“Mnâ€“Zn system at 600Â°C. Journal of Alloys and Compounds, 2013, 556, 296-306.	5.5	1
93	Phase Equilibria at 600ÂÂ°C of the Y-Zn-Zr System. Journal of Phase Equilibria and Diffusion, 2017, 38, 589-599.	1.4	1
94	Phase Equilibria of the Mg-Gd-Ce System at 500ÂÂ°C. Journal of Phase Equilibria and Diffusion, 2021, 42, 142-149.	1.4	1
95	Interdiffusion coefficients and atomic mobilities in fcc Cu-Fe-Mn alloys. Journal of Mining and Metallurgy, Section B: Metallurgy, 2014, 50, 93-99.	0.8	1
96	Isothermal Section at 1000 Â°C of the Nbâ€”Tiâ€”Si System.. ChemInform, 2005, 36, no.	0.0	0
97	Phase Equilibria of the Feâ€”Nbâ€”Ti System at 900 Â°C.. ChemInform, 2005, 36, no.	0.0	0
98	Phase Equilibria of the Cuâ€”Nbâ€”Ti System at 850 Â°C.. ChemInform, 2005, 36, no.	0.0	0
99	Phase diagram of the Coâ€“Cuâ€“Ti system at 850 ^{Â°}C. International Journal of Materials Research, 2022, 97, 140-144.	0.3	0