Mario J Kriegel

List of Publications by Year
in descending order

40 papers	945 citations	516215 16 h-index	454577 30 g-index
41 all docs	41 docs citations	41 times ranked	650 citing authors

#	Article	IF	Citations
1	The Î±â†’Ï‰ and Î²â†’Ï‰ phase transformations in Tiâ€“Fe alloys under high-pressure torsion. Acta Materialia, 2018, 144, 337-351.	3.8	118
2	Phase Transformations in Tiâ€“Fe Alloys Induced by Highâ€Pressure Torsion. Advanced Engineering Materials, 2015, 17, 1835-1841.	1.6	95
3	Promoting abnormal grain growth in Fe-based shape memory alloys through compositional adjustments. Nature Communications, 2019, 10, 2337.	5.8	79
4	Formation of the Ï‰ Phase in the Titaniumâ€"Iron System under Shear Deformation. JETP Letters, 2020, 111, 568-574.	0.4	65
5	Phase transformations in the severely plastically deformed Zrâ€“Nb alloys. Materials Letters, 2012, 81, 225-228.	1.3	61
6	Cyclic degradation in bamboo-like Feâ€“Mnâ€“Alâ€“Ni shape memory alloys â€" The role of grain orientation. Scripta Materialia, 2016, 114, 156-160.	2.6	61
7	Transformations of Î±' martensite in Tiâ€“Fe alloys under high pressure torsion. Scripta Materialia, 2017, 136, 46-49.	2.6	44
8	Thermodynamic assessment of the Crâ€“Ti and first assessment of the Alâ€“Crâ€“Ti systems. Intermetallics, 2011, 19, 1222-1235.	1.8	32
9	Calorimetric investigation of the La2Zr2O7, Nd2Zr2O7, Sm2Zr2O7 and LaYO3 compounds and CALPHAD assessment of the La2O3â€“Y2O3 system. Thermochimica Acta, 2011, 526, 50-57.	1.2	30
10	On the microstructural and functional stability of Fe-Mn-Al-Ni at ambient and elevated temperatures. Scripta Materialia, 2019, 162, 442-446.	2.6	27
11	Transformation Pathway upon Heating of Tiâ€“Fe Alloys Deformed by Highâ€Pressure Torsion. Advanced Engineering Materials, 2018, 20, 1700933.	1.6	23
12	Heat capacity for the Eu2Zr2O7 and phase relations in the ZrO2â€“Eu2O3 system: Experimental studies and calculations. Thermochimica Acta, 2013, 558, 74-82.	1.2	22
13	Cyclic Degradation Behavior of $$ langle 001 angle $$ âŸ¨ 001 âŸ© -Oriented Feâ€“Mnâ€“Alâ€“Ni Single Crystals in Tension. Shape Memory and Superelasticity, 2017, 3, 335-346.	1.1	22
14	Effective Temperature of High Pressure Torsion in Zr-Nb Alloys. High Temperature Materials and Processes, 2012, 31, .	0.6	20
15	Thermophysical properties of pyrochlore and fluorite phases in the Ln2Zr2O7â€“Y2O3 systems (Ln=La,) Tj ETQq1 1 0.784314 rgBT /Ove Compounds, 2014, 586, 118-128.	2.8	19
16	Thermodynamic assessment and experimental investigation of the systems Alâ€“Feâ€“Mn and Alâ€“Feâ€“Mnâ€“Ni. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2019, 66, 101621.	0.7	19
17	Effect of Melt Conditioning on Removal of Fe from Secondary Al-Si Alloys Containing Mg, Mn, and Cr. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 6375-6389.	1.1	15
18	Thermodynamic and physical properties of Zr3Fe and ZrFe2 intermetallic compounds. Intermetallics, 2019, 109, 189-196.	1.8	14

#	ARTICLE	IF	CITATIONS
19	Thermal Stability of Athermal Ï‰â€•Ti(Fe) Produced upon Quenching of Î²â€•Ti(Fe). Advanced Engineering Materials, 2019, 21, 1800158.	1.6	14
20	Thermodynamics of martensite formation in Feâ€“Mnâ€“Alâ€“Ni shape memory alloys. Scripta Materialia, 2021, 192, 26-31.	2.6	14
21	High-temperature phase equilibria with the bcc-type Î² (AlMo) phase in the binary Alâ€“Mo system. Intermetallics, 2017, 83, 29-37.	1.8	12
22	Formation and Thermal Stability of Ï‰-Ti(Fe) in Î±-Phase-Based Ti(Fe) Alloys. Metals, 2020, 10, 402.	1.0	12
23	Thermophysical properties of pyrochlore and fluorite phases in the Ln2Zr2O7â€“Y2O3 systems (Ln = La,) Tj ETQq1 1 0.784314 rgBT / Sm2Zr2O7â€“Y2O3. Journal of Alloys and Compounds, 2015, 625, 200-207.	2.8	10
24	Thermodynamic assessment and experimental investigation of the Alâ€“Mnâ€“Ni system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2019, 64, 78-89.	0.7	10
25	Functionally graded structures realized based on Feâ€“Mnâ€“Alâ€“Ni shape memory alloys. Scripta Materialia, 2021, 194, 113619.	2.6	10
26	In situ characterization of the functional degradation of a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"><mml:mrow><mml:mo>[</mml:mo><mml:mrow><mml:mn>00</mml:mn><mml:mover accent="true"><mml:mn>1</mml:mn><mml:mo>Â¯</mml:mo></mml:mover></mml:mrow><mml:mo>]</mml:mo></mml:mrow></mml: orientated Feâ€“Mnâ€“Alâ€“Ni single crystal under compression using acoustic emission measurements. Acta Materialia, 2021, 220, 117333.	3.8	10
27	New experimental investigations of phase relations in the Yb2O3â€“Al2O3 and ZrO2â€“Yb2O3â€“Al2O3 systems and assessment of thermodynamic parameters. Journal of the European Ceramic Society, 2015, 35, 2855-2871.	2.8	9
28	Experimental Investigations of the Fe-Mn-Ti System in the Concentration Range of up to 30Âat.% Ti. Journal of Phase Equilibria and Diffusion, 2020, 41, 457-467.	0.5	9
29	Phase equilibria at 1473K in the ternary Alâ€“Crâ€“Ti system. Journal of Alloys and Compounds, 2013, 550, 519-525.	2.8	8
30	Nanoscale twinning in Feâ€“Mnâ€“Alâ€“Ni martensite: a backscatter Kikuchi diffraction study. Journal of Applied Crystallography, 2021, 54, 54-61.	1.9	8
31	The ternary Alâ€“Moâ€“Ti system revisited: Phase equilibria of Al63(Mo,Ti)37. Journal of Alloys and Compounds, 2019, 811, 152055.	2.8	7
32	An orthorhombic D022-like precursor to Al8Mo3 in the Alâ€“Moâ€“Ti system. Journal of Alloys and Compounds, 2020, 823, 153807.	2.8	7
33	High temperature phase equilibria in the Ti-poor part of the Alâ€“Moâ€“Ti system. Journal of Alloys and Compounds, 2017, 706, 616-628.	2.8	6
34	Binary Tiâ€“Fe system. Part I: Experimental investigation at high pressure. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2021, 74, 102322.	0.7	6
35	Constitution of the liquidus and solidus surfaces of the Alâ€“Tiâ€“Cr system. Journal of Alloys and Compounds, 2014, 584, 438-446.	2.8	5
36	Nanoscale twinning and superstructures of martensite in the Feâ€“Mnâ€“Alâ€“Ni system. Materialia, 2021, 16, 101062.	1.3	5

#	Article	IF	Citations
37	Binary Tiâ€“Fe system. Part II: Modelling of pressure-dependent phase stabilities. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2022, 76, 102383.	0.7	5
38	Specific Heat Capacity Measurements of Intermetallic Phases in the Ternary Al-Ti-Cr System. Journal of Phase Equilibria and Diffusion, 2014, 35, 658-665.	0.5	4
39	Experimental investigation of phase relations and thermodynamic properties in the system ZrO 2 â€“Eu 2 O 3 â€“Al 2 O 3. Journal of the European Ceramic Society, 2016, 36, 1455-1468.	2.8	4
40	Thermodynamic re-modelling of the Cuâ€“Nbâ€“Sn system: Integrating the nausite phase. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2022, 77, 102409.	0.7	4