

Ludger Weber

List of Publications by Year in descending order

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59
papers

1,952
citations

279798

23
h-index

254184

43
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62
all docs

62
docs citations

62
times ranked

1542
citing authors

#	ARTICLE	IF	CITATIONS
1	Liquid metal infiltration of silicon based alloys into porous carbonaceous materials. Part II: Experimental verification of modelling approaches by infiltration of Si-Zr alloy into idealized microchannels. <i>Journal of the European Ceramic Society</i> , 2022, 42, 1984-1994.	5.7	4
2	Liquid metal infiltration of silicon based alloys into porous carbonaceous materials. Part I: Modelling of channel filling and reaction phase formation. <i>Journal of the European Ceramic Society</i> , 2022, 42, 1971-1983.	5.7	5
3	Kinetic processes in the high-temperature pressure-infiltration of Al into Al ₂ O ₃ . <i>Acta Materialia</i> , 2020, 189, 105-117.	7.9	10
4	Reactive pressure infiltration of Cu-46at.pct. Si into carbon. <i>Acta Materialia</i> , 2019, 177, 9-19.	7.9	5
5	Role of the electron-phonon coupling on the thermal boundary conductance of metal/diamond interfaces with nanometric interlayers. <i>Journal of Applied Physics</i> , 2019, 126, 165302.	2.5	10
6	Mechanical properties of replicated cellular Zn and Zn1.5Mg in uniaxial compression. <i>Materials Characterization</i> , 2019, 157, 109895.	4.4	5
7	Towards a coherent database of thermal boundary conductance at metal/dielectric interfaces. <i>Journal of Applied Physics</i> , 2019, 125, 095302.	2.5	18
8	Influence of interfacial structural disorder and/or chemical interdiffusion on thermal boundary conductance for Ti/Si and Au/Si couples. <i>Journal of Applied Physics</i> , 2019, 126, .	2.5	7
9	Studying the wettability of Si and eutectic Si-Zr alloy on carbon and silicon carbide by sessile drop experiments. <i>Journal of the European Ceramic Society</i> , 2019, 39, 735-742.	5.7	31
10	Influence of the thickness of a nanometric copper interlayer on Au/dielectric thermal boundary conductance. <i>Journal of Applied Physics</i> , 2018, 124, .	2.5	19
11	Development of a new family of phosphorous-free Pt-based bulk metallic glasses. <i>Journal of Alloys and Compounds</i> , 2017, 695, 3419-3428.	5.5	8
12	Effects of partial crystallization in Pt-Si-B-based bulk metallic glasses on glass transition and crystallization of the remaining amorphous matrix. <i>Journal of Non-Crystalline Solids</i> , 2017, 460, 66-73.	3.1	6
13	Fluid flow through replicated microcellular materials in the Darcy-Forchheimer regime. <i>Acta Materialia</i> , 2017, 126, 280-293.	7.9	15
14	Effect of hydrostatic pressure on flow and deformation in highly reinforced particulate composites. <i>Acta Materialia</i> , 2016, 117, 345-355.	7.9	11
15	Thermal Boundary Conductance: A Materials Science Perspective. <i>Annual Review of Materials Research</i> , 2016, 46, 433-463.	9.3	185
16	Influence of the wetting angle on capillary forces in pressure infiltration. <i>Acta Materialia</i> , 2015, 91, 57-69.	7.9	33
17	Percolation and Universal Scaling in Composite Infiltration Processing. <i>Materials Research Letters</i> , 2015, 3, 7-15.	8.7	13
18	Influence of a Nanometric Al ₂ O ₃ Interlayer on the Thermal Conductance of an Al/(Si, Diamond) Interface. <i>Advanced Engineering Materials</i> , 2015, 17, 68-75.	3.5	12

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19	Temperature dependence of the thermal boundary conductance in Ag ³ Si/diamond composites. <i>Diamond and Related Materials</i> , 2015, 57, 37-42.	3.9	13
20	Qualitative link between work of adhesion and thermal conductance of metal/diamond interfaces. <i>Journal of Applied Physics</i> , 2014, 115, .	2.5	46
21	Infiltration of tin bronze into alumina particle beds: influence of alloy chemistry on drainage curves. <i>Journal of Materials Science</i> , 2014, 49, 7669-7678.	3.7	7
22	Thermal boundary conductance between refractory metal carbides and diamond. <i>Acta Materialia</i> , 2014, 73, 337-346.	7.9	42
23	Open cellular magnesium alloys for biodegradable orthopaedic implants. <i>Journal of Magnesium and Alloys</i> , 2013, 1, 303-311.	11.9	31
24	Effect of diamond surface orientation on the thermal boundary conductance between diamond and aluminum. <i>Diamond and Related Materials</i> , 2013, 39, 8-13.	3.9	31
25	Influence of diamond surface termination on thermal boundary conductance between Al and diamond. <i>Journal of Applied Physics</i> , 2013, 113, .	2.5	39
26	Thermal boundary conductance of transition metals on diamond. <i>Emerging Materials Research</i> , 2012, 1, 89-98.	0.7	25
27	Solid solubility of germanium in silver. <i>Thermochimica Acta</i> , 2012, 544, 57-62.	2.7	7
28	Influence of sample processing parameters on thermal boundary conductance value in an Al/AlN system. <i>Applied Physics Letters</i> , 2011, 98, 091905.	3.3	14
29	Influence of processing route on electrical and thermal conductivity of Al/SiC composites with bimodal particle distribution. <i>Journal of Materials Science</i> , 2010, 45, 2203-2209.	3.7	19
30	Influence of reinforcement contiguity on the thermal expansion of alumina particle reinforced aluminium composites. <i>International Journal of Materials Research</i> , 2010, 101, 1113-1120.	0.3	27
31	Processing of Ag ³ Cu alloy foam by the replication process. <i>Scripta Materialia</i> , 2009, 61, 351-354.	5.2	17
32	Rigidity of diamond reinforced metals featuring high particle contents. <i>Composites Science and Technology</i> , 2009, 69, 1660-1666.	7.8	21
33	In situ flow stress of pure aluminium constrained by tightly packed alumina fibres. <i>Acta Materialia</i> , 2009, 57, 1795-1812.	7.9	60
34	High-temperature wettability of aluminum nitride during liquid metal infiltration. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 495, 197-202.	5.6	24
35	Tensile flow stress of ceramic particle-reinforced metal in the presence of particle cracking. <i>Acta Materialia</i> , 2008, 56, 4402-4416.	7.9	20
36	Thermal conductivity of Al ³ SiC composites with monomodal and bimodal particle size distribution. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 480, 483-488.	5.6	144

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37	Direct measurement of drainage curves in infiltration of SiC particle preforms. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 495, 203-207.	5.6	11
38	Thermal conductivity of aluminum matrix composites reinforced with mixtures of diamond and SiC particles. <i>Scripta Materialia</i> , 2008, 58, 393-396.	5.2	117
39	On the influence of active element content on the thermal conductivity and thermal expansion of Cu ϵ X (X=Cr, B) diamond composites. <i>Scripta Materialia</i> , 2007, 57, 988-991.	5.2	251
40	The electrical conductivity of microcellular metals. <i>Journal of Applied Physics</i> , 2006, 100, 044912.	2.5	38
41	Reactivity and thermal behaviour of Cu ϵ Si/SiC composites: effects of SiC oxidation. <i>Materials Science and Technology</i> , 2006, 22, 1464-1468.	1.6	19
42	Damage evolution in Saffil alumina short-fibre reinforced aluminium during tensile testing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005, 395, 27-34.	5.6	16
43	Non-conducting inclusions in a conducting matrix: Influence of inclusion size on electrical conductivity. <i>Acta Materialia</i> , 2005, 53, 1945-1953.	7.9	23
44	Ductility of Saffil ϵ short fibre reinforced metals. <i>Scripta Materialia</i> , 2005, 53, 17-21.	5.2	1
45	Measuring and tailoring capillary forces during liquid metal infiltration. <i>Current Opinion in Solid State and Materials Science</i> , 2005, 9, 196-201.	11.5	49
46	Damage evolution of Nextel 610TM alumina fibre reinforced aluminium. <i>Acta Materialia</i> , 2004, 52, 573-581.	7.9	23
47	On the electrical conductivity of metal matrix composites containing high volume fractions of non-conducting inclusions. <i>Acta Materialia</i> , 2003, 51, 3199-3211.	7.9	102
48	Transmitted light microscopy of a fibre reinforced metal. <i>Journal of Microscopy</i> , 2003, 209, 8-12.	1.8	6
49	On the influence of the shape of randomly oriented, non-conducting inclusions in a conducting matrix on the effective electrical conductivity. <i>Acta Materialia</i> , 2003, 51, 495-505.	7.9	56
50	Corrigendum to: on the tensile behaviour of infiltrated alumina particle reinforced aluminium composites. <i>Acta Materialia</i> , 2003, 51, 6493-6496.	7.9	7
51	The influence of non-linear elasticity on the determination of Weibull parameters using the fibre bundle tensile test. <i>Composites Part A: Applied Science and Manufacturing</i> , 2003, 34, 907-912.	7.6	5
52	Equilibrium solid solubility of silicon in silver. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2002, 33, 1145-1150.	2.2	34
53	Nextel ϵ 610 alumina fibre reinforced aluminium: influence of matrix and process on flow stress. <i>Composites Part A: Applied Science and Manufacturing</i> , 2001, 32, 1067-1075.	7.6	23
54	Quantification of microdamage phenomena during tensile straining of high volume fraction particle reinforced aluminium. <i>Acta Materialia</i> , 2001, 49, 497-505.	7.9	68

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55	Influence of damage on the tensile behaviour of pure aluminium reinforced with 40 vol. pct alumina particles. <i>Acta Materialia</i> , 2001, 49, 3699-3709.	7.9	86
56	Plasticity in Chevron-notch fracture toughness testing. <i>Engineering Fracture Mechanics</i> , 2000, 67, 263-276.	4.3	12
57	Swift and inverse Swift effect in alumina fiber reinforced aluminum wires. <i>Acta Materialia</i> , 2000, 48, 2451-2459.	7.9	4
58	Fracture strength of alumina fiber reinforced aluminum wire with and without a torsional pre-strain. <i>Acta Materialia</i> , 2000, 48, 3235-3244.	7.9	4
59	Surface Modification of Diamonds in Diamond/Al-Matrix Composite. <i>Advanced Materials Research</i> , 0, 59, 125-130.	0.3	13