

Michael B Kerber

List of Publications by Year in descending order

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35
papers

1,127
citations

430874

18
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395702

33
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all docs

36
docs citations

36
times ranked

1145
citing authors

#	ARTICLE	IF	CITATIONS
1	Structure-dynamics relationships in cryogenically deformed bulk metallic glass. <i>Nature Communications</i> , 2022, 13, 127.	12.8	24
2	The impact of high hydrostatic pressure maintenance after high-pressure torsion on phenomena during high hydrostatic pressure annealing. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2022, 840, 142874.	5.6	2
3	Half-Heusler alloys: Enhancement of ZT after severe plastic deformation (ultra-low thermal) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tt 5	7.9	44
4	In-Situ Synchrotron Profile Analysis after High-Pressure Torsion Deformation. <i>Crystals</i> , 2019, 9, 232.	2.2	10
5	Sustainable and simple processing technique for n-type skutterudites with high ZT and their analysis. <i>Acta Materialia</i> , 2019, 173, 9-19.	7.9	22
6	Plastic yielding of glass in high-pressure torsion apparatus. <i>International Journal of Applied Glass Science</i> , 2019, 10, 17-26.	2.0	3
7	Strengthening during heat treatment of HPT processed copper and nickel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 742, 124-131.	5.6	14
8	Direct SPD-processing to achieve high-ZT skutterudites. <i>Acta Materialia</i> , 2018, 159, 352-363.	7.9	27
9	Phase transformations of severely plastically deformed Ti-Ni-Pd high-temperature shape memory alloys. <i>Functional Materials Letters</i> , 2017, 10, 1740012.	1.2	5
10	Dislocation Movement Induced by Molecular Relaxations in Isotactic Polypropylene. <i>Macromolecules</i> , 2017, 50, 6362-6368.	4.8	23
11	In Situ X-Ray Synchrotron Profile Analysis During High Pressure Torsion of Ti. <i>Minerals, Metals and Materials Series</i> , 2017, , 645-651.	0.4	1
12	Nonequilibrium structural states in nickel after large plastic deformation. <i>Letters on Materials</i> , 2014, 4, 100-103.	0.7	3
13	Nature and density of lattice defects in ball milled nanostructured copper. <i>Mechanics of Materials</i> , 2013, 67, 59-64.	3.2	8
14	The role of dislocations in β -iPP under plastic deformation investigated by X-ray line profile analysis. <i>Mechanics of Materials</i> , 2013, 67, 126-132.	3.2	20
15	Following the deformation behavior of nanocrystalline Pd films on polyimide substrates using in situ synchrotron XRD. <i>Mechanics of Materials</i> , 2013, 67, 65-73.	3.2	14
16	Deformation-induced grain growth and twinning in nanocrystalline palladium thin films. <i>Beilstein Journal of Nanotechnology</i> , 2013, 4, 554-566.	2.8	27
17	Changes of Thermoelectric Properties and Hardness After HPT Processing of Micro- and Nanostructured Skutterudites. <i>NATO Science for Peace and Security Series B: Physics and Biophysics</i> , 2013, , 81-91.	0.3	3
18	The role of dislocations for the plastic deformation of semicrystalline polymers as investigated by multireflection X-ray line profile analysis. <i>Journal of Applied Polymer Science</i> , 2012, 125, 4150-4154.	2.6	13

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19	The formation of supersaturated solid solutions in Fe-Cu alloys deformed by high-pressure torsion. <i>Acta Materialia</i> , 2012, 60, 860-871.	7.9	144
20	High-pressure torsion, a new processing route for thermoelectrics of high ZTs by means of severe plastic deformation. <i>Acta Materialia</i> , 2012, 60, 2146-2157.	7.9	117
21	X-ray line profile analysis—An ideal tool to quantify structural parameters of nanomaterials. <i>Jom</i> , 2011, 63, 61-70.	1.9	42
22	Plasticity and X-ray Line Profile Analysis of the semicrystalline polymer poly(3-hydroxybutyrate). <i>Journal of Physics: Conference Series</i> , 2010, 240, 012146.	0.4	4
23	Activation Enthalpies of Deformation-Induced Lattice Defects in Severe Plastic Deformation Nanometals Measured by Differential Scanning Calorimetry. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2010, 41, 810-815.	2.2	41
24	Determination of lamella thickness distributions in isotactic polypropylene by X-ray line profile analysis. <i>Polymer</i> , 2010, 51, 4195-4199.	3.8	25
25	Nanocrystallization and Dissolution of Immiscible Powder Alloys Using High Pressure Torsion. <i>Materials Science Forum</i> , 2010, 667-669, 151-156.	0.3	0
26	Multifilled nanocrystalline p-type didymium - Skutterudites with $ZT > 1.2$. <i>Intermetallics</i> , 2010, 18, 2435-2444.	3.9	93
27	Thermoelectric performance of mischmetal skutterudites $M_{my}Fe_{4-x}Co_xSb_{12}$ at elevated temperatures. <i>Journal of Alloys and Compounds</i> , 2010, 490, 19-25.	5.5	49
28	Impact of high pressure torsion on the microstructure and physical properties of $Pr_{0.67}Fe_3CoSb_{12}$, $Pr_{0.71}Fe_{3.5}Ni_{0.5}Sb_{12}$, and $Ba_{0.06}Co_4Sb_{12}$. <i>Journal of Alloys and Compounds</i> , 2010, 494, 78-83.	5.5	50
29	Synchrotron X-ray line-profile analysis experiments for the in-situ microstructural characterisation of SPD nanometals during tensile deformation. <i>International Journal of Materials Research</i> , 2009, 100, 770-774.	0.3	9
30	Structure and texture of electrochemically prepared nickel layers with co-deposited zirconia nanoparticles. <i>Surface and Coatings Technology</i> , 2009, 203, 1438-1443.	4.8	10
31	$MmFe_4Sb_{12}$ - and $CoSb_3$ -based nano-skutterudites prepared by ball milling: Kinetics of formation and transport properties. <i>Journal of Alloys and Compounds</i> , 2009, 481, 106-115.	5.5	64
32	Microstructural investigation of the annealing behaviour of high-pressure torsion (HPT) deformed copper. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007, 462, 139-143.	5.6	50
33	Lattice defect investigation of ECAP-Cu by means of X-ray line profile analysis, calorimetry and electrical resistometry. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005, 410-411, 169-173.	5.6	159
34	Head-on collision of ultrarelativistic charges. <i>Classical and Quantum Gravity</i> , 2004, 21, S1-S10.	4.0	2
35	Impact of Ball Milling and High-Pressure Torsion on the Microstructure and Thermoelectric Properties of p- and n-Type Sb-Based Skutterudites. <i>Materials Science Forum</i> , 0, 667-669, 1089-1094.	0.3	5