Stefan Mitsche

List of Publications by Year
in descending order

43	863	623734	477307
papers	citations	14 h-index	29 g-index

45	45	45	914
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Dynamic recrystallization of Ni-base alloysâ€"Experimental results and comparisons with simulations. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 420, 306-314.	5.6	86
2	Assessment of dynamic softening mechanisms in AllvacÂ® 718Plusâ„¢ by EBSD analysis. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 3754-3760.	5.6	72
3	Recrystallization behaviour of the nickelâ€based alloy 80 A during hot forming. Journal of Microscopy, 2007, 227, 267-274.	1.8	70
4	On the discrimination of semi-graphite and graphite by Raman spectroscopy. International Journal of Coal Geology, 2016, 159, 48-56.	5.0	67
5	Enzymatic hydrolysis of PTT polymers and oligomers. Journal of Biotechnology, 2008, 135, 45-51.	3.8	63
6	Laser powder bed fusion of nano-CaB6 decorated 2024 aluminum alloy. Journal of Alloys and Compounds, 2021, 863, 158714.	5.5	59
7	Investigations into the delayed fracture susceptibility of 34CrNiMo6 steel, and the opportunities for its application in ultra-high-strength bolts and fasteners. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 590, 66-73.	5.6	55
8	Unified description of the softening behavior of beta-metastable and alpha+beta titanium alloys during hot deformation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 651, 280-290.	5.6	55
9	Martensite laths in creep resistant martensitic 9â€"12% Cr steels â€" Calculation and measurement of misorientations. Materials Characterization, 2007, 58, 874-882.	4.4	42
10	Biotransformation of Scheelite CaWO4 by the Extreme Thermoacidophile Metallosphaera sedula: Tungstenâ€"Microbial Interface. Frontiers in Microbiology, 2019, 10, 1492.	3.5	25
11	FE modelling of microstructure evolution during friction stir spot welding in AA6082-T6. Welding in the World, Le Soudage Dans Le Monde, 2013, 57, 895-902.	2.5	24
12	Effect of commercial anatase-TiO2 raw materials on the electrical characteristics of ceramics with positive temperature coefficient of resistivity. Journal of the European Ceramic Society, 2011, 31, 2339-2349.	5.7	22
13	Geopolymerization of coal fly ash in the presence of electric arc furnace dust. Minerals Engineering, 2013, 49, 24-32.	4.3	22
14	A method to measure the total scattering cross section and effective beam gas path length in a lowâ€vacuum SEM. Scanning, 2009, 31, 107-113.	1.5	19
15	Influence of Melt-Pool Stability in 3D Printing of NdFeB Magnets on Density and Magnetic Properties. Materials, 2020, 13, 139.	2.9	15
16	Substrate structure dependence of the growth modes of p-quaterphenyl thin films on gold. Thin Solid Films, 2005, 484, 408-414.	1.8	14
17	Recrystallization and grain growth in the nickel-based superalloy allvac 718Plus. International Journal of Materials Research, 2009, 100, 1088-1098.	0.3	14
18	Microstructure Evolution in a 6082 Aluminium Alloy during Thermomechanical Treatment. Materials, 2018, 11, 1319.	2.9	14

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19	Evolution of Microstructure and Texture in Laboratory- and Industrial-Scaled Production of Automotive Al-Sheets. Materials, 2020, 13, 469.	2.9	14
20	Creep and damage investigation of advanced martensitic chromium steel weldments for high temperature applications in thermal power plants. Science and Technology of Welding and Joining, 2015, 20, 82-90.	3.1	12
21	The Impact of Weld Metal Creep Strength on the Overall Creep Strength of 9% Cr Steel Weldments. Journal of Engineering Materials and Technology, Transactions of the ASME, 2011, 133, .	1.4	11
22	Viscoplastic Self-consistent Modeling of the Through-Thickness Texture of a Hot-Rolled Al-Mg-Si Plate. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 3066-3075.	2.2	11
23	In situ mechanical compression of polycrystalline BaTiO3 in the ESEM. Journal of the European Ceramic Society, 2014, 34, 2211-2215.	5.7	9
24	On the modelling of the interaction of materials softening and ductile damage during hot working of Alloy 80A. Journal of Materials Processing Technology, 2006, 177, 282-286.	6.3	8
25	Quantification of the Recrystallized Fraction in a Nickelbase-Alloy from EBSD-Data. Microscopy and Microanalysis, 2003, 9, 344-345.	0.4	7
26	Comparison of experimental and Finite Element Modelling of the extrusion of AA6082 on both tools and extrudate as a function of process parameters. International Journal of Material Forming, 2008, 1, 427-430.	2.0	6
27	Structure and morphology of an organic/inorganic multilayer stack: An x-ray reflectivity study. Journal of Applied Physics, 2011, 110, .	2.5	6
28	Investigations on susceptibility to intergranular corrosion of thermoâ€mechanically rolled corrosionâ€resistant materials 316L and Alloy 825. Materials and Corrosion - Werkstoffe Und Korrosion, 2013, 64, 290-299.	1.5	6
29	Recrystallized cube grains in an Alâ€“Mgâ€“Si alloy dependent on prior cold rolling. Materials Science and Technology, 2019, 35, 1081-1087.	1.6	6
30	Advanced Microstructures for Increased Creep Rupture Strength of MARBN Steels. Materials Science Forum, 0, 783-786, 1867-1871.	0.3	5
31	Analysis of the evolution of Mg₂Si precipitates during continuous cooling and subsequent re-heating of a 6061 aluminum alloy with differential scanning calorimetry and a simple model. International Journal of Materials Research, 2022, 113, 316-326.	0.3	5
32	Physically Based Microstructure Modelling of AA6082 during Hot Extrusion. Key Engineering Materials, 2009, 424, 27-34.	0.4	3
33	Microstructural Evolution of AA6082 with Small Aluminides under Hot Torsion and Friction Stir Processing. Materials Science Forum, 0, 753, 263-266.	0.3	3
34	Preparation Method of Spherical and Monocrystalline Aluminum Powder. Metals, 2019, 9, 375.	2.3	3
35	Numerical investigation of the effect of rate-sensitivity, non-octahedral slip and grain shape on texture evolution during hot rolling of aluminum alloys. Modelling and Simulation in Materials Science and Engineering, 2021, 29, 015006.	2.0	3
36	Influence of Temperature and Strain Rate on Dynamic Softening Processes in AllvacÂ® 718Plusâ„¢. Materials Science Forum, 0, 706-709, 2440-2445.	0.3	2

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37	Physical and Numerical Simulations of the Microstructure Evolution in AA6082 during Friction Stir Processing by Means of Hot Torsion and FEM. Materials Science Forum, 0, 762, 590-595.	0.3	2
38	Intermetallic Compound and Void Kinetics Extraction From Resistance Evolution in Copper Pillars During Electromigration Stress Tests. IEEE Transactions on Device and Materials Reliability, 2018, 18, 313-320.	2.0	1
39	Analysis of submicron particles by scanning electron microscopyâ€energyâ€dispersive Xâ€ray spectrometryâ€"accuracy of size measurement. Scanning, 2006, 28, 282-288.	1.5	0
40	Reconstruction of Î´-phase in Superalloy by 3D EDXS in a DualBeam FIB. Microscopy and Microanalysis, 2008, 14, 984-985.	0.4	0
41	Physical Based Microstructure Modelling Coupled with Nucleation Theory during and after Hot Forming of AA5083. Advanced Materials Research, 0, 89-91, 509-514.	0.3	0
42	Investigation of Friction Stir Welding of Stainless Steel Using a Stop-Action-Technique. Advanced Materials Research, 2011, 409, 293-298.	0.3	0
43	Dissimilar Electron Beam Welds of Nickel Base Alloy A625 with a 9% Cr-Steel for High Temperature Applications. Materials Science Forum, 2016, 879, 2100-2106.	0.3	0