

Kumar Babu Surreddi

List of Publications by Year in descending order

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43
papers

1,920
citations

394286

19
h-index

276775

41
g-index

45
all docs

45
docs citations

45
times ranked

1704
citing authors

#	ARTICLE	IF	CITATIONS
1	Microstructure and mechanical properties of Al ¹² Si produced by selective laser melting: Effect of heat treatment. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 590, 153-160.	2.6	649
2	Mechanical properties of Al-based metal matrix composites reinforced with Zr-based glassy particles produced by powder metallurgy. <i>Acta Materialia</i> , 2009, 57, 2029-2039.	3.8	229
3	Powder metallurgy of Al-based metal matrix composites reinforced with $\hat{1}^2$ -Al ₃ Mg ₂ intermetallic particles: Analysis and modeling of mechanical properties. <i>Acta Materialia</i> , 2009, 57, 4529-4538.	3.8	165
4	Production and mechanical properties of metallic glass-reinforced Al-based metal matrix composites. <i>Journal of Materials Science</i> , 2008, 43, 4518-4526.	1.7	88
5	Significant tensile ductility induced by cold rolling in Cu _{47.5} Zr _{47.5} Al ₅ bulk metallic glass. <i>Intermetallics</i> , 2011, 19, 1394-1398.	1.8	83
6	Ductile bulk metallic glasses produced through designed heterogeneities. <i>Scripta Materialia</i> , 2011, 65, 815-818.	2.6	76
7	Mechanical alloying and milling of Al-Mg alloys. <i>Journal of Alloys and Compounds</i> , 2009, 483, 2-7.	2.8	67
8	Effect of cold rolling on compressive and tensile mechanical properties of Zr _{52.5} Ti ₅ Cu ₁₈ Ni _{14.5} Al ₁₀ bulk metallic glass. <i>Journal of Alloys and Compounds</i> , 2011, 509, S128-S130.	2.8	56
9	Crystallization behavior and consolidation of gas-atomized Al ₈₄ Gd ₆ Ni ₇ Co ₃ glassy powder. <i>Journal of Alloys and Compounds</i> , 2010, 491, 137-142.	2.8	50
10	Microstructure and mechanical properties of Laves phase-reinforced Fe-Zr-Cr alloys. <i>Intermetallics</i> , 2009, 17, 532-539.	1.8	39
11	Grain and crystallite size evaluation of cryomilled pure copper. <i>Journal of Alloys and Compounds</i> , 2011, 509, S343-S347.	2.8	33
12	High-strength Al ₈₇ Ni ₈ La ₅ bulk alloy produced by spark plasma sintering of gas atomized powders. <i>Journal of Materials Research</i> , 2009, 24, 2909-2916.	1.2	28
13	Enhanced plastic deformation of Zr _{41.2} Ti _{13.8} Cu _{12.5} Ni ₁₀ Be _{22.5} bulk metallic glass by the optimization of frictional boundary restraints. <i>Scripta Materialia</i> , 2010, 62, 750-753.	2.6	25
14	Phase evolution during the reactive sintering of ternary Al-Ni-Ti powder compacts. <i>Journal of Alloys and Compounds</i> , 2016, 661, 294-305.	2.8	25
15	Strain-induced structural transformation of single-phase Al-Cu-Fe icosahedral quasicrystal during mechanical milling. <i>Philosophical Magazine</i> , 2011, 91, 2482-2490.	0.7	23
16	Formation of oxide layers on tungsten at low oxygen partial pressures. <i>Journal of Nuclear Materials</i> , 2018, 506, 26-34.	1.3	22
17	Crystallization kinetics of Zr ₆₅ Ag ₅ Cu _{12.5} Ni ₁₀ Al _{7.5} glassy powders produced by ball milling of pre-alloyed ingots. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009, 513-514, 279-285.	2.6	21
18	Mechanical properties of cold-rolled Zr ₆₀ Ti ₅ Ag ₅ Cu _{12.5} Ni ₁₀ Al _{7.5} metallic glass. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2010, 207, 1118-1121.	0.8	21

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19	Shear band morphology and fracture behavior of cold-rolled Zr _{52.5} Ti ₅ Cu ₁₈ Ni _{14.5} Al ₁₀ bulk metallic glass under tensile loading. <i>Journal of Alloys and Compounds</i> , 2017, 708, 722-727.	2.8	19
20	Consolidation and mechanical properties of ball milled Zr ₅₀ Cu ₅₀ glassy ribbons. <i>Journal of Alloys and Compounds</i> , 2009, 483, 227-230.	2.8	17
21	Enhanced Densification of PM Steels by Liquid Phase Sintering with Boron-Containing Master Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2018, 49, 255-263.	1.1	17
22	Microstructure and mechanical properties of partially amorphous Al ₈₅ Y ₈ Ni ₅ Co ₂ plate produced by spray forming. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010, 527, 2747-2758.	2.6	16
23	Improved Room Temperature Plasticity of Zr _{41.2} Ti _{13.8} Cu _{12.5} Ni ₁₀ Be _{22.5} Bulk Metallic Glass by Channel Die Compression. <i>Advanced Engineering Materials</i> , 2010, 12, 1123-1126.	1.6	14
24	Pressure-assisted sintering of Al-Gd-Ni-Co amorphous alloy powders. <i>Materialia</i> , 2018, 2, 157-166.	1.3	13
25	Formation of Nanocrystalline Matrix Composite during Spray Forming of Al ₈₃ La ₅ Y ₅ Ni ₅ Co ₂ . <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2009, 40, 450-461.	1.1	12
26	Structure and mechanical properties of Al-Mg alloys produced by copper mold casting. <i>Journal of Alloys and Compounds</i> , 2010, 504, S483-S486.	2.8	11
27	Deformation at ambient and high temperature of <i>in situ</i> Laves phases-ferrite composites. <i>Science and Technology of Advanced Materials</i> , 2014, 15, 034801.	2.8	11
28	Solid-state processing of Al-Mg alloys. <i>Journal of Physics: Conference Series</i> , 2009, 144, 012019.	0.3	10
29	Structural and Mechanical Characterization of Zr _{58.5} Ti _{8.2} Cu _{14.2} Ni _{11.4} Al _{7.7} Bulk Metallic Glass. <i>Materials</i> , 2012, 5, 1-11.	1.3	10
30	Effect of stress concentration on plastic deformation of Zr _{41.2} Ti _{13.8} Cu _{12.5} Ni ₁₀ Be _{22.5} bulk metallic glass under compressive loading. <i>Materials Letters</i> , 2016, 179, 202-205.	1.3	10
31	Microstructure analysis of martensitic low alloy carbon steel samples subjected to deformation dilatometry. <i>Materials Characterization</i> , 2019, 157, 109926.	1.9	10
32	Study of heavy ion beam induced damage in tungsten for high power target applications. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2019, 439, 7-16.	0.6	9
33	Al-based metal matrix composites reinforced with nanocrystalline Al-Ti-Ni particles. <i>Journal of Physics: Conference Series</i> , 2010, 240, 012154.	0.3	8
34	Spark plasma sintering of gas atomized Al ₈₇ Ni ₈ La ₅ amorphous powder. <i>Journal of Physics: Conference Series</i> , 2009, 144, 012079.	0.3	7
35	Microstructural characteristics of spray formed and heat treated Al-(Y, La)-Ni-Co system. <i>Journal of Alloys and Compounds</i> , 2013, 578, 471-480.	2.8	7
36	<i>In situ</i> X-ray diffraction of mechanically milled Al ₃ Mg ₂ powders. <i>Physica Status Solidi - Rapid Research Letters</i> , 2008, 2, 272-274.	1.2	4

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37	Spray forming of bulk Al ₈₅ Y ₈ Ni ₅ Co ₂ with co-existing amorphous, nano- and micro-crystalline structures. Transactions of the Indian Institute of Metals, 2009, 62, 331-335.	0.7	4
38	Tool wear by dissolution during machining of alloy 718 and Waspaloy: a comparative study using diffusion couples. International Journal of Advanced Manufacturing Technology, 2020, 106, 1431-1440.	1.5	4
39	Production of high-strength Al ₈₅ Y ₈ Ni ₅ Co ₂ bulk alloy by spark plasma sintering. Journal of Physics: Conference Series, 2010, 240, 012155.	0.3	2
40	Stress-induced martensitic transformation in a Ti ₄₅ Zr ₃₈ Al ₁₇ cast rod. Journal of Physics: Conference Series, 2009, 144, 012090.	0.3	1
41	Microstructure and properties of in situ high entropy alloy/tungsten carbide composites by mechanical alloying.. Material Design and Processing Communications, 2021, 3, .	0.5	1
42	Consolidation and Mechanical Properties of Mechanically Alloyed Al-Mg Powders. Materials Research Society Symposia Proceedings, 2008, 1128, 54601.	0.1	0
43	Powder metallurgy of high-strength Al _{90.4} Y _{4.4} Ni _{4.3} Co _{0.9} gas-atomized powder. , 2012, , 1017-1022.		0