Kumar Babu Surreddi

List of Publications by Citations

44 papers	1,526 citations	17 h-index	39 g-index
45 ext. papers	1,730 ext. citations	3.7 avg, IF	4.22 L-index

#	Paper	IF	Citations
44	Microstructure and mechanical properties of Al–12Si produced by selective laser melting: Effect of heat treatment. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 590, 153-160	5.3	481
43	Mechanical properties of Al-based metal matrix composites reinforced with Zr-based glassy particles produced by powder metallurgy. *Acta Materialia*, **2009**, 57, 2029-2039	8.4	194
42	Powder metallurgy of Al-based metal matrix composites reinforced with β-Al3Mg2 intermetallic particles: Analysis and modeling of mechanical properties. *Acta Materialia*, **2009**, 57, 4529-4538	8.4	128
41	Significant tensile ductility induced by cold rolling in Cu47.5Zr47.5Al5 bulk metallic glass. *Intermetallics*, **2011**, 19, 1394-1398	3.5	75
40	Production and mechanical properties of metallic glass-reinforced Al-based metal matrix composites. *Journal of Materials Science*, **2008**, 43, 4518-4526	4.3	74
39	Ductile bulk metallic glasses produced through designed heterogeneities. *Scripta Materialia*, **2011**, 65, 815-818	5.6	64
38	Mechanical alloying and milling of Al–Mg alloys. *Journal of Alloys and Compounds*, **2009**, 483, 2-7	5.7	62
37	Effect of cold rolling on compressive and tensile mechanical properties of Zr52.5Ti5Cu18Ni14.5Al10 bulk metallic glass. *Journal of Alloys and Compounds*, **2011**, 509, S128-S130	5.7	48
36	Crystallization behavior and consolidation of gas-atomized Al84Gd6Ni7Co3 glassy powder. *Journal of Alloys and Compounds*, **2010**, 491, 137-142	5.7	36
35	Microstructure and mechanical properties of Laves phase-reinforced Fe–Zr–Cr alloys. *Intermetallics*, **2009**, 17, 532-539	3.5	29
34	Grain and crystallite size evaluation of cryomilled pure copper. *Journal of Alloys and Compounds*, **2011**, 509, S343-S347	5.7	24
33	High-strength Al87Ni8La5 bulk alloy produced by spark plasma sintering of gas atomized powders. *Journal of Materials Research*, **2009**, 24, 2909-2916	2.5	24
32	Enhanced plastic deformation of Zr41.2Ti13.8Cu12.5Ni10Be22.5 bulk metallic glass by the optimization of frictional boundary restraints. *Scripta Materialia*, **2010**, 62, 750-753	5.6	21
31	Phase evolution during the reactive sintering of ternary Al–Ni–Ti powder compacts. *Journal of Alloys and Compounds*, **2016**, 661, 294-305	5.7	20
30	Crystallization kinetics of Zr65Ag5Cu12.5Ni10Al7.5 glassy powders produced by ball milling of pre-alloyed ingots. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2009**, 513-514, 279-285	5.3	20
29	Strain-induced structural transformation of single-phase Al–Cu–Fe icosahedral quasicrystal during mechanical milling. *Philosophical Magazine*, **2011**, 91, 2482-2490	1.6	20
28	Mechanical properties of cold-rolled Zr60Ti5Ag5Cu12.5Ni10Al7.5 metallic glass. *Physica Status Solidi (A) Applications and Materials Science*, **2010**, 207, 1118-1121	1.6	20

27	Microstructure and mechanical properties of partially amorphous Al85Y8Ni5Co2 plate produced by spray forming. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2010**, 527, 2747-2758	5.3	15
26	Improved Room Temperature Plasticity of Zr41.2Ti13.8Cu12.5Ni10Be22.5 Bulk Metallic Glass by Channel-Die Compression. *Advanced Engineering Materials*, **2010**, 12, 1123-1126	3.5	14
25	Formation of oxide layers on tungsten at low oxygen partial pressures. *Journal of Nuclear Materials*, **2018**, 506, 26-34	3.3	14
24	Shear band morphology and fracture behavior of cold-rolled Zr52.5Ti5Cu18Ni14.5Al10 bulk metallic glass under tensile loading. *Journal of Alloys and Compounds*, **2017**, 708, 722-727	5.7	13
23	Enhanced Densification of PM Steels by Liquid Phase Sintering with Boron-Containing Master Alloy. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2018**, 49, 255-263	2.3	12
22	Consolidation and mechanical properties of ball milled Zr50Cu50 glassy ribbons. *Journal of Alloys and Compounds*, **2009**, 483, 227-230	5.7	12
21	Formation of Nanocrystalline Matrix Composite during Spray Forming of Al83La5Y5Ni5Co2. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2009**, 40, 450-461	2.3	11
20	Pressure-assisted sintering of Al□dNi□o amorphous alloy powders. *Materialia*, **2018**, 2, 157-166	3.2	10
19	Deformation at ambient and high temperature of Laves phases-ferrite composites. *Science and Technology of Advanced Materials*, **2014**, 15, 034801	7.1	9
18	Solid-state processing of Al-Mg alloys. *Journal of Physics: Conference Series*, **2009**, 144, 012019	0.3	9
17	Structure and mechanical properties of Al□Mg alloys produced by copper mold casting. *Journal of Alloys and Compounds*, **2010**, 504, S483-S486	5.7	8
16	Structural and Mechanical Characterization of ZrTiCuNiAl Bulk Metallic Glass. *Materials*, **2011**, 5, 1-11	3.5	8
15	Al-based metal matrix composites reinforced with nanocrystalline Al-Ti-Ni particles. *Journal of Physics: Conference Series*, **2010**, 240, 012154	0.3	8
14	Study of heavy ion beam induced damage in tungsten for high power target applications. *Nuclear Instruments & Methods in Physics Research B*, **2019**, 439, 7-16	1.2	8
13	Microstructural characteristics of spray formed and heat treated Al□(Y, La)Ni□o system. *Journal of Alloys and Compounds*, **2013**, 578, 471-480	5.7	5
12	Spark plasma sintering of gas atomized Al87Ni8La5amorphous powder. *Journal of Physics: Conference Series*, **2009**, 144, 012079	0.3	5
11	Effect of stress concentration on plastic deformation of Zr41.2Ti13.8Cu12.5Ni10Be22.5 bulk metallic glass under compressive loading. *Materials Letters*, **2016**, 179, 202-205	3.3	5
10	Microstructure analysis of martensitic low alloy carbon steel samples subjected to deformation dilatometry. *Materials Characterization*, **2019**, 157, 109926	3.9	4

9	In-situ X-ray diffraction of mechanically milled Al3Mg2 powders. *Physica Status Solidi - Rapid Research Letters*, **2008**, 2, 272-274	2.5	4
8	Spray forming of bulk Al85Y8Ni5Co2 with co-existing amorphous, nano- and micro-crystalline structures. *Transactions of the Indian Institute of Metals*, **2009**, 62, 331-335	1.2	3
7	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	3.2	3
6	Solidification of Alloy 718, ATI 718Plus and Waspaloy **2014**, 181-192		2
5	Production of high-strength Al85Y8Ni5Co2bulk alloy by spark plasma sintering. *Journal of Physics: Conference Series*, **2010**, 240, 012155	0.3	2
4	Stress-induced martensitic transformation in a Ti45Zr38Al17cast rod. *Journal of Physics: Conference Series*, **2009**, 144, 012090	0.3	1
3	Microstructure and properties of in-situ high entropy alloy/tungsten carbide composites by mechanical alloying.. *Material Design and Processing Communications*, **2020**,	0.9	1
2	Consolidation and mechanical properties of mechanically alloyed Al-Mg powders. *Materials Research Society Symposia Proceedings*, **2008**, 1128, 54601		
1	Powder metallurgy of high-strength Al90.4Y4.4Ni4.3Co0.9 gas-atomized powder **2012**, 1017-1022		