

Bs S Murty

List of Publications by Year in descending order

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399
papers

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19608

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403
all docs

403
docs citations

403
times ranked

9557
citing authors

#	ARTICLE	IF	CITATIONS
1	Grain refinement of aluminium and its alloys by heterogeneous nucleation and alloying. International Materials Reviews, 2002, 47, 3-29.	9.4	706
2	Decomposition in multi-component AlCoCrCuFeNi high-entropy alloy. Acta Materialia, 2011, 59, 182-190.	3.8	656
3	Novel materials synthesis by mechanical alloying/milling. International Materials Reviews, 1998, 43, 101-141.	9.4	553
4	Alloying behavior in multi-component AlCoCrCuFe and NiCoCrCuFe high entropy alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 534, 83-89.	2.6	326
5	Bulk tracer diffusion in CoCrFeNi and CoCrFeMnNi high entropy alloys. Acta Materialia, 2018, 146, 211-224.	3.8	295
6	Tensile and wear behaviour of in situ Al ⁷ Si/TiB ₂ particulate composites. Wear, 2008, 265, 134-142.	1.5	286
7	Synthesis and characterization of nanocrystalline AlFeTiCrZnCu high entropy solid solution by mechanical alloying. Journal of Alloys and Compounds, 2008, 460, 253-257.	2.8	280
8	High-entropy alloys by mechanical alloying: A review. Journal of Materials Research, 2019, 34, 664-686.	1.2	258
9	Mechanical properties of Al-based metal matrix composites reinforced with Zr-based glassy particles produced by powder metallurgy. Acta Materialia, 2009, 57, 2029-2039.	3.8	229
10	Ni tracer diffusion in CoCrFeNi and CoCrFeMnNi high entropy alloys. Journal of Alloys and Compounds, 2016, 688, 994-1001.	2.8	222
11	Alloying, thermal stability and strengthening in spark plasma sintered Al _x CoCrCuFeNi high entropy alloys. Journal of Alloys and Compounds, 2014, 583, 419-426.	2.8	220
12	High-Entropy Alloys. , 2014, , 13-35.		220
13	Processing and properties of nanocrystalline CuNiCoZnAlTi high entropy alloys by mechanical alloying. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 1027-1030.	2.6	219
14	Development of ultrafine grained high strength Al ⁴ Cu alloy by cryorolling. Scripta Materialia, 2006, 54, 2013-2017.	2.6	201
15	Development of an efficient grain refiner for Al ⁷ Si alloy and its modification with strontium. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 283, 94-104.	2.6	194
16	On the Hall-Petch relationship in a nanostructured Al ⁴ Cu alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 7821-7825.	2.6	178
17	Effect of TiB ₂ particles on sliding wear behaviour of Al ⁴ Cu alloy. Wear, 2007, 262, 160-166.	1.5	170
18	Influence of oxygen on the crystallization behavior of Zr ₆₅ Cu _{27.5} Al _{7.5} and Zr _{66.7} Cu _{33.3} metallic glasses. Acta Materialia, 2000, 48, 3985-3996.	3.8	165

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19	Aluminum-Based Cast In Situ Composites: A Review. <i>Journal of Materials Engineering and Performance</i> , 2015, 24, 2185-2207.	1.2	162
20	Thermal Spray High-Entropy Alloy Coatings: A Review. <i>Journal of Thermal Spray Technology</i> , 2020, 29, 857-893.	1.6	162
21	On the parameters to assess the glass forming ability of liquids. <i>Journal of Non-Crystalline Solids</i> , 2005, 351, 1366-1371.	1.5	155
22	Effect of grain size on dielectric and ferroelectric properties of nanostructured Ba _{0.8} Sr _{0.2} TiO ₃ ceramics. <i>Journal of Advanced Ceramics</i> , 2015, 4, 46-53.	8.9	154
23	Plasma-Sprayed High Entropy Alloys: Microstructure and Properties of AlCoCrFeNi and MnCoCrFeNi. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2015, 46, 791-800.	1.1	149
24	Direct evidence for oxygen stabilization of icosahedral phase during crystallization of Zr ₆₅ Cu _{27.5} Al _{7.5} metallic glass. <i>Applied Physics Letters</i> , 2000, 76, 55-57.	1.5	143
25	Atomic-scale compositional characterization of a nanocrystalline AlCrCuFeNiZn high-entropy alloy using atom probe tomography. <i>Acta Materialia</i> , 2013, 61, 4696-4706.	3.8	138
26	Development of Al-Ti-C grain refiners and study of their grain refining efficiency on Al and Al-7Si alloy. <i>Journal of Alloys and Compounds</i> , 2005, 396, 143-150.	2.8	134
27	Phase formation in mechanically alloyed Al _x CoCrCuFeNi (x=0.45, 1, 2.5, 5 mol) high entropy alloys. <i>Intermetallics</i> , 2013, 32, 119-126.	1.8	131
28	Sliding wear behaviour of T6 treated A356-TiB ₂ in-situ composites. <i>Wear</i> , 2009, 266, 865-872.	1.5	122
29	Hot consolidation and mechanical properties of nanocrystalline equiatomic AlFeTiCrZnCu high entropy alloy after mechanical alloying. <i>Journal of Materials Science</i> , 2010, 45, 5158-5163.	1.7	110
30	Microstructural characterization and corrosion behavior of multipass friction stir processed AA2219 aluminium alloy. <i>Surface and Coatings Technology</i> , 2008, 202, 4057-4068.	2.2	107
31	Multiscale mechanical performance and corrosion behaviour of plasma sprayed AlCoCrFeNi high-entropy alloy coatings. <i>Journal of Alloys and Compounds</i> , 2021, 854, 157140.	2.8	107
32	Nanocomposites and an extremely hard nanocrystalline intermetallic of Al-Fe alloys prepared by mechanical alloying. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010, 527, 2370-2378.	2.6	106
33	Phase formation and thermal stability of CoCrFeNi and CoCrFeMnNi equiatomic high entropy alloys. <i>Journal of Alloys and Compounds</i> , 2019, 774, 856-864.	2.8	105
34	Solid state amorphization in binary Ti-Ni, Ti-Cu and ternary Ti-Ni-Cu system by mechanical alloying. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1992, 149, 231-240.	2.6	103
35	Local structure of amorphous Zr ₇₀ Pd ₃₀ alloy studied by electron diffraction. <i>Applied Physics Letters</i> , 2001, 79, 485-487.	1.5	102
36	Ageing behaviour of A356 alloy reinforced with in-situ formed TiB ₂ particles. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 489, 220-226.	2.6	102

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37	Formation and Stability of Equiatomic and Nonequiatomic Nanocrystalline CuNiCoZnAlTi High-Entropy Alloys by Mechanical Alloying. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 2703-2709.	1.1	100
38	Investigation of intrinsic defects in core-shell structured ZnO nanocrystals. Journal of Applied Physics, 2012, 111, .	1.1	100
39	Radioactive isotopes reveal a non sluggish kinetics of grain boundary diffusion in high entropy alloys. Scientific Reports, 2017, 7, 12293.	1.6	100
40	Effect of processing parameters on the corrosion behaviour of friction stir processed AA 2219 aluminum alloy. Solid State Sciences, 2009, 11, 907-917.	1.5	99
41	Milling maps and amorphization during mechanical alloying. Acta Metallurgica Et Materialia, 1995, 43, 2443-2450.	1.9	98
42	Effect of grain refinement on wear properties of Al and Al ⁷ Si alloy. Wear, 2004, 257, 148-153.	1.5	97
43	Phase evolution and stability of nanocrystalline CoCrFeNi and CoCrFeMnNi high entropy alloys. Journal of Alloys and Compounds, 2019, 770, 1004-1015.	2.8	94
44	Phase Evolution and Densification Behavior of Nanocrystalline Multicomponent High Entropy Alloys During Spark Plasma Sintering. Jom, 2013, 65, 1797-1804.	0.9	93
45	Glass forming ability: Miedema approach to (Zr, Ti, Hf) ⁷ (Cu, Ni) binary and ternary alloys. Journal of Alloys and Compounds, 2008, 465, 163-172.	2.8	91
46	Understanding the microstructural evolution of high entropy alloy coatings manufactured by atmospheric plasma spray processing. Applied Surface Science, 2020, 505, 144117.	3.1	91
47	Development of an efficient grain refiner for Al ⁷ Si alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2000, 280, 58-61.	2.6	87
48	Mechanism of mechanical alloying in NiAl and CuZn systems. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1996, 214, 146-152.	2.6	86
49	Nanoquasicrystallization of binary Zr ⁷ Pd metallic glasses. Applied Physics Letters, 2000, 77, 1102-1104.	1.5	84
50	On sinterability of nanostructured W produced by high-energy ball milling. Journal of Materials Research, 2007, 22, 1200-1206.	1.2	78
51	Analysis of phase formation in multi-component alloys. Journal of Alloys and Compounds, 2012, 544, 152-158.	2.8	75
52	Influence of sequence of elemental addition on phase evolution in nanocrystalline AlCoCrFeNi: Novel approach to alloy synthesis using mechanical alloying. Materials and Design, 2017, 126, 37-46.	3.3	75
53	Optimization of bulk metallic glass forming compositions in Zr ⁷ Cu ⁷ Al system by thermodynamic modeling. Intermetallics, 2007, 15, 716-721.	1.8	74
54	Study of microstructure and magnetic properties of AlNiCo(CuFe) high entropy alloy. Journal of Alloys and Compounds, 2018, 746, 194-199.	2.8	73

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55	Influence of in situ formed TiB ₂ particles on the abrasive wear behaviour of Al-4Cu alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007, 465, 160-164.	2.6	71
56	Thermal stability of AlCoFeMnNi high-entropy alloy. <i>Scripta Materialia</i> , 2019, 162, 465-467.	2.6	70
57	Prediction of grain size of Al-7Si Alloy by neural networks. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005, 391, 131-140.	2.6	69
58	Milling criteria for the synthesis of nanocrystalline NiAl by mechanical alloying. <i>Journal of Alloys and Compounds</i> , 2007, 429, 204-210.	2.8	69
59	Effect of Sc addition on the microstructure and wear properties of A356 alloy and A356-TiB ₂ in situ composite. <i>Materials & Design</i> , 2015, 78, 85-94.	5.1	69
60	Structure and thermal stability of nanocrystalline materials. <i>Sadhana - Academy Proceedings in Engineering Sciences</i> , 2003, 28, 23-45.	0.8	67
61	High temperature wear behavior of Al-4Cu-TiB ₂ in situ composites. <i>Wear</i> , 2010, 268, 1266-1274.	1.5	67
62	Ferroelectric phase transition in Pb _{0.92} Gd _{0.08} (Zr _{0.53} Ti _{0.47}) _{0.98} O ₃ nanoceramic synthesized by high-energy ball milling. <i>Journal of Applied Physics</i> , 2003, 94, 6091-6096.	1.1	65
63	Effect of crystal structure and grain size on corrosion properties of AlCoCrFeNi high entropy alloy. <i>Journal of Alloys and Compounds</i> , 2021, 863, 158056.	2.8	65
64	Nanoquasicrystalline phase formation in binary Zr-Pd and Zr-Pt alloys. <i>Acta Materialia</i> , 2001, 49, 3453-3462.	3.8	62
65	Mechanical and electrical properties of Cu-Ta nanocomposites prepared by high-energy ball milling. <i>Acta Materialia</i> , 2007, 55, 4439-4445.	3.8	62
66	Effect of Sc addition and T6 aging treatment on the microstructure modification and mechanical properties of A356 alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 674, 438-450.	2.6	62
67	On Joule heating during spark plasma sintering of metal powders. <i>Scripta Materialia</i> , 2014, 93, 52-55.	2.6	61
68	Novel materials synthesis by mechanical alloying/milling. <i>International Materials Reviews</i> , 1998, 43, 101-141.	9.4	61
69	Grain refinement response of LM25 alloy towards Al-Ti-C and Al-Ti-B grain refiners. <i>Journal of Alloys and Compounds</i> , 2009, 472, 112-120.	2.8	59
70	Wear behaviour of near eutectic Al-Si alloy reinforced with in-situ TiB ₂ particles. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009, 506, 27-33.	2.6	58
71	Characterization of Oxide Dispersed AlCoCrFe High Entropy Alloy Synthesized by Mechanical Alloying and Spark Plasma Sintering. <i>Transactions of the Indian Institute of Metals</i> , 2013, 66, 369-373.	0.7	58
72	Ti ₂ NiCoSnSb - a new half-Heusler type high-entropy alloy showing simultaneous increase in Seebeck coefficient and electrical conductivity for thermoelectric applications. <i>Scientific Reports</i> , 2019, 9, 5331.	1.6	58

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73	Icosahedral phase formation by the primary crystallization of a Zr-Cu-Pd metallic glass. <i>Scripta Materialia</i> , 2000, 43, 103-107.	2.6	57
74	Microstructural and wear behavior of hypoeutectic Al-Si alloy (LM25) grain refined and modified with Al-Ti-Ca-Sr master alloy. <i>Wear</i> , 2006, 261, 133-139.	1.5	57
75	Grain growth kinetics in CoCrFeNi and CoCrFeMnNi high entropy alloys processed by spark plasma sintering. <i>Journal of Alloys and Compounds</i> , 2019, 791, 1114-1121.	2.8	57
76	Synthesis of copper-alumina nanocomposite by reactive milling. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005, 393, 382-386.	2.6	56
77	Al-(L12)Al3Ti nanocomposites prepared by mechanical alloying: Synthesis and mechanical properties. <i>Journal of Alloys and Compounds</i> , 2010, 492, 128-133.	2.8	55
78	Critical evaluation of glass forming ability criteria. <i>Materials Science and Technology</i> , 2016, 32, 380-400.	0.8	55
79	Phase prediction in high entropy alloys – A kinetic approach. <i>Acta Materialia</i> , 2018, 153, 214-225.	3.8	54
80	Synthesis and stability of L12-Al3Ti by mechanical alloying. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004, 367, 218-224.	2.6	53
81	Large-scale green synthesis of Cu nanoparticles. <i>Environmental Chemistry Letters</i> , 2013, 11, 183-187.	8.3	53
82	Influence of process parameters on the synthesis of nano-titania by sol-gel route. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007, 452-453, 758-762.	2.6	52
83	Nanoquasicrystallization of Zr-based metallic glasses. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 312, 253-261.	2.6	51
84	Effect of scandium additions on microstructure and mechanical properties of Al-Zn-Mg alloy welds. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007, 467, 132-138.	2.6	50
85	Effect of Temperature on the Wear Behavior of Al-7Si-TiB2 In-Situ Composites. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2009, 40, 223-231.	1.1	50
86	Manufacture of Al-Ti-B master alloys by the reaction of complex halide salts with molten aluminium. <i>Journal of Materials Processing Technology</i> , 1999, 89-90, 152-158.	3.1	49
87	Microstructure and mechanical properties of a high entropy alloy with a eutectic composition (AlCoCrFeNi2.1) synthesized by mechanical alloying and spark plasma sintering. <i>Journal of Alloys and Compounds</i> , 2020, 835, 155424.	2.8	49
88	Enhanced magnetoelectric voltage in multiferroic particulate Ni _{0.83} Co _{0.15} Cu _{0.02} Fe _{1.90} As _{1.7} PbZr _{0.52} Ti _{0.48} O ₃ composites – dielectric, piezoelectric and magnetic properties. <i>Current Applied Physics</i> , 2009, 9, 1134-1139.	1.1	48
89	Microstructure and Mechanical Properties of Nanostructured Al-4Cu Alloy Produced by Mechanical Alloying and Vacuum Hot Pressing. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2009, 40, 2798-2801.	1.1	48
90	Influence of silicon and magnesium on grain refinement in aluminium alloys. <i>Materials Science and Technology</i> , 1999, 15, 986-992.	0.8	47

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91	Tribological behaviour of Cu ₆₀ Zr ₃₀ Ti ₁₀ bulk metallic glass. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007, 458, 290-294.	2.6	47
92	A statistical analysis on erosion wear behaviour of A356 alloy reinforced with in situ formed TiB ₂ particles. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 476, 333-340.	2.6	47
93	Crystallization kinetics and consolidation of mechanically alloyed Al ₇₀ Y ₁₆ Ni ₁₀ Co ₄ glassy powders. <i>Journal of Alloys and Compounds</i> , 2009, 477, 171-177.	2.8	47
94	Novel rare-earth and transition metal-based entropy stabilized oxides with spinel structure. <i>Scripta Materialia</i> , 2020, 178, 513-517.	2.6	47
95	Electrochemical behavior of multicomponent amorphous and nanocrystalline Zr-based alloys in different environments. <i>Corrosion Science</i> , 2006, 48, 2212-2225.	3.0	46
96	Three-dimensional visualization of the microstructure development of Sr-modified Al ₁₅ Si casting alloy using FIB-EsB tomography. <i>Acta Materialia</i> , 2010, 58, 6600-6608.	3.8	45
97	Effect of aggregation of methylene blue dye on TiO ₂ surface in self-cleaning studies. <i>Catalysis Communications</i> , 2010, 11, 518-521.	1.6	45
98	Comparison of corrosion behaviour of friction stir processed and laser melted AA 2219 aluminium alloy. <i>Materials & Design</i> , 2011, 32, 4502-4508.	5.1	44
99	A new thermodynamic parameter to predict glass forming ability in iron based multi-component systems containing zirconium. <i>Intermetallics</i> , 2013, 35, 73-81.	1.8	44
100	Maxwell-Wagner polarization in grain boundary segregated NiCuZn ferrite. <i>Current Applied Physics</i> , 2014, 14, 1727-1733.	1.1	44
101	Influence of welding process on Type IV cracking behavior of P91 steel. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 613, 148-158.	2.6	43
102	Formation of Nanocrystalline Particles in Glassy Matrix in Melt-Spun Mg-Cu Based Alloys. <i>Materials Transactions, JIM</i> , 2000, 41, 1538-1544.	0.9	42
103	Effect of hot rolling and heat treatment of Al ₅ Ti ₁ B master alloy on the grain refining efficiency of aluminium. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 301, 180-186.	2.6	42
104	Effect of prior microstructure on microstructure and mechanical properties of modified 9Cr ₁ Mo steel weld joints. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 477, 185-192.	2.6	42
105	Microstructural features of as-cast A356 alloy inoculated with Sr, Sb modifiers and Ti-C grain refiner simultaneously. <i>Materials Letters</i> , 2008, 62, 273-275.	1.3	42
106	Mechanical activation of aluminothermic reduction of NiO by high energy ball milling. <i>Journal of Alloys and Compounds</i> , 2010, 497, 142-146.	2.8	42
107	Low temperature synthesis of dense TiB ₂ compacts by reaction spark plasma sintering. <i>International Journal of Refractory Metals and Hard Materials</i> , 2015, 48, 201-210.	1.7	42
108	Austenitic Oxide Dispersion Strengthened Steels : A Review. <i>Defence Science Journal</i> , 2016, 66, 316.	0.5	42

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109	Microstructure and the wear mechanism of grain-refined aluminum during dry sliding against steel disc. <i>Wear</i> , 2008, 264, 638-647.	1.5	41
110	Role of zirconium and impurities in grain refinement of aluminium INith Al-Ti-B. <i>Materials Science and Technology</i> , 1997, 13, 769-777.	0.8	40
111	On icosahedral phase formation in mechanically alloyed Al70Cu20Fe10. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2000, 294-296, 65-67.	2.6	40
112	Structural changes in iron powder during ball milling. <i>Materials Chemistry and Physics</i> , 2010, 123, 247-253.	2.0	40
113	SYNTHESIS OF LEAD FREE SODIUM BISMUTH TITANATE (NBT) CERAMIC BY CONVENTIONAL AND MICROWAVE SINTERING METHODS. <i>Journal of Advanced Dielectrics</i> , 2011, 01, 71-77.	1.5	40
114	Electrical propeties of Gd-doped PZT nanoceramic synthesized by high-energy ball milling. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2004, 110, 58-63.	1.7	39
115	Investigation and characterization of Pb(Zr0.52Ti0.48)O3 nanocrystalline ferroelectric ceramics: By conventional and microwave sintering methods. <i>Materials Chemistry and Physics</i> , 2011, 126, 295-300.	2.0	39
116	Synthesis, characterization and demonstration of self-cleaning TiO2 coatings on glass and glazed ceramic tiles. <i>Progress in Organic Coatings</i> , 2013, 76, 1756-1760.	1.9	39
117	Recent advances in aluminium matrix composites reinforced with graphene-based nanomaterial: A critical review. <i>Progress in Materials Science</i> , 2022, 128, 100948.	16.0	39
118	Phase fields of nickel silicides obtained by mechanical alloying in the nanocrystalline state. <i>Journal of Applied Physics</i> , 2000, 87, 8393-8400.	1.1	38
119	Continuous drive friction welding of Inconel 718 and EN24 dissimilar metal combination. <i>Materials Science and Technology</i> , 2009, 25, 851-861.	0.8	38
120	Functionally Graded Al Alloy Matrix In-Situ Composites. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2010, 41, 242-254.	1.1	38
121	Effect of yttria particle size on the microstructure and compression creep properties of nanostructured oxide dispersion strengthened ferritic (Fe ¹² Cr ² W ^{0.5} Y2O3) alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 528, 4579-4584.	2.6	38
122	Transition of Crack from Type IV to Type II Resulting from Improved Utilization of Boron in the Modified 9Cr-1Mo Steel Weldment. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012, 43, 3724-3741.	1.1	38
123	Experimental assessment of the thermodynamic factor for diffusion in CoCrFeNi and CoCrFeMnNi high entropy alloys. <i>Scripta Materialia</i> , 2018, 157, 81-85.	2.6	38
124	Investigation and characterization of La-doped PZT nanocrystalline ceramic prepared by mechanical activation route. <i>Materials Chemistry and Physics</i> , 2008, 112, 31-34.	2.0	37
125	Influence of Al content on thermal stability of nanocrystalline Al _x CoCrFeNi high entropy alloys at low and intermediate temperatures. <i>Advanced Powder Technology</i> , 2020, 31, 1985-1993.	2.0	37
126	Mechanical alloying of Al ¹² Cu ² Fe elemental powders. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 304-306, 863-866.	2.6	36

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127	Dielectric relaxation studies of nanocrystalline CuAlO ₂ using modulus formalism. Journal of Applied Physics, 2007, 102, 104104.	1.1	36
128	Magnetoelectric effect of (100-x)BaTiO ₃ (x)NiFe _{1.98} O ₄ (x=20-80 wt%) particulate nanocomposites. Applied Physics Letters, 2009, 94, .	1.5	36
129	Synthesis of in-situ NiAl-Al ₂ O ₃ nanocomposite by reactive milling and subsequent heat treatment. Intermetallics, 2010, 18, 353-358.	1.8	36
130	Thermodynamic prediction of bulk metallic glass forming alloys in ternary Zr-Cu-X (X=Ag, Al, Ti, Ga) systems. Journal of Non-Crystalline Solids, 2011, 357, 3495-3499.	1.5	36
131	Grain-size-dependent non-monotonic lattice parameter variation in nanocrystalline W: The role of non-equilibrium grain boundary structure. Scripta Materialia, 2015, 98, 20-23.	2.6	36
132	Synthesis of Cu-W Nanocomposite by High-Energy Ball Milling. Journal of Nanoscience and Nanotechnology, 2007, 7, 2376-2381.	0.9	35
133	High strength nanocrystalline L12-Al ₃ (Ti,Zr) intermetallic synthesized by mechanical alloying. Intermetallics, 2007, 15, 26-33.	1.8	35
134	Effect of Molybdenum and Niobium on the Phase Formation and Hardness of Nanocrystalline CoCrFeNi High Entropy Alloys. Journal of Nanoscience and Nanotechnology, 2014, 14, 8106-8109.	0.9	35
135	Micro and nano indentation studies on Zr ₆₀ Cu ₁₀ Al ₁₅ Ni ₁₅ bulk metallic glass. Materials & Design, 2015, 65, 98-103.	5.1	35
136	Microstructural studies on nanocrystalline oxide dispersion strengthened austenitic (Fe-18Cr-8Ni-2W-0.25Y ₂ O ₃) alloy synthesized by high energy ball milling and vacuum hot pressing. Journal of Materials Science, 2010, 45, 4858-4865.	1.7	34
137	Phase Formation in Equiatomic High Entropy Alloys: CALPHAD Approach and Experimental Studies. Transactions of the Indian Institute of Metals, 2012, 65, 375-380.	0.7	34
138	Strengthening mechanisms in CrMoNbTiW refractory high entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 819, 141503.	2.6	34
139	Synthesis of quasicrystalline phase by mechanical alloying of Al ₇₀ Cu ₂₀ Fe ₁₀ . Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 2000, 80, 1207-1217.	0.8	33
140	Estimation of entrapped powder temperature during mechanical alloying. Scripta Materialia, 2004, 50, 1199-1202.	2.6	33
141	Prediction of Glass Forming Ability Using Thermodynamic Parameters. Transactions of the Indian Institute of Metals, 2012, 65, 559-563.	0.7	33
142	Formation of nanocrystalline phases in the Cu-Zn system during mechanical alloying. Journal of Materials Science, 1996, 31, 3207-3211.	1.7	32
143	On the infiltration behavior of Al, Al-Li, and Mg melts through SiC p bed. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2000, 31, 319-325.	1.1	32
144	Gibbs free energy for the crystallization of glass forming liquids. Applied Physics Letters, 2003, 83, 671-673.	1.5	32

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145	Miedema model based methodology to predict amorphous-forming-composition range in binary and ternary systems. <i>Journal of Alloys and Compounds</i> , 2013, 550, 483-495.	2.8	32
146	Fabrication of W-Cu functionally graded composites using high energy ball milling and spark plasma sintering for plasma facing components. <i>Advanced Powder Technology</i> , 2020, 31, 3657-3666.	2.0	32
147	Reaction of fluoride salts with aluminium. <i>Materials Science and Technology</i> , 1996, 12, 766-770.	0.8	31
148	Al-Ti-Ca-Sr master alloy—A melt inoculant for simultaneous grain refinement and modification of hypoeutectic Al-Si alloys. <i>Journal of Alloys and Compounds</i> , 2009, 480, L49-L51.	2.8	30
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