

Bs S Murty

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403
ext. papers

14,814
ext. citations

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L-index

#	Paper	IF	Citations
397	Grain refinement of aluminium and its alloys by heterogeneous nucleation and alloying. <i>International Materials Reviews</i> , 2002 , 47, 3-29	16.1	609
396	Decomposition in multi-component AlCoCrCuFeNi high-entropy alloy. <i>Acta Materialia</i> , 2011 , 59, 182-190	8.4	509
395	Novel materials synthesis by mechanical alloying/milling. <i>International Materials Reviews</i> , 1998 , 43, 101-141	11.1	466
394	Alloying behavior in multi-component AlCoCrCuFe and NiCoCrCuFe high entropy alloys. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012 , 534, 83-89	5.3	250
393	Tensile and wear behaviour of in situ Al ₃ Si/TiB ₂ particulate composites. <i>Wear</i> , 2008 , 265, 134-142	3.5	237
392	Synthesis and characterization of nanocrystalline AlFeTiCrZnCu high entropy solid solution by mechanical alloying. <i>Journal of Alloys and Compounds</i> , 2008 , 460, 253-257	5.7	224
391	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	8.4	194
390	Bulk tracer diffusion in CoCrFeNi and CoCrFeMnNi high entropy alloys. <i>Acta Materialia</i> , 2018 , 146, 211-224	24	186
389	Processing and properties of nanocrystalline CuNiCoZnAlTi high entropy alloys by mechanical alloying. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010 , 527, 1027-1030	5.3	178
388	Development of ultrafine grained high strength AlCu alloy by cryorolling. <i>Scripta Materialia</i> , 2006 , 54, 2013-2017	5.6	177
387	High-Entropy Alloys 2014 , 13-35		168
386	Development of an efficient grain refiner for Al ₃ Si alloy and its modification with strontium. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2000 , 283, 94-104	5.3	162
385	Ni tracer diffusion in CoCrFeNi and CoCrFeMnNi high entropy alloys. <i>Journal of Alloys and Compounds</i> , 2016 , 688, 994-1001	5.7	157
384	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. <i>Acta Materialia</i> , 2000 , 48, 3985-3996	8.4	151
383	Effect of TiB ₂ particles on sliding wear behaviour of Al ₃ Cu alloy. <i>Wear</i> , 2007 , 262, 160-166	3.5	150
382	Alloying, thermal stability and strengthening in spark plasma sintered Al _x CoCrCuFeNi high entropy alloys. <i>Journal of Alloys and Compounds</i> , 2014 , 583, 419-426	5.7	146
381	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	3.4	132

380	High-entropy alloys by mechanical alloying: A review. <i>Journal of Materials Research</i> , 2019 , 34, 664-686	2.5	131
379	On the HallPetch relationship in a nanostructured AlCu alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010 , 527, 7821-7825	5.3	128
378	On the parameters to assess the glass forming ability of liquids. <i>Journal of Non-Crystalline Solids</i> , 2005 , 351, 1366-1371	3.9	125
377	Aluminum-Based Cast In Situ Composites: A Review. <i>Journal of Materials Engineering and Performance</i> , 2015 , 24, 2185-2207	1.6	118
376	Development of AlTi grain refiners and study of their grain refining efficiency on Al and AlSi alloy. <i>Journal of Alloys and Compounds</i> , 2005 , 396, 143-150	5.7	118
375	Atomic-scale compositional characterization of a nanocrystalline AlCrCuFeNiZn high-entropy alloy using atom probe tomography. <i>Acta Materialia</i> , 2013 , 61, 4696-4706	8.4	112
374	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	3.5	109
373	Sliding wear behaviour of T6 treated A356TiB2 in-situ composites. <i>Wear</i> , 2009 , 266, 865-872	3.5	108
372	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	2.3	98
371	Nanocomposites and an extremely hard nanocrystalline intermetallic of AlBe alloys prepared by mechanical alloying. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010 , 527, 2370-2378	5.3	95
370	Solid state amorphization in binary TiNi, TiCu and ternary TiNiCu system by mechanical alloying. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1992 , 149, 231-240	5.3	92
369	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	10.7	91
368	Local structure of amorphous Zr ₇₀ Pd ₃₀ alloy studied by electron diffraction. <i>Applied Physics Letters</i> , 2001 , 79, 485-487	3.4	91
367	Investigation of intrinsic defects in core-shell structured ZnO nanocrystals. <i>Journal of Applied Physics</i> , 2012 , 111, 113712	2.5	90
366	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	4.3	87
365	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	5.3	87
364	Effect of grain refinement on wear properties of Al and AlSi alloy. <i>Wear</i> , 2004 , 257, 148-153	3.5	87
363	Microstructural characterization and corrosion behavior of multipass friction stir processed AA2219 aluminium alloy. <i>Surface and Coatings Technology</i> , 2008 , 202, 4057-4068	4.4	86

362	Milling maps and amorphization during mechanical alloying. <i>Acta Metallurgica Et Materialia</i> , 1995 , 43, 2443-2450		85
361	Effect of processing parameters on the corrosion behaviour of friction stir processed AA 2219 aluminum alloy. <i>Solid State Sciences</i> , 2009 , 11, 907-917	3.4	83
360	Formation and Stability of Equiatomic and Nonequiatomic Nanocrystalline CuNiCoZnAlTi High-Entropy Alloys by Mechanical Alloying. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2010 , 41, 2703-2709	2.3	83
359	Glass forming ability: Miedema approach to (Zr, Ti, Hf)(Cu, Ni) binary and ternary alloys. <i>Journal of Alloys and Compounds</i> , 2008 , 465, 163-172	5.7	81
358	Nanoquasicrystallization of binary ZrPd metallic glasses. <i>Applied Physics Letters</i> , 2000 , 77, 1102-1104	3.4	80
357	Phase Evolution and Densification Behavior of Nanocrystalline Multicomponent High Entropy Alloys During Spark Plasma Sintering. <i>Jom</i> , 2013 , 65, 1797-1804	2.1	77
356	Development of an efficient grain refiner for Al ₇₅ Si alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2000 , 280, 58-61	5.3	76
355	Mechanism of mechanical alloying in NiAl and CuZn systems. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1996 , 214, 146-152	5.3	76
354	On sinterability of nanostructured W produced by high-energy ball milling. <i>Journal of Materials Research</i> , 2007 , 22, 1200-1206	2.5	71
353	Optimization of bulk metallic glass forming compositions in ZrTiAl system by thermodynamic modeling. <i>Intermetallics</i> , 2007 , 15, 716-721	3.5	66
352	Phase formation and thermal stability of CoCrFeNi and CoCrFeMnNi equiatomic high entropy alloys. <i>Journal of Alloys and Compounds</i> , 2019 , 774, 856-864	5.7	65
351	Thermal Spray High-Entropy Alloy Coatings: A Review. <i>Journal of Thermal Spray Technology</i> , 2020 , 29, 857-893	2.5	64
350	Radioactive isotopes reveal a non sluggish kinetics of grain boundary diffusion in high entropy alloys. <i>Scientific Reports</i> , 2017 , 7, 12293	4.9	63
349	Analysis of phase formation in multi-component alloys. <i>Journal of Alloys and Compounds</i> , 2012 , 544, 152-158	3.7	62
348	Influence of in situ formed TiB ₂ particles on the abrasive wear behaviour of Al ₇₅ Cu alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007 , 465, 160-164	5.3	61
347	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	2.5	60
346	Nanoquasicrystalline phase formation in binary ZrPd and ZrPt alloys. <i>Acta Materialia</i> , 2001 , 49, 3453-3468	4.4	60
345	Novel materials synthesis by mechanical alloying/milling		60

344	Prediction of grain size of Al ₇₀ Si Alloy by neural networks. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005 , 391, 131-140	5.3	59
343	Milling criteria for the synthesis of nanocrystalline NiAl by mechanical alloying. <i>Journal of Alloys and Compounds</i> , 2007 , 429, 204-210	5.7	58
342	Structure and thermal stability of nanocrystalline materials. <i>Sadhana - Academy Proceedings in Engineering Sciences</i> , 2003 , 28, 23-45	1	57
341	Influence of sequence of elemental addition on phase evolution in nanocrystalline AlCoCrFeNi: Novel approach to alloy synthesis using mechanical alloying. <i>Materials and Design</i> , 2017 , 126, 37-46	8.1	54
340	High temperature wear behavior of Al ₇₀ Cu ₁₀ TiB ₂ in situ composites. <i>Wear</i> , 2010 , 268, 1266-1274	3.5	54
339	Icosahedral phase formation by the primary crystallization of a Zr-Cu-Pd metallic glass. <i>Scripta Materialia</i> , 2000 , 43, 103-107	5.6	53
338	Study of microstructure and magnetic properties of AlNiCo(CuFe) high entropy alloy. <i>Journal of Alloys and Compounds</i> , 2018 , 746, 194-199	5.7	52
337	On Joule heating during spark plasma sintering of metal powders. <i>Scripta Materialia</i> , 2014 , 93, 52-55	5.6	51
336	Grain refinement response of LM25 alloy towards Al ₇₀ Ti ₃₀ and Al ₇₀ Ti ₃₀ B grain refiners. <i>Journal of Alloys and Compounds</i> , 2009 , 472, 112-120	5.7	50
335	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		49
334	Wear behaviour of near eutectic AlSi alloy reinforced with in-situ TiB ₂ particles. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009 , 506, 27-33	5.3	49
333	Mechanical and electrical properties of Cu ₃ Al nanocomposites prepared by high-energy ball milling. <i>Acta Materialia</i> , 2007 , 55, 4439-4445	8.4	49
332	Synthesis of copper/Alumina nanocomposite by reactive milling. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005 , 393, 382-386	5.3	49
331	Al ₇₀ (L12)Al ₃ Ti nanocomposites prepared by mechanical alloying: Synthesis and mechanical properties. <i>Journal of Alloys and Compounds</i> , 2010 , 492, 128-133	5.7	48
330	Phase evolution and stability of nanocrystalline CoCrFeNi and CoCrFeMnNi high entropy alloys. <i>Journal of Alloys and Compounds</i> , 2019 , 770, 1004-1015	5.7	47
329	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	1.2	47
328	Nanoquasicrystallization of Zr-based metallic glasses. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001 , 312, 253-261	5.3	47
327	Microstructural and wear behavior of hypoeutectic AlSi alloy (LM25) grain refined and modified with Al ₇₀ Ti ₃₀ Br master alloy. <i>Wear</i> , 2006 , 261, 133-139	3.5	46

326	Manufacture of Al ₇₀ Ti ₃₀ 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	5.3	46
325	Effect of Temperature on the Wear Behavior of Al-7Si-TiB ₂ In-Situ Composites. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2009 , 40, 223-231	2.3	45
324	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	5.3	43
323	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	5.3	43
322	Large-scale green synthesis of Cu nanoparticles. <i>Environmental Chemistry Letters</i> , 2013 , 11, 183-187	13.3	42
321	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	5.3	42
320	Effect of hot rolling and heat treatment of Al ₇₀ Ti ₃₀ 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	5.3	42
319	Understanding the microstructural evolution of high entropy alloy coatings manufactured by atmospheric plasma spray processing. <i>Applied Surface Science</i> , 2020 , 505, 144117	6.7	42
318	Effect of aggregation of methylene blue dye on TiO ₂ surface in self-cleaning studies. <i>Catalysis Communications</i> , 2010 , 11, 518-521	3.2	41
317	Enhanced magnetoelectric voltage in multiferroic particulate Ni _{0.83} Co _{0.15} Cu _{0.02} Fe _{1.9} O ₄ /PbZr _{0.52} Ti _{0.48} O ₃ composites dielectric, piezoelectric and magnetic properties. <i>Current Applied Physics</i> , 2009 , 9, 1134-1139	2.6	41
316	Effect of scandium additions on microstructure and mechanical properties of Al ₇₀ Y ₃₀ Mg alloy welds. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007 , 467, 132-138	5.3	41
315	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	5.7	40
314	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	5.3	40
313	Influence of silicon and magnesium on grain refinement in aluminium alloys. <i>Materials Science and Technology</i> , 1999 , 15, 986-992	1.5	40
312	Electrochemical behavior of multicomponent amorphous and nanocrystalline Zr-based alloys in different environments. <i>Corrosion Science</i> , 2006 , 48, 2212-2225	6.8	39
311	Formation of Nanocrystalline Particles in Glassy Matrix in Melt-Spun Mg-Cu-Y Based Alloys. <i>Materials Transactions, JIM</i> , 2000 , 41, 1538-1544		39
310	Three-dimensional visualization of the microstructure development of Sr-modified Al ₇₀ Si casting alloy using FIB-EsB tomography. <i>Acta Materialia</i> , 2010 , 58, 6600-6608	8.4	38
309	Multiscale mechanical performance and corrosion behaviour of plasma sprayed AlCoCrFeNi high-entropy alloy coatings. <i>Journal of Alloys and Compounds</i> , 2021 , 854, 157140	5.7	38

308	Role of zirconium and impurities in grain refinement of aluminium (with Al-Ti-B). <i>Materials Science and Technology</i> , 1997 , 13, 769-777	1.5	37
307	Synthesis and stability of L1 ₂ Al ₃ Ti by mechanical alloying. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004 , 367, 218-224	5.3	37
306	Electrical properties 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	3.1	37
305	On icosahedral phase formation in mechanically alloyed Al ₇₀ Cu ₂₀ Fe ₁₀ . <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2000 , 294-296, 65-67	5.3	37
304	Phase fields of nickel silicides obtained by mechanical alloying in the nanocrystalline state. <i>Journal of Applied Physics</i> , 2000 , 87, 8393-8400	2.5	37
303	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	2.3	36
302	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	5.3	35
301	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	2.3	35
300	Mechanical activation of aluminothermic reduction of NiO by high energy ball milling. <i>Journal of Alloys and Compounds</i> , 2010 , 497, 142-146	5.7	35
299	Critical evaluation of glass forming ability criteria. <i>Materials Science and Technology</i> , 2016 , 32, 380-400	1.5	35
298	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	5.7	34
297	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	4.1	34
296	Comparison of corrosion behaviour of friction stir processed and laser melted AA 2219 aluminium alloy. <i>Materials & Design</i> , 2011 , 32, 4502-4508		34
295	Functionally Graded Al Alloy Matrix In-Situ Composites. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2010 , 41, 242-254	2.3	34
294	Mechanical alloying of AlCuBe elemental powders. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001 , 304-306, 863-866	5.3	34
293	Thermal stability of AlCoFeMnNi high-entropy alloy. <i>Scripta Materialia</i> , 2019 , 162, 465-467	5.6	34
292	TiNiCoSnSb - 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	4.9	33
291	Synthesis of in-situ NiAl/Al ₂ O ₃ nanocomposite by reactive milling and subsequent heat treatment. <i>Intermetallics</i> , 2010 , 18, 353-358	3.5	33

290	Structural changes in iron powder during ball milling. <i>Materials Chemistry and Physics</i> , 2010 , 123, 247-253	4.4	33
289	Microstructural features of as-cast A356 alloy inoculated with Sr, Sb modifiers and AlTiC grain refiner simultaneously. <i>Materials Letters</i> , 2008 , 62, 273-275	3.3	33
288	Grain-size-dependent non-monotonic lattice parameter variation in nanocrystalline W: The role of non-equilibrium grain boundary structure. <i>Scripta Materialia</i> , 2015 , 98, 20-23	5.6	32
287	Microstructure and the wear mechanism of grain-refined aluminum during dry sliding against steel disc. <i>Wear</i> , 2008 , 264, 638-647	3.5	32
286	Dielectric relaxation studies of nanocrystalline CuAlO ₂ using modulus formalism. <i>Journal of Applied Physics</i> , 2007 , 102, 104104	2.5	32
285	Synthesis of quasicrystalline phase by mechanical alloying of Al ₇₀ Cu ₂₀ Fe ₁₀ . <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 2000 , 80, 1207-1217		32
284	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	5.7	31
283	Investigation and characterization of La-doped PZT nanocrystalline ceramic prepared by mechanical activation route. <i>Materials Chemistry and Physics</i> , 2008 , 112, 31-34	4.4	31
282	Synthesis of Cu-W nanocomposite by high-energy ball milling. <i>Journal of Nanoscience and Nanotechnology</i> , 2007 , 7, 2376-81	1.3	31
281	High strength nanocrystalline L1 ₂ -Al ₃ (Ti,Zr) intermetallic synthesized by mechanical alloying. <i>Intermetallics</i> , 2007 , 15, 26-33	3.5	31
280	On the infiltration behavior of Al, Al-Li, and Mg melts through SiC p bed. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2000 , 31, 319-325	2.3	31
279	Formation of nanocrystalline phases in the Cu-Zn system during mechanical alloying. <i>Journal of Materials Science</i> , 1996 , 31, 3207-3211	4.3	31
278	Thermodynamic prediction of bulk metallic glass forming alloys in ternary ZrCuX (X=Ag, Al, Ti, Ga) systems. <i>Journal of Non-Crystalline Solids</i> , 2011 , 357, 3495-3499	3.9	30
277	Investigation and characterization of Pb(Zr _{0.52} Ti _{0.48})O ₃ nanocrystalline ferroelectric ceramics: By conventional and microwave sintering methods. <i>Materials Chemistry and Physics</i> , 2011 , 126, 295-300	4.4	30
276	Continuous drive friction welding of Inconel 718 and EN24 dissimilar metal combination. <i>Materials Science and Technology</i> , 2009 , 25, 851-861	1.5	30
275	Effect of yttria particle size on the microstructure and compression creep properties of nanostructured oxide dispersion strengthened ferritic (Fe ₉₂ Cr ₈ W _{0.5} Y ₂ O ₃) alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011 , 528-529, 150-154	5.3	30
274	Effect of prior microstructure on microstructure and mechanical properties of modified 9CrMo steel weld joints. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008 , 477, 185-192	5.3	30
273	Micro and nano indentation studies on Zr ₆₀ Cu ₁₀ Al ₁₅ Ni ₁₅ bulk metallic glass. <i>Materials & Design</i> , 2015 , 65, 98-103		29

272	A new thermodynamic parameter to predict glass forming ability in iron based multi-component systems containing zirconium. <i>Intermetallics</i> , 2013 , 35, 73-81	3.5	29
271	Phase Formation in Equiatomic High Entropy Alloys: CALPHAD Approach and Experimental Studies. <i>Transactions of the Indian Institute of Metals</i> , 2012 , 65, 375-380	1.2	29
270	Magnetoelectric effect of (100x)BaTiO3(1-x)NiFe1.98O4 (x=20-80 wt %) particulate nanocomposites. <i>Applied Physics Letters</i> , 2009 , 94, 112902	3.4	29
269	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	1.3	29
268	Influence of heating rate on the microstructure and magnetic properties of Fe3B/Nd2Fe14B nanocomposite magnets. <i>Scripta Materialia</i> , 2001 , 45, 355-362	5.6	29
267	Phase prediction in high entropy alloys – A kinetic approach. <i>Acta Materialia</i> , 2018 , 153, 214-225	8.4	28
266	Equal channel angular pressing of Al5 wt% TiB2 in situ composite. <i>Journal of Alloys and Compounds</i> , 2008 , 459, 239-243	5.7	28
265	Reaction of fluoride salts with aluminium. <i>Materials Science and Technology</i> , 1996 , 12, 766-770	1.5	28
264	Experimental assessment of the thermodynamic factor for diffusion in CoCrFeNi and CoCrFeMnNi high entropy alloys. <i>Scripta Materialia</i> , 2018 , 157, 81-85	5.6	27
263	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	4.8	27
262	AlTi0.5B master alloy – a melt inoculant for simultaneous grain refinement and modification of hypoeutectic AlSi alloys. <i>Journal of Alloys and Compounds</i> , 2009 , 480, L49-L51	5.7	27
261	Microstructural studies on nanocrystalline oxide dispersion strengthened austenitic (Fe18Cr8Ni2W0.25Y2O3) alloy synthesized by high energy ball milling and vacuum hot pressing. <i>Journal of Materials Science</i> , 2010 , 45, 4858-4865	4.3	27
260	On the conditions for the synthesis of bulk metallic glasses by mechanical alloying. <i>Journal of Alloys and Compounds</i> , 2008 , 459, 135-141	5.7	27
259	Estimation of entrapped powder temperature during mechanical alloying. <i>Scripta Materialia</i> , 2004 , 50, 1199-1202	5.6	27
258	Austenitic Oxide Dispersion Strengthened Steels : A Review. <i>Defence Science Journal</i> , 2016 , 66, 316	1.4	27
257	Structure of nanocomposites of Al-Fe alloys prepared by mechanical alloying and rapid solidification processing. <i>Bulletin of Materials Science</i> , 2008 , 31, 449-454	1.7	26
256	Synthesis of nanocrystalline/quasicrystalline Mg32(Al,Zn)49 by melt spinning and mechanical milling. <i>Journal of Materials Science</i> , 2004 , 39, 5155-5159	4.3	26
255	Influence of thermo-mechanical processing of Al5Ti5B master alloy on its grain refining efficiency. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004 , 364, 75-83	5.3	26

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