Ranjit Bauri

List of Publications by Year
in descending order

57 papers	1,831 citations	279701 23 h-index	276775 41 g-index
57 all docs	57 docs citations	57 times ranked	1609 citing authors

#	Article	IF	Citations
1	Effect of friction stir processing (FSP) on microstructure and properties of Alâ€“TiC in situ composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 4732-4739.	2.6	202
2	Effect of friction stir processing on microstructure and mechanical properties of aluminium. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 539, 85-92.	2.6	149
3	Processing, microstructure and mechanical properties of nickel particles embedded aluminium matrix composite. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 1326-1333.	2.6	119
4	Tungsten particle reinforced Al 5083 composite with high strength and ductility. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 620, 67-75.	2.6	105
5	Nickel particle embedded aluminium matrix composite with high ductility. Materials Letters, 2010, 64, 664-667.	1.3	103
6	Effect of equal channel angular pressing (ECAP) on microstructure and properties of Alâ€“SiCp composites. Materials & Design, 2009, 30, 3554-3559.	5.1	94
7	Deactivation and regeneration of Ni catalyst during steam reforming of model biogas: An experimental investigation. International Journal of Hydrogen Energy, 2014, 39, 297-304.	3.8	83
8	A detailed kinetic model for biogas steam reforming on Ni and catalyst deactivation due to sulfur poisoning. Applied Catalysis A: General, 2014, 471, 118-125.	2.2	81
9	Wear properties of 5083 Alâ€“W surface composite fabricated by friction stir processing. Tribology International, 2016, 101, 284-290.	3.0	51
10	Processing and properties of Alâ€“Liâ€“SiC_p composites. Science and Technology of Advanced Materials, 2007, 8, 494-502.	2.8	47
11	Sliding wear behavior of Alâ€“Liâ€“SiCp composites. Wear, 2008, 265, 1756-1766.	1.5	46
12	ÂEffect Of Nanoclay On The Toughness Of Epoxy And Mechanical, Impact Properties Of E-glass-epoxy Composites. Advanced Materials Letters, 2015, 6, 684-689.	0.3	40
13	Synthesis and characterization of nanocrystalline ScSZ electrolyte for SOFCs. International Journal of Hydrogen Energy, 2011, 36, 14936-14942.	3.8	36
14	Processing and compressive strength of Alâ€“Liâ€“SiCp composites fabricated by a compound billet technique. Journal of Materials Processing Technology, 2009, 209, 2077-2084.	3.1	33
15	Y and In-doped BaCeO3-BaZrO3 solid solutions: Chemically stable and easily sinterable proton conducting oxides. Journal of Alloys and Compounds, 2016, 688, 1039-1046.	2.8	33
16	Processing and conduction behavior of nanocrystalline Gd-doped and rare earth co-doped ceria electrolytes. Electrochimica Acta, 2016, 209, 541-550.	2.6	32
17	Synthesis and characterization of nanocrystalline Niâ€“YSZ cermet anode for SOFC. Materials Characterization, 2010, 61, 54-58.	1.9	31
18	Phase formation and ionic conductivity studies on ytterbia co-doped scandia stabilized zirconia (0.9ZrO2â€“0.09Sc2O3â€“0.01Yb2O3) electrolyte for SOFCs. Solid State Sciences, 2011, 13, 1520-1525.	1.5	31

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19	Effect of Process Parameters and Tool Geometry on Fabrication of Ni Particles Reinforced 5083 Al Composite by Friction Stir Processing. Materials Today: Proceedings, 2015, 2, 3203-3211.	0.9	30
20	Friction Stir Processing of Al-TiB2 In Situ Composite: Effect on Particle Distribution, Microstructure and Properties. Journal of Materials Engineering and Performance, 2015, 24, 1116-1124.	1.2	29
21	Fabrication of Al-Zn solid solution via friction stir processing. Materials Characterization, 2018, 136, 221-228.	1.9	29
22	Effects of ball milling and particle size on microstructure and properties 5083 Alâ€“Ni composites fabricated by friction stir processing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 645, 205-212.	2.6	28
23	Damping behavior of Al-Li-SiCp composites processed by stir casting technique. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2005, 36, 667-673.	1.1	26
24	Enhancing the phase stability and ionic conductivity of scandia stabilized zirconia by rare earth co-doping. Journal of Physics and Chemistry of Solids, 2014, 75, 642-650.	1.9	25
25	Microstructure and Mechanical Properties of Titanium Processed by Spark Plasma Sintering (SPS). Metallography, Microstructure, and Analysis, 2014, 3, 30-35.	0.5	25
26	Optimization of process parameters for friction stir processing (FSP) of Alâ€“TiC in situ composite. Bulletin of Materials Science, 2014, 37, 571-578.	0.8	25
27	Development of Cu particles and Cu core-shell particles reinforced Al composite. Materials Science and Technology, 2015, 31, 494-500.	0.8	25
28	Al-Ti Particulate Composite: Processing and Studies on Particle Twinning, Microstructure, and Thermal Stability. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2016, 47, 4226-4238.	1.1	23
29	A novel functionally gradient Ti/TiB/TiC hybrid composite with wear resistant surface layer. Journal of Alloys and Compounds, 2018, 744, 438-444.	2.8	22
30	Synthesis of Al -TiC in-situ composites: Effect of processing temperature and Ti:C ratio. Transactions of the Indian Institute of Metals, 2009, 62, 391-395.	0.7	20
31	Friction surfacing: A tool for surface crack repair. Surface and Coatings Technology, 2021, 422, 127482.	2.2	19
32	Effect of fuel type on microstructure and electrical property of combustion synthesized nanocrystalline scandia stabilized zirconia. Materials Chemistry and Physics, 2011, 126, 741-746.	2.0	16
33	Reaction mechanism, microstructure and properties of Tiâ€“TiB insitu composite processed by spark plasma sintering. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 587, 161-167.	2.6	16
34	Synthesis, phase stability and conduction behavior of rare earth and transition elements doped barium cerates. International Journal of Hydrogen Energy, 2014, 39, 14487-14495.	3.8	16
35	Phase stability and conductivity of rare earth co-doped nanocrystalline zirconia electrolytes for solid oxide fuel cells. Journal of Alloys and Compounds, 2020, 833, 155100.	2.8	16
36	Microstructural characterisation of friction stir processed aluminium. Materials Science and Technology, 2011, 27, 1163-1169.	0.8	13

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37	One step synthesis and conductivity of alkaline and rare earth co-doped nanocrystalline CeO2 electrolytes. Ceramics International, 2015, 41, 6299-6305.	2.3	13
38	Relating microtexture and dynamic micro hardness in an extruded AA8090 alloy and AA8090-8 vol% SiCpcomposite. Science and Technology of Advanced Materials, 2005, 6, 933-938.	2.8	12
39	Effect of sintering atmosphere on densification, redox chemistry and conduction behavior of nanocrystalline Gd-doped CeO2 electrolytes. Ceramics International, 2013, 39, 9421-9428.	2.3	12
40	Rare Earth Co-Doped Nanocrystalline Ceria Electrolytes for Intermediate Temperature Solid Oxide Fuel Cells (IT-SOFC). ECS Transactions, 2013, 57, 1115-1123.	0.3	11
41	A novel route to enhance the sinterability and its effect on microstructure, conductivity and chemical stability of BaCe0.4Zr0.4Y0.2O3-Î´ proton conductors. Materials Chemistry and Physics, 2018, 216, 250-259.	2.0	11
42	Optimized process parameters for fabricating metal particles reinforced 5083 Al composite by friction stir processing. Data in Brief, 2015, 5, 309-313.	0.5	10
43	Development of Niâ€“YSZ cermet anode for solid oxide fuel cells by electroless Ni coating. Journal of Coatings Technology Research, 2012, 9, 229-234.	1.2	6
44	Introduction to Friction Stir Processing (FSP). , 2018, , 17-29.		6
45	Zinc Vanadium Oxide Nanobelts as High-Performance Cathodes for Rechargeable Zinc-Ion Batteries. Energy & Fuels, 2022, 36, 7854-7864.	2.5	5
46	Investigations on serrated flow in 8090 Al alloy and 8090 Alâ€“SiCp composites occurring during dynamic ultra low load micro hardness (DUH) indentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 393, 22-26.	2.6	4
47	Processing Niâ€“YSZ anode by electroless Ni deposition with AgNO₃ as activator. Surface Engineering, 2011, 27, 705-710.	1.1	4
48	Microstructure Development in Single and Double-Pass Friction Stir Processing of Aluminium. Materials Science Forum, 2013, 753, 50-53.	0.3	3
49	Size-controlled growth of spherical nanoparticles of Y-doped BaZrO3 perovskite. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	1.1	3
50	Processing Metal Matrix Composite (MMC) by FSP. , 2018, , 31-55.		3
51	Fabrication of Metal Particles Embedded Aluminum Matrix Composite by Friction Stir Processing (FSP). , 2011, , .		2
52	Surface Composites by FSP. , 2018, , 93-115.		2
53	A novel spark plasma sintering route to process high-strength Tiâ€“4Alâ€“2Fe/TiB nano-composite. Materials Science and Technology, 2018, 34, 2008-2017.	0.8	2
54	A novel method to process oxide dispersed strengthened alloy interconnect. Materialia, 2019, 5, 100229.	1.3	2

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55	A Novel Thermomechanical Processing Route to Fabricate ODS Ferritic Stainless Steel Interconnects and Their Oxidation Behavior. Oxidation of Metals, 2019, 91, 609-624.	1.0	1
56	Phase evolution and morphology of nanocrystalline BaCe0.9Er0.1O3â˜Î´ proton conducting oxide synthesised by a novel modified solution combustion route. Journal of Physics and Chemistry of Solids, 2015, 87, 80-86.	1.9	0
57	Processing Nonequilibrium Composite (NMMC) by FSP. , 2018, , 57-91.		0