Srinivasa Rao Bakshi

List of Publications by Citations

91 papers	4,174 citations	34 h-index	64 g-index
91 ext. papers	4,720 ext. citations	4.5 avg, IF	5.87 L-index

#	Paper	IF	Citations
91	Carbon nanotube reinforced metal matrix composites - a review. *International Materials Reviews*, **2010**, 55, 41-64	16.1	1043
90	An analysis of the factors affecting strengthening in carbon nanotube reinforced aluminum composites. *Carbon*, **2011**, 49, 533-544	10.4	352
89	Boron nitride nanotube reinforced polylactide-polycaprolactone copolymer composite: mechanical properties and cytocompatibility with osteoblasts and macrophages in vitro. *Acta Biomaterialia*, **2010**, 6, 3524-33	10.8	187
88	Carbon nanotube reinforced aluminum composite coating via cold spraying. *Surface and Coatings Technology*, **2008**, 202, 5162-5169	4.4	175
87	Aluminum composite reinforced with multiwalled carbon nanotubes from plasma spraying of spray dried powders. *Surface and Coatings Technology*, **2009**, 203, 1544-1554	4.4	146
86	Aluminum-Based Cast In Situ Composites: A Review. *Journal of Materials Engineering and Performance*, **2015**, 24, 2185-2207	1.6	118
85	Role of powder treatment and carbon nanotube dispersion in the fracture toughening of plasma-sprayed aluminum oxide-carbon nanotube nanocomposite. *Journal of Nanoscience and Nanotechnology*, **2007**, 7, 3553-62	1.3	88
84	Synthesis and characterization of multiwalled carbon nanotube reinforced ultra high molecular weight polyethylene composite by electrostatic spraying technique. *Composites Part A: Applied Science and Manufacturing*, **2007**, 38, 2493-2499	8.4	87
83	Effect of different carbon nano-fillers on rheological properties and lap shear strength of epoxy adhesive joints. *Composites Part A: Applied Science and Manufacturing*, **2016**, 82, 53-64	8.4	81
82	Dual strengthening mechanisms induced by carbon nanotubes in roll bonded aluminum composites. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2009**, 523, 263-270	5.3	79
81	Interface in carbon nanotube reinforced aluminum silicon composites: Thermodynamic analysis and experimental verification. *Journal of Alloys and Compounds*, **2009**, 481, 207-213	5.7	76
80	Spark plasma sintered tantalum carbide: Effect of pressure and nano-boron carbide addition on microstructure and mechanical properties. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2011**, 528, 1287-1295	5.3	74
79	Spark plasma sintered tantalum carbide–carbon nanotube composite: Effect of pressure, carbon nanotube length and dispersion technique on microstructure and mechanical properties. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2011**,	5.3	70
78	A comparison of mechanical and wear properties of plasma sprayed carbon nanotube reinforced aluminum composites at nano and macro scale. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2011**, 528, 3375-3384	5.3	64
77	Quantification of carbon nanotube distribution and property correlation in nanocomposites. *Composites Part A: Applied Science and Manufacturing*, **2009**, 40, 1311-1318	8.4	63
76	Nanoscratch behavior of carbon nanotube reinforced aluminum coatings. *Thin Solid Films*, **2010**, 518, 1703-1711	2.2	62
75	Reaction synthesis of Ti3SiC2 phase in plasma sprayed coating. *Journal of Alloys and Compounds*, **2009**, 484, 113-117	5.7	61

74	Tensile properties of carbon nanotubes reinforced aluminum matrix composites: A review. *Carbon*, **2020**, 160, 14-44	10.4	60
73	Processing of copper–carbon nanotube composites by vacuum hot pressing technique. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 560, 365-371	5.3	58
72	Correlation between nanoindentation and nanoscratch properties of carbon nanotube reinforced aluminum composite coatings. *Surface and Coatings Technology*, **2010**, 204, 2709-2715	4.4	56
71	Effect of Sc addition on the microstructure and wear properties of A356 alloy and A356–TiB2 in situ composite. *Materials & Design*, **2015**, 78, 85-94		49
70	Effect of carbon nano-filler addition on the degradation of epoxy adhesive joints subjected to hygrothermal aging. *Polymer Degradation and Stability*, **2017**, 140, 84-94	4.7	47
69	Thermal Conductivity of Plasma-Sprayed Aluminum Oxide–Multiwalled Carbon Nanotube Composites. *Journal of the American Ceramic Society*, **2008**, 91, 942-947	3.8	45
68	Thermal conductivity of carbon nanotube reinforced aluminum composites: A multi-scale study using object oriented finite element method. *Computational Materials Science*, **2010**, 50, 419-428	3.2	44
67	Microstructure and wear properties of aluminum/aluminum–silicon composite coatings prepared by cold spraying. *Surface and Coatings Technology*, **2009**, 204, 503-510	4.4	44
66	Formation of TiCx during reactive spark plasma sintering of mechanically milled Ti/carbon nanotube mixtures. *Journal of Alloys and Compounds*, **2017**, 709, 829-841	5.7	43
65	Effect of Sc addition and T6 aging treatment on the microstructure modification and mechanical properties of A356 alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 674, 438-450	5.3	43
64	Graphene-induced strengthening in spark plasma sintered tantalum carbide–nanotube composite. *Scripta Materialia*, **2013**, 68, 285-288	5.6	38
63	Processing and characterization of spark plasma sintered copper/carbon nanotube composites. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2017**, 682, 229-237	5.3	37
62	Structural transformations in carbon nanotubes during thermal spray processing. *Surface and Coatings Technology*, **2009**, 203, 2193-2201	4.4	37
61	Deformation and damage mechanisms of multiwalled carbon nanotubes under high-velocity impact. *Scripta Materialia*, **2008**, 59, 499-502	5.6	37
60	In-situ formed graphene nanoribbon induced toughening and thermal shock resistance of spark plasma sintered carbon nanotube reinforced titanium carbide composite. *Composites Part B: Engineering*, **2017**, 123, 227-240	10	36
59	Processing copper–carbon nanotube composite powders by high energy milling. *Materials Characterization*, **2013**, 84, 58-66	3.9	35
58	Low temperature synthesis of dense TiB2 compacts by reaction spark plasma sintering. *International Journal of Refractory Metals and Hard Materials*, **2015**, 48, 201-210	4.1	34
57	Effect of C/Ti ratio on densification, microstructure and mechanical properties of TiCx prepared by reactive spark plasma sintering. *Ceramics International*, **2018**, 44, 484-494	5.1	34

56	Ultrahigh-pressure consolidation and deformation of tantalum carbide at ambient and high temperatures. *Acta Materialia*, **2013**, 61, 4001-4009	8.4	31
55	Hardfacing of AISI H13 tool steel with Stellite 21 alloy using cold metal transfer welding process. *Surface and Coatings Technology*, **2017**, 326, 63-71	4.4	31
54	Effect of graphene nano-platelet reinforcement on the mechanical properties of hot pressed boron carbide based composite. *Ceramics International*, **2018**, 44, 9830-9838	5.1	29
53	Microstructure and tribological behavior of spark plasma sintered iron-based amorphous coatings. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2010**, 527, 5000-5007	5.3	29
52	In-situ synthesis of TiC/SiC/Ti3SiC2 composite coatings by spark plasma sintering. *Surface and Coatings Technology*, **2011**, 205, 3840-3846	4.4	26
51	Carbon nanotube and in-situ titanium carbide reinforced titanium diboride matrix composites synthesized by reactive spark plasma sintering. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 663, 38-48	5.3	24
50	Al-Si-Mn Alloy Coating on Aluminum Substrate Using Cold Metal Transfer (CMT) Welding Technique. *Jom*, **2014**, 66, 1061-1067	2.1	23
49	Grain Growth Behavior of Aluminum Oxide Reinforced with Carbon Nanotube During Plasma Spraying and PostSpray Consolidation. *International Journal of Applied Ceramic Technology*, **2010**, 7, 846-855	2	23
48	Microstructure and mechanical properties of Ti-Al-Ni-Co-Fe based high entropy alloys prepared by powder metallurgy route. *Journal of Alloys and Compounds*, **2019**, 787, 123-132	5.7	21
47	Controlled 3D Carbon Nanotube Structures by Plasma Welding. *Advanced Materials Interfaces*, **2016** , 3, 1500755	4.6	21
46	Low temperature synthesis of dense and ultrafine grained zirconium diboride compacts by reactive spark plasma sintering. *Scripta Materialia*, **2016**, 110, 78-81	5.6	21
45	Microstructure and mechanical properties of as-cast and T6 treated Sc modified A356-5TiB2 in-situ composite. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 739, 383-394	5.3	19
44	Synergistic effect of carbon nanotube as sintering aid and toughening agent in spark plasma sintered molybdenum disilicide-hafnium carbide composite. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2016**, 678, 299-307	5.3	17
43	Intersplat friction force and splat sliding in a plasma-sprayed aluminum alloy coating during nanoindentation and microindentation. *ACS Applied Materials & Interfaces*, **2009**, 1, 235-8	9.5	16
42	Microstructure and mechanical properties of keyhole plasma arc welded dual phase steel DP600. *Journal of Materials Processing Technology*, **2019**, 270, 28-36	5.3	15
41	In-situ synthesis and densification of boron carbide and boron carbide-graphene nanoplatelet composite by reactive spark plasma sintering. *Ceramics International*, **2018**, 44, 21132-21137	5.1	14
40	Effect of carrier gas on mechanical properties and fracture behaviour of cold sprayed aluminium coatings. *Surface Engineering*, **2007**, 23, 18-22	2.6	14
39	Fabrication of W-Cu functionally graded composites using high energy ball milling and spark plasma sintering for plasma facing components. *Advanced Powder Technology*, **2020**, 31, 3657-3666	4.6	14

38	Effect of correction parameters on deposition characteristics in cold metal transfer welding. *Materials and Manufacturing Processes*, **2019**, 34, 1205-1216	4.1	12
37	Nanomechanical behaviour of plasma sprayed PZT coatings. *Surface Engineering*, **2009**, 25, 270-275	2.6	12
36	Microstructure and mechanical properties of oxide dispersion strengthened 18Cr-ferritic steel consolidated by spark plasma sintering. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2018**, 736, 137-147	5.3	12
35	Densification mechanisms during reactive spark plasma sintering of Titanium diboride and Zirconium diboride. *Philosophical Magazine*, **2017**, 97, 1588-1609	1.6	10
34	Effect of Coiling Temperature on the Microstructure and Mechanical Properties of Hot-Rolled TiNb Microalloyed Ultra High Strength Steel. *Transactions of the Indian Institute of Metals*, **2017**, 70, 1773-1781	1.2	10
33	Synthesis and mechanical properties of TiCx and Ti(C,N) reinforced Titanium matrix in situ composites by reactive spark plasma sintering. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2019**, 759, 30-39	5.3	10
32	Graphene nanoplatelets induce crystallographic texturing during reactive spark plasma sintering of titanium diboride. *Carbon*, **2018**, 133, 323-334	10.4	10
31	Comparison of microstructure, dilution and wear behavior of Stellite 21 hardfacing on H13 steel using cold metal transfer and plasma transferred arc welding processes. *Surface and Coatings Technology*, **2019**, 375, 383-394	4.4	10
30	Effect of Carbon Nanotube Dispersion on Mechanical Properties of Aluminum-Silicon Alloy Matrix Composites. *Journal of Materials Engineering and Performance*, **2014**, 23, 1028-1037	1.6	10
29	Effect of different nano-carbon reinforcements on microstructure and properties of TiO2 composites prepared by spark plasma sintering. *Ceramics International*, **2016**, 42, 14266-14277	5.1	10
28	Computational estimation of elastic properties of spark plasma sintered TaC by meshfree and finite element methods. *Computational Materials Science*, **2011**, 50, 2615-2620	3.2	9
27	Structural Evolution during Milling, Annealing, and Rapid Consolidation of Nanocrystalline Fe-10Cr-3Al Powder. *Materials*, **2017**, 10,	3.5	8
26	Fabrication of dense alumina layer on Ti alloy hybrid by cold metal transfer and micro-arc oxidation methods. *Journal of Materials Research*, **2017**, 32, 3415-3424	2.5	7
25	Effect of Pin Length and Rotation Speed on the Microstructure and Mechanical Properties of Friction Stir Welded Lap Joints of AZ31B-H24 Mg Alloy and AA6061-T6 Al Alloy. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2020**, 51, 6269-6282	2.3	7
24	Ab-initio molecular modeling of interfaces in tantalum-carbon system. *Journal of Applied Physics*, **2012**, 111, 063521	2.5	7
23	Effect of graphene nano-platelet addition on the microstructure and spark plasma sintering kinetics of zirconium diboride. *International Journal of Refractory Metals and Hard Materials*, **2019**, 84, 104979	4.1	6
22	Microstructural and morphological changes during ball milling of Copper-Silver-Graphite flake mixtures. *Advanced Powder Technology*, **2019**, 30, 2759-2767	4.6	5
21	Reactive Spark Plasma Sintering and Mechanical Properties of Zirconium DiborideTitanium Diboride Ultrahigh Temperature Ceramic Solid Solutions. *Technologies*, **2016**, 4, 30	2.4	5

20	Microstructure and high temperature mechanical properties of wire arc additively deposited Stellite 6 alloy. *Materialia*, **2020**, 12, 100724	3.2	4
19	Novel single phase (Ti0.2W0.2Ta0.2Mo0.2V0.2)C0.8 high entropy carbide using ball milling followed by reactive spark plasma sintering. *Journal of the European Ceramic Society*, **2021**, 41, 6756-6762	6	4
18	Reactive spark plasma sintering of B4C composite at low temperature using mechanically milled B4C□TiB mixtures. *Ceramics International*, **2021**, 47, 26134-26143	5.1	3
17	Surface integrity studies on ZrB2 and graphene reinforced ZrB2 ceramic matrix composite in EDM process. *CIRP Journal of Manufacturing Science and Technology*, **2022**, 38, 401-413	3.4	3
16	Microstructural Evolution of Ti□Al□Ni (Cr,Co,Fe)-Based High-Entropy Alloys Processed Through Mechanical Alloying. *Transactions of the Indian Institute of Metals*, **2019**, 72, 1427-1430	1.2	2
15	Microstructural evolution and wear behavior of carbon added CoCrFeMnNi multi-component alloy fabricated by mechanical alloying and spark plasma sintering. *Journal of Alloys and Compounds*, **2021**, 883, 160879	5.7	2
14	Solidification and Liquation Cracking Behavior of Dual-Phase Steel DP600. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2019**, 50, 2029-2036	2.5	1
13	Microstructure and Mechanical Properties of Ti□Al□NiCrCoFe-Based High-Entropy Alloys. *Transactions of the Indian Institute of Metals*, **2019**, 72, 1413-1416	1.2	1
12	Surface Engineering for Extreme Conditions. *Jom*, **2015**, 67, 1526-1527	2.1	1
11	Theoretical and experimental studies on thermal stability of nanocrystalline Mg□Mo alloy. *Materialia*, **2020**, 14, 100933	3.2	1
10	Friction Stir Lap Welding of AZ31B and AA6061 Alloys Using Tin as an Inter-Layer. *Metals and Materials International*,1	2.4	1
9	Densification and Mechanical Properties of ZrB2-TiB2 Ultra High Temperature Ceramic Composites. *Ceramic Engineering and Science Proceedings*, **2015**, 275-285	0.1	0
8	Recent Developments in Surface Engineering of Materials. *Jom*, **2013**, 65, 739-740	2.1	0
7	Effect of Graphene nanoplatelets (GNP) reinforcement on grindability of zirconium diboride ceramics. *Journal of Manufacturing Science and Engineering, Transactions of the ASME*,1-20	3.3	0
6	Nanocrystalline structure remarkably enhances oxidation resistance of Fe-20Cr-5Al alloy. *Journal of Alloys and Compounds*, **2022**, 900, 163568	5.7	0
5	Transmission Electron Microscopy Studies of Plasma Arc-Welded DP600 Dual-Phase Steel in Keyhole Mode. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2019**, 50, 5689-5699	2.3	
4	Effect of Post-Weld Heat Treatment on the Microstructure of Plasma Arc Welded DP600 Steel. *Metallography, Microstructure, and Analysis*, **2019**, 8, 848-860	1.1	
3	Advances in Surface Engineering: Alloyed and Composite Coatings. *Jom*, **2012**, 64, 680-681	2.1	

List of Publications

2	Effect of Nanocrystalline Structure on the Oxidation Behavior of Fe20Cr5Al Alloy at High Temperatures. *Oxidation of Metals*, **2022**, 97, 307	1.6
1	Microstructure and Mechanical Properties of NiTiCuFe Multi-component Alloy. *Transactions of the Indian Institute of Metals*, **2018**, 71, 2789-2793	1.2