Rajeev Kumar

List of Publications by Year
in descending order

68	2,557	159585 30	206112 48
papers	citations	h-index	g-index

70	70	70	2532
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Enhanced electromagnetic interference shielding properties of phenolic resin derived lightweight carbon foam decorated with electrospun zinc oxide nanofibers. Materials Today Communications, 2022, 30, 103055.	1.9	15
2	Thermal insulating and fire-retardant lightweight carbon-slag composite foams towards absorption dominated electromagnetic interference shielding. Sustainable Materials and Technologies, 2022, 33, e00453.	3.3	5
3	Role of oxygen functionalities of GO in corrosion protection of metallic Fe. Carbon, 2021, 173, 350-363.	10.3	43
4	Effect of compressive strain rate on the deformation behaviour of austenitic stainless steel foam produced by space holder technique. Materials Chemistry and Physics, 2021, 259, 124010.	4.0	12
5	A nickel oxide-decorated in situ grown 3-D graphitic forest engrained carbon foam electrode for microbial fuel cells. Chemical Communications, 2021, 57, 879-882.	4.1	39
6	Superiority of graphite coated metallic-nanoparticles over graphite coated insulating-nanoparticles for enhancing EMI shielding. New Journal of Chemistry, 2021, 45, 4592-4600.	2.8	9
7	Role of graphitization-controlled conductivity in enhancing absorption dominated EMI shielding behavior of pyrolysis-derived Fe3C@C-PVDF nanocomposites. Materials Chemistry and Physics, 2021, 263, 124429.	4.0	18
8	Partially open cell Ti-6Al-2Co ternary alloy foams with a range of size and volume fraction of spacer particle. Materials Letters, 2021, 290, 129463.	2.6	1
9	Iron/Iron Carbide (Fe/Fe₃C) Encapsulated in S, N Codoped Graphitic Carbon as a Robust HER Electrocatalyst. Energy & Fuels, 2021, 35, 16046-16053.	5.1	11
10	Microstructure and high temperature compressive deformation in lightweight open cell titanium foam. Manufacturing Letters, 2021, 27, 67-71.	2.2	6
11	Microstructure, mechanical and EMI shielding performance in open cell austenitic stainless steel foam made through PU foam template. Materials Chemistry and Physics, 2020, 241, 122273.	4.0	20
12	Lightweight open cell aluminum foam for superior mechanical and electromagnetic interference shielding properties. Materials Chemistry and Physics, 2020, 240, 122274.	4.0	50
13	Effect of Microstructure and Magnetic Properties of Ba-Pb-Hexaferrite Particles on EMI Shielding Behavior of Ba-Pb-Hexaferrite-Polyaniline-Wax Nanocomposites. Journal of Electronic Materials, 2020, 49, 1618-1629.	2.2	54
14	Effect of Al addition and space holder content on microstructure and mechanical properties of Ti2Co alloys foams for bone scaffold application. Materials Science and Engineering C, 2020, 109, 110600.	7.3	13
15	Potential of graphene-based materials to combat COVID-19: properties, perspectives, and prospects. Materials Today Chemistry, 2020, 18, 100385.	3.5	86
16	Synthesis and characterization of 316L stainless steel foam made through two different removal process of space holder method. Manufacturing Letters, 2020, 26, 33-36.	2.2	19
17	Ni Nanoparticles Coated with Nitrogen-Doped Carbon for Optical Limiting Applications. ACS Applied Nano Materials, 2020, 3, 8618-8631.	5.0	49
18	Phenol formaldehyde resin derived carbon-MCMB composite foams for electromagnetic interference shielding and thermal management applications. Composites Communications, 2020, 22, 100433.	6.3	22

#	Article	IF	Citations
19	Three dimension phenolic resin derived carbon-CNTs hybrid foam for fire retardant and effective electromagnetic interference shielding. Composites Part C: Open Access, 2020, 2, 100020.	3.2	11
20	Mechanistic insights into the optical limiting performance of carbonaceous nanomaterials embedded with coreâ€“shell type graphite encapsulated Co nanoparticles. Physical Chemistry Chemical Physics, 2020, 22, 27224-27240.	2.8	35
21	Lightweight carbon-red mud hybrid foam toward fire-resistant and efficient shield against electromagnetic interference. Scientific Reports, 2020, 10, 9913.	3.3	15
22	Effect of Cr Doping on Structural, Optical and Dielectric Properties of ZnO Nanoceramics Synthesized by Mechanical Alloying. Electronic Materials Letters, 2020, 16, 255-263.	2.2	15
23	Graphene Oxide Coatings on Amino Acid Modified Fe Surfaces for Corrosion Inhibition. ACS Applied Nano Materials, 2020, 3, 3540-3557.	5.0	47
24	Non-centrosymmetric zinc silicate-graphene based transparent flexible piezoelectric nanogenerator. Nano Energy, 2020, 73, 104821.	16.0	44
25	Effect of SWCNTs content and relative density on the energy absorption capabilities of closed-cell Al-cenosphere-SWCNTs hybrid foam. Composites Part B: Engineering, 2019, 176, 107304.	12.0	23
26	Investigation on pitch derived mesocarbon spheres based metal composites for highly efficient electromagnetic interference shielding. Composites Part B: Engineering, 2019, 175, 107168.	12.0	14
27	Multi-component framework derived SiC composite paper to support efficient thermal transport and high EMI shielding performance. Composites Part B: Engineering, 2019, 176, 107123.	12.0	20
28	Modulating non-linear optical absorption through controlled graphitization of carbon nanostructures containing Fe3C-graphite core-shell nanoparticles. Carbon, 2019, 153, 545-556.	10.3	55
29	Role of iron in the enhanced reactivity of pulverized Red mud: Analysis by MÃ¶ssbauer spectroscopy and FTIR spectroscopy. Case Studies in Construction Materials, 2019, 11, e00266.	1.7	21
30	Structural, optical and MÃ¶ssbauer spectroscopic investigations on the environment of Fe in Fe-doped ZnO (Zn1-xFexO) ceramics synthesized by solution combustion method. Ceramics International, 2019, 45, 24625-24634.	4.8	43
31	Steady-shear response of magnetorheological fluid containing coral-shaped yttrium-iron-garnet particles. Materials Research Bulletin, 2019, 113, 45-50.	5.2	22
32	Enhancing absorption dominated microwave shielding in Co@Câ€“PVDF nanocomposites through improved magnetization and graphitization of the Co@C-nanoparticles. Physical Chemistry Chemical Physics, 2019, 21, 15595-15608.	2.8	57
33	Improved sensing behaviour of self-healable solar light photodetector based on core-shell type Ni0.2Zn0.8Fe2O4@ poly (Urea-Formaldehyde). Solar Energy, 2019, 188, 278-290.	6.1	23
34	Thermal conductivity and fire-retardant response in graphite foam made from coal tar pitch derived semi coke. Composites Part B: Engineering, 2019, 172, 121-130.	12.0	24
35	Nitrogen doping as a fundamental way to enhance the EMI shielding behavior of cobalt particle-embedded carbonaceous nanostructures. New Journal of Chemistry, 2019, 43, 5568-5580.	2.8	49
36	XRD, internal field-NMR and MÃ¶ssbauer spectroscopy study of composition, structure and magnetic properties of iron oxide phases in iron ores. Journal of Materials Research and Technology, 2019, 8, 2192-2200.	5.8	19

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37	Microstructure and compressive deformation behavior of SS foam made through evaporation of urea as space holder. Materials Chemistry and Physics, 2019, 223, 737-744.	4.0	29
38	Lightweight, high electrical and thermal conducting carbon-rGO composites foam for superior electromagnetic interference shielding. Composites Part B: Engineering, 2019, 160, 131-139.	12.0	86
39	Scalable development of a multi-phase thermal management system with superior EMI shielding properties. Composites Part B: Engineering, 2019, 158, 206-217.	12.0	23
40	Structural and magnetic properties of Al-doped yttrium iron garnet ceramics: 57Fe internal field NMR and MÃ¶ssbauer spectroscopy study. Journal of Alloys and Compounds, 2019, 773, 612-622.	5.5	31
41	Investigation of structural, morphological and NTCR behaviour of Cu-doped ZnO nanoceramics synthesized by high energy ball milling. Materials Chemistry and Physics, 2019, 221, 419-429.	4.0	39
42	Carbon nanotubes or carbon globules: Optimization of the pyrolytic synthesis parameters and study of the magnetic properties. Nano Structures Nano Objects, 2018, 14, 131-137.	3.5	26
43	Effect of Coralâ€Shaped Yttrium Iron Garnet Particles on the EMI Shielding Behaviour of Yttrium Iron Garnetâ€Polyanilineâ€Wax Composites. ChemistrySelect, 2018, 3, 2120-2130.	1.5	46
44	Structural variation study of cobalt nanoparticles synthesized by co-precipitation method using 59Co NMR. AIP Conference Proceedings, 2018, , .	0.4	1
45	Compressive Deformation Behavior of Open-Cell Cu-Zn-Al Alloy Foam Made Through P/M Route Using Mechanically Alloyed Powder. Journal of Materials Engineering and Performance, 2018, 27, 1450-1465.	2.5	2
46	Excited state intramolecular proton transfer emission in bent core liquid crystals. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 358, 186-191.	3.9	13
47	Synthesis of coral-shaped yttrium-aluminium-iron garnets by solution-combustion method. Ceramics International, 2018, 44, 3024-3031.	4.8	47
48	One-step pyrolytic synthesis and growth mechanism of coreâ€“shell type Fe/Fe<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" id="mml11" display="inline" overflow="scroll" altimg="si11.gif"><mml:msub><mml:mrow /><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msub></mml:math>C-graphite nanoparticles-embedded carbon globules. Nano Structures Nano Objects, 2018, 16, 77-85.	3.5	37
49	Excellent EMI shielding performance and thermal insulating properties in lightweight, multifunctional carbon-cenosphere composite foams. Composites Part A: Applied Science and Manufacturing, 2018, 112, 475-484.	7.6	70
50	Effect of solvents on the structure and magnetic properties of pyrolysis derived carbon globules embedded with iron/iron carbide nanoparticles and their applications in magnetorheological fluids. Nano Structures Nano Objects, 2018, 16, 167-173.	3.5	31
51	Mechanistic Insight into the Critical Concentration of Barium Hexaferrite and the Conductive Polymeric Phase with Respect to Synergistically Electromagnetic Interference (EMI) Shielding. ChemistrySelect, 2017, 2, 830-841.	1.5	47
52	Integration of MCMBs/MWCNTs with Fe₃O₄in a flexible and light weight composite paper for promising EMI shielding applications. Journal of Materials Chemistry C, 2017, 5, 322-332.	5.5	94
53	Carbon encapsulated nanoscale iron/iron-carbide/graphite particles for EMI shielding and microwave absorption. Physical Chemistry Chemical Physics, 2017, 19, 23268-23279.	2.8	148
54	Role of pyrolysis reaction temperature and heating-rate in the growth and morphology of carbon nanostructures. Nano Structures Nano Objects, 2017, 12, 229-238.	3.5	40

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55	Lightweight and Easily Foldable MCMB-MWCNTs Composite Paper with Exceptional Electromagnetic Interference Shielding. ACS Applied Materials & Interfaces, 2016, 8, 10600-10608.	8.0	188
56	Three-dimensional and highly ordered porous carbonâ€“MnO₂ composite foam for excellent electromagnetic interference shielding efficiency. RSC Advances, 2016, 6, 100713-100722.	3.6	53
57	Novel 3D lightweight carbon foam as an effective adsorbent for arsenic(<scp>v</scp>) removal from contaminated water. RSC Advances, 2016, 6, 29899-29908.	3.6	25
58	Nanoparticles-decorated coal tar pitch-based carbon foam with enhanced electromagnetic radiation absorption capability. RSC Advances, 2015, 5, 20256-20264.	3.6	19
59	Mesocarbon microsphere composites with Fe₃O₄ nanoparticles for outstanding electromagnetic interference shielding effectiveness. RSC Advances, 2015, 5, 43279-43289.	3.6	29
60	Nanostructuring effect of multi-walled carbon nanotubes on electrochemical properties of carbon foam as constructive electrode for lead acid battery. Applied Nanoscience (Switzerland), 2015, 5, 53-61.	3.1	11
61	Nickel nanoparticles embedded in carbon foam for improving electromagnetic shielding effectiveness. Applied Nanoscience (Switzerland), 2015, 5, 553-561.	3.1	52
62	Strengthening of semicoke based carbon composites through multi-wall carbon nanotubes. Applied Nanoscience (Switzerland), 2014, 4, 601-611.	3.1	8
63	Improved electromagnetic interference shielding effectiveness of light weight carbon foam by ferrocene accumulation. RSC Advances, 2013, 3, 4145.	3.6	91
64	Effective improvement of the properties of light weight carbon foam by decoration with multi-wall carbon nanotubes. Journal of Materials Chemistry A, 2013, 1, 5727.	10.3	154
65	The role of ferrocene on the enhancement of the mechanical and electrochemical properties of coal tar pitch-based carbon foams. Journal of Materials Science, 2013, 48, 7071-7080.	3.7	20
66	Development of mesophase pitch derived high thermal conductivity graphite foam using a template method. Carbon, 2011, 49, 3622-3630.	10.3	68
67	Development of pitch-based carbonâ€“copper composites. Journal of Materials Science, 2010, 45, 1393-1400.	3.7	14
68	Influence of coal tar pitch coating on the properties of micro and nano SiC incorporated carbonâ€“ceramic composites. Journal of Materials Science, 2009, 44, 4633-4638.	3.7	6