

Rajeev Kumar

List of Publications by Year in descending order

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68
papers

2,557
citations

159585

30
h-index

206112

48
g-index

70
all docs

70
docs citations

70
times ranked

2532
citing authors

#	ARTICLE	IF	CITATIONS
1	Lightweight and Easily Foldable MCMB-MWCNTs Composite Paper with Exceptional Electromagnetic Interference Shielding. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 10600-10608.	8.0	188
2	Effective improvement of the properties of light weight carbon foam by decoration with multi-wall carbon nanotubes. <i>Journal of Materials Chemistry A</i> , 2013, 1, 5727.	10.3	154
3	Carbon encapsulated nanoscale iron/iron-carbide/graphite particles for EMI shielding and microwave absorption. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 23268-23279.	2.8	148
4	Integration of MCMBs/MWCNTs with Fe ₃ O ₄ in a flexible and light weight composite paper for promising EMI shielding applications. <i>Journal of Materials Chemistry C</i> , 2017, 5, 322-332.	5.5	94
5	Improved electromagnetic interference shielding effectiveness of light weight carbon foam by ferrocene accumulation. <i>RSC Advances</i> , 2013, 3, 4145.	3.6	91
6	Lightweight, high electrical and thermal conducting carbon-rGO composites foam for superior electromagnetic interference shielding. <i>Composites Part B: Engineering</i> , 2019, 160, 131-139.	12.0	86
7	Potential of graphene-based materials to combat COVID-19: properties, perspectives, and prospects. <i>Materials Today Chemistry</i> , 2020, 18, 100385.	3.5	86
8	Excellent EMI shielding performance and thermal insulating properties in lightweight, multifunctional carbon-cenosphere composite foams. <i>Composites Part A: Applied Science and Manufacturing</i> , 2018, 112, 475-484.	7.6	70
9	Development of mesophase pitch derived high thermal conductivity graphite foam using a template method. <i>Carbon</i> , 2011, 49, 3622-3630.	10.3	68
10	Enhancing absorption dominated microwave shielding in Co@PVPDF nanocomposites through improved magnetization and graphitization of the Co@C-nanoparticles. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 15595-15608.	2.8	57
11	Modulating non-linear optical absorption through controlled graphitization of carbon nanostructures containing Fe ₃ C-graphite core-shell nanoparticles. <i>Carbon</i> , 2019, 153, 545-556.	10.3	55
12	Effect of Microstructure and Magnetic Properties of Ba-Pb-Hexaferrite Particles on EMI Shielding Behavior of Ba-Pb-Hexaferrite-Polyaniline-Wax Nanocomposites. <i>Journal of Electronic Materials</i> , 2020, 49, 1618-1629.	2.2	54
13	Three-dimensional and highly ordered porous carbon@MnO ₂ composite foam for excellent electromagnetic interference shielding efficiency. <i>RSC Advances</i> , 2016, 6, 100713-100722.	3.6	53
14	Nickel nanoparticles embedded in carbon foam for improving electromagnetic shielding effectiveness. <i>Applied Nanoscience (Switzerland)</i> , 2015, 5, 553-561.	3.1	52
15	Lightweight open cell aluminum foam for superior mechanical and electromagnetic interference shielding properties. <i>Materials Chemistry and Physics</i> , 2020, 240, 122274.	4.0	50
16	Nitrogen doping as a fundamental way to enhance the EMI shielding behavior of cobalt particle-embedded carbonaceous nanostructures. <i>New Journal of Chemistry</i> , 2019, 43, 5568-5580.	2.8	49
17	Ni Nanoparticles Coated with Nitrogen-Doped Carbon for Optical Limiting Applications. <i>ACS Applied Nano Materials</i> , 2020, 3, 8618-8631.	5.0	49
18	Mechanistic Insight into the Critical Concentration of Barium Hexaferrite and the Conductive Polymeric Phase with Respect to Synergistically Electromagnetic Interference (EMI) Shielding. <i>ChemistrySelect</i> , 2017, 2, 830-841.	1.5	47

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19	Synthesis of coral-shaped yttrium-aluminium-iron garnets by solution-combustion method. <i>Ceramics International</i> , 2018, 44, 3024-3031.	4.8	47
20	Graphene Oxide Coatings on Amino Acid Modified Fe Surfaces for Corrosion Inhibition. <i>ACS Applied Nano Materials</i> , 2020, 3, 3540-3557.	5.0	47
21	Effect of Coral-shaped Yttrium Iron Garnet Particles on the EMI Shielding Behaviour of Yttrium Iron Garnet-Polyaniline-Wax Composites. <i>ChemistrySelect</i> , 2018, 3, 2120-2130.	1.5	46
22	Non-centrosymmetric zinc silicate-graphene based transparent flexible piezoelectric nanogenerator. <i>Nano Energy</i> , 2020, 73, 104821.	16.0	44
23	Structural, optical and Mössbauer spectroscopic investigations on the environment of Fe in Fe-doped ZnO (Zn _{1-x} Fe _x O) ceramics synthesized by solution combustion method. <i>Ceramics International</i> , 2019, 45, 24625-24634.	4.8	43
24	Role of oxygen functionalities of GO in corrosion protection of metallic Fe. <i>Carbon</i> , 2021, 173, 350-363.	10.3	43
25	Role of pyrolysis reaction temperature and heating-rate in the growth and morphology of carbon nanostructures. <i>Nano Structures Nano Objects</i> , 2017, 12, 229-238.	3.5	40
26	Investigation of structural, morphological and NTCR behaviour of Cu-doped ZnO nanoceramics synthesized by high energy ball milling. <i>Materials Chemistry and Physics</i> , 2019, 221, 419-429.	4.0	39
27	A nickel oxide-decorated <i>in situ</i> grown 3-D graphitic forest engrained carbon foam electrode for microbial fuel cells. <i>Chemical Communications</i> , 2021, 57, 879-882.	4.1	39
28	One-step pyrolytic synthesis and growth mechanism of core-shell type Fe/Fe ₃ C-graphite nanoparticles-embedded carbon globules. <i>Nano Structures Nano Objects</i> , 2018, 16, 77-85.	3.5	37
29	Mechanistic insights into the optical limiting performance of carbonaceous nanomaterials embedded with core-shell type graphite encapsulated Co nanoparticles. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 27224-27240.	2.8	35
30	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. <i>Nano Structures Nano Objects</i> , 2018, 16, 167-173.	3.5	31
31	Structural and magnetic properties of Al-doped yttrium iron garnet ceramics: ⁵⁷ Fe internal field NMR and Mössbauer spectroscopy study. <i>Journal of Alloys and Compounds</i> , 2019, 773, 612-622.	5.5	31
32	Mesocarbon microsphere composites with Fe ₃ O ₄ nanoparticles for outstanding electromagnetic interference shielding effectiveness. <i>RSC Advances</i> , 2015, 5, 43279-43289.	3.6	29
33	Microstructure and compressive deformation behavior of SS foam made through evaporation of urea as space holder. <i>Materials Chemistry and Physics</i> , 2019, 223, 737-744.	4.0	29
34	Carbon nanotubes or carbon globules: Optimization of the pyrolytic synthesis parameters and study of the magnetic properties. <i>Nano Structures Nano Objects</i> , 2018, 14, 131-137.	3.5	26
35	Novel 3D lightweight carbon foam as an effective adsorbent for arsenic(^v) removal from contaminated water. <i>RSC Advances</i> , 2016, 6, 29899-29908.	3.6	25
36	Thermal conductivity and fire-retardant response in graphite foam made from coal tar pitch derived semi coke. <i>Composites Part B: Engineering</i> , 2019, 172, 121-130.	12.0	24

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37	Effect of SWCNTs content and relative density on the energy absorption capabilities of closed-cell Al-cenosphere-SWCNTs hybrid foam. <i>Composites Part B: Engineering</i> , 2019, 176, 107304.	12.0	23
38	Improved sensing behaviour of self-healable solar light photodetector based on core-shell type Ni _{0.2} Zn _{0.8} Fe ₂ O ₄ @ poly (Urea-Formaldehyde). <i>Solar Energy</i> , 2019, 188, 278-290.	6.1	23
39	Scalable development of a multi-phase thermal management system with superior EMI shielding properties. <i>Composites Part B: Engineering</i> , 2019, 158, 206-217.	12.0	23
40	Steady-shear response of magnetorheological fluid containing coral-shaped yttrium-iron-garnet particles. <i>Materials Research Bulletin</i> , 2019, 113, 45-50.	5.2	22
41	Phenol formaldehyde resin derived carbon-MCMB composite foams for electromagnetic interference shielding and thermal management applications. <i>Composites Communications</i> , 2020, 22, 100433.	6.3	22
42	Role of iron in the enhanced reactivity of pulverized Red mud: Analysis by Mössbauer spectroscopy and FTIR spectroscopy. <i>Case Studies in Construction Materials</i> , 2019, 11, e00266.	1.7	21
43	The role of ferrocene on the enhancement of the mechanical and electrochemical properties of coal tar pitch-based carbon foams. <i>Journal of Materials Science</i> , 2013, 48, 7071-7080.	3.7	20
44	Multi-component framework derived SiC composite paper to support efficient thermal transport and high EMI shielding performance. <i>Composites Part B: Engineering</i> , 2019, 176, 107123.	12.0	20
45	Microstructure, mechanical and EMI shielding performance in open cell austenitic stainless steel foam made through PU foam template. <i>Materials Chemistry and Physics</i> , 2020, 241, 122273.	4.0	20
46	Nanoparticles-decorated coal tar pitch-based carbon foam with enhanced electromagnetic radiation absorption capability. <i>RSC Advances</i> , 2015, 5, 20256-20264.	3.6	19
47	XRD, internal field-NMR and Mössbauer spectroscopy study of composition, structure and magnetic properties of iron oxide phases in iron ores. <i>Journal of Materials Research and Technology</i> , 2019, 8, 2192-2200.	5.8	19
48	Synthesis and characterization of 316L stainless steel foam made through two different removal process of space holder method. <i>Manufacturing Letters</i> , 2020, 26, 33-36.	2.2	19
49	Role of graphitization-controlled conductivity in enhancing absorption dominated EMI shielding behavior of pyrolysis-derived Fe ₃ C@C-PVDF nanocomposites. <i>Materials Chemistry and Physics</i> , 2021, 263, 124429.	4.0	18
50	Lightweight carbon-red mud hybrid foam toward fire-resistant and efficient shield against electromagnetic interference. <i>Scientific Reports</i> , 2020, 10, 9913.	3.3	15
51	Effect of Cr Doping on Structural, Optical and Dielectric Properties of ZnO Nanoceramics Synthesized by Mechanical Alloying. <i>Electronic Materials Letters</i> , 2020, 16, 255-263.	2.2	15
52	Enhanced electromagnetic interference shielding properties of phenolic resin derived lightweight carbon foam decorated with electrospun zinc oxide nanofibers. <i>Materials Today Communications</i> , 2022, 30, 103055.	1.9	15
53	Development of pitch-based carbon-copper composites. <i>Journal of Materials Science</i> , 2010, 45, 1393-1400.	3.7	14
54	Investigation on pitch derived mesocarbon spheres based metal composites for highly efficient electromagnetic interference shielding. <i>Composites Part B: Engineering</i> , 2019, 175, 107168.	12.0	14

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55	Excited state intramolecular proton transfer emission in bent core liquid crystals. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2018, 358, 186-191.	3.9	13
56	Effect of Al addition and space holder content on microstructure and mechanical properties of Ti ₂ Co alloys foams for bone scaffold application. <i>Materials Science and Engineering C</i> , 2020, 109, 110600.	7.3	13
57	Effect of compressive strain rate on the deformation behaviour of austenitic stainless steel foam produced by space holder technique. <i>Materials Chemistry and Physics</i> , 2021, 259, 124010.	4.0	12
58	Nanostructuring effect of multi-walled carbon nanotubes on electrochemical properties of carbon foam as constructive electrode for lead acid battery. <i>Applied Nanoscience (Switzerland)</i> , 2015, 5, 53-61.	3.1	11
59	Three dimension phenolic resin derived carbon-CNTs hybrid foam for fire retardant and effective electromagnetic interference shielding. <i>Composites Part C: Open Access</i> , 2020, 2, 100020.	3.2	11
60	Iron/Iron Carbide (Fe/Fe ₃ C) Encapsulated in S, N Codoped Graphitic Carbon as a Robust HER Electrocatalyst. <i>Energy & Fuels</i> , 2021, 35, 16046-16053.	5.1	11
61	Superiority of graphite coated metallic-nanoparticles over graphite coated insulating-nanoparticles for enhancing EMI shielding. <i>New Journal of Chemistry</i> , 2021, 45, 4592-4600.	2.8	9
62	Strengthening of semicoke based carbon composites through multi-wall carbon nanotubes. <i>Applied Nanoscience (Switzerland)</i> , 2014, 4, 601-611.	3.1	8
63	Influence of coal tar pitch coating on the properties of micro and nano SiC incorporated carbon-ceramic composites. <i>Journal of Materials Science</i> , 2009, 44, 4633-4638.	3.7	6
64	Microstructure and high temperature compressive deformation in lightweight open cell titanium foam. <i>Manufacturing Letters</i> , 2021, 27, 67-71.	2.2	6
65	Thermal insulating and fire-retardant lightweight carbon-slag composite foams towards absorption dominated electromagnetic interference shielding. <i>Sustainable Materials and Technologies</i> , 2022, 33, e00453.	3.3	5
66	Compressive Deformation Behavior of Open-Cell Cu-Zn-Al Alloy Foam Made Through P/M Route Using Mechanically Alloyed Powder. <i>Journal of Materials Engineering and Performance</i> , 2018, 27, 1450-1465.	2.5	2
67	Structural variation study of cobalt nanoparticles synthesized by co-precipitation method using ⁵⁹ Co NMR. <i>AIP Conference Proceedings</i> , 2018, , .	0.4	1
68	Partially open cell Ti-6Al-2Co ternary alloy foams with a range of size and volume fraction of spacer particle. <i>Materials Letters</i> , 2021, 290, 129463.	2.6	1