Rajagopalan Thiruvengadathan

List of Publications by Year
in descending order

58 papers	1,724 citations	304743 22 h-index	276875 41 g-index
63 all docs	63 docs citations	63 times ranked	1768 citing authors

#	Article	IF	Citations
1	Template-free chemical deposition of highly crystalline ZnO nanorod thin films. Materials Advances, 2022, 3, 5383-5392.	5.4	3
2	Remediation of Organic Pollutants in Water. Environmental Chemistry for A Sustainable World, 2021, , 501-517.	0.5	0
3	Synthesis and Characterization of Carbon Nanostructures. , 2021, , 1-30.		0
4	Conducting Polymer Nanocomposites with Carbon Nanostructures as Advanced EMI Shielding Materials: Recent Advancements and Challenges. , 2021, , 1-26.		4
5	Carbon Nanostructures and Their Desirable Functionalization for Energy Harvesting. , 2021, , 1-22.		0
6	From Fundamentals to Applications of Carbon Nanostructures: An overview. , 2021, , 1-14.		0
7	Efficient hyperparameter-tuned machine learning approach for estimation of supercapacitor performance attributes. Journal of Physics Communications, 2021, 5, 115011.	1.2	8
8	Carbon Nanostructures in Hybrid Supercapacitors: A Review. , 2021, , 1-20.		0
9	Detection of Interference in C-Band Signals using K-Means Clustering. , 2020, , .		1
10	Evidence of Scatter in C-band Spatio-temporal Signals using Machine Learning Models. , 2020, , .		1
11	Advances in gamma radiation detection systems for emergency radiation monitoring. Nuclear Engineering and Technology, 2020, 52, 2151-2161.	2.3	35
12	Synthesis, characterization and nanoenergetic utilizations of fluorine, oxygen co-functionalized graphene by one-step XeF2 exposure. Combustion and Flame, 2020, 215, 324-332.	5.2	10
13	Advances in detection algorithms for radiation monitoring. Journal of Environmental Radioactivity, 2020, 217, 106216.	1.7	7
14	A log-periodic spiral antenna array for L-band radio interferometric imaging. Journal of Intelligent and Fuzzy Systems, 2020, 38, 6607-6618.	1.4	0
15	Aluminum-Based Nano-energetic Materials: State of the Art and Future Perspectives. Energy, Environment, and Sustainability, 2019, , 9-35.	1.0	3
16	Combustion of aluminum nanoparticles and exfoliated 2D molybdenum trioxide composites. Combustion and Flame, 2018, 187, 1-10.	5.2	27
17	Experimental and Computational Aspects of Electronic Properties of Carbon-Based Polymer Nanocomposites. , 2018, , 175-198.		0
18	Reactive nanoenergetic graphene aerogel synthesized by one-step chemical reduction. Combustion and Flame, 2018, 196, 400-406.	5.2	22

#	Article	IF	Citations
19	A computational approach to determine shielding effectiveness of carbon nanotube-based nanocomposites for EMC application. Computational Materials Science, 2017, 126, 400-406.	3.0	16
20	A holistic approach to evaluate EMI shielding characteristics of carbon nanotube-based polymer composites. , 2017, , .		2
21	Graphene-based Al-Bi<inf>2</inf>O<inf>3</inf> nanoenergetic films by electrophoretic deposition. , 2017, , .		3
22	Electromagnetic fields for propagation and confinement of high current heavy ion beam towards conformal thin film deposition. , 2016, , .		1
23	Enhanced Combustion Characteristics of Bismuth Trioxideâ€Aluminum Nanocomposites Prepared through Graphene Oxide Directed Selfâ€Assembly. Propellants, Explosives, Pyrotechnics, 2015, 40, 729-734.	1.6	35
24	Fast-Impulse Nanothermite Solid-Propellant Miniaturized Thrusters. Journal of Propulsion and Power, 2015, 31, 483-483.	2.2	8
25	Effect of Nitrocellulose Gasifying Binder on Thrust Performance and Highâ€g Launch Tolerance of Miniaturized Nanothermite Thrusters. Propellants, Explosives, Pyrotechnics, 2014, 39, 374-382.	1.6	33
26	A Versatile Self-Assembly Approach toward High Performance Nanoenergetic Composite Using Functionalized Graphene. Langmuir, 2014, 30, 6556-6564.	3.5	91
27	Nanomaterial processing using self-assembly-bottom-up chemical and biological approaches. Reports on Progress in Physics, 2013, 76, 066501.	20.1	114
28	Fast-Impulse Nanothermite Solid-Propellant Miniaturized Thrusters. Journal of Propulsion and Power, 2013, 29, 1400-1409.	2.2	60
29	Ultra-rapid elimination of biofilms via the combustion of a nanoenergetic coating. BMC Biotechnology, 2013, 13, 30.	3.3	8
30	Transient pressure mediated intranuclear delivery of FITC-Dextran into chicken cardiomyocytes by MEMS-based nanothermite reaction actuator. Sensors and Actuators B: Chemical, 2012, 171-172, 1292-1296.	7.8	40
31	Combustion Characteristics of Silicon-Based Nanoenergetic Formulations with Reduced Electrostatic Discharge Sensitivity. Propellants, Explosives, Pyrotechnics, 2012, 37, 359-372.	1.6	37
32	Silicon-based bridge wire micro-chip initiators for bismuth oxideâ€“aluminum nanothermite. Journal of Micromechanics and Microengineering, 2011, 21, 115015.	2.6	47
33	Combustion characteristics of novel hybrid nanoenergetic formulations. Combustion and Flame, 2011, 158, 964-978.	5.2	80
34	Modified Nanoenergetic Composites with Tunable Combustion Characteristics for Propellant Applications. Propellants, Explosives, Pyrotechnics, 2010, 35, 384-394.	1.6	46
35	Entropy driven spontaneous formation of highly porous films from polymerâ€“nanoparticle composites. Nanotechnology, 2009, 20, 425602.	2.6	24
36	Characterization of Nanothermite Material for Solid-Fuel Microthruster Applications. Journal of Propulsion and Power, 2009, 25, 1086-1091.	2.2	80

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37	Nanoenergetic Composites of CuO Nanorods, Nanowires, and Alâ€Nanoparticles. Propellants, Explosives, Pyrotechnics, 2008, 33, 122-130.	1.6	119
38	Hexamethyldisilazane vapor treatment of plasma damaged nanoporous methylsilsesquioxane films: Structural and electrical characteristics. Thin Solid Films, 2008, 516, 3399-3404.	1.8	10
39	Electrochemical Properties of Carbon Nanoparticles Entrapped in a Silica Matrix. Journal of the Electrochemical Society, 2008, 155, K91.	2.9	21
40	Origin of giant photocontraction in obliquely deposited amorphous<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Ge</mml:mtext></mml:mrow><mml:mi>x</mml:mi></mml:msub> films and the intermediate phase. Physical Review B, 2008, 78, .	3.2	15
41	Synergetic effect of ultrasound and sodium dodecyl sulphate in the formation of CdS nanostructures in aqueous solution. Ultrasonics Sonochemistry, 2007, 14, 398-404.	8.2	19
42	Preparation and characterization of a double filler polymeric nanocomposite. Composites Science and Technology, 2007, 67, 895-899.	7.8	20
43	Determination of the Concentration of Single-Walled Carbon Nanotubes in Aqueous Dispersions Using UVâ^'Visible Absorption Spectroscopy. Analytical Chemistry, 2006, 78, 8098-8104.	6.5	198
44	Investigation on hexamethyldisilazane vapor treatment of plasma-damaged nanoporous organosilicate films. Applied Surface Science, 2006, 252, 6323-6331.	6.1	28
45	Post treatments of plasma-enhanced chemical vapor deposited hydrogenated amorphous silicon carbide for low dielectric constant films. Thin Solid Films, 2006, 497, 109-114.	1.8	6
46	Preparation and Characterization of a Carbon Nanotubeâ^'Lyotropic Liquid Crystal Composite. Langmuir, 2006, 22, 854-856.	3.5	91
47	Templating nanostructures by mesoporous materials with an emphasis on room temperature and cryogenic TEM studies. Current Opinion in Colloid and Interface Science, 2005, 10, 280-286.	7.4	6
48	Hierarchically Ordered Cadmium Sulfide Nanowires Dispersed in Aqueous Solution. Chemistry of Materials, 2005, 17, 3281-3287.	6.7	47
49	Supercritical CO2 Treatments for Semiconductor Applications. Materials Research Society Symposia Proceedings, 2004, 812, F4.6.1.	0.1	0
50	Supercritical CO2extraction of porogen phase: An alternative route to nanoporous dielectrics. Journal of Materials Research, 2004, 19, 3224-3233.	2.6	15
51	Low temperature deposition of nanocrystalline silicon carbide films by plasma enhanced chemical vapor deposition and their structural and optical characterization. Journal of Applied Physics, 2003, 94, 5252.	2.5	133
52	Supercritical carbon dioxide extraction of porogens for the preparation of ultralow-dielectric-constant films. Applied Physics Letters, 2003, 82, 4328-4330.	3.3	26
53	Supercritical carbon dioxide extraction to produce low-k plasma enhanced chemical vapor deposited dielectric films. Applied Physics Letters, 2002, 81, 4407-4409.	3.3	14
54	Low-korganosilicate films prepared by tetravinyltetramethylcyclotetrasiloxane. Journal of Applied Physics, 2002, 92, 1033-1038.	2.5	69

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55	Formation of highly oriented GeBiSe films from the as-deposited amorphous state by annealing. Thin Solid Films, 2000, 377-378, 501-506.	1.8	1
56	Thermal and optical properties of Ge5Bi18Se77 films. Journal of Materials Science: Materials in Electronics, 2000, 11, 397-400.	2.2	6
57	Effect of annealing rate on the crystallization process in Ge5Bi18Se77 films. Thin Solid Films, 1999, 353, 254-258.	1.8	12
58	Study of surface topography and optical properties of Ge15Bi38Se47 films. Journal of Materials Science: Materials in Electronics, 1998, 9, 133-137.	2.2	16