# Rajagopalan Thiruvengadathan

List of Publications by Year
in descending order



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|---|---|---|---|
| 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 | 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 |
| 2 | 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 |
| 3 | Nanoenergetic Composites of CuO Nanorods, Nanowires, and Alâ€Nanoparticles. Propellants, Explosives, Pyrotechnics, 2008, 33, 122-130. | 1.6 | 119 |
| 4 | Nanomaterial processing using self-assembly-bottom-up chemical and biological approaches. Reports on Progress in Physics, 2013, 76, 066501. | 20.1 | 114 |
| 5 | Preparation and Characterization of a Carbon Nanotubeâ^'Lyotropic Liquid Crystal Composite. Langmuir, 2006, 22, 854-856. | 3.5 | 91 |
| 6 | A Versatile Self-Assembly Approach toward High Performance Nanoenergetic Composite Using Functionalized Graphene. Langmuir, 2014, 30, 6556-6564. | 3.5 | 91 |
| 7 | Characterization of Nanothermite Material for Solid-Fuel Microthruster Applications. Journal of Propulsion and Power, 2009, 25, 1086-1091. | 2.2 | 80 |
| 8 | Combustion characteristics of novel hybrid nanoenergetic formulations. Combustion and Flame, 2011, 158, 964-978. | 5.2 | 80 |
| 9 | Low-korganosilicate films prepared by tetravinyltetramethylcyclotetrasiloxane. Journal of Applied Physics, 2002, 92, 1033-1038. | 2.5 | 69 |
| 10 | Fast-Impulse Nanothermite Solid-Propellant Miniaturized Thrusters. Journal of Propulsion and Power, 2013, 29, 1400-1409. | 2.2 | 60 |
| 11 | Hierarchically Ordered Cadmium Sulfide Nanowires Dispersed in Aqueous Solution. Chemistry of Materials, 2005, 17, 3281-3287. | 6.7 | 47 |
| 12 | Silicon-based bridge wire micro-chip initiators for bismuth oxideâ€“aluminum nanothermite. Journal of Micromechanics and Microengineering, 2011, 21, 115015. | 2.6 | 47 |
| 13 | Modified Nanoenergetic Composites with Tunable Combustion Characteristics for Propellant Applications. Propellants, Explosives, Pyrotechnics, 2010, 35, 384-394. | 1.6 | 46 |
| 14 | 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 |
| 15 | Combustion Characteristics of Silicon-Based Nanoenergetic Formulations with Reduced Electrostatic Discharge Sensitivity. Propellants, Explosives, Pyrotechnics, 2012, 37, 359-372. | 1.6 | 37 |
| 16 | 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 |
| 17 | Advances in gamma radiation detection systems for emergency radiation monitoring. Nuclear Engineering and Technology, 2020, 52, 2151-2161. | 2.3 | 35 |
| 18 | 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 |

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|---|---|---|---|
| 19 | Investigation on hexamethyldisilazane vapor treatment of plasma-damaged nanoporous organosilicate films. Applied Surface Science, 2006, 252, 6323-6331. | 6.1 | 28 |
| 20 | Combustion of aluminum nanoparticles and exfoliated 2D molybdenum trioxide composites. Combustion and Flame, 2018, 187, 1-10. | 5.2 | 27 |
| 21 | Supercritical carbon dioxide extraction of porogens for the preparation of ultralow-dielectric-constant films. Applied Physics Letters, 2003, 82, 4328-4330. | 3.3 | 26 |
| 22 | Entropy driven spontaneous formation of highly porous films from polymerâ€“nanoparticle composites. Nanotechnology, 2009, 20, 425602. | 2.6 | 24 |
| 23 | Reactive nanoenergetic graphene aerogel synthesized by one-step chemical reduction. Combustion and Flame, 2018, 196, 400-406. | 5.2 | 22 |
| 24 | Electrochemical Properties of Carbon Nanoparticles Entrapped in a Silica Matrix. Journal of the Electrochemical Society, 2008, 155, K91. | 2.9 | 21 |
| 25 | Preparation and characterization of a double filler polymeric nanocomposite. Composites Science and Technology, 2007, 67, 895-899. | 7.8 | 20 |
| 26 | 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 |
| 27 | Study of surface topography and optical properties of Ge15Bi38Se47 films. Journal of Materials Science: Materials in Electronics, 1998, 9, 133-137. | 2.2 | 16 |
| 28 | 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 |
| 29 | Supercritical CO2extraction of porogen phase: An alternative route to nanoporous dielectrics. Journal of Materials Research, 2004, 19, 3224-3233. | 2.6 | 15 |
| 30 | 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 |
| 31 | 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 |
| 32 | Effect of annealing rate on the crystallization process in Ge5Bi18Se77 films. Thin Solid Films, 1999, 353, 254-258. | 1.8 | 12 |
| 33 | Hexamethyldisilazane vapor treatment of plasma damaged nanoporous methylsilsesquioxane films: Structural and electrical characteristics. Thin Solid Films, 2008, 516, 3399-3404. | 1.8 | 10 |
| 34 | 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 |
| 35 | Ultra-rapid elimination of biofilms via the combustion of a nanoenergetic coating. BMC Biotechnology, 2013, 13, 30. | 3.3 | 8 |
| 36 | Fast-Impulse Nanothermite Solid-Propellant Miniaturized Thrusters. Journal of Propulsion and Power, 2015, 31, 483-483. | 2.2 | 8 |

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|---|---|---|---|
| 37 | Efficient hyperparameter-tuned machine learning approach for estimation of supercapacitor performance attributes. Journal of Physics Communications, 2021, 5, 115011. | 1.2 | 8 |
| 38 | Advances in detection algorithms for radiation monitoring. Journal of Environmental Radioactivity, 2020, 217, 106216. | 1.7 | 7 |
| 39 | Thermal and optical properties of Ge5Bi18Se77 films. Journal of Materials Science: Materials in Electronics, 2000, 11, 397-400. | 2.2 | 6 |
| 40 | 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 |
| 41 | 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 |
| 42 | Conducting Polymer Nanocomposites with Carbon Nanostructures as Advanced EMI Shielding Materials: Recent Advancements and Challenges. , 2021, , 1-26. | | 4 |
| 43 | Graphene-based Al-Bi<inf>2</inf>O<inf>3</inf> nanoenergetic films by electrophoretic deposition. , 2017, , . | | 3 |
| 44 | Aluminum-Based Nano-energetic Materials: State of the Art and Future Perspectives. Energy, Environment, and Sustainability, 2019, , 9-35. | 1.0 | 3 |
| 45 | Template-free chemical deposition of highly crystalline ZnO nanorod thin films. Materials Advances, 2022, 3, 5383-5392. | 5.4 | 3 |
| 46 | A holistic approach to evaluate EMI shielding characteristics of carbon nanotube-based polymer composites. , 2017, , . | | 2 |
| 47 | 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 |
| 48 | Electromagnetic fields for propagation and confinement of high current heavy ion beam towards conformal thin film deposition. , 2016, , . | | 1 |
| 49 | Detection of Interference in C-Band Signals using K-Means Clustering. , 2020, , . | | 1 |
| 50 | Evidence of Scatter in C-band Spatio-temporal Signals using Machine Learning Models. , 2020, , . | | 1 |
| 51 | Supercritical CO2 Treatments for Semiconductor Applications. Materials Research Society Symposia Proceedings, 2004, 812, F4.6.1. | 0.1 | 0 |
| 52 | Experimental and Computational Aspects of Electronic Properties of Carbon-Based Polymer Nanocomposites. , 2018, , 175-198. | | 0 |
| 53 | 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 |
| 54 | Remediation of Organic Pollutants in Water. Environmental Chemistry for A Sustainable World, 2021, , 501-517. | 0.5 | 0 |

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|---|---|---|---|
| 55 | Synthesis and Characterization of Carbon Nanostructures. , 2021, , 1-30. | | 0 |
| 56 | Carbon Nanostructures and Their Desirable Functionalization for Energy Harvesting. , 2021, , 1-22. | | 0 |
| 57 | From Fundamentals to Applications of Carbon Nanostructures: An overview. , 2021, , 1-14. | | 0 |
| 58 | Carbon Nanostructures in Hybrid Supercapacitors: A Review. , 2021, , 1-20. | | 0 |