# Rajamani Nagarajan

List of Publications by Year
in descending order

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| 92 | 1,355 | 430874 | 395702 |
|---|---|---|---|
| papers | citations | 18 h-index | 33 g-index |

| 92 | 92 | 92 | 1965 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Optical and Photocatalytic Properties of Heavily F<sup>â€“</sup>-Doped SnO<sub>2</sub> Nanocrystals by a Novel Single-Source Precursor Approach. Inorganic Chemistry, 2011, 50, 5637-5645. | 4.0 | 130 |
| 2 | Synthesis of Cu<sub>1.8</sub>S and CuS from Copper-Thiourea Containing Precursors; Anionic (Cl<sup>â^'</sup>, NO<sub>3</sub><sup>â^'</sup>, SO<sub>4</sub><sup>2â^'</sup>) Influence on the Product Stoichiometry. Inorganic Chemistry, 2011, 50, 3065-3070. | 4.0 | 118 |
| 3 | Zirconia based nucleic acid sensor for Mycobacterium tuberculosis detection. Applied Physics Letters, 2010, 96, . | 3.3 | 70 |
| 4 | Synthesis and optical characterization of strong red light emitting KLaF4:Eu3+ nanophosphors. Chemical Physics Letters, 2011, 508, 117-120. | 2.6 | 68 |
| 5 | Anion (Fluoride)-Doped Ceria Nanocrystals: Synthesis, Characterization, and Its Catalytic Application to Oxidative Coupling of Benzylamines. Inorganic Chemistry, 2014, 53, 2030-2039. | 4.0 | 55 |
| 6 | Hexagonally Ordered KLaF<sub>4</sub> Host: Phase-Controlled Synthesis and Luminescence Studies. Inorganic Chemistry, 2012, 51, 12748-12754. | 4.0 | 46 |
| 7 | Metastable Bi<sub>2</sub>Zr<sub>2</sub>O<sub>7</sub> with Pyrochlore-like Structure: Stabilization, Oxygen Ion Conductivity, and Catalytic Properties. Inorganic Chemistry, 2018, 57, 13667-13678. | 4.0 | 46 |
| 8 | Zirconia grafted carbon nanotubes based biosensor for M. Tuberculosis detection. Applied Physics Letters, 2011, 99, . | 3.3 | 41 |
| 9 | KLaF4:Er an efficient upconversion phosphor. Optical Materials, 2010, 33, 42-47. | 3.6 | 38 |
| 10 | Wurtzite CuInS2: solution based one pot direct synthesis and its doping studies with non-magnetic Ga3+ and magnetic Fe3+ ions. RSC Advances, 2013, 3, 18863. | 3.6 | 28 |
| 11 | Application of KZnF<sub>3</sub> as a Single Source Precursor for the Synthesis of Nanocrystals of ZnO<sub>2</sub>:F and ZnO:F; Synthesis, Characterization, Optical, and Photocatalytic Properties. Journal of Physical Chemistry C, 2011, 115, 10131-10139. | 3.1 | 27 |
| 12 | Reducing Strength Prevailing at Root Surface of Plants Promotes Reduction of Ag+ and Generation of Ag0/Ag2O Nanoparticles Exogenously in Aqueous Phase. PLoS ONE, 2014, 9, e106715. | 2.5 | 26 |
| 13 | Catalytic Application of Oxygen Vacancies Induced by Bi<sup>3+</sup> Incorporation in ThO<sub>2</sub> Samples Obtained by Solution Combustion Synthesis. ACS Omega, 2018, 3, 7171-7181. | 3.5 | 26 |
| 14 | Rapid Synthesis of Mesoporous, Nanoâ€Sized MgCr<sub>2</sub>O<sub>4</sub> and Its Catalytic Properties. Journal of the American Ceramic Society, 2016, 99, 814-818. | 3.8 | 25 |
| 15 | Solâ€“Gel Synthesis of High-Purity Actinide Oxide ThO<sub>2</sub> and Its Solid Solutions with Technologically Important Tin and Zinc Ions. Inorganic Chemistry, 2016, 55, 12798-12806. | 4.0 | 24 |
| 16 | Optical properties of Tb3+ doped KLaF4 in cubic and hexagonal symmetries. Optical Materials, 2013, 36, 396-401. | 3.6 | 23 |
| 17 | Root system of live plants is a powerful resource for the green synthesis of Au-nanoparticles. RSC Advances, 2014, 4, 7361. | 3.6 | 20 |
| 18 | Magnetically separable, bifunctional catalyst MgFe2O4 obtained by epoxide mediated synthesis. Advanced Powder Technology, 2016, 27, 1251-1256. | 4.1 | 20 |

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|---|---|---|---|
| 19 | Synthesis of CuAl2(acac)4(OiPr)4, its hydrolysis and formation of bulk CuAl2O4 from the hydrolyzed gels; a case study of molecules to materials. Dalton Transactions, 2010, 39, 6056. | 3.3 | 19 |
| 20 | Facile synthesis and optical properties of pure and Ni<sup>2+</sup>, Co<sup>2+</sup>, Bi<sup>3+</sup>, Sb<sup>3+</sup>substituted Cu<sub>3</sub>SnS<sub>4</sub>. RSC Advances, 2015, 5, 43202-43208. | 3.6 | 17 |
| 21 | An ethylene glycol intercalated monometallic layered double hydroxide based on iron as an efficient bifunctional catalyst. Dalton Transactions, 2016, 45, 17508-17520. | 3.3 | 17 |
| 22 | Color-Tunable Upconversion in Er<sup>3+</sup>/Yb<sup>3+</sup>-Codoped KLaF<sub>4</sub> Nanophosphors by Incorporation of Tm<sup>3+</sup> Ions for Biological Applications. ACS Omega, 2019, 4, 2275-2282. | 3.5 | 17 |
| 23 | Enhancement in Photocatalytic Activity of SrTiO<sub>3</sub> byÂTailoring Particle Size and Defects. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1900294. | 1.8 | 17 |
| 24 | Correlating the Influence of Two Magnetic Ions at the A-Site with the Electronic, Magnetic, and Catalytic Properties in Gd<sub>1â€“x</sub>Dy<sub>x</sub>CrO<sub>3</sub>. ACS Omega, 2017, 2, 2657-2664. | 3.5 | 16 |
| 25 | Wet-chemical synthesis, structural characterization and optical properties of rare-earth doped halo perovskite K 3 GaF 6. Journal of Fluorine Chemistry, 2017, 200, 1-7. | 1.7 | 16 |
| 26 | Soft chemical synthesis of Ag 3 SbS 3 with efficient and recyclable visible light photocatalytic properties. Materials Research Bulletin, 2014, 60, 872-875. | 5.2 | 15 |
| 27 | A simple one pot synthesis of cubic Cu5FeS4. RSC Advances, 2014, 4, 52633-52636. | 3.6 | 15 |
| 28 | Novel Fluorite Structured Superparamagnetic RbGdF4 Nanocrystals as Versatile Upconversion Host. Inorganic Chemistry, 2014, 53, 10257-10265. | 4.0 | 15 |
| 29 | A sequential logic gate-based â€œsmart probeâ€•for selective monitoring of Cu<sup>2+</sup>, Fe<sup>3+</sup> and CN<sup>â^’</sup>/F<sup>â^’</sup>via differential analyses. Dalton Transactions, 2015, 44, 19786-19790. | 3.3 | 15 |
| 30 | A light/pH/multiple ion-driven smart switchable module for computing sequential logic operations via a resettable dual-optical readout. Journal of Materials Chemistry C, 2015, 3, 12123-12129. | 5.5 | 15 |
| 31 | Strong structural phase sensitive rare-earth photoluminescence color flips in KLaF<sub>4</sub>:RE<sup>3+</sup> (RE<sup>3+</sup> = Eu<sup>3+</sup>,) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 257 Tc | 3.3 | 15 |
| 32 | Synthesis of nanocrystalline mixed metal fluorides in nonaqueous medium. Bulletin of Materials Science, 2009, 32, 583-587. | 1.7 | 14 |
| 33 | Room temperature optical absorption and intrinsic photoluminescence in KZnF3. Chemical Physics Letters, 2010, 494, 284-286. | 2.6 | 12 |
| 34 | Electrophoretically fabricated core-shell CNT-DNA biowires for biosensing. Journal of Materials Chemistry, 2012, 22, 2727-2732. | 6.7 | 12 |
| 35 | Thorium doped and thorium-carbon co doped metastable Î²-Bi2O3. Solid State Sciences, 2019, 95, 105938. | 3.2 | 10 |
| 36 | Highly ordered polyaniline: synthesis, characterization and electrochemical properties. Polymer Bulletin, 2020, 77, 3277-3286. | 3.3 | 10 |

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|---|---|---|---|
| 37 | Effect of phenyl group on the structure and formation of transitional alumina from Al (OPh)3. Journal of Sol-Gel Science and Technology, 2010, 53, 293-299. | 2.4 | 9 |
| 38 | Fabrication and Microhardness Analysis of MWCNT/MnO2 Nanocomposite. Journal of Materials, 2016, 2016, 1-10. | 0.1 | 9 |
| 39 | Mechanochemical transformation of ZnO2 to highly defective ZnO. Materials Letters, 2018, 212, 178-181. | 2.6 | 9 |
| 40 | Luminescent properties of K2SbF5: Ln (Ln = Eu3+, Tb3+, Er3+) obtained by a facile room temperature mechanochemical synthesis. Journal of Luminescence, 2019, 210, 392-396. | 3.1 | 9 |
| 41 | A smart switchable module for the detection of multiple ions via turn-on dual-optical readout and their cell imaging studies. Dalton Transactions, 2016, 45, 8272-8277. | 3.3 | 8 |
| 42 | Evaluation of solid solution formation between ThO2 and Î´-Bi2O3 by molecular precursor route. Materials Research Bulletin, 2018, 107, 66-73. | 5.2 | 8 |
| 43 | Rapid and One-Step Transformation of LiAlH4 to Inorganic and Organic Anion Intercalated Li-Al Layered Double Hydroxides. European Journal of Inorganic Chemistry, 2019, 2019, 2412-2418. | 2.0 | 8 |
| 44 | Polyol intercalation in copper substituted zinc hydroxide acetate and evaluation of its adsorptive role towards Congo red dye. Applied Clay Science, 2020, 185, 105411. | 5.2 | 8 |
| 45 | Energy Upconversion in Rareâ€Earthâ€Doped Tinâ€Based Double Halo Perovskites, A 2 SnCl 6 (A = K, Rb, and) Tj ETQq1 1 0.784314 r | 2.0 | 8 |
| 46 | Topochemical Oxidation of Perovskite KCoF<sub>3</sub> to a K<sub>2</sub>PtCl<sub>6</sub> Structure-Type Oxyfluoride. Inorganic Chemistry, 2015, 54, 10105-10107. | 4.0 | 7 |
| 47 | Double Perovskite K3 InF6 as an Upconversion Phosphor and Its Structural Transformation Through Rubidium Substitution. European Journal of Inorganic Chemistry, 2018, 2018, 4826-4833. | 2.0 | 7 |
| 48 | Interplay between Defects and Cation Nonstoichiometry in Lithium-Substituted CdGa<sub>2</sub>O<sub>4</sub> Leading to Multifunctional Behavior. Journal of Physical Chemistry C, 2018, 122, 22094-22105. | 3.1 | 7 |
| 49 | Implications of including a magnetic ion (Cr3+ and Fe3+) at the vanadium site in a geometrically frustrated spinel MgV2O4: magnetic and catalytic properties. Dalton Transactions, 2019, 48, 16661-16670. | 3.3 | 7 |
| 50 | Magnetic and photocatalytic properties of nano-sized sulfur-doped trirutile oxide, CuSb2O6. Materials Science in Semiconductor Processing, 2020, 119, 105226. | 4.0 | 7 |
| 51 | Comments on â€œVisible-Light-Induced Photocatalyst Based on Nickel Titanate Nanoparticlesâ€• Industrial & Engineering Chemistry Research, 2010, 49, 1995-1996. | 3.7 | 6 |
| 52 | Synthesis of high surface area transitional alumina from Al(OPh)3. Journal of Sol-Gel Science and Technology, 2011, 57, 12-15. | 2.4 | 6 |
| 53 | Fine tuning bifunctional properties of Y0.5Gd0.5BO3 by doping with Ce3+ and co-doping with Li+,Ca2+ and Al3+ following an epoxide mediated gel approach. Materials Today Chemistry, 2018, 7, 15-24. | 3.5 | 6 |
| 54 | Optical property evaluation of thoria doped with heavier rareâ€earth oxides LnO<sub>1.5</sub> (Ln =) Tj ETQq0 0 0 rgBT /Overlock 10 T<br>Ceramic Society, 2019, 102, 1832-1842. | 3.8 | 6 |

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|---|---|---|---|
| 55 | Luminescence properties of Eu<sup>3+</sup>â€•and Tb<sup>3+</sup>â€doped Î´â€Bi<sub>2</sub>O<sub>3</sub> stabilized by Th<sup>4+</sup> substitution. Journal of the American Ceramic Society, 2020, 103, 1027-1036. | 3.8 | 6 |
| 56 | Facile synthesis of Î±-Zn2V2O7 and its catalytic role for the photo mediated conversion of benzyl alcohol. Materials Letters, 2020, 280, 128559. | 2.6 | 6 |
| 57 | The emergence of bifunctional catalytic properties by the introduction of Bi<sup>3+</sup> in defect fluorite-structured PrO<sub>1.833</sub>. Dalton Transactions, 2020, 49, 12707-12715. | 3.3 | 6 |
| 58 | Modulating the optical and magnetic properties of geometrically frustrated ZnV<sub>2</sub>O<sub>4</sub> by the introduction of indium (nonmagnetic ions), iron, and chromium (magnetic ions). Dalton Transactions, 2020, 49, 15810-15820. | 3.3 | 6 |
| 59 | Ammonium fluoride mediated mechano chemical synthesis of A2PdF6 (A = K, Rb) along with their catalytic role in environmental remediation. Journal of Environmental Chemical Engineering, 2017, 5, 5460-5468. | 6.7 | 5 |
| 60 | Consequences of lead incorporation in fluorite structured thoria. Ceramics International, 2019, 45, 11709-11716. | 4.8 | 5 |
| 61 | Microspherical core-shell MoO2-graphitic C3N4 heterojunction promoted integration leading to KrÃ¶hnke pyridines and degradation of xylenol orange. Materials Today Communications, 2021, 26, 102117. | 1.9 | 5 |
| 62 | Optical, electrical, and catalytic (photo-and sono-) properties of indium doped Î³-Bi2O3 with Sillenite structure. Journal of Alloys and Compounds, 2021, 887, 161466. | 5.5 | 5 |
| 63 | Polyaminocarboxylate promoted synthesis of Hafnium/ Zirconium substituted anion excess In2O3: Structure, optical and electrical conductivity properties. Ceramics International, 2022, 48, 6707-6715. | 4.8 | 5 |
| 64 | Mechanochemical synthesis of layered perovskite structured fluorides A2MF4 (A=K, Rb; M=Co, Cu, Mg) and their transformation to AMF3 phase by mechanical activation. Journal of Fluorine Chemistry, 2014, 165, 43-48. | 1.7 | 4 |
| 65 | Emergence of defect fluorite structure in nanoâ€sized thoria through doping with some divalent transitionâ€metal ions. Journal of the American Ceramic Society, 2018, 101, 562-568. | 3.8 | 4 |
| 66 | Site preference for luminescent activator ions in doped fluoroperovskite RbZnF3. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 201, 339-345. | 3.9 | 4 |
| 67 | Black TiO2-graphitic carbon nanocomposite from a single source precursor and its interaction with colored and colorless contaminants under visible radiation. Materials Research Bulletin, 2020, 132, 110983. | 5.2 | 4 |
| 68 | Role of the solvent medium in the wet-chemical synthesis of CuSbS2, Cu3SbS3, and bismuth substituted Cu3SbS3. Journal of Chemical Sciences, 2020, 132, 1. | 1.5 | 4 |
| 69 | Consequences of Bi3+ introduction for Pr3+ in PrAlO3. Journal of Materials Science, 2020, 55, 15415-15425. | 3.7 | 4 |
| 70 | Enhanced surface adsorption of Congo red dye by the metastable Î±-LiAlO2 over LiAl2(OH)7â‹…2H2O. Solid State Sciences, 2021, 120, 106724. | 3.2 | 4 |
| 71 | Ordered LiGa5O8 loaded with redox capable Cu2+, Cr3+ ions to manifest interesting optical, magnetic, and catalytic properties. Journal of Materials Science, 2021, 56, 20111. | 3.7 | 4 |
| 72 | Efficient Use of a Polyamine Carboxylate Ligand to Probe the Extent of Incorporation of Stereochemically Active Bi<sup>3+</sup> in ThO<sub>2</sub>. ChemistrySelect, 2018, 3, 5005-5012. | 1.5 | 3 |

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|---|---|---|---|
| 73 | Critical role of annealing atmosphere on solid solution formation between PrO2-Î´ and ThO2. Solid State Sciences, 2018, 84, 1-7. | 3.2 | 3 |
| 74 | Catalytic applications of mesoporous CaBi2O4 obtained from a single source precursor. Research on Chemical Intermediates, 2019, 45, 2457-2470. | 2.7 | 3 |
| 75 | Correlating oxide ion conductivity with ionic size of dopant and defect structures in ThO2-LnO1.5 (Lnâ€¯=â€¯Y, La and Gd) prepared by modified epoxide gel method. Solid State Ionics, 2019, 329, 67-73. | 2.7 | 3 |
| 76 | Influencing Optical and Magnetic Properties of NiCr2O4 by the Incorporation of Fe(III) for Cr(III) Following Epoxide Gel Synthesis. Journal of Electronic Materials, 2019, 48, 1139-1146. | 2.2 | 3 |
| 77 | KLa<sub>(0.95â€“x)</sub>Gd<sub>x</sub>F<sub>4</sub>:Eu<sup>3+</sup> hexagonal phase nanoparticles as luminescent probes for in vitro Huh-7 cancer cell imaging. Dalton Transactions, 2021, 50, 5197-5207. | 3.3 | 3 |
| 78 | Morphology controlled green synthesis of photoluminescent LaPO4: Ce3+-Tb3+ nanorods. Chemical Physics Letters, 2021, 776, 138704. | 2.6 | 3 |
| 79 | Spin glass behavior and oxidative catalytic property of Zn2MnO4 from a metathesis driven metastable precursor. Journal of Physics and Chemistry of Solids, 2021, 157, 110206. | 4.0 | 3 |
| 80 | Visible light photocatalysis promoted by homogenously doped (non-metals) anatase from a chelated titanium precursor. Materials Science in Semiconductor Processing, 2021, 134, 106039. | 4.0 | 3 |
| 81 | Tuning the thiophilicity of Pr6O11 (PrO1.833) through Pb-substitution to append efficient adsorption characteristics. Applied Surface Science, 2022, 591, 153111. | 6.1 | 3 |
| 82 | Reactivity of Copper(I) Halides CuCl, CuI with Double Alkoxides MAl(iOPr)<sub>4</sub> (M = Na, K). Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2010, 636, 2394-2397. | 1.2 | 2 |
| 83 | Raman Spectroscopic Analysis of Perovskite-Structured Alkali Metal Fluorides Containing Nickel and Copper Ions. Spectroscopy Letters, 2012, 45, 237-239. | 1.0 | 2 |
| 84 | Oxygen ion conductivity studies of bismuth and bismuth-calcium co-doped ThO2. Ceramics International, 2021, 47, 21498-21508. | 4.8 | 2 |
| 85 | Iron substitution in PrAlO3 perovskite leading to structural transformation and multiferroicity. Ceramics International, 2021, 47, 22957-22964. | 4.8 | 2 |
| 86 | Determination of solubility limit of Sn4+in fluorite structured terbia with simultaneous evaluation of photocatalytic function. Dalton Transactions, 2016, 45, 11191-11197. | 3.3 | 1 |
| 87 | Microstructural changes caused by Ba and Pr doping in nanosized Bi<sub>2</sub>Ce<sub>2</sub>O<sub>7</sub> leading to interesting optical, magnetic, and catalytic properties. CrystEngComm, 2021, 23, 986-999. | 2.6 | 1 |
| 88 | Boosting defects through divalent ion substitution to tailor the optical, textural, catalytic, and photocatalytic properties of Th4+-stabilized Î´-Bi2O3. Materials Science in Semiconductor Processing, 2022, 141, 106441. | 4.0 | 1 |
| 89 | Effect of uniaxial pressure on the Raman spectra of fluoro perovskites containing manganese with sodium or potassium. Spectroscopy Letters, 2016, 49, 444-446. | 1.0 | 0 |
| 90 | Effect of trivalent ions containing layered hydroxide acetate on the thermal stability and flame retardancy of poly (methyl methacrylate) composite. AIP Conference Proceedings, 2020, , . | 0.4 | 0 |

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|---|---|---|---|
| 91 | Anatase Nanocrystals Covalently Functionalized with EDTA-diol: Interaction with Aromatic Sulfur. Langmuir, 2021, 37, 11142-11152. | 3.5 | 0 |
| 92 | Chemical pressure-induced structural, optical, and magnetic property transformations of PrAlO3. Ceramics International, 2022, , . | 4.8 | 0 |