

# Vijay Bhooshan Kumar

## List of Publications by Year in descending order

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77  
papers

2,269  
citations

172457  
29  
h-index

243625  
44  
g-index

78  
all docs

78  
docs citations

78  
times ranked

2850  
citing authors

#	ARTICLE	IF	CITATIONS
1	Sonochemical synthesis of carbon dots, mechanism, effect of parameters, and catalytic, energy, biomedical and tissue engineering applications. Ultrasonics Sonochemistry, 2020, 64, 105009.	8.2	132
2	Recent Advancement in Functional Core-Shell Nanoparticles of Polymers: Synthesis, Physical Properties, and Applications in Medical Biotechnology. Journal of Nanoparticles, 2013, 2013, 1-24.	1.4	96
3	Kinetics, Isotherm, and Thermodynamic Studies of Methylene Blue Adsorption on Polyaniline and Polypyrrole Macroâ€Nanoparticles Synthesized by C-Dot-Initiated Polymerization. ACS Omega, 2018, 3, 7196-7203.	3.5	94
4	Accelerated Bone Regeneration by Nitrogen-Doped Carbon Dots Functionalized with Hydroxyapatite Nanoparticles. ACS Applied Materials & Interfaces, 2018, 10, 19373-19385.	8.0	89
5	Advances in nanotechnology and nanomaterials based strategies for neural tissue engineering. Journal of Drug Delivery Science and Technology, 2020, 57, 101617.	3.0	88
6	Formation of nanoscale tungsten oxide structures and colouration characteristics. Bulletin of Materials Science, 2011, 34, 435-442.	1.7	85
7	Activated Carbon Modified with Carbon Nanodots as Novel Electrode Material for Supercapacitors. Journal of Physical Chemistry C, 2016, 120, 13406-13413.	3.1	72
8	Fluorescent metal-doped carbon dots for neuronal manipulations. Ultrasonics Sonochemistry, 2019, 52, 205-213.	8.2	70
9	Ultrasonic cavitation of molten gallium: Formation of micro- and nano-spheres. Ultrasonics Sonochemistry, 2014, 21, 1166-1173.	8.2	69
10	Facile one-step sonochemical synthesis of ultrafine and stable fluorescent C-dots. Ultrasonics Sonochemistry, 2016, 28, 367-375.	8.2	68
11	Refractive-Index Tuning of Highly Fluorescent Carbon Dots. ACS Applied Materials & Interfaces, 2017, 9, 28930-28938.	8.0	51
12	The sonochemical synthesis of Ga@C-dots particles. RSC Advances, 2015, 5, 25533-25540.	3.6	48
13	Facile synthesis of gallium oxide hydroxide by ultrasonic irradiation of molten gallium in water. Ultrasonics Sonochemistry, 2015, 26, 340-344.	8.2	47
14	Sonochemical synthesis of CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> perovskite ultrafine nanocrystal sensitizers for solar energy applications. Ultrasonics Sonochemistry, 2016, 32, 54-59.	8.2	47
15	Novel polymerization of aniline and pyrrole by carbon dots. New Journal of Chemistry, 2018, 42, 535-540.	2.8	47
16	A hydrothermal reaction of an aqueous solution of BSA yields highly fluorescent N doped C-dots used for imaging of live mammalian cells. Journal of Materials Chemistry B, 2016, 4, 2913-2920.	5.8	45
17	Facile synthesis of self-assembled spherical and mesoporous dandelion capsules of ZnO: efficient carrier for DNA and anti-cancer drugs. Journal of Materials Chemistry B, 2014, 2, 3956-3964.	5.8	40
18	Nitrogen-doped carbon dots prepared from bovine serum albumin to enhance algal astaxanthin production. Algal Research, 2017, 23, 161-165.	4.6	39

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19	Fluorescent Nanoparticles with Tissue-Dependent Affinity for Live Zebrafish Imaging. ACS Applied Materials & Interfaces, 2017, 9, 18557-18565.	8.0	39
20	Ultrasonic cavitation of molten gallium in water: entrapment of organic molecules in gallium microspheres. Journal of Materials Chemistry A, 2014, 2, 1309-1317.	10.3	38
21	Sonochemically-fabricated Ga@C-dots@Ga nanoparticle-aided neural growth. Journal of Materials Chemistry B, 2017, 5, 1371-1379.	5.8	37
22	Sonochemical synthesis, structural, magnetic and grain size dependent electrical properties of NdVO <sub>4</sub> nanoparticles. Ultrasonics Sonochemistry, 2014, 21, 599-605.	8.2	36
23	<i>In-Situ</i> Transesterification of <i>Chlorella vulgaris</i> Using Carbon-Dot Functionalized Strontium Oxide as a Heterogeneous Catalyst under Microwave Irradiation. Energy & Fuels, 2016, 30, 10602-10610.	5.1	35
24	Carbon Dot Initiated Synthesis of Poly(4,4'-diaminodiphenylmethane) and Its Methylene Blue Adsorption. ACS Omega, 2018, 3, 7061-7068.	3.5	35
25	Sonochemical Formation of Ga-Pt Intermetallic Nanoparticles Embedded in Graphene and its Potential Use as an Electrocatalyst. Electrochimica Acta, 2016, 190, 659-667.	5.2	34
26	Exploring the Effect of Iron Metal-Organic Framework Particles in Polylactic Acid Membranes for the Azeotropic Separation of Organic/Organic Mixtures by Pervaporation. Membranes, 2021, 11, 65.	3.0	34
27	DSC measurements of the thermal properties of gallium particles in the micron and sub-micron sizes, obtained by sonication of molten gallium. Journal of Thermal Analysis and Calorimetry, 2015, 119, 1587-1592.	3.6	33
28	Selective conversion of starch to glucose using carbon based solid acid catalyst. Renewable Energy, 2015, 78, 141-145.	8.9	33
29	In situ sonochemical synthesis of luminescent Sn@C-dots and a hybrid Sn@C-dots@Sn anode for lithium-ion batteries. RSC Advances, 2016, 6, 66256-66265.	3.6	30
30	Development of Ga Salt of Molybdophosphoric Acid for Biomass Conversion to Levulinic Acid. Energy & Fuels, 2016, 30, 10583-10591.	5.1	30
31	Selective production of furfural from the dehydration of xylose using Zn doped CuO catalyst. Ultrasonics Sonochemistry, 2019, 56, 55-62.	8.2	30
32	Ga@C-dots as an antibacterial agent for the eradication of <i>Pseudomonas aeruginosa</i> . International Journal of Nanomedicine, 2017, Volume 12, 725-730.	6.7	29
33	One-Pot Hydrothermal Synthesis of Elements (B, N, P)-Doped Fluorescent Carbon Dots for Cell Labelling, Differentiation and Outgrowth of Neuronal Cells. ChemistrySelect, 2019, 4, 4222-4232.	1.5	29
34	Evaluation of the Potential of <i>Chlorella vulgaris</i> for Bioethanol Production. Energy & Fuels, 2016, 30, 3161-3166.	5.1	26
35	Silver and gold doped hydroxyapatite nanocomposites for enhanced bone regeneration. Biomedical Materials (Bristol), 2019, 14, 055002.	3.3	25
36	Formation of particles of bismuth-based binary alloys and intermetallic compounds by ultrasonic cavitation. New Journal of Chemistry, 2015, 39, 5374-5381.	2.8	24

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37	Designing idiosyncratic hmPCL -siRNA nanoformulated capsules for silencing and cancer therapy. Nanomedicine: Nanotechnology, Biology, and Medicine, 2016, 12, 579-588.	3.3	23
38	Synthesis of mesoporous SiO <sub>2</sub> @ZnO nanocapsules: encapsulation of small biomolecules for drugs and SiO <sub>2</sub> @ZnO-plex for gene delivery. Journal of Nanoparticle Research, 2013, 15, 1.	1.9	22
39	Glucose production from potato peel waste under microwave irradiation. Journal of Molecular Catalysis A, 2016, 417, 163-167.	4.8	22
40	Ultrafine Highly Magnetic Fluorescent Fe <sub>2</sub> O <sub>3</sub> /NCD Nanocomposites for Neuronal Manipulations. ACS Omega, 2018, 3, 1897-1903.	3.5	22
41	Synthesis of Doped/Hybrid Carbon Dots and Their Biomedical Application. Nanomaterials, 2022, 12, 898.	4.1	22
42	A Brief Review on the In Situ Synthesis of Boron-Doped Diamond Thin Films. International Journal of Electrochemistry, 2012, 2012, 1-7.	2.4	20
43	Chiral imprinting in molten gallium. New Journal of Chemistry, 2015, 39, 2690-2696.	2.8	20
44	Preparation and Catalytic Activity of Thermosensitive Ga <sub>2</sub> O <sub>3</sub> Nanorods. Energy & Fuels, 2016, 30, 7419-7427.	5.1	20
45	Solar-Light-Driven Photocatalytic Activity of Novel Sn@C-Dots-Modified TiO <sub>2</sub> Catalyst. ChemistrySelect, 2017, 2, 6683-6688.	1.5	20
46	Synergistic catalytic effect of the ZnBr <sub>2</sub> -HCl system for levulinic acid production using microwave irradiation. RSC Advances, 2015, 5, 11043-11048.	3.6	19
47	Antiparasitic Ointment Based on a Biocompatible Carbon Dot Nanocomposite. ACS Applied Nano Materials, 2018, 1, 1784-1791.	5.0	19
48	Nutritional assessment study and role of green silver nanoparticles in shelf-life of coconut endosperm to develop as functional food. Saudi Journal of Biological Sciences, 2020, 27, 1280-1288.	3.8	19
49	Fabrication of poly (4,4'-oxybisbenzenamine) and its conjugated copolymers initiated by easily accessible carbon dots. European Polymer Journal, 2018, 109, 153-161.	5.4	17
50	One-pot Sonochemical Synthesis of Hg@Ag Alloy Microspheres from Liquid Mercury. Ultrasonics Sonochemistry, 2018, 40, 157-165.	8.2	14
51	Reduction of metallic ions by molten gallium under ultrasonic irradiation and interactions between the formed metals and the gallium. Journal of Alloys and Compounds, 2015, 637, 538-544.	5.5	13
52	Ga Modified Zeolite Based Solid Acid Catalyst for Levulinic Acid Production. ChemistrySelect, 2016, 1, 5952-5960.	1.5	13
53	Enantiospecific Total Syntheses of (+)-Hapalindole H and (-)-Hapalindole U. Chemistry - A European Journal, 2018, 24, 8980-8984.	3.3	13
54	Development of Doped Carbon Quantum Dot-Based Nanomaterials for Lubricant Additive Applications. Lubricants, 2022, 10, 144.	2.9	13

55	Topographical impact of silver nanolines on the morphology of neuronal SH-SY5Y Cells. Journal of Materials Chemistry B, 2017, 5, 9346-9353.	5.8	12
56	Element (B, N, P) doped carbon dots interaction with neural cells: promising results and future prospective. , 2019, , .		11
57	The interaction between molten gallium and the hydrocarbon medium induced by ultrasonic energy“can gallium carbide be formed?. Journal of the American Ceramic Society, 2017, 100, 3305-3315.	3.8	10
58	Triangular Core“Shell ZnO@SiO <sub>2</sub> Nanoparticles. ChemPhysChem, 2013, 14, 3215-3220.	2.1	9
59	Formation of metallic silver and copper in non-aqueous media by ultrasonic radiation. Ultrasonics Sonochemistry, 2018, 47, 108-113.	8.2	9
60	Tribological Anti-Wear and Extreme-Pressure Performance of Multifunctional Metal and Nonmetal Doped C-based Nanodots. Lubricants, 2019, 7, 36.	2.9	8
61	Physical and Biophysical Characteristics of Nanoscale Tungsten Oxide Particles and Their Interaction with Human Genomic DNA. Journal of Nanoscience and Nanotechnology, 2011, 11, 4659-4666.	0.9	7
62	Probing Spin“Spin and Spin-Lattice Relaxation Through Electron Paramagnetic Resonance Study of Nanoscale WO <sub>3</sub> “System. Materials Express, 2012, 2, 57-63.	0.5	7
63	Thermal and structural characterization of ultrasonicated BiSn alloy in the eutectic composition. Journal of Thermal Analysis and Calorimetry, 2015, 120, 1543-1551.	3.6	6
64	A New Approach to Chiral Enrichment by Exposure of Racemates of Amino Acids to Sonochemically“Prepared BSA Microspheres. ChemistrySelect, 2017, 2, 8234-8238.	1.5	6
65	Type-I superconductivity in carbon-coated Sn nano-spheres. Physica C: Superconductivity and Its Applications, 2018, 546, 6-10.	1.2	6
66	Enantioselective Separation of Racemic Tryptophan with Sonochemically Prepared Egg Albumin Microspheres. ChemistrySelect, 2018, 3, 4004-4008.	1.5	6
67	Stiffening of Metallic Gallium Particles by Entrapment of Organic Molecules. Crystal Growth and Design, 2017, 17, 2041-2045.	3.0	5
68	Advances in Nanotechnology based Strategies for“Synthesis of Nanoparticles of Lignin. Springer Series on Polymer and Composite Materials, 2020, , 203-229.	0.7	5
69	Surfactant-free synthesis of a water-soluble PEGylated nanographeneoxide/metal-oxide nanocomposite as engineered antimicrobial weaponry. Journal of Materials Chemistry B, 2016, 4, 6706-6715.	5.8	4
70	On the nature of the nanospikes obtained in the sonication of a molten mixture of bismuth and indium under silicone oil. Journal of Alloys and Compounds, 2016, 672, 476-480.	5.5	4
71	Facile Molecular Catalysis for Isomerization of Glucose to Fructose Using KMnO <sub>4</sub> in Water. ChemistrySelect, 2020, 5, 2913-2917.	1.5	4
72	Formation of Iron (III) Trimesate Xerogel by Ultrasonic Irradiation. European Journal of Inorganic Chemistry, 0, , .	2.0	4

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73	Dispersion of Polymers in Metallic Gallium. ChemPhysChem, 2016, 17, 162-169.	2.1	3
74	AS101-Loaded PLGA-PEG Nanoparticles for Autoimmune Regulation and Chemosensitization. ACS Applied Bio Materials, 2019, 2, 2246-2251.	4.6	3
75	Cooperative crystallization effect in the formation of sonochemically grafted active materials based on polysaccharides. Colloids and Surfaces B: Biointerfaces, 2020, 190, 110931.	5.0	3
76	Functionalization of WS <sub>2</sub> Nanotubes with Fluorescent Cd dots and Conductive Polythiophenes. Macromolecular Chemistry and Physics, 2019, 220, 1800476.	2.2	2
77	Size-Controlled Synthesis of L10-CoPt Intermetallic Fuel Cell Catalysts on Nitrogen-Doped Mesoporous Graphitized Carbon Support. ECS Meeting Abstracts, 2020, MA2020-01, 1623-1623.	0.0	0