

Bharat B Kale

List of Publications by Year in descending order

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110
papers

4,248
citations

109264

35
h-index

123376

61
g-index

111
all docs

111
docs citations

111
times ranked

5756
citing authors

#	ARTICLE	IF	CITATIONS
1	N-Doped TiO ₂ Nanoparticle Based Visible Light Photocatalyst by Modified Peroxide Sol-Gel Method. Journal of Physical Chemistry C, 2008, 112, 14595-14602.	1.5	398
2	Green approach for hierarchical nanostructured Ag-ZnO and their photocatalytic performance under sunlight. Catalysis Today, 2016, 260, 126-134.	2.2	229
3	Ecofriendly hydrogen production from abundant hydrogen sulfide using solar light-driven hierarchical nanostructured ZnIn ₂ S ₄ photocatalyst. Green Chemistry, 2011, 13, 2500.	4.6	150
4	An eco-friendly, highly stable and efficient nanostructured p-type N-doped ZnO photocatalyst for environmentally benign solar hydrogen production. Green Chemistry, 2012, 14, 2790.	4.6	145
5	Synthesis of Nanosize-Necked Structure γ - and β -Fe ₂ O ₃ and its Photocatalytic Activity. Journal of the American Ceramic Society, 2007, 90, 412-414.	1.9	135
6	Nanowires of silver-polyaniline nanocomposite synthesized via in situ polymerization and its novel functionality as an antibacterial agent. Colloids and Surfaces B: Biointerfaces, 2012, 92, 35-41.	2.5	126
7	Fern-like rGO/BiVO ₄ Hybrid Nanostructures for High-Energy Symmetric Supercapacitor. ACS Applied Materials & Interfaces, 2016, 8, 31602-31610.	4.0	111
8	In-situ preparation of N-TiO ₂ /graphene nanocomposite and its enhanced photocatalytic hydrogen production by H ₂ S splitting under solar light. Nanoscale, 2015, 7, 5023-5034.	2.8	104
9	A Facile Template-Free Approach for the Large-Scale Solid-Phase Synthesis of CdS Nanostructures and Their Excellent Photocatalytic Performance. Small, 2011, 7, 957-964.	5.2	99
10	In situ preparation of N-ZnO/graphene nanocomposites: excellent candidate as a photocatalyst for enhanced solar hydrogen generation and high performance supercapacitor electrode. Journal of Materials Chemistry A, 2015, 3, 17050-17063.	5.2	96
11	Surfactant tunable hierarchical nanostructures of CdIn ₂ S ₄ and their photohydrogen production under solar light. International Journal of Hydrogen Energy, 2011, 36, 11628-11639.	3.8	82
12	Mimics of microstructures of Ni substituted Mn _{1-x} Ni _x Co ₂ O ₄ for high energy density asymmetric capacitors. Chemical Engineering Journal, 2017, 307, 300-310.	6.6	76
13	Template-Free Synthesis of Nanostructured Cd _x Zn _{1-x} S with Tunable Band Structure for H ₂ Production and Organic Dye Degradation Using Solar Light. Environmental Science & Technology, 2013, 47, 6664-6672.	4.6	75
14	Interstitial charge transfer pathways in a TiO ₂ /CdIn ₂ S ₄ heterojunction photocatalyst for direct conversion of sunlight into fuel. Journal of Materials Chemistry A, 2018, 6, 16064-16073.	5.2	73
15	Hierarchical nanostructures of CdIn ₂ S ₄ via hydrothermal and microwave methods: efficient solar-light-driven photocatalysts. Journal of Materials Chemistry, 2010, 20, 6095.	6.7	71
16	Ag:BiVO ₄ dendritic hybrid-architecture for high energy density symmetric supercapacitors. Journal of Materials Chemistry A, 2016, 4, 7580-7584.	5.2	71
17	Novel sonochemical assisted hydrothermal approach towards the controllable synthesis of ZnO nanorods, nanocups and nanoneedles and their photocatalytic study. CrystEngComm, 2009, 11, 2776.	1.3	68
18	Solar light active plasmonic Au@TiO ₂ nanocomposite with superior photocatalytic performance for H ₂ production and pollutant degradation. New Journal of Chemistry, 2018, 42, 10958-10968.	1.4	67

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19	A green process for efficient lignin (biomass) degradation and hydrogen production via water splitting using nanostructured C, N, S-doped ZnO under solar light. RSC Advances, 2014, 4, 60626-60635.	1.7	64
20	Facile Synthesis of Unique Cellulose Triacetate Based Flexible and High Performance Gel Polymer Electrolyte for Lithium Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 34773-34782.	4.0	62
21	Nanostructured N-doped orthorhombic Nb ₂ O ₅ as an efficient stable photocatalyst for hydrogen generation under visible light. Dalton Transactions, 2017, 46, 14859-14868.	1.6	60
22	Nanostructured N-doped TiO ₂ marigold flowers for an efficient solar hydrogen production from H ₂ S. Nanoscale, 2013, 5, 9383.	2.8	57
23	Hierarchical 3D ZnIn ₂ S ₄ /graphene nano-heterostructures: their in situ fabrication with dual functionality in solar hydrogen production and as anodes for lithium ion batteries. Physical Chemistry Chemical Physics, 2015, 17, 31850-31861.	1.3	57
24	Magnetically separable Ag ₃ PO ₄ /NiFe ₂ O ₄ composites with enhanced photocatalytic activity. Dalton Transactions, 2015, 44, 20426-20434.	1.6	57
25	Confinement of nano CdS in designated glass: a novel functionality of quantum dot "glass" nanosystems in solar hydrogen production. Journal of Materials Chemistry, 2007, 17, 4297.	6.7	55
26	Studies of conducting polyaniline (PANI) wrapped-multiwalled carbon nanotubes (MWCNTs) nanocomposite and its application for optical pH sensing. Sensors and Actuators B: Chemical, 2013, 187, 407-412.	4.0	51
27	Unique perforated graphene derived from <i>Bougainvillea</i> flowers for high-power supercapacitors: a green approach. Nanoscale, 2017, 9, 4801-4809.	2.8	51
28	Self-assembled hierarchical nanostructures of Bi ₂ WO ₆ for hydrogen production and dye degradation under solar light. CrystEngComm, 2015, 17, 107-115.	1.3	48
29	A novel template free, one pot large scale synthesis of cubic zinc sulfide nanotriangles and its functionality as an efficient photocatalyst for hydrogen production and dye degradation. Journal of Materials Chemistry, 2011, 21, 19241.	6.7	44
30	Environmentally benign enhanced hydrogen production via lethal H ₂ S under natural sunlight using hierarchical nanostructured bismuth sulfide. RSC Advances, 2014, 4, 49295-49302.	1.7	42
31	Nanostructured 2D MoS ₂ honeycomb and hierarchical 3D CdMoS ₄ marigold nanoflowers for hydrogen production under solar light. Journal of Materials Chemistry A, 2015, 3, 21233-21243.	5.2	41
32	Nanostructured CdS sensitized CdWO ₄ nanorods for hydrogen generation from hydrogen sulfide and dye degradation under sunlight. Journal of Colloid and Interface Science, 2017, 487, 504-512.	5.0	40
33	Cobalt-Doped Manganese Dioxide Hierarchical Nanostructures for Enhancing Pseudocapacitive Properties. ACS Omega, 2021, 6, 5717-5729.	1.6	40
34	Architecture of rose and hollow marigold-like ZnIn ₂ S ₄ flowers: structural, optical and photocatalytic study. RSC Advances, 2014, 4, 12182.	1.7	39
35	Synthesis of porous nitrogen doped zinc oxide nanostructures using a novel paper mediated template method and their photocatalytic study for dye degradation under natural sunlight. Materials Chemistry Frontiers, 2018, 2, 163-170.	3.2	38
36	Unique CdS@MoS ₂ Core Shell Heterostructure for Efficient Hydrogen Generation Under Natural Sunlight. Scientific Reports, 2019, 9, 12036.	1.6	38

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37	Two-dimensional hexagonal SnS ₂ nanostructures for photocatalytic hydrogen generation and dye degradation. Sustainable Energy and Fuels, 2019, 3, 3406-3414.	2.5	37
38	In situ preparation of N doped orthorhombic Nb ₂ O ₅ nanoplates /rGO composites for photocatalytic hydrogen generation under sunlight. International Journal of Hydrogen Energy, 2018, 43, 19873-19884.	3.8	36
39	Perforated N-doped monoclinic ZnWO ₄ nanorods for efficient photocatalytic hydrogen generation and RhB degradation under natural sunlight. Catalysis Science and Technology, 2018, 8, 2909-2919.	2.1	33
40	A stable Bi ₂ S ₃ quantum dot@glass nanosystem: size tuneable photocatalytic hydrogen production under solar light. RSC Advances, 2015, 5, 58485-58490.	1.7	32
41	In situ fabrication of highly crystalline CdS decorated Bi ₂ S ₃ nanowires (nano-heterostructure) for visible light photocatalyst application. RSC Advances, 2016, 6, 23508-23517.	1.7	30
42	Porous MoS ₂ Framework and Its Functionality for Electrochemical Hydrogen Evolution Reaction and Lithium Ion Batteries. ACS Applied Energy Materials, 2019, 2, 5900-5908.	2.5	30
43	Architecture of the CdIn ₂ S ₄ /graphene nano-heterostructure for solar hydrogen production and anode for lithium ion battery. RSC Advances, 2016, 6, 34724-34736.	1.7	29
44	Sn ₃ O ₄ microballs as highly efficient photocatalyst for hydrogen generation and degradation of phenol under solar light irradiation. Materials Chemistry and Physics, 2019, 221, 493-500.	2.0	29
45	Cellulose-Derived Flame-Retardant Solid Polymer Electrolyte for Lithium-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2021, 9, 1559-1567.	3.2	29
46	Synthesis and structural analysis of visible light photocatalyst, ZnBiGaO ₄ for photocatalytic solar hydrogen production. International Journal of Energy Research, 2010, 34, 404-411.	2.2	28
47	Functionality of bismuth sulfide quantum dots/wires-glass nanocomposite as an optical current sensor with enhanced Verdet constant. Journal of Applied Physics, 2011, 109, .	1.1	27
48	Enhanced hydrogen production under a visible light source and dye degradation under natural sunlight using nanostructured doped zinc orthotitanates. New Journal of Chemistry, 2015, 39, 3821-3834.	1.4	27
49	Growth study of hierarchical Ag ₃ PO ₄ /LaCO ₃ OH heterostructures and their efficient photocatalytic activity for RhB degradation. Physical Chemistry Chemical Physics, 2017, 19, 20541-20550.	1.3	27
50	Green sol-gel route for selective growth of 1D rutile Nb@TiO ₂ : a highly active photocatalyst for H ₂ generation and environmental remediation under natural sunlight. RSC Advances, 2017, 7, 33029-33042.	1.7	27
51	Highly crystalline anatase TiO ₂ nanocuboids as an efficient photocatalyst for hydrogen generation. RSC Advances, 2021, 11, 7587-7599.	1.7	27
52	Synthesis of a novel photocatalyst, ZnBiVO ₄ , for the photodecomposition of H ₂ S. Canadian Journal of Chemistry, 2005, 83, 527-532.	0.6	24
53	Nanostructured layered Sn ₃ O ₄ for hydrogen production and dye degradation under sunlight. RSC Advances, 2016, 6, 95663-95669.	1.7	24
54	ZnO decorated Sn ₃ O ₄ nanosheet nano-heterostructure: a stable photocatalyst for water splitting and dye degradation under natural sunlight. RSC Advances, 2019, 9, 10289-10296.	1.7	24

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55	Novel and stable Mn ²⁺ @Bi ₂ S ₃ quantum dots@glass system with giant magneto optical Faraday rotations. Journal of Materials Chemistry C, 2013, 1, 1203-1210.	2.7	23
56	Hierarchical nanostructures of nitrogen-doped molybdenum sulphide for supercapacitors. RSC Advances, 2018, 8, 39749-39755.	1.7	23
57	Growth of Bi ₂ Te ₃ quantum dots/rods in glass: a unique highly stable nanosystem with novel functionality for high performance magneto optical devices. Physical Chemistry Chemical Physics, 2012, 14, 16236.	1.3	22
58	Lignin-Mediated Biosynthesis of ZnO and TiO ₂ Nanocomposites for Enhanced Antimicrobial Activity. Journal of Composites Science, 2019, 3, 90.	1.4	22
59	A hierarchical SnS@ZnIn ₂ S ₄ marigold flower-like 2D nano-heterostructure as an efficient photocatalyst for sunlight-driven hydrogen generation. Nanoscale Advances, 2020, 2, 2577-2586.	2.2	22
60	Biofilm inhibition in Candida albicans with biogenic hierarchical zinc-oxide nanoparticles. Materials Science and Engineering C, 2022, 134, 112592.	3.8	22
61	<i>In situ</i> preparation of CdS decorated ZnWO ₄ nanorods as a photocatalyst for direct conversion of sunlight into fuel and RhB degradation. Sustainable Energy and Fuels, 2019, 3, 793-800.	2.5	21
62	Graphene-wrapped Ag ₃ PO ₄ /LaCO ₃ OH heterostructures for water purification under visible light. Journal of Energy Chemistry, 2016, 25, 845-853.	7.1	20
63	Mesoporous Mn ₂ O ₃ /reduced graphene oxide (rGO) composite with enhanced electrochemical performance for Li-ion battery. Dalton Transactions, 2017, 46, 9777-9783.	1.6	19
64	Nickel nanoparticles grown by successive ionic layer adsorption and reaction method for ethanol electrooxidation and electrochemical quartz crystal microbalance study. New Journal of Chemistry, 2019, 43, 2955-2965.	1.4	18
65	Facile synthesis of SnO ₂ @carbon nanocomposites for lithium-ion batteries. New Journal of Chemistry, 2020, 44, 3366-3374.	1.4	18
66	Unique N doped Sn ₃ O ₄ nanosheets as an efficient and stable photocatalyst for hydrogen generation under sunlight. Nanoscale, 2020, 12, 8502-8510.	2.8	18
67	CdS decorated MnWO ₄ nanorod nanoheterostructures: a new 0D@1D hybrid system for enhanced photocatalytic hydrogen production under natural sunlight. Nanoscale Advances, 2021, 3, 508-516.	2.2	18
68	ZnSe/ZnO Nano-Heterostructures for Enhanced Solar Light Hydrogen Generation. ChemistrySelect, 2017, 2, 9174-9180.	0.7	17
69	Synthesis and spectroscopic characterisation of silver@polyaniline nanocomposite. Materials Research Innovations, 2013, 17, 112-116.	1.0	16
70	Paper templated synthesis of nanostructured Cu@ZnO and its enhanced photocatalytic activity under sunlight. Journal of Materials Science: Materials in Electronics, 2019, 30, 7031-7042.	1.1	16
71	Electrochemical energy storage systems: India perspective. Bulletin of Materials Science, 2020, 43, 1.	0.8	16
72	Surface modified Li ₄ Ti ₅ O ₁₂ by paper templated approach for enhanced interfacial Li ⁺ charge transfer in Li-ion batteries. RSC Advances, 2018, 8, 38391-38399.	1.7	15

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73	Photodegradation of spent wash, a sugar industry waste, using vanadium-doped TiO ₂ nanoparticles. RSC Advances, 2018, 8, 20394-20405.	1.7	14
74	Silicon nanoparticle-sandwiched ultrathin MoS ₂ –graphene layers as an anode material for Li-ion batteries. Materials Chemistry Frontiers, 2019, 3, 587-596.	3.2	14
75	Enhanced performance of PTB7-Th:PCBM based active layers in ternary organic solar cells. RSC Advances, 2019, 9, 7457-7463.	1.7	14
76	Polyaniline-wrapped MnMoO ₄ as an active catalyst for hydrogen production by electrochemical water splitting. Dalton Transactions, 2022, 51, 6027-6035.	1.6	14
77	Hierarchical CdMoO ₄ nanowire–graphene composite for photocatalytic hydrogen generation under natural sunlight. RSC Advances, 2018, 8, 13764-13771.	1.7	13
78	Fragmented lignin-assisted synthesis of a hierarchical ZnO nanostructure for ammonia gas sensing. RSC Advances, 2019, 9, 2484-2492.	1.7	13
79	Solar-light-active mesoporous Cr–TiO ₂ for photodegradation of spent wash: an in-depth study using QTOF LC-MS. RSC Advances, 2019, 9, 4226-4238.	1.7	13
80	N-Enriched carbon nanofibers for high energy density supercapacitors and Li-ion batteries. RSC Advances, 2019, 9, 36075-36081.	1.7	13
81	Characterisation of spectroscopic and magneto-optical faraday rotation in Mn ²⁺ -doped CdS quantum dots in a silicate glass. Journal of Alloys and Compounds, 2020, 817, 152696.	2.8	13
82	Imidazolium-Based Dicationic Ionic Liquid Electrolyte: Strategy toward Safer Lithium-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2022, 10, 8297-8304.	3.2	13
83	Mesoporous cadmium bismuth niobate (CdBi ₂ Nb ₂ O ₉) nanospheres for hydrogen generation under visible light. Journal of Energy Chemistry, 2017, 26, 433-439.	7.1	11
84	Plasmonic Ag decorated CdMoO ₄ as an efficient photocatalyst for solar hydrogen production. RSC Advances, 2019, 9, 28525-28533.	1.7	11
85	Ethoxy–Ester Functionalized Imidazolium based Ionic Liquids for Lithium Ion Batteries. ChemistrySelect, 2018, 3, 6255-6261.	0.7	10
86	Synergic effects of the decoration of nickel oxide nanoparticles on silicon for enhanced electrochemical performance in LIBs. Nanoscale Advances, 2020, 2, 823-832.	2.2	10
87	Ionic Liquid-Supported Interpenetrating Polymer Network Flexible Solid Electrolytes for Lithium-Ion Batteries. Energy & Fuels, 2022, 36, 4999-5008.	2.5	10
88	Highly Crystalline Ordered Cu-dopedTiO ₂ Nanostructure by Paper Templated Method: Hydrogen Production and Dye Degradation under Natural Sunlight. Journal of Composites Science, 2020, 4, 48.	1.4	9
89	Unique hierarchical SiO ₂ @ZnIn ₂ S ₄ marigold flower like nanoheterostructure for solar hydrogen production. RSC Advances, 2021, 11, 14399-14407.	1.7	9
90	Solid-State Synthesis of Layered MoS ₂ Nanosheets with Graphene for Sodium-Ion Batteries. Crystals, 2021, 11, 660.	1.0	9

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109	Synergy of a heteroatom (P&F) in nanostructured Sn3O4 as an anode for sodium-ion batteries. Sustainable Energy and Fuels, 2021, 5, 2678-2687.	2.5	1
110	A Nanostructured Mo2C&rGO Heterostructure as a stable Anode with ultra&high capacity for Lithium&ion Battery**. ChemistrySelect, 2022, 7, .	0.7	0