

Ch Venkata Reddy

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6368909/publications.pdf>

Version: 2024-02-01

109
papers

4,752
citations

87843

38
h-index

106281

65
g-index

110
all docs

110
docs citations

110
times ranked

4509
citing authors

#	ARTICLE	IF	CITATIONS
1	Polymeric graphitic carbon nitride (g-C ₃ N ₄)-based semiconducting nanostructured materials: Synthesis methods, properties and photocatalytic applications. <i>Journal of Environmental Management</i> , 2019, 238, 25-40.	3.8	321
2	ZnO-based nanostructured electrodes for electrochemical sensors and biosensors in biomedical applications. <i>Biosensors and Bioelectronics</i> , 2019, 141, 111417.	5.3	300
3	Green synthesis of Cu-doped ZnO nanoparticles and its application for the photocatalytic degradation of hazardous organic pollutants. <i>Chemosphere</i> , 2022, 287, 132081.	4.2	260
4	Synthesis and characterization of pure tetragonal ZrO ₂ nanoparticles with enhanced photocatalytic activity. <i>Ceramics International</i> , 2018, 44, 6940-6948.	2.3	161
5	Nanostructured titanium oxide hybrids-based electrochemical biosensors for healthcare applications. <i>Colloids and Surfaces B: Biointerfaces</i> , 2019, 178, 385-394.	2.5	156
6	Electrochemical Sensors and Biosensors Based on Graphene Functionalized with Metal Oxide Nanostructures for Healthcare Applications. <i>ChemistrySelect</i> , 2019, 4, 5322-5337.	0.7	140
7	Efficient removal of toxic organic dyes and photoelectrochemical properties of iron-doped zirconia nanoparticles. <i>Chemosphere</i> , 2020, 239, 124766.	4.2	140
8	Template-free synthesis of tetragonal Co-doped ZrO ₂ nanoparticles for applications in electrochemical energy storage and water treatment. <i>Electrochimica Acta</i> , 2019, 317, 416-426.	2.6	136
9	Fabrication of ZnO nanoparticles modified sensor for electrochemical oxidation of methdilazine. <i>Applied Surface Science</i> , 2019, 496, 143656.	3.1	124
10	Copper-doped ZrO ₂ nanoparticles as high-performance catalysts for efficient removal of toxic organic pollutants and stable solar water oxidation. <i>Journal of Environmental Management</i> , 2020, 260, 110088.	3.8	121
11	ZnO nanosheets-decorated Bi ₂ WO ₆ nanolayers as efficient photocatalysts for the removal of toxic environmental pollutants and photoelectrochemical solar water oxidation. <i>Journal of Environmental Management</i> , 2020, 265, 110504.	3.8	117
12	Barium titanate nanostructures for photocatalytic hydrogen generation and photodegradation of chemical pollutants. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 20646-20653.	1.1	110
13	Synthesis, optical properties and efficient photocatalytic activity of CdO/ZnO hybrid nanocomposite. <i>Journal of Physics and Chemistry of Solids</i> , 2018, 112, 20-28.	1.9	109
14	Z-scheme binary 1D ZnWO ₄ nanorods decorated 2D NiFe ₂ O ₄ nanoplates as photocatalysts for high efficiency photocatalytic degradation of toxic organic pollutants from wastewater. <i>Journal of Environmental Management</i> , 2020, 268, 110677.	3.8	106
15	Novel Z-scheme binary zinc tungsten oxide/nickel ferrite nanohybrids for photocatalytic reduction of chromium (Cr (VI)), photoelectrochemical water splitting and degradation of toxic organic pollutants. <i>Journal of Hazardous Materials</i> , 2022, 423, 127044.	6.5	81
16	Synthesis and structural characterization of MoS ₂ nanospheres and nanosheets using solvothermal method. <i>Journal of Materials Science</i> , 2015, 50, 5024-5038.	1.7	77
17	Correlation between physical and structural properties of Co ²⁺ doped mixed alkali zinc borate glasses. <i>Journal of Non-Crystalline Solids</i> , 2011, 357, 3373-3380.	1.5	73
18	A novel biosensor based on graphene oxide-nanoclay hybrid electrode for the detection of Theophylline for healthcare applications. <i>Microchemical Journal</i> , 2019, 149, 103985.	2.3	73

#	ARTICLE	IF	CITATIONS
19	Synthesis and photoelectrochemical water oxidation of (Y, Cu) codoped Fe^{2+} - Fe_2O_3 nanostructure photoanode. <i>Journal of Alloys and Compounds</i> , 2020, 814, 152349.	2.8	73
20	Improved photocatalytic activity of MoS_2 nanosheets decorated with SnO_2 nanoparticles. <i>RSC Advances</i> , 2015, 5, 86675-86684.	1.7	62
21	Ultra-small zinc oxide nanosheets anchored onto sodium bismuth sulfide nanoribbons as solar-driven photocatalysts for removal of toxic pollutants and photoelectrocatalytic water oxidation. <i>Chemosphere</i> , 2021, 267, 128559.	4.2	59
22	Co-precipitation synthesis and characterization of faceted MoS_2 nanorods with controllable morphologies. <i>Applied Physics A: Materials Science and Processing</i> , 2015, 119, 813-823.	1.1	53
23	Functional nanostructured metal oxides and its hybrid electrodes – Recent advancements in electrochemical biosensing applications. <i>Microchemical Journal</i> , 2020, 159, 105522.	2.3	50
24	Synthesis and characterization of VO_2^+ doped $\text{ZnO}@\text{CdS}$ composite nanopowder. <i>Journal of Molecular Structure</i> , 2015, 1081, 254-259.	1.8	49
25	Structural, optical, and bifunctional applications: Supercapacitor and photoelectrochemical water splitting of Ni-doped ZnO nanostructures. <i>Journal of Electroanalytical Chemistry</i> , 2018, 828, 124-136.	1.9	49
26	Structural and optical properties of vanadium doped SnO_2 nanoparticles with high photocatalytic activities. <i>Journal of Luminescence</i> , 2016, 179, 26-34.	1.5	47
27	Spectral investigations on undoped and Cu^{2+} doped $\text{ZnO}@\text{CdS}$ composite nanopowders. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2015, 139, 86-93.	2.0	46
28	Silica gel-modified electrode as an electrochemical sensor for the detection of acetaminophen. <i>Microchemical Journal</i> , 2019, 150, 104206.	2.3	46
29	Green Synthesis of Silver Nanoparticles and Evaluation of Their Antibacterial Activity against Multidrug-Resistant Bacteria and Wound Healing Efficacy Using a Murine Model. <i>Antibiotics</i> , 2020, 9, 902.	1.5	45
30	$\text{ZrO}_2/\text{MoS}_2$ heterojunction photocatalysts for efficient photocatalytic degradation of methyl orange. <i>Electronic Materials Letters</i> , 2016, 12, 812-823.	1.0	44
31	Effect of ball milling on optical properties and visible photocatalytic activity of Fe doped ZnO nanoparticles. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2019, 240, 33-40.	1.7	44
32	Facile synthesis of $\text{Cu}@\text{TiO}_2$ core shell nanowires for efficient photocatalysis. <i>Materials Letters</i> , 2016, 176, 265-269.	1.3	43
33	Preparation and improved photocatalytic activity of mesoporous WS_2 using combined hydrothermal-evaporation induced self-assembly method. <i>Materials Research Bulletin</i> , 2016, 75, 193-203.	2.7	43
34	Facile synthesis of Ni-doped ZnS-CdS composite and their magnetic and photoluminescence properties. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 106335.	3.3	43
35	Synthesis of MoS_2 multi-wall nanotubes using wet chemical method with H_2O_2 as growth promoter. <i>Superlattices and Microstructures</i> , 2015, 85, 124-132.	1.4	42
36	Investigation of structural, thermal and magnetic properties of cadmium substituted cobalt ferrite nanoparticles. <i>Superlattices and Microstructures</i> , 2015, 82, 165-173.	1.4	42

#	ARTICLE	IF	CITATIONS
37	Synthesis of Cr-doped SnO ₂ quantum dots and its enhanced photocatalytic activity. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2017, 223, 131-142.	1.7	40
38	A novel one-pot approach of ZnWO ₄ nanorods decorated onto g-C ₃ N ₄ nanosheets: 1D/2D heterojunction for enhanced solar-light-driven photocatalytic activity. <i>Journal of Materials Science</i> , 2020, 55, 1170-1183.	1.7	40
39	Structural, optical and magnetic properties of Mn ²⁺ doped ZnO-CdS composite nanopowder. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2015, 201, 72-78.	1.7	39
40	Characterization of Cr ³⁺ doped mixed alkali ions effect in zinc borate glasses – Physical and spectroscopic investigations. <i>Optical Materials</i> , 2014, 36, 1329-1335.	1.7	37
41	Novel biosensor for efficient electrochemical detection of methdilazine using carbon nanotubes-modified electrodes. <i>Materials Research Express</i> , 2019, 6, 116308.	0.8	35
42	Effect of Li ₂ O content on physical and structural properties of vanadyl doped alkali zinc borate glasses. <i>Physica B: Condensed Matter</i> , 2011, 406, 2132-2137.	1.3	34
43	Structural, optical, and improved photocatalytic properties of CdS/SnO ₂ hybrid photocatalyst nanostructure. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2017, 221, 63-72.	1.7	34
44	Template-free hydrothermal synthesis of hexa ferrite nanoparticles and its adsorption capability for different organic dyes: Comparative adsorption studies, isotherms and kinetic studies. <i>Materials Science for Energy Technologies</i> , 2019, 2, 657-666.	1.0	33
45	Structural and optical properties of CdO/ZnS core/shell nanocomposites. <i>Journal of Alloys and Compounds</i> , 2015, 628, 39-45.	2.8	32
46	Vanadium-doped graphitic carbon nitride for multifunctional applications: Photoelectrochemical water splitting and antibacterial activities. <i>Chemosphere</i> , 2021, 264, 128593.	4.2	32
47	Synthesis and structural characterization of Co ²⁺ ions doped ZnO nanopowders by solid state reaction through sonication. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2013, 109, 90-96.	2.0	30
48	Spectroscopic investigations and physical properties of Mn ²⁺ doped mixed alkali zinc borate glasses. <i>Materials Research Bulletin</i> , 2011, 46, 2222-2229.	2.7	29
49	Structural and optical investigations on ZnCdO nanopowder. <i>Physica Scripta</i> , 2012, 86, 035708.	1.2	29
50	Au-doped BiVO ₄ nanostructure-based photoanode with enhanced photoelectrochemical solar water splitting and electrochemical energy storage ability. <i>Applied Surface Science</i> , 2021, 545, 149030.	3.1	29
51	Mixed alkali effect and optical properties of Ni ²⁺ doped 20ZnO+xLi ₂ O+(30-x)Na ₂ O+50B ₂ O ₃ glasses. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2011, 79, 1116-1122.	2.0	27
52	Characterization of Fe ³⁺ doped mixed alkali zinc borate glasses – Physical and spectroscopic investigations. <i>Journal of Non-Crystalline Solids</i> , 2013, 365, 6-12.	1.5	27
53	High performance hierarchical SiCN nanowires for efficient photocatalytic - photoelectrocatalytic and supercapacitor applications. <i>Applied Catalysis B: Environmental</i> , 2018, 237, 876-887.	10.8	27
54	Novel BiVO ₄ nanostructures for environmental remediation, enhanced photoelectrocatalytic water oxidation and electrochemical energy storage performance. <i>Solar Energy</i> , 2020, 207, 441-449.	2.9	26

#	ARTICLE	IF	CITATIONS
55	Novel g-C ₃ N ₄ /Cu-doped ZrO ₂ hybrid heterostructures for efficient photocatalytic Cr(VI) photoreduction and electrochemical energy storage applications. <i>Chemosphere</i> , 2022, 295, 133851.	4.2	25
56	Effect of cobalt concentration on morphology of Co-doped SnO ₂ nanostructures synthesized by solution combustion method. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 5197-5203.	1.1	24
57	Enhanced visible-light photocatalytic performance of Fe ₃ O ₄ nanopyramids for water splitting and dye degradation. <i>Journal of Solid State Electrochemistry</i> , 2018, 22, 3535-3546.	1.2	24
58	Investigation of dopant and Ag plasmonic effect on γ -Fe ₂ O ₃ photoelectrode for photoelectrochemical water splitting activity. <i>Applied Surface Science</i> , 2019, 488, 629-638.	3.1	24
59	Effect of plasmonic Ag nanowires on the photocatalytic activity of Cu doped Fe ₂ O ₃ nanostructures photoanodes for superior photoelectrochemical water splitting applications. <i>Journal of Electroanalytical Chemistry</i> , 2019, 842, 146-160.	1.9	24
60	Novel edge-capped ZrO ₂ nanoparticles onto V ₂ O ₅ nanowires for efficient photosensitized reduction of chromium (Cr (VI)), photoelectrochemical solar water splitting, and electrochemical energy storage applications. <i>Chemical Engineering Journal</i> , 2022, 430, 132988.	6.6	24
61	Spectral Investigations on Cu ²⁺ -Doped ZnO Nanopowders. <i>Applied Magnetic Resonance</i> , 2011, 41, 69-78.	0.6	23
62	EPR and Optical Studies of Fe ³⁺ -Doped Ca ²⁺ -Li Hydroxyapatite Nanopowder: Mechanochemical Synthesis. <i>Applied Magnetic Resonance</i> , 2015, 46, 1-15.	0.6	22
63	Highly photostable Zn-doped TiO ₂ thin film nanostructures for enhanced dye degradation deposited by sputtering method. <i>Materials Science in Semiconductor Processing</i> , 2018, 85, 113-121.	1.9	22
64	Synthesis and characterization of undoped and Fe(III) ions doped NaCaAlPO ₄ F ₃ phosphor. <i>Journal of Luminescence</i> , 2014, 145, 324-329.	1.5	21
65	Influence of calcination temperature on Cd _{0.3} Co _{0.7} Fe ₂ O ₄ nanoparticles: Structural, thermal and magnetic properties. <i>Journal of Magnetism and Magnetic Materials</i> , 2015, 394, 70-76.	1.0	21
66	Effect of noble metal ions dopants on solar photoelectrochemical water splitting and electrochemical supercapacitive performance of BiVO ₄ hollow tubes. <i>Solar Energy Materials and Solar Cells</i> , 2021, 226, 111056.	3.0	21
67	Synthesis, structural and optical properties of CdS nanoparticles with enhanced photocatalytic activities by photodegradation of organic dye molecules. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 7799-7808.	1.1	19
68	Synthesis of CdO/ZnS heterojunction for photodegradation of organic dye molecules. <i>Applied Physics A: Materials Science and Processing</i> , 2017, 123, 1.	1.1	18
69	Physical and Spectral Investigations of Cu ²⁺ -Doped Alkali Zinc Borate Glasses. <i>Applied Magnetic Resonance</i> , 2011, 40, 339-350.	0.6	17
70	Solution combustion synthesis of SnO ₂ @NiO heterojunction nanocomposite for photocatalytic application. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 16988-16996.	1.1	16
71	Synthesis and spectral characterizations of Fe ³⁺ doped β -BaB ₂ O ₄ nano crystallite powder. <i>Journal of Molecular Structure</i> , 2012, 1012, 17-21.	1.8	15
72	A systematic study of annealing environment and Al dopant effect on NASICON-type LiZr ₂ (PO ₄) ₃ solid electrolyte. <i>Ionics</i> , 2020, 26, 4287-4298.	1.2	15

#	ARTICLE	IF	CITATIONS
73	Spectroscopic studies on Fe ³⁺ and Mn ²⁺ doped SrB ₄ O ₇ glasses. <i>Physica B: Condensed Matter</i> , 2011, 406, 3295-3298.	1.3	14
74	Spectral investigations of Cu ²⁺ doped beta-barium borate nanopowder by the co-precipitation method. <i>Physica Scripta</i> , 2011, 84, 025602.	1.2	14
75	Effect of Co ²⁺ and Ni ²⁺ -doped zinc borate nano crystalline powders by co-precipitation method. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2015, 142, 279-285.	2.0	14
76	A facile synthesis and spectral characterization of Cu ²⁺ doped CdO/ZnS nanocomposite. <i>Journal of Magnetism and Magnetic Materials</i> , 2015, 384, 6-12.	1.0	14
77	Effect of calcination temperature on cobalt substituted cadmium ferrite nanoparticles. <i>Journal of Materials Science: Materials in Electronics</i> , 2015, 26, 5078-5084.	1.1	14
78	Structural and optical properties of Fe-doped SnO ₂ quantum dots. <i>Materials Research Express</i> , 2017, 4, 125021.	0.8	14
79	Structural, optical, magnetic and thermal investigations on Cr ³⁺ ions doped ZnS nanocrystals by co-precipitation method. <i>Journal of Science: Advanced Materials and Devices</i> , 2019, 4, 260-266.	1.5	14
80	Cobalt Nanoparticle-Embedded Nitrogen-Doped Carbon Catalyst Derived from a Solid-State Metal-Organic Framework Complex for OER and HER Electrocatalysis. <i>Energies</i> , 2021, 14, 1320.	1.6	14
81	Synthesis and optical properties of Co ²⁺ and Ni ²⁺ ions doped β -BaB ₂ O ₄ nanopowders. <i>Journal of Luminescence</i> , 2012, 132, 2325-2329.	1.5	13
82	A stable novel nanostructure of ZnFe ₂ O ₄ based nanocomposite for improved photoelectrocatalytic and photocatalytic activities. <i>Journal of Electroanalytical Chemistry</i> , 2018, 823, 517-526.	1.9	13
83	Synthesis and spectroscopic characterization of Mn(II) doped organic amine templated chlorocadmiumphosphate CdHPO ₄ Cl·[H ₃ N(CH ₂) ₆ NH ₃] _{0.5} crystals. <i>Journal of Coordination Chemistry</i> , 2011, 64, 4276-4285.		12
84	Structural investigations on Cu ²⁺ ions doped ZnCdO nanopowder. <i>Journal of Molecular Structure</i> , 2013, 1034, 57-61.	1.8	11
85	Recent Progress in TiO ₂ - and ZnO-Based Nanostructured Hybrid Photocatalysts for Water Purification and Hydrogen Generation. , 2019, , 815-843.		11
86	Effect of a novel one-dimensional zinc tungsten oxide nanorods anchored two-dimensional graphitic carbon nitride nanosheets for improved solar-light-driven photocatalytic removal of toxic pollutants and photoelectrochemical water splitting. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 33-46.	1.1	11
87	Spectral investigations of Mn ²⁺ doped Zn ₃ (BO ₃) ₂ nanopowder. <i>Journal of Molecular Structure</i> , 2013, 1048, 64-68.	1.8	10
88	Structural and photoluminescence studies of Co ²⁺ doped Ca ²⁺ hydroxyapatite nanopowders. <i>Journal of Materials Science: Materials in Electronics</i> , 2015, 26, 6667-6675.	1.1	10
89	Nickel-doped ZnO structures for efficient water splitting under visible light. <i>Materials Research Express</i> , 2019, 6, 055517.	0.8	10
90	Synthesis and spectroscopic characterization of Cu(II) containing chlorocadmiumphosphate Cd(HPO ₄)Cl·[H ₃ N(CH ₂) ₆ NH ₃] _{0.5} crystals. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2012, 85, 160-164.	2.0	9

#	ARTICLE	IF	CITATIONS
91	Effect of temperature on structural, morphological and magnetic properties of Cd _{0.7} Co _{0.3} Fe ₂ O ₄ nanoparticles. Journal of Magnetism and Magnetic Materials, 2015, 393, 132-138.	1.0	9
92	Structural Properties of Cr ³⁺ -Doped Cadmium Oxide Nanopowders. Applied Magnetic Resonance, 2012, 42, 403-411.	0.6	8
93	Synthesis and spectroscopic studies of Fe ³⁺ -doped zinc borate powder. Journal of Molecular Structure, 2015, 1081, 311-315.	1.8	8
94	Systematic studies of Bi ₂ O ₃ hierarchical nanostructural and plasmonic effect on photoelectrochemical activity under visible light irradiation. Ceramics International, 2019, 45, 16784-16791.	2.3	7
95	Cu ²⁺ and Y ³⁺ co-doped effect on morphology, structural, optical and photoelectrochemical properties of Fe ₂ O ₃ photoanode. Journal of Electroanalytical Chemistry, 2020, 878, 114692.	1.9	7
96	A novel green-emitting Ni ²⁺ -doped Ca-Li hydroxyapatite nanopowders: structural, optical, and photoluminescence properties. Journal of Materials Science: Materials in Electronics, 2020, 31, 5097-5106.	1.1	7
97	Structural and spectral features of Cr ³⁺ doped \hat{I}^2 -BaB ₂ O ₄ nanopowder by co-precipitation method. Physica B: Condensed Matter, 2013, 429, 18-23.	1.3	6
98	Structural, spectral, magnetic and thermal properties of VO ₂ ⁺ doped ZnS nanocrystals by co-precipitation method. Journal of Materials Science: Materials in Electronics, 2018, 29, 6105-6112.	1.1	6
99	Room temperature synthesis and spectral characterization of Cu ²⁺ -doped CdO powder. Indian Journal of Physics, 2016, 90, 359-364.	0.9	5
100	An efficient and room temperature synthesis of Fe ³⁺ doped chlorocadmiumphosphate molecular sieves: Spectroscopic, thermal and powder XRD investigations. Inorganic Chemistry Communication, 2011, 14, 1048-1051.	1.8	4
101	Synthesis and spectroscopic characterizations of copper ions doped zinc borate nanoparticles. Optik, 2016, 127, 4536-4540.	1.4	4
102	Morphological and chemical structure of silver-doped barium strontium titanate thin films fabricated via pulsed laser deposition. Materials Research Express, 2017, 4, 076406.	0.8	4
103	Investigations on structural and spectral properties of undoped and Mn ²⁺ doped SrZn ₂ (PO ₄) ₂ nanophosphors for light emitting devices. Journal of Materials Science: Materials in Electronics, 2019, 30, 5120-5129.	1.1	4
104	Structural, optical, and luminescence properties of Cu ²⁺ -doped Ca-Li hydroxyapatite nanopowders prepared by mechanochemical synthesis. Materials Research Express, 2019, , .	0.8	3
105	Oxygen pressure effect on optical properties and dye degradation of ZnO nanostructured films prepared by sputtering. Materials Research Express, 2017, 4, 095003.	0.8	3
106	Structural and Spectral Characterization of Co ²⁺ - and Ni ²⁺ -DOPED CdO Powder Prepared From Solution at Room Temperature. Journal of Applied Spectroscopy, 2015, 82, 760-766.	0.3	2
107	Fabrication of tunable hierarchical ZnO nanostructures via an anodization process. Materials Letters, 2022, 314, 131890.	1.3	2
108	Room temperature synthesis and spectral characterizations of Fe ³⁺ -doped CdO powder. Journal of Molecular Structure, 2014, 1075, 365-369.	1.8	1

#	ARTICLE	IF	CITATIONS
109	Structural and magnetic properties of $\text{Co}_{0.5}\text{Cd}_{0.5}\text{Fe}_2\text{O}_4$ nano ferrite particles. , 2013, , .		0