

# DenthajeKrishna Bhat

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7364249/publications.pdf>

Version: 2024-02-01

117  
papers

3,875  
citations

87401

40  
h-index

162838

57  
g-index

118  
all docs

118  
docs citations

118  
times ranked

3784  
citing authors

#	ARTICLE	IF	CITATIONS
1	Optimized electronic performance in half-Heusler Ti-doped NbFeSb materials by stoichiometric tuning at the Fe and Sb sites. <i>Journal of Alloys and Compounds</i> , 2022, 891, 162033.	2.8	11
2	Molybdenum as a versatile dopant in SnTe: a promising material for thermoelectric application. <i>Energy Advances</i> , 2022, 1, 9-14.	1.4	25
3	Selective co-doping improves the thermoelectric performance of SnTe: An outcome of electronic structure engineering. <i>Journal of Alloys and Compounds</i> , 2022, 892, 162221.	2.8	30
4	Halide (X = I, Br, Cl) doping to tune the electronic structure for conversion of $\text{Pb}_{0.6}\text{Sn}_{0.4}\text{Te}$ into a high-performing thermoelectric material. <i>Energy Advances</i> , 2022, 1, 15-20.	1.4	9
5	Ultralow Lattice Thermal Conductivity and Enhanced Mechanical Properties of Cu and Sb Co-Doped SnTe Thermoelectric Material with a Complex Microstructure Evolution. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 1367-1372.	3.2	22
6	A case of perfect convergence of light and heavy hole valence bands in SnTe: the role of Ge and Zn co-dopants. <i>Materials Advances</i> , 2022, 3, 5941-5946.	2.6	16
7	Probing of Bi doped GeTe thermoelectrics leads to revelation of resonant states. <i>Journal of Alloys and Compounds</i> , 2022, 921, 165965.	2.8	28
8	Investigations on thermo-mechanical properties of organically modified polymer clay nanocomposites for packaging application. <i>Polymers and Polymer Composites</i> , 2021, 29, 1191-1199.	1.0	10
9	Simple solvothermal synthesis of porous graphene-NiO nanocomposites with high cyclic stability for supercapacitor application. <i>Journal of Alloys and Compounds</i> , 2021, 854, 157190.	2.8	66
10	Electronic structure engineering of SrTiO <sub>3</sub> via rhodium doping: A DFT study. <i>Journal of Physics and Chemistry of Solids</i> , 2021, 148, 109708.	1.9	39
11	Complementary effect of co-doping aliovalent elements Bi and Sb in self-compensated SnTe-based thermoelectric materials. <i>Journal of Materials Chemistry C</i> , 2021, 9, 9922-9931.	2.7	33
12	Vanadium doped CaTiO <sub>3</sub> cuboids: role of vanadium in improving the photocatalytic activity. <i>Nanoscale Advances</i> , 2021, 3, 5301-5311.	2.2	38
13	Hassle-free solvothermal synthesis of NiO nanoflakes for supercapacitor application. <i>Physica B: Condensed Matter</i> , 2021, 611, 412959.	1.3	33
14	Vanadium: A Protean Dopant in SnTe for Augmenting Its Thermoelectric Performance. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 13033-13038.	3.2	32
15	Optimized Mn and Bi co-doping in SnTe based thermoelectric material: A case of band engineering and density of states tuning. <i>Journal of Materials Science and Technology</i> , 2021, 85, 76-86.	5.6	43
16	Improving the $\langle ZT \rangle$ of SnTe using electronic structure engineering: unusual behavior of Bi dopant in the presence of Pb as a co-dopant. <i>Materials Advances</i> , 2021, 2, 6267-6271.	2.6	32
17	Improving hydrogen evolution reaction and capacitive properties on CoS/MoS <sub>2</sub> decorated carbon fibers. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 7788-7800.	3.8	22
18	Bi and Zn co-doped SnTe thermoelectrics: interplay of resonance levels and heavy hole band dominance leading to enhanced performance and a record high room temperature $\langle ZT \rangle$ . <i>Journal of Materials Chemistry C</i> , 2020, 8, 2036-2042.	2.7	76

#	ARTICLE	IF	CITATIONS
19	Disintegration of Flower-Like MoS <sub>2</sub> to Limply Allied Layers on Spherical Nanoporous TiO <sub>2</sub> : Enhanced Visible-Light Photocatalytic Degradation of Methylene Blue. Journal of Nanoscience and Nanotechnology, 2020, 20, 1118-1129.	0.9	8
20	BaTiO <sub>3</sub> -graphene nanocomposite as a photocatalyst for the degradation of methylene blue. AIP Conference Proceedings, 2020, , .	0.3	0
21	Engineered porous nanopillars of Co <sub>3</sub> O <sub>4</sub> : Hydrothermal synthesis and energy storage application. AIP Conference Proceedings, 2020, , .	0.3	0
22	Vanadium-doped BaTiO <sub>3</sub> as high performance thermoelectric material: role of electronic structure engineering. Materials Today Chemistry, 2020, 18, 100384.	1.7	22
23	Solar active ZnO@Eu <sub>2</sub> O <sub>3</sub> for energy and environmental applications. Materials Chemistry and Physics, 2020, 256, 123624.	2.0	8
24	A porous graphene@NiFe <sub>2</sub> O <sub>4</sub> nanocomposite with high electrochemical performance and high cycling stability for energy storage applications. Nanoscale Advances, 2020, 2, 4229-4241.	2.2	46
25	Resonance levels in GeTe thermoelectrics: zinc as a new multifaceted dopant. New Journal of Chemistry, 2020, 44, 17664-17670.	1.4	36
26	Rhodium doping augments photocatalytic activity of barium titanate: effect of electronic structure engineering. Nanoscale Advances, 2020, 2, 5688-5698.	2.2	43
27	Facile solvothermal synthesis of NiFe <sub>2</sub> O <sub>4</sub> nanoparticles for high-performance supercapacitor applications. Frontiers of Materials Science, 2020, 14, 120-132.	1.1	45
28	Mg/Ca doping ameliorates the thermoelectric properties of GeTe: Influence of electronic structure engineering. Journal of Alloys and Compounds, 2020, 843, 155989.	2.8	33
29	Novel porous graphene synthesized through solvothermal approach as high performance electrode material for supercapacitors. AIP Conference Proceedings, 2020, , .	0.3	1
30	Porous graphene@NiCo <sub>2</sub> O <sub>4</sub> nanorod hybrid composite as a high performance supercapacitor electrode material. New Journal of Chemistry, 2020, 44, 4033-4041.	1.4	46
31	Vanadium-Doped SrTiO <sub>3</sub> Nanocubes: Insight into role of vanadium in improving the photocatalytic activity. Applied Surface Science, 2020, 513, 145858.	3.1	78
32	NiO nanoplates for energy storage application: Role of electrolyte concentration on the energy storage property. Materials Today: Proceedings, 2020, 33, 5103-5108.	0.9	0
33	SnTe thermoelectrics: Dual step approach for enhanced performance. Journal of Alloys and Compounds, 2020, 834, 155181.	2.8	45
34	Supercapacitor studies of activated carbon functionalized with poly(ethylene dioxythiophene): Effects of surfactants, electrolyte concentration on electrochemical properties. Materials Letters, 2020, 273, 127978.	1.3	6
35	h-MoO <sub>3</sub> /Activated carbon nanocomposites for electrochemical applications. Ionics, 2019, 25, 607-616.	1.2	8
36	Electrochemical study of graphene-NiCo <sub>2</sub> O <sub>4</sub> nanocomposite prepared through solvothermal approach. AIP Conference Proceedings, 2019, , .	0.3	0

#	ARTICLE	IF	CITATIONS
37	Porous Graphene Wrapped SrTiO <sub>3</sub> Nanocomposite: Sr <sup>2+</sup> C Bond as an Effective Coadjutant for High Performance Photocatalytic Degradation of Methylene Blue. ACS Applied Nano Materials, 2019, 2, 6629-6636.	2.4	75
38	Eco-friendly synthesis of porous graphene and its utilization as high performance supercapacitor electrode material. Journal of Alloys and Compounds, 2019, 799, 256-266.	2.8	59
39	SnO <sub>2</sub> nanoparticles functionalized MoS <sub>2</sub> nanosheets as the electrode material for supercapacitor applications. Materials Research Express, 2019, 6, 085526.	0.8	21
40	Electronic structure engineering of tin telluride through co-doping of bismuth and indium for high performance thermoelectrics: a synergistic effect leading to a record high room temperature $zT$ in tin telluride. Journal of Materials Chemistry C, 2019, 7, 4817-4821.	2.7	69
41	Zn: a versatile resonant dopant for SnTe thermoelectrics. Materials Today Physics, 2019, 11, 100158.	2.9	57
42	Facile solvothermal synthesis and high supercapacitor performance of NiCo <sub>2</sub> O <sub>4</sub> nanorods. Journal of Alloys and Compounds, 2019, 781, 1013-1020.	2.8	132
43	Electrodeposition of Ni-Mo-rGO composite electrodes for efficient hydrogen production in an alkaline medium. New Journal of Chemistry, 2018, 42, 4661-4669.	1.4	15
44	Enhanced thermoelectric performance of bulk tin telluride: Synergistic effect of calcium and indium co-doping. Materials Today Physics, 2018, 4, 12-18.	2.9	95
45	Effect of solvent on the morphology of MoS <sub>2</sub> nanosheets prepared by ultrasonication-assisted exfoliation. AIP Conference Proceedings, 2018, , .	0.3	4
46	Novel NRGO-CoWO <sub>4</sub> -Fe <sub>2</sub> O <sub>3</sub> nanocomposite as an efficient catalyst for dye degradation and reduction of 4-nitrophenol. Materials Chemistry and Physics, 2018, 208, 112-122.	2.0	59
47	Hierarchical Porous Batio <sub>3</sub> Nano-Hexagons as A Visible Light Photocatalyst. International Journal of Engineering and Technology(UAE), 2018, 7, 105.	0.2	18
48	Novel NiWO <sub>4</sub> -ZnO-NRGO Ternary Nanocomposites with Enhanced Photocatalytic Activity. Materials Today: Proceedings, 2018, 5, 22412-22420.	0.9	5
49	Band Engineering of SrTiO <sub>3</sub> : Effect of Synthetic Technique and Site Occupancy of Doped Rhodium. Journal of Physical Chemistry C, 2018, 122, 27567-27574.	1.5	56
50	An introduction of Biopolymer Electrolytes. , 2018, , 1-34.		12
51	Methods of Preparation of Biopolymer Electrolytes. , 2018, , 35-52.		9
52	Biopolymer Electrolytes for Solar Cells and Electrochemical Cells. , 2018, , 117-149.		9
53	Tuning the Photocatalytic Activity of SrTiO <sub>3</sub> by Varying the Sr/Ti Ratio: Unusual Effect of Viscosity of the Synthesis Medium. Journal of Physical Chemistry C, 2018, 122, 20027-20033.	1.5	44
54	Synthesis of BaWO <sub>4</sub> /NRGO-g-C <sub>3</sub> N <sub>4</sub> nanocomposites with excellent multifunctional catalytic performance via microwave approach. Frontiers of Materials Science, 2018, 12, 247-263.	1.1	52

#	ARTICLE	IF	CITATIONS
55	Electrodeposition and characterization of Ni-Mo alloy as an electrocatalyst for alkaline water electrolysis. <i>Journal of Electroanalytical Chemistry</i> , 2017, 796, 57-65.	1.9	64
56	NiWO <sub>4</sub> -ZnO-NRGO ternary nanocomposite as an efficient photocatalyst for degradation of methylene blue and reduction of 4-nitro phenol. <i>Journal of Physics and Chemistry of Solids</i> , 2017, 109, 124-133.	1.9	90
57	RGO/ZnWO <sub>4</sub> /Fe <sub>3</sub> O <sub>4</sub> nanocomposite as an efficient electrocatalyst for oxygen reduction reaction. <i>Journal of Electroanalytical Chemistry</i> , 2017, 799, 102-110.	1.9	17
58	Enhanced photocatalytic performance of N-doped RGO-FeWO <sub>4</sub> /Fe <sub>3</sub> O <sub>4</sub> ternary nanocomposite in environmental applications. <i>Materials Today Chemistry</i> , 2017, 4, 133-141.	1.7	76
59	High Thermoelectric Performance of Co-Doped Tin Telluride Due to Synergistic Effect of Magnesium and Indium. <i>Journal of Physical Chemistry C</i> , 2017, 121, 7123-7130.	1.5	84
60	Enhanced Bulk Thermoelectric Performance of Pb <sub>0.6</sub> Sn <sub>0.4</sub> Te: Effect of Magnesium Doping. <i>Journal of Physical Chemistry C</i> , 2017, 121, 20696-20703.	1.5	55
61	High Performance Dual Catalytic Activity of Novel Zinc Tungstate@Reduced Graphene Oxide Nanocomposites. <i>Advanced Science, Engineering and Medicine</i> , 2017, 9, 115-121.	0.3	15
62	Novel ZnWO <sub>4</sub> /RGO nanocomposite as high performance photocatalyst. <i>AIMS Materials Science</i> , 2017, 4, 158-171.	0.7	21
63	A facile microwave approach to synthesize RGO-BaWO <sub>4</sub> composites for high performance visible light induced photocatalytic degradation of dyes. <i>AIMS Materials Science</i> , 2017, 4, 487-502.	0.7	10
64	Ionic conductivity and dielectric studies of acid doped cellulose acetate propionate solid electrolyte for supercapacitor. <i>Polymer Engineering and Science</i> , 2016, 56, 196-203.	1.5	10
65	Development of multilayer Sn@Ni alloy coating by pulsed sonoelectrolysis for enhanced corrosion protection. <i>RSC Advances</i> , 2016, 6, 77465-77473.	1.7	13
66	Novel RGO@ZnWO <sub>4</sub> @Fe <sub>3</sub> O <sub>4</sub> nanocomposite as high performance visible light photocatalyst. <i>RSC Advances</i> , 2016, 6, 61821-61829.	1.7	65
67	Novel Co@Ni@graphene composite electrodes for hydrogen production. <i>RSC Advances</i> , 2015, 5, 47398-47407.	1.7	54
68	Novel Fe@Ni-Graphene composite electrode for hydrogen production. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 10453-10462.	3.8	78
69	Preparation and characterization of phosphoric acid-doped hydroxyethyl cellulose electrolyte for use in supercapacitor. <i>Materials for Renewable and Sustainable Energy</i> , 2015, 4, 1.	1.5	30
70	Effect of acid dopants in biodegradable gel polymer electrolyte and the performance in an electrochemical double layer capacitor. <i>Physica Scripta</i> , 2015, 90, 095702.	1.2	8
71	Novel one-pot green synthesis of graphene in aqueous medium under microwave irradiation using a regenerative catalyst and the study of its electrochemical properties. <i>New Journal of Chemistry</i> , 2015, 39, 420-430.	1.4	43
72	Novel eco-friendly synthesis of graphene directly from graphite using 2,2,6,6-tetramethylpiperidine 1-oxyl and study of its electrochemical properties. <i>Journal of Power Sources</i> , 2015, 275, 90-98.	4.0	44

#	ARTICLE	IF	CITATIONS
73	Reduced graphene oxide derived from used cell graphite and its green fabrication as an eco-friendly supercapacitor. RSC Advances, 2014, 4, 60039-60051.	1.7	22
74	Miscibility and Conductivity Studies of Poly (methyl methacrylate) and Cellulose Acetate Phthalate Blends. , 2014, 5, 995-1004.		5
75	Partial molar volumes and compressibilities of glycine betaine in aqueous NaCl solutions at temperatures T=(288.15â€“318.15)K. Fluid Phase Equilibria, 2014, 375, 18-22.	1.4	1
76	Tubular array, dielectric, conductivity and electrochemical properties of biodegradable gel polymer electrolyte. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2014, 180, 12-19.	1.7	62
77	Partial molar volume and partial molar isentropic compressibility study of glycine betaine in aqueous and aqueous KCl or MgCl <sub>2</sub> solutions at temperatures T=288.15â€“318.15K. Thermochimica Acta, 2013, 572, 23-29.	1.2	16
78	LiClO <sub>4</sub> -doped plasticized chitosan and poly(ethylene glycol) blend as biodegradable polymer electrolyte for supercapacitors. Ionics, 2013, 19, 277-285.	1.2	85
79	Volumetric, Acoustic, and Refractometric Study of Cyclic Alanine in Aqueous Cobalt Chloride Solutions at Temperatures T = (293.15 to 313.15) K. Journal of Chemical & Engineering Data, 2013, 58, 271-278.	1.0	3
80	Miscibility, water uptake, ion exchange capacity, conductivity and dielectric studies of poly(methyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.3	7
81	Miscibility Studies of Chitosan and Starch Blends in Buffer Solution. Journal of Macromolecular Science - Pure and Applied Chemistry, 2012, 49, 1099-1105.	1.2	12
82	Microwave synthesized nanostructured TiO <sub>2</sub> -activated carbon composite electrodes for supercapacitor. Applied Surface Science, 2012, 263, 236-241.	3.1	83
83	Crystallinity, magnetic and electrochemical studies of PVDF/Co <sub>3</sub> O <sub>4</sub> polymer electrolyte. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2012, 177, 127-131.	1.7	19
84	Influence of nanoscale NiO on magnetic and electrochemical behavior of PVDF-based polymer nanocomposites. Polymer Bulletin, 2012, 68, 253-261.	1.7	21
85	Chitosan/NiO nanocomposites: a potential new dielectric material. Journal of Materials Chemistry, 2011, 21, 13490.	6.7	44
86	Molecular Interactions between Glycylglycine and Mn(COOCH <sub>3</sub> ) <sub>2</sub> in Aqueous and Aqueous Ethanol Mixtures. Journal of Chemical & Engineering Data, 2011, 56, 768-782.	1.0	12
87	Synthesis Of Different Phases Of Nano Manganese Oxides And Their Dielectric Behaviour In Chitosan Composites. , 2011, , .		2
88	Microwave-assisted synthesis and magnetic studies of cobalt oxide nanoparticles. Materials Chemistry and Physics, 2011, 125, 347-350.	2.0	106
89	Soluteâ€“Solvent Interactions in Aqueous Glycylglycineâ€“CuCl <sub>2</sub> Solutions: Acoustical and Molecular Dynamics Perspective. Journal of Solution Chemistry, 2011, 40, 1657-1671.	0.6	9
90	Application of Prigogineâ€“Floryâ€“Patterson theory to volumetric, ultrasonic, and compressibility parameters of (glycylglycine+CuCl <sub>2</sub> ) in aqueous ethanol mixtures. Journal of Chemical Thermodynamics, 2011, 43, 1336-1341.	1.0	6

#	ARTICLE	IF	CITATIONS
91	Crystallinity, conductivity, and magnetic properties of PVDF/Fe <sub>3</sub> O <sub>4</sub> composite films. Journal of Applied Polymer Science, 2011, 119, 968-972.	1.3	70
92	Electrochemical properties of chitosan/Co <sub>3</sub> O <sub>4</sub> nanocomposite films. Journal of Electroanalytical Chemistry, 2011, 657, 135-143.	1.9	18
93	Excess and deviation properties of {(glycylglycine+ZnCl <sub>2</sub> ) in aqueous methanol} mixtures. Journal of Chemical Thermodynamics, 2011, 43, 622-626.	1.0	3
94	Physico-chemical, acoustic and excess properties of glycylglycine/MnCl <sub>2</sub> in aqueous ethanol mixtures at different temperatures. Fluid Phase Equilibria, 2010, 291, 174-179.	1.4	6
95	Volumetric and Ultrasonic Investigation of Glycylglycine in Aqueous FeCl <sub>3</sub> Solutions. Journal of Solution Chemistry, 2010, 39, 1763-1773.	0.6	5
96	Ultrasonic velocities, densities, and viscosities of glycylglycine and CoCl <sub>2</sub> in aqueous and aqueous ethanol systems at different temperatures. Journal of Chemical Thermodynamics, 2010, 42, 742-751.	1.0	18
97	Electrical and magnetic properties of chitosan-magnetite nanocomposites. Physica B: Condensed Matter, 2010, 405, 2078-2082.	1.3	51
98	Nano ZnO-activated carbon composite electrodes for supercapacitors. Physica B: Condensed Matter, 2010, 405, 2286-2289.	1.3	153
99	Excess molar volumes, viscosity deviations and isentropic compressibility changes in glycylglycine/NiCl <sub>2</sub> aqueous ethanol mixtures. Fluid Phase Equilibria, 2010, 298, 169-172.	1.4	7
100	Molar volume, compressibility and excess properties of glycylglycine in aqueous NiCl <sub>2</sub> solutions. Fluid Phase Equilibria, 2010, 299, 102-108.	1.4	2
101	Molecular Dynamics Investigation of Dipeptide - Transition Metal Salts in Aqueous Solutions. Journal of Physical Chemistry B, 2010, 114, 16632-16640.	1.2	11
102	Volumetric, Refractometric, and Excess Properties of Glycylglycine in Aqueous FeCl <sub>2</sub> Solution at Temperatures $T = (288.15 \text{ to } 318.15) \text{ K}$ . Journal of Chemical & Engineering Data, 2010, 55, 4048-4053.	1.0	9
103	Refractive Indices and Isentropic Compressibilities of Glycylglycine/FeCl <sub>2</sub> in Aqueous Ethanol Mixtures. Journal of Chemical & Engineering Data, 2010, 55, 5365-5369.	1.0	4
104	Acoustical and Compressibility Parameters of Glycylglycine/FeCl <sub>3</sub> in Aqueous Ethanol Mixture at $T = (293.15, 303.15, \text{ and } 313.15) \text{ K}$ . Industrial & Engineering Chemistry Research, 2010, 49, 11848-11853.	1.8	7
105	Miscibility of polymethylmethacrylate and polyethyleneglycol blends in tetrahydrofuran. Journal of Applied Polymer Science, 2009, 111, 452-460.	1.3	7
106	LiClO <sub>4</sub> -doped plasticized chitosan as biodegradable polymer gel electrolyte for supercapacitors. Journal of Applied Polymer Science, 2009, 114, 2445-2454.	1.3	32
107	Polyvinyl alcohol/polystyrene sulphonic acid blend electrolyte for supercapacitor application. Physica B: Condensed Matter, 2009, 404, 1143-1147.	1.3	56
108	Molecular Interactions in Glycylglycine/MnCl <sub>2</sub> Aqueous Solutions at $(288.15, 293.15, T_j)$	1.0	22

#	ARTICLE	IF	CITATIONS
109	Facile Synthesis of ZnO Nanorods by Microwave Irradiation of Zinc-Hydrazine Hydrate Complex. Nanoscale Research Letters, 2008, 3, .	3.1	74
110	Activated carbon-polyethylenedioxythiophene composite electrodes for symmetrical supercapacitors. Journal of Applied Polymer Science, 2008, 107, 2165-2170.	1.3	48
111	LiClO <sub>4</sub> doped cellulose acetate as biodegradable polymer electrolyte for supercapacitors. Journal of Applied Polymer Science, 2008, 110, 594-602.	1.3	77
112	N and p doped poly(3,4-ethylenedioxythiophene) electrode materials for symmetric redox supercapacitors. Journal of Materials Science, 2007, 42, 8158-8162.	1.7	58
113	Biodegradability of PMMA Blends with Some Cellulose Derivatives. Journal of Polymers and the Environment, 2006, 14, 385-392.	2.4	36
114	<sup>35</sup> NQR Spectra of Substituted N-(phenyl)-2-chloroacetamides. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1999, 54, 679-684.	0.7	9
115	<sup>35</sup> Cl NQR Spectra of Substituted N-(Phenyl)-2,2,2-Trichloroacetamides. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1999, 54, 261-269.	0.7	10
116	Oxidation of a Dipeptide by Electrolytically Generated Manganese(III) in Aqueous Sulfuric Acid Medium: A Kinetic and Mechanistic Study. Bulletin of the Chemical Society of Japan, 1996, 69, 41-46.	2.0	5
117	Synergistic manifestation of band and scattering engineering in single aliovalent Sb alloyed anharmonic SnTe alloy in concurrence with rule of parsimony. Materials Advances, 0, .	2.6	4