

Physics department Publications-2025

Number of Publications in International Journal	Total Number of journals	SCI	WOS	Scopus			Q1	Q2	Q3	Q4
				Journals	conf. Proceedings	Book chapters				
Dr. Dhananjaya. N	2	1	1	2			1	1		
Dr. Lokesh. R										
Dr. C. Kavitha	3	All-3	All-3	All-3			2	1		
Dr. Yashaswini	3	2	1	2		1				
Dr. Ashwini K R	2	1	1	2			2			
Dr. Daruka prasad B	5	3	2	5			3	2		
Dr. Basavaraj R B	7	3	4	7			4	3		
Dr. Harish Sharma Akkera	3	2	1	3			2	1		
Dr. Chandra Shakher Pathak	2	1	1	2			1	1		
Dr. Santra Dias										
Dr. Venkatesh R										
Total	27									

Sl. No.	Title of the Paper	Name of the Author/s	Name of the Journal	ISSN	Details of publication with doi
1.	Synergistic SERS Enhancement of Highly Sensitive and Reusable rGO-Ag-ZrO ₂ Thin Film Nanocomposite to Detect Synthetic Textile Dyes	Awati Prema Mahadev, C. Kavitha* Jil Rose Perutil, Neena S. John	ACS-Langmuir 2025, 41, 4, 2411–2426		https://doi.org/10.1021/acs.langmuir.4c04105
2.	Enhanced super capacitance performance of V ₂ O ₅ ·nH ₂ O/g-C ₃ N ₄ nanocomposites: Synthesis, characterizations, and electrochemical properties	Dhirendra Jha, Bhargavi Somapur, Abhijit Paul, C. Kavitha , Nagaiah Kambhala	Materials Chemistry and Physics 332 (2025) 130244		https://doi.org/10.1016/j.matchemphys.2024.130244
3.	RGO flakes decorated NiO nanoflowers for supercapacitor applications-synthesis and characterizations	Dhirendra Jha, Bhargavi Somapur, Abhijit Paul, C. Kavitha , Nagaiah Kambhala	Applied Physics A (2025) 131:214		https://doi.org/10.1007/s00339-025-08335-y

Physics department Publications-2025

4.	Flower-like morphology of BiOBr: Eu ³⁺ +nanophosphor: its photoluminescence, J-O parameters and di-electric behaviour	Yashodha S. R. Dhananjaya N Yogananda H. S Bhagya N. P Prashanth G. K Bhavyashri Shetty	Ceramics International, Volume 51, Year 2025, Pages 47548-47558		http://dx.doi.org/10.1016/j.cerami.2025.07.417
5.	Reduced Graphene Oxide (rGO) Doped Copper–Zinc (Cu–Zn) Nanocomposite Ferrites as an Efficient Material for High-Performance Thermoelectric Applications	Ramakrishna B.N.;Khasim S.;Prathibha B.S.;Manjunatha S.O.;Kumar G.P.P.;Pasha A.; Dhananjaya N.	Journal of Inorganic and Organometallic Polymers and Materials, Volume 35, Year 2025, Pages 6561-6580		http://dx.doi.org/10.1007/s10904-025-03679-7
6.	Cost--Effective Synthesis of Eu ³⁺ -Activated BaZrO ₃ for Optoelectronic and Dosimetry Applications	Silpa T.N.;Pandurangappa C.; Yashaswini ;Pratibha S.	Journal of Electronic Materials, Volume 54, Year 2025, Pages 3405-3420		http://dx.doi.org/10.1007/s11664-025-11859-x
7.	Effects of Various Fuels on the Qualified Photoluminescence and Thermoluminescence Properties of BaZrONanophosphors	Silpa T.N.;Pandurangappa C.; Yashaswini ;Pratibha S.;Jayasheelan A.	Journal of Mines Metals and Fuels, Volume 73, Year 2025, Pages 1121-1134		http://dx.doi.org/10.18311/jmmf/2025/48385
8.	Applications of zinc oxide nanoparticles loaded with curcumin for increased antibacterial activity	Ashwini K.R. ;Shashikala B.S.;Lavanya D.R.	Surfaces and Interfaces, Volume 73, Year 2025		http://dx.doi.org/10.1016/j.surfin.2025.107470

Physics department Publications-2025

9.	Fe-doped NiO nanopowders for advanced photochemical applications: Synthesis, characterization, photo-assisted dye degradation and latent fingerprint visualization	Rudresh Kumar K J , Areej S. Alqarni , Ashwini K. R , Manjunatha S. O , Upendra Kumar Kagola , Gurushantha K , Satyanarayana Reddy S , Nagaraj Basavegowda	Physica B Condensed Matter, Volume 701 , Year 2025		http://dx.doi.org/10.1016/j.physb.2025.416991
10.	Therapeutic potential of sustainable zinc oxide nanoparticles biosynthesized using <i>Tradescantia spathacea</i> aqueous leaf extract	Sumreen Sultana , Bagepalli Shivaram Ashwini , Umme Hani , Nazima Haider , Mohammad Nasser Alomary , Venkateshpa Bhavana , Bangari Daruka Prasad , Tekupalli Ravikiran , Mohammad Azam Ansari and Thimappa Ramachandrappa Lakshmeesha	Green Processing and Synthesis , Volume 14 , Year 2025 , Pages 20240241		http://dx.doi.org/https://doi.org/10.1515/gps-2024-0241
11.	From leaf to light: Amaranth derived red CDs as eco-friendly nanofillers in functional nanocomposites for indoor phyto illumination, active food packaging and forensic applications	B. Ananda , B.R. Radha Krushna , M. Gargana , S.C. Sharma , R. Anitha , K.M. Tullanithi , Liza Mohapatra , K. Manjunatha , Sheng Yun Wu , B. Daruka Prasad , Mohamed Ghouse , H. Nagabhushana	Colloids and Surfaces A: Physicochemical and Engineering Aspects, Volume 728 , Year 2025 , Pages 138483		http://dx.doi.org/https://doi.org/10.1016/j.colsurfa.2025.138483
12.	Improved electromagnetic shielding, optical, electrical and structural, behaviour of Poly(methylmethacrylate) composites with an	Preethi Ganesh , Maresh B , Roopashree B , Daruka Prasad B , Revanasiddappa M , Gayathri V	Solid State Communications, Volume 405 , Year 2025		http://dx.doi.org/10.1016/j.ssc.2025.116136

Physics department Publications-2025

	Iron(III) benzimidazole complex				
13.	Synthesis, conductivity and anti-counterfeiting applications of neodymium doped LiAlSiO ₄ nanopowders	K.R. Jyothi , K.R. Bhagya , B.R. Radha Krushna , B. Daruka Prasad , S.C. Sharma , A.P. Gnana Prakash , Thejas Urs G , N.M. Nagabhushana , C. Kavitha , H. Nagabhushana	Ceramics International , Volume 51, Year 2025, Page s 36208-36222		http://dx.doi.org/https://doi.org/10.1016/j.ceramint.2025.05.340
14.	A novel Dy ³⁺ -doped Zn ₂ V ₂ O ₇ nanoparticles: Photoluminescence and electrochemical studies for display and supercapacitor applications	Vinuta, Y.S. Vidya , H.C. Manjunatha , S. Manjunatha , R. Munirathnam , M. Shivanna, Suman Kumar , Daruka Prasad B.	Materials Chemistry and Physics, Year 2025		http://dx.doi.org/10.1016/j.matchemphys.2024.130124
15.	Hexagonal rod-like Eu ³⁺ -doped CaMoO ₄ phosphors: Structural, photoluminescence and photometric properties for display device applications	N.N. Munirajappa, R.B. Basavaraj , D.P. Aarti, M.B. Madhusudana Reddy, G. Nagaraju , H.M. Suresh Kumar , Thalari Chandrasekhar , Anil S. Rathod	Journal of Molecular Structure, Volume 1319, Year 2025		http://dx.doi.org/10.1016/j.molstruc.2024.139331
16.	Tailoring the luminescence and electrochemical properties of dual functional CaMoO ₄ :Sm ³⁺ -fluorescent nanopigments for next-generation optoelectronic devices and modified sensors applications	N.N. Munirajappa, R.B. Basavaraj , Jyothi C. Abbar, D.P. Aarti, N. Nagaraja, K.S. Kantharaj, N. Ramprasad, G. R. Sridhara, H.M. Suresh Kumar, G. Nagaraju, P.K. Jisha	Ceramics International, Year 2025		http://dx.doi.org/10.1016/j.ceramint.2025.09.453

Physics department Publications-2025

17.	Structural and electronic properties of PVA with green synthesized ZnO NCs for electronic device applications,	Watage S.; Basavaraj R.B. ;Aarti D.P.;Jisha P.K.;Nagaraj N.	Next Materials, Vo lume 8, Year 2025		http://dx.doi.org/10.1016/j.nxmte.2025.100890
18.	Multifunctional hybrid red fluorescent nanopigments: Photoluminescence, photocatalytic and advanced forensic applications	Aarti D.P.; Basavaraj R.B. ;Madhusudana Reddy M.B.;Majani S.S.	Ceramics International , Volume 51, Year 2025, Pages 24740-24752		http://dx.doi.org/10.1016/j.ceramint.2025.03.156
19.	High-Performance green light-emitting CPE modified BaZrO ₃ :Tb ³⁺ nanopigments: A potential material for WLEDs and electrochemical sensing applications	Aarti D.P.; Basavaraj R.B. ;Abbar J.C.;Reddy M.B.M.;Jisha P.K.	Journal of Industrial and Engineering Chemistry, Volume 149, Year 2025, Pages 645-656		http://dx.doi.org/10.1016/j.jiec.2025.02.026
20.	Enhanced photocatalytic degradation activity of SrCeO ₃ nanophosphors: Aloe vera gel-mediated synthesis and UV light-driven eradication of Titan Yellow dye	Majani S.S.; Basavaraj R.B. ;Iqbal M.;Shivamallu C.;Amachawadi R.G.;K.N V.;Kollur S.P	Optical Materials, Volume 162, Year 2025		http://dx.doi.org/10.1016/j.optmat.2025.116900
21.	Fabrication of white light emitting SrMoO ₄ : Dy ³⁺ nanophosphors: Photoluminescence, ultrasensitive detection in electrochemical sensing, photocatalytic and advanced forensic applications	Yogananda H.S.;Yashodha S.R.; Basavaraj R.B. ;Bhagya N.P.;Lalithamba H.S.;Sharanakumar T.M.;Ravi Kumar.	Materials Science and Engineering B, Volume 322, Year 2025		http://dx.doi.org/10.1016/j.mseb.2025.118627
22.	Fe-doped NiO nanopowders for advanced photochemical applications: Synthesis, characterization, photo-assisted dye degradation	Rudresh Kumar K J, Areej S. Alqarni, Ashwini K. R , Manjunatha S. O, Upendra Kumar Kagola, Gur	Physica B: Condensed Matter	9214526	

Physics department Publications-2025

	and latent fingerprint visualization	ushantha K, Satyan arayana Reddy S, Nagaraj Basavegowda, Madhu A, Sri natha N			
23.	An experimental study on calcium doped $\text{CH}_3\text{NH}_3\text{Pb}(1-x)\text{CaxCl}_3$ perovskites for UV photodetection	Sarkar P.; Akkerja H.S. ;Srivastava A.;Niranjan N.K.;Deb P.	Materials Science and Engineering B, Volume 314, Year 2025		http://dx.doi.org/10.1016/j.mseb.2025.118069
24.	Impact of Gd-doped on optoelectronic properties of SnO_2 thin films synthesized by spin coating method	Akkerja H.S. ;Kumar Y.;Sarkar P.;Kambhala N.;Reddy G.S.	Physica B Condensed Matter, Volume 699, Year 2025		http://dx.doi.org/10.1016/j.physb.2024.416824
25.	Optimizing CMOS inverter characteristics with evolutionary algorithm strategies	Sarkar P.; Akkerja H.S. ;Rahaman S.;Niranjan N.K.;Devi S.	Exploring the Intricacies of Digital and Analog VLSI, Year 2025, Pages 183-210		http://dx.doi.org/10.4018/979-8-3693-8084-0.ch006
26.	Single-Crystal Perovskite Halide: Crystal Growth to Devices Applications	Prakash K.;Valeti N.J.;Jain P.; Pathak C.S. ;Singha M.K.;Gupta S.;Edri E.;Mukhopadhyay S.	Energy Technology, Volume 13, Year 2025		http://dx.doi.org/10.1002/ente.202400618
27.	Mapping the photocurrent and photovoltage of hybrid perovskite thin films under concentrated sunlight	Pathak C.S.	Macromolecular Research, Volume 33, Year 2025, Pages 439-449		http://dx.doi.org/10.1007/s13233-024-00349-4

Book Chapter Details

Physics department Publications-2025

Sl. No	Title of the Book	Title of the Book Chapter Published	Name of the Author/s	ISBN	Publisher name	Indexed in WoS/Scopus (Yes/No)
1.	Optimization Techniques for 3D-Printed Electrochemical Sensors	Additively Manufactured Electrochemical Sensors Design Performance and Applications, Year 2025, Pages 127-142	Pratibha S.; Yashaswini ;Vinay Kumar Y.B.	http://dx.doi.org/10.1002/9781394303434.ch6	Wiley	Yes