

Department of Physics and Nanotechnology, SRMIST

List of SCI/SCOPUS Research Publications - 2025 (January - March)

S.NO	AUTHORS	TITLE OF PUBLICATION	YEAR	SOURCE TITLE	IF	DOI
1	Thasan, K. B. S., Poornimadevi, C., Kala, C. P., & Thiruvadigal	D. J. Effect of C & Si decoration on the Boron Phosphide (BP) nanosheets for gas sensing applications–A first principles investigation	2025	Materials Science in Semiconductor Processing	4.2	https://doi.org/10.1016/j.mssp.2025.109295
2	M. Karunakaran, Rudra Banerjee	Doping-induced enhancement of Curie temperature in Zn ₂ Ru _{1-x} A _x Mn (A = Ti, Mn, Co, Zr, and Rh) Heusler alloys: An ab initio investigation.	2025	Appl. Phys. Lett.	3.5	https://doi.org/10.1063/5.0238199
3	John, G., Sree, V. G., Navaneethan, M., & Jesuraj	P. J. Unveiling the pH-universal hydrogen evolution ability of SnS/NiFe ₂ O ₄ heterostructure electrocatalyst	2025	Applied Surface Science	6.3	https://doi.org/10.1016/j.apsusc.2025.162324
4	Kathiresan C, Sruthy Subash, Udhayakumar S, Varun Karthik M, Kamala Bharathi K	Nanoengineered RF-Sputtered Mn ₃ O ₄ Cathode Thin Films for Aqueous Zinc-Ion Batteries: Insights into Diffusion Dynamics and Application Potential	2025	Phys. Chem. Lett.	4.9	https://doi.org/10.1021/acs.jpclett.4c03514
5	M. Varun Karthik, Sruthy Subash, K. Kamala Bharathi	High-rate performance of ultra-thin Li-Nb-O thin films as an anode for Li-ion micro-battery applications	2025	Electrochimica Acta	5.5	https://doi.org/10.1016/j.electacta.2024.145618

6	Guo, Z., Kumar, G.J., Wang, Z, K. Kamala Bharathi, Ke Wang	Magnetocaloric properties of ferrimagnetic TbFeCo thin films near compensation temperature with perpendicular anisotropy: effect of sputtering power	2025	Appl. Phys. A	2.5	https://doi.org/10.1007/s00339-025-08240-4
7	KP, M. J., Jayaram, A., & Mani, N	Superior thermoelectric power factor in BiCuSeO enabled by ferromagnetic metallic phase and spin entropy effect	2025	Journal of Physics D: Applied Physics	3.1	10.1088/1361-6463/ada4b9
8	Chandrashekar, A., Hegde, M., Siya, Karthik Reddy, B., Gopi, J. A., Ravichandran, V., . . . Prabhu, T. N	Green covalent surface functionalization of carbon nanofillers and hybridization to improve the thermal and electrical properties of RTV SR nanocomposites	2025	Applied Materials Today	7.2	doi:https://doi.org/10.1016/j.apmt.2025.105826
9	Vijay, V., Priyadharshini, S., Lavanyasivani, S., Krishna, A. A., & Navaneethan M.	Multiscale phonon scattering mediated low lattice thermal conductivity in nanostructured Ga-substituted Bi ₂ Se ₃	2025	Surfaces and Interfaces	5.7	https://doi.org/10.1016/j.surfin.2025.105826
10	R Aiswarya , Thirunavukarasu Kalaivani	Facile synthesis of highly porous hierarchical ZnO nano-flowers array over graphene oxide nanocomposite for high performance supercapacitor applications	2025	Electrochimica Acta	5.5	https://doi.org/10.1016/j.electacta.2025.145676
11	ESR A. NIX, Biswal P., Prellier W., Samal D., & and Behera B.C.	Revealing One-dimensional (1-D) Heisenberg Antiferromagnetic State in Pyrochlore α -Cu ₂ V ₂ O ₇ from Critical Exponent Analysis	2025	Journal of Materials Chemistry C	5.7	https://doi.org/10.1039/D4TC04888A

12	Mariappan, A., Thiruppathi, G., Bharath, G., Sundararaj, P., Dharman, R. K., & Oh, T. H.	Defect-assisted surface modification of a gC 3 N 4@WC heterostructure for tetracycline degradation: DFT calculations, degradation pathways, and nematode-based ecological assessment	2025	Nanoscale	5.8	https://doi.org/10.1039/D4NR04222K
13	Ayyappan, S., Nithya, R., Sivaranjani, T., Karthigeyan, A., Rajakarthiyan, S., & Bharath, G.	Enhanced Photoelectrocatalytic and Antibacterial Performance of g-C3N4/ZnWO4 Heteronanostructures for Sustainable Water Purification	2025	Ceramics International	5.1	https://doi.org/10.1016/j.ceramint.2025.01.293
14	Sabri, M. A., Othman, I., Bharath, G., Alblooshi, H. T., Haija, M. A., Nogueira, R. P., & Banat, F.	Synergistic TaW-based catalysts on date seed-derived activated carbon for sustainable cleaner energy fuel production via electrochemical valorization of furfural	2025	Fuel	6.7	https://doi.org/10.1016/j.fuel.2025.134452
15	Jenitha M, Durgalakshmi D., Ashwin Kishore M. R., Balakumar S., & Ajay Rakkesh R.	Advancing Vanadium MXene Cathodes: Strategic Enhancements for Superior Performance in Zinc-Ion Batteries	2025	Adv. Sustainable Syst	6.5	https://doi.org/10.1002/adsu.202400844
16	Sahni, A., Deepika, S., Nagarajan, C., Han, S., Kawya, J., Girisun, T. S., Manirahulan, K., Flower, N. a. L., & Sujatha, R. A.	., Defect-driven sequential two-photon absorption for enhanced optical limiting in Co:ZnO	2025	Optik		https://doi.org/10.1016/j.ijleo.2025.172213

17	Mehta, S. K., & Ananthavel A	Long-Term Impacts of Aerosols on the Cloud, Temperature, and Rainfall Over the North–East Monsoon Region	2025	Pure and Applied Geophysics	1.9	https://doi.org/10.1007/s00024-025-03657-7
18	Akash, R., A. Sakthi Balaji, K. Janani Sivasankar, Hariharan Rajalakshmi Mohanraj, and D. John Thiruvadigal	N doped armchair silicene nanoribbon as a promising biosensor for detection of VOCs in healthcare monitoring: A first principles study	2025	Materials Science in Semiconductor Processing	4.2	https://doi.org/10.1016/j.mssp.2025.109302
19	Archana C, Rengarajan Abinaya, Navaneethan Mani, and Harish Santhana Krishnan	Strain Effect in the Layered MoS2-rGO Heterostructure with Enhanced Performance for Flexible Thermoelectric Applications	2025	ACS Applied Energy Materials	5.5	https://doi.org/10.1021/acsaem.4c02674
20	Usha, C., Devi, M. S., Panneerselvam, A., Gnanasekaran, L., Al-lohedan, H., Devendrapandi, G., ... & Balu, R	Synthesis, quantum computational and vibrational spectroscopic investigation, HOMO–LUMO, and Fukui function on 2-(morpholino) ethyl ammonium picrate monohydrate single crystal	2025	Journal of Materials Science: Materials in Electronics	2.8	https://doi.org/10.1007/s10854-024-14183-y
21	R Amuthan, K P Mohamed Jibri, J Archana, M Navaneethan* and M Krishna Mohan	Superior thermoelectric power factor in BiCuSeO enabled by a ferromagnetic metallic phase and spin entropy effect	2025	Journal of Physics D: Applied Physics	3.1	10.1088/1361-6463/ada4b9
22	B. Binish, K. Mani Rahulan, T. C. Sabari Girisun & Nisha S. Panicker	Defect state enhanced nonlinear absorption and optical limiting behaviour of erbium doped silver molybdate nanostructures	2025	scientific reports	3.8	https://doi.org/10.1038/s41598-024-78473-5

23	Prince Wesley Vanaraj, Lokeswaran Ravi, Shashikant P. Patole, Dalaver H. Anjum, S. N. Megha, Mangalampalli S. R. N. Kiran, Suresh Perumal & Ravikirana.	Impact of atomic size misfit on lattice distortion in AlFeCoNiX (X = Cr/Mn/Zr) multicomponent alloys.	2025	Journal of Material Science	3.3	https://doi.org/10.1007/s10853-025-10681-4 .
24	Nalini Ravi, Prakash Kanapathi, Subramaniam Mohan and Tamilselvan Appadurai.	Exploring the structural and photophysical properties of tri-cation mixed halide double perovskites (Cs ₂ AgIn _{0.85-x} CeXBi _{0.15} Cl ₆) for high-performance phosphor-based WLEDs.	2025	Dalton Transactions	3.5	https://doi.org/10.1039/D4DT03417A
25	Gopalakrishnan R., Rama M., Dhanalakshmi K., Sethuraman Sudarsan Nithiyanantham S., Gunasekaran B., Krishnaraj L.,.	Influence of rice husk ash and nano-CaCO ₃ on the properties of self-compacting mortar.	2025	Vietnam Journal of Chemistry	1.3	https://doi.org/10.1002/vjch.70005
26	Tejas Dhanalaxmi Raju, Vignesh Murugadoss, Kiran A Nirmal, Tukaram D Dongale, Arul Varman Kesavan, Tae Geun Kim.	Advancements in Perovskites for Solar Cell Commercialization: A Review.	2025	Advanced Powder Materials	28.7	https://doi.org/10.1016/j.apmate.2025.100275
27	Muthamizh Selvamani, Dilipan Elangovan, Ali Alsalmeh, Arul Varman Kesavan, Ganeshraja Ayyakannu Sundaram, A Santhana Krishna Kumar.	Bi ₂ W ₂ O ₉ Nanoflakes Synthesized via a Hydrothermal Method: Antibacterial Potency and Cytotoxicity Evaluation on Human Dermal Fibroblasts.	2025	ACS Omega	3.7	https://doi.org/10.1021/acsomega.4c07612
28	Krishna, P., Vijay, V., Kanagaraj, C., Archana, J., Ponnusamy, S., & Navaneethan, M.	Probing the band structure and phonon dynamics in Fe-mediated Cu ₂ SnS ₃ for thermoelectric applications.	2025	Applied Physics Letters	3.5	https://doi.org/10.1063/5.0250811

29	Karvannan, E., Vijay, V., Nivin, T. S., Navaneethan, M., Archana, J., & Karthigeyan, A.	Tailoring charge carrier dynamics for improved thermoelectric properties in nickel-incorporated Bi ₂ S ₃ .	2025	Materials Chemistry and Physics	4.3	https://doi.org/10.1016/j.matchemphys.2025.130490
30	Wu, C., Sayyad, M. Y., Sailus, R. E., Dey, D., Xie, J., Hays, P., Kopaczek, J., Ou, Y., Susarla, S., Esqueda, I. S., Botana, A., Tongay, S. A.,	Metallic 2D Janus SNbSe Layers Driven by a Structural Phase Change.	2025	Nanoscale	5.8	https://doi.org/10.1039/D4NR04059G
31	Tharani, S., Durgalakshmi, D., Balakumar, S., & Ajay Rakkesh, R.	Dual ion insertion and oxygen vacancy engineering in nanostructured V ₂ O ₅ cathodes for enhanced Zn-ion battery performance and stability.	2025	Journal of Power Sources	8.1	https://doi.org/10.1016/j.jpowsour.2025.236593
32	Lokeswaran Ravi, Prince Wesley Vanaraj, Subathra B.S, Suresh Perumal, Shashi Kumar, Ravikirana.	Enhancing mechanical and tribological properties of Aluminum metal matrix composite reinforced with high entropy alloy using friction stir processing.	2025	Materials Chemistry and Physics	4.3	https://doi.org/10.1016/j.matchemphys.2025.130614
33	S Vibavakumar, KD Nisha, S Harish, J Archana, M Navaneethan.	Enhanced catalytic performance of MoO ₃ /MoS ₂ -rGO counter electrode towards a Pt-free dye sensitized solar cell.	2025	Solar Energy Materials and Solar Cells	6.3	https://doi.org/10.1016/j.solmat.2025.113496
34	S. Shanthi, J. Kawya, T. C. Sabari Girisun, and K. Mani Rahulan.	Impact of MoS ₂ on the nonlinear absorption and optical protection efficiency of SrWO ₄ nanocomposites.	2025	Journal of Nonlinear Optical Physics & Materials	2.9	https://doi.org/10.1142/S0218863525500055

35	Sandeep, Andem., Ravindra, A. V.	Metal (Co/Zn) Acetate-Modified Porous Carbon Derived from Peanut Shells as a Superior Supercapacitor Electrode Material.	2025	ECS Journal of Solid State Science and Technology	1.8	https://dx.doi.org/10.2139/ssrn.4753557
36	M. Gokulnaath, Sivalingam Muthu Mariappan, M. Navaneethan, J. Archana.	Enhanced bi-polaron hopping in Y ³⁺ and Sr ²⁺ co-doped BaSnO ₃ for improved photoanode performance in dye sensitized solar cells.	2025	Optical materials	3.8	https://doi.org/10.1016/j.optmat.2025.116800
37	K. Sathiyamoorthy, A. Silambarasanm, M. Navaneethan, S. Harish.	Interfacial charge transfer in LaCoO ₃ /SnS ₂ heterostructure for boosted photodegradation of environmental organic pollutant.	2025	Surfaces and Interfaces	5.7	https://doi.org/10.1016/j.surfin.2025.106105
38	M. Aashna Sharin, E. Vinoth, J. Archana, A. Karthigeyan, M. Navaneethan.	Deformation energy facilitated high response and low temperature operation of NO ₂ sensor using branched nanorods of Bi ₂ S ₃ .	2025	Microchemical Journal	4.9	https://doi.org/10.1016/j.microc.2025.112981
39	Sneha Mondal, Karthik Dilly Rajan, Lokanath Patra, Maheswaran Rathinam and Vattikondala Ganesh.	Sulfur Vacancy-Induced Enhancement of Piezocatalytic H ₂ Production in MoS ₂ .	2025	Small	13	https://doi.org/10.1002/sml.202411828
40	Rahulgorky Sahayaraj, Karolinekersin Enoch, Sudhanshu Shekar Pati, Anbumozhi Angayarkanni Somasundaram.	Cobalt doped Fe ₃ O ₄ nanoparticles with improved magnetic anisotropy and enhanced hyperthermic efficiency.	2025	Ceramics International	5.1	https://doi.org/10.1016/j.ceramint.2025.02.245

41	Ha, I., Cho, H. W., Lee, H. J., Ravindran, E., Jesuraj, P. J., Lee, J. W., ... & Ryu, S. Y.	Exploring the Origin of White Emission in TAPC: Electron Transport Layer Based Exciplex Devices.	2025	Advanced Optical Materials	8	https://doi.org/10.1002/adom.202403378
42	Saran Narayanasamy, Sonika Shetty, Aravind S, Subhojyoti Sinha.	Insights into the charge dynamics and fractional order capacitive behavior of PVDF – 2D layered MoS ₂ and PVDF – Fibrous polyaniline composite films.	2025	Surfaces and Interfaces	5.7	https://doi.org/10.1016/j.surfin.2025.106048
43	Balaji, A. S., Ramasamy, A., Sivasankar, K. J., Mohanraj, H. R., & Thiruvadigal, D. J.	Low lattice thermal conductance of buckled GeTe/antimonene vdW interface device: A DFT+ NEGF study.	2025	Computational Materials Science	3.1	https://doi.org/10.1016/j.commatsci.2025.113784
44	S, T. M., Hazra, A., Sharma, N., & Dhir, R.,	Weak decays of involving vector mesons in self-consistent covariant light-front approach.	2025	The European Physical Journal C		https://doi.org/10.1140/epjc/s10052-025-13783-0
45	Ranu Bhatt, Rishikesh Kumar, Pramod Bhatt, Pankaj Patro, Shovit Bhattacharya, Mani Navaneethan, Soumen Samanta, Ajay Singh.	Strategic control of excess tellurium to achieve high figure-of-merit in Te-rich Bi _{0.5} Sb _{1.5} Te ₃ .	2025	Materials for Renewable and Sustainable Energy	3.6	https://doi.org/10.1007/s40243-024-00293-4
46	Harish Nanda Arunachalam, T. Perarasan, Santhosh Durairaj, Jaivardhan Sinha, Senthil Kumar Eswaran, S. Chandramohan & Jitendra Kumar Tripathi.	Evolutions of 3D MoS ₂ nano-islands on monolayer MoS ₂ edges under low-energy ion irradiation.	2025	Journal of Materials Science	3.5	https://doi.org/10.1007/s10853-025-10683-2
47	Udhayakeerthana Chinnathambi, Roshan Chandrapal, Aiswarya R, Baskaran Palanivel & T. Kalaivani	Copper-Enriched Co ₃ O ₄ /MoS ₂ Nanocomposites for Superior Photocatalytic Degradation of Methylene Blue under Visible Light.	2025	Journal of Cluster Science	2.7	https://doi.org/10.1007/s10876-024-02764-0

48	K Bharathi, G Bakiyaraj, J Archana, M Navaneethan,	p-n $\text{ZnCr}_2\text{O}_4/\text{Bi}_2\text{O}_3$ heterojunction as an effective photocatalytic degradation of MB and CIP.	2025	Optical Materials	3.8	https://doi.org/10.1016/j.optmat.2025.116862
49	Ashwini S. Gadge, Prakash Bobde, V. Ganesh and R. S. Gedam	Novel green synthesis of Gd-doped TiO_2 nanoparticles for environmental remediation: statistical modeling and process optimization	2025	New Journal of Chemistry	2.7	https://doi.org/10.1039/D5NJ00856E
50	Dharmalingam Nagaraj, Kathirvel Venugopal	Disposable stencil-printed electrochemical sensor for the detection of salicylic acid and indole-3-acetic acid in tomato extract	2025	Microchemical Journal	4.9	https://doi.org/10.1016/j.microc.2025.113285
51	P Baskaran, KD Nisha	Enhanced photovoltaic efficiency of hierarchically structured $\text{Cu}_2\text{MnSnS}_4$ -PVP counter electrodes for platinum-free dye-sensitized solar cells	2025	Journal of Alloys and Compounds	5.8	https://doi.org/10.1016/j.jallcom.2025.179713
52	Sharine Priscilla, G. Devanand Venkatasubbu, Sahabudeen Sheik Mohideen	Chitosan-coated titanium dioxide nanoparticles: fabrication, characterisation and toxicological evaluation in <i>Drosophila melanogaster</i>	2025	Nanotechnology for Environmental Engineering	0	https://doi.org/10.1007/s41204-025-00422-y
53	Haritha J Mani Rahulan K N. Angeline Little Flower T. Sharmila Sabari Girisun T C Annie Sujatha R	Systematic Analysis of Nonlinear Optical Properties in Pristine and Rare-Earth-Doped $\text{Zn}_2\text{V}_2\text{O}_7$ for Low-Power Optical Limiting Applications	2025	Optical Materials	3.8	https://doi.org/10.1016/j.optmat.2025.116974

54	Selva Boopalan A, ,Mani Rahulan K N. Angeline Little Flower A.Dhanusha ,Sabari Girisun T C ,, Annie Sujatha R	Synergistic effects of europium doping on MOF-5: exploring its photoluminescent and non-linear optical behaviour for enhanced optical limiting	2025	Nanoscale	5.8	https://doi.org/10.1039/D4NR04931D
55	Shrestha Dutta, Rudra Banerjee	Electronic structure engineering of Zr-doped Ti ₃ C ₂ and Ti ₃ CN MXenes for efficient hydrogen evolution reaction	2025	Physica B: Condensed Matter	2.8	https://doi.org/10.1016/j.physb.2025.417148
56	Kanchan Kumar Devender, Muthu Mariappan Sivalingam, Vinoth Elangovan, Jayaram Archana, Mani Navaneethan and Harish Santhana Krishnan.	Small or Sharp Edged? Impact of Facets-Controlled Ag{111} Nanoprism on the Gas Sensing Redox Characteristics of WO ₃	2025	Langmuir	3.7	https://doi.org/10.1021/acs.langmuir.4c03446
57	M. Varun Karthik, L. N. Patro, J. Arout Chelvane, K. Kamala Bharathi	Influence of Mn Precursor Adjustments on the Structural and Electrochemical Behavior of P2-Type Na _{0.65} Ni _{0.25} Mn _{0.75} O ₂ Cathodes for Sodium-Ion Batteries	2025	ACS Applied Energy Materials	5.5	https://doi.org/10.1021/acsaem.5c00294
58	Akash Marsalin, Rajaboopathi Mani	From formation to functionality: Insights into mesocrystal development and applications	2025	Journal of Solid State Chemistry	3.2	https://doi.org/10.1016/j.jssc.2025.125331
59	Abhishek S Shekhawat, Navaneeth Krishnan AB, Aarti Diwan, Dhatchayani Murugan, Akila Chithravel, Lakshya Daukiya, Anand M Shrivastav, Tulika Srivastava, Shailendra K Saxena	Harnessing carbon electrodes in molecular junctions: progress and challenges in device engineering	2025	Nanoscale	5.8	https://doi.org/10.1039/D4NR05242K

60	Deb Kumar Rath, Shivansh Raj Pandey, Abhishek S Shekhawat, Love Bansal, Bhumika Sahu, Nikita Ahlawat, Shailendra K Saxena, Subin Kaladi Chondath, Rajesh Kumar	Resonant Fano interaction in B1g/B3g Raman mode under Off-Resonant Excitation in V2O5 μ -crystals: Thermal phonon as facilitator	2025	iScience	4.6	https://doi.org/10.1016/j.isci.2025.112137
61	Lokeswaran Ravi, Prince Wesley Vanaraj, S. Shashi Kumar Ravikirana	Effect of T6 Treatment on AA6061 Composite Reinforced with AlCoFeNiMn HEA Particles via Friction Stir Processing	2025	Metals and Materials International	3.3	https://doi.org/10.1007/s12540-025-01935-6
62	B. Ranjith ,Lalitha Gnanasekaran , P.C. Karthika , Jothi Ramalingam Rajabathar , Hamad A. Al-Lohedan , Woo Kyoung Kim , Vasudeva Reddy Minnam Reddy , Mohit Kapoor , Suresh Singh , Mahimaluru Lavanyaj h , Gautham Devendrapandi	Enhancing the activity of transition metal-based sulfides via synergistic effects for electrochemical overall water splitting	2025	International Journal of Hydrogen Energy	8.1	https://doi.org/10.1016/j.ijhydene.2025.01.349
63	Manikandan Elumalai, Aravind Baskaran, Sankar Ganesh Ramaraj , Vivekananthan Sadaiyandi, Niraj Kumar ,P.C. Karthika ,Nagappan Rajendiran	Effective sensing of environmental pollutants: Hydrogen sulphide and Methylene blue by using gold nanoparticles	2025	Surfaces and Interfaces	5.7	https://doi.org/10.1016/j.surfin.2025.106118
64	Rohini Anandan , Piraviperumal Malar	Broadband feeble light detection using n-Si/ quasi- 1D Sb2Se3 heterojunction photodetectors	2025	Sensors and Actuators A: Physical	4.1	https://doi.org/10.1016/j.sna.2025.116428

65	Shalini Shanmuganathi; Tharani Selvam; Durgalakshmi Dhinasekaran; Ashwin Kishore Munusamy Rajendran; Balakumar Subramanian; Ajay Rakkesh Rajendran	Synergistic Ti ₃ C ₂ MXene/MoS ₂ heterostructure: Unlocking ultra-fast, durable, and high-efficiency energy storage for next-generation supercapacitors	2025	Applied Physics Letters (APL)	3.5	https://doi.org/10.1063/5.0252049
66	Jenitha Moses, Naveen T Bharanitharan, Tharani Selvam, Durgalakshmi Dhinasekaran, Ashwin Kishore Munusamy Rajendran, Balakumar Subramanian, Ajay Rakkesh Rajendran	Boosting Ion Transport Kinetics in Sulfolane-Modified Aqueous Electrolytes for High-Performance Zinc-Ion Batteries with V ₂ C MXene Cathodes	2025	Small Methods	10.7	https://doi.org/10.1002/smtd.202500028
67	Harini Loganathan, Durgalakshmi Dhinasekaran and Ajay Rakkesh Rajendran	Electrochemical Non-Enzymatic Biosensing of Cortisol Using ZnO-Graphene Nanocomposite	2025	Journal of The Electrochemical Society	3.1	10.1149/1945-7111/adb912
68	Batol Abbas, A.V. Ravindra	Nano UiO-66 and UiO-66-NH ₂ MOFs as Bifunctional Electrocatalysts for Water-Splitting: A Comparative Study	2025	Molecular Catalysis	3.9	https://doi.org/10.1016/j.mcat.2025.115025
69	Gone Rajender, Yuvashree Jayavelu, B. Leena, Kovendhan Manavalan, T. Venkatappa Rao, D. Paul Joseph	Interfacial bonding and efficient charge carrier separation in MgTiO ₃ nanoparticles decorated graphitic carbon nitride heterojunction and its impact on the enhanced visible light photocatalysis	2025	Journal of Alloys and Compounds	5.8	https://doi.org/10.1016/j.jallcom.2025.179982
70	Deepak Pandidurai, Raju Attada, Rohit Chakraborty, Amita Kumari, Prashant Kumar	Widespread monsoon extreme rainfall events over central Indian region: influence of dynamics and thermodynamics	2025	Climate Dynamics	3.8	http://dx.doi.org/10.1007/s00382-025-07641-8

71	Karolinekersin Enoch, and Anbumozhi Angayarkanni	Unravelling the rheological and multifunctionality of Justicia adhatoda-impregnated carboxymethyl cellulose hydrogels for drug delivery systems.	2025	International Journal of Biological Macromolecules	7.7	https://doi.org/10.1016/j.ijbiomac.2025.141419
72	Karolinekersin Enoch, and Anbumozhi Angayarkanni.	Development of Mn3O4 nanoparticles and Justicia adhatoda extract incorporated Carboxymethyl cellulose/Carbopol hydrogels: Rheological and in vitro bioactivity for sustained drug delivery system.	2025	International Journal of Biological Macromolecules	7.7	https://doi.org/10.1016/j.ijbiomac.2025.141713
73	M. Geerthana J. Archana E. Senthil Kumar M. Navaneethan	Unveiling the potential of copper-doped metal oxides: A novel strategy for high-capacity hybrid supercapatteries with enhanced power, energy density, and cycling stability	2025	International Journal of Hydrogen Energy	8.1	https://doi.org/10.1016/j.ijhydene.2025.03.134
74	P. Bharathi, Govind A Vangari, S. Harish, M. Krishna Mohan. J. Archana, M. Navaneethan	Layered MoS2/reduced graphene oxide hybrids for superior ambient NO2 sensing application	2025	Journal of Industrial and Engineering Chemistry	5.9	https://doi.org/10.1016/j.jiec.2025.03.045
75	R. Santhosh, Kamala Kannan, S. Harish, J. Archana, S. Ponnusamy, M. Navaneethan	Interface-driven energy filtering effect and enhanced thermoelectric performance of Ag2Se/SnS composites: An experimental and theoretical insights	2025	Journal of Colloid and Interface Science	9.4	https://doi.org/10.1016/j.jiec.2025.03.045

76	S. Karunakaran, V. Vijay, S. Harish, M. Navaneethan, J. Archana	Synergistic effect of mass and strain field phonon scattering in Bi and Sb co-doped Mg ₂ Si for thermoelectric applications	2025	Materials Science in Semiconductor Processing	4.2	https://doi.org/10.1016/j.mssp.2025.109452
77	S. Priyadharshini, V. Vijay, S. Kamalakannan, J. Archana, M. Navaneethan	Point defect scattering driven low lattice thermal conductivity in p-type Mg ₃ Sb ₂ for mid-temperature thermoelectric applications	2025	Surfaces and Interfaces	5.7	https://doi.org/10.1016/j.surfin.2025.106204
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