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**Monthly Bulletin of Publications:
Faculty, Scientists and Students of IISER Pune.
MAY 2024**

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Humanities and Social Sciences	9
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PATENT

Inventor(s) JAKHAR, NAVITA; SINGH, SURJEET
Title Method for Making High Figure-Ofmerit Nanostructured Thermoelectric Materials
Assignee Indian Institute of Science Education and Research Pune
Patent No. 535591
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8973>
Date of Publication 2024-04

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BIOLOGY

Journal Articles

Author(s) CHAKRABORTY, JOYEETA; Poddar, Sakshi; DUTTA, SOUMYAJIT; BAHULEKAR, VAISHNAVI; HARNE, SHRIKANT; Srinivasan, Ramanujam; GAYATHRI, PANANGHAT

Title Dynamics of interdomain rotation facilitates FtsZ filament assembly

Citation Journal of Biological Chemistry, 300(06), 107336.

Publisher Elsevier B.V.

URI <https://doi.org/10.1016/j.jbc.2024.107336>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8950>

Date of Publication 2024-06

Author(s) Ha, Joon; Chen, Phil; CHHABRA, AARYAN et al.

Title Estimating insulin sensitivity and B-cell function from the oral glucose tolerance test: validation of a new insulin sensitivity and secretion (ISS) model test: validation of a new insulin sensitivity and secretion (ISS) model

Citation American Journal of Physiology-Endocrinology and Metabolism, 326(04), E454-E471.

Publisher American Physiological Society

URI <https://doi.org/10.1152/ajpendo.00189.2023>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8965>

Date of Publication 2024-04

Author(s) KANYAL, ABHISHEK; DESHMUKH, BHAGYASHREE; Davies, Heledd; MAMATHARANI, D. V.; FARHEEN, DILSHA; Treeck, Moritz; KARMODIYA, KRISHANPAL

Title PfHDAC1 is an essential regulator of P. falciparum asexual proliferation and host cell invasion genes with a dynamic genomic occupancy responsive to artemisinin stress

Citation mBio.

Publisher American Society for Microbiology

URI <https://doi.org/10.1128/mbio.02377-23>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8956>

Date of Publication 2024-05

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Author(s) Malik, Sajad; Inamdar, Shrirang; Acharya, Jhankar; GOEL, PRANAY; Ghaskadbi, Saroj
Title Characterization of palmitic acid toxicity induced insulin resistance in HepG2 cells.
Citation Toxicology in Vitro, 97, 105802.
Publisher Elsevier B.V.
URI <https://doi.org/10.1016/j.tiv.2024.105802>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8966>
Date of Publication 2024-05

Author(s) Mote, Ridim D.; Tiwari, Mahak; Yadavalli, Narayana; RAJAN, RAGHAV; Subramanyam, Deepa
Title A high-throughput screen in mESCs to identify the cross-talk between signaling, endocytosis, and pluripotency
Citation Cell Biology International.
Publisher Wiley
URI <https://doi.org/10.1002/cbin.12168>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8967>
Date of Publication 2024-05

Author(s) NAG, SURYADEEPTO; BHAT, ANANDA SHIKHARA; Chakrabarty, Siddhartha P.
Title Studying the Age of Onset and Detection of Chronic Myeloid Leukemia Using a Three-Stage Stochastic Model
Citation Journal of Biological Systems, 32(02), 529-546.
Publisher World Scientific Publishing
URI <https://doi.org/10.1142/S0218339024500190>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8969>
Date of Publication 2024-06

Author(s) PRASAD, KALIKA; Palakodeti, Dasaradhi
Title Cellular and molecular mechanisms of development and regeneration
Citation Development, 151(11).
Publisher The Company of Biologists
URI <https://doi.org/10.1242/dev.203023>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8976>
Date of Publication 2024-06

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Author(s) Sagarkar, Sneha; Bhat, Nagashree; Rotti, Deepa; SUBHEDAR, NISHIKANT K.
Title AMPA and NMDA receptors in dentate gyrus mediate memory for sucrose in two port discrimination task
Citation Hippocampus
Publisher Wiley
URI <https://doi.org/10.1002/hipo.23609>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8955>
Date of Publication 2024-05

Author(s) TRIPATHI, SNEHA; GUPTA, EKTA; GALANDE, SANJEEV
Title Statins as anti-tumor agents: A paradigm for repurposed drugs
Citation Cancer Reports, 7(5).
Publisher Wiley
URI <https://doi.org/10.1002/cnr2.2078>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8958>
Date of Publication 2024-05

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CHEMISTRY

Journal Articles

Author(s) AKHTAR, RUKSANA; GAURAV, KUMAR; KHAN, SHABANA
Title Applications of low-valent compounds with heavy group-14 elements
Citation Chemical Society Reviews
Publisher Royal Society of Chemistry
URI <https://doi.org/10.1039/D4CS00101J>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8961>
Date of Publication 2024-05

Author(s) Gaikwad, Shrikrushna S.; WARULE, SAMBHAJI S.; More, Mahendra A.
Title Controlled growth of CuO nanowires on Cu grid via thermal oxidation process with enhanced field electron emission properties
Citation Journal of Materials Science: Materials in Electronics, 35(13)935.
Publisher Springer Nature
URI <https://doi.org/10.1007/s10854-024-12683-5>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8964>
Date of Publication 2024-05

Author(s) GAVHANE, UTRESHWAR ARJUN; JOSHI, DHEERAJ CHANDRA; JAYAKANNAN, MANICKAM
Title Size- and Shape-controlled Biodegradable Polymer Brushes Based on l-Amino Acid for Intracellular Drug Delivery and Deep-Tissue Penetration
Citation Biomacromolecules
Publisher American Chemical Society
URI <https://doi.org/10.1021/acs.biomac.4c00341>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8962>
Date of Publication 2024-05

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Author(s) Gulavani, Vaibhavi; KANADE, SANDEEP; Lokhande, Abhay; THOTIYL, MUSTHAFA OTTAKAM; John, Bibin| Yengantiwar, Ashish
Title Core Shell Structured Silica/Porous Carbon Composite as an Efficient Anode for Lithium Ion Batteries
Citation Energy Technology
Publisher Wiley
URI <https://doi.org/10.1002/ente.202400094>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8957>
Date of Publication 2024-05

Author(s) MEENA, NAMONARAYAN; SAHOO, SUPRIYA; DEKA, NILOTPAL; Zaręba, Jan K.; BOOMISHANKAR, RAMAMOORTHY
Title Ferroelectric Organic-Inorganic Hybrid Ammonium Halogenobismuthate(III) for Piezoelectric Energy Harvesting
Citation Inorganic Chemistry, 63(20), 9245-9251.
Publisher American Chemical Society
URI <https://doi.org/10.1021/acs.inorgchem.4c00908>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8959>
Date of Publication 2024-05

Author(s) ROY, SARUPA; Majee, Priyasha; Sudhakar, Sruthi; Mishra, Satyajit; Kalia, Jeet; Pradeepkumar, P. I.; SRIVATSAN, SEERGAZHI G.
Title Structural elucidation of HIV-1 G-quadruplexes in cellular environment and their ligand binding using responsive ¹⁹F-labeled nucleoside probes
Citation Chemical Science, 15(21), 7982-7991.
Publisher Royal Society of Chemistry
URI <https://doi.org/10.1039/D4SC01755B>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8949>
Date of Publication 2024-04

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Author(s) SHINGOTE, AJINKYA SUNDARNATH; DUTTA, TANIYA; RAJPUT, PARIKSHIT KUMAR; NAG, ANGSUMAN
Title Thermal Evolution of the Structure and Luminescence of the Hybrid-Cation-Stabilized [(4AMTP)PbBr₂]₂PbBr₄ Layered Perovskite
Citation Chemistry of Materials, 36(10), 5277-5283.
Publisher American Chemical Society
URI <https://doi.org/10.1021/acs.chemmater.4c00905>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8963>
Date of Publication 2024-05

Author(s) Tariq, Ayesha; Akram, Muhammad Zain; Ghouri, Muhammad Daniyal; Hussain, Sabir; KANADE, SANDEEP; Kale, Bharat B.;Gautam, Manu
Title Recent Progress on Boron-Doped Diamond Electrodes for Electrochemical CO₂ Reduction: A Mini-review
Citation Energy & Fuels
Publisher American Chemical Society
URI <https://doi.org/10.1021/acs.energyfuels.4c00410>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8974>
Date of Publication 2024-05

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HUMANITIES AND SOCIAL SCIENCES

Journal Articles

Author(s) Kaswan, Parveen; ROY, AKASHDEEP
Title Unearthing calf burials among Asian Elephants *Elephas maximus* Linnaeus, 1758 (Mammalia: Proboscidea: Elephantidae) in northern Bengal, India
Citation Journal of Threatened Taxa, 16(02).
Publisher Wildlife Information Liaison Development (WILD) Society
URI <https://doi.org/10.11609/jott.8826.16.2.24615-24629>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8960>
Date of Publication 2024-02

Author(s) NAG, SURYADEEPTO; BHAT, ANANDA SHIKHARA; Chakrabarty, Siddhartha P.
Title Studying the Age of Onset and Detection of Chronic Myeloid Leukemia Using a Three-Stage Stochastic Model
Citation Journal of Biological Systems, 32(02), 529-546.
Publisher World Scientific Publishing
URI <https://doi.org/10.1142/S0218339024500190>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8969>
Date of Publication 2024-06

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PHYSICS

Journal Articles

Author(s) ANANTH, SUDARSHAN; BHAVE, NIPUN; PANDEY, CHETAN; PANT, SAURABH
Title Deriving interaction vertices in higher derivative theories
Citation Physics Letters B, 853, 138704.
Publisher Elsevier B.V.
URI <https://doi.org/10.1016/j.physletb.2024.138704>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8953>
Date of Publication 2024-06

Author(s) DHAWAN, ABHINAV; BHATTACHARYAY, ARIJIT
Title Itô-distribution from Gibbs measure and a comparison with experiment
Citation Physica A: Statistical Mechanics and its Applications, 637, 129599.
Publisher Elsevier B.V.
URI <https://doi.org/10.1016/j.physa.2024.129599>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8721>
Date of Publication 2024-03

Author(s) Gattu, Mytraya; SREEJITH, G. J.; Jain, J. K.
Title Scanning tunneling microscopy of fractional quantum Hall states: Spectroscopy of composite-fermion bound states
Citation Physical Review B, 109(20), L201123.
Publisher American Physical Society
URI <https://doi.org/10.1103/PhysRevB.109.L201123>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8954>
Date of Publication 2024-05

Author(s) Henderson, Greg J.; SREEJITH, G. J.; Simon, Steven H.
Title Conformal field theory approach to parton fractional quantum Hall trial wave functions
Citation Physical Review B, 109(20), 205128.
Publisher American Physical Society
URI <https://doi.org/10.1103/PhysRevB.109.205128>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8952>
Date of Publication 2024-05

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Author(s) KUNDU, ASHIS; Chen, Yani; Yang, Xiaolong; Meng, Fanchen; Carrete, Jesus; KABIR, MUKUL; Madsen, Georg K. H.; Li, Wu
Title Electron-Induced Nonmonotonic Pressure Dependence of the Lattice Thermal Conductivity of θ -TaN
Citation Physical Review Letters, 132(11), 116301.
Publisher American Physical Society
URI <https://doi.org/10.1103/PhysRevLett.132.116301>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8971>
Date of Publication 2024-03

Author(s) Rosalin, M.; TELANG, PRACHI; SINGH, SURJEET; Muthu, D. V. S.; Sood, A. K.
Title Magnon excitation and spin-phonon coupling in $A_2Ir_2O_7$ ($A=Gd, Dy, \text{ and } Er$)
Citation Physical Review B, 109(18), 184434.
Publisher American Physical Society
URI <https://doi.org/10.1103/PhysRevB.109.184434>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8975>
Date of Publication 2024-05

Author(s) SHENOY, VARNA; NAIK, VIGHNESH DATTATRAYA; Li, Weibin; NATH, REJISH
Title Benchmarking discrete truncated Wigner approximation and neural network quantum states with the exact dynamics in a Rydberg atomic chain
Citation Physica Scripta, 99(06).
Publisher IOP Publishing Ltd.
URI <https://doi.org/10.1088/1402-4896/ad3d9d>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8951>
Date of Publication 2024-06

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