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

Inventor(s) BRITTO, SANDANARAJ S.; REDDY, MULLAPUDI MOHAN
Title Method for Synthesis of Protein Amphiphiles
Assignee Indian Institute of Science Education and Research Pune
Patent No. 493837
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8560>
Date of Publication 2024-01

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BIOLOGY

Journal Articles

Author(s) MOHANASUNDARAM, BOOMINATHAN; PALIT, SHIRSA; BHIDE, AMEY J.; PALA, MADHUSMITA; RAJORIA, KANISHKA; GIRIGOSAVI, PAYAL; BANERJEE, ANJAN K.

Title PpSCARECROW1 (PpSCR1) regulates leaf blade and mid-vein development in *Physcomitrium patens*

Citation Plant Molecular Biology, 114, 12.

Publisher Springer Nature

URI <https://doi.org/10.1007/s11103-023-01398-6>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8487>

Date of Publication 2024.02

Author(s) MONDAL, ABHISHEK; SIWACH, MANISHA; AHMAD, MANZOOR; RADHAKRISHNAN, SUNISH KUMAR; TALUKDAR, PINAKI

Title Pyridyl-Linked Hetero Hydrazones: Transmembrane H⁺/Cl⁻ Symporters with Efficient Antibacterial Activity

Citation ACS Infectious Diseases, 10(02), 371-376.

Publisher American Chemical Society

URI <https://doi.org/10.1021/acsinfecdis.3c00455>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8565>

Date of Publication 2024-02

Author(s) Oza, Chirantap; GOEL, PRANAY et al.

Title Utility of BoneXpert in assessing bone age and bone health in Indian children and youth with type 1 diabetes mellitus

Citation Bone, 178, 116952.

Publisher Elsevier B.V.

URI <https://doi.org/10.1016/j.bone.2023.116952>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8484>

Date of Publication 2024-01

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Author(s) Rajabhoj, Mohit P.; Sankar, Sudev; Bondada, Ramesh; SHANMUKHAN, ANJU P.; PRASAD, KALIKA; Maruthachalam, Ravi

Title Gametophytic epigenetic regulators, MEDEA and DEMETER, synergistically suppress ectopic shoot formation in Arabidopsis

Citation Plant Cell Reports, 43(68).

Publisher Springer Nature

URI <https://doi.org/10.1007/s00299-024-03159-1>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8489>

Date of Publication 2024-02

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CHEMISTRY

Journal Articles

Author(s) HASSAN, NAHID; Nagaraja, Suneetha; SAHA, SAUVIK; Tarafder, Kartick; BALLAV, NIRMALYA

Title Excitonic cuprophilic interactions in one-dimensional hybrid organic-inorganic crystals

Citation Chemical Science

Publisher Royal Society of Chemistry

URI <https://doi.org/10.1039/D3SC06255D>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8566>

Date of Publication 2024-02

Author(s) MONDAL, ABHISHEK; SIWACH, MANISHA; AHMAD, MANZOOR; RADHAKRISHNAN, SUNISH KUMAR; TALUKDAR, PINAKI

Title Pyridyl-Linked Hetero Hydrazones: Transmembrane H⁺/Cl⁻ Symporters with Efficient Antibacterial Activity

Citation ACS Infectious Diseases, 10(02), 371-376.

Publisher American Chemical Society

URI <https://doi.org/10.1021/acsinfecdis.3c00455>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8565>

Date of Publication 2024-02

Author(s) NAYAK, BHOJKUMAR; THODIKA ABDUL RAAFIK ARATTU; KUMAR, HITESH; THIMMAPPA, RAVIKUMAR; THOTIYL, MUSTHAFA OTTAKAM

Title Directional molecular transport in iron redox flow batteries by interfacial electrostatic forces

Citation Journal of Colloid and Interface Science, 662, 289-297.

Publisher Elsevier B.V.

URI <https://doi.org/10.1016/j.jcis.2024.02.074>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8488>

Date of Publication 2024-05

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Author(s) SUTAR, DASHRAT V.; SWAMI, GOURISHANKAR B.; JAMDADE, AKASH B.; GNANAPRAKASAM, BOOPATHY

Title Direct Intramolecular Coupling of Primary/Secondary Alcohols with Secondary Alcohols for Macrocyclic Alkenylation Using Ni-Zeolite Catalyst Under Continuous-Flow Conditions

Citation Advanced Synthesis & Catalysis.

Publisher Wiley

URI <https://doi.org/10.1002/adsc.202301195>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8555>

Date of Publication 2024-01

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EARTH AND CLIMATE SCIENCE

Author(s) SHREYA, K.; ETTAMMAL, SUHAS

Title A survey of westward-propagating mixed Rossby-Gravity waves and quantification of their association with extratropical disturbances

Citation Quarterly Journal of the Royal Meteorological Society

Publisher Wiley

URI <https://doi.org/10.1002/qj.4668>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8564>

Date of Publication 2024-02

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MATHEMATICS

Journal Articles

Author(s) Balodi, Mamta; Banerjee, Abhishek; RAY, SAMARPITA
Title Categories of modules, comodules and contramodules over representations
Citation Forum Mathematicum, 36(01).
Publisher Walter de Gruyter
URI <https://doi.org/10.1515/forum-2023-0043>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8485>
Date of Publication 2024-01

Author(s) MALLICK, VIVEK MOHAN; ROY, KARTIK
Title Comparing two Proj-like constructions on toric varieties
Citation Journal of Pure and Applied Algebra, 228(04), 107521.
Publisher Elsevier B.V.
URI <https://doi.org/10.1016/j.jpaa.2023.107521>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8486>
Date of Publication 2024-04

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PHYSICS

Journal Articles

Author(s) AAKASH; BHATTACHARYAY, ARIJIT
Title Room temperature flashing Ratcheting in nano-channels
Citation Physica A: Statistical Mechanics and its Applications, 622, 128889.
Publisher Elsevier B.V.
URI <https://doi.org/10.1016/j.physa.2023.128889>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8556>
Date of Publication 2023-07

Author(s) ANANTH, SUDARSHAN; PANDEY, CHETAN; PANT, SAURABH
Title Soft Factors and Interaction Vertices from Light-Cone Actions
Citation Fortschritte der Physik - Progress of Physics
Publisher Wiley
URI <https://doi.org/10.1002/prop.202300182>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8554>
Date of Publication 2024-02

Author(s) Baxter, Eric J.; Pandey, Shivam; ADHIKARI, SUSMITA; Cui, Weiguang; Shin, Tae-hyeon; Li, Qingyang; Rasia, Elena
Title The impact of halo concentration on the Sunyaev Zel'dovich effect signal from massive galaxy clusters
Citation Monthly Notices of the Royal Astronomical Society, 527(03), 7847-7860.
Publisher Oxford University Press
URI <https://doi.org/10.1093/mnras/stad3704>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8567>
Date of Publication 2024-01

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Author(s) CMS Collaboration; Tumasyan, A.; ALPANA, A.; DUBE, SOURABH; KANSAL, B.; LAHA, A.; PANDEY, S.; RASTOGI, A.; SHARMA, SEEMA et al.

Title Performance of the local reconstruction algorithms for the CMS hadron calorimeter with Run 2 data

Citation Journal of Instrumentation, 18(11).

Publisher IOP Publishing

URI <https://doi.org/10.1088/1748-0221/18/11/P11017>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8568>

Date of Publication 2023-11

Author(s) CMS Collaboration; Tumasyan, A.; DUBE, SOURABH; KANSAL, B.; PANDEY, S.; RANE, A.; RASTOGI, A.; SHARMA, SEEMA et al.

Title Azimuthal Correlations within Exclusive Dijets with Large Momentum Transfer in Photon-Lead Collisions

Citation Physical Review Letter, 131(05), 051901.

Publisher American Physical Society

URI <https://doi.org/10.1103/PhysRevLett.131.051901>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8563>

Date of Publication 2023-08

Author(s) KUMAR, ARUN; Manuel, Pascal; NAIR, SUNIL

Title Successive magnetic phase transitions with magnetoelastic and magnetodielectric coupling in the ordered triple perovskite $\text{Sr}_3\text{CaRu}_2\text{O}_9$

Citation Physical Review Materials, 8(02), 024405.

Publisher American Physical Society

URI <https://doi.org/10.1103/PhysRevMaterials.8.024405>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8553>

Date of Publication 2024-02

Author(s) Paul, Suvodeep; PISTAWALA, NASHRA; HARNAGEA, LUMINITA et al.

Title Tuning the robust magnetic properties in MPS_3 ($M = \text{Mn}, \text{Fe}, \text{and Ni}$) by proximity-induced Dzyaloshinskii-Moriya interactions

Citation Physical Review B, 109(08), 085136.

Publisher American Physical Society

URI <https://doi.org/10.1103/PhysRevB.109.085136>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8570>

Date of Publication 2024-02

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Author(s) PISTAWALA, NASHRA; KUMAR, ANKIT; ROUT, DIBYATA; HARNAGEA, LUMINITA; SINGH, SURJEET
Title Single Crystal Growth and Properties of 2D Antiferromagnet $Ni_{1-x}Zn_xPS_3$
Citation New Physics: Sae Mulli, 73, 1140-1144.
Publisher New Physics: Sae Mulli
URI <https://doi.org/10.3938/NPSM.73.1140>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8569>
Date of Publication 2023-12

Author(s) Sen, Sanket; MANDAL, S.; SEN, ARNAB et al.
Title Electron and ion spectroscopy of camphor doped helium nanodroplets in the extreme UV and soft x-ray regime
Citation Journal of Physics B: Atomic, Molecular and Optical Physics, 57(01).
Publisher IOP Publishing
URI <https://doi.org/10.1088/1361-6455/ad1d37>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/8557>
Date of Publication 2024-01

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