



SRINIVASA RAMANUJAN LIBRARY
Indian Institute of Science Education and Research Pune
Dr. Homi Bhabha Road, Pune - 411008. India.
e-mail: libraryservices@iiserpune.ac.in

**Monthly Bulletin of Publications:
Faculty, Scientists and Students of IISER Pune.
APRIL 2023**

Contents

Department	Page No.
<u>Biology</u>	2
<u>Chemistry</u>	4
<u>Earth and Climate Science</u>	7
<u>Humanities and Social Sciences</u>	8
<u>Mathematics</u>	9
<u>Physics</u>	10

BIOLOGY

Book Chapter

Author(s) SEN, SUCHARITA; DODAMANI, ANANYA; NAMBIAR, MRIDULA
Title Emerging mechanisms and roles of meiotic crossover repression at centromeres
Citation Current Topics in Developmental Biology, 151, 155-190.
Publisher Elsevier B.V.
URI <https://doi.org/10.1016/bs.ctdb.2022.06.003>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7749>
Date of Publication 2023-01

Journal Articles

Author(s) AITHAL, ANURAAG; Samuel, Jibin J.; Bandyopadhyay, Arka; Karrothu, Varun Kumar; Gangadharappa, Chandrasekhar; Patil, Satish; Narayan, Awadhesh; Aetukuri, Naga Phani B.
Title Extended Conjugation Acceptors Increase Specific Energy Densities in π -Conjugated Redox Polymers
Citation Journal of Physical Chemistry C, 127(11), 5238-5245.
Publisher American Chemical Society
URI <https://doi.org/10.1021/acs.jpcc.3c00385>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7706>
Date of Publication 2023-03

Author(s) CHHAYA, VAIBHAV; Reddy, Sushma; Krishnan, Anand
Title Bill shape imposes biomechanical tradeoffs in cavity-excavating birds
Citation Proceedings of the Royal Society B, 290(1995).
Publisher The Royal Society
URI <https://doi.org/10.1098/rspb.2022.2395>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7786>
Date of Publication 2023-03

[Go to top](#)

Author(s) KUTTANAMKUZHI, ABHIJITH; PANDA, DEBIPRASAD; MALAVIYA, RADHIKA; GAIDHANI, GAUTAMI; LAHIRI, MAYURIKA
Title Altered expression of anti-apoptotic protein Api5 affects breast tumorigenesis
Citation BMC Cancer, 23, 374.
Publisher BioMed Central Ltd.
URI <https://doi.org/10.1186/s12885-023-10866-7>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7788>
Date of Publication 2023-04

Author(s) MADATHIL, ARJUN KOLAPPURATH; Ghaskadbi, Saroj; Kalamkar, Saurabh; GOEL, PRANAY
Title Pune GSH supplementation study: Analyzing longitudinal changes in type 2 diabetic patients using linear mixed-effects models
Citation Frontiers in Pharmacology, 14.
Publisher Frontiers Media S.A.
URI <https://doi.org/10.3389/fphar.2023.1139673>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7723>
Date of Publication 2023-04

[Go to top](#)

CHEMISTRY

Journal Articles

Author(s) Alshanski, Israel; TORASKAR, SURAJ; Shitrit, Ariel; Gordon-Levitan, Daniel; JAIN, PRASHANT; KIKKERI, RAGHAVENDRA; Hurevich, Mattan; Yitzchaik, Shlomo

Title Biocatalysis versus Molecular Recognition in Sialoside-Selective Neuraminidase Biosensing

Citation ACS Chemical Biology, 18(3), 605-614.

Publisher American Chemical Society

URI <https://doi.org/10.1021/acscchembio.2c00913>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7718>

Date of Publication 2023-03

Author(s) DHANKHAR, ANKIT; JAIN, VANSHIKA; CHAKRABORTY, INDRA NARAYAN; PILLAI, PRAMOD P.

Title Enhancing the photocatalytic regeneration of nicotinamide cofactors with surface engineered plasmonic antenna-reactor system

Citation Journal of Photochemistry and Photobiology A: Chemistry, 437, 114472.

Publisher Elsevier B.V.

URI <https://doi.org/10.1016/j.jphotochem.2022.114472>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7712>

Date of Publication 2023-03

Author(s) JAIN, VANSHIKA; CHAKRABORTY, INDRA NARAYAN; RAJ, ROHIT B.; PILLAI, PRAMOD P.

Title Deciphering the Role of Light Excitation Attributes in Plasmonic Photocatalysis: The Case of Nicotinamide Cofactor Regeneration

Citation Journal of Physical Chemistry C, 127(10), 5153-5161.

Publisher American Chemical Society

URI <https://doi.org/10.1021/acs.jpcc.2c08678>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7708>

Date of Publication 2023-03

[Go to top](#)

Author(s) Kamble, Ganesh N.; JOSHI, DHEERAJ CHANDRA; Asha, S. K.
Title Design and synthesis of photocrosslinker and light blocker based on L-Amino acid polyester and their application in solvent-free resin formulation for DLP/SLA 3D printing
Citation Polymer, 270, 125781.
Publisher Elsevier B.V.
URI <https://doi.org/10.1016/j.polymer.2023.125781>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7719>
Date of Publication 2023-03

Author(s) MUKHERJEE, UTTAMA; PRAKASH, PRABHAT; VENKATNATHAN, ARUN
Title Theoretical Assessment of Carbon Dioxide Reactivity in Methylpiperidines: A Conformational Investigation
Citation Journal of Physical Chemistry A, 127(14), 3123-3132.
Publisher American Chemical Society
URI <https://doi.org/10.1021/acs.jpca.3c00406>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7702>
Date of Publication 2023-04

Author(s) PRAKASH, PRABHAT; Fall, Birane; Aguirre, Jordan; Sonnenberg, Laura A.; Chinnam, Parameswara Rao; Chereddy, Sumanth; Dikin, Dmitriy A.; VENKATNATHAN, ARUN; Wunder, Stephanie L.; Zdilla, Michael J.
Title A soft co-crystalline solid electrolyte for lithium-ion batteries
Citation Nature Materials.
Publisher Springer Nature
URI <https://doi.org/10.1038/s41563-023-01508-1>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7703>
Date of Publication 2023-04

Author(s) Rawat, Shivam; Boobalan, T.; Sathish, M.; HOTHAN, SRINIVAS; Thallada, Bhaskar
Title Utilization of CO₂ activated litchi seed biochar for the fabrication of supercapacitor electrodes
Citation Biomass and Bioenergy, 171, 106747.
Publisher Elsevier B.V.
URI <https://doi.org/10.1016/j.biombioe.2023.106747>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7716>
Date of Publication 2023-04

[Go to top](#)

Author(s) Umar, Ahmed; THOTIYL, MUSTHAFA OTTAKAM
Title Perovskite modified catalysts with improved coke resistance for steam reforming of glycerol to renewable hydrogen fuel
Citation Global Change Biology Bioenergy.
Publisher Wiley
URI <https://doi.org/10.1111/gcbb.13050>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7720>
Date of Publication 2023-03

[Go to top](#)

EARTH AND CLIMATE SCIENCE

Journal Articles

Author(s) DATTA, ARJUN; Shekar, Bharath; KUMAR, PUSHUP L.
Title Acoustic full waveform inversion for 2-D ambient noise source imaging
Citation Geophysical Journal International, 234(3), 1628-1639.
Publisher Oxford University Press
URI <https://doi.org/10.1093/gji/ggad158>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7725>
Date of Publication 2023-04

Author(s) Mandal, Prantik; Prathigadapa, Raju; Srinivas, D.; Saha, Satish; SAHA, GOKUL
Title Evidence of structural segmentation of the Uttarakhand Himalaya and its implications for earthquake hazard
Citation Scientific reports, 13, 2079.
Publisher Springer Nature
URI <https://doi.org/10.1038/s41598-023-29432-z>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7787>
Date of Publication 2023-02

[Go to top](#)

HUMANITIES AND SOCIAL SCIENCES

Popular Article

Author(s)	SANCHETI, POOJA
Title	Tasveeren
Citation	Hans, 3, 52-57.
Publisher	Akshar Prakashan Pvt. Ltd.
Description	Translation into Hindi of Kunzang Choden's short story in English titled 'The Photographs'.
DR URI	http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7696
Date of Publication	2023-03

[Go to top](#)

MATHEMATICS

Journal Articles

Author(s) Krithika, R.; Misra , Pranabendu; TALE, PRAFULLKUMAR
Title A single exponential-time FPT algorithm for cactus contraction
Citation Theoretical Computer Science, 954, 113803.
Publisher Elsevier B.V.
URI <https://doi.org/10.1016/j.tcs.2023.113803>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7715>
Date of Publication 2023-04

Author(s) Kundu, Rijubrata; Naik, Tushar Kanta; SINGH, ANUPAM
Title Nilpotent Lie algebras of breadth type (0,3)
Citation Communications in Algebra.
Publisher Taylor & Francis
URI <https://doi.org/10.1080/00927872.2023.2188416>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7721>
Date of Publication 2023-03

Author(s) Lima, Paloma T.; Santos, Vinicius F. dos; Sau, Ignasi; Souza, Uéverton S.; TALE, PRAFULLKUMAR
Title Reducing the vertex cover number via edge contractions
Citation Journal of Computer and System Sciences, 136, 63-87.
Publisher Elsevier B.V.
URI <https://doi.org/10.1016/j.jcss.2023.03.003>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7709>
Date of Publication 2023-09

Author(s) MANDAL, SHEIKH PARVEZ; Ghoshal, Ahana; Srivastava, Chirag; Sen, Ujjwal
Title Invariance of success probability in Grover's quantum search under local noise with memory
Citation Physical Review A, 107(2), 022427.
Publisher American Physical Society
URI <https://doi.org/10.1103/PhysRevA.107.022427>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7717>
Date of Publication 2023-02

[Go to top](#)

PHYSICS

Journal Articles

Author(s) CHAKRAVARTY, SHRUTI; Fjellvåg, Øystein Slagtern; Bhattacharyya, Arpan; Lukas, Keller; NAIR, SUNIL

Title Disorder-driven cluster glass state in a geometrically frustrated hexagonal perovskite

Citation Physical Review B, 107(13), 134414.

Publisher American Physical Society

URI <https://doi.org/10.1103/PhysRevB.107.134414>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7785>

Date of Publication 2023-04

Author(s) Das, Arpit; Gowdigere, Chethan N. N.; MUKHI, SUNIL

Title Meromorphic cosets and the classification of three-character CFT

Citation Journal of High Energy Physics, 2023(03), 23.

Publisher Springer Nature

URI [https://doi.org/10.1007/JHEP03\(2023\)023](https://doi.org/10.1007/JHEP03(2023)023)

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7704>

Date of Publication 2023-03

Author(s) Deshmukh, Akshaya Pisal; Patil, Kalyanee; OGALE, SATISHCHANDRA; Bhave, Tejashree

Title Resistive Switching in CsPbBr₃ (0D)/MoS₂ (2D) Heterojunction System: Trap-Controlled Space Charge Limited Transport Mechanism

Citation ACS Applied Electronic Materials, 5(3), 1536-1545.

Publisher American Chemical Society

URI <https://doi.org/10.1021/acsaelm.2c01590>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7707>

Date of Publication 2023-03

[Go to top](#)

Author(s) JAKHAR, NAVITA; KEDIA, DINESH KUMAR; KUMAR, ANKIT; KUMAR, SAURABH; SINGH, SURJEET
Title Reproducible high thermoelectric figure of merit in Ag₂Se
Citation Applied Physics Letters, 122(16).
Publisher AIP Publishing
URI <https://doi.org/10.1063/5.0143678>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7724>
Date of Publication 2023-04

Author(s) Kowalczyk, Hugo; Biscaras, Johan; PISTAWALA, NASHRA; HARNAGEA, LUMINITA; SINGH, SURJEET; Shukla, Abhay
Title Gate and Temperature Driven Phase Transitions in Few-Layer MoTe₂
Citation ACS Nano, 17(7), 6708-6718.
Publisher American Chemical Society
URI <https://doi.org/10.1021/acsnano.2c12610>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7710>
Date of Publication 2023-04

Author(s) MEHTA, ABHISHEK
Title Gateway-like absurdly benign traversable wormhole solutions
Citation Theoretical and Mathematical Physics, 214, 106-120.
Publisher Springer Nature
URI <https://doi.org/10.1134/S0040577923010063>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7705>
Date of Publication 2023-03

Author(s) Nadler, Ethan O.; BANERJEE, ARKA et al.
Title Symphony: Cosmological Zoom-in Simulation Suites over Four Decades of Host Halo Mass
Citation Astrophysical Journal, 945(2).
Publisher IOP Publishing
URI <https://doi.org/10.3847/1538-4357/acb68c>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7714>
Date of Publication 2023-03

[Go to top](#)

Author(s) SHUKLA, ASHUTOSH; TIWARI, SUNNY; Majumdar, Ayan; Saha, Kasturi; KUMAR, G. V. PAVAN
Title Opto-thermoelectric trapping of Fluorescent Nanodiamonds on Plasmonic Nanostructures
Citation Optics Letters.
Publisher Optica Publishing Group
URI <https://doi.org/10.1364/OL.491431>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7790>
Date of Publication 2023-04

Author(s) UPALE, PRERNA; VERMA, SEEMA; OGALE, SATISHCHANDRA
Title Superior oxygen evolution reaction performance of NiCoFe spinel oxide nanowires in situ grown on β -Ni(OH)₂ nanosheet-decorated Ni foam: case studies on stoichiometric and off-stoichiometric oxides
Citation Journal of Materials Chemistry A, 11(16), 8972-8987.
Publisher Elsevier B.V.
URI <https://doi.org/10.1039/D2TA08994G>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7789>
Date of Publication 2023-04

Author(s) VARGHESE, DHIYA; Wüster, Sebastian; Li, Weibin; NATH, REJISH
Title Maximally entangled Rydberg-atom pairs via Landau-Zener sweeps
Citation Physical Review A, 107(4), 043311.
Publisher American Physical Society
URI <https://doi.org/10.1103/PhysRevA.107.043311>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7711>
Date of Publication 2023-04

[Go to top](#)
