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September 2025**



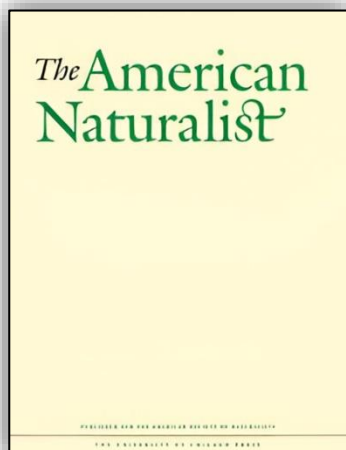
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BIOLOGY

Journal Articles



Author(s): ATHREYA, GAURAV S.; Czuppon, Peter; Gokhale, Chaitanya S.

Title: The Evolution of Dependence and Cohesion in Incipient Endosymbioses

Citation: American Naturalist

Publisher: University of Chicago Press

URI: <https://doi.org/10.1086/737588>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10434>

Publication Date: 2025-09



Author(s): Drnovsek, Eva; ABRAHAM, NIXON M.; ABRAHAM, JANCY N.; RAWAT, DEVESH et al.

Title: Demographic and geographical determinants of human olfactory perception of 909 individuals inhabiting 16 regions

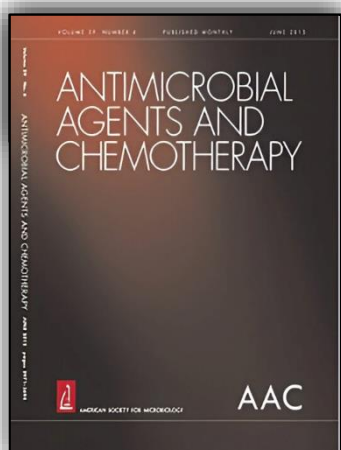
Citation: iScience, 113455.

Publisher: Elsevier B.V.

URI: <https://doi.org/10.1016/j.isci.2025.113455>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10427>

Publication Date: 2025-09



Author(s): Junaid, Iqbal Taliy; MRIDHA, SAPTARSHI; KARMODIYA, KRISHANPAL et al.

Title: Role of novel mutations in food vacuole transporters beyond K13-mediated artemisinin resistance in Plasmodium falciparum

Citation: Antimicrobial Agents and Chemotherapy.

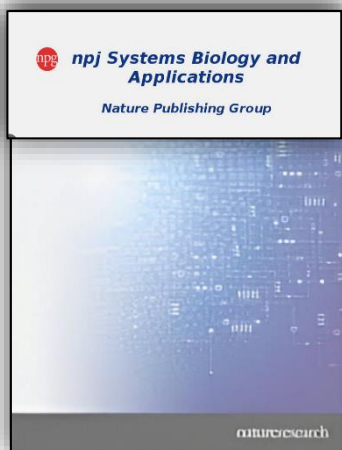
Publisher: American Society for Microbiology

URI: <https://doi.org/10.1128/aac.00293-25>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10441>

Publication Date: 2025-09

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Author(s): KHATRI, DHRUV; NEGI, PRACHI; ATHALE, CHAITANYA A.

Title: Classification of first embryonic division stages of multiple *Caenorhabditis* species by deep learning

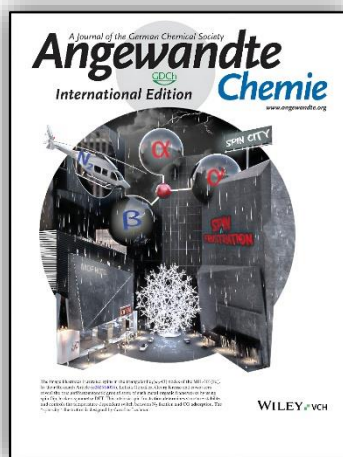
Citation: npj Systems Biology and Applications, 11, 97.

Publisher: Springer Nature

URI: <https://doi.org/10.1038/s41540-025-00566-2>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10397>

Publication Date: 2025-08



Author(s): MONDAL, ABHISHEK; KUTTANAMKUZHI, ABHIJITH; SHIVPUJE, UMESH; LAHIRI, MAYURIKA; TALUKDAR, PINAKI et al.

Title: Pyrrole-Linked Benzimidazolyl Hydrazone Self-Assembly Forms HCl Channels and Induces Apoptosis in Cancer Cells

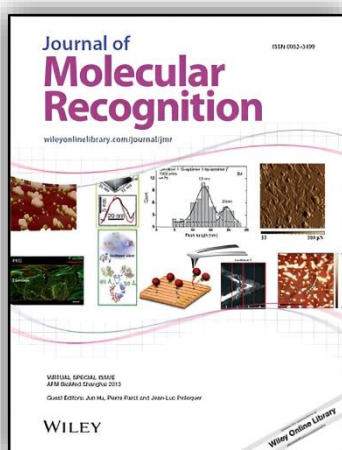
Citation: Angewandte Chemie International Edition

Publisher: Wiley

URI: <https://doi.org/10.1002/anie.202505019>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10398>

Publication Date: 2025-08



Author(s): PURI, SARITA; CHAUDHARY, ISHAAN; KHATRI, ARNAV; PATEL, BASUDHA; Kumawat, Amit; PALKAR, SHARVARI; Das, Gourab; Venkatraman, Prasanna

Title: Conformational Landscape of AlphaFold2-Predicted Amyloidogenic Light Chains and Their Correlation With VL Domain Mutations and Aggregation Propensity

Citation: Journal of Molecular Recognition, 38(05).

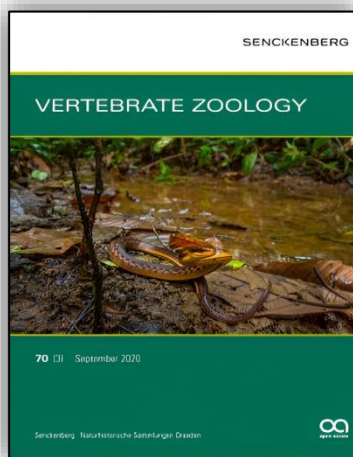
Publisher: Wiley

URI: <https://doi.org/10.1002/jmr.70011>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10404>

Publication Date: 2025-09

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Author(s): Raghavan, Rajeev; DHARMARAJAN, NITHINRAJ PANANGATTU et al.

Title: Phreatic mysteries: Diversity and distribution of fossorial and aquifer-dwelling synbranchid eels of southern peninsular India, and implications for conservation (Pisces: Synbranchiformes: Synbranchidae)

Citation: Vertebrate Zoology, 75, 245-258.

Publisher: Senckenberg Gesellschaft für Naturforschung

URI: <https://doi.org/10.3897/vz.75.e155717>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10435>

Publication Date: 2025-08



Author(s): Walvekar, Ankita; Pandey, Shivangi; KAMAT, SIDDHESH S.; Ladher, Raj K.; Vyas, Neha

Title: The patterning and proliferation roles of Shh are partitioned on distinct exosomes

Citation: Developmental Biology, 528, 239-254.

Publisher: Elsevier B.V.

URI: <https://doi.org/10.1016/j.ydbio.2025.09.017>

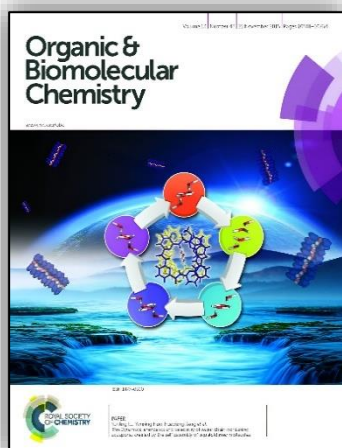
DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10433>

Publication Date: 2025-12

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CHEMISTRY

Journal Articles



Author(s): Chaudhari, Suryakant S.; Nichinde, Chandrakant B.; Patil, Baliram R.; Girase, Amardipsing S.; KAULAGE, SANDEEP H.; Kinage, Anil K.

Title: Rongalite-promoted self-dimerization of 3-acylidene-2-oxindoles: a diastereoselective route to synthesis of bispirooxindoles

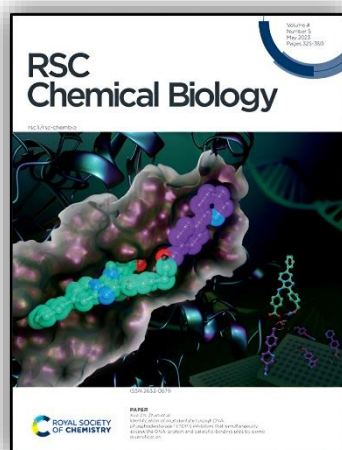
Citation: Organic and Biomolecular Chemistry.

Publisher: Royal Society of Chemistry

URI: <https://doi.org/10.1039/D5OB01069A>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10416>

Publication Date: 2025-09



Author(s): MAHIDA, VIRENDRASINH; RAIGAWALI, RAKESH; González, Paula; Gimeno, Ana; Leviatan Ben-Arye, Shani; ANAND, SAURABH; MARDHEKAR, SANDHYA; Jiménez-Barbero, Jesús; Padler-Karavani, Vered; KIKKERI, RAGHAVENDRA

Title: Unravelling structure-function interactions between fluorinated heparan sulfate mimetics and signaling proteins

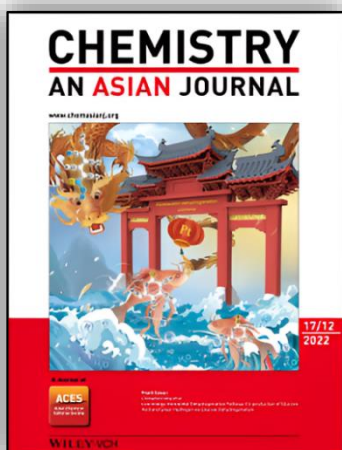
Citation: RSC Chemical Biology, 6(09), 1465-1472.

Publisher: Royal Society of Chemistry

URI: <https://doi.org/10.1039/D5CB00174A>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10408>

Publication Date: 2025-09



Author(s): MEHER, KAJAL B.; BANKAR, ONKAR S.; MUKHERJEE, HRISHIK; BHAT, RAMAKRISHNA G.

Title: Oxonium/Sulfonium Ylide Rearrangements to Access Chromenes and Thiochromenes: Concerted or Stepwise Pathway?

Citation: Chemistry - An Asian Journal

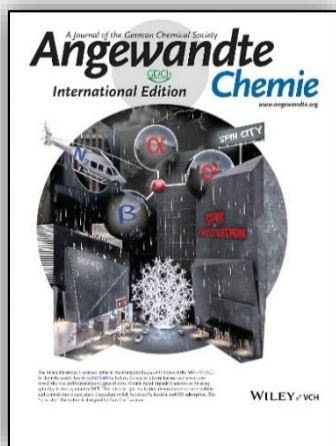
Publisher: Wiley

URI: <https://doi.org/10.1002/asia.202500702>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10399>

Publication Date: 2025-08

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Author(s): MONDAL, ABHISHEK; KUTTANAMKUZHI, ABHIJITH; SHIVPUJE, UMESH; LAHIRI, MAYURIKA; TALUKDAR, PINAKI et al.

Title: Pyrrole-Linked Benzimidazolyl Hydrazone Self-Assembly Forms HCl Channels and Induces Apoptosis in Cancer Cells

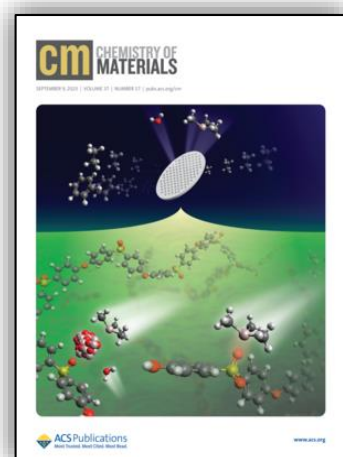
Citation: Angewandte Chemie International Edition

Publisher: Wiley

URI: <https://doi.org/10.1002/anie.202505019>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10398>

Publication Date: 2025-08



Author(s): MUKHOPADHYAY, SANCHAYITA; Kotresh, Harish Makri Nimbegondi; THOTIYL, MUSTHAFA OTTAKAM

Title: Ligand Isomerism-Assisted Electrochemical Process Modulation

Citation: Chemistry of Materials.

Publisher: American Chemical Society

URI: <https://doi.org/10.1021/acs.chemmater.5c01292>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10419>

Publication Date: 2025-09



Author(s): PATRA, SIMA; DAS, SUBRATA; NANDI, SOUVIK; Khatua, Hillol; CHATTOPADHYAY, BUDDHADEB

Title: Catalyst-Enabled Chemoselective Metalloradical Activation for Molecular Rearrangement via Ester Migration and Allylic C(sp³)-H Amination

Citation: Journal of the American Chemical Society, 147(34), 30582-30590.

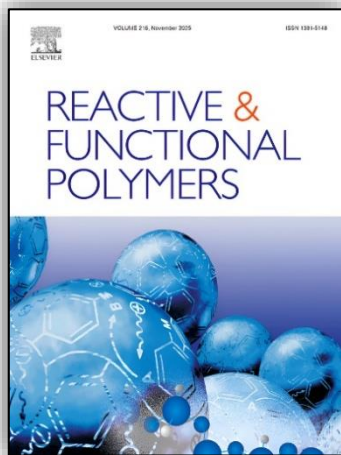
Publisher: American Chemical Society

URI: <https://doi.org/10.1021/jacs.5c07955>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10407>

Publication Date: 2025-08

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Author(s): Verma, Ankit; NAYAK, BHOJKUMAR; Jaiswal, Pradumn; Sahay, Suhag S.; Bhagat, Shivani; Pratap, Umesh R.

Title: Advanced palladium-hybrid covalent organic framework: A highly efficient catalyst for sustainable Cascade synthesis of Chromeno[2,3-d] Pyrimidine-8-amines

Citation: Reactive and Functional Polymers, 216, 106424.

Publisher: Elsevier B.V.

URI: <https://doi.org/10.1016/j.reactfunctpolym.2025.106424>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10400>

Publication Date: 2025-11

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EARTH AND CLIMATE SCIENCE

Journal Articles



Author(s): SHARMA, RASHI; DEHIYA, RAHUL; SARKAR, SUDIPTA; Duraiswami, Raymond

Title: Seismic characterization of lava flow facies in the critical zone of the deccan traps using shear wave velocity models

Citation: Scientific Reports, 15, 28091.

Publisher: Springer Nature

URI: <https://doi.org/10.1038/s41598-025-13638-4>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10423>

Publication Date: 2025-08



Author(s): VENUGOPAL, ACHYUTH; TRIPATHY, GYANA RANJAN; Goswami, Vineet; Khan, Tavheed; Ackerman, Lukas

Title: Unravelling the extent of ocean euxinia during the late Paleoproterozoic: Constraints from Re-Os and Mo isotopes

Citation: Geochimica et Cosmochimica Acta, 407, 158-173.

Publisher: Elsevier B.V.

URI: <https://doi.org/10.1016/j.gca.2025.09.013>

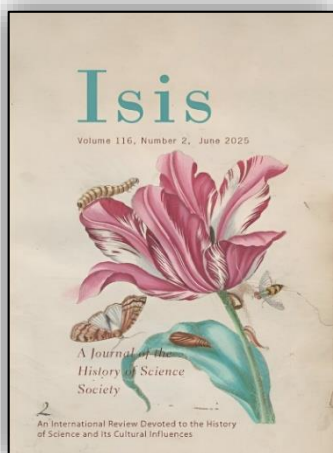
DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10428>

Publication Date: 2025-10

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HUMANITIES AND SOCIAL SCIENCES

Book Review



Author(s): SOHONI, PUSHKAR

Title: Marcia Stephenson. Llamas Beyond the Andes: Untold Histories of Camelids in the Modern World. 448 pp., illus., photos, map, notes, bibl., index. Austin: University of Texas Press, 2023. \$45 (cloth); ISBN 9781477328408.

Citation: Isis, 116(02).

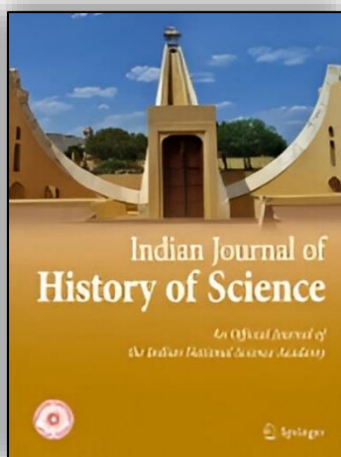
Publisher: University of Chicago

URI: <https://doi.org/10.1086/735746>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10420>

Publication Date: 2025-06

Journal Articles



Author(s): PAI, VENKETESWARA R.

Title: Obtaining the longitude of the moon through mnemonics - An example from a medieval Kerala text, Dṛkkaraṇa

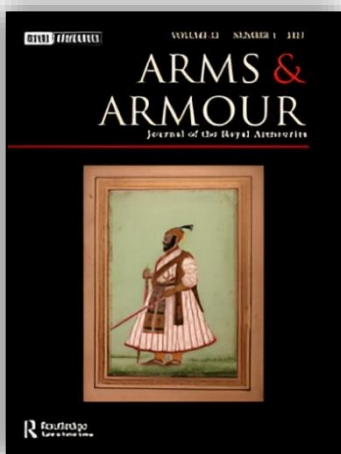
Citation: Indian Journal of History of Science, 60, 121-134.

Publisher: Springer Nature/Indian National Science Academy, New Delhi, India

URI: <https://doi.org/10.1007/s43539-025-00165-4>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10410>

Publication Date: 2025-08



Author(s): SOHONI, PUSHKAR

Title: Pattā: the Maratha sword

Citation: Arms & Armour, 22(01), 131-144.

Publisher: Taylor & Francis

URI: <https://doi.org/10.1080/17416124.2025.2460905>

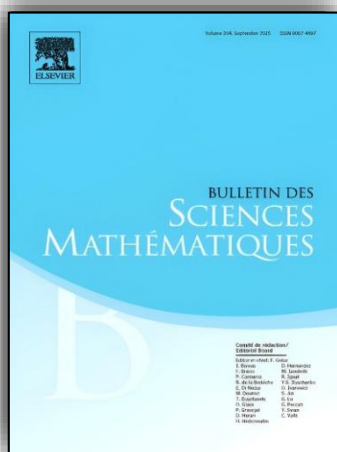
DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10415>

Publication Date: 2025-02

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MATHEMATICS

Journal Articles



Author(s): Dasgupta, Jyoti; Khan, Bivas; PODDAR, MAINAK

Title: Logarithmic connections on principal bundles over normal varieties

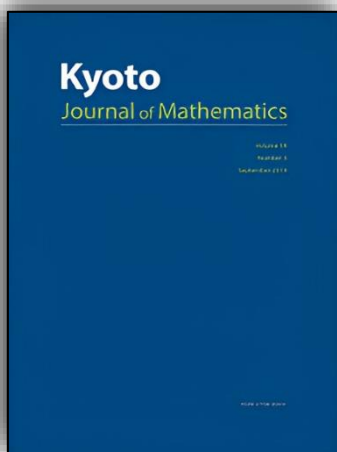
Citation: Bulletin des Sciences Mathématiques, 206, 103715.

Publisher: Elsevier B.V.

URI: <https://doi.org/10.1016/j.bulsci.2025.103715>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10401>

Publication Date: 2026-01



Author(s): Ghate, Eknath; RAI, VIVEK

Title: Reductions of Galois representations of slope $3/2$

Citation: Kyoto Journal of Mathematics, 65(03), 595-636.

Publisher: Duke University Press

URI: <https://doi.org/10.1215/21562261-2024-0022>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10440>

Publication Date: 2025-08



Author(s): MODASIYA, MITESH; SEN, ABHROJYOTI

Title: Fine boundary regularity for fully nonlinear mixed local-nonlocal problems

Citation: Journal of Differential Equations, 452, 113780.

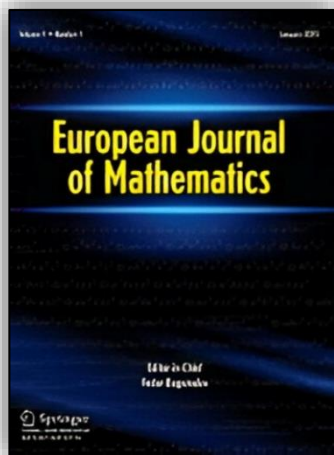
Publisher: Elsevier B.V.

URI: <https://doi.org/10.1016/j.jde.2025.113780>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10439>

Publication Date: 2026-01

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Author(s): Panja, Saikat; SAINI, PRACHI; SINGH, ANUPAM

Title: Surjectivity of polynomial maps on matrices

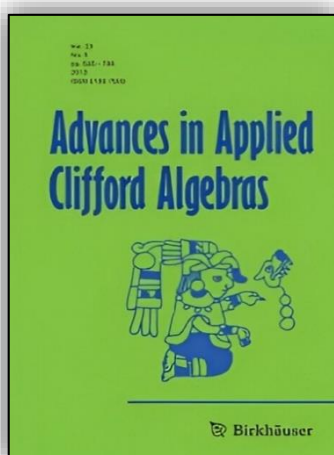
Citation: European Journal of Mathematics, 11, 62.

Publisher: Springer Nature

URI: <https://doi.org/10.1007/s40879-025-00853-6>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10403>

Publication Date: 2025-09



Author(s): SHARMA, HEERAK; Shirokov, Dmitry

Title: Determinant, Characteristic Polynomial, and Inverse in Commutative Analogues of Clifford Algebras

Citation: Advances in Applied Clifford Algebras, 35, 44.

Publisher: Springer Nature

URI: <https://doi.org/10.1007/s00006-025-01406-6>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10396>

Publication Date: 2025-08

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PHYSICS

Journal Articles



Author(s): CMS Collaboration; Hayrapetyan, A.; ACHARYA, S.; ALPANA, A.; DUBE, SOURABH; GOMBER, B.; HAZARIKA, P.; KANSAL, B.; LAHA, A.; SAHU, B.; SHARMA, SEEMA; VAISH, K. Y. et al.

Title: Operation and performance of the CMS silicon strip tracker with proton-proton collisions at the CERN LHC

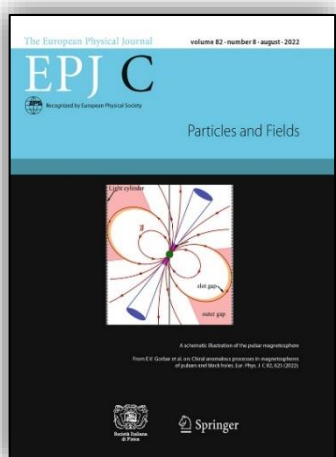
Citation: Journal of Instrumentation, 20.

Publisher: IOP Publications

URI: <https://doi.org/10.1088/1748-0221/20/08/P08027>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10376>

Publication Date: 2025-08



Author(s): CMS Collaboration; Hayrapetyan, A.; ACHARYA, S.; ALPANA, A.; DUBE, SOURABH; GOMBER, B.; HAZARIKA, P.; KANSAL, B.; LAHA, A.; SAHU, B.; SHARMA, SEEMA; VAISH, K. Y. et al.

Title: Reweighting simulated events using machine-learning techniques in the CMS experiment

Citation: European Physical Journal C, 85(05), 495.

Publisher: Springer Nature

URI: <https://doi.org/10.1140/epjc/s10052-025-14097-x>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10417>

Publication Date: 2025-05



Author(s): CMS Collaboration; Hayrapetyan, A.; ACHARYA, S.; ALPANA, K.; DUBE, SOURABH; GOMBER, B.; HAZARIKA, P.; KANSAL, B.; LAHA, A.; SAHU, S.; SHARMA, SEEMA; VAISH, K.Y. et al.

Title: Search for heavy neutral Higgs bosons A and H in the $t\bar{t}Z$ channel in proton-proton collisions at $\sqrt{s} = 13$ TeV

Citation: Physics Letters B, 866, 139526.

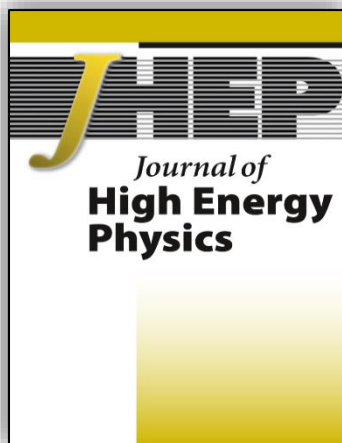
Publisher: Elsevier B.V.

URI: <https://doi.org/10.1016/j.physletb.2025.139568>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10114>

Publication Date: 2025-07

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Author(s): CMS Collaboration; Chekhovsky, V.; ACHARYA, S.; ALPANA, A.; DUBE, SOURABH; GOMBER, B.; HAZARIKA, P.; KANSAL, B.; LAHA, A.; SAHU, B.; SHARMA, SEEMA; VAISH, K. Y. et al.

Title: Measurements of the Higgs boson production cross section in the four-lepton final state in proton-proton collisions at $\sqrt{s}=13.6$ TeV

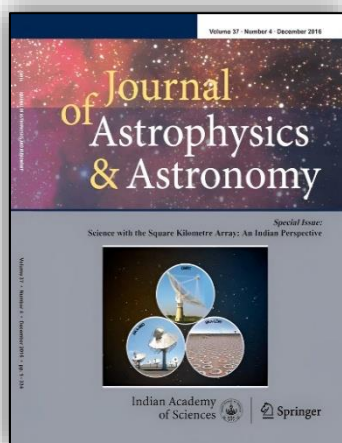
Citation: Journal of High Energy Physics, 2025(05), 79.

Publisher: Springer Nature

URI: [https://doi.org/10.1007/JHEP05\(2025\)079](https://doi.org/10.1007/JHEP05(2025)079)

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10425>

Publication Date: 2025-05



Author(s): Datta, Abhirup; ADHIKARI, SUSMITA; BANERJEE, ARKA et al.

Title: Current status and prospects of cosmology research in India

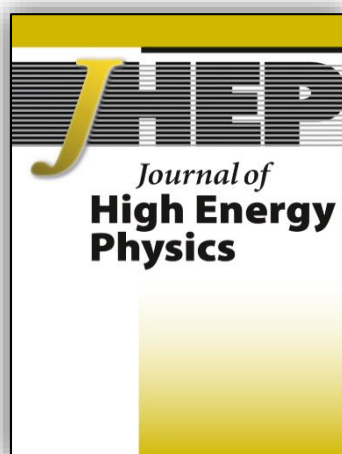
Citation: Journal of Astrophysics and Astronomy, 46(02), 61.

Publisher: Springer Nature/Indian Academy of Sciences and Astronomical Society of India

URI: <https://doi.org/10.1007/s12036-025-10078-4>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10406>

Publication Date: 2025-08



Author(s): DESAI, JAY; GHOSH, DIPTIMOY

Title: Positivity at 1-loop: bounds on photon and gluon EFTs

Citation: Journal of High Energy Physics, 2025(09), 152.

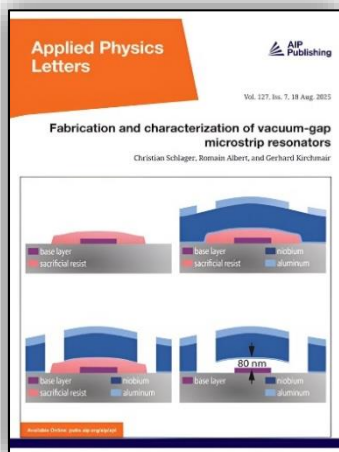
Publisher: Springer Nature

URI: [https://doi.org/10.1007/JHEP09\(2025\)152](https://doi.org/10.1007/JHEP09(2025)152)

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10429>

Publication Date: 2025-09

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Author(s): Deswal, Sonia; Kumar, Deepu; ROUT, DIBYATA; SINGH, SURJEET; Kumar, Pradeep

Title: Dynamics of electron-electron correlation and electron-phonon coupled phase progression in trilayer nickelate $\text{La}_4\text{Ni}_3\text{O}_{10}$

Citation: Applied Physics Letters, 127(07).

Publisher: AIP Publishing

URI: <https://doi.org/10.1063/5.0288265>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10395>

Publication Date: 2025-08



Author(s): JADHAV, SWATI; KAULAGE, LAXMAN; Saha, Suparna; Bano, Amreen; OGALÉ, SATISHCHANDRA

Title: Black Phosphorus Nanosheets as Efficient Ion Navigators at Room Temperature in Polyacrylonitrile-Based Composite Solid Polymer Electrolyte for Li-Ion Batteries

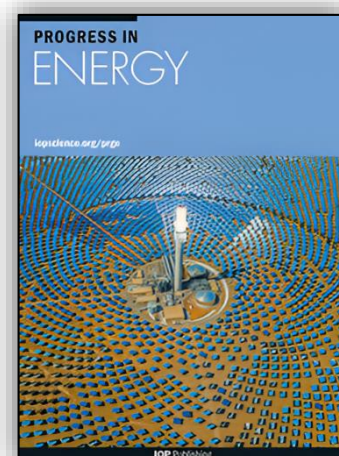
Citation: Small.

Publisher: Wiley

URI: <https://doi.org/10.1002/smll.202504995>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10405>

Publication Date: 2025-09



Author(s): KADAM, SUPRIYA; GODBOLE, RHUSHIKESH; OGALÉ, SATISHCHANDRA

Title: Microgradient patterned NiO coating on copper current collector for anode-free lithium metal battery

Citation: Progress in Energy, 7 (4).

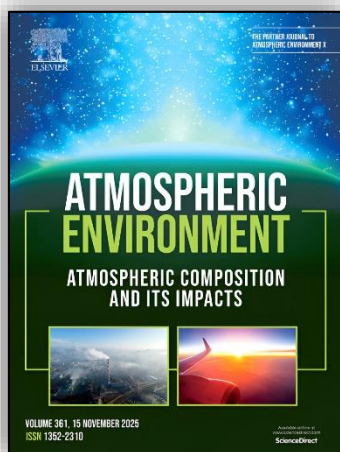
Publisher: IOP Science

URI: <https://doi.org/10.1088/2516-1083/adf687>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10402>

Publication Date: 2025-10

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Author(s): Mukhopadhyay, Swagata; Ningombam, Shantikumar S.; AMOGHAVARSHA, A. V.; Madhavan, B. L.; Eck, Thomas F.; Dumka, Umesh Chandra; Khatri, Pradeep; Gupta, Pawan

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