



SRINIVASA RAMANUJAN LIBRARY

Indian Institute of Science Education and Research Pune

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

July 2026



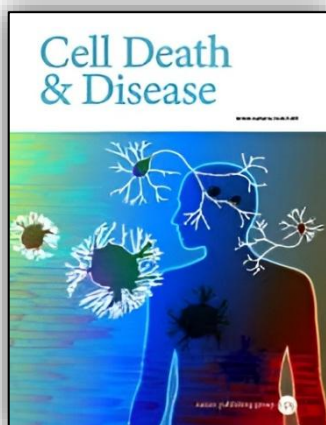
Notify us of your new publications at
libraryservices@iiserpune.ac.in

CONTENTS

Department	Page No.
<u>Biology</u>	1
<u>Chemistry</u>	6
<u>Earth and Climate Science</u>	10
<u>Mathematics</u>	12
<u>Physics</u>	14
Media Links	24
<u>News coverage of recent publications</u>	

BIOLOGY

Journal Articles



Author(s): Agrawal, Ritu; RATH, SATYAJIT et al.

Title: BLM regulates MALT1-driven NF- κ B signalling and is targetable in B-cell malignancies

Citation: Cell Death & Disease, 17, 636.

Publisher: Springer Nature

URI: <https://doi.org/10.1038/s41419-026-08846-3>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11377>

Publication Date: 2026-07



Author(s): Banerjee, Indrakshi; Mondal, Atanu; KAMAT, SIDDHESH S.; Das, Chandrima

Title: Metabolites with a message: impacts on epigenetics and implications for epimetabopathies

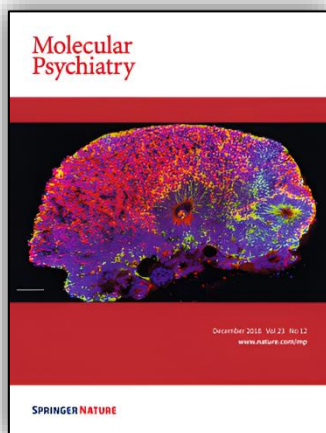
Citation: EMBO Reports

Publisher: Springer Nature

URI: <https://doi.org/10.1038/s44319-026-00891-5>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11391>

Publication Date: 2026-07



Author(s): Caixeta, Fabio V.; Lundberg, Stina; BALASUBRAMANIAN, AKILANDESWARI; Gelder, Charlotte van; Mercer, Ella; Lou, Guofeng; Jonsson, Jörgen; Konradsson-Geuken, Åsa; Kullander, Klas

Title: Serotonergic SLC10A4 regulates extracellular serotonin levels and antidepressant responsiveness

Citation: Molecular Psychiatry

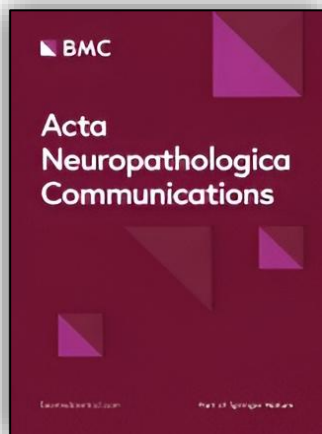
Publisher: Springer Nature

URI: <https://doi.org/10.1038/s41380-026-03697-y>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11359>

Publication Date: 2026-06

[Back to content](#)



Author(s): GARG, LOVLEEN; CHAPLOT, KRITI; Kuppili, Gowith; TENDULKAR, SHWETA; Joseph, Jomon; KAMAT, SIDDHESH; RATNAPARKHI, GIRISH

Title: Neuro-glial lipid imbalance in a Drosophila model of amyotrophic lateral sclerosis 8

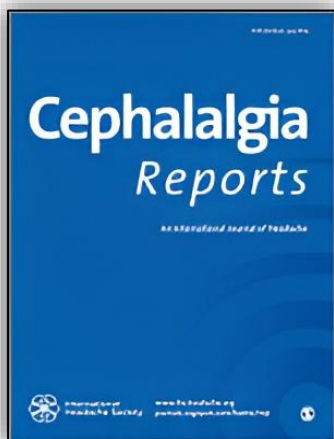
Citation: Acta Neuropathologica Communications

Publisher: Springer Nature

URI: <https://doi.org/10.1186/s40478-026-02391-y>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11399>

Publication Date: 2026-07



Author(s): GARG, MRIDULA; Chowdhury, Samiran; Chowdhury, Debashish

Title: Efficacy of therapeutic patient education for managing migraine: An updated narrative review

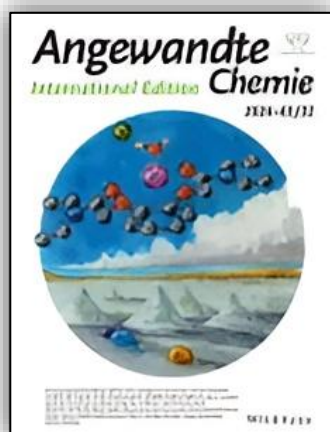
Citation: Cephalalgia Reports

Publisher: Sage Publications

URI: <https://doi.org/10.1177/25158163261467653>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11383>

Publication Date: 2026-07



Author(s): GUPTA, SIMRAN M.; Duraisamy, Santhosh; Takata, Tsuyoshi; Akaike, Takaaki; KAMAT, SIDDHESH S.; Allimuthu, Dharmaraja; CHAKRAPANI, HARINATH

Title: Engineered Substrates for a Sulfurtransferase Enhance Endogenous Hydropersulfides and Inhibit Ferroptosis

Citation: Angewandte Chemie International Edition

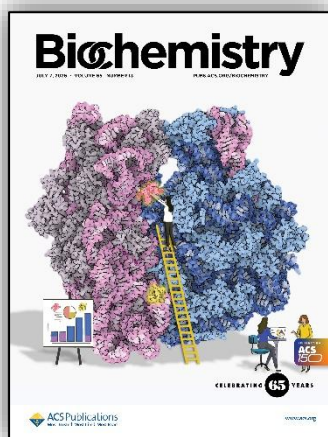
Publisher: Wiley

URI: <https://doi.org/10.1002/anie.4893359>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11374>

Publication Date: 2026-07

[Back to content](#)



Author(s): GUPTA, SONALI; DHAWARE, MAHAMAYA; KAMAT, SIDDHESH S.

Title: Biochemical Characterization of ABHD14A, an Outlying Member of the Metabolic Serine Hydrolase Family

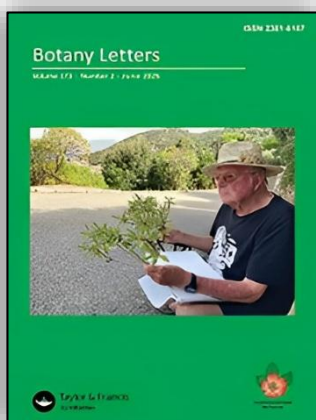
Citation: Biochemistry

Publisher: American Chemical Society

URI: <https://doi.org/10.1021/acs.biochem.6c00515>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11373>

Publication Date: 2026-07



Author(s): Nissar, Showkat; PANDIT, SAGAR; Reshia, Zafar A

Title: Growth performance and metabolomic profiles of native and non-native *Anthemis cotula* L

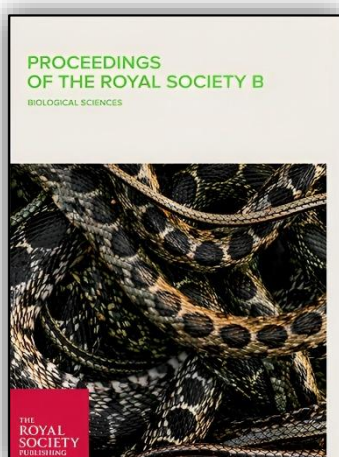
Citation: Botany Letters

Publisher: Taylor & Francis

URI: <https://doi.org/10.1080/23818107.2026.2695074>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11364>

Publication Date: 2026-06



Author(s): MAITRA, ALAKANANDA; Pandit, Rohan; MUNGEE, MANSI; ATHREYA, RAMANA

Title: Symmetries in montane species abundance profiles elucidate the link between environment and abundance

Citation: Proceedings of the Royal Society B, 293(2075), 20252975.

Publisher: The Royal Society

URI: <https://doi.org/10.1098/rspb.2025.2975>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11387>

Publication Date: 2026-07

[Back to content](#)



Author(s): OJHA, MEGHA; INGALE, AKANKSHA; NERLEKAR, ASHISH N.; CHAVAN, BHANUDAS P.; Thorat, Ovee; Agarwal, Prerna; Datar, Mandar N.; BARUA, DEEPAK

Title: Complementary approaches to identify, characterize and prioritize invasive plants in a biodiversity hotspot

Citation: Invasive Plant Science and Management

Publisher: Cambridge University Press

URI: <https://doi.org/10.1017/inp.2026.10055>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11386>

Publication Date: 2026-07



Author(s): Patro, Subhasmita; MOGER, ADITYA; Dash, Lipsa; Behera, Madhusmita; Thaker, Maria

Title: Linking morphology and performance: skeletal growth and sex-specific form-function relationships in an agamid lizard

Citation: Journal of Experimental Biology, 229(09).

Publisher: The Company of Biologists

URI: <https://doi.org/10.1242/jeb.251931>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11390>

Publication Date: 2026-05



Author(s): PURI, SARITA; Valentina Speranzini et al.

Title: Multifaceted effects of N-glycosylation on amyloidogenic κ light chains in AL amyloidosis

Citation: Structure

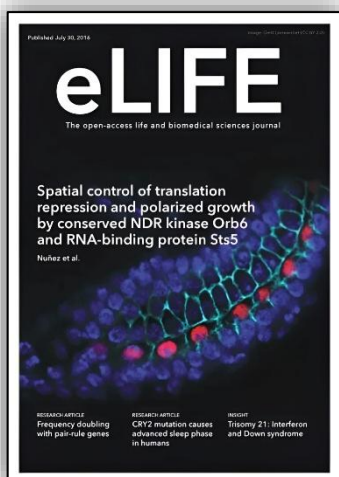
Publisher: Elsevier B.V.

URI: <https://doi.org/10.1016/j.str.2026.05.011>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11404>

Publication Date: 2026-06

[Back to content](#)



Author(s): ROY, AMRITA; ROY, ADHEENA ELSA; Ibragimov, Airat; DaSilva, Juliana; KUMAR, KUNDAN; Schedl, Paul; KAMAT, SIDDHESH S.; RATNAPARKHI, GIRISH S.; DESHPANDE, GIRISH

Title: Wunen(s) help navigate Primordial Germ Cells by attenuating Hedgehog signaling

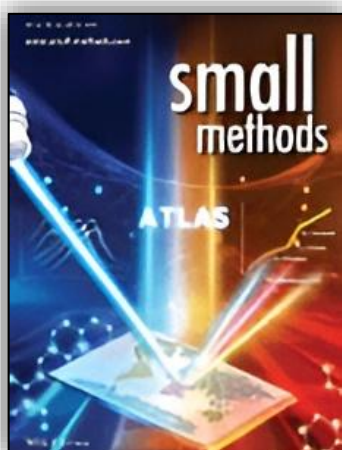
Citation: eLife, 15.

Publisher: eLife Sciences Publications Ltd.

URI: <https://doi.org/10.7554/eLife.111629.1>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11403>

Publication Date: 2026-07



Author(s): Tran, Van Thi-Hong; Ek, Frans; Yassine, Hasan; BEHERA, RAJALAXMI; Hytönen, Vesa P.; Conway, James R. W.

Title: Red-to-Near-Infrared Fluorescence Resonance Energy Transfer Reporters for Dual Imaging Applications

Citation: Small Methods

Publisher: Wiley

URI: <https://doi.org/10.1002/smt.70828>

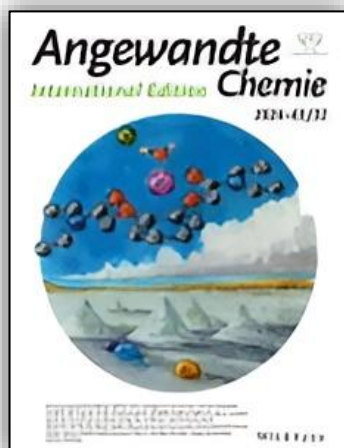
DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11378>

Publication Date: 2026-07

[Back to content](#)

CHEMISTRY

Journal Articles



Author(s): GUPTA, SIMRAN M.; Duraisamy, Santhosh; Takata, Tsuyoshi; Akaike, Takaaki; KAMAT, SIDDHESH S.; Allimuthu, Dharmaraja; CHAKRAPANI, HARINATH

Title: Engineered Substrates for a Sulfurtransferase Enhance Endogenous Hydropersulfides and Inhibit Ferroptosis

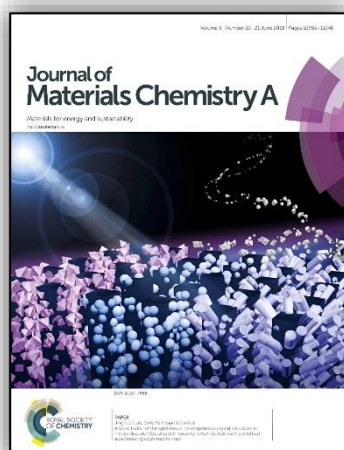
Citation: Angewandte Chemie International Edition

Publisher: Wiley

URI: <https://doi.org/10.1002/anie.4893359>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11374>

Publication Date: 2026-07



Author(s): Das, Chandni; KUMAR, HITESH; THOTIYL, MUSTHAFA OTTAKAM; Roy, Poulomi

Title: Activating lattice oxygen via proton-decoupled electron transfer in iron chromium phosphate for efficient (sea)water oxidation

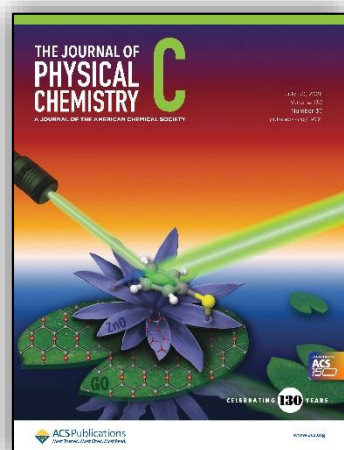
Citation: Journal of Materials Chemistry A

Publisher: Royal Society of Chemistry

URI: <https://doi.org/10.1039/d6ta03572h>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11379>

Publication Date: 2026-06



Author(s): DEY, NAYAN; VENKATNATHAN, ARUN

Title: Effect of Mixed EC/DMC Solvent Composition and Temperature on Structure and Ion Transport in a Lithium Bis(fluorosulfonyl)imide Salt-Based Battery Electrolyte

Citation: Journal of Physical Chemistry C

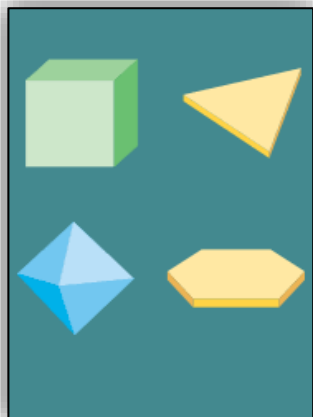
Publisher: American Chemical Society

URI: <https://doi.org/10.1021/acs.jpcc.6c02274>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11396>

Publication Date: 2026-07

[Back to content](#)



Author(s): DEY, NAYAN; VENKATNATHAN, ARUN

Title: Modeling Ion Conduction in Soft Electrolytes

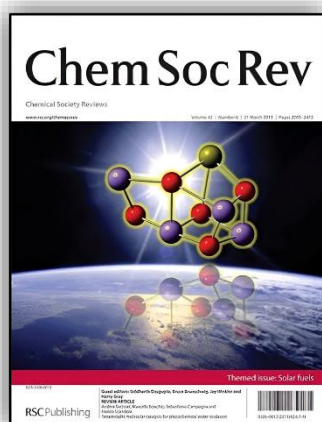
Citation: Annual Review of Materials Research, 56, 155-178.

Publisher: Annual Review

URI: <https://doi.org/10.1146/annurev-matsci-072924-113817>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11363>

Publication Date: 2026-07



Author(s): FAJAL, SAHEL; DUTTA, SUBHAJIT; BISWAS, KISHALAY; GHOSH, SUJIT K.

Title: MOFs, COFs and other porous framework materials for water purification

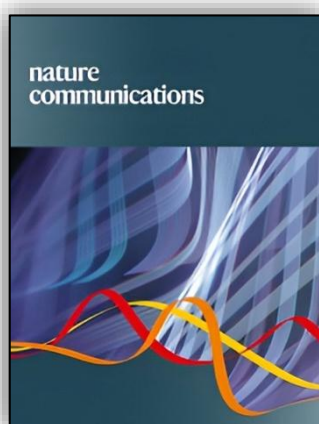
Citation: Chemical Society Reviews

Publisher: Royal Society of Chemistry

URI: <https://doi.org/10.1039/d6cs00594b>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11392>

Publication Date: 2026-07



Author(s): HASSAN, NAHID; Ananthram, Kekkar Subray; JOSE, THERESE MARIYA; ACHARYA, ARADHANA; SAHA, SAUVIK; BHOI, UMASHIS; Tarafder, Kartick; BALLAV, NIRMALYA

Title: Stabilizing $[\text{Ru}(\text{bpy})_3]^{3+}$ at room-temperature in a hybrid crystal with unusual luminescence and ultralow thermal conductivity

Citation: Nature Communications, 17, 5598.

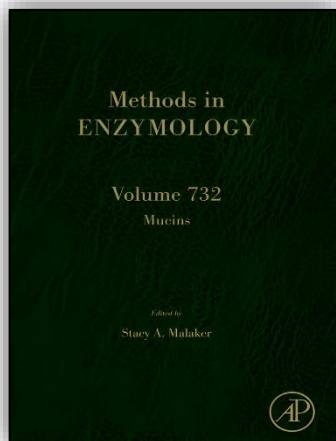
Publisher: Springer Nature

URI: <https://doi.org/10.1038/s41467-026-72230-0>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11354>

Publication Date: 2026-04

[Back to content](#)



Author(s): KHATIK, SADDAM Y.; SRIVATSAN, SEERGAZHI G.

Title: Enzymatic incorporation of a dual-functional nucleotide probe for antibiotic-induced conformational changes in the bacterial ribosomal RNA

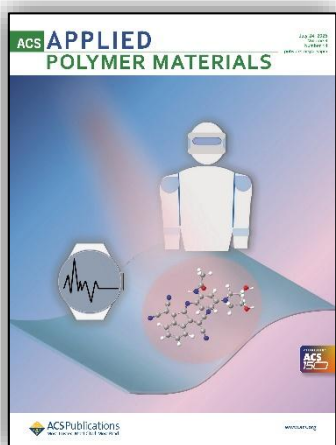
Citation: Methods in Enzymology

Publisher: Elsevier B.V.

URI: <https://doi.org/10.1016/bs.mie.2026.06.017>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11369>

Publication Date: 2026-07



Author(s): Kumar, Vikas; Joshi, Sagar A.; Ramireddy, Ravikanth Reddy; Ganapathy, Subramanian; Avadhani, Chilukuri V.; SIVARAM, SWAMINATHAN; Phani Kumar, Bandaru V. N.

Title: Influence of Porosity of Polybenzimidazole Separator Membranes on Lithium-Ion Diffusion and Local Mobility

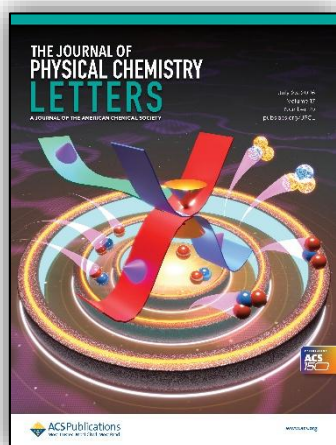
Citation: ACS Applied Polymer Materials, 8(14), 11327–11340.

Publisher: American Chemical Society

URI: <https://doi.org/10.1021/acsapm.6c01364>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11351>

Publication Date: 2026-07



Author(s): RAY, ANWESHA; GHOSH, ANIMESH; NAG, ANGSHUMAN

Title: V^{3+} Doping in $Cs_2NaInCl_6$ Double Perovskite for Near-Infrared-II Luminescence

Citation: Journal of Physical Chemistry Letters

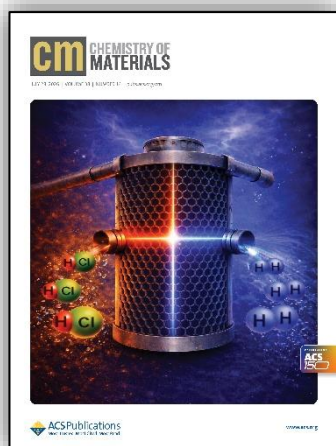
Publisher: American Chemical Society

URI: <https://doi.org/10.1021/acs.jpclett.6c01431>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11375>

Publication Date: 2026-07

[Back to content](#)



Author(s): SINGH, PIYUSH; Marshall, Checkers; SINGH, HIMAN DEV; SHEKHAR, PRAGALBH; JAIN, CHITVAN; SINGH, YASHRAJ KUMAR; VAIDHYANATHAN, RAMANATHAN

Title: Structure-Property Discernments from a Hydrophobic Zinc-Diaminotriazolato-Formate Metal-Organic Framework Exhibiting Improved CO₂/H₂O Binary Characteristics

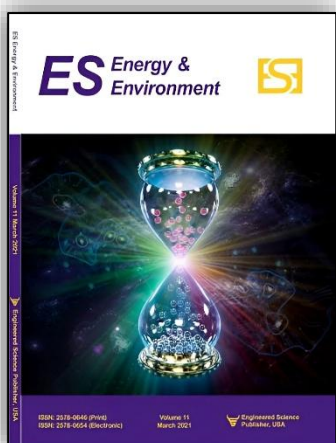
Citation: Chemistry of Materials

Publisher: American Chemical Society

URI: <https://doi.org/10.1021/acs.chemmater.6c00693>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11398>

Publication Date: 2026-07



Author(s): Jokare, Shivshankar; Kharadkar, Shruti; KUSHWAHA, VIKASH; CHATURVEDI, SMITA

Title: Enhanced Energy Harvesting Performance of a Multiferroic Gadolinium Iron Manganese Oxide-Barium Titanate/Polydimethylsiloxane Flexible Triboelectric Nanogenerator

Citation: ES Energy and Environment, 32.

Publisher: Engineered Science Publisher

URI: <https://doi.org/10.30919/ee2216>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11367>

Publication Date: 2026-04

[Back to content](#)

EARTH AND CLIMATE SCIENCE

Journal Articles



Author(s): Agarwalla, Sanjib Kumar; DATTA, ARJUN; Dighe, Amol; Gaur, Vinod Kumar; Upadhyay, Anuj Kumar

Title: Deep Earth imaging through neutrino and seismic tomography

Citation: Current Science, 131(01), 12-14.

Publisher: Indian Academy of Sciences

URI: <https://www.currentscience.ac.in/Volumes/131/01/0012.pdf>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11401>

Publication Date: 2026-07



Author(s): DATTA, ARJUN; MAHESH, AILENI; Lahon, Pankaj

Title: FW-ANSI2D: A Python package for seismic ambient noise cross-correlation modelling and source inversion

Citation: Journal of Seismology, 30, 70.

Publisher: Springer Nature

URI: <https://doi.org/10.1007/s10950-026-10421-4>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11400>

Publication Date: 2026-07



Author(s): JOSHI, AARYA; VENU GOPAL, KELLA; Jukar, Advait M.; Khanna, Pankaj; CHATTOPADHYAY, DEVAPRIYA

Title: Late Oligocene dugongid remains from India: insights into past seagrass-sirenian associations in the eastern Tethys

Citation: Journal of Vertebrate Paleontology.

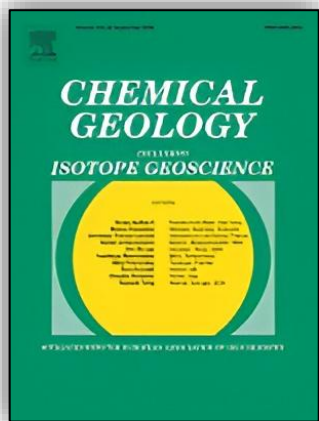
Publisher: Taylor & Francis

URI: <https://doi.org/10.1080/02724634.2026.2669281>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11372>

Publication Date: 2026-07

[Back to content](#)



Author(s): ROUT, RAKESH KUMAR; TRIPATHY, GYANA RANJAN; Das, Satyabrata; VENUGOPAL, ACHYUTH; Kumar, Nitish; Rai, Santosh Kumar; Maurya, Abhayanand Singh

Title: Dual-isotopic ($\delta^{34}\text{S}$ and $\delta^{18}\text{O}$) evidence for net CO_2 release from the northwestern Himalayan catchments

Citation: Chemical Geology, 720, 123609.

Publisher: Elsevier B.V.

URI: <https://doi.org/10.1016/j.chemgeo.2026.123609>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11384>

Publication Date: 2026-09

[Back to content](#)

INTERNATIONAL JOURNAL OF
NUMBER THEORY

$x^n + y^n = z^n$

Managing Editors

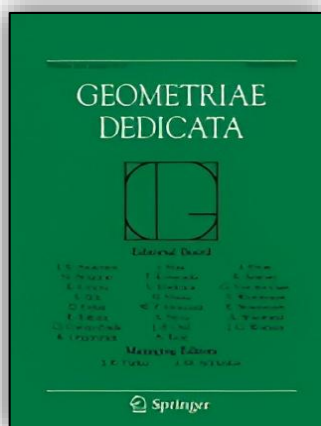
Yann Bugeaud
University of Bordeaux, France

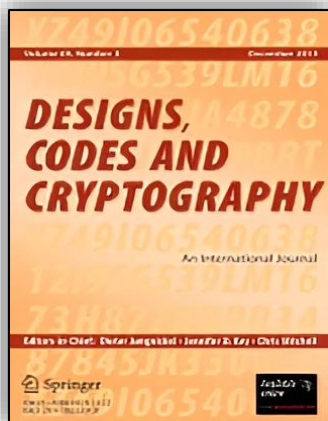
Michael Filaseta
University of South Carolina, USA

E. Sogata
The University of British Columbia, Canada

Ar Ja Ver
The Pennsylvania State University, USA

 World Scientific





Author(s): KAIPA, KRISHNA; Pradhan, Puspendu

Title: Incidence of lines, points and planes in $PG(3, q)$ with respect to the twisted cubic

Citation: Designs, Codes and Cryptography, 94, 180.

Publisher: Springer Nature

URI: <https://doi.org/10.1007/s10623-026-01920-z>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11394>

Publication Date: 2026-08

[Back to content](#)

PHYSICS

Journal Articles



Author(s): Acharyya, Suman; Pradhan, Priodyuti; MEENA, CHANDRAKALA

Title: A comprehensive review on master stability functions in complex network dynamics

Citation: Reports on Progress in Physics, 89(07).

Publisher: IOP Publishing

URI: <https://doi.org/10.1088/1361-6633/ae84e6>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11388>

Publication Date: 2026-07



Author(s): Ashanujjaman, Saiyad; Crivellin, Andreas; MAHARATHY, SIDDHARTH P.; Mellado, Bruce

Title: Searching for a charged Higgs boson in top-quark decays via the WZ mode

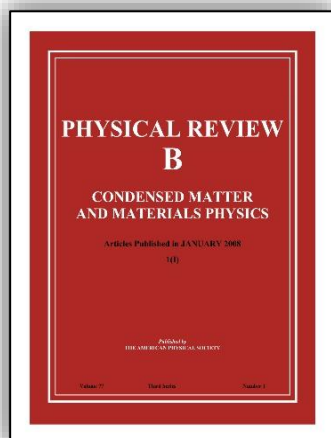
Citation: Physical Review D, 113, 115048.

Publisher: American Physical Society

URI: <https://doi.org/10.1103/n2g2-gld5>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11370>

Publication Date: 2026-06



Author(s): BAGUI, PITAMBAR; CHATTERJEE, ARIJIT; AGARWALLA, BIJAY KUMAR

Title: Detection of Mpemba effect through observables in open quantum systems

Citation: Physical Review B, 114, 014311.

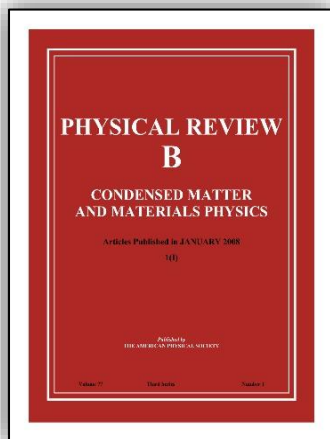
Publisher: American Physical Society

URI: <https://doi.org/10.1103/m4wy-kdc9>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11395>

Publication Date: 2026-07

[Back to content](#)



Author(s): Bairagya, Benugopal; Shukla, Gaurav K.; Patel, Akhilesh Kumar; Manikketh, Murali Krishnan; NAIR, SUNIL; Sakuraba, Yuya; Singh, Sanjay

Title: Anomalous Nernst effect in $\text{Ni}_2\text{MnGa}/\text{MgO}$ (001) shape-memory Heusler alloy thin films

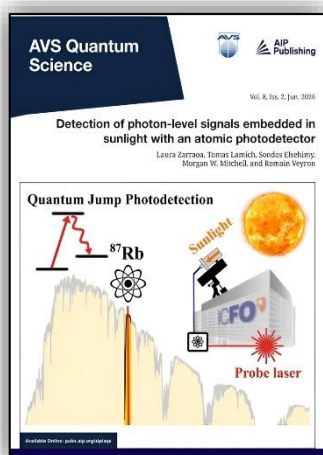
Citation: Physical Review B, 113, 224110.

Publisher: American Physical Society

URI: <https://doi.org/10.1103/tlbw-17sy>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11355>

Publication Date: 2026-06



Author(s): BATRA, PRIYA; MAHESH, T. S.

Title: Physics-informed neural network for quantum control of NMR registers

Citation: AVS Quantum Science, 8, 023803.

Publisher: AIP Publishing

URI: <https://doi.org/10.1116/5.0316840>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11356>

Publication Date: 2026-06



Author(s): Bera, Arnab; G, BASAVARAJA; KABIR, MUKUL et al.

Title: Work function enhancement in ultrathin 2-*H*-Mo Te₂ nanoflakes driven by the interplay of quantum confinement and dielectric screening

Citation: Physical Review Applied, 25, 044075.

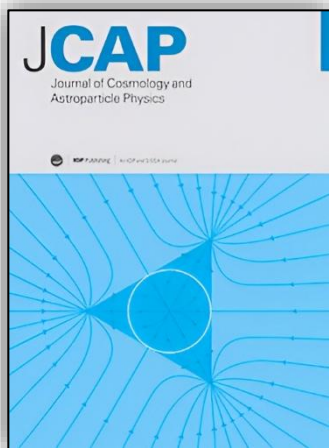
Publisher: American Physical Society

URI: <https://doi.org/10.1103/dz6j-vmh4>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11353>

Publication Date: 2026-04

[Back to content](#)



Author(s): Chakraborty, Anirban; GANGOPADHYAY, KWANIT; BANERJEE, ARKA; Roy Choudhury, Tirthankar

Title: Nearest neighbour-based statistics for 21 cm-galaxy cross-correlations in the Epoch of Reionization

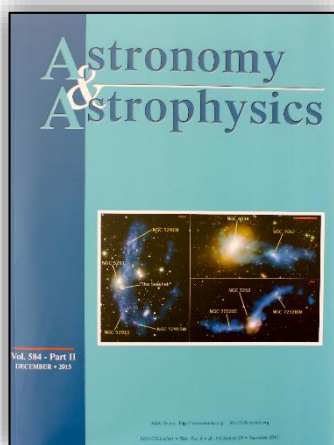
Citation: Journal of Cosmology and Astroparticle Physics, 2026.

Publisher: IOP Publishing

URI: <https://doi.org/10.1088/1475-7516/2026/06/072>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11347>

Publication Date: 2026-06



Author(s): Chatterjee, Atrideb; BANERJEE, ARKA; Villaescusa-Navarro, Francisco; Abel, Tom

Title: Learning cosmology from nearest neighbour statistics

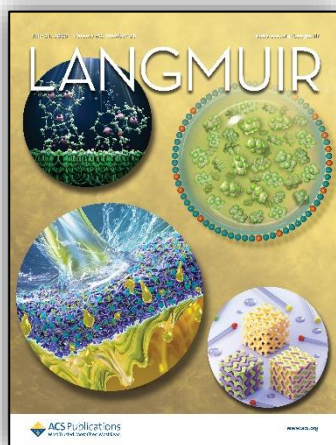
Citation: Astronomy & Astrophysics, 711, A53, 11.

Publisher: EDP Sciences

URI: <https://doi.org/10.1051/0004-6361/202558143>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11366>

Publication Date: 2026-07



Author(s): Chatterjee, Soumyajyoti; Kabir, Anisha; GOANKAR, VEDANT; Sudhakar, Swathi; PATIL, SHIVPRASAD; Basavaraj, Madivala G.

Title: Emulsion-Derived Production of Drug-Loaded Microgranules as an Alternative to Spray Drying

Citation: Langmuir, 42(28), 20114-20125.

Publisher: American Chemical Society

URI: <https://doi.org/10.1021/acs.langmuir.6c00426>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11405>

Publication Date: 2026-07

[Back to content](#)



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: Search for a new neutral gauge boson produced in association with one or two b jets and decaying into a pair of muons in proton-proton collisions at $\sqrt{s}=13$ TeV

Citation: Journal of High Energy Physics, 2026(07), 8.

Publisher: Springer Nature

URI: [https://doi.org/10.1007/JHEP07\(2026\)008](https://doi.org/10.1007/JHEP07(2026)008)

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11381>

Publication Date: 2026-07



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

Title: Search for the pair production of long-lived supersymmetric partners of the tau lepton in proton-proton collisions at $\sqrt{s}=13$ TeV.

Citation: Journal of High Energy Physics, 2026(07), 102.

Publisher: Springer Nature

URI: [https://doi.org/10.1007/JHEP07\(2026\)102](https://doi.org/10.1007/JHEP07(2026)102)

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11389>

Publication Date: 2026-07



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

Title: Measurement and effective field theory interpretation of the photon-fusion production cross section of a pair of W bosons in proton-proton collisions at $\sqrt{s}=13$ TeV.

Citation: Journal of High Energy Physics, 2026(06), 187.

Publisher: Springer Nature

URI: [https://doi.org/10.1007/JHEP06\(2026\)187](https://doi.org/10.1007/JHEP06(2026)187)

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11358>

Publication Date: 2026-06

[Back to content](#)



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

Title: Search for soft unclustered energy patterns produced in association with a W or Z boson in proton-proton collisions at $\sqrt{s} = 13$ TeV.

Citation: Physics Letters B

Publisher: Elsevier B.V.

URI: <https://doi.org/10.1016/j.physletb.2026.140671>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11362>

Publication Date: 2026-08



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

Title: Measurement of the Higgs boson total decay width using the $H \rightarrow WW \rightarrow e\nu\mu\nu$ decay channel in proton-proton collisions at $\sqrt{s} = 13$ TeV

Citation: Physical Review D, 113, 092014

Publisher: American Physical Society

URI: <https://doi.org/10.1103/rny9-zby1>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11380>

Publication Date: 2026-05



Author(s): Deshmukh, Suraj; Guha, Sougata; Roy, Basudha; PATIL, SHIVPRASAD; Saha, Arnab; Muhuri, Sudipto

Title: Miniature work-to-work converter engine powered by motor protein

Citation: Physical Review E, 113, 064407.

Publisher: American Physical Society

URI: <https://doi.org/10.1103/2fl6-1j71>

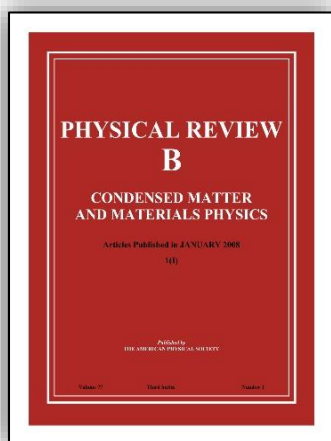
DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11371>

Publication Date: 2026-06

[Back to content](#)



Author(s): Dhawalikar, Saeed; Alam, Shadab; Paranjape, Aseem; BANERJEE, ARKA
 Title: Sahyadri: a simulation suite for the cosmology dependence of the cosmic web
 Citation: Journal of Cosmology and Astroparticle Physics, 2026.
 Publisher: IOP Publishing
 URI: <https://doi.org/10.1088/1475-7516/2026/07/028>
 DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11376>
 Publication Date: 2026-07

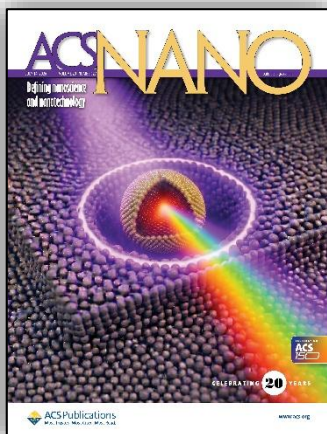


Author(s): GANGULY, KATHA; AGARWALLA, BIJAY KUMAR
 Title: Full counting statistics for boundary driven transport in the presence of correlated gain and loss channels
 Citation: Physical Review B, 114, 055410.
 Publisher: American Physical Society
 URI: <https://doi.org/10.1103/gr7f-p3yx>
 DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11397>
 Publication Date: 2026-07



Author(s): GUPTA, DRISHTI; THALAPILLIL, ARUN M.
 Title: Resurgence in scalar and spinor QED: the Euler-Heisenberg Lagrangian in parallel field backgrounds
 Citation: European Physical Journal C, 86, 750.
 Publisher: Springer Nature
 URI: <https://doi.org/10.1140/epjc/s10052-026-16024-0>
 DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11368>
 Publication Date: 2026-07

[Back to content](#)



Author(s): H. L., PRADEEPA; CHATTERJEE, SAGNIK; PATRA, SAYANTAN; BISOI, SWAPNESWAR; MUSHTAQ, SAQLAIN; Hardeep Singh, Akshay; ARORA, ASHISH; RAHMAN, ATIKUR

Title: Exciton-Resolved Phonon Coupling and Energy Dissipation Pathways in CsPbBr₃

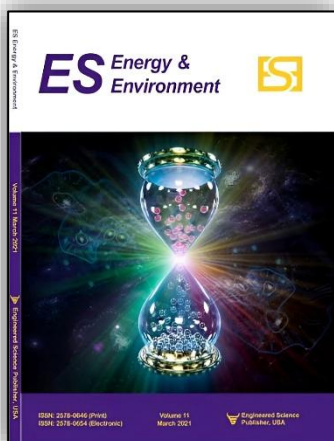
Citation: ACS Nano, 20(27), 19755-19764.

Publisher: American Chemical Society

URI: <https://doi.org/10.1021/acsnano.6c07313>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11346>

Publication Date: 2026-07



Author(s): Jokare, Shivshankar; Kharadkar, Shruti; KUSHWAHA, VIKASH; CHATURVEDI, SMITA

Title: Enhanced Energy Harvesting Performance of a Multiferroic Gadolinium Iron Manganese Oxide-Barium Titanate/Polydimethylsiloxane Flexible Triboelectric Nanogenerator

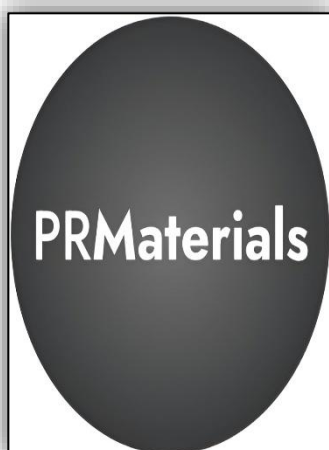
Citation: ES Energy and Environment, 32.

Publisher: Engineered Science Publisher

URI: <https://doi.org/10.30919/ee2216>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11367>

Publication Date: 2026-04



Author(s): Majumder, Saptak; Devan, Chinnu V.; GUPTA, PANKAJ; Chowdhury, Subhadip; Deb, Biswapriya; SINGH, SURJEET; Kamble, Vinayak B.

Title: Role of crystal symmetry in band structure optimization for enhanced thermoelectric transport in Cr and Se modified GeTe

Citation: Physical Review Materials, 10, 065404.

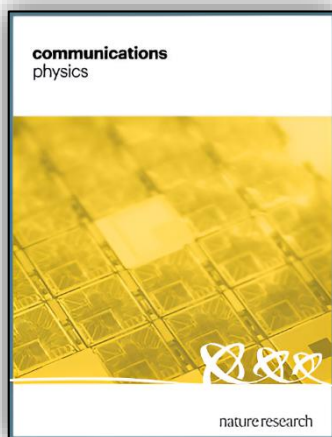
Publisher: American Physical Society

URI: <https://doi.org/10.1103/t8xg-3cz4>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11348>

Publication Date: 2026-06

[Back to content](#)



Author(s): Mutneja, Anoop; BHOWMIK, BHANU PRASAD; Karmakar, Smarajit

Title: Finite disorder critical point in ductile-to-brittle transition in amorphous solids with aspherical impurities

Citation: Communications Physics, 9, 224.

Publisher: Springer Nature

URI: <https://doi.org/10.1038/s42005-026-02646-z>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11365>

Publication Date: 2026-07



Author(s): ROY, SHAUNAK; Kishore, Vimal; SANTHANAM, M. S.

Title: Approach to network failure due to intrinsic fluctuations

Citation: Physical Review E, 113, L062302.

Publisher: American Physical Society

URI: <https://doi.org/10.1103/lknh-5tn8>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11361>

Publication Date: 2026-06



Author(s): SEN, SHOHINI; Banerjee, Suchismita; Chakrabarti, Bikas K.

Title: Relations among different inequality measures in complex systems: From kinetic exchange to earthquake models

Citation: Physical Review E, 113, 064308.

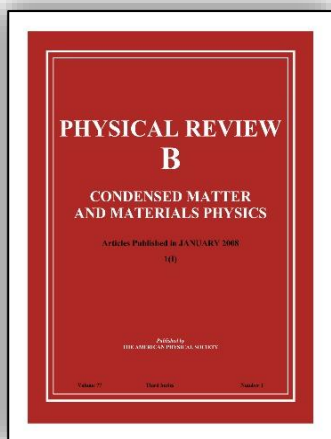
Publisher: American Physical Society

URI: <https://doi.org/10.1103/vnpc-zw1v>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11357>

Publication Date: 2026-06

[Back to content](#)



Author(s): SHARMA, OJASVI; MANNA, SANDIPAN; RAO, PRASHANT SHEKHAR; SREEJITH, G. J.

Title: Group convolutional neural network for the low-energy spectrum in the quantum dimer model

Citation: Physical Review B, 114, 014408.

Publisher: American Physical Society

URI: <https://doi.org/10.1103/nvcg-mb1r>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11344>

Publication Date: 2026-07



Author(s): SINGH, JASVEER; VARDARAJAN, SUNEETA

Title: Computing nonlinearity ratios using second-order black hole perturbation theory

Citation: Physical Review D, 114, 024057.

Publisher: American Physical Society

URI: <https://doi.org/10.1103/h2yj-x6qg>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11402>

Publication Date: 2026-07



Author(s): Zhang, Yuanyuan; ADHIKARI, SUSMITA; Edwards, Louise O. V.; Golden-Marx, Jesse B.; Ogando, Ricardo L. C.; Rykoff, Eli S.

Title: A Splashback-like Feature of Central Galaxies in Galaxy Clusters

Citation: Astrophysical Journal, 1006(01).

Publisher: IOP Publishing

URI: <https://doi.org/10.3847/1538-4357/ae76d1>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11382>

Publication Date: 2026-07

[Back to content](#)

News Coverage of Recent Research Publications



Media Coverage: [[Hindustan Times](#)] [[Loksatta](#)] [[Times of India](#)]

Title: International multisite implementation of distributed cell-free protein biomanufacturing to advance health and research equity

Author(s): Silva, Severino Jefferson Ribeiro da; KALE, TANVI; ATHALE, CHAITANYA A. et al.

Publisher: American Association for the Advancement of Science

URI: <https://doi.org/10.1126/sciadv.aeb7039>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11290>

Acknowledgment: The images used in this document are intended solely for educational purposes. All efforts have been made to ensure compliance with fair use standards. No copyright infringement is intended.