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May 2026



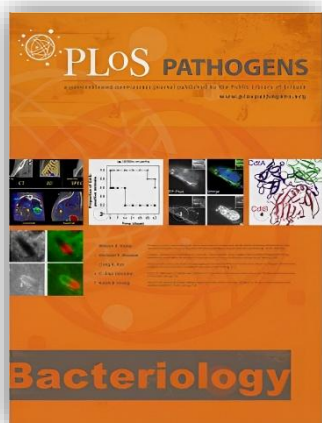
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BIOLOGY

Journal Articles



Author(s): Adhur, Karavadra Asha; Nirdosh, Nirdosh; CHANDRAMOULI, AAKASH; Basu, Swarnali; Lahiri, Amit; KAMAT, SIDDHESH S.; Mishra, Satish; Habib, Saman

Title: A bacterial-type cardiolipin synthase in Plasmodium spp. supports mitochondrial respiration and is important for liver stage maturation

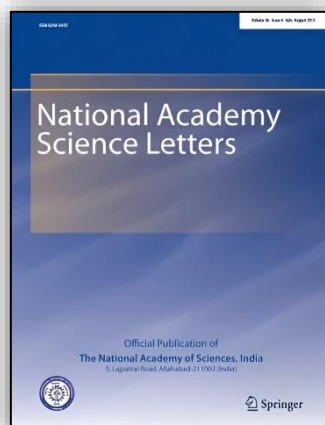
Citation: PLoS Pathogens, 22(5), e1014215.

Publisher: PLOS

URI: <https://doi.org/10.1371/journal.ppat.1014215>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11204>

Publication Date: 2026-05



Author(s): Firake, D. M.; Naga, K. C.; PANDIT, SAGAR; Shaikh, T. R.; Bhosale, P. B.; Shashank, P. R.; Prasad, K. V

Title: Field Diagnosis, Damage, and Seasonal Dynamics of Nygmidae Tussock Moth, Orvasca subnotata on Tuberose in India

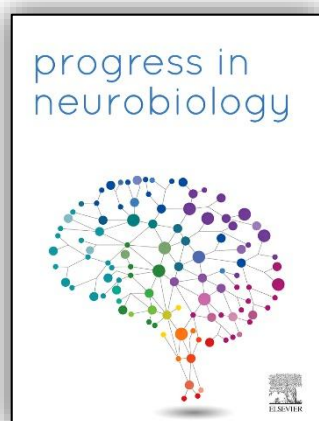
Citation: National Academy Science Letters

Publisher: National Academy of Sciences, India

URI: <https://doi.org/10.1007/s40009-026-02204-9>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11212>

Publication Date: 2026-04



Author(s): Liakath-Ali, Kif; Choi, Dong Il; Han, Xiao; SHETRU, VACHAN JAGADEESH; Goh, Louise Zi Ning; Südhof, Thomas C.; Polepalli, Jai S.

Title: Pattern separation memory requires Cerebellin 4 - Neogenin 1 signaling at dentate gyrus synapses

Citation: Progress in Neurobiology, 262, 102917.

Publisher: Elsevier B.V.

URI: <https://doi.org/10.1016/j.pneurobio.2026.102917>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11217>

Publication Date: 2026-07

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Author(s): MARATHE, SHRUTI D.; PANDEY, SANYUKTA; RAWAT, DEVESH; DAS, SUSOBHAN; ABRAHAM, NIXON M.

Title: Synaptic Inhibition in the Accessory Olfactory Bulb Regulates Pheromone Location Learning and Memory

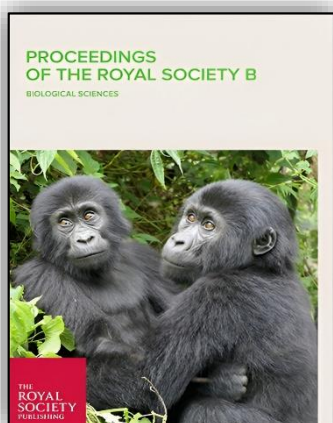
Citation: FASEB BioAdvances, 8(05).

Publisher: Wiley

URI: <https://doi.org/10.1096/fba.2025-00332>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11241>

Publication Date: 2026-06



Author(s): NAIK, SAISMIT; Fronhofer, Emanuel A.

Title: From proteins to species ranges: a framework for understanding thermal adaptation during range expansions

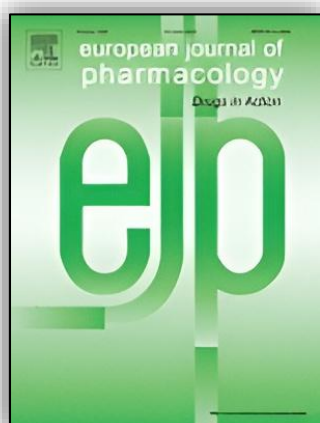
Citation: Proceedings of the Royal Society B, 293 (2069): 20252656.

Publisher: The Royal Society

URI: <https://doi.org/10.1098/rspb.2025.2656>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11222>

Publication Date: 2026-04



Author(s): Patil, Utkarsh P.; Kawade, Harish M.; Pandhare, Deepali M.; Bothikar, Savitra A.; Dhinakaran, S.; SUBHEDAR, NISHIKANT K.; Kokare, Dadasaheb M.

Title: Neuropeptide S alleviates neuropathic pain through lateral hypothalamic orexinergic circuit in rats

Citation: European Journal of Pharmacology

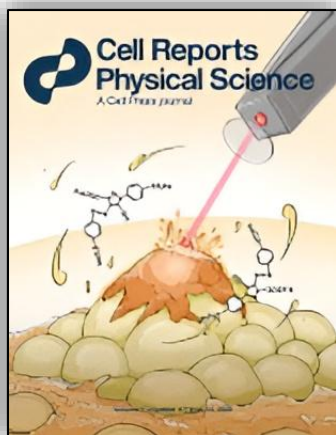
Publisher: Elsevier B.V.

URI: <https://doi.org/10.1016/j.ejphar.2026.178927>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11239>

Publication Date: 2026-06

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Author(s): RAJAMANI, SUDHA; Mathis, Cole; Asche, Silke; Boulesteix, David; Blanco, Celia; Markovitch, Omer; Champagne-Ruel, Alexandre; Bautista, Carla; Peng, Zhen

Title: Better origin(s) of life research through collaboration across disciplines

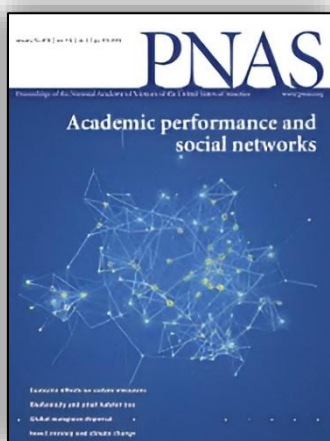
Citation: Cell Reports Physical Science, 7(04), 103220.

Publisher: Elsevier B.V.

URI: <https://doi.org/10.1016/j.xcrp.2026.103220>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11234>

Publication Date: 2026-04



Author(s): Tripathy, Subham Kumar; Mahapatra, Archisman; SAHARAN, OJAL; Chatterjee, Hindol; Sengupta, Neelanjana; KAMAT, SIDDHESH S.; Nair, Sreelaja; Mallik, Roop

Title: Selective targeting of kinesin on lipid droplets in the liver reduces plasma lipids

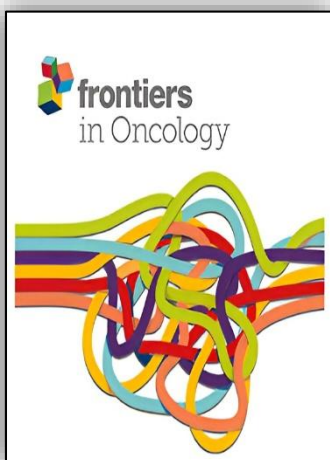
Citation: Proceedings of the National Academy of Sciences, 123 (20).

Publisher: National Academy of Sciences

URI: <https://doi.org/10.1073/pnas.2528332123>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11203>

Publication Date: 2026-05



Author(s): VASAVE, BHAVESH S.; Atreya, Aadya A.; KULKARNI, RISHABH D.; NAGARKAR, SANKET S.; Salvi, Khushi R.; Koppiker, C. B.; SHASHIDHARA, L. S.; Kulkarni, Madhura D.

Title: NELFA-mediated pausing restrains YAP transcription and context-dependent outcomes in breast cancer

Citation: Frontiers in Oncology, 16.

Publisher: Frontiers Media SA.

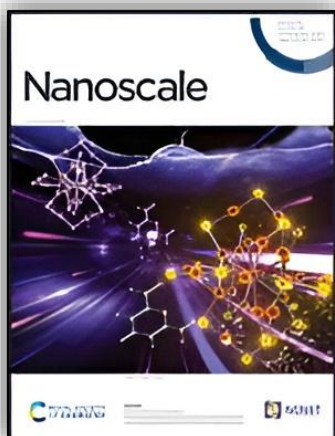
URI: <https://doi.org/10.3389/fonc.2026.1808415>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11225>

Publication Date: 2026-04

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CHEMISTRY



Author(s): Chakraborty, Indranath; NAG, ANGSUMAN; Boldt, Klaus; Lauth, Jannika

Title: Introduction to advanced semiconductor nanocrystals

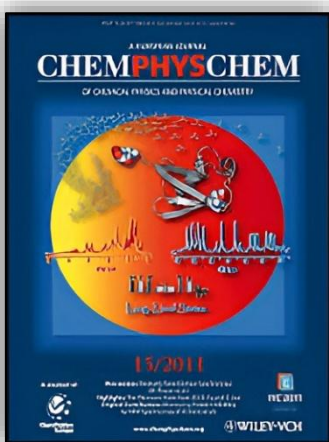
Citation: Nanoscale, 18(20), 10456-10458.

Publisher: Royal Society of Chemistry

URI: <https://doi.org/10.1093/jxb/erag045>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11247>

Publication Date: 2026-05



Author(s): CHAUHAN, AKSHAY; CHAUDHURY, SRABANTI

Title: Effects of Polymer Topology and Crowder Size on Polymer Adsorption at Solid Interfaces

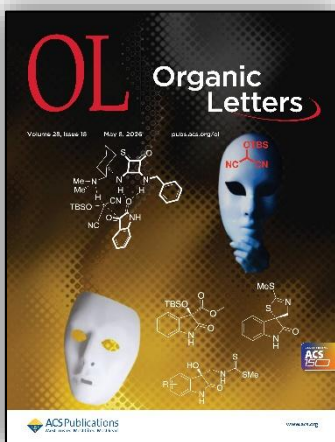
Citation: ChemPhysChem, 27(08).

Publisher: Wiley

URI: <https://doi.org/10.1002/cphc.202500790>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11207>

Publication Date: 2026-04



Author(s): GHOSH, SOMNATH; LONDHE, GOKUL S.; PRADEEP, NANDHANA ONAPARAMBIL; GNANAPRAKASAM, BOOPATHY

Title: Cascade Reaction of α , β -Unsaturated Keto-carboxylic Acid for the Formation of 5-Substituted Isoxazole using $\text{NaN}_3/\text{I}_2/\text{TBHP}$

Citation: Organic Letters, 28(18), 5740-5745.

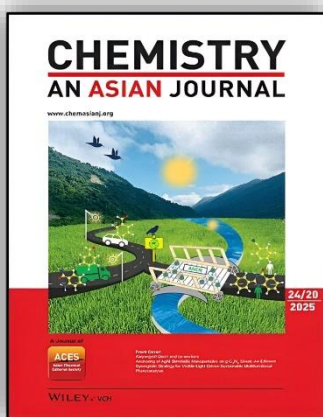
Publisher: American Chemical Society

URI: <https://doi.org/10.1021/acs.orglett.6c01197>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11233>

Publication Date: 2026-05

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Author(s): GOTHE, PRACHI; PANDAY, RISHUKUMAR; KHAN, SHABANA

Title: Rearrangement-Driven Synthesis of Borylhalosilanes from N-Heterocyclic Silylenes and Aminoborondihalides

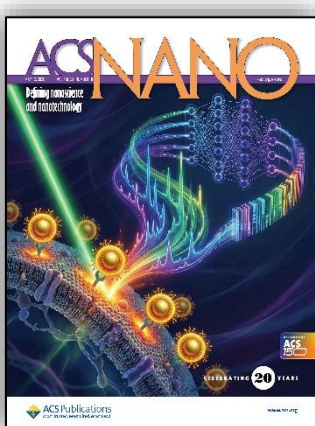
Citation: Organometallics

Publisher: American Chemical Society

URI: <https://doi.org/10.1021/acs.organomet.5c00487>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11254>

Publication Date: 2026-05



Author(s): JAIN, VANSHIKA; SANTRA, ANUSHREE; PILLAI, PRAMOD P.

Title: Photocatalytic Ammonia Synthesis Boosted by Inorganic Metal-Solvent Complexes on Indium Phosphide Quantum Dots

Citation: ACS Nano, 20(18), 13748-13757.

Publisher: American Chemical Society

URI: <https://doi.org/10.1021/acsnano.6c01112>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11232>

Publication Date: 2026-05



Author(s): KHYADE, ASHWINI R.; SANDANARAJ, BRITTO S.

Title: Directed Chemical Evolution of Self-Assembling Artificial Proteins Utilizing a Supramolecular System

Citation: Bioconjugate Chemistry

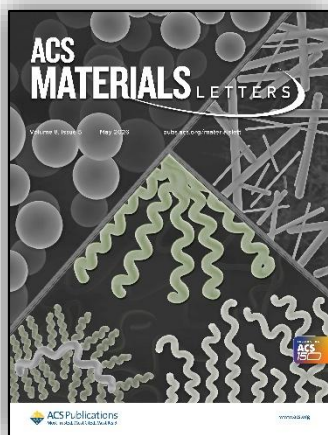
Publisher: American Chemical Society

URI: <https://doi.org/10.1021/acs.bioconjchem.6c00090>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11242>

Publication Date: 2026-05

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Author(s): Thaggard, Grace C.; VAIDHYANATHAN, RAMANATHAN; Khashab, Niveen M.; Shustova, Natalia B.

Title: Emergent Frontiers in Porous Frameworks and Beyond

Citation: ACS Materials Letters, 8(05), 1286-1287.

Publisher: American Chemical Society

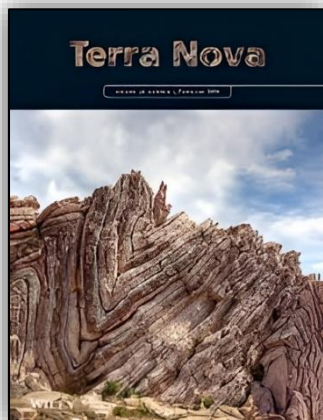
URI: <https://doi.org/10.1021/acsmaterialslett.6c00374>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11235>

Publication Date: 2026-05

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EARTH AND CLIMATE SCIENCE



Author(s): KUMAR, AJAY

Title: Thermochemical Heterogeneities in the Northern Tibet Lithosphere Could Explain the Lithosphere-Scale Low Seismic Velocities

Citation: Terra Nova

Publisher: Wiley

URI: <https://doi.org/10.1111/ter.70043>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11240>

Publication Date: 2026-05



Author(s): Vijayan, S.; BIVAS, DAS et al.

Title: Impacts into the lunar permanently shadowed regions

Citation: npj Space Exploration, 2, 17.

Publisher: Springer Nature

URI: <https://doi.org/10.1038/s44453-026-00032-1>

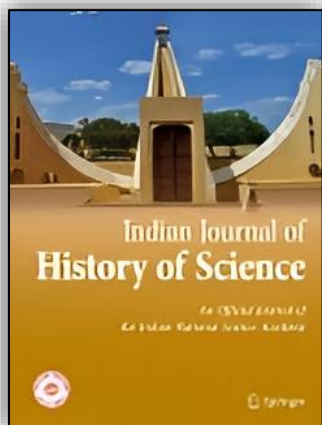
DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11199>

Publication Date: 2026-04

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HUMANITIES AND SOCIAL SCIENCES

Journal Articles



Author(s): Santhoju, Pandu; PAI, VENKETESWARA R.; Behera, Laxmidhar

Title: Computation of planetary geocentric latitudes and declinations based on the Sūryasiddhānta algorithm

Citation: Indian Journal of History of Science, 61, 9-36.

Publisher: Indian National Science Academy

URI: <https://doi.org/10.1007/s43539-026-00198-3>

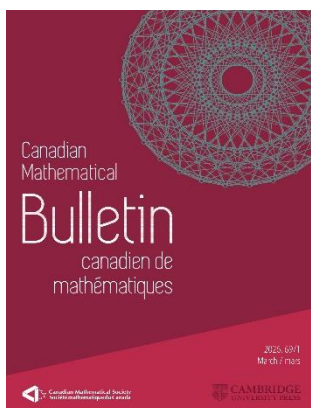
DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11221>

Publication Date: 2026-05

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MATHEMATICS

Journal Articles



Author(s): BANERJEE, DEBARGHA; DAS, SRIJAN

Title: A note on extensions of p-adic representations of $GL_2(\mathbb{Q}_p)$

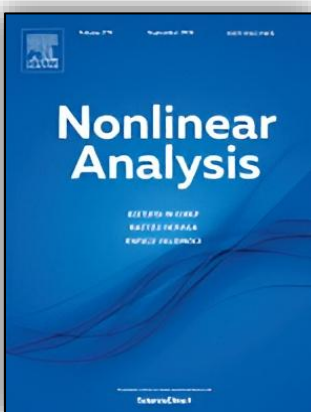
Citation: Canadian Mathematical Bulletin

Publisher: Cambridge University Press

URI: <https://doi.org/10.4153/S0008439526102021>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11200>

Publication Date: 2026-05



Author(s): BHIMANI, DIVYANG G.; Haque, Saikatul; Ikeda, Masahiro

Title: On the Hardy-Hénon heat equation with an inverse square potential

Citation: Nonlinear Analysis, 271, 114148.

Publisher: Elsevier B.V.

URI: <https://doi.org/10.1016/j.na.2026.114148>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11256>

Publication Date: 2026-10



Author(s): GHOSH, PARNASHREE; Gupta, Neena; Pal, Ananya

Title: On the family of affine threefolds $a(x)y = F(x,z,t)$

Citation: Journal of Algebra, 700, 267-288.

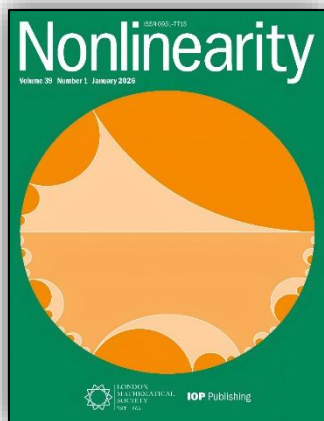
Publisher: Elsevier B.V.

URI: <https://doi.org/10.1016/j.jalgebra.2026.04.008>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11258>

Publication Date: 2026-08

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Author(s): Fetecau, Razvan C; Park, Hansol; VAIDYA, VISHNU

Title: Global energy minimizers for a diffusion-aggregation model on sphere

Citation: Nonlinearity, 39(05).

Publisher: IOP Publishing

URI: <https://doi.org/10.1088/1361-6544/ae6961>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11255>

Publication Date: 2026-05



Author(s): Parameswaran, A. J.; PINE, JAGADISH

Title: Ulrich bundles on cyclic coverings of projective spaces

Citation: Journal of Algebra, 705, 207, 243.

Publisher: Elsevier B.V.

URI: <https://doi.org/10.1016/j.jalgebra.2026.05.010>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11244>

Publication Date: 2026-11

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PHYSICS

Journal Articles



Author(s): ALEXANDER, C.; MAHESH, T. S.

Title: Quantum sensing via large spin clusters in solid-state NMR: Optimal coherence order for practical sensing

Citation: Physical Review A, 113, 042620.

Publisher: American Physical Society

URI: <https://doi.org/10.1103/tcw3-l54f>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11211>

Publication Date: 2026-04



Author(s): ANSARI, ELAF; BHOWMICK, SUPRITHA; GHOSH, DIPTIMOY

Title: Singularities in cosmological loop correlators. Part II. Non local interactions and flat space limits

Citation: Journal of High Energy Physics, 2026(05), 114.

Publisher: Springer Nature

URI: [https://doi.org/10.1007/JHEP05\(2026\)114](https://doi.org/10.1007/JHEP05(2026)114)

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11237>

Publication Date: 2026-05



Author(s): BAPAT, BHAS

Title: The compelling case of the magnetic damped pendulum for undergraduate laboratories

Citation: Physics Education, 61(03).

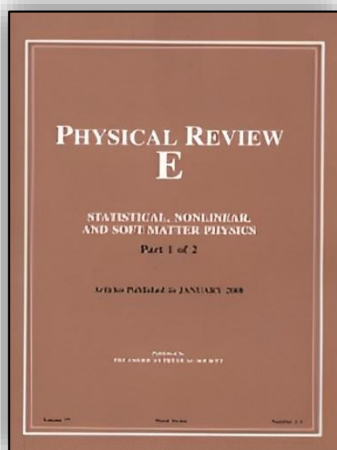
Publisher: IOP Publishing

URI: <https://doi.org/10.1088/1361-6552/ae56ab>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11218>

Publication Date: 2026-06

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Author(s): BHOWMIK, BHANU PRASAD

Title: Tuning the viscosity and jamming point in dense active non-Brownian suspensions

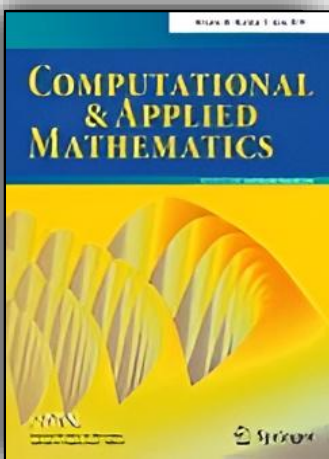
Citation: Physical Review E, 113, L053402.

Publisher: American Physical Society

URI: <https://doi.org/10.1103/g9bh-kqkl>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11253>

Publication Date: 2026-05



Author(s): CHOUDHARY, A.; Sharma, J.; Tiwari, S. K.; Chatterjee, K.

Title: Rational image of r-primitive k-normal elements with prescribed traces

Citation: Computational and Applied Mathematics, 45, 370.

Publisher: Springer Nature

URI: <https://doi.org/10.1007/s40314-026-03761-x>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11230>

Publication Date: 2026-05



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: High-precision measurement of the W boson mass with the CMS experiment

Citation: Nature, 652, 321-327.

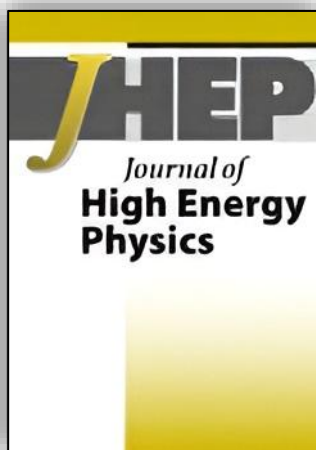
Publisher: Springer Nature

URI: <https://doi.org/10.1038/s41586-026-10168-5>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11224>

Publication Date: 2026-04

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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: Combination and interpretation of differential Higgs boson production cross sections in proton-proton collisions at $\sqrt{s} = 13.6$ TeV

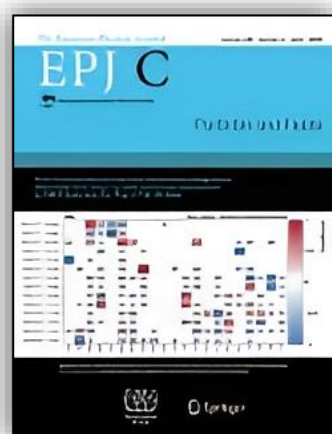
Citation: Journal of High Energy Physics, 2026(04), 93.

Publisher: Springer Nature

URI: [https://doi.org/10.1007/JHEP04\(2026\)093](https://doi.org/10.1007/JHEP04(2026)093)

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11227>

Publication Date: 2026-04



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: Combined effective field theory interpretation of Higgs boson, electroweak vector boson, top quark, and multijet measurements

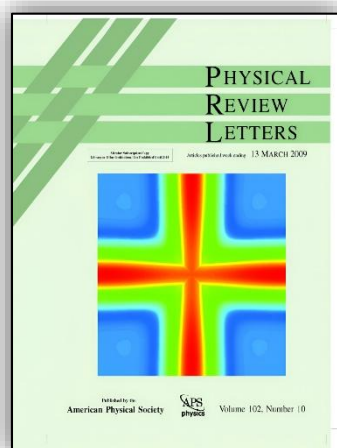
Citation: European Physical Journal C, 86(04), 331.

Publisher: Springer Nature

URI: <https://doi.org/10.1140/epjc/s10052-025-14997-y>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11228>

Publication Date: 2026-04



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

Title: Measurement of D^0 Meson Photoproduction in Ultraperipheral Heavy Ion Collisions

Citation: Physical Review Letters, 136, 122303.

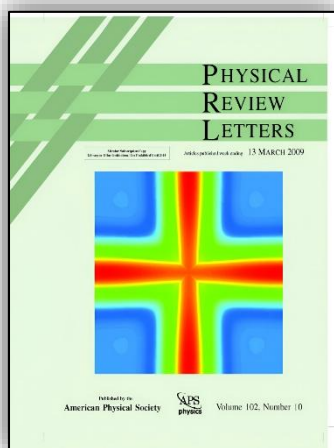
Publisher: American Physical Society

URI: <https://doi.org/10.1103/lckg-sdh9>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11231>

Publication Date: 2026-05

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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: First Evidence for Mixing-Induced CP Violation in $B^0_s \rightarrow J/\psi\phi(1020)$ Decays in pp Collisions at $\sqrt{s}=13$ TeV

Citation: Physical Review Letters, 136, 181801.

Publisher: American Physical Society

URI: <https://doi.org/10.1103/ctqx-vxrj>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11245>

Publication Date: 2026-05



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

Title: Characterizing the initial state and dynamical evolution in XeXe and PbPb collisions using multiparticle cumulants

Citation: Physics Letters B

Publisher: Elsevier B.V.

URI: <https://doi.org/10.1016/j.physletb.2026.140359>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11205>

Publication Date: 2026-05



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

Title: Search for dijet resonances with data scouting in proton-proton collisions at $\sqrt{s} = 13.6$ TeV

Citation: Journal of High Energy Physics, 2026(04), 133.

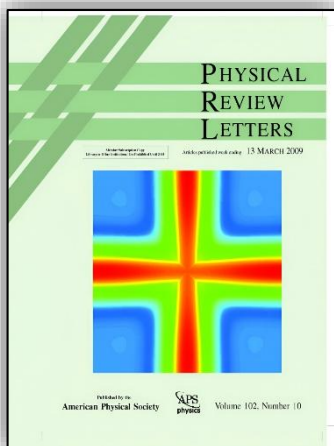
Publisher: Springer Nature

URI: [https://doi.org/10.1007/JHEP04\(2026\)133](https://doi.org/10.1007/JHEP04(2026)133)

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11226>

Publication Date: 2026-04

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

Title: Search for Light Pseudoscalar Bosons, Pair-Produced in Higgs Boson Decays in the Four-Electron Final State in Proton-Proton Collisions at $\sqrt{s}=13$ TeV

Citation: Physical Review Letters, 136, 181807

Publisher: American Physical Society

URI: <https://doi.org/10.1103/r53x-8fqp>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11246>

Publication Date: 2026-05



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

Title: High-level hadronic tau lepton triggers of the CMS experiment in proton-proton collisions at $\sqrt{s} = 13.6$ TeV

Citation: Journal of Instrumentation, 21.

Publisher: IOP Publishing

URI: <https://doi.org/10.1088/1748-0221/21/04/P04002>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11209>

Publication Date: 2026-04



Author(s): JOSHI, JITENDRA; MAHESH, T. S.

Title: NMR protocol for black-box ergotropy estimation via feedback algorithm

Citation: Physical Review A, 113, 032407.

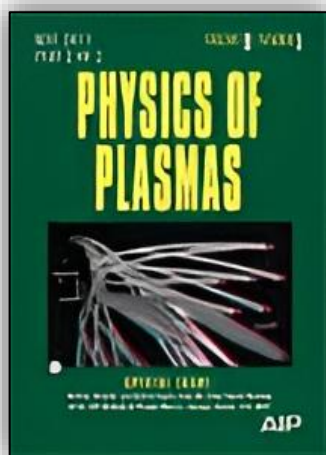
Publisher: American Physical Society

URI: <https://doi.org/10.1103/7pjs-146q>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11236>

Publication Date: 2026-05

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Author(s): Kananovich, Anton; MEHROTRA, PARTH; JAISWA, SURABHI

Title: Large errors in kinetic temperature measurements using particle tracking velocimetry

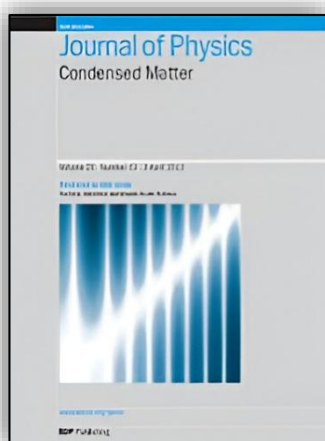
Citation: Physics of Plasmas, 33(05), 053703.

Publisher: AIP Publishing

URI: <https://doi.org/10.1063/5.0318817>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11223>

Publication Date: 2026-05



Author(s): KUMAR, AJAD; BATHU, BHARAT CHAND; CHAKRAVARTY, SHRUTI; NAIR, SUNIL; BAJPAI, ASHNA

Title: Quasi Two-dimensional Antiferromagnet SrRu_2O_6 : Mechanism of Electrical Conduction

Citation: Journal of Physics: Condensed Matter

Publisher: IOP Publishing

URI: <https://doi.org/10.1088/1361-648X/ae7244>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11249>

Publication Date: 2026-05



Author(s): KUMAR, ANKIT; VISHAK, S. S.; GHOSH, PRASENJIT; SINGH, SURJEET

Title: Defect-Assisted Ultrahigh zT of TaFeSb Based Half-Heuslers

Citation: Small

Publisher: Wiley

URI: <https://doi.org/10.1002/sml.73765>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11248>

Publication Date: 2026-05

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Author(s): Kvitnitskaya, O. E.; HARNAGEA, LUMINITA; Shipunov, G.; Aswartham, S.; Kovalchuk, I.; Fisun, V. V.; Efremov, D. V.; Büchner, B.; Naidyuk, Yu G.

Title: Point-contact enhanced superconductivity in trigonal PtBi₂: quest for the origin of 'high-T_c'

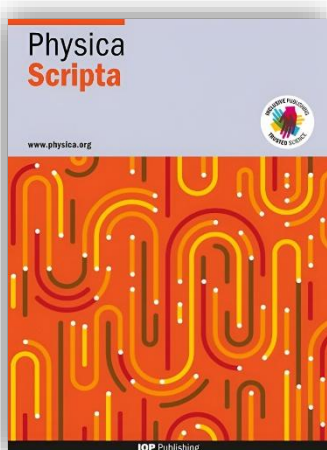
Citation: Superconductor Science and Technology, 39(05).

Publisher: IOP Publishing

URI: <https://doi.org/10.1088/1361-6668/ae61fb>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11259>

Publication Date: 2026-05



Author(s): L J, ADITHYA; Nokkala, Johannes; Piilo, Jyrki; MEENA, CHANDRAKALA

Title: Stability of continuous time quantum walks in complex networks

Citation: Physica Scripta, 101(19).

Publisher: IOP Publishing

URI: <https://doi.org/10.1088/1402-4896/ae6741>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11252>

Publication Date: 2026-05



Author(s): MANGAMURI, SIDDHARTHA; Couëde, L.; JAISWAL, S.

Title: Investigating solid-fluid phase coexistence in dc plasma bilayer crystals: The role of particle pairing and mode coupling

Citation: Physical Review E, 113, 045210.

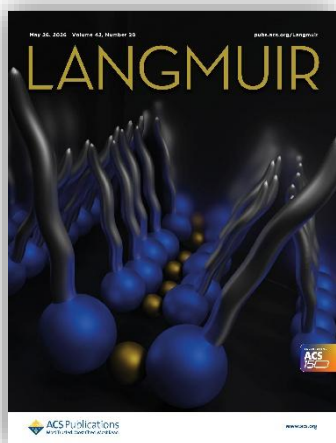
Publisher: American Physical Society

URI: <https://doi.org/10.1103/nxt3-qwj6>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11206>

Publication Date: 2026-04

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Author(s): Moirangthem, Miteshkumar; P., Vrindha; Fani, Irfan Ahmed; MEENA, CHANDRAKALA; Meena, Santosh Kumar

Title: Integrated Machine Learning and Molecular Dynamics for Functional Nanoparticle Design: Synthesis, Characterization, Force-Field Development, and Property Prediction

Citation: Langmuir.

Publisher: American Chemical Society

URI: <https://doi.org/10.1088/1361-6668/ae61fb>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11257>

Publication Date: 2026-05



Author(s): NAIR, BALAGOPAL; Nabeel, Arshed; Danny Raj, M.

Title: Hydrodynamic interactions mask the true heterogeneity of a microscopic collective

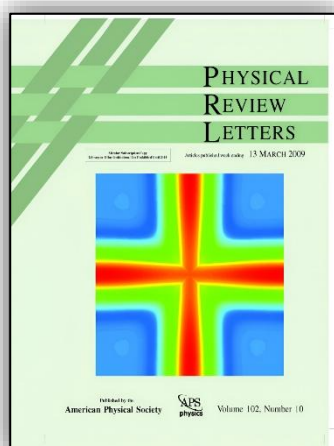
Citation: European Physical Journal Special Topics

Publisher: Springer Nature

URI: <https://doi.org/10.1140/epjs/s11734-026-02383-y>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11243>

Publication Date: 2026-05



Author(s): Nandi, Saikat; MAHAPATRA, SAGAR et al.

Title: Novel Quantum Spin Liquid States in the $S = 12$ Three-Dimensional Compound $Y_3Cu_2Sb_3O_{14}$

Citation: Physical Review Letters, 136, 166502.

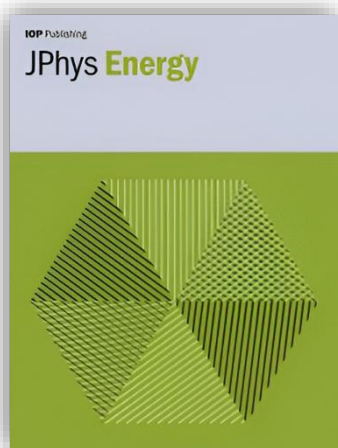
Publisher: American Physical Society

URI: <https://doi.org/10.1103/2bps-xv18>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11260>

Publication Date: 2026-04

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Author(s): Patil, Kalyanee; HARNAGEA, LUMINITA; Das, Tisita; Bhawe, Tejashree; OGALE, SATISHCHANDRA.

Title: $\text{Cs}_2\text{AgBiBr}_6/\text{HfSe}_2$ (0D/2D) nano-hetero interface for superior photoconduction via efficient charge separation

Citation: Journal of Physics: Energy, 8(01).

Publisher: IOP Publishing

URI: <https://doi.org/10.1088/2515-7655/ae1fad>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11201>

Publication Date: 2026-03



Author(s): PATTANAYAK, NAMRATA; KUMAR, ARUN; Nigam, Arun Kumar; Pomjakushin, Vladimir; NAIR, SUNIL; BAJPAI, ASHNA

Title: Quasi-Static Remanence as a generic-feature of spin-canting in Dzyaloshinskii-Moriya Interaction driven canted-antiferromagnets

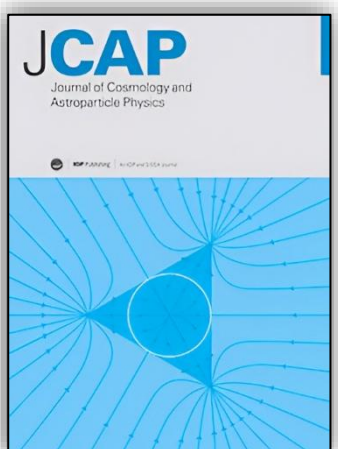
Citation: Journal of Physics: Condensed Matter

Publisher: IOP Publishing

URI: <https://doi.org/10.1088/1361-648X/ae72e1>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11250>

Publication Date: 2026-05



Author(s): PUNDIR, GAURAV; Roy Choudhury, Tirthankar; Paranjape, Aseem

Title: Conditioning halos on the tidal environment for fast and accurate HI power spectra during reionization

Citation: Journal of Cosmology and Astroparticle Physics, 2026, 043.

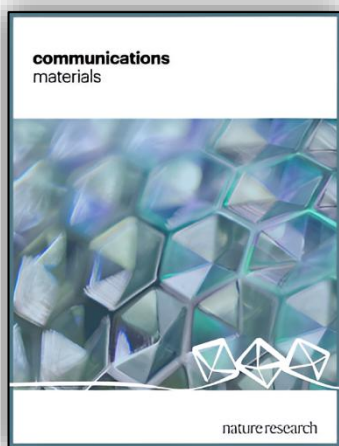
Publisher: IOP Publishing

URI: <https://doi.org/10.1088/1475-7516/2026/04/043>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11208>

Publication Date: 2026-04

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Author(s): RAJPUT, MANISHA; SHUKLA, ASHUTOSH; MAHAPATRA, AVINASH; BISOI, SWAPNESWAR; KUMAR, G. V. PAVAN; RAHMAN, ATIKUR

Title: Morphotaxial Cu doping in monolayer MoS₂ for high-performance optoelectronics

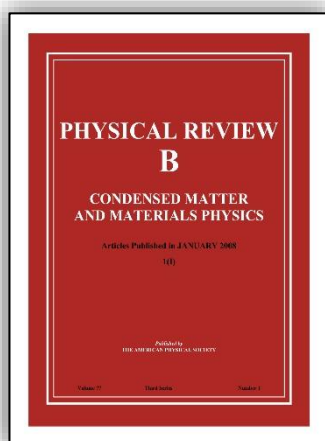
Citation: Communications Materials, 7, 119.

Publisher: Springer Nature

URI: <https://doi.org/10.1038/s43246-026-01120-1>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11251>

Publication Date: 2026-03



Author(s): Ray, Tamoghna; GANGULY, KATHA; Poletti, Dario; Kulkarni, Manas; AGARWALLA, BIJAY KUMAR

Title: Quantum dynamics in lattices in the presence of bulk dephasing and a localized source

Citation: Physical Review B, 113, 054307.

Publisher: American Physical Society

URI: <https://doi.org/10.1103/6frd-chqr>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10790>

Publication Date: 2026-02



Author(s): SULTANA, NARGIS; SEETHARAMAN, SIDDHARTH; NATH, REJISH

Title: Quantum dynamics of spin-J particles in static and rotating magnetic fields: entanglement resonances and kinks

Citation: New Journal of Physics, 28, 054503.

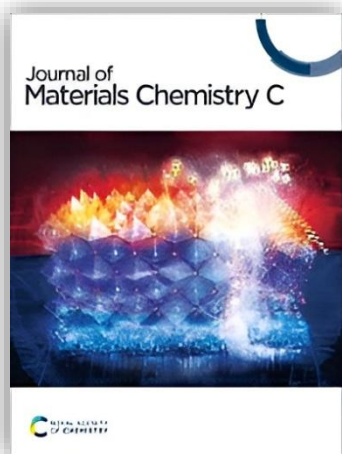
Publisher: IOP Publishing

URI: <https://doi.org/10.1088/1367-2630/ae5fc5>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11219>

Publication Date: 2026-05

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Author(s): Verma, Visheshvar; MAHAPATRA, AVINASH; Sahu, Rajesh Kumar; Singh, Ram Sevak; RAHMAN, ATIKUR; Gupta, Mukul; Banik, Soma; Singh, Arun Kumar

Title: Surface transfer n-type doping of graphene using WO₃ nanoparticles prepared without the use of hazardous chemicals

Citation: Journal of Materials Chemistry C.

Publisher: Royal Society of Chemistry

URI: <https://doi.org/10.1039/D6TC00248J>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/11210>

Publication Date: 2026-04

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Media Coverage: [[Prabhat](#)]

Title: Phase separation of heterochromatin protein 1 regulates virulence gene expression in *Plasmodium falciparum*

Author(s): MAMATHARANI, D.V.; PURKAYASTHA, DEVATRISHA; Niederwieser, Igor; Rai, Sandeep K.; Gaur, Prakshi; Ganji, Mahipal; Mukhopadhyay, Samrat; Voss, Till S.; KARMODIYA, KRISHANPAL

Publisher: Elsevier B.V.

URI: <https://doi.org/10.1016/j.celrep.2026.117168>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10767>

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