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BIOLOGY

Journal Articles



Author(s): Bhat, Younus A.; Bhat, Javaid Y.; Shiek, Suhail A.; Dar, Mohammad Abaas; Amin, Shajrul; Peterson, Craig L.; UDGAONKAR, JAYANT B.; Wani, Ajazul H.

Title: Dynamic Conformations of Chromatin Remodeler ISWI during Nucleosome Sliding Revealed by Hydrogen-Deuterium Exchange Coupled to Mass Spectrometry

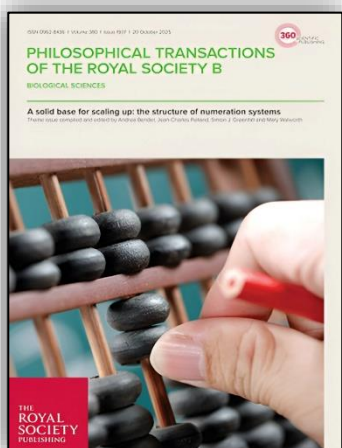
Citation: Biochemistry, 64(19), 4155-4169.

Publisher: American Chemical Society

URI: <https://doi.org/10.1021/acs.biochem.5c00330>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10467>

Publication Date: 2025-10



Author(s): DAS, SOURADEEP; PAL, RUCHIRA; RAJAMANI, SUDHA

Title: Dynamical interactions among protocell populations: Implications for membrane-mediated chemical evolution

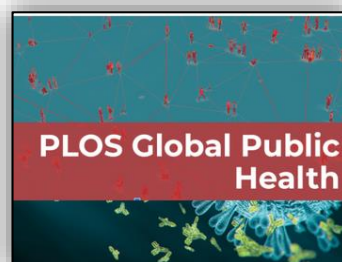
Citation: Philosophical Transactions of the Royal Society B.

Publisher: The Royal Society

URI: <https://doi.org/10.1098/rstb.2025.0104>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10503>

Publication Date: 2025-10



Author(s): Kagemann, Catherine H; CHAKRABORTY, ARNAB; KAMAT, SIDDHESH S. et al.

Title: Metabolite dynamics over the course of anti-tuberculosis treatment in individuals with mild and severe tuberculosis

Citation: PLOS Global Public Health, 5(10).

Publisher: PLOS

URI: <https://doi.org/10.1371/journal.pgph.0004925>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10464>

Publication Date: 2025-10

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Author(s): KUMAR, JOHN ELISA; Tripathy, Ashutosh; SHETH, RONIT GAURANG; BHAGWAT, SUNIL S.

Title: Colour removal of binary mixture of food colouring dye by classical fenton oxidation: Effect of salts, citric acid and kinetics study

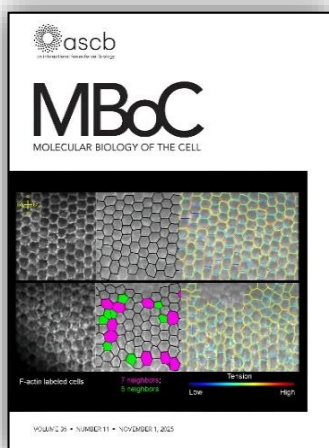
Citation: Next Chemical Engineering, 1, 100012.

Publisher: Elsevier B.V.

URI: <https://doi.org/10.1016/j.nxcen.2025.100012>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10505>

Publication Date: 2025-10



Author(s): KALE, TANVI; Dasgupta, Ryth; Inamdar, Mandar M.; ATHALE, CHAITANYA A.

Title: Mechanics of Escherichia coli cell width homeostasis and bulge dynamics from MreB and septum inhibition

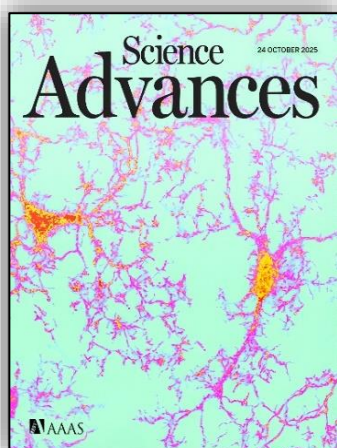
Citation: Molecular Biology of the Cell, 36(10).

Publisher: American Society for Cell Biology

URI: <https://doi.org/10.1091/mbc.E24-12-0543>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10492>

Publication Date: 2025-10



Author(s): MAHAJAN, SARANG; DAS, SUSOBHAN; TAMBOLI, SUHEL; PANDEY, SANYUKTA; BHATTACHARJEE, ANINDYA S.; PARDASANI, MEENAKSHI; SRIKANTH, PRIYADHARSHINI; MARATHE, SHRUTI D.; ADLAKHA, AVI; RANJAN, LAVANYA; ABRAHAM, NIXON M.

Title: Mouse olfactory system acts as anemo-detector and anemo-discriminator

Citation: Science Advances, 11(41).

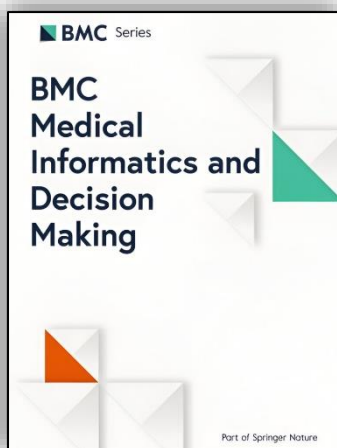
Publisher: American Association for the Advancement of Science

URI: <https://doi.org/10.1126/sciadv.adq8390>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10470>

Publication Date: 2025-10

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Author(s): Nalband, Saif; KIRATKAR, PALLAVI; Gupta, Maulik; Gambhir, Mansi; Sonam, Surabhi; Robert, Femj; Prince, A. Amalin

Title: Ensemble techniques for predictive modeling of leishmanial activity via molecular fingerprints

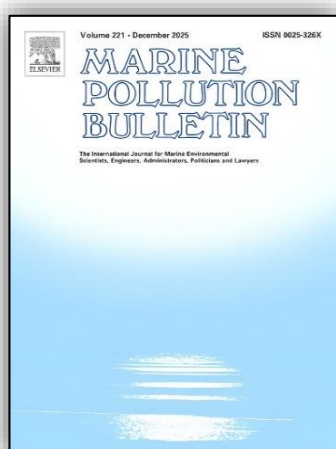
Citation: BMC Medical Informatics and Decision Making, 25, 378.

Publisher: BioMed Central Ltd

URI: <https://doi.org/10.1186/s12911-025-03041-4>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10493>

Publication Date: 2025-10



Author(s): PATRE, MONALI VASANT; Bora, Garima; Jakhete, Sharayu; Dsouza, Shawn; Shanker, Kartik

Title: Microplastic accumulation in marine organisms across trophic levels along the west coast of India

Citation: Marine Pollution Bulletin, 222, Part 2, 118816.

Publisher: Elsevier B.V.

URI: <https://doi.org/10.1016/j.marpolbul.2025.118816>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10465>

Publication Date: 2026-01



Author(s): PURI, SARITA; PALKAR, SHARVARI; Kumawat, Amit; CHAUDHARY, ISHAAN; PATEL, BASUDHA; Kumar, V. Vinoth; Sriramoju, Manoj K.; Garai, Kanchan; Hsu, Shang-Te Danny; Ricagno, Stefano

Title: Dimer Dissociation and Aggregation Hot-spot Exposure Synergistically Accelerate Light Chain Variable Domain Aggregation Associated With AL Amyloidosis

Citation: Journal of Molecular Biology, 437(24), 169468.

Publisher: Elsevier B.V.

URI: <https://doi.org/10.1016/j.jmb.2025.169468>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10498>

Publication Date: 2025-12

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Author(s): SHAH, DISHA; KARMODIYA, KRISHANPAL

Title: Yet to SET: Plasmodium falciparum Histone Lysine Methyltransferases

Citation: ACS Infectious Diseases

Publisher: American Chemical Society

URI: <https://doi.org/10.1021/acsinfecdis.5c00578>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10459>

Publication Date: 2025-10



Author(s): Wong, Tsung-Yun; MEHDIRATTA, KRITTEE; BHOSALE, RASHMI S.; CHAKRABORTY, ARNAB; KAMAT, SIDDHESH S.; GOKHALE, RAJESH S. et al.

Title: Kupyaphores—Self-Assembling Diisocyanolipopeptide Zn^{II} Ionophores in Mycobacterium tuberculosis Zn^{II}/Cu^I/ Homeostasis and Antibacterial Effects

Citation: Journal of the American Chemical Society

Publisher: American Chemical Society

URI: <https://doi.org/10.1021/jacs.5c13262>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10497>

Publication Date: 2025-10

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CHEMISTRY

Journal Articles



Author(s): HASSAN, NAHID; PANDAY, RISHUKUMAR; JOSE, THERESE MARIYA; BHOI, UMASHIS; BOOMISHANKAR, RAMAMOORTHY; BALLAV, NIRMALYA et al.

Title: Rotational Flexibility in Dication Drives Ambient Temperature Ferroelectricity in an Organic-Inorganic Hybrid Halide

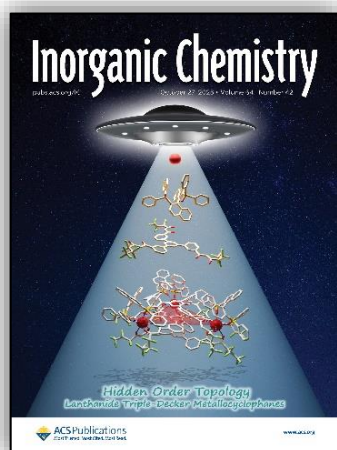
Citation: Angewandte Chemie International Edition

Publisher: Wiley

URI: <https://doi.org/10.1002/anie.202512104>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10501>

Publication Date: 2025-10



Author(s): MAHATO, SUBHAM KUMAR; KUSHWAHA, VIKASH; Zareba, Jan K.; BOOMISHANKAR, RAMAMOORTHY

Title: A Chiral Edge-Sharing Biocuboctahedral Chlorobismuthate(III) Hybrid Ferroelectric and Its Application in Piezoelectric Energy Harvesting

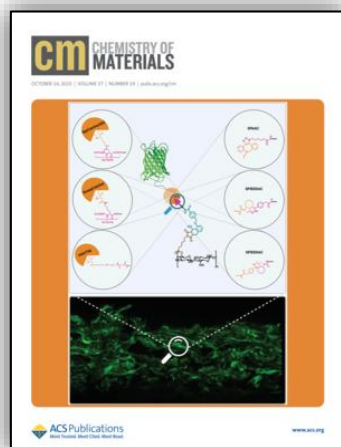
Citation: Inorganic Chemistry, 64(42), 21194–21203.

Publisher: American Chemical Society

URI: <https://doi.org/10.1021/acs.inorgchem.5c03925>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10496>

Publication Date: 2025-10



Author(s): MAJUMDER, DIPANJAN; FAJAL, SAHEL; SARKAR, NAYAN; Sengupta, Arijit; MANDAL, WRITAKSHI; Shirolkar, Mandar M.; GHOSH, SUJIT K.

Title: Chemically Robust Functionalized MOF/Polymer Composite for Selective Sequestration of Higher-Valent Actinides from Simulated Nuclear Waste

Citation: Chemistry of Materials, 37(19), 7996–8008.

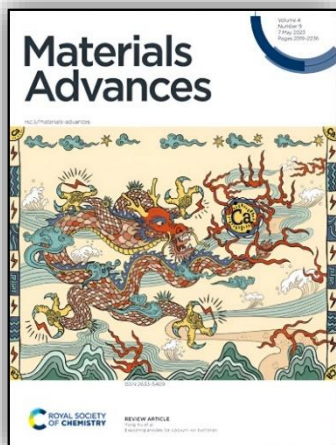
Publisher: American Chemical Society

URI: <https://doi.org/10.1021/acs.chemmater.5c01870>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10499>

Publication Date: 2025-09

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Author(s): Okshtein, Hen; Alshanski, Israel; KIKKERI, RAGHAVENDRA; Yitzchaik, Shlomo; Hurevich, Mattan

Title: Sialylated glycan-based impedimetric biosensing for the detection of *Vibrio cholerae* biomarkers in cell culture media

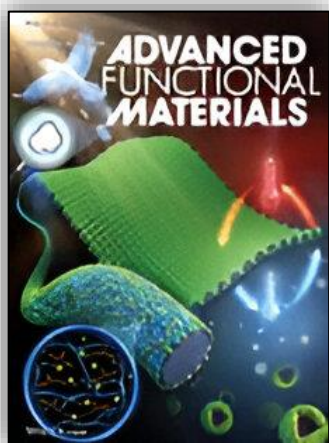
Citation: Materials Advances, 6(21), 8071-8077.

Publisher: Royal Society of Chemistry

URI: <https://doi.org/10.1039/D5MA00993F>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10500>

Publication Date: 2025-09



Author(s): PARMAR, MUSKAN; DARGILY, NEETHU CHRISTUDAS; NAYAK, BHOJKUMAR; PANDEY, VINAY; Kotresh, Harish Makri Nimbegondi; THOTIYL, MUSTHAFA OTTAKAM

Title: Molecular-Scale Geometry Switching for Proton-Driven Macroscopic Actuation

Citation: Advanced Functional Materials.

Publisher: Wiley

URI: <https://doi.org/10.1002/adfm.202515664>

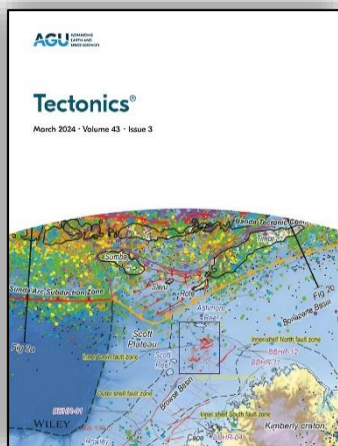
DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10453>

Publication Date: 2025-10

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EARTH AND CLIMATE SCIENCE

Journal Articles



Author(s): ISMAIEL, M.; Ali, M. Y.; Decarlis, A.

Title: Flexural Development in the Foreland Basin Adjacent to Northern Oman-UAE Mountain Belt: Effect of Lithospheric Weakening

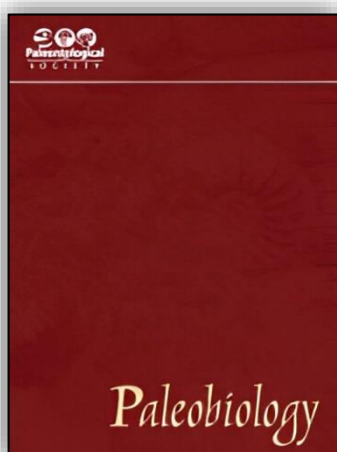
Citation: Tectonics, 44(10).

Publisher: Wiley

URI: <https://doi.org/10.1029/2025TC008941>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10463>

Publication Date: 2025-10



Author(s): Smith, Jansen A.; DEVAPRIYA CHATTOPADHYAY et al.

Title: Identifying the Big Questions in paleontology: a community-driven project

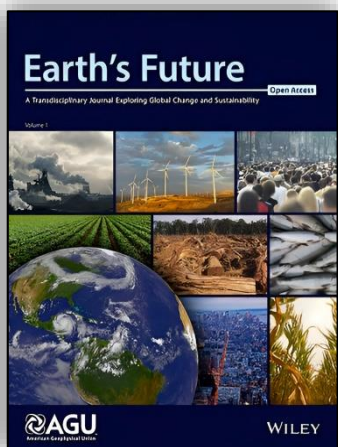
Citation: Paleobiology, 51(03).

Publisher: Cambridge University Press

URI: <https://doi.org/10.1017/pab.2025.10042>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10472>

Publication Date: 2025-08



Author(s): THOMAS, TRESA MARY; Duan, Lei; Bala, Govindasamy; Caldeira, Ken

Title: A Stylized Study of the Climate Response to Longwave and Shortwave Forcing at the Altitude of Aviation-Induced Cirrus

Citation: Earth's Future, 13(10).

Publisher: Wiley

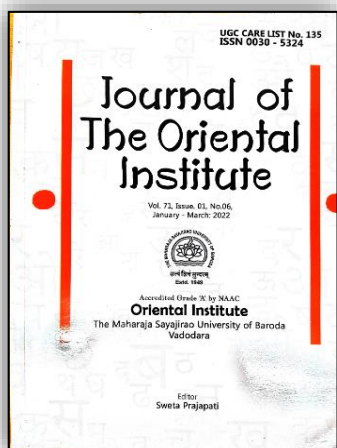
URI: <https://doi.org/10.1029/2025EF006201>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10494>

Publication Date: 2025-10

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HUMANITIES AND SOCIAL SCIENCES



Author(s): Shroff, Anita Nikhil; PAI, VENKETESWARA R.

Title: Nipātana as A Tool in Application of Rules

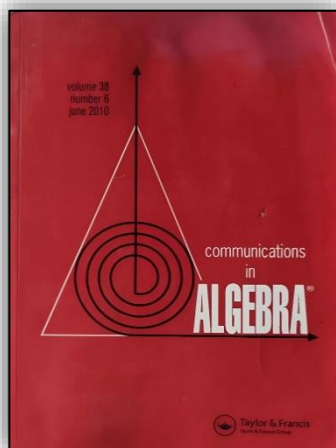
Citation: Journal of the Oriental Institute, 74, 43-52.

Publisher: The Oriental Institute

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10502>

Publication Date: 2025

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Author(s): CHOUDHARY, AAKASH; Sharma, Jyotsna

Title: Arithmetic progressions of some special elements in finite fields

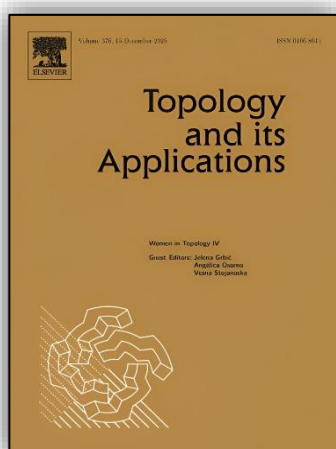
Citation: Communications in Algebra.

Publisher: Taylor & Francis

URI: <https://doi.org/10.1080/00927872.2025.2561951>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10460>

Publication Date: 2025-09



Author(s): DATTA, SUTIRTHA; DAUNDKAR, NAVNATH; SARKAR, ABHISHEK

Title: Higher topological complexity of planar polygon spaces having small genetic codes

Citation: Topology and its Applications, 375, 109575.

Publisher: Elsevier B.V.

URI: <https://doi.org/10.1016/j.topol.2025.109575>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10477>

Publication Date: 2025-12



Author(s): GOSWAMI, ANINDYA; Rana, Nimit

Title: A market resilient data-driven approach to option pricing

Citation: Quantitative Finance.

Publisher: Taylor & Francis

URI: <https://doi.org/10.1080/14697688.2025.2562161>

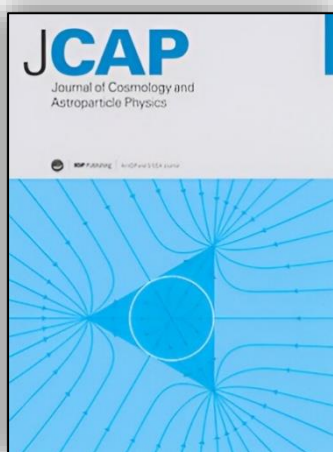
DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10456>

Publication Date: 2025-10

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PHYSICS

Journal Articles



Author(s): ANSARI, ARHUM; BANERJEE, ARKA; JAIN, SACHIN; Padhyegurjar, Shaunak

Title: Time non-locality in dark matter and LSS

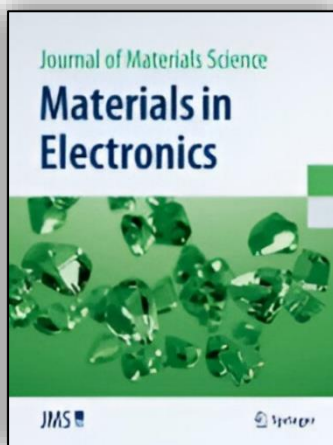
Citation: Journal of Cosmology and Astroparticle Physics, 2025(10).

Publisher: IOP Publications

URI: <https://doi.org/10.1088/1475-7516/2025/10/018>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10468>

Publication Date: 2025-10



Author(s): Choudhari, Sanju; KEDIA, DINESH KUMAR; Yadav, Manisha; Kumar, Pradeep; Ram, Pura

Title: Exploring thermoelectric properties of hydrothermally synthesized Ag-doped SnS material

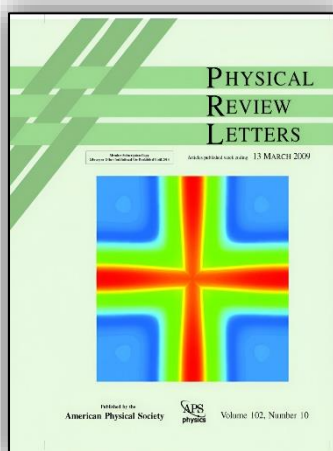
Citation: Journal of Materials Science: Materials in Electronics, 36, 1760.

Publisher: Springer Nature

URI: <https://doi.org/10.1007/s10854-025-15761-4>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10461>

Publication Date: 2025-09



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: Probing Gluon Fluctuations in Nuclei with the First Energy-Dependent Measurement of Incoherent J/ψ Photoproduction in Ultraperipheral PbPb Collisions

Citation: Physical Review Letters, 135, 112301.

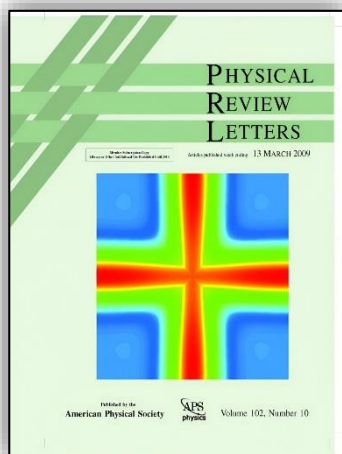
Publisher: American Physical Society

URI: <https://doi.org/10.1103/w9kp-f8xr>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10462>

Publication Date: 2025-09

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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: Observation of Λ Hyperon Local Polarization in p -Pb Collisions at $\sqrt{s_{NN}}=8.16$ TeV

Citation: Physical Review Letters, 135, 132301.

Publisher: American Physical Society

URI: <https://doi.org/10.1103/6ywq-gm61>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10460>

Publication Date: 2025-09



Author(s): DATAR, AADITYA; Krishnan, Chethan

Title: Virasoro blocks and trouble at the Euclidean horizon

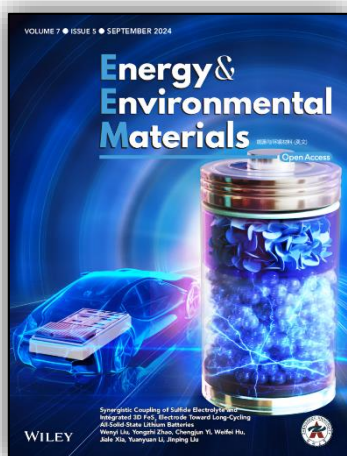
Citation: Physical Review D, 112, 066015.

Publisher: American Physical Society

URI: <https://doi.org/10.1103/65zz-yjhl>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10454>

Publication Date: 2025-09



Author(s): Kanagaraj, Amarsingh Bhabu; Chandrakant Lokhande, Abhishek; Sharma, Gautam; Bulakhe, Ravindra N.; KUMAR, ANKIT; Singh, Nirpendra; Choi, Daniel S.

Title: Gallium Vanadium Oxide-Based Free-Standing Versatile Electrode for Next-Generation Lithium and Sodium Energy Storage: Combined Experimental and First-Principles Insights into Electrochemical Performance

Citation: Energy & Environmental Materials

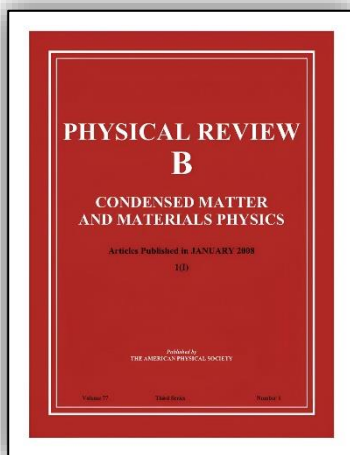
Publisher: Wiley

URI: <https://doi.org/10.1002/eem2.70082>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10475>

Publication Date: 2025-09

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Author(s): Kuibarov, A.; HARNAGEA, LUMINITA et al.

Title: Measuring superconducting arcs by angle-resolved photoemission spectroscopy

Citation: Physical Review B, 112, 144518.

Publisher: American Physical Society

URI: <https://doi.org/10.1103/5q36-wgl9>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10504>

Publication Date: 2025-10



Author(s): MAITY, SUVASHIS

Title: ACT-ing on inflation: Implications of non bunch-Davies initial condition and reheating on single-field slow roll models

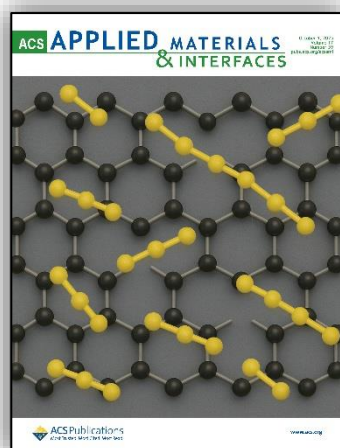
Citation: Physics Letters B, 870, 139913.

Publisher: Elsevier B.V.

URI: <https://doi.org/10.1016/j.physletb.2025.139913>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10466>

Publication Date: 2025-11



Author(s): RAJPUT, MANISHA; Hwang, Sooyeon; RAHMAN, ATIKUR

Title: Dielectric-Engineered Monolayer MoS₂ Memtransistors for Brain-Inspired Computing with High Recognition Accuracy

Citation: ACS Applied Materials & Interfaces, 17(39), 55189-55198.

Publisher: American Chemical Society

URI: <https://doi.org/10.1021/acsami.5c11139>

DR URI: <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/10478>

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