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

Author(s) DAS DE, TANWEE; Sharma, Punita et al.
Title Bidirectional Microbiome-Gut-Brain-Axis Communication Influences Metabolic Switch-Associated Responses in the Mosquito *Anopheles culicifacies*
Citation Cells, 11(11), 1798.
Publisher MDPI
URI <https://doi.org/10.3390/cells11111798>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7138>
Date of Publication 2022-06

Author(s) GIRISH, KRISHNA S.; Srinivasan, Umesh
Title Community science data provide evidence for upward elevational range shifts by Eastern Himalayan birds
Citation Biotropica.
Publisher Wiley
URI <https://doi.org/10.1111/btp.13133>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7231>
Date of Publication 2022-06

Author(s) Harish Kumar; UDGAONKAR, JAYANT B.
Title Elongation of Fibrils Formed by a Tau Fragment is Inhibited by a Transient Dimeric Intermediate
Citation Journal of Physical Chemistry B, 126(18), 3385-3397.
Publisher American Chemical Society
URI <https://doi.org/10.1021/acs.jpcc.1c10752>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7099>
Date of Publication 2022-05

Author(s) HEGDE, SUSHMITHA; Sreejan, Ashley; Gadgil, Chetan J.; RATNAPARKHI, GIRISH S.
Title SUMOylation of Dorsal attenuates Toll/NF- κ B signaling
Citation Genetics.
Publisher Oxford University Press
URI <https://doi.org/10.1093/genetics/iyac081>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7097>
Date of Publication 2022-05

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Author(s) JOSHI, MIHIR; Ellsworth, Brontë; Thaker, Maria
Title Single components of complex chemical signals convey sex identity and individual variation
Citation Animal Behaviour, 187, 1-13.
Publisher Elsevier B.V.
URI <https://doi.org/10.1016/j.anbehav.2022.02.013>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7150>
Date of Publication 2022-05

Author(s) Kalamkar, Saurabh; Acharya, Jhankar; MADATHIL, ARJUN KOLAPPURATH; Gajjar, Vijay; Divate, Uma; Karandikar-Iyer, Sucheta; GOEL, PRANAY; Ghaskadbi, Saroj
Title Randomized Clinical Trial of How Long-Term Glutathione Supplementation Offers Protection from Oxidative Damage and Improves HbA1c in Elderly Type 2 Diabetic Patients
Citation Antioxidants, 11(5), 1026.
Publisher MDPI
URI <https://doi.org/10.3390/antiox11051026>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7061>
Date of Publication 2022-05

Author(s) RAJENDRAN, ABINAYA; SOORY, AMARENDRANATH; KHANDELWAL, NEHA; RATNAPARKHI, GIRISH; KAMAT, SIDDHESH S.
Title A multi-omics analysis reveals that the lysine deacetylase ABHD14B influences glucose metabolism in mammals
Citation Journal of Biological Chemistry.
Publisher Elsevier B.V.
URI <https://doi.org/10.1016/j.jbc.2022.102128>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7092>
Date of Publication 2022-06

Author(s) Sagarkar, Sneha; Bhat, Nagashree; Sapre, Madhura; Dudhabhate, Biru; Kokare, Dadasaheb M.; SUBHEDAR, NISHIKANT K.; Sakharkar, Amul J
Title TET1-induced DNA demethylation in dentate gyrus is important for reward conditioning and reinforcement
Citation Molecular Neurobiology.
Publisher Springer Nature
URI <https://doi.org/10.1007/s12035-022-02917-0>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7156>
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Author(s) SHETTY, ANKITHA; GALANDE, SANJEEV et al.
Title A systematic comparison of FOSL₁, FOSL₂ and BATF-mediated transcriptional regulation during early human Th₁₇ differentiation
Citation Nucleic Acids Research, 50(9), 4938-4958.
Publisher Oxford University Pres
URI <https://doi.org/10.1093/nar/gkac256>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7066>
Date of Publication 2022-05

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CHEMISTRY

Author(s) Bajpai, Aman; DEEPSHIKHA; Chhabria, Dimple; Mishra, Tripti; Kirubakaran, Sivapriya; Basu, Sudipta
Title Small molecule NSAID derivatives for impairing powerhouse in cancer cells
Citation Biorganic & Medicinal Chemistry, 64, 116759.
Publisher Elsevier B.V.
URI <https://doi.org/10.1016/j.bmc.2022.116759>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7151>
Date of Publication 2022-06

Author(s) Braun, Michael; KUMAR, PIYUSH et al.
Title Electrooxidation of Alcohols on Mixed Copper-Cobalt Hydroxycarbonates in Alkaline Solution
Citation ChemElectroChem.
Publisher Wiley
URI <https://doi.org/10.1002/celc.202200267>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7137>
Date of Publication 2022-05

Author(s) CHAKRABORTY, DEBANJAN; MULLANGI, DINESH; CHANDRAN, CHANDANA; VAIDHYANATHAN, RAMANATHAN
Title Nanopores of a Covalent Organic Framework: A Customizable Vessel for Organocatalysis
Citation ACS Omega, 7(18), 15275-15295.
Publisher American Chemical Society
URI <https://doi.org/10.1021/acsomega.2c00235>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7222>
Date of Publication 2022-05

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Author(s) Devulapalli, Venkata Swaroopa Datta; KUSHWAHA, RINKU; Ovalle, Edwin; SINGH, HIMAN DEV; SHEKHAR, PRAGALBH; CHAKRABORTY, DEBANJAN; Vinod, Chathakudath Prabhakaran; VAIDHYANATHAN, RAMANATHAN; Borguet, Eric

Title Synergistic Electronic Effects in AuCo Nanoparticles Stabilized in a Triazine-Based Covalent Organic Framework: A Catalyst for Methyl Orange and Methylene Blue Reduction

Citation ACS Applied Nano Materials, 5(4), 4744-4753.

Publisher American Chemical Society

URI <https://doi.org/10.1021/acsnm.1c04212>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7229>

Date of Publication 2022-04

Author(s) FAJAL, SAHEL; MANDAL, WRITAKSHI; MOLLICK, SAMRAJ; MORE, YOGESHWER D.; Torris, Arun; SAURABH, SATYAM; Shirolkar, Mandar M.; GHOSH, SUJIT K.

Title Trap Inlaid Cationic Hybrid Composite Material for Efficient Segregation of Toxic Chemicals from Water

Citation Angewandte Chemie International Edition.

Publisher Wiley

URI <https://doi.org/10.1002/anie.202203385>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7105>

Date of Publication 2022-04

Author(s) JAIN, VANSHIKA; KASHYAP, RADHA KRISHNA; PILLAI, PRAMOD P.

Title Plasmonic Photocatalysis: Activating Chemical Bonds through Light and Plasmon

Citation Advanced Optical Materials.

Publisher Wiley

URI <https://doi.org/10.1002/adom.202200463>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7149>

Date of Publication 2022-06

Author(s) Johannes, W. M.; GHOSH, SUJIT K.; MUKHERJEE, SOUMYA et al.

Title How Reproducible are Surface Areas Calculated from the BET Equation?

Citation Advanced Materials.

Publisher Wiley

URI <https://doi.org/10.1002/adma.202201502>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7064>

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Author(s) MALLA, JAVID AHMAD; UPADHYAY, AVISIKTA; GHOSH, PULAK; MONDAL, DEBASHIS; MONDAL, ABHISHEK; Sharma, Shilpy; TALUKDAR, PINAKI
Title Chloride Transport across Liposomes and Cells by Nontoxic 3-(1H-1,2,3-Triazol-1-yl)benzamides
Citation Organic Letters, 24(23), 4124-4128.
Publisher American Chemical Society
URI <https://doi.org/10.1021/acs.orglett.2c01219>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7093>
Date of Publication 2022-06

Author(s) MANAE, MEGHNA A.; HAZRA, ANIRBAN
Title Quantum effects in photosensitization: the case of singlet oxygen generation by thiothymines
Citation Physical Chemistry Chemical Physics, 24(21), 13266-13274.
Publisher Royal Society of Chemistry
URI <https://doi.org/10.1039/D2CP01337A>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7153>
Date of Publication 2022-06

Author(s) MANDAL, WRITAKSHI; FAJAL, SAHEL; MOLLICK, SAMRAJ; Shirolkar, Mandar M.; MORE, YOGESHWAR D.; SAURABH, SATYAM; MAHATO, DEBANJAN; GHOSH, SUJIT K.
Title Unveiling the Impact of Diverse Morphology of Ionic Porous Organic Polymers with Mechanistic Insight on the Ultrafast and Selective Removal of Toxic Pollutants from Water
Citation ACS Applied Materials & Interfaces, 14(17), 20042-20052.
Publisher American Chemical Society
URI <https://doi.org/10.1021/acsami.2c02174>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7106>
Date of Publication 2022-04

Author(s) NISAL, RAHUL; JAYAKANNAN, MANICKAM
Title Tertiary-Butylbenzene Functionalization as a Strategy for fl-Sheet Polypeptides
Citation Biomacromolecules, 23(6), 2667-2684.
Publisher American Chemical Society
URI <https://doi.org/10.1021/acs.biomac.2c00416>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7221>
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Author(s) PARIKSHIT KUMAR; Poonia, Ajay K.; MUKHERJEE, SUMAN; SHEIKH, TARIQ; Shrivastava, Megha; Adarsh, K. V.; NAG, ANGSHUMAN

Title Chiral Methylbenzylammonium Bismuth Iodide with Zero-Dimensional Perovskite Derivative Structure

Citation Journal of Physical Chemistry C, 126(23), 9889-9897.

Publisher American Chemical Society

URI <https://doi.org/10.1021/acs.jpcc.2c00530>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7228>

Date of Publication 2022-06

Author(s) ROY, SUMIT; ADURY, VENKATA SAI SREYAS; RAO, ANISH; ROY, SOUMENDU; MUKHERJEE, ARNAB; PILLAI, PRAMOD P.

Title Electrostatically Directed Long-Range Self-Assembly of Nucleotides with Cationic Nanoparticles To Form Multifunctional Bioplasmonic Networks

Citation Angewandte Chemie International Edition

Publisher Wiley

URI <https://doi.org/10.1002/anie.202203924>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7096>

Date of Publication 2022-05

Author(s) SHEIKH, TARIQ; MAQBOOL, SHABNUM; RAJPUT, PARIKSHIT KUMAR; MANDAL, PANKAJ; NAG, ANGSHUMAN

Title Effect of chirality on the optical properties of layered hybrid perovskite R- and S- α -methylbenzylammonium lead iodide

Citation Chemical Communications.

Publisher Royal Society of Chemistry

URI <https://doi.org/10.1039/D2CC01811J>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7225>

Date of Publication 2022-06

Author(s) TORASKAR, SURAJ; CHAUDHARY, PREETI MADHUKAR; KIKKERI, RAGHAVENDRA

Title The Shape of Nanostructures Encodes Immunomodulation of Carbohydrate Antigen and Vaccine Development

Citation ACS Chemical Biology, 17(5), 1122-1130.

Publisher American Chemical Society

URI <https://doi.org/10.1021/acschembio.1c00998>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7134>

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Author(s) UBALE, AKASH S.; LONDHE, GOKUL S.; SHAIKH, MOSEEN A.; GNANAPRAKASAM, BOOPATHY

Title Transition-Metal-Free Alkylative Aromatization of Tetralone Using Alcohol/Amino Alcohol towards the Synthesis of Bioactive Naphthol and Benzo[e/g]indole

Citation Journal of Organic Chemistry, 87(12), 8104-8117.

Publisher American Chemical Society

URI <https://doi.org/10.1021/acs.joc.2c00779>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7226>

Date of Publication 2022-06

EARTH AND CLIMATE SCIENCE

Author(s) Srujan, K. S. S. Sai; Sandeep, S.; ETTAMMAL, SUHAS; Kodamana, Hariprasad

Title A Dynamical Linkage Between Western North Pacific Tropical Cyclones and Indian Monsoon Low-Pressure Systems

Citation Geophysical Research Letters, 49(11), e2022GL098597.

Publisher Wiley

URI <https://doi.org/10.1029/2022GL098597>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7161>

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Humanities and Social Sciences

Author(s) ROY, AKASHDEEP; Dash, Suraj Kumar; Sathyakumar, Sambandam
Title A Combination of Cultural Values and Economic Benefits Promote Tolerance Towards Large Mammals in a Hotspot of Human-Wildlife Conflicts in Eastern India
Citation Human Ecology, 50(2), 321-329.
Publisher Springer Nature
URI <https://doi.org/10.1007/s10745-022-00306-8>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7065>
Date of Publication 2022-04

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MATHEMATICS

Author(s) BISWAS, ANUP; PRADHAN, SOMNATH
Title Ergodic risk-sensitive control of Markov processes on countable state space revisited
Citation Esaim-Control Optimisation and Calculus Of Variations, 28, 26.
Publisher EDP Sciences
URI <https://doi.org/10.1051/cocv/2022018>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7102>
Date of Publication 2022-06

Author(s) BORAH, DIGANTA; Verma, Kaushal
Title Narasimhan-Simha-type metrics on strongly pseudoconvex domains in
Citation Complex Variables and Elliptic Equations.
Publisher Talor & Francis
URI <https://doi.org/10.1080/17476933.2022.2069758>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7094>
Date of Publication 2022-05

Author(s) BORAH, DIGANTA; KAR, DEBAPRASANNA
Title Some remarks on the Kobayashi - Fuks metric on strongly pseudoconvex domains
Citation Journal of Mathematical Analysis and Applications, 512(2), 126162.
Publisher Elsevier B.V.
URI <https://doi.org/10.1016/j.jmaa.2022.126162>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7155>
Date of Publication 2022-08

Author(s) Chatterjee, Saikat; Chaudhuri, Aditya; KOUSHIK, PRAPHULLA
Title Atiyah sequence and gauge transformations of a principal 2-bundle over a Lie groupoid
Citation Journal of Geometry and Physics, 176, 104509.
Publisher Elsevier B.V.
URI <https://doi.org/10.1016/j.geomphys.2022.104509>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7160>
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Author(s) CHORWADWALA, ANISA M. H.; Ghosh, Mrityunjy
Title Optimal shapes for the first Dirichlet eigenvalue of the p-Laplacian and dihedral symmetry
Citation Journal of Mathematical Analysis and Applications, 508(2), 125901.
Publisher Elsevier B.V.
URI <https://doi.org/10.1016/j.jmaa.2021.125901>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7233>
Date of Publication 2022-04

Author(s) GOSWAMI, ANINDYA; Rana, Nimit; Siu, Tak Kuen
Title Regime switching optimal growth model with risk sensitive preferences
Citation Journal of Mathematical Economics.
Publisher Elsevier B.V.
URI <https://doi.org/10.1016/j.jmateco.2022.102702>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7148>
Date of Publication 2022-04

Author(s) KALANE, SAGAR B.; Tiwari, Devendra
Title On free group generated by two Heisenberg translations
Citation Proceedings - Mathematical Sciences, 132, 38.
Publisher Springer Nature
URI <https://doi.org/10.1007/s12044-022-00691-6>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7135>
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PHYSICS

Author(s) Banerjee, Nabamita; BHATTACHARJEE, ARINDAM; Biswas, Surajit; Neogi, Turmoli
Title Dual theory for maximally NN extended flat supergravity
Citation Journal of High Energy Physics, 2022, 179.
Publisher Springer Nature
URI [https://doi.org/10.1007/JHEP05\(2022\)179](https://doi.org/10.1007/JHEP05(2022)179)
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7136>
Date of Publication 2022-05

Author(s) BHATTACHARYAY, Arjit.; MANIAR, ROHAN
Title Response to the "Comment on the paper by R. Maniar and A. Bhattacharyay, [Random walk model for coordinate-dependent diffusion in a force field, Physica A 584 (2021) 126348]" by A. Vezzani
Citation Physica A: Statistical Mechanics and its Applications, 592, 126786.
Publisher Elsevier B.V.
URI <https://doi.org/10.1016/j.physa.2021.126786>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7159>
Date of Publication 2022-04

Author(s) Bhattacharyya, Souradip; ADHIKARI, SUSMITA; BANERJEE, ARKA; More, Surhud; Kumar, Amit; Nadler, Ethan O.; Chatterjee, Suchetana
Title The Signatures of Self-interacting Dark Matter and Subhalo Disruption on Cluster Substructure
Citation Astrophysical Journal, 932(1), 30.
Publisher IOP Publishing
URI <https://doi.org/10.3847/1538-4357/ac68e9>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7163>
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Author(s) CHAUBEY, SHAILENDRA K.; TIWARI, SUNNY; GOKUL, M. A.; PAUL, DIPTABRATA; RAHMAN, ATIKUR; KUMAR, G. V. PAVAN

Title Mirror-coupled microsphere can narrow the angular distribution of photoluminescence from WS₂ monolayers

Citation Applied Physics Letters, 120(26), 261109.

Publisher AIP Publishing

URI <https://doi.org/10.1063/5.0089863>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7232>

Date of Publication 2022-06

Author(s) Chhabra, Roha; Peshattiwari, Vaibhavi; Pant, Tejal; DESHPANDE, APARNA; Modi, Deepak; Sathaye, Sadhana; Tibrewala, Anil; Dyawanapelly, Sathish; Jain, Ratnesh; Dandekar, Prajakta

Title In Vivo Studies of 3D Starch-Gelatin Scaffolds for Full-Thickness Wound Healing

Citation ACS Applied Bio Materials, 3(5), 2920-2929.

Publisher American Chemical Society

URI <https://doi.org/10.1021/acsabm.9b01139>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7108>

Date of Publication 2022-05

Author(s) CMS Collaboration; Tumasyan, A.; ALPANA, K.; DUBE, SOURABH; KANSAL, B.; LAHA, A.; PANDEY, S.; RANE, A.; RASTOGI, A.; SHARMA, SEEMA et al.

Title Precision measurement of the W boson decay branching fractions in proton-proton collisions at $\sqrt{s}=13$ TeV

Citation Physical Review D, 105(7), 072008.

Publisher American Physical Society

URI <https://doi.org/10.1103/PhysRevD.105.072008>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7157>

Date of Publication 2022-04

Author(s) CMS HGICAL collaboration; Acar, B.; ALPANA, A.; PANDEY, S.; SHARMA, S. et al.

Title Response of a CMS HGICAL silicon-pad electromagnetic calorimeter prototype to 20-300 GeV positrons

Citation Journal of Instrumentation, 17.

Publisher IOP Publishing

URI <https://doi.org/10.1088/1748-0221/17/05/P05022>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7098>

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Author(s) Das, Manjil; BANDYOPADHYAY, ABHISEK et al.
Title Interplay between structural, magnetic, and electronic states in the pyrochlore iridate $\text{Eu}_2\text{Ir}_2\text{O}_7$
Citation Physical Review B, 105(13), 134421.
Publisher American Physical Society
URI <https://doi.org/10.1103/PhysRevB.105.134421>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7109>
Date of Publication 2022-04

Author(s) DEVARAJAN, U.; NAIR, SUNIL; Venkateswaran, C.
Title Transformation of magnetic ordering in $\text{MnCo}_{1-x}\text{Ni}_x\text{Ge}$ ($x = 0-0.6$) alloys, its investigations on structural, transport, magnetic, and magnetocaloric properties
Citation Materials Today: Proceedings
Publisher Elsevier B.V.
URI <https://doi.org/10.1016/j.matpr.2022.06.066>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7223>
Date of Publication 2022-06

Author(s) Elumalai, Pavithra; YADAV, YASHARTH; Williams, Nitin; Saucan, Emil; Jost,
Title Graph Ricci curvatures reveal atypical functional connectivity in autism spectrum disorder
Citation Scientific Reports, 12, 8295.
Publisher Springer Nature
URI <https://doi.org/10.1038/s41598-022-12171-y>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7104>
Date of Publication 2022-05

Author(s) GHOSH, DIPTIMOY; GUHA, ATANU; SACHDEVA, DIVYA
Title Exclusion limits on dark matter-neutrino scattering cross section
Citation Physical Review D, 105(10), 103029.
Publisher American Physical Society
URI <https://doi.org/10.1103/PhysRevD.105.103029>
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Author(s) KRITHIKA, V. R.; Solanki, Parvinder; Vinjanampathy, Sai; MAHESH, T. S.
Title Observation of quantum phase synchronization in a nuclear-spin system
Citation Physical Review A, 105(6), 062206.
Publisher American Physical Society
URI <https://doi.org/10.1103/PhysRevA.105.062206>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7101>
Date of Publication 2022-06

Author(s) KUMAR, ARUN; Sahu, Girish; NAIR, SUNIL
Title Evidence for cluster glass ground state in the potential giant dielectric constant material $\text{Ba}(\text{Fe}_{1/2}\text{Sn}_{1/2})\text{O}_{3-\delta}$
Citation Journal of Alloys and Compounds, 920, 165914.
Publisher Elsevier B.V.
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Author(s) Kumar, Vijendra; Barnwal, Abhishek; Shukla, Rajesh K.; SHAKYA, JYOTI
Title Enhancement of thermal conductivity in polymer composites by maximizing surface-contact area of polymer-filler interface
Citation Journal of Polymer Engineering
Publisher De Gruyter
URI <https://doi.org/10.1515/polyeng-2022-0005>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7100>
Date of Publication 2022-05

Author(s) LIGO Scientific Collaboration; Virgo Collaboration; Abbott, R.; RAPOL, UMAKANT D.; SOURADEEP, TARUN et al.
Title Search of the early O3 LIGO data for continuous gravitational waves from the Cassiopeia A and Vela Jr. supernova remnants
Citation Physical Review D, 105(8), 082005.
Publisher American Physical Society
URI <https://doi.org/10.1103/PhysRevD.105.082005>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7230>
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Author(s) Nayak, Sanjay; SINGH, CHANDAN K.; Dahlqvist, Martin; Rosen, Johanna; Eklund, Per; Birch, Jens
Title First-principles study on the superconductivity of doped zirconium diborides
Citation Physical Review Materials, 6(4), 044805.
Publisher American Physical Society
URI <https://doi.org/10.1103/PhysRevMaterials.6.044805>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7103>
Date of Publication 2022-04

Author(s) PATRA, MOUMITA
Title Effect of spin-orbit interaction on circular current: pure spin current phenomena within a ring conductor
Citation Journal of Physics-Condensed Matter, 34(32), 325301.
Publisher IOP Publishing
URI <https://doi.org/10.1088/1361-648X/ac7309>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/7154>
Date of Publication 2022-08

Author(s) PROJJWAL KANTI KANJILAL; BHATTACHARYAY, ARIJIT
Title A variational approach for the ground-state profile of a trapped spinor-BEC: a detailed study of phase transition in spin-1 condensate at zero magnetic field
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