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BIOLOGY

Author(s) Schepartz, Alanna; Ananthanarayanan, Vaishnavi; KAMAT, SIDDHESH S. et al.
Title Introducing "Future of Biochemistry 2020: The Asia-Pacific Issue"
Citation Biochemistry, 59(1), 1-7.
Publisher American Chemical Society
URI <https://doi.org/10.1021/acs.biochem.9b01113>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4395>
Date of Publication 2020-01

Author(s) CHAND, MAHESH KUMAR; CARLE, VANESSA; ANUVIND, K.G.; SAIKRISHNAN, KAYARAT
Title DNA-mediated coupling of ATPase, translocase and nuclease activities of a Type ISP restriction-modification enzyme
Citation Nucleic Acids Research.
Publisher Oxford University Press
URI <https://doi.org/10.1093/nar/gkaa023>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4383>
Date of Publication 2020-01

Author(s) CHITNIS, SHIVAM S.; RAJAN, SAMYUKTHA; KRISHNAN, ANAND
Title Sympatric wren-warblers partition acoustic signal space and song perch height
Citation Behavioral Ecology.
Publisher Oxford University Press
URI <https://doi.org/10.1093/beheco/arz216>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4376>
Date of Publication 2020-01

Author(s) Dexter, Joseph P.; PRABAKARAN, SUDHAKARAN; Gunawardena, Jeremy
Title A Complex Hierarchy of Avoidance Behaviors in a Single-Cell Eukaryote
Citation Current Biology, 29(24), 4323-4329.
Publisher Elsevier B.V.
URI <https://doi.org/10.1016/j.cub.2019.10.059>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4368>
Date of Publication 2019-12

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Author(s) FARHEEN, NIDA; Thattai, Mukund
Title Frustration and fidelity in influenza genome assembly
Citation Journal of the Royal Society Interface, 16(160).
Publisher The Royal Society
URI <https://doi.org/10.1098/rsif.2019.0411>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4393>
Date of Publication 2019-11

Author(s) GOPINATH, AATHIRA; KULKARNI, MANASI; AHMED, ISHTIYAQ; CHOUHAN, OM PRAKASH; SAIKRISHNAN, KAYARAT
Title The conserved aspartate in motif III of B family AdoMet-dependent DNA methyltransferase is important for methylation
Citation Journal of Biosciences, 45(10).
Publisher Indian Academy of Sciences
URI <https://doi.org/10.1007/s12038-019-9983-2>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4367>
Date of Publication 2020-01

Author(s) JOSE, GREGOR P.; GOPAN, SHILPA; BHATTACHARYYA, SOUMYA; PUCADYIL, THOMAS J.
Title A facile, sensitive and quantitative membrane-binding assay for proteins
Citation Traffic.
Publisher Wiley
URI <https://doi.org/10.1111/tra.12719>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4369>
Date of Publication 2019-12

Author(s) MATANGE, NISHAD
Title Highly Contingent Phenotypes of Lon Protease Deficiency in Escherichia coli upon Antibiotic Challenge
Citation Journal of Bacteriology, 202(3).
Publisher American Society for Microbiology
URI <https://doi.org/10.1128/JB.00561-19>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4389>
Date of Publication 2020-02

Author(s) MiKieu Trinh; Wayland, Matthew T.; PRABAKARAN, SUDHAKARAN
Title Behavioural analysis of single-cell aneural ciliate, *Stentor roeseli*, using machine learning approaches
Citation Journal of the Royal Society Interface, 16(161).
Publisher The Royal Society
URI <https://doi.org/10.1098/rsif.2019.0410>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4374>
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Author(s) Olasagasti, Felix; RAJAMANI, SUDHA
Title Lipid-Assisted Polymerization of Nucleotides
Citation Life, 9(4).
Publisher MDPI
URI <https://doi.org/10.3390/life9040083>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4377>
Date of Publication 2019-11

Author(s) Raj, Smrithy; Kumar, Appukkuttannair Biju; Raghavan, Rajeev; DAHANUKAR, NEELESH
Title Amazonian invaders in an Asian biodiversity hotspot: Understanding demographics for the management of the armoured sailfin catfish, *Pterygoplichthys pardalis* in Kerala, India
Citation Journal of Fish Biology.
Publisher Wiley
URI <https://doi.org/10.1111/jfb.14243>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4353>
Date of Publication 2019-12

Author(s) RAWAT, MUKUL; MALHOTRA , RASHIM; SHINTRE, SHARVANI; PANI, SAMARENDRA; KARMODIYA, KRISHANPAL
Title Role of PfGCN5 in nutrient sensing and transcriptional regulation in *Plasmodium falciparum*
Citation Journal of Biosciences, 45(11).
Publisher Indian Academy of Sciences
URI <https://doi.org/10.1007/s12038-019-9981-4>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4381>
Date of Publication 2020-01

- Author(s)** REDDY, PULI CHANDRAMOULI; PRADHAN, SAURABH J.; KARMODIYA, KRISHANPAL; GALANDE, SANJEEV
- Title** Origin of RNA Polymerase II pause in eumetazoans: Insights from Hydra
- Citation** Journal of Biosciences, 45(8).
- Publisher** Indian Academy of Sciences
- URI** <https://doi.org/10.1007/s12038-019-9979-y>
- DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4380>
- Date of Publication** 2020-01
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- Author(s)** Sun, Ruo; Jiang, Xingcong; Reichelt, Michael; Gershenson, Jonathan; PANDIT, SAGAR SUBHASH; Vassao, Daniel Giddings
- Title** Tritrophic metabolism of plant chemical defenses and its effects on herbivore and predator performance
- Citation** eLife, 8.
- Publisher** eLife Sciences Publications Ltd.
- URI** <https://doi.org/10.7554/eLife.51029>
- DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4373>
- Date of Publication** 2019-12
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- Author(s)** Vidhate, Ravindra P.; BHIDE, AMEY J.; Gaikwad, Sushama M.; Giri, Ashok P.
- Title** A potent chitin-hydrolyzing enzyme from Myrothecium verrucaria affects growth and development of Helicoverpa armigera and plant fungal pathogens
- Citation** International Journal of Biological Macromolecules, 141, 517-528.
- Publisher** Elsevier B.V.
- URI** <https://doi.org/10.1016/j.ijbiomac.2019.09.031>
- DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4384>
- Date of Publication** 2019-12

CHEMISTRY

- Author(s)** CHAUDHARI, MORESHWAR BHAGWAN; JAYAN, KRISHNA; GNANAPRAKASAM, BOOPATHY
- Title** Sn-Catalyzed Criegee-Type Rearrangement of Peroxyoxindoles Enabled by Catalytic Dual Activation of Esters and Peroxides
- Citation** The Journal of Organic Chemistry.
- Publisher** American Chemical Society
- URI** <https://doi.org/10.1021/acs.joc.9b03160>
- DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4397>
- Date of Publication** 2020-01

Author(s) Dutta, Moinak; Matteppanavar, Shidaling; Prasad, Matukumilli V. D.; Pandey, Juhi; WARANKAR, AVINASH; MANDAL, PANKAJ; Soni, Ajay; Waghmare, Umesh V.; Biswas, Kanishka

Title Ultralow Thermal Conductivity in Chain-like TlSe Due to Inherent Tl⁺ Rattling

Citation Journal of the American Chemical Society, 141(51), 20293-20299.

Publisher American Chemical Society

URI <https://doi.org/10.1021/jacs.9b10551>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4361>

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Author(s) HRIDYA, V. M.; Hynes, James T.; MUKHERJEE, ARNAB

Title Dynamical Recrossing in the Intercalation Process of the Anticancer Agent Proflavine into DNA

Citation Journal of Physical Chemistry B, 123(51), 10904-10914.

Publisher American Chemical Society

URI <https://doi.org/10.1021/acs.jpcc.9b08470>

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Date of Publication 2019-12

Author(s) Keswani, Bhavna C.; Patil, S. I.; James, A. R.; Nath, R. C.; BOOMISHANKAR, R.; Kolekar, Y. D.; Ramana, C. V.

Title Structural, magnetic and ferroelectric properties of lead free piezoelectric 0.9(0.45Ba_{0.7}Ca_{0.3}TiO₃-0.55BaTi_{0.8}Zr_{0.2}O₃) and magnetostrictive 0.1(Co_{0.7}Mn_{0.3}Fe_{1.95}Dy_{0.05}O₄) magnetoelectric particulate composite

Citation Journal of Applied Physics, 126(22).

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URI <https://doi.org/10.1063/1.5124159>

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Date of Publication 2019-12

Author(s) KOTTAICHAMY, ALAGAR RAJA; BEGUM, SHABBAH; Nazrulla, Mohammed Azeezulla; DARGILY, NEETHU CHRISTUDAS; DEVENDRACHARI, MRUTHYUNJAYACHARI CHATTANAHALLI; BHAT, ZAHID MANZOOR; THIMMAPPA, RAVIKUMAR; Kotresh, Harish Makri Nimbegondi; Vinod, Chathakudath Prabhakaran; THOTIYL, MUSTHAFA OTTAKAM

Title Unprecedented Isomerism-Activity Relation in Molecular Electrocatalysis

Citation Journal of Physical Chemistry Letters, 11(1), 263-271.

Publisher American Chemical Society

URI <https://doi.org/10.1021/acs.jpcllett.9b02689>

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Author(s) LET, SUMANTA; SAMANTA, PARTHA; DUTTA, SUBHAJIT; GHOSH, SUJIT K.
Title A Dye@MOF composite as luminescent sensory material for selective and sensitive recognition of Fe(III) ions in water
Citation Inorganica Chimica Acta, 500.
Publisher Elsevier B.V.
URI <https://doi.org/10.1016/j.ica.2019.119205>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4364>
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Author(s) MALWAL, SATISH R.; PARDESHI, KUNDANSINGH A.; CHAKRAPANI, HARINATH
Title Synthesis of Cyclic Sulfite Diesters and their Evaluation as Sulfur Dioxide (SO₂) Donors
Citation ChemBioChem.
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URI <https://doi.org/10.1002/cbic.201900614>
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Date of Publication 2020-01

Author(s) MANAE, MEGHNA A.; HAZRA, ANIRBAN
Title Triplet Decay Dynamics in Sulfur-Substituted Thymine: How Position of Substitution Matters
Citation Journal of Physical Chemistry A, 123(51), 10862-10867.
Publisher American Chemical Society
URI <https://doi.org/10.1021/acs.jpca.9b08214>
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Author(s) PARVIN, NASRINA; HOSSAIN, JABED; George, Anjana; Parameswaran, Pattiyil; KHAN, SHABANA
Title N-heterocyclic silylene stabilized monocordinated copper(i)-arene cationic complexes and their application in click chemistry
Citation Chemical Communications, 56(2), 273-276.
Publisher Royal Society of Chemistry
URI <https://doi.org/10.1039/c9cc09115g>
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Date of Publication 2020-01

Author(s) SHAIKH, MOSEEN A.; AGALAVE, SANDIP G.; UBALE, AKASH S.; GNANAPRAKASAM, BOOPATHY
Title Ligand-Free Ru-Catalyzed Direct sp³ C-H Alkylation of Fluorene Using Alcohols
Citation The Journal of Organic Chemistry.
Publisher American Chemical Society
URI <https://doi.org/10.1021/acs.joc.9b02913>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4396>
Date of Publication 2020-01

Author(s) Surya, Sandeep G.; BHANOTH, SREENU; Majhi, Sanjit M.; MORE, YOGESHWAR D.; Teja, V. Mani; Chappanda, Karumbaiah N.
Title A silver nanoparticle-anchored UiO-66(Zr) metal-organic framework (MOF)-based capacitive H₂S gas sensor
Citation Crystengcomm, 21(47), 7303-7312.
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URI <https://doi.org/10.1039/c9ce01323g>
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Earth and Climate Science

Author(s) Dutta, Saurav; CHATTOPADHYAY, DEVAPRIYA; Chattopadhyay, Debarati; Misra, Sambuddha; Turchyn, Alexandra V.
Title Strontium stratigraphy of the Oligocene-Early Miocene shellbeds of the Kutch Basin, western India, and its implications
Citation Lethaia.
Publisher Wiley
URI <https://doi.org/10.1111/let.12364>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4360>
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Mathematics

Author(s) BISWAS, ANUP; Jarohs, Sven
Title On overdetermined problems for a general class of nonlocal operators
Citation Journal of Differential Equations, 268(5), 2368-2393.
Publisher Elsevier B.V.
URL <https://doi.org/10.1016/j.jde.2019.09.010>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4375>
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Author(s) Nualart, David; TILVA, ABHISHEK
Title Continuous Breuer-Major theorem for vector valued fields
Citation Stochastic Analysis and Applications.
Publisher Taylor and Francis
URL <https://doi.org/10.1080/07362994.2019.1711118>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4365>
Date of Publication 2020-01

Physics

Author(s) Acharya, Bobby S.; Dhuria, Mansi; GHOSH, DIPTIMOY; Maharana, Anshuman; Muia, Francesco
Title Cosmology in the presence of multiple light moduli
Citation Journal of Cosmology and Astroparticle Physics, 2019(11).
Publisher IOP Publishing Ltd.
URI <https://doi.org/10.1088/1475-7516/2019/11/035>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4394>
Date of Publication 2019-11

Author(s) Anumarlapudi, Akash; Bhalerao, Varun; Tendulkar, Shriharsh P.; BALASUBRAMANIAN, A.
Title Prompt X-Ray Emission from Fast Radio Bursts-Upper Limits with AstroSat
Citation Astrophysical Journal, 888(1).
Publisher IOP Publishing
URL <https://doi.org/10.3847/1538-4357/ab5363>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4354>
Date of Publication 2020-01

Author(s) CMS Collaboration; Sirunyan, A. M.; CHAUHAN, S.; DUBE, S.; HEGDE, V.; KANSAL, B.; KAPOOR, A.; KOTHEKAR, K.; PANDEY, S.; RANE, A.; RASTOGI, A.; SHARMA, S. et al.
Title Search for low mass vector resonances decaying into quark-antiquark pairs in proton-proton collisions at $\sqrt{s}=13$ Tev
Citation Physical Review D, 100(11).
Publisher American Physical Society
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Title Measurements of triple-differential cross sections for inclusive isolated-photon plus jet events in pp collisions at root s=8 TeV

Citation European Physical Journal C, 79(11).

Publisher Springer

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Title Measurement of the single top quark and antiquark production cross sections in the t channel and their ratio in proton-proton collisions at root s=13 TeV

Citation Physics Letters B, 800.

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Title Search for light pseudoscalar boson pairs produced from decays of the 125 GeV Higgs boson in final states with two muons and two nearby tracks in pp collisions at root s=13TeV

Citation Physics Letters B, 800.

Publisher Elsevier B.V.

URL <https://doi.org/10.1016/j.physletb.2019.135087>

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Author(s) CMS Collaboration; Sirunyan, A. M.; CHAUHAN, S.; DUBE, S.; HEGDE, V.; KANSAL, B.; KAPOOR, A.; KOTHEKAR, K.; PANDEY, S.; RANE, A.; SHARMA, S. et al.

Title Probing the chiral magnetic wave in pPb and PbPb collisions at root S-NN=5.02 TeV using charge-dependent azimuthal anisotropies

Citation Physical Review C, 100(6).

Publisher American Physical Society

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Title Observation of nuclear modifications in $W^{+/-}$ boson production in pPb collisions at $\sqrt{s(NN)}=8.16$ TeV
Citation Physics Letters B, 800.
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Date of Publication 2020-01

Author(s) DE, AVIRUP; GHOSH, ARUP; MANDAL, RAJESH; OGALE, SATISHCHANDRA; NAIR, SUNIL
Title Temperature Dependence of the Spin Seebeck Effect in a Mixed Valent Manganite
Citation Physical Review Letters, 124(1).
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URL <https://doi.org/10.1103/PhysRevLett.124.017203>
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Author(s) Saha, K.; Pandey, A.; Banerjee, S. B.; BAPAT, BHAS
Title Fragmentation kinematics of SF₆ upon photo-excitation of S(2p) core shell and subsequent Auger decays
Citation Chemical Physics Letters, 739.
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URL <https://doi.org/10.1016/j.cplett.2019.137038>
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Author(s) Sahoo, S.; Dutta, U.; HARNAGEA, L.; Sood, A. K.; Karmakar, S.
Title Pressure-induced suppression of charge density wave and emergence of superconductivity in 1T-VSe₂
Citation Physical Review B, 101(1).
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URL <https://doi.org/10.1103/PhysRevB.101.014514>
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Author(s) SEN, ARNAB; Sairam, T.; Sahu, S. R.; BAPAT, BHAS; Gopal, R.; Sharma, V.
Title Hindered alignment in ultrashort, intense laser-induced fragmentation of O₂
Citation Journal of Chemical Physics, 152(1).
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Date of Publication 2020-01

Author(s) Zhou, Yijia; Li, Yongqiang; NATH, REJISH; Li, Weibin
Title Quench dynamics of Rydberg-dressed bosons on two-dimensional square lattices
Citation Physical Review A, 101.
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