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# BIOLOGY

- Author(s)** Padhye, Sameer; DAHANUKAR, NEELESH
- Title** Methodological flaws overshadow the evidence for a species complex in *Indialonaganapati* (Chydoridae)
- Citation** Mitochondrial DNA Part A, 30(8), 880-881.
- Publisher** Taylor & Francis Ltd.
- URI** <https://doi.org/10.1080/24701394.2019.1693552>
- DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4281>
- Date of Publication** 23-11-2019
- 
- Author(s)** REDDY, PULI CHANDRAMOULI; GUNGI, AKHILA; UBHE, SUYOG; PRADHAN, SAURABH J.; KOLTE, AMOL; GALANDE, SANJEEV
- Title** Molecular signature of an ancient organizer regulated by Wnt/beta-catenin signalling during primary body axis patterning in Hydra
- Citation** Communications Biology, 2.
- Publisher** Springer Nature
- URI** <https://doi.org/10.1038/s42003-019-0680-3>
- DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4254>
- Date of Publication** 26-11-2019
- 
- Author(s)** SEN, NEELADRI; KANITKAR, TEJASHREE RAJARAM; ROY, ANKIT ANIMESH; SONI, NEELESH; AMRITKAR, KAUSTUBH; SUPEKAR, SHREYAS; NAIR, SANJANA; SINGH, GULZAR; MADHUSUDHAN, M. S.
- Title** Predicting and designing therapeutics against the Nipah virus
- Citation** PLoS Neglected Tropical Diseases , 13(12).
- Publisher** Public Library of Science
- URI** <https://doi.org/10.1371/journal.pntd.0007419>
- DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4248>
- Date of Publication** 12-12-2019
- 
- Author(s)** Sen, Sreemantee; UDGAONKAR, JAYANT B.
- Title** Binding-induced folding under unfolding conditions: Switching between induced fit and conformational selection mechanisms
- Citation** Journal of Biological Chemistry, 294(45), 16942-16952.
- Publisher** American Society for Biochemistry and Molecular Biology
- URI** <https://doi.org/10.1074/jbc.RA119.009742>
- DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4316>
- Date of Publication** 08-11-2019

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**Author(s)** UDGAONKAR, JAYANT B.  
**Title** Introducing the Mechanical Forces in Biochemistry Special Issue  
**Citation** Biochemistry, 58 (47), 4655-4656.  
**Publisher** American Chemical Society  
**URI** <https://doi.org/10.1021/acs.biochem.9b00999>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4251>  
**Date of Publication** 26-11-2019

## CHEMISTRY

**Author(s)** Bhat, Gulzar A.; HALDAR, SATTWICK; Verma, Sonam; CHAKRABORTY, DEBANJAN; VAIDHYANATHAN, RAMANATHAN; Murugavel, Ramaswamy  
**Title** Facile Exfoliation of Single-Crystalline Copper Alkylphosphates to Single-Layer Nanosheets and Enhanced Supercapacitance  
**Citation** Angewandte Chemie-International Edition, 58(47), 16844-16849.  
**Publisher** Wiley  
**URI** <https://doi.org/10.1002/anie.201910157>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4320>  
**Date of Publication** 18-11-2019

**Author(s)** Ghosh, Arijit; Bhattacharjee, Sangheeta; Chowdhuri, Srijita Paul; MALLICK, ABHIK; Rehman, Ishita; Basu, Sudipta; Das, BenuBrata  
**Title** SCAN1-TDP1 trapping on mitochondrial DNA promotes mitochondrial dysfunction and mitophagy  
**Citation** Science Advances, 5(11).  
**Publisher** American Association for the Advancement of Science  
**URI** <https://doi.org/10.1126/sciadv.aax9778>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4247>  
**Date of Publication** 01-11-2019

**Author(s)** HARDIKAR, R. P.; MONDAL, UNMESH; Thakkar, Foram M.; Roy, Sudip; GHOSH, PRASENJIT  
**Title** Theoretical investigations of a platinum-water interface using quantum-mechanics-molecular-mechanics based molecular dynamics simulations  
**Citation** Physical Chemistry Chemical Physics, 21(44), 24345-24353.  
**Publisher** Royal Society of Chemistry  
**URI** <https://doi.org/10.1039/C9CP03558C>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4253>  
**Date of Publication** 28-11-2019

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**Author(s)** Jayee, Bhumika; MALPATHAK, SHREYAS; Ma, Xinyou; Hase, William L.  
**Title** Is CH<sub>3</sub>NC isomerization an intrinsic non-RRKM unimolecular reaction?  
**Citation** Journal of Chemical Physics, 151(18).  
**Publisher** AIP Publishing  
**URI** <https://doi.org/10.1063/1.5126805>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4280>  
**Date of Publication** 14-11-2019

**Author(s)** KOTTAICHAMY, ALAGAR RAJA; BEGUM, SHABBAH; Azeezulla Nazrulla, Mohammed; 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** The Journal of Physical Chemistry Letters, 11,263-271.  
**Publisher** American Chemical Society  
**URI** <https://doi.org/10.1021/acs.jpcllett.9b02689>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4259>  
**Date of Publication** 13-12-2019

**Author(s)** KSHIRSAGAR, ANURAJ S.; NAG, ANGSUMAN  
**Title** Synthesis and optical properties of colloidal Cs<sub>2</sub>AgSb<sub>1-x</sub>BixCl<sub>6</sub> double perovskite nanocrystals  
**Citation** Journal of Chemical Physics, 151(16).  
**Publisher** AIP Publishing  
**URI** <https://doi.org/10.1063/1.5127971>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4256>  
**Date of Publication** 28-10-2019

**Author(s)** KUMAR, MOTHUKURI GANESH; VEERESH, KURUVA; NALAWADE, SACHIN A.; NITHUN, RAJ V.; GOPI, HOSAHUDYA N.  
**Title** Direct Transformation of N-Protected alpha, beta-Unsaturated gamma-Amino Amides into gamma-Lactams through a Base-Mediated Molecular Rearrangement  
**Citation** Journal of Organic Chemistry, 84(23), 15145-15153.  
**Publisher** American Chemical Society  
**URI** <https://doi.org/10.1021/acs.joc.9b01936>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4317>  
**Date of Publication** 06-12-2019

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**Author(s)** MISRA, RAJKUMAR; George, Gijo; SASEENDRAN, ABHIJITH; Raghothama, Srinivasarao; GOPI, HOSAHUDYA N.  
**Title** Ambidextrous alpha,gamma-Hybrid Peptide Foldamers  
**Citation** Chemistry-An Asian Journal, 14(23), 4408-4414.  
**Publisher** Wiley  
**URI** <https://doi.org/10.1002/asia.201901411>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4283>  
**Date of Publication** 02-12-2019

**Author(s)** PANT, RAKESH; Sengupta, Soumyadipt; Lyulin, Alexey, V.; VENKATNATHAN, ARUN  
**Title** Charge delocalization effects on Nafion structure and water/proton dynamics in hydrated environments  
**Citation** Fluid Phase Equilibria, 504.  
**Publisher** Elsevier B.V.  
**URI** <https://doi.org/10.1016/j.fluid.2019.112340>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4250>  
**Date of Publication** 15-01-2020

**Author(s)** RAJASEKAR, PRABHAKARAN; Pandey, Swechchha; Ferrara, Joseph D.; Del Campo, Mark; Le Magueres, Pierre; BOOMISHANKAR, RAMAMOORTHY  
**Title** Chiral Separation of Styrene Oxides Supported by Enantiomeric Tetrahedral Neutral Pd(II) Cages  
**Citation** Inorganic Chemistry, 58(22), 15017-15020.  
**Publisher** American Chemical Society  
**URI** <https://doi.org/10.1021/acs.inorgchem.9b02389>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4252>  
**Date of Publication** 01-11-2019

**Author(s)** SAPPATI, SUBRAHMANYAM; George, Leena; Swamy, Vincent Paul; Devi, R. Nandini; GHOSH, PRASENJIT  
**Title** Descriptors to Predict Dye-Sensitized Semiconductor Based Photocatalyst for Hydrogen Evolution Reaction  
**Citation** Chemcatchem, 11(24), 6460-6466.  
**Publisher** Wiley  
**URI** <https://doi.org/10.1002/cctc.201901924>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4245>  
**Date of Publication** 18-12-2019

**Author(s)** SHEIKH, TARIQ; Shinde, Aparna; Mahamuni, Shailaja; NAG, ANGSUMAN  
**Title** Dual excitonic emissions and structural phase transition of octylammonium lead iodide 2D layered perovskite single crystal  
**Citation** Materials Research Express, 6(12).  
**Publisher** IOP Publishing  
**URI** <https://doi.org/10.1088/2053-1591/ab53a1>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4284>  
**Date of Publication** 15-11-2019

## Earth and Climate Science

**Author(s)** Kumar, Pankaj; Saharwardi, Md. Saquib; BANERJEE, ARGHA; Azam, Mohd. F. Arooq; Dubey, Aditya Kumar; Murtugudde, Raghu  
**Title** Snowfall Variability Dictates Glacier Mass Balance Variability in Himalaya-Karakoram  
**Citation** Scientific Reports, 9.  
**Publisher** Springer Nature  
**URI** <https://doi.org/10.1038/s41598-019-54553-9>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4260>  
**Date of Publication** 03-12-2019

**Author(s)** Lee, Wei-Liang; Li, Jui-Lin Frank; Xu, Kuan-Man; SUHAS, ETTAMAL; Jiang, Jonathan H.; Wang, Yi-Hui; Stephens, Graeme; Fetzer, Eric; Yu, Jia-Yuh  
**Title** Relating Precipitating Ice Radiative Effects to Surface Energy Balance and Temperature Biases Over the Tibetan Plateau in Winter  
**Citation** Journal of Geophysical Research-Atmospheres.  
**Publisher** American Geophysical Union  
**URI** <https://doi.org/10.1029/2018JD030204>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4286>  
**Date of Publication** 26-10-2019

## Humanities and Social Sciences

**Author(s)** PAI, VENKETESWARAR.  
**Title** The Rationale for Sṛīrgunamitrādivākya as Described in the Laghuprakāśikā  
**Citation** Journal of Astronomical History and Heritage, 22(3), 545-552.  
**Publisher** National Astronomical Research Institute of Thailand  
**URI** <http://www.narit.or.th/en/files/2019JAHHvol22/2019JAHH...22..545P.pdf>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4318>  
**Date of Publication** 2019

**Author(s)** SANCHETI, POOJA  
**Title** Written and Over-written: Investigating Metafictional Strategies in Janet Frame’s The Carpathians”  
**Citation** Language, Literature, and Interdisciplinary Studies (LLIDS), 90-109.  
**Publisher** Language, Literature, and Interdisciplinary Studies (LLIDS)  
**URI** <http://ellids.com/archives/2019/10/3.1-Sancheti.pdf>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4276>  
**Date of Publication** 2019

**Author(s)** Shylaja, B. S.; PAI, VENKETESWARAR.  
**Title** Āpa and Apāṃvatsa - enigmatic stars catalogued in Sūryasiddhānta  
**Citation** Journal of Astrophysics and Astronomy, 40.  
**Publisher** Indian Academy of Sciences  
**URI** <https://doi.org/10.1007/s12036-019-9614-1>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4282>  
**Date of Publication** 05-12-2019

## Mathematics

**Author(s)** BANERJEE, DEBARGHA; MANDAL, TATHAGATA  
**Title** A note on quadratic twisting of epsilon factors for modular forms with arbitrary nebentypus  
**Citation** Proceedings of the American Mathematical Society.  
**Publisher** American Mathematical Society  
**URL** <https://doi.org/10.1090/proc/14887>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4274>  
**Date of Publication** 2019

**Author(s)** GANGULY, JYOTIRMOY; SPALLONE, STEVEN  
**Title** Spinorial representations of symmetric groups  
**Citation** Journal of Algebra, 544, 29-46.  
**Publisher** Elsevier B.V.  
**URL** <https://doi.org/10.1016/j.jalgebra.2019.09.025>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4279>  
**Date of Publication** 15-02-2020

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**Author(s)** MISHRA, MANISH; PATTANAYAK, BASUDEV  
**Title** A note on depth preservation  
**Citation** Journal of The Ramanujan Mathematical Society, 34(4), 393-400.  
**Publisher** Ramanujan Mathematical Society  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4249>  
**Date of Publication** DEC-2019

## Physics

**Author(s)** Bandyopadhyay, Soumik; Bai, Rukmani; Pal, Sukla; Suthar, K.; NATH, REJISH; Angom, D.  
**Title** Quantum phases of canted dipolar bosons in a two-dimensional square optical lattice  
**Citation** Physical Review A, 100(5).  
**Publisher** American Physical Society  
**URI** <https://doi.org/10.1103/PhysRevA.100.053623>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4275>  
**Date of Publication** 25-11-2019

**Author(s)** Banerjee, Nabamita; BHATTACHARJEE, ARINDAM; Neetu; Neogi, Turmoli  
**Title** New  $N = 2$  SuperBMS3 algebra and invariant dual theory for 3D supergravity  
**Citation** Journal of High Energy Physics.  
**Publisher** Springer  
**URI** [https://doi.org/10.1007/JHEP11\(2019\)122](https://doi.org/10.1007/JHEP11(2019)122)  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4246>  
**Date of Publication** 21-11-2019

**Author(s)** CMS Collaboration; Sirunyan, A. M.; CHAUHAN, S.; DUBE, S.; HEGDE, V.; KAPOOR, A.; KOTHEKAR, K.; PANDEY, S.; RANE, A.; RASTOGI, A.; SHARMA, S. et al.  
**Title** Measurement of the average very forward energy as a function of the track multiplicity at central pseudorapidities in proton-proton collisions at  $\sqrt{s}=13\text{TeV}$   
**Citation** The European Physical Journal C, 79(11), 893.  
**Publisher** Springer  
**URI** <https://doi.org/10.1140/epjc/s10052-019-7402-3>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4287>  
**Date of Publication** 05-11-2019



**Author(s)** CMS Collaboration; Sirunyan, A. M.; CHAUHAN, S.; DUBE, S.; HEGDE, V.; KAPOOR, A.; KOTHEKAR, K.; PANDEY, S.; RANE, A.; RASTOGI, A.; SHARMA, S. et al.  
**Title** Search for Low-Mass Quark-Antiquark Resonances Produced in Association with a Photon at root s=13 TeV  
**Citation** Physical Review Letters, 123(23).  
**Publisher** American Physical Society  
**URI** <https://doi.org/10.1103/PhysRevLett.123.231803>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4257>  
**Date of Publication** 06-12-2019

**Author(s)** CMS Collaboration; Sirunyan, A. M.; CHAUHAN, S.; DUBE, S.; HEGDE, V.; KAPOOR, A.; KOTHEKAR, K.; PANDEY, S.; RANE, A.; RASTOGI, A.; SHARMA, S. et al.  
**Title** Constraints on anomalous HVV couplings from the production of Higgs bosons decaying to tau lepton pairs  
**Citation** Physical Review D, 100(11).  
**Publisher** American Physical Society  
**URI** <https://doi.org/10.1103/PhysRevD.100.112002>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4261>  
**Date of Publication** 04-12-2019

**Author(s)** CMS Collaboration; Sirunyan, A. M.; CHAUHAN, S.; DUBE, S.; HEGDE, V.; KAPOOR, A.; KOTHEKAR, K.; PANDEY, S.; RANE, A.; RASTOGI, A.; SHARMA, S. et al.  
**Title** Search for long-lived particles using delayed photons in proton-proton collisions at root s=13 TeV  
**Citation** Physical Review D, 100(11).  
**Publisher** American Physical Society  
**URI** <https://doi.org/10.1103/PhysRevD.100.112003>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4319>  
**Date of Publication** 01-12-2019

**Author(s)** CMS Collaboration; Sirunyan, A. M.; CHAUHAN, S.; DUBE, S.; HEGDE, V.; KAPOOR, A.; KOTHEKAR, K.; PANDEY, S.; RANE, A.; SHARMA, S. et al.  
**Title** Pseudorapidity distributions of charged hadrons in xenon-xenon collisions at root S-NN=5.44 TeV  
**Citation** Physics Letters B, 799.  
**Publisher** Elsevier B.V.  
**URI** <https://doi.org/10.1016/j.physletb.2019.135049>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4258>  
**Date of Publication** 10-12-2019

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**Author(s)** CMS Collaboration; Sirunyan, A. M.; CHAUHAN, S.; DUBE, S.; HEGDE, V.; KAPOOR, A.; KOTHEKAR, K.; PANDEY, S.; RANE, A.; RASTOGI, A.; SHARMA, S. et al.  
**Title** Search for Physics beyond the Standard Model in Events with Overlapping Photons and Jets  
**Citation** Physical Review Letters, 123(24).  
**Publisher** American Physical Society  
**URI** <https://doi.org/10.1103/PhysRevLett.123.241801>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4321>  
**Date of Publication** 11-12-2019

**Author(s)** Dey, Anirban; Bhakuni, Devendra Singh; AGARWALLA, BIJAY KUMAR; Sharma, Auditya  
**Title** Quantum entanglement and transport in a non-equilibrium interacting double-dot system: the curious role of degeneracy  
**Citation** Journal of Physics: Condensed Matter, 32(7).  
**Publisher** IOP Publishing  
**URI** <https://doi.org/10.1088/1361-648X/ab5317>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4244>  
**Date of Publication** 18-11-2019

**Author(s)** HARDIKAR, R. P.; MONDAL, UNMESH; Thakkar, Foram M.; Roy, Sudip; GHOSH, PRASENJIT  
**Title** Theoretical investigations of a platinum-water interface using quantum-mechanics-molecular-mechanics based molecular dynamics simulations  
**Citation** Physical Chemistry Chemical Physics, 21(44), 24345-24353.  
**Publisher** Royal Society of Chemistry  
**URI** <https://doi.org/10.1039/C9CP03558C>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4253>  
**Date of Publication** 28-11-2019

**Author(s)** NARAYANAN, VRINDA; M A , GOKUL; RAHMAN, ATIKUR  
**Title** How to 'train' your CVD to grow large-area 2D materials  
**Citation** Materials Research Express, 6(12).  
**Publisher** IOP Publishing  
**URI** <https://doi.org/10.1088/2053-1591/ab5383>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4288>  
**Date of Publication** 13-11-2019

**Author(s)** Paul, Sanku; SARKAR, SUMIT; VISHWAKARMA, CHETAN; MANGAONKAR, JAY; SANTHANAM, M. S.; RAPOL, UMAKANT  
**Title** Nonmonotonic diffusion rates in an atom-optics Levy kicked rotor  
**Citation** Physical Review E, 100(6).  
**Publisher** American Physical Society  
**URI** <https://doi.org/10.1103/PhysRevE.100.060201>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4255>  
**Date of Publication** 04-12-2019

**Author(s)** SAPPATI, SUBRAHMANYAM; George, Leena; Swamy, Vincent Paul; Devi, R. Nandini; GHOSH, PRASENJIT  
**Title** Descriptors to Predict Dye-Sensitized Semiconductor Based Photocatalyst for Hydrogen Evolution Reaction  
**Citation** Chemcatchem, 11(24), 6460-6466.  
**Publisher** Wiley  
**URI** <https://doi.org/10.1002/cctc.201901924>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4245>  
**Date of Publication** 18-12-2019

**Author(s)** Sarkar, Subhajit; Sumukh, S. S.; ROY, KINGSHUK; Kamboj, Navpreet; Purkait, Taniya; Das, Manisha; Dey, Ramendra Sundar  
**Title** Facile one step synthesis of Cu-g-C<sub>3</sub>N<sub>4</sub> electrocatalyst realized oxygen reduction reaction with excellent methanol crossover impact and durability  
**Citation** Journal of Colloid and Interface Science, 558, 182-189.  
**Publisher** Elsevier B.V.  
**URI** <https://doi.org/10.1016/j.jcis.2019.09.107>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4277>  
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