



SRINIVASA RAMANUJAN LIBRARY  
Indian Institute of Science Education and Research Pune  
Dr. Homi Bhabha Road, Pune - 411008. India.  
e-mail: [libraryservices@iiserpune.ac.in](mailto:libraryservices@iiserpune.ac.in)

---

Monthly Bulletin of Publications:  
Faculty, Scientists and Students of IISER Pune.  
September 2021

---

## CONTENTS

| Subject                                 | Page No. |
|---|----------|
| <a href="#"><u>Books</u></a>            | 2        |
| <a href="#"><u>Popular Articles</u></a> | 2        |
| Journal Articles                        |          |
| <a href="#"><u>Biology</u></a>          | 2        |
| <a href="#"><u>Chemistry</u></a>        | 4        |
| <a href="#"><u>Mathematics</u></a>      | 6        |
| <a href="#"><u>Physics</u></a>          | 6        |

## Book

|                     |   |
|---------------------|---|
| Editor(s)           | SOHONI, PUSHKAR; Tschacher, Torsten   |
| Book Title          | Non-Shia Practices of Muḥarram in South Asia and the Diaspora: Beyond Mourning  |
| Publisher           | Routledge   |
| URI                 | <a href="https://www.routledge.com/Non-Shia-Practices-of-Muarram-in-South-Asia-and-the-Diaspora-Beyond/Sohoni-Tschacher/p/book/9780367819040">https://www.routledge.com/Non-Shia-Practices-of-Muarram-in-South-Asia-and-the-Diaspora-Beyond/Sohoni-Tschacher/p/book/9780367819040</a> |
| DR URI              | <a href="http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6298">http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6298</a>   |
| Date of Publication | 2021-09   |

## POPULAR ARTICLE

|                     |   |
|---------------------|---|
| Author(s)           | MONTEIRO, JOY MERWIN  |
| Title               | Half a million and counting: Covid-19 in Pune   |
| Publisher           | The Indian Express  |
| URI                 | <a href="https://indianexpress.com/article/cities/pune/pune-covid-19-cases-7535956/">https://indianexpress.com/article/cities/pune/pune-covid-19-cases-7535956/</a> |
| DR URI              | <a href="http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6299">http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6299</a>                                 |
| Date of Publication | 27.09.2021  |

## JOURNAL ARTICLES

### BIOLOGY

|                     |   |
|---------------------|---|
| Author(s)           | KONDHARE, KIRTIKUMAR R.; KUMAR, AMIT; PATIL, NIKITA S.; MALANKAR, NILAM N.; SAHA, KISHAN; BANERJEE, ANJAN K.                        |
| Title               | Development of aerial and belowground tubers in potato is governed by photoperiod and epigenetic mechanism                          |
| Citation            | Plant Physiology.   |
| Publisher           | Oxford University Press   |
| URI                 | <a href="https://doi.org/10.1093/plphys/kiab409">https://doi.org/10.1093/plphys/kiab409</a>   |
| DR URI              | <a href="http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6269">http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6269</a> |
| Date of Publication | 2021-09   |

**Author(s)** Tan, Kuan Pern; KANITKAR, TEJASHREE RAJARAM; Kwoh, Chee Keong; MADHUSUDHAN, M. S.

**Title** Packpred: Predicting the Functional Effect of Missense Mutations

**Citation** Frontiers in Molecular Biosciences, 8.

**Publisher** Frontiers Media S.A.

**URI** <https://doi.org/10.3389/fmlob.2021.646288>

**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6285>

**Date of Publication** 2021-08

**Author(s)** KUMAR, YASHWANT; SINGH, REMAN KUMAR; HAZRA, AMRITA B.

**Title** Characterization of a Novel Mesophilic CTP-Dependent Riboflavin Kinase and Rational Engineering to Create Its Thermostable Homologues

**Citation** CheBioChem.

**Publisher** Wiley

**URI** <https://doi.org/10.1002/cbic.202100211>

**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6288>

**Date of Publication** 2021-08

**Author(s)** PARDASANI, MEENAKSHI; MARATHE, SHRUTI D.; PURNAPATRE, MAITREYEE MANDAR; DALVI, URVASHI; ABRAHAM, NIXON M.

**Title** Multimodal learning of pheromone locations

**Citation** FASEB Journal, 35(9).

**Publisher** Wiley

**URI** <https://doi.org/10.1096/fj.202100167R>

**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6266>

**Date of Publication** 2021-09

**Author(s)** Raghavan, Rajeev; Britz, Ralf; DAHANUKAR, NEELESH

**Title** Poor groundwater governance threatens ancient subterranean fishes

**Citation** Trends in Ecology & Evolution, 36(10), 875-878.

**Publisher** Elsevier B.V.

**URI** <https://doi.org/10.1016/j.tree.2021.06.007>

**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6295>

**Date of Publication** 2021-10

|                            |   |
|----------------------------|---|
| <b>Author(s)</b>           | SARKAR, SUSOVAN; DAGAR, SHIKHA; RAJAMANI, SUDHA   |
| <b>Title</b>               | Cover profile: Influence of Wet-Dry Cycling on the Self-Assembly and Physicochemical Properties of Model Protocellular Membrane Systems |
| <b>Citation</b>            | ChemSystemsChem, 3(5), e2100032.  |
| <b>Publisher</b>           | Wiley   |
| <b>URI</b>                 | <a href="https://doi.org/10.1002/syst.202100032">https://doi.org/10.1002/syst.202100032</a>   |
| <b>Date of Publication</b> | 2021-09   |

## CHEMISTRY

|                            |   |
|----------------------------|---|
| <b>Author(s)</b>           | Baljozovic, Milos; BALLAV, NIRMALYA et al.  |
| <b>Title</b>               | Self-Assembly and Magnetic Order of Bi-Molecular 2D Spin Lattices of M(II,III) Phthalocyanines on Au(111)                           |
| <b>Citation</b>            | Magnetochemistry, 7(8), 119.  |
| <b>Publisher</b>           | MDPI  |
| <b>URI</b>                 | <a href="https://doi.org/10.3390/magnetochemistry7080119">https://doi.org/10.3390/magnetochemistry7080119</a>                       |
| <b>DR URI</b>              | <a href="http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6270">http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6270</a> |
| <b>Date of Publication</b> | 2021-08   |

|                            |   |
|----------------------------|---|
| <b>Author(s)</b>           | DABHADE, AKASH; CHAUDHURY, SRABANTI   |
| <b>Title</b>               | Simulation Study of the Conformational Properties of Diblock Polyelectrolytes in Salt Solutions                                     |
| <b>Citation</b>            | Chemistry-An Asian Journal.   |
| <b>Publisher</b>           | Wiley   |
| <b>URI</b>                 | <a href="https://doi.org/10.1002/asia.202100905">https://doi.org/10.1002/asia.202100905</a>   |
| <b>DR URI</b>              | <a href="http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6277">http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6277</a> |
| <b>Date of Publication</b> | 2021-08   |

|                            |   |
|----------------------------|---|
| <b>Author(s)</b>           | Dutta, Sanjay; Vikas; THANGAVEL, VIJAYAKANTH; Munshi, Parthapratim  |
| <b>Title</b>               | Ferroelectricity and Uniaxial Negative Thermal Expansion in a Purely Organic Multifunctional Material                               |
| <b>Citation</b>            | ACS Applied Electronic Materials, 3(8), 3633-3640.  |
| <b>Publisher</b>           | American Chemical Society   |
| <b>URI</b>                 | <a href="https://doi.org/10.1021/acsaelm.1c00544">https://doi.org/10.1021/acsaelm.1c00544</a>                                       |
| <b>DR URI</b>              | <a href="http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6291">http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6291</a> |
| <b>Date of Publication</b> | 2021-08   |

**Author(s)** JAMDADE, AKASH BANDU; SUTAR, DASHRAT VISHAMBAR; BISHT, GIRISH SINGH; GNANAPRAKASAM, BOOPATHY

**Title** Ru-MACHO-Catalyzed Direct Inter/Intramolecular Macrocyclization of Alcohols and Ketones

**Citation** Organic Letters.

**Publisher** American Chemical Society

**URI** <https://doi.org/10.1021/acs.orglett.1c02569>

**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6283>

**Date of Publication** 2021-09

**Author(s)** KUMAR, YASHWANT; SINGH, REMAN KUMAR; HAZRA, AMRITA B.

**Title** Characterization of a Novel Mesophilic CTP-Dependent Riboflavin Kinase and Rational Engineering to Create Its Thermostable Homologues

**Citation** CheBioChem.

**Publisher** Wiley

**URI** <https://doi.org/10.1002/cbic.202100211>

**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6288>

**Date of Publication** 2021-08

**Author(s)** Ravi, Ramya; Kumaraswamy, Anand; CHAUHAN, PREETI; Rajesh, Bharathidevi Subramaniam

**Title** Exogenous administration of hydrogen sulfide alleviates homocysteine induced inflammation in ARPE-19 cells

**Citation** Experimental Eye Research, 212, 108759.

**Publisher** Elsevier B.V.

**URI** <https://doi.org/10.1016/j.exer.2021.108759>

**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6294>

**Date of Publication** 2021-11

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

**Title** Indium Catalyzed Sequential Regioselective Remote C–H Indolylation and Rearrangement Reaction of Peroxoxindole

**Citation** Advanced Synthesis & Catalysis.

**Publisher** Wiley

**URI** <https://doi.org/10.1002/adsc.202100793>

**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6282>

**Date of Publication** 2021-08

## MATHEMATICS

|                            |   |
|----------------------------|---|
| <b>Author(s)</b>           | AGRAWAL, GARIMA; MAITY, SOUMEN  |
| <b>Title</b>               | The Small Set Vertex Expansion Problem  |
| <b>Citation</b>            | Theoretical Computer Science, 886, 84-93.   |
| <b>Publisher</b>           | Elsevier B.V.   |
| <b>URI</b>                 | <a href="https://doi.org/10.1016/j.tcs.2021.07.017">https://doi.org/10.1016/j.tcs.2021.07.017</a>                                   |
| <b>DR URI</b>              | <a href="http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6284">http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6284</a> |
| <b>Date of Publication</b> | 2021-09   |

|                            |   |
|----------------------------|---|
| <b>Author(s)</b>           | MISHRA, MANISH; PATTANAYAK, BASUDEV   |
| <b>Title</b>               | Principal series component of Gelfand-Graev representation  |
| <b>Citation</b>            | Proceedings of the American Mathematical Society, 149(11), 4955-4962.   |
| <b>Publisher</b>           | American Mathematical Society   |
| <b>URI</b>                 | <a href="https://doi.org/10.1090/proc/15642">https://doi.org/10.1090/proc/15642</a>   |
| <b>DR URI</b>              | <a href="http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6302">http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6302</a> |
| <b>Date of Publication</b> | 2021-11   |

## PHYSICS

|                            |   |
|----------------------------|---|
| <b>Author(s)</b>           | Bowens, R.; SHINDE, M. et al.   |
| <b>Title</b>               | Exoplanets with ELT-METIS I. Estimating the direct imaging exoplanet yield around stars within 6.5 parsecs                          |
| <b>Citation</b>            | Astronomy & Astrophysics, 653, A8.  |
| <b>Publisher</b>           | EDP Sciences  |
| <b>URI</b>                 | <a href="https://doi.org/10.1051/0004-6361/202141109">https://doi.org/10.1051/0004-6361/202141109</a>                               |
| <b>DR URI</b>              | <a href="http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6272">http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6272</a> |
| <b>Date of Publication</b> | 2021-08   |

|                            |   |
|----------------------------|---|
| <b>Author(s)</b>           | CHOWDHURY, TAMAGHNA; PAUL, DIPTABRATA; NECHIYIL, DIVYA; GOKUL, M. A.; Watanabe, Kenji; Taniguchi, Takashi; KUMAR, G. V. PAVAN; RAHMAN, ATIKUR |
| <b>Title</b>               | Modulation of trion and exciton formation in monolayer WS <sub>2</sub> by dielectric and substrate engineering                                |
| <b>Citation</b>            | 2D Materials, 8(4).   |
| <b>Publisher</b>           | IOP Publishing  |
| <b>URI</b>                 | <a href="https://doi.org/10.1088/2053-1583/ac234f">https://doi.org/10.1088/2053-1583/ac234f</a>   |
| <b>DR URI</b>              | <a href="http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6303">http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6303</a>           |
| <b>Date of Publication</b> | 2021-10   |

[Go to top](#)

|                            |   |
|----------------------------|---|
| <b>Author(s)</b>           | CMS Collaboration; Sirunyan, A. M.; ALPANA, K.; DUBE, SOURABH; KANSAL, B.; PANDEY, S.; RANE, A.; RASTOGI, A.; SHARMA, SEEMA et al.                              |
| <b>Title</b>               | Search for lepton-flavor violating decays of the Higgs boson in the $\mu\tau$ and $e\tau$ final states in proton-proton collisions at $\sqrt{s} = 13\text{TeV}$ |
| <b>Citation</b>            | Physical Review D, 104(3).  |
| <b>Publisher</b>           | American Physical Society   |
| <b>URI</b>                 | <a href="https://doi.org/10.1103/PhysRevD.104.032013">https://doi.org/10.1103/PhysRevD.104.032013</a>   |
| <b>DR URI</b>              | <a href="http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6281">http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6281</a>                             |
| <b>Date of Publication</b> | 2021-08   |

|                            |  |
|----------------------------|--|
| <b>Author(s)</b>           | CMS Collaboration; Sirunyan, A. M.; DUBE, SOURABH; KANSAL, B.; KOTHEKAR, K.; PANDEY, S.; RANE, A.; RASTOGI, A.; SHARMA, SEEMA et al.                   |
| <b>Title</b>               | Constraints on the Initial State of Pb-Pb Collisions via Measurements of Z -Boson Yields and Azimuthal Anisotropy at $\sqrt{s_{NN}} = 5.02\text{ TeV}$ |
| <b>Citation</b>            | Physical Review Letters, 127(10).  |
| <b>Publisher</b>           | Physical Review Letters  |
| <b>URI</b>                 | <a href="https://doi.org/10.1103/PhysRevLett.127.102002">https://doi.org/10.1103/PhysRevLett.127.102002</a>  |
| <b>DR URI</b>              | <a href="http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6289">http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6289</a>                    |
| <b>Date of Publication</b> | 2021-09  |

|                            |  |
|----------------------------|--|
| <b>Author(s)</b>           | CMS Collaboration; Sirunyan, A. M.; DUBE, SOURABH; KANSAL, B.; KAPOOR, A.; KOTHEKAR, K.; PANDEY, S.; RANE, A.; RASTOGI, A.; SHARMA, SEEMA et al. |
| <b>Title</b>               | Hard color-singlet exchange in dijet events in proton-proton collisions at $\sqrt{s} = 13\text{TeV}$   |
| <b>Citation</b>            | Physical Review D, 104(3).   |
| <b>Publisher</b>           | American Physical Society  |
| <b>URI</b>                 | <a href="https://doi.org/10.1103/PhysRevD.104.032009">https://doi.org/10.1103/PhysRevD.104.032009</a>  |
| <b>DR URI</b>              | <a href="http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6267">http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6267</a>              |
| <b>Date of Publication</b> | 2021-08  |

|                            |   |
|----------------------------|---|
| <b>Author(s)</b>           | CMS Collaboration; Sirunyan, A. M.; DUBE, SOURABH; KANSAL, B.; PANDEY, S.; RANE, A.; RASTOGI, A.; SHARMA, SEEMA et al.              |
| <b>Title</b>               | Precision luminosity measurement in proton-proton collisions at $\sqrt{s} = 13\text{TeV}$ in 2015 and 2016 at CMS                   |
| <b>Citation</b>            | European Physical Journal C, 81, 800.   |
| <b>Publisher</b>           | Springer Nature   |
| <b>URI</b>                 | <a href="https://doi.org/10.1140/epjc/s10052-021-09538-2">https://doi.org/10.1140/epjc/s10052-021-09538-2</a>                       |
| <b>DR URI</b>              | <a href="http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6293">http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6293</a> |
| <b>Date of Publication</b> | 2021-09   |

|                            |  |
|----------------------------|--|
| <b>Author(s)</b>           | CMS Collaboration; Sirunyan, A. M.; DUBE, SOURABH; KANSAL, B.; PANDEY, S.; RANE, A.; RASTOGI, A.; SHARMA, SEEMA et al.               |
| <b>Title</b>               | Search for a heavy vector resonance decaying to a Z boson and a Higgs boson in proton-proton collisions at $\sqrt{s} = 13\text{TeV}$ |
| <b>Citation</b>            | European Physical Journal C, 81(8), 688.   |
| <b>Publisher</b>           | Springer Nature  |
| <b>URI</b>                 | <a href="https://doi.org/10.1140/epjc/s10052-021-09348-6">https://doi.org/10.1140/epjc/s10052-021-09348-6</a>                        |
| <b>DR URI</b>              | <a href="http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6286">http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6286</a>  |
| <b>Date of Publication</b> | 2021-08  |

|                            |   |
|----------------------------|---|
| <b>Author(s)</b>           | GHOSH, DIPTIMOY   |
| <b>Title</b>               | LHCb finds evidence for the violation of lepton universality in B meson decays  |
| <b>Citation</b>            | Current Science, 121(5), 610-611.   |
| <b>Publisher</b>           | Indian Academy of Sciences  |
| <b>URI</b>                 | <a href="https://www.currentscience.ac.in/Volumes/121/05/0610.pdf">https://www.currentscience.ac.in/Volumes/121/05/0610.pdf</a>     |
| <b>DR URI</b>              | <a href="http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6278">http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6278</a> |
| <b>Date of Publication</b> | 2021-09   |

|                            |   |
|----------------------------|---|
| <b>Author(s)</b>           | JAIN, SACHIN; JOHN, RENJAN RAJAN; MEHTA, ABHISHEK; Nizami, Amin A.; SURESH, ADITHYA   |
| <b>Title</b>               | Higher spin 3-point functions in 3d CFT using spinor-helicity variables   |
| <b>Citation</b>            | Journal of High Energy Physics, 2021(9).  |
| <b>Publisher</b>           | Springer Nature   |
| <b>URI</b>                 | <a href="https://doi.org/10.1007/JHEP09(2021)041">https://doi.org/10.1007/JHEP09(2021)041</a>                                       |
| <b>DR URI</b>              | <a href="http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6280">http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6280</a> |
| <b>Date of Publication</b> | 2021-09   |

|                            |   |
|----------------------------|---|
| <b>Author(s)</b>           | Khedkar, Chaitali, V.; Daware, Krishna D.; BADGUJAR, PRASHANT S.; Kolekar, Yesh D.; Gosavi, Suresh W.; Patil, Shankar I.            |
| <b>Title</b>               | Ag-SiO <sub>2</sub> nanocomposite for the optical detection of Hg(II) ions and catalytic reduction of methylene blue                |
| <b>Citation</b>            | Optical Materials, 120, 111426.   |
| <b>Publisher</b>           | Elsevier B.V.   |
| <b>URI</b>                 | <a href="https://doi.org/10.1016/j.optmat.2021.111426">https://doi.org/10.1016/j.optmat.2021.111426</a>                             |
| <b>DR URI</b>              | <a href="http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6268">http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6268</a> |
| <b>Date of Publication</b> | 2021-10   |

|                     |   |
|---------------------|---|
| Author(s)           | THALAPILLIL, ARUN M.  |
| Title               | Wobbling muons deepen fundamental mystery   |
| Citation            | Current Science, 121(5), 611-612.   |
| Publisher           | Indian Academy of Sciences  |
| URI                 | <a href="https://www.currentscience.ac.in/Volumes/121/05/0611.pdf">https://www.currentscience.ac.in/Volumes/121/05/0611.pdf</a>     |
| DR URI              | <a href="http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6279">http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6279</a> |
| Date of Publication | 2021-09   |

[Go to top](#)

\*\*\*