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Monthly Bulletin of Publications:  
Faculty, Scientists and Students of IISER Pune.  
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## PATENT

<b>Inventor/Creator</b>	BRITTO, SANDANARAJ S.; BHANDARI, PAVANKUMAR JANARDHAN; REDDY, MULLAPUDI MOHAN
<b>Title</b>	Supramolecular protein assemblies with advanced functions and synthesis thereof
<b>Patent No.</b>	US11173212B2
<b>DR URI</b>	<a href="http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/5762">http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/5762</a>
<b>Date of Publication</b>	2021-11

## Book Review

<b>Author(s)</b>	THOMAS, BEJOY K.
<b>Title</b>	The Spirit of Green: The Economics of Collisions and Contagions in a Crowded World
<b>Citation</b>	Current Science, 121(10), 1361-1362.
<b>Publisher</b>	Indian Academy of Sciences
<b>URI</b>	<a href="https://www.currentscience.ac.in/Volumes/121/10/1361.pdf">https://www.currentscience.ac.in/Volumes/121/10/1361.pdf</a>
<b>DR URI</b>	<a href="http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6389">http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6389</a>
<b>Date of Publication</b>	2021-11

## Journal Articles

### BIOLOGY

<b>Author(s)</b>	Awathale, Sanjay N.; Waghade, Akash M.; Kawade, Harish M.; Jadhav, Gouri; CHOUDHARY, AMIT G.; Sagarkar, Sneha; Sakharkar, Amul J.; SUBHEDAR, NISHIKANT K.; Kokare, Dadasaheb M
<b>Title</b>	Neuroplastic Changes in the Superior Colliculus and Hippocampus in Self-rewarding Paradigm: Importance of Visual Cues
<b>Citation</b>	Molecular Neurobiology.
<b>Publisher</b>	Springer Nature
<b>URI</b>	<a href="https://doi.org/10.1007/s12035-021-02597-2">https://doi.org/10.1007/s12035-021-02597-2</a>
<b>DR URI</b>	<a href="http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6414">http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6414</a>
<b>Date of Publication</b>	2021-11

**Author(s)** NERU, ARUN; ASSISI, COLLINS  
**Title** Theta Oscillations Gate the Transmission of Reliable Sequences in the Medial Entorhinal Cortex  
**Citation** Eneuro, 8(3).  
**Publisher** The Society for Neuroscience  
**URI** <https://doi.org/10.1523/ENEURO.0059-20.2021>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6404>  
**Date of Publication** 2021-05

**Author(s)** Patel, Chirag; Patel, Priyanshi; SARKAR, DIPTA; Bulsara, Jeshica; Soni, Arun; Isapure, Kiran; Acharya, Sanjeev  
**Title** Neuroprotective Effect of Lutein in Scopolamine-Induced Alzheimer's Disease in Mice and Zebrafish  
**Citation** Revista Brasileira de Farmacognosia.  
**Publisher** Springer Nature  
**URI** <https://doi.org/10.1007/s43450-021-00202-0>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6376>  
**Date of Publication** 2021-10

**Author(s)** SINGH, SHUBHAM; KAMAT, SIDDHESH S.  
**Title** The loss of enzymatic activity of the PHARC associated lipase ABHD12 results in increased phagocytosis that causes neuroinflammation  
**Citation** European Journal of Neuroscience, 54(10), 7442-7457.  
**Publisher** Wiley  
**URI** <https://doi.org/10.1111/ejn.15516>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6396>  
**Date of Publication** 2021-11

## CHEMISTRY

**Author(s)** ARFIN, HABIBUL; NAG, ANGSHUMAN  
**Title** Origin of Luminescence in Sb<sup>3+</sup> and Bi<sup>3+</sup>-Doped Cs<sub>2</sub>SnCl<sub>6</sub> Perovskites: Excited State Relaxation and Spin-Orbit Coupling  
**Citation** Journal of Physical Chemistry Letters, 12(41), 10002-10008.  
**Publisher** American Chemical Society  
**URI** <https://doi.org/10.1021/acs.jpcllett.1c02973>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6418>  
**Date of Publication** 2021-10

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**Author(s)** CHAKRABORTY, RAYAN; GHOSH, PRASENJIT  
**Title** Mechanistic insights of hydrogen evolution reaction on quaternary earth-abundant chalcogenide Cu<sub>2</sub>BaSnS<sub>4</sub> from first principles  
**Citation** Applied Surface Science, 570,151049.  
**Publisher** Elsevier B.V.  
**URI** <https://doi.org/10.1016/j.apsusc.2021.151049>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6419>  
**Date of Publication** 2021-12

**Author(s)** CHATTERJEE, JOY; CHATTERJEE, ABHIJIT; HAZRA, PARTHA  
**Title** Intrinsic-to-extrinsic emission tuning in luminescent Cu nanoclusters by in situ ligand engineering  
**Citation** Physical Chemistry Chemical Physics, 23(45), 25850-25865.  
**Publisher** Royal Society of Chemistry  
**URI** <https://doi.org/10.1039/D1CP03596G>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6395>  
**Date of Publication** 2021-12

**Author(s)** GUPTA, RISHABH; SAHOO, SUPRIYA; DESWAL, SWATI; Kothavade, Premkumar; Dixit, Prashant; Zareba, Jan K.; Shanmuganathan, Kahiravan; BOOMISHANKAR, RAMAMOORTHY  
**Title** A Flexible Energy Harvester from an Organic Ferroelectric Ammonium Salt  
**Citation** Chemistry-An Asian Journal.  
**Publisher** Wiley  
**URI** <https://doi.org/10.1002/asia.202101128>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6397>  
**Date of Publication** 2021-10

**Author(s)** KUMAR, VIKAS; Gonnade, Rajesh G.; Yildiz, Cem B.; MAJUMDAR, MOUMITA  
**Title** Stabilization of the Elusive Antimony(I) Cation and Its Coordination Complexes with Transition Metals  
**Citation** Angewandte Chemie International Edition, 60(48), 25522-25529.  
**Publisher** Wiley  
**URI** <https://doi.org/10.1002/anie.202111339>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6374>  
**Date of Publication** 2021-11

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**Author(s)** LET, SUMANTA; DUTTA, SUBHAJIT; SAMANTA, PARTHA; SHARMA, SHIVANI; GHOSH, SUJIT  
**Title** Magnetic Nanoparticle-Embedded Ionic Microporous Polymer Composite as an Efficient Scavenger of Organic Micropollutants  
**Citation** ACS Applied Materials & Interfaces, 13(43), 51474-51484.  
**Publisher** American Chemical Society  
**URI** <https://doi.org/10.1021/acsami.1c14819>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6394>  
**Date of Publication** 2021-11

**Author(s)** MALLA, JAVID AHMAD; AHMAD, MANZOOR; TALUKDAR, PINAKI  
**Title** Molecular Self-Assembly as a Tool to Construct Transmembrane Supramolecular Ion Channels  
**Citation** Chemical Record.  
**Publisher** Wiley  
**URI** <https://doi.org/10.1002/tcr.202100225>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6399>  
**Date of Publication** 2021-11

**Author(s)** MAQBOOL, SHABNUM; SHEIKH, TARIQ; THEKKAYIL, ZIYAD; DESWAL, SWATI; BOOMISHANKAR, RAMAMOORTHY; NAG, ANGSHUMAN; MANDAL, PANKAJ  
**Title** Third Harmonic Upconversion and Self-Trapped Excitonic Emission in 1D Pyridinium Lead Iodide  
**Citation** Journal of Physical Chemistry C, 125, 41, 22674-22683.  
**Publisher** American Chemical Society  
**URI** <https://doi.org/10.1021/acs.jpcc.1c07639>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6417>  
**Date of Publication** 2021-10

**Author(s)** MUKHERJEE, SOUMYA; DUTTA, SUBHAJIT; MORE, YOGESHWAR D.; FAJAL, SAHEL; GHOSH, SUJIT K.  
**Title** Post-synthetically modified metal-organic frameworks for sensing and capture of water pollutants  
**Citation** Dalton Transactions.  
**Publisher** Royal Society of Chemistry  
**URI** <https://doi.org/10.1039/D1DT02862F>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6412>  
**Date of Publication** 2021-10

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**Author(s)** NAG, ANGSUMAN  
**Title** "Plenty of Room" at the Interface of Hybrid Metal Halide Perovskite Single Crystals  
**Citation** Nano Letters, 21(20), 8529-8531.  
**Publisher** American Chemical Society  
**URI** <https://doi.org/10.1021/acs.nanolett.1c03247>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6409>  
**Date of Publication** 2021-11

**Author(s)** Pandit, Sarwar Ahmad; BHAT, ZAHID MANZOOR; THOTIYL, MUSTHAFA OTTAKAM et al.  
**Title** Surface Active Ionic Liquid Assisted Metal-Free Electrocatalytic-Carboxylation in Aqueous phase: A Sustainable approach for CO<sub>2</sub> utilization paired with electro-detoxification of Halocarbons  
**Citation** Green Chemistry.  
**Publisher** Royal Society of Chemistry  
**URI** <https://doi.org/10.1039/D1GC03412J>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6382>  
**Date of Publication** 2021-11

**Author(s)** Poonia, Ajay K.; Shrivastava, Megha; MIR, WASIM J.; Aneesh, J.; NAG, ANGSUMAN; Adarsh, K. V.  
**Title** Intervalley polaronic biexcitons in metal halide perovskite quantum dots  
**Citation** Physical Review B, 104(16).  
**Publisher** American Physical Society  
**URI** <https://doi.org/10.1103/PhysRevB.104.L161407>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6422>  
**Date of Publication** 2021-10

**Author(s)** TIWARI, OM SHANKER  
**Title** Synthesis, characterization, and investigation of capacitance and redox properties of self-assembled Phe-Phe with ferrocene conjugates  
**Citation** Molecular Systems Design & Engineering.  
**Publisher** Royal Society of Chemistry  
**URI** <https://doi.org/10.1039/D1ME00115A>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6398>  
**Date of Publication** 2021-10

**Author(s)** Yudina, Olga N.; Gening, Marina L.; TALUKDAR, PINAKI; Gerbst, Alexey G.; Tsvetkov, Yury E.; Nifantiev, Nikolay E.  
**Title** Synthesis of a cyclic tetramer of 3-amino-3-deoxyallose with axially oriented amino groups  
**Citation** Carbohydrate Research, 511, 108476.  
**Publisher** Elsevier B.V.  
**URI** <https://doi.org/10.1016/j.carres.2021.108476>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6413>  
**Date of Publication** 2022-01

## EARTH AND CLIMATE SCIENCE

**Author(s)** Srivastava, D. K.; DAVE, ALOK; Dangwal, V.  
**Title** Sequence stratigraphy of the Andaman Basin, northern Indian Ocean  
**Citation** Marine and Petroleum Geology, 133, 105298.  
**Publisher** Elsevier B.V.  
**URI** <https://doi.org/10.1016/j.marpetgeo.2021.105298>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6373>  
**Date of Publication** 2021-11

## MATHEMATICS

**Author(s)** BHIMANI, DIVYANG G.; Okoudjou, Kasso A.  
**Title** Bimodal Wilson systems in  $L^2(\mathbb{R})$   
**Citation** Journal of Mathematical Analysis and Applications, 505(1), 125480.  
**Publisher** Elsevier B.V.  
**URI** <https://doi.org/10.1016/j.jmaa.2021.125480>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6372>  
**Date of Publication** 2022-01

**Author(s)** Bhunia, Sushil; SINGH, ANUPAM  
**Title** z-classes in groups: a survey  
**Citation** Indian Journal of Pure and Applied Mathematics.  
**Publisher** Springer Nature  
**URI** <https://doi.org/10.1007/s13226-021-00186-6>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6383>  
**Date of Publication** 2021-11

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**Author(s)** Kadu, Ganesh S.; Joshi, Vinayak; GONDE, SAMRUDDHA  
**Title** On Weakly Perfect Annihilating-Ideal Graphs  
**Citation** Bulletin of the Australian Mathematical Society, 104(3), 362-372.  
**Publisher** Cambridge University Press  
**URI** <https://doi.org/10.1017/S0004972721000265>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6410>  
**Date of Publication** 2021-12

## PHYSICS

**Author(s)** ANANTH, SUDARSHAN; Brink, Lars; Majumdar, Sucheta  
**Title** BMS algebra from residual gauge invariance in light-cone gravity  
**Citation** Journal of High Energy Physics, 2021(11), 8.  
**Publisher** Springer Nature  
**URI** [https://doi.org/10.1007/JHEP11\(2021\)008](https://doi.org/10.1007/JHEP11(2021)008)  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6420>  
**Date of Publication** 2021-11

**Author(s)** Balasubramanian, Mahesh K. N.; PATIL, RAJ; Rudra, Arnab  
**Title** Spinning amplitudes from scalar amplitudes  
**Citation** Journal of High Energy Physics, 2021(11), 151.  
**Publisher** Springer Nature  
**URI** [https://doi.org/10.1007/JHEP11\(2021\)151](https://doi.org/10.1007/JHEP11(2021)151)  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6411>  
**Date of Publication** 2021-11

**Author(s)** CHAKRABORTY, RAYAN; GHOSH, PRASENJIT  
**Title** Mechanistic insights of hydrogen evolution reaction on quaternary earth-abundant chalcogenide Cu<sub>2</sub>BaSnS<sub>4</sub> from first principles  
**Citation** Applied Surface Science, 570,151049.  
**Publisher** Elsevier B.V.  
**URI** <https://doi.org/10.1016/j.apsusc.2021.151049>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6419>  
**Date of Publication** 2021-12

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**Author(s)** Chandra, Rajorshi Sushovan; SOURADEEP, TARUN  
**Title** Primordial Power Spectrum reconstruction from CMB Weak Lensing Power Spectrum  
**Citation** Journal of Cosmology and Astroparticle Physics, 2021(10).  
**Publisher** IOP Publishing  
**URI** <https://doi.org/10.1088/1475-7516/2021/10/081>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6392>  
**Date of Publication** 2021-10

**Author(s)** CMS Collaboration; Sirunyan, A. M.; DUBE, SOURABH; KANSAL, B.; PANDEY, S.; RANE, A.; RASTOGI, A.; SHARMA, SEEMA et al.  
**Title** First measurement of the cross section for top quark pair production with additional charm jets using dileptonic final states in pp collisions at  $\sqrt{s} = 13$  TeV  
**Citation** Physics Letters B, 820, 136565.  
**Publisher** Elsevier B.V.  
**URI** <https://doi.org/10.1016/j.physletb.2021.136565>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6407>  
**Date of Publication** 2021-09

**Author(s)** CMS Collaboration; Sirunyan, A. M.; DUBE, SOURABH; KANSAL, B.; PANDEY, S.; RANE, A.; RASTOGI, A.; SHARMA, SEEMA et al.  
**Title** Search for  $W$  bosons decaying to a top and a bottom quark at  $\sqrt{s} = 13$  TeV in the hadronic final state  
**Citation** Physics Letters B, 820, 136535.  
**Publisher** Elsevier B.V.  
**URI** <https://doi.org/10.1016/j.physletb.2021.136535>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6415>  
**Date of Publication** 2021-09

**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** Search for a heavy Higgs boson decaying into two lighter Higgs bosons in the  $\tau\tau b\bar{b}$  final state at 13 TeV  
**Citation** Journal of High Energy Physics, 2021(11), 57.  
**Publisher** Springer Nature  
**URI** [https://doi.org/10.1007/JHEP11\(2021\)057](https://doi.org/10.1007/JHEP11(2021)057)  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6408>  
**Date of Publication** 2021-11

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

**Title** Measurements of the  $pp \rightarrow W^\pm \gamma \gamma$  and  $pp \rightarrow Z \gamma \gamma$  cross sections at  $\sqrt{s} = 13$  TeV and limits on anomalous quartic gauge couplings

**Citation** Journal of High Energy Physics, 2021(18), 174.

**Publisher** Springer Nature

**URI** [https://doi.org/10.1007/JHEP10\(2021\)174](https://doi.org/10.1007/JHEP10(2021)174)

**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6421>

**Date of Publication** 2021-10

**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** Combined searches for the production of supersymmetric top quark partners in proton-proton collisions at  $\sqrt{s} = 13$  TeV

**Citation** European Physical Journal C, 81, 970.

**Publisher** Springer Nature

**URI** <https://doi.org/10.1140/epjc/s10052-021-09721-5>

**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6385>

**Date of Publication** 2021-11

**Author(s)** GUHA, ATANU; Sen, Debashree

**Title** Feeble DM-SM interaction via new scalar and vector mediators in rotating neutron stars

**Citation** Journal of Cosmology and Astroparticle Physics, 2021.

**Publisher** IOP Publishing

**URI** <https://doi.org/10.1088/1475-7516/2021/09/027>

**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6375>

**Date of Publication** 2021-09

**Author(s)** Henderson, Greg J.; SREEJITH, G. J.; Simon, Steven H.

**Title** Entanglement action for the real-space entanglement spectra of chiral Abelian quantum Hall wave functions

**Citation** Physical Review B, 104(19).

**Publisher** American Physical Society

**URI** <https://doi.org/10.1103/PhysRevB.104.195434>

**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6424>

**Date of Publication** 2021-11

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**Author(s)** KALRA, DAYAL SINGH; SANTHANAM, M. S.  
**Title** Inferring long memory using extreme events  
**Citation** Chaos: An Interdisciplinary Journal of Nonlinear Science, 31(11).  
**Publisher** AIP Publishing  
**URI** <https://doi.org/10.1063/5.0064432>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6403>  
**Date of Publication** 2021-11

**Author(s)** KUMAR, AANJANEYA; ZODAGE, ANIKET; SANTHANAM, M. S.  
**Title** First detection of threshold crossing events under intermittent sensing  
**Citation** Physical Review E, 104(5).  
**Publisher** American Physical Society  
**URI** <https://doi.org/10.1103/PhysRevE.104.L052103>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6402>  
**Date of Publication** 2021-11

**Author(s)** LIGO Scientific Collaboration; Virgo Collaboration; Abbott, R.; RAPOL, UMAKANT D.; SOURADEEP, TARUN et al.  
**Title** Searches for Continuous Gravitational Waves from Young Supernova Remnants in the Early Third Observing Run of Advanced LIGO and Virgo  
**Citation** Astrophysical Journal, 921(1).  
**Publisher** IOP Publishing  
**URI** <https://doi.org/10.3847/1538-4357/ac17ea>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6381>  
**Date of Publication** 2021-11

**Author(s)** LIGO Scientific Collaboration; Virgo Collaboration; KAGRA Collaboration; Abbott, R.; RAPOL, UMAKANT D.; SOURADEEP, TARUN et al.  
**Title** All-sky search for long-duration gravitational-wave bursts in the third Advanced LIGO and Advanced Virgo run  
**Citation** Physical Review D, 104(10).  
**Publisher** American Physical Society  
**URI** <https://doi.org/10.1103/PhysRevD.104.102001>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6406>  
**Date of Publication** 2021-11

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**Author(s)** NAIK, SAISMIT; Naik, Mit H.; Maity, Indrajit; Jain, Manish  
**Title** Twister: Construction and structural relaxation of commensurate moiré superlattices  
**Citation** Computer Physics Communications, 271, 108184.  
**Publisher** Elsevier B.V.  
**URI** <https://doi.org/10.1016/j.cpc.2021.108184>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6357>  
**Date of Publication** 2022-02

**Author(s)** SADEKAR, ONKAR; BUDAMAGUNTA, MANSI; SREEJITH, G. J.; JAIN, SACHIN; SANTHANAM, M. S.  
**Title** An infectious diseases hazard map for India based on mobility and transportation networks  
**Citation** Current Science, 121(09), 1208-1215.  
**Publisher** Indian Academy of Sciences  
**URI** <https://www.currentscience.ac.in/Volumes/121/09/1208.pdf>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6401>  
**Date of Publication** 2021-11

**Author(s)** SAHA, SAYAN; Shaikh, Shabbir | Mukherjee, Suvodip; SOURADEEP, TARUN; Wandelt, Benjamin D.  
**Title** Bayesian estimation of our local motion from the Planck-2018 CMB temperature map  
**Citation** Journal of Cosmology and Astroparticle Physics, 2021(10).  
**Publisher** IOP Publishing  
**URI** <https://doi.org/10.1088/1475-7516/2021/10/072>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6393>  
**Date of Publication** 2021-10

**Author(s)** SHARMA, VANDANA; TIWARI, SUNNY; PAUL, DIPTABRATA; SAHU, RATIMANASEE; CHIKKADI, VIJAYAKUMAR; KUMAR, G V PAVAN  
**Title** Optothermal pulling, trapping, and assembly of colloids using nanowire plasmons  
**Citation** Soft Matter.  
**Publisher** Royal Society of Chemistry  
**URI** <https://doi.org/10.1039/D1SM01365C>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6386>  
**Date of Publication** 2021-11

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**Author(s)** SINGH, DIPTI UMED; Narayanan, Remya  
**Title** Temperature tunable flexible photo absorbers based on near-infrared 1D photonic crystal hybridized W-doped VO<sub>2</sub> nanostructures  
**Citation** Nanotechnology, 33(6).  
**Publisher** IOP Publishing  
**URI** <https://doi.org/10.1088/1361-6528/ac33d4>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6405>  
**Date of Publication** 2021-11

**Author(s)** SINGH, MOHIT KUMAR; DATTA, SHOUVIK  
**Title** Dual measurements of temporal and spatial coherence of light in a single experimental setup using a modified Michelson interferometer  
**Citation** Review of Scientific Instruments, 92(10), 105109.  
**Publisher** AIP Publishing  
**URI** <https://doi.org/10.1063/5.0041438>  
**DR URI** <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/6336>  
**Date of Publication** 2021-10

**Author(s)** Singhal, Akshat; KULKARNI, SUMEET et al.  
**Title** Deep co-added sky from Catalina Sky Survey images  
**Citation** Monthly Notices of the Royal Astronomical Society, 507(4), 4983-4996.  
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