



New Publications of  
Faculty, Scientists and  
Students of IISER Pune.

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## Biology

Author(s) **Rangarajan, Nivedita**; Kulkarn, Prakash; Hannenhalli, Sridhar  
Title Evolutionarily Conserved Network Properties of Intrinsically Disordered Proteins  
Name of the Journal PLoS One  
Volume No. 10  
Issue No. 5  
Date of Publication 14-MAY-15  
Name of the Publisher Public Library of Science  
DOI 10.1371/journal.pone.0126729

## Chemistry

Author(s) **Kumar, Pramod; Jain, Deepak R.**  
Title Cy-Aminopropylene peptide nucleic acid (amp-PNA): chiral cationic PNAs with superior PNA:DNA/RNA duplex stability and cellular uptake.  
Name of the Journal Tetrahedron  
Volume No. 71  
Issue No. 21  
Pages 3378–3384  
Date of Publication 27-MAY-15  
Name of the Publisher Elsevier  
DOI 10.1016/j.tet.2015.03.093

Author(s) **Vishakha Karnawat and Mrinalini Puranik**  
Title Solution Structures of Purine Base Analogues 9-deazaguanine and 9-deazahypoxanthine.  
Name of the Journal Journal of Biomolecular Structure and Dynamics  
Date of Publication 20-MAY-2015  
Name of the Publisher Taylor & Fancis  
DOI 10.1080/07391102.2015.1042916

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Author(s) **Karnawat, Vishakha;** Gogia, Spriha; Balaram, Hemaltha and **Puranik, Mrinalini**  
Title Differential Distortion of Purine Substrates by Human and Plasmodium falciparum Hypoxanthine-Guanine Phosphoribosyl transferase to Catalyse the Formation of Mononucleotides.  
Name of the Journal ChemPhysChem  
Date of Publication 05-MAY-15  
Name of the Publisher WILEY-VCH Verlag GmbH & Co. KGaA,  
DOI 10.1002/cphc.201500084

Author(s) **Goel, Mahima; Narasimha, Karnati and Jayakannan, Manickam**  
Title Direct Evidence for Secondary Interactions in Planar and Nonplanar Aromatic pi-Conjugates and Their Photophysical Characteristics in Solid-State Assemblies  
Name of the Journal Journal of Physical Chemistry B  
Volume No. 119  
Issue No. 15  
Pages 5102-5112  
Date of Publication 24-MAR-2015  
Name of the Publisher American Chemical Society  
DOI 10.1021/acs.jpcc.5b01956

Author(s) **Karmakar, Avishek; Desai, Aamod V.; Manna, Biplab; Joarder, Biplab; Ghosh and Sujit K.**  
Title An Amide-Functionalized Dynamic Metal-Organic Framework Exhibiting Visual Colorimetric Anion Exchange and Selective Uptake of Benzene over Cyclohexane  
Name of the Journal Chemistry-A European Journal  
Volume No. 21  
Issue No. 19  
Pages 7071-7076  
Date of Publication 23-MAR-2015  
Name of the Publisher Wiley  
DOI 1002/chem.201406233

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Author(s) **Mukherjee, Soumya ; Joarder, Biplab; Desai, Aamod V.;Manna, Biplab;** Krishna, Rajamani and **Ghosh, Sujit K.**  
Title Exploiting Framework Flexibility of a Metal–Organic Framework for Selective Adsorption of Styrene over Ethylbenzene  
Name of the Journal Inorganic Chemistry  
Volume No. 54  
Issue No. 9  
Pages 4403–4408  
Date of Publication 15-APR-2015  
Name of the Publisher American Chemical Society  
DOI 10.1021/acs.inorgchem.5b00206

Author(s) **Desai , Aamod V.; Samanta, Partha; Manna, Biplab and Ghosh, Sujit K.**  
Title Aqueous phase nitric oxide detection by an amine-decorated metal–organic framework  
Name of the Journal Chemical Communications  
Volume No. 51  
Issue No. 28  
Pages 6111-6114  
Date of Publication FEB-2015  
Name of the Publisher Royal Society of Chemistry  
DOI 10.1039/C5CC00773A

Author(s) **Nagarkar, Sanjog S.; Desai, Aamod V.; Samanta, Partha and Ghosh, Sujit K.**  
Title Aqueous phase selective 2,4,6-trinitrophenol detection via fluorescent metal-organic framework with pendant recognition site  
Name of the Journal Dalton Transactions  
Date of Publication MAR-2015  
Name of the Publisher Royal Society of Chemistry  
DOI 10.1039/c5dt00397k

Author(s) **Manna,Biplab; Desai, Aamod V.; Kumar, Naveen ; Karmakar, Avishek and Ghosh, Sujit K.**  
Title Single-Crystal-to-Single-Crystal Transformation of an Anion Exchangeable Dynamic Metal-Organic Framework  
Name of the Journal CrystEngComm  
Date of Publication MAR 2015  
Name of the Publisher Royal Society of Chemistry  
DOI 10.1039/C5CE00139K

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Author(s) **Mukherjee, Soumya and Ghosh, Sujit K.**  
Title Recent Progress in the Realm of Homonuclear Ln6 Single Molecule Magnets: Structural Overview and Synthetic Approaches  
Name of the Proceedings of the Indian National Science Academy  
Volume No. 81  
Issue No. 2  
Pages 357-379  
Date of Publication MAR-2015  
Name of the Publisher Springer  
DOI 10.16943/ptinsa/2015/v81i2/48093

Author(s) **Thimmappa, Ravikumar; Paswan, Bhuneshwar; Gaikwad, Pramod; Devendrachari, Mruthyunjayachari Chattanahalli;** Kotresh, Harish Makri Nimbegondi; Mohan, Ramsundar Rani; Alias, Joy Pattayil and **Thotiyl , Musthafa Ottakam**  
Title Chemically Chargeable Photo Battery  
Name of the Journal Journals of Physical Chemistry C  
Date of Publication 25-MAY-15  
Name of the Publisher American Chemical Society  
DOI 10.1021/acs.jpcc.5b02871

Author(s) **Nagarkar, Sanjog S. and Ghosh, Sujit K.**  
Title Reversible structural transformations in a Co(II) based 2D dynamic metal-organic framework showing selective solvent uptake  
Name of the Journal Journal of Chemical Sciences  
Volume No. 127  
Issue No. 4  
Pages 627-633  
Date of Publication 24-MAY-2015  
Name of the Publisher Springer  
DOI 10.1007/s12039-015-0820-3

## Physics

Author(s) **Vardarajan, Suneeta**  
Title The sausage sigma model revisited.  
Name of the Journal Classical Quantum Gravity  
Volume No. 32  
Issue No. 11  
Date of Publication May- 2015  
Name of the Publisher IOP Publishing  
DOI 10.1088/0264-9381/32/11/115005

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Author(s) Huillet, Thierry; **Santhanam, MS**  
Title Preface to the special issue on Extreme Events and its Applications.  
Name of the Journal Chaos Solitons & Fractals  
Volume No. 74  
Pages 1-2  
Date of Publication MAY-15  
Name of the Publisher Pergamon-Elsevier Science Ltd  
DOI 10.1016/j.chaos.2015.03.001

Author(s) **Ananth, Sudarshan** and **Mali, Mahendra**  
Title Light-cone gravity in dS(4).  
Name of the Journal Physics Letters B  
Volume No. 745  
Pages 48-51  
Date of Publication 18-MAY-15  
Name of the Publisher Elsevier Science  
DOI 10.1016/j.physletb.2015.04.006

Author(s) **Ingale, M.; Subramanian, P.**; Cairns, Iver  
Title Coronal turbulence and the angular broadening of radio sources - the role of the structure function.  
Name of the Journal Monthly Notices of the Royal Astronomical Society  
Volume No. 447  
Issue No. 4  
Pages 3486-3497  
Date of Publication MAR-15  
Name of the Publisher Oxford University Press  
DOI 10.1093/mnras/stu2703

Author(s) Mercier, C.; **Subramanian, P.**; Chambe, G.; Janardhan, P.  
Title The structure of solar radio noise storms  
Name of the Journal Astronomy & Astrophysics  
Volume No. 576  
Pages 3486-3497  
Date of Publication APR-15  
Name of the Publisher EDP Sciences  
DOI <http://dx.doi.org/10.1051/0004-6361/201321064>

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Author(s) **Arunbabu, K. P.**; Antia, H. M.; Dugad, S. R.; Gupta, S. K.; Hayashi, Y.; Kawakami, S.; Mohanty, P. K.; Oshima, A.; **Subramanian, P.**  
Title How are Forbush decreases related to interplanetary magnetic field enhancements ?  
Name of the Journal Astronomy & Astrophysics  
Date of Publication MAY-15  
Name of the Publisher eprint arXiv:1504.06473  
DOI 2015arXiv150406473A

Author(s) **Singh, Danveer; Dasgupta, Arindam ; Aswathy, V. G. ; Tripathi, Ravi P. N.;** and **Kumar, G. V. Pavan**  
Title Directional out-coupling of light from a plasmonic nanowire-nanoparticle junction.  
Name of the Journal Optics Letters  
Volume No. 40  
Issue No. 6  
Pages 1006-1009  
Date of Publication 15-MAR-15  
Name of the Publisher Optical Society America  
DOI 10.1364/OL.40.001006

Author(s) **Banerjee, Nabamita;** Dutta, Suvankar and Jain, Akash  
Title Higher derivative corrections to charged fluids in  $2n$  dimensions  
Name of the Journal Journal of High Energy Physics  
Volume No. 5  
Issue No. 10  
Date of Publication 04-MAY-15  
Name of the Publisher Springer  
DOI 10.1007/JHEP05(2015)010

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Author(s) Glaetzel, Alexander; Dalmonte, Marcello; **Nath, Rejish**; Gross, Christian; Bloch, Immanuel and Zoller, Peter  
Title Designing Frustrated Quantum Magnets with Laser-Dressed Rydberg Atoms  
Name of the Journal Physical Review Letters  
Volume No. 114  
Issue No. 17  
Date of Publication 1-MAY-2015  
Name of the Publisher American Physical Society  
DOI 10.1103/PhysRevLett.114.173002

## General

Author(s) Ganesh, Krishna N  
Title Connect research with education.  
Name of the Journal Nature  
Volume No. 521  
Issue No. 7551  
Pages 154-155  
Date of Publication 13-MAY-2015  
Name of the Publisher Nature Publishing Group  
DOI <http://www.nature.com/news/research-management-priorities-for-science-in-india-1.17509#/ganesh>

## Book Review

Author(s) K.P. Madhu  
Title Book Review- Media Construction of environment and sustainability in India  
Name of the Journal Current Science  
Vol. No. 108  
Issue No. 6  
Pages 1166-1167  
Date of Publication 25-MAR-2015  
Name of the Publisher Indian Academy of Science  
DOI <http://www.currentscience.ac.in/Volumes/108/06/1166.pdf>

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