



SRINIVASA RAMANUJAN LIBRARY
Indian Institute of Science Education and Research Pune
Dr. Homi Bhabha Road, Pune - 411008. India.
e-mail: library@iiserpune.ac.in

Monthly Bulletin of Publications:
Faculty, Scientists and Students of IISER Pune.
September 2019

Contents

Subject	Page No.
Book Chapters	2
Journal Articles	
Biology	2
Chemistry	3
Earth and Climate Science	5
Mathematics	6
Physics	6

Book Chapter

Author(s)	GNANAPRAKASAM, B. ; CHAUDHARI, M. B.
Chapter Title	Metal-Catalyzed Synthesis of Peroxides
Book Title	Science of Synthesis Knowledge Updates 2019/2.
Publisher	Georg Thieme Verlag KG
ISSN No	2510-5469/ 2566-7297
URI	https://www.thieme.de/statics/dokumente/thieme/final/en/dokumente/tw_chemistry/SOS-toc-knowledge-updates-2019-2.pdf
DR URI	http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/3837
Date of Publication	2019

Journal Articles

BIOLOGY

Author(s)	BATHLA, PUNITA; SANDANARAJ, BRITTO S.
Title	Development of activity-based reporter gene technology (abrgt) for imaging of protease activity with an exquisite specificity in a single live cell
Citation	ACS Chemical Biology.
Publisher	American Chemical Society
URI	https://doi.org/10.1021/acscchembio.9b00614
DR URI	http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4099
Date of Publication	09-09-2019
Author(s)	BHATTACHARJEE, ANINDYA S.; KONAKAMCHI, SASANK; Turaev, Dmitriy; Vincis, Roberto; Nunes, Daniel; DINGANKAR, ATHARVA A.; Spors, Hartwig; Carleton, Alan; Kuner, Thomas; ABRAHAM, NIXON M.
Title	Similarity and strength of glomerular odor representations define a neural metric of sniff-invariant discrimination time
Citation	Cell Reports, 28(11), 2966-2978.
Publisher	Elsevier B.V.
URI	https://doi.org/10.1016/j.celrep.2019.08.015
DR URI	http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4122
Date of Publication	10-09-2019

[Go to top](#)

Author(s) Gupta, Suman; Basu, Srijani; BAL, VINEETA; Rath, Satyajit; George, Anna
Title Gut IgA abundance in adult life is a major determinant of resistance to dextran sodium sulfate-colitis and can compensate for the effects of inadequate maternal IgA received by neonates
Citation Immunology, 158(1), 19-34.
Publisher Wiley
URI <https://doi.org/10.1111/imm.13091>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4096>
Date of Publication SEP-2019

Author(s) Kumar, Harish; UDGAONKAR, JAYANT B.
Title Mechanistic approaches to understand the prion-like propagation of aggregates of the human tau protein
Citation Biochimica et Biophysica Acta (BBA)-Proteins and Proteomics, 1867(10), 922-932.
Publisher Elsevier B.V.
URI <https://doi.org/10.1016/j.bbapap.2019.04.004>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4095>
Date of Publication OCT-2019

Author(s) RAJENDRAN, ABINAYA; VAIDYA, KAVERI; Mendoza, Johnny; Bridwell-Rabb, Jennifer; KAMAT, SIDDHESH S.
Title Functional annotation of ABHD14B, an orphan serine hydrolase enzyme
Citation Biochemistry.
Publisher American Chemical Society
URI <https://doi.org/10.1021/acs.biochem.9b00703>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4093>
Date of Publication 03-09-2019

CHEMISTRY

Author(s) ARRA, SRILATHA; BARBAR, ROHIT; KABIR, MUKUL
Title van der Waals heterostructure for photocatalysis: Graphitic carbon nitride and Janus transition-metal dichalcogenides
Citation Physical Review Materials, 3(9).
Publisher American Physical Society
URI <https://doi.org/10.1103/PhysRevMaterials.3.095402>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4129>
Date of Publication 13-09-2019

[Go to top](#)

Author(s) Bodapati, Ramakrishna; Sahoo, Chakradhar; GUEM, MAHESH; Das, Samar K.
Title Mononuclear Ru(II) Complexes of an Arene and Asymmetrically Substituted 2,2'-Bipyridine Ligands: Photophysics, Computation, and NLO Properties
Citation Inorganic Chemistry, 58(17), 11470-11479.
Publisher American Chemical Society
URI <https://doi.org/10.1021/acs.inorgchem.9b01235>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4112>
Date of Publication 20-08-2019

Author(s) BATHLA, PUNITA; SANDANARAJ, BRITTO S.
Title Development of activity-based reporter gene technology (abrgt) for imaging of protease activity with an exquisite specificity in a single live cell
Citation ACS Chemical Biology.
Publisher American Chemical Society
URI <https://doi.org/10.1021/acscchembio.9b00614>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4099>
Date of Publication 09-09-2019

Author(s) KUMAR, SATISH; MISHRA, KAMAL K.; SINGH, SANTOSH K.; BORISH, KSHETRIMAYUM; DEY, SANJIT; Sarkar, Biplab; DAS, ALOKE
Title Observation of a weak intra-residue C5 hydrogen-bond in a dipeptide containing Gly-Pro sequence
Citation Journal of Chemical Physics, 151(10).
Publisher AIP Publishing
URI <https://doi.org/10.1063/1.5115040>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4110>
Date of Publication 13-09-2019

Author(s) MANOHARAN, RAMASAMY; Jeganmohan, Masilamani
Title Cobalt-catalyzed cyclization of benzamides with alkynes: a facile route to isoquinolones with hydrogen evolution
Citation Organic & Biomolecular Chemistry, 16(37), 8384-8389.
Publisher Royal Society of Chemistry
URI <https://doi.org/10.1039/c8ob01924j>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4117>
Date of Publication 06-09-2019

[Go to top](#)

Author(s) MARICHELVAM, THAMARAICHELVAN; BHAT, ZAHID MANZOOR; THIMMAPPA, RAVIKUMAR; DEVENDRACHARI, MRUTHYUNJAYACHARI CHATTANAHALLI; KOTTAICHAMY, ALAGAR RAJA; Sundaram, Venkata Narayanan Naranammalpuram; THOTIYL, MUSTHAFA

Title Hydrogen Fuel Exhaling Zn-Ferricyanide Redox Flow Battery

Citation ACS Sustainable Chemistry & Engineering.

Publisher American Chemical Society

URI <https://doi.org/10.1021/acssuschemeng.9b03213>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4108>

Date of Publication 16-09-2019

Author(s) PANDEY, AKANKSHA M.; AGALAVE, SANDIP G.; Vinod, Chathakudath P.; GNANAPRAKASAM, BOOPATHY

Title MnO₂@Fe₃O₄ Magnetic Nanoparticles as Efficient and Recyclable Heterogeneous Catalyst for Benzylic sp³ C-H Oxidation

Citation Chemistry: An Asian Journal.

Publisher Wiley

URI <https://doi.org/10.1002/asia.201900810>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4121>

Date of Publication 16-08-2019

Author(s) SINGH, SANTOSH K.; PANWARIA, PRAKASH; MISHRA, KAMAL K.; DAS, ALOKE

Title Steric as well as n→π* Interaction Controls the Conformational Preferences of Phenyl Acetate: Gas-phase Spectroscopy and Quantum Chemical Calculations

Citation Chemistry: An Asian Journal.

Publisher Wiley

URI <https://doi.org/10.1002/asia.201901158>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4111>

Date of Publication 06-09-2019

Earth and Climate Science

Author(s) Mukherjee, Soumyajit; TAYADE, LOKESH

Title Kinematic analyses of brittle roto-translational planar and listric faults based on various rotational to translational velocities of the faulted blocks

Citation Marine and Petroleum Geology, 107, 326-333.

Publisher Elsevier B.V.

URI <https://doi.org/10.1016/j.marpetgeo.2019.04.024>

DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4123>

Date of Publication SEP-2019

Author(s) Van Der Voort, Tessa Sophia; MANNU, UTSAV et al.
Title Dynamics of deep soil carbon - insights from C-14 time series across a climatic gradient
Citation Biogeosciences, 16, 3233-3246.
Publisher Copernicus Publications
URI <https://doi.org/10.5194/bg-16-3233-2019>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4104>
Date of Publication 29-08-2019

Mathematics

Author(s) BALASUBRAMANYAM, BASKAR; MAJUMDAR, DIPRAMIT
Title p-adicAsai transfer
Citation Journal of the Ramanujan Mathematical Society, 34(3), 305-324.
Publisher Ramanujan Mathematical Society
URL <http://www.mathjournals.org/jrms/2019-034-003/2019-034-003-004.html>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4116>
Date of Publication SEP-2019

Physics

Author(s) Aggarwal, Leena; SINGH, CHANDAN K.; Aslam, Mohammad; Singha, Ratnadwip; Pariari, Arnab; Gayen, Sirshendu; KABIR, MUKUL; Mandal, Prabhat; Sheet, Goutam
Title Tip-induced superconductivity coexisting with preserved topological properties in line-nodal semimetal ZrSiS
Citation Journal of Physics: Condensed Matter, 31(48).
Publisher IOP Publishing Ltd.
URI <https://doi.org/10.1088/1361-648X/ab3b61>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4119>
Date of Publication 05-09-2019

Author(s) ARRA, SRILATHA; BARBAR, ROHIT; KABIR, MUKUL
Title van der Waals heterostructure for photocatalysis: Graphitic carbon nitride and Janus transition-metal dichalcogenides
Citation Physical Review Materials, 3(9).
Publisher American Physical Society
URI <https://doi.org/10.1103/PhysRevMaterials.3.095402>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4129>
Date of Publication 13-09-2019

[Go to top](#)

Author(s) CMS Collaboration; Sirunyan, A. M.; CHAUHAN, S.; DUBE, S.; HEGDE, V.; KAPOOR, A.; KOTHEKAR, K.; PANDEY, S.; RANE, A.; RASTOGI, S.; SHARMA, S. et al.
Title A search for pair production of new light bosons decaying into muons in proton-proton collisions at 13 TeV
Citation Physics Letters B, 796, 131-154.
Publisher Elsevier B.V.
URI <https://doi.org/10.1016/j.physletb.2019.07.013>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4114>
Date of Publication 10-09-2019

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 Measurement of B-s(0) meson production in pp and PbPb collisions at root S-NN=5.02 TeV
Citation Physics Letters B, 796, 168-190.
Publisher Elsevier B.V.
URI <https://doi.org/10.1016/j.physletb.2019.07.014>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4115>
Date of Publication 10-09-2019

Author(s) CMS Collaboration; Sirunyan, A. M.; CHAUHAN, S.; DUBE, S.; HEGDE, V.; KAPOOR, A.; KOTHEKAR, K.; PANDEY, S.; RANE, A.; RASTOGI, S.; SHARMA, S. et al.
Title Search for supersymmetry with a compressed mass spectrum in the vector boson fusion topology with 1-lepton and 0-lepton final states in proton-proton collisions at $\sqrt{s} = 13$ TeV
Citation Journal of High Energy Physics, 8.
Publisher Springer
URI [https://doi.org/10.1007/JHEP08\(2019\)150](https://doi.org/10.1007/JHEP08(2019)150)
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4124>
Date of Publication 27-08-2019

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 Measurement of exclusive $\rho(770)(0)$ photoproduction in ultraperipheralPb collisions at root s(NN)=5.02 TeV
Citation European Physical Journal C, 79.
Publisher Springer
URI <https://doi.org/10.1140/epjc/s10052-019-7202-9>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4098>
Date of Publication 21-08-2019

[Go to top](#)

Author(s) CMS Collaboration; Sirunyan, A. M.; CHAUHAN, S.; DUBE, S.; HEGDE, V.; KAPOOR, A.; KOTHEKAR, K.; PANDEY, S.; RANE, A.; RASTOGI, S.; SHARMA, S. et al.
Title Search for vectorlike leptons in multilepton final states in proton-proton collisions at $\sqrt{s}=13$ TeV
Citation Physical Review D, 100(5).
Publisher American Physical Society
URI <https://doi.org/10.1103/PhysRevD.100.052003>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4128>
Date of Publication 06-09-2019

Author(s) Date, Mihir; Mukherjee, Sudipta; Ghosh, Joydeep; Saha, Dipankar; Ganguly, Swaroop; Laha, Apurba; GHOSH, PRASENJIT
Title Efficient ab initio plus analytic calculation of the effect of GaN layer tensile strain in AlGaN/GaN heterostructures
Citation Japanese Journal of Applied Physics,58(9).
Publisher IOP Publishing Ltd.
URI <https://doi.org/10.7567/1347-4065/ab39d0>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4100>
Date of Publication 27-08-2019

Author(s) De, Chandan; BAG, RABINDRANATH; SINGH, SURJEET; Sundaresan, A.
Title Multiferroic memory effect far above the Néel temperature in single-crystal Gd_{0.5}Dy_{0.5}MnO₃
Citation Physical Review B, 100(10).
Publisher American Physical Society
URI <https://doi.org/10.1103/PhysRevB.100.104407>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4097>
Date of Publication 04-09-2019

Author(s) DEVARAJAN, U.; NAIR, SUNIL
Title Investigations on Cu induced couple-decoupled magneto-structural transition in MnCoGe alloys
Citation Materials Research Express, 6(10).
Publisher IOP Publishing Ltd.
URI <https://doi.org/10.1088/2053-1591/ab400b>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4127>
Date of Publication 11-09-2019

[Go to top](#)

Author(s) KAR, ADITYA; Mandal, Taniya; Saha, Arunabha
Title The large D membrane paradigm for general four-derivative theory of gravity with a cosmological constant
Citation Journal of High Energy Physics, 8.
Publisher Springer
URI [https://doi.org/10.1007/JHEP08\(2019\)078](https://doi.org/10.1007/JHEP08(2019)078)
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4106>
Date of Publication 13-08-2019

Author(s) MENON, DHANYA S.; SUNEETA, VARDARAJAN
Title Gravitational perturbations in a cavity: Nonlinearities
Citation Physical Review D, 100(04).
Publisher American Physical Society
URI <https://doi.org/10.1103/PhysRevD.100.044060>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4103>
Date of Publication 30-08-2019

Author(s) Mohammed, Abdul Khayum; Vijayakumar, Vidyanand; Halder, Arjun; Ghosh, Meena; Addicoat, Matthew; BANSODE, UMESH; Kurungot, Sreekumar; Banerjee, Rahul
Title Weak Intermolecular Interactions in Covalent Organic Framework-Carbon Nanofiber Based Crystalline yet Flexible Devices
Citation ACS Applied Materials & Interfaces, 11(34), 30828-30837.
Publisher American Chemical Society
URI <https://doi.org/10.1021/acsami.9b08625>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4118>
Date of Publication 06-08-2019

Author(s) Raja, K. Sasikumar; Janardhan, P.; Bisoi, Susanta Kumar; INGALE, MADHUSUDAN; SUBRAMANIAN, PRASAD; Fujiki, K.; Maksimovic, Milan
Title Global Solar Magnetic Field and Interplanetary Scintillations During the Past Four Solar Cycles
Citation Solar Physics, 294(123).
Publisher Springer
URI <https://doi.org/10.1007/s11207-019-1514-7>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4109>
Date of Publication 16-09-2019

[Go to top](#)

Author(s) SRIVASTAVA, VINEESHA; NIRANJAN, ANKITA; NATH, REJISH
Title Dynamics and quantum correlations in two independently driven Rydberg atoms with distinct laser fields
Citation Journal of physics B-Atomic molecular and optical physics, 52(18).
Publisher IOP Publishing Ltd.
URI <https://doi.org/10.1088/1361-6455/ab32a2>
DR URI <http://dr.iiserpune.ac.in:8080/xmlui/handle/123456789/4094>
Date of Publication 22-08-2019

[Go to top](#)