

A. Journal Articles

1. Abbott B.P.*, Bhandare R., Dave I., George J., Pai S.A., Pant B.C., Rajan C, Raja S. et al.
Search for gravitational waves from a long-lived remnant of the binary neutron star merger GW170817
The Astrophysical Journal **875**, 122 (2019)
2. Abbott B.P.*, Bhandare R., Dave I., George J., Pai S.A., Pant B.C., Rajan C, Raja S. et al.
Low-latency gravitational-wave alerts for multimessenger astronomy during the second advanced LIGO and Virgo observing run
The Astrophysical Journal **875**, 161(1-20) (2019)
3. Abbott B.P.*, Bhandare R., Dave I., George J., Pai S.A., Pant B.C., Rajan C, Raja S. et al.
Constraining the p-mode-g-mode tidal instability with GW170817
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5. Abbott B.P.*, Bhandare R., Dave I., George J., Pai S.A., Pant B.C., Rajan C, Raja S. et al.
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8. Abharana N. *, Modi M.H. et al.
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10. Ahlawat M., Pareek P., Shinde R.S.
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Disorder driven weak localization and phase coherent electron transport in Ga doped (Zn:V)O thin films
Journal of Solid State Science and Technology **8**, Q61-Q65 (2019)
12. Albert A. *, Raja S. et al.
Search for multimessenger sources of gravitational waves and high-energy neutrinos with advanced LIGO during its first observing run ANTARES and IceCube
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13. Antony A. *, Poornesh P. *, Kityk I.V. *, Myronchuk G. *, Sanjeev D. *, Petwal V.C., Verma V.P., Dwivedi J.
A study of 8 MeV e-beam on localized defect states in ZnO nanostructures and its role on photoluminescence and third harmonic generation
Journal of Luminescence **207**, 321-332 (2019)

14. Antony A.*, Dwivedi J. et al.
An electron beam induced study in fluorine doped ZnO nanostructures for optical filtering and frequency conversion application
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109. Sundar S., Salem-Sugui S.*, Chattopadhyay M.K., Roy S.B., Chandra L.S.S., Cohen L.F.*, Ghivelder L.*
Study of Nb_{0.18}Re_{0.82} non-centrosymmetric superconductor in the normal and superconducting states
Superconductor Science and Technology 32, 055003(1-8) (2019)
110. Tiwari A.*, Tiwari M.K., Gupta M.*, Wille H.C.*, Gupta A.*
Interface sharpening in miscible and isotopic multilayers: Role of short-circuit diffusion
Physical Review B 99, 205413(1-8) (2019)
111. Verma A.*, Yadav A.K.*, Kumar S.*, Srihari V.*, Jangir R., Poswal H.K.*, Liu S.W.*, Biring S.*, Sen S.*
Improvement of energy storage properties with the reduction of depolarization temperature in lead-free (1-x)Na_{0.5}Bi_{0.5}TiO₃-xAgTaO₃ ceramics
Journal of Applied Physics 125, 054101(1-7) (2019)
112. Warshi M.K.*, Kumar A.*, Mishra V.*, Sati A.*, Sagdeo A., Kumar R.*, Sagdeo, P.R.*
Effect of self-doping on the charge state of Fe ions and crystalfield transitions in YFeO₃: experiments and theory
Journal of Applied Physics 125, 204101(1-7) (2019)
113. Yadav R. K. *, J. Aneesh*, Sharma R. *, Salvi M. *, J Jayabalan, Jain H. *, Adarsh K.V. *
Giant enhancement of nonlinear absorption in graphene oxide-Sb₂Se₃ nanowire heterostructure
Journal of Applied Physics 125, 025702 (2019)
114. Yogi P.*, Mondal P., Khan S., Singh A., Chari R., Kumar R. *, J. Jayabalan
Spatial delocalization of absorption and emission process in silicon nanowires
Journal of Luminiscence 214, 116551 (2019)



B. Invited Talks

1. Banerjee A.
Density functional theory based study of a two-dimensional gas of dipolar fermions in a harmonic trap
22nd National Conference on Atomic and Molecular Physics, Indian Institute of Technology, Kanpur, Mar. 25-28, 2019
2. Bhaumik I., Soharab M., Bhatt R., Saxena A., Ganesamoorthy S.*, Karnal A. K.
Growth of orthovanadate single crystal by optical floating zone technique
23rd National Seminar on Crystal Growth and Applications (NSCGA-2019), Coimbatore, Jan. 28-30, 2019
3. Chakrabarti A.
Chemistry and physics of two-dimensional monolayers: aluminene and other systems
International Conference on Advances in Nanomaterials and Devices for Energy and Environment (ICAN-2019), Gwalior, Jan. 27-29, 2019
4. Fakhri A.A., Kant P., Ghodke A.D.
Beam emittance reduction in Indus-2 and lattice upgrade studies
Asian Forum for Accelerator and Detectors Conference (AFAD-2019), New Delhi, Feb. 14-15, 2019.
5. Ghosh Haranath
Electronic structure studies of Fe-based superconductors
2nd Annual Meeting on Physics of Strongly Correlated Electron Systems, New Delhi Mar. 6-8, 2019
6. Khan S.
Ultrafast dynamics: a tool to look into devices
International Conference on Photonics, Metamaterials & Plasmonics, Noida, Feb. 14-16, 2019
7. Kumar P., Ghodke A.D.
Beam lifetime measurement and its enhancement strategies in synchrotron radiation source Indus
Asian Forum for future Accelerator and Detectors (AFAD-2019), New Delhi Feb.14-15, 2019
8. Modi M.H.
Soft x-ray techniques for surface/interface characterization at Indus synchrotron source
International conference on Electron Microscopy and Allied Analytical Techniques (EMAAT 2019), Shimla, Jun., 7-9, 2019
9. Moorti A.
Laser based advanced electron acceleration techniques
Indo Japan Accelerator School (IJAS-2019), Hyderabad, Feb. 20-22, 2019
10. Moorti A.
Role of direct laser acceleration in laser plasma accelerator
Asian Forum for Accelerators & Detectors (AFAD-2019), New Delhi, Feb. 14-15, 2019

C. Seminar/Conference Presentations

C.1. AIP Conference Proceeding Vol. 2115

1. Aggarwal R., Ingale A.A., Dixit V.K.
Investigation of relative content of zinc-blende and wurtzite phases in GaP/Ge(111) using Raman spectroscopy
2. Bhakar A., Gupta P., Sinha A.K., Singh M.N., Reddy V.R.*, Rai S.K.
Influence of milling conditions on the preparation of Fe₇₅Si₂₀B₅ solid solution
3. Chandra J., Manekar M.A.
Effect of hydrogen loading on superconducting properties of niobium

4. Dhawan Rajnish, Rai S.K.
X-ray reflectivity study of growth characteristics of ion beam deposited NbC thin films
5. Halder S., Vashisht G., Ghosh U.K., Jaiswal A.K., Porwal S., Khakha A., Sharma T.K., Dixit V.K.
Development of a simple cost-effective maskless photolithography system
6. Jangir R., Kumar D.*, Bhakar A., Yadav A.K.*, Tokas R.B.*, Jha S.N.*, Ganguli T.
Optical and electrical studies of Al substituted Cr₂O₃
7. Panda M.R.*, K. Anish Raj*, Singh M.N., Sagdeo A., Sinha A.K., Bao Q.*, Sagar M.*
Structural and electrochemical mechanism study of layered MoTe₂ anode material for sodium-ion battery
8. Pandey D., Kamal C., Chakrabarti A.
Strain induced magnetism and half-metallicity in alkali metal substituted aluminene
9. Rai V.N., Jain B., Mukherjee C., Choudhary P.*, Varshney M.*, Mishra A.*
Effect of gamma irradiation on optical properties of Kapton
10. Sinha M., Gupta R.K., Dasilva P.*, Mercere P.*, Modi M.H.
Continuous optical constants (δ & β) spectra of aluminium oxide near AlL and OK-edge region
11. Taya P., Singh V.K.*, Jana D.*, Tyagi R.*, Sharma T.K.
Optical characterization of InAlN/AlN/InGaN/GaN/sapphire high electron mobility transistor structures
12. Tripathi J.*, Sharma A.*, Bisen R.*, Kumar D.*, Gupta M.*, Gupta P., Tripathi S.*
Thickness dependent structural and magnetic properties of Au/Co/Si (100) ultra-thin wedge film
13. Trivedi A., Rao P.N., Choudhary R.J.*, Tiwari M.K.
Determination of arsenic diffusion in PLD grown ZnO thin films using synchrotron based XRR-GIXRF measurements
14. Yadav P.K., Gupta R.K., Modi M.H.
Use of zero order synchrotron radiation for in-situ cleaning of beamline optics: results of trial experiments

C.2. Other Seminar/Conference Presentations

1. Antony A.*, P Poornesh*, Kityk I.V.*, Ozga K.*, Philip R.*, Sanjeev G.*, Petwal V.C., Verma V.P. Dwivedi J.
Electron beam induced modifications in third harmonic process of spray coated Mn: ZnO nanostructures
Proceedings of SPIE vol. 10919; Oxide-based Materials and Devices X, San Francisco, Feb. 3-7, 2019
2. Darji Heena, Vashisht Geetanjali, Roychowdhury R., Halder S., Khamari S.K., Dixit V.K., Sharma T.K.
Role of surface and interface states on the performance of GaAs based photodetectors
AIP Conference Proceedings, vol. 2110 (2019)
3. Ghosh S., Ghosh Harnath
Core electron spectroscopic studies for 11-Fe-based superconductors
International Conference on Advances in Nanomaterials and Devices for Energy and Environment (ICAN-2019), Gwalior, Jan.27-29, 2019
4. Ghosh A., Ghosh Harnath
Sb doping in 112 iron based superconductors: an ab-initio study
International Conference on Advances in Nanomaterials and Devices for Energy and Environment (ICAN-2019), Gwalior, Jan.27-29, 2019

5. Joshi S., Verma D.K., Saxena G., Paraye A.
Issues in training a convolutional neural network model for image classification
3rd International Conference on Advances in Computing and Data Sciences (ICACDS 2019), Ghaziabad, Apr. 12-13, 2019
6. Kim H.T*, Shin J. H.*, Aniculaesei C.*, Rao B. S., Pathak V. B.*, Cho M. H.*, Hojbota C.*, Lee S. K.*, Sung J. H.*, Lee H.W.*, Yoon J.W.*, Nam C. H.*
Laser wakefield acceleration research at Center for Relativistic Laser Science
Laser Plasma Accelerator Workshop 2019 (LPAW2019), Croatia, May 5-10, 2019
7. Laundry D.*, Sawhney K.*, Dhamgaye V., Duller G.*, Evans G.*, Trincao J.*, Warren A.*
Optical elements for dynamically broadening the focus of micro-focus optics at synchrotron x-ray sources
AIP Conference Proceedings, vol. 2054 (2019)
8. Maurya V. K., Yadav S.K., Bachhil K.K., Chouhan H.S., Chaudhari S., Tomar S. S., Rajan A., Rawat A.
Proactive data centre & network room overheating management system (DCNROMS) utilizing open source software and tools
5th International Conference on Advanced Computing & Communication Systems (ICACCS-2019), Coimbatore, Mar. 15-16, 2019
9. Rana R., Yadav R.P., Fatnani P.
Local orbit bump control in Indus-2 using intelligent agents based control for enhanced system operability
4th International Conference on Reliability, Safety and Hazard (ICRESH-2019), Chennai, Jan. 10-13, 2019
10. Rangire A., Rao A.K., Patel A.N., Lambhate Y., Parchani G.
Novel technique for design & construction of retaining wall in newly filled up region close to water body
Indian Conference on Geotechnical and Geo-Environmental Engineering (ICGGE-2019), Allahabad, Mar.1-2, 2019
11. Yadav R.P., Rana R. Fatnani P.
ARM SoC based VME CPU board development using open source framework for intelligent accelerator control system
4th International Conference on Reliability, Safety and Hazard (ICRESH-2019), Chennai, Jan. 10-13, 2019

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