

A. Journal Articles

1. Acharya M., Shrivastava P.
Design and development of a prototype 25 kV, 10 A long pulse Marx modulator for high power klystron
Review of Scientific Instruments **87**, 025114 (2016)
2. Ahlawat A., Satapathy S., Choudhary R.J.*, Singh M.K., Gupta P.K.
Observation of magnetoelectric coupling in BiFeO₃-(Pb(Mg_{1/3}Nb_{2/3})O₃-PbTiO₃) composites
Materials Letters **181**, 123-126 (2016)
3. Ahlawat A., Satapathy S., Choudhary R.J., Shirolkar M.M., Singh M.K., Gupta P.K.
Tunable room temperature magneto electric response of nano SmFeO₃/poly (vinylidene fluoride) composite films
RSC Advances **6**, 44843-44850 (2016)
4. Ahlawat S., Chowdhury A., Uppal A., Kumar N., Gupta P.K.
Use of Raman optical tweezers for cell cycle analysis
Analyst **141**, 1339-1346 (2016)
5. Ananthakumar S.*, Jayabalan J., Singh A., Khan S., Babu S.M.*, Chari R.
Size dependence of upconversion photoluminescence in MPA capped CdTe quantum dots: existence of upconversion bright point
Journal of Luminescence **169**, 308-312 (2016)
6. Ansari A.S.*, Pathak K., Jain A., Tiwari G.*
Design & implementation of dual band power dividers
Journal of Emerging Technologies and Innovative Research **3**, 2349-5162 (2016)
7. Awasthi V.*, Pandey S.K.*, Garg V.*, Sengar B.S.*, Sharma P.*, Kumar Shailendra, Mukherjee C., Mukherjee S.*
Plasmon generation in sputtered Ga doped MgZnO thin films for solar cells applications
Journal of Applied Physics **119**, 233101 (2016)
8. Babu P. R.*, Bhaumik I., Ganesamoorthy S.*, Kalainathan S.*, Bhatt R., Karnal A.K., Gupta P.K.
Growth mechanical and magnetic study of SmFeO₃ single crystal grown by optical floating zone technique
Journal of Alloys and Compounds **676**, 313-319 (2016)
9. Benerji N.S., Varshnay N.K., Ghodke D.V., Singh A.
A repetitively pulsed xenon chloride excimer laser with all ferrite magnetic cores (AFMC) based all solid state exciter
Optics & Laser Technology **84**, 72-78 (2016)
10. Bevara S.*, Achary S.N.*, Patwe S.J.*, Sinha A.K., Tyagi A.K.*
Preparation and crystal structure of K₂Ce(PO₄)₂: a new complex phosphate of Ce(IV) having structure with one-dimensional channels
Dalton Transactions **45**, 980-991 (2016)
11. Bhakar A., Pandey A.H., Singh M.N., Upadhyay A., Sinha A.K., Gupta S.M., Ganguli T.
Structural analysis of lead magnesium niobate using synchrotron powder x-ray diffraction and the Rietveld method
Acta Cryst. B **72**, 404-409 (2016)
12. Bhargava K.*, Bilgaiyan A.*, Raj Mohan S., Itoop M.O., Joshi M. P., Kukreja L.M., Singh V.*
Investigating the influence of Alkyl chain length in Poly(3-alkylthiophene)s over the thin film

- morphology by optical and electrical characterization
Journal of Nanoscience and Nanotechnology 16, 3241-3247 (2016)
13. Bhatt R., Bhaumik I., Ganesamoorthy S.*, Soharab M., Karnal A.K., Gupta P.K.
Spectroscopic analysis of erbium doped LiNbO₃: effect of dopant concentration vapor transport equilibration and poling
Journal of Alloys and Compounds 664, 481-486 (2016)
14. Bhowmik R.N.*, Kazhugasalamoorthy S.*, Ranganathan R.*, Sinha A.K.
Tuning of composite cubic spinel structure in Co_{1.75}Fe_{1.25}O₄ spinel oxide by thermal treatment and its effects on modifying the ferrimagnetic properties
Journal of Alloys and Compounds 680, 315-327 (2016)
15. Biswas B.
Spherical aberration from trajectories in real and hard-edge solenoid fields
Pramana: Journal of Physics 86, 1299-1306 (2016)
16. Biswas D.*, Singh M.N., Sinha A.K., Bhattacharyya S.*, Chakraborty S.*
Effect of excess hafnium on HfO₂ crystallization temperature and leakage current behavior of HfO₂/Si metal-oxide-semiconductor devices
Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics: Materials, Processing, Measurement and Phenomena 34, 022201(1-5) (2016)
17. Biswas D.*, Sinha A.K., Chakraborty S.*
Effects of oxygen partial pressure and annealing temperature on the residual stress of hafnium oxide thin-films on silicon using synchrotron-based grazing incidence x-ray diffraction
Applied Surface Science 384, 376-379 (2016)
18. Chakraborty A., Mishra S.R., Ram S.P., Tiwari S.K., Rawat H.S.
A toroidal trap for cold ⁸⁷Rb atoms using an rf-dressed quadrupole trap
Journal of Physics B: At. Mol. Opt. Phys. 49, 075304 (2016)
19. Chatterjee S., Pavan K.Y., Singh R., Singh S.
Measurement of the surface form error of large aperture plane optical surfaces with a polarization phase-shifting liquid reference reflection Fizeau interferometer
Applied Optics 55, 310-316 (2016)
20. Das G.*, Khooha A.*, Singh A.K., Srivastava A.K., Tiwari M.K.
Exploring interface morphology of a deeply buried layer in periodic multilayer
Applied Physics Letters 108, 263109 (2016)
21. Das K., Uppal A., Saini R.K.
Surfactant induced aggregation behavior of Merocyanine-540 adsorbed on polymer coated positively charged gold nanoparticles
Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy 152, 378-383 (2016)
22. Deshmukh P., Satapathy S., Singh M.K., Gupta P.K.
Effect of surfactant concentration and solvent used for washing in the preparation of Yb:Y₂O₃ transparent ceramics
Nanosystem: Physics Chemistry Mathematics 7, 534-537 (2016)
23. Doohan R.S., Kush P.K., Maheshwari G.*
Exergy based optimization and experimental evaluation of plate fin heat exchanger
Applied Thermal Engineering 102, 80-90 (2016)



24. D'Souza S.W.*, Chakrabarti A., Barman S.R.*
Magnetic interactions and electronic structure of Ni Mn In
Journal of Electron Spectroscopy and Related Phenomena 208, 33-39 (2016)
25. Faruque Sk A.K. Md.*, Sinha A.K., Chakraborty S.*
Oxidation kinetics of ZrO₂ films on Si by differential scanning calorimetry
Journal of Materials Science: Materials in Electronics 27, 4923-4927 (2016)
26. Faruque Sk A.K. Md.*, Bhattachryya S.R.*, Sinha A.K., Chakraborty S.*
Study of temperature dependent zirconium silicide phases in Zr/Si structure by differential scanning calorimetry
Journal of Physics D: Applied Physics 49, 065102(1-5) (2016)
27. Garg A.D., Yadav S., Kumar M., Shrivastava B.B., Karnewar A.K., Ojha A., Puntambekar T.A.
Studies of longitudinal profile of electron bunches and impedance measurements at Indus-2 synchrotron radiation source
Nuclear Instruments and Methods in Physics Research Section A: 814, 66-72 (2016)
28. Garg V.*, Sengar B.S.*, Awasthi V.*, Arya Shree, Sharma P.*, Mukherjee C., Kumar Shailendra, Mukherjee S.*
Localized surface plasmon resonance on Au nano particles : tuning and exploitation for performance enhancement in ultrathin photovoltaics
RSC Adv. 6, 26216-26226 (2016)
29. Gaur A.*, Shukla R., Kumar B.*, Pal A.*, Chatterji S.*, Ranjan R.*, Maiti P.
Processing and nanoclay induced piezoelectricity in poly (vinylidene fluoride-co-hexafluoro propylene) nanohybrid for device application
Polymer 97, 362-369 (2016)
30. Ghosh H., Sen S.
Role of Sn impurity on electronic topological transitions in 122 Fe-based superconductors
Journal of Alloys and Compounds 677, 245-251 (2016)
31. Jana D., Sharma T.K.
An unambiguous identification of 2D electron gas features in the photoluminescence spectrum of AlGaIn/GaN heterostructures
Journal of Physics D: Applied Physics 49, 265107 (2016)
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Correlation between surface modification and photoluminescence properties of Ga₂O₃ nanostructures
AIP Advances 6, 035120 (2016)
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Electromagnetically induced absorption and transparency in degenerate two level systems of metastable Kr atoms and measurement of Lande g-factor
Optics Communications 380, 297-301 (2016)
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Cerenkov free-electron laser with side walls
Nuclear Instruments and Methods in Physics Research Section A 827, 85-94 (2016)
35. Kamal C., Chakrabarti A., Ezawa M.*
Direct band gaps in group IV-VI monolayer materials: binary counterparts of phosphorene
Physical Review B 93, 125428 (2016)
36. Kane S.R., Kumar S., Ghosh H., Singh A.K., Tiwari M.K.



- Study of XANES near Ta-L edges in LiTaO₃ through thermal wave fluorescence and first principles
Applied Physics A: Materials Science and Processing **122**, 42491 (2016)
37. Khan Saif A.*, Saravanan K.*, Tayyab M., Bagchi S., Avasthi D.K.*
Au C allotrope nano-composite films at extreme conditions generated by intense ultra-short laser
Nuclear Instruments and Methods in Physics Research B **379**, 28-35 (2016)
38. Khatun N.*, Rini E.G.*, Shirage P.*, Rajput P., Jha S.N., Sen S.*
Effect of lattice distortion on bandgap decrement due to vanadium substitution in TiO₂ nanoparticles
Materials Science in Semiconductor Processing **50**, 41456 (2016)
39. Kher S., Dhamgaye V., Chaubey S., Lodha G.S., Oak S.M.
Long period fiber grating written by synchrotron x-ray radiation
IEEE Photonics Technology Letters **28**, 178-180 (2016)
40. Kore B.P.*, Dhoble N.S.*, Kadam R.M.*, Lochab S.P.*, Singh M.N., Dhoble S.J.*, Swart H.C.*
Thermoluminescence and EPR study of K₂CaMg(SO₄)₃:Dy phosphor: the dosimetric application point of view
Journal of Physics D: Applied Physics **49**, 095102 (1-11) (2016)
41. Krishnananda, Mirji S.*, Badiger N.M.*, Tiwari M.K.
Effect of chemical environment on L subshell fluorescence yields using synchrotron radiation
Journal of Alloys and Compounds **656**, 357-361 (2016)
42. Krishnananda, Mirji S.*, Badiger N.M.*, Tiwari M.K.
Measurement of the radiative L₃-M vacancy transfer probabilities of some 4f elements and compounds using Indus-2 synchrotron radiation
Chemical Physics Letters **658**, 192-196 (2016)
43. Krishnananda, Mirji S., Hosamani M.*, Badiger N.M.*, Tiwari M.K., Lodha G.S.*
Measurement of L subshell fluorescence yields of some rare earth elements using synchrotron radiation
X-ray Spectrometry **45**, 72-76 (2016)
44. Kumar M., Chakravarty U., Rathore R., Chakera J.A., Naik P.A., Gupta P.D.
Enhancement of conversion efficiency and spatial coherence of high order harmonics generated from pre-formed plasma plumes using an apertured laser beam
Journal of Physics B: At. Mol. Opt. Phys. **49**, 075601 (2016)
45. Kumar M., Bhagat M.S., Biswas A.K., Rana L.B., Pakhare J.*, Rawat B.S., Kukreja L.M.
Self-consistent modeling for estimation of the reduced electric field in a DC excited diffusion controlled CW CO₂ laser
Optics and Laser Technology **81**, 77-83 (2016)
46. Kumar Pavan Y., Chatterjee S., Negi S.S.
Small roll angle measurement using lateral shearing cyclic path polarization interferometry
Applied Optics **55**, 979-983 (2016)
47. Kumar R.*, Rani A.*, Singh R.M., Tiwari M.K., Singh A.K.
Measurement of L-XRF cross-sections and Coster-Kronig enhancement factors for ⁶²Sm at excitation energies 6.8, 7.4 and 8KeV
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48. Kumar R., Dixit V.K., Sinha A.K., Ganguli T., Mukherjee C., Oak S.M., Sharma T.K.
Study of the microstructure information of GaAs epilayers grown on silicon substrate using synchrotron radiation
Journal of Synchrotron Radiation **23**, 238-243 (2016)
49. Kumar Y.P., Chatterjee S., Negi S.S.
Small roll angle measurement using lateral shearing cyclic path polarization interferometry
Applied Optics **55**, 979-983 (2016)
50. Late R. *, Rai H.M. *, Saxena S.K. *, Rajesh Kumar R. *, Sagdeo A., Sagdeo P.R. *
Effect of Hf doping on the structural dielectric and optical properties of $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ ceramic
Journal of Materials Science: Materials in Electronics **2016**, 5878-5885 (2016)
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High-field paramagnetic Meissner effect and flux creep in low- T_c Ti-V alloy superconductors
Superconductor Science & Technology **29**, 025003(1-8) (2016)
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Thio residue from thermal processing of cometary ices containing carbon disulfide and ammonia
Advances in Space Research **58**, 438-443 (2016)
53. Mirji S. *, Badiger N.M. *, Kulkarni S.S. *, Gai P.B. *, Tiwari M.K.
Measurement of linear attenuation coefficients of normal and malignant breast tissues using synchrotron radiation
X-Ray Spectrometry **45**, 185-189 (2016)
54. Mishra G.K., Kumar A., Prakash O., Biswal R., Dixit S.K., Nakhe S.V.
Linewidth of a high pulse repetition rate (H~20 kHz) class dye laser
Laser Physics **26**, 015003(1-8) (2016)
55. Misra R. *, Maragani R. *, Singh C.P., Chari R.
Photonic properties of star shaped ferrocenyl substituted triazines
Dyes and Pigments **126**, 110-117 (2016)
56. Nayak M., Pradhan P.C., Lodha G.S.
Element-specific structural analysis of Si/B₄C using resonant X-ray reflectivity. Corrigendum
Journal of Applied Crystallography **49**, 715-716 (2016)
57. Nayak M.K., Sahu T.K., Nair Haridas G., Nandedkar R.V. *, Bandyopadhyay T. *, Tripathi R.M. *, Hannurkar P.R.
Optimum target source term estimation for high energy electron accelerators
Radiation Physics and Chemistry **122**, 77-81 (2016)
58. Pal S., Sathe V.G. *, Rajiv K., Mukherjee C., Kumar R., Dixit V.K.
Effect of surface morphology on the optical properties of InAs/Ge(1 1 1)
Applied Surface Science **372**, 70-78 (2016)
59. Pandey A.H., Sathe V.G. *, Gupta S.M.
Raman spectroscopic investigation of Gd-substituted lead magnesium niobate ceramics $\text{Pb}_{1-x}\text{Gd}_x(\text{Mg}_{1+x/3}\text{Nb}_{2-x/3})\text{O}_3$ ($0 < x < 0.1$)
Journal of Alloys and Compounds **682**, 180-187 (2016)
60. Pradhan P.C., Gangir D., Majhi A., Nayak M., Biswas A. *, Bhattacharyya D. *, Lodha G.S.
Fabrication and performance of a high resolution

ultra-short period W/B₄C multilayer structure

Journal of Physics D: Applied Physics **49**, 135305(1-10) (2016)

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Solid state synthesis crystal growth and optical properties of urea and p-chloronitrobenzene solid solution

Journal of Solid State Chemistry **233**, 244-251 (2016)

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Localized surface plasmon resonance and refractive index sensitivity of vacuum-evaporated nanostructured gold thin films
Indian Journal of Physics **90**, 107-116 (2016)

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Insight into co-operative growth of nearly monodisperse CdS nanocrystals embedded in polyvinyl pyrrolidone
Journal of Materials Science **51**, 1581-1590 (2016)

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Corroboration of Raman and AFM mapping to study Si nanocrystals embedded in SiO₂
Journal of Alloys and Compounds **672**, 403-412 (2016)

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Microstructure and composition analysis of low-Z/low-Z multilayers by combining hard and resonant soft x-ray reflectivity
Journal of Applied Physics **119**, 245301 (2016)

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Compact high voltage high peak power high

frequency transformer for converter type modulator applications

Review of Scientific Instruments **87**, 045109(1-6) (2016)

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Possibility of martensite transition in Pt-Y-Ga (Y≥Cr Mn and Fe) system: an ab-initio calculation of the bulk mechanical electronic and magnetic properties
Journal of Magnetism and Magnetic Materials **401**, 929-937 (2016)

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Design synthesis and nonlinear optical properties of (E)-1-(4-substituted)-3-(4-hydroxy-3-nitrophenyl) prop-2-en-1-one compounds
Chemical Physics Letters **653**, 184-189 (2016)

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Dimensional crossover of electron weak localization in ZnO/TiOx stacked layers grown by atomic layer deposition
Applied Physics Letters **108**, 042109(1-5) (2016)

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Observation of dopant-profile independent electron transport in sub-monolayer TiOx stacked ZnO thin films grown by atomic layer deposition
Applied Physics Letters **108**, 032101(1-5) (2016)

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Gas bremsstrahlung studies for medium energy electron storage rings using FLUKA Monte Carlo code
Radiation Physics and Chemistry **119**, 51-54 (2016)

72. Sahu V.K., Misra P., Ajimsha R.S., Das Amit K., Singh B.
Effect of growth temperature on diode parameters of

- n-ZnO/p-Si heterojunction diodes grown by atomic layer deposition
Materials Science in Semiconductor Processing **54**, 42491 (2016)
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Enhancing the accelerated beam current in the booster synchrotron by optimizing the transport line beam propagation
Pramana **86**, 847-860 (2016)
74. Saxena M.K., Jagannadha Raju S.D.V.S., Arya R., Pachori R.B.*; Ravindranath S.V.G.*, Kher S., Oak S.M.
Empirical mode decomposition-based detection of bend-induced error and its correction in a Raman optical fiber distributed temperature sensor
IEEE Sensors Journal **16**, 1243-12521 (2016)
75. Sen S., Ghosh H.
Nematicity magnetic fluctuation and ferro-spin-orbital ordering in BaFe₂As₂ family
Journal of Alloys and Compounds **675**, 416-422 (2016)
76. Sharma V.K., Manekar M.A., Rai S.K., Singh M.K., Roy S.B.
Interesting magnetic properties observed in the 4f ferromagnet NdRu₂
Intermetallics **69**, 110-117 (2016)
77. Shukla V., Jayabalan J., Chari R.
Optical shielding of nickel nanoparticle by a bubble: Optical limiting gets limited
Applied Physics Letters **108**, 241909 (2016)
78. Singh A., Sinha M., Gupta R.K., Modi M.H.
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Applied Optics **55**, 3170-3175 (2016)
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Experimental study on soliton rain patterns in Yb-doped all-fiber standing wave cavity configuration
IEEE Photonics Technology Letters **28**, 1533 -1536 (2016)
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Short range ferromagnetic magneto-electric and magneto-dielectric effect in ceramic Co₃TeO₆
Journal of Applied Physics **119**, 044104(1-7) (2016)
81. Singh H., Ghosh H., Prajapat C.L.* , Singh M.R.*
Griffiths like robust ferromagnetism in Co_{3-x}Mn_xTeO₆; (x ≥ 0.5, 1, 2)
Materials Research Bulletin **80**, 273-279 (2016)
82. Singh N., Deo M.N.* , Roy S.B.
Possible influence of surface oxides on the optical response of high-purity niobium material used in the fabrication of superconducting radio frequency cavity
Nuclear Instruments and Methods in Physics Research Section A **830**, 59-66 (2016)
83. Singh S.D., Nand M.* , Das A., Ajimsha R.S., Upadhyay A., Kamparath R., Shukla D.K., Mukherjee C., Misra P., Rai S.K., Sinha A.K., Jha S.N., Phase D.M., Ganguli T.
Structural, electronic structure, and band alignment properties at epitaxial NiO/Al₂O₃ heterojunction evaluated from synchrotron based X-ray techniques
Journal of Applied Physics **119**, 165302 (2016)
84. Sinhamahapatra D., Haridas G., Kumar Pradeep, Ghodke A.D., Tiwari M.K., Hannurkar P.R.
Measurements of dose rate for 10-16 keV synchrotron X-ray photons at BL-16 beam line of Indus-2
Indian Journal of Pure & Applied Physics **54**, 259-262 (2016)

85. Siva V.*, Pradhan P. C., Santosh B.G.*, Nayak M., Sahoo P.K. *, Senapati K.*
Superconducting proximity effect in NiBi₃-Ni-NiBi₃ trilayer system with sharp superconductor-ferromagnet boundaries
Journal of Applied Physics **119**, 063902(1-9) (2016)
86. Siva V.*, Sahu S.S.*, Datta D.P.*, Pradhan P.C., Nayak M., Solanki V.*, Topwal D.*, Senapati K.*, Sahoo P.K.*
Ion irradiation induced phase transition of Co in Co/Au multilayers
Journal of Alloys and Compounds **680**, 722-728 (2016)
87. Srivastava H., Srivastava A.K., Babu M., Rai S.K., Ganguli T.
Topotaxial growth of α -Fe₂O₃ nanowires on iron substrate in thermal annealing method
Journal of Applied Physics **119**, 244311 (2016)
88. Tiwari N.*, Doke S.*, Lohar A.*, Mahamuni S.*, Kamal C., Chakrabarti A., Choudhary R.J.*, Mondal P., Jha S.N., Bhattacharyya D.*
Local structure investigation of (Co Cu) co-doped ZnO nanocrystals and its correlation with magnetic properties
Journal of Physics and Chemistry of Solids **90**, 100-113 (2016)
89. Vashisht G., Dixit V.K., Porwal S., Kumar R., Sharma T.K., Oak S.M.
Charge carrier localization effects on the quantum efficiency and operating temperature range of InAs_xP_{1-x}/InP quantum well detectors
Journal of Applied Physics **119**, 095708(1-7) (2016)
90. Verma S., Rao R.K.*, Kar S., Bartwal K.S.
Unidirectional growth of large size urea doped l-cysteine hydrochloride monohydrate NLO organic crystal and investigations of its crystalline and optical properties
Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy **153**, 16-21 (2016)
91. Wagh A.*, Petwal V., Dwivedi J., Upadhyaya V.*, Raviprakash Y.*, Kamath S.D.*
Structural morphological and optical investigations on electron-beam irradiated PbF₂-TeO₂-B₂O₃-Eu₂O₃
Radiation Physics and Chemistry **126**, 37-48 (2016)
92. Wagh A.*, Petwal V.C., Verma V.P., Dwivedi J., Raviprakash Y.*, Kamath S.D.*
Electron beam irradiation on lead fluoroborate glasses doped by europium ions
Journal of Thermal Analysis and Calorimetry **124**, 619-628 (2016)

B. Invited Talk

- Dixit V.K.
Challenges in the integration of III-V and III-V-N semiconductors on Si or Ge substrates
20th National Seminar on Single Crystal Growth and Applications (NSCGA-2016), Mumbai, Jan.19-21, 2016
- Ghosh H.
Orbital, nematic order, topological transition in Fe-based superconductors
PRL-Conference on Condensed Matter, Gandhinagar, April 11-13, 2016
- Gupta P.K.
Photonics for health care applications
DAE-BRNS Popular Science Lecture Series 2015-2016, Navi Mumbai, March 9, 2016
- Gupta P.K.
Photonics for health care applications



PUBLICATIONS (JAN 2016 - JUN 2016)

Mahatma Gandhi Mission Medical College and Hospital, Navi Mumbai, March 10, 2016

Meeting (AGM) of the Material Research Society of India (MRSI), Jorhat, Feb. 18-20, 2016

5. Gupta P.K.
Raman spectroscopic studies on optically trapped cells
International Conference on Optics Within Life Sciences (OWLS-2016), Mumbai, March 16-19, 2016
6. Karnal A.K., Bhaumik I., Bhatt R., Saxena A., Soharab M., Ganesamoorthy S.*, Sajith B.K., Gupta P.K.
Growth issues of some technologically important vanadate and phosphate laser single crystals
20th National Seminar on Crystal Growth and Applications, Mumbai, Jan. 19-21, 2016
7. Misra Pankaj
Photoluminescence characteristics of Zinc Oxide quantum structures grown by pulsed laser deposition
International Conference on Advances in Light Technologies and Spectroscopy of Materials (ICALTSM-2016), Lucknow, Jan. 16-18, 2016
8. Moorti Anand
Recent developments on laser plasma acceleration activity in India
7th Workshop of Asian Forum for Accelerators & Detectors (AFAD-2016), Kyoto, Japan, Feb. 1-3, 2016
9. Rawat Anil
IT in DAE - Way Forward
9th DAE Vision for Information Exchange (DAE-VIE) 2016 Symposium on Emerging Trends in Instrumentation & Control and Computer Systems, Kalpakkam, June 23-24, 2016
10. Sharma T.K.
Role of semiconductor epitaxial layers in photonic applications
MRSI Medal Lecture at 27th Annual General Meeting (AGM) of the Material Research Society of India (MRSI), Jorhat, Feb. 18-20, 2016
11. Sharma T.K.
Optical probing of 2-dimensional electron gas in AlGaIn/GaN heterostructures
National Conference on Semiconductor Materials and Devices (NCSMD), Jodhpur, Mar. 4-6, 2016

C.1.1 26th International Cryogenics Engineering Conference, International Cryogenics Material Conference (ICES26-ICMC2016), New Delhi, Mar. 7-11, 2016

1. Doohan R. S., Kush P. K., Maheshwari, G.*
Capacity enhancement of indigenously designed and developed expansion engine based helium liquefier
2. Geet J.*, Chaudhary S.*, Gupta Prabhat Kumar, Kush P.K.
Flow mal-distribution study in cryogenic counter-flow plate fin heat exchangers
3. Khare P, Gilankar S., Kush P. K., Lakshminarayanan A., Chaube R., Ghosh R., Jain A., Patel H., Gupta P D, Hocker James A*, Ozelis Joseph P*, Geynisman Michael G*, Reid Clark M*, PoloubotkoValeri V*, Mitchell Donald*, Peterson Tom*, Nicol Tom*
Design of horizontal test cryostat for testing two 650 MHz SCRF cavities: cryogenic considerations
4. Kumar Manoj, Duttagupta B.N., Doohan R.S., Joshi S.K., Sagar A.K., Chowdhary L., Naika R., Gupta Prabhat Kumar, Nema Vivek, Patel H.K., Kush P.K.
Cryogenic infrastructure at RRCAT for characterization of SCRF cavities at 2K
5. Nema V., Doohan R.S., Kush P.K.
Study of tube and tube heat exchanger for helium purification



6. Patel H.K., Shukla A.K., Joshi S.K., Kush P.K.
Design of movable shield for the vertical test stand cryostat
7. Shukla A.K., Patel H.K., Doohan R.S., Kush P.K.
Cold box vessel design for medium scale helium liquefaction system
7. Nand M.*, Babita, Jena S., Tokas R.B.*, Rajput P.*, Mukharjee C., Thakur S.*, Jha S.N., Sahoo N.K.*
Development of high damage threshold multilayer thin film beam combiner for laser application
8. Pandey A.*, Gupta S.M., Nigam A.K.*
Field induced polarization and magnetization behaviour of Gd-doped lead magnesium niobate ceramics

C1.2 AIP Conference Proceedings, vol. 1731 (2016)

1. Arab J.M.*, Brahmankar P.K.*, Pawade R.S.*, Srivastava A.K.
Optimization of lithography process for the fabrication of Micro-Faraday cup array
2. Bevara S.*, Achary S.N.*, Patwe S.J.*, Sinha A.K., Mishra R.K., Kumar A.*, Kaushik C.P.*, Tyagi A.K.*
Crystal structure and cation exchanging properties of a novel open framework phosphate of Ce (IV)
3. Dhawan R., Rai S.
Characterization of ion beam sputtered deposited W/Si multilayers by grazing incidence x-ray diffraction and x-ray reflectivity technique
4. Jangir R., Porwal S., Tiwari P., Rai S.K., Ganguli T.
Study of O₂ sensitive photoluminescence of β -Ga₂O₃ nanostructures annealed in moist environments
5. Mishra A.*, Tiwari S.P.*, Mondal P., Bhatt H.*, Rai V.N., Srivastava A.K.
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6. Mondal P., Pradhan P.C.*, Tiwari P., Srivastava A.K.
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9. Sahu V.K., Misra Pankaj, Ajimsha R.A., Das A.K., Joshi M.P., Kukreja L.M.
Resistive memory switching in ultrathin TiO₂ films grown by atomic layer deposition
10. Selvamani R., Pandey A.*, Gupta S.M.
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12. Shirbhate S.C.*, Yadav A.K., Acharya S.A.*, Sagdeo A.P., Jha S.N.
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15. Sudheer*, Tiwari P., Varshney G.K.*, Rai V.N.,

Srivastava A.K.

Plasmonic characterization of photo-induced silver nanoparticles extracted from silver halide based TEM film

16. Tiwari P., Mondal P., Srivastava A.K.

Fabrication of soft x-ray Fresnel zone plate on ultrathin membrane

17. Yadav P.K., Swami M.K.

Synchrotron radiation-induced contamination on LiF window: Characterization by Raman spectroscopy

4. Chakera J.A., Moorti A., Singhal H., Rao B.S.; Arora V., Bagchi S., Tayyab M., Kumar M., Rathore R., Mandal T., Naik P.A., Gupta P.D.

Ultra-high intensity laser-matter interaction studies at RRCAT, India

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5. Das G.*, Khooha A.*, Kane S.R., Singh A.K., Tiwari M.K.

Surface and interface analysis of nanomaterials at microfocus beamline (BL-16) of Indus-2

AIP Conf. Proc. vol. 1728, 020142 (2016)

C.1.3 Others Seminars/Conference Presentation

1. Agrawal S. K., Kumar J., Mokhariwale A., Prakash O., Nakhe S. V.

Development of fiber bragg grating based temperature sensor for online temperature monitoring of oil immersed high voltage components

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2. Awasthi V.*, Garg V.*, Sengar B.S.*, Singh R.*, Pandey S.K.*, Kumar Shailendra, Mukherjee C. Mukherjee S.*

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Compound Semiconductor Week 2016, Toyoma, Japan, June 26-30, 2016

3. Bhardwaj N., Soharab M., Sajith B.K., Bhatt R., Bhaumik I., Sexana A., Karnal A.K., Gupta P.K.

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11. Meshram V., Tomar S.S., Rawat A.
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12. Pandey A. *, Singh H., Ghosh H., Yadav A.K., Gupta S.M., Nigam A.K.
Magnetization and synchrotron X-ray absorption spectroscopy study of $\text{Co}_4\text{Nb}_2\text{O}_9$
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13. Patidar S.C., Tomar S.S., Rawat A.
Vehicle movement logging system at RRCAT
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