A. Journal Articles

1. Aggarwal R., Ingale A.A., Pal S., Dixit V.K., Sharma T.K., Oak S.M.
Intersubband plasmon-phonon coupling in GaAsP/AlGaAs near surface quantum well
Applied Physics Letters 102, 181120 (1-4) (2013)

2. Ahlawat A*, Mishra D.K.*, Sathe V.G.*, Kumar Ravi, Sharma T.K.
Raman tensor and domain structure study of single-crystal like epitaxial films $CaCu_3Ti_4O_{12}$ grown by pulsed laser deposition
Journal of Physics: Condensed Matter 25, 025902(1-6) (2013)

3. Ajimsha R.S., Das A.K., Misra P., Kukreja L.M.
Studies on the structural, optical and electrical properties of Ga doped ZnO thin films grown by buffer assisted pulsed laser deposition
Physics Express 3, 1-5 (2013)

4. Ansari M.S., Ravindranath S.V.G.*, Bhatia M.S.*, Singh Bhupinder, Navathe C.P.
Electromagnetic coupling through apertures and shielding effectiveness of a metallic enclosure housing electro-optic pockels cell in a high power laser system
International Journal of Applied Electromagnetics and Mechanics 42, 191-199 (2013)

5. Ansari M.S., Bhatia M.S.*, Ravindranath S.V.G.*, Singh Bhupinder, Navathe C.P.
Investigation of electromagnetic interference from a pulsed solid state laser power supply
International Journal of Engineering Research and Applications 3, 1577-1581 (2013)

6. Arora V., Vora H.S., Chakera J.A., Tayyab M., Naik P.A., Gupta P.D.
Dispersion-less spectrograph for absolute measurement of multi keV x-ray flux from high intensity laser produced plasmas
Journal of Instrumentation 8, 01010 (2013)

7. Basu S.*, Varma S.*, Shirsat A.N.*, Wani B.N.*, Bharadwaj S.R.*, Chakrabarti A., Jha S.N.*, Bhattacharyya, D.*
Extended X-ray absorption fine structure study of Gd doped ZrO_2 systems
Journal of Applied Physics 113, 043508(1-4) (2013)

8. Benerji N.S., Varshnay N., Mittal J.K.
Development of a compact and reliable repetitively pulsed Xe Cl (308 nm) excimer laser
Sadhana 38, 101-108 (2013)

9. Bhatt R., Ganesamoorthy S.*, Bhaumik I., Sexana A., Karnal A.K., Gupta P.K., George J.*, Ranganathan K.*
Photorefractive properties of Fe,Zn co- doped near stoichiometric $LiNbO_3$ crystals at moderate intensities ($0.5\ 6W/cm^2$).
Optics & Laser Technology 50, 112-117 (2013)

10. Bhaumik I., Singh Gurvinderjit, Ganesamoorthy S.*, Bhatt R., Karnal A.K., Tiwari V.S., Gupta P.K.
Growth of lead-free piezoelectric 0.45BZT-0.55BCT single crystal and investigation of dielectric, polarization and birefringence properties.
Journal of Crystal Growth 375, 20-25 (2013)

11. Biswal R., Mishra G.K., Agrawal P.K., Nakhe S.V., Dixit S.K.
Studies on the spectral purity of copper hydrogen bromide laser radiations
Applied Optics 52, 3269-3278 (2013)

12. Brahma S.*, Huang J.-L.*, Liu C.P.*, Kukreja L.M., Shivashankar S.A.*
Low temperature and rapid deposition of ZnO nanorods on Si(100) substrate with tunable optical emissions
Materials Chemistry and Physics 140, 634-642 (2013)

13. Chakravarty U., Kuruvilla A., Harikrishnan H.*, Upadhyaya B.N., Bindra K.S., Oak, S.M.
Study on self-pulsing dynamics in Yb-doped photonic crystal fiber laser
Optics & Laser Technology 51, 82-89 (2013)

14. Chatterjee S., Pavan Kumar Y.
Measurement of the surface form error of a spherical surface with a wedge phase shifting Fizeau interferometer
Journal of Optics 42, 122-127 (2013).

15. Chen S.*, Powers N.D.*, Ghebregziabher I.*, Maharjan C.M.*, Liu C.*, Golovin G.*, Banerjee S.*, Zhang J.*, Cunningham N.*, Moorti A., Clarke S.*, Pozzi S.*, Umstadter D.P.*

MeV-Energy x-rays from inverse Compton scattering with laser-wakefield accelerated electrons
Physical Review Letters 110, 155003:1-5 (2013)

16. Choubey A., Vishwakarma S.C., Ali S., Jain R.K., Upadhyaya B.N., Oak S.M.
Performance study of highly efficient 520 W average power long pulse ceramic Nd:YAG rod laser
Optics & Laser Technology 51, 98-105 (2013)

17. Das A.K., Misra P., Bose A., Joshi S.C., Kumar R., Sharma T.K., Oak S.M., Kukreja L.M.
Structural, electrical and optical characteristics of Al doped ZnO films grown by sequential pulsed laser deposition
Physics Express 3, 1-6 (2013)

18. Detty A.P., Singh B.N., Sahu V.K., Misra P., Kumar R., Sharma T.K., Sathe V.G.*, Phase D.M.*, Srivastava A.K., Oak S.M., Pillai V.P.M.*, Kukreja L.M.
Studies on ensembles of luminescent silicon nanoparticles embedded in silicon nitride grown by pulsed laser deposition
Journal of Nanoscience Letters 3, 14, 1-7 (2013)

19. Ganesamoorthy S., Bhaumik I., Bhatt, R., Saxena, A., Karnal A.K., Gupta P.K.
Spectroscopic analysis on the basis of Judd- Ofelt theory along [0 0 1] of Er:YVO_4 grown by optical floating zone technique
Materials Research Bulletin 48, 1132-1136 (2013)

20. Gopi V.*, Karthika A.*, Sekar M.*, Kavitha L.*, Pramod R., Dwivedi J.
Development of lotus-like hydroxyapatite coating on HELCDEB treated titanium by pulsed electrodeposition
Materials Letters 105, 216-219 (2013)

21. Husain R., Ghodke A.D., Yadav S., Holikatti A.C., Yadav R.P., Fatnani P., Puntambekar T.A., Hannurkar P.R.
Measurement, analysis and correction of the closed orbit distortion in Indus-2 synchrotron radiation source
Pramana: Journal of Physics 80, 263-275 (2013)

22. Jain Akhilesh, Hannurkar P.R., Pathak S.K., Sharma D.K., Gupta A.K.
Investigation of class J continuous mode for high power solid state RF amplifier
IET Microwaves, Antennas & Propagation 7, 686-692 (2013)

23. Jain B., Uppal A., Gupta P.K., Das K.
Photophysical properties of Chlorin-p6 bound to coated gold nanorods
Journal of Molecular Structure 1032, 23-28 (2013)

24. Jain Rajiv and Nagaraju J.*
An automation software for ECR experiment at cryogenics temperatures
Elixir Journal of Comp. Sci. & Engg., 58, 0115002-15004 (2013)

25. Jain S.K., Tayyab M., Bagchi S., Chakera J.A., Naik P.A.
Characterization of proton beam emission from an electron cyclotron resonance ion source
Nuclear Instruments & Methods in Physics Research: Section A 708, 51-55 (2013)

26. Jana A.R., Kumar V., Kumar A., Gaur R.
Electromagnetic design of a $_g$ = 0.9 650-MHz superconducting- radio-frequency cavity
IEEE Transactions on Applied Superconductivity 23, 6514631(1-8) (2013)

27. Jayabalan J., Ananthakumar S.*, Khan S., Singh Asha, Mondal P., Srivastava A.K., Babu S.M.*, Chari R.
Multi-photon induced photoluminescence in TGA capped CdTe nanoparticles
Asian Journal of Chemistry, S42-S44 (2013)

28. Jayabalan J., Singh Asha, Khan S., Chari R.
Volume fraction dependence of transient absorption signal and nonlinearities in metal nanocolloids
Journal of Optics 15, 055203(1-6) (2013)

29. Kamal C., Chakrabarti A., Banerjee A., Deb S.K.
Ab initio studies of effect of intercalation on the properties of single walled carbon and gallium phosphide nanotubes
Physica E 54, 273 (2013)

30. Kamal C., Chakrabarti A., Banerjee A., Deb S.K.
Silicene beyond mono-layers - different stacking configurations and their properties
Journal of Physics: Condensed Matter 25, 085508(1-10) (2013)

31. Khan M.K., Krishna H., Majumder S.K., Rao K.D., Gupta P.K.
Depth-sensitive Raman spectroscopy combined with optical coherence tomography for layered analysis
Journal of Biophotonics, 1-7 (2013)

32. Khare J., Srivastava H., Singh C.H.P., Joshi M.P., Kukreja L.M.
Vapor phase synthesis of hexagonal shaped single crystalyttria stabilized zirconia nanoparticle susing CO_2 laser
Ceramics International 39, 1103-1109 (2013)

33. Kolli B., Mishra S.P.*, Joshi M.P., Raj Mohan S., Dhami T.S., Kukreja L.M., Samui A.B.*
Synthesis and characterization of Y-type polymers for second-order nonlinear optical applications
Journal of Polymer Science Part A: Polymer Chemistry 51, 836-843 (2013)

34. Kumar J., Mahakud R., Prakash O., Dixit S.K.
Effect of pump beam resonator on the performance of narrow line-width Rhodamine 110 dye laser
Optics and Laser Technology 45, 373-378 (2013)

35. Kumar J., Mahakud R., Prakash O., Dixit S.K.
Study on hydrofluoric acid-based clad etching and chemical sensing characteristics of fiber Bragg gratings of different reflectivity fabricated under different UV exposure times
Optical Engineering 52, 0544021-0544026 (2013)

36. Kumar Manoj, Bhargava P., Biswas A.K., Sahu S.*, Mandloi V., Ittoop M.O., Khattak B.Q., Tiwari M.K., Kukreja L.M.
Epoxy-paint stripping using TEA CO_2 laser: determination of threshold fluence and the parameters
Optics & Laser Technology 46, 29-36 (2013)

37. Kumar Manoj, Biswas A.K., Bhargav P., Reghu T., Sahu, S.*, Pakhare J.S.*, Bhagat M.S., Kukreja L.M.
Theoretical estimation and experimental studies on gas dissociation in TEA CO_2 laser for long term arc free operation
Optics & Laser Technology 52, 57-64 (2013)

38. Kumar Mukund, Modi M.H., Singhal H., Raja S. Sendhil, Chakera J.A., Gupta R.K., Naik P.A., Lodha G.S., Gupta P.D.
Restoration of absolute diffraction efficiency and blaze angle of carbon contaminated gratings by ultraviolet cleaning
Applied Optics 52, 1725-1730 (2013)

39. Kumar P., Ghodke A.D., Singh Gurnam
Beam lifetime measurement and analysis in Indus-2 electron storage ring
Pramana: Journal of Physics 80, 855-871 (2013)

40. Mane M.L.*, Dhage V.N.*, Shirsath S.E.*, Sundar R., Ranganathan K., Oak S.M., Jadhav K.M.*
Nd:YAG laser irradiation effects on the structural and magnetic properties of polycrystalline cobalt ferrite
Journal of Molecular Structure 1035, 27-30 (2013)

41. Matin M., Sharath Chandra L.S., Chattopadhyay M.K., Meena R.K., Kaul R., Singh M.N., Sinha A.K., Roy S.B.
Magnetic irreversibility and pinning force density in the Ti-V alloys
Journal of Applied Physics 113, 163903(1-11) (2013)

42. Mishra G.K., Biswal R., Agrawal S., Prakash O., Dixit S.K.
Studies on 20 kHz pulse repetition rate class narrow line-width dye laser
Optik: International Journal for Light and Electron Optics 124, 1595-1600 (2013)

43. Misra N.L.*, Dhara S.*, Phatak R.*, Yadav A.K.*, Poswal A.K.*, Jha S.N., Bhattacharyya D.D.*, Mishra S.K.*, Sinha A.K.
Characterization of Sb-doped Bi_2UO_6 solid solutions by x-ray diffraction and x-ray absorption spectroscopy
Analytical Sciences 29, 579-584 (2013)

44. Misra N. L.*, Tiwari M. K., Kumar S.S.*, Sangita D.*, Singh Ajit Kumar, Lodha G.S., Deb S.K., Gupta P. D., Aggarwal S.K.*
Synchrotron-induced EDXRF determination of uranium and thorium in mixed uranium thorium pellets
X-Ray Spectrometry 42, 1-4 (2013)

45. Misra N.*, Biswal J. *, Dhamgaye V.P., Lodha G.S., Sabharwal S.*
A comparative study of gamma, electron beam, and synchrotron X-ray irradiation method for synthesis of silver nanoparticles in PVP
Advanced Materials Letters 4, 458-463 (2013)

46. Mokhariwale A., Agrawal S.K., Saini V.K., Nakhe S.V.
Wavelength scanner for precision tuning of pulsed dye laser
Journal of Instruments Society of India 43, 5-6 (2013)

47. Mondal K.*, Ghanty T.K.*, Banerjee Arup, Chakrabarti A., Kamal C.
Density functional investigation on the structures and properties of Li atom doped Au_{20} cluster
Molecular Physics 111, 1-10 (2013)

48. Mondal S.*, Paul C.P., Kukreja L.M., Bandyopadhyay A.*, Pal P.K.*
Application of Taguchi-based gray relational analysis for evaluating the optimal laser cladding parameters for AISI1040 steel plane surface
International Journal of Advanced Manufacturing Technology 66, 91-96 (2013)

49. Mondal S.*, Singh S.P.*, Hussain K.*, Choubey A., Upadhyay B.N., Datta P.K.*
Efficient depolarization-loss-compensation of solid state lasers using only a Glan-Taylor polarizer
Optics and Laser Technology 45, 154-159 (2013)

50. Namdeo S.*, Sinha A.K., Singh M.N., Awasthi A.M.*
Investigation of charge states and multiferroicity in Fe-doped h-$YMnO_3$
Journal of Applied Physics 113, 104101(1-6) (2013)

51. Pai C.*, Joshi M.P., Raj Mohan S., Dhami T.S., Khatei J.*, Rao K.S. Koteshwar*, Kukreja L.M., Sanjeev G.*
Effect of electron beam irradiation on photoluminescence properties of thioglycolic acid (TGA) capped CdTe nanoparticles
Advanced Materials Letters 4, 454-457 (2013)

52. Pai C.S.*, Joshi M.P, Raj Mohan S., Deshpande U.P.*, Dhami T.S., Khatei J.*, Koteshwar Rao, K., Sanjeev G.*
Electron irradiation effects on TGA-capped CdTe quantum dots
Journal of Physics D: Applied Physics 46, 175304(1-7) (2013)

53. Pal S., Singh S.D., Porwal S., Sharma T.K., Khan S., Jayabalan J., Chari R., Oak S.M.
Effect of light-hole tunnelling on the excitonic properties of GaAsP/AlGaAs near-surface quantum wells
Superconductor Science & Technology 28, 035016(1-8) (2013)

54. Pal S., Singh S.D., Dixit V.K., Ingale A., Tiwari P., Srivastava H., Kumar R., Mukharjee C., Prakash P.*, Oak S.M.
Low- and high-density InAs nanowires on Si(0 0 1) and their Raman imaging
Semiconductor Science and Technology 28, 015025(1-10) (2013)

55. Parihar A*, Dube A, Gupta P.K.
Photodynamic treatment of oral squamous cell carcinoma in hamster cheek pouch model using chlorin p6-histamine conjugate
Photodiagnosis and Photodynamic Therapy 10, 79-86 (2013)

56. Paul C.P., Mishra S.K., Kumar A., Kukreja L.M.
Laser rapid manufacturing on vertical surfaces: analytical and experimental studies
Surface and Coatings Technology 224, 18-28 (2013)

57. Paul C.P., Mishra S.K., Tiwari P., Kukreja L.M.
Solid-particle erosion behaviour of WC/Ni composite clad layers with different contents of WC particles
Optics & Laser Technology 50, 155-162 (2013)

58. Pavunny S.P.*, Misra P., Thomas R.*, Kumar A.*, Schubert J.*, Scott J.F.*, Katiyar R.S.*
Advanced high-k gate dielectric amorphous $LaGdO_3$ gated metal-oxide-semiconductor devices with sub-nanometer equivalent oxide thickness
Applied Physics Letters 102, 192904(1-5) (2013)

59. Prakash O., Astadjov D.N.*, Kumar P., Mahakud R., Kumar J., Nakhe S.V., Dixit S.K.
Effect of spatial coherence on the focusability of annular laser beams
Optics Communications 290, 1-7 (2013)

60. Priolkar K.R.*, Bhobe P.A. *, Lobo D.N. *, D Souza S.W.*, Barman S.R.*, Chakrabarti A., Emura S.*
Antiferromagnetic exchange interactions in the $Ni_2Mn_{1.4}In_{0.6}$ ferromagnetic Heusler alloy
Physical Review B 87, 144412(1-6) (2013)

61. Ram S.P., Tiwari S.K., Mishra S.R., Rawat H.S.
Push beam spot-size dependence of atom transfer in a

double magneto-optical trap setup
Review of Scientific Instruments 84, 073102(1-4) (2013)

62. Rani N.*, Vijayan N.*, Thukral K.*, Maurya K.K.*, Haranath D.*, Bhagavannarayan G.*, Verma S., Waha, M.A.*
Crystalline perfection, optical and third harmonic generation analyses of non-linear optical single crystal of L-lysine acetate
Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 105, 192-199 (2013)

63. Rao B.S., Moorti A., Rathore R., Chakera J.A., Naik P.A., Gupta P.D.
High-quality electron beam from laser wake-field acceleration in laser produced plasma plumes
Applied Physics Letters 102, 231108 (2013)

64. Rao B.T., Verma S., Gangrade M*, Ganesan V.*, Kukreja L.M.
Factors affecting surface plasmon resonance of silver nanoparticle films grown by pulsed laser deposition
Journal of Nanoscience Letters 3, 1-5 (2013)

65. Riscob B.*, Bhatt R., Vijayan N.*, Bhaumik I., Ganesamoorthy S.*, Wahab M.A.*, Rashmia*, Bhagavannarayana G.*
Structural, optical and thermal properties of Zr-Fe co-doped congruent $LiNbO_3$ single crystals
Journal of Applied Crystallography 46, 601-609 (2013)

66. Roy S.B.
First order magneto-structural phase transition and associated multi-functional properties in magnetic solids
Journal of Physics: Condensed Matter 25, 183201(1-25) (2013)

67. Sagdeo A., Mondal P., Upadhyay A., Sinha A.K., Srivastava A.K., Gupta S.M., Chowdhury P.*, Ganguli, T., Deb S.K.
Correlation of microstructural and physical properties in bulk $BiFeO_3$ prepared by rapid liquid-phase sintering
Solid State Sciences 18, 1-9 (2013)

68. Saha D., Sahu V.K., Das A.K., Ajimsha R.S., Misra P., Kukreja L.M.
Studies on optical and electrical characteristics of ZnO thin films grown by atomic layer deposition
Physics Express 3, 1-6 (2013)

69. Sahu V.K., Saha D., Das A.K., Ajimsha R.S., Misra P., Kukreja L.M.
Studies on the electrical characteristics of n-ZnO/p-Si grown by pulsed laser deposition for UV photo detecting applications
Physics Express 3, 1-5 (2013)

70. Sahu K., Sharma M., Bansal H., Dube A., Gupta P.K.
Topical photodynamic treatment with poly-L-lysine~chlorin p6 conjugate improves wound healing by reducing hyperinflammatory response in Pseudomonas aeruginosa-infected wounds of mice
Lasers in Medical Science 22, 465-471 (2013)

71. Saini, V. K.
Laser-induced optogalvanic signal oscillations in miniature neon glow discharge plasma
Applied Optics 52, 4404-4411 (2013)

72. Sharma A.K., Patidar R.K., Daiya D., Joshi A., Naik P.A., Gupta P.D.
Simple and sensitive technique for alignment of the pinhole of a spatial filter of a high-energy, high-power laser system
Applied Optics 52, 2546-2554 (2013)

73. Sharma Amalendu, Singh P.*, Abdurrahim, Ghodke A.D., Singh Gurnam
Analytical expressions of transfer functions for a hard edge dipole magnet using a basic geometrical approach
Physical Review Special Topics - Accelerators and Beams 16, 014001(1-16) (2013)

74. Sharma V.K., Chattopadhyay M.K., Sharath Chandra L.S., Khandelwal A., Meena R.K., Roy S.B.
Scaling of the isothermal entropy change and magnetoresistance in Ni-Mn-In based off-stoichiometric Heusler alloys
The European Physical Journal Applied Physics 62, 30601 (2013)

75. Shukla V., Singh C.P., Mukherjee C., Bindra K.S.
Investigation of optical limiting in Cobalt nanoparticles synthesized by laser ablation
Chemical Physics Letters 555, 149-153 (2013)

76. Singh Gurvinderjit, Tiwari V.S., Gupta P.K.
Evaluating the polymorphic phase transition in calcium-doped $Ba(Zr_{0.05}Ti_{0.95})O_3$: A lead-free piezoelectric ceramic
Journal of Applied Crystallography 46, 324-331 (2013)

77. Singh Gurvinderjit, Bhaumik I., Ganesamoorthy S*., Bhatt R., Karnal A.K., Tiwari V.S., Gupta P.K.
Electro-caloric effect in $0.45BaZr_{0.2}Ti_{0.8}O_3$-$0.55Ba_{0.7}Ca_{0.3}TiO_3$ single crystal
Applied Physics Letters 102, 082902 (2013)

78. Singh Gurvinderjit, Tiwari V.S., Gupta P.K.
Thermal stability of piezoelectric coefficients in $(Ba_{1-x}Ca_x)(Zr_{0.05}Ti_{0.95})O_3$: a lead-free piezoelectric ceramic
Applied Physics Letters 102, 162905(1-5) (2013)

79. Singh M.K., Banerjee Arup
Growth and dissolution mechanism at the opposite and hemihedral faces of polar
CrystEngComm. 15, 4143-4152 (2013)

80. Singh M.K., Banerjee Arup
Role of solvent and external growth environments to determine growth morphology of molecular crystals
Crystal Growth & Design 13, 2413-2425 (2013)

81. Singh Nageshwar, Patel H.K., Dixit S.K.
Fluorescence fluctuation of Rhodamine 6G dye for high repetition rate laser excitation
Journal of Luminescence 134, 607-613 (2013)

82. Singh Nageshwar, Jain R., Dixit S.K., Vora H.S.
Studies on thermo-optic characteristics of a high repetition rate dye laser
Optics & Laser Technology 48, 309-314 (2013)

83. Singh Nageshwar, Patel H.K., Vora, H.S.
Study of a new dye cell for a high repetition rate dye laser
Optics & Laser Technology 45, 256-261 (2013)

84. Singh S., Singh V., Tiwari V.B., Mishra S.R., Rawat H.S.
Magnetic field assisted enhancement in number density of metastable krypton (Kr*)atoms in a krypton atomic beam
Indian Journal of Pure & Applied Physics 51, 230-234 (2013)

85. Sugandhi K.*, Verma S., Jose M.*, Joseph V.*, Jerome Das S.*
Effect of pH on the growth, crystalline perfection, nonlinear, optical and mechanical properties of potential tris-glycine zinc chloride single crystals
Optics and Laser Technology 54, 347-352 (2013)

86. Swami M.K., Patel H.S., Gupta P.K.
Backscattering Mueller matrix measurement scheme using the same polarizing-analyzing optics
Journal of Optics 15, 035709(1-7) (2013)

87. Swami M.K., Patel H.S., Gupta P.K.
Conversion of 3x3 Mueller matrix to 4x4 Mueller matrix for non-depolarizing samples
Optics Communications 286, 18-22 (2013)

88. Tiwari M.K., Gupta P., Sinha A.K., Kane S.R., Singh A.K., Garg S.R., Garg C.K., Lodha G.S., Deb S.K.
A microfocus X-ray fluorescence beamline at Indus-2 synchrotron radiation facility
Journal of Synchrotron Radiation 20, 386-389 (2013)

89. Tiwari M.K., Wang H.*, Sawhney K.J.S.*, Nayak M., Lodha G.S.
X-ray standing wave induced Compton and elastic scattering from thin periodic multilayer structures
Physical Review B 2013 June 87, 235401(1-11) (2013)

90. Toppo A.*, Kaul R., Pujar M.G.*, Mudali U.K.*, Kukreja L.M.
Enhancement of corrosion resistance of type 304 stainless steel through a novel thermo-mechanical surface treatment
Journal of Materials Engineering and Performance 22, 632-639 (2013)

91. Tripathi A., Badapanda M.K., Hannurkar P.R.
Design and development of DSP controlled filament power supply for 1 MW, 352.2 MHz klystron
International Journal of Engineering Research 2, 137-140 (2013)

92. Tripathi A., Upadhyay R., Rao J.N., Badapanda M.K.,Hannurkar P.R.
Sequence control system of 1 MW, 352.2 MHz CW klystron amplifier
Universal Journal of Electrical and Electronic Engineering 1, 6-9 (2013)

93. Varshney G.K., Saini R.K., Gupta P.K., Das K.
Effect of curcumin on the diffusion kinetics of a hemicyanine dye, LDS-698, across a lipid bilayer probed by second harmonic spectroscopy.
Langmuir 29, 2912-2918 (2013)

94. Vijayan N.*, Bhagavannarayana G.*, Halder S.K.*, Verma S., Philip J.*, Philip R.*, Rathi B.*
X-ray topography, photopyroelectric and two-photon absorption studies on solution grown, benzimidazole single crystal
Applied Physics A 110, 55-58 (2013)

95. Yadav P.K., Gupta R.K., Modi M.H., Kumar S.
Role of radiative decay of valence plasmons in transmission spectra of Si, SiN_x and PET membranes
Solid State Communications 156, 12-15 (2013)

96. Yadav R.P., Varde P.V.*, Nataraj P.S.V.*, Fatnani P.
Intelligent agent based operator support and beam orbit control scheme for synchrotron radiation sources
International Journal of Advanced Science and Technology 52, 1-24 (2013)

B. Invited Talk

1. Arora V.
Time resolved x-ray diffraction studies with laser plasma x-ray source
Workshop on Recent Developments in Magnetic Materials and Thin Films (RDMMTF) 2013, Indore, May 24 -25, 2013

2. Ghosh H.
Iron based superconductors: a brief review
National Workshop on Advances in Material Science and Technology, Warangal

3. Gupta P.K.
Development and utilization of optical techniques for medical diagnostics, Synergy in Physics and Industry (SPI-2013), BARC, Mumbai, 21 – 22 January, 2013

4. Kamal C.
Computational studies on two dimensional graphene-like structures
Workshop on Advances in Computational Physics (ACP2013), Thiruvarur, Feb. 14-16, 2013

4. Kukreja L.M.
Semiconductor - metal transition in ZnO thin films sparsely doped with Al
Second International Conference on Optoelectronic Materials and Thin Films for Advanced Technologies (OMTAT 2013), Cochin, January 3-5, 2013

5. Kukreja L.M.
Laser surface engineering: a perspective
International Workshop on Surface Science and Engineering (SSEW 2013), Indore, March 4-5,2013

6. Kukreja L.M.
Science and technology at nano-scale: an overview
National Workshop on Nano-scale Technology & Superconductivity, Indore, April 12-13, 2013

7. Kukreja L.M.
Semiconductor like resistivity at low temperature of metal like SiZnO thin films
Solid State Physics Colloquium at University of Ulm, Ulm, Germany, June 20, 2013

8. Kukreja L.M.
Pulsed laser and atomic layer depositions of semiconductor nanostructures
Advanced Materials Science Seminar at University of Ulm, Ulm (Germany), June 24, 2013

9. Kukreja L.M.
Quantum corrections for low temperature electrical conductivity of $Si_xZn_{1-x}O$ thin films
Walther - Meissner Seminar of Bavarian Academy of Sciences, Garching (Germany), June 28, 2013

10. Kumar Shailendra
Plasma and thermal waves in characterization of semiconductors
One day Course Workshop on Semiconductors, Jammu, Jan. 30, 2013

11. Kumar Shailendra
Valence plasmons, valence band onset and nano clusters of SnO_2
2nd International Symposium on Semiconductor Materials and Devices, Jammu, Jan. 31, Feb. 2, 2013

12. Kush P.K.
Design and indigenous development of helium liquefier

and cryocoolers at RRCAT
DAE- BRNS Theme Meeting on Liquid Helium Plants, Cryogenic Systems and their Applications (LHeP-CSA), Kolkata, Feb. 21-22, 2013

13. Mishra S.R.
Bose-Einstein condensation of ^{87}Rb atoms in a QUIC trap
DAE-BRNS National Laser Symposium (NLS-21), Mumbai, Feb. 6-9, 2013

14. Moorti A.
Laser-driven plasma based electron acceleration
Topical Conference on Laser Driven Charged Particle Acceleration and Applications, Delhi, Apr. 5-7, 2013

15. Upadhyay B.N.
High power CW and pulsed fiber lasers - development at RRCAT and future scope
DAE-BRNS National Laser Symposium (NLS-21), Mumbai, Feb. 6-9, 2013

C. Seminar/Conference Presentation

C1. *DAE-BRNS National Laser Symposium (NLS-21), Mumbai, Feb. 6-9, 2013*

1. Agrawal D.K., Misra P., Choubey A., Vishwakarma S.C., Jain R.K., Ali S., Singh Rajpal, Saini B.K., Ekka B., Babbar L.K., Karnewar A.K., Puntambekar T.A., Upadhyaya B.N., Oak S.M.
Laser based profile cutting and drilling of holes in different ceramics using long pulse Nd:YAG laser

2. Ananthakumar S.*, Jayabalan J., Singh Asha, Khan S., Prajapati S., Moorthy Babu S.*, Chari R.
Size independent peak shift between normal and upconversion photoluminescence in MPA capped CdTe nanoparticles

3. Ansari M.S., Ravindranath S.V.G.*, Bhatia M.S.*, Singh Bhupinder, Joshi A.S., Navathe C.P.
Dependence of xenon flash lamp spectrum and pumping efficiency of Nd:glass laser amplifier on the power supply circuit parameters

4. Arora V., Chakravarty U., Singh M.P., Chakera J.A., Naik P.A., Gupta P.D.
Spectral analysis of K-shell x-ray emission of magnesium plasma produced by ultrashort high intensity laser pulse irradiation

5. Benerji N.S., Varshnay N., Singh Amrendra, Singh Bijendra
Design and performance characteristics of a Krypton Chloride (222 nm) excimer laser

6. Banerji N.S., Singh Amrendra, Varshnay N., Singh Bijendra
Enhanced performance of a repetitively pulsed 130 mJ KrF laser with improved pre-ionization parameters

7. Benerji N.S., Singh Amrendra, Varshnay N., Singh Bijendra
Excimer laser with axicon based conical resonator (ABCD)

8. Barnwal S., Prasad Y.B.S.R., Aneesh K., Nigam S., Chakera J.A., Naik P.A., Navathe C.P., Gupta P.D.
Energy measurement of soft x-ray laser produced from capillary discharge plasma

9. Bhagat M.S., Biswas A.K., Rana L.B., Verma Abrat, Kumar Manoj, Kukreja L.M.
Correlation of discharge resistance and temperature in RF FAF CW CO_2 laser

10. Bhatt R., Ganesamoorthy S., Bhaumik I., Sajith B.K., Karnal A.K., Gupta P.K.
Growth and pyroelectric measurements on Ru doped $LiNbO_3$ single crystals

11. Bhaumik I., Ganesamoorthy S., Bhatt R., Saxena A., Karnal A.K., Gupta P.K.
Growth of Nd:Cr:YVO_4 single crystals by OFZ technique and optical absorption studies

12. Biswal R., Mishra G.K. , Agrawal S.K. , Dixit S.K. , Nakhe S.V.
A real-time study on the spectral line-width characteristics of a Copper-HBr laser

13. Bundel H.R., Tiwari Shradha, Singh C.P., Deshpande P.P., Bhanage V., Chari R., Navathe C.P.
Data acquisition and control software for transient absorption spectroscopy experiments

14. Chakravarty U., Kuruvilla A., Singh Rajpal, Upadhyay

B.N., Bindra K.S., Oak S.M.
Linearly polarized intra-cavity passive Q-switched Yb-doped photonic crystal fiber laser

15. Chakravarty U., Srikanth G., Kuruvilla A., Krishnan H.*, Upadhyay B.N., Bindra K.S., Oak S.M.
Mode-locked Yb-doped fiber laser oscillator in all-normal-dispersion regime of operation without use of intra-cavity spectral filter and polarizer controller elements

16. Chaubey S., Kher S., Kishore J., Oak S.M.
CO_2 laser-inscribed low-cost, shortest-period Long Period Fiber Grating in B-Ge codoped fiber for high-sensitivity strain measurement

17. Choubey A., Vishwakarma S.C., Vachhani D.M., Narwat D., Pant K.K., Misra P., Singh Ravindra, Ali S., Jain R.K., Agrawal D.K., Arya R., Upadhyaya B.N., Oak S.M.
Development of short pulse fiber-coupled Nd:YAG laser with 1.25 J of pulse energy for cleaning applications

18. Choubey A., Jain R.K., Vishwakarma S.C., Ali S., Singh Ravindra, Agrawal D.K., Arya R., Kaul R., Upadhyaya B.N., Oak S.M.
Pulsed Nd:YAG laser cutting of 20 mm thick section of stainless steel in dry air and underwater environment

19. Daiya D., Sharma A.K., Naik P.A., Gupta P.D.
On the observation of active pulse shaping in regenerative amplifier

20. Daiya D., Sharma A.K., Naik P.A., Gupta P.D.
Studies on parametric space for a large aperture single grating pulse compressor

21. Dave I., Bhandare R., Raja S. Sendhil, Gupta P.K.
Development of 2D vector graphics based application software with control interface board for Laser materials processing applications

22. George J., Priyanka T.*, Bindra K.S., Oak S.M.
Demonstration of nearly Fourier transform limited Cr:F laser using transverse mode induced mode locking

23. George J., Bindra K.S., Oak S.M.
LOPUT laser: a novel concept to realize single longitudinal mode laser

24. Gupta Pradeep Kumar, Singh A.J., Sharma S.K., Mukhopadhyay P.K., Bindra K.S., Oak S.M.
A comparative study of AO Q-switching in end-pumped Nd:YVO_4 and Nd:$GdVO_4$ laser at 1342nm

25. Gurram S., Chakravarty U., Kuruvilla A., Upadhyaya B.N., Bindra K.S., Oak S.M.
Studies on effect of output coupling on output characteristics of Yb-doped fiber ring laser

26. Gurram S., Kuruvilla A., Singh Rajpal, Ekka B., Upadhyay B.N., Bindra K.S., Oak S.M.
Erbium-Ytterbium fiber laser emitting more than 13 watts of power in 1.55 micron region

27. Joshi M.J., Deshpande P.P., Navathe C.P., Khan S., Singh A., Jayabalan J., Chari R.
Development of master software for ultrafast plasmonic experiments

28. Joshi M.P., Raj Mohan S., Kolli B.*, Mishra S.P.*, Palai A.K.*, Kanai T.*, Dhami T.S., Kukreja L.M., Samui A.B.*
Second harmonic generation from corona-poled polymer thin films of Y-shape chromophore with different isolation groups

29. Kamath M.P., Tripathi P.K., Kulkarni A.P., Patwa S.R., Joshi A.S., Kumar Pawan, Jain S., Naik P.A., Gupta P.D.
Development of a 2x2 array second harmonic convertor in quadrature geometry for large diameter Nd:glass high power laser beam

30. Khan S., Jayabalan J., Singh Asha, Chari R., Pal Suparna, Porwal S., Sharma T.K., Oak S.M.
Coherent oscillations of holes in $GaAs_{0.8}6P_{0.14}/Al_{0.7}Ga_{0.3}As$ surface quantum well

31. Khare R., Shukla P.K., Shrivastava V.K., Nakhe S.V.
Effect of confocal optical pulse stretcher (COPS) on the performance of a copper vapour laser pumped dye laser

32. Kulkarni A.P., Jain S., Kamath M.P., Joshi A.S., Naik P.A., Gupta P.D., Annapurna K.*, Mandal A.K.*, Karmakar B.*, Sen R.*
Measurement of the figure of merit of indigenously developed Nd doped phosphate laser glass rods for use in high power lasers

33. Kumar J., Mahakud R., Prakash O., Dixit S.K.
Studies on HF based clad etching of Fiber Bragg grating and its utilization in concentration sensing of laser dye in dye-ethanol solution

34. Kumar M., Singhal H., Khan R.A., Chakera J.A., Naik P.A., Gupta P.D.
Effect of aperture size on spatial coherence and intensity of high order harmonic radiation generated from pre-formed plasma plume

35. Kumar Manoj, Bhagat M.S., Biswas A.K., Rana L.B., Pakhare J.S.*, Rawat B.S., Kukreja L.M.
Self-consistent modeling of glow discharge positive column for estimating the reduced electric field in diffusion controlled CW CO_2 laser

36. Kumar P., Prakash O., Dixit S.K., Nakhe S.V.
Dynamic optogalvanic effect studies in ytterbium transitions at 555.648 nm and 581.067 nm using pulsed dye laser.

37. Kumar P., Kumar J., Prakash O., Saini V.K., Agrawal S.K., Mokhariwale A., Dixit S.K., Nakhe S. V.
Studies on selective excitation of ytterbium isotopes using 500 MHz-1000 MHz line-width CVL pumped dye laser

38. Kumbhare M.N., Pareek R., Mukherjee C., Rajiv V., Joshi A.S., Naik P.A., Gupta P.D.
A comparative study of ammonia and hexa-methyl di-siloxane treated sol-gel coatings for adhesion, abrasion, hardness, and laser damage

39. Kushwaha P.K., Patel H.S., Swami M.K., Uppal A., Gupta P.K.
Self assembled planer nano structure for efficient enhancement of Raman signal

40. Malik A., Sendhil Raja S., Gupta P.K.
Micro-fluidic based dye laser: initial experiments

41. Malik A., Sendhil Raja S., Gupta P.K.
Versatile laser micro-fabrication techniques for Lab-on-Chip (LOC) devices in general and uranium analysis in particular

42. Mishra G.K. , Biswal R. , Prakash O. , Agrawal P.K. , Dixit S.K., Nakhe S.V.
Studies on ~20 kHz repetition rate dye laser MOPA system pumped by Copper-HBr laser

43. Mishra R.K., Tiwari G.N., Nakhe S.V.
Studies on effect of variation of delay time between copper bromide laser oscillator and amplifier on the laser system power

44. Pakhare J.S.*, Kumar Manoj, Reghu T., Rawat B.S., Sadhu R.K.*, Kukreja L.M.
Development of 20 kV switch mode power supply for 500 W V-fold CW CO_2 laser

45. Pandey B.K.*, Shahi A.K.*, Sinha A.K., Gopal R.*
Study of surfactant assisted synthesis of Mn nanoparticles by pulse laser ablation

46. Pareek R., Kumbhare M.N., Joshi A.S., Naik P.A., Gupta P.D.
Optimization of single layer sol-gel silica anti-reflection coating process for Nd:glass rods

47. Pathak V.K., Singh C.P., Chari R.
On study of white-light generation in calcium fluoride with femtosecond laser pulses

48. Patidar R.K., Raghuramaiah M., Sharma A.K., Naik P.A., Gupta P.D.
Experimental studies on efficient second harmonic generation of femtosecond duration laser pulses in double pass nonlinear crystal

49. Patwa S.R., Joshi A.S., Jain S., Jain D.K., Kher A.M., Joshi M.K., Tripathi P.K., Naik P.A., Gupta P.D.
Fabrication of Hohlraum bonded thin foil wedge target for equation of state studies

50. Prakash O., Kumar J., Mahakud R., Kumbhakar U., Nakhe S.V., Dixit S.K.
Development of tilted fiber Bragg gratings using highly coherent 255 nm radiation

51. Raghuramaiah M., Sharma A.K., Daiya D., Rathore C.K., Patidar R.K., Naik P.A., Gupta P.D.
Development of Faraday rotator based large aperture double pass Nd:phosphate glass laser amplifier for high power laser system

52. Rajan C, Dave I., Bhandare R., Shyam Sundar S., Sendhil Raja S., Gupta P.
Photon counting based uranium analyser

53. Rajiv K., Mukherjee C., Ganguli T., Abhinandan L.
Design and development of dichoric mirror for pressure

calibration using R1 emission of ruby crystal

54. Ram S.P., Tiwari S.K., Mishra S.R., Rawat H.S.
Optimization of transfer of laser cooled atom cloud to a quadrupole magnetic trap

55. Ram S.P., Tiwari S.K., Mishra S.R., Rawat H.S.
Push beam spot-size dependence on atom transfer in a double-MOT setup

56. Rana L.B., Kumar Manoj, Pakhare J.S., Rawat B.S., Bhagat M.S., Biswas A.K., Kukreja L.M.
Development of a high power diffusion cooled CO_2 laser with planar zigzag resonator

57. Rao B.S., Moorti A., Pathak G., Rathore R., Chakera J.A., Naik P.A., Gupta P.D.
Highly collimated relativistic electron beam from intense femtosecond laser interaction at grazing incidence with pre-pulse formed solid target plasma

58. Rao P.N., Nayak M., Modi M.H., Rai S.K., Lodha G.S.
Growth of multilayer optics for synchrotron radiation sources

59. Rathore C.K.*, Sharma A.K., Daiya D., Naik P.A., Gupta P.D.
Experimental studies on depolarization in a high repetition rate large aperture Nd:phosphate glass laser amplifier

60. Saini V.K., Kumar P., Dixit S.K., Nakhe S.V.
Isotope selective optogalvanic spectroscopy of europium with pulsed and CW dye lasers

61. Saxena M.K., Kher S., Arya R., Raju S.D.V.S.J., Ravindranath S.V.G.*, Oak S.M.
Optical fiber Raman distributed temperature sensor: auto-correction for differential attenuation and temperature-compensation of stokes signal using Wavelet transform for better temperature accuracy

62. Sharma A.K., Daiya D., Naik P.A., Gupta P.D.
Effect of detector position on the measurement of chirped femtosecond laser pulses using a single shot autocorrelator

63. Sharma A.K., Naik P.A., Gupta P.D.
Far field beam profile analysis for a multi-segmented grating compressor in presence of linear and nonlinear phase distortion of the incident laser beam

64. Sharma A.K., Daiya D., Naik P.A., Gupta P.D.
Measurement of nanometer displacements using two dimensional interferometry

65. Sharma S.K.*, Banjare P.R., Singh Yeshpal, Bartwal K.S., Gupta P.K.
Effect of seed orientation on the growth kinetics and aspect ratio of KDP crystals

66. Sharma S.K., Singh A.J., Gupta P.K., Hedaoo P., Mukhopadhyay P.K., Ranganathan K., Bindra K.S., Oak S.M.
Thermal birefringence compensated linear intracavity frequency doubled Nd:YAG rod laser with 73 ns pulse duration and 160W green output power

67. Shukla V., Mukherjee C., Chari R., Rai S., Bindra K.S., Banerjee A.
Study of uniaxial magnetic anisotropy of Cobalt thin films on different substrates using magneto-optic Kerr effect

68. Singh A.J., Sharma S.K., Gupta P.K., Mukhopadhyay P.K., Bindra K., Oak S.M.
Improvement of beam quality parameter (M^2) of high average power intracavity frequency doubled DPSS green laser

69. Singh A.J., Gupta P.K., Sharma S.K., Mukhopadhyay P.K., Bindra K.S., Oak S.M.
Efficient Yellow beam genetration by intracavity sum frequency mixing in DPSS Nd:YVO_4 laser

70. Singh Amol, Choubey A.K., Modi M.H., Upadhyaya B.N., Lodha G.S.
Study on effective laser cleaning method to remove carbonlayer from a gold surface

71. Singh Asha, Khan S., Sivasankaraiah P., Jayabalan J., Chari R.
Tunable third-harmonic probe for non-degenerate ultrafast pump-probe measurements

72. Singh Bhupinder, Ansari M.S., Navathe C.P.
A 10KV flashlamp power supply for high power Nd: glass laser amplifier

73. Singh Bijendra
Performance of a high power copper vapor laser with prism resonator configurations

74. Singh Bijendra, Ghodke D.V., Muralikrishnan K., Subrahmanyam V.V., Chakrabarti A., Daulatabad S.R.
Multiplexed solid state pulse power supply for high power copper vapor laser (KE-CVL)

75. Singh C.P., Reddy D.S., Bindra K.S., Chari R.
Effect of shaped femtosecond pulses on propagation through optical fiber

76. Singh Ravindra *, Choubey A., Jain R.K., Vishwakarma S.C., Agrawal D.K., Ali S., Upadhyaya B.N., Oak S.M.
Efficient delivery of 60 J pulse energy of long pulse Nd:YAG laser through 200 μm core diameter optical fiber

77. Singh S., Tiwari V.B., Mishra S.R., Rawat H.S.
Characterization of RF discharge produced metastable Kr atoms

78. Singh S.P., Sharma M., Gupta P.K.
Effect of complexing with silica nanoparticle on the photodynamic toxicity of curcumin

79. Singh Vivek; Pal S., Mishra S.R., Rawat H.S.
Studies on laser beam tweezers for coherent atomic wave-packet

80. Tiwari G.N., Mishra. R.K., Nakhe S.V.
Development of 110 W copper bromide laser master oscillator power amplifier set up

81. Tiwari G.N., Mishra R.K., Nakhe S.V., Khare R.
Spectral distribution of power in a copper bromide laser

82. Verma R.S., Dasgupta R., Kumar N., Ahlawat S., Uppal A., Gupta P.K.
Manipulation of microparticles and red blood cells using opto-electronic tweezers

83. Verma S., Rao K.R.*, Kar S., Bartwal K.S., Gupta P.K.
Growth of deuterated Zinc Tris (thiourea) Sulfate (d-ZTS) single crystal by unidirectional and conventional solution growth techniques and its characterization

84. Verma S., Senthil Pandian M.*, Pareek P.*, Ramasamy P.*, Kar S., Bartwal K.S., Gupta P.K.
Optical imaging of concentration, convection and solutal boundary layer during unidirectional crystal growth from solution

85. Vishwakarma S.C.*, Choubey A., Singh Ravindra, Jain R.K., Saini B.K., Agrawal D.K., Singh Rajpal, Ali S. Upadhyay B.N., Oak S.M.
An evaporative laser cutting technique for steam generation tubes of pressurized heavy water reactors

C2. AIP Conf. Proc. 1512 (2013): 57th DAE Solid State Physics Symposium, Mumbai

1. Ahlawat M., Shinde R.S.
Development of wide band complex permeability measurement set-up

2. Baral M., Banik S., Ganguli T., Chakrabarti A., Thamizhavel A.*, Phase D.M.*, Sinha A.K., Deb S.K.
Electronic structure of Co_2MnSn Heusler alloy

3. Bhakar A.*, Gupta S.M., Ganguli T., Sinha A.K., Singh M.N., Upadhyay A., Deb S.K., Gupta P.K.
Study of structural disorder in $Pb(Mg_{1/3}Nb_{2/3})O_3$

4. Gupta P., Ganguli T., Sinha A.K., Singh M.N., Svec P. Jr.*, Deb S.K.
Ordering of FeCo nanocrystalline phase in FeCoNbB alloy: an anomalous diffraction study

5. Jain K., Singh Gurvinderjit, Upadhyaya G.K., Tiwari V.S.
Investigation of dielectric and structural behaviour of lead free $(Ba1-_xCa_x)(Zr_{0.05}Ti_{0.95})O_3$ ceramics

6. Jangir R., Porwal S., Tiwari P., Rai S.K., Mondal P., Ganguli T., Oak S.M., Deb S.K.
Photoluminescence study of β−Ga2O3 nanostructures under different oxygen pressure conditions

7. Joseph A.*, Modi M.H., Singh A.*, Gupta R.K., Lodha G.S.
Analysis of soft x-ray/VUV transmission characteristics of Si and Al filters

8. Karmakar S., Sharma R., Pathak S.K., Gupta S.M., Gupta P.K.
Study of de-watering from the gelatinous precipitate formed during co-precipitation of Nd-YAG powder

9. Raj Mohan S., Singh M.P., Joshi M.P., Kukreja L.M.
Monte Carlo simulation of charge transport in disordered organic thin films: applicability of Meyer-Neldel rule for extracting energetic disorder

10. Nanocrystalline Ni-Al ferrites for high frequency applications
Ramesh T.*, Bharadwaj S.*, Shinde R.S., Murthy S.R.*

11. Ramaniah L.M.*, Kamal C., Sikka S.K.*
First principles DFT study of weak C-H...O bonds in crystalline amino acids under pressure-alanine

12. Srivastava H., Ganguli T., Deb S.K., Sant T.*, Poswal H.*, Sharma S.M.
In-situ study of the growth of CuO nanowires by energy dispersive X-ray diffraction

13. Shukla R., Jain V.K., Dhamgaye V.P., Lodha G.S.
Developing high aspect ratio comb-drive using synchrotron radiation at Indus-2

14. Shyam Sundar S., Sharath Chandra L.S., Sharma V.K., Chattopadhyay M.K., Roy S.B.
Electrical transport and magnetic properties of superconducting Mo52Re48 alloy

15. Yadav P.K.*, Kumar Shailendra, Gupta R.K., Modi M.H., Tiwari P., Lodha G.S., Deb S.K.
Role of Valence plasmons in transmission of photons through mica membrane in energy range 10-40eV

C3. Journal of Physics: Conference Series 425 (2013): 11th International Conference on Synchrotron Radiation Instrumentation, Lyon, France

1. Deb S.K., Singh Gurnam, Gupta P.D.
Indus-2 synchrotron radiation source: current status and utilization

2. Ganguli T., Sinha A.K., Narayana C.*, Upadhyay A., Singh M.N., Saxena P., Dubey V.K., Singh I.J., Sendhil Raja S., Vora H.S., Deb S.K.
A high pressure XRD setup at ADXRD beamline (BL-12) on Indus-2

3. Rao P.N., Nayak, M., Modi, M.H., Rai, S.K., Lodha, G.S.
Growth of multilayer optics for synchrotron radiation sources

4. Singh Amol, Choubey A.K., Modi M.H., Upadhyaya B.N., Lodha G.S.
Study on effective laser cleaning method to remove carbon layer from a gold surface

5. Sinha A.K., Sagdeo A., Gupta P., Upadhyay A., Kumar Ashok, Singh M.N., Gupta R.K., Kane S.R., Verma A., Deb S.K.
Angle dispersive x-ray diffraction beamline on Indus-2 synchrotron radiation source: commissioning and first results

6. Tiwari M.K., Kane S.R., Sinha A.K., Garg C.K.*, Singh A.K., Gupta P., Garg S.R., Lodha G.S., Deb S.K.
A microprobe-XRF beamline on Indus-2 synchrotron light source

C4. 24th National Symposium on Cryogenics, Ahemdabad, Jan. 21-24, 2013

1. Chaube R., Khare P., Kush P.K.
Cryogenically economical frame bridge structure for horizontal test stand

2. Doohan R.S., Kush P.K.
Design of 2K cryostat for a cryothermometry investigation

3. Doohan R.S., Kush P.K., Maheshwari G.*
Exergy analysis of indigenously developed reciprocating type cryogenic expansion engine based helium liquefier

4. Gupta Prabhat Kumar, Nema V., Kush P.K.
Comparative design evaluation of plate fin heat exchanger and coiled finned tube heat exchanger for helium liquefier in the temperature range of 300-80 K

5. Gupta Prabhat Kumar, Kush P.K.
Process design study of 40 liters/hour helium liquefier

6. Kush P.K.
Latest developments in cryogenic engineering and technology at RRCAT

7. Kush P.K., Khare P., Gilankar S.G., Ghosh R., Jain A., Chaube R., Lakshminarayanan A., Orlov Y.*, Peterson T.J.*
Design and prototyping efforts towards development of a cryomodule for 650MHz SCRF cavities,

8. Kush P.K., Khare P., Gilankar S.G., Ghosh R., Jain A., Chaube R., Lakshminarayanan A., Hocker A.*, Peterson T.J.*, Degraff B.D.*, Patel R.*
Design of a horizontal test stand for testing two SCRF cavities

C5. Others Seminars/Conference Presentation

1. Astadjov D.N.*, Prakash O.
Experimental verification of focusability of coherent annular laser beams
Proc. SPIE 8770, 17th International School on Quantum Electronics: Laser Physics and Applications 8770, 87701O-5 (2013)

2. Astadjov D.N.*, Prakash O.
Spatial coherence of low-cost 532 nm green laser
Proc. SPIE 8770, 17th International School on Quantum Electronics: Laser Physics and Applications 8770, 87701-5 (2013)

3. Kapadia S.*, Dwivedi V.K., Singh Alok, Borage M., Tiwari S., Saxena R.*
Comparison of interleaved series input parallel output (ISIPO) forward converters with different secondary side configurations
***Proc. 1st National Conference on Power Electronics Systems and Applications*, Rourkela, Mar. 16-17, 2013**

4. Rajan A., Joshi B.K.*, Rawat A.
Analytical studies of peak computing power deliverable by small and mid size HPCC
7th National Conference on Computing For Nation Development (IndiaCom 2013), New Delhi, Mar. 7-8, 2013

5. Rao B.S., Moorti A., Rathore R., Mandal T., Chakera J.A., Naik P.A., Gupta P.D.
Comparative study of laser-driven electron acceleration in different gas jet targets
Topical Conference on Laser Driven Charged Particle Acceleration and Applications, Delhi, Apr. 5-7, 2013

6. Rao B.S., Moorti A., Rathore R., Chakera J.A., Naik P.A., Gupta P.D.
Highly-collimated quasi-mono-energetic electron beam by laser wake-field acceleration in laser produced solid target plasma plume
4th Asian Forum for Accelerators and Detectors, Novosibirsk, Russia, Feb. 25-26, 2013

7. Singh Rashmi, Singh Ashish, Kohli D.K., Singh M.K., Gupta P.K.
Pt loaded carbon aerogel catalyst for catalytic exchange reactions between water and hydrogen gas
AIP Conference Proceedings 1538, 71 (2013)

8. Yadaiah N.*, Bag S.*, Paul C.P., Kukreja L.M.
Fiber laser welding of austenitic stainless steel in protective atmosphere of argon
Proc. 7th Asia Pacific IIW International Congress, Singapore, July 8-10, 2013

D. Book Chapter

1. Ghosh H., Sen S.*
Iron based superconductors: a brief over view
Advances in Materials Science and Technologies
LAP LAMBERT Publishing, pp. 264-304 (2013)

2. Kukreja L.M., Kaul R., Paul C.P., Ganesh P., Rao B.T.
Emerging laser materials processing techniques for future industrial applications
Invited review chapter in ***Laser-Assisted Fabrication of Materials***
J. Dutta Majumdar and I. Manna (Eds.), Springer-Verlag, Berlin, pp. 423 - 478 (2013)

3. Paul C.P., Kumar Atul, Bhargava P., Kukreja L.M.
Laser-assisted manufacturing: fundamentals, current scenario, and future applications
Invited review chapter in ***Nontraditional Machining Processes***
J. P. Davim (Ed.), Springer-Verlag, London, pp. 1 - 34 (2013)

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