



Publications (January 2010 to June 2010)

A. Journal Articles

1. Ajimsha R.S., Das A.K., Singh B.N., Misra P., Kukreja L.M.
Structural, electrical and optical properties of Dy doped ZnO thin films grown by buffer assisted pulsed laser deposition
Physica E: Low-dimensional Systems & Nanostructures 42, 1838-43 (2010)
2. Barua A.G.*, Hazarika S.*, Pathak J.S.* Manhas S.
Spectral signature of ripening in the seeds of chilli (*Capsicum annum* L.)
Spectroscopy Letters 43, 163-66 (2010)
3. Chaliha R.S.*, Annapurna K.*, Tarafder A.*, Tiwari V.S., Gupta P.K., Karmakar B.
Optical and dielectric properties of isothermally crystallized nano-KNbO₃ Er³⁺ doped K₂O-Nb₂O₅-SiO₂ glasses
Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 75, 243-50 (2010)
4. Chatterjee S.*, Ganesh P., Palai R.*, Wu J.A.*, Kaul R.K., Majumdar J.D.* Choudhury A.R.*
Effect of h-BN addition on the properties of nanostructured Al₂O₃-TiB₂-TiN based coatings developed by combined SHS and laser surface alloying
Surface & Coatings Technology 204, 1702-09 (2010)
5. Chatterjee Sanjib, Pavan Kumar Y.
Measurement of centering error of a lens with cyclic optical configuration
Optical Engineering 49, 043601(1-5) (2010)
6. Chatterjee Sanjib, Pavan Kumar Y.
Measurement of residual wedge angle of a high optical quality transparent parallel plate with a multi-pass optical configuration
Optical Engineering 49, 053605(1-4) (2010)
7. Chattopadhyay M.K., Roy S.B.
Disorder influenced magnetic phase transition in the Ce(Fe_{0.9}Ru_{0.1})₂ alloy
Journal of Physics: Condensed Matter 22, 236002-1-11 (2010)
8. Chaube Rajeev
The effect of varying the hydraulic parameters of a flow cell in a dye laser pumped by a copper vapor laser
Optics & Laser Technology 42, 819-27 (2010)
9. Dinakaran S., Verma S., Das S.J.*, Kar S., Bartwal K.S.
Optical imaging of the growth kinetics and polar morphology of zinc tris (thiourea) sulphate single crystals
Crystal Research and Technology 45, 233-38 (2010)
10. Dinakaran S., Verma S., Das S.J.*, Kar S., Bartwal K.S., Gupta P.K.
Investigations for obtaining enhanced SHG element of KH₂PO₄ crystal
Physica B: Condensed Matter, 405, 1809-12 (2010)
11. Dinakaran S., Verma S., Das S.J.*, Bhagavannarayana G., Kar S., Bartwal K.S.
Investigations on crystalline and optical perfection of SHG oriented KDP crystals
Applied Physics A, 99, 445-450 (2010)
12. Fakhri, A.A., Ghodke, A.D., Singh, G.
Effect of wavelength shifter on Indus-1
Nuclear Instruments & Methods in Physics Research A 613, 169-76 (2010)
13. Ganeev R.A.*, Singhal H., Naik P.A. Chakera J.A., Tayyab M.*, Srivastava A.K., Dhama T.S., Joshi M.P., Singh A., Chari R., Kumbhare S.R., Kushwaha R.P., Khan R.A., Bhat R.K., Gupta P.D.
Particular features of higher harmonics generation in nanocluster-containing plasmas using single- and two-color pumps
Optics and Spectroscopy 108, 787-03 (2010)
14. Ganesh P., Moitra A.*, Tiwari P., Sathyanarayanan S.*, Kumar H., Rai S.K., Kaul R., Paul C.P., Prasad R.C.*, Kukreja L.M.
Fracture behavior of laser-clad joint of stellite 21 on AISI 316L stainless steel
Materials Science and Engineering 527, 3748-56 (2010)
15. George J., Oak S.M., Singh B.P.*
Effect of pump spectra and axial mode separation on the



PUBLICATIONS (JAN. 2010-JUNE 2010)

- single longitudinal mode performance in end pumped solid-state lasers with semi-monolithic gain medium
Optics & Laser Technology, 42, 192-97 (2010)
16. Ghanty T.K. *, Banerjee A., Chakrabarti A.
Structures and the electronic properties of $Au_{19}X$ Clusters (X = Li, Na, K, Rb, Cs, Cu, and Ag)
Journal of Physical Chemistry C 114, 20-27 (2010)
17. Ghosh H., Chari Rama
Gigantic stimulated Raman scattering in one-dimensional Mott-Hubbard insulators: a possible THz source
Physics Letters A 374, 2379-82 (2010)
18. Gupta Prabhat Kumar, Kush P.K., Tiwari A.
Experimental studies on pressure drop characteristics of cryogenic cross-counter flow coiled finned tube heat exchangers
Cryogenics 50, 257-65 (2010)
19. Idir M. *, Mercere P. *, Modi M.H, Dovillaire G. *, Levecq X. *, Bucourt S. *, Escolano L. *, Sauvageot P. *
X-ray active mirror coupled with a Hartmann wavefront sensor
Nuclear Instruments & Methods in Physics Research A 616, 162-71 (2010)
20. Idir M. *, Fricker S. *, Modi M.H., Potier J. *
X-ray digital wavefront sensor development
Nuclear Instruments & Methods in Physics Research A 616, 255-60 (2010)
21. Jain B., Uppal A., Gupta P.K., Das K.
Interaction of ANS and TNS with organically modified silica nanoparticles in aqueous media
Advanced Science Letters 3, 225-230 (2010)
22. Jain S.K., Malik R. *, Sekar K. *, Naik P.A., Hannurkar P.R.
Design, fabrication and measurement of 90-Degree mass-analyzing magnet
Indian Journal of Pure & Applied Physics 48, 315-320 (2010)
23. Jain V., Bhandarkar U.V. *, Yadav S., Joshi S.C., Ghodke A.D., Lad M., Hannurkar P.R.
Estimation of higher order modes of INDUS-2 RF cavity using combined electromagnetic-thermal-structural simulations
Nuclear Instruments & Methods in Physics Research A 612, 225-40 (2010)
24. Joshi M.A., Jathar M.R., Mehrotra S.C.
Designing of distributed system using TINI for temperature monitoring
Journal of Instrument Society of India 40, 39-40 (2010)
25. Joshi M.A., Mehrotra S.C., Jathar M.R.
Multichannel temperature monitoring using 1-wire sensors
International Journal of Computer Science & Application, 0974-0767, 195-196 (2010)
26. Kar S., Verma S., Bartwal K.S.
Preparation of Mn doped Li nanoparticles by glass quenching
Journal of Alloys Compounds 495, 288-91 (2010)
27. Kadir A. *, Gokhale M.R. *, Shah A.P. *, Bhattacharya A. *, Ganguli T.
The role of InGa_N interlayers on the microstructure of InN epilayers grown via metal organic vapour phase epitaxy
Physica Status Solidi (A) Applications and Materials 207, 1070-1-4 (2010)
28. Keller M.D. *, Majumder S.K., Kelley M.C. *, Meszoely I.M. *, Boulos F.I. *, Olivares G.M. *
Autofluorescence and diffuse reflectance spectroscopy and spectral imaging for breast surgical margin analysis
Lasers in Surgery & Medicine 42 (2010)
29. Khare R., Saini V.K., Shrivastava V.K., Nundy U.
Observation of penning ionization in Zr-Ne discharge by optogalvanic effect
Optics Communications 283, 542-46 (2010)
30. Kher S., Dixit A. *, Rawat D.N., Sodha M.S. *
Experimental verification of light induced field emission
Applied Physics Letters 96, 044101-1-2 (2010)
31. Kher S., Saxena M.K., Chaube S., Keskar A. *, Tiwari S. *, Oak S.M.
Transverse micro-structuring of photonic crystal fibers for industrial sensors and side viewing probes for



- Optical Coherence Tomography Applications Sensors & Transducers Journal** 116, 112-21 (2010)
32. Kumar P.*, Moorthy Babu S.*, Bhaumik I., Ganesamoorthy S., Karnal A.K., Pandey A.K.*, Raman R.* Influence of dopant concentration on the structural and optical characteristics in Ti doped (2 and 5 mol%) LiNbO₃ nonlinear optical single crystal
Optical Materials 32, 1364-1367, (2010)
33. Kumar V., Mishra G.*
Analysis of pulsed wire method for field integral measurements in undulators
Pramana - Journal of Physics 74, 743-53 (2010)
34. Masanta M.*, Ganesh P., Kaul R., Roy Choudhury A.*
Microstructure and mechanical properties of TiB₂-TiC-Al₂O₃-SiC composite coatings developed by combined SHS, sol-gel and laser technology
Surface & Coatings Technology 204, 3471-80 (2010)
35. Misra P., Das A.K.*, Kukreja L.M.
Switching characteristics of ZnO based transparent resistive random access memory devices grown by pulsed laser deposition
Physics Status Solidi C 7, 1718 - 1720 (2010)
36. Moorti A., Naik P.A., Gupta P.D.
Fast ion generation in the cathode plasma jet of a multipicosecond laser-triggered vacuum discharge
Review of Scientific Instruments 81, 033504-1-5 (2010)
37. Morrison K.*, Barcza A.*, Moore J.D.*, Sandeman K.G.*, Chattopadhyay M.K., Roy S.B.
The magnetocaloric performance in pure and mixed magnetic phase CoMnSi
Journal of Physics D: Applied Physics 43, 195001-1-9 (2010)
38. Nayak M., Lodha G.S., Prasad T.T., Nageswararao P., Sinha A.K.
Probing porosity at buried interfaces using soft x-ray resonant reflectivity
Journal of Applied Physics 107, 023529-1-5 (2010)
39. Paul M.C.*, Upadhyaya B.N., Das S.*, Dhar A.*, Pal M.*, Kher S., Dasgupta K.*, Bhadra S.K.*, Sen R.*
Study of the fabrication parameters of large core Yb₂O₃ doped optical fibre through solution doping technique
Optics Communications 283, 1039-46 (2010)
40. Kumar P., Moorthy S. Babu, Bhaumik I., Ganesamoorthy S., Karnal A. K., Kumar Praveen, Rodrigues G. O., Sulania I., Kanjilal D. , Pandey A. K. and Raman R.
Recharging processes, radiation induced strain and changes on OH- bands under H⁺ ion implantation. in Ti doped lithium niobate
Nuclear Instruments and Methods in Physics Research B 268, 172-177(2010)
41. Pavan Kumar Y., Chatterjee Sanjib
Application of Newton's method to determine the focal length of lenses using a lateral shearing interferometer and cyclic path optical configuration set up
Optical Engineering 49, 053604(1-5) (2010)
42. Pavan Kumar Y., Chatterjee Sanjib
Measurement of moderate wedge angles of optical windows using a wedge shear plate
Optical Engineering 49, 063603(1-5) (2010)
43. Petwal V.C., Rao J.N.*, Dwivedi J. Senecha V.K., Subbaiah K.V.*
Dosimetric measurements and monte carlo simulation for achieving uniform surface dose in pulsed electron beam irradiation facility
Pramana: Journal of Physics 74, 457-68 (2010)
44. Prasad Y. B. S. R., Barnwal S., Naik P.A., Chakera J.A., Khan R.A., Gupta P.D.
Chirped pulse shadowgraphy for single shot time resolved plasma expansion measurements
Applied Physics Letters 96, 221503-1-3 (2010)
45. Rai V.N., Raja Sekhar B.N., Kher S., Deb S.K.
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Journal of Luminescence 130, 582-86 (2010)
46. Ram Sankar P., Tiwari P., Kumar. Ravi Ganguli T., Mukherjee C., Srivastava A.K., Oak S.M., Pathak R.K.*
Synthesis and characterization of cadmium selenide nanostructures on porous aluminum oxide templates by high frequency alternating current electrolysis
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Generation of a highly collimated, mono-energetic electron beam from Laser-driven plasma-based acceleration
News Journal of Physics 12, 045011-1-9 (2010)
48. Romanov I.V.*, Brantov A.V.*, Rupasov A.A.*, Shikanov A.S.*, Paperny V.L.*, Moorti A., Bhat R.K., Naik P.A., Gupta, P.D.
Flux of multiple charged metal ions of high energy from plasma produced by a moderate energy laser pulse
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49. Ruwali K., Yamanaka A. *, Hosoyama K.*
Estimation of energy dissipated during superconducting wire motion in a magnetic field
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50. Sagdeo A., Rai S.K., Lodha G.S., Singh K.P.*, Yadav N.*, Dhawan R., Tonpe U.*, Vahia M.N.*
X-ray characterization of thin foil gold mirrors of a soft x-ray telescope for ASTROSAT Characterization of SXT mirrors by x-ray reflectivity
Experimental Astronomy 28, 11-23(2010)
51. Sharma S.*, Mohan D.*, Singh N., Sharma M.*, Sharma A.K.*
Spectroscopic and lasing properties of Xanthene dyes encapsulated in silica and polymeric matrices
Optik - International Journal for Light and Electron Optics 121, 11-18 (2010)
52. Sharma T.K., Towe E.*
Application-oriented nitride substrates: The key to long-wavelength nitride lasers beyond 500 nm
Journal of Applied Physics 107, 024516-1-11 (2010)
53. Sharma T.K., Towe E.*
On ternary nitride substrates for visible semiconductor light-emitters
Applied Physics Letters 96, 191105-1-3 (2010)
54. Sharma V.K., Chattopadhyay M.K., Roy S.B.
Large magnetocaloric effect in $\text{Ni}_{50}\text{Mn}_{33}\text{Cr}_{0.34}\text{In}_6$ alloy
Journal of Physics D: Applied Physics 43, 225001-1-4 (2010)
55. Sharma V.K., Moore J.D.*, Chattopadhyay M.K., Morrison K.*, Cohen L.F.*, Roy S.B.
A scanning Hall probe imaging study of the field induced martensite-austenite phase transition in $\text{Ni}_{50}\text{Mn}_{34}\text{In}_{16}$ alloy
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56. Shukla S., Sahu K., Verma Y., Rao K.D., Dube A., Gupta P.K.
Effect of helium-neon laser irradiation on hair follicle growth cycle of Swiss Albino Mice
Skin Pharmacology and Physiology 23, 79-85 (2010)
57. Singh Gurvinderjit, Tiwari V.S., Gupta P.K.
Role of oxygen vacancies on relaxation and conduction behavior of KNbO_3
Journal of Applied Physics 107, 064103-1-9 (2010)
58. Singh N.
Analysis of the spectral variation of a dye laser by gain medium inhomogeneity
Optics & Laser Technology 42, 225-29 (2010)
59. Singh N., Vora H.S.
A study of the influence of the input electrical power on the spectral width of the 510.6 nm line of an atomic copper vapor laser
Optics & Laser Technology 42, 866-72 (2010)
60. Singh R., Khardekar R.K., Kohli D.K., Singh M.K., Srivastava H., Gupta P.K.
Synthesis of platinum nanoparticles on carbon aerogel by ambient pressure drying method
Materials Letters 64, 843-45 (2010)
61. Singh S., Tiwari V.B., Rawat H.S.,
Efficient loading of a Rb dark-magneto optical trap by controlling current through a getter source
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62. Singhal H., Ganeev R.A.*, Naik P.A., Srivastava A.K., Singh A., Chari R., Khan R.A., Chakera J.A., Gupta P.D.
Study of high-order harmonic generation from nanoparticles
Journal of Physics B: Atomic, Molecular & Optical Physics 43, 025603-1-8 (2010)



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Applied Optics 49, 3458-64 (2010)
64. Tarafder A.* Annapurna K.*, Chaliha R.S.*, Tiwari V.S.*, Gupta P.K., Karmakar B.
Structure, dielectric and optical properties of Nd³⁺-doped LiTaO₃ ferroelectric glass-ceramic nanocomposites
Journal of Alloys and Compounds 489, 281-88 (2010)
65. Tian Y.*, Yu W.*, Xu H.*, Wang X.*, Deng D.*, Senecha V.
Spatial and spectral characteristics of laser-field synchrotron radiation
Optik - International Journal for Light and Electron Optics 121, 808-12 (2010)
66. Tiwari M.K., Sawhney K.J.S.*
Structural characterization of thin layered materials using x-ray standing wave enhanced elastic and inelastic scattering measurements
Journal of Physics: Condensed Matter 22, 175003-1-9 (2010)
67. Tiwari M.K., Lodha G.S., Sawhney K.J.S.*
Application of the CATGIXRF computer program to the grazing incidence x-ray fluorescence and x-ray reflectivity characterization of thin films and surfaces
X-Ray Spectrometry 39, 127-134 (2010)
68. Tiwari M.K., Sawhney K.J.S.*, Lodha G.S.
Multilayer mirror as substrate for total reflection x-ray fluorescence spectrometry
Spectrochimica Acta Part B 65, 434-440 (2010)
69. Tiwari M.K., Sawhney K.J.S.*, Lodha G.S.
Characterization of trace embedded impurities in thin multilayer structures using synchrotron x-ray standing waves
Surface Interface Analysis 42, 110-116 (2010)
70. Tiwari S.K., Ram S.P., Jayabalan J., Mishra S.R.
Measuring a narrow Bessel beam spot by scanning a charge-coupled device (CCD) pixel
Measurement Science and Technology 21, 025308-1-5 (2010)
71. Tiwari V.B., Singh S., Rawat H.S., Singh M.P., Mehendale S.C.
Electromagnetically induced transparency in cold ⁸⁵Rb atoms trapped in the ground hyperfine F = 2 state
Journal of Physics B: Atomic, Molecular & Optical Physics 43, 095503-1-6 (2010)
72. Upadhyaya B.N., Kuruvilla A., Chakravarty U., Shenoy M.R.*, Thyagarajan K.*, Oak S.M.
Effect of laser linewidth and fiber length on self-pulsing dynamics and output stabilization of single-mode Yb-doped double-clad fiber laser
Applied Optics 49, 2316-25 (2010)
73. Upadhyaya B.N., Chakravarty U., Kuruvilla A., Oak S.M., Shenoy M.R.*, Thyagarajan K.*
Self-pulsing characteristics of a high-power single transverse mode Yb-doped CW fiber laser
Optics Communications 283, 2206-13 (2010)
74. Varghese N.*, Vinod K.*, Chattopadhyay M.K., Roy S.B. Syamaprasad U.*
Effect of combined addition of nano-SiC and nano-Ho₂O₃ on the in-field critical current density of MgB₂ superconductor
Journal of Applied Physics 107, 013907-1-5 (2010)
75. Verma R.S., Swami M.K., Manhas S.S., Gupta P.K.
Mueller matrix-based optimization of reflective type twisted nematic liquid crystal SLM at oblique incidences
Optics Communications 283, 2580-87 (2010)
76. Verma S., Muralidhar K.*
Imaging transport phenomena and surface micromorphology in crystal growth using optical techniques
National Academy Science Letters, 33, 1-15 (2010)

B Book Chapter

1. Dixit V.K. and Bhat H.L.
Growth and characterization of antimony based narrow band gap III-V semiconductor crystals for infrared detector applications: A Review
Handbook of Crystal Growth 1st Edition, Springer Verlag, XXXVIII (2010).



C. Invited Talk

1. Divakar Rao K.
Optical coherence tomography for cancer diagnosis
Indo-French Workshop on Biomedical Applications of Vibrational Spectroscopy and Imaging, Mumbai, 13-15 Feb, 2010
2. Ganesamoorthy S., Bhaumik I., Bhatt R., Karnal A.K., Gupta P.K.
Role of stoichiometry in oxide crystals: LiTaO₃ and LiNbO₃,
14th National Seminar on Crystal Growth NSCG-XIV, Vellore, 10-12 March, 2010
3. Gupta P.K.
Optical techniques for biomedical imaging and diagnosis
Indo-French Workshop on Biomedical Applications of Vibrational Spectroscopy and Imaging, Mumbai, 13-15 Feb, 2010
4. Jayabalan J.
Measurement of carrier dynamics and nonlinearities in metal nanoclusters
Topical Conference on Interaction of EM Radiation with Atoms, Molecules & Clusters (TC-2010), Indore, 3-6 March, 2010
5. Kukreja L.M.
Nanomaterials for future solar cells
5th Nanotechnology Conclave 2010, New Delhi, 14-15 April, 2010
6. Kukreja L.M.
Photoluminescence processes in ultra-small ZnO quantum dots
National Seminar on Nanomaterials for Devices: Characterization and Applications (NS-2010), Pune, 24-26 June, 2010
7. Kukreja L.M.
Science, research and education in Indian context
National Technology Day Seminar, Indore, 14 May, 2010
8. Majumder S.K.
Near-infrared Raman spectroscopy: towards clinical diagnosis of cancer
Indo-French Workshop on Biomedical Applications of Vibrational Spectroscopy and Imaging, Mumbai, 13-15 Feb, 2010
9. Mukhopadhyay P.K.
Femto-second pulse generation and amplification in Yb-doped fiber oscillator-amplifier system
National Laser Symposium 2009, Mumbai, 13-16 January, 2010
10. Rao B.S.
Experimental studies on laser-driven plasma-based electron acceleration: status in India
7th Asia-Pacific Laser Symposium-2010, Jeju Island, South Korea, 11-15 May, 2010
11. Roy, S.B.
Kinetically arrested first order magneto-structural phase transitions and associated glass-like non-equilibrium phenomena
International Conference on Interaction, Instability, Transport and Kinetics: Glassiness and Jamming, Kanpur, 4-8 February, 2010
12. Singh C.P.
Control and analysis of photoemission efficiency by ultrafast pulse shaping
National Laser Symposium (NLS-09), Mumbai, 13-16 January, 2010
13. Shrivastava P.
High voltage pulse modulators
School on Pulsed Power Technology, SPPT-2010, Mumbai, 18-21 May, 2010
14. Verma S.
Investigating the anisotropy in the growth kinetics of ZTS crystals
14th National Seminar on Crystal Growth, Vellore, 10-12 March, 2010



D. Seminars/Conference Presentation

D1 National Laser Symposium (NLS-09), Mumbai, 13-16 January, 2010

1. Agrawal P.K., Nakhe S.V., Biswal R., Mittal J.K.
Development of IGBT based high power (11 kW), high repetition rate (20 kHz) pulsed power supply for copper HyBrID laser, on CD
2. Alee K.S.*, Bindra K.S., Narayana Rao D.*
Three dimensional polystyrene photonic crystals and their optical characteristics
3. Ali Akbar S., Bisht P.B.*, Shukla V., Bindra K.S., Oak S.M.
Generation and amplification of femtosecond pulses by using two stage non collinear optical parametric amplifier
4. Aneesh K., Nigam S., Navathe C.P.
Development of an electronic control and data acquisition system for a fast capillary discharge plasma setup
5. Arora V., Naik P.A., Chakera J.A., Khan R.A., Gupta P.D.
Study of 2Φ and $3/2 \Phi$ harmonics in ultrashort high intensity laser plasma interaction
6. Barnwal S., Prasad Y.B.S.R., Naik P.A., Chakera J.A., Kumbhare S.R., Gupta P.D.
Time resolved chirped pulse interferometry of plasma
7. Benerji N.S., Varshnay N., Murali Krishnan K., Ghodke D.V., Mittal J.K.
Development of 150 mJ, 150 Hz Xenon Chloride laser with two stage magnetic pulse compression circuit
8. Bhagat M.S., Ittoop M.O., Biswas A.K., Rana L.B., Kukreja L.M.
Design aspects of control system for RF excited fast axial flow CW CO₂ Laser
9. Biswal R., Agrawal P.K., Mishra G.K., Nakhe S.V., Dixit S.K., Mittal J.K.
Development of 16 kHz repetition rate, 110 W average power copper HyBrID laser, on CD
10. Biswas A.K., Bhagat M.S., Rana L.B., Verma A., Kukreja L.M.
Indigenous development of a 2 kW RF excited fast axial flow CO₂ laser
11. Chakravarty U., Naik P.A., Chakera J.A., Arora V., Khan R.A., Srivastava H., Srivastava A., Tiwari P., Verma G.D.*, Gupta P.D.
A comparative experimental study of the absorption of intense, short laser pulses in plasmas formed by planar solids and nano-form matter
12. Ghodke D.V., Murali Krishnan K., Varshnay N., Benerji N.S., Mittal J.K.
Design and performance of 35kV/ 150mA constant current capacitor charging power supply for pulsed discharge excimer lasers
13. Gupta C., Ittoop M.O., Reghu T., Chaturvedi A., Kukreja L.M.
Embedded control system for maneuvering target carousel of pulsed laser deposition set-up
14. Joshi M.J., Deshpande P.P., Bhanage V.P., Navathe C.P.
Development of efficient algorithms for laser marker system
15. Kamath M.P., Kulkarni A.P., Jain S., Tripathi P.K., Joshi A.S., Naik P.A., Gupta P.D.
Development of a Raman shifted probe laser beam for plasma diagnostics
16. Khan S., Jayabalan J., Chari R.
Some issues in analysis of time resolved pump probe reflectivity data
17. Kumar Manoj, Reghu T., Pakhare J.S., Bhargav P., Soni R.K., Gupta C., Verma A., Mandloi V., Paul C.P., Kumar S., Yadav G.S.*, Nath A.K.*, Oak S.M., Kukreja L.M.
Indigenous development of high energy, high repetition rate line tunable TEA CO₂ laser
18. Kumar P.*, Moorthy Babu S., Perero S.*, Bhaumik I., Ganesamoorthy S., Karnal A.K.
XPS, HRXRD and refractive index analyses of Ti ions doped lithium niobate (Ti: LiNbO₃) nonlinear optical single crystal
19. Mishra R.K., Nakhe S.V., Tiwari G.N., Mittal J.K.
Development of IGBT based power supply for elemental copper vapor laser
20. Mukhopadhyay P.K., Oak S.M.
Choice of appropriate combination of seed strength, pump power and gain fiber length for low ASE contribution in ultrafast fiber amplifier
21. Patwa S.R., Jain S., Tripathi P.K., Joshi A.S., Naik P.A., Gupta P.D.



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- Optimization of laser hole drilling process on thick gold spherical hohlraums for intense x-ray generation,
22. Pakhare J.S., Reghu T., Kukreja L.M.
All solid state pulsed power supply for multi-kilowatt transversely excited transverse flow CW CO₂ laser
 23. Paul P.*, Kaul R., Paul C.P., Mishra S.K., Preamsingh C.H., Tiwari P., Subba Rao R.V.*, Sai Baba M.*, Kukreja L.M., Dayal R.K.
Laser-assisted surface boronizing of type 304L stainless steel and characterization of the boronized coating Proceedings Seminar on Application of Laser in Materials Processing, Jadhavpur Jan. 8-9, 2010
 24. Raghuramaiah M., Patidar R.K., Joshi R.A., Naik P.A., Gupta P.D.
Regeneratively amplified pump laser using a 4-pass grating pair based pulse stretcher for an OPCPA based multi-terawatt Nd:glass laser system
 25. Ram S. P., Tiwari S. K., Mishra S. R.
Enhanced transfer of cold atoms between two MOTs using a pulsed push beam
 - 26.. Rama Gopal S.V.*, Mishra V.*, Singh G.S.*, Biswas A.K., Kukreja L.M. Kapur P*.
Fabrication and characterization of aspheric resonator mirrors for high-power CO₂ lasers
 27. Reghu T., Kumar Manoj, Verma A., Mandloi V., Kukreja L.M.
Arc sensing techniques for reliable operation of TEA CO₂ laser
 28. Sharma S.K., Singh A.J., Mukhopadhyay P.K., Oak S.M.
101W of average green beam from diode-side-pumped Nd:YAG/LBO based system in a relay imaged cavity
 29. Sharma S.K., Singh A.J., Mukhopadhyay P.K., Oak S.M.
Efficient and high power green beam generation by frequency doubling of AO Q-switched diode-side pumped Nd:YAG rod laser in a coupled cavity
 30. Singh A., Jayabalan J., Chari R., Oak S.M.
Improving the stability of silver nanoplatelet colloid against femtosecond laser irradiation
 31. Singh A.J., Sharma S.K., Mukhopadhyay P.K., Oak S.M.
A comparative study of Nd:YVO₄ and Nd:GdVO₄ laser operating at 1342 nm
 32. Singh A.J., Sharma S.K., Mukhopadhyay P.K., Oak S.M.
Dual wavelength operation in diode-end-pumped hybrid vanadate laser
 33. Singh A.J., Sharma S.K., Mukhopadhyay P.K., Oak S.M.
Effect of doping concentration in quasi-three level Nd:YVO₄ laser at 914 nm
 34. Singh B., Subrahmanyam V.V., Daulatabad S.R., Chakraborty A.
Enhanced performance of a wide aperture copper vapor laser with hydrogen additive in neon buffer gas
 35. Singh C.P., Bindra K.S., Oak S.M.
Nonlinear optical studies in semiconductor doped glasses under femtosecond pulse excitation
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2. Ashoka.H, Jathar M.R., Meshram V., Malviya N.D., Kohli D.K., Khardekar R.K.
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12. Harita B*, Saxena P, Singh KK, Singh I, and Mundra G
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13. Jathar M.R., Ashoka H., Sahu R.K.
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14. Jayabalan J.
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Note : '*' indicates author affiliation other than RRCAT, Indore