

**A. Journal Articles**

1. Aasi J. *, Raja, S. et al.
Implementation of a f-statistic all-sky search for continuous gravitational waves in Virgo VSR1 data
*Classical and Quantum Gravity*31, 165014 (2014)
2. Aasi J. *, Raja, S. et al.
Methods and results of a search for gravitational waves associated with gamma-ray bursts using the GEO 600, LIGO, and Virgo detectors
*Physical Review D*89, 122004(2014)
3. Aasi J. *, Raja, S. et al.
First searches for optical counterparts to gravitational-wave candidate events
*The Astrophysical Journal Supplement Series*211, 7 (2014)
4. Aasi J. *, Raja, S. et al.
Gravitational waves from known pulsars: results from the initial detector era
*The Astrophysical Journal*785, 119 (2014)
5. Aasi J. *, Raja, S. et al.
Improved upper limits on the stochastic gravitational-wave background from 2009 2010 LIGO and Virgo data
*Physical Review Letters*113, 231101(1-10)(2014)
6. Aasi J. *, Raja, S. et al.
Search for gravitational radiation from intermediate mass black hole binaries in data from the second LIGO-Virgo joint science run
*Physical Review D*89, 122003(2014)
7. Aasi J. *, Raja, S. et al.
Search for gravitational wave ringdowns from perturbed intermediate mass black holes in LIGO-Virgo data from 2005-2010
*Physical Review D*89, 102006(2014)
8. Aasi J. *, Raja, S. et al.
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*Physical Review Letters*113, 011102(1-8)(2014)
9. Aasi J. *, Raja, S. et al.
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11. Ahlawat A.*, Satapathy S., Maan S. *, Sathe V.G.*, Gupta P.K.
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Polarized Raman spectroscopic investigations on hemoglobin ordering in red blood cells
*Journal of Biomedical Optics*19, 087002(1-9)(2014)
13. Ajimsha R.S., Das A.K., Joshi M.P., Kukreja L.M.
Band alignment studies of Al₂O₃/CuGaO₂ and ZnO/CuGaO₂ hetero-structures grown by pulsed laser deposition
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14. Aneesh P.M.*, Jayaraj M.K.*, Reshmi, R., Ajimsha R.S.*, Kukreja L. M., Aldrin A.*, Rojas F.*, Bertomeu J.*, Lopez-Vidrier J.*, Hernandez, S.*
Observation of room temperature photoluminescence from asymmetric CuGaO₂/ZnO/ZnMgO multiple quantum well structures
*Journal of Nanoscience and Nanotechnology*14, 42011(2014)
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A comparative study of the inner-shell and the ionic line radiation from ultra-short laser-produced magnesium plasma
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Seminar at Biomedical Technology Wing of Sri Chitra Tirunal Institute of Medical Science and Technology, Trivandrum, Oct. 8, 2014
5. Kukreja L.M.
Quantum corrections for low temperature electrical conductivity of Si_xZn_{1-x}O thin films
SPIE Colloquium, Kochi, Oct. 10, 2014
6. Kukreja L.M.
Emerging laser based manufacturing technologies for future industrial applications
American Society for Materials (ASM) International Conference on Emerging Materials and Technologies (MET 14) Ahmedabad, Dec. 4-6, 2014
7. Kumar Shailendra
Use of photoelectron spectroscopy in study of bands alignment and plasmons at the interface of semiconductors
59th DAE-Solid State Physics Symposium, Vellore, Dec.16-20, 2014
8. Kumar Shailendra
Interface plasmons in semiconductors,
National Conference on Emerging Trends in Nanoscience, Indore, Sept. 12, 2014

B. Invited Talk

1. Kamal C.
Properties of multi-layered and hybrid structures of silicene: a detailed DFT study



9. Mukhopadhyay P.K.
Development of novel ytterbium doped fiber oscillators with output in diverse temporal format for seeding of multi-stage power amplifier
National Laser Symposium (NLS-23), Tirupati, Dec. 3-6, 2014
10. Naik P.A.
Overview of the ultra-intense laser activity at RRCAT, Indore
International Conference on Ultrahigh Intensity Lasers - 2014, Goa, Oct. 13-17, 2014
11. Paul C.P.
Laser additive manufacturing,
52nd National Metallurgists' Day (NMD) and 68th Annual Technical Meeting (ATM), Pune, Nov. 12-15, 2014
12. Rawat A.
Making Indian engineers world-class
Engineers Day Theme Talk, Indore, Sept. 15, 2014
13. Rawat A.
Cognitive OTP - novel technique to establish identity of a person (human) in cyber space
28th NORDUnet Conference, Uppsala, Sweden, Sept. 23, 2014
14. Rawat A.
Campus networks deployment strategies
Workshop on Recent Trends in Communication Networks, Indore, Dec. 12, 2014
15. Rao B.S.
High brightness electron beams from laser driven plasma accelerators: prospects for compact FEL
International Workshop on Science & Technology of Free Electron Laser, Indore, Dec. 4-6, 2014
16. Rao B.S.
Progress and applications of laser plasma accelerators
International Workshop on Science & Technology of Free Electron Laser, Indore, Dec. 4-6, 2014
17. Shukla R.
High aspect ratio MEMS using deep x-ray lithography at Indus-2
School of Materials Science and Technology, Varanasi, Sept. 25, 2014
18. Singh Gurvinderjit, Tiwari V.S., Gupta P.K.
Polymorphic phase transition and enhanced piezoelectric properties in lead-free piezoelectric materials
59th DAE-Solid State Physics Symposium, Vellore, Dec. 16-20, 2014
19. Maheswar Nayak
X-ray Multilayer Optics for Indus Synchrotron Application
59th DAE-SSPS Symposium, Vellore, Tamilnadu, Dec. 16-20, 2014.

C1 National Laser Symposium (NLS-23), Tirupati, Dec. 3-6, 2014

1. Agrawal D.K., Babbar L.K., Vaishnav D., Singh Rajpal, Saini B.K., Ali S., Singh Ravindra, Choubey A., Jain R.K., Bhardwaj V., Vishwakarma S.C., Kumar Mukesh, Upadhyaya B.N., Puntambekar T.A., Bindra K.S., Oak S.M.
Ultra high vacuum compatible laser welding of SMA feedthrough and button electrode with beam position indicator for accelerator applications
2. Agrawal P. K., Muralikrishnan K., Subrahmanyam V.V.V. and Nakhe S.V.
Studies on temporal jitter and amplitude stability of copper vapor laser system pumped by IGBT based high voltage pulse power supply
3. Ashoka H, Deshpande P.P., Bhanage V.P., Navathe C.P.
Design of intelligent controller for capacitor charging power supply of high power Nd:glass laser
4. Bagchi S., Tayyab M., Upadhyay A., Ramakrishna B., Mandal T., Chakera J.A., Naik P.A., Gupta P.D.
Observation of negative ion acceleration from ultra-



- short laser pulse interaction with transparent solids
5. Banerjee C., Singh M.P.
The structure of electromagnetic field of circularly polarized counter propagating intense laser pulses
 6. Benerji N.S., Singh A., Varshnay N.K., Singh Bijendra
Improved beam characteristics of an excimer laser for material processing applications
 7. Benerji N.S., Varshnay N.K., Singh A., Singh Bijendra
Long pulse XeCl excimer laser using auto pre-pulse excitation scheme
 8. Bhardwaj V., Singh A.J., Sharma S.K., Paul C.P., Mukhopadhyay P.K., Bindra K.S., Oak S.M.
Studies on material removal rate of copper under different gas environment during DPSS green laser based micro-drilling
 9. Chakravarty Usha, Kuruvilla A., Singh Rajpal, Upadhyaya B.N., Bindra K.S., Oak S.M.
Study and generation of 17 W average power passively Q-switched Yb-doped fiber laser
 10. Chaturvedi A., Joshi M.P., Patel H.S., Mondal P., Jain B., Kukreja L.M.
Growth of TiO₂ nanoparticles in non-aqueous toluene medium using pulsed laser ablation in liquid (PLAL) technique
 11. Chaubey S., Kishore J., Sahu N.*, Kher S., Oak S.M.
Simultaneous measurement of temperature and strain using specialty fiber grating
 12. Daiya D., Sharma A.K., Naik P.A., Gupta P.D.
Theoretical studies on depolarization dynamics in flash lamp pumped large aperture Nd:glass laser rod amplifiers at higher repetition rates
 13. Daiya D., Sharma A.K., Jain A.K.*, Naik P.A., Gupta P.D.
Development of a high dynamic range second order auto-and cross-correlator for laser pulse characterization
 14. Dubey V.K., Saxena P., Singh I.J., Vora H.S.
2-D scanning and data acquisition system for detection of THz radiation
 15. George J., Bindra K.S., Oak S.M.
LOPUT green laser: a novel concept to realize single frequency green laser
 16. Gupta Pradeep K., Mukhopadhyay P.K., Singh C.P., Bindra K.S., Oak S.M.
Generation of tunable, flat-top, nanosecond duration mode-locked pulses in Yb-doped fiber laser in Figure-8 cavity configuration
 17. Jain B., Sajid A.*, Nayak J.*
Infra red spectroscopic study on the effect of heating on the trans component of commercially available edible oils used in Indian kitchen
 18. Jain R.K., John B.*, Vaidya, Ullas K.O., Singh Ravindra, Saini B.K., Singh Rajpal, Vishwakarma S.C., Choubey A., Narwat D., Agrawal D.K., Upadhyaya B.N.*, Arya R., Bindra K.S., Oak S.M.
Development of Nd:YAG laser based axial cutting technique to reduce the pull out strength of rolled joint steam generator(SG) tubes of PHWR with tube sheet
 19. Kale Y.B., Tiwari V.B., Singh Surendra, Mishra S.R., Rawat H.S.
Electromagnetically Induced Transparency in metastable ⁸⁴Kr atoms
 20. Kamath M.P., Jadhav R., Tripathi P.K., Kumar A., Kulkarni A.P., Jain S., Patwa S.R., Kumbhare M.N., Joshi A.S., Singh B., Ansari M.S., Padiyar A.S., Mundra G., Navathe C.P., Naik P.A., Gupta P.D.
Design, development and studies of efficient large sized amplifier for use in high energy, high power Nd:glass laser systems
 21. Khan K.M., Dutta S.B., Majumder S.K., Gupta P.K.
Spatially-offset Raman spectroscopy (SORS) of paraffin-embedded tissue blocks



22. Khan S., Jayabalan J., Singh Asha, Pal S., Chari R.
Carrier dynamics and photoluminescence studies of triangular quantum well in an $Al_{0.7}Ga_{0.3}As$ -GaAs heterostructure
23. Khare J., Joshi M.P., L. M. Kukreja
Raman studies of Yttria stabilized zirconia nanoparticles synthesized by laser vaporization method
24. Khare R., Shukla P. K., Shrivastava V. K., Tiwari G. N., Agarwal S. K., Mokhariwale A., Nakhe S. V.
Bandwidth fluctuation of a computer controlled picomotor tuned GIG dye laser
25. Kulkarni A.P., Kamath M.P., Padiyar A.S., Jain S., Patwa S.R., Nair A.*, Saha D., Ansari M.S., Joshi A.S., Navathe C.P., Naik P.A., Gupta P.D.
Vibration studies of flash lamp assembly by optical methods
26. Kumar Atul, Kamath M.P., Joshi A.S., Naik P.A., Gupta P.D., Singh A.K., Tiwari M.K.
Detection of the impurities in Nd doped phosphate laser glass by x-ray fluorescence technique
27. Kumar Atul, Kamath M.P., Prasad Y.B.S.R., Jain S., Kulkarni A.P., Satapathy S., Yadav Y.*, Goswami M.*, Patwa S.R., Joshi A.S., Naik P.A., Gupta P.K., Gupta P.D.
PVDF based sensor for laser produced plasma induced acoustic wave
28. Kumar Manoj Kumar, Rana L.B., Bhagat M.S., Singh Bupendra, Kukreja L.M.
Gas phase synthesis of TiO_2 nanoparticles using CW CO_2 Laser for photochemical water splitting application
29. Kumar Sandeep, Krishna H., Majumder S.K., Gupta P.K.
Raman spectroscopy for simultaneous determination of urea and creatinine
30. Kumbhkar U. , Kumar J., Mahakud R., Ghosh, U. K., Agrawal S. K., Prakash Om, Dixit S. K., Nakhe S. V.
Efficient writing of fiber Bragg grating in telecommunication optical fiber by utilizing indigenously developed hydrogen loading system
31. Mishra G.K., Sharma S. K. , Singh A. J. , Prakash Om , Mukhopadhyay P. K. , Bindra K.S., Dixit S. K., Nakhe S. V.
Studies on dye laser pumped by high repetition rate frequency doubled diode pumped Nd: YAG laser
32. Mishra G.K. Kumar Abhay, Prakash Om, Dixit S. K., Nakhe S. V.
CFD analysis of ~20 kHz pulse repetition rate dye laser
33. Mishra S.K., Kumar U., Preamsingh C.H.S., Rawat B.S., Ittoop M.O., Kumar A., Bhargava P., Paul C.P., Kukreja L.M.
Investigating powder, wire and hybrid feeding for laser rapid manufacturing
34. Mishra R.K., Agrawal S.K., Raju D.V.S., Tiwari G.N., Nakhe S.V.
Development of Master Oscillator Power Amplifier Set-up of Copper Vapor Lasers using combination of Thyatron & IGBT based power supplies
35. Misra Pushkar, Jain R.K., Kuruvilla A., Singh Rajpal, Upadhyaya B.N., Bindra K.S., Oak S.M.
Development of 215 W of narrow linewidth all-fiber Yb-doped CW fiber laser based on MOPA configuration
36. Pathak Ayukt Kumar, Ansari M.A., Tiwari Shradha, Deshpande P.P., Navathe C.P.
Automation of laser rapid manufacturing system
37. Patidar R.K., Sharma A.K., Daiya D., Sharma J., Naik P.A., Gupta P.D.
A diode pumped Nd:glass regenerative amplifier for chirped pulse amplification based laser system
38. Raj Mohan S., Joshi M.P., Ghosh S.C., Kukreja L.M.
Influence of film morphology on charge transport in drop casted MDMO PPV thin films
39. Ram S.P., Tiwari S.K., Mishra S.R., Rawat H.S.
Splitting a magnetically trapped cold atom cloud using



- a sheet type laser beam
40. Rao B.T., Verma S., Verma P., Thakur T., Ittoop M.O., Rawat B.S., Ghosh C., Joshi M.P., Singh B.N., Kukreja L.M.
Liquid phase pulsed laser ablation based synthesis of plasmonic silver nanoparticles at different pH and their interaction with Rhodamine6G dye
 41. Rathore R., Arora V., Mandal T., Padiyar A., Chakera J.A., Naik P.A., Gupta P.D.
Highly repetitive ultra-short collimated Kx-ray source produced by high intensity laser pulse irradiation
 42. Sahu Y., Singh Vikas, Saha D.D., VermaAbrat, Ansari M.S., Navathe C.P.
Development of integrated flash lamp test set-up
 43. Sharma P., Kumar S., Verma Y., Gupta P.K.
Three dimensional velocity vector measurement using three beam based spectral domain doppler optical coherence tomography
 44. Sharma S.K., Singh A.J., Gupta Pradeep K., Mukhopadhyay P.K., Bindra K.S., Oak S.M.
104 W of continuous wave (CW) green beam generation by intracavity frequency doubling of diode side pumped Nd:YAG laser
 45. Sharma S.K., Singh Yeshpal, Verma S., Bartwal K.S., Gupta P.K.
Unidirectional growth of DKDP crystal along [001] direction by solute feeding technique and its characterization
 46. Shrivastava V. K., Shukla P. K., Tiwari G. N., Nakhe S. V., Khare R.
A narrow bandwidth dye laser with intracavity capillaries
 47. Shukla V., Chari R., Singh C.P., Bindra K.S.
Optical limiting properties of Iron nanoparticles colloid
 48. Singh Asha, Khan S., Jayabalan J., Chari R.
Fluorescence quenching of CdTe quantum dots in the vicinity of silver nanoparticles
 49. Singh A.J., Sharma S.K., Gupta Pradeep K., Singh C.P., Mukhopadhyay P.K., Bindra K.S., Oak S.M.
—Studies on single frequency intracavity frequency doubled Nd:YVO4 laser in a unidirectional ring cavity configuration
 50. Singh Bhupinder, Saha D.D., VermaAbrat, Ansari M.S., Navathe C.P.
Precision capacitor bank charging control for stable flashlamp pumping of regenerative amplifier in CPA laser system
 51. Singh C.P., Ranganathan K., Hedao P., Soni J.K., Bindra K.S., Oak S.M.
Generation and characterization of laser marked profiles on stainless steel by Qswitched diode pumped Nd:YVO4 laser
 52. Singh C. P., Gupta Pradeep K., Mukhopadhyay P.K., Bindra K.S., Oak S.M.
Tunable bound pulses in ultra-long Yb-doped fiber laser oscillator
 53. Singh Ravindra, Jain R.K., Vishwakarma S.C., Ali S., Choubey A., Agrawal D.K., Singh Rajpal, Saini B.K., Arya R., Upadhyaya B.N., Bindra K.S., Oak S.M.
Single pass pulsed Nd:YAG laser cutting of up to 35 mm thick stainless steel
 54. Singh Surendra, Tiwari V.B., Kale Y.B., Mishra S.R., Rawat H.S.
Temperature measurement of cold atom cloud in metastable Krypton MOT by transient probe absorption
 55. Singh Vivek, Tiwari V. B., Mishra S.R., Rawat H.S.
Loading of a magneto-optical trap (MOT) using a pulsed Rb-dispenser source
 56. Singhal H., Kimb H.T.*, Yun H.*, Kim I.J.*, Pae K.H., Sung J.H.*, Lee S.K., Jeong T.M., Nam C.H.
Analysis of Thomson Scattering during Laser Wakefield electron acceleration using PW laser pulses
 57. Singhal H., Kim I.J.*, Pae K.H.*, Kim C.M.*, Kim H.T.*, Lee C-L*, Choi I.W.*, Sung J.H.*, Lee S.K.*, Lee H.W.*, Nickles P.V.*, Jeong T.M.*, Nam C.H.*



Experimental investigation on the spectra of scattered lights during the radiation pressure acceleration of protons with PW laser pulses

58. Soharab M., Bhaumik I., Bhatt R., Saxena A., Karnal A.K., Gupta P.K.
Effect of Cr co-doping in Yb:YVO₄ single crystal, a self-Q-switched laser gain medium
59. Soni J.K., Hedao P., Ranganathan K., Bindra K.S., Oak S.M.
Development of diode-end-pumped Q-switched Nd:YAG laser marker
60. Srikanth G., Kuruvilla A., Singh Rajpal, Upadhyay B.N., Bindra K.S., Oak S.M.
Development of eye-safe Yb-free Er-doped LMA fiber laser emitting more than 12 W of CW power
61. Tiwari G. N., Shukla P. K., Mishra R. K., Shrivastava V. K., Khare R.
Injection seeded copper bromide laser oscillator with hydrogen additive
62. Tiwari S.K., Ram S.P., Mishra S.R., Rawat H.S.
Effect of cooling beams size asymmetry on number and temperature of atoms in a magneto-optical trap
63. Valecha A., Joshi M., Bhanage V.P., Deshpande P.P., Navathe C.P.
Data-acquisition system of flashlamp monitoring for table-top terawatt laser
64. Verma S., Rao B.T., Thakur Tithi, Bhartiya S., Kukreja L.M.
Studies on localized surface plasmon resonance responses in silver copper and their bimetallic films grown by pulsed laser deposition
65. Vora H.S., Jain Rajiv, Saxena P.
Padma - an advanced image acquisition and on-line analysis solution for laser oriented experiments

C2 29th National Symposium on Plasma Science & Technology, Kottayam, Dec. 8-11, 2014

1. Bagchi S., Tayyab M., Upadhyay A., Ramakrishna B., Mandal T., Chakera J.A., Naik P.A., Gupta P.D.
Production of energetic neutrals from interaction of ultra-short laser pulses with transparent solid targets
2. Banerjee C., Singh M.P.
On pair production with focused ultrafast intense laser pulses: role of polarization
3. Barnwal S., Prasad Y.B.S.R., Nigam S., Aneesh K., Naik P.A., Navathe C.P., Gupta P.D.
Measurement of gain-coefficient of 46.9 nm capillary discharge soft x-ray laser
4. Barnwal S., Nigam S., Aneesh K., Prasad Y.B.S.R., Tripathi P.K., Naik P.A., Navathe C.P., Gupta P.D.
Study on nitrogen Z-pinch plasma for x-ray lasing
5. Chakravarty Uday
Coupled LC nano-circuit model for interacting nanostructures.
6. Kumar M., Chakravarty Uday, Rathore R., Chakera J.A., Naik P.A., Gupta P.D.
Intensity enhancement of harmonic generation from plasma plume using apertured laser beam
7. Prasad Y.B.S.R., Barnwal S., Patidar R., Sharma A.K., Joshi A.S., Naik P.A., Gupta P.D.
Chirped pulse shadowgraphy for studying the evolution of shock wave velocity
8. Prasad Y.B.S.R., Barnwal S., Kamath M.P., Kumar A., Joshi A.S., Naik P.A., Gupta P.D.
Temporal variation of shock wave velocity in soda-lime glass.
9. Tayyab M., Bagchi S., Ramakrishna B., Mandal T., Upadhyay A., Chakera J.A., Naik P.A., Gupta P.D.
Studies on proton acceleration from layered targets



10. Upadhyay A., Bagchi S., Chakera J.A., Naik P.A., Gupta P.D.
Effect of relativistic transparency on proton acceleration in thin foils
11. Upadhyay A., Tayyab M., Bagchi S., Ramakrishna B., Mandal T., Chakera J.A., Naik P.A., Gupta P.D.
Pulse chirp controlled proton acceleration from thin foil targets

C3 Others Seminars/Conference Presentation

1. Agrawal S.K., Mokhariwale A., Kumar J., Mahakud R., Prakash O., Dixit S.K., Nakhe S.V.
Development of fiber bragg grating sensor inscription set up based on copper vapour laser
3rd DAE-BRNS National Symposium on Advances in Control and Instrumentation (SACI-2014), Mumbai, Nov. 24-26, 2014
2. Ahlawat S., Chowdhury A., Kumar N., Uppal A., Verma R.S., Gupta P.K.
Polarisation sensitive Raman spectroscopy of an optically trapped cell
14th International Conference on Raman Spectroscopy, Jena, Germany, Aug. 10-15, 2014.
3. Ansari M.S., Singh B., Ravindranath S.V.G.*, Bhatia M.S.*
Multi-resolution analysis of partial discharge current in low pressure flash lamps
26th International Symposium on Discharges and Electrical Insulation in Vacuum (ISDEIV-2014), Mumbai, Sept. 28 - Oct. 3, 2014
4. Das Kaustuv
Real time monitoring of molecular transport across a bilayer by interfacial second harmonic generation spectroscopy
Advances in Spectroscopy and Ultrafast Dynamics, an International Conference on Spectroscopy for Applications in Biology, Materials and Atmosphere, Kolkata, Dec. 12-14, 2014
5. Faillace L.*, Agustsson R.*, Pant K.K., Kumar A.
Injector system for the IR-FEL at RRCAT
27th International Linear Accelerator Conference, Geneva, Switzerland, Aug. 30 - Sept. 05, 2014
6. Fatnani P. et al
Status of Indus-2 Control System
10th International Workshop on Personal Computers and Particle Accelerator Controls (PCaPAC-2014), Karlsruhe, Germany, Oct. 14 - 17 Oct, 2014
7. Fatnani P., Agrawal R.K., Srivastava B.S.K.
Eplanner Software for Machine Activities Management—
10th International Workshop on Personal Computers and Particle Accelerator Controls (PCaPAC-2014), Karlsruhe, Germany, Oct. 14-17, 2014
8. Ganesh P., Sundar S., Sunil Kumar B., Gupta R.K., Kaul R., Ranganathan K., Nagpure D.C., Bindra K.S., Kain V., Oak S.M., Kukreja L.M.
Enhancement of stress corrosion cracking resistance of machined type 304L stainless steel through laser surface treatment
International Corrosion Conference (CORCON 2014), Mumbai Nov. 12-15, 2014
9. Gandhi M.L., Lingam S., Thakurta A.C.
Bipolar active shunt with bidirectional utility interface for the quadrupole magnets of Indus-2
9th IEEE International Conference on Industrial and Information Systems (ICIIS), Gwalior, Dec. 15-17, 2014
10. Gupta Pradeep K., Mukhopadhyay P.K., Singh C.P., Singh A.J., Sharma S.K., Bindra K.S., Oak S.M.
Efficient, high power, low spectral distortion and ASE free amplification of mode locked Yb-doped fiber laser
1st International Conference on Opto-Electronics and Applied Optics (IEMOPTRONIX 2014), Kolkata, Dec. 17-18, 2014
11. Gupta R.K.*, Ganesh P., Sundar R., Sunil Kumar B.*, R. Kaul, Ranaganathan K., Nagpure D.C., Bindra K.S., Kain V., Oak S.M., Kukreja L.M.
Enhancement of stress corrosion cracking resistance of machined type 304L stainless steel through laser



- surface treatment, Proc. *International Conference and Expo on Corrosion - CORCON 2014*, Mumbai, Nov. 12-15, 2014
12. Jana A.R., Kumar Vinit
Design studies for medium and high beta SCRF cavities for Indian spallation neutron source
27th International Linear Accelerator Conference, Geneva, Switzerland, Aug. 30 - Sept. 05, 2014
 13. Joshi S.C., Raghvendra S., Suhane S., Kumar M., Mohania P., Chauhan A., Fatnani P., Shrivastava P., Kush P.K., Gupta P.D.
Commissioning of vertical test stand facility for 2 K testing of superconducting cavities at RRCAT
27th Linear Accelerator Conference (LINAC-2014), Geneva, Switzerland, Sept. 1-5, 2014.
 14. Joshi S.C., Kane G.V., Sharma N.K., Chaturvedi Anurag, Raghavendra S., Das K.K., Chauhan S.K., Kokil S.V., Oraon B.
Development of 3 MeV prototype RFQ structure for high intensity proton linac for ISNS
27th Linear Accelerator Conference (LINAC-2014), Geneva, Switzerland, Sept. 1-5, 2014.
 15. Joshi S.C., Raghavendra S., Jain V.K., Puntambekar A., Khare P., Dwivedi J., Mundra G., Kush P.K., Shrivastava P., Roy S.B., Hannurkar P.R., Gupta P.D.
Development of superconducting cavities and related infrastructure for high intensity proton linac for spallation neutron source
27th Linear Accelerator Conference (LINAC-2014), Geneva, Switzerland, Sept. 1-5, 2014.
 16. Kamal C.
Ab initio Studies on properties of nanostructures
59th DAE-Solid State Physics Symposium, Vellore, Dec.16-20, 2014
 17. Khare J., Rajput P., Joshi M.P., Jha S.N., Bhattacharyya D., Kukreja L.M.
X-ray absorption spectroscopy of yttria stabilized zirconia nanoparticles generated by laser evaporation method: Effect of mode of laser operation
23rd International Conference on Processing and Fabrication of Advanced Materials (PFAM 2014), Roorkee, Dec. 5-7, 2014
 18. Kumar J., Prakash O., Mahakud R., Agrawal S.K., Dixit S.K., Nakhe S.V.
Temperature sustainability of type IIa FBGs written in different Ge doped fiber
Photonics-2014: 12th International conference on Fiber Optics and Photonics, Kharagpur, Dec. 13-16, 2014
 19. Kumar Vinit
Design studies for medium and high beta SCRF cavities for Indian spallation neutron source
27th International Linear Accelerator Conference, Geneva, Switzerland, Aug. 30 - Sept. 05, 2014
 20. Kumar Sandeep, Majumder S.K., Gupta P.K.,
Detection of glucose in saliva using Raman spectroscopic technique- a feasibility study
12th International Conference on Fiber Optics and Photonics (Photonics-2014), Kharagpur, Dec. 13-16, 2014
 21. Kumar Sandeep, Majumder S.K., Gupta P.K., Patidar H., Kulkarni C.
Raman spectroscopy for estimation of urea in urine
12th International Conference on Fiber Optics and Photonics (Photonics-2014), Kharagpur, Dec. 13-16, 2014
 22. Kumar J., Prakash O., Mahakud R., Agrawal S.K., Dixit S.K., Nakhe S.V.
Temperature sustainability of type IIa FBGs written in different Gedoped fiber
12th International Conference on Fiber Optics and Photonics (Photonics-2014), Kharagpur, Dec. 13-16, 2014
 23. Mahakud R., Kumar J., Prakash O., Dixit S.K., Nakhe S.V.
Optimization of FBG writing by bi-prism interferometer
12th International Conference on Fiber Optics and



- Photonics (Photonics-2014)*, Kharagpur, Dec. 13-16, 2014
24. Mandal T., Arora V., Bagchi S., Tayyab M., Rathore R., Chakera J.A., Naik P.A., Gupta P.D.
Particle induced K-alpha x-ray emission from laser produced proton beam
International Conference on Ultrahigh Intensity Lasers - 2014, Goa, Oct. 13-17, 2014
25. Nirsanametla Y.*, Swarup B.*, Paul C.P., Kukreja L.M.
An experimental investigation on fiber laser welding at controlled inert gas atmosphere
Proc. 5th International & 26th All India Manufacturing Technology, Design and Research Conference (AIMTDR 2014), Guwahati, Dec. 12-14, 2014
26. Pathak S.K., Singh Gurvinderjit, Gupta S.M., Tiwari V.S., Gupta P.K.
Effect of SiO₂ on microstructure and transparency of Nd:Y₂O₃ ceramics
59th DAE-Solid State Physics Symposium, Vellore, Dec. 16-20, 2014
27. Ramakrishna B.
Laser driven radiation pressure acceleration of ions with thin foils
International Conference on Ultrahigh Intensity Lasers - 2014, Goa, Oct. 13-17, 2014
28. Rao B.S., Moorti A., Khan R.A., Chakera J.A., Naik P.A., Gupta P.D.
Laser-driven plasma-based electron acceleration in nitrogen and argon gas jets
International Conference on Ultrahigh Intensity Lasers - 2014, Goa, Oct. 13-17, 2014
29. Rao B.S., Moorti A., Chakera J.A., Naik P.A., Gupta P.D.
High quality electron beams from laser plasma acceleration using gas jets and preformed plasmas from solids
International Symposium on Ultrafast Intense Laser Science - XIII (ISUILS-13), Jodhpur, Oct. 5-10, 2014
30. Selvamani R., Singh Gurvinderjit, Sinha A.K., Tiwari V.S., Gupta P.K.
A monoclinic-to-tetragonal crossover in Na_{0.5}Bi_{0.5}TiO₃-BaZrO₃ solid solution
59th DAE-Solid State Physics Symposium, Vellore, Dec. 16-20, 2014
31. Sharma J., Daiya D., Sharma A.K., Patidar R.K., Naik P.A., Gupta P.D.
Time multiplexed pulse amplification approach for enhanced extraction efficiency of laser amplifier
International Conference on Ultrahigh Intensity Lasers - 2014, Goa, Oct. 13-17, 2014
32. Singh Alok, Borage M., Tiwari S., Thakurta A.C.
Two-quadrant power supply for fast current ramping application
IEEE International Conference on Power Electronics, Drives and Energy Systems (PEDES-2014), Mumbai, Dec. 16-19, 2014
33. Tayyab M., Bagchi S., Ramakrishna B., Mandal T., Chakera J.A., Naik P.A., Gupta P.D.
Effect of laser chirp on proton acceleration in thin foil targets
17th International Conference on Plasma Physics (ICPP 2014), Lisbon, Portugal, Sept. 15-19, 2014
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