



A. Journal Articles

1. Aasi J. et al. *, Raja S.
Directed search for continuous gravitational waves from the Galactic center
Physical Review D **88**, 102002(1-12) (2013)
2. Aasi J*, et al., Raja S.
Enhanced sensitivity of the LIGO gravitational wave detector by using squeezed states of light
Nature Photonics **7**, 613-619 (2013)
3. Ahlawat Anju*, Satapathy S., Sathe V.G.*, Choudhary R.J.*, Gupta P.K.
Evidence of spin phonon coupling in magnetoelectric NiFe₂O₄/PMN-PT composite.
Applied Physics Letters **103**, 252902 (2013)
4. Ahlawat Sunita, Kumar N., Dasgupta R., Verma R.S., Uppal A., Gupta P.K.
Raman spectroscopic investigations on optical trap induced deoxygenation of red blood cells.
Applied Physics Letters **103**, 183704 (2013)
5. Arora V., Bagchi S., Gupta M.*, Chakera J.A., Gupta A.*, Naik P.A., Chaddah P., Gupta P.D.
Study of strain propagation in laser irradiated silicon crystal by time-resolved diffraction of K- α x-ray probe of different photon energies
Journal of Applied Physics **114**, 023302(1-5) (2013)
6. Athiray P.S.*, Sudhakar M.*, Tiwari M.K., Narendranath S.*, Lodha G.S., Deb S.K., Sreekumar P.*, Dash S.K.*
Experimental validation of XRF inversion code for Chandrayaan-1
Planetary and Space Science **89**, 183-187 (2013)
7. Badera N*, Godbole B*, Srivastava S.B.*, Vishwakarma P.N.*, Jain D.*, Sharath Chandra L.S., Ganesan V.*
Photoconductivity of cobalt doped CdS thin films
Physics Procedia **49**, 190-198 (2013)
8. Banerjee M.*, Majumdar A.K.*, Rai S., Tiwari P., Lodha G.S., Banerjee A.*, Nair K.G.M.*, Sarkar J.*, Choudhary R.J.*, Phase D.M.*
Room temperature ferromagnetism down to 10 nanometer Ni-Fe-Mo alloy films
Thin Solid Films **545**, 385-390 (2013)
9. Bhaumik I., Ganesamoorthy S.*, Bhatt Rajeev, Saxena A., Karnal A.K., Gupta P.K.
Growth of Nd:Cr:YVO₄ single crystals by the optical floating zone technique under different oxygen partial pressures to control the oxidation state of chromium
Crystal Growth & Design **13**, 38783883 (2013)
10. Biswas B.
A model of field and spherical aberration in soft/hard edge solenoid magnets
Review of Scientific Instruments **84**, 103301(1-7) (2013)
11. Biswas B., Kale U., Khurshed M., Kumar A., Kumar V., Lal S., Nerpagar P, Patel A, Pant K.K.
Signature of build-up of coherence in an indigenously built compact ultrafast terahertz free electron set up
Current Science **105**, (00113891) (2013)
12. Borage M., Tiwari S.
A 25 kW, 25 kHz induction heating power supply for MOVPE system using L-LC resonant inverter
Advances in Power Electronics, 584129(1-10) (2013)
13. Borthakur P.R.*, Hazarika S.*, Gupta P.K., Barua A.G.*
405 nm- excited fluorescence spectra of the juice of the lemon (citrus x limon)
Food Biophysics **8**, 297-301 (2013)
14. Brahma S.*, Kukreja L.M., Krupanidhi S.B.*, Shivashankar S.A.*
Contrast in luminescence characteristics (intense UV to bright visible light) of ZnO nanostructures with the variation in microstructure
Physica Status Solidi A **210**, 2600-2610 (2013)
15. Chakrabarti A., Siewert M.*, Roy T.*, Mondal K., Banerjee A., Gruner M.E.*, Entel P.*
Ab initio studies of effect of copper substitution on the electronic and magnetic properties of Ni₂MnGa and Mn₂NiGa
Physical Review B **88**, 174116(1-11) (2013)
16. Chakravarty U., Rao B.S., Arora V., Upadhyay A., Singhal H., Naik P.A., Chakera J.A., Mukherjee C., Gupta, P.D.
Enhanced water window x-ray emission from in situ formed carbon clusters irradiated by intense ultra-short laser pulses
Applied Physics Letters **103**, 054107(1-4) (2013)
17. Chatterjee S., Kumar Y. Pavan
Determination of the index inhomogeneity of transparent isotropic optical material with a dual sagnac interferometer
Applied Optics **52**, 4820-4826 (2013)



18. Chopade S.S.*, Barve S.A.*, Thulasi Raman K.H.*, Chand N.*, Deo M.N.*, Biswas A.*, Rai S., Lodha G.S., Rao G.M.*, Patil D.S.*
RF plasma MOCVD of Y_2O_3 thin films: effect of RF self-bias on the substrates during deposition
Applied Surface Science 385, 524-531 (2013)
19. Choubey Ambar, Vishwakarma S.C., Misra P., Jain R.K., Agrawal D.K., Arya R., Upadhyaya B.N., Oak S.M.
A highly efficient and compact long pulse Nd:YAG rod laser with 540 J of pulse energy for welding application
Review of Scientific Instruments 84, 073108(1-8) (2013)
20. Choubey Ambar, Jain R.K., Vishwakarma S.C., Upadhyaya B.N., Oak S.M.
Nd:YAG laser assisted drilling and spallation of rocks
Advanced Science, Engineering and Medicine 5, 905-911 (2013)
21. Choubey Ambar, Jain R.K., Vishwakarma S.C., Upadhyaya B.N.
Performance improvement of long pulse Nd:YAG laser using advanced diffuse ceramic reflectors
Materials Focus 2013 2, 362-368 (2013)
22. Choubey Ambar, Singh Amol, Modi M.H., Upadhyaya B.N., Lodha G.S., Oak S.M.
Study on effective cleaning of gold layer from fused silica mirrors using nanosecond-pulsed Nd:YAG laser
Applied Optics 52, 7540-7548 (2013)
23. Daiya D., Sharma A.K., Joshi A.S., Naik P.A., Gupta P.D.
Theoretical and experimental studies on single tiled grating pulse compressor
Optics Communications 309, 15-20 (2013)
24. Das Amit K., Misra P., Ajimsha R.S., Bose A., Joshi S.C., Porwal S., Sharma T.K., Oak S.M., Kukreja L.M.
Effect of Mg diffusion on photoluminescence spectra of MgZnO/ZnO bi-layers annealed at different temperatures
Journal of Applied Physics 114, 183103 (2013)
25. Entel P.*, Siewert M.*, Gruner M.E.*, Chakrabarti A., Barman S.R.*, Sokolovskiy V.V.*, Buchelnikov V.D.*
Optimization of smart Heusler alloys from first principles
Journal of Alloys and Compounds 577, 107-112 (2013)
26. Fakhri A.A., Prajapati S.K., Ghodke A.D., Singh Gurnam
Studies of beam injection with a compensated bump and uncompensated bump in a synchrotron.
Review of Scientific Instruments 84, 083303(1-10) (2013)
27. Ganesh P., Vinod Kumar A.*, Thinaharan C.*, Krishna N.G.*, George R.P.*, Parvathavarthini N.*, Rai S.K., Kaul R., Mudali U.K.*, Kukreja L.M.
Enhancement of intergranular corrosion resistance of type 304 stainless steel through a novel surface thermo-mechanical treatment
Surface and Coatings Technology 232, 920-927 (2013)
28. Ganesh P., Kumar H., Kaul R., Kukreja L.M.
Microstructural characterisation of laser surface treated AISI 1040 steel with portable X-ray stress analyzer
Surface Engineering 29, 600-607 (2013)
29. Ghodke D.V., Muralikrishnan K., Singh Bijendra
New multiplexed all solid state pulser for high power wide aperture kinetically enhanced copper vapor laser
Review of Scientific Instruments 84, 113102 (2013)
30. Godbole B.*, Badera N.*, Shrivastava S.B.*, Jain D.*, Chandra Sharath L.S., Ganesan V.*
Synthesis, structural, electrical and magnetic studies of Ni-Ferrite nanoparticles
Physics Procedia 49, 58-66 (2013)
31. Gopi D.*, Rajeswari D.*, Ramya S.*, Sekar M., Dwivedi J., Kavitha L.*, Ramaseshan R.*
Enhanced corrosion resistance of strontium hydroxyapatite coating on electron beam treated surgical grade stainless steel
Applied Surface Science 286, 83-90 (2013)
32. Gupta P., Ganguli T., Svec P.*, Sinha A.K., Gupta A.*, Svec Sr. P.*, Singh M.N., Reddy V.R.*, Deb S.K.
Effect of Co addition on the atomic ordering of FeCo-phase in nanocrystalline $Fe_{81-x}Co_xNb_7B_{12}$ alloys (x520.25, 27, 40.5, 54, 60.75): an anomalous diffraction and Mossbauer study
Journal of Applied Physics 114, 083516(1-9) (2013)
33. Jain Akhilesh, Sharma D.K., Gupta A.K., Hannurkar P.R., Pathak, S.K.*
Compact solid state radio frequency amplifiers in kW regime for particle accelerator subsystems
Sadhana 38, 667-678 (2013)

34. Jain P.K.*, Kane S., Garg C.
High voltage control for ionized chamber
International Journal of Computer Applications 77, 1-3 (2013)
35. Jain S.K., Senecha V.K., Naik P.A., Hannurkar P.R., Joshi S.C.
Microwave power coupling with electron cyclotron resonance plasma using Langmuir probe
Pramana: Journal of Physics 81, 157-167 (2013)
36. Jain V., Bhandarkar U.V.*, Joshi S.C., Krishnagopal S.*
Note: Matching index technique for avoiding higher order mode resonance in accelerators: INDUS-2 accelerator as a case study
Review of Scientific Instruments 84, 086101 (2013)
37. Jangir R., Ganguli T., Porwal S., Tiwari P., Rai S.K., Bhaumik I., Kukreja L.M., Gupta P.K., Deb S.K.
Applicability of Langmuir equation to oxygen pressure dependent photoluminescence from BGa_2O_3 nanostructures
Journal of Applied Physics 114, 074309(1-5) (2013)
38. Jat S.K.*, Vijayan N.*, Krishna A., Philip J.*, Verma S., Bdiqin I.*, Singh Budhendra*, Bhagavannarayana G.*, Halder S.K.*
Nucleation kinetics, growth, mechanical, thermal and optical characterization of sulphamic acid single crystal
Cryst Eng Comm 15, 10034-10042 (2013)
39. Jhavar S.*, Paul C.P., Jain N.K.*
Causes of failure and repairing options for dies and molds: a review
Engineering Failure Analysis 34, 519-535 (2013)
40. Khandelwal A., Sharma V.K., Chandra L.S. Sharath, Singh M.N., Sinha A.K., Chattopadhyay M.K.
Magnetic properties of the ternary aluminide $TbFe_2Al_{10}$
Physica Scripta 88, 035706(1-8) (2013)
41. Kher S., Chaubey S., Kishore J., Oak S.M.
Detection of fuel adulteration with high sensitivity using turnaround point long period fiber gratings in B/Ge doped fibers
IEEE Sensor Journal 13, 4482-4486 (2013)
42. Kher S., Chaubey S., Oak S.M.
Long period fiber grating based nuclear radiation sensors for high level dose applications
Instrumentation Science & Technology 41, 1-6 (2013)
43. Kolli B.*, Pandey S., Mishra S.P.*, Kanai T.*, Joshi M.P., Mohan Raj S., Dhama T.S., Kukreja L.M., Samui A.B.*
Synthesis and characterization of azo bisbenzylidene-based polymers for second order nonlinear optics
Journal of Polymer Science Part A: Polymer Chemistry 51, 4317-4324 (2013)
44. Krishna H., Majumder S.K., Chaturvedi P.*, Gupta P.K.
Anatomical variability of in vivo Raman spectra of normal oral cavity and its effect on oral tissue classification
Biomedical Spectroscopy and Imaging 2, 199-217 (2013)
45. Krishna H., Majumder S.K., Chaturvedi P.*, Sidramesh M.*, Gupta P.K.
In vivo Raman spectroscopy for detection of oral neoplasia: a pilot clinical study
Journal of Biophotonics 1, 1-12 (2013)
46. Kulkarni N.S.
Three-dimensional simulation studies of 10 MeV, 352.2 MHz drift tube linac
Pramana: Journal of Physics 80, 971-981 (2013)
47. Kumar Abhay, Ganesh P., Kaul R., Mondal P., Tiwari P., Srivastava A.K., Soni R.K., Kukreja L.M.,
Titanium-mediated tribo-chemically activated cold welding of aluminum
Chem. Mater. Eng. J, 116-121 (2013)
48. Kumar M., Singhal H., Chakera J.A., Naik P.A., Khan R.A., Gupta P.D.
Study of the spatial coherence of high order harmonic radiation generated from pre-formed plasma plumes
Journal of Applied Physics 114, 033112(1-7) (2013)
49. 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 process parameters
Optics & Laser Technology 46, 29-36 (2013)
50. Kumar Pankaj, Kumar J.K., Prakash O., Saini V.K., Dixit S.K., Nakhe S.V.
Studies on the optogalvanic effect and isotope-selective excitation of ytterbium in a hollow cathode discharge lamp using a pulsed dye laser
Applied Spectroscopy 67, 1036-1041 (2013)



51. Kumar Pradeep, Ghodke A.D., Karnewar A.K., Holikatti A.C., Yadav S., Puntambekar T.A., Singh G., Singh P.
Measurements of aperture and beam lifetime using movable beam scrapers in Indus-2 electron storage ring
Review of Scientific Instruments **84**, 123301 (2013)
52. Kumar Vijay, Raja Sekhar B.N., Rai V.N., Singh P.S.*, Sivasubramanian V.*, Deb S.K., Jagatap B.N.
Optical properties of sodium salicylate as a wavelength shifter under the effect of synchrotron radiation
Asian Journal of Physics **22**, 63 (2013)
53. Lee K.H.*, Park S.B.*, Singhal H., Nam C.H.*
Ultrafast direct imaging using a single high harmonic burst
Optics Letters **38**, 1253-1255 (2013)
54. Leela C.*, Bagchi S.K., Rakesh V.*, Tewari S.P.*, Kiran P.P.*
Dynamics of laser induced micro-shock waves and hot core plasma in quiescent air
Laser and Particle Beams **31**, 263-272 (2013)
55. Mahakud R., Kumar J., Prakash O., Dixit S.K.
Study of the nonuniform behavior of temperature sensitivity in bare and embedded fiber Bragg gratings: experimental results and analysis.
Applied Optics **52**, 7570-7579 (2013)
56. Mahakud R., Kumar J., Prakash O., Dixit S.K.
Analysis of ultraviolet fringes contrast on first and second order Fiber Bragg gratings written by prism interferometers
Optical Engineering **52**, 076114(1-8) (2013)
57. Matin Md., Sharath Chandra L.S., Chattopadhyay M.K., Singh M.N., Sinha A.K., Roy S.B.
High field paramagnetic effect in the superconducting state of $Ti_{0.8}V_{0.2}$ alloy
Superconductor Science and Technology **26**, 115005(1-7) (2013)
58. 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)
59. Mohan S.R., Singh M.P., Joshi M.P., Kukreja L.M.
Monte Carlo simulation of carrier diffusion in organic thin films with morphological inhomogeneity
The Journal of Physical Chemistry C **117**, 24663-24672
60. Mohania P., Mahawar A., Shrivastava P., Gupta P.D.
A compact 10 kW, 476 MHz solid state radio frequency amplifier for pre-buncher cavity of free electron laser injector linear accelerator
Review of Scientific Instruments **84**, 094703(1-7) (2013)
61. Mohanta P.*, Singh D.*, Kumar R., Ganguli T., Srinivasa R.S.*, Major S.S.*
Effect of ZnO buffer layer thickness on the epitaxial growth of GaN by reactive magnetron sputtering
Thin Solid Films **544**, 238-243 (2013)
62. 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)
63. Mukhopadhyay P.K., Gupta P.K., Bindra K.S., Oak S.M.
Note: Amplification characteristics of all-normal-dispersion mode-locked Yb-doped fiber laser: Influence of input pulse shape
Review of Scientific Instruments **84**, 076107 (2013)
64. Nayak M., Lodha G.S.
Approach to combine structural with chemical composition profiles using resonant X-ray scattering
Journal of Applied Crystallography **46**, 1569-1575 (2013)
65. Nayak M., Lodha, G.S.
Chemical selective microstructural analysis of thin film using resonant x-ray reflectivity
Journal of Applied Physics **114**, 023505(1-8) (2013)
66. Pandey S.K.*, Mukherjee C., Mishra P., Gupta M.*, Barman S.R.*, D Souza S.W.*, Mukherjee S.*
Effect of growth temperature on structural, electrical and optical properties of dual ion beam sputtered ZnO thin films
Journal of Materials Science: Materials in Electronics **24**, 2541-2547 (2013)
67. Pant B.K.*, Sundar R., Kumar H., Kaul R., Pavan A.H.V.*, Ranganathan K., Bindra K.S., Oak S.M., Kukreja, L.M.
Studies towards development of laser peening technology for martensitic stainless steel and titanium alloys for steam turbine applications



- Materials Science and Engineering: A** 587, 352-358 (2013)
68. Phadte D.S., Patidar C.B.
Effect of nonlinear radiofrequency electromagnetic fields on the emittance of bunched beams
Journal of Instrumentation 8, 1-13 (2013)
69. Prakash O., Mahakud R., Nakhe S.V., Dixit S.K.
Effect of pulse to pulse variation of divergence, pointing and amplitude of copper vapor laser radiations on their second harmonic and sum frequency conversion
Optics & Laser Technology 50, 43-50 (2013)
70. Prasad A.V.*, Misra P., Ahirwar G.*
A study on structural and optical properties of Mg_xZn_{1-x}O thin films using pulsed laser deposition (PLD)
Research Journal of Physical Sciences 1, 11-14 (2013)
71. Ramaniah L.M.*, Kamal C., Kshirsagar R.J.*, Chakrabarti A., Banerjee Arup
How universal are hydrogen bond correlations: a density functional study of intramolecular hydrogen bonding in low-energy conformers of -amino acids
Molecular Physics 1, 10 (2013)
72. Ramesh T.*, Shinde R.S., Murthy S.R.*
Synthesis and characterization of nanocrystalline Ni_{0.94}Co_{0.03}Mn_{0.04}Cu_{0.03}Fe_{1.96-x}Al_xO₄ ferrites for microwave device applications
Journal of Magnetism and Magnetic Materials 345, 276-281 (2013)
73. Rao B.S., Moorti A., Naik P.A., Gupta P.D.
Effect of chirp on self-modulation and laser wakefield electron acceleration in the regime of quasimonoenergetic electron beam generation
Physical Review Special Topics - Accelerators and Beams 16, 091301(1-6) (2013)
74. Rao P.N., Rai S.K., Nayak M., Lodha G.S.
Stability and normal incidence reflectivity of W/B₄C multilayer mirror near the boron K absorption edge
Applied Optics 52, 6126-6130 (2013)
75. Rao P.N., Modi M.H., Rai S.K., Sathe V.G.*, Deb S.K., Lodha G.S.
Thermal stability studies of ion beam sputter deposited C/B₄C x-ray multilayer mirror
Thin Solid Films 527, 244-249 (2013)
76. Riscob B.*, Bhaumik I., Ganesamoorthy S., Bhatt R., Vijayan V.*, Karnal A.K., Wahab M.A.*, Bhagavannarayana G.*
Effect of Mg doping on the growth aspects, crystalline perfection, and optical and thermal properties of congruent LiNbO₃ single crystals
Journal of Applied Crystallography 46, 1854-1862 (2013)
77. Russell L.*, Kumar R.*, Tiwari V.B., Nic Chormaic S.*
Measurements on release-recapture of cold ⁸⁵Rb atoms using an optical nanofibre in a magneto-optical trap
Optics Communications 309, 313-317 (2013)
78. Ryu H.*, Bartwal K.S.
Effect of Ti co-doping on photoluminescence characteristics of Eu: BaAl₂O₄
Journal of Alloys and Compounds 574, 331-334 (2013)
79. Sagdeo P.R.*, Sagdeo A.
Readdressing the issue of low-temperature resistivity minimum in La_{0.7}Ca_{0.3}MnO₃ thin films
Applied Physics A 113, 793-800 (2013)
80. Saha D., Das A.K., Ajimsha R.S., Misra P., Kukreja L.M.
Effect of disorder on carrier transport in ZnO thin films grown by atomic layer deposition at different temperatures
Journal of Applied Physics 114, 043703(1-6) (2013)
81. Saini R.K., Das K.
Picosecond spectral relaxation of curcumin excited state in toluene-alcohol mixtures
Journal of Luminescence 144, 169-175 (2013)
82. Sathe V.G.*, Dubey A.*, Banik S., Barman S.R.*
An x-ray absorption spectroscopy study of Ni Mn Ga shape memory alloys
Journal of Physics: Condensed Matter 25, 046001(1-17) (2013)
83. Sekar M., Chandra Shekar N.V.*, Sahu S.C.*, P.C. Babu*, Sinha R.*, Upadhyay A., Singh M.N.
High pressure structural investigation on LaGa
Philosophical Magazine 93, 4264, 4275 (2013)
84. Sharma A., Dhar S., Singh B.P., Nayak C., Bhattacharyya D., Jha S.N.
Surface strain engineering through Tb doping to study the pressure dependence of exciton-phonon coupling in ZnO nanoparticles
Journal of Applied Physics 114, 214309 (2013)
85. Sharma A.K., Patidar R.K., Naik P.A., Gupta P.D.
Theoretical studies on optimization of a broadband optical parametric amplifier for enhanced output



- stability
Optics Communications 309, 139-147 (2013)
86. Sharma S.K., Verma S., Singh Yeshpal, Bartwal K.S.
Growth technique to increase the device purpose yield of a KDP crystal and assessment of its quality using X-ray and optical techniques
CrystEngComm 46, 9955-9962 (2013)
87. Singh Amol, Choubey A., Modi M.H., Upadhyaya B.N., Oak, S.M., Lodha G.S., Deb S.K.
Cleaning of carbon layer from the gold films using a pulsed Nd:YAG laser
Applied Surface Science 283, 612-616 (2013)
88. Singh Gurvinderjit, Tiwari V.S., Gupta P.K.
Electro-caloric effect in $(\text{Ba}_{1-x}\text{Ca}_x)(\text{Zr}_{0.05}\text{Ti}_{0.95})\text{O}_3$: A lead-free ferroelectric material
Applied Physics Letters 103, 202903 (2013)
89. Singh M.K., Sharma S.K., Banerjee Arup
Asymmetrical growth and dissolution along polar axis of resorcinol crystal: role of solvent and external environment
CrystEngComm 42, 8493-8503 (2013)
90. Singh N., Vora H.S.
Spectral fluctuations of a high repetition rate dye laser through a flowing gain medium
Laser Physics 23, 085008(1-5) (2013)
91. Singh Nageshwar, Vora H.S.
High repetition rate dye laser spectral fluctuations through dye cells
Optik - International Journal for Light and Electron Optics 124, 7027-7031 (2013)
92. Singh Nageshwar, Vora H.S.
On the coherence measurement of a narrow bandwidth dye laser
Applied Physics B: Lasers and Optics 110, 483-489 (2013)
93. Singh Nageshwar
Spectral intensity variation by the correlation function of refractive index fluctuations of the liquid medium
International Journal of Optics, 525142(1-7) (2013)
94. Singh Nageshwar, Kumar Abhay, Vora H.S.
Studies on gain medium inhomogeneity and spectral fluctuations coupled with a high repetition rate dye laser
Laser Physics 23, 125003(1-6) (2013)
95. Singh S.P., Sharma M., Gupta P.K.
Enhancement of phototoxicity of curcumin in human oral cancer cells using silica nanoparticles as delivery vehicle
Lasers in Medical Science 28, 1-9 (2013)
96. Sreeja S.*, Leela C.*, Kumar V.R.*, Bagchi S.P., Shuvan T.*, Radhakrishnan P.*, Tewari S.P.*, Rao S.Venugopal*, Kiran P.P.*
Dynamics of tightly focused femtosecond laser pulses in water
Laser Physics 23, 106002(1-8) (2013)
97. Sreeramulu K., Kulshreshta P.K., Thakur V., Ruwali K., Singh Lakshman, Kumar Ashok, Srinivasan B., Mishra A.K., Shinde R.S. Indigenous development of close-type quadrupole magnets for a 2.5 GeV synchrotron radiation source, I
International Journal of Scientific Engineering and Technology 2, 1152-1155 (2013)
98. Srivastava H., Ganguli T., Deb S.K., Sant T. *, Poswal H.K.*, Sharma S.M.*
In-situ energy dispersive x-ray diffraction study of the growth of CuO nanowires by annealing method:
Journal of Applied Physics 114, 144303(1-8) (2013)
99. Swami M.K., Patel H.S., Geethu P., Uppal A., Kushwaha P.K., Gupta P.K.
Effect of gold nanoparticles on depolarization characteristics of Intralipid tissue phantom
Optics Letters 38, 2855-2857 (2013)
100. Swami M.K., Patel H.S., Uppal A., Kushwaha P.K., Gupta P.K.
Spectral Mueller matrix measurements for characterization of depolarization from non-spherical gold nanoparticles
Optics Communications 308, 136-141 (2013)
101. Tian Y.*, Zhang Q.*, Feng E. *, Liu H. *, Shi X. *, Chen D. *, Chen L. *, Lu, X. *, Senecha V.
Spatial and spectral characteristics of nonlinear Thomson scattering in the few-cycle regime.
Laser Physics 23, 076001(1-7) (2013)
102. 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)



103. Vatansaver F.*, Ferraresi C.*, de Sousa M.V.P.*, Yin R.*, Rineh A.*, Sharma S.K., Hamblin M.R.*
Can biowarfare agents be defeated with light?
Virulence 4, 796-825 (2013)
104. Verma R.S., Dasgupta R., Ahlawat S., Kumar N., Uppal A., Gupta P.K.
Pattern matching based active optical sorting of colloids/cells
Journal of Optics 15, 085301 (1-9) (2013)

B. Invited Talk

1. Banerjee Arup
Hydrodynamical approach to excited states: application to collective oscillations in metal clusters
DAE BRNS Symposium on Current Trends in Theoretical Chemistry, Mumbai, Sept. 26-28, 2013
2. Bhaumik I, Ganesamoorthy S.*, Bhatt R., Karnal A.K., Gupta P.K.
Doped yttrium ortho-vanadate single crystals: related growth issues in the optical floating zone technique and investigation of spectroscopic properties
58th DAE-Solid State Physics Symposium (DAE-SSPS), Patiala, Dec. 17-21, 2013
3. Bindra K.S.
Ultrafast nonlinear optics
DAE BRNS Theme Meeting on Ultrafast Science 2013, Kharagpur, Oct. 25-26, 2013
4. Chakera J.A., Tayyab M., Bagchi S., Rao B.S., Ramakrishana B., Moorti A., Naik P.A., Gupta P.D.
Recent results on particle acceleration in ultra short laser produced plasmas at RRCAT, Indore
Indian Particle Accelerator Conference (InPAC2013), Kolkata, Nov. 19-22, 2013
5. Ganguli T.
Photoelectron spectroscopy studies on PLD grown ZnO/Ge and ZnO/Gap systems
DAE-BRNS 7th National Symposium on Pulsed Laser Deposition of Thin Films and Nanostructured Materials, Kharagpur, Nov. 14-16, 2013
6. Gupta P.D.
Recent progress in accelerator activities at Raja Ramanna Centre for Advanced Technology, Indore
Indian Particle Accelerator Conference (InPAC2013), Kolkata, Nov. 19-22, 2013
7. Joshi M. P.
Charge transport and photovoltaic properties of polymer-nanoparticle composites: experiment and simulation studies
Indo-Italian Bilateral Workshop on Nanophase Excitation in Emergent Materials (NEEM 2013), Ahmedabad, Nov. 25-26, 2013
8. Joshi M. P.
Characterization of optoelectronic properties of nanomaterials and nanocomposites,
Indo-Italian Bilateral School on Advanced Characterization Methods for Nanophase Materials (ACNM-2013), Ahmedabad. Nov. 22-23, 2013
9. Kukreja L. M.
Lasers of ZnO nano-structures
National Workshop on Nano-photonics (NWNP 2013), Indore, Sept. 26-28, 2013
10. Kukreja L. M.
Disorder induced quantum effects in PLD grown doped thin films of ZnOL
DAE-BRNS 7th National Symposium on Pulsed Laser Deposition of Thin Films and Nanostructured Materials (PLD 2013), Kharagpur, Nov. 14 - 16, 2013
11. Kukreja L. M.
Pulsed laser deposited quantum Dots of ZnO: how do those grow and how do those glow?
Indo - German Conference on Laser Applications in Nanoscience, Trivandrum, Dec. 5-7, 2013
12. Kukreja L. M.
Anomalous optical transitions in photoluminescence from pulsed laser deposited ensembles of capped Silicon nanoparticles
International Union of Materials Research Society - International Conference in Asia (IUMRS-ICA 2013), Bangalore, Dec. 16-20, 2013
13. Kumar Vinit, Jana A.R., Gaur R.
Electromagnetic design issues in elliptic superconducting radio frequency cavity for H-linac
Indian Particle Accelerator Conference (InPAC2013), Kolkata, Nov. 19-22, 2013
14. Kush P.K., Doohan R.S., Sharma R.S., Kumar Manoj, Naika R., Patel H.K., Duttagupta B.N., Nema V., Gupta Prabhat Kumar
Cryogenics activities at RRCAT for development of superconducting RF cavities
Indian Particle Accelerator Conference (InPAC2013), Kolkata, Nov. 19-22, 2013



15. Lad M., Jain M.K., Kumar Ramesh, Jain Akhilesh, Badapanda M.K., Tiwari N., Bohrey A., Deo R.K., Sharma D.K., Gupta Alok Kumar, Bagduwal P.S., Hannurkar P.R.
Recent advances in high power RF systems of Indus synchrotron
Indian Particle Accelerator Conference (InPAC2013), Kolkata, Nov. 19-22, 2013
16. Pant K.K.
Progress in free electron laser activity at RRCAT
Indian Particle Accelerator Conference (InPAC2013), Kolkata, Nov. 19-22, 2013
17. Paul C.P.
Emerging applications of laser rapid manufacturing
2nd International Conference on Robotics, Automation and Manufacturing (IRAM 2013), Indore, Dec.16-18, 2013
18. Petwal V.C
Electron beam radiation processing facility: a prototype facility at RRCAT, Indore
International Food Convention- 2013 (IFCON-2013), Mysore, Dec. 18-21, 2013
19. Puntambekar A.M., Dwivedi J., Shrivastava P., Mundra G., Joshi S.C., Gupta P.D.
SCRF cavity development at RRCAT
Indian Particle Accelerator Conference (InPAC2013), Kolkata, Nov. 19-22, 2013
5. Arora R.K., Prasad M., Lad M., Hannurkar P.R.
Observations and control of beam instabilities due to higher order modes in Indus-2
6. Badapanda M.K., Tripathi A., Upadhyay R., Rao J.N., Tiwari A., Jain Akhilesh, Lad M.R., Hannurkar P.R.
Development of high power CW and pulsed RF test facility based on 1 MW 352.2 MHz klystron amplifier
7. Bagduwal P.S., Tiwari N., Lad M., Kumar Ramesh, Sharma Dheeraj, Kumar Narendra, Hannurkar P.R.
Commissioning experience of 31.6 MHz 2 kW solid state RF amplifier for Indus-2
8. Bagre M., Jain V., Yedle A., Maurya T., Yadav A., Puntambekar A., Goswami S.G., Choudhary R.S., Sandha R.S., Dwivedi J., Kane G.V., Mahawar A., Mohania P., Shrivastava P., Sharma S., Gupta R., Sharma S.D., Joshi S.C., Mistri K.K.*, Prakash P.N.*
Development of 650 MHz (B=0.9) single-cell SCRF cavity
9. Bansod T., Shukla S.K., Kumar K.V.A.N.P.S., Sridhar R.
Synchrotron Radiation induced gas desorption study for Indus-2 vacuum system
10. Bhatnagar P., Yadav Ramdular, Joshi S., Sridhar R, Thakurta A.C.
Development of a single channel Measurement system for measuring instantaneous radial movements of Indus-2 Dipole vacuum chambers

C. Seminar/Conference Presentation

C1. DAE-BRNS Indian Particle Accelerator Conference -2013 (InPAC-2013), Kolkata, Nov. 19-22, 2013

1. Acharya M., Shrivastava P.
Design and development of high voltage Marx modular technology for long pulse application
2. Aditya L.K., Ahlawat M., Shinde R.S.
Development of calcium vanadium garnets for high power cw circulators for particle accelerators
3. Ahuja R.*, Kothari A.*, Safvan C.P.*, Kumar Sugam, Ram Sankar P.
Design & fabrication of radio frequency quadrupole (RFQ) accelerator at IUAC, New Delhi
4. Ahlawat M., Shinde R.S.
Design and simulation of 505.8 MHz strip line directional coupler
11. Borage M.
PhD thesis: Resonant converter topologies for constant-current power supplies and their applications
12. Borage M., Singh Alok, Tiwari S., Thakurta A.C.
A novel high-frequency multiphase crowbarless high-voltage DC power supply
13. Das A.K.*, Raja Sekhar B.N.*, Jagatap B.N.*, Rahim A., Ghodke A.D., Deb S.K.
Radiation characteristics of a planar permanent magnet (PPM) undulator for atomic molecular & optical science (AMOS) beamline
14. Das S., Sreeramulu K., Kumar Ashok, Srinivasan B., Singh Kushraj, Singh Bhim, Mishra A.K., Shinde R.S.
Development of fast corrector magnets for fast orbit feedback system of Indus-2



15. Das S., Srinivasan B., Thakur V., Kumar Ashok, Shinde R.S.
Development of rotating coil based magnetic measurement setup at RRCAT
16. Deo R.K., Jain M.K., Kumar Gautam, Lad M., Badapanda M.K., Bagre S., Upadhyay R., Tripathi A., Rao J.N., Pandiyar M., Hannurkar P.R.
IOT based RF power systems as an alternative to klystron amplifier in Indus-2 @ 505.812 MHz
17. Dhingra R., Kulkarni N.S., Kumar Vinit
Electromagnetic design and beam dynamics studies for a 10MeV, 10 KW electron linac
18. Dubey V.K., Saxena P., Singh I.J., Vora H.S., Navathe C.P., Garg S.R., Lodha G.S.
Development of electrometer & das for ionization chamber for Indus-2, RRCAT
19. Fakhri A.A., Ghodke A.D.
Electron beam optics of INDUS-2 for proposed insertion devices
20. Gaud V., Pareek P., Shinde R.S.
Design of pulsed septum magnet with large aperture for improved extraction of electron beam from booster synchrotron
21. Gaur R., Kumar Vinit
Design studies of 325 MHz RFQ at RRCAT
22. Gauttam V.K., Kasliwal A., Banwari R., Pandit T.G., Thakurta A. C.
Frequency controlled LCL - T resonant converter for H⁺ Ion source
23. Ghodke D.V., Gulene N.*, Agnihotri M.*, Senecha V.K., Joshi S.C.
Simulation of magnetic field produced by RF antenna and CUSP magnets for RF driven H⁺ ion source
24. Goyal P.K., Sharma Amalendu, Kumar Vinit, Ghodke A.D.
Studies on linear lattice for a 1GeV proton accumulator ring
25. Gupta A.K., Sharma D.K., Jain Akhilesh, Hannurkar P.R.
Design and development of 60kW rigid coaxial line 3-way power combiner at 505.8 MHz
26. Husain R., Ghodke A.D.
Orbit response matrix analysis in Indus-2 at 2.5 GeV
27. Husain R., Vats D.K., Ghodke A.D.
Chromaticity measurement during beam energy ramp in Indus-2
28. Jain A.K., Ansari M.S., Dwivedi J., Sandha R.S., Soni R.K.
Development of cathode conditioning bench for LaB₆ cathode
29. Jain M.L., Kumar Gautam, Deo R.K., Hannurkar P.R.
Realization of 476 MHz pulse power cavity amplifier using planar triode
30. Jain V.K.
PhD thesis: Analytical, numerical and experimental investigations of higher order modes in accelerator RF cavities
31. Jana A.R., Kumar Vinit, Gaur R.
Electromagnetic design optimization studies for $\beta_g = 0.61$, 650 MHz elliptic superconducting radio frequency cavity
32. Jena S., Fakhri A.A., Ghodke A.D.
Beam dynamics requirement for proposed booster extraction septum magnet
33. Jana P.K., Kumar Vinit
Physics design study of separated function drift tube linac
34. Jana P.K., Kumar Vinit, Kulkarni N.S.
Design of RF power coupler for 5 MeV, 3 kW traveling wave electron linac
35. Kale U., Nerpagar P., Patel A.
Design, development and testing of a 65 MW klystron pulse modulator
36. Kane G.V., Sharma N.K., Chaturvedi Anurag, Raghavendra S., Das K.K., Chauhan S.K., Kokil S.V., Oraon B., Gaur R., Kumar Vinit, Joshi S.C.
Prototype development of 352.2 MHz, 3 MeV RFQ structure
37. Kant P., Fakhri A.A., Ghodke A.D.
Exploration of tune point for booster



38. Kant P., Fakhri A.A., Ghodke A.D.
Field error tolerances of Eddy current thin septum for Indus-2
39. Karandikar U.S., Singh Yashpal, Thakurta A.C.
Phase shifted PWM with double two-switch bridge for high power capacitor charging
40. Kasliwal A., Gauttam V.K., Banwari R., Pandit T.G., Thakurta A.C.
An LCLC resonant topology based filament power supply for 300 keV industrial accelerator
41. Kelkar Y., Singh Yashpal, Thakurta A.C.
2kJ/s 1kV, 25Hz PRR capacitor charging power supply with twin phase shifted primary windings to achieve high charge transfer rate and stability
42. Kelkar Y., Singh Yashpal, Thakurta A.C.
Development of optical fiber based high voltage compatible IGBT driver with status acknowledge and protection
43. Khare P., Gilankar S.G., Ghosh R., Jain Abhishek, Lakshminarayanan A., Kush P.K.
Development of 650 MHz cryomodule and test rig for testing of prototypes of cryomodule subsystems
44. Khursheed M., Biswas B., Kumar A., Kumar Vinit., Pant K.K., Lal S., Patel A.
Beam profile and emittance measurement in the cute-FEL setup
45. Kulkarni N.S., Kumar Vinit
Electromagnetic and beam dynamics design of a 5 Mev, 3KW travelling wave electron linear accelerator
46. Kumar Gautam, Deo R.K., Jain M.K., Bagre S., Hannurkar P.R.
Control interlock and monitoring system for 80 KW iot based RF power amplifier system at 505.812 MHz for Indus -2
47. Kumar K.V.A.N.P.S., Bhange N., Gothwal P.K., Fatnani P., Shukla S.K., Sridhar R.
Residual gas analysis system of synchrotron radiation source Indus-2
48. Kumar Mukesh, Babbar L.K., Yadav Surendra, Puntambekar T.A., Navathe C.P.
Physics design of beam position indicator for insertion device section in Indus-2
49. Kumar Pradeep, Ghodke A.D., Singh Gurnam, Singh Pitamber
Effect of RF phase modulation on longitudinal parameters in Indus-2 electron storage ring
50. Kumar V., Jana A.R., Kulkarni N.S., Dhingra R.
Analysis of regenerative beam break up instability in linear accelerators
51. Kumar V., Kalkal Y.
Analysis of Cherenkov free-electron laser driven by a flat electron beam
52. Lal S., Biswas B., Kale U., Khursheed M., Kumar A., Kumar V., Nerpagar P., Patel A., Pant K.K.
Enhancement of THz radiation from the cute-FEL using an S-band pre-buncher
53. Mahawar A., Mohania P., Shrivastava P., Yadav Anand, Puntambekar A.M.
Room temperature RF characterization of niobium SCRF cavities and the their prototypes
54. Maheshwari P., Sheth Y., Fatnani P., Navathe C.P.
FPGA based control system hardware for microtron
55. Malik R., William S., Sreeramulu K., Mishra R.K., Shinde R.S.
Design of solenoid magnet for ARPF at RRCAT, Indore
56. Maurya T., Yedle A., Bagre M., Yadav A., Puntambekar A.M., Choudhary R.S., Sandha R.S., Kane G.V., Dwivedi J., Mahawar A., Mohania P., Singh K.A.P., Rajput V., Shrivastava P., Sharma S., Gupta R.K., Mundra G., Joshi S.C., Mistri K.K.*, Prakash P.N.*
Development of 1.3 GHz five cell SCRF cavity
57. Mistri K.S.*, Potukuchi P.N.*, Sacharias J.*, Sonti S.S.K.*, Kanjilal D.*, Puntambekar A.M., Maurya T., Vaishnav K.G., Bagre M., Yadle A.
EBW of superconducting niobium cavities at IUAC
58. Nathwani R.K., Holikatti A., Yadav Surendra, Puntambekar T.A., Navathe C.P.
Development of a data acquisition system for beam current measurement of booster synchrotron at RRCAT
59. Nayak M.K., Sahu T.K., Haridas G., Nandedkar R.V.*, Bandyopadhyay T., Tripathi R.M., Sharma D.N.*
Determination of Bremsstrahlung efficiency for 450 MeV electrons
60. Nayak M.K., Khan S., Haridas G., Joshi D.S., Chouksey S., Bandyopadhyay T., Tripathi R.M., Sharma D.N.*
Radiation shielding evaluation for 35MeV IR FEL linac



61. Nigam N., Sharma N.K., Joshi S.C.
Study of lorentz force detuning analysis for 650 MHz 5-cell cavity
62. Ojha A., Garg A.D., Karnewar A.K., Holikatti A.C., Shrivastava B.B., Puntambekar T.A., Navathe C.P.
Development of LabVIEW based image processing algorithm for online measurement of beam parameters at X-ray diagnostic beamline of Indus-2
63. Pal M.K., Gaur R., Kumar V.
Geometry optimization of 325 MHz half-wave and single spoke resonators
64. Pandey R.M., Prasad B., Deshmukh G.R., Bahadur R., Gupta S.
Development and operation of 65KW capacity precision cooling system for the Indus-2 RF cavities
65. Pandiyar M.L., Lad M., Hannurkar P.R.
Conditioning of RF cavities for Indus-2
66. Pareek P., Gaud V., Shinde R.S.
Development of prototype transmission line kicker magnet for booster synchrotron
67. Patidar C.B., Sharma Amalendu
Closed orbit analysis for ISNS accumulator ring's FODO lattice
68. Petwal V.C., Kumar Ajay, Jain A.K., Choudhary R.S., Seema M., Wanmode Y., Kasliwal A., Sheth Y., Sridhar R., Dwivedi J.
Interlock system with fast response against sudden foil rupture and vacuum failure in linac structure
69. Rao B.S.
PhD thesis: Study of laser driven plasma based electron accelerator and Bremsstrahlung radiation emission using ultra-high intensity laser pulses
70. Rao J.N., Badapanda M.K., Upadhyay R., Tripathi A., Hannurkar P.R.
Design and development of embedded control system for high power RF test facility
71. Raghavendra S., Suhane S.K., Chauhan S.K., Sharma N.K., Ram Sankar P., Das K.K., Kokil S., Singh Amar, Chaturvedi Anurag, Singh A.P., Rajpoot D.S., Verma S.C., Hussain M.A., Joshi S.C.
Processing of single cell 1.3 GHz superconducting RF cavity
72. Ruwali K., Shinde R.S.
Design of transfer line magnets for booster synchrotron from injector linac at RRCAT
73. Ruwali K., Singh Kushraj, Mishra A.K., Shinde R.S.
Quadrupole magnets for IR-FEL at RRCAT
74. Sahani P.K., Nayak M.K., Haridas G., Bandyopadhyay T., Hannurkar P.R.
Evaluation of radiological conditions in the experimental hutch of SEXAF beam line of Indus-2 due to introduction of a photon beam shutter
75. Saini R.S., Ghodke A.D.
Beam optics design of electron beam transport line from proposed injector linac to the booster synchrotron
76. Sankar P.R., Khattak B.Q., Singh A.P., Singh B.P., Joshi S.C.
Surface treatment and modification of accelerator components for functional requirements
77. Seema M., Sheth Y., Agrawal R.K., Gothwal P., Shrivastava B.S.K., Kar S., Fatnani P., Navathe C.P.
Supervisory control system for 10 MeV linac
78. Senecha V.K., Kumar Rajnish, Khare R.K., Vadjikar R.M., Ghodke D.V., Jain S.K., Kasliwal A., Gauttam V., Joshi S.C.
Extraction of H^- ion beam from filament based multicusp H^- ion source
79. Sharma Amalendu, Ghodke A.D.
Application program development and its use in Indus-2
80. Sharma Amalendu, Singh P., Ghodke A.D., Singh Gurnam
CSR studies for transfer line-2 at CTF3, CERN
81. Sharma D.K., Jain Akhilesh, Gupta Alok, Hannurkar P.R.
Development of 325 MHz 1.8 kW pulse RF power amplifier
82. Shiroman R., Yadav D.P., Sridhar R.
Development of metal seal for UHV compatible all metal quick disconnect flange joint for proton machine



83. Shrivastava B.B., Holikatti A.C., Ojha A., Garg A.D., Karnewar A.K., Sonawane B.B., Chouhan M., Hire T.S., Puntambekar T.A., Navathe C.P.
Development of data acquisition and control system for diagnostic beamlines of Indus-2
84. Sindal B.K., Kumar K.V.A.N.P.S., Shiroman R., Yadav D.P., Bhange N., Sridhar R., Shukla S.K.
UHV testing of upgraded vacuum chambers for Indus-1
85. Singhai Sheth S., Sheth Y.M., Kumar Sandeep, Satheesan T.V., Francis A., Fatnani P., Navathe C.P.
Power supply control module for magnet power supplies control system of Indus-1
86. Singh Alok, Koli M., Borage M., Tiwari S., Thakurta A.C.
Upgraded switch mode power supply for transport line - 1 magnets in Indus
87. Singh S.N., Singh T.N., Khatwani H.K., Gandhi M.L., Thakurta A.C.
Corrector magnet power supplies for Indus-2
88. Singh S.N., Singh T.N., Khatwani H.K., Gandhi M.L., Thakurta A.C.
Fast corrector magnet power supplies for Indus-2
89. Singh Urmila, Sharma Amalendu, Kumar Vinit, Ghodke A.D.
Preliminary studies on longitudinal beam dynamics for a 1 GeV proton accumulator ring
90. Sinha G., Shinde R.S.
Analytical model of a superconducting dipole magnet
91. Sinha G., Shinde R.S.
Modification of time varying field in presence of metallic plate
92. Sreeramulu K., Thakur V., Kulshreshta P.K., Das S., Singh Kushraj, Kumar Ashok, Kumar Preveen, Srinivasan B., Singh Bhim, Mishra A.K., Shinde R.S.
Development of magnets with support systems for up gradation of 700 MeV Booster Synchrotron
93. Srinivas L., Pandey R.M., Yadav R.P., Gupta S., Gandhi M.L., Thakurta A.C.
Automation of secondary loop operation in Indus-2 LCW plant
94. Vitisha S.*, Sahani P.K., Senecha V.K., Sunil C.*, Joshi D.S., Haridas G.,
Experimental study of radiation shielding requirement for a 3 MeV proton linac
95. Tiwari A.K., Kumar Ramesh, Hannurkar P.R.
Flexible co-axial lines and four way high power waveguide combiner for Indus-2
96. Tiwari N., Bagduwal P.S., Sharma D., Chakraborty S., Lad M., Hannurkar P.R.
Development of prototype digital LLRF system at RRCAT
97. Tiwari N., Lad M., Bagduwal P.S., Arora R.K., Hannurkar P.R.
Optimization of Indus-2 RF parameters for 150 mA at 2.5 GeV
98. Tyagi Y., Saini R.S., Garg A.D., Ghodke A.D., Puntambekar T.A., Navathe C.P.
Development of a transverse beam emittance and twiss parameter measurement system for transport line-1
99. Yadav D.P., Shiroman R., Sridhar R.
Design and finite element analysis of insertion device vacuum chamber for Indus-2 storage ring
100. Yadav D.P., Kaul R., Ganesh P., Shiroman R., Tiwari P., Sridhar R., Kukreja L.M.
Study on alumina-alumina brazing for application in vacuum chambers of proton synchrotron
101. Yedle A., Bagre M., Maurya T., Yadav A., Puntambekar A.M., Mahawar A., Mohania P., Shrivastava P., Joshi S.C.
Development of end group for 1.3 GHz nine cell SCRF cavity

C3. 7th DAE-BRNS National Symposium on Pulsed Laser Deposition of Thin Films and Nanostructured Materials (PLD 2013), Kharagpur, Nov. 14-16, 2013

1. Ajimsha R.S., Das A.K., Sahu V.K., Misra P., Joshi M.P., Kukreja L.M.
Fabrication of Ga:ZnO/P:ZnO homojunction using pulsed laser deposition
2. Baral M., Detty A. P., Banik S., Gupta P., Rai S.K., Maniraj M., Barman S.R.*, Reddy V.R.*, Ganguli T., Kukreja L.M., Deb S.K.
Structural and magnetic characterization of pulsed laser deposited Co₂FeAl thin films



3. Chaturvedi A., Joshi M.P., Kukreja L.M.
Role of surfactant and ablation time on growth of anatase and rutile TiO₂ nanoparticles using liquid phase pulsed laser ablation
 4. Das A.K., Ajimsha R.S., Kukreja L.M.
Electrical and optical properties of Mg x Zn 1-x O/ZnO heterostructures
 5. Detty A.P., Baral M., Banik S., Rai S.K., Babu M., Tiwari P., Maniraj M.*, Barman S.R.*, Ganguli T., Deb S.K., Kukreja L.M.
Optimization of process parameters for growth of stoichiometric Co₂FeAl thin films using pulsed laser deposition
 6. Rao B.T., Verma S., Singh R., Rai S.K., Kukreja L.M.
Plasmonic characteristics of gold nanoparticle films of gradient thickness grown by pulsed laser deposition
 7. Saha D., Ajimsha R.S., Kukreja L.M.
Carrier transport phenomena in Zn_{1-x}V_xO thin films grown by pulsed laser deposition
 8. Singh B.N., Rao B.T., Verma S., Thakur A.S., Vaid S., Srivastava A.K., Kukreja L.M.
Plasmonic response of silver nanoparticles in different liquid media grown by pulsed laser ablation
 9. Singh S.D., Ganguli T., Ajimsha R.S., Misra P., Kukreja L.M., Deb S.K.
Epitaxial ZnO on GaP(1 1 1) substrate grown by using pulsed laser deposition
 10. Verma S., Rao B.T., Reynolds D.*, Ganesan V.*, Kukreja L.M.
Effect of alumina capping on plasmon resonance characteristics and stability of silver nanoparticle films grown by pulsed laser deposition
- C2. Journal of Physics: Conference Series 425, 2013**
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.
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
Journal of Physics: Conference Series 425, 152020(1-4)(2013)
 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
Journal of Physics: Conference Series 425, 072020(1-4)(2013)
- C3. Others Seminars/Conference Presentation**
1. Anandha Babu G.*, Subramaniyan R.*, Bhaumik I., Ganesamoorthy S.*, Ramasamy P.*, Gupta P.K.
Growth and characterization of lead-free piezoelectric single crystal 0.80Na_{0.5}Bi_{0.5}TiO₃-0.20K_{0.5}Bi_{0.5}TiO₃
15th Summer School on Crystal Growth (ISSCG-15), Gdańsk, Poland, Aug. 4-10, 2013
 2. Anandha Babu G.*, Subramaniyan R.*, Bhaumik I., Ganesamoorthy S.*, Ramasamy P.*, Gupta P.K.
Growth and characterization of undoped and Mn doped lead-free piezoelectric single crystals 0.80Na_{0.5}Bi_{0.5}TiO₃-0.20K_{0.5}Bi_{0.5}TiO₃
17th International Conference on Crystal Growth and Epitaxy (ICCGE-17), Warsaw, Poland, Aug. 11-16, 2013
 3. Anandha Babu G.*, Subramaniyan R.*, Bhaumik I., Ganesamoorthy S.*, Ramasamy P.*, Gupta P.K.
Growth and investigation of the electrical properties of 0.80Na_{0.5}Bi_{0.5}TiO₃-0.20K_{0.5}Bi_{0.5}TiO₃ lead free piezoelectric single crystal
19th American Conference on Crystal Growth and Epitaxy (ACCGE-19), Colorado, USA, July 21-25, 2013
 4. Bhargava K., Mohan S.R., Joshi M.P., Kukreja L.M., Singh V.
Influence of alkyl-chain-length variation of poly(3-alkylthiophene) on the morphology of their blend films



- with PCBM
India-Japan Workshop on Biomolecular Electronics & Organic Nanotechnology for Environment Preservation, New Delhi, Dec. 13-15, 2013
5. Ganesamoorthy S.^{*}, Bhaumik I., Bhatt R., Karnal A.K., Gupta P.K., Takekawa S.^{*}, Kitamura K.^{*}
Dielectric and ferroelectric hysteresis measurement of $\text{Sr}_x\text{Ba}_{1-x}\text{Nb}_2\text{O}_6$ single crystals
International Union of Materials Research Society, International Conference in Asia (IUMRS-ICA), Bangalore, Dec. 16-20, 2013
 6. Ghodke D.V., Agnihotri M.^{*}, Jain P.^{*}, Senecha V.K., Joshi S.C.
Simulation of multi-cusp magnetic field for efficient confinement of hydrogen plasma in H-Ion source
28th National Symposium on Plasma Science & Technology, Bhubaneswar, Dec. 03-06, 2013
 7. Gunele N.K.^{*}, Bhongade S.^{*}, Ghodke D.V., Vadjikar R.M., Senecha V.K., Joshi S.C.
Modeling and simulation of 2 MHz external antenna for RF driven H^- ion source
4th IEEE Applied Electromagnetic Conference, Bhubaneswar, 2013
 8. Jain A., Khare G., Pathy D., Rajan A., Rawat A.
High availability setup and performance improvement for RRCAT information portal using server load balancing
International Conference on Cloud, Big Data and Trust (ICCBTD-2013), Bhopal, Nov. 13-15, 2013
 9. Joshi M., Deshpande P.P., Navathe C.P.
Development of image processing and analyzing software for nuclear fuel pellet end faces
14th Asia Pacific Conference on Non-Destructive Testing (APCNDT-2013), Mumbai, Nov. 18 - 22, 2013
 10. Joshi M. P.
Charge transport and photovoltaic properties of polymer-nanoparticle composites: experiment and simulation studies
Indo-Italian Bilateral Workshop on Nanophase Excitation in Emergent Materials (NEEM 2013), Ahmedabad, Nov. 25-26, 2013,
 11. Khare J., Joshi M.P., Satapathy S., Kukreja L.M.
On enhanced ionic conductivity in Ytria stabilized zirconia nanoparticles generated via pulsed mode of laser vaporization method
10th National Conference on Solid State Ionics (NCSSI 2013), Kharagpur, Dec. 22-24, 2013,
 12. Riscob B.^{*}, Ganesamoorthy S.^{*}, Bhatt R., Vijayan N.^{*}, Bhaumik I., Wahab M.A.^{*}, Bhagavannarayana G.^{*}
Crystal growth, crystalline perfection and optical property analyses of Ru doped congruent LiNbO_3 single crystals at different axial positions
17th International Conference on Crystal Growth and Epitaxy (ICCGE-17), Warsaw, Poland, Aug. 11-16, 2013
 13. Sinnarkar D., Jain Rajiv, Jana A.R., Kumar Abhay, Vora H.S., Navathe C.P.
Akruti - wrapper for poisson SUPERFISH
National Symposium on Nuclear Instrumentation (NSNI-2013), Mumbai, Nov. 19-21, 2013
 14. Srimathy B.^{*}, Bhaumik I., Ganesamoorthy S.^{*}, Karnal A.K., Kumar J.^{*}
Dielectric and magnetic investigations of GaFeO_3 single crystals
58th DAE-Solid State Physics Symposium (DAE-SSPS), Patiala, Dec. 17-21, 2013
 15. Srimathy B.^{*}, Bhaumik I., Ganesamoorthy S.^{*}, Bhatt R., Karnal A.K., Kumar J.^{*}
Investigation of $\text{Ga}_{2-x}\text{Fe}_x\text{O}_3$ single crystals grown by floating zone method
17th International Conference on Crystal Growth and Epitaxy (ICCGE-17), Warsaw, Poland, Aug. 11-16, 2013
 16. Verma Dharendra Kumar, Rajan A., Paraye A., Rawat A.
Virtual walkthrough of data centre
2nd IEEE International Conference on Image Information Processing (ICIIP-2013), Shimla, Dec., 9-11, 2013
 17. Verma V.P., Petwal V.C., Dwivedi J., Thakurta A.C.
Standardization of electron beam irradiation for low to high dose applications
International Food Convention- 2013 (IFCON-2013), Mysore, Dec. 18-21, 2013
 18. Yadaiah N.^{*}, Bag S.^{*}, Paul C.P., Kukreja L.M.
Fiber laser welding of austenitic stainless steel in protective atmosphere of argon
7th Asia Pacific IIW International Congress 2013, Singapore, July 8-10, 2013
- ^{*}indicate author affiliation other than RRCAT.