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)

   Evidence of spin phonon coupling in magnetoelectric NiFe2O4/PMN-PT composite.

   Raman spectroscopic investigations on optical trap induced deoxygenation of red blood cells.

   Study of strain propagation in laser irradiated silicon crystal by time-resolved diffraction of K-\$ x-ray probe of different photon energies
   *Journal of Applied Physics 114, 023302(1-5) (2013)

   Experimental validation of XRF inversion code for Chandrayaan-1

   Photoconductivity of cobalt doped CdS thin films
   *Physics Procedia 49, 190-198 (2013)

   Room temperature ferromagnetism down to 10 nanometer Ni-Fe-Mo alloy films

   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

    Signature of build up of coherence in an indigenously built compact ultrafast terahertz free electron setup
    *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)

    405 nm- excited fluorescence spectra of the juice of the lemon (citrus x limon)
    *Food Biophysics 8, 297-301 (2013)

    Contrast in luminescence characteristics (intense UV to bright visible light) of ZnO nanostructures with the variation in microstructure

    Ab initio studies of effect of copper substitution on the electronic and magnetic properties of Ni2MnGa and Mn2NiGa

    Enhanced water window x-ray emission from in situ formed carbon clusters irradiated by intense ultra-short laser pulses

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)
RF plasma MOCVD of YbO thin films: effect of RF self-bias on the substrates during deposition
*Applied Surface Science 385, 524-531 (2013)

A highly efficient and compact long pulse Nd:YAG rod laser with 540 J of pulse energy for welding application

Nd:YAG laser assisted drilling and spallation of rocks
*Advanced Science, Engineering and Medicine 5, 905-911 (2013)

Performance improvement of long pulse Nd:YAG laser using advanced diffuse ceramic reflectors

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)

Theoretical and experimental studies on single filed grating pulse compressor
*Optics Communications 309, 15-20 (2013)

Effect of Mg diffusion on photoluminescence spectra of MgZnO/ZnO bi-layers annealed at different temperatures
*Journal of Applied Physics 114, 183103 (2013)

Optimization of smart Heusler alloys from first principles

26. Fakhri A.A., Prajapati S.K., Ghodke A.D., Singh Gumam
Studies of beam injection with a compensated bump and uncompensated bump in a synchrotron.
*Review of Scientific Instruments 84, 083303(1-10) (2013)

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

Synthesis, structural, electrical and magnetic studies of Ni-Ferrite nanoparticles

Enhanced corrosion resistance of strontium hydroxyapatite coating on electron beam treated surgical grade stainless steel

Effect of Co addition on the atomic ordering of FeCo-phase in nanocrystalline
Fe1-xCoOxNbB4 alloys (x=0.10, 0.15, 0.20, 0.25): 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  

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  

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  

Applicability of Langmuir equation to oxygen pressure dependent photoluminescence from BGa,O3 nanostructures  
*Journal of Applied Physics 114, 074309 (1-5) (2013)

Nucleation kinetics, growth, mechanical, thermal and optical characterization of sulphamic acid single crystal  
CrystEngComm 15, 10034-10042 (2013)

Causes of failure and repairing options for dies and molds: a review  
*Engineering Failure Analysis 34, 519-553 (2013)

Magnetic properties of the ternary aluminide TbFe,Al16  

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  

42. Kher S., Chaubey S., Oak S.M.  
Long period fiber gratings based nuclear radiation sensors for high level dose applications  
Instrumentation Science & Technology 41, 1-6 (2013)

Synthesis and characterization of azo bis benzylidene-based polymers for second order nonlinear optics  

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)

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)


Study of the spatial coherence of high order harmonic radiation generated from pre-formed plasma plumes  

Epoxy-paint stripping using TEA CO2 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., Nakhle S.V.  
Studies on the optogalvanic effect and isotope-selective excitation of ytterbium in a hollow cathode discharge lamp using a pulsed dye laser  


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.*, Misra P., Ahirwar G.*
A study on structural and optical properties of Mg_{x}Zn_{1-x}O thin films using pulsed laser deposition (PLD)

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_{0.64}Co_{0.36}Mn_{0.36}Cu_{0.36}Fe_{0.36}Al_{0.36}O_{4} ferrites for microwave device applications
Journal of Magnetism and Magnetic Materials 345, 276-281 (2013)

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/B/C multilayer mirror near the boron K absorption edge
Applied Optics 52, 6126-6130 (2013)

Thermal stability studies of ion beam sputter deposited C/B/C x-ray multilayer mirror
Thin Solid Films 527, 244-249 (2013)

Effect of Mg doping on the growth aspects, crystalline perfection, and optical and thermal properties of congruent LiNbO_{3}, single crystals

77. Russell L.*, Kumar R.*, Tiwari V.B., Nic Chormaic S.*
Measurements on release-recapture of cold ^{85}Rb 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:BaAl_{2}O_{4}

79. Sagdeo P.R.*, Sagdeo A.
Readdressing the issue of low-temperature resistivity minimum in La$_3$Ca$_{2}$MnO$_7$ 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

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$_2$MnGa shape memory alloys

High pressure structural investigation on LaGa$_2$P$_2$O$_7$
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

Theoretical studies on optimization of a broadband optical parametric amplifier for enhanced output
65. 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)

Dynamics of tightly focused femtosecond laser pulses in water


68. Srivastava H., Ganguli T., Deb S.K., Sant T. *, Poswal H.K.*, Sharma S.M.*

Effect of gold nanoparticles on depolarization characteristics of Intralipid tissue phantom
Optics Letters 38, 2855-2857 (2013)

70. 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)

Spatial and spectral characteristics of nonlinear Thomson scattering in the few-cycle regime.
Laser Physics 23, 076001(1-7) (2013)

Enhancement of corrosion resistance of type 304 stainless steel through a novel thermo-mechanical surface treatment
Can biowarfare agents be defeated with light?
*Virulence* 4, 796-825 (2013)

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

Doped yttrium ortho-vanadate single crystals: related growth issues in the optical floating zone technique and investigation of spectroscopic properties

3. Bindra K.S.
Ultrafast nonlinear optics

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

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

8. Joshi M.P.
Characterization of optoelectronic properties of nanomaterials and nanocomposites,

9. Kukreja L. M.
Lasers of ZnO nano-structures

10. Kukreja L. M.
Disorder induced quantum effects in PLD grown doped thin films of ZnO.

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

Electromagnetic design issues in elliptic superconducting radio frequency cavity for H-linac
*Indian Particle Accelerator Conference (InPAC2013)*, Kolkata, Nov. 19-22, 2013

Cryogenics activities at RRCAT for development of superconducting RF cavities
*Indian Particle Accelerator Conference (InPAC2013)*, Kolkata, Nov. 19-22, 2013
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

SCRF cavity development at RRCAT
Indian Particle Accelerator Conference (InPAC2013), Kolkata, Nov. 19-22, 2013

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.*, Saifvan 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

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

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

Development of 650 MHz (B=0.9) single-cell SCRF cavity

Synchrotron Radiation induced gas desorption study for Indus-2 vacuum system

Development of a single channel Measurement system for measuring instantaneous radial movements of Indus-2 Dipole vacuum chambers

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

Radiation characteristics of a planar permanent magnet (PPM) undulator for atomic molecular & optical science (AMOS) beamline

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

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

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

Frequency controlled LCL - T resonant converter for H Ion source

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 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

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

Electromagnetic design optimization studies for βg =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. Jena 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

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 acknowledgement and protection

Development of 650 MHz cryomodule and test rig for testing of prototypes of cryomodule subsystems

44. 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

45. Kulkarni N.S., Kumar Vinit  
 Electromagnetic and beam dynamics design of a 5 Mev, 3KW travelling wave electron linear accelerator

Enhancement of THz radiation from the cute-FEL using an S-band pre-buncher

47. Mahawar A., Mohania P., Shrivastava P., Yadav Anand, Puntambekar A.M.  
Room temperature RF characterization of niobium SCRF cavities and the their prototypes

FPGA based control system hardware for microtron

EBW of superconducting niobium cavities at IUAC

Development of a data acquisition system for beam current measurement of booster synchrotron at RRCAT

51. Nayak M.K., Khan S., Haridas G., Joshi D.S., Chouksey S., Bandypadhyay T., Tripathi R.M., Sharma D.N.*  
Determination of Bremsstrahlung efficiency for 450 MeV electrons

Radiation shielding evaluation for 35 MeV IR FEL linac
61. Nigam N., Sharma N.K., Joshi S.C.
Study of Lorentz force detuning analysis for 650 MHz 5-cell cavity

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

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.
Quadrapole 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

Supervisory control system for 10 MeV linac

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
Development of data acquisition and control system for diagnostic beam lines of Indus-2

UHV testing of upgraded vacuum chambers for Indus-1

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

Corrector magnet power supplies for Indus-2

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 1GeV 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

Development of magnets with support systems for upgradation of 700 MeV Booster Synchrotron

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., Puntambaker 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

Study on alumina-alumina brazing for application in vacuum chambers of proton synchrotron

Development of end group for 1.3 GHz nine cell SCRF cavity


1. Ajimsha R.S., Das A.K., Sahu V.K., Misra P., Joshi M.P., Kukreja L.M.
Fabrication of Ga2ZnO/P:ZnO homojunction using pulsed laser deposition

Structural and magnetic characterization of pulsed laser deposited Co,FeAl 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

Optimization of process parameters for growth of stoichiometric Co2FeAl thin films using pulsed laser deposition

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 Zn0.7V0.3 thin films grown by pulsed laser deposition

Plasmonic response of silver nanoparticles in different liquid media grown by pulsed laser ablation

Epitaxial ZnO on GaP(1 1 1) substrate grown by using pulsed laser deposition

Effect of alumina capping on plasmon resonance characteristics and stability of silver nanoparticle films grown by pulsed laser deposition


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

A high pressure XRD setup at ADXRD beamline (BL-12) on Indus-2

Growth of multilayer optics for synchrotron radiation sources

Study on effective laser cleaning method to remove carbon layer from a gold surface

Angle dispersive X-ray diffraction beamline on Indus-2 synchrotron radiation source: commissioning and first results

C3. Others Seminars/Conference Presentation

Growth and characterization of lead-free piezoelectric single crystal 0.80Na0.85Bi0.15TiO3-0.20K0.85Bi0.15TiO3
15th Summer School on Crystal Growth (ISSCG-15), Gdansk, Poland, Aug. 4-10, 2013

Growth and characterization of undoped and Mn doped lead-free piezoelectric single crystals 0.80Na0.85Bi0.15TiO3-0.20K0.85Bi0.15TiO3
17th International Conference on Crystal Growth and Epitaxy (ICCGE-17), Warsaw, Poland, Aug. 11-16, 2013

Growth and investigation of the electrical properties of 0.80Na0.85Bi0.15TiO3-0.20K0.85Bi0.15TiO3 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


Dielectric and ferroelectric hysteresis measurement of Sr$_3$Ba$_2$Nb$_6$O$_{17}$ single crystals

Simulation of multi-cusp magnetic field for efficient confinement of hydrogen plasma in H-Ion source

Modeling and simulation of 2 MHz external antenna for RF driven H$^+$ ion source

High availability setup and performance improvement for RRCAT information portal using server load balancing

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

On enhanced ionic conductivity in Yttria stabilized zirconia nanoparticles generated via pulsed mode of laser vaporization method


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