Publications (January 2009 to June 2009)

A. Journal Articles

1. Aditya L., Nanda J.*, Samajdar I.*, Venkataramani N.*, Prasad S.*
Correlation of grain boundary nature with magnetization in RF-sputtered lithium zinc ferrite thin films
Journal of Magnetism and Magnetic Materials 321, 3373-79 (2009)

2. Banerjee Arup, Chakrabarti A., Ghanty T.K.*
Time-Dependent density functional theory calculation of van der waals coefficient of potassium clusters
International Journal of Quantum Chemistry 109, 1376-84 (2009)

3. Banerjee Arup, Harbola M.K.*, Chakrabarti A., Ghanty T.K.*
Time-Dependent density functional theory calculation of van der waals coefficient of potassium clusters
Journal of Chemical Physics (AIP Conference Proceeding Series 1108) 1, 114-28 (2009)

4. Bhalerao G.M., Sinha A.K., Srivastava H.
Synthesis and studies of growth kinetics of monodispersed iron oxide nanoparticles using ferrocene as novel precursor.
Applied Physics A: Materials Science and Processing 95, 373-80 (2009)

5. Borage M., Nagesh K.V.*, Bhatia M.S.*, Tiwari S.
Design of LCL-T resonant converter including the effect of transformer winding capacitance
IEEE Transactions on Industrial Electronics 56, 1420-27 (2009)

6. Chakrabarti A., Barman S.R.*
Theoretical prediction of shape memory behavior and ferrimagnetism in Mn_2NiIn
Applied Physics Letters 94, 161908 (2009)

7. Chakravarty U., Naik P.A., Kumbhare S.R., Gupta P.D.
Efficient keV X-ray generation from irradiation of in-situ produced silver clusters by Ti:sapphire laser pulses
Journal of the Optical Society of Korea 13, 80 (2009)

8. Chatteree K.*, Ghodke D.V., Chandra A.*, Al-Haddad K.*
Simple controller for STATCOM-based var generators
Journal of Power Electronics (formerly IEE) 2, 103-114 (2009)

9. Chatterjee S., Kumar Pavan Y.
External measurement of dihedral right angles with cyclic optical configuration
Applied Optics 48, 1598-605 (2009)

10. Chatterjee S., Kumar Pavan Y.
Simple technique for the generation of white-light Haidinger fringes with cyclic optical configuration
Optics Letters 34, 1291-303 (2009)

11. Choubey R.*, Trivedi R.*, Das M.*, Sen P.K.*, Sen P.*, Kar S., Bartwal K.S., Ganeev R.*
Growth and study of nonlinear refraction and absorption in Mg doped $LiNbO_3$ single crystals
Journal of Crystal Growth 311, 2597-2601 (2009)

12. Desale G.R.*, Paul C.P., Gandhi B.K.*, Jain S.C.*
Erosion wear behavior of laser clad surfaces of low carbon austenitic steel
Wear 266, 975-987 (2009)

13. Dinakaran S.*, Verma S., Raj C. J. *, Linet J.M. *, Krishnan S.*, Das S. J. *
Growth of a bulk organic single crystal of benzoylglycine by unidirectional crystal growth method
Crystal Growth Design 9, 151-55 (2009)

14. Dixit V.K., Neishi K.*, Koike J.*
Electronic transport properties of $Cu/MnO_x/SiO_2/p$-Si MOS devices
Materials Research Society, D4.11 (2009)

15. Dutta Majumdar J.*, Manna I.*, Kumar A.*, Bhargava P., Nath A.K.
Direct laser cladding of Co on Ti-6Al-4V with a compositionally graded interface
Journal of Material Processing Technology 209, 2237-243 (2009)

16. Fox N.E.*, Sharma T.K., Sweeney S.J.*, Hosea T. J. C.*
Room temperature characterisation of novel InGaAlAs quantum well laser structures using electro-modulated reflectance and surface photovoltage spectroscopy
Physica Stat. Solidi (a) 206, 796 (2009)

17. Ghodke D.V., Sreeraj E.S.*, Chatterjee K.*, Fernandes B.G.*
One-cycle-controlled bidirectional AC-to-DC converter with constant power factor
IEEE Transations on Industrial Electronics 56, 1499-510 (2009)

18. Gupta P., Sokhey K.J.S., Rai S., Choudhary R.J.*, Phase D.M.*, Lodha G.S.
Pulsed laser ablated off-stoichiometric thin films of the

Heusler alloy Co_2TiSn on Si (100) substrate
Thin Solid Films 517, 3650-55 (2009)

19. Gupta P.K., Kush P.K., Tiwari A.*
Experimental research on heat transfer coefficients for cryogenic cross-counter-flow coiled finned-tube heat exchangers
International Journal of Refrigeration 32, 960-72 (2009)

20. Jain A., Sharma D.K., Gupta A.K., Hannurkar P.R.
Design of high power radio frequency radial combiner for proton accelerator
Review of Scientific Instruments 80, 016106-1 (2009)

21. Jayabalan J., Singh A., Chari R., Khan S., Srivastava H., Oak S.M.
Transient absorption and higher-order nonlinearities in silver nanoplatelets
Applied Physics Letters 94, 181902-1-3 (2009)

22. Kamal C., Ghanty T.K., Banerjee Arup, Chakrabarti A.
Ab initio study of stoichiometric gallium phosphide clusters
Journal of Chemical Physics 130, 024308-1-8 (2009)

23. Kanter E.*, Vargis E.*, Majumder S.K., Keller M.D.*, Woeste E.*, Rao G.G.*, Mahadevan-Jansen A.*
Application of Raman spectroscopy for cervical dysplasia diagnosis
Journal of Biophotonics 2, 81-90 (2009)

24. Kanter E.M.*, Majumder S.K., Kanter G.J.*, Woeste E.M.*, Mahadevan-Jansen A.*
Effect of hormonal variation on Raman spectra for cervical disease detection
Am. J. Obstet. Gynecol. 200, 512.e1-512.e5 (2009)

25. Kanter E.M.*, Majumder S.K., Kanter G.J.*, Woeste E.M.*, Mahadevan-Jansen A.*
Multi-class discrimination of cervical pre-cancers using ***Raman spectroscopy Journal of Raman Spectroscopy*** 40, 205-211 (2009)

26. Kar S., Verma S., Bartwal K.S.
Structural and optical investigations on Mn doped $Li_2B_4O_7$ crystals
Crystal Research & Technology 44, 305-308 (2009)

27. Keller M.D.*, Majumder S.K., Mahadevan-Jansen A.*
Spatially offset Raman spectroscopy of layered soft tissues
Optics Letters 34, 926-928 (2009)

28. Kratzer P.*, Chakrabarti A, Liu Q.K.K.*, Scheffler M.*
Theory of shape evolution of InAs quantum dots on $In_{0.5}Ga_{0.5}As$/InP(001) substrate
New Journal of Physics 11, 073018 (2009)

29. Kukreja L.M., Misra P., Fallert J.*, Sartor J.*, Kalt H.*, Klingshirn C.*
Nano - ZnO in photonics landscape (Invited Paper)
IEEE Proc. Photonics Global, 1 - 6 (2009)

30. Kukreja L.M., Das A.K.*, Misra P.
Studies on nonvolatile resistance memory switching in ZnO thin films (invited paper)
Bulletin of Material Science 32, 247 - 252 (2009)

31. Kumar Pavan Y., Chatterjee S.
Technique for the focal-length measurement of positive lenses using Fizeau interferometry
Applied Optics 48, 730-36 (2009)

32. Kumar S.*, Petwal V.C, Kaul A., Beher A.*, Pramod R., Bapna S.C., Soni S.C., Sharma Arun*
Sprout inhibition in potato (Solanum tuberosum L.) with low energy electrons
Journal of Food Science and Technology 46, 50-53 (2009)

33. Late D.J.*, Misra P., Singh B.N., Kukreja L.M., Joag D.S.*, More M.A.*
Enhanced field emission of pulsed laser deposited nanocrystalline ZnO thin films on Re and W
Applied Physics A 95, 613 - 620 (2009)

34. Mahakud R., Prakash O., Dixit S.K., Mittal J.K.
Analysis on the laser beam pointing instability induced fringe shift and contrast dilution from different interferometers used for writing fiber Bragg grating
Optics Communications 282, 2204-11 (2009)

35. Majumder S.K., Gupta A.* Gupta S.*
Non-linear multi-class pattern recognition for laser-induced fluorescence diagnosis of oral cavity cancer
Photo/Electrochemistry & Photobiology in the Environment, Energy and Fuel 95-114, 2009

36. Masanta M.*, Ganesh P., Kaul R., Nath A.K., Roy Choudhury A.*
Development of a hard nano-structured multi-component ceramic coating by laser cladding
Materials Science & Engineering A 508, 134-140 (2009)

37. Misra P., Sharma T.K., Kukreja L.M.
Temperature dependent photoluminescence processes in

ZnO thin films grown on sapphire by pulsed laser deposition
Current Applied Physics 9, 179-83 (2009)

38. Mukhopadhyay P.K., Oezgoren K.*, Budunoğlu L.*, Iday O.*
All-fiber low-noise high-power femtosecond Yb-fiber amplifier system seeded by an all-normal dispersion fiber oscillator
IEEE Journal of Selected Topics in Quantum Electronics 15, 145-52 (2009)

39. Nautiyal P.B.*, Bisht K.S.* Bindra K.S., Oak S.M.
Effects of thickness of beta barium borate and angle of non-collinearity on the fs pulse generation by optical parametric amplification
Journal of Optics and Laser Technology 41, 539, (2009)

40. Neishi K.*, Dixit V.K., Aki S.*, Koike J.* Matsumoto K.*, Sato H.*, Itoh H.*, Hosaka S.*
Adhesion and Cu diffusion barrier properties of a MnO_x barrier layer formed with thermal MOCVD
Material Research Society, D4.10, 2009

41. Raj Mohan S., Joshi M.P., Singh M.P.
Negative electric field dependence of mobility in TPD doped Polystyrene.
Chemical Physics Letters 470, 279-84 (2009)

42. Rao D., Aneesh A.*, Verma Y., Sreeja T.*, Gupta P.K.
Real-time in vivo imaging of adult Zebrafish brain using optical coherence tomography
Journal of Biophotonics 2, 288-291 (2009)

43. Reddy B.*, Elizabeth S.*, Bhat H.L.*, Karnal A.K.
Development of a versatile high temperature top seeded solution growth unit for growing cesium lithium borate crystals
Review of Scientific Instruments 80, 013908 (2009)

44. Roy S. B., Chattopadhyay M.K.
Contrasting the magnetic response between a magnetic glass and a reentrant spin glass
Physical Review B 79, 052407-1-4 (2009)

45. Ryu H.*, Bartwal K.S.
Defect structure and its relevance to photoluminescence in $SrAl_2O_4$: Eu^{2+}, Nd^{3+}
Physica B 404, 1714-1718 (2009)

46. Ryu H.*, Bartwal K.S.
Enhancement in photoluminescence on Mg substitution in $Mg_xSr_{1-x}Al_2O_4$: Eu, Nd
Open Applied Physics Journal 2, 1-4 (2009)

47. Ryu H.*, Bartwal K.S.
Preparation of crystalline fibres of codoped $BaAl_2O_4$:Eu^{2+}: Cr^{3+}
Crystal Research & Technology 44, 69-73 (2009)

48. Ryu H.*, Bartwal K.S.
Exploration and optimization of Dy codoping in polycrystalline $CaAl_2O_4$: Eu
J. Alloys & Compd. 476, 379-382 (2009)

49. Sahu K., Bansal H., Mukherjee C., Sharma M., Gupta P.K.
Atomic force microscopic study on morphological alterations induced by photodynamic action of Toluidine Blue O in Staphy lococcus aureus and Escherichia coli
Journal of Photochemistry and Photobiology B: Biology 96, 9-16 (2009)

50. Sahu K., Mohanty S.K., Gupta P.K.
He-Ne laser (632.8 nm) pre-irradiation gives protection against DNA damage induced by a near-infrared trapping beam
Journal of Biophotonics 2, 140-144 (2009)

51. Satapathy S., Gupta P.K., Varma K.B.R.*
Enhancement of nonvolatile polarization and pyroelectric sensitivity in lithium tantalite (LT)/Poly (vinylidene fluoride) PVDF nano composite
Journal of Physics D: Applied Physics 42, 055402 (2009)

52. Sharma T.K., Fox N.*, Hosea T.J.C.*
Fourier transform infrared surface photovoltage spectroscopy for the investigation of mid-infrared semiconductor lasers
Physica Stat. Solidi 206, 808 (2009)

53. Singh B.K.*, Cho S.W.*, Bartwal K.S.
Effect on structure and hydrogen storage characteristics of composite alloys $Ti_{0.32}Cr_{0.43}V_{0.25}$
with $LaNi_5$ and rare-earth elements La, Ce, Y
J. Alloys & Compounds 478, 785–788 (2009)

54. Singh N., Vora H.S.
On the hyperfine spectral lines of an atomic copper vapor laser
Optics Communications 282, 1393-98 (2009)

55. Singhal H., Arora V., Rao B.S., Naik P.A., Chakravarty U., Khan R.A., Gupta P.D.
Dependence of high-order harmonic intensity on the length of preformed plasma plumes
Physical Review A 79, 023807 (2009)

56. Sinha A.K.
Heat transfer studies for a crystal in a synchrotron radiation beamline
Sadhana 34, 243-254 (2009)

57. Solanki G.S.*, Nigam S., Sharma A.*, Pant H.C.
Visible regime application of zone plate coded incoherent holography
Optics Communications 282, 2796-99 (2009)

58. Sundar R., Ranganathan K., George J., Oak S.M.
Experimental analysis of the effects of orientation and location of the Pockels cell in an Nd:YAG laser resonator
Optics & Laser Technology 41, 705-9 (2009)

B. Invited Talks

1. Banerjee Arup
Time-dependent density functional theory calculation of Van der Waals coefficient of metal clusters
DAE-BRNS Symposium on Atomic, Molecular, and Optical Physics, New Delhi, February 2009

2. Chakera J.A.
Femto second laser plasma interaction: a micro high energy electron / x-ray source
8th DAE-BRNS National Laser Symposium (NLS-2008), New Delhi, 7-10 January, 2009

3. Ganguli Tapas
Development of Semiconductor Diode lasers at RRCAT
8th DAE-BRNS National Laser Symposium (NLS-2008), New Delhi, 7-10 January, 2009

4. Gupta P.D.
Laser wakefield electron acceleration
Indian Particle Accelerator Conference-2009, Indore, 12 February, 2009

5. Ingale A.
Raman spectroscopy: insight into physics of materials
Science Day, Indore, 2009

6. Ingale A.
Light and colour
Science Day, Indore, 2009

7. Kukreja L.M.
Genesis of laser light and its applications
All India refresher course for lecturers in Physics, Pune, 19 March 2009

8. Kukreja L.M.
Nanostructures of ZnO for photonics,
UGC - CAS seminar in two parts, Pune, 20-21 March 2009

9. Kukreja L.M.
ZnO Nano-rod Lasers,
SPIE Colloquium (Kerala Chapter), Cochin, 9 May 2009

10. Kumar Vinit
Introduction to synchrotron radiation sources and free-electron lasers
DST-SERC School on Experimental Techniques in ***Atomic and Molecular Physics,*** Ahmedabad, 20-23 April 2009

11. Majumder S.K.
Raman spectroscopy for diagnosis of cancer, S K Majumder,
8th DAE-BRNS National Laser Symposium (NLS-2008), New Delhi, 7-10 January, 2009

12. Petwal V.C.
Radiation processing of food and agricultural produce: fruits and vegetables
Novel Techniques in Packaging, Storage, Processing and ***Quality Control of Fruits and Vegetables,*** Bhopal, 24 Feb. 2009 to 16 Mar. 2009

13. Ranganathan. K.
Development and studies of diode-pumped high power Nd:YAG lasers
8th DAE-BRNS National Laser Symposium (NLS-2008), New Delhi, 7-10 January, 2009

14. Rawat Anil
Protecting children in cyber space
World Telecommunication and IT Day, Indore, 17 May, 2009

15. Roy S.B.
Indo-US Conference on Advanced Magnetic Materials & Applications, Mumbai, 1-4 March 2009

16. Roy S.B.
Physics Colloquium, Kanpur, 2 April, 2009

17. Singh M.P.
Introduction to neural networks, a set of four lectures
National Initiative on Undergraduate Science VI, Mumbai, 6-8 June 2009

18. Sharma S. K.
Development of shape modification techniques for KDP crystal growth to enhance cross-section and crystallization yield
13th National Seminar on Crystal Growth, Chennai, Jan. 2009

19. Thakurta A.C.
Dynamic response of accelerator power supplies-Indus experience
Proceedings InPAC-2009, Feb10-13, 2009

20. Verma S.
Optical imaging techniques for studying crystal growth process: present and future
13th National Seminar on Crystal Growth, Chennai, 27-29 Jan 2009

C. Seminars/Conference Presentation

C1. Proc. Indian Particle Accelerator Conference (InPAC 2009), RRCAT, Indore, 10-13 Feb. 2009

1. Aditya L., Kumar S., Singh K., Pareek P., Shinde R.S.
Development of large size ferrite toroids for fast magnetic switching applications in accelerators

2. Aditya L., Jain A.K., Shinde R.S.
Development of microwave ferrites & garnets for prototype ferrite circulators at 352 MHz & 700 MHz

3. Ahlawat M., Shinde R.S.
Development of versatile dielectric-constant measurement system for low loss ferrite and dielectrics

4. Badapanda M.K., Upadhyay R., Tyagi R., Hannurkar P.R.
Triggered spark gap based crowbar system for Indus-2 synchrotron radiation source

5. Bagre M, Maurya T., Yedle A, Sharma D., Jain V., Puntambekar A., Bheema N., Shrivastava P.
Initial work on Electron Beam Welding of 1.3 GHz single cell prototype cavity & their process validation efforts

6. Banwari R., Kasliwal A., Pandit T.G.
Commissioning experiences on high voltage generator of 750 keV DC accelerator at RRCAT, Indore

7. Baxy D., Shrivastava P.
Design, prototype development and tests of an S-Band fast phase control loop for pulsed RF/Microwave systems

8. Biswas B.*, Lal S.*, Kumar V.
Development of in-vacuum mirror system, compact magnets and undulator for beam line for CUTE-FEL

9. Borage M., Singh T., Koli M., Tiwari S.
Modular magnet power supplies for CUTE-FEL beam line magnets and photocathode gun based linac

10. Chaudhari S., Rajan A., Marathe R.G., Rawat A.
Indus beamlines – software for booking and usage tracking

11. Chauhan A., Fatnani P.
Redundancy scheme for multi-layered accelerator control system

12. Chauhan S.K., Raghavendra S., Kokil S.V., Rajpoot D.S., Joshi S.C.
Development of automated test bench for measurement of the field distribution in single cell elliptical superconducting cavity

13. Chitnis P., Fatnani P., Barpande K., Agrawal R.K.
EPICS based control system for Indus-1 accelerator

14. Fatnani P.,. Barpande K, Sheth Y., Agrawal R.K., Chauhan A., Saifee K., Yadav R.P., Gupta A.M., Merh B., Gothwal P., Sampa G., Seema M., Janardhan M., Lulani N., Srivastava B.S. K., Prabhu A., Parate V.C., Jidee J.P., Sanjai K., Gupta V K., Sanga S., Francis A., Satheesan T.V., Pawanarkar P., Hemant K., Vaishnav H., Kar S.
Indus-2 computer controls – past, present & future

15. Fatnani P.,. Barpande K, Sheth Y., Agrawal R. K., Chauhan A., Saifee K., Yadav R. P., Gupta A. M., Merh B., Gothwal P., Sampa G., Seema M., Janardhan M., Lulani N., Srivastava B. S. K., Prabhu A., Parate V. C., Jidee J. P., Sanjai K., Gupta V K., Sanga S., Francis A., Satheesan T. V., Pawanarkar P., Hemant K., Vaishnav H., Kar S.
Role of computer controls in Indus-2 commissioning

16. Gandhi M.L., Thakurta A.C.
High stability bipolar current power supply for a variable pole gap dipole magnet

17. Gaur R., Jana P.K., Shrivastava P.
RF cavity design of 352.2 MHz, 3 MeV RFQ

18. Gaur R., Shrivastava P.
Error analysis on a 352.2 MHz, 3 MeV RFQ

19. Gaur R., Jana P.K., Shrivastava P.
Beam dynamics design and analysis of 3 MeV RFQ operating at 352.2 MHz

20. Gehlot M.*, Mishra G.*, Chouksey S., Kale U., Kumar V., Nerpagar P.
Proposed pulsed wire experiment for undulator chracterization

21. Gothwal P., Yadav R.P., Seema M., Fatnani P.
Indus-2 beam line front end controls using real time operating system

22. Gothwal P., Gupta A. M., Merh B., Fatnani P., Vaishnav H., Satheesan T. V.
Indus-2 machine safety interlock system – from design to commissioning

23. Holikatti A.C., Puntambekar T.A., Pithawa C.K.
Microcontroller Based four-channel current readout unit for Beam slit monitor

24. Jain S.K., Malik R., Sekar K., Hannurkar P.R.
Development of 90 degree mass analyzing magnet for charge abnalysis

25. Jain S.K., Hannurkar P.R.
Study of extraction electrode geometry for 30 mA,50 keV ECR proton source using IGUN software

26. Jain V., Bhandarkar U.V., Biswas B., Pithawa C. K.
Accurate estimation of electromagnetic parameters using FEA for Indus-2 RF cavity

27. Jana P.K., Shrivastava P.
3D Electromagnetic simulation study of RF cavity of 20 MeV injector microtron

28. Jana P.K., Shrivastava P., Kulkarni N.S..
Design of microwave coupler for 10 MeV electron linear accelerator

29. Kak A., Kulshreshtha P.K., Lal S.
Development of brazing technique for a 1.6 cell BNL/SLAC/UCLA type photocathode guns by hydrogen brazing

30. Kasliwal A., Banwari R., Pandit T.G.
Mapping of feedback voltage generated by generating volt meter with its linear and angular variations with respect to the Hemispherical HV source

31. Kelkar Y., Raikwar Y., Thakurta A.C.
A capacitor charging power supply using series resonant topology

32. Kulkarni N.S., Shrivastava P.
Geometrical optimization studies on 10 MeV, 352.2 MHz drift tube linac

33. Kumar A., Senecha V.K.
Cusp leak width computation and optimization for H- Ion source

34. Kumar A., Senecha V.K.
Filter Magnet Design study for H– Ion source

35. Lulani N., Barpande K, Fatnani P., Sheth Y.
FPGA based VME boards for Indus-2 timing control system

36. Merh B., Fatnani P.
Indus-2 alarm handling system: from perception to practice

37. Nayak M.K., Dev V., Sahani P.K., Verma D., Haridas G., Thakkar K.K., Sarkar P.K.* Singh G., Sharma D.N.
Experimental determination of beam loss point in transport line-2 of Indus accelerator complex

38. Mishra D., Prasad M.
Higher order mode (HOM) order mode (HOM) analysis of 350 MHz reentrant superconducting cavity

39. Mohania P., Baxy D., Shrivastava P.
Design and development of power metering system for pulsed microwave signals

40. Murthy Y.R., Kokil S.V., Chauhan S.K., Raghavendra S., Kane G.V., Joshi S.C.
Pulse field measurements of DTL quadrupole magnet at RRCAT for SNS project

41. Nathwani R.K., Joshi D.K., Tyagi Y., Soni R.S., Puntambekar T.A., Pithawa C.K.
A Setup for measurement of beam stability and position using position sensitive detector for Indus-1.

42. Pareek P., Shinde R.S.
Measurement of longitudinal coupling impedance of Indus-2 kicker magnet

43. Pareek P., Singh K., Shinde R.S.
Up-gradation of wide band FCT for improved performance in booster synchrotron

44. Patil J., Tomar S.S., Rawat A., Raghunathan S.*
Control and monitoring of EXAFS beamline of Indus-2 at RRCAT remotely from BARC

45. Petwal V.C., Pramod R., Dwivedi J., Senecha V.K.
Thickness optimization and activity induction in beam slit monitor for indus

46. Prasad M., Mishra D., Hannurkar P.R.
Effects of temperature and hom plunger on higher order modes of Indus-2 RF cavity

47. Prasad M., Mishra D., Bagduwal P.S., Kumar R., Hannurkar P.R.
RF design and characterization of inductive coupler for new Indus-1 RF cavity RRCAT

48. Prasad M., Mishra D., Bagduwal P.S., Hannurkar P.R.
RF design and characterisation of Indus-1 RF cavity

49. Pramod R., Petwal V.C.
Optimization of beam parameters of electron gun for 2.5 MeV/100 kW high power industrial accelerator

50. Rao B.S., Moorti A., Naik P.A., Kumbhare S.R., Gupta P.D.
Mono-energetic, low divergence, high energy electron beam by laser wake-field electron acceleration in RRCAT

51. Sahani P.K., Haridas G., Dev V., Thakkar K.K., Singh G., Sarkar P.K.*, Sharma D.N.*
Simulation of electron, positron and bremsstrahlung spectrum generated due to electromagnetic cascade by 2.5GeV electron hitting lead target using FLUKA code

52. Sandha R.S., Goswami S.G., Dwivedi J., Holikatti A.C., Puntambekar T.A., Gupta A.M., Saifee K., Fatnani P., Sharma S.D., Bhatnagar V., Jain A.K., Sridhar R., Shukla S.K.
Development of multi-functional beam diagnostic device for transfer line TL-1 of Indus-1

53. Sanjeev G.*, Shrivastava P.
Performance and applications of 8/12 MeV variable energy microtron at Mangalore university

54. Senecha V.K., Vadjikar R.M., Kumar A.
Simulation of H ion extraction in cesiated and noncesiated ion sources

55. Sharma D.K., Jain A., Hannurkar P.R.
Supervisory system for Indus-2 RF system

56. Sharma N.K., Joshi S.C.
Search method optimization technique for thermal design of high power RFQ structure

57. Shrivastava P., Mulchandani J.K., Bheema N., Acharya M., Rajput V., Singh H.G., Pithawa C.K., Sahni V.C.
Development efforts on a 1.3 MW pulsed 352.2 MHz test stand at RRCAT

58. Shrivastava P., Mohania P., Mulchandani J.K.
Upgrade of microwave system and efforts for generation of variable pulse width electron beam from 20MeV pre-injector microtron for Indus complex

59. Sreeramulu K., Kulshreshtha P.K., Singh S., Sinha G., Singh L., Thakurta A.C., Pithawa C.K.
Development and characterisation of aluminium stranded water-cooled conductor for rapid cycling synchrotron magnets

60. Sreeramulu K., Kulshreshta P.K., Singh L., Pithawa C.K.
Development of prototype compact compound motion precision jacks for positioning of small accelerator components

61. Tiwari S., Deshpande P.P., Bhanage V.P., Navathe C.P.
SCADA Software for CUTE-FEL

62. Tripathi A., Badapanda M.K., Tyagi R., Upadhyay R., Bohrey A., Hannurkar P.R.
Tetrode bias power supply for Indus-1, synchrotron radiation source

63. Tripathi S.*, Gehlot M.*, Khan H.J.*, Mishra G.*, Chouksey S., Kumar V., Kale U., Nerpagar P.
Measurement of wire sag and wave velocity in the pulsed wire setup

64. Tyagi Y., Puntambekar T.A., Pithawa C.K.
Beam profile and beam size measurement in TL-1 in Indus Accelerator Complex using fluorescent screen beam profile monitors.

65. Tyagi Y., Yadav S., Puntambekar T.A., Pithawa C.K.
Development of image acquisition and analysis software for accelerator applications

66. Upadhyay R. *, Badapanda M.K., Tripathi A., Hannurkar P.R., Pithawa C.K.
Optimized control strategy for crobarless solid state modular power supply

67. Verma D., Nayak M.K., Dev V., Sahani P.K., Kumar Vijay, Nair G.H., , Thakkar K.K., Sarkar P.K.*, Sharma D.N.*, Suhane S.K., Chouksey S., Singh G.
Experimental evaluation of the radiological condition of HRVUV beam line of Indus-1 SRS at RRCAT

68. Wanmode Y.D., Bhisikar A., Shrivastava P.
Design and development of 6MW peak, 25KW mean power WR-284 wave guide line components

69. Yadav A., Manekar M.A., Puntambekar A.
Residual resitivity ratio measurement of niobium

70. Yadav A., Manekar M.A., Puntambekar A.
Testing and evaluation of high temperature superconductor current leads

71. Yadav R.P., Fatnani P.
Indus-1 LCW plant control system using reconfigurable logic and timed interlock bypass

72. Yadav R.P., Fatnani P., Choubey A.*
Reconfigurable data Parser module for Indus-1 LCW plant control software

73. Yadav R. P., Fatnani P., Varde P. V.
Simulation and modeling of emission process in microtron with type II cavity

74. Yadav S., Tyagi Y., Puntambekar T.A., Pithawa C.K.
Software for online tune measurement system for Indus-2 accelerator

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