PEER-Reviewed Publications in Scientific Journals/Conference Proceedings/Book Chapter

2015-2016 (149 Reprints)

1. Advanced LIGO
J. AASI, A. KUMAR et.al.
Classical and Quantum Gravity, 32, 074001, 2015

2. Potential around a Dust Grain in Collisional Plasma
R. MOULICK, and K. S. GOSWAMI
Physics of Plasmas, 22, 043701, 2015

3. Probing Negative Ion Density and Temperature using a Resonance Hairpin Probe
N. SIRSE, S. K. KARKARI, and M. M. TURNER
Plasma Sources Science and Technology, 24, 022001, 2015

4. Collisionless Sheath Heating in Current-Driven Capacitively Coupled Plasma Discharges via Higher Order Sinusoidal Signals
S. SHARMA, S. K. MISHRA, P. K. KAW, A. DAS, N. SIRSE, and M. M. TURNER
Plasma Sources Science and Technology, 24, 025037, 2015

5. Cryogenic Acceptance Tests of SST-1 Superconducting Coils
A.N. SHARMA, U. PRASAD, K. DOSHI, P. VARMORA, Y. KHRISTI, D. PATEL, A. PANCHAL, S.J. JADEJA, V.L. TANNA, Z. KHAN, D. SHARMA, S. PRADHAN
IEEE Transactions on Applied Superconductivity, 25, 6924776, 2015

6. Data Acquisition and Control System for ECRH Systems on SST-1
JATINKUMAR J. PATEL, HARSHIDA C. PATEL, NATARAJABOOBATHI RAJANBABU, PRAGNESH DHORAJIYA, BRAJ KISHORE SHUKLA, PARESH J. PATEL, RATNESHWAR JHA, and DHIRAJ BORA
IEEE Transactions on Plasma Science, 43, 100-1105, 2015

7. Plasma-assisted Synthesis of Carbon Encapsulated Magnetic Nanoparticles with Controlled Sizes Correlated to Smooth Variation of Magnetic Properties
N. AOMOA, TRINAYAN SARMAH, U.P. DESHP and E, V. SATHE, A. BANERJEE, T. SHRIPATHI, V.R. REDDY, N.P. LALLA, A. GUPTA, RAJEEV GUPTA, DIVESH N. SRIVASTAVA, R.K. BORDOLOI, S. SARMA, A. SRINIVASAN, M. KAKATI
Carbon, 84, 24-37, 2015

8. Effect of Mass and Charge of Ionic Species on Spatio-Temporal Evolution of Transient Electric Field in CCP Discharges
S. SHARMA, S. K. MISHRA, P. K. KAW, M. M. TURNER, and S. K. KARKARI
Contributions to Plasma Physics, 55, 331-336, 2015(IPR/RR-674/2014)

9. Quench Detection of SST-1 TF Coils by Helium Flow and Pressure Measurement
A. N. SHARMA, S. PRADHAN, U. PRASAD, P. VARMORA, Y. KHRISTI, K. DOSHI, and D. PATEL
Journal of Fusion Energy, 34, 331-338, 2015

10. Inverse Mirror Plasma Experimental Device (IMPED) - A Magnetized Linear Plasma Device for Wave Studies
SAYAK BOSE, P. K. CHATTOPADHYAY, J. GHOSH, S. SENGUPTA, Y. C. SAXENA, and R. PAL
Journal of Plasma Physics, 81, 00117, 2015(IPR/RR-687/2014)

11. Thermal Expansion Characteristics of Fe-9Cr-0.12C-0.56Mn-0.24V-1.38W-0.06Ta (wt.%) Reduced Activation Ferritic-Martensitic Steel
RAJU SUBRAMANIAN, HARAPRASANNA TRIPATHY, ARUN KUMAR RAI, RAJ NARAYAN HAJRA, SAROJA SAIBABA, TAMMANA JAYAKUMAR, ELLAPPAN RAJENDRA KUMAR
Journal of Nuclear Materials, 459, 150-158, 2015

12. Anomalous Collisional Absorption of Laser Pulses in Underdense Plasma at Low Temperature
M. KUNDU
Physical Review E, 91, 043102, 2015

13. Photoelectric Sheath Formation around Small Spherical Objects in Space
SHIKHA MISRA, S. K. MISHRA, and M. S. SODHA
Physics of Plasmas, 22, 043705, 2015

14. Application of Computational Fluid Dynamics for the Simulation of Cryogenic Molecular Sieve Bed Adsorber of Hydrogen Isotopes Recovery System for Indian LLCB-TBM
V. GAYATHRI DEVI, AMIT SIRCAR, and B. SARKAR
Fusion Science and Technology, 67, 567-570, 2015

15.Reduced Leakage Current and Improved Ferroelectricity in Magneto-Electric Composite Ceramics Prepared with Microwave Assisted Radiant Hybrid Sintering
SANJAY KUMAR UPADHYAY, V. RAGHAVENDRA REDDY, S. M. GUPTA, N. CHAUHAN, and AJAY GUPTA
AIP Advances, 5, 047135, 2015

16. Phase Transformation of Alumina Coating by Plasma Assisted Tempering of Aluminized P91 Steels
N.I. JAMNAPARAA, S. MUKHERJEE, S. KHANNA
Journal of Nuclear Materials, 464, 73-79, 2015(IPR/RR-711/2015)

17. Epoxy-Novolac Interpenetrating Network Adhesive for Bonding of Plasma-Nitrided Titanium
S. AHMED, D. CHAKRABARTY, S. BHOWMIK, S. MUKHERJEE, and R.RANE.
Journal of Adhesion Science and Technology, 29, 1446, 2015

18. Observation of External Control and Formation of a Void in Cogenerated Dusty Plasma
SANJIB SARKAR, MALAY MONDAL, M. BOSE and S. MUKHERJEE
Plasma Sources Science and Technology, 24, 035007, 2015

19. Localized electron heating and density peaking in downstream helicon plasma
SOUMEN GHOSH, K. K. BARADA, P. K. CHATTOPADHYAY, J. GHOSH and D. BORA
Plasma Sources Science and Technology, 24, 034011, 2015(IPR/RR-721/2015)

20. An Experimental and Numerical Study of Flow and Heat Transfer in Helium Cooled Divertor Finger Mock-Up with Sectorial Extended Surface
SANDEEP RIMZA, SAMIR KHIRWADKAR, and KARUPPANNA VELUSAMY
Applied Thermal Engineering, 82, 390-402, 2015

21. Modelling and Analytic Studies of Sheared Flow Effects on Tearing Modes
D. CHANDRA, A. THYAGARAJA, A. SEN, C.J. HAM, T.C. HENDER, R.J. HASTIE, J.W. CONNOR, P. KAW, and J. MENDONCA
Nuclear Fusion, 55, 053016, 2015

22. Radial Resolution Evaluation for Oblique-View Electron Cyclotron Emission for ITER
P. V. SUBHASH, Y. GHAI, S. K. AMIT, A. M. BEGUM, and P. VASU
Fusion Science and Technology, 67, 705-717, 2015

23. Multipass Welding
SURESH AKELLA, and RAMESH KUMAR BUDDU
Yuva Engineers, 4, 4-8, 2015

24. Analytic Structure of a Drag-Driven Confined Dust Vortex Flow in Plasma
MODHUCHANDRA LAISHRAM, DEVENDRA SHARMA, and PREDHIMAN K. KAW
Physical Review E - Statistical, Nonlinear, and Soft Matter Physics, 91, 063110, 2015

25. An Experimental Set Up For Studying the Fusion Edge Plasma Facing Materials using TOF Mass Spectrometry
SUNIL KUMAR, PRAGYA BHATT, B.K. SINGH, AJAI KUMAR, R. SHANKER
International Journal of Mass Spectrometry, 385, 32-41, 2015

26. Characterization of the LIGO Detectors during their Sixth Science Run
J. AASI, A. KUMAR, et.al

Classical and Quantum Gravity, 32, 115012, 2015

27. Thermal-Hydraulic Characteristics and Performance of 3D Wavy Channel Based Printed Circuit Heat Exchanger
HAMID HASSAN KHAN, ANEESH A. M, ATUL SHARMA, ATUL SRIVASTAVA, PARITOSH CHAUDHURI
Applied Thermal Engineering, 87, 519-528, 2015

28. Investigation of Shock-Shock Interaction and Mach Reflection in Laterally Colliding Laser-Blow-Off Plasmas
BHUPESH KUMAR, R. K. SINGH, SUDIP SENGUPTA, P. K. KAW and AJAI KUMAR
Physics of Plasmas, 22, 063505, 2015

29. Inverse Mirror Plasma Experimental Device - A New Magnetized Linear Plasma Device with Wide Operating Range
SAYAK BOSE, MANJIT KAUR, P. K. CHATTOPADHYAY, J. GHOSH and Y. C. SAXENA
Review of Scientific Instruments, 86, 063501, 2015

30. Novel Approaches for Mitigating Runaway Electrons and Plasma Disruptions in ADITYA Tokamak
R.L. TANNA, J. GHOSH, P.K. CHATTOPADHYAY, PRAVESH DHYANI, SHISHIR PUROHIT, S. JOISA, C.V.S. RAO, V.K. PANCHAL, D. RAJU, K.A. JADEJA, S.B. BHATT, C.N. GUPTA, CHHAYA CHAVDA, S.V. KULKARNI, B.K. SHUKLA, PRAVEENLAL E.V., JAYESH RAVAL, A. AMARDAS, P.K. ATREY, U. DHOBI, R. MANCHANDA, N. RAMAIYA, N. PATEL, M.B. CHOWDHURI, S.K. JHA, R. JHA, A. SEN, Y.C. SAXENA, D. BORA and ADITYA TEAM
Nuclear Fusion, 55, 063010, 2015

31. Flow Structure and Shear Generation in the 3D SOL of Circular Tokamak Plasma in Aditya
BIBHU PRASAD SAHOO, DEVENDRA SHARMA, RATNESHWAR JHA and YUHE FENG
Nuclear Fusion, 55, 063042, 2015

32. The ITPA Disruption Database
N.W. EIDIETIS, S.P. GERHARDT, R.S. GRANETZ, Y. KAWANO, M. LEHNEN, J.B. LISTER, G. PAUTASSO,V. RICCARDO, R.L. TANNA, A.J. THORNTON
Nuclear Fusion, 55, 063030, 2015

33. Studies on Mechanical Properties, Microstructure and Fracture Morphology Details of Laser Beam Welded Thick SS304L Plates for Fusion Reactor Applications
RAMESH KUMAR BUDDU, N. CHAUHAN, P.M. RAOLE, and HARSHAD NATU
Fusion Engineering and Design, 95, 34-43, 2015

34. Performance of Straight Tungsten Mono-Block Test Mock-Ups using New High Heat Flux Test Facility at IPR
YASHASHRI PATIL, S.S. KHIRWADKAR, S.M. BELSARE, RAJAMANNAR SWAMY, M.S. KHAN, S. TRIPATHI, K. BHOPE, D. KRISHNAN, P. MOKARIA, N. PATEL, I. ANTWALA, K. GALODIYA, M. MEHTA, T. PATEL
Fusion Engineering and Design, 95, 84-90, 2015

35. Tritium Breeding Mock-Up Experiments Containing Lithium Titanate Ceramic Pebbles and Lead Irradiated with DT Neutrons
SHRICHAND JAKHAR, M. ABHANGI, S. TIWARI, R. MAKWANA, V. CHAUDHARI, H.L. SWAMI, C. DANANI, C.V.S. RAO, T.K. BASU, D. MANDAL, SONALI BHADE, R.V. KOLEKAR, P.J. REDDY, R. BHATTACHARYAY, P. CHAUDHURI
Fusion Engineering and Design, 95, 50-58, 2015
(IPR/RR-705/2014)

36. R&D on Divertor Plasma Facing Components at the Institute for Plasma Research
YASHASHRI PATIL, S. KHIRWADKAR, S. M. BELSARE, RAJAMANNAR SWAMY, M. S. KHAN, S. TRIPATHI, K. BHOPE
Nukleonika, 60, 285-288, 2015

37. An Atomic Magnetometer with Autonomous Frequency Stabilization and Large Dynamic Range
S. PRADHAN, S. MISHRA, R. BEHERA, POORNIMA and K. DASGUPTA
Review of Scientific Instruments, 86, 063104, 2015

38. ENG-Cladded Metamaterial-Loaded Helical Waveguide for Optoelectronics Applications
D.K. SHARMA, S.K. PATHAK
Journal of Electromagnetic Waves and Applications, 29, 2501- 2511, 2015

39. Ultrasonic Inspection of High Heat Flux (HHF) Tested Tungsten Monoblock Type Divertor Test Mock ups
KEDAR BHOPE, MAYUR MEHTA and S.S.KHIRWADKAR
E-Journal of Nondestructive Testing, 20, 2015

40. Fluid Simulation of Relativistic Electron Beam Driven Wakefield in a Cold Plasma
RATAN KUMAR BERA, SUDIP SENGUPTA and AMITA DAS
Physics of Plasmas, 22, 073109, 2015
(IPR/RR-725/2015)

41. Design, Development and Testing of Circular Waveguide Taper for Millimeter Wave Transmission Line
KRUPALI D. DONDA, RAVINDER KUMAR, and HITESHKUMAR B. PANDYA
International Journal of Microwaves Applications, 4, 22, 2015

42. Global Gas Balance and Influence of Atomic Hydrogen Irradiation on the Wall Inventory in Steady-State Operation of QUEST Tokamak
A. KUZMIN, H. ZUSHI, I. TAKAGI, S.K. SHARMA, A. RUSINOV, Y. INOUE, Y. HIROOKA, H. ZHOU, M. KOBAYASHI, M. SAKAMOTO, K. HANADA, N. YOSHIDA, K. NAKAMURA, A. FUJISAWA, K. MATSUOKA, H. IDEI, Y. NAGASHIMA, M. HASEGAWA, T. ONCHI, S. BANERJEE, K. MISHRA
Journal of Nuclear Materials, 463, 1087-1090, 2015

43. Identification of Best Fit Parameters of Void Nucleation and Growth Model using Particle Swarm Technique
RITESH SUGANDHI, MANOJ WARRIER, SHASHANK CHATURVEDI
Applied Soft Computing Journal, 35, 113-122, 2015

44. Linear and Nonlinear Evolution of the Ion Resonance Instability in Cylindrical Traps: A Numerical Study
M. SENGUPTA and R. GANESH
Physics of Plasmas, 22, 072112, 2015
(IPR/RR-723/2015)

45. Collisionless Microtearing Modes in Hot Tokamaks: Effect of Trapped Electrons
ADITYA K. SWAMY, R. GANESH, S. BRUNNER, J. VACLAVIK and L. VILLARD
Physics of Plasmas, 22, 072512, 2015
(IPR/RR-726/2015)

46. Enhanced X-Ray Emission from Nano-Particle Doped Bacteria
M. KRISHNAMURTHY, M. KUNDU, KARTIK BANE, AMIT D. LAD, PRASHANT KUMAR SINGH, GOURAB CHATTERJEE, G. RAVINDRA KUMAR, and KRISHANU RAY
Optics Express, 23, 17909, 2015

46. Adaptive Directional Decomposition in Non Sub Sample Contourlet Transform Domain for Single Image Super Resolution
AMISHA J. SHAH, SURYAKANT B. GUPTA
Multimedia Tools and Applications, 1-25, 2015
(IPR/RR-715/2015)

47. Stability of an Elliptical Vortex in a Strongly Coupled Dusty Plasma
SAYANEE JANA, DEBABRATA BANERJEE and NIKHIL CHAKRABARTI
Physics of Plasmas, 22, 083704, 2015

48. Design, Development, and Results from a Charge-Collector Diagnostic for a Toroidal Electron Plasma Experiment

SAMBARAN PAHARI, LAVKESH LACHHVANI, MANU BAJPAI, KARAN RATHOD, YOGESH YEOLE and P. K. CHATTOPADHYAY
Review of Scientific Instruments, 86, 083504, 2015

49. Rayleigh-Taylor Instability in Dusty Plasma Experiment
K. AVINASH and A. SEN
Physics of Plasmas, 22, 083707, 2015

50. Numerical Simulation of 14.1 MeV Neutron Irradiation Effects on Electrical Characteristics of PIPS Detector for Plasma X-Ray Tomography
P. VIGNESHWARA RAJA, N. V. L. NARASIMHA MURTY, C. V. S RAO, and MITUL ABHANGI
IEEE Transactions on Nuclear Science, 62, 7156174, 2015

51. Self Organization of High $ß_p$ Plasma Equilibrium with an Inboard Poloidal Magnetic Field Null in QUEST
K.MISHRA, H. ZUSHI, H. IDEI, M. HASEGAWA, T. ONCHI, S. TASHIMA, S. BANERJEE, H. HANADA, H. TOGASHI, T. YAMAGUCHI, A.EJIRI, Y. TAKASE, K. NAKAMURA, A. FUJISAWA, Y. NAGASHIMA, A. KUZMIN
Nuclear Fusion, 55, 083009, 2015

52. Development of Impurity Seeding and Radiation Enhancement in the Helical Divertor of LHD
K. MUKAI, S. MASUZAKI, B.J. PETERSON, T. AKIYAMA, M. KOBAYASHI, C. SUZUKI, H. TANAKA,S.N. PANDYA, R. SANO, G. MOTOJIMA
Nuclear Fusion, 55, 083016, 2015

53. 1D3V PIC Simulation of Propagation of Relativistic Electron Beam in an Inhomogeneous Plasma
CHANDRASEKHAR SHUKLA, AMITA DAS and KARTIK PATEL
Physica Scripta, 90, 085605, 2015

54. A Molecular Dynamics Study of Phase Transition in Strongly Coupled Pair-Ion Plasmas
SWATI BARUAH, R. GANESH and K. AVINASH
Physics of Plasmas, 22, 082116, 2015
(IPR/RR-719/2015)

55. Nonlinear Wave Excitations by Orbiting Charged Space Debris Objects
ABHIJIT SEN, SANAT TIWARI, SANJAY MISHRA, PREDHIMAN KAW
Advances in Space Research, 56, 429-435, 2015
(IPR/RR-698/2014)

56. Generation of Multiple Toroidal Dust Vortices by a Non-Monotonic Density Gradient in a Direct Current Glow Discharge Plasma
MANJIT KAUR, SAYAK BOSE, P. K. CHATTOPADHYAY, D. SHARMA, J. GHOSH, Y. C. SAXENA and EDWARD THOMAS JR.
Physics of Plasmas, 22, 093702, 2015

57. Confinement and Re-Expansion of Laser Induced Plasma in Transverse Magnetic Field: Dynamical Behaviour and Geometrical Aspect of Expanding Plume
NARAYAN BEHERA, R.K. SINGH, AJAI KUMAR
Physics Letters, Section A: General, Atomic and Solid State Physics, 379, 2215-2220, 2015
(IPR/RR-700/2014)

58. Progress in the Realization of the PRIMA Neutral Beam Test Facility
V. TOIGO, D. BOILSON, T. BONICELLI, R. PIOVAN, M. HANADA, A. CHAKRABORTY, G. AGARICI, V. ANTONI, U. BARUAH, M. BIGI, G. CHITARIN, S. DAL BELLO, H.DECAMPS, J. GRACEFFA, M. KASHIWAGI,R. HEMSWORTH, A. LUCHETTA, D. MARCUZZI, A. MASIELLO, F. PAOLUCCI, R. PASQUALOTTO, H. PATEL,N. POMARO, C. ROTTI, G. SERIANNI, M. SIMON, M. SINGH, N.P. SINGH, L. SVENSSON, H. TOBARI, K. WATANABE, P. ZACCARIA, P. AGOSTINETTI, M. AGOSTINI, R. ANDREANI, D. APRILE, M. BANDYOPADHYAY,M. BARBISAN, M. BATTISTELLA, P. BETTINI, P. BLATCHFORD, M. BOLDRIN, F. BONOMO, E. BRAGULAT,M. BROMBIN, M. CAVENAGO, B. CHUILON, A. CONIGLIO, G. CROCI, M. DALLA PALMA, M. D'ARIENZO,R. DAVE, H. P. L DE ESCH, A. DE LORENZI, M. DE MURI, R. DELOGU, H. DHOLA, U. FANTZ, F. FELLIN,L. FELLIN, A. FERRO, A. FIORENTIN, N. FONNESU, P. FRANZEN, M. FROSCHLE, E. GAIO, G. GAMBETTA,G. GOMEZ, F. GNESOTTO, G. GORINI, L. GRANDO, V. GUPTA, D. GUTIERREZ, S. HANKE, C. HARDIE,B. HEINEMANN, A. KOJIMA, W. KRAUS, T. MAESHIMA, A. MAISTRELLO, G. MANDUCHI, N. MARCONATO, G. MICO, J. F. MORENO, M. MORESCO, A. MURARO, V. MUVVALA, R. NOCENTINI, E. OCELLO, S. OCHOA, D. PARMAR, A. PATEL, M. PAVEI, S. PERUZZO, N. PILAN, V. PILARD, M. RECCHIA, R. RIEDL, A. RIZZOLO,G. ROOPESH, G. ROSTAGNI, S. SANDRI, E. SARTORI, P. SONATO, A. SOTTOCORNOLA, S. SPAGNOLO, M. SPOLAORE, C. TALIERCIO, M. TARDOCCHI, A. THAKKAR, N. UMEDA, M. VALENTE, P. VELTRI, A. YADAV, H. YAMANAKA, A. ZAMENGO, B. ZANIOL, L. ZANOTTO and M. ZAUPA
Nuclear Fusion, 55, 083025, 2015

59. Plasma Nitriding on Titanium Surface For Adhesion Promotion
S.AHMED, D. CHAKRABARTY, S. BHOWMIK, S. MUKHERJEE, R.RANE
Surface Engineering, 31, 616- 622, 2015

60. Observation of the Rayleigh-Benard Convection Cells in Strongly Coupled Yukawa Liquids
HARISH CHARAN and RAJARAMAN GANESH
Physics of Plasmas, 22, 083702, 2015

(IPR/RR-708/2014)

61. Magnesium-Diboride-based Prototype ELM Coil Fabrication, DC Characterization, and AC Transport-Current-Induced Loss Estimation: A Feasibility Study
A. KUNDU, S. PRADHAN, A. PANCHAL, A. BANO, P.RAJ, S.K. DAS, N.KUMAR
IEEE Transactions on Applied Superconductivity, 25, 7115069, 2015

62. Technology and Engineering Aspects of High Power Pulsed Single Longitudinal Mode Dye Lasers
V.S. RAWAT, JAYA MUKHERJEE, L.M. GANTAYET
Progress in Quantum Electronics, 43, 31-77, 2015

63. Thermionic and Photoelectric Emission of Electrons from Positively Charged Particles in a Plasma with Debye Shielding
MAHENDRA SINGH SODHA, RASHMI MISHRA, SWETA SRIVASTAVA and SANJAY KUMAR MISHRA
Physics of Plasmas, 22, 093704, 2015

64. Sustenance of Inhomogeneous Electron Temperature in a Magnetized Plasma Column
S. K. KARKARI, S. K. MISHRA and P. K. KAW
Physics of Plasmas, 22, 092107, 2015

65. Hot Dip Aluminizing of 9Cr-1Mo Steels and their Heat Treatment
JALPA PATEL, PRASHANT HUILGOL, NIRAV JAMNAPARA, K. UDAYA BHAT
Materials Science Forum, 830-831, 143-146, 2015

66. An Update of Spacecraft Charging Research in India: Spacecraft Plasma Interaction Experiments-SPIX-II
SURYAKANT B. GUPTA, KEENA R. KALARIA, NARESH P. VAGHELA, RASHMI S. JOSHI, SUBROTO MUKHERJEE, SURESH E. PUTHANVEETTIL, MUTHUSAMY SANKARAN, and RANGANATH S. EKKUNDI
IEEE Transactions on Plasma Science, 43, 3041, 2015

67. Diagnostic of Neutralization Current for Arcs on Satellite Solar Panel Coupons
RASHMI S. JOSHI and SURYAKANT B. GUPTA
IEEE Transactions on Plasma Science, 43, 3000, 2015
(IPR/RR-736/2015)

68. Emission Analysis of a Laser-Produced Barium Plasma Plume
R. K. SINGH, H. C. JOSHI, and AJAI KUMAR
Applied Optics, Vol.54, 7673-7678, 2015

69. Design of Vacuum Vessel for Indian Test Facility (INTF) for 100 KeV Neutral Beams

JAYDEEP JOSHI , ASHISH YADAV, ROOPESH GANGADHARAN, RAMBILAS PRASAD, SHINO ULAHANNAN, CHANDRAMOULI ROTTI, MAINAK BANDYOPADHYAY, ARUN CHAKRABORTY
Fusion Engineering and Design, 96-97, 488-492, 2015

70. Design of Data Acquisition and Control System for Indian Test Facility of Diagnostics Neutral Beam
JIGNESH SONI, HIMANSHU TYAGI, RATNAKAR YADAV, CHANDRAMOULI ROTTI, MAINAK BANDYOPADHYAY, GOURAB BANSAL, AGRAJIT GAHLUAT, DASS SUDHIR, JAYDEEP JOSHI, RAMBILAS PRASAD, KAUSHAL PANDYA, SEJAL SHAH, DEEPAK PARMAR, ARUN CHAKRABORTY
Fusion Engineering and Design, 96-97, 961-965, 2015

71. Maturity Assessment of ITER Diagnostics Plant Instrumentation and Control Design
STEFAN SIMROCK, LANA ABADIE, ROBIN BARNSLEY, BERTRAND BAUVIR, LUCIANO BERTALOT, PETRI MAKIJARVI, MIKYUNG PARK, ROGER REICHLE, DENIS STEPANOV, GEORGE VAYAKIS, ANDERS WALLANDER, MICHAEL WALSH, AXEL WINTER, IZURU YONEKAWA, ZHAO LI, TSUYOSHI YAMAMOTO, SANJEEV VARSHNEY, JIHYUN CHOI, EKATERINA MIRONOV, ANDRE NETO, BILL DEVAN, PRABHAKANT PATIL, MANOJKUMAR ANNIGERI, DARIUSZ MAKOWSKI, ALEKSANDER MIELCZAREK, PIOTR PEREK, MARIUSZ ORLIKOWSKI, MATJAZ BERCIC, KLEMENZAGAR, VINCENT MARTIN
Fusion Engineering and Design, Volumes 96-97, 952-956, 2015

72. Status of R&D Activity for ITER ICRF Power Source System
APARAJITA MUKHERJEE, RAJESH TRIVEDI, RAGHURAJ SINGH, KUMAR RAJNISH, HARSHA MACHCHHAR, P. AJESH, GAJENDRA SUTHAR, DIPAL SONI, MANOJ PATEL, KARTIK MOHAN, J.V.S. HARI, ROHIT ANAND, SRIPRAKASH VERMA, ROHIT AGARWAL, AKHIL JHA, FABIENNE KAZARIAN, BERTRAND BEAUMONT
Fusion Engineering and Design, 96-97, 542-546, 2015

73. Progress in the ITER Electron Cyclotron Heating and Current Drive System Design
T. OMORI , F. ALBAJA, T. BONICELLI , G. CARANNANTE , M. CAVINATO , F. CISMONDI , C. DARBOS , G. DENISOV , D. FARINA, M. GAGLIARDI , F. GANDINI , T. GASSMANN, T. GOODMAN , G. HANSON , M.A. HENDERSON , K. KAJIWARA , K. MCELHANEY, R. NOUSIAINEN , Y. ODA , A. OUSTINOV , D. PARMAR , V.L. POPOV , D. PUROHIT , S.L RAO, D. RASMUSSEN , V. RATHOD , D.M.S. RONDEN, G. SAIBENE , K. SAKAMOTO , F. SARTORI , T. SCHERER , N.P. SINGH , D. STRAUSS, K.TAKAHASHI
Fusion Engineering and Design, 96-97, 547-552, 2015

74. First Experiments in SST-1
S. PRADHAN, Z. KHAN, V.L. TANNA, A.N. SHARMA, K.J. DOSHI, U. PRASAD, H. MASAND, AVEG KUMAR, K.B. PATEL, M.K. BHANDARKAR, J.R. DHONGDE, B.K.

SHUKLAI.A. MANSURI, A. VARADARAJULU,Y.S. KHRISTI, P. BISWAS, C.N. GUPTA, D.K. SHARMA, D.C. RAVAL, R. SRINIVASAN, S.P. PANDYA, P.K. ATREY, P.K. SHARMA, P.J. PATEL, H.S. PATEL, P. SANTRA, T.J. PAREKH, K.R. DHANANI, Y. PARAVASTU,F.S. PATHAN, P.K. CHAUHAN, M.S. KHAN, J.K. TANK, P.N.PANCHAL, R.N. PANCHAL, R.J. PATEL, S. GEORGE, P.SEMWAL, P. GUPTA, G.I. MAHESURIYA, D.P. SONARA, S.P. JAYSWAL, M. SHARMA, J.C. PATEL,P.P. VARMORA, D.J. PATEL, G.L.N. SRIKANTH, D.R. CHRISTIAN, A GARG, N. BAIRAGI, G.R. BABU, A.G. PANCHAL, M.M. VORA, A.K. SINGH, R. SHARMA, D. RAJU, S.V. KULKARNI, M. KUMAR, R. MANCHANDA, S. JOISA, K. TAHILIANI, S.K. PATHAK, K.M. PATEL, H.D. NIMAVAT, P.R. SHAH, H.H. CHUDASMA, T.Y. RAVAL, A.L. SHARMA, A. OJHA, B.R. PARGHI, M. BANAUDHA, A.R. MAKWANA,M. CHOWDHURI, N. RAMAIYA, A. KUMAR, J.V. RAVAL, S. GUPTA, S. PUROHIT, R. KAUR, A.N. ADHIYA, R. JHA, S. KUMAR, U.C. NAGORA, V. SIJU, J. THOMAS, V.R. CHAUDHARI, K.G. PATEL, K.K.AMBULKAR, S. DALAKOTI, C.G. VIRANI, P.R. PARMAR, A.L. THAKUR, A. DAS, D. BORA and THE SST-1 TEAM
Nuclear Fusion, 55, 104009, 2015

75. Kolmogorov Flow in Two Dimensional Strongly Coupled Yukawa Liquid: A Molecular Dynamics Study
A. GUPTA, R. GANESH, and A. JOY
Physics of Plasmas, 22, 103706, 2015
(IPR/RR-656/2014)

76. Coaxial Propagation of Laguerre-Gaussian (LG) and Gaussian Beams in a Plasma and Gaussian Beams in a Plasma
S .MISRA, S.K MISHRA, P.BRIJESH
Laser and Particle Beams, 33, 123-133, 2015

77. 25th IAEA Fusion Energy Conference: Summary of Sessions EX/S, EX/W and ICC
A. SEN
Nuclear Fusion, 55, 104024, 2015

78. Optical Characterisation of Plasmonic Nanostructures on Planar Substrates using Second-Harmonic Generation
LINA PERSECHINI, RUGGERO VERRE, CHRISTOPHER M. SMITH, KARSTEN FLEISCHER, IGOR V. SHVETS, MUKESH RANJAN, STEFAN FACSKO, and JOHN F. MCGILP
Optics Express, 23, 26486-26498, 2015

79. From The Conceptual Design to the First Simulation of the New WEST Plasma Control System
R. NOUAILLETAS, N. RAVENEL, J. SIGNORET, W. TREUTTERER, A. SPRING, M. LEWERENTZ, C.J. RAPSON, H. MASAND, J. DHONGDE, P. MOREAU, B.

GUILLERMINET, S. BREMOND, L. ALLEGRETTI, G. RAUPP, A. WERNER, F. SAINT LAURENT, E. NARDON, M. BHANDARKAR
Fusion Engineering and Design, 96-97, 680-684, 2015

80. Operation of SST-1 TF Power Supply during SST-1 Campaigns
DINESH KUMAR SHARMA, MURTUZA M. VORA, AMIT OJHA, AKHILESH KUMAR SINGH, CHIRAG BHAVSAR.
Fusion Engineering and Design, 98-99, 1153-1157, 2015

81. Enhanced Integrators for WEST Magnetic Diagnostics
PASCAL SPUIG, PRAVEENA KUMARI, MICHEL MOREAU, PHILIPPE MOREAU, ALAIN LE-LUYER, PHILIPPE MALARD
Fusion Engineering and Design, 96-97, 966-969, 2015

82. Investigation of X-Ray Spectral Response of D-T Fusion Produced Neutron Irradiated PIPS Detectors for Plasma X-Ray Diagnostics
P.V. RAJA, N.V.L.N. MURTY, C.V.S. RAO, and M. ABHANGI
Journal of Instrumentation, 10, P10018, 2015

83. New Design Aspects of Cooling Scheme for SST-1 Plasma Facing Components
YUVAKIRAN PARAVASTU, ZIAUDDIN KHAN, SUBRATA PRADHAN
Fusion Engineering and Design, 98-99, 1375-1379, 2015

84. Development of Laser Beam Welding for the Lip Seal Configuration
ASHISH YADAV , JAYDEEP JOSHI, DHANANJAY KUMAR SINGH, HARSHAD NATU, CHANDRAMOULI ROTTI, MAINAK BANDYOPADHYAY, ARUN CHAKRABORTY
Fusion Engineering and Design, 96-97, 192-198, 2015

85. Second-Harmonic Ion Cyclotron Resonance Heating Scenarios of Aditya Tokamak Plasma
ASIM KUMAR CHATTOPADHYAY, S V KULKARNI, R SRINIVASAN, ADITYA TEAM
Pramana - Journal of Physics, 85, 713-721, 2015

86. High-Resolution Spectroscopy Diagnostics for Measuring Impurity Ion Temperature and Velocity on the COMPASS Tokamak
VLADIMIR WEINZETTL, GAURAV SHUKLA, JOYDEEP GHOSH, RADEK MELICH, RADOMIR PANEK, MATEJ TOMES, MARTIN IMRISEK, DIANA NAYDENKOVA, JOSEF VARJU, TIAGO PEREIRA, RUI GOMES, IVANA ABRAMOVIC, ROGER JASPERS, MICHAEL PISARIK, TOMAS ODSTRCIL, GUIDO VAN OOST
Fusion Engineering and Design, 96-97, 1006-1011, 2015

87. Development of Highly Hard and Corrosion Resistant A286 Stainless Steel through Plasma Nitrocarburizing Process
J. ALPHONSA, V.S. RAJA, S. MUKHERJEE

Surface and Coatings Technology, 280, 268-276, 2015

88. Calibration of Acoustic Emission System for Materials Characterization
SV RANGANAYAKULU, BS GOUD, PV SASTRY, BR KUMAR
Universal Journal of Materials Science, 3, 62-69, 2015

90. Effect of Magnetic Field on Dust Charging and Corresponding Probe Measurement
D. KALITA, B. KAKATI, B. K. SAIKIA, M. BANDYOPADHYAY and S. S. KAUSIK
Physics of Plasmas, 22, 113704, 2015

91. Neutron Flux Spectra Investigations in Breeding Blanket Assembly Containing Lithium Titanate and Lead Irradiated with DT Neutrons
SHRICHAND JAKHAR, S. TIWARI, M. ABHANGI, V. CHAUDHARI, R. MAKWANA, C.V.S. RAO, T.K. BASU, D. MANDAL
Fusion Engineering and Design, 100, 619-628, 2015
(IPR/RR-729/2015)

92. Optimal Design of Divertor Heat Sink with Different Geometric Configurations of Sectorial Extended Surfaces
SANDEEP RIMZA, KAMALAKANTA SATPATHY, SAMIR KHIRWADKAR, KARUPANNA VELUSAMY
Fusion Engineering and Design, 100, 581-595, 2015

93. Study of Plasma Nitriding and Nitrocarburizing for Higher Corrosion Resistance and Hardness of 2205 Duplex Stainless Steel
J. ALPHONSA, V.S. RAJA, S. MUKHERJEE
Corrosion Science, 100, 121-132, 2015

94. Two-Dimensional Studies of Relativistic Electron Beam Plasma Instabilities in an Inhomogeneous Plasma
CHANDRASEKHAR SHUKLA, AMITA DAS and KARTIK PATEL
Physics of Plasmas, 22, 112118, 2015

95. Simulation Study of Induced EMFs and the Suppression during SST-1 Start-Up
V. JAIN, D. SHARMA, A. VARDHRAJULU, C.N. GUPTA, R. SRINIVASAN, R. DANIEL
Fusion Engineering and Design, 100, 287-292, 2015

96. Effect of W and Ta on Creep-Fatigue Interaction Behavior of Reduced Activation Ferritic-Martensitic (RAFM) Steels
V. SHANKAR, K. MARIAPPAN, R. SANDHYA K. LAHA, T. JAYAKUMAR, E.R. KUMAR
Fusion Engineering and Design, 100, 314-320, 2015

97. Searches for Continuous Gravitational Waves from Nine Young Supernova Remnants

J. AASI, A. KUMAR ET.AL.
Astrophysical Journal, 813, 39, 2015

98. An Approach to Verification and Validation of MHD Codes for Fusion Applications
S. SMOLENTSEV , S. BADIA, R. BHATTACHARYAY, L. BUHLER, L. CHEN, Q. HUANG, H.G. JIN, D. KRASNOV, D.W. LEE, E. MAS DE LES VALLS, C. MISTRANGELO, R. MUNIPALLI, M.-J. NI, D. PASHKEVICH, A. PATEL, G. PULUGUNDLA, P. SATYAMURTHY, A. SNEGIREV, V. SVIRIDOV, P. SWAIN, T. ZHOU, O. ZIKANOV
Fusion Engineering and Design, 100, 65-72, 2015

99. Facilities, Testing Program and Modeling Needs for Studying Liquid Metal Magneto hydrodynamic Flows in Fusion Blankets
L. BUHLER, C. MISTRANGELO, J. KONYS, R. BHATTACHARYAY, Q. HUANG, D. OBUKHOV, S. SMOLENTSEV, M. UTILI
Fusion Engineering and Design, 100, 55-64, 2015

100. Online Impedance Matching System for ICRH-RF Experiments on SST-1 Tokomak
R. JOSHI, M. SINGH, H.M. JADAV, K. MISHRA, RAJ SINGH, S.V. KULKARNI, D. BORA, ICRH-RF GROUP
Fusion Engineering and Design, 100, 293-300, 2015

101. Effect of Microwave and Conventional Sintering on Densification, Microstructure and Dielectric Properties of BZT-$x$$Cr_2O_3$ Ceramics
SWATHI MANIVANNAN, ANDREWS JOSEPH, P.K. SHARMA, K.C. JAMES RAJU, DIBAKAR DAS
Ceramics International, 41, 10923-10933, 2015

102. Multidirectional Plasma Flow Measurement by Gundestrup Probe in Scrape-Off Layer of ADITYA Tokamak
DEEPAK SANGWAN, RATNESHWAR JHA and RAKESH L. TANNA
Physics of Plasmas, 22, 112501, 2015

103. Dusty Plasma Experimental (DPEx) Device for Complex Plasma Experiments with Flow
S. JAISWAL, P. BANDYOPADHYAY and A. SEN
Review of Scientific Instruments, 86, 113503, 2015

104. Low-Temperature Dyeing of Silk Fabric using Atmospheric Pressure Helium/Nitrogen Plasma
M.D.TELI, K.K. SAMANTA, P.PANDIT, S. BASAK, S.K.CHATTOPADHYAY
Fibers and Polymers, 16, 2375- 2383, 2015

105. Positron Annihilation Lifetime Measurement and X-Ray Analysis on 120 MeV Au^{+7} Irradiated Polycrystalline Tungsten

CHARU LATA DUBE, PAWAN KUMAR KULRIYA, DHANADEEP DUTTA, PRADEEP K. PUJARI, YASHASHRI PATIL, MAYUR MEHTA, PRIYANKA PATEL, SAMIR S. KHIRWADKAR
Journal of Nuclear Materials, 467, 406-412, 2015

106. Control Methodology and Test Modes during the Qualification Test of the ITER Cold Circulator
R. BHATTACHARYA, B. SARKAR, H. VAGHELA, P. PATEL, M. SRINIVASA, H.-S. CHANG, T. ISONO, KATSUMI KAWANO, MINORU SATO, M. CHALIFOUR
Physics Procedia, 67, 288-293, 2015

107. Crystal Growth of Ru-Doped Congruent $LiNbO_3$ and Investigation of Crystalline Perfection and Optical Properties
B. RISCOB, I.BHAUMIK, S.GANESAMOORTHY, R. BHATT, N.VIJAYAN, K. ZIMIK, A.K.KARNAL, G. BHAGAVANNARAYANA, P.K.GUPTA
Journal of Applied Crystallography, 48, 1753-1760, 2015

108. Acceptance Plan and Performance Measurement Methodology for the ITER Cryoline System
S. BADGUJAR, M. BONNETON, N. SHAH, M. CHALIFOUR, H.-S. CHANG, E. FAUVE, A. FORGEAS, N. NAVION-MAILLOT, B. SARKAR
Physics Procedia, 67, 48-53, 2015

109. Investigation of Thermal Equilibrium around an Accidental Event and Impact on Possibly Enclosed Surrounding Environment
BISWANATH SARKAR, NITIN SHAH, KETAN CHOUKEKAR, HIMANSHU KAPOOR, UDAY KUMAR, JOTIRMOY DAS, RITENDRA BHATTACHARAYA, HITENSINH VAGHELA, SRINIVASA MURALIDHARA
Physics Procedia, 67, 613-618, 2015

110. Cool Down Experiences with the SST-1 Helium Cryogenics System Before and After Current Feeders System Modification
R. PATEL, P. PANCHAL, R. PANCHAL, J. TANK, G. MAHESURIYA, D. SONARA, G.L.N. SRIKANTH, A. GARG, N. BAIRAGI, D. CHRISTIAN, K. PATEL, P. SHAH, H. NIMAVAT, R. SHARMA, J.C. PATEL, N.C. GUPTA, U. PRASAD, A.N. SHARMA, V.L. TANNA, S. PRADHAN
Physics Procedia, 67, 170-175, 2015

111. First Operational Results with the SST-1 Superconducting Magnet & its Cryogenics
S. PRADHAN, V. TANNA, A. SHARMA, Z. KHAN, U. PRASAD, K. DOSHI, Y. KHRISTI, B. PARGHI, M. BANOUDHA, G. MAHESURIA, R. PATEL, P. PANCHAL, R. PANCHAL, J. TANK, D. SONARA, D. SHARMA, M. VORA, A. VARADARAJULU
Physics Procedia, 67, 756-761, 2015

112. Parametric Study of a Pin-Plane Probe in Moderately Magnetized Plasma
S BINWAL, S GANDHI, H KABARIYA, and S K KARKARI
Measurement Science and Technology, 26, 125015, 2015

113. Proof-of-Concept Experiment for On-Line Laser Induced Breakdown Spectroscopy Analysis of Impurity Layer Deposited on Optical Window and Other Plasma Facing Components of Aditya Tokamak
GULAB SINGH MAURYA, ROHIT KUMAR, AJAI KUMAR, and AWADHESH KUMAR RAI
Review of Scientific Instruments, 86, 123112, 2015

114. Radiation Reaction Effect on Laser Driven Auto-Resonant Particle Acceleration
V. SAGAR, S. SENGUPTA, P.K.KAW
Physics of Plasmas, 22, 123102, 2015

115. Comparative Study of Electrical Breakdown Properties of Deionized Water and Heavy Water under Pulsed Power Conditions
G. VEDA PRAKASH, R. KUMAR, K. SAURABH, NASIR, V. P. ANITHA, M. B. CHOWDHURI and A. SHYAM
Review of Scientific Instruments, 87, 015115, 2016
(IPR/RR-706/2014)

116. Effect of Microwave Power on Electron Temperature and Electron Density in Deuterium Plasma Generated By Electron Cyclotron Resonance
A. T. T. MOSTAKO, S. VALA, R. J. MAKWANA, N. VIRANI, J. GHOSH, R. MANCHANDA, C. V. S. RAO, and T. K. BASU
IEEE Transactions on Plasma Science, 44, 7-14, 2016

117. Controllable Transition from Positive Space Charge to Negative Space Charge in an Inverted Cylindrical Magnetron
R. RANE, M. BANDYOPADHYAY, M. RANJAN and S. MUKHERJEE
Physics of Plasmas, 23, 013514, 2016
(IPR/RR-744/2015)

118. A Dipole Probe for Electric Field Measurements in the LVPD
P K SRIVASTAVA, L M AWASTHI, G RAVI, SUNIL KUMAR and S K MATTOO
Measurement Science and Technology, 27, 1-12, 2016

119. Multiple Wall-Reflection Effect in Adaptive-Array Differential-Phase Reflectometry on QUEST
H. IDEI, K. MISHRA, M.K. YAMAMOTO, A. FUJISAWA, Y. NAGASHIMA, M. HAMASAKI, Y. HAYASHI, T.ONCHI, K. HANADA, H.ZUSHI and QUEST team

Journal of Instrumentation, 11, 2016

120. Droplet Shaped Anode Double Layer and Electron Sheath Formation in Magnetically Constricted Anode
S. CHAUHAN, M. RANJAN, M. BANDYOPADHYAY, and S. MUKHERJEE
Physics of Plasmas, 23, 013502, 2016 (IPR/RR-756/2015)

121. Design of the 1.5 MW, 30-96 MHz Ultra-Wideband 3 dB High Power Hybrid Coupler for Ion Cyclotron Resonance Frequency (ICRF) Heating in Fusion Grade Reactor
RANA PRATAP YADAV, SUNIL KUMAR, and S. V. KULKARNI
Review of Scientific Instruments, 87, 014703, 2016

122. Sub- and Super-Luminar Propagation of Structures Satisfying Poynting-Like Theorem for Incompressible Generalized Hydrodynamic Fluid Model Depicting Strongly Coupled Dusty Plasma Medium
VIKRAM DHARODI, AMITA DAS, BHAVESH PATEL and PREDHIMAN KAW
Physics of Plasmas, 23, 013707, 2016

123. Search of the Orion Spur For Continuous Gravitational Waves Using a Loosely Coherent Algorithm on Data from LIGO Interferometers
J. AASI, M. K. GUPTA, Z. KHAN, A. KUMAR, A. K. SRIVASTAVA, et al.
Physical Review D, 93, 042006, 2016

124. Nonlinearly Interacting Trapped Particle Solitons in Collisionless Plasmas
DEBRAJ MANDAL and DEVENDRA SHARMA
Physics of Plasmas, 23, 022108, 2016 (IPR/RR-734/2015)

125. Overview of Ion Source Characterization Diagnostics in INTF
M. BANDYOPADHYAY, DASS SUDHIR, M. BHUYAN, J. SONI, H. TYAGI, J. JOSHI, A. YADAV, C. ROTTI, DEEPAK PARMAR, H. PATEL, S. PILLAI, and A. CHAKRABORTY
Review of Scientific Instruments, 87, 02B906, 2016

126. Physics-Electrical Hybrid Model for Real Time Impedance Matching and Remote Plasma Characterization in RF Plasma Sources
D. SUDHIR, M. BANDYOPADHYAY, and A. CHAKRABORTY
Review of Scientific Instruments, 87, 02B312, 2016

127. Slowing and Stopping of Wave in Dispersive Metamaterial Loaded Helical Guide
DUSHYANT K. SHARMA and SURYA K. PATHAK
Optics Express, 24, 2687, 2016

128. Conceptual Design of a Permanent Ring Magnet Based Helicon Plasma Source Module Intended to be used in a Large Size Fusion Grade Ion Source

ARUN PANDEY, DASS SUDHIR, M. BANDYOPADHYAY, A. CHAKRABORTY
Fusion Engineering and Design, 103, 1-7, 2016

129. Conditioning of SST-1 Tokamak Vacuum Vessel by Baking and Glow Discharge Cleaning
ZIAUDDIN KHAN, SIJU GEORGE, PRATIBHA SEMWAL, KALPESHKUMAR R. DHANANI, FIROZKHAN S. PATHAN, YUVAKIRAN PARAVASTU, DILIP C. RAVAL, GATTU RAMESH BABU, MOHAMMED SHOAIB KHAN, SUBRATA PRADHAN
Fusion Engineering and Design, 103, 69-73, 2016

130. High Heat Flux Testing of Divertor Plasma Facing Materials and Components Using the HHF Test Facility at IPR
YASHASHRI PATIL, S S KHIRWADKAR, SUNIL BELSARE, RAJAMANNAR SWAMY, SUDHIR TRIPATHI, KEDAR BHOPE and SHAILESH KANPARA
Physica Scripta, 2016, 1-6, 2016

131. Thermomechanical Analysis of Preheat Effect on Grade P91 Steel during GTA Welding
M. ZUBAIRUDDIN, S. K. ALBERT, M. VASUDEVAN, S. MAHADEVAN, V. CHAUDHRI, and V. K. SURI
Materials and Manufacturing Processes, 31, 366-371, 2016

132. First Low Frequency All-Sky Search for Continuous Gravitational Wave Signals
J. AASI, M. K. GUPTA, Z. KHAN, A. KUMAR, A. K. SRIVASTAVA, et. al.
Physical Review D - Particles, Fields, Gravitation and Cosmology, 93, 042007, 2016

133. Astrophysical Implications of the Binary Black Hole Merger GW150914
B. P. ABBOTT, G. GAUR, M. K. GUPTA, Z. KHAN, A. K. SRIVASTAVA, et.al
Astrophysical Journal Letters, 818, L22, 2016

134. Measurement of ^{55}Fe *(n,p)* Cross Sections by the Surrogate-Reaction Method for Fusion Technology Applications
BHAWNA PANDEY, V. V. DESAI, S. V. SURYANARAYANA, B. K. NAYAK, A. SAXENA, E. T. MIRGULE, S. SANTRA, K. MAHATA, R. MAKAWANA, M. ABHANGI, T. K. BASU, C. V. S. RAO, S. JAKHAR, S. VALA, B. SARKAR, H. M. AGRAWAL, G. KAUR, P. M. PRAJAPATI, ASIM PAL, D. SARKAR, and A. KUNDU
Physical Review C - Nuclear Physics, 93, 021602, 2016

135. Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo
B.P ABBOTT, G. GAUR, M. K. GUPTA, Z. KHAN, A. K. SRIVASTAVA et al.
(LIGO Scientific Collaboration and Virgo Collaboration)
Living Reviews in Relativity, 19, 1-39, 2016

136. Charge Distribution over Dust Particles Configured with Size Distribution in a Complex Plasma
SHIKHA MISRA, SANJAY K. MISHRA
European Physical Journal D, 70, 43, 2016

137. Effect of Collisions on Photoelectron Sheath in a Gas
MAHENDRA SINGH SODHA and S. K. MISHRA
Physics of Plasmas, 23, 022115, 2016

138. All-Sky Search for Long-Duration Gravitational Wave Transients with Initial LIGO
P. ABBOTT, G. GAUR, M. K. GUPTA, Z. KHAN, A. K. SRIVASTAVA, et al.
(The LIGO Scientific Collaboration and the Virgo Collaboration)
Physical Review D, 93, 042005, 2016

139. Observation of Gravitational Waves from a Binary Black Hole Merger
B.P. ABBOTT, G. GAUR, M. K. GUPTA, Z. KHAN, A. K. SRIVASTAVA, et al. (LIGO Scientific Collaboration and Virgo Collaboration)
Physical Review Letters, 116, 061102, 2016

140. Wakes and Precursor Soliton Excitations by a Moving Charged Object in Plasma
SANAT KUMAR TIWARI and ABHIJIT SEN
Physics of Plasmas, 23, 022301, 2016 (IPR/RR-760/2015)

141. A Comparison between Finite Element Modeling and Various Thermographic Non-Destructive Testing Techniques for the Quantification of the
Thermal Integrity of Macro-Brush Plasma Facing Components used in a Tokamak
SANTOSH P. PANDYA, SHWETANG N. PANDYA, YASHASHRI V. PATIL, DEEPU S. KRISHNAN, MENAKA MURUGESAN, D. SHARATH, K. PREMJIT SINGH, MD. SHOAIB KHAN, M. ARAFAT, N. BIJU, SAMIR S. KHIRWADKAR, JAGANNATHAN GOVIDARAJAN, B. VENKATRAMAN and KRISHNAN BALASUBRAMANIAM
Review of Scientific Instruments, 87, 024901, 2016

142. Arc Location Predictor on a 2D Composite Surface in Vacuum
R.S. JOSHI and S.B. GUPTA
IEEE Transactions on Dielectrics and Electrical Insulation, 23, 7422539, 2016

143. Life Estimation of Knee Joint Prosthesis by Combined Effect of Fatigue and Wear
B.R. RAWAL, AMIT YADAV and VINOD PARE
Procedia Technology, 23, 60–67, 2016

144. Multiphysics Simulation of Laser Cladding Process to Study the Effect of Process Parameters on Clad Geometry
R PAREKH, RK BUDDU, RI PATEL

Procedia Technology, 23, 529-536, 2016

145. Titanium Nitride Deposition on Aluminum for Adhesion Promotion
A.SUBRAMANIAN, T. PRATAP, D.A. KURUP, G. THANGARAJ, S. BHOUMIK, S. MUKHERJEE, and R. RANE
Surface Engineering, 32, 272, February 2016

146. Tearing and Surface Preserving Electron Magnetohydrodynamic Modes in a Current Layer
GURUDATT GAUR and PREDHIMAN K. KAW
Physics of Plasmas, 23, 032106, 2016 (IPR/RR-757/2015)

147. Surface Modification by Atmospheric Pressure Air Plasma Treatment to Improve Dyeing with Natural Dyes: An Environment Friendly Approach for Leather Processing
HEMEN DAVE, LALITA LEDWANI, S. K. NEMA
Plasma Chemistry and Plasma Processing, 36, 599-613, 2016

148. LabVIEW Software for Analyzing Langmuir Probe Characteristics in Magnetized Plasma
S. GANDHI, S. BINWAL, H. KABARIYA, S.K. KARKARI
Journal of Instrumentation, 11, T03003, 2016 (IPR/RR-745/2015)

149. Dynamics of Three-Dimensional Radiative Structures during RMP Assisted Detached Plasmas on the Large Helical Device and Its Comparison with EMC3-EIRENE Modeling
SHWETANG N. PANDYA, BYRON J. PETERSON, MASAHIRO KOBAYASHI, KATSUMI IDA, KIYOFUMI MUKAI, RYUICHI SANO, JUNICHI MIYAZAWA, HIROHIKO TANAKA, SUGURU MASUZAKI, TSUYOSHI AKIYAMA, GEN MOTOJIMA, NORIYASU OHNO, and LHD EXPERIMENT GROUP
Nuclear Fusion, 56, 1-11, 2016

Conference Papers 2015-16 (29)

1. Can We Estimate Plasma Density in ICP Driver through Electrical Parameters in RF Circuit?
M. BANDYOPADHYAY, DASS SUDHIR, and A. CHAKRABORTY
AIP Conference Proceedings, 1655, 020013, 2015

2. Infrared Imaging Diagnostics for INTF ion beam
D. SUDHIR, M. BANDYOPADHYAY, R. PANDEY, J. JOSHI, A. YADAV, C. ROTTI, M. BHUYAN, G. BANSAL, J. SONI, H. TYAGI, K. PANDYA, and A. CHAKRABORTY
AIP Conference Proceedings, 1655, 060011, 2015

3. High Speed Analog Fiber Optical Transmission Link Based on Voltage to Frequency Converter Technique for ITER-India Gyrotron Test Facility
V. RATHOD, R. PARMAR, D. MANDGE, R. SHAH, S.L. RAO
2015 International Conference on Industrial Instrumentation and Control, ICIC 2015, 7150830, 687-691, 2015

4. Enhanced Group Velocity Characteristics of A ENG Cladded Metamaterial Loaded Helical Guide
D.K.SHARMA, S.K. PATHAK
Progress in Electromagnetics Research Symposium, 486- 488, 6-9, 2015

5. Broadband Cross Polarization Converter Formed By Twisted F-Shaped Chiral Metamaterial
D.K.SHARMA, S.K. PATHAK
Progress in Electromagnetics Research Symposium, 1479- 1481, 6-9, 2015

6. A Multiphysics Investigation of RF Dry Loads
YOGESH JAIN, HARISH DIXIT, AVIRAJ JADHAV, ALICE CHEERAN, VIKAS GUPTA, AND PROMOD K. SHARMA
IEEE Bombay Section Symposium, Mumbai, 10-11 September 2015

7. Advanced Safety Measures Implemented in Negative Neutral Beam (NNB) HVPS Facility at IPR
A. GAHLAUT, V. MAHESH, A.K. CHAKRABORTY, K.G PARMAR, B.K. PRAJAPATI, D.V. MODI, D. PARMAR, H. SHISHANGIYA, M.N. VISHNUDEV, J. SONI, G. BANSAL, M. BANDOPADHYAY, R.K. YADAV, K. PANDYA, J. BHAGORA, H. TYAGI and H. MISTRI
32nd DAE Safety & Occupational Health Professionals Meet, Raja Ramanna Centre for Advanced Technology, Indore, 32, 5-7 October 2015

8. Implementation of Safety Measures of New High Heat Flux Test Facility at IPR
SUNIL BELSARE, RAJAMANNAR SWAMY, TUSHAR PATEL, SAMIR KHIRWADKAR, DEVENDRA MODI, YASHASHRI PATIL, KEDAR BHOPE and PRAKASH MOKARIA
32nd DAE Safety & Occupational Health Professionals Meet, Raja Ramanna Centre for Advanced Technology, Indore, 46, 5-7 October 2015

9. Safety and Environment (S&E) Aspects of Tokamak-Type Fusion Power Reactors - An Overview
BHARAT DOSHI and D. CHENNA REDDY
32nd DAE Safety & Occupational Health Professionals Meet, Raja Ramanna Centre for Advanced Technology, Indore, 89, 5-7 October 2015

10. Testing and Preventive Maintenance of Electrical Power Systems in Substation for Safety and Reliability
CHANDRA KISHOR GUPTA
32nd DAE Safety & Occupational Health Professionals Meet, Raja Ramanna Centre for Advanced Technology, Indore, 115, 5-7 October 2015

11. Safety Aspects in Helium Recovery System at IPR
SAMIRAN SHANTI MUKHERJEE, D.V. MODI, RANJANA GANGRADEY, P. PANCHAL, J. S. MISHRA, D. TRIPATHI, S. KASTHURIRENGAN, JYOTI AGARWAL and PRATIK NAYAK

32nd DAE Safety & Occupational Health Professionals Meet, Raja Ramanna Centre for Advanced Technology, Indore, 167, 5-7 October 2015

12. Study of the Safety Criteria and the Radiation Limit in Microwave Coal Gasification Experiments
VISHAL JAIN
32nd DAE Safety & Occupational Health Professionals Meet, Raja Ramanna Centre for Advanced Technology, Indore, 179, 5-7 October 2015

13. Safety Management System Implementation at IPR
D.V. MODI and D. CHENNA REDDY
32nd DAE Safety & Occupational Health Professionals Meet, Raja Ramanna Centre for Advanced Technology, Indore, 180, 5-7 October 2015

14. Thermal Performance Analysis of Cryogenic System for Cooling of Superconducting Magnets at 4K Temperature Level
H. VAGHELA, B. SARKAR, A. BISHT, and V J LAKHERA
5th Nirma University International Conference on Engineering, Ahmedabad, Gujarat, 26-28 November 2015

15. Preparation & Characterization of SiO_2 Interface Layer by Dip Coating Technique on Carbon Fibre for Cf/SiC Composites
KUNDAN KUMAR, C. JARIWALA, R. PILLAI, N. CHAUHAN, and P. M. RAOLE
AIP Conference Proceedings, 1675, 020046, 2015

16. The Effect of Spraying Parameters on Micro-Structural Properties of WC-12%Co Coating Deposited on Copper Substrate by HVOF Process
NISHIT SATHWARA, C. JARIWALA, N. CHAUHAN, P. M. RAOLE, and D. K. BASA
AIP Conference Proceedings, 1675, 030057, 2015

17. Interfacing ICRH DAC System with WEB
R. JOSHI, H.M. JADAV, and S.V.KULKARNI
2015 International Conference on Advances in Computing, Communications and Informatics, ICACCI 2015, 1170-1173, 2015

18. Studies of Thermal Behavior on Activated Carbons for the Selection of Regeneration Scheme
SAMIRAN MUKHERJEE, PRATIK NAYAK, JYOTI AGARWAL, and RANJANA GANGRADEY
Materials Today: Proceedings, 2, Pages 1225-1229, 2015

19. Multiple Species Plasma Boundary Criterion with Non-Degenerate Entry Flows
PRABHAT KUMAR DUBEY, NISHCHHAL YADAV and DEVENDRA SHARMA
AIP Conference Proceedings, 1670, 030008, 2015

20. Hydrogen in Stainless Steel as Killing Agent for UHV: A Review
MANOJ KUMAR GUPTA, ABHINAV PRIYADARSHI, and ZIAUDDIN KHAN

Materials Today: Proceedings, 2, 1074-1081, 2015

21. Value Engineering in System of Cryoline and Cryo-Distribution for ITER: In-Kind Contribution from India
B SARKAR, N SHAH, H VAGHELA, R BHATTACHARYA, K CHOUKEKAR, P PATEL, H-S CHANG, S BADGUJAR and M CHALIFOUR
IOP Conference Series: Material Science and Engineering, 101, 012036, 2015

22. Pumping Speed Offered by Activated Carbon at Liquid Helium Temperatures by Sorbents Adhered to Indigenously Developed Hydroformed Cryopanel
RANJANA GANGRADEY, SAMIRAN SHANTI MUKHERJEE, PARESH PANCHAL, PRATIK NAYAK, JYOTI AGARWAL, CHIRAG RANA, S KASTHURIRENGAN, JYOTI SHANKAR MISHRA, HARESH PATEL, PAWAN BAIRAGI, VRUSHABH LAMBADE and REENA SAYANI
IOP Conference Series: Material Science and Engineering, 101, 012044, 2015

23. Design Realization towards the Qualification Test of ITER Cold Circulator
R BHATTACHARYA, B SARKAR, H VAGHELA, P PATEL, J DAS, M SRINIVASA, and V SHUKLA
IOP Conference Series: Material Science and Engineering, 101, 012040, 2015

24. Loads Specification and Embedded Plate Definition for the ITER Cryoline System
S BADGUJAR, L BENKHEIRA, M CHALIFOUR, A FORGEAS, N SHAH, H VAGHELA, and B SARKAR
IOP Conference Series: Material Science and Engineering, 101, 012035, 2015

25. Materials Research and Development Opportunities in Fusion Reactors
S MUKHERJEE and N I JAMNAPARA
Proceedings of the National Science Academy, 81, 827-839, 2015

26. Development of Traveling Wave Resonator Based Test Bed for High Power Transmission Line Component Testing
AKHIL JHA, JVS HARIKRISHNA, P AJESH, ROHIT ANAND, RAJESH TRIVEDI, and APARAJITA MUKHERJEE
AIP Conference Proceedings, 1689, 070006, 2015

27. Development of Mismatch Transmission Line (MMTL) System for ICH&CD Test Rig
P AJESH, AKHIL JHA, ROHIT ANAND, JVS HARIKRISHNA, RAJESH TRIVEDI, and APARAJITA MUKHERJEE
AIP Conference Proceedings, 1689, 070007, 2015

28. Enhancement of Surface Properties of Maraging Steel C300 by Plasma Nitriding
NAND KUMAR, B. GANGULI, S. SHARMA
NCIMACEMT-2016 Conference Proceedings, International Journal of Engineering Research and Technology, 4, 53, March 2016

29. Surface Modification of 17-4 PH Stainless Steel by Plasma Nitriding
SANGITA JADEJA, B. GANGULI, D.K. BASA
NCIMACEMT-2016 Conference Proceedings, International Journal of Engineering Research and Technology, 4, 138, March 2016

Book Chapters 2015-16 (3)

1. Plasma Nitriding - An Eco Friendly Indigenously Developed Process for Enhancing the Life of Industrial Components, A case study of journey from laboratory to industry
J. ALPHONSA, G. JHALA, S. B. GUPTA, S. MUKHERJEE
Transforming India through Quality Leadership", page 348-355, American Society for Quality India Pvt. Ltd., 2015. ISBN: 9788193021613

2. Investigation of sticking behaviour of silver atoms on patterned substrate with RBS
M. RANJAN
Nanoscale Excitation in Emergent Materials - NEEM 2015, Superstripes Press, Rome, Italy, 2015 Editor(s): Augusto Marcelli, Chidambara and Balasubramanian
ISBN: 9788866830450

3. Nanoscale Excitation in Emergent Materials - NEEM 2015
Co-edited: Chidambara Balasubramanian
Superstripes Press, Rome, 2015
ISBN 9788866830450