

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

### 2010-2011 Reprints (102)

1. Deposition of Thick and Adherent Teflon-like Coating on Industrial Scale Stainless Steel Shell using Pulsed DC and RF PECVD  
SATYAPRASAD, S.K. NEMA, N.K. SINHA, and BALDEV RAJ  
[\*Applied Surface Science\*, 256, 4334, 2010](#)
2. Experimental Investigation of Different Structures of a Radio Frequency Produced Plasma Column  
RAJNEESH KUMAR and DHIRAJ BORA  
[\*Physics of Plasmas\*, 17, 043503, 2010](#)
3. Fast Integrator based Data Acquisition System for the SST-1 Thomson Scattering System  
KIRAN PATEL and AJAI KUMAR  
[\*Review of Scientific Instruments\*, 81, 043501, 2010](#)
4. Free Energy Source for Flow Shear Driven Instabilities in Electron-magnetohydrodynamics  
SITA SUNDAR and AMITA DAS  
[\*Physics of Plasmas\*, 17, 042106, 2010](#)
5. Study of Electromagnetic Fluctuations in High Beta Plasma of a Large Linear Device  
L. M. AWASTHI, S. K. MATTOO, R. JHA, R. SINGH, and P. K. KAW  
[\*Physics of Plasmas\*, 17, 042109, 2010](#)
6. Nonlinear Oscillations in a Cold Dissipative Plasma  
PRABAL SINGH VERMA, J. K. SONI, S. SENGUPTA, and P. K. KAW  
[\*Physics of Plasmas\*, 17, 044503, 2010](#)
7. Miniature Plasma Focus Device as a Compact Hard X-ray Source for Fast Radiography Applications  
R. VERMA, R.S. RAWAT, P. LEE, M. KRISHNAN, S.V. SPRINGHAM, T.L. TAN  
[\*IEEE Transactions on Plasma Science\*, 38, 652, 2010](#)
8. Studies on Ion Emission from the Plasma Focus Device by Using Ion Collector and Track Detector  
M. BHUYAN, N.K. NEOG, S.R. MOHANTY, C.V.S. RAO, P.M. RAOLE  
[\*Journal of Fusion Energy\*, 29, 177, 2010](#)
9. Dry Sliding Wear Behaviour of Plasma Nitrocarburised AISI 304 Stainless Steel Using Response Surface Methodology  
M.M. KUMARI, S. NATARAJAN, J. ALPHONSA, S. MUKHERJEE  
[\*Surface Engineering\*, 26, 191, 2010](#)

10. Characteristics and Temperature Measurement of a Non-Transferred Cascaded DC Plasma Torch  
BORA, N. AOMOA and M. KAKATI  
[\*Plasma Science and Technology\*, \*\*12\*\*, 181, 2010](#)
11. Kelvin Helmholtz Instability in Strongly Coupled Yukawa Liquids  
J. ASHWIN and R. GANESH  
[\*Physical Review Letters\*, \*\*104\*\*, 215003, 2010](#)
12. Synchronous Solutions and their Stability in Nonlocally Coupled Phase Oscillators with Propagation Delays  
GAUTAM C. SETHIA, ABHIJIT SEN and FATIHCAN M. ATAY  
[\*Physical Review E\*, \*\*81\*\*, 056213, 2010](#)
13. Nonlinear Studies of Fast Electron Current Pulse Propagation in a Two Dimensional Inhomogeneous Plasma  
SHARAD KUMAR YADAV and AMITA DAS  
[\*Physics of Plasmas\*, \*\*17\*\*, 052306, 2010](#)
14. Effect of Magnetic Field on Laser-blow-off Plasma Plume: Structured Temporal Emission Profile  
AJAI KUMAR, H.C. JOSHI, V. PRAHLAD, R.K. SINGH  
[\*Physics Letters A\*, \*\*374\*\*, 2555, 2010](#)
15. Effect of a Transverse Magnetic Field on the Plume Emission in Laser-Produced Plasma: An Atomic Analysis  
H.C. JOSHI, AJAI KUMAR, R.K. SINGH, V. PRAHLAD  
[\*Spectrochimica Acta Part B: Atomic Spectroscopy\*, \*\*65\*\*, 415, 2010](#)
16. Effect of Collisional Quenching on the Measurement of Ion Species Mix in Neutral Beam Injectors  
P. BHARATHI and V. PRAHLAD  
[\*Journal of Applied Physics\*, \*\*107\*\*, 123307, 2010](#)
17. Experiments of Bending Strain on Reduced-scale HTS Conductors for Fusion Energy Reactors  
R. CHAMPAILLER, N. YANAGI, G. BANSAL, H. TAMURA, T. MITO, S. IMAGAWA, J.-L. DUCHATEAU  
[\*IEEE Transactions on Applied Superconductivity\*, \*\*20\*\*, 1565, 2010](#)
18. Radiation Effects on Insulation Systems for Superconducting Fusion Magnets  
RAJIV SHARMA, V.L. TANNA, ANURAG SHAYAM, BASANT DAS and B. V. DAVE  
[\*Indian Journal of Cryogenics\*, \*\*35 A\*\*, 491, 2010](#)
19. Cryogenic Application of Composites Materials

RAJIV SHARMA, V. L. TANNA and B.V. DAVE

*International Journal of Advances in Thermal Sciences and Engineering, 1, 157, 2010*

20. Solvatochromic Study of 2-hydroxy-4-methylquinoline for the Determination of Dipole Moments and Solute–solvent Interactions  
R. RAUTELA, N.K. JOSHI, H.C. JOSHI, N. TEWARI, S. PANT  
[\*Journal of Molecular Liquids, 154, 47, 2010\*](#)
21. Drift-Alfven Waves Induced Optical Emission Fluctuations in Aditya Tokamak  
R. MANCHANDA, J. GHOSH, P. K. CHATTOPADHYAY, M. B. CHOWDHURI, SANTANU BANERJEE, N. RAMASUBRAMANIAN, KETAN. M. PATEL, VINAY KUMAR, P. VASU, R. L. TANNA, B. PARADKAR, C. N. GUPTA, S. B. BHATT, D. RAJU, R. JHA, P. K. ATREY, S. JOISA, C. V. S. RAO, Y. C. SAXENA, and ADITYA TEAM  
[\*Physics of Plasmas, 17, 072515, 2010\*](#)
22. Calibration of a VUV Spectrograph by Collisional-radiative Modelling of a Discharge Plasma  
RAM PRAKASH, JALAJ JAIN, VINAYKUMAR, R MANCHANDA, BISHU AGARWAL, M B CHOWDHURI, SANTANU BANERJEE and P VASU  
[\*Journal of Physics B: Atomic, Molecular and Optical Physics, 43, 144012, 2010\*](#)
23. Effect of Polarization Force on the Propagation of Dust Acoustic Solitary Waves  
P. BANDYOPADHYAY, U. KONOPKA, S.A. KHRAPAK, G.E. MORFILL, A. SEN  
[\*New Journal of Physics, 12, 073002, 2010\*](#)
24. Improved Forecasting of Time Series Data of Real System using Genetic Programming  
DILIP P. AHALPARA  
[\*Proceedings of the 12th Annual Genetic and Evolutionary Computation Conference, GECCO '10, Portland, 977, 2010\*](#)
25. Design and Optimization of Superconducting Magnet System for 42.0-GHz Gyrotron  
S. KEDIA, and S. PRADHAN  
[\*IEEE Transactions on Applied Superconductivity, 20, 2235, 2010\*](#)
26. Electron Dumps for ITER HNB and DNB Beamlines  
H.P.L. DE ESCH, and M.J. SINGH  
[\*Fusion Engineering and Design, 85, 707, 2010\*](#)
27. Analysis of Welding Distortion Due to Narrow-gap Welding of Upper Port Plug  
PANKAJ BISWAS, N.R. MANDAL, PARAMESWARAN VASU, SHRISHAIL B. PADASALAGI  
[\*Fusion Engineering and Design, 85, 780, 2010\*](#)
28. Extraordinary Optical Transmission by Interference of Diffracted Wavelets  
RAJ KUMAR

*Optica Applicata*, **40**, 491, 2010

29. Status of SST-1 Refurbishment  
SUBRATA PRADHAN and SST-1 MISSION TEAM  
[\*Journal of Plasma and Fusion Research Series\*, \*\*9\*\*, 650, 2010](#)
30. On the Current Transfer Length and Current Sharing in Short Length MgB<sub>2</sub> Wires  
K VINOD, NESON VARGHESE, S RAHUL, K M DEVADAS, SYJU THOMAS, P GURUSAMY, S KEDIA, S PRADHAN and U SYAMAPRASAD  
*Superconductor Science and Technology*, **23**, 105002, 2010
31. Nonlinear Lower-Hybrid Oscillations in Cold Plasma  
MAITY, N. CHAKRABARTI, S. SENGUPTA  
[\*Physics of Plasmas\*, \*\*17\*\*, 082306, 2010](#)
32. Low Frequency Ionization Waves in Helium Surface Barrier Discharge at Atmospheric Pressure  
A.K. SRIVASTAVA, G. PRASAD  
[\*Physics Letters A\*, \*\*374\*\*, 3960, 2010](#)
33. Numerical Investigation of Nanoparticle Synthesis in Supersonic Thermal Plasma Expansion  
B. BORA, B.J. SAIKIA, C. BORGOHAIN, M. KAKATI, and A.K. DAS  
[\*Vacuum\*, \*\*85\*\*, 283, 2010](#)
34. Fuzzy Logic Based Feedback Control System for Laser Beam Pointing Stabilization  
RANJEET SINGH, KIRAN PATEL, J. GOVINDARAJAN, and AJAI KUMAR  
[\*Applied Optics\*, Vol. \*\*49\*\*, 5143, 2010](#)
35. Runaway-loss Induced Negative and Positive Loop Voltage Spikes in the Aditya Tokamak  
BHOOSHAN PARADKAR, J. GHOSH, P. K. CHATTOPADHYAY, R. L. TANNA, D. RAJU, S. B. BHATT, C. V. S. RAO, SANKAR JOISA, SANTANU BANERJEE, R. MANCHANDA, C. N. GUPTA, Y. C. SAXENA and ADITYA TEAM  
[\*Physics of Plasmas\*, \*\*17\*\*, 092504, 2010](#)
36. Influence of Laser Beam Intensity Profile on Propagation Dynamics of Laser-Blow-Off Plasma Plume  
KUMAR, A., GEORGE, S., SINGH, R.K., NAMPOORI, V.P.N.  
[\*Laser and Particle Beams\*, \*\*28\*\*, 387, 2010](#)
37. Performance of a Floating Hairpin Probe in Strongly Magnetized Plasma  
S.K. KARKARI, G.S. GOGNA, D. BOILSON, M.M. TURNER, A. SIMONIN  
[\*Contributions to Plasma Physics\*, \*\*50\*\*, 903, 2010](#)
38. Parallel Shear Flow Instabilities in Strongly Coupled Yukawa Liquids: A Comparison of Generalized Hydrodynamic Model and Molecular Dynamics Results  
J. ASHWIN and R. GANESH

[Physics of Plasmas, 17, 103706, 2010](#)

39. Toroidal Universal Drift Instability: A Global Gyrokinetic Study  
J. CHOWDHURY, R. GANESH, S. BRUNNER, J. VACLAVIK, and L. VILLARD  
[Physics of Plasmas, 17, 102105, 2010](#)
40. Life Cycle of Density Structures in a Simple Magnetized Torus  
R KAUR, A SARADA SREE, A K SINGH and S K MATTOO  
[New Journal of Physics, 12, 103013, 2010](#)
41. Active Spectroscopic Measurements using the ITER Diagnostic System  
M. THOMAS, G. COUNSELL, D. JOHNSON, P. VASU, and A. ZVONKOV  
[Review of Scientific Instruments, 81, 10D725, October 2010](#)
42. Possible Excitation of Solitary Electron Holes in a Laboratory Plasma  
S. KAR, S. MUKHERJEE, G. RAVI, and Y. C. SAXENA  
[Physics of Plasmas, 17, 102113, 2010](#)
43. Computation of Charge and Ion Drag Force on Multiple Static Spherical Dust Grains Immersed in RF Discharges  
V. R. IKKURTHI, K. MATYASH, A. MELZER, and R. SCHNEIDER  
[Physics of Plasmas, 17, 103712, 2010](#)
44. Experimental Study of Parameters of a Plasma Antenna  
RAJNEESH KUMAR and DHIRAJ BORA  
[Plasma Science and Technology, 12, 592, 2010](#)
45. Active Beam Spectroscopy for ITER  
M.G. VON HELLERMANN, R. BARNSELY, W. BIEL, E. DELABIE, N. HAWKES, R. JASPERS, D. JOHNSON, F. KLINKHAMER, O. LISCHTSCHENKO, O. MARCHUK, B. SCHUNKE, M.J. SINGH, B. SNIJDERS, H.P. SUMMERS, D. THOMAS, S. TUGARINOV, P. VASU  
[Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 623, 720, 2010](#)
46. Steady State Performance Test Analysis of Actively Cooled Extractor Grids for SST-1 Neutral Beam Injector  
M. R. JANA, S. K. MATTOO, and M. KHAN  
[Review of Scientific Instruments, 81, 113506, 2010](#)
47. Studies of Intermittency-like Phenomena in Plasma turbulence at IPR  
R. JHA, A. DAS, N. BISAI, and P. KAW  
[AIP Conference Proceedings: International Symposium on Waves, Coherent Structures and Turbulence in Plasmas, 1308, 13, 2010](#)

48. Synergy of Edge Shear Layer and Micro Turbulence in the Dynamics of the Density Limit of H-mode Discharges  
R. SINGH  
[\*AIP Conference Proceedings: International Symposium on Waves, Coherent Structures and Turbulence in Plasmas, 1308, 97, 2010\*](#)
49. Geodesic Acoustic Mode in Toroidal Plasma  
N. CHAKRABARTI, P. N. GUZDAR, R. G. KLEVA, R. SINGH, P. K. KAW, V. NAULIN, and J. J. RASMUSSEN  
[\*AIP Conference Proceedings: International Symposium on Waves, Coherent Structures and Turbulence in Plasmas, 1308, 108, 2010\*](#)
50. Energetic Electron Transport in an Inhomogeneous Plasma Medium  
AMITA DAS  
[\*AIP Conference Proceedings: International Symposium on Waves, Coherent Structures and Turbulence in Plasmas, 1308, 158, 2010\*](#)
51. Collective Dynamics of Strongly Coupled Dusty Plasmas  
ABHIJIT SEN  
[\*AIP Conference Proceedings: International Symposium on Waves, Coherent Structures and Turbulence in Plasmas, 1308, 184, 2010\*](#)
52. Fluorescence Properties of 4-Amino Salicylic Acid in Polymers  
KANCHAN SUYAL, NEERAJ KUMAR JOSHI, RANJANA RAUTELA, HEM CHANDRA JOSHI, and SANJAY PANT  
[\*Journal of Photochemistry and Photobiology A: Chemistry, 216, 51, 2010\*](#)
53. Validation of the ITER-Relevant Passive-Active-Multijunction LHCD Launcher on Long Pulses in Tore Supra  
A. EKEDAHL, L. DELPECH, M. GONICHE, D. GUILHEM, J. HILLAIRET, M. PREYNAS, P.K. SHARMA, J. ACHARD, Y.S. BAEI, X. BAI, C. BALORIN, Y. BARANOV, V. BASIUK, A. BÉCOULET, J. BELO, G. BERGER-BY, S. BRÉMOND, C. CASTALDO, S. CECCUZZI, R. CESARIO, E. CORBEL, X. COURTOIS, J. DECKER, E. DELMAS, X. DING, D. DOUAI, C. GOLETTA, J.P. GUNN, P. HERTOOUT, G.T. HOANG, F. IMBEAUX, K.K. KIROV, X. LITAUDON, R. MAGNE, J. MAILLOUX, D. MAZON, F. MIRIZZI, P. MOLLARD, P. MOREAU, T. OOSAKO, V. PETRZILKA, Y. PEYSSON, S. POLI, M. PROU, F. SAINT-LAURENT, F. SAMAILLE and B. SAOUTIC  
[\*Nuclear Fusion, 50, 112002, 2010\*](#)
54. Temperature Profile Measurement of Graphite Material using a CO<sub>2</sub> Laser  
PAYAL MEHTA, ARUN SARMA, JOYDEEP GHOSH, SHWETANG PANDYA, SANTOSH PANDYA, PARITOSH CHOUDHURI, J GOVINDARAJAN, C IONITA SCHRITTWIESER and ROMAN SCHRITTWIESER  
[\*Physica Scripta, 82, 055402, 2010\*](#)

55. Effect of Collisional Quenching on the Measurement of Ion Species Ratios in Neutral Beam Injectors  
BHARATHI PUNYAPU and PRAHLAD VATTIPALLE  
[\*Plasma and Fusion Research, 5, S2086, December 2010\*](#)
56. Integration of IC/EC systems in ITER  
T. GASSMANN, B. BEAUMONT, U.K. BARUAH, T. BONICELLI, S. CHIOCCHIO, D. COX, C. DARBOS, H. DECAMPS, G. DENISOV, M. HENDERSON, KAZARIAN, P.U. LAMALLE, A. MUKHERJEE, D. RASMUSSEN, G. SAIBENE, R. SARTORI, K. SAKAMOTO and A. TANGA  
[\*Fusion Engineering and Design, 85, 1245, 2010\*](#)
57. Preliminary Studies on MHD Simulation and Heat Transfer Analysis for LLCB TBM  
K.S. GOSWAMI, B. DEY, P.J. BHUYAN, and E. RAJENDRAKUMAR  
[\*Fusion Engineering and Design, 85, 1371, 2010\*](#)
58. Explosive Detection System using Pulsed 14 MeV Neutron Source  
SURENDER KUMAR SHARMA, SHRICHAND JAKHAR, ROHIT SHUKLA, ANURAG SHYAM and C.V.S. RAO  
[\*Fusion Engineering and Design, 85, 1562, 2010\*](#)
59. Must we use Ferritic Steel in TBM?  
J.-F. SALAVY, L.V. BOCCACCINI, P. CHAUDHURI, S. CHO, M. ENOEDA, L.M. GIANCARLI, R.J. KURTZ, T.Y. LUO, K. BHANU SANKARA RAO and C.P.C. WONG  
[\*Fusion Engineering and Design, 85, 1896, 2010\*](#)
60. Current Status of Design and Engineering Analysis of Indian LLCB TBM  
PARITOSH CHAUDHURI, CHANDAN DANANI, VILAS CHAUDHARI, R. SRINIVASAN, E. RAJENDRA KUMAR and S.P. DESHPANDE  
[\*Fusion Engineering and Design, 85, 1966, 2010\*](#)
61. Diamagnetic Flux Measurement in Aditya Tokamak  
SAMEER KUMAR, RATNESHWAR JHA, PRAVEEN LAL, CHANDRESH HANSALIYA, M. V. GOPALKRISHNA, SANJAY KULKARNI, and KISHORE MISHRA  
[\*Review of Scientific Instruments, 81, 123505, 2010\*](#)
62. Determination of Useful Parameter Space for a Double-Walled Carbon Nanotube Based Motor Subjected to a Sinusoidally Varying Electric Field  
S. NEGI, M. WARRIER and S. CHATURVEDI  
[\*Computational Materials Science, 50, 761, 2010\*](#)
63. P3M Simulations of Dusty Plasmas  
K. MATYASH, R. SCHNEIDER, R. IKKURTHI, L. LEWERENTZ, A. MELZER  
[\*Plasma Physics and Controlled Fusion, 52, 124016, 2010\*](#)
64. Lower Hybrid Current Drive for the Steady-State Scenario

- M GONICHE, L AMICUCCI, Y BARANOV, V BASIUK, G CALABRO, A CARDINALI, C CASTALDO, R CESARIO, J DECKER, D DODT, A EKEDAHL, L FIGINI, J GARCIA, G GIRUZZI, J HILLAIRET, G T HOANG, A HUBBARD, E JOFFRIN, K KIROV, X LITAUDON, J MAILLOUX, T OOSAKO, R PARKER, V PERICOLI RIDOLFINI, Y PEYSSON, P PLATANIA, F RIMINI, P K SHARMA, C SOZZI and G WALLACE  
[\*Plasma Physics and Controlled Fusion\*, \*\*52\*\*, 124031, 2010](#)
65. Gyrokinetic Simulations of Turbulent Transport: Size Scaling and Chaotic Behaviour  
L VILLARD, A BOTTINO, S BRUNNER, A CASATI, J CHOWDHURY, T DANNERT, R GANESH, X GARBET, T GORLER, V GRANDGIRARD, R HATZKY, Y IDOMURA, F JENKO, S JOLLIET, S KHOSH AGHDAM, X LAPILLONNE, G LATU, B F MCMILLAN, F MERZ, Y SARAZIN, TMTRAN and T VERNAY  
[\*Plasma Physics and Controlled Fusion\*, \*\*52\*\*, 124038, 2010](#)
66. Wall Reflection Modeling for Charge Exchange Recombination Spectroscopy (CXRS) Measurements on Textor and ITER  
SANTANU BANERJEE, P VASU, M VON HELLERMANN and R J E JASPERS  
[\*Plasma Physics and Controlled Fusion\*, \*\*52\*\*, 125006, 2010](#)
67. Finite-Element Analysis of Dump Resistor for Prototype Superconducting Magnet Carrying 3.60 MA-t  
S. KEDIA, S. ROY, S. PRADHAN  
[\*IEEE Transactions on Applied Superconductivity\*, \*\*20\*\*, 2354, 2010](#)
68. Measurement of Electromagnetic and Thermal Stresses on Conduction-Cooled Joints of the SST-1 spare TF coil  
S. KEDIA, S. PRADHAN, Y. KHRISTI, U. PRASAD, K. DOSHI, A.N. SHARMA  
[\*IEEE Transactions on Applied Superconductivity\*, \*\*20\*\*, 2360, 2010](#)
69. Using the Resonance Hairpin Probe and Pulsed Photodetachment Technique as a Diagnostic for Negative Ions in Oxygen Plasma  
J. CONWAY, N. SIRSE, S.K. KARKARI, M.M. TURNER  
[\*Plasma Sources Science and Technology\*, \*\*19\*\*, 065002, 2010](#)
70. A study on Port Plug Distortion Caused by Narrow Gap Combined GTAW & SMAW and Electron Beam Welding  
PANKAJ BISWAS, N.R. MANDAL, PARAMESWARAN VASU and SHRISHAIL B. PADASALAG  
[\*Fusion Engineering and Design\*, \*\*86\*\*, 99, 2011](#)
71. Intrinsic Toroidal and Poloidal Flow Generation in the Background of Ion Temperature Gradient Turbulence  
RAMESWAR SINGH, RAJARAMAN GANESH, RAGHVENDRA SINGH, PREDHIMAN KAW and ABHIJIT SEN  
[\*Nuclear Fusion\*, \*\*51\*\*, 013002, 2011](#)

72. Nonlinear Evolution of an Arbitrary Density Perturbation in a Cold Homogeneous Unmagnetized Plasma  
PRABAL SINGH VERMA, SUDIP SENGUPTA, and PREDHIMAN K. KAW  
[\*Physics of Plasmas\*, \*\*18\*\*, 012301, 2011](#)
73. Territorial Characteristics of Low Frequency Electrostatic Fluctuations in a Simple Magnetized Torus  
R. KAUR, A.K. SINGH, R. SINGH, A. SARADA SREE, S.K. MATTOO  
[\*Physics of Plasmas\*, \*\*18\*\*, 012109, 2011](#)
74. Mirrorlike Pulsed Laser Deposited Tungsten Thin Film  
A.T.T. MOSTAKO, C.V.S. RAO, A. KHARE  
[\*Review of Scientific Instruments\*, \*\*82\*\*, 013101, 2011](#)
75. Effect of Airy disk on Schlieren Diffraction Interferometer  
R. KUMAR  
[\*Optik\*, \*\*122\*\*, 105, 2011](#)
76. Nondestructive Test of Brazed Cooling Tubes of Prototype Bolometer Camera Housing Using Active Infrared Thermography  
KUMUDNI TAHILIANI, SANTOSH P. PANDYA, SHWETANG PANDYA, RATNESHWAR JHA, and J. GOVINDARAJAN  
[\*Review of Scientific Instruments\*, \*\*82\*\*, 014901, 2011](#)
77. Highly Enhanced Hard X-Ray Emission from Oriented Metal Nanorod Arrays Excited by Intense Femtosecond Laser Pulses  
SUDIPTA MONDAL, INDRANI CHAKRABORTY, SAIMA AHMAD, DANIEL CARVALHO, PRASHANT SINGH, AMIT D. LAD, V. NARAYANAN, PUSHAN AYYUB, G. RAVINDRA KUMAR, J. ZHENG, and Z.M. SHENG  
[\*Physical Review B\*, \*\*83\*\*, 035408, 2011](#)
78. Differential Charging Calculation of a Spherical Geometry in Space Plasma Condition  
BHOOMI K. MEHTA, SHISHIR DESHPANDE, S. MUKHERJEE and SURESH E. PUTHANVEETIL  
*Journal of Spacecraft Technology*, **21**, 07, 2011
79. Smelting of Niobium Pentoxide in a Transferred Arc Argon Plasma and Characterization of the Smelted Product  
BIJAN B. NAYAK, B. K. MISHRA, and S. PRADHAN  
[\*High Temperature Material Processes\*, \*\*14\*\*, 233, 2010](#)
80. Influence of Nano-Cu Additive on MgB<sub>2</sub> Phase Formation, Processing Temperature, and Transport Properties  
NESON VARGHESE, K. VINOD, S. RAHUL, K. M. DEVADAS, SYJU THOMAS, S. PRADHAN, and U. SYAMAPRASAD  
[\*Journal of Applied Physics\*, \*\*109\*\*, 033902, 2011](#)

81. Study of Laser-Blow-Off Plume Dynamics using Singular Value Decomposition Technique  
DANIEL RAJU, AJAI KUMAR, and RAJESH K. SINGH  
[IEEE Transactions on Plasma Science, 39, 630, 2011](#)
82. Properties of a Differentially Pumped Constricted Hollow Anode Plasma Source  
M.A. MUJAWAR, S.K. KARKARI, M.M. TURNER  
[Plasma Sources Science and Technology, 20, 015024, 2011](#)
83. Effect of Ion Beam Irradiation on Metal Particle Doped Polymer Composites  
N.L. SINGH, S. SHAH, A. QURESHI, A. TRIPATHI, F. SINGH, D.K. AVASTHI, P.M. RAOLE  
[Bulletin of Materials Science, 34, 81, 2011](#)
84. Quasi-optical Mode Converter for High Power Gyrotron  
B.K. SHUKLA, D. BORA  
[IEEE International Vacuum Electronics Conference, IVEC-2011, 191, 2011](#)
85. A Conceptual Scheme for Focusing of High Power Microwaves in SYMPLE  
R. BAHL, K. SATHYANARAYNA, V.P. ANITHA, P.J. RATHOD, Y.C., SAXENA  
[IEEE International Vacuum Electronics Conference, IVEC-2011, 203, 2011](#)
86. A Plasma Source for System for Microwave Plasma Experiments (SYMPLE)  
V.P. ANITHA, R. BAHL, P.J. RATHOD, J., RAVAL, Y.C. SAXENA  
[IEEE International Vacuum Electronics Conference, IVEC-2011, 217, 2011](#)
87. Interaction of High Power Microwave with Plasma  
V.P. ANITHA, A. DAS, Y.C. SAXENA, A. SHYAM, P.K. KAWI  
[IEEE International Vacuum Electronics Conference, IVEC-2011, 481, 2011](#)
88. Design and Testing of a PFN for the Washer-gun in SYMPLE  
P.J. RATHOD, V.P. ANITHA, Z.H. SHOLAPURWALA, J. RAVAL, R. BAHL, Y.C. SAXENA  
[IEEE International Vacuum Electronics Conference, IVEC-2011, 483, 2011](#)
89. A Compact Generator Based on Tesla Transformer and Water Pulsed Forming Line for POS Application  
R. KUMAR, J. PATEL, V.P. ANITHA, A. SHYAM  
[IEEE International Vacuum Electronics Conference, IVEC-2011, 489, 2011](#)
90. Short Pulse High Power Microwave Generation from an Axially Extracted Virtual Cathode Oscillator  
R. VERMA, A. SHYAM, T. PATEL, Y.C. SAXENA  
[IEEE International Vacuum Electronics Conference, IVEC-2011, 491, 2011](#)
91. Temporal and Spatial Study of Neon Ion Emission from a Plasma Focus Device

- M. BHUYAN, N. K. NEOG, S. R. MOHANTY, C. V. S. RAO, and P. M. RAOLE  
[\*Physics of Plasmas\*, \*\*18\*\*, 033101, 2011](#)
92. Time-varying Magnetic Field Coupled Noise Reduction in Low-Voltage Measurements in Superconductors  
K. DOSHI, Y. KHRISTI, S. KEDIA, S. PRADHAN  
[\*IEEE Transactions on Instrumentation and Measurement\*, \*\*60\*\*, 990, 2011](#)
93. Gyrokinetic Analysis of Tearing Instabilities in a Collisionless Plasma  
A.K. SUNDARAM, and A. SEN  
[\*Physics of Plasmas\*, \*\*18\*\*, 032112, 2011](#)
94. Phase-resolved Optical Emission of Dusty RF Discharges: Experiment and Simulation  
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