

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

2017-2018 (187 Reprints)

1. Design of a Helicon Plasma Source for Ion-Ion Plasma Production
N. SHARMA, M. CHAKRABORTY, N.K. NEOG, M. BANDYOPADHYAY
[Fusion Engineering and Design, 117, 30, 2017](#)
2. Search for Continuous Gravitational Waves from Neutron Stars in Globular Cluster NGC 6544
B.P. ABBOTT, A. DASGUPTA, G. GAUR, M. K. GUPTA, Z. KHAN, R. KUMAR, A. K. SRIVASTAVA, S. SUNIL, et al. (LIGO Scientific Collaboration and Virgo Collaboration)
[Physical Review D, 95, 082005, 2017](#)
3. First Search for Gravitational Waves from Known Pulsars with Advanced LIGO
B. P. ABBOTT, A. DASGUPTA, M. K. GUPTA, Z. KHAN, R. KUMAR, A. K. SRIVASTAVA, S. SUNIL (LIGO Scientific Collaboration and Virgo Collaboration)
[Astrophysical Journal, 839, 1, April 2017](#)
4. Nonlinear Dynamics of Turbulence Driven Magnetic Islands. I. Theoretical Aspects
O. AGULLO, M. MURAGLIA, S. BENKADDA, A. POYE, N. DUBUIT, X. GARBET, and A. SEN
[Physics of Plasmas, 24, 42308, 2017](#)
5. Nonlinear Dynamics of Turbulence Driven Magnetic Islands. II. Numerical Simulations
O. AGULLO, M. MURAGLIA, S. BENKADDA, A. POYE, N. DUBUIT, X. GARBET, and A. SEN
[Physics of Plasmas, 24, 42309, 2017](#)
6. Effects of Waveform Model Systematics on the Interpretation of GW150914
B.P. ABBOTT, A. DASGUPTA, M.K. GUPTA, Z. KHAN, R. KUMAR, A.K. SRIVASTAVA, S. SUNIL et al. (LIGO Scientific Collaboration, Virgo Collaboration)
[Classical and Quantum Gravity, 34, 104002, 2017](#)
7. Effect of Cold Plasma Treatment on Physiological Quality of Okra Seed
RAVINDER SEHRAWAT, ASHOK K. THAKUR, AMIT VIKRAM, A. VAID, R. RANE
[Journal of Hill Agriculture, 8, 66, 2017](#)
8. Plasma Wakefield Excitation in a Cold Magnetized Plasma for Particle Acceleration
MITHUN KARMAKAR, NIKHIL CHAKRABARTI and SUDIP SENGUPTA
[Physics of Plasmas, 24, 052111, 2017](#)

9. Correlation of Structural and Optical Properties of PVD Grown Amorphous Carbon Thin Films
INFANT SOLOMON, MUKUL BHATNAGAR, KRISHNANAND SHUKLA, BORNALI SARMA, MUKESH RANJAN, ARUN SARMA
[Diamond & Related Materials, 75, 69, 2017](#)
10. Virtual Reality Applications in Remote Handling Development for Tokamaks in India
PRAMIT DUTTA, NAVEEN RASTOGI, KRISHAN KUMAR GOTEWAL
[Fusion Engineering and Design, 118, 73, 2017](#)
11. Nonlinear Simulation of ELM Dynamics in the Presence of Resonant Magnetic Perturbations
D. CHANDRA, A. THYAGARAJA, A. SEN and P. KAW
[Nuclear Fusion, 57, 076001, 2017\(IPR/RR-846/2016\)](#)
12. Energy Exchange Dynamics Across L-H Transitions in NSTX
A. DIALLO, S. BANERJEE, S.J. ZWEBEN and T. STOLTZFUS-DUECK
[Nuclear Fusion, 57, 066050, 2017](#)
13. Studies on Radial and Poloidal Particle Transport at the Edge of SST-1 Tokamak
B. KAKATI, S. PRADHAN, J. DHONGDE, P. SEMWAL and SST-1 TEAM
[Physics of Plasmas, 24, 052306, 2017](#)
14. Amplification of a Turbulence Driven Seed Magnetic Island by Bootstrap Current
M. MURAGLIA, O. AGULLO, A. POYE, S. BENKADDA, N. DUBUIT, X. GARBET and A. SEN
[Nuclear Fusion, 57, 072010, 2017](#)
15. Time-Resolved Whole Field Investigation of Plasma Plume-Induced Shock Wave in Liquid Media of Different Densities
KAUSHIK CHOUDHURY, R. K. SINGH, SURYA NARAYAN, ATUL SRIVASTAVA and AJAI KUMAR
[Applied Physics B: Lasers and Optics, 123, 163, 2017](#)
16. Numerical Simulation of Multi-Pass GTA Welding of Grade 91 Steel
M. ZUBAIRUDDIN, S.K. ALBERT, M. VASUDEVAN, S. MAHADEVAN, V. CHAUDHARI and V.K. SURI
[Journal of Manufacturing Processes, 27, 87, 2017](#)
17. High-Temperature Tribological Studies of Plasma-Nitrided Tool Steels
ASHISH KUMAR, MANPREET KAUR, SUNPREET SINGH, ALPHONSA JOSEPH, GHANSHYAM JHALA and SANJEEV BHANDARI

[Surface Engineering, 34, 620, 2017](#)

18. GW170104: Observation of a 50-Solar-Mass Binary Black Hole Coalescence at Redshift 0.2
B.P. ABBOTT, A. DASGUPTA, M.K. GUPTA, Z. KHAN, R. KUMAR, A.K. SRIVASTAVA, S. SUNIL, et al. (LIGO Scientific and Virgo Collaboration)
[Physical Review Letters, 118, 221101, 2017](#)
19. Design of the 3.7 Ghz, 500 Kw CW Circulator for the LHCD System of the SST-1 Tokamak
HARISH V. DIXIT, AVIRAJ R. JADHAV, YOGESH M. JAIN, ALICE N. CHEERAN, VIKAS GUPTA and P.K. SHARMA
[Fusion Engineering and Design, 119, 51, 2017](#)
20. SPINS-IND: Pellet Injector for Fuelling of Magnetically Confined Fusion Systems
R. GANGRADEY, J. MISHRA, S. MUKHERJEE, P. PANCHAL, P. NAYAK, J. AGARWAL
and Y.C. SAXENA
[Review of Scientific Instruments, 88, 063503, 2017](#)
21. Search for Gravitational Waves Associated with Gamma-Ray Bursts during the First Advanced LIGO Observing Run and Implications for the Origin of GRB 150906B
B.P. ABBOTT, A. DASGUPTA, M.K. GUPTA, Z. KHAN, R. KUMAR, A.K. SRIVASTAVA, S. SUNIL, et al (LIGO Scientific Collaboration, Virgo Collaboration)
[The Astrophysical Journal, 841, 89, 2017](#)
22. Search for Gravitational Waves from Scorpius X-1 in the First Advanced LIGO Observing Run with a Hidden Markov Model
B.P. ABBOTT, A. DASGUPTA, M.K. GUPTA, Z. KHAN, R. KUMAR, A.K. SRIVASTAVA, S. SUNIL, et al (LIGO Scientific Collaboration, Virgo Collaboration)
[Physical Review D, 95, 122003, 2017](#)
23. Magnetic Turbulence in a Table-Top Laser-Plasma Relevant to Astrophysical Scenarios
GOURAB CHATTERJEE, KEVIN M. SCHOEFFLER, PRASHANT KUMAR SINGH, AMITAVA ADAK, AMIT D. LAD, SUDIP SENGUPTA, PREDHIMAN KAW, LUIS O. SILVA, AMITA DAS and G. RAVINDRA KUMAR
[Nature Communications, 8, 15970, 2017](#)
24. Nonlinear Laser–Plasma Interactions (Chandrasekhar Lecture)
P.K. KAW
[Reviews of Modern Plasma Physics, 1, 1, 2017](#)

25. Investigation of Neutral Particle Dynamics in Aditya Tokamak Plasma with DEGAS2 Code
RITU DEY, JOYDEEP GHOSH, M.B. CHOWDHURI, R. MANCHANDA, S. BANERJEE, N. RAMAIYA, DEEPTI SHARMA, R. SRINIVASAN, D.P. STOTLER and ADITYA TEAM
[Nuclear Fusion, 57, 086003, 2017](#)
26. Overview of Recent Experimental Results from the Aditya Tokamak
R.L. TANNA, J. GHOSH, P.K. CHATTOPADHYAY, HARSHITA RAJ, SHARVIL PATEL, P. DHYANI, C.N. GUPTA, K.A. JADEJA, K.M. PATEL, S.B. BHATT, V.K. PANCHAL, N.C. PATEL, CHHAYA CHAVDA, E.V. PRAVEENLAL, K.S. SHAH, M.N. MAKAWANA, S.K. JHA, M.V. GOPALKRISHANA, K. TAHILIANI, DEEPAK SANGWAN, D. RAJU, UMESH NAGORA, S.K. PATHAK, P.K. ATREY, S. PUROHIT, J. RAVAL, Y.S. JOISA, C.V.S. RAO, M.B. CHOWDHURI, S. BANERJEE, N. RAMAIYA, R. MANCHANDA, J. THOMAS, AJAI KUMAR, KUMAR AJAY, P.K. SHARMA, S.V. KULKARNI, K. SATHYANARAYANA, B.K. SHUKLA, AMITA DAS, R. JHA, Y.C. SAXENA, A. SEN, P.K. KAW, D. BORA and THE ADITYA TEAM
[Nuclear Fusion, 57, 102008, 2017](#)
27. Plasma Fireball: A Unique Tool to Fabricate Patterned Nanodots
S. CHAUHAN, T. BARMAN, M. BHATNAGAR, M. RANJAN and S. MUKHERJEE
[Review of Scientific Instruments, 88, 063507, 2017](#)
28. Development of Data Acquisition and Control System for Long Pulse Operations of Indian Test Facility of ITER DNB
HIMANSHU TYAGI, RATNAKAR YADAV, KARTIK PATEL, MAINAK BANDYOPADHYAY, CHANDRAMOULI ROTTI, DASS SUDHIR, AGRAJIT GAHLAUT,
KAUSHAL PANDYA, ARUN CHAKRABORTY and TEJ TRIVEDI
[IEEE Transactions on Nuclear Science, 64, 1426, 2017](#)
29. Triple Probe Interrogation of Spokes in a HiPIMS Discharge
F LOCKWOOD ESTRIN, S.K KARKARI and J.W BRADLEY
[Journal of Physics D: Applied Physics, 50, 295201, 2017](#)
30. Gated Integrator PXI-DAQ System for Thomson Scattering Diagnostics
KIRAN PATEL, VISHAL PILLAI, NEHA SINGH, JINTO THOMAS and AJAI KUMAR
[Fusion Engineering and Design, 119, 17, 2017](#)
31. Study on Metal Decorated Oxidized Multiwalled Carbon Nanotube (MWCNT) - Epoxy Adhesive for Thermal Conductivity Applications

AMIT K. SINGH, BISHNU P. PANDA, SMITA MOHANTY, SANJAY K. NAYAK
and MANOJ K. GUPTA

[Journal of Materials Science: Materials in Electronics, 28, 8908, 2017](#)

32. Overview of the JET Results in Support to ITER

X. LITAUDON, M. ABHANGI, J. BUCH, D. CHANDRA, P. DUTTA, P.V.
EDAPPALA, M. GHATE, A. KUNDU, B. MAGESH, R. MAKWANA, S. PANJA, S.
PATHAK, V. PRAJAPATI, R. PRAKASH, S. RANJAN, K. RATHOD, P. SANTA, A.
SINHA, M. STEPHEN and K. VASAVA et al

[Nuclear Fusion, 57, 102001, 2017](#)

33. Helical Type EM Induction Pump with Permanently Magnetized Rotor for High Pressure
Heads

BUCENIEKS, E. PLATACIS, O. MIKANOVSKIS, A. ZIK and V. MEHTA

[Magnetohydrodynamics, 53, 423, 2017](#)

34. The ITER Neutral Beam Test Facility towards SPIDER Operation

V. TOIGO, A. CHAKRABORTY, U. BARUAH, C. ROTTI, H. PATEL, M.V.
NAGARAJU, N.P. SINGH, A. PATEL, H. DHOLA, B. RAVAL et al.

[Nuclear Fusion, 57, 086027, 2017](#)

35. Search for Intermediate Mass Black Hole Binaries in the First Observing Run of
Advanced LIGO

B.P. ABBOTT, A. DASGUPTA, M.K. GUPTA, Z. KHAN, R. KUMAR, A.K.
SRIVASTAVA, S. SUNIL, et al (LIGO Scientific Collaboration, Virgo Collaboration)

[Physical Review D, 96, 022001, 2017](#)

36. A Parametric Model for Contribution of Superthermal Electrons to Oblique Measurement
Electron Cyclotron Spectra under ITER-Like Conditions

P.V. SUBHASH, AMIT KUMAR SINGH, HITESH PANDYA, V.S. DIVYA, M.P.
APARNA and T.K. BASITHA THANSEEM

[Fusion Science and Technology, 72, 49, 2017](#)

37. Time-Resolved Raman Spectroscopy of Polystyrene under Laser Driven Shock
Compression

VINAY RASTOGI, S. CHAURASIA, USHA RAO, C.D. SIJOY, V. MISHRA,
MANMOHAN

KUMAR, S. CHATURVEDI and M.N. DEO

[Journal of Raman Spectroscopy, 48, 1007, 2017](#)

38. Magnetic Flux Surfaces and Radial Shafranov Shifts (ΔR) in SST-1 Tokamak Plasma

SUBRATA JANA, SUBRATA PRADHAN, JASRAJ DHONGDE, HARISH MASAND,
MANOJ KUMAR, SAMEER KUMAR, PRAVEENLAL EDAPPALA, HITESH PATEL
and DEBASHIS GHOSH

[Fusion Engineering and Design, 120, 39, 2017](#)

39. 200 kJ Pulsed Power System for Pulsed Plasma Device

SURAMONI BORTHAKUR, NAYAN TALUKDAR, NIROD KUMAR NEOG,
TRIDIP KUMAR BORTHAKUR, RAJESH KUMAR, RISHI VERMA, and ANURAG
SHYAM

[IEEE Transactions on Plasma Science, 45, 7949071, 2017](#)

40. Search for High-Energy Neutrinos from Gravitational Wave Event GW151226 and
Candidate LVT151012 with ANTARES and IceCube

A. ALBERT, A. DASGUPTA, M.K. GUPTA, Z. KHAN, R. KUMAR, A.K.
SRIVASTAVA, S. SUNIL, et al (ANTARES Collaboration, IceCube Collaboration,
LIGO Scientific Collaboration, Virgo Collaboration)

[Physical Review D, 96, 022005, 2017](#)

41. Measurements of the Cross Sections of the $^{186}\text{W}(n,\gamma)^{187}\text{W}$, $^{182}\text{W}(n,p)^{182}\text{Ta}$,
 $^{154}\text{Gd}(n,2n)^{153}\text{Gd}$, and $^{160}\text{Gd}(n,2n)^{159}\text{Gd}$ Reactions at Neutron Energies of 5 to 17 MeV

RAJNIKANT MAKWANA, S. MUKHERJEE, P. MISHRA, H. NAIK, N.L. SINGH, M.
MEHTA, K. KATOVSKY, S.V. SURYANARAYANA, V. VANSOLA, Y. SANTHI
SHEELA, M. KARKERA, R. ACHARYA, and S. KHIRWADKAR

[Physical Review C, 96, 024608, 2017](#)

42. Study of Surface Properties of Plasma Nitrided Ferritic Stainless Steel 430L

D. GAUTAM, B. GANGULI, and S. SHARMA

[Material Performance and Characterization, 6, 581, 2017](#)

43. Effect of Cold Plasma Treatment and Priming in Bell Pepper (*Capsicum annuum* L.)

CHERRY NALWA, ASHOK K. THAKUR, AMIT VIKRAM, R. RANE and A. VAID

[International Journal of Bio-resource and Stress Management, 8, 535, 2017](#)

44. Effect of Plasma Treatment on growth and yield of Okra (*Abelmoschus Esculentus* (L.)
under field conditions

RAVINDER KUMAR, ASHOK K. THAKUR, AMIT VIKRAM, A.VAID, R. RANE

[International Journal of Bio-resource and Stress Management, 8, 656, 2017](#)

45. 3D Monte-Carlo Study of Toroidally Discontinuous Limiter SOL Configurations of
Aditya Tokamak

BIBHU PRASAD SAHOO, DEVENDRA SHARMA, RATNESHWAR JHA, and
YUHE FENG

[Physics of Plasmas, 24, 082505, 2017](#)

46. A Dynamic Analysis of the Magnetized Plasma Sheath in a Collisionless Scenario with Ion Sources
S. ADHIKARI, R. MOULICK and K.S. GOSWAMI
[Physics of Plasmas, 24, 083501, 2017](#)
47. Study on Discharge Plasma in a Cylindrical Inertial Electrostatic Confinement Fusion Device
N. BUZARBARUAH, N.J. DUTTA, D. BORGOHAIN, S.R. MOHANTY and H. BAILUNG
[Physics Letters A, 381, 2391, 2017](#)
48. Numerical Investigation of Nanosecond Laser Induced Plasma and Shock Wave Dynamics from Air Using 2D Hydrodynamic Code
S. SAI SHIVA, CH. LEELA, P. PREM KIRAN, C.D. SIJOY, V.R. IKKURTHI and S. CHATURVEDI
[Physics of Plasmas, 24, 083110, 2017](#)
49. Influence of DC Arc Current on the Formation of Cobalt-Based Nanostructures
P.B. ORPE, C. BALASUBRAMANIAN and S. MUKHERJEE
[Pramana - Journal of Physics, 89, 20, 2017](#)
50. Local Structure of Cobalt Nanoparticles Synthesized by High Heat Flux Plasma Process
P.B. ORPE, E. PARIS, C. BALASUBRAMANIAN, B. JOSEPH, S. MUKHERJEE, D. DI GIOACCHINO, A. MARCELLI and N.L. SAINI
[Radiation Physics and Chemistry, 137, 108, 2017](#)
51. LIGO-India - A Unique Adventure in Indian Science
TARUN SOURADEEP, SENDHIL RAJA, ZIAUDDIN KHAN, C.S. UNNIKRISHNAN and BALA IYER
[Current Science, 113, 672, 2017](#)
52. Aligned Multi-Walled Carbon Nanotubes (MWCNT) and Vapor Grown Carbon Fibers (VGCF) Reinforced Epoxy Adhesive for Thermal Conductivity Applications
AMIT KUMAR SINGH, ASHUTOS PARHI, BISHNU PRASAD PANDA, SMITA MOHANTY, SANJAY KUMAR NAYAK and MANOJ KUMAR GUPTA
[Journal of Materials Science: Materials in Electronics, 28, 17655, 2017](#)
53. Performance of Epitaxial and HPSI 4H-SiC Detectors for Plasma X-Ray Imaging Systems
P.V. RAJA, J. AKHTAR, S. VALA, M. ABHANGI and N.V.L.N. MURTY
[Journal of Instrumentation, 12, 08006, 2017](#)

54. The PRIMA Test Facility: SPIDER and MITICA Test-Beds for ITER Neutral Beam Injectors
V TOIGO, A CHAKRABORTY, U BARUAH, C ROTTI, H PATEL, M.V. NAGARAJU, N.P SINGH, A PATEL, H DHOLA, B RAVAL, ET. AL.
[New Journal of Physics, 19, 085004, 2017](#)
55. Indigenous Manufacturing Realization of TWIN Source and its Auxiliary
RAVI PANDEY, M. BANDYOPADHYAY, R. YADAV, D. PARMAR, H. TYAGI, H. SHISHANGIYA, S. SHAH, DASS SUDHIR KUMAR, A. GAHLAUT, M. VUPPUGALLA, J. SONI, J. BHAGORA, G. BANSAL, K. PANDYA, and A. CHAKRABORTY
[IEEE Transactions on Plasma Science, 45, 7971983, 2017](#)
56. Spatial Distribution of Atomic and Ion Hydrogen Flux and its Effect on Hydrogen Recycling in Long Duration Confined and Non-Confined Plasmas
A. KUZMIN, H. ZUSHI, I. TAKAGI, S.K. SHARMA, M. KOBAYASHI, Y. HIROOKA, T. ONCHI, K. HANADA, N. YOSHIDA, K. NAKAMURA, A. FUJISAWA, H. IDEI, Y. AGASHIMA, M. HASEGAWA, T. MUTOH, K. MISHRA and H. OHWADA
[Nuclear Materials and Energy, 12, 627, 2017](#)
57. Numerical Study of the Lateral Interactions of Two Plasma Plumes
SHARAD K YADAV, BHAVESH G PATEL, R.K SINGH, AMITA DAS, PREDHIMAN K KAW and AJAI KUMAR
[Journal of Physics D: Applied Physics, 50, 355201, 2017 \(IPR/RR-825/2016\)](#)
58. Development of a Novel Surface Assisted Volume Negative Hydrogen Ion Source
B. KAKATI, S.S. KAUSIK, M. BANDYOPADHYAY, B.K. SAIKIA and P.K. KAW
[Scientific Reports, 7, 11078, 2017](#)
59. Development and Validation of ACTYS, an Activation Analysis Code
SAI CHAITANYA TADEPALLI, PRITI KANTH, GUNJAN INDAULIYA, ISHWITA SAIKIA, SHISHIR P. DESHPANDE, P.V. SUBHASH
[Annals of Nuclear Energy, 107, 71, 2017](#)
60. Structural, Mechanical and Corrosion Resistance Properties of Ti/TiN Bilayers Deposited by Magnetron Sputtering on AISI 316L
K. SHUKLA, R. RANE, J. ALPHONSA, P. MAITY and S. MUKHERJEE
[Surface and Coatings Technology, 324, 167, 2017 \(IPR/RR-798/2016\)](#)
61. Influence of Pretreatment on Surface Behavior of Duplex Plasma Treated AISI H13 Tool Steel

KALYAN DAS, J. ALPHONSA, MANOJIT GHOSH, J. GHANSHYAM,
RAMAKRISHNA RANE, and S. MUKHERJEE
[Surfaces and Interfaces, 8, 206, 2017](#)

62. Spectrum Average Cross Section Measurement of ^{183}W (n, p) ^{183}Ta and ^{184}W (n, p) ^{184}Ta Reaction Cross Section in ^{252}Cf (sf) Neutron Field
RAJNIKANT MAKWANA, S. MUKHERJEE, L. SNOJ, S.S. BARALA, M. MEHTA,
P. MISHRA, S. TIWARI, M. ABHANGI, S. KHIRWADKAR and H. NAIK
[Applied Radiation and Isotopes, 127, 150, 2017](#)

63. Novel Target Design for Enhanced Laser Driven Proton Acceleration
MALAY DALUI, M. KUNDU, SHEROY TATA, AMIT D. LAD, J. JHA, KRISHANU
RAY, and M. KRISHNAMURTHY
[AIP Advances, 7, 095018, 2017](#)

64. All-Sky Search for Periodic Gravitational Waves in the O1 LIGO Data
B.P. ABBOTT, A. DASGUPTA, M.K. GUPTA, Z. KHAN, R. KUMAR, A.K.
SRIVASTAVA, S. SUNIL, et al. (LIGO Scientific Collaboration and Virgo
Collaboration)
[Physical Review D, 96, 062002, 2017](#)

65. Role of Atom Redeposition during Rising Ion Flux in Ion-Induced Nanodot Self-
Assembly on GaSB Surfaces
MUKESH RANJAN, PURVEE JOSHI, MUKUL BHATNAGAR and SUBROTO
MUKHERJEE
[Nanotechnology, 28, 394002, 2017](#)

66. Upper Limits on Gravitational Waves from Scorpius X-1 from a Model-Based Cross-
Correlation Search in Advanced LIGO Data
B.P. ABBOTT, A. DASGUPTA, M.K. GUPTA, Z. KHAN, R. KUMAR, A.K.
SRIVASTAVA, S. SUNIL, et al. (LIGO Scientific Collaboration and Virgo
Collaboration)
[Astrophysical Journal, 847, 47, 2017](#)

67. Observation of Enhanced Absorption of Laser Radiation by Nanostructured Targets in
PIC Simulations
CHANDRASEKHAR SHUKLA and AMITA DAS
[Physics of Plasmas, 24, 093118, 2017 \(IPR/RR-895/2017\)](#)

68. Design of Biodegradable Quadruple-Shaped DRA for WLAN/Wi-Max Applications
PRAMOD KUMAR, SANTANU DWARI, UTKARSH and JITENDRA KUMAR
[Journal of Microwaves, Optoelectronics and Electromagnetic Applications, 16, 867, 2017](#)

69. Nuclear Analyses of Neutron Activation System for Indian TBM
H.L. SWAMI, A.K. SHAW, A.N. MISTRY, S. TIWARI and C. DANANI
[Fusion Engineering and Design, 121, 174, 2017\(IPR/RR-843/2016\)](#)
70. Spectroscopic Performance Studies of 4H-SiC Detectors for Fusion Alpha-Particle Diagnostics
P. VIGNESHWARA RAJA, JAMIL AKHTAR, C.V.S. RAO, SUDHIRSINH VALA, MITUL ABHANGI and N.V.L. NARASIMHA MURTY
[Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 869, 118, 2017](#)
71. Development, Optimization and Validation of Ultrasonic Testing for NDE of ELM Coils
K. BHOPE, M. GHATE, M. MEHTA, A. PANCHAL, S. PRADHAN and S. KHIRWADKAR
[Fusion Engineering and Design, 121, 218, 2017](#)
72. Intrinsic Non-Inductive Current Driven by ETG Turbulence in Tokamaks
RAMESWAR SINGH, P.K. KAW, R. SINGH, and O.D. GURCAN
[Physics of Plasmas, 24, 102303, 2017](#)
73. Effect of Colloidal Processing on Densification and Dielectric Properties of Ba(Zn_{1/3}Ta_{2/3})O₃ Ceramics
SWATHI MANIVANNAN, ANDREWS JOSEPH, P.K. SHARMA, K.C. JAMES RAJU and DIBAKAR DAS
[Ceramics International, 43, 12658, 2017](#)
74. GW170817: Observation of Gravitational Waves from a Binary Neutron Star Inspiral
B.P. ABBOTT, A. DASGUPTA, M.K. GUPTA, Z. KHAN, R. KUMAR, A.K. SRIVASTAVA, S. SUNIL, et al. (LIGO Scientific Collaboration and Virgo Collaboration)
[Physical Review Letters, 119, 161101, 2017](#)
75. GW170814: A Three-Detector Observation of Gravitational Waves from a Binary Black Hole Coalescence
B.P. ABBOTT, A. DASGUPTA, M.K. GUPTA, Z. KHAN, R. KUMAR, A.K. SRIVASTAVA, S. SUNIL, et al. (LIGO Scientific Collaboration and Virgo Collaboration)
[Physical Review Letters, 119, 141101, 2017](#)
76. Joining of WCu-CuCrZr Coupon Materials by Diffusion Bonding Technique for Divertor Plasma Facing Components
K. PREMJI SINGH, RUSHUB BHAVSAR, KAUSHAL PATEL, S.S. KHIRWADKAR, ALPESH PATEL AND KEDAR BHOPE

77. Gravitational Waves and Gamma-Rays from a Binary Neutron Star Merger: GW170817 and GRB 170817A
B.P. ABBOTT, A. DASGUPTA, M.K. GUPTA, Z. KHAN, R. KUMAR, A.K. SRIVASTAVA, S. SUNIL, et al. (LIGO Scientific Collaboration and Virgo Collaboration)
[Astrophysical Journal Letters, 848, L13, 2017](#)
78. Observation of Thick Toroidal Filaments during the Disruptive Phase of Aditya Tokamak Plasma
SANTANU BANERJEE, N. BISAI, D. CHANDRA, P. DHYANI, R. MANCHANDA, M.B. CHOWDHURI, N. RAMAIYA, D. SANGWAN, J. GHOSH, R.L. TANNA, P.K. CHATTOPADHYAY, D. RAJU, P.K. ATREY, Y. SHANKAR JOISA, A. SEN, P.K. KAW and ADITYA TEAM
[Physics of Plasmas, 24, 102513, 2017 \(IPR/RR-842/2016\)](#)
79. External Control of the Synchronization Dynamics of Two Inductively Coupled Glow Discharge Plasma Sources
NEERAJ CHAUBEY, S. MUKHERJEE and A. SEN
[Physics of Plasmas, 24, 102316, 2017 \(IPR/RR-912/2017\)](#)
80. Investigation of Diocotron Modes in Toroidally Trapped Electron Plasmas using Non-Destructive Method
LAVKESH LACHHVANI, SAMBARAN PAHARI, SUDIP SENGUPTA, YOGESH G. YEOLE, MANU BAJPAI and P.K. CHATTOPADHYAY
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NIRAV PATEL, RAKESH RANJAN, GUMAN GOHIL, HIREN PATEL, JINENDRA
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PRADHAN

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NISHA CHANDWANI, PURVI DAVE, VISHAL JAIN, SUDHIR NEMA and
SUBROTO MUKHERJEE

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ANANYA KUNDU, SUBRAT KUMAR DAS, ANEES BANO and SUBRATA PRADHAN

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S. DANANI, H.K.B. PANDYA, RAVINDER KUMAR, M.E. AUSTIN, V.S. UDINTSEV and VINAY KUMAR

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PRAVEEN KUMAR ATREY, DHAVAL PUJARA and SUBROTO MUKHERJEE

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SANDEEP RIMZA, SAMIR KHIRWADKAR and KARUPANNA VELUSAMY

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V. GAYATHRI DEVI, DEEPAK YADAV and AMIT SIRCAR
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UPENDRA PRASAD, SUBRATA PRADHAN, MAHESH GHATE, PIYUSH RAJ, V.L. TANNA, ZIAUDDIN KHAN, SWATI ROY, PROSENJIT SANTRA, PRABAL BISWAS, A.N. SHARMA, YOHAN KHRISTI, DEVEN KANABER and PANKAJ VARMORA
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