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B. Invited Talk

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3. Chari R.
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4. Dasgupta R.
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5. Dixit V.K.
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6. Jain Akhilesh
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7. Jha S.N.
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8. Joshi M.P.
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9. Khan S.
Ultrafast dynamics of two-dimensional electron gas formed in an AlGaAs-GaAs heterostructure
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10. Lad M.
High power RF Systems: operational experience and

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11. Misra Pankaj
Studies on resistive switching times in Au/NiO/Pt devices
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12. Naik P.A.
Ultra-short laser plasma interaction studies at RRCAT
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13. Prakash O.
Fiber bragg gratings fabrication and their utilization for sensor development
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14. Sharma T.K.
Novel characterization methods for the investigation of MBE grown AlGaN/GaN heterostructures
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15. Shinde R.S.
Techniques and instrumentation for characterization of high frequency magnetic materials in accelerators at RRCAT
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17. Shrivastava P.
High power microwave systems for particle accelerators for IRFEL and irradiation applications
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C. Seminar/Conference Presentations

C.1 26th DAE-BRNS National Laser Symposium (NLS-26), Mumbai, Dec. 20-23, 2017

1. Agrawal D.K., Jain R.K., Bairwa M.K., Singh Rajpal, Saini B.K., Kumar Prabhat, Upadhyaya B.N., Bhawsar V., Raju A.A., Kumar Manoj, Kushwah S., Arya R., Mudgal N.*, Ghosh S.*, Sanyal D.N.*, Barot R.R.*, Vhora S.F.*, Bindra K.S.
Laser cutting of bellow lip weld joints during en-masse coolant channel replacement (EMCCR) campaign at KAPS-2 reactor

2. Agrawal R., Verma S., Rao B.T., Singh Rashmi, Kaul R., Singh Bijendra
Nanosecond pulsed laser induced shape transformation of gold nanocubes into nanospheres studied from plasmonic response

3. Ansari A., Kumar M., Singhal H., Chakera J.A., Naik P.A.
Development of velocity map imaging spectrograph

4. Bagchi S., Tayyab M., Saxena S., Chakera J,A., Naik P.A.
Development and characterization of Plasma Mirror System for enhancing ultra-short laser pulse contrast

5. Bhardwaj V., Kumar Prabhat, Bairwa M., Singh Rajpal, Ekka B., Upadhyaya B.N., Bindra K.S.
Blast free oxygen assisted underwater laser cutting of up to 10 mm thick mild steel using pulsed Nd:YAG laser

6. Bhatt R., Soharab M., Bhaumik I., Jachpure D.*, Saxena A., Karnal A.K.
Investigation of absorption and emission properties of Yb doped gadolinium yttrium calcium oxoborate (GdYCOB) single crystals for laser application

7. Bhaumik I., Soharab M., Bhatt R., Saxena A., Ganesamoorthy S.*, Karnal A.K.
Effect of Cr co-doping on the optical absorption of Nd:YVO_4 single crystals grown in different oxygen partial pressures

8. Bairwa M.K., Jain R.K., Singh Rajpal, Saini B.K., Upadhyaya B.N., Agrawal D.K., Bhawsar V., Sah S.K., Raju A.A., Kumar Manoj, Arya R., Sanyal D.N.*, Barot R.R.*, Vhora S.F.*, Bindra K.S.
Development of an in-situ Nd:YAG laser cutting technology for 18mm thick end fitting near roll joint area for PIE data of pressure tube at KAPS-1 reactor

9. Bairwa M.K., Shukla V., Singh Rajpal, Paul B., Bhardwaj V., Jain R.K., Saini B.K., Raju A.A., Bhawsar V., Arya R., Upadhyaya B.N., Bindra K.S.
Study and development of 500W all ceramic Nd:YAG laser

10. Bhale D.*, Gangopadhyay S., Barpande K., Fatnani P., Rawat V.S.*, Kawade N.
Synchronized triggering system and delay control for CVL MOPA operation using indigenous developed timing card

11. Bhawsar V., Khanwalkar J., Arya R.
TEC based temperature controller for electro-optic devices

12. Biswal R., Mishra G.K., Agrawal S.K., Dixit S.K., Nakhe S.V.
Design & demonstration of a diode pump alkali (rubidium) laser at $\lambda \sim 795$ nm

13. Bundel H.R., Tiwari Shradha, Sharath Chandra L.S., Deshpande P.P., Bhanage V.
Automation of resonant ultrasound spectroscopy experiments

14. Chakraborty A., Mishra S.R., Ram S.P.
Evolution of laser cooled ^{87}Rb atom cloud in a time varying radio-frequency dressed

15. Chakravarty Usha, Gurram S., Kuruvilla A., Singh Rajpal, Upadhyaya B.N., Bindra K.S.
Amplification of q-switched pulses to more than 25 W average power in single mode Yb-doped dual stage all fiber amplifier

16. Chatterjee S.*, Mahapatra S.S.*, Bharadwaj V.K., Choubey A., Upadhyay B.N., Bindra K.S.
Parametric evaluation of weldments of Ti6Al4V using Nd:YAG pulsed Laser

17. Chaturvedi A., Mondal P., Dhami T.S., Joshi M.P.
Characterization of Au doped TiO_2 nanoparticles grown using liquid phase pulsed laser ablation method

18. Chaturvedi M., Pant B., Kumar Atul, Daiya D., Benerji N.S., Raja S., Joshi A.S., Naik P.A.
Design and development of a push pull velocity interferometer (VISAR)

19. Chaubey S., Mittal M.*, Sharma R.K., Kher S., Dixit S.K.
Investigation of rare earth doped double clad fibers and long period fiber gratings: applications for fiber laser and radiation dosimetry

20. Choubey A., Ali S., Yadav P., Ranganathan K., Upadhyaya B.N., Modi M.H., Bindra K.S.
Laser cleaning of Cr layer from fused silica mirror surface using ns pulses

21. Chowdhury A., Waghmare D.*, Dasgupta R., Majumder S.K.
Diabetes detection with laser tweezers

22. Daiya D., Patidar R.K., Moorti A., Benerji N.S., Joshi A.S., Naik P.A.
A novel scheme of all reflective FROG using near 90 degree retro-reflector for single shot characterization of ultra-short laser pulses

23. Dalal A., Kumar N., Chourasia C.*, Khan K.M., Krishna H., Majumder S.K.
Spatially-offset Raman spectroscopic detection of urea adulteration in packaged milk samples

24. Dave I., Pant B., Raja S., Joshi A.S.
Design and development of a laser scan micrometer

25. Debnath C., Kar S., Sharma S.K., Verma S., Bartwal K.S., Karnal A.K.
Second harmonic generation of Nd:YAG laser output from LN:PMMA nanocomposites as a function o f nanoparticles concentration and poling electric field

26. Deshmukh P., Satapathy S., Ahlawat A., Karnal A.K.
Fabrication of Yb:Y_2O_3 transparent ceramic using Zr and La as sintering additives.

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29. Dutta S.B.*, Shrivastava R., Khan K.M., Gupta S.*, Majumder S.K.
Improving the performance of SERS for detecting analytes of biomedical importance

30. Ganesh S.*, Kumar P., Saini V.K.
Characterization of improved design hollow-cathode lamp for optogalvanic spectroscopy

31. Gorey A.*, Ansari M.S., Vasudevan S.*
Frequency spectral analysis through continuous wave laser based photoacoustic (CWPA) technique: a phantom study

32. Gouda G.M.*, Mukherjee C., Ajithkumar S.*, Kamath M.P., Viswanathan M.*
Development of very high reflectance coatings with high damage threshold

33. Gupta Pradeep K., Singh C.P., Mukhopadhyay P.K., Bindra K.S.
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34. Gurram S., Daiya D., Patidar R.K., Benerji N.S., Kamath M.P., Joshi A.S.
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35. Ittoop M.O., Saini S.*, Rawat B.S., Yadav R., Kumar Manoj, Kaul R.
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36. Jain R.K., Bairwa M.K., Saini B.K., John B.*, Kumar M.*, Gopal B., Singh Rajpal, Bhawsar V., Raju A.A., Agrawal D.K., Upadhyaya B.N., Bindra K.S.
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37. Jinoop A.N., Paul C.P., Bhartiya S., Denny J.*, Nayak S.K., Kar S., Bindra K.S.
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38. Kalita S.*, Rao B.T., Kumar Manoj, Kumar A.*, Kaul R.
Photoluminescence response of TiO_2 nanoparticles grown by CO_2 laser based gas-phase pyrolysis technique

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Crystal growth, optical and laser studies of triphenylphosphine oxide 4-nitrophenol (TPNP) for nonlinear optical (NLO) applications

40. Khan S., Jayabalan J., Singh Asha, Khan S., Chari R.
Carrier dynamics near resonance in near surface single quantum wells using two colour pump-probe reflectivity

41. Khanwalkar J., Patel C.*, Arya R.
Electrical equivalent model of thermoelectric cooler for performance-simulation of temperature controllers

42. Khare R., Shukla P.K., Shrivastava V.K., Tiwari G.N.
Short-term, single-pulse, beam pointing stabilities of dye laser and its pump laser

43. Krishna H., Majumder S.K.
Studies on fluorescence photo-bleaching of urine for diagnosis of oral cancer

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Czochralski growth of $LiKB_4O_7$ crystal for NLO and thermoluminescence applications

45. Kulkarni A.P., Nair D.*, Sharma Jyoti, Patidar R.K., Benerji N.S., Kamath M.P., Joshi A.S., Naik P.A.
Optical figure of merit of indigenously developed Neodymium doped phosphate laser glass.

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48. Kumar J., Agrawal S.K., Prakash O., Dixit S.K., Nakhe S.V.
Development of high temperature (~ 900 °C) distributed fiber Bragg grating sensor

49. Kumar Manoj, Biswas A.K., Rana L.B., Yadav Rajiv, Kaul R.
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50. Kumar Nitin, Khan K.M., Dalal A., Krishna H., Majumder S.K.
Sub-surface Raman spectroscopic measurements in layered biological samples using the line focus of an axicon

51. Kumar P., Kumar S., Kumar J., Prakash O., Dixit S.K.
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52. Kumar Pankaj, Saini V.K., Purbia G.S., Prakash O., Dixit S.K., Nakhe S.V.
Studies on lithium excited state transition at 610.4 nm in a hollow cathode discharge

53. Kumar V., Dutta S.B.*, Krishna H., Singh Bijendra, Majumder S.K.
Raman spectroscopy of radiochromic films: an approach to low energy radiation dosimetry

54. Kumar P.Y., Negi S.S., Kamath M.P., Joshi A.S.
Interferomtetric straightness measurement using an optical wedge plate and cyclic path optical configuration setup.

55. Kushwaha P.K., Jayabalan J., Singh Asha, Gurung S., Chari R.
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56. Mahakud R., Kumbhkar U., Kumar S., Kumar J., Prakash O., Dixit S.K.
Fiber bragg gratings for cryogenic temperature sensing

57. Mandal T., Arora V., Moorti A., Chakera J.A., Naik P.A.
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58. Manasa P.*, Srihari T.*, Basavapoornima C.*, Joshi A.S., Jayasankar C.K.*
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59. Maravi S., Sundar R.*, Dwivedi P.K.*, Gupta R.K., Nagpure D.C., Ranganathan K., Chowdhury A., Ganesh P., Jain P., Bindra K.S., Kaul R.
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60 Mishra C., Chakraborty A., Rama S.P., Tiwari V.B., Mishra S.R.
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62. Mishra S.K., Kumar U., Paul C.P., Bindra K.S.
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63. Misra P., Kumar A., Jain R.K., Singh R., Upadhyaya B.N., Bindra K.S.
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65. Nair R.B.*, Dutta S.B.*, Khan K.M., Krishna H., Rao K.D.*, Majumder S.K.
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66. Naphade D., Singh Bhupinder
LCCL-T Resonant immittance converter (RIC) topology as constant current supply for capacitor charging in flash lamps

67. Narwat D., Upadhyaya B.N., Arya R.
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70. Pal S., Kamparath R., Vashisht G., Kumar Ravi, Mukherjee C., Joshi A.S.
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75. Rai A.K., Biswal R., Gupta R.K., Nagpure D.C., Ranganathan K., Sundar R.*, Ganesh P., Kaul R., Bindra K.S.
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78. Saini V.K., Talwar S., Sarangpani K.K., Dixit S.K.
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82. Selvamani R., Anand A.S.*, Singh Gurvinderjit, Tiwari V.S., Karnal A.K.
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C.2 32nd National Symposium on Plasma Science & Technology (PLASMA-2017), Gandhinagar, Nov. 7-10, 2017

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3. Chakravarty U.
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6. Kumar M., Singhal H., Chakera J.A., Naik P.A.
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8. Kumar Rajnish, Pathak M., Ghodke D.V., Senecha V.K.
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9. Nigam,S., Daiya D., Padiyar A.S., Sharma M.L., Aneesh K., Prasad Y.B.S.R., Chakera J.A., Joshi A. S., Naik P.A.
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14. Tayyab M., Bagchi S., Nayak M., Chakera J.A., Naik P.A.
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Analysis of residual stress in W/B4C multilayer

4. Pradhan P.C., Majhi A., Nayak M.
Study of W/B4C multilayer for hard x-ray monochromator application

5. Singh Amol, Sinha M., Modi M.H.
Optical properties of niobium carbide (NbC) in soft x-ray energy region (60-150A^0)

6. Sinha M., Gupta R.K., Modi M.H.
Soft x-ray reflectivity and absorption characterization of zirconium oxide thin films

C.4 XIX International Workshop on the Physics of Semiconductor Devices (IWPSD-2017), Delhi, Dec. 11-15, 2017

1. Chatterjee A., Khamari S., Porwal S., Sharma T.K.
Effect of capacitance hysteresis on the performance of GaN metal-oxide- semiconductor photodetectors

2. Haldar S., Vashisht G., Porwal S., Sharma T.K., Dixit V.K.
Effect of barrier layer on the effective mass of excitons in GaAs/$Al_xGa_{1-x}As$ QWs investigated via parallel and transverse Magneto-PL spectroscopy

3. Jana D., Porwal S., Sharma T.K.
Compensation of unintentional donors in AlGaN/GaN HEMT structures by Mg-doping during initial growth of GaN buffer layer

4. Khan S., Jayabalana J., Singh Asha, Bhandari R.*, Chari R.
Direct measurement of carrier dynamics of near-surface quantum well using two colour pump-probe refelectivity

5. Raj Mohan S., Singh M.P., Joshi M.P., Singh Bijendra
Extracting energetic disorder in inhomogeneous organic thin films using Meyer-Neldel rule

6. Raj Mohan S., Joshi M.P., Verma A.*, Ittoop M.O., Shalu C.*, Dhami T.S., Singh Bijendra
Photo conductivity studies on MDMO PPV thin films

7. Shalu C.*, Raj Mohan S., Joshi M.P., Singh V.*
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8. Vashisht G., Haldar S., Porwal S., Kumar R., Sharma T.K., Dixit V.K.
InAsP/InP multiple quantum well based IR detectors with enhanced spectral photoresponse

C.5 ISSS International Conference on MEMS (ISSS-2017) 8th International Conference on Smart Materials, Structures & Systems, Bengaluru, July 5-7, 2017

1. Bundel P., Dhamgaye V.P., Srivastava A.*, Khantwal N., Thakur B.S.
   X-ray liga microfabrication of folded waveguide slow wave structure for 0.22 THz TWT

2. Chinthulal V.S.*, Dhamgaye V.P.
   X-ray wave propagation simulation of x–ray focusing microstructures

3. Dhamgaye V.P., Khantwal N., Thakur B.S., Pavan Kumar Y., Kamath M.P., Rai S.K., Dhawan R., Utsumi Y.*
   Development of carbon membrane based x-ray mask for x-ray LIGA microstructures

4. Shukla R., Kannojia H.K., Mukherjee C., Ram Sanker P., Thakur B.S., Pandey D.*
   Challenges in fabrication of high aspect ratio electrostatic comb-drive using one-step x-ray lithography

C.6 International Conference on Nanotechnology: Ideas, Innovations and Initiative (ICN:3I-2017), Roorkee, Dec. 6-7, 2017

1. Chakravarty U.
   Nanoplasmonics with ultra-short high intensity laser pulses

2. Gupta V.K., Ingale A., Ghokhale M.
   Study of polytypism in InAs nanowires using resonance Raman spectroscopy

3. Kumar S.
   Surface photovoltage and photoelectron spectroscopies of nano structure semiconductors

C.7 Others Seminars/Conference Presentation

1. Das G., Khooha A., Singh A.K., Tiwari M.K.
   Depth resolved chemical speciation of a superlatice
   66th Annual Denver X-ray Conference, Big Sky, Montana, USA, July 31- Aug. 4, 2017

2. Ganesh P., Kumar Abhay, Vishwakarma S.C., Bose A., Gupta R.K., Sindal B., Rai S.K., Rao Chinna P . , Sankar Ram P., Nagpure D.C., Kaul R., Mundra G., Singh Bijendra
   Vacuum brazing of titanium/316L stainless steel transition joint for application in helium vessel of superconducting cavities
   International Congress of the International Institute of Welding (IC-2017), Chennai, Dec. 7-9, 2017

3. Jena S.K., Ghodke A.D.
   Improvements in stable beam operation of Indus-2 storage ring
   6th Accelerator Reliability Workshop (ARW-2017), Versailles, Paris, France, Oct. 15-20, 2017

4. Kak A., Murugan M. Sowrirajan S., Tiwari V.B., Gupta R.K., Sharma S.D.
   Development of fused silica glass to metal sealed system for laser cooling of rubidium atoms
   International conference on Expanding Horizons of Technological Applications of Ceramics and Glasses (EH-TACAG'17), Pune, Dec. 14-16, 2017

5. Krishna R.*, Rajput P., Saxena N.*, Manjhi P.*, Sinha O.P.*
   Local structural investigation of doped ZnO nanoparticles
   International Conference on Accelerator in Materials and Medical Sciences (ICAMMS-2017), Oct. 5-7, 2017

6. Mishra D.K.*, Sathe V.G.*, Rawat R.*, Sharma T.K.
   Strain disorder: new degree of freedom to control structurally dissimilar magnetic phase separation in $La_{5/8-y}PryCa_{3/8}MnO_3$ epitaxial thin films
   International Conference on Accelerator in

Materials and Medical Sciences (ICAMMS-2017), Oct. 5-7, 2017

7. Patel A., Kale U., Shrivastava P., Pant K.K., Nerpagar P., Nayak V.*
10MW peak power RF system for a pulse radiolysis facility
Proceedings of the VEDA-2017 Symposium, Roorkee, Nov. 17-19, 2017

8. Pradhan P.C., Bhartiya S., Singh A.*, Majhi A., Gome A., Dhawan R., Nayak M., Sahoo P.K.*, Rai S.K., Reddy V.R.*
Fabrication and characterization of W/B4C lamellar multilayer grating and NbC/Si multilayer phase-shift reflector
Proc. of SPIE, vol. 10386, Advances in X-Ray/EUV Optics and Components XII, San Diego, California, USA, Aug. 6-10, 2017

9. Roy T., Pandey D., Chakrabarti A.
Probing the possibility of coexistence of martensite transition and half-metallicity in Ni and Co-based full-Heusler alloys: an Ab initio calculation
International conference on Martensite Transformations (ICOMAT-2017), Chicago, Illinois, USA, July 9-14, 2017

10. Roychowdhury R.
Photoelectron spectropsy of GaP grown on Si, Ge and GaAs substrate
National Science Day Celebrations at UGC-DAE CSR, Indore, Dec. 14, 2017

11. Shalu C.*, Raj Mohan S., Joshi M.P., Singh V.
Role of casting solvent on the leakage current in PVP as a polymeric dielectric in OFET
Proc. 9th International Conference on Materials for Advanced Technologies (ICMAT2017), Singapore, June 18-23, 2017

12. Singhal H., Kumar N., Chakera J.A., Naik P.A.
Ultrafast shadowgraphy of plasma plumes using high order harmonics of Ti:Saphhire laser
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13. Sondhi H.*, Krishna R.*, Rajput P., Sinha O.P.*
Study of ZnO-CdS core shell nanostructures using synchrotron source
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14. Sudheer, Tiwari P., Bhartiya S., Mukherjee C., Rai S.K., Sinha A.K., Rai V.N., Srivastava A.K.
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15. Tomar S.S., Rawat A., Vyavahare P.D.*, Tokekar S.*
A novel central arbiter to mitigate denial of service attacks on duplicate address detection in IPv6 networks
11th International Conference on Emerging Security Information, Systems and Technologies (SECURWARE 2017), Rome, Italy, Sept.10-14, 2017

16. Verma R.S., Kumar N.
Opto electronic tweezers based smart sweeper for cells/micro-particles sorting
Optics and Photonics 2017(Internet session), Saratov Fall Meeting, Russia, Sept. 26-30, 2017

Note: '*' indicates author affiliation other than RRCAT, Indore.