



A. Journal Articles

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Influence of periodically modulated cavity field on the generation of atomic-squeezed states
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Surface plasmon resonances of Ag-Au alloy nanoparticle films grown by sequential pulsed laser deposition at different compositions and temperatures
Journal of Applied Physics **117**, 133105(1-11) (2015)
106. Verma Shweta, Rao B.T., Bhartiya S., Sathe V.*, Kukreja L.M.
Growth temperature dependent surface plasmon resonances of densely packed gold nanoparticles films and their role in surface enhanced Raman scattering of Rhodamine6G
Applied Surface Science **346**, 379-387 (2015)



B. Invited Talk

1. Arora V.
Emerging trends in applications of plasmas produced by ultra-high intensity laser beams
International Conference on Emerging Interfaces of Plasma Science and Technology (EIPT-2015), Ujjain March 9-10, 2015.
2. Banerjee Arup
Influence of periodically modulated cavity field on the generation of atomic-squeezed states
4th International Conference on Current Developments in Atomic, Molecular, Optical and Nano Physics with Applications, Delhi, Mar. 11-14, 2015
3. Bhaumik I., Ganesamoorthy S.*, Bhatt R., Soharab M., Saxena A., Karnal A.K., Gupta P.K.
Growth issues in the optical floating zone technique: A special focus on the growth of oxides for optical applications
19th National Seminar on Crystal Growth, Vellore, Mar. 12-14, 2015
4. Ghosh H.
Fe-based superconductors ; 7 years after its discovery
Invited Colloquium at the Physical Research Laboratory, Ahmedabad, Jan. 21, 2015
5. Gupta P.K.
Biomedical applications of lasers
National Seminar on Science for National Development, Nagpur, Mar. 14-15, 2015
6. Gupta P.K.
Optical spectroscopy for biomedical diagnosis
International Conference on Frontiers of Spectroscopy, Varanasi, Jan. 10, 2015
7. Gupta P.K.
Photonics for health care applications: studies at RRCAT
National Symposium on Frontiers of Biology: The DAE Spectra, Kolkata, Jan. 21-22, 2015
8. Gupta P.K.
Use of optical spectroscopic and imaging techniques for biomedical diagnosis
Workshop on Achieving In situ Functional Histology, Kharagpur, Mar. 21-22, 2015
9. Karnal A.K., Saxena A., Bhatt R., Ganesamoorthy S.*, Bhaumik I., Sajith B.K., Gupta P.K.
Growth challenges of important non-linear optical phosphate and borate crystals
19th National Seminar on Crystal Growth, Vellore, Mar. 12-14, 2015
10. Tiwari V.B.
Introduction to laser cooling and atom optics
International Workshop and Conference on Frontiers of Spectroscopy, Varanasi, Jan. 8-11, 2015

C1. International Conference on Frontiers of Spectroscopy (ICFS-2015), Varanasi, Jan. 10-12, 2015

1. Kumar P., Saini V. K., Purbia G. S., Prakash O., Dixit S. K., Nakhe S.V.
Saturation absorption spectroscopy of lithium in hollow cathode lamp
2. Saini V. K., Kumar P., Sarangpani K. K., Dixit S. K., Nakhe S.V.
Studies on pulsed and CW optogalvanic effects in in-house developed see-through lithium hollow cathode
3. Talwar S., Subrahmanyam V. V., Saini V. K., Sarangpani K. K., Nakhe S.V. Development of time of flight mass spectrometer for studies on lithium isotopes

C2. Others Seminars/Conference Presentation

1. Bhalla S.*, Srinivasan K.*, Dwivedi J., Gautam S.*, Sharma A.*
Electron beam irradiation: novel technology for phytosanitary purposes
Proceedings of the DAE-BRNS Life Sciences Symposium on Advances in Microbiology of Food



- Agriculture, Health and Environment* Bio-Science Group, Mumbai, Feb. 3-5, 2015
2. Dwivedi J., Sandha R.S., Petwal V.C., Kumar Pankaj, Soni R.K., Kumar H., Goswami S.G., Dutta S., Choudhary R.S., Jain Arihant, Pramod R., Kumar Ajay, Verma V.P., Thakurta A.C., Gupta P.D.
Status of electron beam irradiation facility under development at RRCAT
NAARRI-International Conference on State of the Art Radiation Processing - NICSTAR-2015, Mumbai, March 4-6, 2015
 3. Ganesamoorthy S.*, Bhaumik I., Bhatt R., Karnal A.K., Gupta P.K., Sridharan V.*, Subramanian
Growth of ortho-ferrite single crystal and its characterization
19th National Seminar on Crystal Growth, Vellore, Mar. 12-14, 2015
 4. Kohli D.K., Bhartiya S., Singh A., Singh R., Singh M.K., Gupta P.K.,
Capacitive deionization of ground water using carbon aerogel based electrodes
Trombay Symposium on Desalination and Water Reuse (TSDWR-2015), Mumbai, Jan. 22-23, 2015
 5. Kushwaha P.K., Patel H.S., Swami M.K., Gupta P.K.
Controlled shaping of photonic nanojets using core shell microspheres
International Conference on Optics and Photonics 2015, June 15, 2015
 6. Mishra G.K., Kumar Abhay, Prakash O., Dixit S.K.
CFD analysis on optical quality of high flow rate dye laser
National Agency for Finite Element Methods and Standards (NAFEMS) India Regional Conference-2015, Chennai, Feb. 6-8, 2015
 7. Petwal V.C., Verma V.P., Yadav S., Pramod R., Dwivedi J., Thakurta A.C.
Electron beam irradiation of various samples for agricultural and material research
NAARRI-International Conference on State of the Art Radiation Processing - NICSTAR-2015, Mumbai, March 4-6, 2015
 8. Rai V.N., Rajput P.*, Jha S.N.*, Bhattacharyya D.*
X-ray absorption studies of gamma irradiated Nd doped phosphate glass
AIP Conference Proceedings 1665, 070015 (2015)
 9. Subramaniyan S.*, AnandhaBabu G.*, Bhaumik I., Ganesamoorthy S.*, Ramasamy P.*, Gupta P.K.
Growth and investigation of electrical properties of $0.80\text{Na}_{0.5}\text{Bi}_{0.5}\text{TiO}_3 - 0.20\text{K}_{0.5}\text{Bi}_{0.5}\text{TiO}_3$ lead-free single crystal
19th National Seminar on Crystal Growth, Vellore, Mar. 12-14, 2015
 10. Sudheer P., Tiwari S.P., Mukharjee C., Rai V.N., Srivastava A.K.
Large area fabrication of plasmonic nanoparticle grating structure by conventional scanning electron microscope
AIP Conference Proceedings 1665, 050049 (2015)
 11. Tripathi A., Upadhyay R., Badapanda M.K., Gupta A., Tyagi R., Tiwari A., Jain Akhilesh, Kumar Ramesh, Lad M.R., Hannurkar P.R.
Installation and commissioning of 1 MW, 352 MHz CW and pulsed RF test stand
Workshop on RFQ Accelerators and Associated Technologies, Gandhinagar, June 10, 2015
- Note: '*' indicates author affiliation other than RRCAT, Indore.**