PROGRAM DETAILS (PLD 2013)

Keynote Lecture **Pulsed Laser Deposition – 25 Years Young**
Richard Pinto

Invited Review Talks

IRT1.1 **Strain control of physical properties in PLD grown films**
A. K. Raychaudhuri

IRT 1.2 **Atomically engineered oxide interfaces using pulsed laser deposition**
Ariando

IRT 1.3 **Disorder induced quantum effects in PLD grown doped thin films of ZnOL.**
M. Kukreja and Amit K. Das

IRT 1.4 **Optical Properties of Semiconductor Hetero and Nanostructures Grown by Pulsed Laser Deposition**
Samit K. Ray

IRT 1.5 **High-energy optical conductivity and anomalous spectral weight transfer in correlated electron systems**
Andrivo Rusydi

IRT 1.6 **Laser generation of multicomponent nanoparticles in liquids**
R.K. Soni

IRT 1.7 **Artificial Ferroic Superlattices**
S.B. Krupanidhi

IRT 1.8 **From Superconductor thin films to metal-oxide nanostructures: 25 glorious years of PLD**
M.S.Ramachandra Rao

Invited Talks

IT-1 **High quality ZnO-based transparent conducting oxides thin films prepared by pulsed laser deposition technique**
Durga Basak and Arindam Mallick

IT-2 **Mirror like thin films of heavy metals via PLD for First Mirror application in Tokamk**
Alika Khare and A T T Mostako

IT-3 **Temperature Dependent Effects of Mn-doping on Charge-Transport of NdNiO3 Thin Films**
Mahesh Chandra, Rakesh Rana, Fozia Aziz, D. S. Rana, K. R. Mavani,

IT-4 **Photoelectron Spectroscopy studies on PLD grown ZnO/Ge and ZnO/GaP systems**
Tapas Ganguli, S. D. Singh, R. S. Ajimsha, Vikas Sahu, Ravi Kumar, P. Misra, D.M. Phase, S. M. Oak, L. M. Kukreja and S. K. Deb

IT-5 **Physics of PLD grown epitaxial TiN(Ni)/p-Si heterojunction**
T. K. Nath

IT-6 **Pulsed laser ablation of metallic thin films and multilayers**
P.S. Anil Kumar

IT-7 **Growth of complex oxide epitaxial films and nanowires by Pulsed Laser Deposition and tunning of physical properties controlling growth parameters**
Barnali Ghosh (Saha)

IT-8 **Pulsed Laser Deposited Nanocrystalline and Iso-Epitaxial Tugston TrioxideThin Films For Electrochromic And Gas Sensing Applications**
A.S.Swapna Smitha and O.M.Hussain

IT-9 **Multiferroicity in oxide films**
S. Giri

IT-10 **Studies on synthesizing Ni-Ti SMA thin films using Pulsed Laser Deposition (PLD) for the development of micro-pump**
I.A. Palani

IT-11 **Excimer laser technology trends and developments for thin film fabrication**
Burkhard Fechner, Ralph Delmdahl

IT-12 **Thermal Expansion Behaviour of Multilayer Oxide Films Prepared by Pulsed Laser Deposition**
P. Kuppusami

IT-13 **Resonant Photoemission spectroscopic study of pulsed laser deposited thin films of dilute magnetic semiconductors.**
D.M. Phase

IT-14 **Wide Range Temperature Sensing using ZnO as Non-contact Optical Probe**
Satish Laxman Shinde and Karuna Kar Nanda

IT-15 **Growth and characterization of conducting transparent titanium dioxide thin films**
Pratima K. Mishra

Poster Presentations

PP 1.1 **Hole Transport Properties of a Hybrid Material based Thin Films**
R. N. Jana, A. Bhattacharya, D. Naskar, S. Chatterjee

PP 1.2 **Fabrication process for multiferroic $PbTi_{0.5}Fe_{0.5}O_3$ based micro-cantilevers**
Seeraz Nawaz, K. Bose, S.Cahkrabarti and V.R. Palkar

PP1.3 **Magnetization reversal mechanism in hard magnetic epitaxial bilayers: SmCo5/PrCo.**
A.K. Patra,F. Fleischhauer,S. Oswald, L. Schultz,V. Neu

PP1.4 **Effect of Al Doping on Electronic, Magnetic and Transport properties of pulsed laser deposited La0.7Ca0.3MnO3 Thin Films**
Manish Kumar, R. J. Choudhary and D. M. Phase

PP1.5 **Magnetoresistance properties in polycrystalline Gd0.7Ca0.3MnO3**
Sanjay Biswas and Sudipta Pal

PP1.6 **Magnetism in PLD grown Fe and Al co-doped ZnO Films**
Savan Katba, Malay Udeshi, Sadaf Jethva, Priyanka Trivedi,
M.J. Keshvani,Ashish Ravalia, Megha Vagadia, P.S. Solanki,
N.A. Shah,R.J. Choudhary, D.M. Phase and D.G. Kuberkar

PP1.7 **A simplified analysis on the photoemission from quantum confined structure of optoelectronic nanostructured materials**
Singha roy and S. Singha Roy

PP1.8 **Laser Ablated Plasma Plume Diagnostics of Cerium Oxide: Effect of Oxygen Partial Pressure**
Arun Kumar Panda, Akash Singh,P. Kuppusami,Maneesha Mishra,R.Thirumurugesan and E. Mohandas

PP1.9 **Effect of Incorporation of Manganese Oxide on the Structural, Morphological and Optical Properties of Nanostructured Zinc Oxide Thin Films Prepared by Pulsed Laser Deposition**
R. Sreeja Sreedharan, R.Jolly Bose, R. Reshmi Krishnan,V.S Kavitha, R. Vinodkumar, S. K. Sudheer, M.Gupta , V.Ganeshan and V.P.Mahadevan Pillai

PP 1.10 **Effect of Annealing on the Structural and Optical Properties of Laser Ablated Nanostructured Barium Tungstate Thin Films**
V.S. Kavitha , R. Jolly Bose , R. Sreeja Sreedharan ,R. Reshmi Krishnan,S. K. Sudheer,V. Ganeshan ,V. P Mahadevan Pillai

PP 1.11 **A comparative morphological analysis of nano- structured carbon films obtained by pulsed laser deposition and laser molecular beam epitaxy**
Asit Behera, S. K. Patel

PP1.12 **Effect of Tin oxide Doping on the Properties of Laser Ablated Nanostructured Indium oxide Films**
R. Reshmi Krishnan, R. Sreeja Sreedharan,S. R. Chalana,R. Jolly Bose,R. Vinodkumar,S. K. Sudheer, V.Ganesan,and V. P. Mahadevan Pillai

PP 1.13 **Electronic transmission in a comb-shaped quasi-periodic nanostructure**
Biplab Pal and Arunava Chakrabarti

PP 1.14 **In-plane antiferromagnetic and out-of-plane ferromagnetic exchange coupling in $SrRuO_3/La_{0.7}Sr_{0.3}MnO_3$ superlattices**
B. C. Behera,A. V. Ravindra, P. Padhan, and W. Prellier

PP 1.15 **Studies of Microstructures, Optical, Nanomechanical and Thermal Expansion Properties of Y_2O_3, ZrO_2, CeO_2 and Gd_2O_3 Thin films and Y_2O_3/ZrO_2 and CeO_2/Gd_2O_3 Multilayers Prepared by Pulsed Laser Deposition**
Maneesha Mishra, P. Kuppusami

PP 1.16 **2D growth of LaAlO3/SrTiO3 heterointerface using in-situ RHEED**
Pramod Kumar, Aswin V, Pooja Singh, Anjana Dogra and R.C. Budhani

PP 1.17 **Pulsed Laser Heating of Gold Nanoparticles for Photothermal Therapy**
Sanchari Biswas, Aotula T. Imchen, R. K. Soni

PP 1.18 **Constricted magnetic hysteresis loop in zinc ferrite nanocrystallites**
Susmita Misra and S. Ram

PP 1.19 **Pulsed laser deposition of CdS shell layer on Si nanowire core to form Si/CdSradial heterojunction for high efficiency photodetectors**
Santanu Manna, A. Katiyar and Samit K. Ray

PP 1.20 **Ferroelectric and dielectric properties of pure and Fe doped BaSnO3 nanostructures**
N. Rajamanickam,S. Rajashabala and K. Ramachandran

PP 1.21 **Optical Properties of Laser Generated Pd and Au@Pd Nanoparticles**
Navas M.P and R.K Soni

PP 1.22 **Influence of silver doping on the structural and optical properties of zinc sulfide thin films prepared by pulsed laser deposition**
S.R .Chalana, R. Reshmi Krishnan, R. Sreeja Sreedharan, R. Jolly Bose, R. Vinodkumar, V. Ganesan and V.P.Mahadevan Pillai

PP1.23 **Synthesis and water oxidation property of cobalt oxide magnetic colloids synthesized by PLA**
B. K. Pandey A. K. Shahi and R. Gopal

PP1.24 **Epitaxial ZnO on GaP(1 1 1) substrate grown by using pulsed laser deposition**
S. D. Singh, Tapas Ganguli, R. S. Ajimsha, P. Misra, L. M. Kukreja, and S. K. Deb

PP 1.25 **Growth of oriented thin films and nanorods of WO_3 by Pulsed Laser Depositionand observation of large photo conductive response at room temperature**
Samik Roy Moulik , Sudeshna Samanta, Barnali Ghosh

PP 1.26 **Effect of Co doping in epitaxial $La_{1.85}Sr_{0.15}CuO_4$ thin films**
P. K. Rout1 and R. C. Budhani

PP 1.27 **Growth and annealing studies of HfO_2 on Si (100)**
R.R. Mohanta, V.R.R. Medicherla, Nimai C. Naik

PP 1.28 **Pulsed Laser Deposition of CrO_2 Thin Films on Lattice-matched TiO_2 Layers**
S. Dwivedi, V. Chavan and S. Biswas

PP 1.29 **Growth of Highly Oriented Topological Insulator Bi_2Se_3 Thin Films by Pulsed Laser Deposition**
Biswajit Saha, Pragati Chaturvedi and Swaroop Ganguly

PP 1.30 **Pulsed Laser Ablated WO_3 Nanocrystalline and Iso-Epitaxial Thin Films For Electrochromic And Gas Sensing Applications**
A.S.Swapna Smitha and O.M.Hussain

PP 1.31 **Growth and characterization of PLD grown Sb doped ZnO thin films**
Joynarayan Mukherjee, M. Ramanjaneyulu and M. S. Ramachandra Rao

PP 1.32 **Structural and optical properties of aluminum doped zinc oxide: formation of nanorods**
Sanjeev Kumar,Fouran Singh, A.Kapoor

PP 1.33 **Temperature dependent dielectric properties of Fe_3BO_6 nanoplates**
K. Kumari, S. Ram and R. K. Kotnala

PP 1.34 **Spectroscopic study of interaction between casein and biosynthesized silver nanoparticles**
Swarup Roy and Tapan Kumar Das

PP1.35 **Plasmonic Properties of Pulsed Laser Deposited Nanoisland Silver Thin Film**
Mahima Arya and Anirban Mitra

PP 1.36 **Dual acceptor doping in ZnO to realize a stable *p*-type ZnO**
M. Ramanjaneyulu, Nandita DasGupta and M.S. Ramachandra Rao

PP 1.37 **Growth and Characterization of $PbZr_xTi_{1-x}O_3$ thin films on $SrRuO_3$ buffered Si by pulsed laser deposition**
Martando Rath, Brajesh Tiwari and M.S.Ramachandra Rao

PP 1.38 **Frequency - temperature dielectric response of electromagnetic $BiFeO_3$ Ceramics**
Trisha Karan and Shanker Ram

PP 1.39 **Fabrication and Characterization of 2-D Magnetic Antidot Arrays for Applications in Magnonic Crystals**
N. Porwal, S. Pal, S. Barman, K. Das, A. K. Raychaudhuri ,S. K. Ray and A. Barman,

PP 1.40 **Comparative study of conventionally and microwave heated dysprosia stabilized zirconia (DySZ)**
Mukul Pastor, A.C. Pandey and K. Biswas

PP 1.41 **Pulsed Laser deposition growth of superconducting/ferromagnetic (HoBa2Cu3O7-x/La2/3Ca1/3MnO3) multilayered thin films**
A. I. Mallick and M. S. Ramachandra Rao

PP 1.42 **A New SRR Type Metamaterial Design with Negative Index Band**
Raghvendra P.Chaudhary, Sumit Saxena and Shobha Shukla

PP 1.43 **Fabrication of SiO_x thin films by Pulsed Laser Deposition Technique in O2 ambient pressure**
Partha P Dey and Alika Khare

PP 1.44 **Optical and morphological studies on laser ablated V_2O_5 thin films**
K. V. Madhuri, K, Srinivasa Rao, O. M. Hussain

PP 1.45 **Preparation, characterization and optical properties of Gadolinium doped ceria thin films by pulsed laser deposition technique**
P.Nagaraju, Y.Vijaya Kumar,C.Vishnuvardhan Reddy,M.V.Ramana reddy,D.M Phase and V.Raghavendra Reddy

PP 1.46 **Structural and magnetic characterization of Pulsed Laser Deposited Co_2FeAl thin films**
Madhusmita Baral, Detty A. P, Soma Banik, P. Gupta, S. K. Rai, M. Maniraj, S. R. Barman, V. R. Reddy, Tapas Ganguli, L. M. Kukreja and S. K. Deb

PP 2.1 **Diamond Like Carbon Films Deposited by Pulsed Laser Ablation of Graphite Target**
Indrajeet Kumar and Alika Khare

PP 2.2 **Plasmon Enhanced Frequency Upconversion in Er^{3+}/Yb^{3+} doped Y_2O_3 Thin Film by Using Gold Film**
Kaushal Kumara,, Manoj Kumar Mahataa & Ram Janay Choudharyb

PP 2.3 **Nanocrystalline diamond coatings on Ti for biomedical applications**
Dinesh Kumar, Maneesh Chandran, and M.S. Ramachandra Rao

PP 2.4 **Dielectric, Impedance and Electrical Conductivity of (Zn,Sr)TiO_3 composite**
P. Jayabal, V. Sasirekha, V. Ramakrishnan

PP 2.5 **Ferroelectricity and ferromagnetism near room temperature: a multilayer engineering of SmFeO3-BaTiO3**
A. Ghosh, K. Dey, S. Majumdar, and S. Giri

PP 2.6 **Structural, morphological, optical and gas sensing properties of platinum incorporated laser ablated nanostructured tungsten oxide films**
R. Jolly Bose, Navas I,K. S. Tan,Usman Ilyas,R. S. Rawat,Murukeshan Vadakke Matham and V. P. Mahadevan Pillai1

PP 2.7 **Role of Surfactant and Ablation Time on Growth of Anatase and Rutile TiO2 Nanoparticles Using Liquid Phase Pulsed Laser Ablation**
Amita Chaturvedi, M. P. Joshi, L. M. Kukreja

PP 2.8 **Effect of annealing on Ferromagnetic resonance in FePt/MgO thin films**
Himanshu Pandey, R. K. Rakshit, K. K. Maurya, Anurag Gupta, R. P. Pant, and R. C. Budhani

PP 2.9 **Effect of preparation method on photocatalytic properties of titanium dioxide (TiO2) thin films**
R. Lavanya and V. Vasu

PP 2.10 **Electrical characterisation of flexible organic light emitting diodes with Al doped ZnO electrodes deposited by Laser pulse deposition**
Rajesh Awasthy , J.K. Sharma, R. Swami, Swati Sahu, A.K.Verma and Sanjay Tiwari ,

PP 2.11 **Magnetic diode behavior of $Mn_{0.01}Sn_{0.99}O_{2-x}$ /*p*-Si heterojunction**
S. Bhaumik, S. K. Ray and A. K. Das

PP 2.12 **Influence of substrate temperature on Zinc Sulphide thin films by RF magnetronsputtering technique for photovoltaic applications**
T.S. Shyju and P. Kuppusami

PP 2.13 **Deposition and characterization of nanocrystalline copper indium disulphide thin films by photochemical method for Solar cell applications**
R.Suriakarthick, V.Nirmalkumar, T.S.Shyju, R.Gopalakrishnan1

PP 2.14 **CdSe nanoparticles produced by liquid phase pulse laser ablation**
A. K. Shahi, B. K. Pandey and R. Gopal

PP 2.15 **Light emission from Er doped Ge nanocrystals embedded in Al_2O_3 matrix**
R. Aluguri, S. Manna, and S. K. Ray

PP 2.16 **Unusual metal like nature in nanosized $Zn_{0.5}Ni_{0.5}Fe_2O_4$ with reduced dielectric constant**
D.Vanidha, A.Arunkumar and R.Kannan

PP 2.17 **The influence of thickness on the Band Gap of vacuum evaporated $CuSbS_2$ thin films for solar cell applications**
Thiruvenkadam .Sa, Leo Rajesh.Aa

PP 2.18 **Synthesis and characterization of SnO_2 based thin films prepared by pulsed laser deposition for functional applications**
S. K. Sinha, S. K. Ray, I. Manna

PP 2.19 **Tuning the Curie temperature to an unprecedented maximum in La0.5Sr0.5CoO3 thin films**
Kaustuv Manna, D. Samal, Suja Elizabeth and P. S. Anil Kumar

PP 2.20 **Growth and characterization of ZnO-SnO_2 composite thin films**
T. Rakshit, I. Manna, and S. K. Ray

PP 2.21 **Effect of Substrate Induced Stress on Structure and Band Gap of Cobalt Ferrite Thin Films**
Venkata Ravindra A, Bhaskar Chandra Behera, Prahallad Padhan and Wilfrid Prellier

PP 2.22 **Si/ZnS radial heterojunction fabricated by pulsed laser deposition for white light emission**
Ajit K. Katiyar, Arun Kumar Sinha, S. Manna, and S. K. Ray

PP 2.23 **Ion Beam Studies of Ultra-small Silicon Nanoparticles prepared by Ultrafast Laser Ablation**
V.S. Vendamani, Syed Hamad, S. Venugopal Rao, A.P. Pathak and S.V.S. Nageswara Rao,

PP 2.24 **Giant low temperature positive junction magnetoresistance in PLD grown CoFe2O4/SiO2/p-Si Magnetic diode like heterojunction**
Jaganandha Panda, A. Santhosh Kumar and Tapan Kumar Nath

PP 2.25 **Strain induced first order magnetic phase transition in epitaxial Sm0.55Sr0.45MnO3 thin film**
S. K. Giri, P. T. Das and T. K. Nath

PP 2.26 **Studies on Yttria Stabilized Zirconia Coating Developed by Pulsed Laser Deposited**
Subhasisa Nath, Indranil Manna,S. K. Ray and Jyotsna Dutta Majumdar

PP 2.27 **Synthesis of Quantum Critical $Pd_{1-x}Ni_x$ Nanoalloys**
P. Swain, Suneel K. Srivastava and Sanjeev K. Srivastava1

PP 2.28 **Facile hydrothermal synthesis of PVP assisted WO_3 nanorods**
V. Rajendran, S. Gnanam, K. Anandan, J. Gajendiran ,R. Vijayalakshmi, J. UmaV. Revathi, S. Usharani

PP 2.29 **Effect of Laser Energy on the Electrical, Optical and photoconductivity Properties of ZnO Thin Films Prepared by Pulsed Laser Deposition Technique**
Arindam Mallick and Durga Basak

PP 2.30 **Crack free DC sputtering of metal thin film on soft elastomers for thin film application**
Debashis Maji and Soumen Das

PP 2.31 **Carrier transport phenomena in $Zn_{1-x}V_xO$ thin films grown by pulsed laser deposition**
D. Saha, R. S. Ajimsha and L. M. Kukreja

PP 2.32 **SPR and NLO Behavior of PLD Deposited Cu Thin Films**
G. P. Bharti, Raja Bonia, Partha P Dey, A. T. T. Mostako Satchi Kumari and Alika Khare

PP 2.33 **Electrical and dielectric properties of Bi_2Te_3 nanosheets: scope of novel storage of renewable energy in nanoelectronics**
Punita Srivastava and Kedar Singh

PP 2.34 **Plasmonic response of silver nanoparticles in different liquid media grown by pulsed laser ablation**
B.N. Singh, B.T. Rao, S. Verma, A.S. Thakur, S. Vaid, A.K. Srivastava1 and L.M. Kukreja

PP 2.35 **Effect of alumina capping on plasmon resonance characteristics and stability of silver nanoparticle films grown by pulsed laser deposition**
Shweta Verma, B.Tirumala Rao, D. Reynolds, V. Ganesan and L.M. Kukreja

PP 2.36 **Plasmonic characteristics of gold nanoparticle films of gradient thickness grown by pulsed laser deposition**
B.Tirumala Rao, S. Verma, R. Singh, S.K.Rai and L.M. Kukreja

PP 2.37 **Effect of Ambient Oxygen Pressure on the Structural, Electrical and Optical Properties of Pulsed Laser Deposited Eu Doped ZnO Thin Films**
A. Mandal, S. D. Shinde, K. P. Adhi, S. K. Adhi1

PP 2.38 **Pulsed Laser Deposited Praseodymium zinc Molybedate coating for anticorrosion applications**
SurendhiranDevaraj and N.Victor Jaya

PP 2.39 **Optimization of process parameters for growth of stoichiometric Co_2FeAl thin films using pulsed laser deposition**
Detty A P, Madhusmita Baral, Soma Banik, S K Rai, Mahendra Babu,Pragya Tiwari,M Maniraj, S R Barman, Tapas Ganguli, S K Deb and L M Kukreja

PP 2.40 **Fabrication of Ga:ZnO/P:ZnO homojunction using pulsed laser deposition**
R. S. Ajimsha, Amit. K. Das, V. K. Sahu, M. P. Joshi, and L. M. Kukreja

PP 2.41 **Giant exchange bias and ferromagnetic evidence of $CaRuO_3$ in Pr0.5Ca0.5MnO3/CaRuO3 superlattice**
Sanjay Kumar, Shivendra Tripathi, V.Eswara Phanindra and D.S. Rana

PP 2.42 **Bismuth ferrite/polymer based hybrid piezoelectric photovoltaic thin film**
M. Dewan and S. Ram

PP 2.43 **Electrical and optical properties of $Mg_xZn_{1-x}O$/ZnO heterostructures**
Amit K. Das, R. S. Ajimsha and L. M. Kukreja

PP 2.44 **Magnetization reversal in Pr1-xGdxMnO3**
Sanjay Biswas and Sudipta Pal

PP 2.45 **Effect of Substrate Temperature, Film Thickness on the Structural and Electrical Properties of Pulsed Laser Deposited BaPbO3 thin films deposited on Si/SiO2 substrates**
Satish B, M K Jayaraj

PP 2.46 **Nanomechanical Properties of of TiN/ZrN Mulitilayers Prepared by Pulsed Laser Deposition**
G.Pradhaban, P. Kuppusami

PP 2.47 **Evidence of ultraviolet transparency of graphene on $SrTiO_3$ induced by excitonic Fano anti-resonance**
Pranjal Kumar Gogoi, Paolo E. Trevisanutto,Chan La-O-Vorakiat, Ming Yang Iman Santoso, Teguh Citra Asmara, Yuan Ping Feng, Kian Ping Loh,T. Venkatesan ,Elbert E. M. Chia, Antonio H. Castro Neto, Andrivo Rusydi

PP 2.48 **Influence of oxygen partial pressure on the dielectric properties of $Ba(Zr_{0.15}Ti_{0.85})O_3$ thin films grown on Pt(111) substrates using pulsed laser deposition**
M.L.V. Mahesh, A.R. James and V.V. Bhanuprasad