

2011

- Characteristics of A.C Electroluminescence in $ZnGa_2O_4:Mn^{2+}$ Thin film Devices, G.Anoop, B.Mini Krishna and M.K.Jayaraj J. Electrochem Soc 158 J269(2011)
- Sensitised luminescence of SrS: Dy, Cu, Cl phosphor E.I Anila and M.K.Jayaraj Philosophical Magazine 91, 3641(2011)
- Influence of oxygen to argon ratio on the properties of RF magnetron sputtered $Ba_{0.7}Sr_{0.3}TiO_3$ thin films R.Reshmi. M.T.Sebastien, M.K.Jayaraj J Electrochemical Soc 158, G124(2011).
- High tunability of pulsed laser deposited $Ba_{0.7}Sr_{0.3}TiO_3$ thin films on perovskite oxide electrode, R. Reshmi, A. S. Asha, P. S. Krishnaprasad and M. K. Jayaraj, M. T. Sebastian, Journal of Alloys and Compounds 509, 6561(2011).
- Formation of hydroxyapatite coating on titanium at 200°C through pulsed laser deposition followed by hydrothermal treatment, Manoj Komath, P. Rajesh, C. V. Muraleedharan, H. K. Varma, R. Reshmi and M. K. Jayaraj, Bulletin of material Science 34, 389(2011).
- Linear and Nonlinear Optical Properties of Multi Walled Carbon Nanotubes with Attached Gold Nanoparticles R. Sreeja, P. M. Aneesh, K. Hasna, M. K. Jayaraj, Journal of The Electrochemical Society, 158 (10), K187(2011)
- Defect induced Raman active modes in Mn doped ZnO thin films, Arun Aravind, K. Hasna and M. K. Jayaraj, Proc. of SPIE, 81001 L-1 (2011)
- Colour control in SrS:Cu,Cl powder phosphor E.I.Anila, I.P.Sanjaykumar and M.K.Jayaraj; Mater.Sci. Eng.A 530, 624(2011)

2010

- Effect of Buffer Layer on the Properties of Laser Ablated PZT Thin Films, R Reshmi, V Natarajan, and M K Jayaraj, Integrated Ferroelectrics, 117, 104 (2010)

- Violet luminescence from ZnO nanorods grown by room temperature pulsed laser deposition, R.S Ajimsha, R. Manoj, P. M. Aneesh and M. K. Jayaraj, Current Applied Physics, 10 (2), 693 (2010)
- Effect of Dysprosium doping on the optical properties of SrS:Dy,Cl phosphor, E.I. Anila and M.K. Jayaraj, Journal of Alloys and Compounds 504, 257 (2010)
- Growth of vertically aligned ZnO nanorods on various substrates by hydrothermal method, P. M. Aneesh, P. P. Subha, L. S. Vikas, Sonima Mohan and M. K. Jayaraj, Proceedings of SPIE - The International Society for Optical Engineering, 7766, 776606 (2010)
- Low temperature deposition of SrS:Cu,F ACTFEL device by electron beam evaporation, E.I. Anila, M.K.Jayaraj, Journal of Luminescence 130, 2180, (2010)
- Photoluminescence of Eu³⁺ doped Ba_{0.7}Sr_{0.3}TiO₃ thin film for optoelectronic application, R. Reshma, M. K. Jayaraj, K. Jithesh and M. T. Sebastian, Journal of Electrochemical society, 157 (7), H783 (2010)
- Co²⁺ Doped ZnO Nanoflowers Grown by Hydrothermal Method, P.M. Aneesh, Christie Thomas Cherian, M.K. Jayaraj and T. Endo, J. Ceramic. Soc. Japan 118, 333 (2010)
- Growth of ITO thin films on polyamide substrate by bias sputtering, M. Nisha, K. A. Vanaja, K. C. Sanal, K. J. Saji, P. M. Aneesh and M. K Jayaraj, Materials Science in Semiconductor Processing, 13, 64 (2010)
- Linear and nonlinear optical properties of luminescent ZnO nanoparticles embedded in PMMA matrix, R. Sreeja, Jobina John, P. M. Aneesh and M. K. Jayaraj, Optics Communications, 283, 2908 (2010)
- Spatial investigations of ion and electron time of flight in laser ablated ZnO plasma, N V Joshy and M K Jayaraj, Journal of Physics: Conference Series 208, 012131 (2010)
- Red luminescence from hydrothermally synthesized Eu doped ZnO nanoparticles under visible excitation, P. M. Aneesh and M. K. Jayaraj, Bulletin of Materials Science 33, 1 (2010)

- Linear and nonlinear optical properties of rare earth doped of BST thin films, R. Reshma, R. Sreeja, M. K. Jayaraj, J. James and M. T. Sebastian, Applied Physics B: Lasers and Optics, 96, 433 (2009)
- Size dependent optical nonlinearity of Au nanocrystals, R. Sreeja, P.M. Aneesh, Arun Aravind, R. Reshma, Reji Philip and M. K. Jayaraj, Journal of Electrochemical society, 156 (10), K167 (2009)
- Dependence of Size of Liquid Phase Pulsed Laser Ablated ZnO Nanoparticles on pH of the Medium, P. M. Aneesh, Arun Aravind, R. Reshma, R. S. Ajimsha and M. K. Jayaraj, Transactions of Materials Research Society of Japan, 34, 759 (2009)
- Growth of silver nanoparticles in SiO₂ matrix by co-sputtering technique, K.C.Sanal, , R. Sreeja, K. Anlin Lazar, M.K. Jayaraj, Proceedings of SPIE - The International Society for Optical Engineering, 7393, art. no. 73930J (2009)
- Mg_{1.96-1.96x}Zn_{1.96x}GeO₄:Mn_{0.04} phosphors for electroluminescent display applications, G. Anoop, K. Mini Krishna and M. K. Jayaraj, Journal of Alloys and Compounds 468, 512 (2009)
- Hydrothermal synthesis and characterization of undoped and Eu doped ZnGa₂O₄ nanoparticles, P. M. Aneesh, K. Mini Krishna and M. K. Jayaraj, Journal of Electrochemical society 156(3), K33 (2009)
- Polycrystalline coating of hydroxyapatite on TiAl₆V₄ implant material grown at lower substrate temperatures by hydrothermal annealing after pulsed laser deposition ,K. K. Saju, R. Reshma, N. H. Jayadas, J. James, M. K. Jayaraj, Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine. 223 (8), 1049 (2009)
- Effect Of Surface Characteristics Of Anodized Ti-6Al-4V Implant Material On Osteoblast Attachment And Proliferation, K.K. Saju, Sasidharan Vidyanand, N.H. Jayadas, Jackson James, M.K. Jayaraj, J.Orthopaedics 6(1),e5 (2009)

2008

- P-AgCoO₂/n-ZnO heterojunction diode grown by rf magnetron sputtering, K. A. Vanaja, U. M. Bhatta, R. S. Ajimsha, S. Jayalekshmi and M. K. Jayaraj, Bulletin of Materials Science 31 (5), pp. 753-758 (2008)
- Determination of third-order optical absorptive nonlinearity of ZnO nanoparticles by Z-scan technique, R. Sreeja, R. Reshma, Manu George and M. K. Jayaraj, Proceedings of SPIE - The International Society for Optical Engineering 7155, art. no. 715521 (2008)
- Spatial and Temporal Studies of Laser Ablated ZnO Plasma, N. V. Joshy, K. J. Saji and M. K. Jayaraj, Journal of Applied Physics, 104, 053307 (2008)
- Also in Virtual Journal of Ultrafast Science, Vol. 7, October 2008
- Luminescence from surfactant free ZnO quantum dots prepared by laser ablation in liquids, R. S. Ajimsha, G. Anoop, Arun Aravind and M. K. Jayaraj, Electrochemical and Solid State Letters 11(2), K14 (2008).
- Also in Virtual Journal of Nanoscale Science & Technology, Vol. 17, January 2008
- Structural and optical properties of Zn_{1-x}Mg_xO films grown by pulsed laser deposition, Krishnaprasad P. S., Ragitha E. K., Jayaraj M. K., Proc. SPIE Vol. 7067, 70670E1 (2008)
- Influence of RF power and fluorine doping on the properties of sputtered ITO thin films, M. Nisha and M. K. Jayaraj, Applied Surface Science, 255 (5 PART 1), pp. 1790-1795 (2008)
- Optical and carrier transport properties of co-sputtered multicomponent amorphous oxide, Zn-In-Sn-O, films and their application to thin film transistor, K. J. Saji, M. K. Jayaraj, K. Nomura, T. Kamiya and H. Hosono, Journal of Electrochemical society 155(6), H390 (2008)
- Photoluminescence of SrS:Cu nanophosphor, E. I. Anila, Arun Aravind and M. K. Jayaraj, Nanotechnology 19, 145604 (2008)
- Characterization of ZnO plasma in a radio frequency sputtering system, N. V. Joshy, Johny Isaac and M. K. Jayaraj, Journal of Applied Physics 103, 123305(2008)
- Optical and electrical properties of amorphous zinc tin oxide thin films examined for thin film transistor application, M. K. Jayaraj, K. J. Saji, K. Nomura, T. Kamiya and H. Hosono, Journal of Vacuum Science and Technology B: Microelectronics and Nanometer structures, 26(2), 495 (2008)

- The effect of ZnO buffer layer on structural and optical properties of RF magnetron sputtered Zn₂GeO₄:Mn²⁺ thin films, G. Anoop, K. Mini Krishna , K. Rajeev Kumar and M. K. Jayaraj, Journal of Electrochemical society 155(10), J270 (2008)
- Effect of oxygen partial pressure on optical and electrical properties of co-sputtered amorphous zinc indium tin oxide thin films, K. J. Saji and M. K. Jayaraj, Physica Status Solidi: A 205(7), 1625 (2008)
- Effect of Oxygen intercalation on the properties of sputtered CuYO₂ for potential use as p-type transparent conducting films, R. Manoj, M. Nisha, K.A. Vanaja, M.K. Jayaraj, Bulletin of Materials Science 31(1), 49 (2008)
- Synthesis of highly luminescent, bio-compatible ZnO quantum dots doped with Na, B. Vineetha, K. Manzoor, R. S. Ajimsha, P. M. Aneesh and M. K. Jayaraj, Synthesis and Reactivity in Inorganic, Metal-organic and Nano-metal Chemistry 38, 126 (2008)
- Electrical Characteristics of n-ZnO/p-Si Heterojunction Diodes Grown by Pulsed Laser Deposition at Different Oxygen Pressures, R. S. Ajimsha, M. K. Jayaraj, and L. M. Kukreja, Journal of Electronic Materials 37(5), 770 (2008)
- Influence of dopant source on structural and optical properties of Mn doped ZnGa₂O₄ thin films, G. Anoop, K. Mini Krishna and M. K. Jayaraj, Applied Physics A: Materials Science and Processing 90, 711 (2008)
- Pulsed Laser Deposition of p-type a-AgGaO₂ thin films. K. A. Vanaja, R. S. Ajmsha, A. S. Asha, K. Rajeev Kumar and M. K. Jayaraj, Thin Solid Films 516 (7), 1426 (2008)
- Optical and electrical properties of co-sputtered amorphous zinc indium tin oxide, K. J. Saji and M. K. Jayaraj, Thin solid films 516, 6002(2008)
- The effect of Mg incorporation on structural and optical properties of Zn₂GeO₄:Mn²⁺ phosphor, G. Anoop, K. Mini Krishna and M. K. Jayaraj, Journal of Electrochemical society 155, J7 (2008)
- Structural and Electrical properties of La_{0.5}Sr_{0.5}CoO₃ thin films by rf magnetron sputtering, A. S. Asha, M. T. Sebastian and M. K. Jayaraj, Journal of Alloys and compounds 449 (1-2), 68 (2008)

2007

- Synthesis of ZnO nanoparticles by hydrothermal method, P.M. Aneesh, K.A. Vanaja and M.K. Jayaraj, Proc. SPIE Vol. 6639, (Sep. 2007)
- Host sensitized white luminescence from $ZnGa_2O_4:Dy^{3+}$ phosphor, K. Mini Krishna, G. Anoop and M.K. Jayaraj, Journal of Electrochemical society 154, J310(2007)
- Study on sulfur diffusion in $CuInSe_2$ thin films using two thermal profiles>, Rahana Yoosuf, and M.K. Jayaraj, Thin Solid Films, 515 (15), 6188 (2007)
- Transparent p-AgCoO₂/n-ZnO Diode Heterojunction Fabricated by Pulsed Laser Deposition, R. S. Ajimsha, K. A. Vanaja, M. K. Jayaraj, P. Misra, V. K. Dixit and L. M. Kukreja. Thin solid film 515, 7352 (2007)
- Structural and luminescent characteristics of $ZnGa_2O_4:Dy^{3+}$ thin films by rf magnetron sputtering, K. Mini Krishna, G. Anoop and M.K Jayaraj, Journal of Electrochemical Society 154, J379(2007).

2006

- p-type electrical conduction in a-AgGaO₂ delafossite thin films , K.A. Vanaja, R.S. Ajmsha, A.S. Asha and M.K. Jayaraj, Applied Physics Letters 88, 212103 (2006)
- Growth of zinc oxide thin films for optoelectronic application by pulsed laser deposition, K.J. Saji, R. Manoj, R.S. Ajimsha, and M.K. Jayaraj, Proc. SPIE Vol. 6286, 62860D (Aug. 28, 2006)
- Optical emission spectroscopic studies on laser ablated zinc oxide plasma, K.J. Saji, N.V. Joshy and M.K. Jayaraj, Journal of Applied Physics 100, 043302 (2006)

- Effect of surface roughness on Photoluminescent spectra of silicon nanocrystals grown by offaxis pulsed laser deposition, J.R. Rani, V.P. Mahadevan Pillai, R.S. Ajimsha, M.K. Jayaraj, R.S. Jayasree. Journal of Applied Physics 100, 014302 (2006)
- Characterization of Radio Frequency plasma using Langmuir Probe and Optical Emission Spectroscopy, M. Nisha, K.J. Saji, R.S. Ajimsha, N.V. Joshy and M.K. Jayaraj, Journal of Applied Physics 99, 033304 (2006)

2005

- Effect of substrate temperature on the growth of ITO thin films, M.Nisha, Anusha.S, Aldrin Antony, R.Manoj and M.K.jayaraj, Appl Surface Science 252, 1430 (2005)
- Optical and photoelectrical properties of b-In₂S₃ thin films prepared by two stage process, Rahana Yoousf, M.K.Jayaraj, Solar energy materials and solar cells 89, 85 (2005)
- Electrical and optical properties of ZnGa₂O₄ thin films deposited by pulsed laser deposition, Mini Krishna K, Nisha.M, Reshma R Manoj R, Asha.A.S, M.K.Jayaraj, Materials Forum 29, 594 (2005)
- Pulsed laser deposition of ZnGa₂O₄ phosphor films, Reshma R, Mini Krishna K, Manoj R, M.K.Jayaraj Applied surf coatings 198, 345 (2005)
- The effect of pH on the growth and properties of chemical bath deposited ZnS films, A.Antony, K.V.Murali, R.Manoj and M.K.Jayaraj, Materials chemistry and physics 90, 116 (2005)

2004

- Nuclear Quadrupole Resonance Studies of Transparent Conducting Oxides, W. W. Warren, Jr., A. Rajabzadeh, T. Olheiser, J. Liu, J. Tate, M. K. Jayaraj, K. A. Vanaja, Solid State Nuclear Magnetic Resonance 26, 209 (2004)
- Effect of substarte to target distance on the properties of indium tin oxide thin films, Aldrin Antony, Nisha.M, Manoj.R and M.K.Jayaraj Appl Surf science 225, 294 (2004)
- Growth of CuInS₂ films by sulphurisation of Cu-In alloys, Aldrin antony, Asha A.S, Rahana Yousf, Manoj.RM.K.Jayaraj Solar energy materials and solar cells 81, 207 (2004)
- b-In₂S₃ thin films prepared by the sulphurisation of evaporated indium films, Rahana Yoosuf, Jerome.K, Aldrin Antony, Manoj R and M.K.Jayaraj, Proc.SPIE Materials, active devices and optical amplifiers Edited by Chang-Hasnain, Connie J.; Huang, Dexiu; Nakano,Yoshiaki; Ren, Xiaomin. Proceedings of the SPIE, Volume 5280, 669 (2004)
- Preparation and characterisation of ZnS thin films by Chemical bath deposition and Electron beam evaporation Murali K.V, Aldrin Antony, Manoj Ramachandran and M. K. Jayaraj, Asia-Pacific optical and wireless conference Proc.SPIE Materials, active devices and optical amplifiers Edited by Chang-Hasnain, Connie J.; Huang, Dexiu; Nakano,Yoshiaki; Ren, Xiaomin. Proceedings of the SPIE, Volume 5280, 600 (2004)

2000-2003

- Photoacoustic investigations on thermal diffusivity of CuGa_{1-x}Fe_xO₂, Jyotsna ravi, M.K.Jayaraj, K.V.Vanaja,K.P.R.Nair and T.M.A.Rasheed, Semiconductor Science and Technology 18, 693(2003)
- New CuM_{2/3}Sb_{1/3}O₂ and AgM_{2/3}Sb_{1/3}O₂ compounds with the delafossite structure,Nagarajan. R, Uma. S, Jayaraj, M. K, Tate. J., Sleight A. W. Solid State Sciences 4(6),787 (2002)
- Optical and electrical properties of rf magnetron sputtered ZnO:Al thin films, M.K.Jayaraj, Aldrin Antony, and R.Manoj, Bull of Material Science 25, 227 (2002)

- P-type oxides for use in transparent diodes. J. Tate, M.K.Jayaraj, A. D. Draeseke, T. Ulbrich, A. W. Sleight, K. A. Vanaja, R. Nagarajan, J. F. Wager, and R. L. Hoffman , Thin Solid Films 411, 119 (2002)
- Electrical characterization of pin hectrojunction diode, R.L.Hoffman, J.F.Wager, M.K.Jayaraj and J.Tate , Journal Applied Physics 90, 5763 (2001)
- Growth and Characterisation of $Zn_{1-x}Mg_xS$ thin films for electroluminescent applications, M.K.Jayaraj J.material Science. Mateials for electronics 12, 733 (2001)
- Transparent pn hectrojunction thinfilm devices, M.K.Jayaraj A.Draeske, J.Tate and J.F.Wager , Mat.Res.Symp.Proc 666(2001)F4.1.1 (*invited paper*) *Transport and microstructural phenomena in oxide electronics* Ed: D.S.Ginely, M.E.Hawley, D.C.Pain, D.H.Blank and S.K.Steriffer, MRS, Denver Co, 2001
 - Green electroluminescence from $Zn_{1-x}Mg_xS:Mn$ ACTFEL devices, M.K.Jayaraj, Aldrin Antony and Deneshan.P, Thin Solid Films 389, 284 (2001)
- P-type Transparent thin films of $Cu(YCa)O_2$, M.K.Jayaraj, A.Draeseke , J.Tate and A.W.Sleight Thin solid films, 397, 244 (2001)
- P-type conductivity in the delfossite Structure, R.Nagarajan, N.Duan, M.K.Jayaraj, J.Li, K.A.Vanaja, A.Yokochi, A.Draskee, J.Tate and A.W.Sleight, Int J. Inorganic Materials 3, 265(2001)
- Transparent p-type conducting $CuScO_{2+x}$ films, N.Duan, M.K.Jayaraj, J.Tate and A.W.Sleight , Appl.Phys.Letts, 77, 1325 (2000)

1989-1998

- $CuInSe_2$ thin films grown by CSVT processes, M.L.Adonize, S.Loreti, L.Quercia and M.K.Jayaraj, J.Cryst. Growth 183, 196 (1998)

- Growth of thin chalcopyrite CuInSe₂ films by closed vapour transport processes, M.L.Adonize, S.Loreti, A.Agati, M.Pelleigrino, L.Querica, M.K.Jayaraj and A.Parretta, Material Science Forum 203, 149 (1996)
- CH overtone spectroscopy of acrylonitrile and polyacrylonitriles, T.M.A.Rasheed, Sajan P.Shamsudeen and M.K.Jayaraj, Indian Journal of Pure and Applied Physics 34, 534 (1996)
- Electrical and optical properties of copper oxide films prepared by rf magnetron sputtering, A.Parretta, M.K.Jayaraj, A.Di Nocera, S.Loreti and L.Querica, Physica status Solidii a 155, 399(1996)
- Influence of oxygen partial pressure and heat treatment on the properties of reactively sputtered In₂O₃ films, M.K.Jayaraj,S.Loreti and A.Parretta, Physica Status Solidii a 155, 115 (1996)
- Percolation and superconducting properties of ceramic insulator-superconductor composite Ba₂YnbO₆-YBa₂Cu₃O₇, K.V.Paulose and M.K.Jayaraj, Physica Status Solidii 142, 185 (1994)
- Ceramic insulator-superconductor composites, Ba₂YSbO₆-YBa₂Cu₃O₇, K.V.Paulose, M.K.Jayaraj, J.Koshy and A.D.Damodaran, Supercond.Sci. and Technol. 6, 257 (1993)
- Preparation and properties of Ba₂YSbO₆-YBa₂Cu₃O₇ composite, K.V.Paulose, M.K.Jayaraj, J.Koshy and A.D.Damodaran, Solid State Commun. 87, 147 (1993)
- Transport properties of YBa₂Cu₃O₇-YBa₂SnO_{5.5} percolation system, J.Koshy, K.V.Paulose, M.K.Jayaraj and A.D.Damodaran, Phys. Rev. B 47, 15304 (1993)
- The Effect of CuxS layer on the emission properties of thin film EL devices, M.K.Jayaraj , J. Material Sci: Material for electronics 4, 229 (1993)
- Direct Current electroluminescence in CaS:Ce phosphor, M.K.Jayaraj, Bull. Electrochem. 8, 433 (1992)
- Dielectric properties of electron beam evaporated samarium oxide films, M.K.Jayaraj and C.P.G.Vallabhan, Thin Solid Films 197, 15 (1991)

- Effect of Insulating films on the performance of thin film electroluminescent devices, M.K.Jayaraj and C.P.G.Vallabhan, Bull. Mater.Sci. 14, 41 (1991)
- Thin film electroluminescent devices using ZnS:Tb,Cl and ZnS:Nd,Cl, M.K.Jayaraj and C.P.G.Vallabhan, Bull. Indian Vacuum Society 20, 81 (1991)
- AC thin film electroluminescent devices with rare earth doped ZnS, M.K.Jayaraj and C.P.G.Vallabhan, J. Electrochem. Soc. 138, 1512 (1991)
- Low voltage driven ZnS:Mn device with MIS and MISIM structure thin film electroluminescent devices with Eu₂O₃ insulator layer, M.K.Jayaraj and C.P.G.Vallabhan, J. Phys. D: Appl. Phys. 23, 1706 (1990)
- Low Voltage driven-white light emitting thin film EL devices, M.K.Jayaraj and C.P.G.Vallabhan, Physica Status Solidii a 114, k233 (1989)
- AC conductivity of europium oxide films, M.K.Jayaraj and C.P.G.Vallabhan Physica Status Solidii a 115, k63 (1989)
- AC electroluminescent thin film devices with ZnS:Dy,Cl and ZnS:Pr,Cl Phosphors, M.K.Jayaraj and C.P.G.Vallabhan, Bull. electrochem. 5, 284 (1989)
- A study of white electroluminescence from ZnS, Cu, Pr, Cl phosphors, M.K.Jayaraj and C.P.G.Vallabhan, J.Phys.D: Appl. Phys. 22, 1380 (1989)
- Dielectric properties of europium oxide films, M.K.Jayaraj and C.P.G.Vallabhan, Thin Solid Films 177, 59 (1989)
- Observation of Energy transfer Cu and Ag centers to rare earth ions in ZnS(Cu/Ag)RE,Cl phosphors, M.K.Jayaraj and C.P.G.Vallabhan, Ind. J. Phys. 63A, 480 (1989)