

## DEPARTMENT OF PHYSICS, CIIT-LAHORE

### PUBLICATION FOR YEAR 2014

1. S. H. Bukhari, S. Aslam, F. Mustafa, A. Jamil, S. N. Khan, M. A. Ahmad, "Entangled coherent states for quantum information processing" *Optik - International Journal for Light and Electron Optics* Volume 125(15)2014, 3788–3790
2. M. Asif "Theoretical Calculation of Effective Ionic Charge with Lithium Limiter on HT-7 Tokamak" *Journal of Fusion Energy*, Volume 33(4)2014, 444-448
3. M. Asif "Study of Energy Confinement Time by the Analytical Solution of Grad-Shafranov Equation with Lithium Limiter for Circular Cross-Section Tokamak" *Journal of Fusion Energy*, Volume 33(4)2014, 449-452
4. S. Q. Hussain, W-K. Oh, S. Kim, S. Ahn, A. H. Tuan Le et al., "Study of Low Resistivity and High Work Function ITO Films Prepared by Oxygen Flow Rates and N<sub>2</sub>O Plasma Treatment for Amorphous/Crystalline Silicon Heterojunction Solar Cells" *Journal of Nanoscience and Nanotechnology*, Volume 14 (2014), 1-5
5. S. Q. Hussain, W-K. Oh, S. Ahn, A. H. Tuan Le et al., "Highly transparent RF magnetron-sputtered indium tin oxide films for a-Si:H/c-Si heterojunction solar cells amorphous/crystalline silicon" *Materials Science in Semiconductor Processing*, Volume 24(2014), 225-230
6. S. Q. Hussain, W-K. Oh, S. Ahn, A. H. Tuan Le et al., "RF Magnetron Sputtered ITO:Zr Thin Films for the High Efficiency a-Si:H/c-Si Heterojunction Solar Cells" *Met. Mater. Int.*, Volume 20 (3)2014, 565-569
7. M. A. Sultan, N. Akbar, B. Masud and F. Akram "Higher hybrid charmonia in an extended potential model" *Physics review-D*, Volume 90(2014), 054001
8. M. Idrees, M. Nadeem, N-E. Sung, T. Asanova, T. J. Shin "On the oxidation state of 'Fe' in LaFe<sub>1-x</sub>Ni<sub>x</sub>O<sub>3</sub>" *Chemical Physics Letters*, Volume 612(2014), 262-265
9. M. A. Khan, R. Raza, R. B. Lima, M. A. Chaudhry, E. Ahmed, B. Zhu, N. Nasir "Effect of titania concentration on the grain boundary conductivity of calcium-doped ceria electrolyte" *Ceramics International*, Volume 40(7),2014, 9775–9781
10. M. N. Akhter, M. H. Asif, R. Raza et al. "Mn<sub>0.8</sub>Zn<sub>0.2</sub>Fe<sub>2</sub>O<sub>4</sub> nano particulates spinel ferrites: An approach to enhance the antenna field strength for improved magnitude versus offset (MVO)" *Progress in Natural Science: Materials International* Volume 24(4)2014, 364–372
11. M. Saleem, L. Fang, M. A. Ahmad, R. Raza et al., "Synthesis, Characteristics and Application of ZnO nanowires in Dye-sensitized Solar Cells via Water Bath Method" *NANO*, Volume 9(6)2014, 1450061
12. M. Asif and the HT-7 Team "Study of Energy Confinement Time by the Analytical Solution of Grad-Shafranov Equation with Lithium Limiter for Circular Cross-Section Tokamak" *Journal of Fusion Energy*, Volume 33(4)2014,449-452
13. M. Asif and HT-7 Team "Theoretical Calculation of Effective Ionic Charge with Lithium Limiter on HT-7 Tokamak" *Journal of Fusion Energy*, Volume 33(4) 2014,444-448
14. M. Jamil, Z. Mir, M. Asif and M. Salimullah "Jeans stability in collisional quantum dusty magnetoplasmas" *Physics of Plasmas* Volume 29(1)2014, 092111

15. Rasheed, M. Jamil, M. Siddique, F. Huda, Y.-D. Jung “Beam excited acoustic instability in semiconductor quantum plasmas” *Physics of Plasmas*, Volume 21(2014), 062107
16. Rozina, N. L. Tsintsadze, M. Jamil, A. Rasheed, S. Ali “Electromagnetic wave instability in a relativistic electron-positron-ion plasma” *Astrophysics and Space Science*, Volume 353(2)2014, 485
17. Y-D. Jung, A. Rasheed, M. Jamil “Renormalization screening and collision induced quantum interference in dense plasmas” *Physics of Plasmas*, Volume 21(2014), 074503
18. Rasheed, M. Jamil, A. A. Khan, W. M. Moslem “Shielding with the dynamics of electron acoustic wave in multi-electron plasmas” *Astrophysics and Space Science*, DOI 10.1007/s10509-014-2098-1
19. M. N. Akhtar, N. Nasir, M. Kashif, N. Yahya, M. Ahmad et al., “Mn<sub>0.8</sub>Zn<sub>0.2</sub>Fe<sub>2</sub>O<sub>4</sub> nanoparticulates spinel ferrites: An approach to enhance the antenna field strength for improved magnitude versus offset (MVO)” *Progress in Natural Science: Materials International*, Volume 24 ( 4)2014, 364-372
20. M. A. Khan, K. Khan, A. Mahmood, G. Murtaza, M. N. Akhtar et al., “Nanocrystalline La<sub>1-x</sub>Sr<sub>x</sub>Co<sub>1-y</sub>Fe<sub>y</sub>O<sub>3</sub> perovskites fabricated by the micro-emulsion route for high frequency response devices fabrications” *Ceramics International* Volume 40(8), Part B(2014), 13211–13216
21. M. N. Akhtar, M. A. Khan, M.R. Raza et al., “Structural, morphological, dielectric and magnetic characterizations of Ni<sub>0.6</sub>Cu<sub>0.2</sub>Zn<sub>0.2</sub>Fe<sub>2</sub>O<sub>4</sub> (NCZF/MWCNTs/ PVDF) nano composites for multilayer chip inductor (MLCI) applications” *Ceramics International*, Volume40(10)2014, 15821–15829
22. M. A. Ahmad, N. Akram, R. Raza “Structural and electrical characterization of nanostructure electrodes for SOFCs” *International Journal of Hydrogen Energy*, Volume 39(30)2014, 17487–17491
23. R. J. Amjad, M. R. Sahar, S.F. Shaukat, H. Mahmood, A. Sattar et al., “Plasmon enhanced scattering and fluorescence in amorphous matrix” *International Journal of Materials Research*, Volume 105(11)2014
24. S. Rehman, H. Mumtaz, S. Hayashi, S. F. Shaukat and Z. Sekkat, “Estimation of optical constants of a bio-thin layer (onion epidermis), using SPR spectroscopy”, *Journal of Optics*, Volume 16(12)2014, 125014
25. H. Latif, M. S. Rafique, M. K. Rahaman, A. Sattar et al., “Surface modification of platinum by laser-produced X-rays” *Radiation Effects and Defects in Solids* DOI: 10.1080/10420150.2014.972398
26. M. Rashad, F. Pan, M. Asif, S. Hussain, M. Saleem “Improving properties of Mg with Al–Cu additions”, *Materials Characterization*, Volume 95(2014),140- 147
27. M. N. Akhtar, M. A. Khan, M.R. Raza, M. Ahmad, G. Murtaza, R. Raza at al., “Structural, morphological, dielectric and magnetic characterizations of Ni<sub>0.6</sub>Cu<sub>0.2</sub>Zn<sub>0.2</sub>Fe<sub>2</sub>O<sub>4</sub> (NCZF/MWCNTs/PVDF) nanocomposites for multilayer chip inductor (MLCI) applications” *Ceramics International*, Volume 40(10) 2014, 15821–15829
28. M. N. Aslam, S. M. Qaim, “Nuclear model analysis of excitation functions of proton and deuteron induced reactions on <sup>64</sup>Zn and <sup>3</sup>He- and  $\alpha$ -particle induced reactions on <sup>59</sup>Co leading to the formation of copper-61: Comparison of major production routes”, *Applied Radiation and Isotopes*, Volume 602 (25)2014, 131–140

29. G. Murtaza, R. Ahmad, T. Hussain, R. Ayub, I. Ali, M. A. Khan, M. N. Akhtar, “Structural and magnetic properties of Nd–Mn substituted Y-type hexaferrites synthesized by micro-emulsion method”, *Journal of Alloys and Compounds* Volume 602(25)2014, 122-129
30. M. A. Khan, K. Khan, A. Mahmood, G. Murtaza, M. N. Akhtar et al., “Nano crystalline  $\text{La}_{1-x}\text{Sr}_x\text{Co}_{1-y}\text{Fe}_y\text{O}_3$  perovskites fabricated by the micro-emulsion route for high frequency response devices fabrications”, *Ceramic International*, Volume (40)8, 2014, 13211-13216