

Publications

(a) Chapters in Books Already Published:

1. Farai, I.P. and **Awe, O. E.** (2012). Physics, Space Exploration and Exploitation. In Ekundayo, O. and Awe, O. E. (Eds.) *Science, Industry and Mankind*. Ibadan: General Studies Programme Unit. 52-69 pp. ISBN 978-978-365-84-8-4.
- 2a. **Awe, O. E.** (2013). Electric Field and Electric Field Intensity. In Farai, I.P. and Oni, O.M. (Eds.) *Fundamentals of Electricity and Magnetism*. Ibadan: Ibadan University Press. 41-47 pp. ISBN 978-978-8456-09-4.
- 2b. **Awe, O. E.** (2013). Simple Circuit Laws. In Farai, I.P. and Oni, O.M. (Eds.) *Fundamentals of Electricity and Magnetism*. Ibadan: Ibadan University Press. 87-97 pp. ISBN 978-978-8456-09-4.

(b) Articles that have Already Appeared in Refereed Conference Proceedings:

3. Olopade, M.A., **Awe, O.E.**, Awobode, A.M., Oberafo, A. and Zebase Kana, M.G. (2012). Fabrication of $\text{Cu}_2\text{ZnSnS}_4$ Thin Film Solar Cells by the Spin Coating technique. In Burhanuddin, Y.M. and Ibrahim, A. (Eds.) *Proceedings of 2012 10th IEEE International conference on Semiconductor Electronics (ICSE), Kuala Lumpur, Malaysia*. 678-681 pp.

(c) Articles that have Already Appeared in Learned journals:

4. Akinlade, O., Hussain, L.A. and **Awe, O. E.** (2003). Thermodynamics of liquid Al-In, Ag-In and In-Sb alloys from a four atom cluster model. *Zeitschrift fur. Metallkunde* Vol. 94. No. 12: 1276-1279.
5. **Awe, O.E.**, Akinlade, O. and Hussain, L.A. (2003). Thermodynamic properties of liquid Te-Ga and Te-Tl alloys. *Journal of Alloys and Compounds* Vol. 316: 227-233.
6. **Awe, O.E.**, Akinlade, O. and Hussain, L.A. (2005). Conditional probabilities and thermodynamic properties of liquid Ag-Au, Cd-Pb, and Ga-Zn alloys. *Journal of Alloys and Compounds* Vol. 387: 256- 259.
7. **Awe, O.E.**, Akinlade, O. and Hussain, L. A. (2005). Thermodynamic investigations of Bi-Cd, In-Pb and Ni-Pd liquid alloys. *Zeitschrift fur. Metallkunde* Vol. 96. No. 1: 89-93.
8. **Awe, O.E.**, Akinlade, O. and Hussain, L. A. (2006). Bulk and surface properties of liquid Al-Mg, Au-Sn, and Mg-Tl compound forming alloys. *Surface Science* Vol. 600: 2122-2128.
9. Akinlade, O. and **Awe, O.E.**, (2006). Bulk and surface properties of liquid Ga-Tl and Zn-Cd. *International Journal of Materials Research (formerly Zeitschrift fur Metallkunde)* Vol. 97. No. 4: 377-381.
10. **Awe, O.E.**, Akinlade, O. and Hussain, L.A. (2006). A Quasi-lattice Theory for compound forming ternary liquid alloys. *International Journal of Modern Physics B* 20. Vol. 23: 3319-3340.

11. Odusote, Y.A., Hussain, L.A. and **Awe, O.E.** (2007). Bulk and dynamic properties in Al-Zn and Bi-In liquid alloys using a theoretical model. *Journal of Non-Crystalline Solids* Vol. 353. Issues 11-12: 1167-1171.
12. **Awe, O.E.**, Odusote, Y.A., Akinlade, O. and Hussain, L.A. (2008). Thermodynamic properties of some gallium-based Binary alloys. *Journal of Physica B* Vol. 403. Issue 17: 2629-2633.
13. **Awe, O.E.**, Odusote, Y.A., Akinlade, O. and Hussain, L.A. (2008). Energetics of Mixing in Bi-Pb and Sb-Sn Liquid Alloys. *Journal of Physica B* Vol. 403. Issue 17: 2732-2739.
14. **Awe, O. E.** (2009). Size difference effects on the bulk and surface properties of Bi-Zn, Cu-Pb, K-Pb and K-Tl liquid alloys. *International Journal of Materials Research (formerly Zeitschrift fur Metallkunde)* Vol. 11: 1593-1601.
15. **Awe, O.E.**, Akinwale, T.I., Imeh, J. and Otu, J. (2010). Calculation of experimental concentration-concentration fluctuations of liquid binary alloys using experimental free energy of mixing and experimental activities. *Physics and Chemistry of Liquids* Vol. 48. Issue 2: 243- 256.
16. **Awe, O.E.** (2010). Size mismatch effects on the atomic transport properties of Copper and Potassium-based liquid alloys. *Journal of Physica B* Vol. 405. Issue 11: 2545-2550.
17. **Awe, O.E.**, Odusote, Y.A., Akinlade, O. and Hussain, L.A. (2011). Temperature dependence of thermodynamic properties of Si-Ti binary liquid alloys. *Thermochimica Acta* Vol. 519: 1- 5.
18. **Awe, O.E.** and Alvan, W. (2010). Theoretical Determination of Dynamic properties of Bi-Sn liquid alloys. *Journal of Science Research* Vol. 9: 86-89.
19. **Awe, O.E.** , Adegoke, J.A. and Eniafe, B.S. (2011). The impact of the variability of ionospheric phase refractive index on radio signals instability. *International Journal of the Physical Sciences* Vol. 6. Issue 30: 6801-6819.
20. **Awe, O.E.** and Onifade, A. (2012). Effects of surface coordination of atoms on the surface properties of some liquid binary alloys. *Physics and Chemistry of liquids* Vol. 50. Issue 5: 579-595.
21. **Awe, O.E.** and Olawole, O. (2012). Correlation between bulk and surface properties in Cd-X (= Hg, Mg) liquid alloys. *Journal of Non-crystalline solids* Vol. 358: 1491-1496.
22. Olopade, M.A., **Awe, O.E.**, Awobode, A.M. and Alu, N. (2012). Characterization of SnO₂: F Films Deposited by Atmospheric Pressure Chemical Vapour Deposition for Optimum Performance Solar Cells. *The African Review of Physics* (2012) Vol. 7: 177-181.

23. Olopade, M.A., Awobode, A.M., **Awe, O.E.** and Imalerio, T.I. (2013). Structural and Optical Characteristics of Sol Gel Spin-coated Nanocrystalline CdS Thin Film. *International Journal of Research and Reviews in Applied Sciences* Vol.15. Issue 1: 120-124. (Pakistan)
24. **Awe, O. E.** and Oshakuade, O.M. (2014). Theoretical prediction of thermodynamic activities of all components in the Bi-Sb-Sn ternary lead-free solder system and Pb-Bi-Sb-Sn quaternary system. *Thermochimica Acta* Vol. 589: 47-55.
25. **Awe, O. E.** and Oshakuade, O.M. (2016). Computation of Infinite Dilute Activity Coefficients of Binary Liquid Alloys using Complex Formation Model. *Journal of Physica B* Vol. 487: 13-17.
26. **Awe, O.E.** (2016). The role of size effect on the bulk properties of copper-tin liquid alloys. *Journal of Science Research* Vol. 15. 109-118.
27. **Awe, O. E.**, and Oshakuade, O.M. (2017). Theoretical prediction of thermodynamic activities of liquid Au-Sn-X (X= Bi,Sb,Zn) solder systems. *Journal of Physica B* Vol. 507: 84-94.
28. **Awe, O.E.** and Azeez, A. A (2017). Temperature dependence of the bulk and surface properties of liquid Zn-Cd alloys. *Applied Physics A* Vol. 123 Issue 5: 1-10.
29. Dada, M.O.,Jayeoba, B., Awojoyogbe, B.O., Uno, U.E., and **Awe, O.E.** (2017). Mathematical development and computational analysis of Harmonic Phase-Magnetic Resonance Imaging (HARP-MRI) based on bloch Nuclear Magnetic Resonance (NMR) diffusion model for myocardial motion. *J.Med Syst.* Vol. 41 Issue 10: 1-20
30. **Awe, O.E.** (2019). Thermodynamic investigation of thermophysical properties of thallium-based liquid alloys. *Physics and Chemistry of liquids.* Vol.57 Issue 3:296-310