Photo-Physical Properties and PL Measurements of ZnO Nanoparticles Synthesized by Sonochemical Method

Alireza Aslani¹ *, Ertan Şahin², Seyid Javad Musevi³ and Mohammad Khanzadeh⁴

¹Department of Chemistry, Faculty of Basic Science, Jundi Shapur University of Technology, Dizful, Islamic Republic of Iran, P.O. BOX: 64615-3345, Tel: +98-641-6268000, +98-914-1261366, Fax +98-641-6260993  
Email: aslani_aa@yahoo.com.tr, aslani@jsu.ac.ir, ijmet2011@yahoo.com

²Department of Chemistry, Faculty of Fen, Ataturk University, P. O. BOX. 25240, Erzurum, Turkey (Atatürk Üniversitesi Fen Fakültesi Kimya Bölümü 25240-ERZURUM )

³Department of Chemistry, Shahid Beheshti Technical Faculty, Technical and Vocational University, Urmia, Islamic Republic of Iran

⁴Department of Physics, Faculty of Sciences, Vali-e-Asr University of Rafsanjan, IRI, P.O. BOX: 77176

Nanoparticles of ZnO at different sizes were prepared by a novel sonochemical route from zinc acetate and sodium hydroxide without any requirement of calcinations steps at high temperature and without surfactants. Variations in several parameters and their effects on the structural (crystal size and morphology) properties of nanoparticles were investigated. Characterizations were carried out by X-Ray diffraction (XRD), Scanning Electron Microscopy (SEM), Raman spectroscopy, solid state UV and solid state fluorescent (PL).

Keywords: Sonochemistry, Zinc oxide, UV, PL

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