

Abstract Submitted
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Liquid Plasma Synthesis of Carbon Coated Iron Oxide Particles AYSEGUL UYGUN, Department of Chemistry, Suleyman Demirel University, Faculty of Arts and Science, NOAH HERSHKOWITZ, College of Engineering, University of Wisconsin-Madison, ESIN EREN, Department of Chemistry, Suleyman Demirel University, Faculty of Arts and Science, EMRE UYGUN, Techno Park Plazma Tek Company, Suleyman Demirel University, GAMZE CELIK COGAL, GOZDE YURDABAK KARACA, Department of Chemistry, Suleyman Demirel University, Faculty of Arts and Science, SORIN MANOLACHE, College of Engineering, University of Wisconsin-Madison, GUNASEKARAN SUNDARAM, OMER SADAK, Biological Systems Engineering, University of Wisconsin-Madison, LUTFI OKSUZ, Department of Physics, Faculty of Arts and Science, Suleyman Demirel University — Recently, magnetic metal or metal oxide nanoparticles encapsulated in carbon are important in biomedical applications [1]. The relevant reason to study toxicity of the magnetic nanoparticles coated by carbon is that they have great potential to contribute to cancer treatment. In this work, the synthesis of iron oxide nano-particles coated by graphitic carbon shells using pulsed plasma in liquid method. Short duration of RF plasma discharge, low electrical energy and fast quenching of the surrounding media can let to synthesize various kinds of pure nanoparticles. *Corresponding author: ayseguluygun@sdu.edu.tr,lutfioksuz@sdu.edu.tr [1] S S khiabani et al., Artificial cells, nanomedicine and biotechnology, 45,1, 6-17 (2017)

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