

Abstract Submitted
for the DPP17 Meeting of
The American Physical Society

Magnetic nanomotor fabrication by plasma coating method and its biological application LUTFI OKSUZ, Department of Physics, Faculty of Arts and Science, Suleyman Demirel University, GOZDE YURDABAK KARACA, Department of Chemistry, Faculty of Arts and Sciences, Suleyman Demirel University, EMRE UYGUN, Teknopark, Plazma Tek., Suleyman Demirel University, AYSEGUL UYGUN OKSUZ, Department of Chemistry, Faculty of Arts and Sciences, Suleyman Demirel University — Nano/micro scale motors are exciting research area due to a wide range of application area especially offer considerable promise for the diagnosis and treatment of the diseases. In this scope, the preparation and characterization of Gold (Au)/ Nickel (Ni) nanomotors transport and their applications based on the detection of miRNA-21 will be examined. In addition, magnetic segment Ni which was coated by RF magnetron sputter technique on to the electrochemical synthesized Au nanowire can also be used to focus on the controlled movement and target. We propose a sensitive stable plasma coated magnetic nanomotor-based approach for miRNA-21 detection for simple and cancer diagnosis.

Lutfi Oksuz
Suleyman Demirel University

Date submitted: 14 Sep 2017

Electronic form version 1.4