

## Accepted Manuscript

Title: Magnetic Studies of  $\text{Co}^{2+}$ ,  $\text{Ni}^{2+}$ , and  $\text{Zn}^{2+}$ —Modified DNA Double—Crossover Lattices

Authors: Sreekantha Reddy Dugasani, Young Hoon Oh, Bramaramba Gnapareddy, Tuson Park, Won Nam Kang, Sung Ha Park



PII: S0169-4332(17)32400-5  
DOI: <http://dx.doi.org/doi:10.1016/j.apsusc.2017.08.069>  
Reference: APSUSC 36906

To appear in: *APSUSC*

Received date: 12-2-2017  
Revised date: 23-7-2017  
Accepted date: 8-8-2017

Please cite this article as: Sreekantha Reddy Dugasani, Young Hoon Oh, Bramaramba Gnapareddy, Tuson Park, Won Nam Kang, Sung Ha Park, Magnetic Studies of  $\text{Co}^{2+}$ ,  $\text{Ni}^{2+}$ , and  $\text{Zn}^{2+}$ —Modified DNA Double—Crossover Lattices, *Applied Surface Science* <http://dx.doi.org/10.1016/j.apsusc.2017.08.069>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

# **Magnetic Studies of $\text{Co}^{2+}$ , $\text{Ni}^{2+}$ , and $\text{Zn}^{2+}$ -Modified DNA Double-Crossover Lattices**

**Sreekantha Reddy Dugasani<sup>1,2</sup>, Young Hoon Oh<sup>1</sup>, Bramaramba Gnapareddy<sup>1,2</sup>,  
Tuson Park<sup>1</sup>, Won Nam Kang<sup>1</sup> and Sung Ha Park<sup>1,2,\*</sup>**

<sup>1</sup> Department of Physics, Sungkyunkwan University, Suwon 16419, Korea

<sup>2</sup> Sungkyunkwan Advanced Institute of Nanotechnology (SAINT), Sungkyunkwan  
University, Suwon 16419, Korea

Corresponding Author

E-mail: [sunghapark@skku.edu](mailto:sunghapark@skku.edu)

## **Highlights for the Article:**

- **$\text{Co}^{2+}$ ,  $\text{Ni}^{2+}$ , and  $\text{Zn}^{2+}$ -modified DNA lattices are fabricated on a substrate. Magnetic characteristics of divalent-metal-ion-modified DNA lattices are studied.**
- **The magnetic measurement of the sample shows unique ferromagnetic characteristics.**
- **The magnetic hysteresis suggests potential feasibility of use in memory devices.**

Download English Version:

<https://daneshyari.com/en/article/5346803>

Download Persian Version:

<https://daneshyari.com/article/5346803>

[Daneshyari.com](https://daneshyari.com)