

Table of Contents

Volume 6 Number 5

May 2015

Fabrication of Erbium and Ytterbium Co-Doped Tantalum-Oxide Thin Films Using Radio-Frequency Co-Sputtering

K. Miura, Y. Arai, K. Kano, O. Hanaizumi..... 343

Performance Evaluation of a New Type of Polymer Profile Control Agent

Q. W. Liu, Z. Zhang, Z. Z. Fan, J. G. Wang..... 348

Synthesis of Hexagonal Boron Carbonitride without Nitrogen Void Defects

Md. A. Mannan, Y. Baba, T. Kida, M. Nagano, H. Noguchi..... 353

Efficient Thermal Stabilization of Polyvinyl Chloride with Tannin-Ca Complex as Bio-Based Thermal Stabilizer

H. A. Shnawa, M. N. Khalaf, Y. Jahani, A. A. H. Taobi..... 360

Theoretical Investigation of X-Ray Absorption near Edge Spectroscopy (XANES) Angular Dependence of Aligned Carbon Nanotubes Grown by DC HF CVD Process

B. T. Sendja, R. E. Medjo, J. M. Mane, G. H. Ben-Bolie, P. O. Ateba..... 373

Hydration of Portland Cement in the Presence of Highly Reactive Metakaolin

A. Brykov, S. Krasnobaeva, M. Mokeev..... 391

DNA Nano Devices as a Biased Random Walk Process: A Case Study of Isothermal Ratchet?

J.-P. Aimé, J. Elezgaray..... 401

Performance Evaluation of One-Way Concrete Slabs Reinforced with New Developed GFRP Bars

A. H. Ali, M. Z. Afifi, B. Abdulsalam, H. Haggag, A. El Hashimy, T. El-Sayed, H. M. Mohamed..... 420

Effect of Annealing Temperature on Prepared Nanoparticles Li-Ferrite Using Positron Annihilation Lifetime Technique

A. M. Samy, E. H. Aly..... 436

Optical Properties of Tetrahedral Amorphous Carbon Films and Their Potential for Lab-on-a-Chip

K. Guenther, F. Sonntag, T. Roch, A. F. Lasagni..... 445