

# Table of Contents

<b>INVITED PAPER: Agrifood Nanotechnology: A Tiny Revolution in Food and Agriculture</b>	1
S. Shrivastava and D. Dash	
<b>Solid State Preparation of TiO<sub>2</sub> Nanoparticles in Optimal NaCl: TiOSO<sub>4</sub> Weight Ratio and Milling Time</b>	15
M. Salari, M. Rezaee and P. Marashi	
<b>An Advanced LOCOS-Process for the Sub-50 nm-Region Using Low-Stress PECVD-Silicon Nitrides</b>	15
K.T. Kallis, L.O. Keller and H.L. Fiedler	
<b>Nanoscaled C, Ni, Pt Thin Films</b>	23
W.Y. Wu, C.W. Hsu and J.M. Ting	
<b>Investigation of Interrelation between Particle Size and Phase Transition in the Al<sub>2</sub>O<sub>3</sub>-ZrO<sub>2</sub> System</b>	29
D.A. Ivanov-Pavlov, V.G. Konakov, E.N. Solovieva, V.M. Ushakov and N.V. Borisova	
<b>On the Nanostructure of Cu in Ti<sub>x</sub>Cu<sub>1-x</sub> and TiN/Cu Films: A XAFS Study</b>	35
F. Pinakidou, M. Katsikini, P. Patsalas, G. Abadias and E.C. Paloura	
<b>Fabrication of Copper-Alumina Nanocomposites by Mechanochemical Routes</b>	43
F. Shehata, M. Abdelhameed, A. Fathy and S.F. Moustafa	
<b>Tuning of Titanium Oxide Morphology at Micro and Nano Scale by Alternating Current Anodising</b>	51
M.V. Diamanti, M. Ormellese and M.P. Pedeferri	
<b>Fabrication of Nanowires from Gold Nanoparticles by AC Dielectrophoresis and Ink-Jet Delivery</b>	61
J. Tang and D. Tsoukalas	
<b>Precursor to High Purity Carbon Nanotubes: A Step by Step Evaluation of Carbon Yield</b>	67
K.N. Patil and C.S. Solanki	
<b>Amorphous/Nanocrystalline Films Prepared by Magnetron Sputtering with Additional External Magnetic Field</b>	75
G.V. Kalinnikov, R.A. Andrievski and V.K. Egorov	
<b>Biological Properties of Ti-Si-C-O-N Thin Films</b>	89
M. Henriques, M. Susano, I. Carvalho, I. Ferreri, S. Carvalho and R. Oliveira	
<b>Effect of Nano-Al<sub>2</sub>O<sub>3</sub> Addition on the Densification of YSZ Electrolytes</b>	99
D. Hotza, A. Leo, J. Sunarso and J.C. Diniz da Costa	
<b>Miscibility Enhancement in All-Polymer Nanocomposites Composed of Weakly-Charged Flexible Chains and Polar Nanoparticles</b>	115
S. Montes, H. Grande, A. Etxeberria and J.A. Pomposo	
<b>Exploiting the Sequence of Naturally Occurring Elastin: Construction, Production and Characterization of a Recombinant Thermoplastic Protein-Based Polymer</b>	123
R. Machado, A.J. Ribeiro, J. Padrão, D. Silva, A. Nobre, J.A. Teixeira, F.J. Arias, A.M. Cunha, J.C. Rodríguez-Cabello and M. Casal	
<b>Silver-Polymer Nanohybrids Prepared by Microemulsion Polymerization</b>	133
D. Donescu, C.L. Nistor, V. Purcar, S. Serban, C. Radovici, V. Raditoiu, C. Petcu and M. Ghiurea	
<b>Synthesis of ZnO Nanostructures by Hydrothermal Method</b>	147
P. Georgiou, K. Kolokotronis and J. Simitzis	
<b>Nano-Composites NiCrAl (MCrAl) Ternary Alloy Powder Synthesized by Mechanical Alloying</b>	157
M.S. Hussain and M.A. Ababtain	
<b>Microstructure Evolution During Mechanical Alloying of Face Centered Cubic Ti<sub>3</sub>Si Nanoparticles</b>	169
Q. Wu, C.S. Li, H. Tang, X.H. Yu, K.S. Cao and J.H. Yang	
<b>Influence of Structural Imperfections and Doping on the Mechanical Properties of Single-Walled Carbon Nanotubes</b>	177
M. Rahmandoust and A. Öchsner	
<b>Enhancement of Conductivity in Ceria-Carbonate Nanocomposites for LTSOFCs</b>	185
R. Raze, X.D. Wang, Y. Ma, Y.Z. Huang and B. Zhu	
	197

<b>Effect of Annealing on Dielectric Property in Ni<sub>1-x</sub>CoxFe<sub>2</sub>O<sub>4</sub> Nanoparticles Synthesized Using Albumen (egg white)</b>	
S. Marutha Senthil, R. Jayaprakash, S.R. Murthy, A.R. Phani, V.N. Singh and G. Govindaraj	205
<b>Towards Silicon-Nanowire-Structured Materials by the Intimate Mixing of Patterning the Solid State and Chemical Reactions</b>	
D. Hourlier, B. Legrand, C. Boyaval and P. Perrot	215
<b>Relationship Between Stickiness and Surface Roughness Of Composite Materials: Atomic Force Microscopy and Intermolecular Adhesion Force Measurement</b>	
S.D. Sherman, A. Quist and P. Hansma	225