Editorial

"Nano Hybrids" is going to complete a pretty successful one year with this volume. Here we have included seven interesting articles from different aspects of nano-technology and hybrid materials. The first article "Theoretical Study of Spin Conduction in the Ni/DTE/Ni nanohybrid", presents the finding based on density functional theory (DFT) and the non-equilibrium Green function (NEGF) method. They studied the transport characteristics of dithienylethene (DTE) in the context of spin-polarized leads. DTE is an important molecule for constructing optoelectronic molecular devices. Here they have carried a comparative study on spin-polarized leads of different metals (Ni, Ag and Au). It was observed that the Ni-based device exhibits a sustained high conductance ratio even at high bias; this property can have relevance in future device design. Second article "Radial Basis Function Neural Network Model For Optimizing Thermal Annealing Process Operating Condition", is on computational modeling for optimum thermal annealing process. Thermal annealing process is important for nanotechnology based photonic devices and gas sensors. In the third article "Pinch-off effect in p-type double gate and single gate junctionless silicon nanowire transistor fabricated by Atomic Force Microscopy Nanolithography", the researcher fabricated p-type double gate and single gate junctionless silicon nanowire transistor by Atomic Force Microscopy Nanolithography and investigated the pinch-*off* effect in double gate and single gate junctionless lateral gate transistors. The junctionless transistor (JLT) is the novel metal–oxide–semiconductor (MOS) field effect transistor that can be a reliable alternative for the conventional scaled metal–oxide–semiconductor field effect transistor (MOSFETs). In the fourth article "Imaging of colloidal gold nanoparticle using atomic force microscope", the author presented a through explanation and the experimental data that how effectively the Atomic Force Microscopy (AFM) can be used to study the colloidal nanoparticles (in this case it is gold nano particles). Fifth article "Synthesis, Characterization, Anti-bacterial Properties and Modeling of Peanut-shaped ZnO Nano-bunches" describes simple synthesis of zinc oxide nano particles and its antimicrobial activity. Last tow articles "Green synthesis of silver nanoparticles, using local honey" and "Microwave synthesis of silver nano particles through green route**"**, are short communications. Here the researchers have used green synthesis route to prepare silver nano participles.

Nanoparticles/nanomaterials have already showered their fascinating characters, even in case of their application. Now, more interestingly the improvement and promotion is turning towards the hybridization of organic and/or inorganic nanomaterials i.e. towards the hybrid-nano-materials. Although nanolevel hybridization is challenging and it involves many difficulties to attain desired natures for application, this is an emerging filed. It is still difficult to say when a truly disruptive nanotechnology emerges commercially and makes an impact. However, it may not be too long to witness compelling innovations, forming a foundation for this technology to become a competitive alternative for the future. I hope NH readers will find these papers interesting and informative.

Amir-Al-Ahmed

Chief Editor