

Editorial

In the era of ICT, the information wealth is no way lesser than its tangible counterpart. Employing honeypots is now rampant in cyber security. A research team provides defence strategies to address the issues in the nascent fields of digital and network forensics. A single layer security may not be sufficient to protect information, it can fall through. A team employs a new algorithm and multi layer security, to enhance and strengthen this information security. Network data transmissions consume most energy. An algorithm can now provide a solution to lower energy consumption while saving time and increase network lifetime.

Measuring essential parameters of a process has always been quite challenging especially when the reaction environment is hostile and the product is inaccessible. A solution can be found from a study which suggests new types of fuzzy retractions, fuzzy folding and fuzzy deformation retract of fuzzy $(n+3)$ - dimensional spheroidal space time. Another group implemented a quantitative interpretation method of self-potential field data related to simple geometric models such as cylinders, spheres bodies for determining the centre depth, electric dipole moment, polarization angle, and geometric shape of an underground buried body. The method is based on mathematical modelling by using the least squares inversion.

Climatic conditions impact the availability of the renewable energy sources. To resolve this problem a combination of energy sources are suggested to create greater reliability and less fluctuation. Research reported here used an optimal sizing model to optimize the capacity sizes of hybrid photovoltaic/wind power generation system employing a battery bank.

Hydroxyapatite (HA) as a bone mineral component, has been an attractive bioceramic for the reconstruction of hard tissues. However, its poor mechanical properties, including low fracture toughness and tensile strength, have been a challenge to its application. A team of researchers formulated a method to overcome the problem.

There is an article where a team unfolds a novel approach for the synthesis of the Dy_2O_3 nanoparticles without applying calcination temperature. Dysprosia has specialized uses in ceramics, glass, phosphors, lasers and dysprosium metal halide lamps.

Factors such as contact stress in rail and wheel are very important in mechanical and railway engineering. In this issue, new formulations of the contact stress are presented for two rolling bodies. Innovative elastic wheel-rail contact models and FE modelling are proposed.

A research finding depicts that the biochar derived from common weed *Prosopis juliflora* can be exploited to develop slow release N fertilizer with greater efficiency while being less hazardous to the environment.

A tool to promote tourist destinations! Researchers have come up with country-based assessing tool., Homestay program is seen as one of the fastest growing segments of the Community-Based Tourism, especially in third world countries and is expected to continue in near future.

Current estimates of changes in climate indicate an increase in global mean annual temperatures of 1°C by 2025. As the temperature is projected to rise, it may be favourable for some insects to oviposit early and breed faster. Thus, a research team forewarns the impending threat due to global warming.

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