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Scientific Tracks & Abstracts

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Optimization of the electrical conductivity of copper phthalocyanine for the formulation of a conductive ink applicable by screen printing on textile materials

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We report results on the conductivity of conductive ink based on copper phthalocyanine, which contain different organic solvents, i.e., dimethyl sulfoxide (DMSO) or THF, and with different percentage of copper phthalocyanine. Conductive inks were prepared from the copper phtaloyanine by dispersion of the conductive pigment in a screen printing paste. A Variety of patterns have been developed with different percentages of CuPc on a cotton substrate using the screen printing technique. Simultaneously, the presence of solvent residue in the printed pattern also resulted in poor control of the morphology and conductivity of the pattern. The solvent effect on copper phtalocyanine dispersion's was studied by UV visible spectroscopy and the minimum sheet resistance of printed circuit board was reached at about 3% of CuPc in THF and DMSO with 1 Mcm and 1.8 Mcm respectively.

Biography

Mohamed Tahiri is currently a full professor of Chemistry, water, Bio-energy and environment engineering, Chemical Risks, Climate changes and Air Pollution, at Sciences Faculty of Hassan II University of Casablanca. Since January 2010, he's Chair holder of University Chair on Innovation. As part of his supported role, Mohamed Tahiri has received extensive training in Europe on Innovation, technology Transfer, Intellectual Property Rights and innovation Management.

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Education and their relationship to contemporary trends in the field of international recruiting

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This study aims to generate a conceptual framework for relationship to contemporary trends in the field of international recruiting and the needs' for the labor market of teacher of excellence through higher education, specialized science, and technology needs an explicitly stated goal and specific strategies for achieving that goal as the needs' for the labor market of teacher of excellence through higher education.

The current perception for these institutes can be described as unique environments including advanced curriculum, expert teachers, and opportunities for internships and immersion. Researchers have categorized these schools with three types.

Messaging and marketing campaign that changes school culture and raises the prominence of standards of courses must be in place. Parents and community members should see that science, technology, engineering, and mathematics matter for the students, and adjust curricular expectations accordingly. Science and technology can no longer be perceived as mere enrichment, second in value to language arts and mathematics. Content reading and writing skills, as well as evaluating evidence from non-fiction texts, now appear in the common core state standards for English language arts. Standards of course education gives students access to disciplinary skills that are essential to a productive life in contemporary trends in the field of international recruiting. We created a conceptual framework of effective learning environments for standards of courses that included students, teachers, community leaders, and role models, as well as contextual factors.

Biography

Albu Adina-Victoria, Head of industrial management in the textiles and leather work department. Teacher, lecturer in leather works and shoe technology, raw materials, automotive materials. She was a faculty of energetic engineering during the year 2011-2014 at University of Oradea.

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Synthesis of Nanomaterials by Laser Ablation for Water Applications

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Bi-metallic core-shell nanoparticles were prepared using an environmentally friendly and economic way. AuCoreAgShell and AgCoreAuShell nanoparticles were developed using Laser ablation in liquid technique with Nd-YAG laser at 1064nm wavelength, laser fluence 55 J/cm2 in (DDW). The prepared bimetallic nanoparticles' morphological and structural properties were characterized using TEM, DLS, and UV–Vis spectrophotometry. Furthermore, the core-shell mechanism of formation has also been represented. The prepared Ag NPs and Au NPs have a spherical shape with an average particle size in the range of 8 to 10nm and 10 to 15nm respectively.. Moreover, the AuCoreAgShell and AgCoreAuShell forms were spherical and oval shaped. The plasmon band of core–shell NPs has been red shifted with increasing the thickness of the deposited gold shell while, it turned blue shifted with increasing the deposited thickness of sliver shell. To get a better understanding of the coating conditions, and to confirm the core-shell configuration, high-resolution electron microscopy HRTEM images were used. All the prepared nanoparticles in this study showed Bragg's characteristic reflection plane of fcc structure. AgCoreAuShel more stable than AuCoreAgShell because the gold has higher negativity than silver.

Metal and bimetal nanoparticles are used to remove Methylene Blue as a toxic dye from an aqueous solution under sunlight irradiation. A comparative study was performed on the photocatalytic degradation performance of silver and Agcore Aushell. The degradation efficiency of Ag NPs and Agcore Aushell's in 70 min were 88.8% and 95.4% respectively. There is an improvement in the photocatalytic degradation performance of Agcore Aushell of silver nanoparticles. Consequently, the present study opens a new era for metal and bimetal nanostructures preparation. Furthermore, the high removal efficiency of core-shell samples prepared with a few milligrams as a photocatalyst has opened a promising application for removing toxic dyes such as Methylene Blue removal from industrial effluents. As far as the authors are aware, such photocatalysts have been rarely studied in the past.

Biography

Hisham M imam has obtained his Doctor of Philosophy (PhD) in nanotoxicology Currently working on exosomes derived from human induced Pluripotent Stem Cells for drug delivery in epilepsy..

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The effect of the growth condition on the structure and the physical properties of Gd-doped Ti Co ferrite thin films via Pulsed Laser Deposition (PLD)

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Pulsed Laser Deposition (PLD) allows the growth of thin films with complex chemical compounds and the structural properties can be controlled by the laser parameters. Gd doped Co-Ti ferrite ($Co_{1.1}Ti_{0.1}Gd_{0.04}Fe_{1.76}O_4$) thin films have been deposited on cleaned Si(100) substrates at room temperature by the PLD with a Nd:YAG laser (1064 nm) and 10 Hz repetition rate. Deposition of the thin films was prepared in a high vacuum of pressure ~2′10-6 Torr. Ex-situ thermal annealing of the thin films for 2 hours was performed at different temperatures. The thin-film structural properties, elemental analysis, and surface morphology were investigated by X-ray diffraction, Energy-dispersive X-ray spectroscopy, Raman spectroscopy, and scanning electron microscope. The film stoichiometry was found to match the target. The structural analysis results of the annealed Gd doped Co-Ti ferrite thin films indicated a preferential growth orientation and a single spinel structure. The surface morphology was improved after the annealing of the thin films.

Biography

Mohamed A. Hafez, teaching assistant in the faculty of computers and information, Cairo University from 2007 until 2016. During this period, he experienced working in the private sector as well especially with applying data mining techniques in the oil & gas industry. He did B.Sc. (2006) & M.Sc. (2014) from the faculty of computers and information, Cairo University in Egypt. M.Sc. thesis was in the area of Databases, resolving data conflicts/duplicates using Statistical methods. He is currently a PhD graduate student in the computer science department at Rice University. He is working in applying machine learning as surrogate models in weather forecasting.

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Properties of torsion rod in "SULZER" projectile Loom

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The torsion rod characteristics of the "SULZER" loom can be adjusted in the zero position by means of the adjusting lever and the adjusting actuator of the torsion rod of the loom. In the sulzer projectile loom, the movement of the intermediate member results in the axial movement of the adjusting lever to change the position of the zero according to the material and characteristics of the rod. The intermediate member transmits a force exerted by the adjusting lever to a fixed sliding surface. However, the described device in some countries has a serious drawback, because the tuning drive acts on the torsion rod adjusting lever so that when the projectile is fired into the sulzer loom, the picking mechanism reacts through the sudden, harmful pressure of the tuning drive. A solid wedge-shaped idler that can be moved by the adjusting motor is placed between the sliding surface of the adjusting lever and a fixed sliding surface. In the Sulzer projectile loom, known torsion rod control enables projectile loom operation with improved energy consumption and reduced wear.

Biography

Dmitry Pirogov, he has designed books published in Germany and Ukraine. Has published over 50 scientific Articles. Editorial board member & Reviewer for more than 20 journals, organizer for more than 32 conferences and workshops all over the world.

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Sustainable textiles industries in brand technology between technologies of brands

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Sustainable Textiles industries in Brand Technology between Technology of production Brands, The technology industry thrives on change, requiring constant experimentation and innovation. Rather than deterring new entries, highly saturated markets beckon for potentially Technology products and ideas. other hand; To stimulate customer loyalty and differentiate from competitors, tech brands strive to continually deliver Technology software updates of textiles, communicate novel use cases or launch new systems of textiles Technology and brand if textiles; to know how strategic tech company branding and marketing can help your company generate a competitive advantage in this fast-moving space.

Biography

Elsayed Ahmed Elnashar, Full-Professor of textiles apparel, Kaferelsheikh University, Egypt. Born on 19 /8/1965. Ph.D. 2000, Msc-1995, Bsc-1989, Helwan University. Diploma 1985 Advanced industrial textiles institute. He holds several academic administrative positions: Dean, Vice Dean, Head of Department, He has many textiles patents, and Member of international scientific committees. Development of Faculties of Education, commissioned by the Supreme Council of Egyptian Universities. Has design books published in Germany and Ukraine. Has published over 190 scientific Articles. Editorial board member & Reviewer for more than 95 journals, organizer for more than 70 conferences and workshops all over the world, Founder, and editor of two scientific journals and Smartex Conference, Egypt.

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