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In this issue

Research Article

Open Access Research Article PTZAID:IJNNN-6-134

Nano material parts for medical analysis machine-applications

Published On: February 03, 2020 | Pages: 013 - 015

Author(s): Thorsten Hickmann*

When it comes to application of specific material properties, high accuracy and minimal rework of nano-metal components are the key elements for a sucessful process. The parts can be either produced by Laser melting, or by metal injection moulding, depending on the volumes oft he desired applications. These nanostructured materials are possible to produce on differe ...

Abstract View Full Article View DOI: 10.17352/2455-3492.000034

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Ultrasound assisted synthesis of nanosized oxide semiconductors/ordered mesoporous carbon nanoarchitectures

Published On: February 03, 2020 | Pages: 006 - 012

Author(s): Maria Ignat*, Liviu Sacarescu and Aurelia Vasile

The present work reports the ultrasound assisted synthesis of nanosized oxide semiconductors, as TiO2 (anatase) and Bi2O3 (-phase)/mesoporous carbon stable architectures exhibiting high photocatalytic activity for organic pollutants degradation. The use of ordered mesoporous carbon with a pore diameter around 5nm and high specific surface area of 1392m2/g was a succ ...

Abstract View Full Article View DOI: 10.17352/2455-3492.000033

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Hemicellulose/poly(acrylic acid) semi-IPN magnetic nanocomposite hydrogel for lysozyme adsorption

Published On: January 22, 2020 | Pages: 001 - 005

Author(s): Tao Zhang and Xiao-Feng Sun*

A novel hemicellulose-based magnetic nanocomposite hydrogel was synthesized with modified Fe3O4 nanoparticles using H2O2-Vc as a green initiator system. The nanocomposite hydrogels were characterized by FT-IR, SEM and VSM, and the swelling properties of the hydrogels were also studied. The result demonstrated that the nanocomposite hydrogels had excellent pH sensitivi ...

Abstract View Full Article View DOI: 10.17352/2455-3492.000032

Review Article

Open Access Review Article PTZAID:IJNNN-6-135

Deduction of relativistic length variations based on tests using a Cryogenic Optical Resonator

Published On: July 14, 2020 | Pages: 016 - 020

Author(s): Robert J Buenker*

Experiments with the transverse Doppler effect have demonstrated that the wavelength of light increases with the speed of the source relative to the observer. The relativity principle implies that such a change cannot be detected by in situ measurements and this prediction has been verified by wavelength determinations carried out with a cavity resonator over an exten ...

Abstract View Full Article View DOI: 10.17352/2455-3492.000035