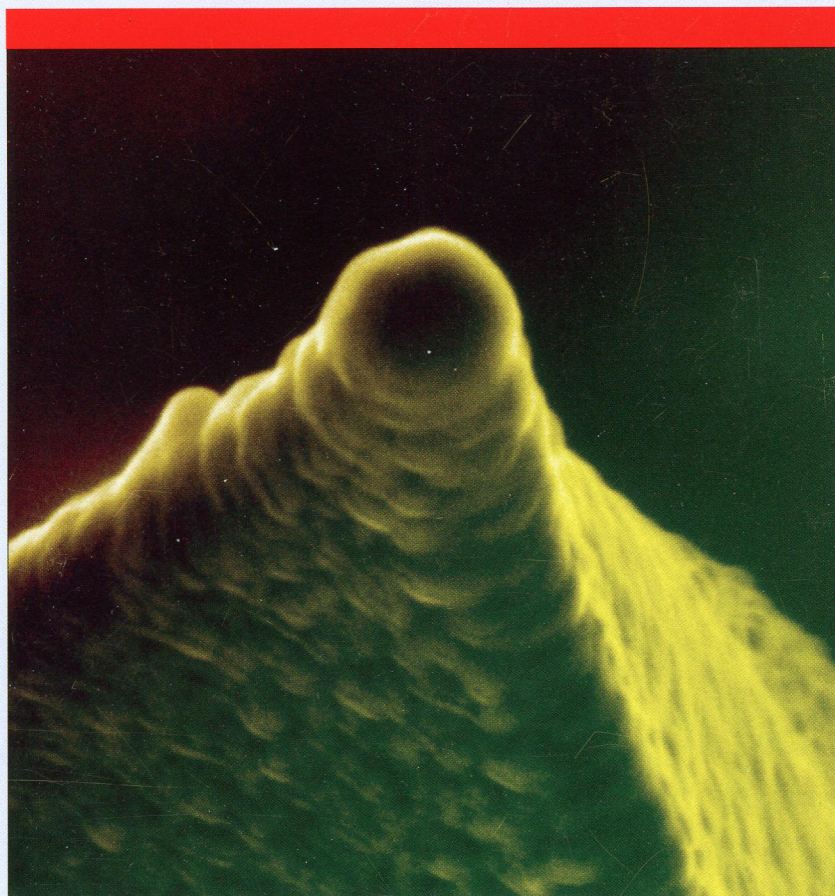


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# NANOTECHNOLOGY

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**Featured article**

Enhancing Raman signals with an  
interferometrically controlled AFM tip

*M Oron-Carl and R Krupke*

**IOP Publishing**

# Nanotechnology

## Volume 24

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415101 **Single-base DNA discrimination via transverse ionic transport** James Wilson and M Di Ventra

415102 **Lipid drug conjugate nanoparticle as a novel lipid nanocarrier for the oral delivery of decitabine: *ex vivo* gut permeation studies**

Yub Raj Neupane, M D Sabir, Nafees Ahmad, Mushir Ali and Kanchan Kohli

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#### *Electronics and photonics*

415201 **Interface effects on tunneling magnetoresistance in organic spintronics with flexible amine–Au links**

Narjes Gorjizadeh and Su Ying Quek (1.25 MB)

415202 **Characterizations of Ohmic and Schottky-behaving contacts of a single ZnO nanowire**

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#### *Patterning and nanofabrication*

415301 **Enhanced by-product desorption via laser assisted electron beam induced deposition of  $W(CO)_6$  with improved conductivity and resolution** Nicholas A Roberts, Carlos M Gonzalez, Jason D Fowlkes and Philip D Rack

415302 **Femtosecond laser irradiation of metallic surfaces: effects of laser parameters on superhydrophobicity**

Sona Moradi, Saeid Kamal, Peter Englezos and Savvas G Hatzikiriakos (3.24 MB)

415303 **Solid–liquid–vapor metal-catalyzed etching of lateral and vertical nanopores**

Jesper Wallentin, Knut Deppert and Magnus T Borgström

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#### *Energy at the nanoscale*

415401 **Enhanced photovoltaic performance of a quantum dot-sensitized solar cell using a Nb-doped  $TiO_2$  electrode** Lei Jiang, Ting You and Wei-Qiao Deng (946 KB)

415402 **Diffuse scattering from hemispherical nanoparticles at the air–silicon interface**

Anthony Centeno, Badar Ahmed, Haricharan Reehal and Fang Xie

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## *Sensing and actuating*

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415502 **Nanocontainer-based corrosion sensing coating**

F Maia, J Tedim, A C Bastos, M G S Ferreira and M L Zheludkevich

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415601 **Hybrid Ag@TiO<sub>2</sub> core-shell nanostructures with highly enhanced photocatalytic performance**

X H Yang, H T Fu, K Wong, X C Jiang and A B Yu (1.38 MB)

415602 **Structure and performance of dielectric films based on self-assembled nanocrystals with a high dielectric constant**

Limin Huang, Shuangyi Liu, Barry J Van Tassell, Xiaohua Liu, Andrew Byro, Henan Zhang, Eli S Leland, Daniel L Akins, Daniel A Steingart, Jackie Li and Stephen O'Brien

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415702 **Conducting properties of nearly depleted ZnO nanowire UV sensors fabricated by dielectrophoresis**

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415703 **Influence of SiO<sub>2</sub> on the structure-controlled synthesis and magnetic properties of prismatic MnO<sub>2</sub> nanorods**

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415704 **Reinforcing Ag nanoparticle thin films with very long Ag nanowires**

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415705 **NiO-based nanostructures with efficient optical and electrochemical properties for high-performance nanofluids**

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415706 **Significantly reduced thermal diffusivity of free-standing two-layer graphene in graphene foam**

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415707 **Local crystallography analysis for atomically resolved scanning tunneling microscopy images**

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415708 **Anodic bonded 2D semiconductors: from synthesis to device fabrication**

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415709 **Theory of amplitude modulated electrostatic force microscopy for dielectric measurements in liquids at MHz frequencies**

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