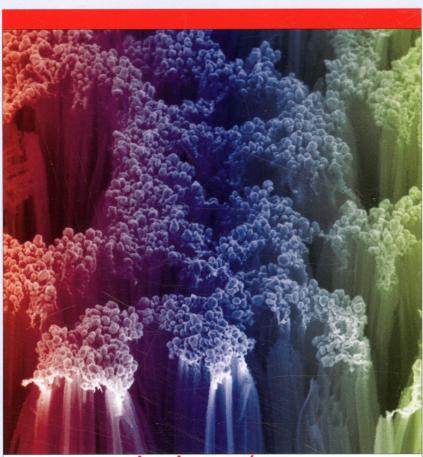
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#### **Featured article**

The antimicrobial effect of silicon nanowires decorated with silver and copper nanoparticles O Fellahi, R K Sarma, M R Das, R Saikia, L Marcon, Y Coffinier, T Hadjersi, M Maamache and R Boukherroub

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#### Biology and medicine

495101 The antimicrobial effect of silicon nanowires decorated with silver and copper nanoparticles Ouarda Fellahi, Rupak K Sarma, Manash R Das, Ratul Saikia, Lionel Marcon, Yannick Coffinier, Toufik Hadjersi, Mustapha Maamache and Rabah Boukherroub

495102 Surface modification of graphene nanopores for protein translocation Y P Shan, P B Tiwari, P Krishnakumar, I Vlassiouk, W Z Li, X W Wang, Y Darici, S M Lindsay, H D Wang, S Smirnov and J He

495103 Vesicular gold assemblies based on host–guest inclusion and its controllable release of doxorubicin Wei Ha, Yang Kang, Shu-Lin Peng, Li-Sheng Ding, Sheng Zhang and Bang-Jing Li

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495202 Temperature-dependent thermal conductivities of 1D semiconducting nanowires via four-point-probe 3-ω method Seung-Yong Lee, Mi-Ri Lee, No-Won Park, Gil-Sung Kim, Heon-Jin Choi, Tae-Youl Choi and Sang-Kwon Lee

#### Patterning and nanofabrication

495301 Modelling and engineering of stress based controlled oxidation effects for silicon nanostructure patterning Xiang-Lei Han, Guilhem Larrieu and Christophe Krzeminski

495302 Self-assembling of large ordered DNA arrays using superhydrophobic patterned surfaces G Ciasca, L Businaro, M Papi, A Notargiacomo, M Chiarpotto, A De Ninno, V Palmieri, S Carta, E Giovine, A Gerardino and M De Spirito

495303 Monte Carlo simulations of nanoscale focused neon ion beam sputtering Rajendra Timilsina and Philip D Rack

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495401 Easy hydrothermal preparation of Cu<sub>2</sub>ZnSnS<sub>4</sub> (CZTS) nanoparticles for solar cell application Sekou Mariama Camara, Lingling Wang and Xintong Zhang

495402 Thermoelectric power factor of ternary single-crystalline Sb<sub>2</sub>Te<sub>3</sub>- and Bi<sub>2</sub>Te<sub>3</sub>-based nanowires Svenja Bäßler, Tim Böhnert, Johannes Gooth, Christian Schumacher, Eckhard Pippel and Kornelius Nielsch

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495501 Hydrothermally formed functional niobium oxide doped tungsten nanorods Jerry Yu, Liu Yuan, Hao Wen, Mahnaz Shafiei, Matthew Richard Field, Jia Liang, Jin Yang, Zhi Fu Liu, Wojtek Wlodarski, Nunzio Motta, Yong Xiang Li, Gengmin Zhang, Kourosh Kalantar-zadeh and Peter To Lai

495502 Development of a novel water-soluble magnetic fluorescent nanoparticle for the selective detection and removal of Cu<sup>2+</sup> Baocun Zhu, Peilun Yang, Haiqin Yu, Liangguo Yan, Qin Wei and Bin Du

495503 Noise and its reduction in graphene based nanopore devices Ashvani Kumar, Kyeong-Beom Park, Hyun-Mi Kim and Ki-Bum Kim

#### Materials: synthesis or self-assembly

495601 One-step aqueous synthesis of fluorescent copper nanoclusters by direct metal reduction Mónica Fernández-Ujados, Laura Trapiella-Alfonso, José M Costa-Fernández, Rosario Pereiro and Alfredo Sanz-Medel

#### Materials: properties, characterization or tools

495701 High-detectivity nanowire photodetectors governed by bulk photocurrent dynamics with thermally stable carbide contacts Rujia Zou, Zhenyu Zhang, Junqing Hu, Liwen Sang, Yauso Koide and Meiyong Liao

495702 Density functional theory study on the interactions of 1-cysteine with graphene: adsorption stability and magnetism Huijuan Luo, Hejun Li, Qiangang Fu, Yanhui Chu, Xiaoyu Cao, Can Sun, Xiaoyan Yuan and Lei Liu

495703 Controlled co-deposition of FePt nanoparticles embedded in MgO: a detailed investigation of structure and electronic and magnetic properties S D'Addato, V Grillo, A di Bona, P Luches, S Frabboni, S Valeri, P Lupo, F Casoli and F Albertini

495704 Metal enhanced fluorescence in rare earth doped plasmonic core—shell nanoparticles OPEN ACCESS S Derom, A Berthelot, A Pillonnet, O Benamara, A M Jurdyc, C Girard and G Colas des Francs

#### **Erratum**

499601 Erratum: 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