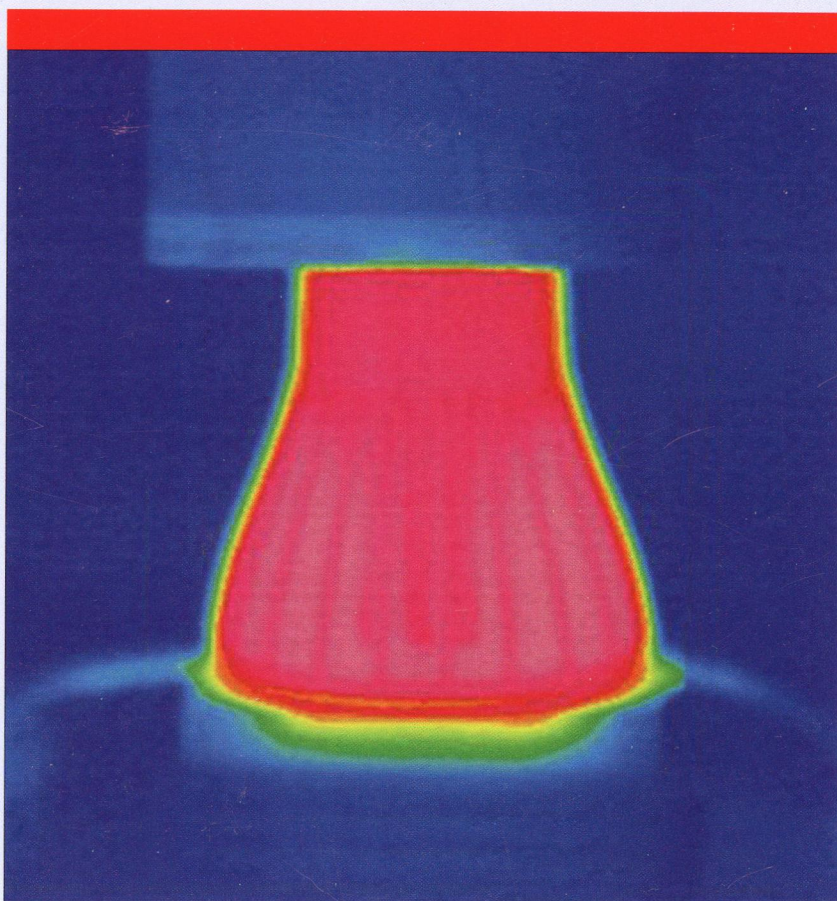


ПН
N 21

ISSN 0957-4484

NANOTECHNOLOGY

VOLUME 24 NUMBER 39 4 OCTOBER 2013



iopscience.org/nano

Featured article

Monolayer graphene dispersion and radiative cooling
for high power LED

T-J Hsiao, T Eyassu, K Henderson, T Kim and C-T Lin

IOP Publishing

Papers

Biology and medicine

395101 Chitosan coating of copper nanoparticles reduces *in vitro* toxicity and increases inflammation in the lung Kristan L S Worthington, Andrea Adamcakova-Dodd, Amaraporn Wongrakpanich, Imali A Mudunkotuwa, Kranti A Mapuskar, Vijaya B Joshi, C Allan Guymon, Douglas R Spitz, Vicki H Grassian, Peter S Thorne and Aliasger K Salem **PDF (1.09 MB)**

395102 Wound healing and antibacterial activities of chondroitin sulfate- and acharan sulfate-reduced silver nanoparticles A-Rang Im, Jee Young Kim, Hyun-Seok Kim, Seonho Cho, Youmie Park and Yeong Shik Kim **PDF (2.89 MB)**

Electronics and photonics

395201 ZnSe nanowire/Si p–n heterojunctions: device construction and optoelectronic applications

Xiwei Zhang, Xiujuan Zhang, Liu Wang, Yiming Wu, Yan Wang, Peng Gao, Yuanyuan Han and Jiansheng Jie

395202 Highly tunable local gate controlled complementary graphene device performing as inverter and voltage controlled resistor

Wonjae Kim, Juha Riikonen, Changfeng Li, Ya Chen and Harri Lipsanen **PDF (548 KB)**

395203 Vertically aligned nanostructures based on Na-doped ZnO nanorods for wide band gap semiconductor memory applications

Jian Huang, Jing Qi, Zonglin Li and Jianlin Liu

Patterning and nanofabrication

395301 Helium focused ion beam fabricated plasmonic antennas with sub-5 nm gap

Olivier Scholder, Konstantins Jefimovs, Ivan Shorubalko, Christian Hafner, Urs Sennhauser and Gian-Luca Bona

Energy at the nanoscale

395401 Monolayer graphene dispersion and radiative cooling for high power LED

Tun-Jen Hsiao, Tsehaye Eyassu, Kimberly Henderson, Taesam Kim and Chhiu-Tsu Lin

Sensing and actuating

395501 **Photoreceptors for a light biotransducer: a comparative study of the electrical responses of two(*type-1*) opsins**

E Alfinito, J Pousset, L Reggiani and K Lee

Materials: synthesis or self-assembly

395601 **Low temperature preparation of α -FeOOH/reduced graphene oxide and its catalytic activity for the photodegradation of an organic dye**

Guanbo Huang, Congcong Zhang, Ying Long, Jeanne Wynn, Yu Liu, Wei Wang and Jianping Gao

395602 **Preparation of non-aggregating aqueous fullerenes in highly saline solutions with a biocompatible non-ionic polymer**

Nirupam Aich, Linkel K Boateng, Joseph R V Flora and Navid B Saleh

395603 **Facile synthesis of graphene on dielectric surfaces using a two-temperature reactor CVD system**

C Zhang, B Y Man, C Yang, S Z Jiang, M Liu, C S Chen, S C Xu, Z C Sun, X G Gao and X J Chen

395604 **Synthesis of carboxylate-functionalized graphene nanosheets for high dispersion of platinum nanoparticles based on the reduction of graphene oxide via 1-pyrenecarboxaldehyde**

Yinjie Kuang, Jinhua Chen, Xingliang Zheng, Xiaohua Zhang, Qionghua Zhou and Cuihong Lu

395605 **Colloidal stability and thermo-responsive properties of iron oxide nanoparticles coated with polymers: advantages of Pluronic® F68–PEG mixture**

Manuela Chiper, Katel Hervé Aubert, Amélie Augé, Jean-François Fouquenot, Martin Soucé and Igor Chourpa

Materials: properties, characterization or tools

395701 **Gold nanoparticle coated silicon tips for Kelvin probe force microscopy in air**

Silvia Hormeño, Marcos Penedo, Cristina V Manzano and Mónica Luna [PDF \(1.39 MB\)](#)

395702 **Frequency tuning, nonlinearities and mode coupling in circular mechanical graphene resonators**

A M Eriksson, D Midtvedt, A Croy and A Isacsson

395703 **Tip loading effects on AFM-based transport measurements of metal–oxide interfaces**

Jiechang Hou, Baptiste Rouxel, Wei Qin, Stephen S Nonnenmann and Dawn A Bonnell

395704 **Recovery of nanomolecular electronic states from tunneling spectroscopy: LDOS of low-dimensional phthalocyanine molecular structures on Cu(111)**

Y Yamagishi, S Nakashima, K Oiso and T K Yamada

395705 **Simple continuous-flow synthesis of Cu–In–Zn–S/ZnS and Ag–In–Zn–S/ZnS core/shell quantum dots**

Shenjie Li, Yanyan Chen, Lijian Huang and Daocheng Pan [PDF \(1.02 MB\)](#)

395706 **Surface activation of graphene oxide nanosheets by ultraviolet irradiation for highly efficient anti-bacterials**

Murugan Veerapandian, Linghe Zhang, Karthikeyan Krishnamoorthy and Kyusik Yun

Corrigenda

399501 Corrigendum: Rapid and highly sensitive detection of Enterovirus 71 by using nanogold-enhanced electrochemical impedance spectroscopy

Hsing-Yuan Li, Shing-Hua Tseng, Tsai-Mu Cheng, Hsueh-Liang Chu, Yu-Ning Lu, Fang-Yu Wang, Li-Yun Tsai, Juo-Yu Shieh, Jyh-Yuan Yang, Chien-Chang Juan, Lung-Chen Tu and Chia-Ching Chang

399502 Corrigendum: High-field electron transport in semiconducting zigzag carbon nanotubes

Kannan Thiagarajan and Ulf Lindefelt