

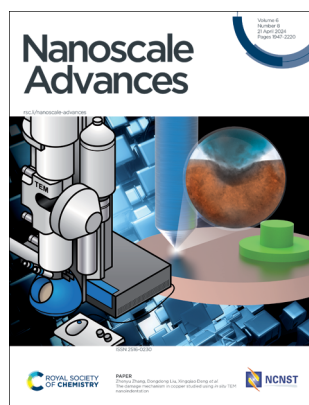
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Cover

See Zhenyu Zhang, Dongdong Liu, Xingqiao Deng *et al.*, pp. 2002–2012. Image reproduced by permission of Zhenyu Zhang from *Nanoscale Adv.*, 2024, 6, 2002.



Inside cover

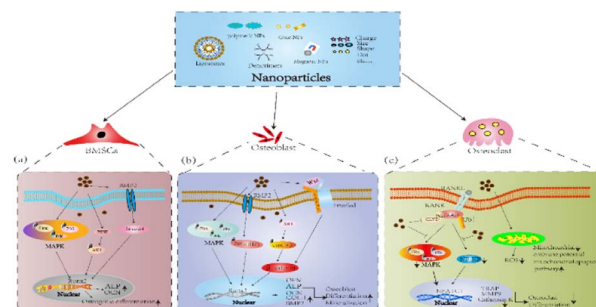
See Su-Hyun Kim *et al.*, pp. 2013–2025. Image reproduced by permission of Jun-Bo Yoon from *Nanoscale Adv.*, 2024, 6, 2013.

REVIEWS

1957

Recent advances of nanoparticles on bone tissue engineering and bone cells

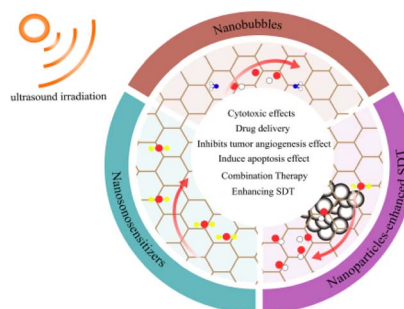
Gejing Zhang, Chenxiao Zhen, Jiancheng Yang, Jianping Wang, Shenghang Wang, Yanwen Fang and Peng Shang*



1974

Nanotechnology-enabled sonodynamic therapy against malignant tumors

Yunxi Huang, Wenhao Ouyang, Zijia Lai, Guanhua Qiu, Zhaoting Bu, Xiaoqi Zhu, Qin wang, Yunfang Yu* and Junjie Liu*



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Fundamental questions
Elemental answers

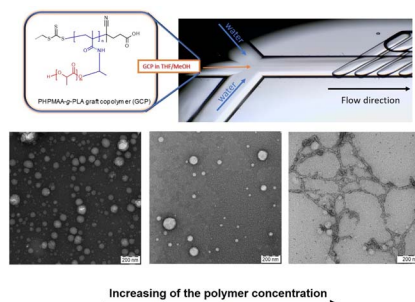


COMMUNICATIONS

1992

Effect of polymer concentration on the morphology of the PHPMAA-*g*-PLA graft copolymer nanoparticles produced by microfluidics nanoprecipitation

Svetlana Lukáš Petrova,^{*} Ewa Pavlova, Václav Pokorný and Vladimír Sincari^{*}



1997

Crystallization-induced emission from F-doped carbon dots

Tingxuan Guo, Gaixia Yang, Yan Li,^{*} Can Liu, Fulin Yang, Defa Hou, Hao Sun, Yunwu Zheng, Xu Lin^{*} and Lanxiang Liu^{*}

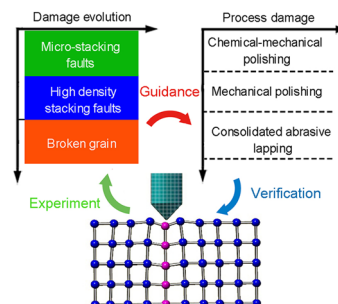


PAPERS

2002

The damage mechanism in copper studied using *in situ* TEM nanoindentation

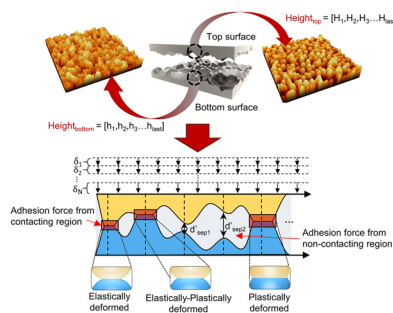
Dong Wang, Zhenyu Zhang,^{*} Dongdong Liu,^{*} Xingqiao Deng,^{*} Chunjing Shi, Yang Gu, Xiuqing Liu, Xiaoyu Liu and Wei Wen



2013

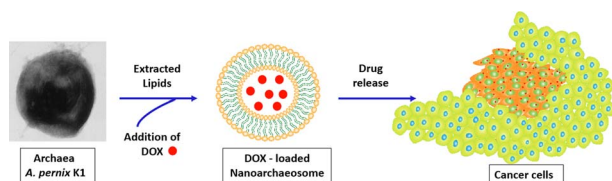
An experimental and numerical study on adhesion force at the nanoscale

Su-Hyun Kim, Pan-Kyu Choi, Yong-Bok Lee, Tae-Soo Kim, Min-Seung Jo, So-Young Lee, Hyun-Woo Min and Jun-Bo Yoon^{*}



PAPERS

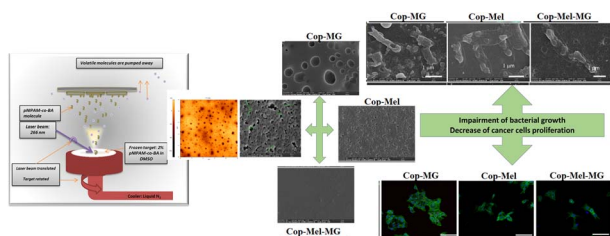
2026



Doxorubicin loaded thermostable nanoarchaeosomes: a next-generation drug carrier for breast cancer therapeutics

Kaviya Vijayalakshmi Babunagappan, Abirami Seetharaman, Subastri Ariraman, Poornima Budime Santhosh, Julia Genova, Natasa Poklar Ulrih and Swathi Sudhakar*

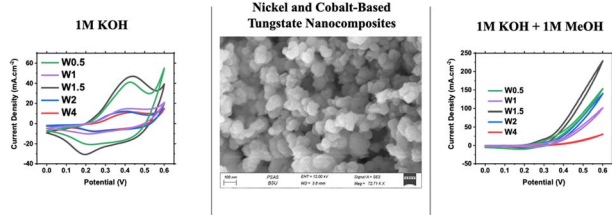
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Hybrid bio-nanoporous peptide loaded-polymer platforms with anticancer and antibacterial activities

Madalina Icriverzi, Paula Ecaterina Florian, Anca Bonciu, Luminita Nicoleta Dumitrescu, Antoniu Moldovan, Diana Pelinescu, Robertina Ionescu, Ionela Avram, Cristian V. A. Munteanu, Livia Elena Sima, Valentina Dinca, Laurentiu Rusen* and Anca Roseanu*

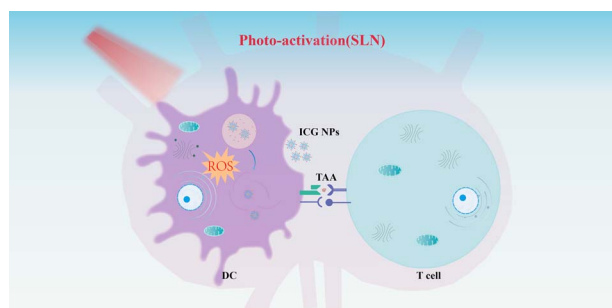
2059



Nickel and cobalt-based tungstate nanocomposites as promising electrocatalysts in alkaline direct methanol fuel cells

Imtenan Mahmoud, Ahmed A. Farghali, Waleed M. A. El-Rouby and Abdalla Abdelwahab*

2075



Boosted photo-immunotherapy via near-infrared light excited phototherapy in tumor sites and photo-activation in sentinel lymph nodes

Chen Wang, Bobo Gu,* Shuhong Qi,* Siyi Hu* and Yu Wang*

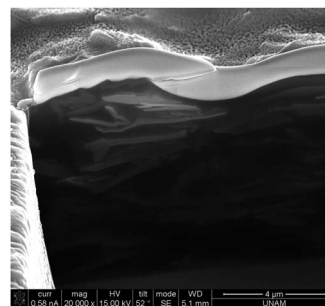


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2088

Orientation of reduced graphene oxide in composite coatings

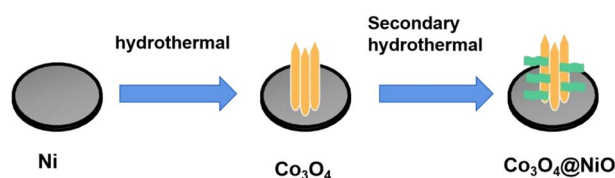
Knut Thorshaug,* Terje Didriksen, Ingvild Thue Jensen, Patricia Almeida Carvalho, Juan Yang, Mathieu Grandcolas, Alain Ferber, Andy M. Booth, Özlem Ağaç, Hüseyin Alagöz, Nursev Erdoğan, Anıl Kuban and Branson D. Belle



2096

3D net-like $\text{Co}_3\text{O}_4@\text{NiO}$ nanostructures for high performance supercapacitors

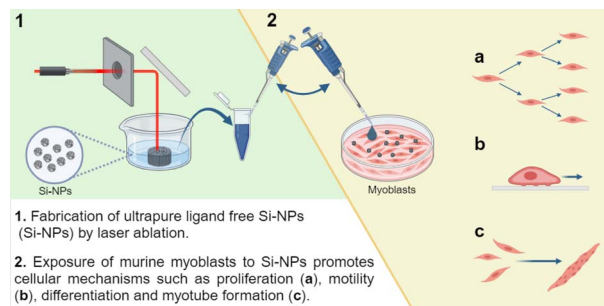
Xiaochen Sun and Zengyun Jian*



2104

Assessment of laser-synthesized Si nanoparticle effects on myoblast motility, proliferation and differentiation: towards potential tissue engineering applications

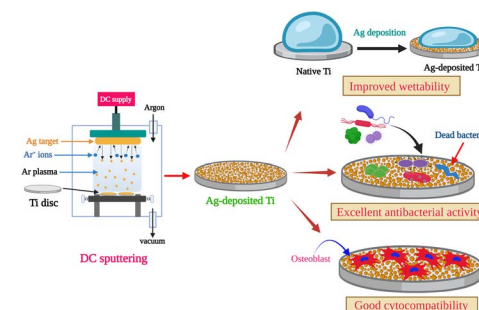
Clarissa Murru, Lucas Duvert, Frederique Magdinier, Adrien Casanova, Anne-Patricia Alloncle, Stefano Testa* and Ahmed Al-Kattan*



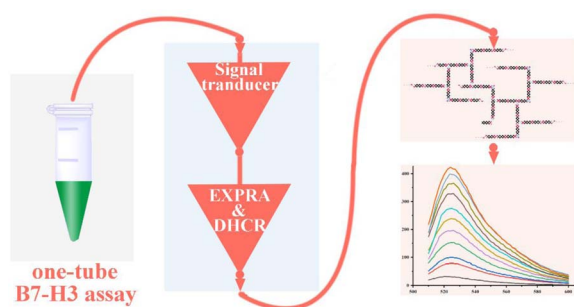
2113

Silver-deposited titanium as a prophylactic 'nano coat' for peri-implantitis

Vaibhav Madiwal and Jyutika Rajwade*



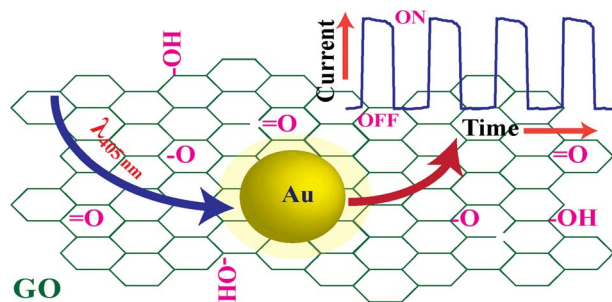
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One-tube B7-H3 detection based on isothermal exponential amplification and dendritic hybridization chain reaction

Xiangyun Chen, Chun Xuan, Jingtao Lin, Zhongquan Pan, Xiaoliang Wu, Pin Wu, Zhenchang Liang,* Luxin Yu* and Cailing Qiu*

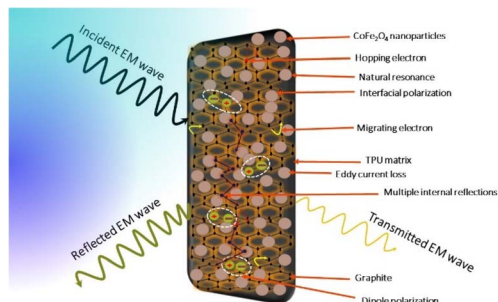
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Role of oxygen functional groups and attachment of Au nanoparticles on graphene oxide sheets for improved photodetection performance

Ningthoujam Somorjit Singh, Abdul Kaium Mia and P. K. Giri*

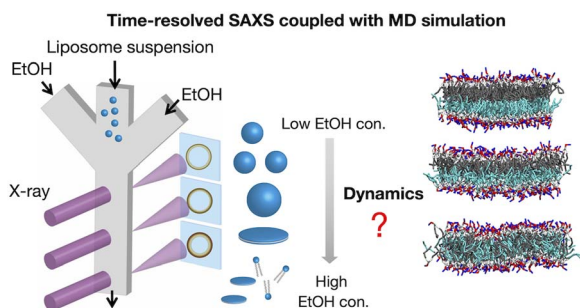
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Optimization of CoFe₂O₄ nanoparticles and graphite fillers to endow thermoplastic polyurethane nanocomposites with superior electromagnetic interference shielding performance

Anju, Milan Masař, Michal Machovský, Michal Urbánek, Pavol Šuly, Barbora Hanulíková, Jarmila Vilčáková, Ivo Kuřitka and Raghvendra Singh Yadav*

2166



Understanding the effects of ethanol on the liposome bilayer structure using microfluidic-based time-resolved small-angle X-ray scattering and molecular dynamics simulations

Masatoshi Maeki,* Niko Kimura, Yuto Okada, Kazuki Shimizu, Kana Shibata, Yusuke Miyazaki, Akihiko Ishida, Kento Yonezawa, Nobutaka Shimizu, Wataru Shinoda and Manabu Tokeshi*

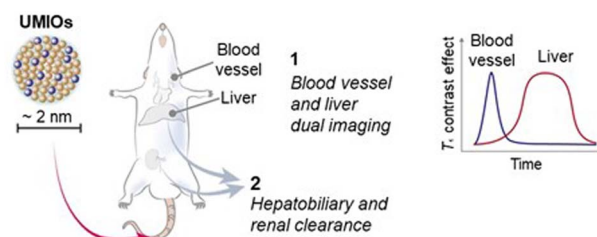


PAPERS

2177

Ultrasmall Mn-doped iron oxide nanoparticles with dual hepatobiliary and renal clearances for T_1 MR liver imaging

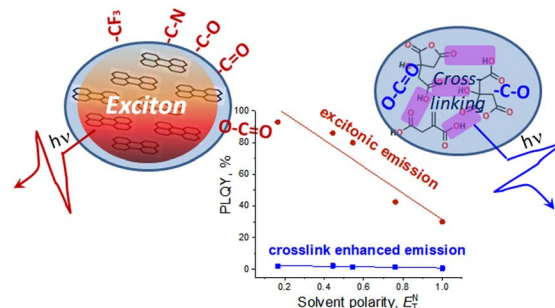
Sanghoon Lee, Arim Byun, Juhee Jo, Jong-Min Suh, Jeasang Yoo, Mi Hee Lim, Ji-wook Kim,* Tae-Hyun Shin* and Jin-sil Choi*



2185

Photoluminescence quantum yield of carbon dots: emission due to multiple centers *versus* excitonic emission

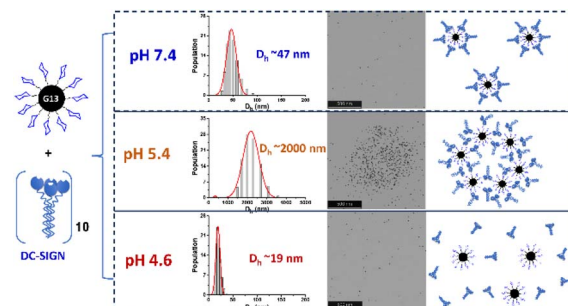
Oleg Dimitriev, Dmytro Kysil,* Alexander Zaderko, Oksana Isaieva, Andrii Vasin, Yuri Piryatinski, Mats Fahlman and Alexei Nazarov



2198

Probing the pH-dependency of DC-SIGN/R multivalent lectin–glycan interactions using polyvalent glycan-gold nanoparticles

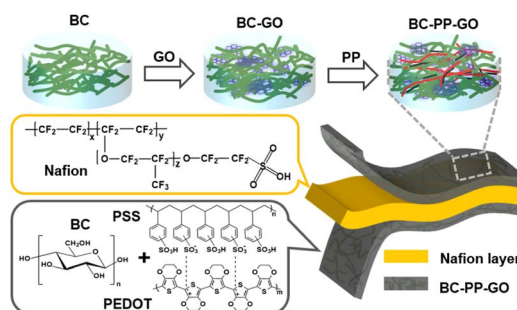
Rahman Basaran, Xinyu Ning, Darshita Budhadev, Nicole Hondow, Yuan Guo* and Dejian Zhou*



2209

Self-standing bacterial cellulose-reinforced poly(3,4-ethylenedioxythiophene)/poly(4-styrenesulfonate) doped with graphene oxide composite electrodes for high-performance ionic electroactive soft actuators

Yujiao Wu,* Qiyuan Cui, Ruibin Qi and Fan Wang*



CORRECTION

2217

Correction: Universal control of proton concentration using an electrochemically generated acid compatible with miniaturization

Janwa El-Maiss, Divya Balakrishnan and César Pascual García*

