

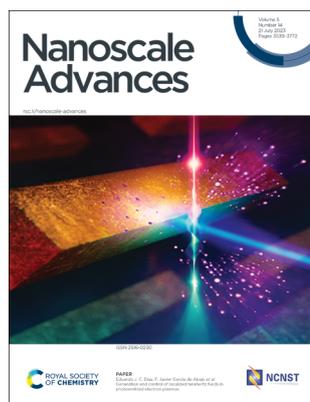
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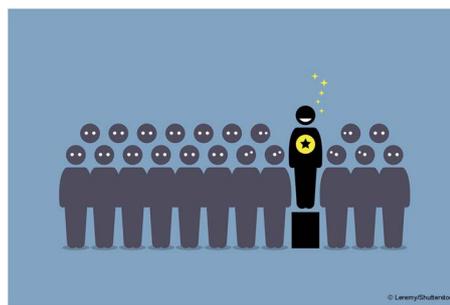


Inside cover
See Bongju Kim, Dong-Wook Han *et al.*, pp. 3619–3628. Image reproduced by permission of Dong-Wook Han from *Nanoscale Adv.*, 2023, 5, 3619.

EDITORIAL

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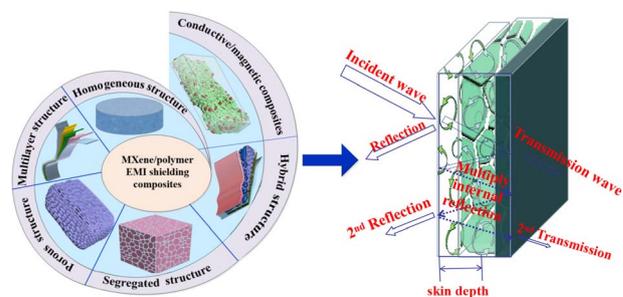


REVIEWS

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Structural design and preparation of $Ti_3C_2T_x$ MXene/polymer composites for absorption-dominated electromagnetic interference shielding

Qimei Zhang, Qi Wang, Jian Cui, Shuai Zhao, Guangfa Zhang, Ailin Gao and Yehai Yan*



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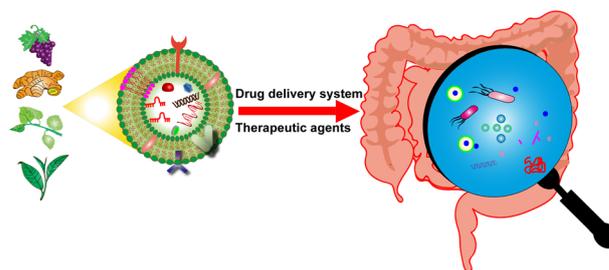


REVIEWS

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Plant-derived exosomal nanoparticles: potential therapeutic for inflammatory bowel disease

De-feng Li, Qi Tang, Mei-feng Yang, Hao-ming Xu, Min-zheng Zhu, Yuan Zhang, Cheng-mei Tian, Yu-qiang Nie, Jian-yao Wang,* Yu-jie Liang,* Li-sheng Wang* and Jun Yao*

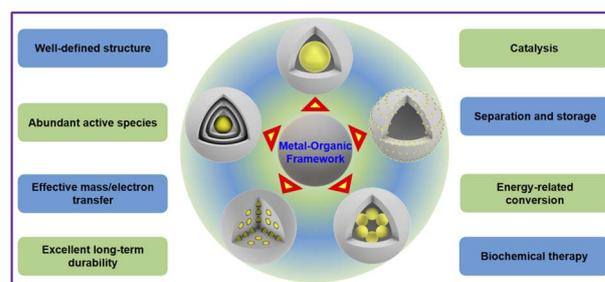


MINIREVIEWS

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Recent strategies for constructing hierarchical multicomponent nanoparticles/metal–organic framework hybrids and their applications

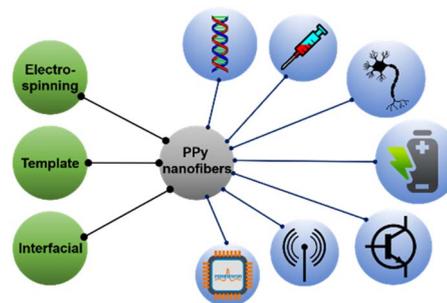
Ngoc Minh Tran, Anh Ngoc Nguyen, Jungeun Bae, Jinhee Kim, Dahae Kim and Hyojong Yoo*



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Synthesis and application of polypyrrole nanofibers: a review

Yang Liu* and Feng Wu*

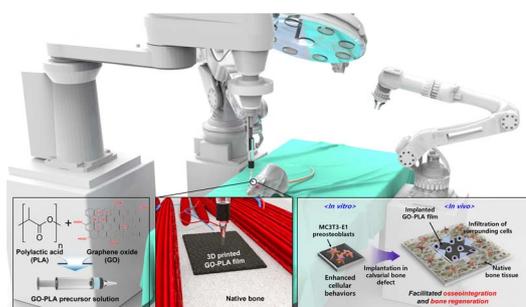


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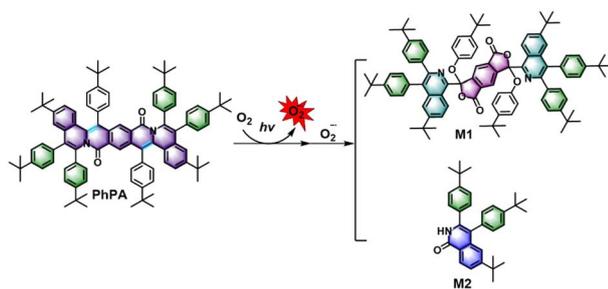
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3D printed membranes of polylactic acid and graphene oxide for guided bone regeneration

Hee Jeong Jang, Moon Sung Kang, Won-Hyeon Kim, Hyo Jung Jo, Sung-Ho Lee, Eun Jeong Hahm, Jung Hyun Oh, Suck Won Hong, Bongju Kim* and Dong-Wook Han*



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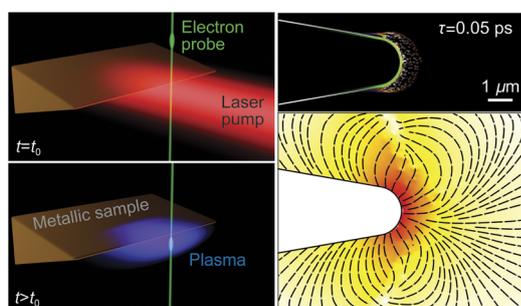


Synthesis and properties of novel type I photosensitizer polycyclic amide

Kui Wang, Tao Ye, Haoyang Du, Xiangyu Jin, Xiaofen Yi, Huiying Gao, Yuan Zhang, Wei Dong, Shihui Liu, Jing Guan,* Feng Lin* and Debin Xia

PAPERS

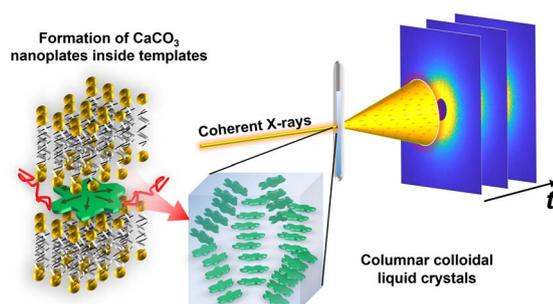
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Generation and control of localized terahertz fields in photoemitted electron plasmas

Eduardo J. C. Dias,* Ivan Madan, Simone Gargiulo, Francesco Barantani, Michael Yannai, Giovanni Maria Vanacore, Ido Kaminer, Fabrizio Carbone and F. Javier García de Abajo*

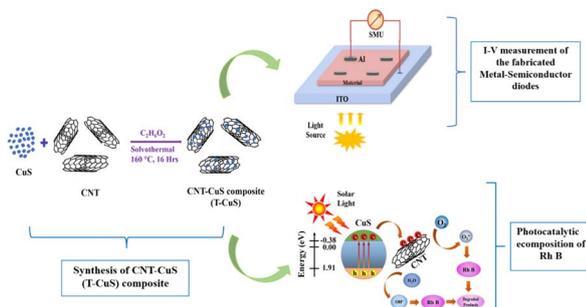
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Experimental probing of dynamic self-organized columnar assemblies in colloidal liquid crystals

Taiki Hoshino,* Masanari Nakayama,* Yoshihiro Hosokawa, Kohei Mochizuki, Satoshi Kajiyama, Yoshiki Kohmura and Takashi Kato*

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Development of hierarchical copper sulfide-carbon nanotube (CuS-CNT) composites and utilization of their superior carrier mobility in efficient charge transport towards photodegradation of Rhodamine B under visible light

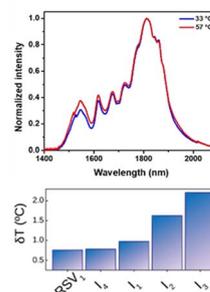
Mainak Das, Dhananjay Das, Sayantan Sil and Partha Pratim Ray*



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Lanthanide doped nanoparticles for reliable and precise luminescence nanothermometry in the third biological window

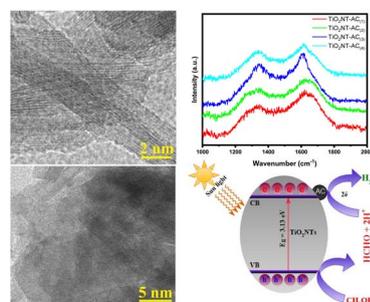
Ana C. C. Soares, Tasso O. Sales, Erving C. Ximendes, Daniel Jaque* and Carlos Jacinto*



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Biomass-derived carbon deposited TiO₂ nanotube photocatalysts for enhanced hydrogen production

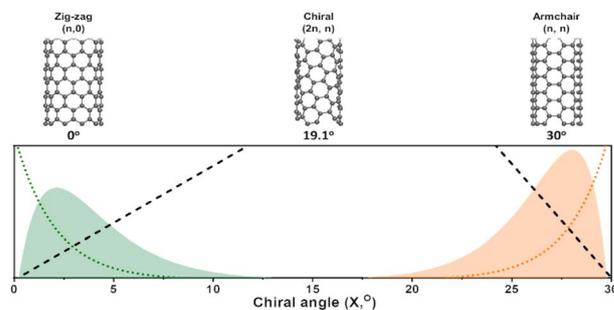
Shaeel Ahmed Althabaiti, Zaheer Khan, Maqsood Ahmad Malik*, Salem Mohamed Bawaked, Soad Zahir Al-Sheheri, Mohamed Mokhtar, Sharf Ilahi Siddiqui and Katabathini Narasimharao*



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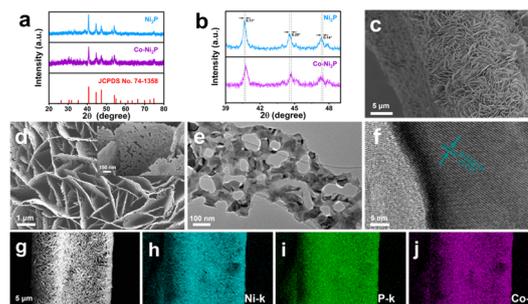
Nigora Turaeva, Yoosuk Kim and Irma Kuljanishvili*



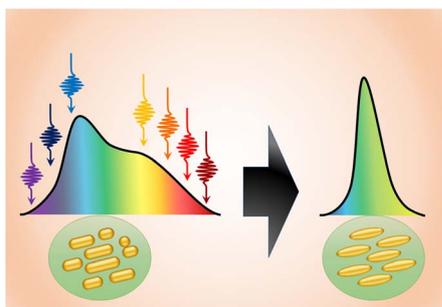
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Defect engineering and atomic doping of porous Co-Ni₂P nanosheet arrays for boosting electrocatalytic oxygen evolution

Qiangqiang Wang, Hongmin Ma, Xiang Ren, Xu Sun, Xuejing Liu, Dan Wu* and Qin Wei*



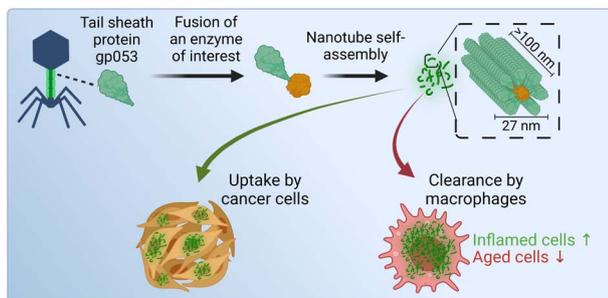
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Tunable-wavelength nanosecond laser tailoring of plasmon resonance spectra of gold nanoparticle colloids

Thanyada Sukmanee, Michał Szuster, Aleksander Gorski, Marcin Hołdyński and Sylwester Gawinkowski*

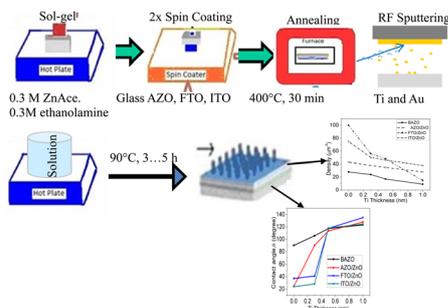
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Nanotubes from bacteriophage tail sheath proteins: internalisation by cancer cells and macrophages

Dovydas Gabrielaitis, Vilmante Zitkute, Lina Saveikyte, Greta Labutyte, Martynas Skapas, Rolandas Meskys, Vida Casaite, Ausra Sasnauskiene* and Urte Neniskyte*

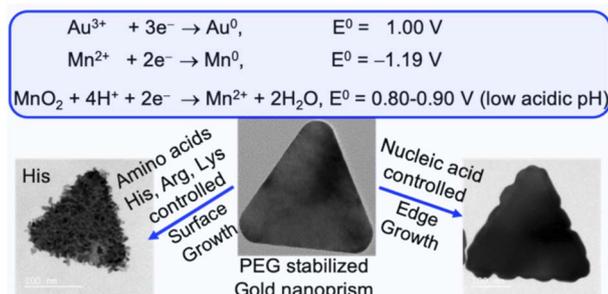
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Effect of Ti and Au buffer layers on controlling the density and wettability of well-aligned ZnO nanorod arrays grown on different substrates

M. Kamruzzaman* and J. A. Zapien*

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Seed free synthesis of polyethylene glycol stabilized gold nanoprisms exploiting manganese metal at low pH

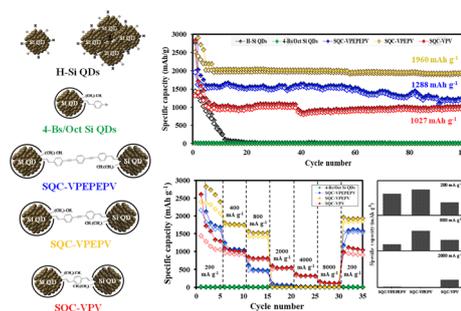
Kanika Bharti, Md Azimuddin Sk and Kalyan K. Sadhu*



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Influence of bridge structure manipulation on the electrochemical performance of π -conjugated molecule-bridged silicon quantum dot nanocomposite anode materials for lithium-ion batteries

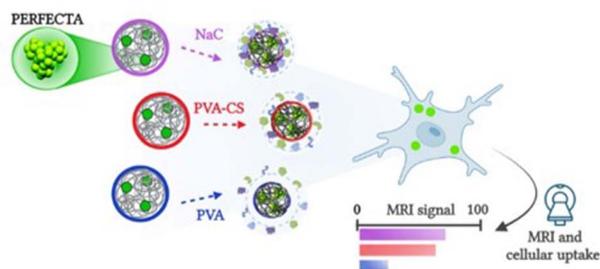
Young-Hwa Choi, Jiyoung Bang, Sunyoung Lee and Hyun-Dam Jeong*



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Pivotal role of the protein corona in the cell uptake of fluorinated nanoparticles with increased sensitivity for ¹⁹F-MR imaging

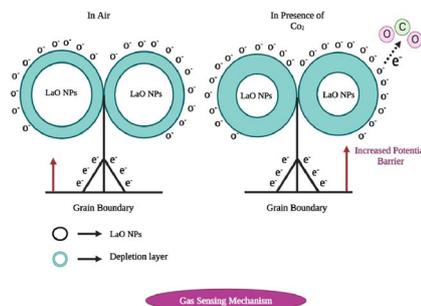
Lodovico Gatti, Cristina Chirizzi, Giulia Rotta, Pietro Milesi, Maria Sancho-Albero, Victor Sebastián, Anna Mondino, Jesús Santamaría, Pierangelo Metrangolo, Linda Chaabane* and Francesca Baldelli Bombelli*



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Highly selective CO₂ sensing response of lanthanum oxide nanoparticle electrodes at ambient temperature

Amutha Eswaran, Madhumitha Thirumalainambi, Rajadurai Pandian Subramaniam and Gurusamy Annadurai*



Gas Sensing Mechanism

