

Materials Advances

An open access journal publishing across the breadth of materials science

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IN THIS ISSUE

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Cover

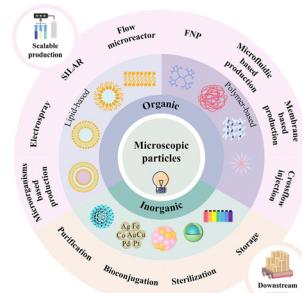
See Sheng Ye, He Li et al., pp. 2918–2925.
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REVIEW

2885

Scalable production of microscopic particles for biological delivery

Huoyue Lin, Jing Leng, Pingqing Fan, Zixing Xu* and Gang Ruan*

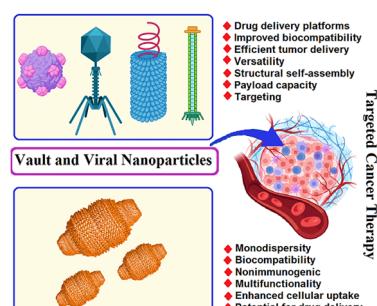


HIGHLIGHT

2909

Vault, viral, and virus-like nanoparticles for targeted cancer therapy

Siavash Iravani* and Rajender S. Varma



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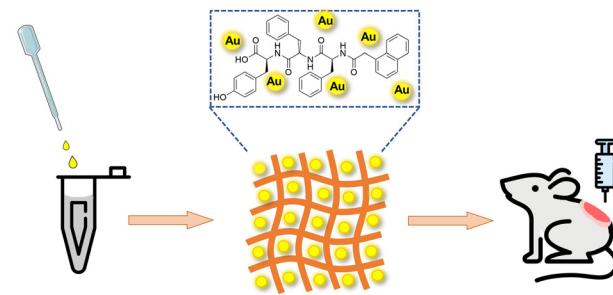


PAPERS

2918

A novel wound dressing based on a gold nanoparticle self-assembled hydrogel to promote wound healing

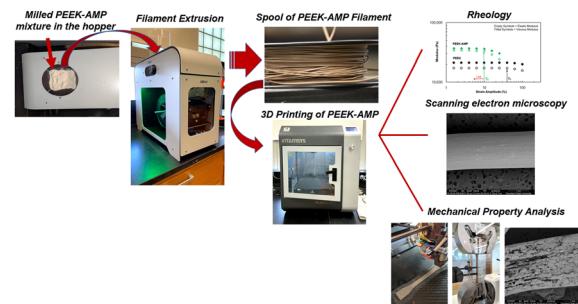
Weihong Chen, Ruixi Chu, Hualong Li, Tianfeng Hua, Hong Chen, Rui Li, Deqing Zhou, Sufeng Cao, Sheng Ye* and He Li*



2926

Extrusion of uniform-diameter polyetheretherketone–magnesium phosphate bio-composite filaments for 3D printing of design-specific multi-functional implants

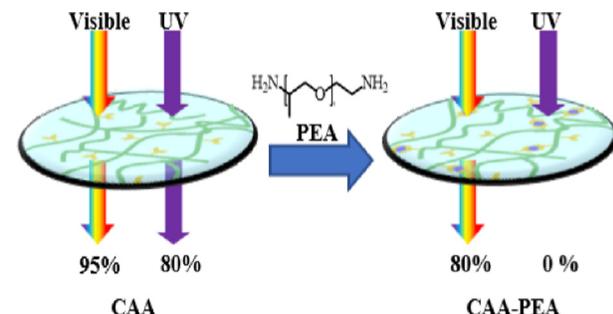
Vijay K. Bokam, Surendrasingh Y. Sonaye, Phaniteja Nagaraju, Harsha P. S. Naganaboyina and Prabaha Sikder*



2940

Cellulose-based fluorescent films with anti-counterfeiting and UV shielding capabilities enabled by enamine bonds

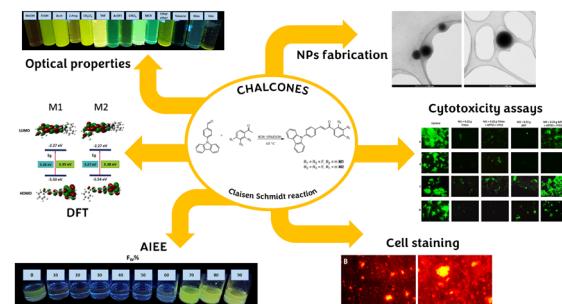
Yuhong Qiao, Youwei Ma, Xiaomin Chen, Wenyao Guo, Yulin Min, Jinchen Fan* and Zixing Shi*



2950

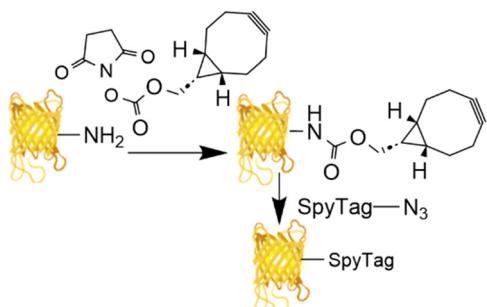
Fabrication of photoluminescent nanoparticles from carbazole-derived chalcones: a study of optical properties, cell biomarking, and metabolism

Susana Lucía Estrada-Flores, Cesar Garcias-Morales,* Catalina M. Perez-Berumen, Arxel de León-Santillán, Mario Rodríguez, Juan Pablo García-Merinos, Jesús A. Claudio-Rizo and Eder Iván Martínez-Mora



PAPERS

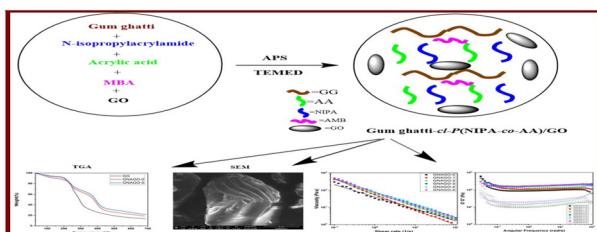
2963



Modification of bacterial microcompartments with target biomolecules via post-translational SpyTagging

David M Beal,* Mingzhi Liang,* Ian Brown, James D Budge, Emily R Burrows, Kevin Howland, Phoebe Lee, Sarah Martin, Andrew Morrell, Emi Nemoto-Smith, Joanne Roobol, Maria Stanley, C Mark Smales and Martin J Warren

2971



Synthesis and rheological investigations of gum-ghatti-cl-poly(NIPA-co-AA)-graphene oxide based hydrogels

Pragnesh N. Dave,* Pradip M. Macwan and Bhagvan Kamaliya

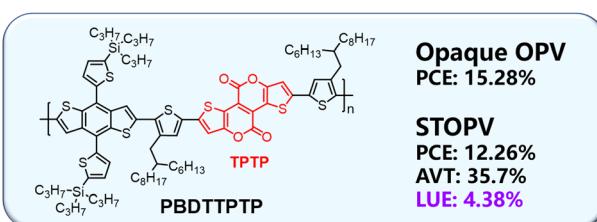
2981



Removal of methyl red from wastewater using a NiO@*Hyphaene thebaica* seed-derived porous carbon adsorbent: kinetics and isotherm studies

Abdelaal S. A. Ahmed,* Moustafa M. S. Sanad, Ahmed Kotb, Ahmed N. R. M. Negm and Mohamed H. Abdallah

2991



A tetracyclic-bislactone-based copolymer donor for efficient semitransparent organic photovoltaics

Mingjie Li, Tai An, Zongliang Ou, Ke Jin, Zhiwen Jin, Keyou Yan, He Tian, Wentao Wang, Shangfeng Yang, Guan-Wu Wang,* Qiuling Song,* Zuo Xiao* and Liming Ding

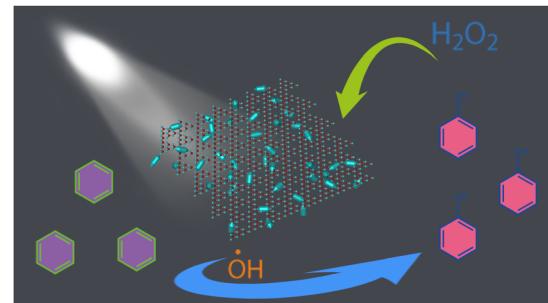


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2999

An efficient photocatalysis-self-Fenton system based on Fe(II)-MOF/g-C₃N₄ for direct hydroxylation of benzene to phenol

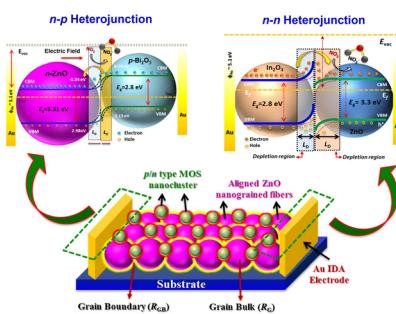
Xu Jia,* Xuetong Xu, Cong Liu, Fuying Wang, Liuxue Zhang,* Shuyan Jiao,* Genxing Zhu, Guomin Yu and Xiulian Wang



3010

1D aligned, n-p and n-n type ZnO heterojunction nanofibers for NO₂ sensors: exploration of conduction mechanism using *in situ* impedance spectroscopy

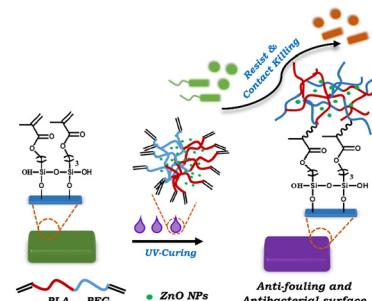
Ramakrishnan Vishnuraj, Mahaboobbatcha Aleem, Keerthi G Nair and Biji Pullithadathil*



3026

Zinc oxide nanoparticles embedded photo-crosslinkable PLA-block-PEG toward effective antibacterial coatings

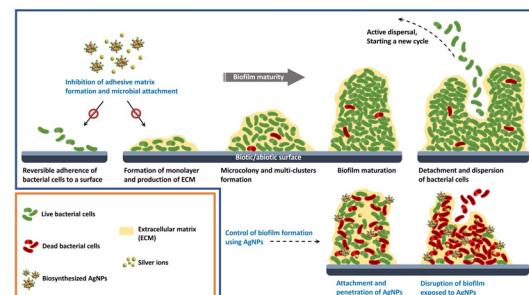
Nabasmita Maity, Netta Bruchiel-Spanier, Orna Sharabani-Yosef, Daniel Mandler* and Noam Eliaz*



3037

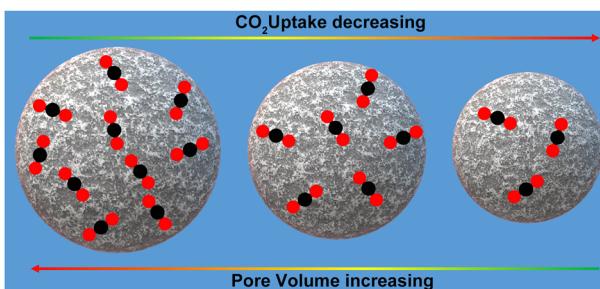
Bioinspired green-synthesized silver nanoparticles: *in vitro* physicochemical, antibacterial, biofilm inhibitory, genotoxicity, antidiabetic, antioxidant, and anticoagulant performance

Hamed Barabadi,* Omid Hosseini, Kamyar Jounaki, Salar Sadeghian-Abadi, Fatemeh Ashouri, Ayat Mostafa Abdulabbas Alrikabi, Hossein Vahidi, Salimeh Amidi, Faraz Mojab, Neda Mohammadi and Ebrahim Mostafavi*



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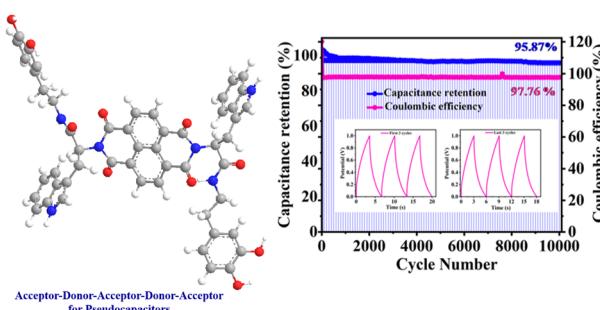
3055



Pore volume regulated CO_2 adsorption in C–C bonded porous organic frameworks

Himan Dev Singh, Piyush Singh, Deepak Rase and Ramanathan Vaidhyanathan*

3061



Molecular engineered A–D–A–D–A organic electrode system for efficient supercapacitor applications

Sudhir D. Jagdale, Chepuri R. K. Rao,*
Sidhanath V. Bhosale* and Sheshanath V. Bhosale*

