

# RSC Applied Interfaces

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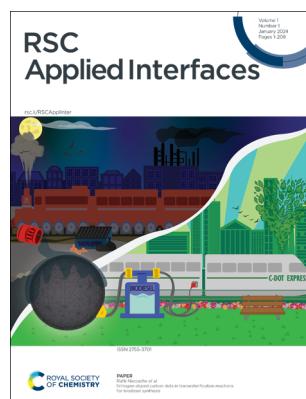
N/A CODEN RAISCD 1(1) 1–208 (2024)



### Cover

See Yoshiyuki Nonoguchi et al., pp. 80–85.

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### Inside cover

See Rafik Naccache et al., pp. 86–97.

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## EDITORIAL

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### Introducing *RSC Applied Interfaces*

Federico Rosei

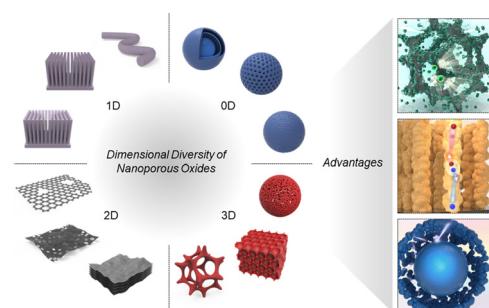


## REVIEWS

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### Nanoporous oxide electrodes for energy conversion and storage devices

Jin Wook Yang, Hee Ryeong Kwon, Jin Ho Seo, Sangwoo Ryu\* and Ho Won Jang\*





# RSC Applied Polymers

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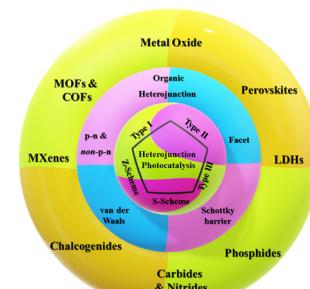


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**Recent advances in semiconductor heterojunctions: a detailed review of the fundamentals of photocatalysis, charge transfer mechanism and materials**

Aniket Balapure, Jayati Ray Dutta\*  
and Ramakrishnan Ganesan\*

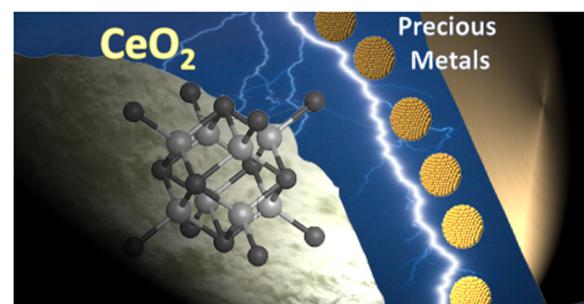


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**The role of ceria/precious metal interfaces in catalysis**

Michele Melchionna\* and Paolo Fornasiero\*

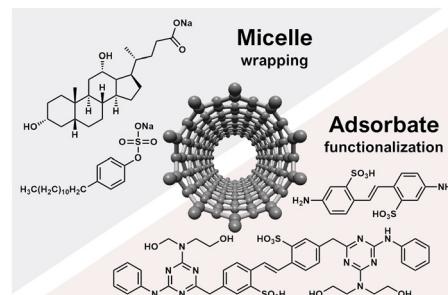


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**Dye adsorption-assisted colloidal dispersion of single-walled carbon nanotubes in polar solvents**

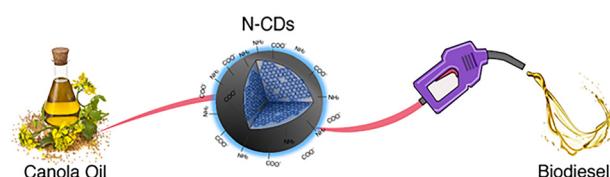
Akiho Horibe, Tomoko Murayama, Tsuyoshi Kawai and Yoshiyuki Nonoguchi\*



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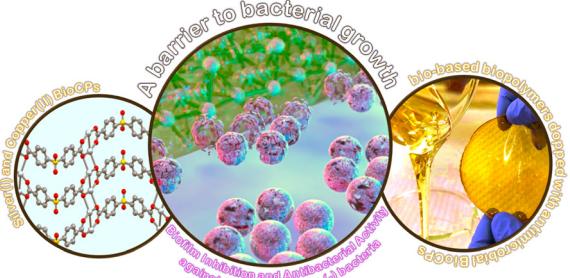
**Nitrogen-doped carbon dots in transesterification reactions for biodiesel synthesis**

Tayline V. de Medeiros, Alexia Macina, João P. de Mesquita and Rafik Naccache\*



## PAPERS

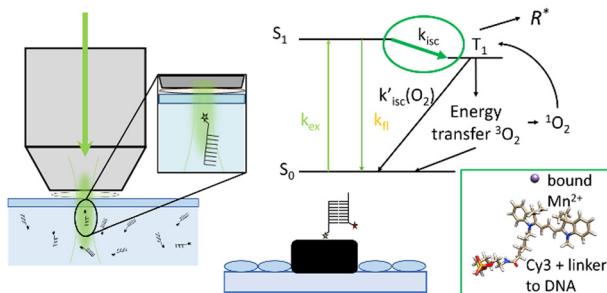
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## Sulfonyldibenzoate coordination polymers as bioactive dopants for polysaccharide films with antibacterial and antbiofilm properties

Tiago A. Fernandes, Filipa Macedo, Rafaela G. Cabral, Telma Guiu, Chris H. J. Franco, Paula Jorge, Ana Catarina Sousa, Vânia André, Nuno Cerca\* and Alexander M. Kirillov\*

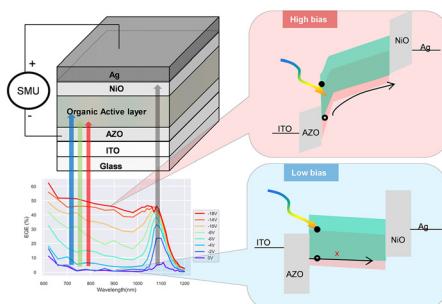
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## New buffer systems for photopainting of single biomolecules

Christoph Naderer, Heinrich Krobath, Dmitry Sivun, Georgii Gvindzhilia, Thomas A. Klar and Jaroslaw Jacak\*

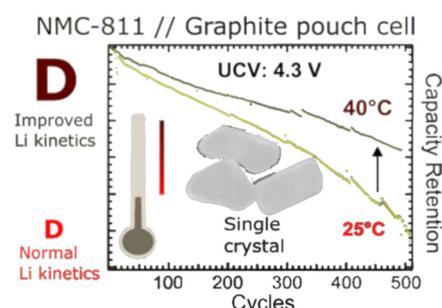
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## Bias switchable narrowband/broadband NIR organic photodetector fabricated with a scalable technique

Lai-Hung Lai,\* Wei-Hsiang Lin, Chin-Chuan Hsieh and Maria Antonietta Loi

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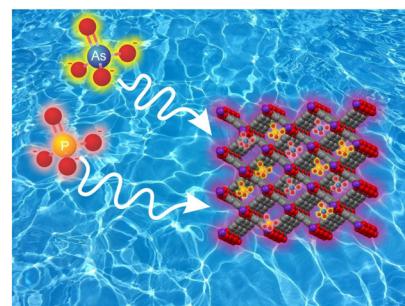


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**Al(III)-based MOF for the selective adsorption of phosphate and arsenate from aqueous solutions**

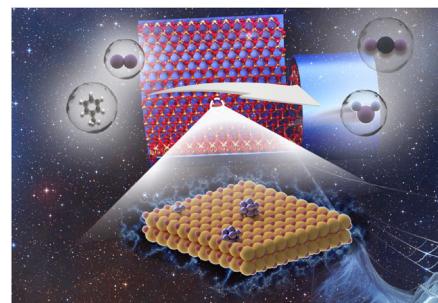
Juan L. Obeso, Herlys Viltres, Catalina V. Flores, Valeria B. López-Cervantes, Camilo Serrano-Fuentes, Amin Reza Rajabzadeh, Seshasai Srinivasan, Ricardo A. Peralta,\* Illich A. Ibarra\* and Carolina Leyva\*



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**Engineering Pt nanoclusters on CeO<sub>2</sub> surface with abundant point defects by *in situ* confined-domain encapsulation strategy for the catalytic elimination of VOCs**

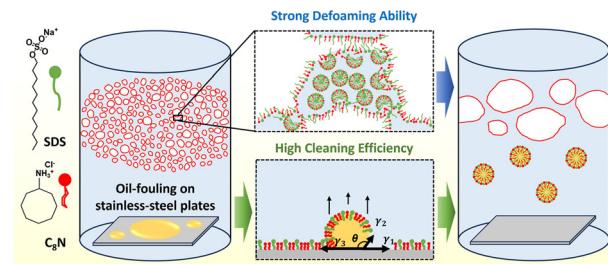
Siyi Ma, Fang Dong, Weiliang Han, Weigao Han and Zhicheng Tang\*



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**Highly efficient oil-fouling and foam removal achieved by surfactant mixed systems**

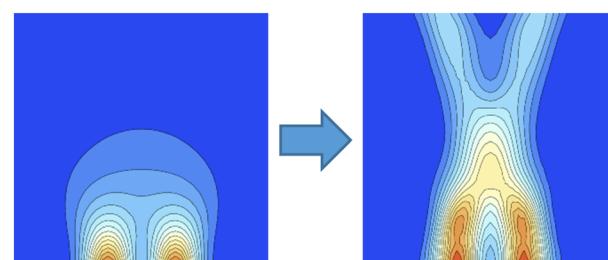
Zeyu Zhao, Tengda Wang, Jiling Yue, Yaxun Fan\* and Yilin Wang\*



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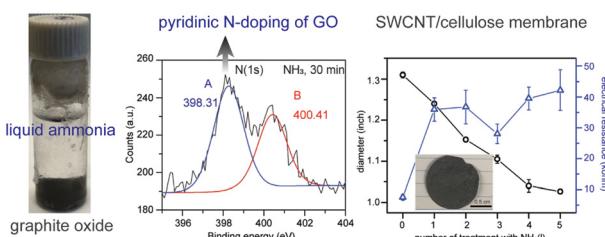
**Developing 3D computational models to capture the spatial, temporal and thermal behavior as laser beams propagate through photo-thermally responsive gels**

Victor V. Yashin, Fariha Mahmood, Kalaichelvi Saravanamuttu and Anna C. Balazs\*



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## Interactions between liquid ammonia and graphitic materials

Cheng-Wei Lin, Zhiyin Yang, Ailun Huang, Xueying Chang, Chenxiang Wang, Fan Yang, Chen Wei, Markus Thiel, Yuto Katsuyama, Lihua Jin, David Jassby and Richard B. Kaner\*

