

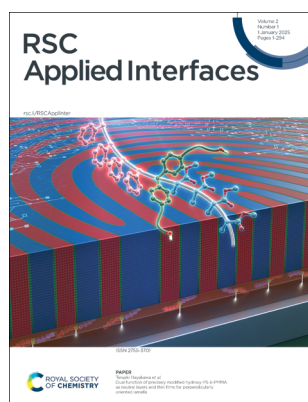
# RSC Applied Interfaces

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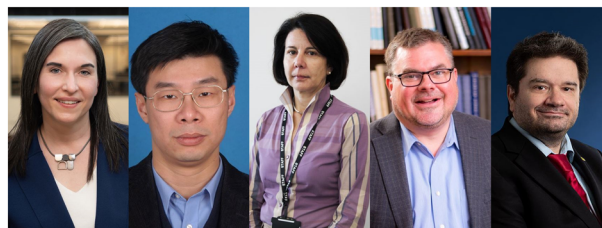
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Teruaki Hayakawa from  
*RSC Appl. Interfaces*,  
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### The first year of *RSC Applied Interfaces*: a retrospective

Shelley A. Claridge, Jianbin Huang, Serena Margadonna, Ryan Richards and Federico Rosei\*

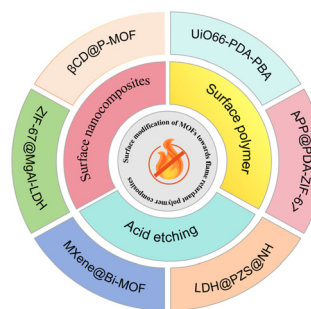


## REVIEWS

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### Surface modification of MOFs towards flame retardant polymer composites

Xiuhong Sun, Ye-Tang Pan,\* Wei Wang and Rongjie Yang





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Elemental answers



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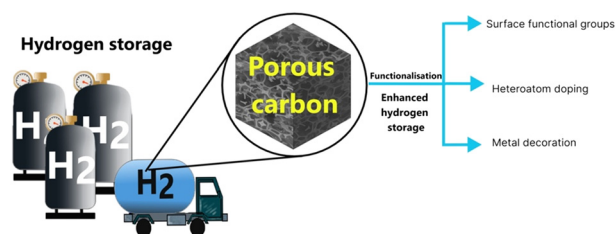


## REVIEWS

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**Porous carbons: a class of nanomaterials for efficient adsorption-based hydrogen storage**

Lila A. M. Mahmoud, Jemma L. Rowlandson, David J. Fermin, Valeska P. Ting\* and Sanjit Nayak\*

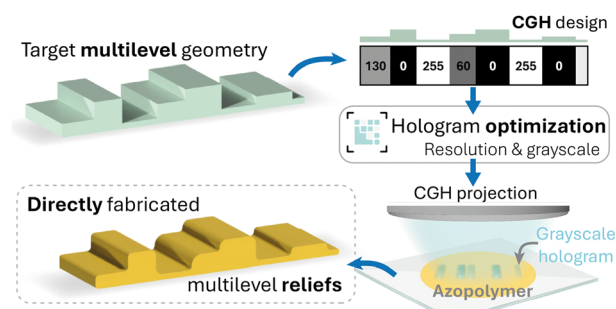


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**Multilevel azopolymer patterning from digital holographic lithography**

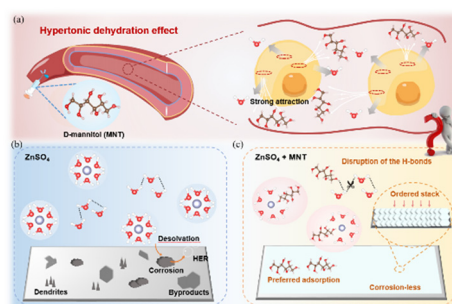
Marcella Salvatore, Francesco Reda, Fabio Borbone and Stefano Luigi Oscurato\*



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**A medicine-inspired hydroxyl-rich equimolar ZnSO<sub>4</sub>/D-mannitol electrolyte enables horizontally stacked Zn deposition for long-cycling aqueous batteries**

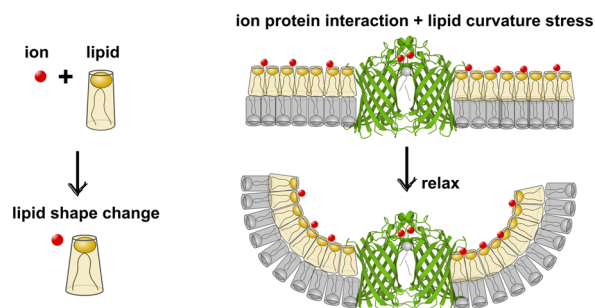
Jin Xiao, Chenbo Yuan, Cong Liu, Ximei Sun, Bing Cheng, Zitong Huang, Xiaowen Zhan\* and Lingyun Zhu\*



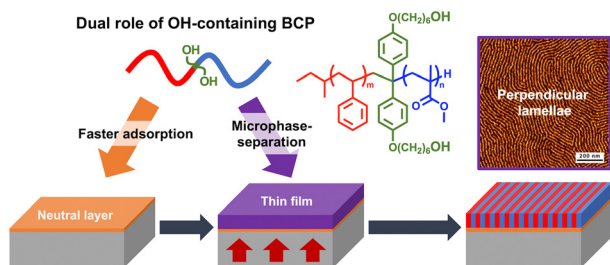
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**Metal ion cofactors modulate integral enzyme activity by varying differential membrane curvature stress**

Paulina Piller, Paul Reiterer, Enrico F. Semeraro and Georg Pabst\*



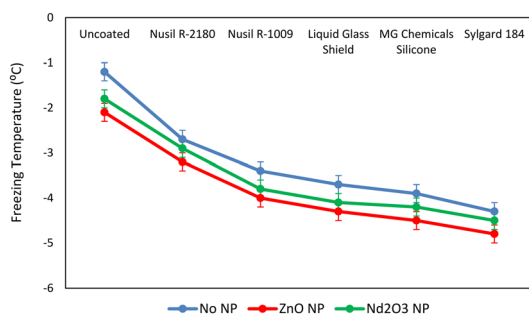
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### Dual function of precisely modified hydroxy-PS-*b*-PMMA as neutral layers and thin films for perpendicularly oriented lamella

Riku Mizusaki, Shinsuke Maekawa, Takehiro Seshimo, Takahiro Dazai, Kazufumi Sato, Kan Hatakeyama-Sato, Yuta Nabae and Teruaki Hayakawa\*

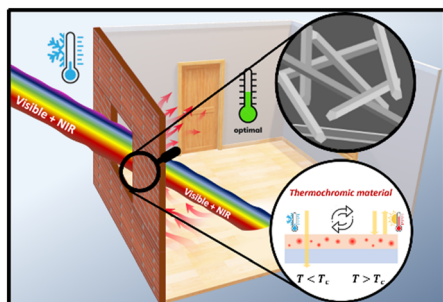
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### Influence of surface roughness and metal oxide nanoparticles on airframe with icephobic coatings

Kate Yeadon, Edward P. C. Lai,\* Xiao Huang and Naiheng Song

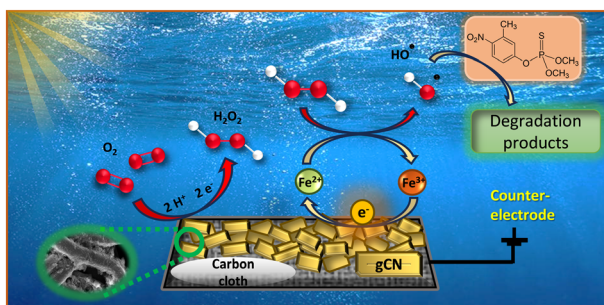
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### Low-emissivity fine-tuning of efficient VO<sub>2</sub>-based thermochromic stacks with silver nanowire networks

Amaury Baret,\* Ambreen Khan, Aline Rougier, Daniel Bellet and Ngoc Duy Nguyen

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### Defect-engineered graphitic carbon nitride on carbon cloth supports for the photoelectrocatalytic degradation of organophosphate pesticides

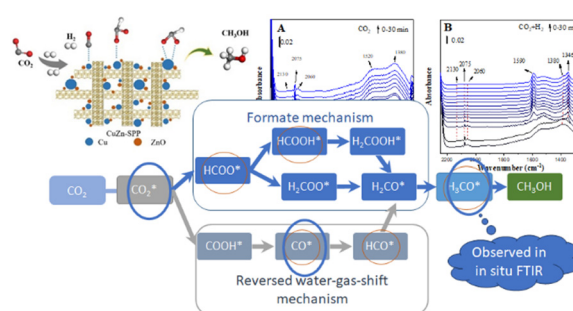
Giacomo Marchiori, Roberta Seraglia, Gian Andrea Rizzi, Chiara Maccato,\* Mattia Benedet, Emanuela Callone, Sandra Dirè, Alberto Gasparotto and Davide Barreca



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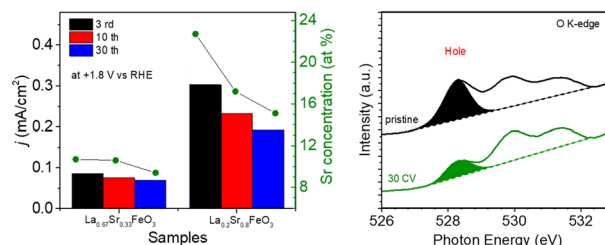
Xiaolong Liu, Guangying Fu,\* Qiaolin Lang, Ruiqin Ding, Qiangsheng Guo, Ke Liang, Shuman Gao, Xiaobo Yang and Bing Yu\*



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### Evaluating the electronic structure and stability of epitaxially grown Sr-doped LaFeO<sub>3</sub> perovskite alkaline O<sub>2</sub> evolution model electrocatalysts

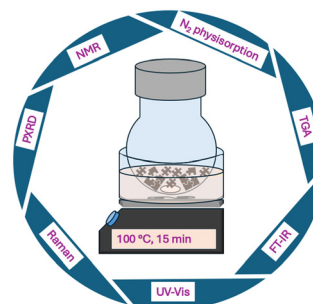
Chuanmu Tian, Clément Maheu, Xiaochun Huang, Freddy E. Oropeza, Márton Major, Joachim Brötz, Marcus Einert, Wolfgang Donner, Kelvin Hongliang Zhang and Jan P. Hofmann\*



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### Synthesis of a mixed-linker Ce-UiO-67 metal-organic framework

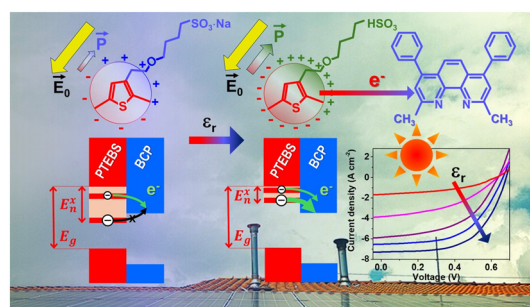
V. Finelli, G. Mastronardi, N. G. Porcaro, M. Signorile, F. Bonino, P. Á. Szilágyi and S. Bordiga\*



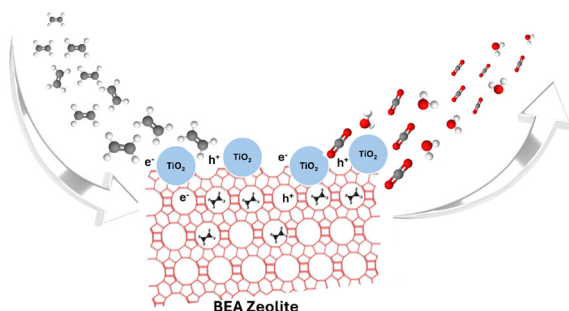
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### Dielectric-constant effects on the exciton dissociation and photovoltaic conversion efficiency of water-soluble green conducting polymers

Xin Wei, Daniel Williams and Giovanni Fanchini\*



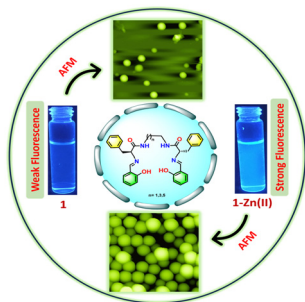
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### On the characterization and performance of highly dispersed TiO<sub>2</sub> nanoparticles onto BEA zeolite in the continuous gas-phase photooxidation of ethylene

Ricardo Ferreira, Sergio Morales-Torres, Luisa M. Pastrana-Martinez, Francisco J. Maldonado-Hódar, João Paulo Lourenço, João Miguel Silva, Isabel M. João, Maria Filipa Ribeiro and Auguste Fernandes\*

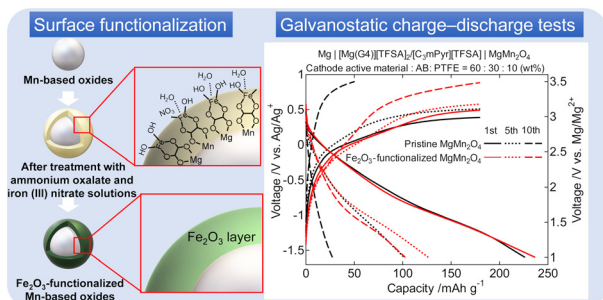
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### Salicylaldimine-functionalized L-phenylalanine-based pseudopeptides: zinc-instructed conformational tuning of self-assembled nanostructures

Kamlesh Kumar Nigam, Surabhi Asthana and Mrituanjay D. Pandey\*

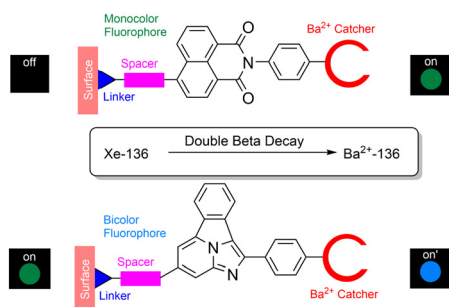
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### Oxalate-assisted Fe<sub>2</sub>O<sub>3</sub> surface functionalization of nanosized MgMn<sub>2</sub>O<sub>4</sub> and $\alpha$ -MnO<sub>2</sub> cathodes for rechargeable magnesium batteries

Masanao Ishijima,\* Arisa Omata, Kiyoshi Kanamura, Toshihiko Mandai, Xiatong Ye, Tetsu Ichitsubo and Koichi Kajihara\*

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### Supramolecular chemistry in solution and solid-gas interfaces: synthesis and photophysical properties of monocolour and bicolor fluorescent sensors for barium tagging in neutrinoless double beta decay

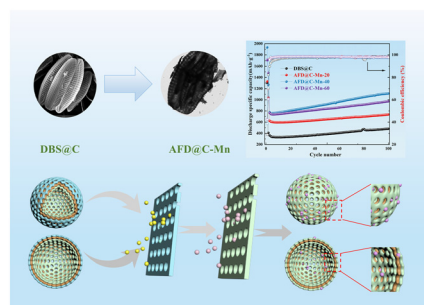
F. Auria-Luna, F. W. Foss Jr., J. Molina-Canteras, I. Velazco-Cabral, A. Marauri, A. Larumbe, B. Aparicio, J. L. Vázquez, N. Alberro, I. Arrastia, V. S. Nacianceno, A. Colom, C. Marcuello, B. J. P. Jones, D. Nygren, J. J. Gómez-Cadenas, C. Rogero, I. Rivilla,\* F. P. Cossío\* and the NEXT collaboration



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### A diatom frustule-based $\text{Mn}_2\text{SiO}_4@\text{C}@\text{SiO}_2$ multilayer-structure composite as a high-performance anode electrode material for lithium-ion batteries

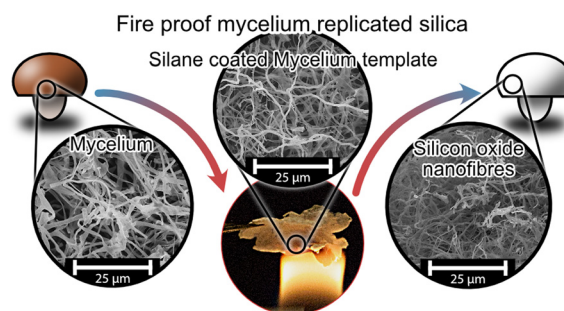
Shimao Sun, Hongchang Liu,\* Yuxin Chen, Hongwei Liu, Rongda Yu, Xingfu Zheng, Yunchao Li, Jian Zhu, Jinlan Xia and Jun Wang



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### Silicon oxide nanofibers using fungi mycelium as template material/from water purification to space insulation

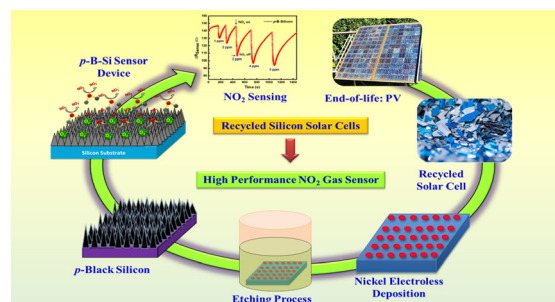
Björn K. Birdsong,\* Antonio J. Capezza, Maryam Nejati, Anton Bjurström, Yuanyuan Li, Amparo Jiménez-Quero\* and Richard T. Olsson\*



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### Recycled silicon solar cell-derived nanostructured p-black silicon device for high performance $\text{NO}_2$ gas sensor applications

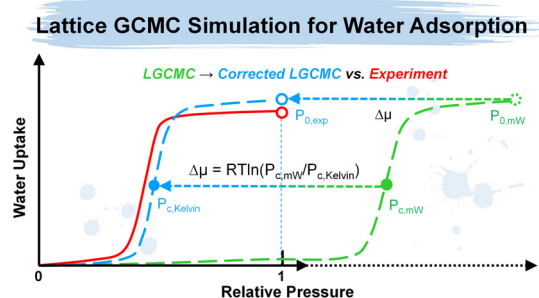
Mahaboobbatcha Aleem, Ramakrishnan Vishnuraj and Biji Pullithadathil\*



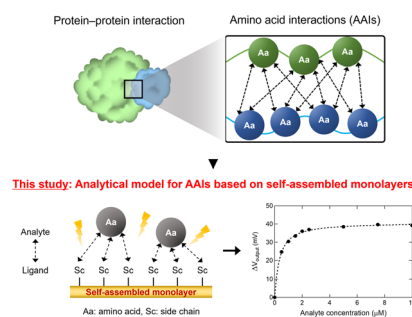
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### High-efficiency prediction of water adsorption performance of porous adsorbents by lattice grand canonical Monte Carlo molecular simulation

Zhilu Liu, Wei Li and Song Li\*



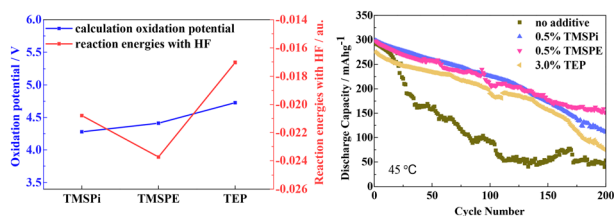
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## Analysis of interactions between amino acids and monolayers of charged side chains

Akira Nomoto, Kentaro Shiraki and Tsukuru Minamiki\*

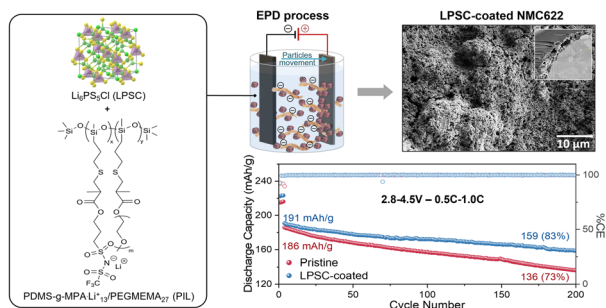
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## A phosphite derivative with stronger HF elimination ability as an additive for Li-rich based lithium-ion batteries at elevated temperatures

Xiangzhen Zheng, Tao Huang, Ying Pan, Yongwei Chen, Mingdeng Wei\* and Maoxiang Wu\*

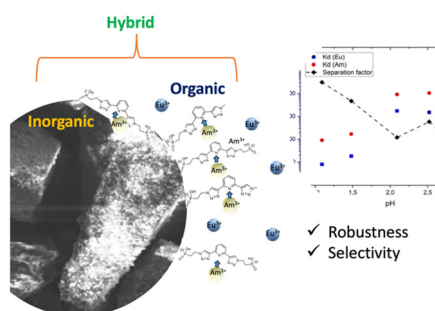
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Inbar Anconina and Diana Golodnitsky\*

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O.-M. Hiltunen, T. Suominen, J. Aho, M. Otaki, A. Zupanc, S. Hietala, G. Silvennoinen and R. Koivula

