

RSC Applied Interfaces

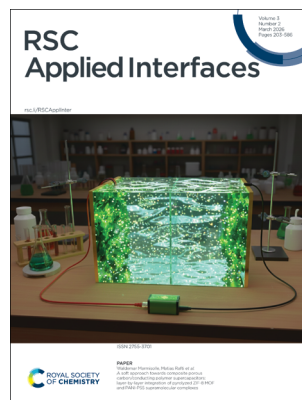
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N/A CODEN RAISCD 3(2) 203–586 (2026)



Cover
See I-Chung Cheng, Jian-Zhang Chen *et al.*, pp. 340–351.
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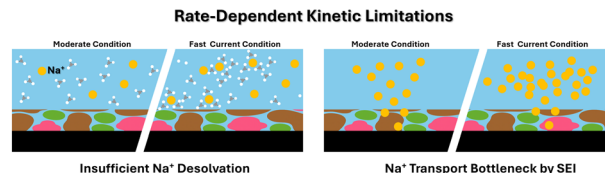
Inside cover
See Waldemar Marmisolle, Matias Rafti *et al.*, pp. 352–363.
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REVIEWS

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Fast-charging sodium metal anodes: challenges, degradation mechanisms, and interphase engineering strategies

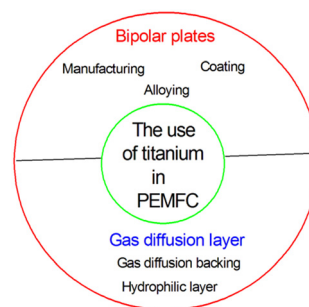
Yeongjun Oh, Yuxuan Zhang, Jinwook Baek, Minyoung Kim and Sunghwan Lee*



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Titanium and titanium compounds in the bipolar plate/gas diffusion layer system of polymer electrolyte membrane fuel cells: manufacturing methods, surface treatments and properties

Ermete Antolini



Environmental Science: Atmospheres

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Fundamental questions
Elemental answers



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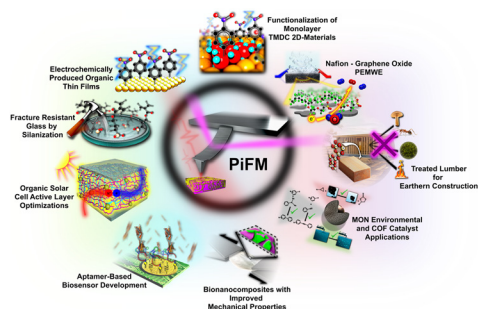


REVIEWS

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Photo-induced force microscopy for nanometer surface characterization of functional interfaces

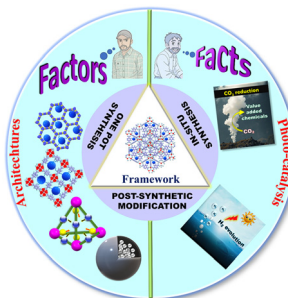
Maziar Jafari, Amir Khojastehnezhad and Mohamed Siaj*



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Framework-stabilized metal nanostructures for next-generation photocatalysis

Bikash Chandra Dhal, Debadutta Samal, Debashis Acharya, Subrat Swain, Basudeb Dutta, Srikanta Palei, A. K. Tyagi, Puspanjali Sahu* and Rojalin Sahu*

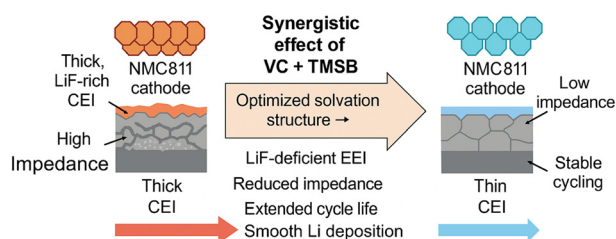


COMMUNICATIONS

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Enhanced cycling stability of Ni-rich Li-metal cells enabled by dual vinylene carbonate and tris(trimethylsilyl)borate electrolyte additives

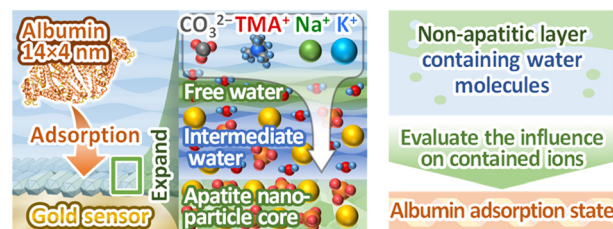
Zishuo Zhao, Yunyuan Lu, Yuwei Zhu, Dennis Nordlund, Sooyeon Hwang* and Linqin Mu*



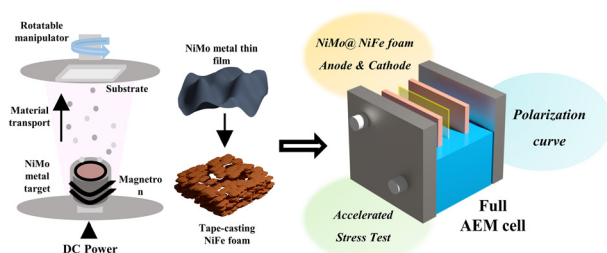
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Surface-interactive control of apatite nanoparticles with albumin

Kazuto Sugimoto, Ryota Akutsu, Zizhen Liu, Shimon Konosu and Motohiro Tagaya*



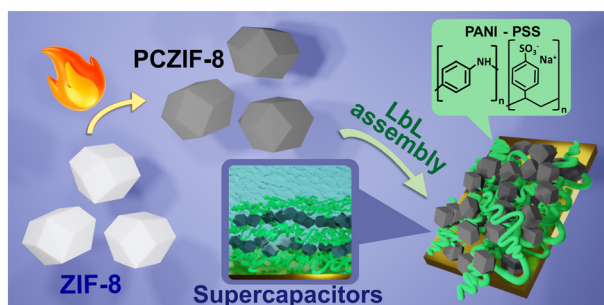
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NiMo sputter-deposition on tape-casted NiFe foam for anion exchange membrane water electrolysis

Shuo-En Yu, I-Chung Cheng,* I-Chun Cheng and Jian-Zhang Chen*

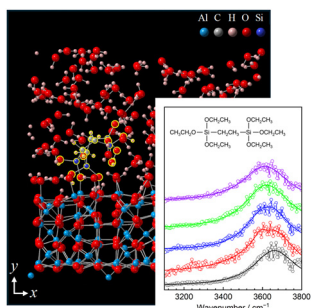
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A soft approach towards composite porous carbon/conducting polymer supercapacitors: layer-by-layer integration of pyrolyzed ZIF-8 MOF and PANI-PSS supramolecular complexes

Ana Paula Mártire, Omar Azzaroni, Waldemar Marmisolle* and Matias Rafti*

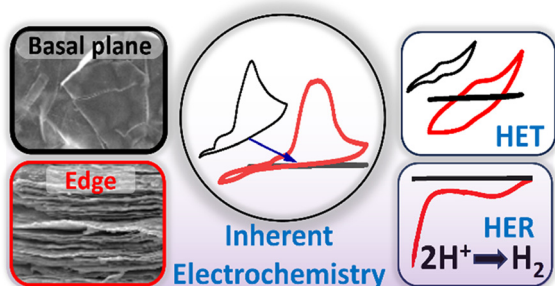
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Adhesion strength of aluminium surfaces coated with silane coupling protective layers *via* acid-base interactions

Kumpei Kobori, Shuji Ogata,* Shintaro Yamamoto, Yusuke Takahashi and Takayuki Miyamae*

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Edge vs. basal plane of $\text{Ti}_3\text{C}_2\text{T}_x$ MXene: enhanced inherent electrochemistry, electron transfer, and catalytic activity at the edge

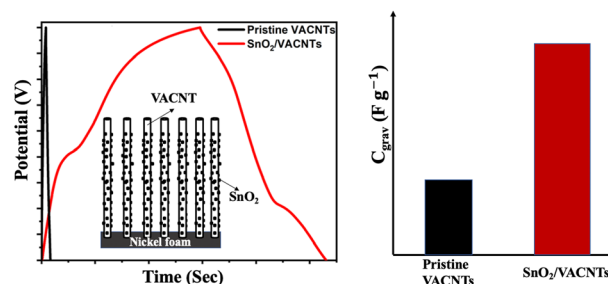
Shubham B. Upadhye, Gopal K. Pradhan and Pranati Nayak*



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Pseudocapacitive enhancement of VACNTs with SnO₂ for next-generation supercapacitors

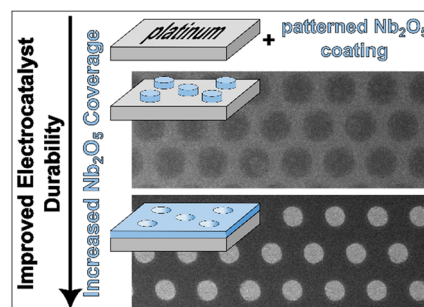
Chinaza E. Nwanno, Arun Thapa, John Watt, Winson Kuo and Wenzhi Li*



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Fine-tuning the surface coverage of niobium oxide on platinum catalysts and its impact on the oxygen reduction reaction

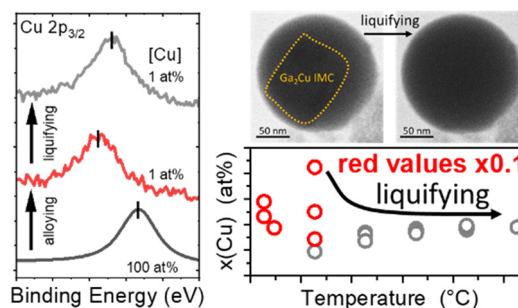
Annabelle M. K. Hadley, Jennie I. Eastcott, Abhinav Parakh, Michael T. Y. Paul, Matthew W. Bilton, Austin W. H. Lee and Byron D. Gates*



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Surface properties of Ga–Cu based liquid-metal alloys: impact of Cu dilution, topography, and alloy liquifaction

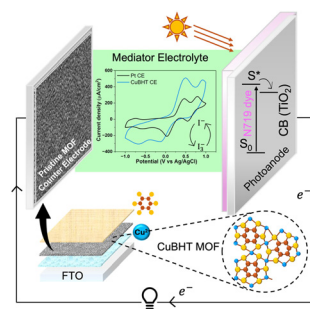
Tzung-En Hsieh,* Michael S. Moritz, Andreas Molkner, Christoph Wichmann, Johannes Frisch, Julien Steffen, Caiden J. Parker, Vaishnavi Krishnamurthi, Torben Daeneke, Hans-Peter Steinruck, Andreas Gorling, Christian Papp and Marcus Bar*



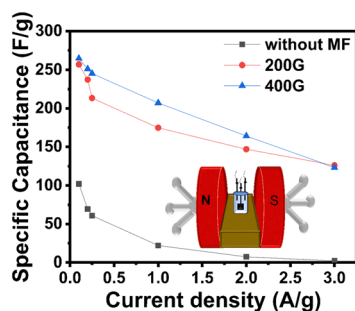
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Pristine conductive metal–organic framework film as a cost-effective counter electrode for dye-sensitized solar cells

Alisha Gogia, Navdeep Kaur, Cheng-Yu Lai and Daniela Radu*



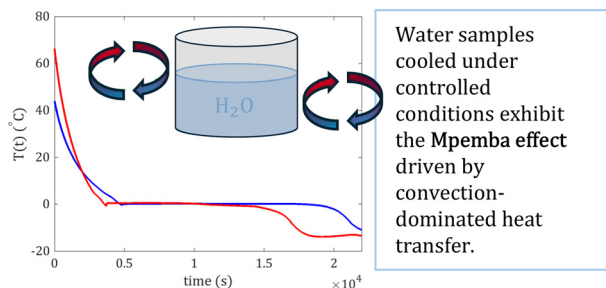
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Magnetic-field-induced enhanced electrochemical energy storage performance of nickel cobalt phosphide

Anuradha Yadav, Erdenebayar Baasanjav, Mihir Sahoo, Kalpataru Pradhan, Sang Mun Jeong,*
Manoj Kumar Singh* and Chandra Sekhar Rout*

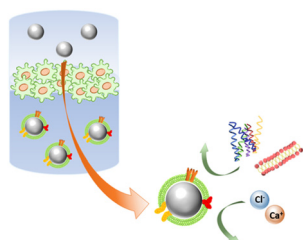
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An experimental investigation of the Mpemba effect

Anna Janni,* Santiago Botero Ampudia and E. Dan Dahlberg

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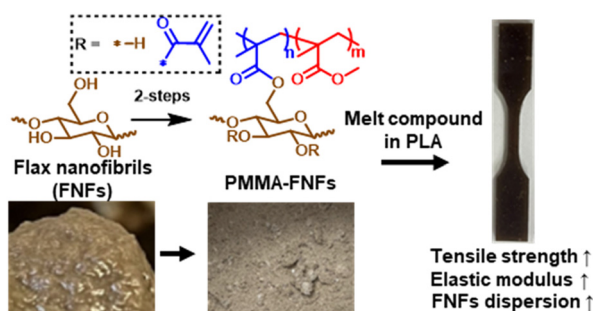


Silver nanoparticles covered with biomembrane

Enhancing the stability of silver nanoparticles in biomimetic environments through biomembrane hybridization

Tatsuhiko Yokoyama,* Hiroyuki Harada, Shin-ichi Sawada, Kazunari Akiyoshi, Hikaru Takaya, Ryoosuke Mizuta and Yoshihiro Sasaki

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Strengthening poly(lactic acid) composites with poly(methyl methacrylate) functionalized flax nanofibrils

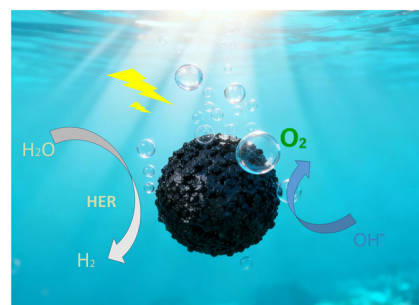
Abigail Mulligan, Ahmad A. L. Ahmad, Peter V. Kelly, Siamak Shams Es-haghi, Peng Cheng, Amber M. Hubbard, Kathryn Slavny, Meghan E. Lamm, Sanjita Wasti and William M. Gramlich*



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FeCoNiMnMo high-entropy alloy/carbon microspheres constructed *via* MOF-derived spray-drying granulation for enhanced oxygen evolution reaction

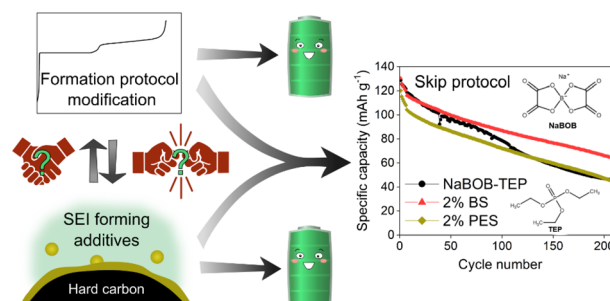
Tong Wu, Ziyu Yang, Zhilin Chen, Rui Wang, Ch. Venkata Reddy, Jaesool Shim* and Hui Tang*



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Synergy or interference? The effect of electrolyte additives and formation protocols combined in sodium-ion batteries

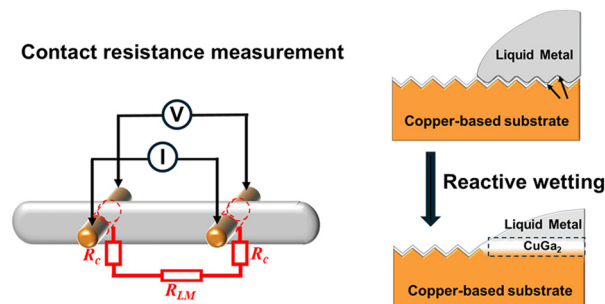
Katja Lahtinen,* Paul Latis, Lucas Bruylants and Guiomar Hernández*



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Study on electrical contact of a solid-liquid interface between a copper-based electrode and liquid metal

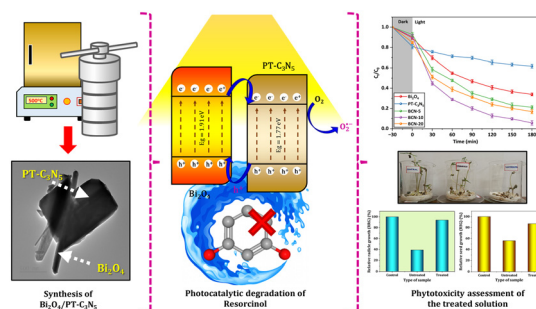
Jiasheng Zu, Yuntao Cui,* Chunwei Li, Xueqing Chen and Zhongshan Deng*



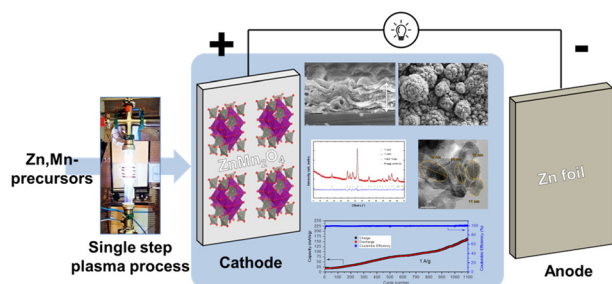
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Quasi-1D/3D Bi₂O₄/phase-tuned C₃N₅ type-II heterostructure for the visible-light-driven photocatalytic degradation of resorcinol in wastewater: insights into the inhibitory effects of matrix interferences and phytotoxicity assessment

Adarsh Singh, Balbir, Suneel Kumar Srivastava, Amit Bhatnagar and Ashok Kumar Gupta*



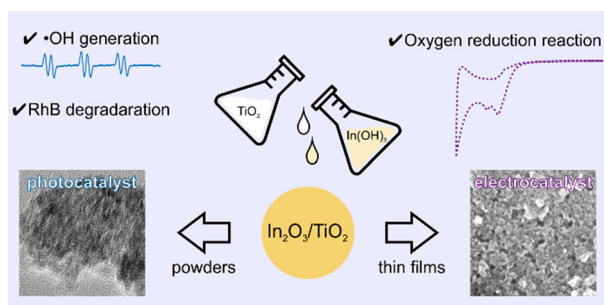
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Facile one-step elaboration of nanostructured ZnMn_2O_4 thin films by a plasma process as a high-performance rechargeable zinc-ion battery cathode

Lounis H. Bekkar, Alex Lemarchand, Noël Girodon-Boulandet, Cyrille Bazin, Mathieu Frégnaux, Hubert Perrot and Mehrdad Nikravech*

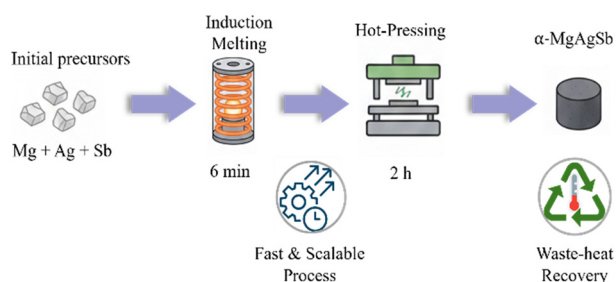
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Dual-function catalysis: linking photo- and electrocatalytic behavior in $\text{In}_2\text{O}_3/\text{TiO}_2$ composites

Hanna Maltanova, Nikita Belko,* Pauliina Nevalainen, Niko M. Kinnunen, Konstantin Tamarov, Jani O. Moilanen, Jari T. T. Leskinen, Vesa-Pekka Lehto and Polina Kuzhir

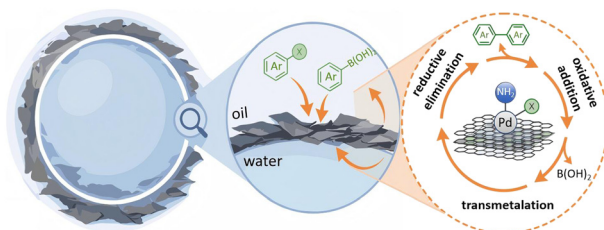
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Novel fast synthesis route for $\alpha\text{-MgAgSb}$ thermoelectric materials

Beatriz A. Santos,* Ana I. de Sá, Paulo Luz, Filipe Neves, Johannes de Boor and António P. Gonçalves

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Utilizing a Pickering emulsion for the Suzuki-Miyaura coupling with an amine-coordinated Pd catalyst

Mingshuang Li, Junhao Huang, Xing-Bao Wang and Yuanyuan Shan*



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Constructing an efficient NiCu single-atom alloy towards acetylene semi-hydrogenation

Xi Zhang, Peng Yin,* Kunze Xue, Tianwei Song, Haiwei Liang and Huan Yan*

