RSC Applied Interfaces

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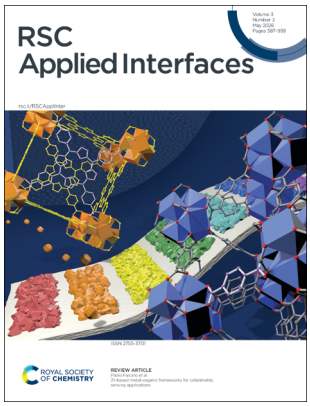

Cover
See Paolo Falcaro *et al.*, pp. 597–615.
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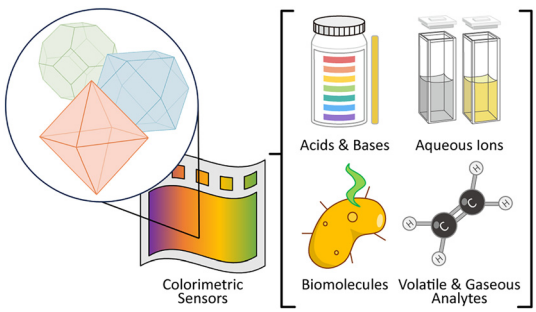
Zr-based metal–organic frameworks for colorimetric sensing applications

Xinhao Li, Sergey M. Borisov, Francesco Carraro and Paolo Falcaro*



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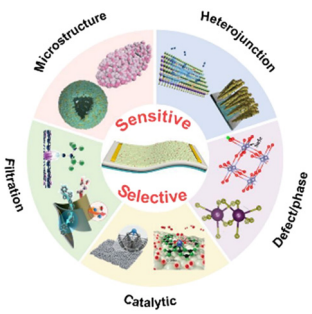
Materials design strategies for semiconducting metal-oxide chemiresistive gas sensors: a review

Maosong Tian, Yufan Wu, Zhihao Zhao, Zhe Chen, Nansong Zhu and Xiangyu Jiang*



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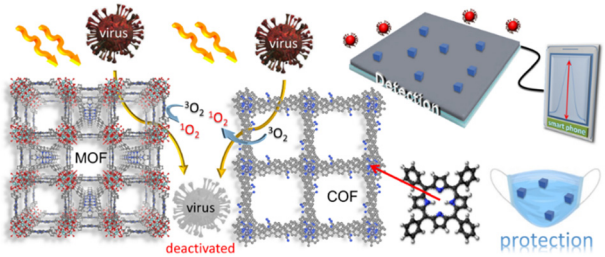
Sensor and protection technologies against viruses using porphyrin-based MOFs and COFs

Pierre D. Harvey*



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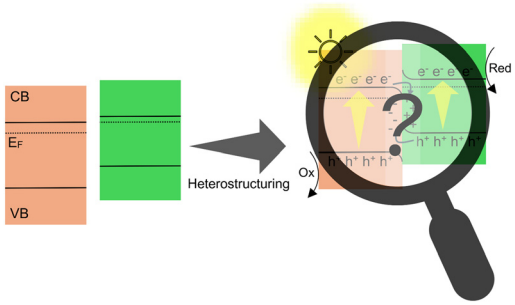
Important but often overlooked issues in heterojunction photocatalysts

Hanggara Sudrajat,* Ari Susanti and Muharani Asnal



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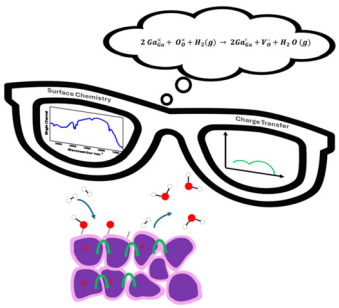
Unravelling chemical pathways of H_2 on Ga_2O_3 surfaces with spectro-electrochemistry

Krishna Teja Valeti, Kazi Rifat Bin Rafiq, William A. Callahan, Dino Klotz, Andriy Zakutayev, Ryan O'Hayre and Anna F. Staerz*



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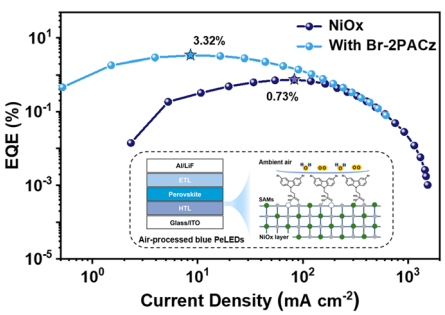
Self-assembled monolayer modified nickel oxide surface for air-processed blue perovskite light-emitting diodes

Jiandong Wu, Yujie Wang, Fankai Lin, Chaoran Ni, Shuhao Xiong, Miao Zhang, Hongyue Wang* and Hongqiang Wang*



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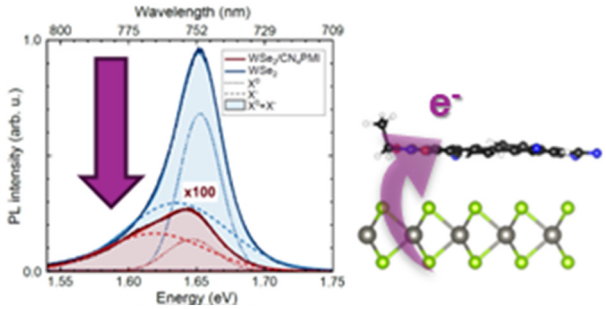

Photoluminescence quenching in WSe_2 *via* p-doping induced by functionalized rylene dyes

Ana M. Valencia, Theresa Kuechle, Maximiliam Tomoscheit, Sarah Jasmin Finkelmeyer, Olga Utismenko, Kalina Peneva, Martin Presselt, Giancarlo Soavi and Caterina Cocchi*

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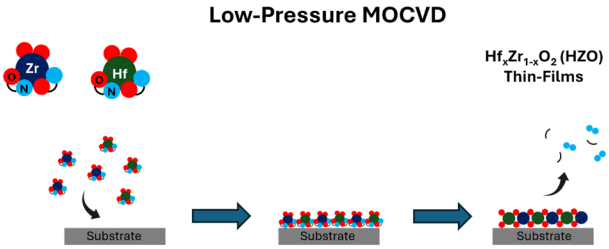

$Hf_xZr_{1-x}O_2$ thin films from chemical vapor deposition of fluorinated β-ketoenamine precursors

Billy Oktora Abdilah Fauzi, Andreas Lichtenberg, Corinna Hegemann, Thomas Fischer, Marcel Schmickler, Harish Parala, Anjana Devi and Sanjay Mathur*

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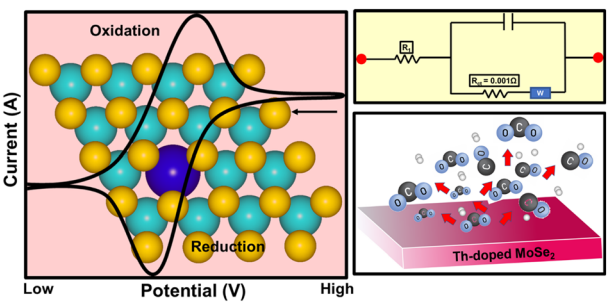

Electrocatalytic oxidation of methanol: role of thorium (Th) doping in $MoSe_2$

Pooja, Sarita Yadav, Ravinder Pawar* and Rajeev Ahuja*

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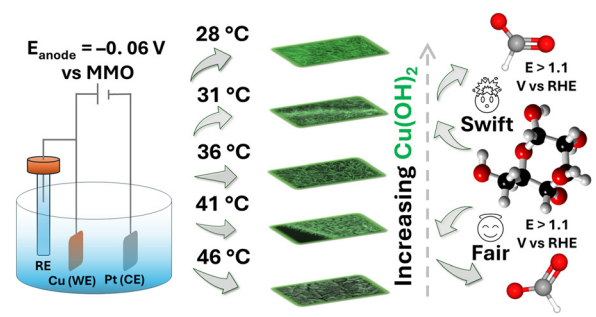

Dictating the CuO : $Cu(OH)_2$ ratio and microstructural evolution by varying the temperature of anodization of Cu for the OER-masking GOR

Neha Clare Minj, Bhavana Santhoshkumar Deepa, Chittela Pavan Kumar, Balakumaran Kamaraj, Thandavarayan Maiyalagan and Anantharaj Sengeni*

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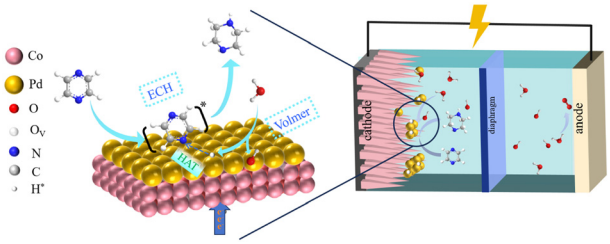
Bifunctional Pd sites on Pd_4/Co_3O_4 nanowires for high selectivity of pyrazine electrocatalytic hydrogenation with water as the hydrogen source

Fangcheng Qiu, Siyi Chen, Xin Zheng, Hanyu Li, Bowen Chen, Shaowen Tan, Xue Han and Shengping Wang*



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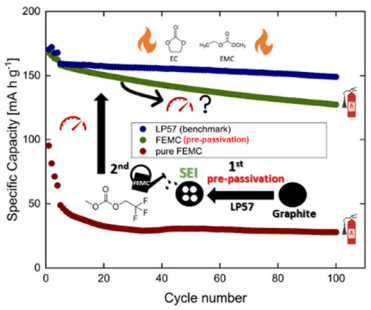
Investigating interfacial chemistry for pre-passivated lithium-ion battery electrodes employing non-flammable methyl(2,2,2-trifluoroethyl)carbonate electrolytes

Lasse Dettmann, Florian Gebert and Andrew J. Naylor*



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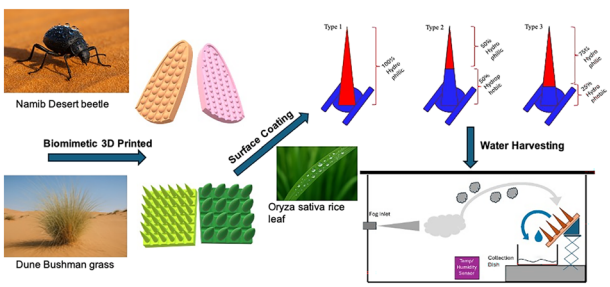
Biomimetic engineering for water harvesting: 3D printed solutions for arid regions

Henry Apsey, Donald Hill and Shirin Alexander*



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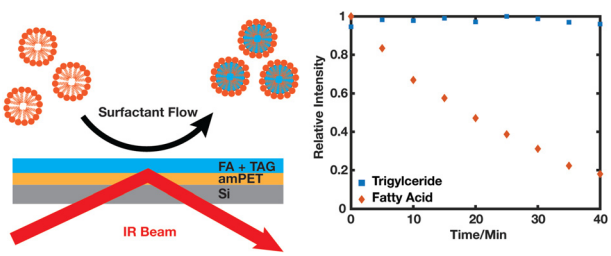
***In situ* monitoring of lipid removal from model fabric surfaces**

James A. Barclay, Lydia G. Smith, Dalila Di Leva, Silvia Ruscigno, Clare S. Mahon and Andrew Beeby*



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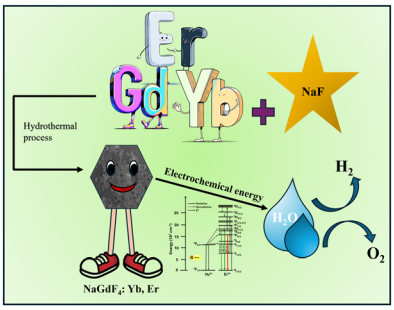

Bifunctional $NaGdF_4$:Yb^{3+}/Er^{3+} upconversion nanoparticles for efficient overall water splitting

Soumantika Jana, Debika Gogoi, Neha Patel, Bo-Yan Feng, Jeffrey C. S. Wu* and Rakesh K. Sharma*

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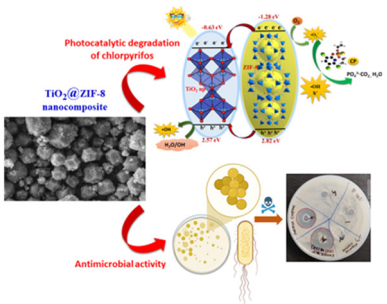

Solar light driven type-II heterojunction TiO_2@ZIF-8 nanocomposite for sustainable chlorpyrifos detoxification: physicochemical insights, mineralization pathways and antibacterial performance

Subhashree Mohanty, Bibeka Nanda Marai and Sushanta Kumar Badamali*

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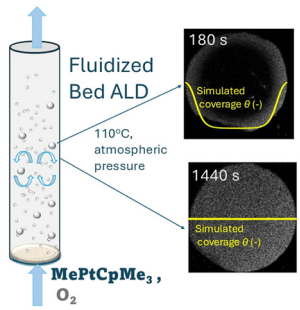

From egg-shell to uniform distribution of platinum by atomic layer deposition on mesoporous alumina spheres: experiments and modeling

Christine Gonsalves,* Jänis Järvilehto, Saeed Saedy, Jorge A. Velasco, Thomas Grehl, Philipp Brüner, Niko Heikkinen, Juha Lehtonen, J. Ruud van Ommen and Riikka L. Puurunen*

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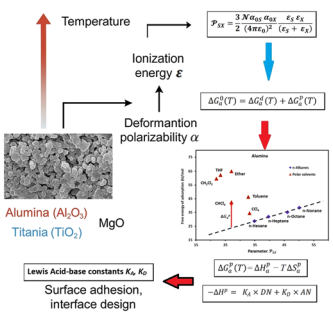

Effect of temperature dependence of deformation polarizability and ionization energy of solvents on surface properties of solid materials

Tayssir Hamieh*

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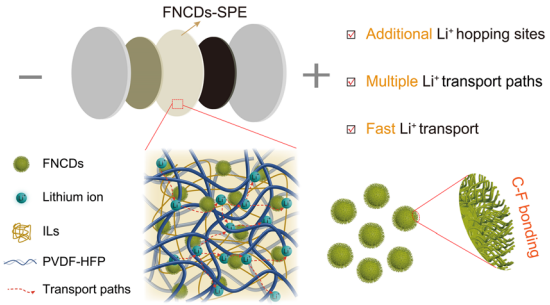
Multifunctional fluorine–nitrogen modified carbon quantum dots for enhanced solid polymer electrolytes toward solid-state lithium batteries

Yang Wu and Wenbo Yue*



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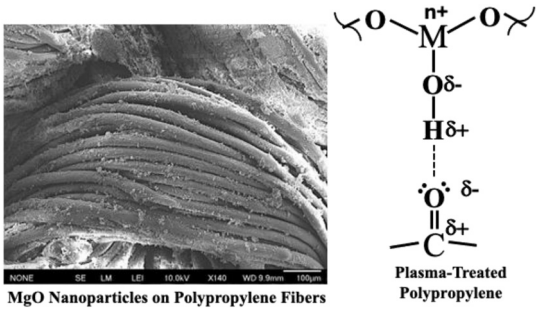
Open-air plasma treatment of polypropylene fabrics for enhanced metal oxide nanoparticle adhesion: the effect of oxide acid–base character

Owen C. Grimm, Saurabh Karande and James E. Whitten*



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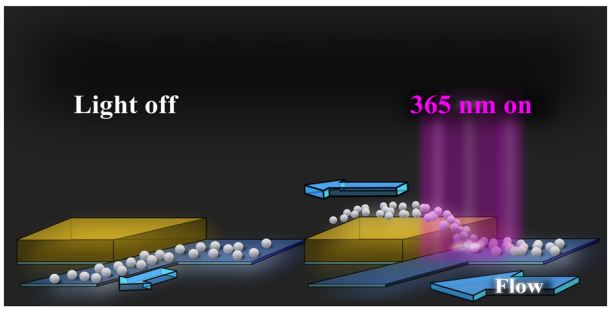
Phototunable hopping of microparticles enables surface-selective continuous separation *via* microfluidics

Fabian Rohne, Daniela Vasquez Muñoz, Yulia Gordievskaya, Cevin Braksch, Isabel Meier, Anjali Sharma, Sarah Loebner, Anne Nitschke, Nino Lomadze, Andreas Taubert, Svetlana Santer and Marek Bekir*



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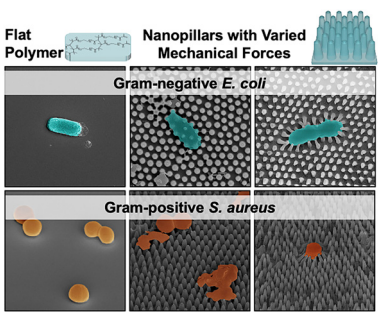
Stiffness-driven modulation of bactericidal behavior in nanostructured polymer thin films

Ruwen Tan, Emma Thomas, Nicolas Marzolini and Yeongseon Jang*



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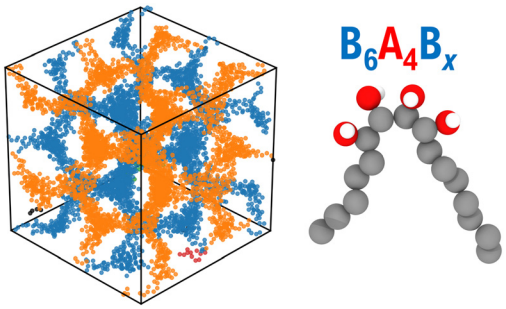

Stable double gyroid network phases in asymmetric linear triblock amphiphiles

Daoyuan Li, Mahesh K. Mahanthappa, Timothy P. Lodge* and J. Ilja Siepmann*

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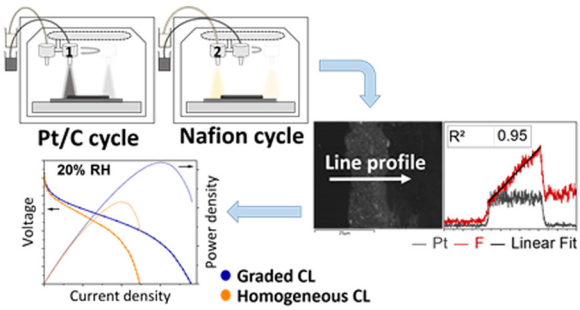

Interfacial control as a strategy for advanced catalyst layer architectures in PEMFCs

Emanuele Magliocca, Shangwei Zhou, Dan J. L. Brett and Thomas S. Miller*

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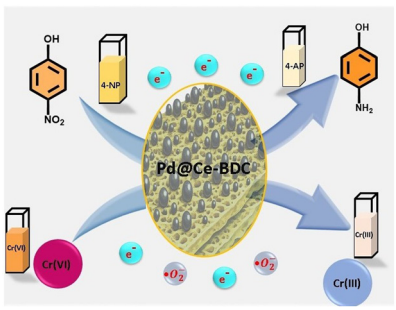

Pd@Ce metal organic framework for dual reduction of nitrophenols and chromium(VI)

Niharika Das, Anulipsa Priyadarshini, Saraswati Soren, Malay Kumar Rana, Dipankar Singha, Bikash Chandra Dhal, Subrat Swain, Jagannath Panda, Daray Soren and Rojalin Sahu*