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# RSC Applied Interfaces

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**Cover**
See Hiroshi Yabu *et al.*, pp. 435–442.
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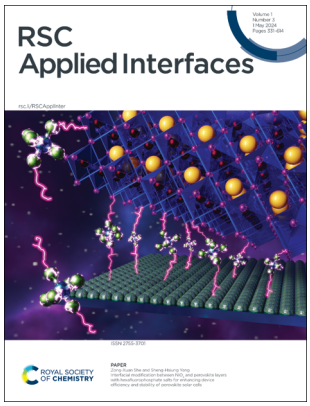


**Inside cover**
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## REVIEW

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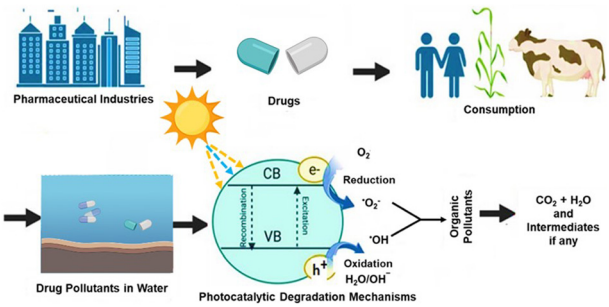
**Recent advances in removal of pharmaceutical pollutants in wastewater using metal oxides and carbonaceous materials as photocatalysts: a review**

Suneel Kumar Srivastava*

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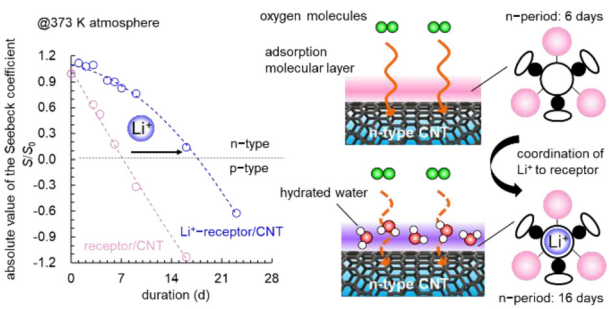
**Prolonging the n-type conduction of thermoelectric carbon nanotubes exposed to warm air by mixing hydrated water into the adsorbed dopant layers composed of $Li^+$-receptor molecules**

Shinichi Hata,* Chika Nakagawa, Ayako Taketoshi, Toru Murayama, Tamao Ishida, Yukou Du, Yukihide Shiraishi* and Naoki Toshima



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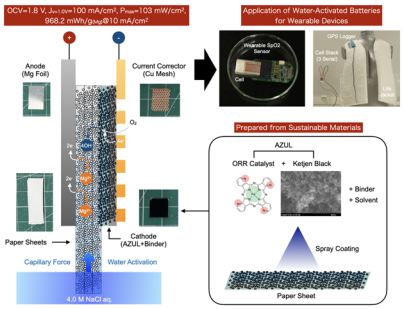
**Rare-metal-free high-performance water-activated paper battery: a disposable energy source for wearable sensing devices**

Kosuke Ishibashi, Shimpei Ono, Jun Kamei, Koju Ito and Hiroshi Yabu*

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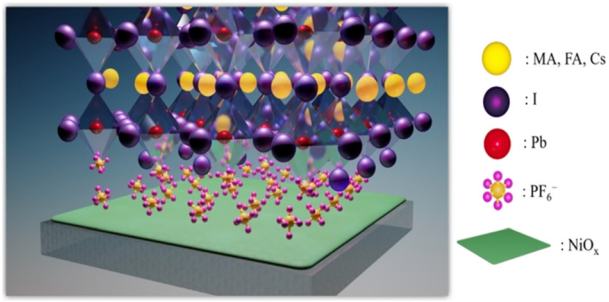
**Interfacial modification between $NiO_x$ and perovskite layers with hexafluorophosphate salts for enhancing device efficiency and stability of perovskite solar cells**

Zong-Xuan She and Sheng-Hsiung Yang*

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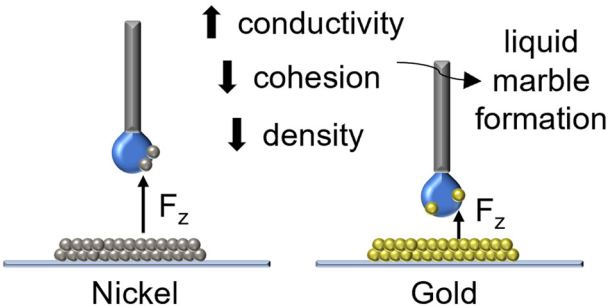
**Impact of high conductivity on particle transport to liquid droplets for liquid marble formation**

Casey A. Thomas,* Benjamin T. Lobel, Peter M. Ireland, Erica J. Wanless, Olivier J. Cayre and Grant B. Webber

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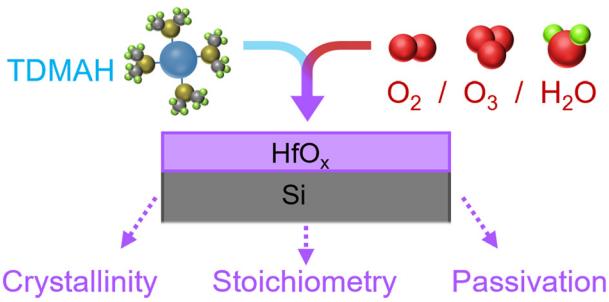

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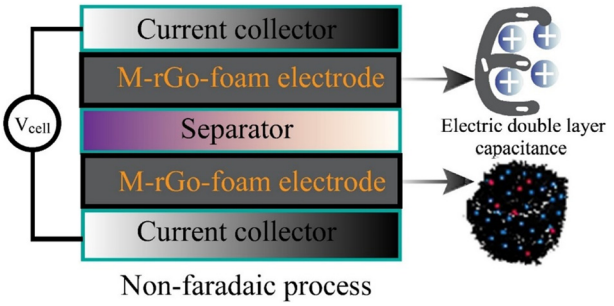


**A metallated graphene oxide foam with a carbon nanotube shell for an enhanced capacitance device**

Rahul Patil, Lingaraj Pradhan, Babasahab M. Matsagar, Rahul R. Salunkhe, Kevin C.-W. Wu, Bikash Kumar Jena* and Saikat Dutta*

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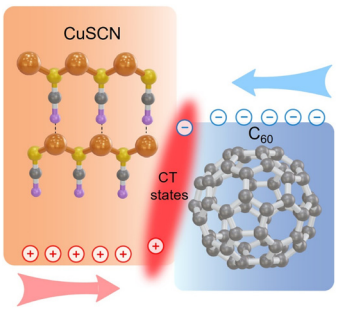


**Solution treatment controls charge-transfer states and energy-level alignment at hybrid CuSCN-organic interfaces**

Yingying Li, Zhewei Chen, Wenjie Zhou, Qi Wang, Yuan Zhang, Tao Song,* Baoquan Sun* and Steffen Duhm*

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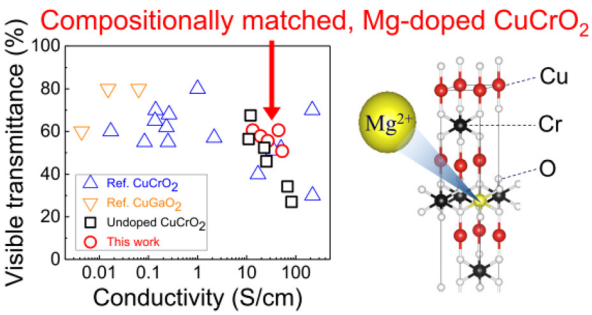


**Improved transparency and conductivity in copper chromium oxide coatings through aliovalent doping and stoichiometry control**

Jaewon Kim,* Owen Kendall, Triet Thien Huu Nguyen, Joel van Embden and Enrico Della Gaspera*

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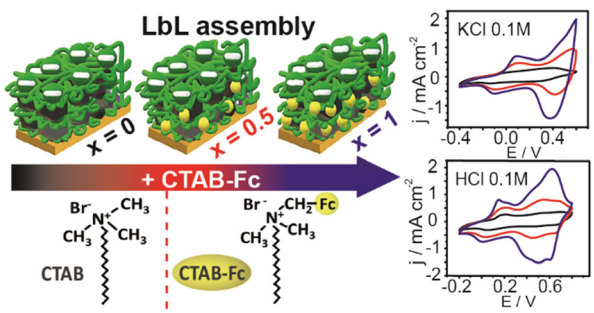


**Ferrocene-labelled surfactants enhance the supercapacitor performance in PANI-PSS/nanocarbon layer-by-layer nanoarchitectonics electrodes**

Ana Paula Mártire, Gonzalo E. Fenoy, Omar Azzaroni, Matías Rafti and Waldemar A. Marmisollé*



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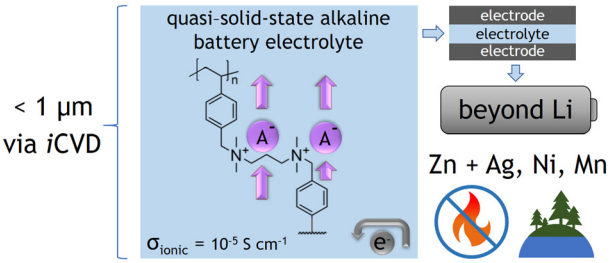
**Submicron-thick single anion-conducting polymer electrolytes**

Hunter O. Ford, Brian L. Chaloux, Youngchan Kim, Jeffrey W. Long, Debra R. Rolison* and Megan B. Sassin*

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**Non-line-of-sight synthesis and characterization of a conformal submicron-thick cationic polymer deposited on 2D and 3D substrates**

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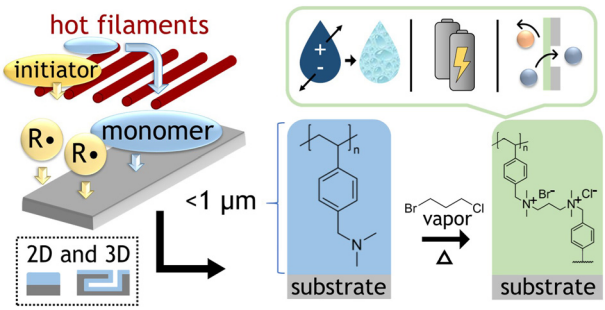


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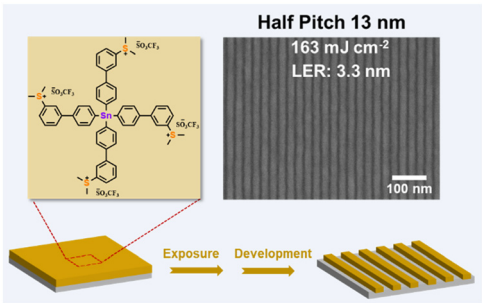


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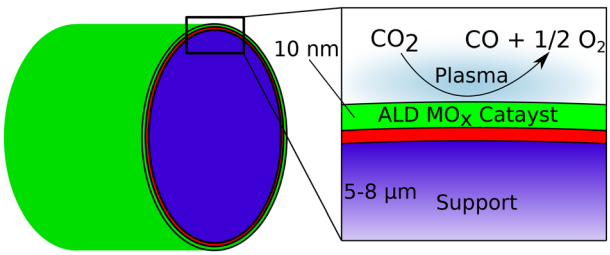
**Characterizing catalyst function and transformations in the plasma reduction of $CO_2$ on atomic layer deposition-synthesized catalysts**

Samuel K. Conlin, Hamed Mehrabi, David N. Parette, Eva M. Nichols and Robert H. Coridan*



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## PAPERS

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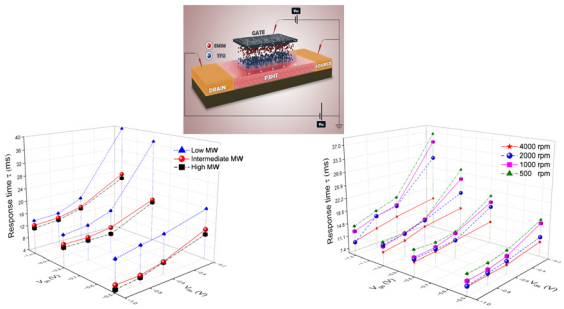


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**Green synthesis of a disordered N-doped carbonaceous aerogel from waste for the removal of over-the-counter drugs and environmental assessment**

Himanshu Asati, Raka Mondal and Kumud Malika Tripathi*

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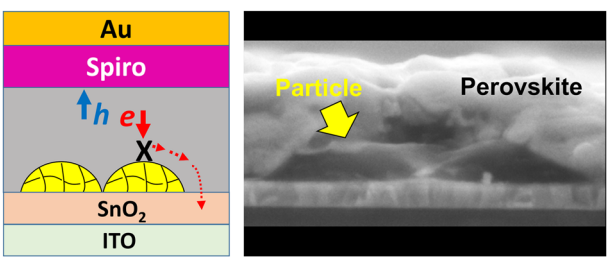


**The effects of selectively blocking the electron transport layer of n-i-p perovskite solar cells with polymer particles on device performance**

Amal Altujjar,* Ran Wang, Xuelian Wang, Jennifer M. Saunders, Zhenyu Jia, Ben Spencer, Nigel Hodson, Janet Jacobs, Osama M. Alkhudhari, Andrew Thomas, Richard Curry and Brian R. Saunders*



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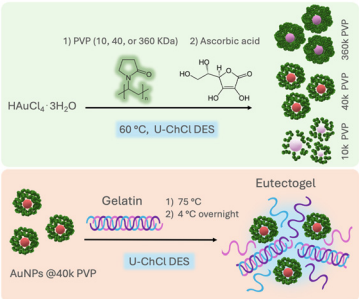
# Polyvinylpyrrolidone-mediated synthesis of ultra-stable gold nanoparticles in a nonaqueous choline chloride–urea deep eutectic solvent

Raúl Ortega-Córdova, Kaori Sánchez-Carillo, Saúl Carrasco-Saavedra, Gonzalo Ramírez-García, María G. Pérez-García, J. Félix Armando Soltero-Martínez and Josué D. Mota-Morales*

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