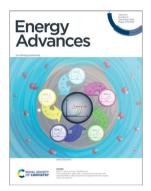
# **Energy Advances**

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ISSN 2753-1457 CODEN EANDBJ 2(11) 1773-1972 (2023)



#### Cover

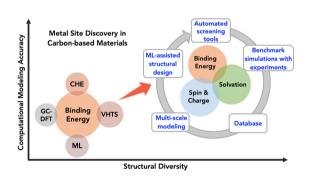
See Marc F. Tesch, Anna K. Mechler et al., pp. 1823-1830. Image reproduced by permission of Marc F. Tesch and Anna K. Mechler from Energy Adv., 2023, **2**, 1823.

# **REVIEWS**

1781

Advancements in computational approaches for rapid metal site discovery in carbon-based materials for electrocatalysis

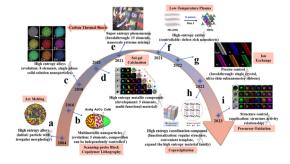
Somayeh Faraji, Zhiyu Wang, Paola Lopez-Rivera and Mingjie Liu\*



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# High entropy materials—emerging nanomaterials for electrocatalysis

Hang Li, Li Ling, Shengfa Li, Feng Gao\* and Qingyi Lu\*



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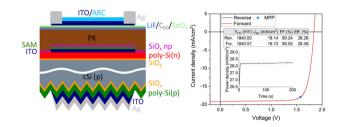


#### COMMUNICATION

#### 1818

Rear textured p-type high temperature passivating contacts and their implementation in perovskite/ silicon tandem cells

Arnaud Walter,\* Brett A. Kamino, Soo-Jin Moon, Patrick Wyss, Juan J. Diaz Leon, Christophe Allebé, Antoine Descoeudres, Sylvain Nicolay, Christophe Ballif, Quentin Jeangros and Andrea Ingenito\*

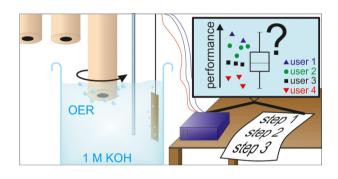


# **PAPERS**

#### 1823

The rotating disc electrode: measurement protocols and reproducibility in the evaluation of catalysts for the oxygen evolution reaction

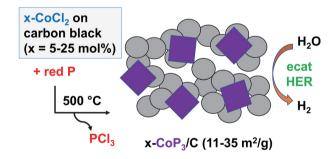
Marc F. Tesch,\* Sebastian Neugebauer, Praveen V. Narangoda, Robert Schlögl and Anna K. Mechler\*



# 1831

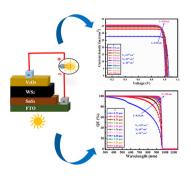
Flexible direct synthesis of phosphorus-rich CoP<sub>3</sub> on carbon black and its examination in hydrogen evolution electrocatalysis

Ishanka A. Liyanage, Hannah Barmore and Edward G. Gillan\*



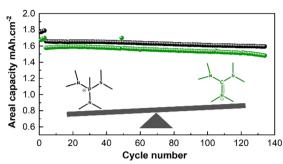
Design and analysis of a SnS<sub>2</sub>/WS<sub>2</sub>/V<sub>2</sub>O<sub>5</sub> double-heterojunction toward high-performance photovoltaics

Jubair Al Mahmud, Md. Ferdous Rahman,\* Abdul Kuddus,\* Md. Hasan Ali, A. T. M. Saiful Islam, Md. Dulal Haque, Sheikh Rashel Al Ahmed, Muhammad Mushtaq and Abu Bakar Md. Ismail



# **PAPERS**

# 1859



# A comparison of the impact of cation chemistry in ionic liquid-based lithium battery electrolytes

Faezeh Makhlooghiazad,\* Colin S. M. Kang, Mojtaba Eftekharnia, Patrick C. Howlett, Öliver Hutt, Maria Forsyth, Luke A. O'Dell and Jennifer M. Pringle\*

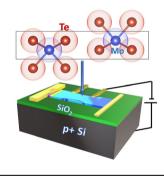
#### 1872



# Semi-solid electrodes based on injectable hydrogel electrolytes for shape-conformable batteries

Mario Borlaf, Matias L. Picchio, Gisela Carina Luque, Miryam Criado-Gonzalez, Gregorio Guzmán-Gonzalez, Daniel Pérez-Antolin, Gabriele Lingua, David Mecerreyes\* and Edgar Ventosa\*

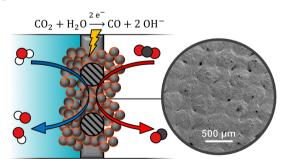
# 1882



# Electrostatic modulation of thermoelectric transport properties of 2H-MoTe<sub>2</sub>

Tianhui Zhu, Sree Sourav Das, Safoura Nayeb Sadeghi, Farjana Ferdous Tonni, Sergiy Krylyuk, Costel Constantin, Keivan Esfarjani, Albert V. Davydov and Mona Zebarjadi\*

#### 1893



# Electrowetting limits electrochemical CO<sub>2</sub> reduction in carbon-free gas diffusion electrodes

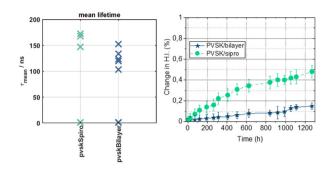
Lorenz M. Baumgartner, Andrey Goryachev, Christel I. Koopman, David Franzen, Barbara Ellendorff, Thomas Turek and David A. Vermaas\*

# **PAPERS**

#### 1905

# An Fe<sub>3</sub>O<sub>4</sub> based hole transport bilayer for efficient and stable perovskite solar cells

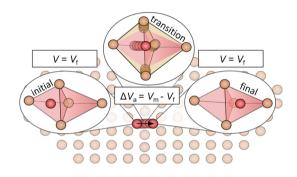
Akbar Ali Qureshi, Emilia R. Schütz, Sofia Javed.\* Lukas Schmidt-Mende and Azhar Fakharuddin\*



#### 1915

# Pressure dependence of ionic conductivity in site disordered lithium superionic argyrodite Li<sub>6</sub>PS<sub>5</sub>Br

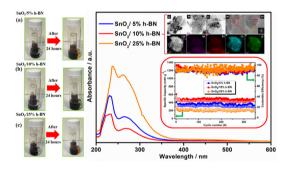
Vasiliki Faka, Matthias T. Agne, Paul Till, Tim Bernges, Marcel Sadowski, Ajay Gautam, Karsten Albe and Wolfgang G. Zeier\*



# 1926

# SnO<sub>2</sub>/h-BN nanocomposite modified separator as a high-efficiency polysulfide trap in lithium-sulfur batteries

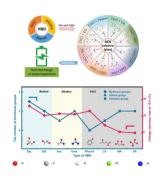
Chandra Sekhar Bongu, Yasmin Mussa, Sara Aleid, Muhammad Arsalan and Edreese H. Alsharaeh\*



#### 1935

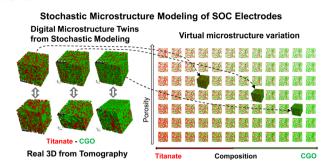
# Screening the deep eutectic electrolytes for supercapacitors with alleviated self-discharge

Wenxia Huang, Xiaohui Yan, Yige Xiong, Qihui Guo, Xin Zhang, Fengyu Huang, Houqiang Shi and Xiang Ge\*



# **PAPERS**

1942



# Stochastic microstructure modeling of SOC electrodes based on a pluri-Gaussian method

Philip Marmet,\* Lorenz Holzer, Thomas Hocker, Vinzenz Muser, Gernot K. Boiger, Mathias Fingerle, Sarah Reeb, Dominik Michel and Joseph M. Brader

# CORRECTION

1968

Correction: Generation of covalent organic framework-derived porous N-doped carbon nanosheets for highly efficient electrocatalytic hydrogen evolution

Sayan Halder, Anup Kumar Pradhan, Soumen Khan and Chanchal Chakraborty\*