# Sustainable Energy & Fuels

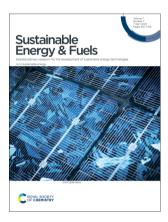
Interdisciplinary research for the development of sustainable energy technologies

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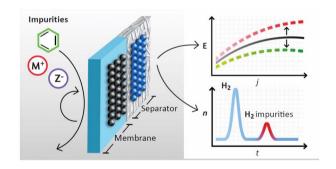
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### **REVIEWS**

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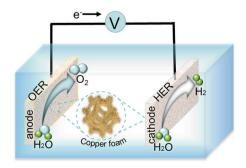
Hans Becker, James Murawski, Dipak V. Shinde, Ifan E. L. Stephens,\* Gareth Hinds and Graham Smith\*



#### 1604

# Development of copper foam-based composite catalysts for electrolysis of water and beyond

Jiaming Wang, Yuting Hu, Feiyu Wang, Yatao Yan,\* Yang Chen, Mengting Shao, Qianhui Wu,\* Shoupu Zhu,\* Guowang Diao and Ming Chen\*



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# COMMUNICATION

### 1627

Efficient syngas production with controllable CO: H2 ratios based on aqueous electrocatalytic CO<sub>2</sub> reduction over mesoporous TiO<sub>2</sub> films modified with a cobalt porphyrin molecular catalyst

Hironobu Ozawa,\* Ryoma Kikunaga, Hajime Suzuki, Ryu Abe and Ken Sakai\*

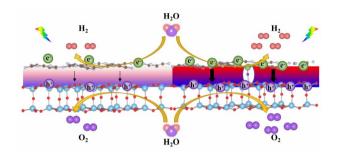


# **PAPERS**

# 1633

A Li-F co-doped  $g-C_3N_4/TiO_2-B(001)$ heterostructure as an efficient hydrogen evolution photocatalyst

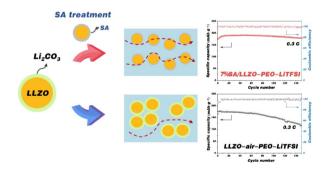
Xiaojia Yuan, Shuhan Tang and Xiaojie Liu\*



### 1645

Salicylic acid treated Li<sub>7</sub>La<sub>3</sub>Zr<sub>2</sub>O<sub>12</sub> achieves dual functions for a PEO-based solid polymer electrolyte in lithium metal batteries

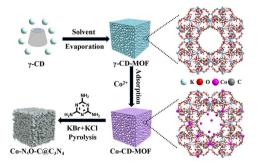
Wen He, Hui Ding, Chuandong Li, Xu Chen and Wensheng Yang\*



#### 1656

γ-CD-MOF-derived heterostructures as bifunctional electrocatalysts for rechargeable zinc-air batteries

Ruirui Chai, Xinxin Sang,\* Shiguo Ou, Jiahao Li, Junling Song and Dawei Wang\*



# **PAPERS**

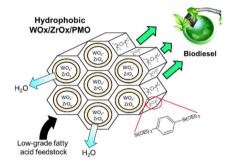
### 1664



# The cooperative role of nitrogen defects and cyanogroup functionalization in carbon nitride towards enhancing its CO<sub>2</sub> photoreduction activity

Shreya Singh, Pankaj Tiwari, Guguloth Venkanna, Kamal K. Pant\* and Pratim Biswas\*

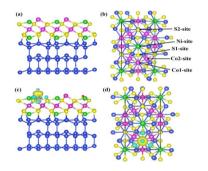
# 1677



# WO<sub>x</sub>/ZrO<sub>x</sub> functionalised periodic mesoporous organosilicas as water-tolerant catalysts for carboxylic acid esterification

Vannia C. dos Santos-Durndell, Lee J. Durndell,\* Mark A. Isaacs, Adam F. Lee\* and Karen Wilson\*

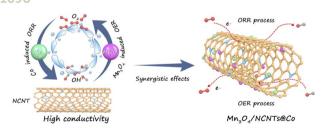
#### 1687



# NiCo<sub>2</sub>S<sub>4</sub> cocatalyst supported Si nanowire heterostructure for improved solar-driven water reduction: experimental and theoretical insights

S. Gopalakrishnan, Mihir Ranjan Sahoo, Avijeet Ray, Nirpendra Singh, S. Harish, E. Senthil Kumar and M. Navaneethan\*

# 1698



# Biomass chitosan-derived Co-induced N-doped carbon nanotubes to support Mn<sub>3</sub>O<sub>4</sub> as efficient electrocatalysts for rechargeable Zn-air batteries

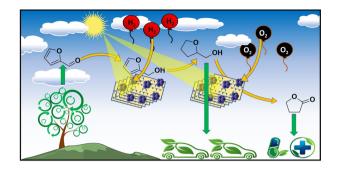
Wenshu Zhou, Yanyan Liu, Dichao Wu, Limin Zhou, Gaoyue Zhang, Kang Sun, Baojun Li and Jianchun Jiang\*

# **PAPERS**

### 1707

Photocatalytic selective conversion of furfural to γbutyrolactone through tetrahydrofurfuryl alcohol intermediates over Pd NP decorated g-C<sub>3</sub>N<sub>4</sub>

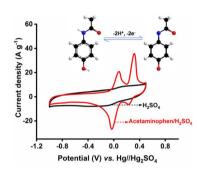
Rajat Ghalta and Rajendra Srivastava\*



# 1724

# Acetaminophen: a novel redox-additive for snowballing the energy density of flexible supercapacitors

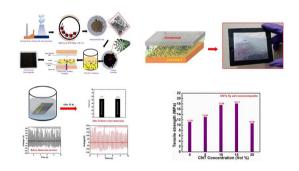
M. Sandhiya, D. Ponraj Jenis, V. Sudha, S. M. Senthil Kumar, R. Thangamuthu and M. Sathish\*



### 1735

Sustainable robust waste-recycled ocean waterresistant fly ash-carbon nanotube nanocompositebased triboelectric nanogenerator

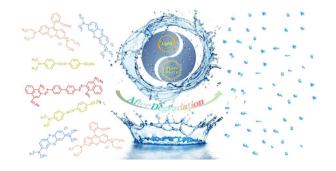
Ashish Kumar Chaturvedi, Simadri Badatya, Asokan Pappu, Avanish Kumar Srivastava and Manoj Kumar Gupta\*



# 1747

A novel covalent triazine-based frameworks as photocatalysts for the degradation of dyes under visible light irradiation

Yajing Du, Haoqiang Ai, Yun Liu and Hongzhi Liu\*



# CORRECTION

1755

Correction: One-pot synthesis of ordered nanoporous amorphous H-Zn-aluminosilicate for catalysis of bulky molecules

Jitendra Diwakar, Nagabhatla Viswanadham,\* Saurabh Kumar, Adarsh Kumar and Sandeep K. Saxena