Journal of Materials Chemistry A

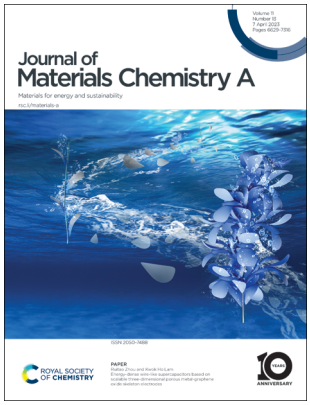
Materials for energy and sustainability

rsc.li/materials-a

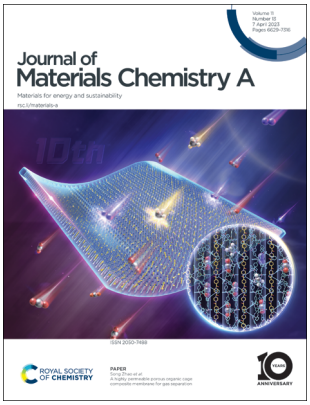
The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

IN THIS ISSUE

ISSN 2050-7488 CODEN JMCAET 11(13) 6629–7316 (2023)

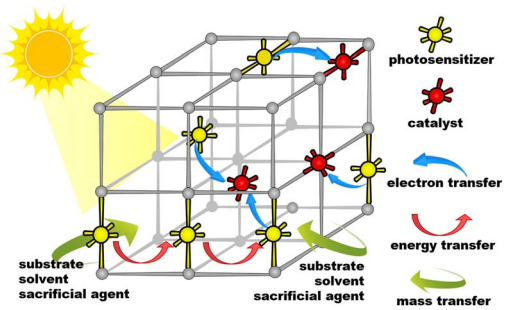


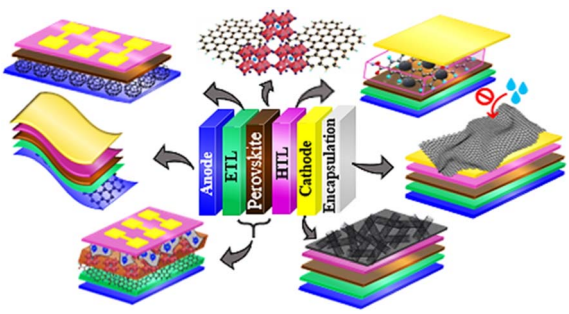
Cover
See Ruitao Zhou and Kwok Ho Lam, pp. 6820–6830. Image reproduced by permission of Ruitao Zhou from *J. Mater. Chem. A*, 2023, **11**, 6820.



Inside cover
See Song Zhao *et al.*, pp. 6831–6841. Image reproduced by permission of Song Zhao from *J. Mater. Chem. A*, 2023, **11**, 6831.

REVIEWS





Journal of Materials Chemistry A (electronic: ISSN 2050-7496) is published 48 times a year by the Royal Society of Chemistry, Thomas Graham House, Science Park, Milton Road, Cambridge, UK CB4 0WF.

All orders, with cheques made payable to the Royal Society of Chemistry, should be sent to the Royal Society of Chemistry Order Department, Royal Society of Chemistry, Thomas Graham House, Science Park, Milton Road, Cambridge, CB4 0WF, UK
Tel +44 (0)1223 432398; E-mail **orders@rsc.org**

2023 Annual (electronic) subscription price: £1968, $4085. Customers in Canada will be subject to a surcharge to cover GST. Customers in the EU subscribing to the electronic version only will be charged VAT.

If you take an institutional subscription to any Royal Society of Chemistry journal you are entitled to free, site-wide web access to that journal. You can arrange access via Internet Protocol (IP) address at www.rsc.org/ip

Customers should make payments by cheque in sterling payable on a UK clearing bank or in US dollars payable on a US clearing bank.

ROYAL SOCIETY OF CHEMISTRY

Journal of Materials Chemistry A

rsc.li/materials-a

Journal of Materials Chemistry A, B & C cover high quality studies across all fields of materials chemistry. The journals focus on those theoretical or experimental studies that report new understanding, applications, properties and synthesis of materials. *Journal of Materials Chemistry A* covers materials with applications in energy & sustainability.

Information for Authors

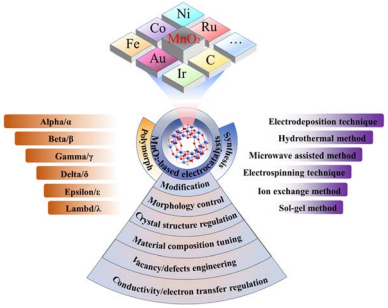
Full details on how to submit material for publication in Journal of Materials Chemistry A are given in the Instructions for Authors (available from **http://www.rsc.org/authors**).
Submissions should be made via the journal's homepage: **rsc.li/materials-a.** Submissions: The journal welcomes submissions of manuscripts for publication as Full Papers, Communications, Reviews, Highlights and Applications. Full Papers and Communications should describe original work of high quality and impact which must highlight the novel properties or applications (or potential properties/applications) of the materials studied.

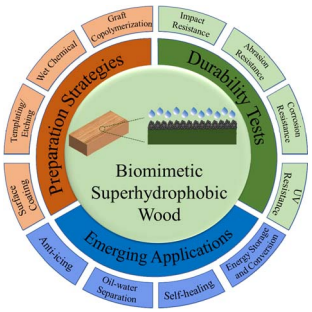
Additional details are available from the Editorial Office or **http://www.rsc.org/authors**

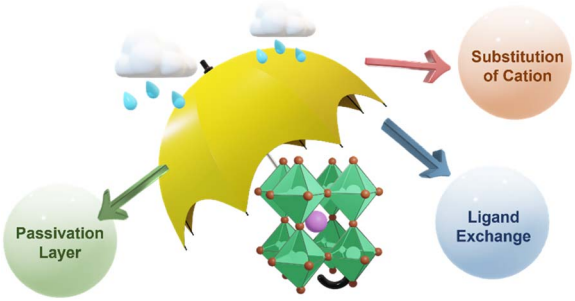
Authors may reproduce/republish portions of their published contribution without seeking permission from the Royal Society of Chemistry, provided that any such republication is accompanied by an acknowledgement in the form: (Original Citation)–Reproduced by permission of the Royal Society of Chemistry.

Registered charity number: 207890

REVIEWS





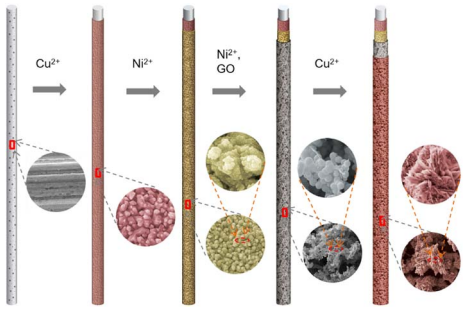


COMMUNICATION

Main-group indium single-atom catalysts for electrocatalytic NO reduction to NH_3

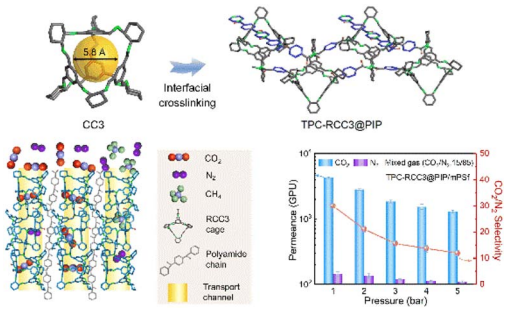
Kai Chen, Nana Zhang, Fuzhou Wang, Jilong Kang and Ke Chu*

PAPERS



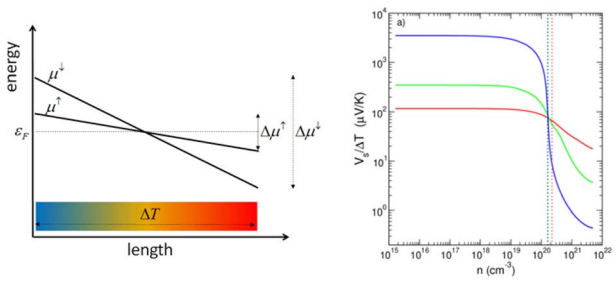
Energy-dense wire-like supercapacitors based on scalable three-dimensional porous metal-graphene oxide skeleton electrodes

Ruitao Zhou and Kwok Ho Lam*



A highly permeable porous organic cage composite membrane for gas separation

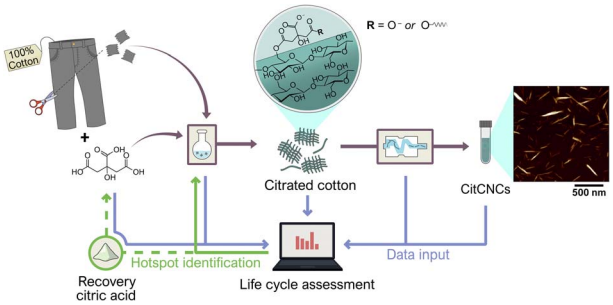
Zhihao Jiang, Ying Wang, Menglong Sheng, Zhiyuan Zha, Jixiao Wang, Zhi Wang and Song Zhao*

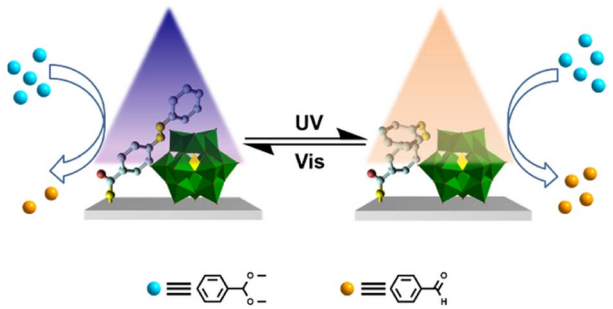


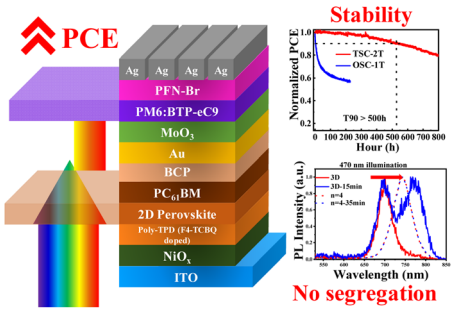
Giant spin-dependent Seebeck effect from fully spin-polarized carriers in n-doped $EuTiO_3$: a prototype material for spin-caloritronic applications

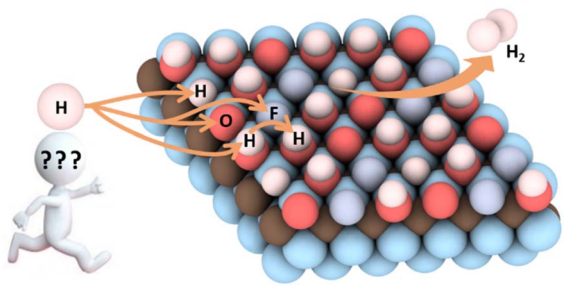
P. Wadhwa, A. Bosin and A. Filippetti*

PAPERS







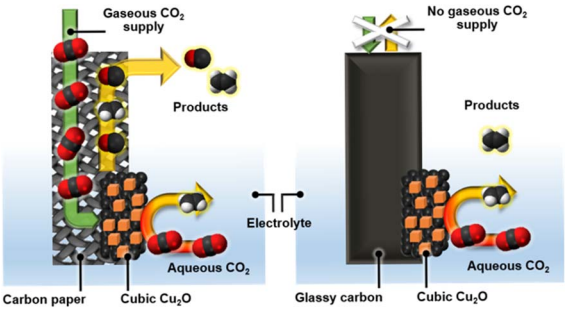


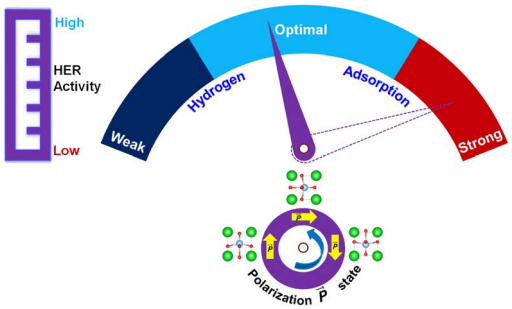
PAPERS

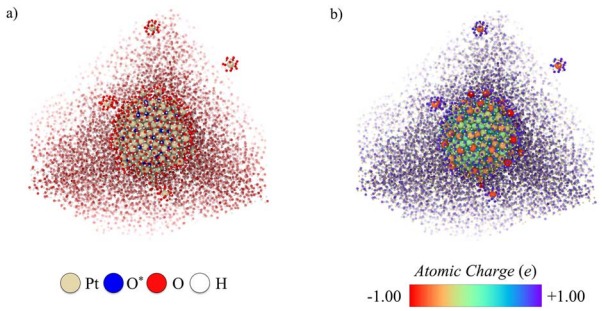
PAPERS

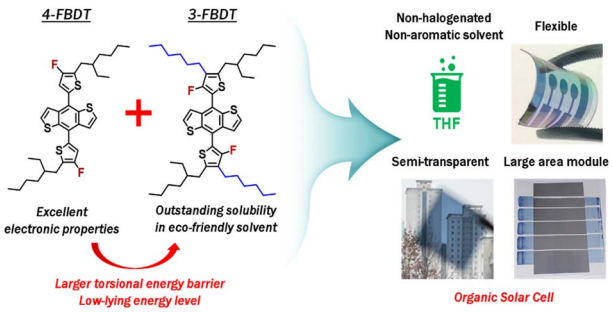
PAPERS

PAPERS



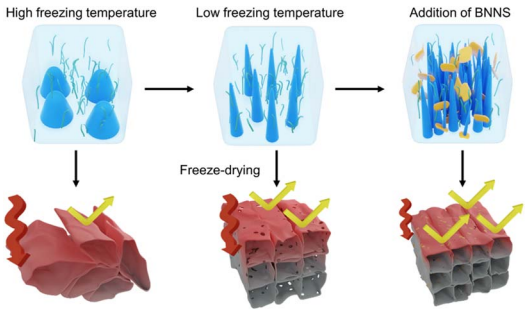


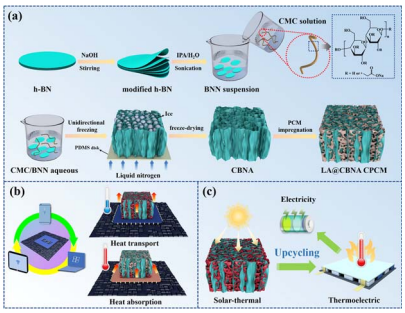


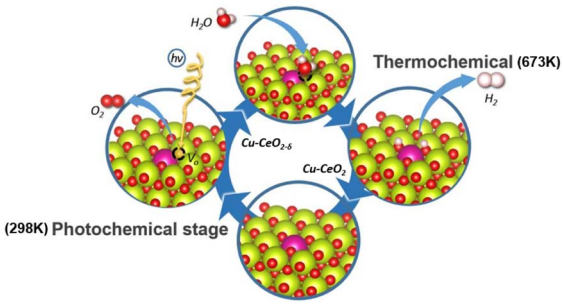


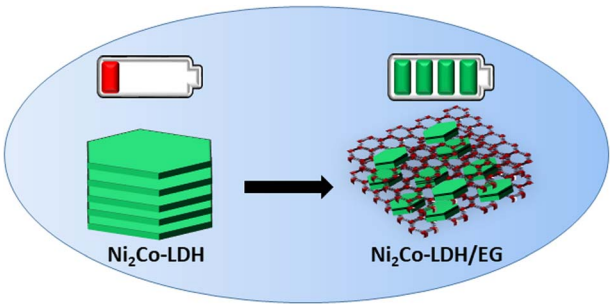
PAPERS

PAPERS



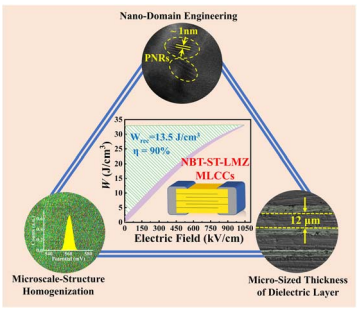


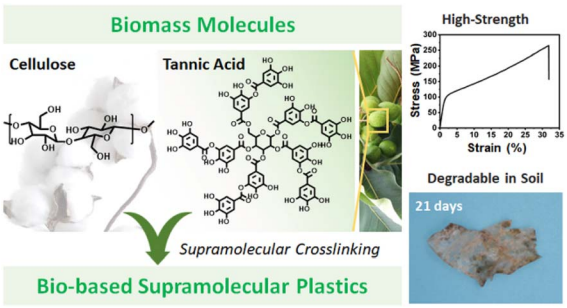


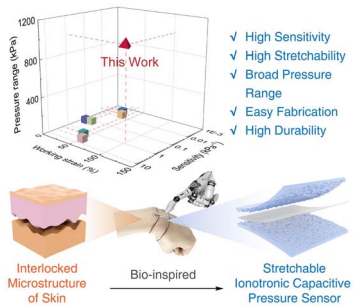


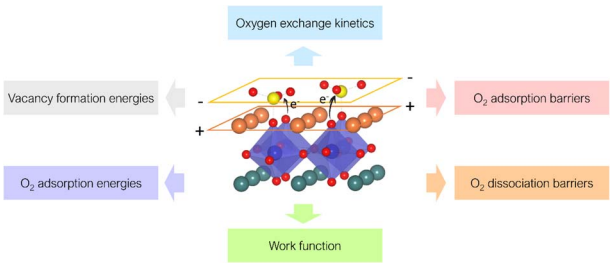
PAPERS

PAPERS









PAPERS

PAPERS