

RSC

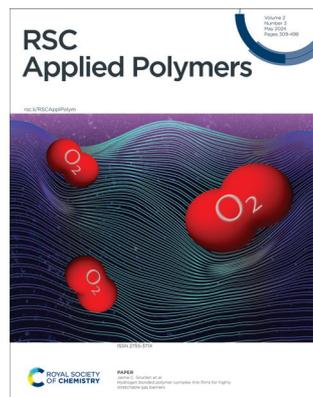
Applied Polymers

rsc.li/rscapplpolym

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.

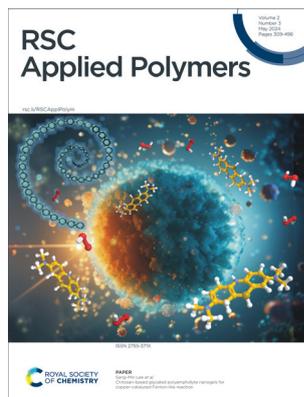
IN THIS ISSUE

eISSN 2755-371X CODEN RAPSBD 2(3) 309–498 (2024)



Cover
See Jaime C. Grunlan *et al.*,
pp. 356–364.

Image reproduced by
permission of
Jaime C. Grunlan from
RSC Appl. Polym.,
2024, **2**, 356.



Inside cover
See Sang-Min Lee *et al.*,
pp. 365–373.

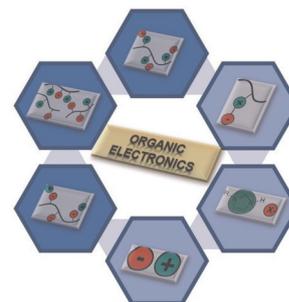
Image reproduced by
permission of Sang-Min Lee
from *RSC Appl. Polym.*,
2024, **2**, 365.

REVIEW

317

A review: advancing organic electronics through the lens of ionic liquids and polymerized ionic liquids

Swati Arora* and Nagendra Verma

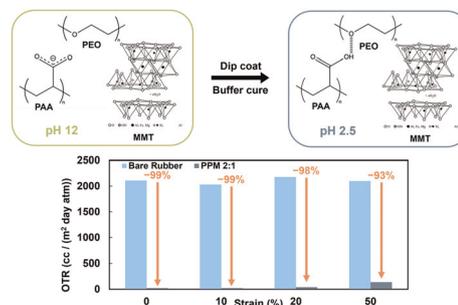


PAPERS

356

Hydrogen bonded polymer complex thin films for highly stretchable gas barriers

Sarah G. Fisher, Hsu-Cheng Chiang, Ethan T. Iverson,
Edward Chang and Jaime C. Grunlan*



Environmental Science: Atmospheres

GOLD
OPEN
ACCESS

Connecting communities
and inspiring new ideas

rsc.li/submittoEA

Fundamental questions
Elemental answers

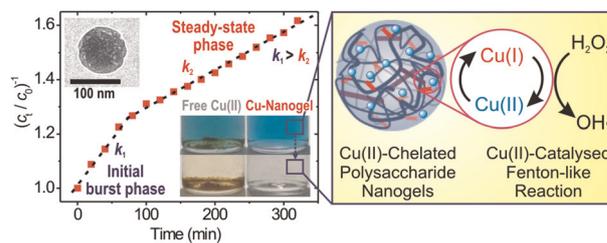


PAPERS

365

Chitosan-based glycosylated polyampholyte nanogels for copper-catalysed Fenton-like reaction

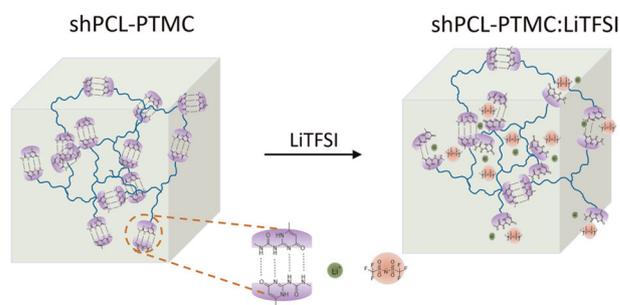
Yeonjoo Jung, Eunseo Lee, So-Lee Baek and Sang-Min Lee*



374

Inherent limitations of the hydrogen-bonding UPy motif as self-healing functionality for polymer electrolytes

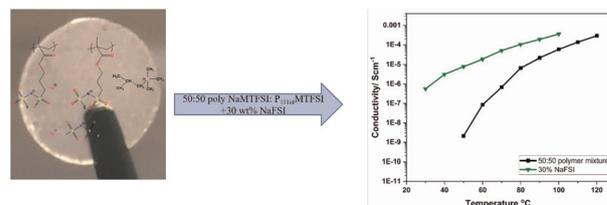
Cuc Thu Mai, Harish Gudla, Guiomar Hernández, Kristina Edström and Jonas Mindemark*



384

Ion conduction and phase behaviour in dual cation polyelectrolyte blends for sodium-ion batteries

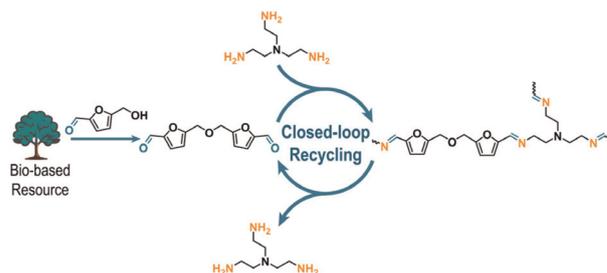
Sneha Malunavar, Luca Porcarelli,* Patrick C. Howlett, David Mecerreyes and Maria Forsyth*



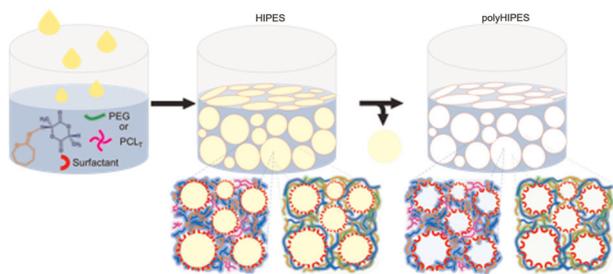
395

Closing the loop: polyimine thermosets from furfural derived bioresources

Tankut Türel, Keita Saito, Ivona Glišić, Tim Middelhoeck and Željko Tomović*



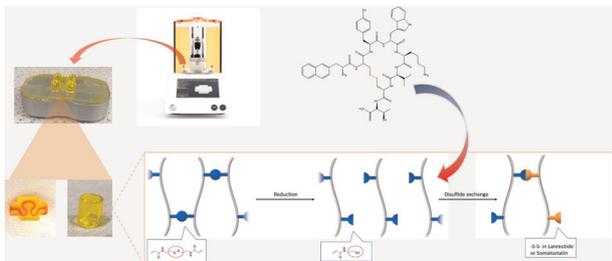
403



Ring-opening polymerization of emulsion-templated deep eutectic system monomer for macroporous polyesters with controlled degradability

Martin Castillo-Santillan, Priscila Quiñonez-Angulo, Dina Maniar, José Román Torres-Lubian, María C. Gutiérrez, Théophile Pelras, Albert J. J. Woortman, Qi Chen, María Guadalupe Pérez-García, Katja Loos* and Josué D. Mota-Morales*

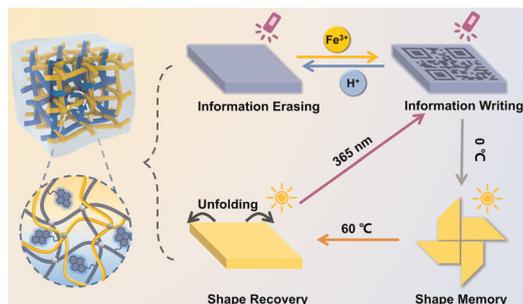
415



Fabrication of 3D objects incorporating peptides covalently attached *via* reversible disulfide linkages with potential for controlled drug release

Zhongyuan Wan, Wai Hin Lee, Yicheng Wang, Ataula Shegiwal* and David M. Haddleton*

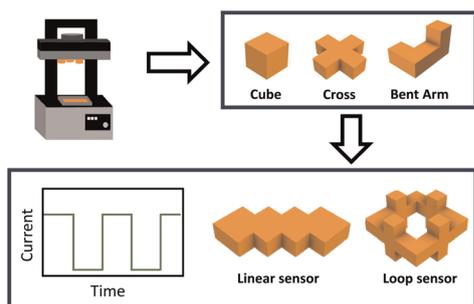
426



An organohydrogel with tunable fluorescence and shape-memory property for advanced anti-counterfeiting

Yu Sun, Hui Shang, Xiaoxia Le* and Tao Chen*

434



3D printed modular piezoelectric sensors using dynamic covalent bonds

Julian Smith-Jones, Nathan Ballinger, Naroa Sadaba, Xabier Lopez de Pariza, Yunxin Yao, Stephen L. Craig, Haritz Sardon and Alshakim Nelson*

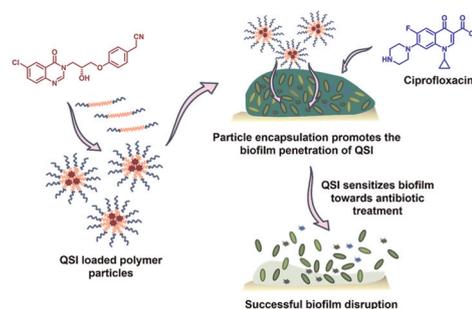


PAPERS

444

Triblock copolymer micelles enhance solubility, permeability and activity of a quorum sensing inhibitor against *Pseudomonas aeruginosa* biofilms

Karolina Kasza, Fadi Soukariéh, Manuel Romero, Kim R. Hardie, Pratik Gurnani, Miguel Cámara and Cameron Alexander*



456

Enhancing microplastic capture efficiencies with adhesive coatings on stainless-steel filters

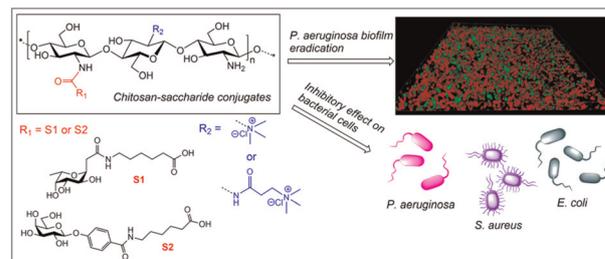
Malavika Ramkumar, Woojung Ji, Henry E. Thurber, Madeline E. Clough, Sarena Chirdon and Anne J. McNeil*



461

Chitosan–saccharide conjugates for eradication of *Pseudomonas aeruginosa* biofilms

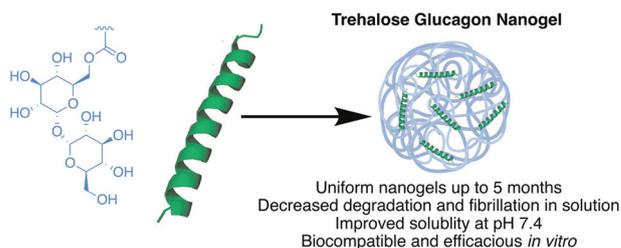
Priyanka Sahariah,* Francesco Papi, Koi L. Merz, Olafur E. Sigurjonsson, Rikke Louise Meyer and Cristina Nativi



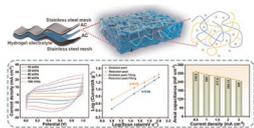
473

Uniform trehalose nanogels for glucagon stabilization

Ellie G. Puente, Rajalakshmi P. Sivasankaran, Daniele Vinciguerra, Jane Yang, Haillie-Ann C. Lower, Andrea L. Hevener and Heather D. Maynard*



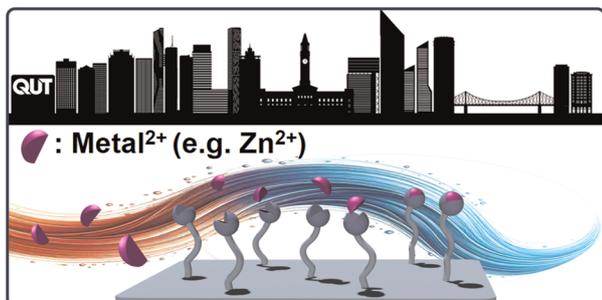
483



Ultrathin redox active hydrogel electrolytes for high performance flexible supercapacitors

Mengmeng Xun, Xiuting Shi, Haiping Wang, Xiaoyan Li, Wenxing Miao, Xiangbing Wang, Kanjun Sun, Hui Peng, Guofu Ma* and Yuxi Xu*

490



A bioinspired approach to reversibly metal binding interfaces

Agnes C. Morrissey, Vishakya Jayalatharachchi, Lukas Michalek, Prasanna Egodawatta, Neomy Zaquen, Laura Delafresnaye* and Christopher Barner-Kowollik*

