

Polymer Chemistry

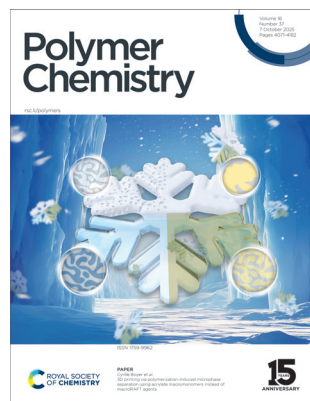
The home for the most innovative and exciting polymer chemistry, with an emphasis on polymer synthesis and applications thereof

rsc.li/polymers

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 1759-9962 CODEN PCOHC2 16(37) 4071-4182 (2025)



Cover

See Cyrille Boyer *et al.*, pp. 4102–4112.

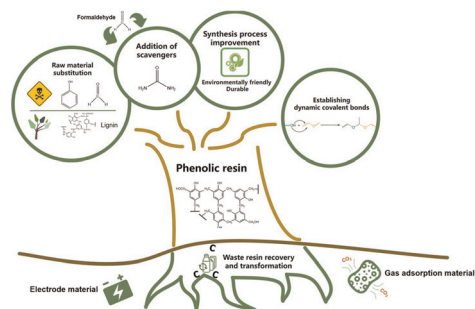
Image reproduced by permission of Maxime Michelas from *Polym. Chem.*, 2025, **16**, 4102.

MINIREVIEW

4077

Endowing phenolic formaldehyde resin with sustainability: why and how?

Xinyao Jiang, Bing Zhu, Shahid Hussain and Maiyong Zhu*

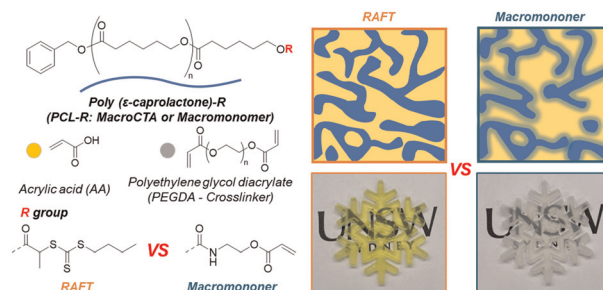


PAPERS

4102

3D printing via polymerization-induced microphase separation using acrylate macromonomers instead of macroRAFT agents

Maxime Michelas, Nathaniel Corrigan and Cyrille Boyer*



**GOLD
OPEN
ACCESS**

EES Batteries

**Exceptional research on
batteries and energy storage**

Part of the EES family

**Join
in**

Publish with us

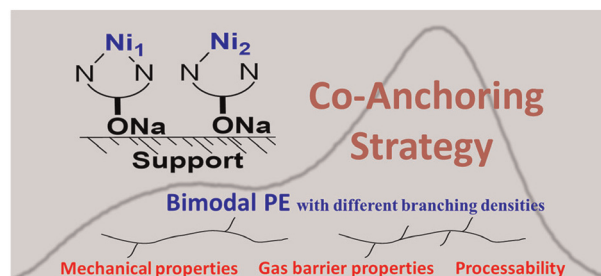
rsc.li/EESBatteries

PAPERS

4113

Preparation of bimodal polyethylene with different branching densities by a co-anchoring strategy

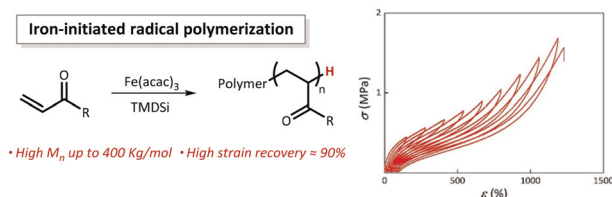
Chuncaai Zhao, Shiwei Dai, Huiyu Yu, Wenmin Pang, Fuzhou Wang, Daohong Liao,* Wenbing Wang* and Chen Zou*



4120

Iron-initiated radical polymerization of acrylate monomers

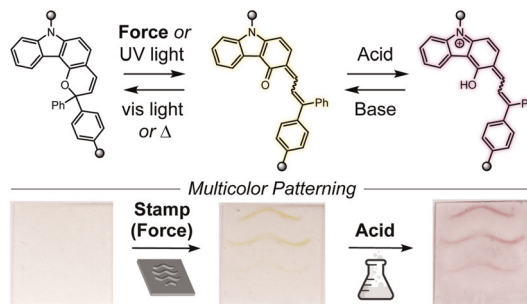
Benedetta Palucci,* Adriano Vignali, Fabio Bertini and Simona Losio



4128

Mechanochemical activation of an indole-fused 2H-benzopyran generates an acidochromic merocyanine dye enabling multicolor chromomorphous materials

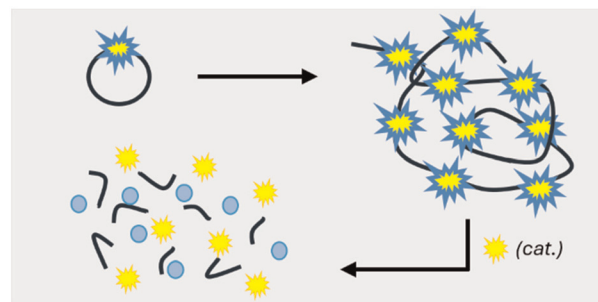
Yan Sun, Wendy Granados Razo, Stella M. Luo, Skylar K. Osler and Maxwell J. Robb*



4136

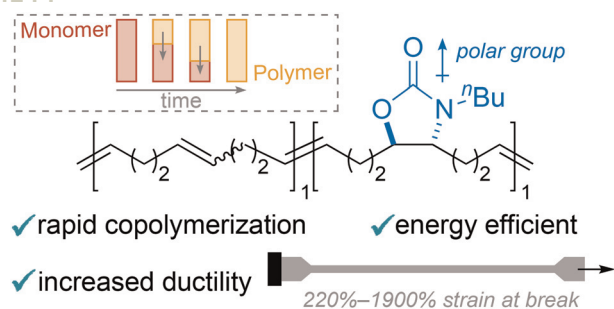
Degradable polyacetals and polyacetal/polycyclooctene Co-polymers from a novel dioxepin

Andrew Mazza, Brian H. Morrow, Judith A. Harrison and Julia Pribyl*



PAPERS

4144



Incorporating polar oxazolidinones into polycyclooctadiene via frontal ring-opening metathesis polymerization

Jazmin E. Aguilar-Romero, Elizabeth G. Rogan, Allison R. Wong, Brandon M. Hosford, Angela L. Mosconi and Jessica R. Lamb*

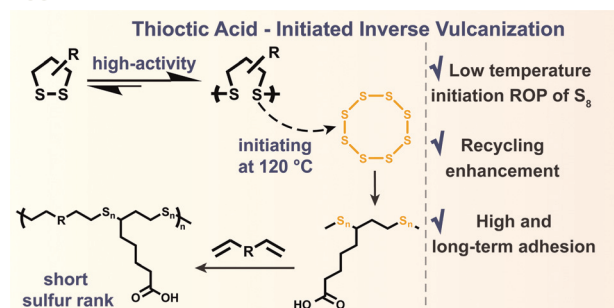
4150



Economical sulfur conversion to polythioamides through multicomponent polymerizations of sulfur, dibromides, and diamines

Shuangshuang Xu, Xinwen Fu, Guanfei Yao, Rongrong Hu* and Ben Zhong Tang*

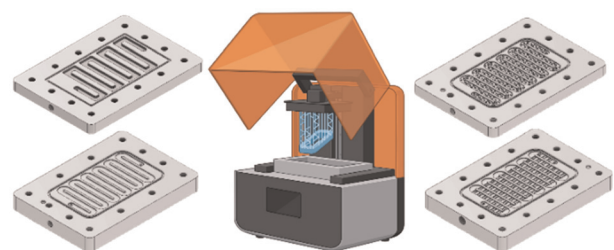
4159



Long-term humid adhesion of sulfur thermoplastic polymers enabled by thioctic acid-initiated polymerization

Tongye Zhang, Zhiyue Fang, Shifang Luan, Lei Wang* and Hengchong Shi*

4171



3D-printed microfluidic dialysis apparatus for efficient polymer purification

Timo Koswig, Robert Geitner, Ilya Anufriev, Ivo Nischang, Stefan Zechel, Ulrich S. Schubert* and Tanja Junkers*

