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(8) 917-1012 (2025)



Cover See Miao Hong et al., pp. 936-946.

Image reproduced by permission of Miao Hong from Polym. Chem., 2025, 16, 936. Acknowledgment: Meadow grass and oil rig from Pixabav.

REVIEW

Synthesis and applications of conjugated mainchain charged polyelectrolytes

Hai-Yan Huang, Dongyang Fan,* Dong Wang, Ting Han* and Ben Zhong Tang*

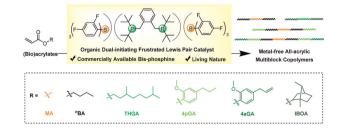


PAPERS

936

A dual-initiating organic frustrated Lewis pair catalyst for living polymerizations of (bio)acrylates to facilitate the synthesis of metal-free multiblock copolymers

Zhen-Hua Zhang, Yuyang Chen, Yuesheng Li and Miao Hong*



Industrial Chemistry & Materials

Focus on industrial chemistry Advance material innovations Highlight interdisciplinary feature

Innovative.
Interdisciplinary.
Problem solving

APCs currently waived

Learn more about ICM Submit your high-quality article

- **f** @IndChemMater
- ☑ @IndChemMater rsc.li/icm





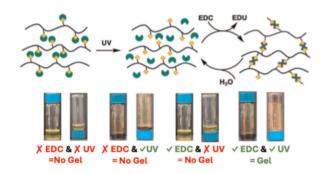


PAPERS

947

Photoresponsive polymers for carbodiimide-fueled transient hydrogels

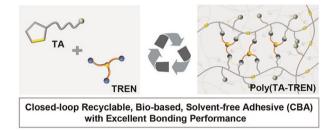
Ibrahim O. Raji, Torin C. Wilcox, C. Scott Hartley and Dominik Konkolewicz*



954

An eco-friendly adhesive with ultra-strong adhesive performance

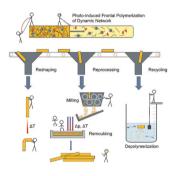
Zhenyu Yang,* Xiaoting Ji, Xin-long Sha, Jincheng Ding, Lin Cheng and Guangfeng Li*



963

Frontal polymerization of thiol-acrylate covalent adaptable networks

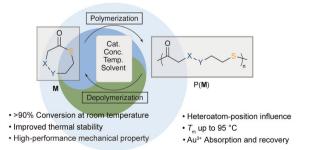
Christoph Schmidleitner, Matthias Udo Kriehuber, Roman Korotkov, Sandra Schlögl* and Elisabeth Rossegger*



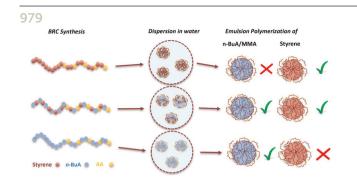
972

Chemically recyclable poly(thioether-thioester)s via ring-opening polymerization of sevenmembered thiolactones

Long-Hai Liu, Si-Qi Wang, Hua-Zhong Fan, Qing Cao, Zhongzheng Cai* and Jian-Bo Zhu*



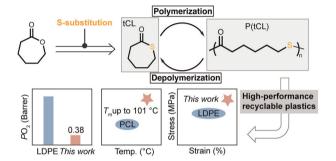
PAPERS



Amphiphilic block-random copolymer stabilisers: extension to other monomer types

Arthur Werner, Connor A. Sanders, Sandra E. Smeltzer, Sean R. George, Andreas Gernandt, Bernd Reck and Michael F. Cunningham*

987



Implementing a sulfur-substitution approach toward a high-performance recyclable polythioester

Si-Qi Wang, Long-Hai Liu, Kun Li, Wei Xiong, Hua-Zhong Fan, Qing Cao, Zhongzheng Cai* and Jian-Bo Zhu*

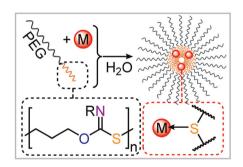
994

Photo- surfactant-free emulsion polymerization TPO-Na Surfactant-free latex

Shedding light on surfactant-free emulsion polymerization

Erika Paola Fonseca Parra, Jean-Luc Six and Khalid Ferji*

1003



Sulfur-containing block polymers from ring-opening copolymerization: coordinative encapsulants for transition metals

Jenny Stephan, Merlin R. Stühler, Christoph Fornacon-Wood, Mathias Dimde, Kai Ludwig, Heinz Sturm, Jorge L. Olmedo-Martínez, Alejandro J. Müller and Alex J. Plajer*