

# 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(35) 3889–3988 (2025)



### Cover

See Emrah Çakmakçı,  
Joanna Ortyl *et al.*,  
pp. 3895–3915.

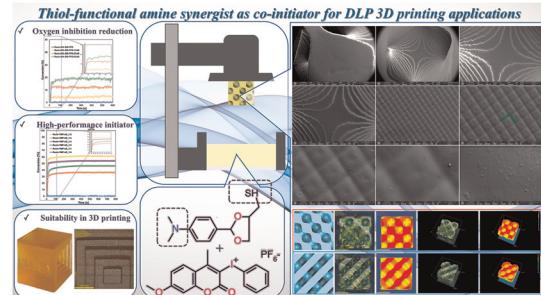
Image reproduced by  
permission of Joanna Ortyl  
and Magdalena Jankowska  
from *Polym. Chem.*, 2025,  
**16**, 3895.

## PAPERS

3895

### A thiol-functional amine synergist as a co-initiator for DLP 3D printing applications

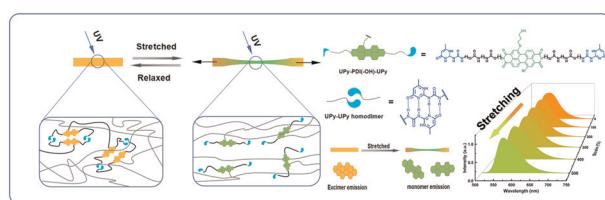
Magdalena Jankowska, Ozge Ozukanar,  
Emrah Çakmakçı\* and Joanna Ortyl\*



3916

### Enhanced mechano-responsive luminescence in polyurethanes by supramolecular mechanophores based on synergy between quadruple H-bonding and $\pi$ - $\pi$ stacking

Yaxing Tang, Fengmao Liu, Geng Li, Juemin Zhao,  
Jiaxing Ma, Haonan Lin, Jie Li\* and Hua Wang\*





GOLD  
OPEN  
ACCESS

# RSC Applied Polymers

The application of polymers,  
both natural and synthetic

Interdisciplinary and open access

[rsc.li/RSCApplPolym](http://rsc.li/RSCApplPolym)

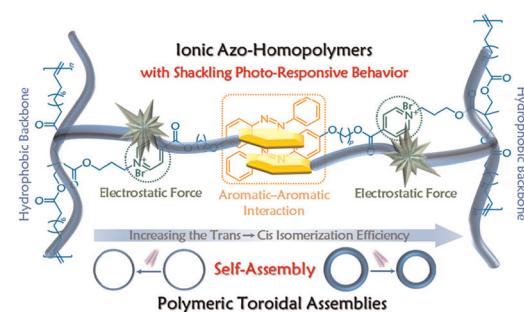
Fundamental questions  
Elemental answers

## PAPERS

3924

**Polymeric toroidal assemblies formed from ionic homopolymers with shackling photo-responsive behavior**

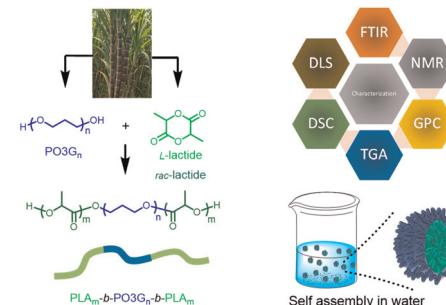
Qingqing Yang, Junjun Lv, Jinye Wang, Wei Song and Liang Ding\*



3935

**Bio-based poly(1,3-trimethyleneglycol-co-lactide) triblock copolymers: a promising platform for biomedical applications**

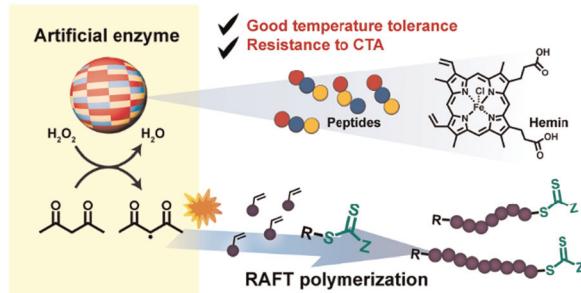
Ernesto Tinajero Díaz, Eduard Carles Zamora and Antxon Martínez de Ibarra\*



3946

**A catalytic peptide/hemin complex as an artificial enzyme for RAFT polymerization**

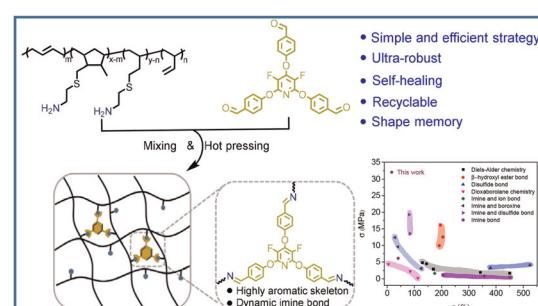
Yao-Yu Jhang and Sheng-Sheng Yu\*



3957

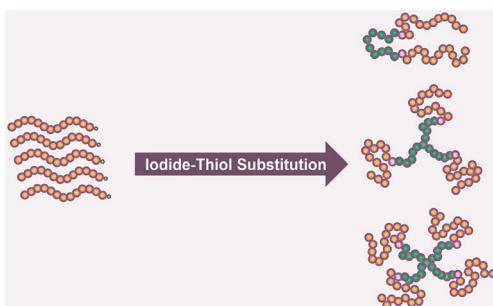
**Rigidity-tuned fluoroaromatic imine vitrimers yield ultra-high-strength, self-healing, and recyclable shape memory polybutadiene rubbers**

Yi Wu, Yingjia Yu, Guanliang He, Yuze Shi and Xuqing Liu\*



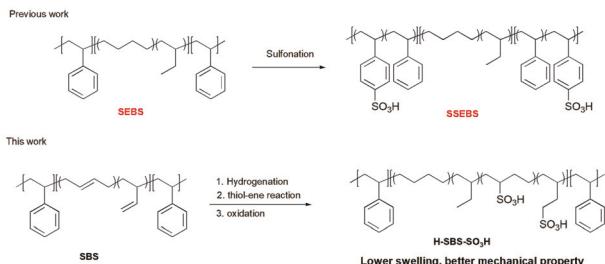
## PAPERS

3968

Rapid and versatile polymer–polymer coupling *via* iodide–thiol substitution click chemistry

Jirui Zhang and Atsushi Goto\*

3977



## Soft block sulfonated styrene–butadiene–styrene (SBS) triblock copolymer proton exchange membranes

Michael K. Pagels, Ding Tian, Stefan Turan and Chulsung Bae\*

