

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 15(48) 4911-5034 (2024)



Cover

See Xin Wang,
Yuan Hu *et al.*,
pp. 4952–4961.

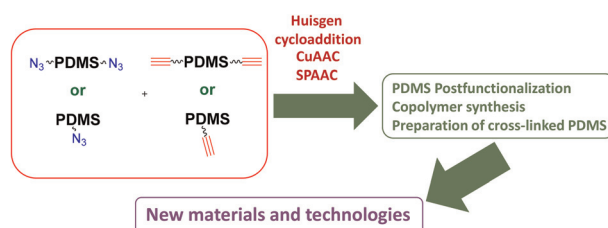
Image reproduced
by permission of
Xin Wang from
Polym. Chem.,
2024, **15**, 4952.

REVIEW

4917

Azide–alkyne cycloaddition for polydimethylsiloxane chemistry

Kseniya A. Bezlepikina, Sergey A. Milenin* and Aziz M. Muzafarov

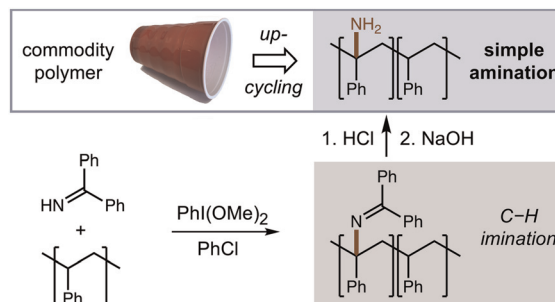


COMMUNICATION

4947

Simple amination of polystyrene via radical sp^3 C–H imination

Mengnan Hu, Lizhe He and Robert J. Comito*



RSC Advances

**At the heart of open access for
the global chemistry community**

Editor-in-chief

Russell J Cox

Leibniz Universität Hannover, Germany

We stand for:



Breadth We publish work in all areas of chemistry and reach a global readership



Quality Research to advance the chemical sciences undergoes rigorous peer review for a trusted, society-run journal



Affordability Low APCs, discounts and waivers make publishing open access achievable and sustainable



Community Led by active researchers, we publish quality work from scientists at every career stage, and all countries

Submit your work now

rsc.li/rsc-advances

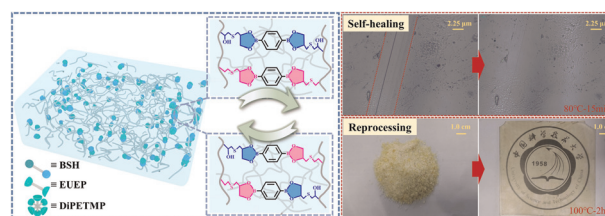
[@RSC_Adv](#)

PAPERS

4952

Self-healable, reprocessable and anti-flammable eugenol-derived covalent adaptable thermosets based on dynamic covalent boronic esters and thiol–ene click chemistry

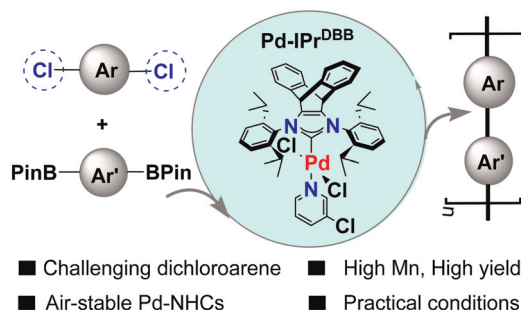
Haixin Niu, Yu Li, Ping Zhang, Wenwen Guo, Xin Wang* and Yuan Hu*



4962

Dibenzobarrelene-derived Pd-NHCs: efficient precatalysts for the Suzuki–Miyaura polycondensations of dichloroarene monomers

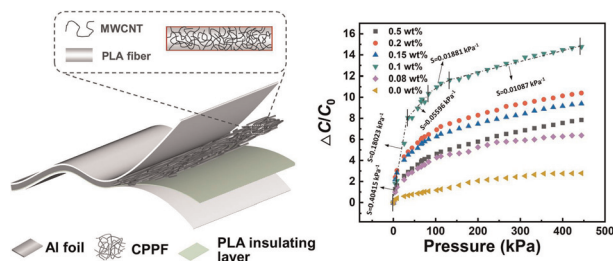
Yuman Guo, Hao Wu, Meng-Jiao Zhang and Feng-Shou Liu*



4972

Biodegradable pressure sensors with high sensitivity and wide detection range via a piezoresistive/capacitive dual response

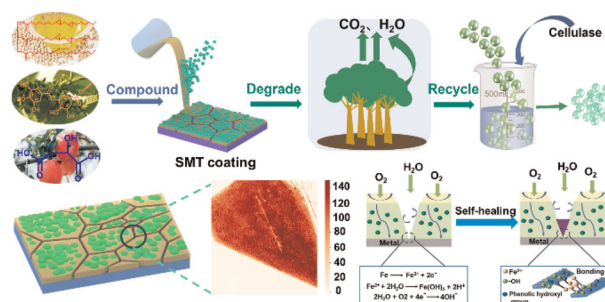
Xiaowan Luan, Yanlong Zhu, Yankun Chen, Xiaoxia Gu, Qian Xu, Guoming Liu, Xiuqin Zhang and Minxuan Kuang*



4982

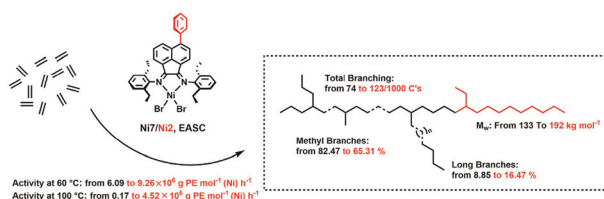
Long afterglow epoxidized soybean oil polymer composites with reversible dynamic cross-linking for intelligent coating

Jiaman Hu, Zihao Wang, Minglin Yang, Chuansong Yu, Siyu Li, Yinggang Miao, Xiangqian Quan, Jize Liu* and Shiyang Shao*



PAPERS

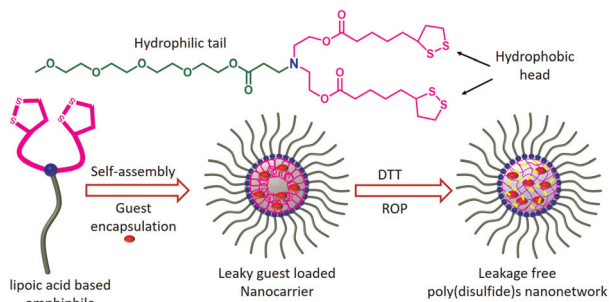
4993



Axial-phenyl-constrained bis(imino)acenaphthene-nickel precatalysts enhance ethylene polymerization

Quanchao Wang, Qiuyue Zhang, Yizhou Wang, Song Zou, Yanping Ma, Tongling Liang and Wen-Hua Sun*

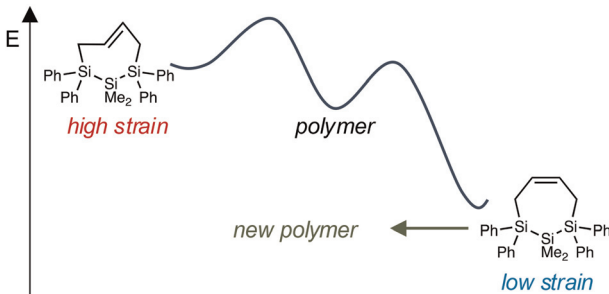
5007



Reducing agent-triggered templated synthesis of a dynamic covalent poly(disulfide)s nanonetwork: remarkable tuning in noncovalent encapsulation stabilities and cargo release

Arun Mondal, Sk Sujauddin, Dhiman Mondal, Soumya Kolay, Shuvajyoti Sarkar and Mijanur Rahman Molla*

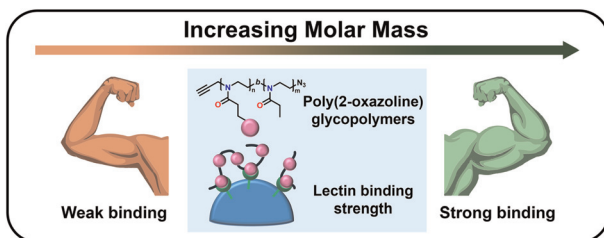
5016



Isomer-driven polymerization, depolymerization, and reconstruction

Herbert Wakefield IV, Nicholas J. Fromel, Jennifer Jiang, Ilia Kevlishvili, Yunxin Yao, Stephen L. Craig, Heather J. Kulik and Rebekka S. Klausen*

5023



Effect of molar mass of poly(2-oxazoline) based glycopolymers on lectin binding

Caitlin L. A. Nutting, James Lefley, Zivani Varanaraja, Gokhan Yilmaz and C. Remzi Becer*

