

Polymer Chemistry

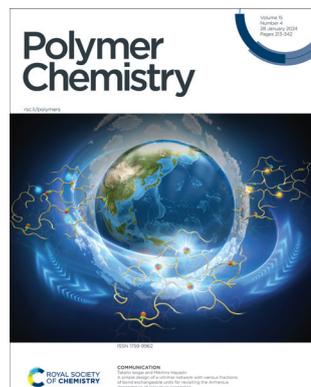
The home for the most innovative and exciting polymer chemistry, with an emphasis on polymer synthesis and applications thereof

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(4) 213-342 (2024)



Cover

See Taketo Isogai and Mikihiro Hayashi, pp. 269–275.

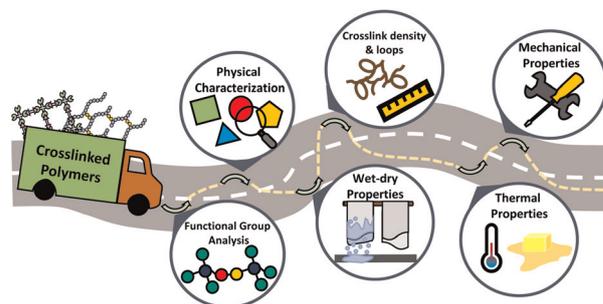
Image reproduced by permission of Mikihiro Hayashi from *Polym. Chem.*, 2024, **15**, 269.

TUTORIAL REVIEW

219

Educational series: characterizing crosslinked polymer networks

Chamoni W. H. Rajawasam, Obed J. Dodo, M. A. Sachini N. Weerasinghe, Ibrahim O. Raji, Shiwanka V. Wanasinghe, Dominik Konkolewicz* and Nethmi De Alwis Watuthantrige*

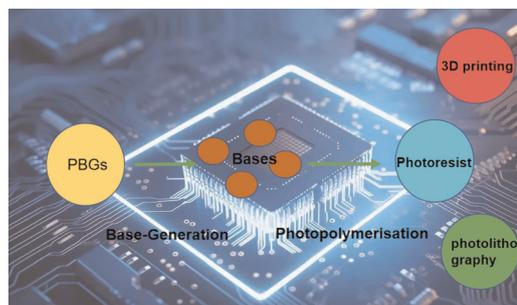


REVIEW

248

Photopolymerization activated by photobase generators and applications: from photolithography to high-quality photoresists

Han-Wen Pei, Kai Ye, Yizhi Shao, Dan Chen, Zhao-Yan Sun, Tao Gong,* Dandan Liu* and Ke Sun*



Industrial Chemistry & Materials

GOLD
OPEN
ACCESS

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

 [@IndChemMater](https://www.facebook.com/IndChemMater)

 [@IndChemMater](https://twitter.com/IndChemMater)

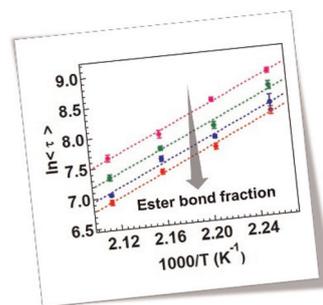
rsc.li/icm

COMMUNICATION

269

A simple design of a vitrimer network with various fractions of bond exchangeable units for revisiting the Arrhenius dependence of relaxation properties

Taketo Isogai and Mikihiro Hayashi*



Reaction rate equation

$$k = A \exp\left(-\frac{E_a}{RT}\right)$$



Arrhenius equation of vitrimers

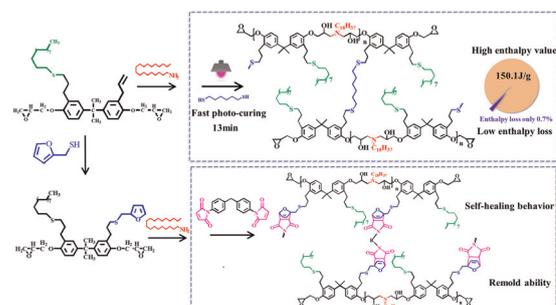
$$\tau = \tau_0 \exp\left(\frac{E_a}{RT}\right)$$

PAPERS

276

Adjustable comb/bottlebrush fast UV-curable epoxy-based form-stable phase change materials with high encapsulation rates and ultralow enthalpy loss

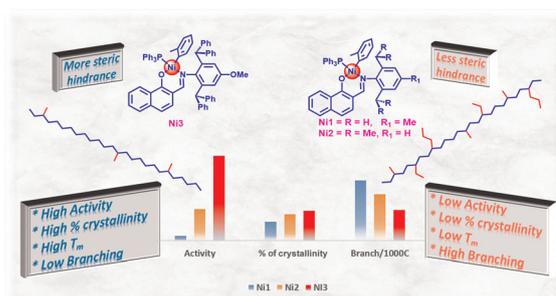
Yu Fan, Yanyun Li, Xinyuan Tang, Junying Zhang, Jue Cheng* and Qingsong Lian*



292

Regulating the polyethylene microstructure by increasing steric crowding in naphthoxy imine-ligated Ni(II) complexes

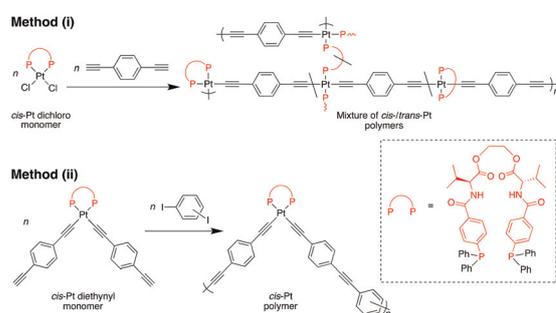
Rajkumar S. Birajdar, Rajesh G. Gonnade and Samir H. Chikkali*



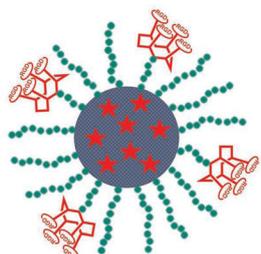
303

Synthesis of geometry-controlled platinum-containing polymers bearing optically active bidentate phosphine ligands

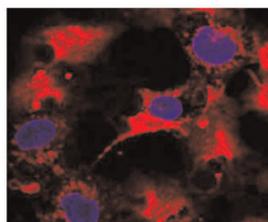
Takashi Horiuchi, Soya Makino, Natsuhiko Sano, Hiromitsu Sogawa and Fumio Sanda*



310



PISA-RAFT nanoparticles decorated with cRGD peptide clusters

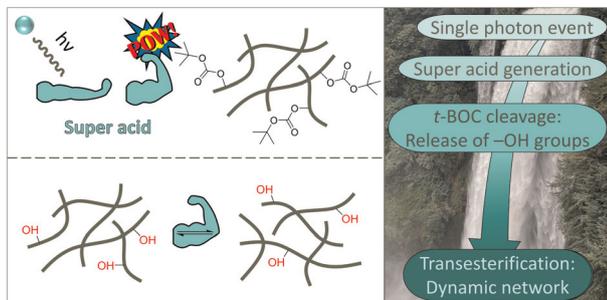


Selective targeting of integrin-expressing cells

Synthesis of cRGD peptide cluster-decorated NIR-fluorescent PISA-RAFT nanoparticles targeting integrin expressing cells

Damien Duret, Adrien Grassin, Maxime Henry, Pierre Alcouffe, Sebastian Raja, Carlos Baleizão, José Paulo Farinha, Marie-Thérèse Charreyre, Didier Boturyn, Jean-Luc Coll and Arnaud Favier*

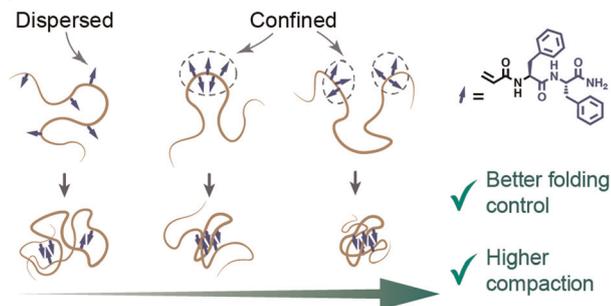
321



The use of a sulfonium-based photoacid generator in thiol-ene photopolymers for the controlled activation of transesterification through chemical amplification

Walter Alabiso, Yang Li, Joost Brancart, Guy Van Assche, Elisabeth Rossegger* and Sandra Schlögl*

332



Confinement of folding motifs within central blocks improves single chain polymer nanoparticle folding

Shegufta Farazi, Martina H. Stenzel* and Robert Chapman*

- ✓ Better folding control
- ✓ Higher compaction

