

Polymer Chemistry

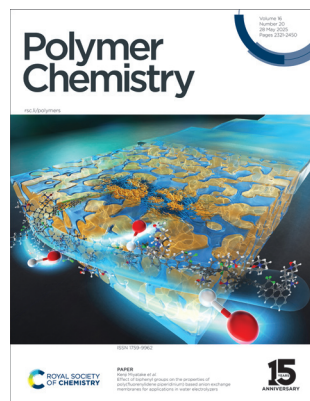
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IN THIS ISSUE

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Cover

See Kenji Miyatake *et al.*,
pp. 2358–2371.

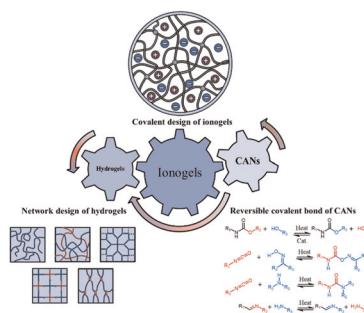
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Polym. Chem.,
2025, **16**, 2358.

REVIEW

2327

Covalent design of ionogels: bridging with hydrogels and covalent adaptable networks

Junjia Zhang,* Yian Wang, Yinglu Liu, Jérémy Odent and Yukikazu Takeoka*

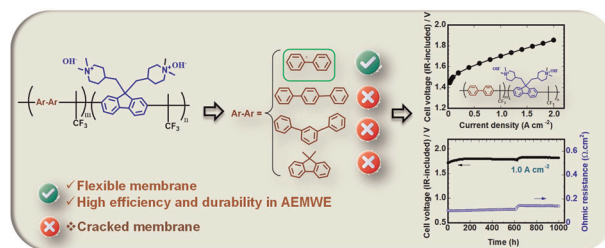


PAPERS

2358

Effect of biphenyl groups on the properties of poly(fluorenylidene piperidinium) based anion exchange membranes for applications in water electrolyzers

Ahmed Mohamed Ahmed Mahmoud, Kenji Miyatake,* Fanghua Liu, Vikrant Yadav, Fang Xian, Lin Guo, Chun Yik Wong, Toshio Iwataki, Makoto Uchida and Katsuyoshi Kakinuma





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Fundamental questions
Elemental answers

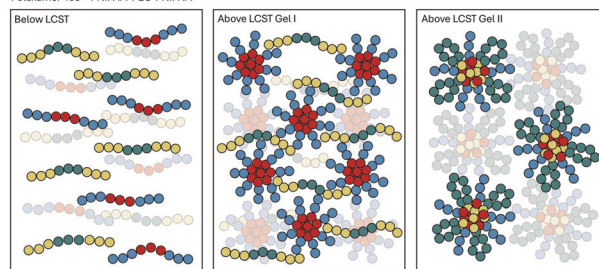
PAPERS

2372

Two-stepping: sol–gel–gel transitions in a mixed thermoresponsive polymer system

Mohamad A. Abou-Shamat, Alan Reader, Eleanor Hilton, Niamh Haslett, Abhishek Rajbanshi, Najet Mahmoudi, Marcelo Alves da Silva, Jacqueline Stair, Jesus Calvo-Castro and Michael T. Cook*

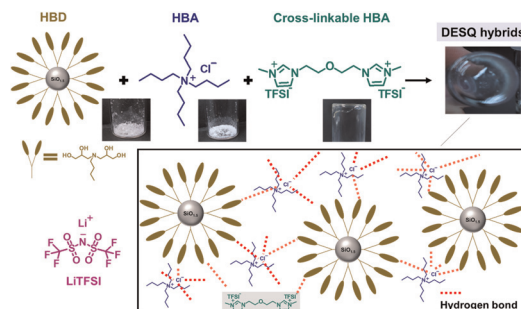
Plotaxamer 405 + PNIPAM-PEG-PNIPAM



2378

Deep eutectic ion-conductive hybrids produced by combining hydroxyl-functionalized silsesquioxane and mono-/difunctional hydrogen bond acceptors

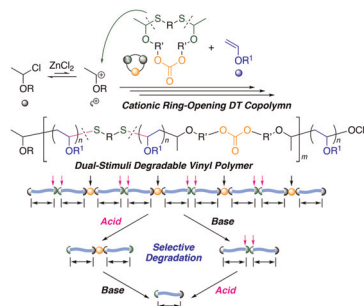
Tomohito Inoue, Sota Saito, Akihiro Nishioka and Hideharu Mori*



2389

Cyclic thioacetal carbonates for dual-stimuli degradable poly(vinyl ether)s with cleavable thioacetal and carbonate bonds evenly distributed in the main chains by cationic degenerative chain-transfer copolymerization

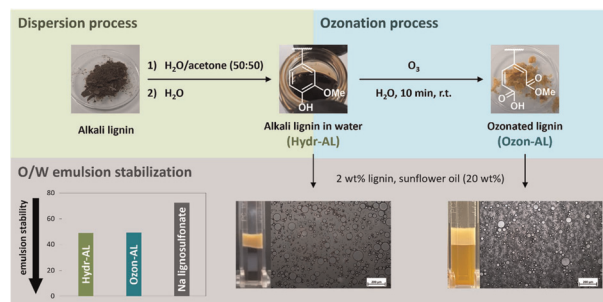
Mineto Uchiyama,* Kaoru Matoba and Masami Kamigaito*



2401

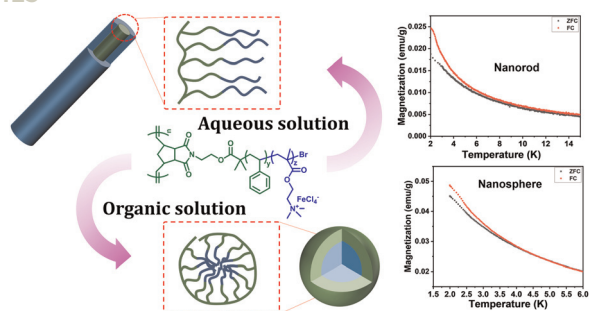
Alkali lignin stabilization of oil-in-water emulsions via simple dispersion and ozonation processes

Maëva Peloille, Frédérique Ham-Pichavant, Marie Reulier, Cécile Joseph, Henri Cramail* and Stéphane Grelier*



PAPERS

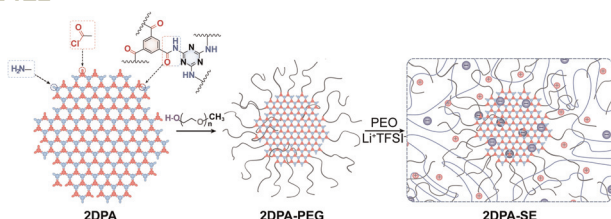
2413



Self-assembly of core-shell magnetic bottlebrush poly(ionic liquid)s: morphologies vs. magnetic properties

Chunman Li, Mingzhe Zhao, Zenian Gou, Tengda Zhao, Huimin Han, Kongying Zhu, Xiaoyan Yuan and Lixia Ren*

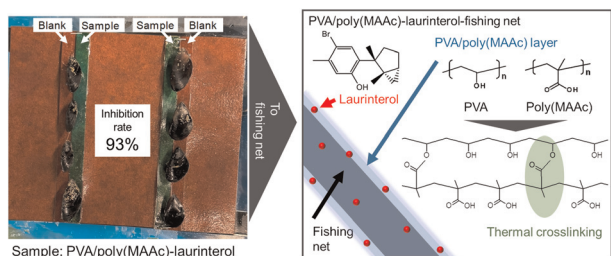
2421



Corona-shaped two-dimensional polyaramid derivatives for poly(ethylene oxide)-based all-solid-state lithium batteries

Feifan Zheng, Liping Jiang, Xiaoli Gong, Zhengqiao Yin, Fei Wang and Yuwen Zeng*

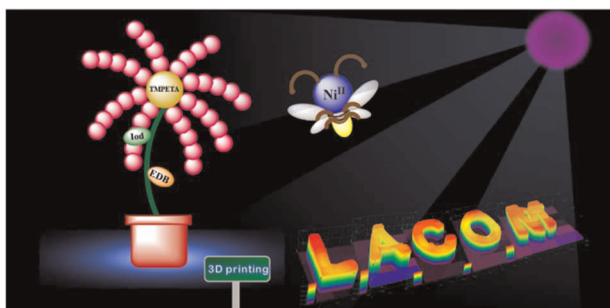
2428



Developing environmentally friendly fishing nets by integrating halogenated marine terpene with hydrogel polymers

Daiki Osada, Yohei Kotsuchibashi,* Kazumi Nimura, Yukimasa Yamagishi and Takashi Kamada*

2436



Visible light-promoted nickel-NHC photocatalysts for free radical photopolymerization and 3D printing application

Naralyne M. Pesqueira, Fabrice Morlet-Savary, Michael Schmitt, Valdemiro P. Carvalho-, Jr, Beatriz E. Goi* and Jacques Lalevée*

