Soft Matter

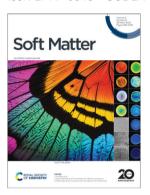
Where physics meets chemistry meets biology for fundamental soft matter research

rsc.li/soft-matter-journal

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 1744-6848 CODEN SMOABF 21(12) 2185-2376 (2025)



Cover

See Ying Diao et al., pp. 2217-2229. Image reproduced by permission of Sanghyun Jeon and Chengyue Li from Soft Matter, 2025, 21, 2217.



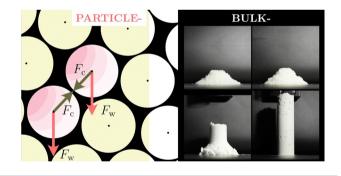
Inside cover

See Chenglin Wu, Zhaoiian Li, Shaoting Lin et al., pp. 2230-2241. Image reproduced by permission of Jiabin Liu from Soft Matter, 2025, 21, 2230. Image credit: Jiabin Liu.

REVIEW

Experimental models for cohesive granular materials: a review

Ram Sudhir Sharma and Alban Sauret*

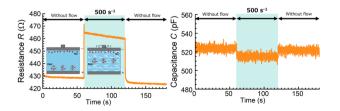


COMMUNICATION

2209

A torrent intercepts the ionic flow in a polyelectrolyte solution

Kaito Watanabe, Sayaka Naya, Yoshifumi Yamagata, Keisuke Miyamoto, Mika Kawai and Tetsu Mitsumata*





Royal Society of Chemistry approved training courses

Explore your options.

Develop your skills.

Discover learning that suits you.

Courses in the classroom, the lab, or online

Find something for every stage of your professional development. Search our database by:

- subject area
- location
- event type
- skill level

Members get at least 10% off

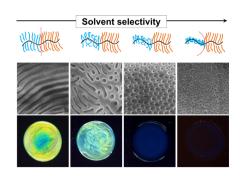
Visit rsc.li/cpd-training



2217

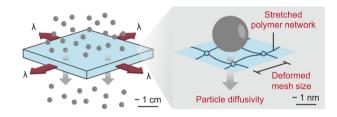
Large modulation of the bottlebrush diblock copolymer morphology and structural color through solvent selectivity

Sanghyun Jeon, Yash Kamble, Zhuang Xu, Azzaya Khasbaatar, Changhyun Hwang, Jong-Hoon Lee, Jiachun Shi, Simon A. Rogers, Damien Guironnet and Ying Diao*



Mechano-diffusion of particles in stretchable hydrogels

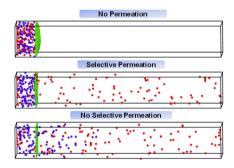
Chuwei Ye, Congjie Wei, Jiabin Liu, Tsz Hung Wong, Xinyue Liu, Ziyou Song, Chenglin Wu,* Zhaojian Li* and Shaoting Lin*



2242

Demixing of an active-passive binary mixture through a two-dimensional elastic meshwork

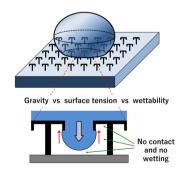
Ramanand Singh Yadav and Rajarshi Chakrabarti*



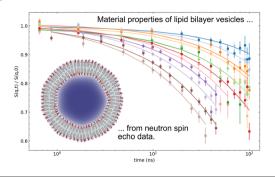
2251

Synthesis and isolation of metalloprotein on a super water-repellent umbrella-shaped pillar array with double re-entrant structure

Daiki Tanaka,* Masashi Kobayashi, Risa Fujita, Dong Hyun Yoon, Tetsushi Sekiguchi, Takashiro Akitsu, Shuichi Shoji, Takashi Tanii and Masahiro Furuya

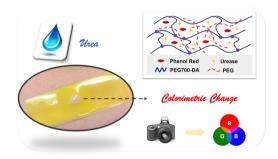


2258



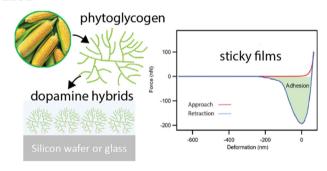
The effect of cholesterol on the bending modulus of DOPC bilayers: re-analysis of NSE data

Frank Heinrich* and John F. Nagle*



Development of colorimetric PEG-based hydrogel sensors for urea detection

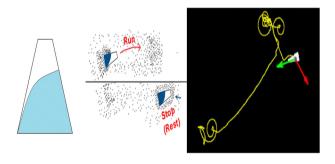
Spyridon Efstathiou, Alan M. Wemyss, Despina Coursari, Rachel A. Hand, Emmett Cullen Tinley, Jane Ford, Stephanie E. Edwards, Susan Bates, Richard L. Evans, Ezat Khoshdel and David M. Haddleton*



Hybrid phytoglycogen-dopamine nanoparticles as biodegradable underwater adhesives

Jiayi Liu, Dmitrii Sychev, Nadiia Davydiuk, Mahmoud Al-Hussein, Andreas Fery and Quinn A. Besford*

2291



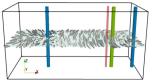
Run-and-tumble like motion of a camphor-infused Marangoni swimmer

Pampa Dey,* Abhishek Thakur, Aarsh Chotalia, Amitabha Nandi and P. Parmananda

2300

Defect dynamics in cholesterics: beyond the Peach-Koehler force

Joseph Pollard* and Richard G. Morris

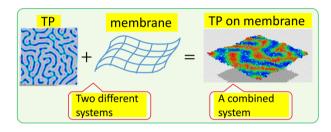




2317

Turing patterns on polymerized membranes: coarse-grained lattice modelling with an internal degree of freedom for polymer direction

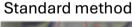
Fumitake Kato, Hiroshi Koibuchi,* Elie Bretin. Camille Carvalho, Roland Denis, Simon Masnou, Madoka Nakayama, Sohei Tasaki and Tetsuya Uchimoto

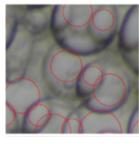


2339

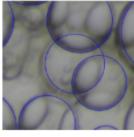
Computer vision for high-throughput analysis of pickering emulsions

Kieran D. Richards,* Ella Comish and Rachel C Evans*





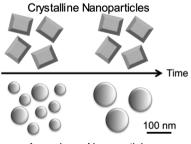




2349

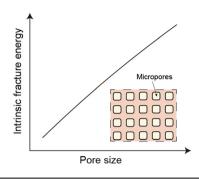
On the Ostwald ripening of crystalline and amorphous nanoparticles

Manja Annette Behrens, Alexandra Franzén, Sara Carlert, Urban Skantze, Lennart Lindfors and Ulf Olsson*



Amorphous Nanoparticles

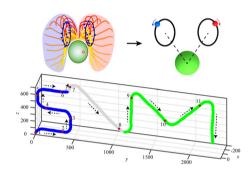
2355



Micropores can enhance the intrinsic fracture energy of hydrogels

Puyu Cao, Bin Chen,* Yi Cao and Huajian Gao

2363



Reinforcement learning selects multimodal locomotion strategies for bioinspired microswimmers

Yangzhe Liu, Zhao Wang and Alan C. H. Tsang*