

# Soft Matter

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## IN THIS ISSUE

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### Cover

See Ali Lakkis, Reinhard Richter, Sofia Kantorovich *et al.*, pp. 1081–1091. Image reproduced by permission of Ali Lakkis, Sofia Kantorovich, Reinhard Richter from *Soft Matter*, 2026, 22, 1081. Cover artwork created by Sofia S. Kantorovich, utilizing an experimental photo as background image.



### Inside cover

See Nick J. Carroll *et al.*, pp. 1092–1097. Image reproduced by permission of Adam Quintana, Gabriel P. López and Nick J. Carroll from *Soft Matter*, 2026, 22, 1092.

## PAPERS

1081

### Two time scales drive the formation of transient networks in a ferrogranular experiment

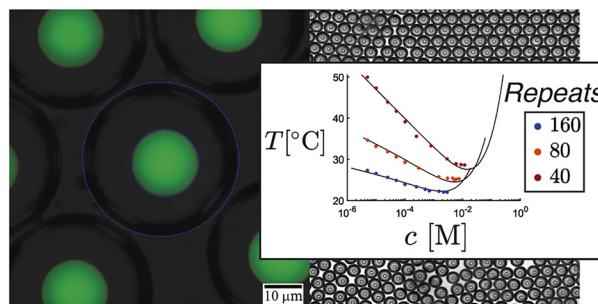
Ali Lakkis,\* Matthias Biersack, Oksana Bilous, Sofia Kantorovich and Reinhard Richter\*



1092

### Equilibrium scaling of phase separated elastin-like polypeptides for engineered condensates

Adam Quintana, Gabriel P. López and Nick J. Carroll\*



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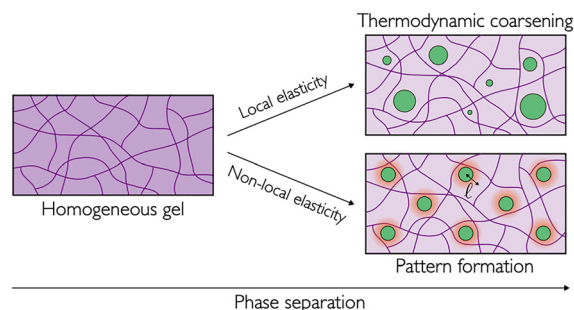
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1098

### Dynamics of phase separation in non-local elastic networks

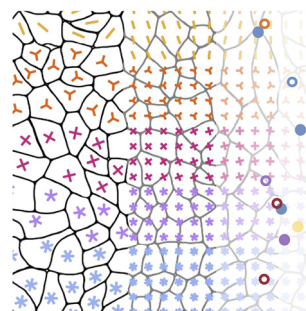
Oliver W. Paulin, Yicheng Qiang and David Zwicker\*



1109

### A spectrum of $p$ -atic symmetries and defects in confluent epithelia

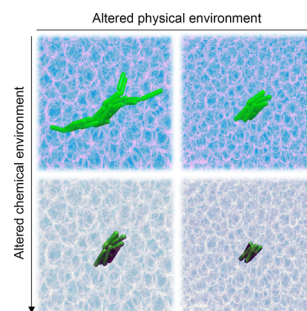
Lea Happel, Griseldis Oberschelp, Anneli Richter, Gwenda Roselene Rode, Valeriia Grudtsyna, Amin Doostmohammadi and Axel Voigt\*



1130

### Physico-chemical regulation of bacterial growth success under 3D confinement

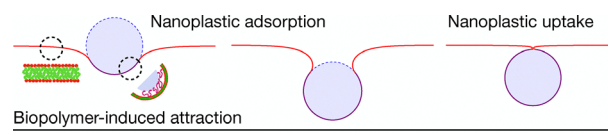
Nikita Bagade, M. Sreepadmanabh, Gokulnath Ganesan and Tapomoy Bhattacharjee\*



1141

### Predicting bio-corona-induced adsorption and uptake of nanoplastics

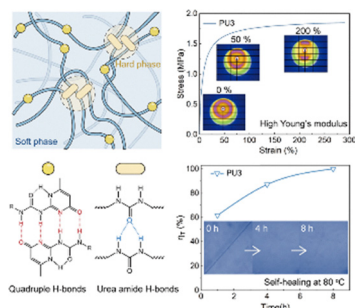
Wenlin Zhang\* and Anderson D. S. Duraes



In this work, we combine theories of polymer adsorption and elasticity of lipid membranes to predict bio-corona-induced adsorption and uptake of nanoplastics.



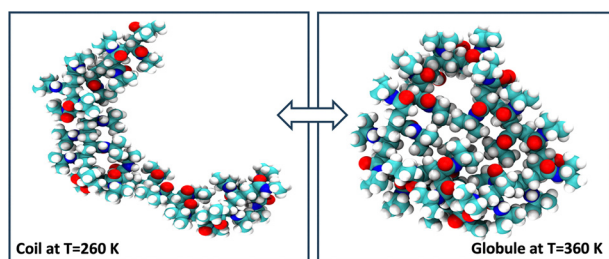
1151



### Hydrogen bond-triggered self-healing polyurea elastomers with mechanical robustness via dual-dynamic phase structure construction

Tianyu Wang, Chenxi Huyan, Qiuzhen Chen, Xiang Han, Fahu Yang, Zibi Wang, Changxiang Guo, Dong Liu\* and Fei Chen

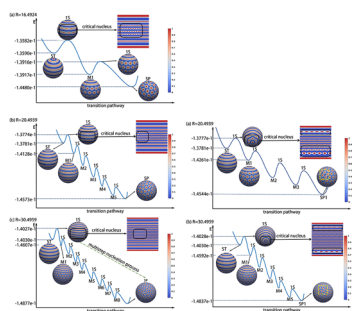
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### Sequence-defined phase behavior of poly(*N*-isopropylacrylamide-co-acrylamide) in water

Sandeep Parma, Ramamurthy Nagarajan and Tarak K. Patra\*

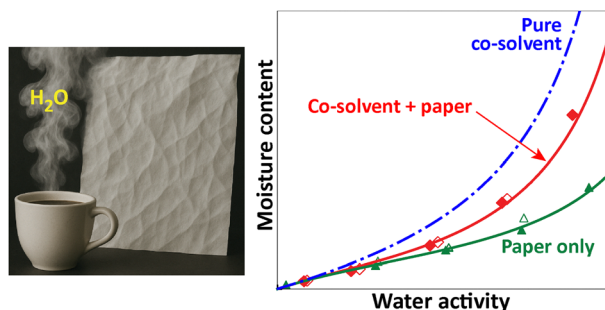
1171



### Exploring nucleation and phase transition of crystalline phases confined on spherical surfaces via the Landau–Brazovskii model

Qun Qiu and Guanghua Ji\*

1183



### Moisture sorption of cellulose-based porous media containing co-solvents and its impact on pore-fiber transport rates of co-solvent solutions

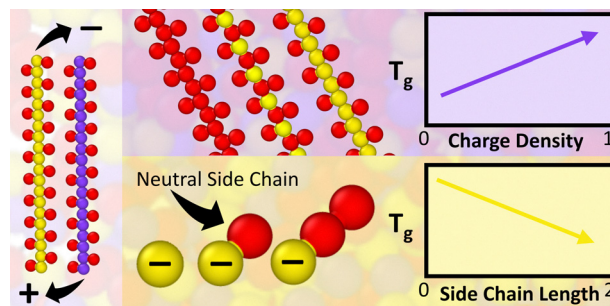
Sajjad Karimnejad and Anton A. Darhuber\*



1195

## A molecular dynamics study of the structure and dynamics of screened polyelectrolyte complex materials

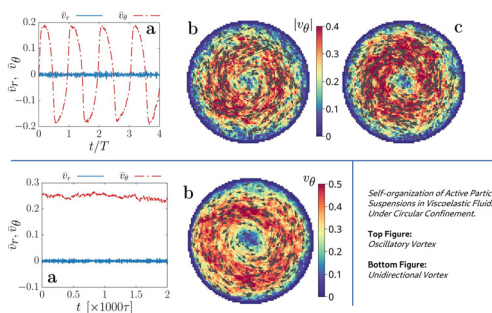
Sophie G. M. van Lange, Nayan Vengallur, Andrea Giuntoli\* and Jasper van der Gucht\*



1205

## Spatiotemporal organization in an active viscoelastic suspension: a dissipative particle dynamics study

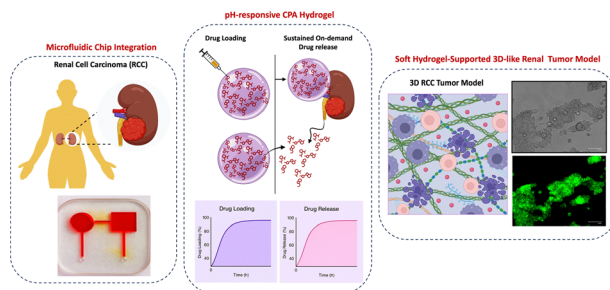
Simran Kapoor, Harinadha Gidituri and V. S. Akella\*



1214

## A bi-functional pH-responsive chip with a soft hydrogel-supported 3D-like renal tumor model for sustained drug delivery

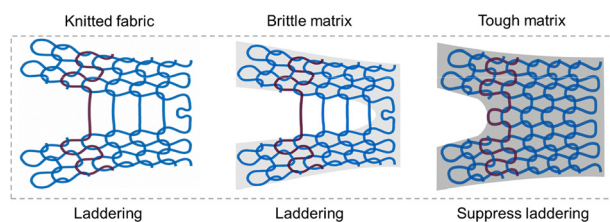
Upasana Gupta, Bisma Yousuf, Shashank Kumar Singh\* and Ravi Kumar Arun\*



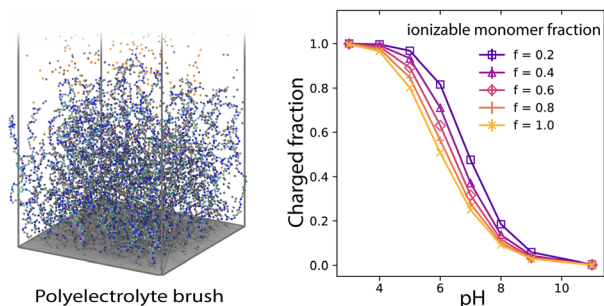
1230

## Composite of knitted fabric and soft matrix. II. Laddering

Fengkai Liu, Wanqi Zhang, Simin Zheng, Xi Chen and Jingda Tang\*



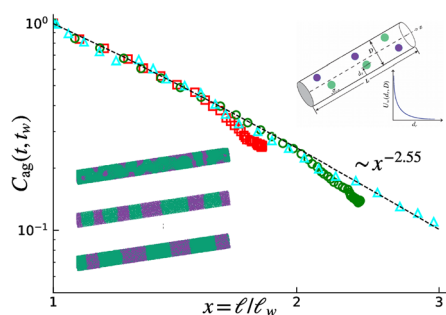
1240



### Simulation of weak polyelectrolyte brushes: the effects of ionizable monomer fraction and monovalent salt

Xin Yuan, Shahryar Ramezani Bajgiran, Rahatun Akter, Amanda B. Marciel\* and Jeremy C. Palmer\*

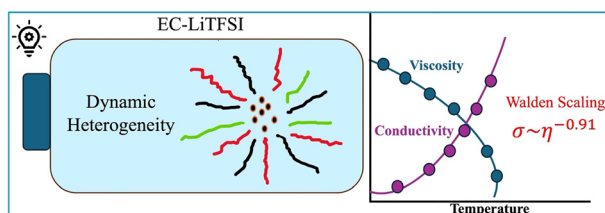
1251



### Domain growth and aging in a phase separating binary fluid confined inside a nanopore

Saikat Basu, Suman Majumder,\* Raja Paul and Subir K. Das

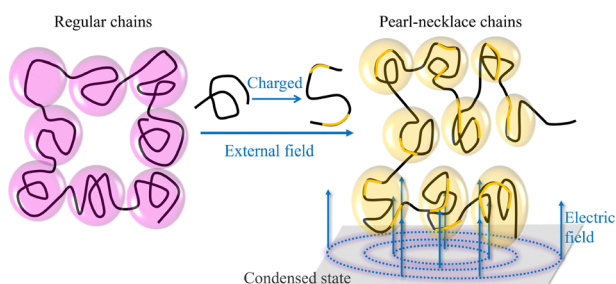
1262



### Molecular insights into temperature-driven transport mechanisms in EC-LiTFSI electrolytes

Hema Teherpuria, Prabhat K. Jaiswal and Santosh Mogurampelly\*

1272



### A thermodynamic strategy of hydrogels with pearl-necklace-like chains towards excellent hyperelasticity

Ziyu Xing,\* Yifan Liu, Xiaodong Wang,\* Xiaoling Hu and Rongguo Zhao

