

# Soft Matter

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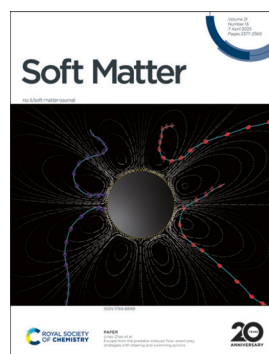
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### Cover

See Paul A. Janmey *et al.*, pp. 2400–2412. Image reproduced by permission of Jakub A. Kochanowski from *Soft Matter*, 2025, 21, 2400.



### Inside cover

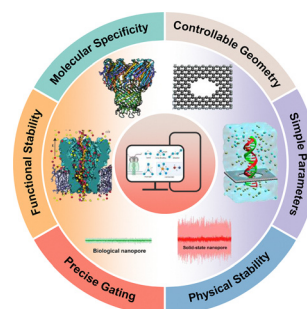
See Lihao Zhao *et al.*, pp. 2413–2421. Image reproduced by permission of Lihao Zhao, Bocheng Li and Jingran Qiu from *Soft Matter*, 2025, 21, 2413.

## PERSPECTIVE

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### Probing nanopores: molecular dynamics insights into the mechanisms of DNA and protein translocation through solid-state and biological nanopores

Yuanshuo Zhang and Mingming Ding\*

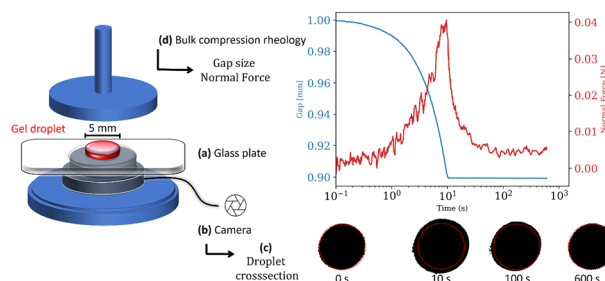


## PAPERS

2400

### Poroelasticity and permeability of fibrous polymer networks under compression

Paul Mollenkopf, Jakub A. Kochanowski, Yifei Ren, Kyle H. Vining, Paul A. Janmey\* and Prashant K. Purohit



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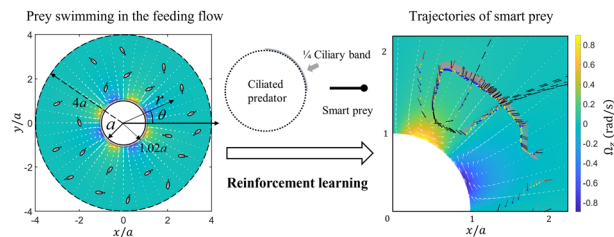
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2413

### Escape from the predator-induced flow: smart prey strategies with steering and swimming actions

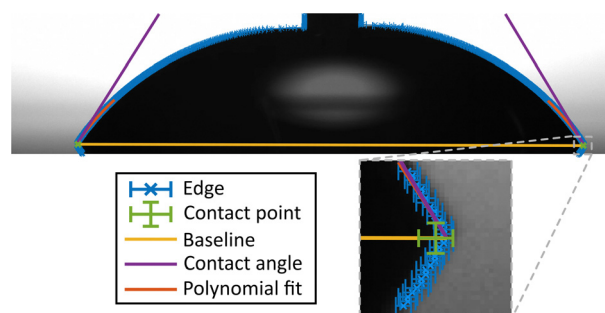
Bocheng Li, Jingran Qiu and Lihao Zhao\*



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### In situ error analysis in contact angle goniometry

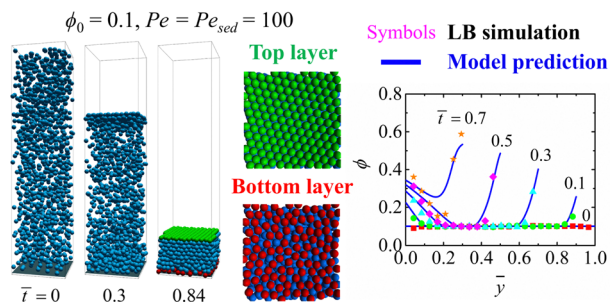
Heikki A. Nurmi,\* Gentrit Zenuni, Sakari Lepikko, Reetta Saine, Maja Vuckovac and Robin H. A. Ras\*



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### Microstructural evolution in drying colloidal films driven by evaporation and sedimentation: lattice Boltzmann simulation and a mathematical model

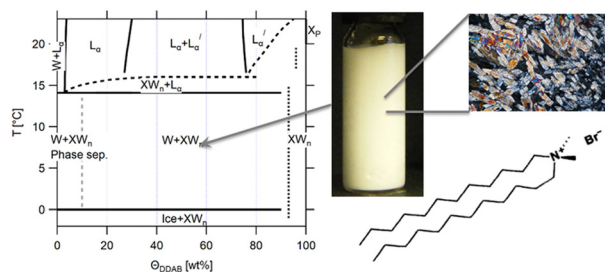
Jinseong Yun, Byoungjin Chun\* and Hyun Wook Jung\*



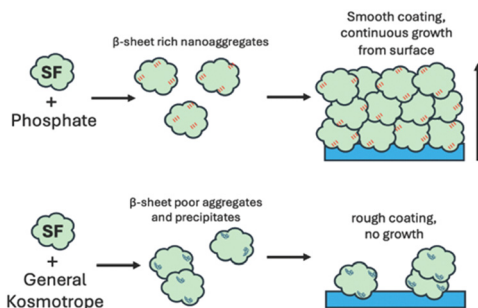
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### Physical science of the didodecyldimethylammonium bromide–water system: 1. Equilibrium phase behaviour

Louisa Reissig,\* Wim Pyckhout-Hintzen, Simon Dalglish, Andrew R. Mount, Michael E. Cates, David J. Fairhurst\* and Stefan E. Egelhaaf



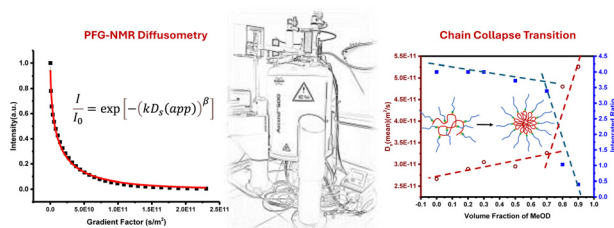
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### The role of phosphate in silk fibroin self-assembly: a Hofmeister study

Caleb Wigham, Vrushi Varude, Henry O'Donnell and R. Helen Zha\*

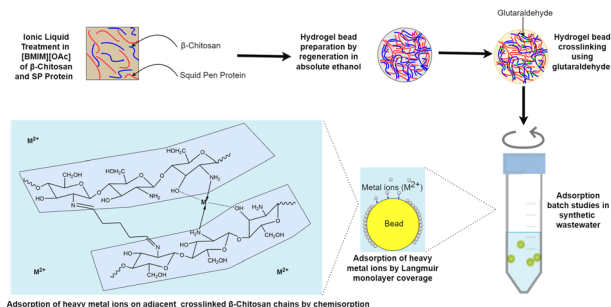
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### Tracking solvent-induced conformational collapse of periodically grafted amphiphilic polymers using PFG NMR diffusometry

Harshita Sardana, B. V. N. Phani Kumar\* and S. Ramakrishnan\*

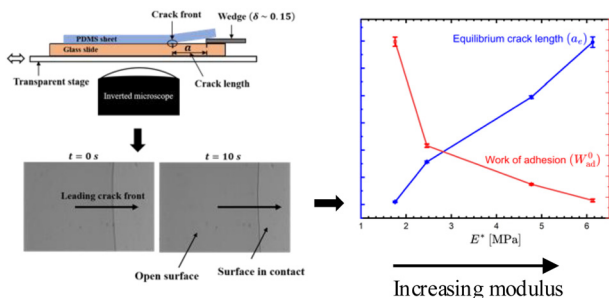
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### Preparation of hybrid β-chitosan – squid pen protein hydrogel beads by ionic liquid regeneration for adsorption of copper(II) and zinc(II) from wastewater

Liyan Moralez, Pedro Nakasu\* and Jason Hallett\*

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### Adhesion study at the interface of a PDMS-elastomer and borosilicate glass-slide: effect of modulus and thickness of the elastomer

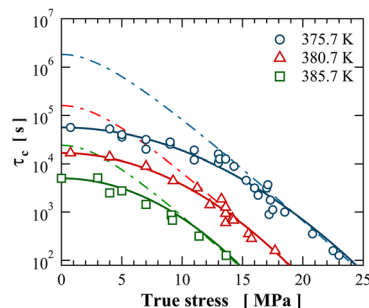
Susheel Kumar, Chiranjit Majhi, Krishnacharya Khare and Manjesh K. Singh\*



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## Eyring theory for plasticity in amorphous polymers violates Curie's principle

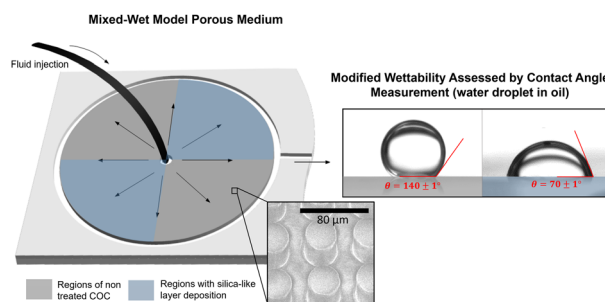
Thomas C. Merlette, Elian Masnada, Paul Sotta and Didier R. Long\*



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## Fabrication of COC micromodels with wettability heterogeneities: method and influence on fluid transport

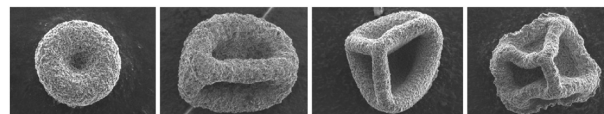
Camille Brigodiot,\* Elliot Speirs, Cédric Guyon, Michaël Tatoulian and Nicolas Pannacci



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## Evaporation driven buckling of a drop laden with graphene oxide nanosheets

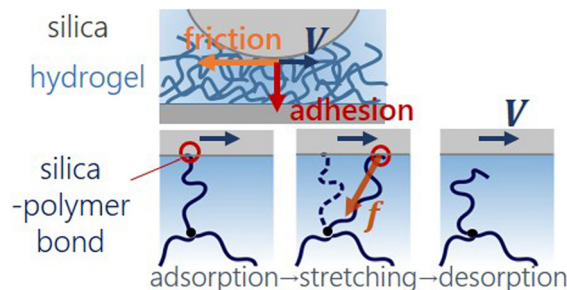
Suriya Prakash, Eva Krolis, Alvaro Marin and Lorenzo Botto\*



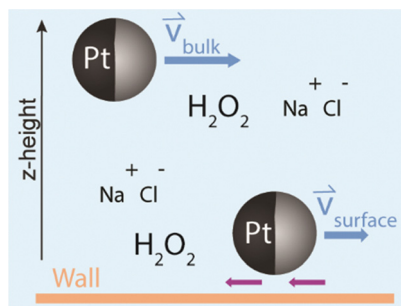
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## Molecular adsorption induces normal stresses at frictional interfaces of hydrogels

Lola Ciapa, Yvette Tran, Christian Frétygn, Antoine Chateaubinois\* and Emilie Verneuil\*



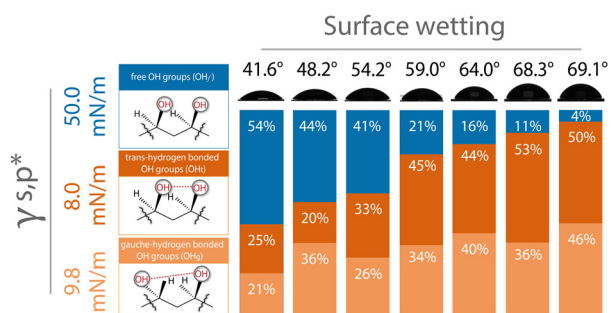
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### The motion of catalytically active colloids approaching a surface

Julio Melio, Solenn Riedel, Ali Azadbakht, Silvana A. Caipa Cure, Tom M.J. Evers, Mehrad Babaei, Alireza Mashaghi, Joost de Graaf and Daniela J. Kraft\*

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### Quantitative rationalization of the unexpectedly moderate water wettability of poly(vinyl alcohol) surfaces: thermodynamic evaluation and prediction of surface hydrogen bonding

Zhuohuan Guo, Zhuoyuan Ma\* and Dayang Wang\*

