

# Soft Matter

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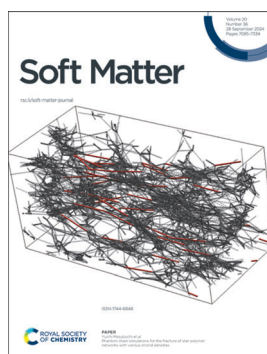
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### Cover

See Ryan Poling-Skutvik *et al.*, pp. 7094–7102. Image reproduced by permission of Ryan Poling-Skutvik and Katharine Walker from *Soft Matter*, 2024, 20, 7094.



### Inside cover

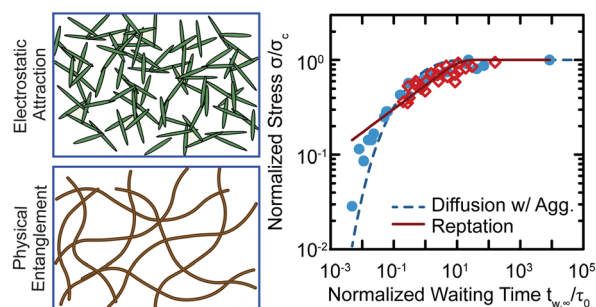
See Yuichi Masubuchi *et al.*, pp. 7103–7110. Image reproduced by permission of Yuichi Masubuchi from *Soft Matter*, 2024, 20, 7103.

## PAPERS

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### Elucidating the role of physicochemical interactions on gel rheology

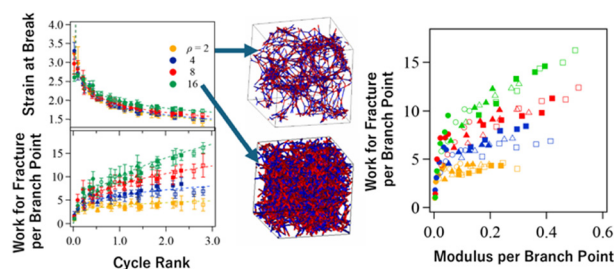
Elnaz Nikoumanesh, Charles Joseph M. Jouaneh and Ryan Poling-Skutvik\*



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### Phantom chain simulations for the fracture of star polymer networks with various strand densities

Yuichi Masubuchi,\* Takato Ishida, Yusuke Koide and Takashi Uneyama



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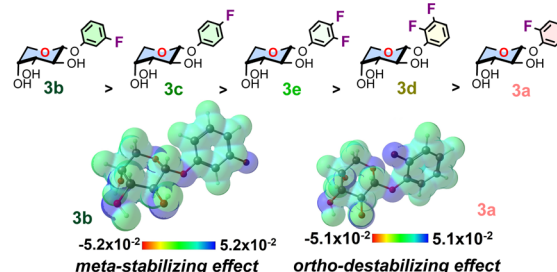
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# Understanding the gelation properties of the fluorophenyl glycosides of arabinoside gelators: experimental and theoretical studies

Sachchida N. Pandey, Navendu P. Pathak, Arunava Sengupta\* and Somnath Yadav\*

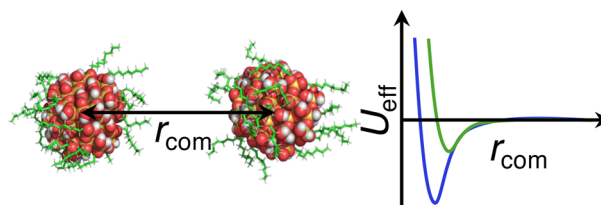
## Supramolecular Gelation Pattern in fluorinated Derivative



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# Computational investigation of the effects of polymer grafting on the effective interaction between silica nanoparticles in water

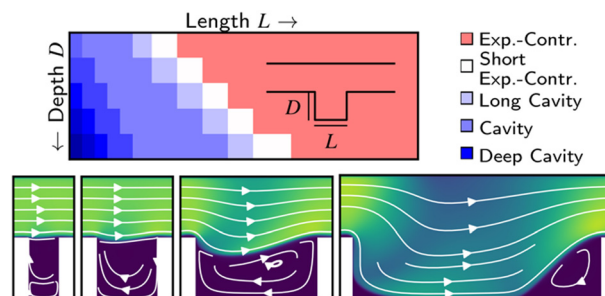
Yuvraj Singh, Chandan K. Choudhury, Rikhia Ghosh and Rakesh S. Singh\*



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# Flow of wormlike micellar solutions over concavities

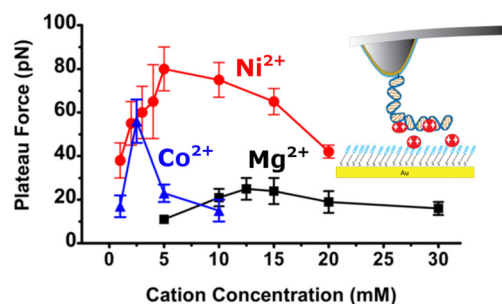
Fabian Hillebrand,\* Stylianos Varchanis, Cameron C. Hopkins, Simon J. Haward and Amy Q. Shen



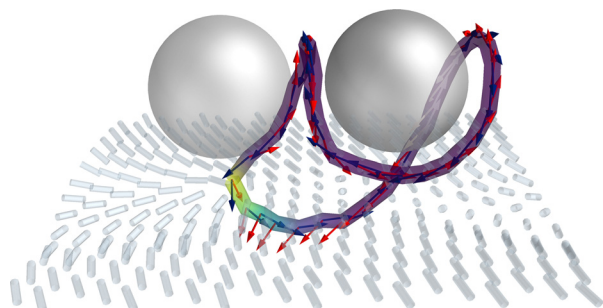
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# Quantitative measurement of cation-mediated adhesion of DNA to anionic surfaces

Xian Hao, Qufei Gu, Christine Isborn, Jesus Rodriguez Vasquez, Makenzie Provorse Long\* and Tao Ye\*



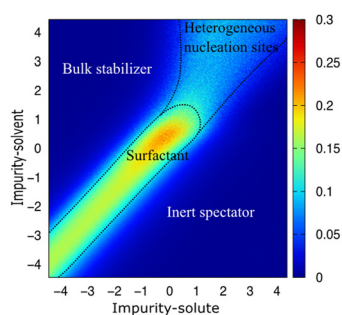
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### Entangled nematic disclinations using multi-particle collision dynamics

Louise C. Head,\* Yair A. G. Fosado, Davide Marenduzzo and Tyler N. Shendruk\*

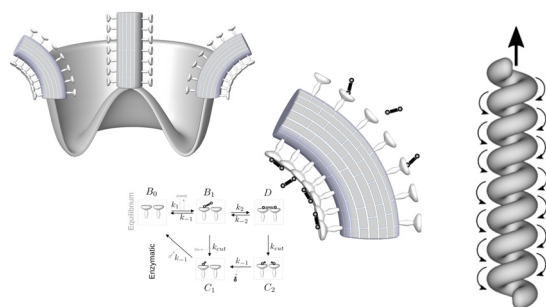
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### Mapping the influence of impurity interaction energy on nucleation in a lattice-gas model of solute precipitation

Dipanjan Mandal\* and David Quigley

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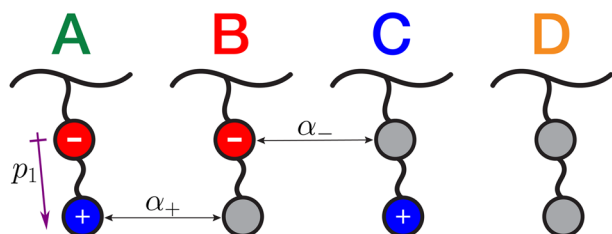


### Reshaping and enzymatic activity may allow viruses to move through the mucus

Falko Ziebert, Kenan G. Dokonon and Igor M. Kulić

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### Four zwitterionic states



### Theory and quantitative assessment of pH-responsive polyelectrolyte–polyzwitterion complexation

Samuel C. Hoover, Khatcher O. Margossian and Murugappan Muthukumar\*



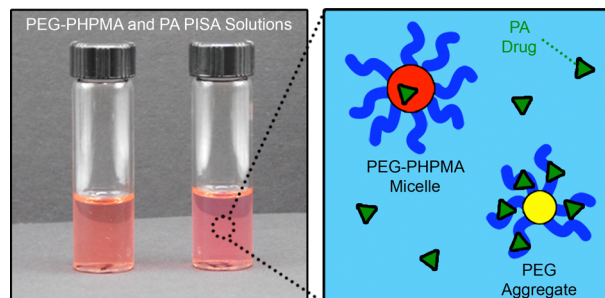


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## Impact of a poly(ethylene glycol) corona block on drug encapsulation during polymerization induced self-assembly

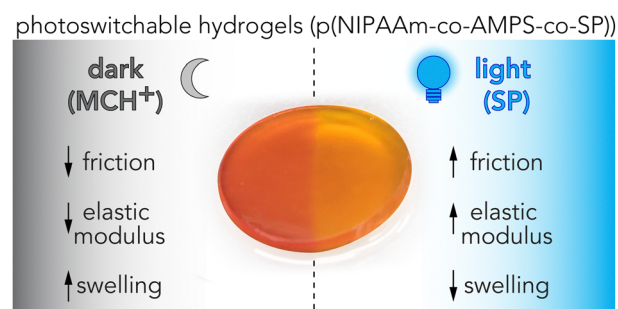
Guanrui Li, Cassie Duclos and Ralm G. Ricarte\*



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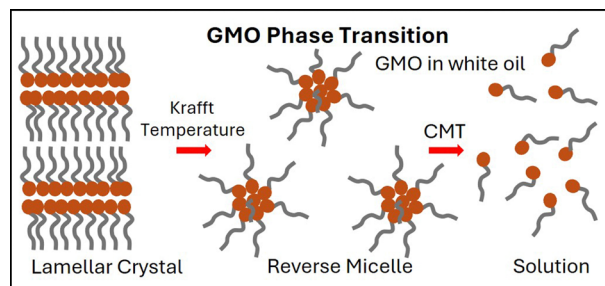
Allison L. Chau, Kseniia M. Karnaukh, Ian Maskiewicz, Javier Read de Alaniz\* and Angela A. Pitenis\*



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## Impact of water and oleic acid on glycerol monooleate phase transition and bi-continuous structure formation in white oil

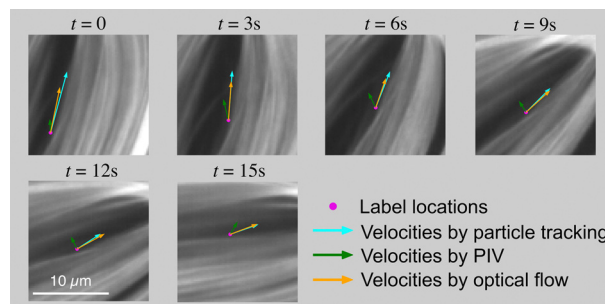
Ngoc A. Nguyen, Deborah Y. Liu and Daniel V. Krogstad\*



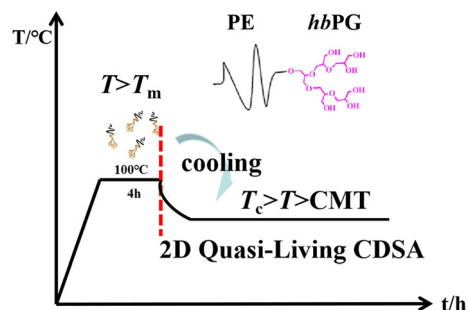
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## Deep-learning optical flow for measuring velocity fields from experimental data

Phu N. Tran, Sattvic Ray, Linnea Lemma, Yunrui Li, Reef Sweeney, Aparna Baskaran, Zvonimir Dogic, Pengyu Hong\* and Michael F. Hagan\*



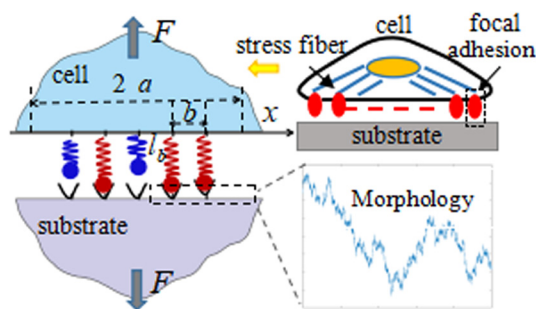
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## Two-dimensional (2D) quasi-living crystallization-driven self-assembly of polyethylene-*b*-hyperbranched polyglycidol diblock copolymers in solution

Xiaowen Si, Chenxi Jiang, Yu Hu and Jingshan Mu\*

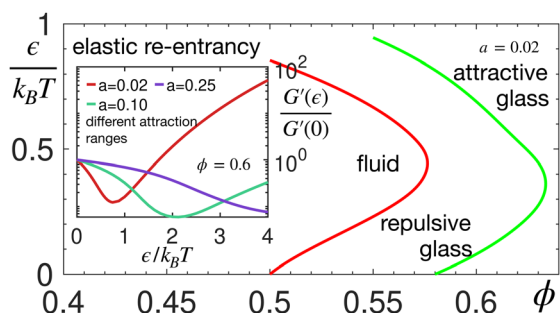
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## A viscoelastic-stochastic model of cell adhesion considering matrix morphology and medium viscoelasticity

Shuying Li, Chuanzhen Huang,\* Hanlian Liu,\* Xu Han, Zhichao Wang, Zhuang Chen, Jun Huang and Zhen Wang

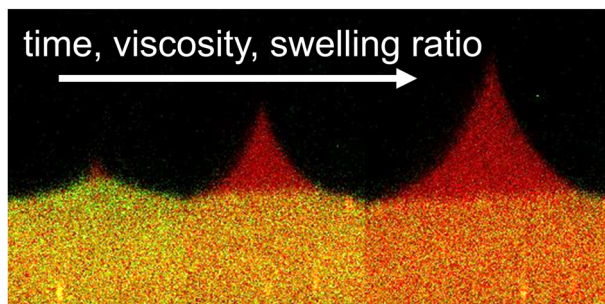
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## Microscopic theory of the elastic shear modulus and length-scale-dependent dynamic re-entrancy phenomena in very dense sticky particle fluids

Anoop Mutneja and Kenneth S. Schweizer\*

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## Phase separation dynamics in wetting ridges of polymer surfaces swollen with oils of different viscosities

Zhuoyun Cai, Rodrique G. M. Badr, Lukas Hauer, Krishnaroop Chaudhuri, Artem Skabeev, Friederike Schmid\* and Jonathan T. Pham\*

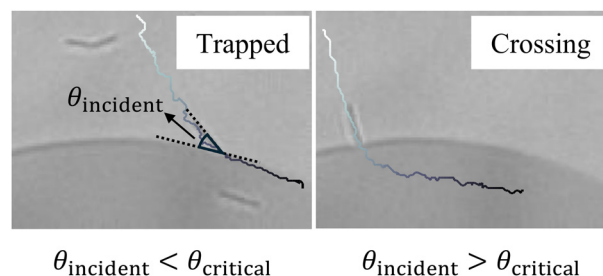


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# Motile bacteria crossing liquid–liquid interfaces of an aqueous isotropic–nematic coexistence phase

Jiyong Cheon, Joowang Son, Sungbin Lim, Yundon Jeong, Jung-Hoon Park, Robert J. Mitchell, Jaeup U. Kim and Joonwoo Jeong\*



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# Phospholipase-catalyzed degradation drives domain morphology and rheology transitions in model lung surfactant monolayers

Julia M. Fisher\* and Todd M. Squires

