

# Soft Matter

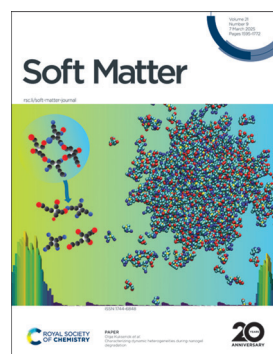
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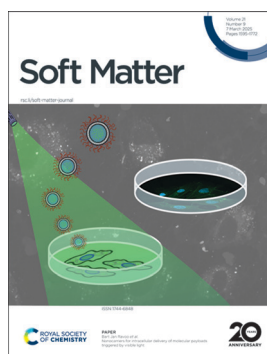
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ISSN 1744-6848 CODEN SMOABF 21(9) 1595-1772 (2025)



### Cover

See Olga Kuksenok *et al.*, pp. 1624–1638. Image reproduced by permission of Olga Kuksenok and Zafrin F. Mira from *Soft Matter*, 2025, 21, 1624.



### Inside cover

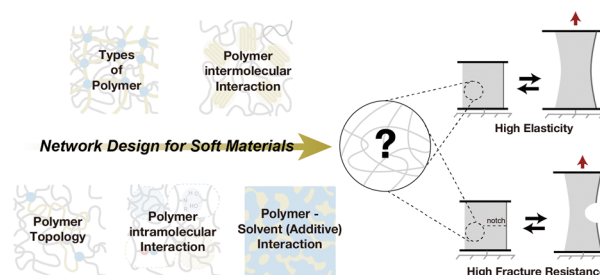
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## REVIEW

1603

### Network design for soft materials: addressing elasticity and fracture resistance challenges

Yong Eun Cho, Sihwan Lee, Sang Jun Ma and Jeong-Yun Sun\*

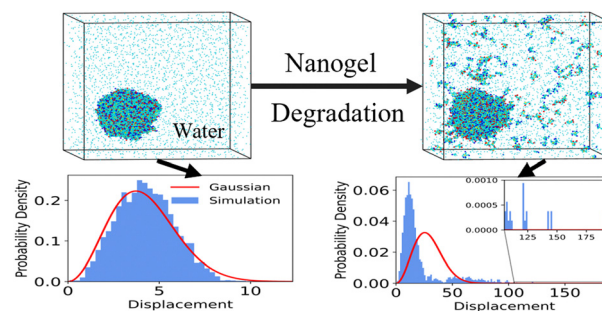


## PAPERS

1624

### Characterizing dynamic heterogeneities during nanogel degradation

Zafrin Ferdous Mira, Vaibhav Palkar and Olga Kuksenok\*



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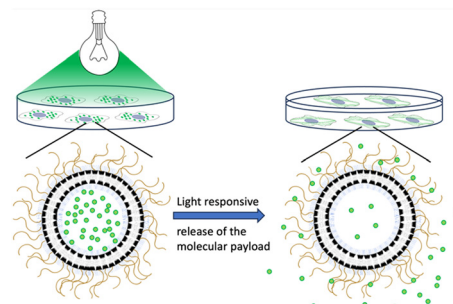


## PAPERS

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**Nanocarriers for intracellular delivery of molecular payloads triggered by visible light**

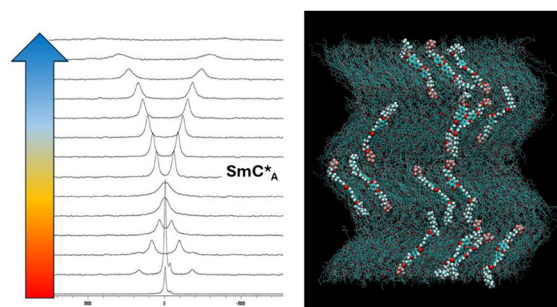
Ashutosh Kanojiya, Julian Tergrane, Volker Gerke and Bart Jan Ravoo\*



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**Chemical and physical properties of orthoconic liquid crystals:  $^2\text{H}$  NMR spectroscopy and molecular dynamics simulations**

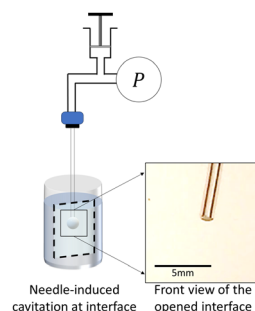
Anna Drzewicz, Martina Rossi, Mario Cifelli, Giacomo Saielli, Marzena Tykarska and Valentina Domenici\*



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**Measuring interfacial strength of ultra-soft materials with needle-induced cavitation**

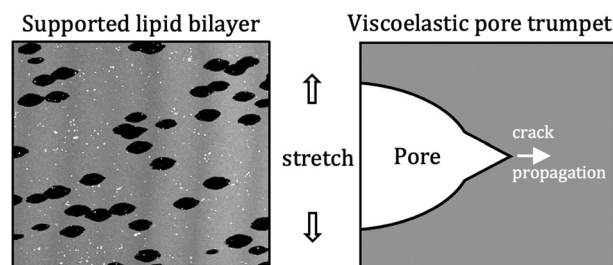
Hongbo Fu and Alfred J. Crosby\*



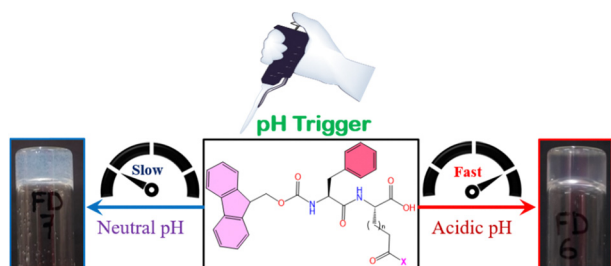
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**Lipid bilayer fracture under uniaxial stretch**

Rachel Joanne Goodband and Margarita Staykova\*



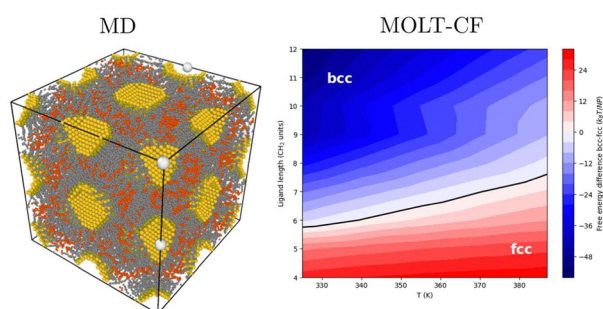
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### Fmoc-conjugated dipeptide-based hydrogels and their pH-tuneable behaviour

Soumen Kuila, Souvik Misra, Riya Saha, Laboni Ghosh, Pijush Singh, Anamika Ghosh, Kolimi Prashanth Reddy, Subhradip Pandit, Debabani Ganguly, Pallab Datta, Samik Bindu, Gouranga Nandi, Suman Samai and Jayanta Nanda\*

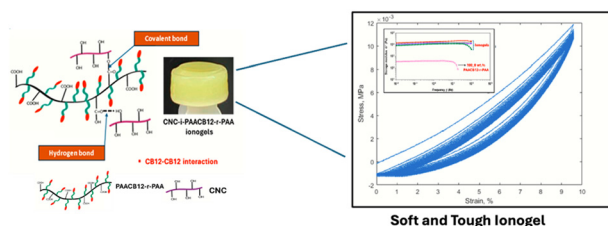
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### Temperature dependence of phase diagrams and dynamics in nanocrystal assembly by solvent evaporation

Alex Upah, Leandro Missoni, Mario Tagliazucchi\* and Alex Traveset\*

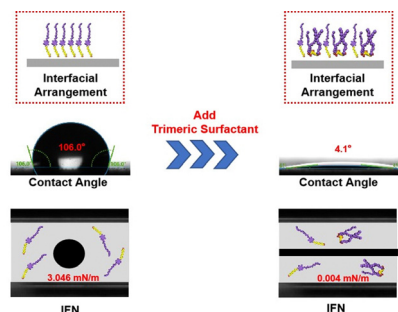
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### Soft and tough cellulose nanocrystals interlocked with polyacrylate-bearing cyanobiphenyl ionogels through a double network strategy

Patrick K. Njenga, Francis K. Masese, Dennis M. Ndaya, M. Daniela Morales-Acosta, Nicholas Eddy and Rajeswari M. Kasi\*

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### Enhancing surface/interface activity and wettability via trimeric surfactant-containing mixtures

Chao Zhang, Jianlin Jiang, Linbi Zhou, Lili Zhou,\* Bing Qin\* and Fulin Qiao\*



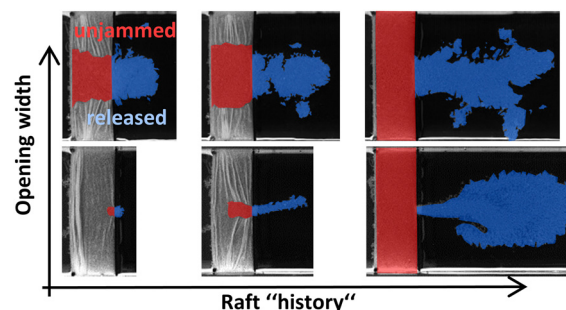


## PAPERS

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# Unjamming of particle–laden interfaces: effects of geometry and history

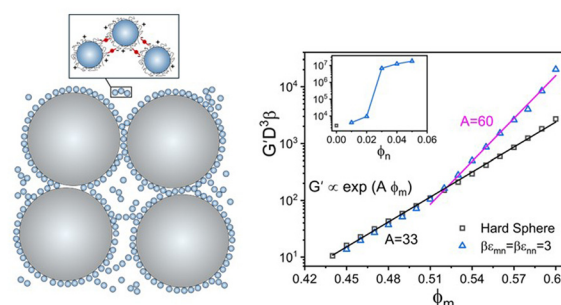
Carole Planchette\* and Gregor Plohl



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# Theoretical study of the impact of dilute nanoparticle additives on the shear elasticity of dense colloidal suspensions

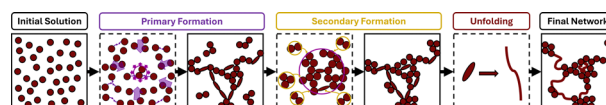
Subhasish Chaki, Benito Román-Manso, Larissa Senatus, Jennifer A. Lewis and Kenneth S. Schweizer\*



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# Capturing the impact of protein unfolding on the dynamic assembly of protein networks

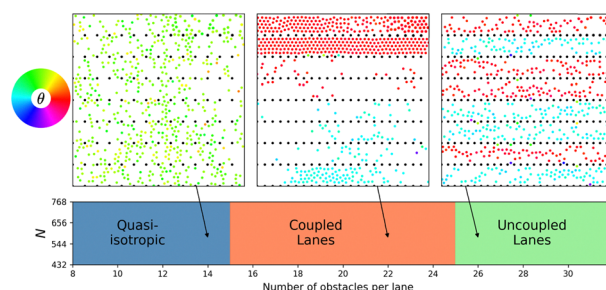
Matt D. G. Hughes, Sophie Cussons, Ahmad Borumand, Arwen I. I. Tyler, David J. Brockwell and Lorna Dougan\*



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# Polarization and dynamic phases of aligning active matter in periodic obstacle arrays

Daniel Canavello, C. Reichardt, C. J. O. Reichardt and Clécio C. de Souza Silva\*



## CORRECTIONS

1768

**Correction: *Anoplophora graafi* longhorn beetle coloration is due to disordered diamond-like packed spheres**

Kenza Djeghdi, Cédric Schumacher, Viola Bauernfeind, Ilja Gunkel, Bodo D. Wilts\* and Ullrich Steiner

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**Correction: Topological defects induced by air inclusions in ferroelectric nematic liquid crystals with ionic doping**

Zhongjie Ma, Shengzhu Yi, Miao Jiang, Mingjun Huang, Satoshi Aya, Rui Zhang and Qi-Huo Wei\*

