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Soft Matter

Where physics meets chemistry meets biology for fundamental soft matter research

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ISSN 1744–6848 CODEN SMOABF 21(21) 4121–4308 (2025)

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See Piero Baglioni *et al.*, pp. 4165–4176.
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Inside cover
See Emiko Mouri *et al.*, pp. 4146–4149.
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PERSPECTIVE

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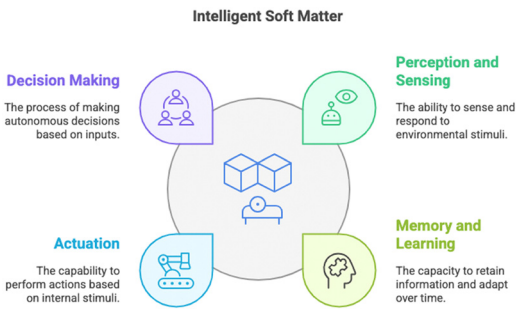
Intelligent soft matter: towards embodied intelligence

Vladimir A. Baulin,* Achille Giacometti, Dmitry A. Fedosov, Stephen Ebbens, Nydia R. Varela-Rosales, Neus Feliu, Mithun Chowdhury, Minghan Hu, Rudolf Füchslin, Marjolein Dijkstra, Matan Mussel, René van Roij, Dong Xie, Vassil Tzanov, Mengjie Zu, Samuel Hidalgo-Caballero, Ye Yuan, Luca Cocconi, Cheol-Min Ghim, Cécile Cottin-Bizonne, M. Carmen Miguel, Maria Jose Esplandiu, Juliane Simmchen, Wolfgang J. Parak, Marco Werner, Gerhard Gompper and Martin M. Hanczyc

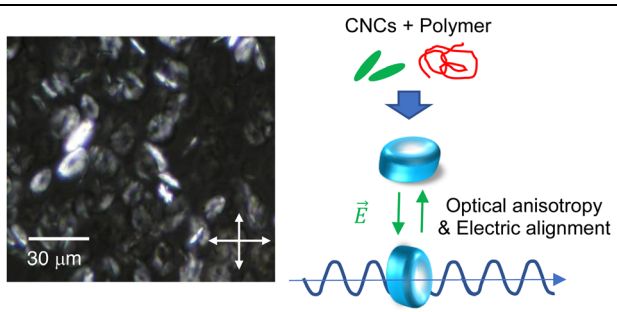


COMMUNICATIONS

4146

Multiple anisotropy of cellulose nanocrystals self-organized into disc-shaped particles

Emiko Mouri,* Kenta Noma, Keito Hirayama, Ryohei Iwahisa, Satsuki Azuma and Teruyuki Nakato



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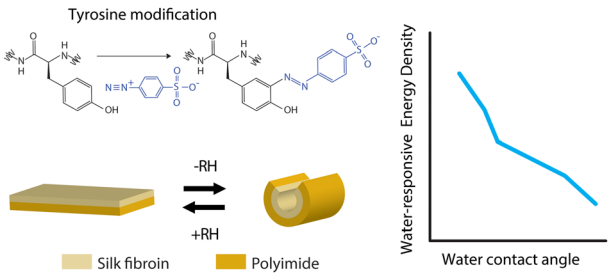
COMMUNICATIONS

4150

Modulating water-responsive actuation energy of regenerated silk fibroin *via* tyrosine modification

Maheen K. Khan, Vignesh Athiyarath, Darjan Podbevšek, Yeojin Jung, Seungri Kim, Yuchen Zhang, Gonca Kilavuz-Ecker, Raymond S. Tu and Xi Chen*



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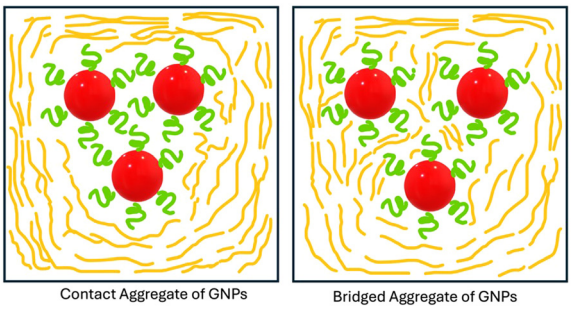
Thickening of liquids using copolymer grafted nanoparticles

Prama Adhya, Sachin M. B. Gautham, Tarak K. Patra,* Manish Kaushal* and Titash Mondal*



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New perspectives on green and sustainable wet cleaning systems for art conservation

David Chelazzi, Romain Bordes, Andrea Casini, Rosangela Mastrangelo, Krister Holmberg and Piero Baglioni*

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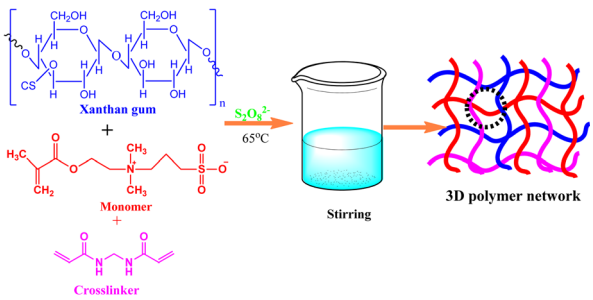
Developing multifunctional zwitterionic-xanthan gum-anchored network copolymers for biomedical applications

Vikrant Sharma,* Disha Kapil and Baljit Singh



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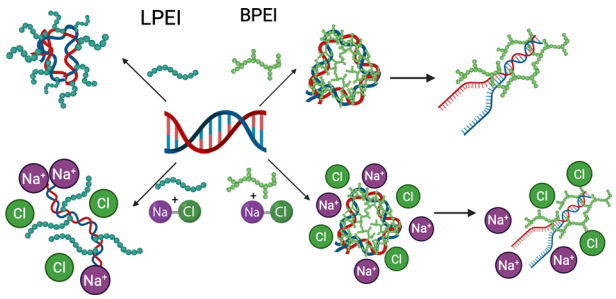

Revealing two distinct molecular binding modes in polyethyleneimine–DNA polyplexes using infrared spectroscopy

Rusul Mustafa, Danielle Diorio, Madeline Harper and David Punihaole*

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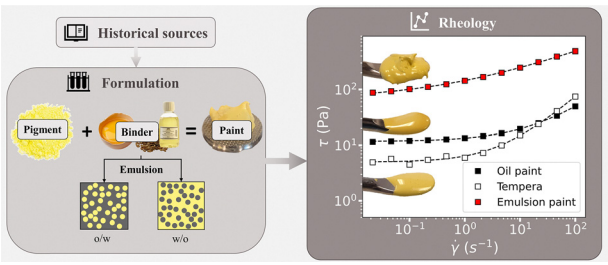

Rheological and structural characterization of emulsion-based paints

Côme Thillaye du Boullay, Maguy Jaber, Céleste Coulont and Laurence de Viguerie*

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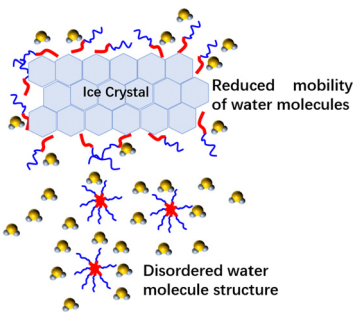

L-Methionine sulfoxide and L-alanine copolymers for ice control

Huimin Han, Qingjing Niu, Kongying Zhu, Xiaoyan Yuan and Lixia Ren*

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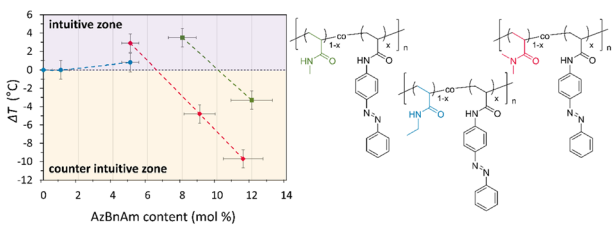

Counter-intuitive photo-modulation of the aqueous phase behavior of azo dye-functionalized polyacrylamides

René Steinbrecher, Peiran Zhang, Christine M. Papadakis, Peter Müller-Buschbaum, Andreas Taubert and André Laschewsky*

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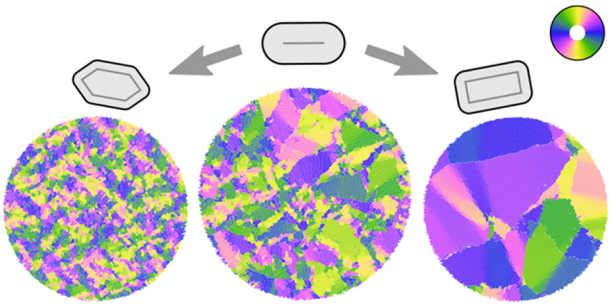
Sensitive particle shape dependence of growth-induced mesoscale nematic structure

Jonas Isensee and Philip Bittihn*



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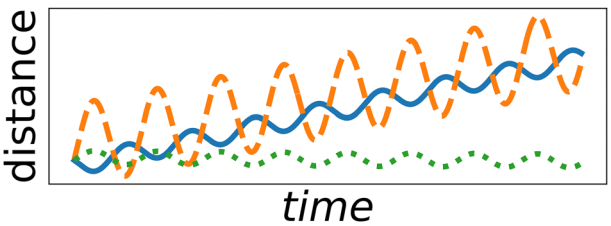
Amoeboid propulsion of active solid bodies, vesicles and droplets: a comparison

Reiner Kree* and Annette Zippelius*



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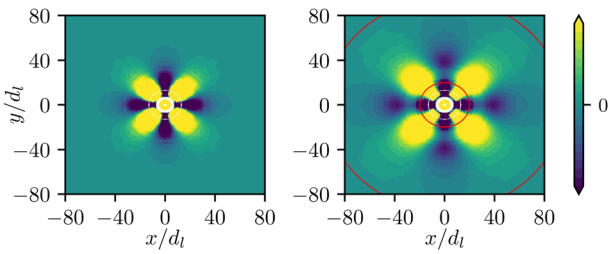
Stress correlations and stress memory kernels in viscoelastic fluids

Niklas Grimm, Jörg Baschnagel, Alexander N. Semenov, Annette Zippelius and Matthias Fuchs*



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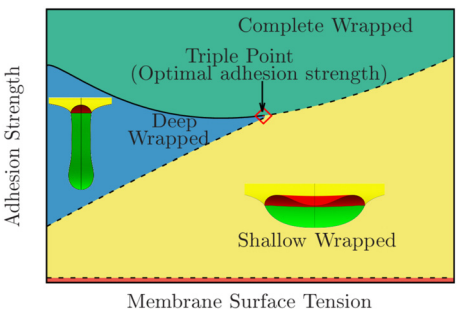
Wrapping nonspherical vesicles at bio-membranes

Ajit Kumar Sahu, Rajkumar Malik and Jiarul Midya*



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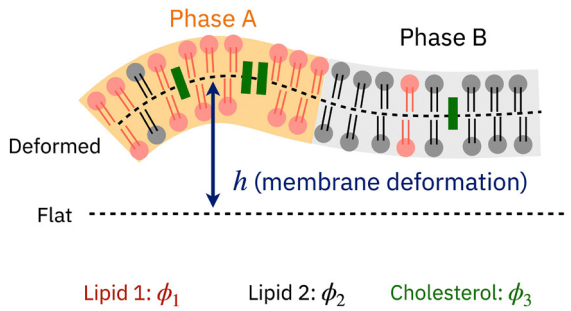

Pattern formation of lipid domains in bilayer membranes

Qiwei Yu and Andrej Košmrlj*

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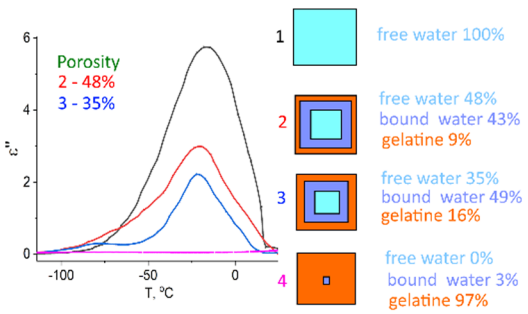

Determining hydrogel porosity through dielectric relaxation intensity ratios between water and hydrogel

Maksym M. Lazarenko,* Yuriy F. Zabashta, Dmytro. K. Honcharuk, Oleksandr M. Alekseev, Kateryna S. Yablochkova, Liena Yu. Vergun, Dmytro A. Andrusenko, Mykhaylo V. Lazarenko and Leonid A. Bulavin

EXPRESSION OF CONCERN

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Expression of concern: Substrate induced differentiation of human mesenchymal stem cells on hydrogels with modified surface chemistry and controlled modulus

Mathieu Lanniel, Ejaz Huq, Stephanie Allen, Lee Buttery, Philip M. Williams and Morgan R. Alexander*

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