

Soft Matter

Where physics meets chemistry meets biology for fundamental soft matter research

rsc.li/soft-matter-journal

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

IN THIS ISSUE

ISSN 1744-6848 CODEN SMOABF 20(17) 3543-3710 (2024)



Cover

See Michael Izaguirre and Shima Parsa, pp. 3585–3592. Image reproduced by permission of Shima Parsa, Rochester Institute of Technology from *Soft Matter*, 2024, 20, 3585.



Inside cover

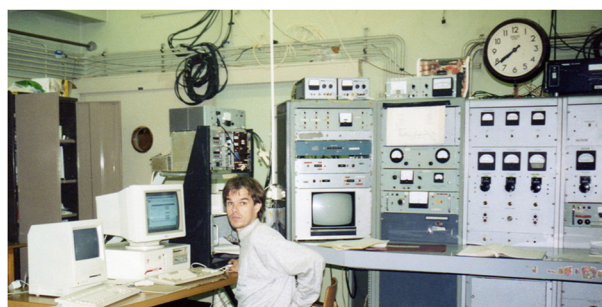
See Youhua Jiang and Zhujiang Wang, pp. 3593–3601. Image reproduced by permission of Youhua Jiang from *Soft Matter*, 2024, 20, 3593.

PROFILE

3551

Ullrich Steiner: portrait of the scientist as a young student

Jacob Klein

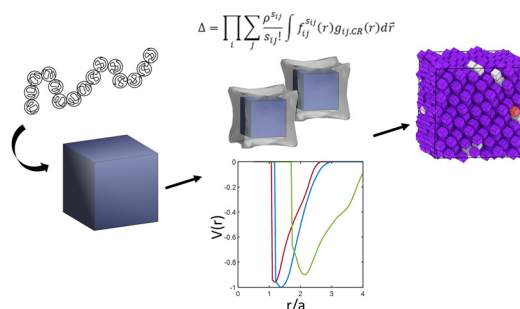


REVIEW

3554

Theory and simulation of ligand functionalized nanoparticles – a pedagogical overview

Thi Vo



Environmental Science journals

One impactful portfolio for
every exceptional mind

Harnessing the power of interdisciplinary
science to preserve our environment

rsc.li/envsci

Fundamental questions
Elemental answers

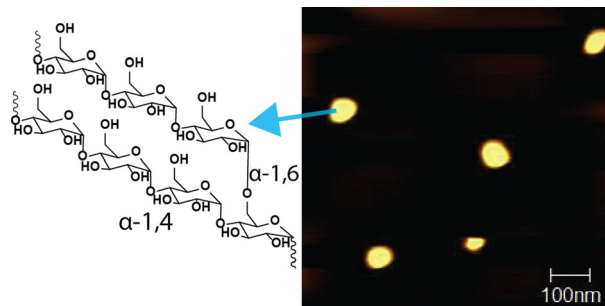


PERSPECTIVE

3577

The sweetest polymer nanoparticles: opportunities ahead for glycogen in nanomedicine

Quinn A. Besford

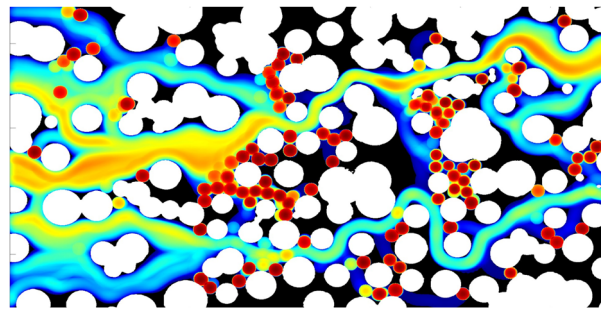


PAPERS

3585

Emergence of preferential flow paths and intermittent dynamics in emulsion transport in porous media

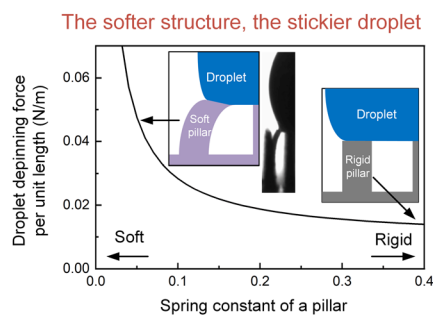
Michael Izaguirre and Shima Parsa*



3593

Soft wetting: an analytical model for pillar topography- and softness-dependent droplet depinning force

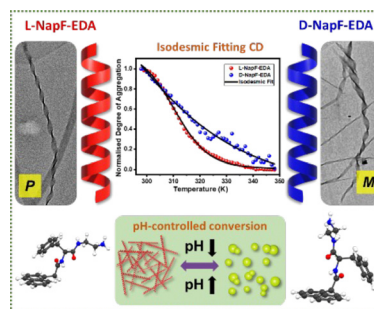
Youhua Jiang* and Zhujiang Wang



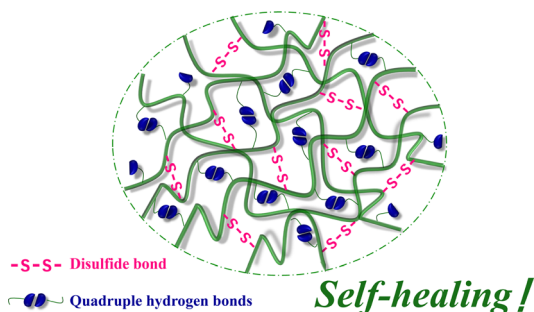
3602

Divergent self-assembly propensity of enantiomeric phenylalanine amphiphiles that undergo pH-induced nanofiber-to-nanoglobule conversion

Manas Kumar Pradhan, Nayanika Misra, Fathima Sahala, Nyaya Prakash Pradhan and Aasheesh Srivastava*



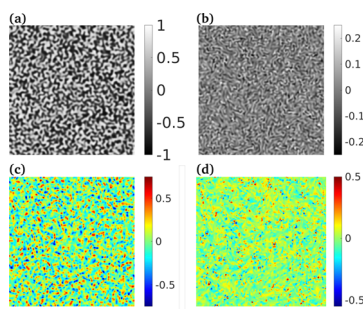
3612



Self-healing polyacrylates based on dynamic disulfide and quadruple hydrogen bonds

Longjin Du, Yuting Zhong,* Linying Zhao, Chengzhen Hu, Liang Shen,* Yuping Yang and Jiang Zhong*

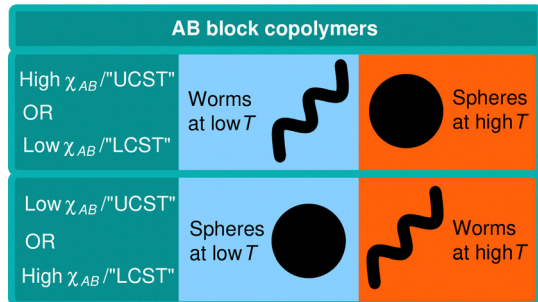
3620



Novel turbulence and coarsening arrest in active-scalar fluids

Nadia Bihari Padhan,* Kolluru Venkata Kiran and Rahul Pandit

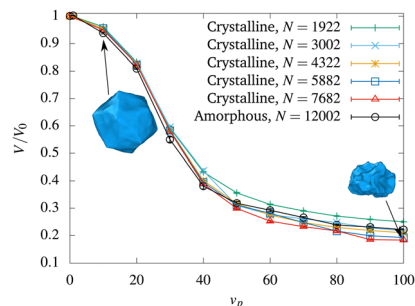
3628



Temperature dependence of micelle shape transitions in copolymer solutions: the role of inter-block incompatibility

M. J. Greenall* and M. J. Derry

3635



Spontaneous crumpling of active spherical shells

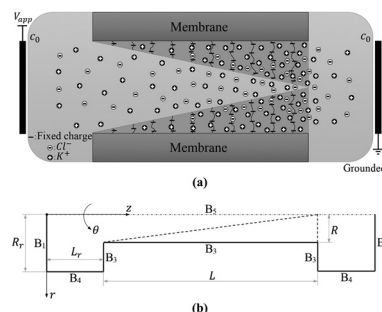
M. C. Gandikota, Shibananda Das and A. Cacciuto*



3641

Improved ionic current rectification utilizing cylindrical nanochannels coated with polyelectrolyte layers of non-uniform thickness

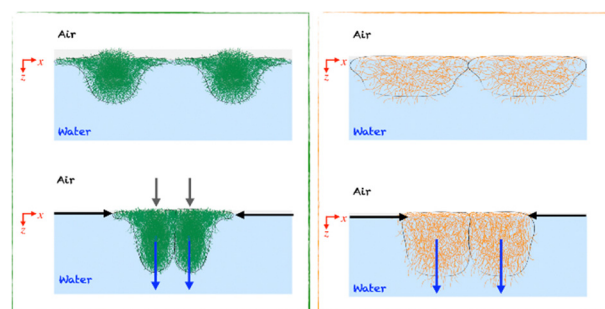
Nader Nekoubin, Steffen Hardt and Arman Sadeghi*



3653

Softness matters: effects of compression on the behavior of adsorbed microgels at interfaces

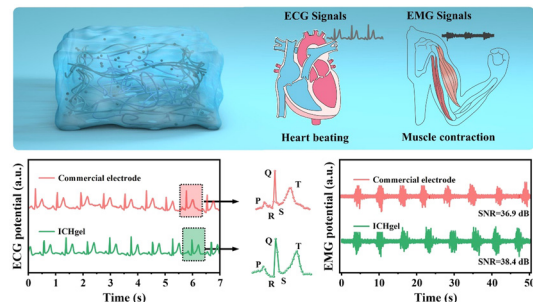
Yuri Gerelli,* Fabrizio Camerin,* Steffen Bochenek, Maximilian M. Schmidt, Armando Maestro, Walter Richtering, Emanuela Zaccarelli and Andrea Scotti*



3666

Multiple physical crosslinked highly adhesive and conductive hydrogels for human motion and electrophysiological signal monitoring

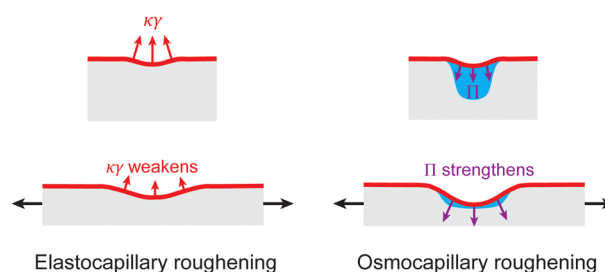
Qirui Wu, Anbang Chen, Yidan Xu, Songjiu Han, Jiayu Zhang, Yujia Chen, Jianren Hang, Xiaoxiang Yang* and Lunhui Guan*



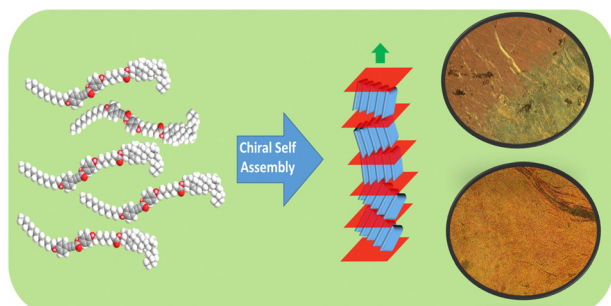
3676

Deformation-dependent gel surface topography due to the elastocapillary and osmocapillary effects

Luochang Wang and Qihan Liu*



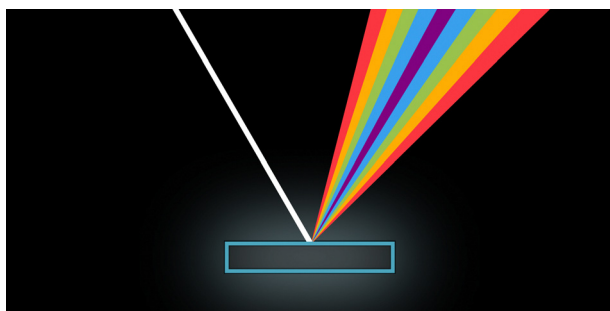
3685



The interplay of chirality and restricted rotation: stabilisation of chiral, frustrated mesophases over a wide thermal range

Sachin A. Bhat and Channabasaveshwara V. Yelamaggad*

3695



Angle-resolved optical spectroscopy of photonic cellulose nanocrystal films reveals the influence of additives on the mechanism of kinetic arrest

Thomas G. Parton, Richard M. Parker, Sonja Osbild, Silvia Vignolini* and Bruno Frka-Petecic*

