

# Soft Matter

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## IN THIS ISSUE

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### Cover

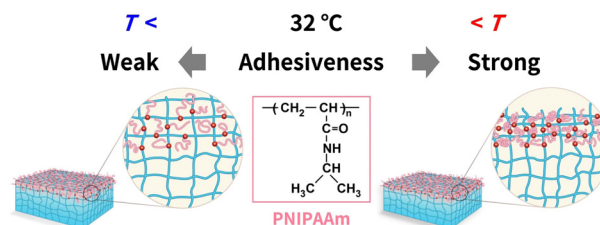
See Sangwoo Lee *et al.*, pp. 3257–3266. Image reproduced by permission of Juhong Ahn and Sangwoo Lee from *Soft Matter*, 2023, 19, 3257.

## COMMUNICATIONS

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### A surface-grafted hydrogel demonstrating thermoresponsive adhesive strength change

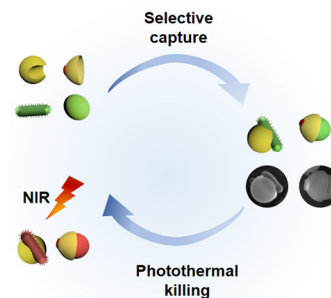
Aya M. Akimoto,\* Yuji Ohta, Yuki Koizumi, Taichi Ishii, Masaru Endo, Takafumi Enomoto, Taihei Nishimoto and Ryo Yoshida\*



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### Colloidal antibiotic mimics: selective capture and killing of microorganisms by shape-anisotropic colloids

Sihua Ren, Fei Xu, Huaguang Wang\* and Zexin Zhang\*



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# Soft Matter

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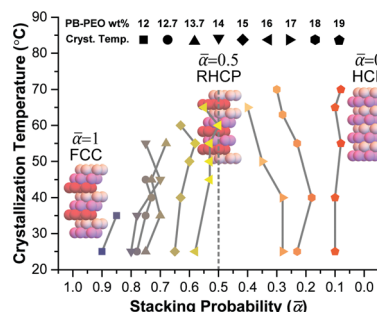
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## Continuous transition of colloidal crystals through stable random orders

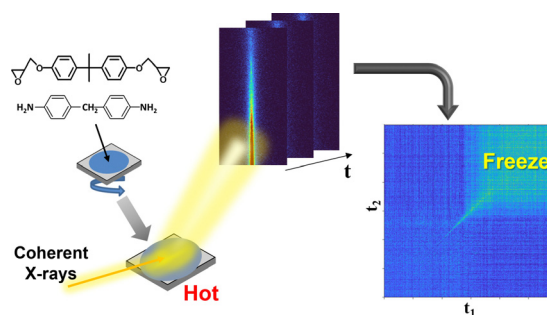
Juhong Ahn, Liwen Chen, Patrick T. Underhill, Guillaume Freychet, Mikhail Zhernenkov and Sangwoo Lee\*



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## Dynamic behaviours of epoxy resin thin films during the curing process

Taiki Hoshino,\* Yasushi Okamoto, Atsushi Yamamoto and Hiroyasu Masunaga

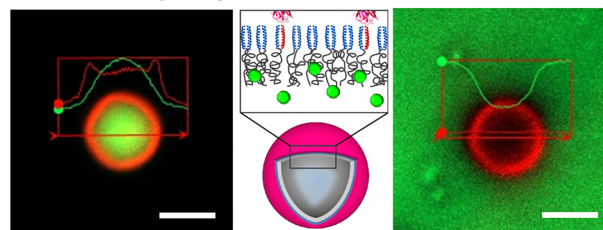


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## Temperature-responsive membrane permeability of recombinant fusion protein vesicles

Jackson Powers and Yeongseon Jang\*

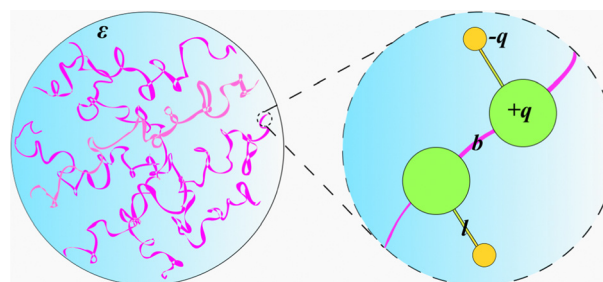
### The permeability changes of protein vesicles to dyes, dictated by temperature and membrane structure



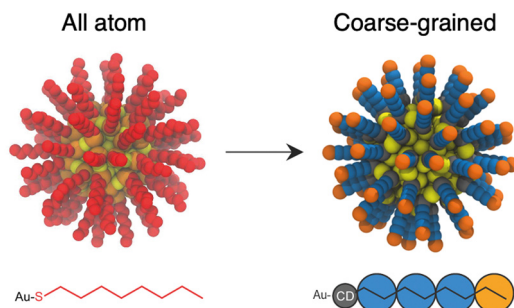
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## Theory of self-coacervation in semi-dilute and concentrated zwitterionic polymer solutions

Yury A. Budkov,\* Petr E. Brandyshev and Nikolai N. Kalikin



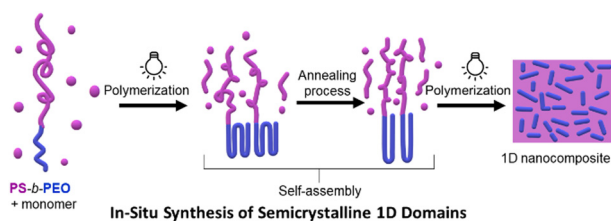
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### Development of a coarse-grained model for surface-functionalized gold nanoparticles: towards an accurate description of their aggregation behavior

Emanuele Petretto, Pablo Campomanes and Stefano Vanni\*

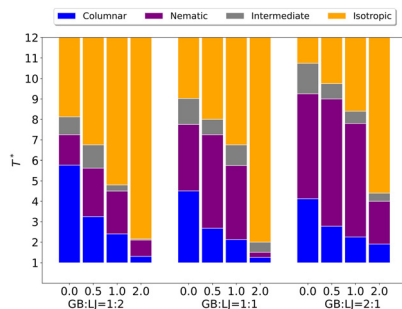
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### Controlling block copolymer one-dimensional self-assembly in polymeric matrices

Jessica Gutiérrez González, Marcelo Ceolín, Walter F. Schroeder and Ileana A. Zucchi\*

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### Phase behaviour of mixtures of charged soft disks and spheres

Valerio Mazzilli, Katsuhiko Satoh\* and Giacomo Saielli\*

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Congruent tangent disks (CTD)	n	3	4	5	6
	shape				
	$\phi_c$	$0.5288 \pm 0.0005$	$0.5195 \pm 0.0007$	$0.5284 \pm 0.0008$	$0.5213 \pm 0.0011$
Incongruent tangent disks (ITD)	n	2	3	4	5
	shape				
	$\phi_c$	$0.5402 \pm 0.0005$	$0.5654 \pm 0.0010$	$0.5719 \pm 0.0008$	$0.5771 \pm 0.0007$
Congruent overlapping disks (COD)	n	2	3	4	5
	shape				
	$\phi_c$	$0.5777 \pm 0.0004$	$0.5864 \pm 0.0009$	$0.5917 \pm 0.0005$	$0.5921 \pm 0.0006$
Congruent tangent disks (CTD)	n	3	4	5	6
	shape				
	$\phi_c$	$0.5112 \pm 0.0005$	$0.4695 \pm 0.0011$	$0.4325 \pm 0.0008$	$0.4000 \pm 0.0009$
Incongruent tangent disks (ITD)	n	2	3	4	5
	shape				
	$\phi_c$	$0.5309 \pm 0.0006$	$0.5099 \pm 0.0007$	$0.4566 \pm 0.0010$	$0.4318 \pm 0.0010$
Congruent overlapping disks (COD)	n	2	3	4	5
	shape				
	$\phi_c$	$0.5425 \pm 0.0005$	$0.5112 \pm 0.0005$	$0.4695 \pm 0.0011$	$0.4325 \pm 0.0008$

### Optimal shapes of disk assembly in saturated random packings

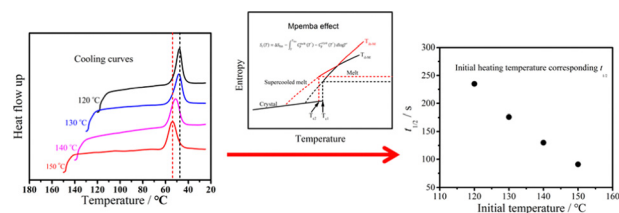
Zhaohui Huang, Wei Deng, Shixuan Zhang and Shuixiang Li\*



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## Mpemba effect in crystallization of polybutene-1

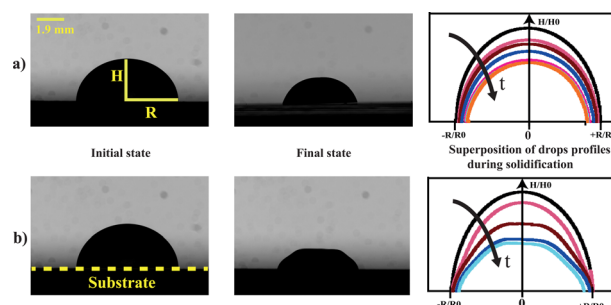
Jinghua Liu, Jingqing Li, Binyuan Liu, Ian W. Hamley and Shichun Jiang\*



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## Structuration and deformation of colloidal hydrogels

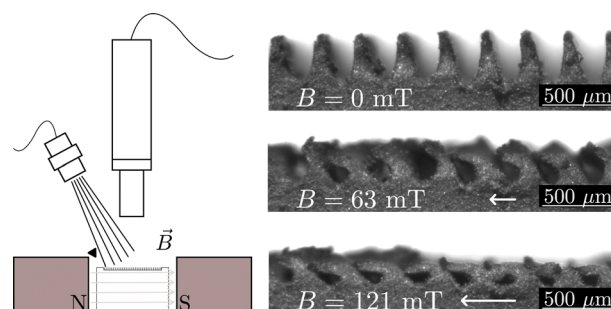
S. N'Mar,\* L. Pauchard, P. Guenoun, J. P. Renault and F. Giorgiutti-Dauphiné



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## Dynamically tunable lamellar surface structures from magnetoactive elastomers driven by a uniform magnetic field

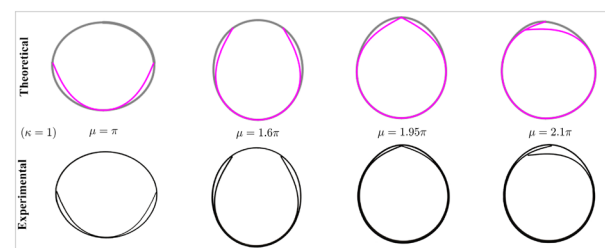
Izidor Straus, Gašper Kokot,\* Gaia Kravanja, Luka Hribar, Raphael Kriegl, Mikhail Shamonin, Matija Jezeršek and Irena Drevenšek-Olenik



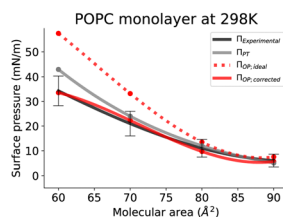
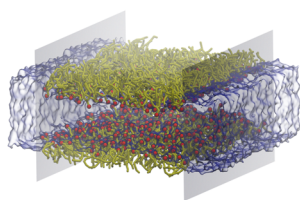
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## Growth of a flexible fibre in a deformable ring

Arsenio Cutolo, Massimiliano Fraldi, Gaetano Napoli\* and Giuseppe Puglisi



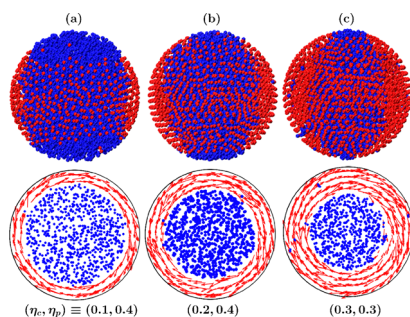
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### An *in silico* osmotic pressure approach allows characterization of pressure–area isotherms of lipid monolayers at low molecular areas

Janak Prabhu, Akhil Pratap Singh and Stefano Vanni\*

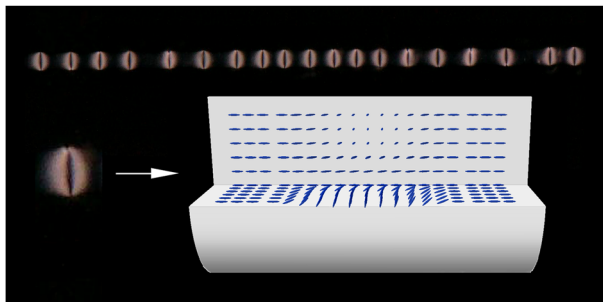
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### Phase behavior and dynamics in a colloid–polymer mixture under spherical confinement

Arabinda Bera, Kurt Binder, Sergei A. Egorov and Subir K. Das\*

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### Photopolymerization of 1D photonic structures induced by nematic–isotropic phase transition in liquid crystal

Miłosz S. Chychtowski,\* Marta Kajkowska, Bartłomiej Jankiewicz, Bartosz Bartosewicz, Tomasz R. Woliński and Piotr Lesiak

