

Functional Materials and Nanotechnology



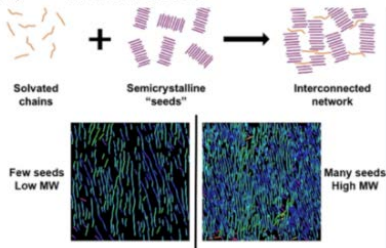
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ACS APPLIED MATERIALS & INTERFACES

Cite This: ACS Appl. Mater. Interfaces 2019, 11, 37955–37965

Control of Nucleation Density in Conjugated Polymers via Seed Nucleation

Michael McBride,[†] Guillermo Bacardi,[†] Carlex Morales,[†] Bailey Risteen,[†] Daniel Keane,[†] Elsa Reichmanis,^{*,†,§} and Martha A. Grover^{*,†,§}

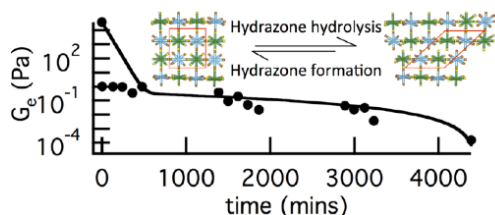


Macromolecules

pubs.acs.org/Macromolecules

Dynamic Changes in Material Properties and Degradation of Poly(ethylene glycol)–Hydrazone Gels as a Function of pH

Francisco Escobar, IV,[†] Kristi S. Anseth,[†] and Kelly M. Schultz^{*,†,§}

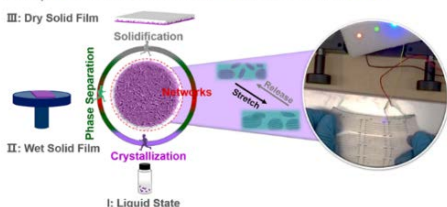


cm CHEMISTRY OF MATERIALS

Cite This: Chem. Mater. 2019, 31, 6530–6539

Robust and Stretchable Polymer Semiconducting Networks: From Film Microstructure to Macroscopic Device Performance

Guoyan Zhang,[†] Savannah Lee,[†] Elizabeth Gutiérrez-Meza,[†] Carolyn Buckley,[†] Michael McBride,[†] David A. Valverde-Chávez,[†] Yo Han Kwon,[†] Victoria Savikhin,[†] Hao Xiong,[†] Tim J. Dunn,[†] Michael F. Toney,[†] Zhibo Yuan,[†] Carlos Silva,^{†,§} and Elsa Reichmanis^{*,†,§}



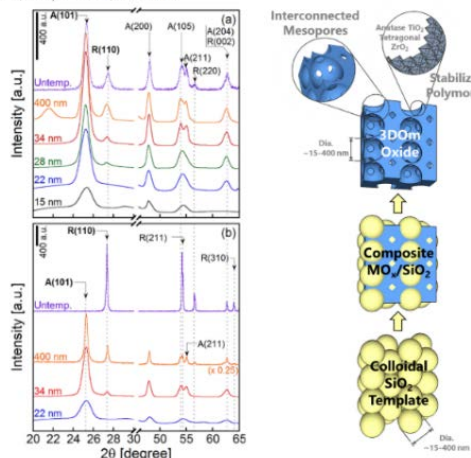
LANGMUIR

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Template-Induced Structuring and Tunable Polymorphism of Three-Dimensionally Ordered Mesoporous (3DOM) Metal Oxides

Daniel G. Gregory,[†] Qianying Guo,[†] Li Lu,[†] Christopher J. Kiely,^{†,§} and Mark A. Snyder^{*,†}

[†]Department of Chemical and Biomolecular Engineering and [§]Department of Materials Science and Engineering, Lehigh University, Bethlehem, Pennsylvania 18015, United States



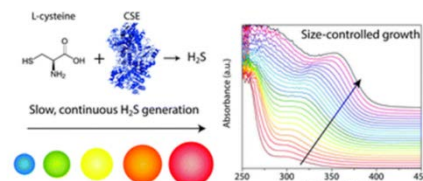
Nanoscale

PAPER



Low temperature aqueous synthesis of size-controlled nanocrystals through size focusing: a quantum dot biomineralization case study[†]

Leah C. Spangier,[†] Joseph P. Cline,[†] Christopher J. Kiely^{*,†,§} and Steven McIntosh^{*,†,§}

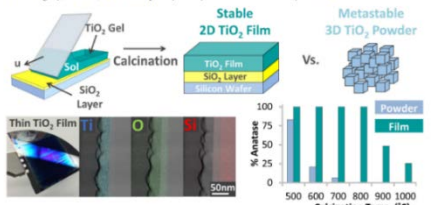


THE JOURNAL OF PHYSICAL CHEMISTRY C

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Interfacial Stabilization of Metastable TiO₂ Films

Daniel G. Gregory,[†] Li Lu,[†] Christopher J. Kiely,^{†,§} and Mark A. Snyder^{*,†}

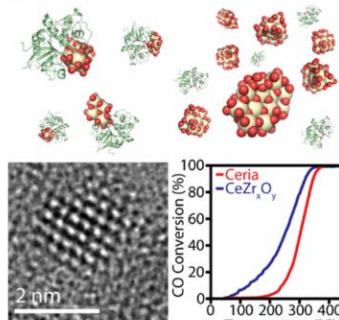


ACS NANO

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Direct Single-Enzyme Biomineralization of Catalytically Active Ceria and Ceria–Zirconia Nanocrystals

Christopher D. Curran,[†] Li Lu,[†] Yue Jia,[†] Christopher J. Kiely,^{†,§} Bryan W. Berger,^{†,§} and Steven McIntosh^{*,†,§}

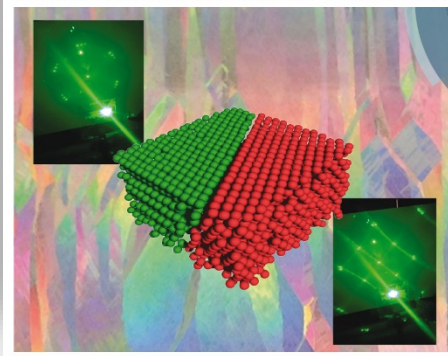


Soft Matter



Flow-induced alignment of (100) fcc thin film colloidal crystals[†]

Midhun Joy, Tanyakorn Muangnapoh, Mark A. Snyder^{*,†} and James F. Gilchrist^{*,†}

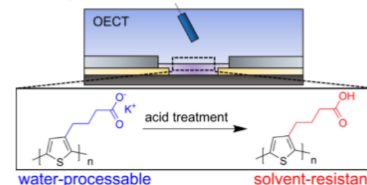


ACS MATERIALS LETTERS

Cite This: ACS Mater. Lett. 2019, 1, 599–605

Carboxylic Acid Functionalization Yields Solvent-Resistant Organic Electrochemical Transistors

Brian V. Khau,[†] Lisa R. Savagian,[†] Michel De Keersmaecker,[†] Miguel A. Gonzalez,[†] and Elsa Reichmanis^{*,†,§}

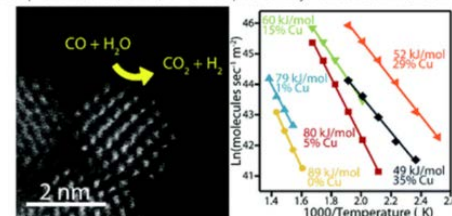


Journal of Materials Chemistry A

PAPER

Ambient temperature aqueous synthesis of ultrasmall copper doped ceria nanocrystals for the water gas shift and carbon monoxide oxidation reactions[†]

Christopher D. Curran,[†] Li Lu,[†] Christopher J. Kiely^{*,†,§} and Steven McIntosh^{*,†,§}



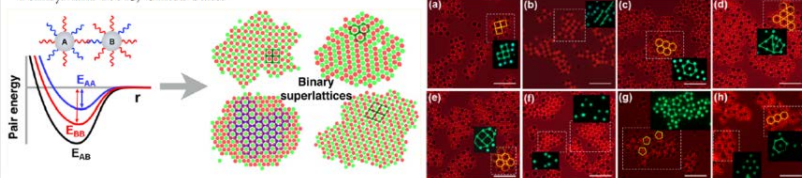
LANGMUIR

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Binary Superlattice Design by Controlling DNA-Mediated Interactions

Minseok Song,[†] Yajun Ding,[†] Hasan Zerze, Mark A. Snyder,[†] and Jeetain Mittal^{*,†}

Department of Chemical and Biomolecular Engineering, Lehigh University, 111 Research Drive, Iacocca Hall, Bethlehem, Pennsylvania 18015, United States



Colloids and Interfacial Science



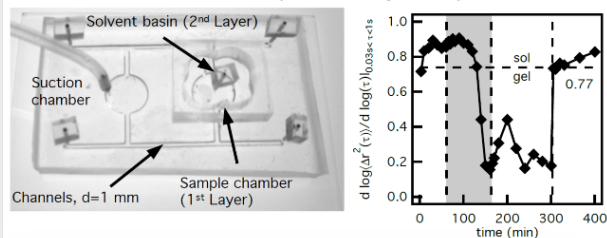
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Lab on a Chip

PAPER

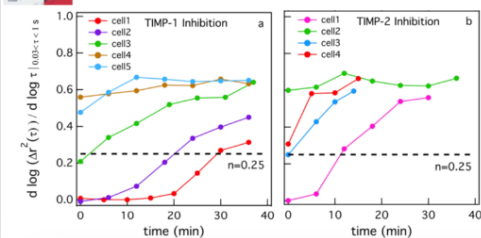
Using μ^2 rheology to quantify rheological properties during repeated reversible phase transitions of soft matter†

Matthew D. Wehrman,^a Melissa J. Milstrey,^a Seth Lindberg^b and Kelly M. Schultz^{a,b}



Characterizing the dynamic rheology in the pericellular region by human mesenchymal stem cell re-engineering in PEG-peptide hydrogel scaffolds

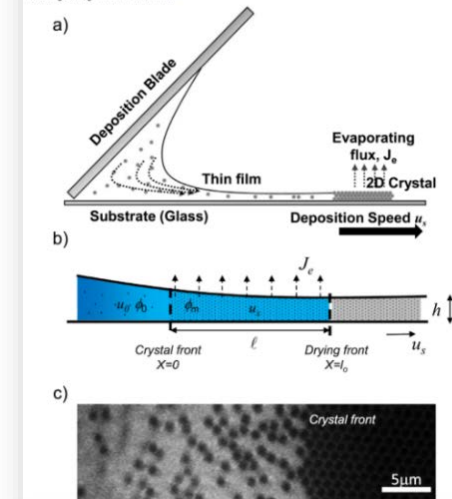
Maryam Daviran¹ · Kelly M. Schultz¹



Contents lists available at ScienceDirect
Journal of Colloid and Interface Science
journal homepage: www.elsevier.com/locate/jcis

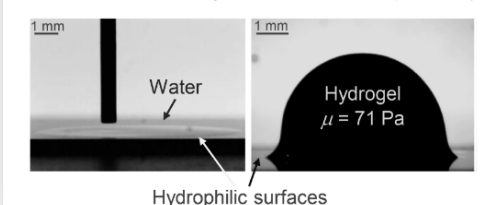
Regular Article Estimation of drying length during particle assembly by convective deposition

Kedar Joshi, James F. Gilchrist^{*}



LANGMUIR Elastowetting of Soft Hydrogel Spheres

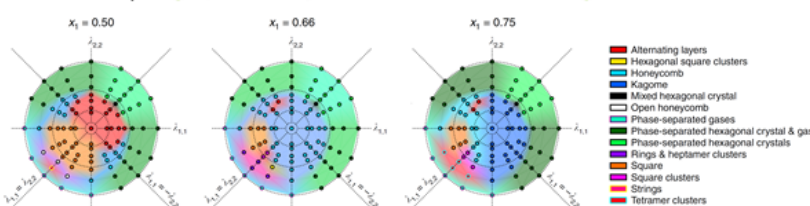
Aditi Chakrabarti,¹ Amir Porat,² Elie Raphaël,² Thomas Salez,^{3,4} and Manoj K. Chaudhury^{1,5,6}



nature COMMUNICATIONS

Using symmetry to elucidate the importance of stoichiometry in colloidal crystal assembly

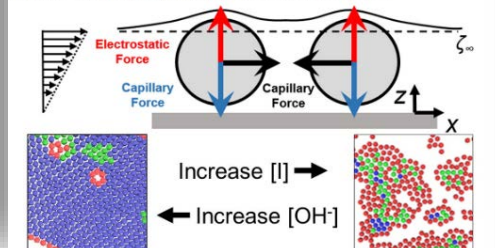
Nathan A. Mahynski^{1,3}, Evan Pretti², Vincent K. Shen¹ & Jeetain Mittal^{2,3}



Langmuir

Effect of Ionic Strength and Surface Charge on Convective Deposition

Kedar Joshi, Tanyakorn Muangnapoh, Michael D. Stever, and James F. Gilchrist¹

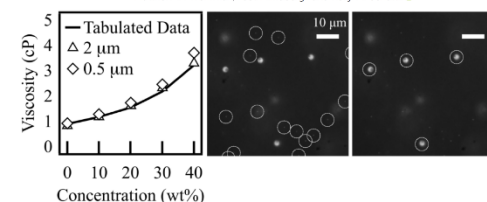


Soft Matter

PAPER

Multiple particle tracking microrheology measured using bi-disperse probe diameters†

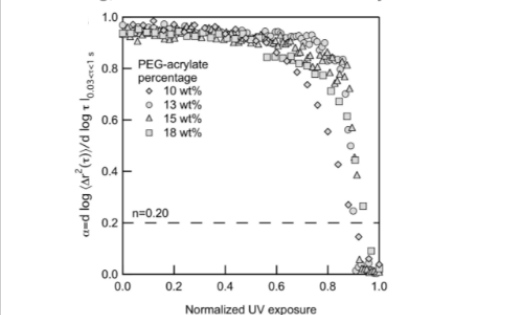
Matthew D. Wehrman,^a Seth Lindberg^b and Kelly M. Schultz^{a,b}



frontiers in Chemistry

Structural Changes in Polymeric Gel Scaffolds Around the Overlap Concentration

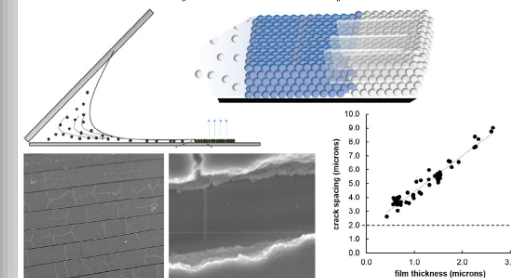
Han Zhang, Matthew D. Wehrman and Kelly M. Schultz^{*}



Contents lists available at ScienceDirect
Journal of Colloid and Interface Science
journal homepage: www.elsevier.com/locate/jcis

Regular Article Uniformly spaced nanoscale cracks in nanoparticle films deposited by convective assembly

Alexander L. Weldon^a, Kedar Joshi^a, Alexander F. Routh^b, James F. Gilchrist^{a,b}

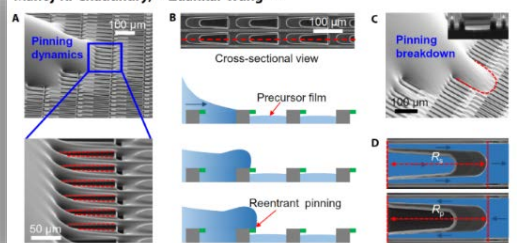


SCIENCE ADVANCES | RESEARCH ARTICLE

PHYSICS

Topological liquid diode

Jiaqian Li,^{1*} Xiaofeng Zhou,^{2*} Jing Li,¹ Lufeng Che,² Jun Yao,³ Glen McHale,⁴ Manoj K. Chaudhury,^{5†} Zuankai Wang^{1,6†}



ARTICLES

PUBLISHED ONLINE: 1 FEBRUARY 2016 | DOI: 10.1038/NPHYS33643

Directional transport of high-temperature Janus droplets mediated by structural topography

Jing Li,¹ Youmin Hou², Yahua Liu³, Chonglei Hao³, Minfei Li¹, Manoj K. Chaudhury^{2*}, Shuhuai Yao^{2*} and Zuankai Wang^{1,4*}

