Chinedum O Osuji

List of Publications by Citations

139 papers	7,078 citations	44 h-index	81 g-index
143 ext. papers	8,182 ext. citations	9.1 avg, IF	6.41 L-index

#	Paper	IF	Citations
139	Materials for next-generation desalination and water purification membranes. *Nature Reviews Materials*, **2016**, 1,	73.3	1380
138	Structure, function, and self-assembly of single network gyroid (I4132) photonic crystals in butterfly wing scales. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 11676-81	11.5	353
137	Directed self-assembly of block copolymers: a tutorial review of strategies for enabling nanotechnology with soft matter. *Soft Matter*, **2014**, 10, 3867-89	3.6	280
136	Antifouling ultrafiltration membranes via post-fabrication grafting of biocidal nanomaterials. *ACS Applied Materials & Interfaces*, **2011**, 3, 2861-8	9.5	226
135	Omniphobic Membrane for Robust Membrane Distillation. *Environmental Science and Technology Letters*, **2014**, 1, 443-447	11	224
134	Enhanced antibacterial activity through the controlled alignment of graphene oxide nanosheets. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, E9793-E9801	11.5	215
133	Anisotropic ionic conductivity in block copolymer membranes by magnetic field alignment. *Journal of the American Chemical Society*, **2010**, 132, 17516-22	16.4	165
132	Scalable fabrication of polymer membranes with vertically aligned 1 nm pores by magnetic field directed self-assembly. *ACS Nano*, **2014**, 8, 11977-86	16.7	155
131	Alignment of Self-Assembled Hierarchical Microstructure in Liquid Crystalline Diblock Copolymers Using High Magnetic Fields. *Macromolecules*, **2004**, 37, 9903-9908	5.5	117
130	Hybrid pressure retarded osmosis-membrane distillation system for power generation from low-grade heat: thermodynamic analysis and energy efficiency. *Environmental Science & Technology*, **2014**, 48, 5306-13	10.3	114
129	High Performance Nanofiltration Membrane for Effective Removal of Perfluoroalkyl Substances at High Water Recovery. *Environmental Science & Technology*, **2018**, 52, 7279-7288	10.3	112
128	Stimuli-responsive smart gels realized via modular protein design. *Journal of the American Chemical Society*, **2010**, 132, 14024-6	16.4	99
127	Engineering flat sheet microporous PVDF films for membrane distillation. *Journal of Membrane Science*, **2015**, 492, 355-363	9.6	98
126	NANOPARTICLES. Production of amorphous nanoparticles by supersonic spray-drying with a microfluidic nebulator. *Science*, **2015**, 349, 956-60	33.3	98
125	Magnetic field alignment of block copolymers and polymer nanocomposites: Scalable microstructure control in functional soft materials. *Journal of Polymer Science, Part B: Polymer Physics*, **2012**, 50, 2-8	2.6	97
124	Role of interparticle attraction in the yielding response of microgel suspensions. *Soft Matter*, **2013**, 9, 5492	3.6	88
123	Nanocomposites of vertically aligned single-walled carbon nanotubes by magnetic alignment and polymerization of a lyotropic precursor. *ACS Nano*, **2010**, 4, 6651-8	16.7	80

122	Thin Polymer Films with Continuous Vertically Aligned 1 nm Pores Fabricated by Soft Confinement. *ACS Nano*, **2016**, 10, 150-8	16.7	77
121	Shear thickening and scaling of the elastic modulus in a fractal colloidal system with attractive interactions. *Physical Review E*, **2008**, 77, 060402	2.4	75
120	Facile Alignment of Amorphous Poly(ethylene oxide) Microdomains in a Liquid Crystalline Block Copolymer Using Magnetic Fields: Toward Ordered Electrolyte Membranes. *Macromolecules*, **2010**, 43, 3286-3293	5.5	74
119	Post-fabrication modification of electrospun nanofiber mats with polymer coating for membrane distillation applications. *Journal of Membrane Science*, **2017**, 530, 158-165	9.6	70
118	Rheology of cellulose nanofibrils in the presence of surfactants. *Soft Matter*, **2016**, 12, 157-64	3.6	68
117	Side-chain liquid crystalline polymer networks: exploiting nanoscale smectic polymorphism to design shape-memory polymers. *ACS Nano*, **2011**, 5, 3085-95	16.7	68
116	New insights on fumed colloidal rheology Shear thickening and vorticity-aligned structures in flocculating dispersions. *Rheologica Acta*, **2009**, 48, 871-881	2.3	67
115	Highly Selective Vertically Aligned Nanopores in Sustainably Derived Polymer Membranes by Molecular Templating. *ACS Nano*, **2017**, 11, 3911-3921	16.7	64
114	Structural Diversity of Arthropod Biophotonic Nanostructures Spans Amphiphilic Phase-Space. *Nano Letters*, **2015**, 15, 3735-42	11.5	62
113	Single-step microfluidic fabrication of soft monodisperse polyelectrolyte microcapsules by interfacial complexation. *Lab on A Chip*, **2014**, 14, 3494-7	7.2	60
112	Order-disorder transition and alignment dynamics of a block copolymer under high magnetic fields by in situ x-ray scattering. *Physical Review Letters*, **2013**, 110, 078301	7.4	60
111	Janus Graft Block Copolymers: Design of a Polymer Architecture for Independently Tuned Nanostructures and Polymer Properties. *Angewandte Chemie - International Edition*, **2018**, 57, 8493-8497	16.4	57
110	Guided Evolution of Bulk Metallic Glass Nanostructures: A Platform for Designing 3D Electrocatalytic Surfaces. *Advanced Materials*, **2016**, 28, 1940-9	24	56
109	Thermally switchable aligned nanopores by magnetic-field directed self-assembly of block copolymers. *Advanced Materials*, **2014**, 26, 5148-54	24	55
108	Magnetic Field Alignment of a Diblock Copolymer Using a Supramolecular Route.. *ACS Macro Letters*, **2012**, 1, 184-189	6.6	55
107	Highly anisotropic vorticity aligned structures in a shear thickening attractive colloidal system. *Soft Matter*, **2008**, 4, 1388-1392	3.6	54
106	Transverse Cylindrical Microdomain Orientation in an LC Diblock Copolymer under Oscillatory Shear. *Macromolecules*, **1999**, 32, 7703-7706	5.5	54
105	Directed Assembly of Hybrid Nanomaterials and Nanocomposites. *Advanced Materials*, **2018**, 30, e1705724	24	52

104	Rational Design of a Block Copolymer with a High Interaction Parameter. *Macromolecules*, **2014**, 47, 6687-6696	5.5	52
103	Nanoscale size effects in crystallization of metallic glass nanorods. *Nature Communications*, **2015**, 6, 8157	17.4	50
102	Monoliths of semiconducting block copolymers by magnetic alignment. *ACS Nano*, **2013**, 7, 5514-21	16.7	50
101	Molecular Design of Liquid Crystalline Brush-Like Block Copolymers for Magnetic Field Directed Self-Assembly: A Platform for Functional Materials.. *ACS Macro Letters*, **2014**, 3, 462-466	6.6	49
100	Poly(ethylenimine)-Based Polymer Blends as Single-Ion Lithium Conductors. *Macromolecules*, **2014**, 47, 3401-3408	5.5	49
99	Tailoring Crystallization Behavior of PEO-Based Liquid Crystalline Block Copolymers through Variation in Liquid Crystalline Content. *Macromolecules*, **2011**, 44, 3924-3934	5.5	47
98	Time-resolved viscoelastic properties during structural arrest and aging of a colloidal glass. *Physical Review E*, **2010**, 82, 031404	2.4	45
97	Self-Assembly of an Ultrahigh-Block Copolymer with Versatile Etch Selectivity. *Macromolecules*, **2018**, 51, 6460-6467	5.5	44
96	Precise nanofiltration in a fouling-resistant self-assembled membrane with water-continuous transport pathways. *Science Advances*, **2019**, 5, eaav9308	14.3	44
95	Continuous equilibrated growth of ordered block copolymer thin films by electrospray deposition. *ACS Nano*, **2013**, 7, 2960-70	16.7	43
94	Magnetic Alignment of Block Copolymer Microdomains by Intrinsic Chain Anisotropy. *Physical Review Letters*, **2015**, 115, 258302	7.4	43
93	Understanding anisotropic transport in self-assembled membranes and maximizing ionic conductivity by microstructure alignment. *Soft Matter*, **2013**, 9, 7106	3.6	42
92	Dynamics of internal stresses and scaling of strain recovery in an aging colloidal gel. *Physical Review E*, **2009**, 80, 010404	2.4	39
91	Shaping and Locomotion of Soft Robots Using Filament Actuators Made from Liquid Crystal Elastomer–Carbon Nanotube Composites. *Advanced Intelligent Systems*, **2020**, 2, 1900163	6	38
90	Elements Provide a Clue: Nanoscale Characterization of Thin-Film Composite Polyamide Membranes. *ACS Applied Materials & Interfaces*, **2015**, 7, 16917-22	9.5	37
89	Selectivity and Mass Transfer Limitations in Pressure-Retarded Osmosis at High Concentrations and Increased Operating Pressures. *Environmental Science & Technology*, **2015**, 49, 12551-9	10.3	37
88	Mesenchymal stromal cells form vascular tubes when placed in fibrin sealant and accelerate wound healing in vivo. *Biomaterials*, **2015**, 40, 61-71	15.6	35
87	Directed self-assembly of hybrid oxide/polymer core/shell nanowires with transport optimized morphology for photovoltaics. *Advanced Materials*, **2012**, 24, 82-7	24	35

86	Physical aging and relaxation of residual stresses in a colloidal glass following flow cessation. *Journal of Rheology*, **2010**, 54, 943-958	4.1	35
85	Phase Behavior of Polylactide-Based Liquid Crystalline Brushlike Block Copolymers. *Macromolecules* , **2015**, 48, 8315-8322	5.5	34
84	Liquid crystalline order and magnetocrystalline anisotropy in magnetically doped semiconducting ZnO nanowires. *ACS Nano*, **2011**, 5, 8357-64	16.7	34
83	Supramolecular Microphase Separation in a Hydrogen-Bonded Liquid Crystalline Comb Copolymer in the Melt State. *Macromolecules*, **2006**, 39, 3114-3117	5.5	33
82	Controlling orientational order in block copolymers using low-intensity magnetic fields. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, E9437-E9444	11.5	31
81	Relating Selectivity and Separation Performance of Lamellar Two-Dimensional Molybdenum Disulfide (MoS) Membranes to Nanosheet Stacking Behavior. *Environmental Science & Technology*, **2020**, 54, 9640-9651	10.3	31
80	Role of HF in oxygen removal from carbon nanotubes: implications for high performance carbon electronics. *Nano Letters*, **2014**, 14, 6179-84	11.5	31
79	Aligned nanostructured polymers by magnetic-field-directed self-assembly of a polymerizable lyotropic mesophase. *ACS Applied Materials & Interfaces*, **2014**, 6, 19710-7	9.5	30
78	Hierarchically Self-Assembled Photonic Materials from Liquid Crystalline Random Brush Copolymers. *Macromolecules*, **2013**, 46, 4558-4566	5.5	30
77	Smectic Demixing in the Phase Behavior and Self-Assembly of a Hydrogen-Bonded Polymer with Mesogenic Side Chains. *Macromolecules*, **2010**, 43, 6646-6654	5.5	30
76	Tuning the permselectivity of polymeric desalination membranes via control of polymer crystallite size. *Nature Communications*, **2019**, 10, 2347	17.4	29
75	Loss of Phospholipid Membrane Integrity Induced by Two-Dimensional Nanomaterials. *Environmental Science and Technology Letters*, **2017**, 4, 404-409	11	29
74	Cholesteric mesophase in side-chain liquid crystalline polymers: influence of mesogen interdigitation and motional decoupling. *Soft Matter*, **2012**, 8, 3185	3.6	27
73	Viscoelasticity of a colloidal gel during dynamical arrest: Evolution through the critical gel and comparison with a soft colloidal glass. *Journal of Rheology*, **2014**, 58, 1557-1579	4.1	26
72	Smart Cellulose Nanofluids Produced by Tunable Hydrophobic Association of Polymer-Grafted Cellulose Nanocrystals. *ACS Applied Materials & Interfaces*, **2017**, 9, 31095-31101	9.5	26
71	Soft microcapsules with highly plastic shells formed by interfacial polyelectrolyte-nanoparticle complexation. *Soft Matter*, **2015**, 11, 7478-82	3.6	25
70	Size-dependent viscosity in the super-cooled liquid state of a bulk metallic glass. *Applied Physics Letters*, **2013**, 102, 221901	3.4	25
69	Fabrication of a Desalination Membrane with Enhanced Microbial Resistance through Vertical Alignment of Graphene Oxide. *Environmental Science and Technology Letters*, **2018**, 5, 614-620	11	24

68	Photoresponsive and Magnetoresponsive Graphene Oxide Microcapsules Fabricated by Droplet Microfluidics. *ACS Applied Materials & Interfaces*, **2017**, 9, 44192-44198	9.5	24
67	Lyotropic self-assembly of high-aspect-ratio semiconductor nanowires of single-crystal ZnO. *Langmuir*, **2011**, 27, 11616-21	4	24
66	Shear-accelerated crystallization in a supercooled atomic liquid. *Physical Review E*, **2015**, 91, 020301	2.4	23
65	Sustainable manufacturing of sensors onto soft systems using self-coagulating conductive Pickering emulsions. *Science Robotics*, **2020**, 5,	18.6	23
64	Sub-10 nm Self-Assembly of Mesogen-Containing Grafted Macromonomers and Their Bottlebrush Polymers. *Macromolecules*, **2018**, 51, 3680-3690	5.5	23
63	Lyotropic Hexagonal Ordering in Aqueous Media by Conjugated Hairy-Rod Supramolecules. *Macromolecules*, **2010**, 43, 7549-7555	5.5	23
62	Controlled alignment of lamellar lyotropic mesophases by rotation in a magnetic field. *Langmuir*, **2010**, 26, 8737-42	4	23
61	Pathway-engineering for highly-aligned block copolymer arrays. *Nanoscale*, **2017**, 10, 416-427	7.7	22
60	Single crystal texture by directed molecular self-assembly along dual axes. *Nature Materials*, **2019**, 18, 1235-1243	27	21
59	Isomeric Effect Enabled Thermally Driven Self-Assembly of Hydroxystyrene-Based Block Copolymers. *ACS Macro Letters*, **2016**, 5, 833-838	6.6	21
58	Morphology Development in Thin Films of a Lamellar Block Copolymer Deposited by Electrospray. *Macromolecules*, **2014**, 47, 5703-5710	5.5	21
57	Highly stiff yet elastic microcapsules incorporating cellulose nanofibrils. *Soft Matter*, **2017**, 13, 2733-2737	3.6	20
56	Alignment of Self-Assembled Structures in Block Copolymer Films by Solvent Vapor Permeation. *Macromolecules*, **2010**, 43, 3132-3135	5.5	19
55	Fabrication of Modularly Functionalizable Microcapsules Using Protein-Based Technologies. *ACS Biomaterials Science and Engineering*, **2016**, 2, 1856-1861	5.5	19
54	Atomic imprinting into metallic glasses. *Communications Physics*, **2018**, 1,	5.4	19
53	Optically Active Elastomers from Liquid Crystalline Comb Copolymers with Dual Physical and Chemical Cross-Links. *Macromolecules*, **2017**, 50, 5929-5939	5.5	18
52	Directing block copolymer self-assembly with permanent magnets: photopatterning microdomain alignment and generating oriented nanopores. *Molecular Systems Design and Engineering*, **2017**, 2, 549-559	4.6	18
51	Non-degenerate magnetic alignment of self-assembled mesophases. *Soft Matter*, **2009**, 5, 3417	3.6	18

50	The Effects of Magnetic Field Alignment on Lithium Ion Transport in a Polymer Electrolyte Membrane with Lamellar Morphology. *Polymers*, **2019**, 11,	4.5	17
49	Large area vertical alignment of ZnO nanowires in semiconducting polymer thin films directed by magnetic fields. *Nanoscale*, **2013**, 5, 10511-7	7.7	17
48	Dual-Functionality Fullerene and Silver Nanoparticle Antimicrobial Composites via Block Copolymer Templates. *ACS Applied Materials & Interfaces*, **2016**, 8, 33583-33591	9.5	17
47	Optical materials and metamaterials from nanostructured soft matter. *Nano Research*, **2019**, 12, 2172-2183	10	15
46	Multi-Scale Assembly of Polythiophene-Surfactant Supramolecular Complexes for Charge Transport Anisotropy. *Macromolecules*, **2017**, 50, 1047-1055	5.5	14
45	Implications of Grain Size Variation in Magnetic Field Alignment of Block Copolymer Blends. *ACS Macro Letters*, **2017**, 6, 404-409	6.6	14
44	Multiscale patterning of a metallic glass using sacrificial imprint lithography. *Microsystems and Nanoengineering*, **2015**, 1,	7.7	14
43	Stable sequestration of single-walled carbon nanotubes in self-assembled aqueous nanopores. *Journal of the American Chemical Society*, **2012**, 134, 3950-3	16.4	14
42	Finite size effects in the crystallization of a bulk metallic glass. *Applied Physics Letters*, **2013**, 103, 111912	3.4	14
41	Nanoimprinting sub-100 nm features in a photovoltaic nanocomposite using durable bulk metallic glass molds. *ACS Applied Materials & Interfaces*, **2015**, 7, 3456-61	9.5	13
40	Rapid Fabrication by Lyotropic Self-Assembly of Thin Nanofiltration Membranes with Uniform 1 Nanometer Pores. *ACS Nano*, **2021**, 15, 8192-8203	16.7	13
39	Strong Orientational Coupling of Block Copolymer Microdomains to Smectic Layering Revealed by Magnetic Field Alignment. *ACS Macro Letters*, **2016**, 5, 292-296	6.6	12
38	Effect of Final Monomer Deposition Steps on Molecular Layer-by-Layer Polyamide Surface Properties. *Langmuir*, **2016**, 32, 10815-10823	4	12
37	Sequential deposition of block copolymer thin films and formation of lamellar heterolattices by electrospray deposition. *Journal of Polymer Science, Part B: Polymer Physics*, **2016**, 54, 247-253	2.6	11
36	Experimental Evidence for Proposed Transformation Pathway from the Inverse Hexagonal to Inverse Diamond Cubic Phase from Oriented Lipid Samples. *Langmuir*, **2015**, 31, 7707-11	4	10
35	Aligned Morphologies in Near-Edge Regions of Block Copolymer Thin Films. *Macromolecules*, **2019**, 52, 7224-7233	5.5	9
34	Physical Continuity and Vertical Alignment of Block Copolymer Domains by Kinetically Controlled Electrospray Deposition. *Macromolecular Rapid Communications*, **2015**, 36, 1290-6	4.8	9
33	Scalable high-fidelity growth of semiconductor nanorod arrays with controlled geometry for photovoltaic devices using block copolymers. *Small*, **2014**, 10, 4304-9	11	9

32	Creating Aligned Nanopores by Magnetic Field Processing of Block Copolymer/Homopolymer Blends. *ACS Macro Letters*, **2019**, 8, 261-266	6.6	9
31	Janus Graft Block Copolymers: Design of a Polymer Architecture for Independently Tuned Nanostructures and Polymer Properties. *Angewandte Chemie*, **2018**, 130, 8629-8633	3.6	9
30	Hexagonally Ordered Arrays of Helical Bundles Formed from Peptide-Dendron Hybrids. *Journal of the American Chemical Society*, **2017**, 139, 15977-15983	16.4	8
29	Continuous and patterned deposition of functional block copolymer thin films using electrospray. *MRS Communications*, **2015**, 5, 235-242	2.7	8
28	Flat Drops, Elastic Sheets, and Microcapsules by Interfacial Assembly of a Bacterial Biofilm Protein, BslA. *Langmuir*, **2017**, 33, 13590-13597	4	8
27	Evaluating the Dispersant Stabilization of Colloidal Suspensions from the Scaling Behavior of Gel Rheology and Adsorption Measurements. *Langmuir*, **2018**, 34, 1092-1099	4	8
26	Facile Protein Immobilization Using Engineered Surface-Active Biofilm Proteins. *ACS Applied Nano Materials*, **2018**, 1, 2483-2488	5.6	8
25	Electrospray deposition tool: Creating compositionally gradient libraries of nanomaterials. *Review of Scientific Instruments*, **2020**, 91, 013701	1.7	7
24	Polymer Nanosheets from Supramolecular Assemblies of Conjugated Linoleic Acid-High Surface Area Adsorbents from Renewable Materials. *Langmuir*, **2017**, 33, 10690-10697	4	6
23	Synthesis and suspension rheology of titania nanoparticles grafted with zwitterionic polymer brushes. *Journal of Colloid and Interface Science*, **2012**, 386, 135-40	9.3	5
22	Lyotropic liquid crystals as templates for advanced materials. *Journal of Materials Chemistry A*,	13	5
21	Synthesis of High Etch Contrast Poly(3-hydroxystyrene)-Based Triblock Copolymers and Self-Assembly of Sub-5 nm Features. *Macromolecules*, **2021**, 54, 9542-9550	5.5	4
20	High-throughput morphology mapping of self-assembling ternary polymer blends.. *RSC Advances*, **2020**, 10, 42529-42541	3.7	4
19	Soft robotic constrictor for in vitro modeling of dynamic tissue compression. *Scientific Reports*, **2021**, 11, 16478	4.9	4
18	Simple production of cellulose nanofibril microcapsules and the rheology of their suspensions. *Soft Matter*, **2021**, 17, 4517-4524	3.6	4
17	Nanoscale Thickness Control of Nanoporous Films Derived from Directionally Photopolymerized Mesophases. *Advanced Materials Interfaces*, **2021**, 8, 2001977	4.6	4
16	Rapid fabrication of ZnO nanorod arrays with controlled spacing by micelle-templated solvothermal growth. *Nanoscale*, **2016**, 8, 149-56	7.7	3
15	Nanocomposites of 2D-MoS2 Exfoliated in Thermotropic Liquid Crystals **2021**, 3, 704-712		3

14	Film Thickness and Composition Effects in Symmetric Ternary Block Copolymer/Homopolymer Blend Films: Domain Spacing and Orientation. *Macromolecules*, **2021**, 54, 7970-7986	5.5	3
13	Self-assembly of supramolecular complexes of charged conjugated polymers and imidazolium-based ionic liquid crystals. *Giant*, **2022**, 9, 100088	5.6	2
12	Effects of Labile Mesogens on the Morphology of Liquid Crystalline Block Copolymers in Thin Films. *Macromolecules*, **2021**, 54, 3223-3231	5.5	2
11	Stable cross-linked lyotropic gyroid mesophases from single-head/single-tail cross-linkable monomers. *Chemical Communications*, **2021**, 57, 10931-10934	5.8	2
10	Three-Dimensional Compatible Sacrificial Nanoimprint Lithography for Tuning the Wettability of Thermoplastic Materials. *Journal of Micro and Nano-Manufacturing*, **2018**, 6,	1.3	2
9	Dynamics of Transient Vorticity-Aligned Structures and Internal Stresses in Shear Thickening Colloidal Gels. *AIP Conference Proceedings*, **2008**,	0	1
8	Yielding and bifurcated aging in nanofibrillar networks. *Physical Review Materials*, **2020**, 4,	3.2	1
7	100th Anniversary of Macromolecular Science Viewpoint: Opportunities for Liquid Crystal Polymers in Nanopatterning and Beyond.. *ACS Macro Letters*, **2021**, 10, 945-957	6.6	1
6	Dynamic magnetic field alignment and polarized emission of semiconductor nanoplatelets in a liquid crystal polymer.. *Nature Communications*, **2022**, 13, 2507	17.4	1
5	Plasmonic Sensing from Vertical Au-Coated ZnO Nanorod Arrays Templated by Block Copolymers. *ACS Applied Nano Materials*, **2021**, 4, 8556-8563	5.6	0
4	Tunable organic solvent nanofiltration in self-assembled membranes at the sub-1 nm scale.. *Science Advances*, **2022**, 8, eabm5899	14.3	0
3	Shaping and Locomotion of Soft Robots Using Filament Actuators Made from Liquid Crystal Elastomer□arbon Nanotube Composites. *Advanced Intelligent Systems*, **2020**, 2, 2070063	6	
2	Correlation of droplet elasticity and volume fraction effects on emulsion dynamics. *Soft Matter*, **2020**, 16, 2574-2580	3.6	
1	Electrocatalysts: Guided Evolution of Bulk Metallic Glass Nanostructures: A Platform for Designing 3D Electrocatalytic Surfaces (Adv. Mater. 10/2016). *Advanced Materials*, **2016**, 28, 1902-1902	24	