Nancy R Sottos

List of PR Articles by Year in descending order

193 PR articles	14,921 PR citations	10584 62 PR h-index	12609 118 g-index
212 documents	23205 doc citations	8682 71 h-index	14842 citing authors

#	Article	IF	PR Citations
1	Rheological modeling of frontal-polymerization-based direct ink writing of thermoset polymers. Computer Methods in Applied Mechanics and Engineering, 2024, 418, 116565.	7.1	15
2	Unraveling Reactivity Differences: Room-Temperature Ring-Opening Metathesis Polymerization (ROMP) versus Frontal ROMP. Journal of the American Chemical Society, 2024, 146, 7216-7221.	15.0	26
3	Probing In Operando Manganese Dissolution and Associated Mechanical Deformation in LiMn₂O₄ Cathodes. ACS Applied Energy Materials, 2024, 7, 2142-2152.	5.4	12
4	Photo-modulated activation of organic bases enabling microencapsulation and on-demand reactivity. Nature Communications, 2024, 15, .	13.9	3
5	Fluid convection driven by surface tension during free-surface frontal polymerization. Mechanics of Materials, 2024, 194, 104987.	3.7	6
6	Nickelâ€“silicon interfacial adhesion strength measured by laser spallation. Journal of Applied Physics, 2024, 135, .	2.1	1
7	Reprocessability in Engineering Thermosets Achieved Through Frontal Ringâ€Opening Metathesis Polymerization. Advanced Materials, 2024, 36, .	24.5	29
8	Controlled patterning of crystalline domains by frontal polymerization. Nature, 2024, 634, 85-90.	38.7	31
9	Efficient Manufacture, Deconstruction, and Upcycling of High-Performance Thermosets and Composites. , 2023, 1, 477-485.		43
10	Energy-efficient manufacturing of multifunctional vascularized composites. Journal of Composite Materials, 2023, 57, 581-592.	2.1	8
11	Remolding and Deconstruction of Industrial Thermosets via Carboxylic Acid-Catalyzed Bifunctional Silyl Ether Exchange. Journal of the American Chemical Society, 2023, 145, 1916-1923.	15.0	53
12	Buoyancy-Induced Convection Driven by Frontal Polymerization. Physical Review Letters, 2023, 130, .	8.2	14
13	Rapid Controlled Synthesis of Large Polymers by Frontal Ring-Opening Metathesis Polymerization. Macromolecules, 2023, 56, 1527-1533.	5.0	30
14	Frontal Polymerizations: From Chemical Perspectives to Macroscopic Properties and Applications. Chemical Reviews, 2023, 123, 3237-3298.	52.7	181
15	A Model Ensemble Approach Enables Data-Driven Property Prediction for Chemically Deconstructable Thermosets in the Low-Data Regime. ACS Central Science, 2023, 9, 1810-1819.	9.2	27
16	Self-healing of transverse crack damage in carbon fiber composites. Composites Science and Technology, 2023, 242, 110158.	8.8	11
17	Anisotropic Foams via Frontal Polymerization. Advanced Materials, 2022, 34, .	24.5	48
18	Production of Organizational Chiral Structures by Design. Journal of the American Chemical Society, 2022, 144, 824-831.	15.0	7

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19	Acidâ€Responsive Anticorrosion Microcapsules for Selfâ€Protecting Coatings. Macromolecular Chemistry and Physics, 2022, 223, .	2.5	4
20	Rapid multiple-front polymerization of fiber-reinforced polymer composites. Composites Part A: Applied Science and Manufacturing, 2022, 158, 106931.	8.2	45
21	Sacrificial Cyclic Poly(phthalaldehyde) Templates for Low-Temperature Vascularization of Polymer Matrices. ACS Applied Polymer Materials, 2022, 4, 479-487.	4.6	4
22	Selfâ€Regulative Direct Ink Writing of Frontally Polymerizing Thermoset Polymers. Advanced Materials Technologies, 2022, 7, .	5.9	53
23	Frontal Polymerization of Thin Layers on a Thermally Insulating Substrate. ACS Applied Polymer Materials, 2022, 4, 4919-4927.	4.6	20
24	Storable, Dual-Component Systems for Frontal Ring-Opening Metathesis Polymerization. Macromolecules, 2022, 55, 5459-5473.	5.0	20
25	Anisotropic thermal and electrical conductivities of individual polyacrylonitrile-based carbon fibers. Carbon, 2022, 197, 1-9.	10.7	43
26	Identification of RVE length scale in fiber composites via combined optical and SEM digital image correlation. Composites Science and Technology, 2022, 227, 109613.	8.8	25
27	Switching Frontal Polymerization Mechanisms: FROMP and FRaP. ACS Macro Letters, 2022, 11, 1097-1101.	5.0	24
28	Frontal Polymerization of Dihydrofuran Comonomer Facilitates Thermoset Deconstruction. Chemistry of Materials, 2022, 34, 8790-8797.	6.7	59
29	In Situ Strain Measurement in Solid-State Li-Ion Battery Electrodes. Journal of the Electrochemical Society, 2021, 168, 010516.	3.1	23
30	Spontaneous Patterning during Frontal Polymerization. ACS Central Science, 2021, 7, 603-612.	9.2	62
31	Fast, reversible mechanochromism of regioisomeric oxazine mechanophores: Developing in situ responsive force probes for polymeric materials. CheM, 2021, 7, 1080-1091.	16.6	143
32	Rapid synchronized fabrication of vascularized thermosets and composites. Nature Communications, 2021, 12, .	13.9	56
33	Survey of Catalysts for Frontal Ring-Opening Metathesis Polymerization. Macromolecules, 2021, 54, 5117-5123.	5.0	45
34	Single carbon fiber transverse electrical resistivity measurement via the van der Pauw method. Journal of Applied Physics, 2021, 130, .	2.1	14
35	Sunlightâ€Activated Selfâ€Healing Polymer Coatings. Advanced Engineering Materials, 2020, 22, .	2.9	39
36	Photoexcitation of Grubbsâ€™ Second-Generation Catalyst Initiates Frontal Ring-Opening Metathesis Polymerization. ACS Macro Letters, 2020, 9, 1563-1568.	5.0	42

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37	Photothermal Initiation of Frontal Polymerization Using Carbon Nanoparticles. ACS Applied Polymer Materials, 2020, 2, 4690-4696.	4.6	49
38	Localization of Spiropyran Activation. Langmuir, 2020, 36, 5847-5854.	3.6	12
39	Shock Wave Energy Dissipation in Catalyst-Free Poly(dimethylsiloxane) Vitrimers. Macromolecules, 2020, 53, 4741-4747.	5.0	65
40	A polarization reconfigurable microstrip patch antenna using liquid metal microfluidics. Smart Materials and Structures, 2020, 29, 045032.	3.4	4
41	Interfacial Forceâ€Focusing Effect in Mechanophoreâ€Linked Nanocomposites. Advanced Science, 2020, 7, .	12.7	40
42	Triggered Transience of Plastic Materials by a Single Electron Transfer Mechanism. ACS Central Science, 2020, 6, 266-273.	9.2	33
43	Force-Modulated Equilibria of Mechanophoreâ€“Metal Coordinate Bonds. Chemistry of Materials, 2020, 32, 3869-3878.	6.7	15
44	Fabrication of pH-responsive monodisperse microcapsules using interfacial tension of immiscible phases. Soft Matter, 2020, 16, 5139-5147.	2.7	11
45	Cross-Linking Agents for Enhanced Performance of Thermosets Prepared via Frontal Ring-Opening Metathesis Polymerization. Macromolecules, 2020, 53, 8360-8366.	5.0	62
46	Rapid Synthesis of Elastomers and Thermosets with Tunable Thermomechanical Properties. ACS Macro Letters, 2020, 9, 819-824.	5.0	77
47	Cathode/Electrolyte Interface-Dependent Changes in Stress and Strain in Lithium Iron Phosphate Composite Cathodes. Journal of the Electrochemical Society, 2019, 166, A2707-A2714.	3.1	17
48	Controlling Expansion in Lithium Manganese Oxide Composite Electrodes via Surface Modification. Journal of the Electrochemical Society, 2019, 166, A2357-A2362.	3.1	12
49	Digital Texture Voxels for Stretchable Morphing Skin Applications. Advanced Materials Technologies, 2019, 4, .	5.9	29
50	Self-healing of impact damage in fiber-reinforced composites. Composites Part B: Engineering, 2019, 173, 106808.	12.8	31
51	Effect of Polymerized Ionic Liquid Structure and Morphology on Shockwave Energy Dissipation. ACS Macro Letters, 2019, 8, 535-539.	5.0	17
52	Self-healing of fatigue damage in cross-ply glass/epoxy laminates. Composites Science and Technology, 2019, 175, 122-127.	8.8	37
53	Light-triggered thermal conductivity switching in azobenzene polymers. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 5973-5978.	7.6	142
54	A Robust Patterning Technique for Electron Microscopy-Based Digital Image Correlation at Sub-Micron Resolutions. Experimental Mechanics, 2019, 59, 1063-1073.	1.9	53

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55	Manufacture of carbon-fiber prepreg with thermoplastic/epoxy resin blends and microencapsulated solvent healing agents. Composites Part A: Applied Science and Manufacturing, 2019, 121, 365-375.	8.2	33
56	Spatially Selective and Density-Controlled Activation of Interfacial Mechanophores. Journal of the American Chemical Society, 2019, 141, 4080-4085.	15.0	65
57	Strain and stress mapping by mechanochemical activation of spiropyran in poly(methyl methacrylate). Strain, 2019, 55, .	2.2	28
58	Rapid Degradation of Poly(lactic acid) with Organometallic Catalysts. ACS Applied Materials & Interfaces, 2019, 11, 46226-46232.	8.0	30
59	Tracking capsule activation and crack healing in a microcapsule-based self-healing polymer. Scientific Reports, 2019, 9, .	3.5	36
60	Fully Recyclable Metastable Polymers and Composites. Chemistry of Materials, 2019, 31, 398-406.	6.7	62
61	Processing-dependent mechanical properties of solvent cast cyclic polyphthalaldehyde. Polymer, 2019, 162, 29-34.	4.2	8
62	Coreâ€“Shell Microcapsules Containing Flame Retardant Tris(2-chloroethyl phosphate) for Lithium-Ion Battery Applications. ACS Omega, 2018, 3, 1609-1613.	4.3	56
63	Cyclic Poly(phthalaldehyde): Thermoforming a Bulk Transient Material. ACS Macro Letters, 2018, 7, 47-52.	5.0	47
64	Interfacial Mechanophore Activation Using Laser-Induced Stress Waves. Journal of the American Chemical Society, 2018, 140, 5000-5003.	15.0	50
65	Damage-Responsive Microcapsules for Amplified Photoacoustic Detection of Microcracks in Polymers. Chemistry of Materials, 2018, 30, 2198-2202.	6.7	22
66	Effect of microchannels on the crashworthiness of fiber-reinforced composites. Composite Structures, 2018, 184, 428-436.	6.3	18
67	Restoration of Impact Damage in Polymers via a Hybrid Microcapsuleâ€“Microvascular Selfâ€Healing System. Advanced Functional Materials, 2018, 28, .	17.0	57
68	Autonomous Damage Detection in Multilayered Coatings via Integrated Aggregation-Induced Emission Luminogens. ACS Applied Materials & Interfaces, 2018, 10, 40361-40365.	8.0	57
69	Mechanical Reactivity of Two Different Spiropyran Mechanophores in Polydimethylsiloxane. Macromolecules, 2018, 51, 9177-9183.	5.0	137
70	Self-Protecting Epoxy Coatings with Anticorrosion Microcapsules. ACS Omega, 2018, 3, 14157-14164.	4.3	29
71	Enhanced Mixing of Microvascular Self-Healing Reagents Using Segmented Gasâ€“Liquid Flow. ACS Applied Materials & Interfaces, 2018, 10, 32659-32667.	8.0	11
72	Effects of interface roughness on cohesive strength of self-assembled monolayers. Applied Surface Science, 2017, 397, 192-198.	6.7	25

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73	Silicon Composite Electrodes with Dynamic Ionic Bonding. Advanced Energy Materials, 2017, 7, .	22.6	49
74	Electrochemical Stiffness Changes in Lithium Manganese Oxide Electrodes. Advanced Energy Materials, 2017, 7, .	22.6	33
75	Multi-scale model of effects of roughness on the cohesive strength of self-assembled monolayers. International Journal of Fracture, 2017, 208, 131-143.	2.2	24
76	Alkyl Phosphite Inhibitors for Frontal Ring-Opening Metathesis Polymerization Greatly Increase Pot Life. ACS Macro Letters, 2017, 6, 609-612.	5.0	120
77	Low-Ceiling-Temperature Polymer Microcapsules with Hydrophobic Payloads via Rapid Emulsion-Solvent Evaporation. ACS Applied Materials & Interfaces, 2017, 9, 20115-20123.	8.0	34
78	Regenerative Polymeric Coatings Enabled by Pressure Responsive Surface Valves. Advanced Engineering Materials, 2017, 19, .	2.9	4
79	A Microvascular System for the Autonomous Regeneration of Large Scale Damage in Polymeric Coatings. Advanced Engineering Materials, 2017, 19, .	2.9	6
80	Time Release of Encapsulated Additives for Enhanced Performance of Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 40244-40251.	8.0	16
81	Manufacturing of unidirectional glass/epoxy prepreg with microencapsulated liquid healing agents. Composites Science and Technology, 2017, 153, 190-197.	8.8	18
82	Repeated healing of delamination damage in vascular composites by pressurized delivery of reactive agents. Composites Science and Technology, 2017, 151, 1-9.	8.8	32
83	Mechanisms and characterization of impact damage in 2D and 3D woven fiber-reinforced composites. Composites Part A: Applied Science and Manufacturing, 2017, 101, 432-443.	8.2	96
84	Comparison of Compression-After-Impact and Flexure-After-Impact protocols for 2D and 3D woven fiber-reinforced composites. Composites Part A: Applied Science and Manufacturing, 2017, 101, 471-479.	8.2	82
85	Self-healing Polymers and Composites. American Scientist, 2017, 99, 392.	0.1	49
86	Strategies for Volumetric Recovery of Large Scale Damage in Polymers. Advanced Functional Materials, 2016, 26, 4561-4569.	17.0	20
87	Polymers with autonomous life-cycle control. Nature, 2016, 540, 363-370.	38.7	409
88	A NURBS-based generalized finite element scheme for 3D simulation of heterogeneous materials. Journal of Computational Physics, 2016, 318, 373-390.	3.7	19
89	Survival of actively cooled microvascular polymer matrix composites under sustained thermomechanical loading. Composites Part A: Applied Science and Manufacturing, 2016, 82, 170-179.	8.2	20
90	Nanoscale mechanical tailoring of interfaces using self-assembled monolayers. Mechanics of Materials, 2016, 98, 71-80.	3.7	7

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91	Regioisomer-Specific Mechanochromism of Naphthopyran in Polymeric Materials. Journal of the American Chemical Society, 2016, 138, 12328-12331.	15.0	218
92	Crystal Structure, Thermal Properties, and Shock-Wave-Induced Nucleation of 1,2-Bis(phenylethynyl)benzene. Crystal Growth and Design, 2016, 16, 6148-6151.	3.4	5
93	Electrochemical stiffness in lithium-ion batteries. Nature Materials, 2016, 15, 1182-1187.	35.2	142
94	Energy Absorption Behavior of Polyurea Under Laser-Induced Dynamic Mixed-Mode Loading. Journal of Dynamic Behavior of Materials, 2016, 2, 379-390.	1.2	12
95	A Robust Damage-Reporting Strategy for Polymeric Materials Enabled by Aggregation-Induced Emission. ACS Central Science, 2016, 2, 598-603.	9.2	139
96	Malleable and Recyclable Poly(ureaâ€urethane) Thermosets bearing Hindered Urea Bonds. Advanced Materials, 2016, 28, 7646-7651.	24.5	403
97	Effect of Mechanical Stress on Spiropyran-Merocyanine Reaction Kinetics in a Thermoplastic Polymer. ACS Macro Letters, 2016, 5, 1312-1316.	5.0	47
98	Characterization of core-shell microstructure and self-healing performance of electrospun fiber coatings. Polymer, 2016, 107, 263-272.	4.2	75
99	Active Cooling of a Microvascular Shape Memory Alloyâ€Polymer Matrix Composite Hybrid Material. Advanced Engineering Materials, 2016, 18, 1145-1153.	2.9	19
100	Autonomous Indication of Mechanical Damage in Polymeric Coatings. Advanced Materials, 2016, 28, 2189-2194.	24.5	142
101	Biomimetische Selbstheilung. Angewandte Chemie, 2015, 127, 10572-10593.	1.4	33
102	Thermally Triggered Degradation of Transient Electronic Devices. Advanced Materials, 2015, 27, 3783-3788.	24.5	178
103	Biomimetic Selfâ€Healing. Angewandte Chemie - International Edition, 2015, 54, 10428-10447.	14.4	436
104	Shock-Induced Ordering in a Nano-segregated Network-Forming Ionic Liquid. Journal of the American Chemical Society, 2015, 137, 16000-16003.	15.0	16
105	A NURBSâ€based interfaceâ€enriched generalized finite element method for problems with complex discontinuous gradient fields. International Journal for Numerical Methods in Engineering, 2015, 101, 950-964.	3.0	24
106	Retention of mechanical performance of polymer matrix composites above the glass transition temperature by vascular cooling. Composites Part A: Applied Science and Manufacturing, 2015, 78, 412-423.	8.2	28
107	Repeatable self-healing of an epoxy matrix using imidazole initiated polymerization. Polymer, 2015, 67, 174-184.	4.2	52
108	Autonomic healing of PMMA via microencapsulated solvent. Polymer, 2015, 69, 241-248.	4.2	34

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109	Coreâ€“Shell Polymeric Microcapsules with Superior Thermal and Solvent Stability. ACS Applied Materials & Interfaces, 2015, 7, 10952-10956.	8.0	95
110	Multidimensional Vascularized Polymers using Degradable Sacrificial Templates. Advanced Functional Materials, 2015, 25, 1043-1052.	17.0	62
111	Autonomic Healing of Acrylic Bone Cement. Advanced Healthcare Materials, 2015, 4, 202-207.	8.8	22
112	Thermally Stable Autonomic Healing in Epoxy using a Dualâ€Microcapsule System. Advanced Materials, 2014, 26, 282-287.	24.5	203
113	Shockwave Loading of Mechanochemically Active Polymer Coatings. ACS Applied Materials & Interfaces, 2014, 6, 5350-5355.	8.0	81
114	Interfacial adhesion of photodefinable polyimide films on passivated silicon. Thin Solid Films, 2014, 552, 116-123.	1.9	40
115	Continuous Selfâ€Healing Life Cycle in Vascularized Structural Composites. Advanced Materials, 2014, 26, 4302-4308.	24.5	240
116	Modeling mechanophore activation within a viscous rubbery network. Journal of the Mechanics and Physics of Solids, 2014, 63, 141-153.	5.5	57
117	Tensile properties and damage evolution in vascular 3D woven glass/epoxy composites. Composites Part A: Applied Science and Manufacturing, 2014, 59, 9-17.	8.2	69
118	Triggered Transience of Metastable Poly(phthalaldehyde) for Transient Electronics. Advanced Materials, 2014, 26, 7637-7642.	24.5	196
119	Structural reinforcement of microvascular networks using electrostatic layer-by-layer assembly with halloysite nanotubes. Soft Matter, 2014, 10, 544-548.	2.7	35
120	Molecular Tailoring of Interfacial Failure. Langmuir, 2014, 30, 11096-11102.	3.6	24
121	Enhanced autonomic shutdown of Li-ion batteries by polydopamine coated polyethylene microspheres. Journal of Power Sources, 2014, 269, 735-739.	7.9	42
122	Fracture-induced activation in mechanophore-linked, rubber toughened PMMA. Polymer, 2014, 55, 4164-4171.	4.2	90
123	The Effect of Polymer Chain Alignment and Relaxation on Forceâ€Induced Chemical Reactions in an Elastomer. Advanced Functional Materials, 2014, 24, 1529-1537.	17.0	99
124	Microencapsulated Carbon Black Suspensions for Restoration of Electrical Conductivity. Advanced Functional Materials, 2014, 24, 2947-2956.	17.0	46
125	Autonomic Healing of Carbon Fiber/Epoxy Interfaces. ACS Applied Materials & Interfaces, 2014, 6, 6033-6039.	8.0	79
126	Microfluidically Switched Frequency-Reconfigurable Slot Antennas. IEEE Antennas and Wireless Propagation Letters, 2013, 12, 828-831.	3.6	61

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127	Computational analysis of actively-cooled 3D woven microvascular composites using a stabilized interface-enriched generalized finite element method. International Journal of Heat and Mass Transfer, 2013, 65, 153-164.	5.6	44
128	Fracture behavior of a self-healing, toughened epoxy adhesive. International Journal of Adhesion and Adhesives, 2013, 44, 157-165.	3.4	106
129	High-Affinity DNA Base Analogs as Supramolecular, Nanoscale Promoters of Macroscopic Adhesion. Journal of the American Chemical Society, 2013, 135, 7288-7295.	15.0	96
130	Interfacial Adhesive Properties between a Rigid-Rod Pyromellitimide Molecular Layer and a Covalent Semiconductor via Atomistic Simulations. ACS Applied Materials & Interfaces, 2013, 5, 4702-4711.	8.0	7
131	Exploiting Force Sensitive Spiropyrans as Molecular Level Probes. Macromolecules, 2013, 46, 3746-3752.	5.0	139
132	Time-Dependent Mechanochemical Response of SP-Cross-Linked PMMA. Macromolecules, 2013, 46, 8917-8921.	5.0	63
133	Self-sealing of mechanical damage in a fully cured structural composite. Composites Science and Technology, 2013, 79, 15-20.	8.8	45
134	Autonomic restoration of electrical conductivity using polymer-stabilized carbon nanotube and graphene microcapsules. Applied Physics Letters, 2012, 101, 043106.	3.0	54
135	Chemical Treatment of Poly(lactic acid) Fibers to Enhance the Rate of Thermal Depolymerization. ACS Applied Materials & Interfaces, 2012, 4, 503-509.	8.0	58
136	Role of Mechanophore Orientation in Mechanochemical Reactions. ACS Macro Letters, 2012, 1, 163-166.	5.0	114
137	A Selfâ€healing Conductive Ink. Advanced Materials, 2012, 24, 2578-2581.	24.5	155
138	Proton-Coupled Mechanochemical Transduction: A Mechanogenerated Acid. Journal of the American Chemical Society, 2012, 134, 12446-12449.	15.0	225
139	Autonomic Shutdown of Lithiumâ€ion Batteries Using Thermoresponsive Microspheres. Advanced Energy Materials, 2012, 2, 583-590.	22.6	192
140	Computational modeling and design of actively-cooled microvascular materials. International Journal of Heat and Mass Transfer, 2012, 55, 5309-5321.	5.6	44
141	Self-healing thermoset using encapsulated epoxy-amine healing chemistry. Polymer, 2012, 53, 581-587.	4.2	338
142	Autonomic Restoration of Electrical Conductivity. Advanced Materials, 2012, 24, 398-401.	24.5	308
143	Bioinspired Materials for Self-Cleaning and Self-Healing. MRS Bulletin, 2011, 33, 732-741.	4.1	115
144	Environmental effects on mechanochemical activation of spiropyran in linear PMMA. Journal of Materials Chemistry, 2011, 21, 8443.	7.3	149

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145	Characterizing the mechanochemically active domains in gem-dihalocyclopropanated polybutadiene under compression and tension. Journal of Materials Chemistry, 2011, 21, 8454.	7.3	87
146	Adhesion Promotion via Noncovalent Interactions in Self-Healing Polymers. ACS Applied Materials & Interfaces, 2011, 3, 3072-3077.	8.0	42
147	Shear activation of mechanophore-crosslinked polymers. Journal of Materials Chemistry, 2011, 21, 8381.	7.3	177
148	Visual Indication of Mechanical Damage Using Coreâ€“Shell Microcapsules. ACS Applied Materials & Interfaces, 2011, 3, 4547-4551.	8.0	63
149	Silicaâ€Protected Micron and Subâ€Micron Capsules and Particles for Selfâ€Healing at the Microscale. Macromolecular Rapid Communications, 2011, 32, 82-87.	4.1	74
150	Accelerated Self-Healing Via Ternary Interpenetrating Microvascular Networks. Advanced Functional Materials, 2011, 21, 4320-4326.	17.0	97
151	Threeâ€Dimensional Microvascular Fiberâ€Reinforced Composites. Advanced Materials, 2011, 23, 3654-3658.	24.5	220
152	Structural health management technologies for inflatable/deployable structures: Integrating sensing and self-healing. Acta Astronautica, 2011, 68, 883-903.	3.2	61
153	Fracture and fatigue response of a self-healing epoxy adhesive. Polymer, 2011, 52, 1628-1634.	4.2	131
154	Dynamic delamination of patterned thin films: a numerical study. International Journal of Fracture, 2010, 162, 77-90.	2.2	19
155	Restoration of Conductivity with TTFâ€TCNQ Chargeâ€Transfer Salts. Advanced Functional Materials, 2010, 20, 1721-1727.	17.0	137
156	Autonomic Recovery of Fiber/Matrix Interfacial Bond Strength in a Model Composite. Advanced Functional Materials, 2010, 20, 3547-3554.	17.0	71
157	Selfâ€Healing of Internal Damage in Synthetic Vascular Materials. Advanced Materials, 2010, 22, 5159-5163.	24.5	192
158	A hybrid experimental/numerical approach to characterize interfacial adhesion in multilayer low-Îº thin film specimens. Thin Solid Films, 2010, 519, 337-344.	1.9	17
159	Evaluation of peroxide initiators for radical polymerizationâ€based selfâ€healing applications. Journal of Polymer Science Part A, 2010, 48, 2698-2708.	2.3	68
160	A Self-sealing Fiber-reinforced Composite. Journal of Composite Materials, 2010, 44, 2573-2585.	2.1	65
161	Force-Induced Redistribution of a Chemical Equilibrium. Journal of the American Chemical Society, 2010, 132, 16107-16111.	15.0	252
162	Autonomic healing of low-velocity impact damage in fiber-reinforced composites. Composites Part A: Applied Science and Manufacturing, 2010, 41, 360-368.	8.2	186

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163	Robust, Double-Walled Microcapsules for Self-Healing Polymeric Materials. ACS Applied Materials & Interfaces, 2010, 2, 1195-1199.	8.0	223
164	Programmable Microcapsules from Self-Immolative Polymers. Journal of the American Chemical Society, 2010, 132, 10266-10268.	15.0	200
165	Microencapsulation of a Reactive Liquid-Phase Amine for Self-Healing Epoxy Composites. Macromolecules, 2010, 43, 1855-1859.	5.0	168
166	Masked Cyanoacrylates Unveiled by Mechanical Force. Journal of the American Chemical Society, 2010, 132, 4558-4559.	15.0	159
167	Delivery of Twoâ€Part Selfâ€Healing Chemistry via Microvascular Networks. Advanced Functional Materials, 2009, 19, 1399-1405.	17.0	289
168	Selfâ€Healing Materials with Interpenetrating Microvascular Networks. Advanced Materials, 2009, 21, 4143-4147.	24.5	409
169	Mixed-mode interfacial adhesive strength of a thin film on an anisotropic substrate. Journal of the Mechanics and Physics of Solids, 2009, 57, 51-66.	5.5	17
170	Mechanically-Induced Chemical Changes in Polymeric Materials. Chemical Reviews, 2009, 109, 5755-5798.	52.7	1,286
171	Embedded Shapeâ€Memory Alloy Wires for Improved Performance of Selfâ€Healing Polymers. Advanced Functional Materials, 2008, 18, 2253-2260.	17.0	204
172	Full Recovery of Fracture Toughness Using a Nontoxic Solventâ€Based Selfâ€Healing System. Advanced Functional Materials, 2008, 18, 1898-1904.	17.0	261
173	Adhesion strength measurement of polymer dielectric interfaces using laser spallation technique. Thin Solid Films, 2008, 516, 7627-7635.	1.9	50
174	Hybrid spectral/finite element analysis of dynamic delamination of patterned thin films. Engineering Fracture Mechanics, 2008, 75, 4217-4233.	4.7	24
175	Evaluation of Ruthenium Catalysts for Ring-Opening Metathesis Polymerization-Based Self-Healing Applications. Chemistry of Materials, 2008, 20, 3288-3297.	6.7	142
176	A new self-healing epoxy with tungsten (VI) chloride catalyst. Journal of the Royal Society Interface, 2008, 5, 95-103.	3.3	149
177	Microencapsulation of Isocyanates for Self-Healing Polymers. Macromolecules, 2008, 41, 9650-9655.	5.0	456
178	Peripherally decorated binary microcapsules containing two liquids. Journal of Materials Chemistry, 2008, 18, 5390.	7.3	56
179	Dynamic delamination of patterned thin films. Applied Physics Letters, 2008, 93, 261902.	3.0	27
180	Mechanophore-Linked Addition Polymers. Journal of the American Chemical Society, 2007, 129, 13808-13809.	15.0	389

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181	Solvent-Promoted Self-Healing Epoxy Materials. Macromolecules, 2007, 40, 8830-8832.	5.0	285
182	Self-healing kinetics and the stereoisomers of dicyclopentadiene. Journal of the Royal Society Interface, 2007, 4, 389-393.	3.3	114
183	Effect of microcapsule size on the performance of self-healing polymers. Polymer, 2007, 48, 3520-3529.	4.2	474
184	Catalyst Morphology and Dissolution Kinetics of Self-Healing Polymers. Chemistry of Materials, 2006, 18, 1312-1317.	6.7	206
185	Fluorescent Image Correlation for Nanoscale Deformation Measurements. Small, 2006, 2, 631-635.	11.6	74
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