Steven Howdle

List of Publications by Year
in descending order

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314 papers	14,796 citations	15503 65 h-index	30920 102 g-index
322 all docs	322 docs citations	322 times ranked	12548 citing authors

#	Article	IF	Citations
1	Silver nanoparticles and polymeric medical devices: a new approach to prevention of infection?. Journal of Antimicrobial Chemotherapy, 2004, 54, 1019-1024.	3.0	655
2	Water-in-Carbon Dioxide Microemulsions: An Environment for Hydrophiles Including Proteins. Science, 1996, 271, 624-626.	12.6	554
3	Applications of supercritical CO2 in the fabrication of polymer systems for drug delivery and tissue engineering. Advanced Drug Delivery Reviews, 2008, 60, 373-387.	13.7	254
4	Materials processing in supercritical carbon dioxide: surfactants, polymers and biomaterialsElectronic supplementary information (ESI) available: video clips relating to work carried out in the Howdle research group. See http://www.rsc.org/suppdata/jm/b3/b315262f/. Journal of Materials Chemistry, 2004, 14, 1663.	6.7	252
5	Human osteoprogenitor growth and differentiation on synthetic biodegradable structures after surface modification. Bone, 2001, 29, 523-531.	2.9	249
6	Growth factor release from tissue engineering scaffolds. Journal of Pharmacy and Pharmacology, 2010, 53, 1427-1437.	2.4	234
7	Water in Supercritical Carbon Dioxide Microemulsions:Â Spectroscopic Investigation of a New Environment for Aqueous Inorganic Chemistry. Journal of the American Chemical Society, 1997, 119, 6399-6406.	13.7	218
8	The effect of the delivery of vascular endothelial growth factor and bone morphogenic protein-2 to osteoprogenitor cell populations on bone formation. Biomaterials, 2010, 31, 1242-1250.	11.4	214
9	PEGylated chitosan derivatives: Synthesis, characterizations and pharmaceutical applications. Progress in Polymer Science, 2012, 37, 659-685.	24.7	204
10	The effect of anisotropic architecture on cell and tissue infiltration into tissue engineering scaffolds. Biomaterials, 2006, 27, 5909-5917.	11.4	201
11	Control of pore size and structure of tissue engineering scaffolds produced by supercritical fluid processing. , 2007, 14, 64-77.		200
12	Supercritical fluid technologies and tissue engineering scaffolds. Current Opinion in Solid State and Materials Science, 2004, 8, 313-321.	11.5	197
13	Supercritical fluid mixing: preparation of thermally sensitive polymer composites containing bioactive materials. Chemical Communications, 2001, , 109-110.	4.1	191
14	Vibrational Spectroscopy in Supercritical Fluids: From Analysis and Hydrogen Bonding to Polymers and Synthesis. Angewandte Chemie International Edition in English, 1995, 34, 1275-1295.	4.4	168
15	The influence of dispersant concentration on the pore morphology of hydroxyapatite ceramics for bone tissue engineering. Biomaterials, 2005, 26, 697-702.	11.4	162
16	Adenoviral BMP-2 Gene Transfer in Mesenchymal Stem Cells: In Vitro and in Vivo Bone Formation on Biodegradable Polymer Scaffolds. Biochemical and Biophysical Research Communications, 2002, 292, 144-152.	2.1	160
17	Induction of Human Osteoprogenitor Chemotaxis, Proliferation, Differentiation, and Bone Formation by Osteoblast Stimulating Factor-1/Pleiotrophin: Osteoconductive Biomimetic Scaffolds for Tissue Engineering. Journal of Bone and Mineral Research, 2003, 18, 47-57.	2.8	149
18	The effect of mesenchymal populations and vascular endothelial growth factor delivered from biodegradable polymer scaffolds on bone formation. Biomaterials, 2008, 29, 1892-1900.	11.4	138

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19	Solubilization in nonionic reverse micelles in carbon dioxide. AICHE Journal, 1994, 40, 543-555.	3.6	136
20	In vitro assessment of cell penetration into porous hydroxyapatite scaffolds with a central aligned channel. Biomaterials, 2004, 25, 5507-5514.	11.4	133
21	Three-Dimensional Bioactive and Biodegradable Scaffolds Fabricated by Surface-Selective Laser Sintering. Advanced Materials, 2005, 17, 327-330.	21.0	130
22	Porous inverse vulcanised polymers for mercury capture. Chemical Communications, 2016, 52, 5383-5386.	4.1	130
23	Enzyme-Catalyzed Ring-Opening Polymerization of Îµ-Caprolactone in Supercritical Carbon Dioxide. Macromolecules, 2004, 37, 2450-2453.	4.8	124
24	Clean preparation of nanoparticulate metals in porous supports: a supercritical routeElectronic supplementary information (ESI) available: synthesis of precursor complexes; preparation of aerogels. See http://www.rsc.org/suppdata/jm/b1/b111111f/.. Journal of Materials Chemistry, 2002, 12, 1898-1905.	6.7	120
25	Characterisation of microcellular foams produced from semi-crystalline PCL using supercritical carbon dioxide. European Polymer Journal, 2006, 42, 3145-3151.	5.4	119
26	Controlling Chain Growth:Â A New Strategy to Hyperbranched Materials. Macromolecules, 2007, 40, 7184-7194.	4.8	118
27	Porous methacrylate scaffolds: supercritical fluid fabrication and in vitro chondrocyte responses. Biomaterials, 2004, 25, 3559-3568.	11.4	115
28	Can Block Copolymers Be Synthesized by a Single-Step Chemoenzymatic Route in Supercritical Carbon Dioxide?. Journal of the American Chemical Society, 2005, 127, 2384-2385.	13.7	114
29	Human Osteoprogenitor Bone Formation Using Encapsulated Bone Morphogenetic Protein 2 in Porous Polymer Scaffolds. Tissue Engineering, 2004, 10, 1037-1045.	4.6	109
30	Using Plasma Deposits to Promote Cell Population of the Porous Interior of Three-Dimensional Poly(D,L-Lactic Acid) Tissue-Engineering Scaffolds. Advanced Functional Materials, 2005, 15, 1134-1140.	14.9	109
31	Block copolymer synthesis by controlled/living radical polymerisation in heterogeneous systems. Chemical Society Reviews, 2016, 45, 5055-5084.	38.1	108
32	Organometallic chemistry in supercritical fluids. The generation and detection of dinitrogen and nonclassical dihydrogen complexes of Group 6, 7, and 8 transition metals at room temperature. Journal of the American Chemical Society, 1990, 112, 4804-4813.	13.7	107
33	The effect of processing variables on morphological and mechanical properties of supercritical CO2 foamed scaffolds for tissue engineering. Acta Biomaterialia, 2012, 8, 61-71.	8.3	101
34	The production of protein-loaded microparticles by supercritical fluid enhanced mixing and spraying. Journal of Controlled Release, 2005, 101, 85-92.	9.9	100
35	Surfaceâ€Enhanced Raman Scattering Using Microstructured Optical Fiber Substrates. Advanced Functional Materials, 2007, 17, 2024-2030.	14.9	97
36	Successful Dispersion Polymerization in Supercritical CO₂ Using Polyvinylalkylate Hydrocarbon Surfactants Synthesized and Anchored via RAFT. Journal of the American Chemical Society, 2008, 130, 12242-12243.	13.7	96

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37	Using a Coreâ€“Sheath Distribution of Surface Chemistry through 3D Tissue Engineering Scaffolds to Control Cell Ingress. Advanced Materials, 2006, 18, 1406-1410.	21.0	95
38	Poly-3-hydroxyoctanoate P(3HO), a Medium Chain Length Polyhydroxyalkanoate Homopolymer from Pseudomonas mendocina. Biomacromolecules, 2011, 12, 2126-2136.	5.4	93
39	One-Pot Synthesis of Block Copolymers in Supercritical Carbon Dioxide: A Simple Versatile Route to Nanostructured Microparticles. Journal of the American Chemical Society, 2012, 134, 4772-4781.	13.7	93
40	Effect of PEGylation on the Toxicity and Permeability Enhancement of Chitosan. Biomacromolecules, 2010, 11, 2854-2865.	5.4	92
41	Drug delivery goes supercritical. Materials Today, 2005, 8, 42-48.	14.2	91
42	Silver Nanoparticle Impregnated Polycarbonate Substrates for Surface Enhanced Raman Spectroscopy. Advanced Functional Materials, 2008, 18, 1265-1271.	14.9	89
43	Progress in the synthesis of sustainable polymers from terpenes and terpenoids. Green Materials, 2016, 4, 115-134.	2.1	89
44	Immunoselection and adenoviral genetic modulation of human osteoprogenitors: in vivo bone formation on PLA scaffold. Biochemical and Biophysical Research Communications, 2002, 299, 208-215.	2.1	88
45	Controlled Dispersion Polymerization of Methyl Methacrylate in Supercritical Carbon Dioxide via RAFT. Macromolecules, 2008, 41, 1215-1222.	4.8	88
46	Free Radical Polymerization of Methyl Methacrylate in Supercritical Carbon Dioxide Using a Pseudo-Graft Stabilizer:â€‰ Effect of Monomer, Initiator, and Stabilizer Concentrations. Macromolecules, 2000, 33, 9222-9227.	4.8	86
47	A highly effective gene delivery vector â€“ hyperbranched poly(2-(dimethylamino)ethyl methacrylate) from in situ deactivation enhanced ATRP. Chemical Communications, 2010, 46, 4698.	4.1	86
48	Osteoblast growth on titanium foils coated with hydroxyapatite by pulsed laser ablation. Biomaterials, 2001, 22, 337-347.	11.4	85
49	Laser stereolithography and supercritical fluid processing for custom-designed implant fabrication. Journal of Materials Science: Materials in Medicine, 2004, 15, 123-128.	3.6	85
50	Supercritical carbon dioxide generated vascular endothelial growth factor encapsulated poly(dl-lactic acid) scaffolds induce angiogenesis in vitro. Biochemical and Biophysical Research Communications, 2007, 352, 135-141.	2.1	84
51	Kinetics of Enzymatic Ring-Opening Polymerization of Îµ-Caprolactone in Supercritical Carbon Dioxide. Macromolecules, 2006, 39, 7967-7972.	4.8	83
52	A facile and green route to terpene derived acrylate and methacrylate monomers and simple free radical polymerisation to yield new renewable polymers and coatings. Polymer Chemistry, 2016, 7, 2882-2887.	3.9	80
53	Advantages of Block Copolymer Synthesis by RAFT-Controlled Dispersion Polymerization in Supercritical Carbon Dioxide. Macromolecules, 2013, 46, 6843-6851.	4.8	78
54	Human Osteoprogenitor Bone Formation Using Encapsulated Bone Morphogenetic Protein 2 in Porous Polymer Scaffolds. Tissue Engineering, 2004, 10, 1037-1045.	4.6	78

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55	Sustained release hGH microsphere formulation produced by a novel supercritical fluid technology: In vivo studies. Journal of Controlled Release, 2010, 141, 153-160.	9.9	76
56	Thermoresponsive and Photocrosslinkable PEGMEMA-PPGMA-EGDMA Copolymers from a One-Step ATRP Synthesis. Biomacromolecules, 2009, 10, 822-828.	5.4	73
57	Dispersion Polymerization of Methyl Methacrylate in Supercritical Carbon Dioxide with a Monofunctional Pseudo-Graft Stabilizer. Macromolecules, 2000, 33, 237-239.	4.8	72
58	Supercritical carbon dioxide: putting the fizz into biomaterials. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2006, 364, 249-261.	3.4	70
59	Dispersion polymerisation in supercritical CO2 using macro-RAFT agents. Chemical Communications, 2008, , 5942.	4.1	70
60	Electrodeposition of metals from supercritical fluids. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 14768-14772.	7.1	70
61	Photo-Cross-Linked Hydrogels from Thermoresponsive PEGMEMA-PPGMA-EGDMA Copolymers Containing Multiple Methacrylate Groups: Mechanical Property, Swelling, Protein Release, and Cytotoxicity. Biomacromolecules, 2009, 10, 2895-2903.	5.4	69
62	Fluorinated Graft Stabilizers for Polymerization in Supercritical Carbon Dioxide:â€‰ The Effect of Stabilizer Architecture. Macromolecules, 2001, 34, 20-25.	4.8	68
63	Biocompatibility and osteogenic potential of human fetal femur-derived cells on surface selective laser sintered scaffolds. Acta Biomaterialia, 2009, 5, 2063-2071.	8.3	68
64	Supercritical fluids: A route to palladium-aerogel nanocomposites. Journal of Materials Chemistry, 2004, 14, 1212.	6.7	67
65	Synthesis of Semifluorinated Block Copolymers Containing Poly(Îµ-caprolactone) by the Combination of ATRP and Enzymatic ROP in scCO2. Macromolecules, 2006, 39, 633-640.	4.8	67
66	Sorption and swelling of poly(<scp>DL</scp>â€lactic acid) and poly(lacticâ€coâ€glycolic acid) in supercritical CO₂: An experimental and modeling study. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 483-496.	2.1	67
67	Bacteria clustering by polymers induces the expression of quorum-sensing-controlled phenotypes. Nature Chemistry, 2013, 5, 1058-1065.	13.6	67
68	Synthesis and characterisation of advanced UHMWPE/silver nanocomposites for biomedical applications. European Polymer Journal, 2007, 43, 307-314.	5.4	66
69	One-Step Chemoenzymatic Synthesis of Poly(Îµ-caprolactone-block-methyl methacrylate) in Supercritical CO2. Macromolecules, 2006, 39, 5352-5358.	4.8	65
70	â€œLivingâ€•Polymer Beads in Supercritical CO2. Macromolecules, 2007, 40, 2965-2967.	4.8	65
71	Synthesis and Phase Behavior of CO₂-Soluble Hydrocarbon Copolymer: Poly(vinyl) Tj ETQq1 1 0.784314 rgBT /Overlock	4.8	65
72	Simultaneous enzymatic ring opening polymerisation and RAFT-mediated polymerisation in supercritical CO2. Chemical Communications, 2006, , 4383.	4.1	64

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73	Physical, chemical, and biological characterization of pulsed laser deposited and plasma sputtered hydroxyapatite thin films on titanium alloy. Journal of Biomedical Materials Research Part B, 2000, 50, 536-545.	3.1	63
74	Synthesis of Graft Copolymers by the Combination of ATRP and Enzymatic ROP in scCO2. Macromolecules, 2006, 39, 9080-9086.	4.8	62
75	Scaffold for tissue engineering fabricated by non-isothermal supercritical carbon dioxide foaming of a highly crystalline polyester. Acta Biomaterialia, 2010, 6, 130-136.	8.3	62
76	Thermal and diffusion processes in laser-induced stress relaxation and reshaping of cartilage. Journal of Biomechanics, 1997, 30, 813-817.	2.1	61
77	Incorporation of Proteins into Polymer Materials by a Novel Supercritical Fluid Processing Method. Advanced Materials, 2002, 14, 1802-1804.	21.0	59
78	Putting the fizz into chemistry: applications of supercritical carbon dioxide in tissue engineering, drug delivery and synthesis of novel block copolymers. Biochemical Society Transactions, 2007, 35, 516-521.	3.4	59
79	Macromonomer surfactants for the polymerisation of methyl methacrylate in supercritical CO2. Polymer, 2000, 41, 6715-6721.	3.8	58
80	Large-aperture variable-volume view cell for the determination of phase-equilibria in high pressure systems and supercritical fluids. Review of Scientific Instruments, 2004, 75, 3233-3236.	1.3	57
81	Dispersion Polymerization of Methyl Methacrylate in Supercritical Carbon Dioxide:Â An Investigation into Stabilizer Anchor Group. Macromolecules, 2005, 38, 3271-3282.	4.8	56
82	Interconnectivity and permeability of supercritical fluid-foamed scaffolds and the effect of their structural properties on cell distribution. Polymer, 2014, 55, 435-444.	3.8	56
83	The effects of fluid density on the rotational Raman spectrum of hydrogen dissolved in supercritical carbon dioxide. Chemical Physics Letters, 1993, 214, 215-219.	2.6	55
84	Probing Vapor/Liquid Equilibria of Near-Critical Binary Gas Mixtures by Acoustic Measurements. The Journal of Physical Chemistry, 1996, 100, 9522-9526.	2.9	55
85	Amorphous Vanadium Phosphate Catalysts from Supercritical Antisolvent Precipitation. Journal of Catalysis, 2001, 197, 232-235.	6.2	53
86	Preparation of a Poly(methyl methacrylate)/Ultrahigh Molecular Weight Polyethylene Blend Using Supercritical Carbon Dioxide and the Identification of a Three-Phase Structure:Â An Atomic Force Microscopy Study. Macromolecules, 2002, 35, 8869-8877.	4.8	53
87	Controlling protein release from scaffolds using polymer blends and composites. European Journal of Pharmaceutics and Biopharmaceutics, 2008, 68, 82-89.	4.3	53
88	Gene therapy used for tissue engineering applicationsâ€. Journal of Pharmacy and Pharmacology, 2010, 59, 329-350.	2.4	51
89	Synthesis and application of new CO2-soluble vinyl pivalate hydrocarbon stabilisers via RAFT polymerisation. Polymer Chemistry, 2011, 2, 1293.	3.9	51
90	New renewably-sourced polyesters from limonene-derived monomers. Green Chemistry, 2019, 21, 149-156.	9.0	51

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91	Silver(I) Coordination Polymers Using Thioether Macrocycle Building Blocks. Inorganic Chemistry, 2000, 39, 1035-1038.	4.0	50
92	Dispersion Atom Transfer Radical Polymerization of Vinyl Monomers in Supercritical Carbon Dioxide. Macromolecules, 2008, 41, 8575-8583.	4.8	50
93	Preparation of cross-linked microparticles of poly(glycidyl methacrylate) by dispersion polymerization of glycidyl methacrylate using a PDMS macromonomer as stabilizer in supercritical carbon dioxide. Polymer, 2002, 43, 6653-6659.	3.8	49
94	Modular Construction of Multifunctional Bioresponsive Cell-Targeted Nanoparticles for Gene Delivery. Bioconjugate Chemistry, 2011, 22, 156-168.	3.6	49
95	Dynamic IR spectroscopy: occurrence and predictability of coalescence in the carbon monoxide stretching vibrations of 13CO-enriched tricarbonyl(.eta.4-norbornadiene)iron. Journal of the American Chemical Society, 1991, 113, 8347-8353.	13.7	48
96	Suspension Polymerization ofl-Lactide in Supercritical Carbon Dioxide in the Presence of a Triblock Copolymer Stabilizer. Macromolecules, 2003, 36, 5908-5911.	4.8	47
97	A comparison of polymer and polymerâ€“hydroxyapatite composite tissue engineered scaffolds for use in bone regeneration. An in vitro and in vivo study. Journal of Biomedical Materials Research - Part A, 2014, 102, 2613-2624.	4.0	47
98	Porous methacrylate tissue engineering scaffolds: using carbon dioxide to control porosity and interconnectivity. Journal of Materials Science, 2006, 41, 4197.	3.7	46
99	High-pressure rheological analysis of CO2-induced melting point depression and viscosity reduction of poly(Îµ-caprolactone). Polymer, 2015, 69, 17-24.	3.8	46
100	Mammalian cell survival and processing in supercritical CO2. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 7426-7431.	7.1	45
101	In vitro antimicrobial activity of silver-processed catheters for neurosurgery. Journal of Antimicrobial Chemotherapy, 2010, 65, 258-265.	3.0	45
102	New biomaterials from renewable resources â€“ amphiphilic block copolymers from Î´-decalactone. Polymer Chemistry, 2015, 6, 7196-7210.	3.9	45
103	Preparation of polymerâ€“nanoparticle composite beads by a nanoparticle-stabilised suspension polymerisation. Journal of Materials Chemistry, 2007, 17, 4382.	6.7	44
104	The application of human bone marrow stromal cells and poly(dl-lactic acid) as a biological bone graft extender in impaction bone grafting. Biomaterials, 2008, 29, 3221-3227.	11.4	44
105	Studies on the interactions of CO2 with biodegradable poly(dl-lactic acid) and poly(lactic) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 2010, 51, 1425-1431.	3.8	43
106	Amylose/cellulose nanofiber composites for all-natural, fully biodegradable and flexible bioplastics. Carbohydrate Polymers, 2021, 253, 117277.	10.2	43
107	Infrared spectroscopy and chemistry in liquid rare-gas solvents. Faraday Discussions of the Chemical Society, 1988, 86, 271.	2.2	42
108	Novel Graft Stabilizers for the Free Radical Polymerization of Methyl Methacrylate in Supercritical Carbon Dioxide. Macromolecules, 2000, 33, 1996-1999.	4.8	42

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109	Controlled Dispersion Polymerization in Supercritical Carbon Dioxide. Australian Journal of Chemistry, 2009, 62, 786.	0.9	42
110	Macroparticle distribution and chemical composition of laser deposited apatite coatings. Applied Physics Letters, 1995, 66, 2451-2453.	3.3	41
111	Tin(II) Ethyl Hexanoate Catalyzed Precipitation Polymerization of Îµ-Caprolactone in Supercritical Carbon Dioxide. Macromolecules, 2005, 38, 1190-1195.	4.8	41
112	The preparation of gold nanoparticle composites using supercritical carbon dioxide. Journal of Supercritical Fluids, 2007, 42, 282-287.	3.2	41
113	Bioreducible cross-linked core polymer micelles enhance in vitro activity of methotrexate in breast cancer cells. Biomaterials Science, 2017, 5, 532-550.	5.4	41
114	In-Situ Investigation on the Mechanism of Dispersion Polymerization in Supercritical Carbon Dioxide. Macromolecules, 2000, 33, 4008-4014.	4.8	39
115	Synthesis and CO2Solubility Studies of Poly(ether carbonate)s and Poly(ether ester)s Produced by Step Growth Polymerization. Macromolecules, 2005, 38, 1691-1698.	4.8	39
116	One-pot controlled synthesis of biodegradable and biocompatible co-polymer micelles. Journal of Materials Chemistry, 2009, 19, 4529.	6.7	39
117	Biodegradable Coreâ^'Shell Materials via RAFT and ROP: Characterization and Comparison of Hyperbranched and Microgel Particles. Macromolecules, 2011, 44, 1347-1354.	4.8	39
118	â€œSolvent-Freeâ€•Photochemical Activation of CH4, C2H4, and C2H6 by (C5Me5)Ir(CO)2 in Supercritical Fluid Solution. Organometallics, 1996, 15, 1804-1812.	2.3	38
119	Plasticization and spraying of poly (DLâ€lactic acid) using supercritical carbon dioxide: control of particle size. Journal of Pharmaceutical Sciences, 2004, 93, 1083-1090.	3.3	38
120	A facile synthetic route to aqueous dispersions of silver nanoparticles. Materials Letters, 2007, 61, 4906-4910.	2.6	38
121	Organometallic photochemistry in supercritical fluids: the reaction of H2with [(Î·5-C5H5)M(CO)3](M î€† Re) Tj ETQq1 1 0.784314 rgBT Chemical Society Chemical Communications, 1989, , 1099-1101.	2.0	37
122	Charge Transfer Complex Inimer: A Facile Route to Dendritic Materials. Advanced Materials, 2003, 15, 1348-1352.	21.0	37
123	Uniform cell colonization of porous 3-D scaffolds achieved using radial control of surface chemistry. Acta Biomaterialia, 2011, 7, 3336-3344.	8.3	37
124	Infrared Spectral Features Due to Very Rapid Fluxional Motion: Changes in the Infrared Carbonyl Stretching Spectra of Tricarbonyl(.eta.4-norbornadiene)iron with Temperature. The Journal of Physical Chemistry, 1995, 99, 17532-17538.	2.9	36
125	Novel one pot synthesis of silver nanoparticleâ€“polymer composites by supercritical CO2 polymerisation in the presence of a RAFT agent. Chemical Communications, 2007, , 3933.	4.1	36
126	Synthetic Polymers for Simultaneous Bacterial Sequestration and Quorum Sense Interference. Angewandte Chemie - International Edition, 2011, 50, 9852-9856.	13.8	36

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127	In vitro study of hydroxyapatite-based photocurable polymer composites prepared by laser stereolithography and supercritical fluid extraction. Acta Biomaterialia, 2008, 4, 1603-1610.	8.3	35
128	Image-based characterization of foamed polymeric tissue scaffolds. Biomedical Materials (Bristol), 2008, 3, 015011.	3.3	35
129	New vinyl ester copolymers as stabilisers for dispersion polymerisation in scCO2. Polymer, 2011, 52, 5403-5409.	3.8	35
130	Porous Copolymers of Îµ-Caprolactone as Scaffolds for Tissue Engineering. Macromolecules, 2013, 46, 8136-8143.	4.8	35
131	Amphiphilic block copolymers from a renewable Îµ-decalactone monomer: prediction and characterization of micellar core effects on drug encapsulation and release. Journal of Materials Chemistry B, 2016, 4, 7119-7129.	5.8	35
132	Copolymerization of Vinylidene Fluoride and Hexafluoropropylene in Supercritical Carbon Dioxide. Macromolecules, 2005, 38, 9135-9142.	4.8	34
133	A novel synthetic route to metalâ€“polymer nanocomposites by in situ suspension and bulk polymerizations. European Polymer Journal, 2008, 44, 1331-1336.	5.4	34
134	Surface Characterisation of Bioadhesive PLGA/Chitosan Microparticles Produced by Supercritical Fluid Technology. Pharmaceutical Research, 2011, 28, 1668-1682.	3.5	34
135	Preparation of hybrid polymer nanocomposite microparticles by a nanoparticle stabilised dispersion polymerisation. Journal of Materials Chemistry, 2008, 18, 998.	6.7	33
136	Epoxy functionalised poly(Îµ-caprolactone): synthesis and application. Chemical Communications, 2008, , 5806.	4.1	33
137	Polyacrylates Derived from Biobased Ethyl Lactate Solvent via SET-LRP. Biomacromolecules, 2019, 20, 2135-2147.	5.4	33
138	Spectroscopic analysis and in situ monitoring of impregnation and extraction of polymer films and powders using supercritical fluids. Journal of Polymer Science, Part B: Polymer Physics, 1994, 32, 541-549.	2.1	32
139	The homo and copolymerisation of 2-(dimethylamino)ethyl methacrylate in supercritical carbon dioxide. Polymer, 2003, 44, 3803-3809.	3.8	32
140	New Thiolateâ^'Cobalt(II) Complexes for Catalytic Chain Transfer Polymerization of Methyl Methacrylate. Macromolecules, 2004, 37, 6667-6669.	4.8	32
141	Polymerization of Vinylidene Fluoride in Supercritical Carbon Dioxide:Â Effects of Poly(dimethylsiloxane) Macromonomer on Molecular Weight and Morphology of Poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overloc	4.8	32
142	Fabrication of polymer scaffolds for tissue engineering using surface selective laser sintering. Laser Physics, 2006, 16, 774-787.	1.2	32
143	Supercritical CO2: an effective medium for the chemo-enzymatic synthesis of block copolymers?. Chemical Communications, 2007, , 3805.	4.1	32
144	Preparative-scale organometallic chemistry in supercritical fluids; isolation of [Cr(CO)5(C2H4)] as a stable solid at room temperature. Journal of the Chemical Society Chemical Communications, 1993, , 1814.	2.0	31

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145	Reversibly collapsible macroporous poly(styrene-divinylbenzene) resins. Polymer, 2000, 41, 7273-7277.	3.8	31
146	FTIR analysis of water in supercritical carbon dioxide microemulsions using monofunctional perfluoropolyether surfactants. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2003, 214, 143-150.	4.7	31
147	Supercritical carbon dioxide foaming of elastomer/heterocyclic methacrylate blends as scaffolds for tissue engineering. Journal of Materials Chemistry, 2005, 15, 4881.	6.7	31
148	Supercritical CO₂: A Clean and Low Temperature Approach to Blending P_{DL}LA and PEG. Advanced Functional Materials, 2012, 22, 1684-1691.	14.9	31
149	Supercritical CO2 fluid-foaming of polymers to increase porosity: A method to improve the mechanical and biocompatibility characteristics for use as a potential alternative to allografts in impaction bone grafting?. Acta Biomaterialia, 2012, 8, 1918-1927.	8.3	31
150	Development of a slow non-viral DNA release system from PDLLA scaffolds fabricated using a supercritical CO2 technique. Biotechnology and Bioengineering, 2007, 98, 679-693.	3.3	30
151	Effects of poly(vinyl pivalate)-based stabiliser architecture on CO2-solubility and stabilising ability in dispersion polymerisation of N-vinyl pyrrolidone. Polymer Chemistry, 2013, 4, 3791.	3.9	30
152	Supercritical fluid assisted melting of poly(ethylene glycol): a new solvent-free route to microparticles. Journal of Materials Chemistry, 2005, 15, 1148.	6.7	29
153	Copper bromide complexed by fluorinated macroligands: towards microspheres by ATRP of vinyl monomers in scCO2. Chemical Communications, 2008, , 314-316.	4.1	29
154	Controlled aqueous polymerization of acrylamides and acrylates and â€œin situâ€•depolymerization in the presence of dissolved CO₂. Chemical Communications, 2016, 52, 6533-6536.	4.1	29
155	Controlled polymerisation of lactide using an organo-catalyst in supercritical carbon dioxide. Green Chemistry, 2011, 13, 2032.	9.0	28
156	Dispersion Polymerization of Vinylidene Fluoride in Supercritical Carbon Dioxide Using a Fluorinated Graft Maleic Anhydride Copolymer Stabilizer. Macromolecules, 2005, 38, 1542-1545.	4.8	27
157	Simultaneous Dynamic Kinetic Resolution in Combination with Enzymatic Ring-Opening Polymerization. Macromolecules, 2006, 39, 7302-7305.	4.8	27
158	HRP-mediated inverse emulsion polymerisation of acrylamide in supercritical carbon dioxide. Green Chemistry, 2008, 10, 863.	9.0	27
159	Viscosity studies of poly(<scp>DL</scp>â€lactic acid) in supercritical CO₂. Journal of Polymer Science, Part B: Polymer Physics, 2012, 50, 1383-1393.	2.1	27
160	Can High-Pressure Raman Spectroscopy Be Simplified? A Microscale Optical-Fiber Capillary Cell for the Study of Supercritical Fluids. Applied Spectroscopy, 1994, 48, 214-218.	2.2	26
161	Monitoring dispersion polymerisations of methyl methacrylate in supercritical carbon dioxide. European Polymer Journal, 2003, 39, 423-428.	5.4	26
162	The preparation of novel nano-structured polymer blends of ultra high molecular weight polyethylene with polymethacrylates using supercritical carbon dioxide. Journal of Materials Chemistry, 2003, 13, 2838-2844.	6.7	26

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