Joseph M Desimone

List of Publications by Year
in descending order

124 papers	11,778 citations	47004 47 h-index	26610 107 g-index
126 all docs	126 docs citations	126 times ranked	17195 citing authors

#	Article	IF	Citations
1	3D printed drug-loaded implantable devices for intraoperative treatment of cancer. Journal of Controlled Release, 2022, 344, 147-156.	9.9	10
2	New insights into immunomodulation via overexpressing lipoic acid synthase as a therapeutic potential to reduce atherosclerosis. Vascular Pharmacology, 2020, 133-134, 106777.	2.1	10
3	Pulmonary Delivery of Nanoparticle-Bound Toll-like Receptor 9 Agonist for the Treatment of Metastatic Lung Cancer. ACS Nano, 2020, 14, 7200-7215.	14.6	38
4	Lithium Salt Distribution and Thermodynamics in Electrolytes Based on Short Perfluoropolyether-block-Poly(ethylene oxide) Copolymers. Macromolecules, 2020, 53, 1142-1153.	4.8	12
5	Role of Linker Length and Antigen Density in Nanoparticle Peptide Vaccine. ACS Omega, 2019, 4, 5547-5555.	3.5	22
6	Optimization of Surface Display of DENV2 E Protein on a Nanoparticle to Induce Virus Specific Neutralizing Antibody Responses. Bioconjugate Chemistry, 2018, 29, 1544-1552.	3.6	10
7	Impact of formulation on the iontophoretic delivery of the FOLFIRINOX regimen for the treatment of pancreatic cancer. Cancer Chemotherapy and Pharmacology, 2018, 81, 991-998.	2.3	10
8	Controlling release from 3D printed medical devices using CLIP and drug-loaded liquid resins. Journal of Controlled Release, 2018, 278, 9-23.	9.9	73
9	Extending antigen release from particulate vaccines results in enhanced antitumor immune response. Journal of Controlled Release, 2018, 269, 393-404.	9.9	22
10	Formulation of High-Performance Dry Powder Aerosols for Pulmonary Protein Delivery. Pharmaceutical Research, 2018, 35, 195.	3.5	22
11	Spatially controlled coating of continuous liquid interface production microneedles for transdermal protein delivery. Journal of Controlled Release, 2018, 284, 122-132.	9.9	90
12	Use of iontophoresis for the treatment of cancer. Journal of Controlled Release, 2018, 284, 144-151.	9.9	53
13	Incipient microphase separation in short chain perfluoropolyether-block-poly(ethylene oxide) copolymers. Soft Matter, 2017, 13, 4047-4056.	2.7	7
14	Mediating Passive Tumor Accumulation through Particle Size, Tumor Type, and Location. Nano Letters, 2017, 17, 2879-2886.	9.1	199
15	Docetaxel-Loaded PLGA Nanoparticles Improve Efficacy in Taxane-Resistant Triple-Negative Breast Cancer. Nano Letters, 2017, 17, 242-248.	9.1	94
16	Particles for Local Delivery of Proteins Using Intraâ€Articular Route. Advanced Healthcare Materials, 2016, 5, 653-658.	7.6	1
17	Lessons in Translating University Research to the Marketplace. ACS Symposium Series, 2016, , 87-90.	0.5	1
18	Pulmonary Delivery of Butyrylcholinesterase as a Model Protein to the Lung. Molecular Pharmaceutics, 2016, 13, 1626-1635.	4.6	15

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19	Relationship between Conductivity, Ion Diffusion, and Transference Number in Perfluoropolyether Electrolytes. Macromolecules, 2016, 49, 3508-3515.	4.8	114
20	Co-opting Moore's law: Therapeutics, vaccines and interfacially active particles manufactured via PRINTÂ®. Journal of Controlled Release, 2016, 240, 541-543.	9.9	25
21	Layerless fabrication with continuous liquid interface production. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 11703-11708.	7.1	228
22	Liquid perfluoropolyether electrolytes with enhanced ionic conductivity for lithium battery applications. Polymer, 2016, 100, 126-133.	3.8	26
23	Reduction Sensitive PEG Hydrogels for Codelivery of Antigen and Adjuvant To Induce Potent CTLs. Molecular Pharmaceutics, 2016, 13, 3381-3394.	4.6	33
24	Organic Polymer Chemistry in the Context of Novel Processes. ACS Central Science, 2016, 2, 588-597.	11.3	4
25	Novel materials. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 11667-11669.	7.1	4
26	Subtumoral analysis of PRINT nanoparticle distribution reveals targeting variation based on cellular and particle properties. Nanomedicine: Nanotechnology, Biology, and Medicine, 2016, 12, 1053-1062.	3.3	27
27	Nanoparticle surface charge impacts distribution, uptake and lymph node trafficking by pulmonary antigen-presenting cells. Nanomedicine: Nanotechnology, Biology, and Medicine, 2016, 12, 677-687.	3.3	119
28	Iontophoretic device delivery for the localized treatment of pancreatic ductal adenocarcinoma. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 2200-2205.	7.1	18
29	Compliant glassâ€“polymer hybrid single ion-conducting electrolytes for lithium batteries. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 52-57.	7.1	108
30	Tumor Presence Induces Global Immune Changes and Enhances Nanoparticle Clearance. ACS Nano, 2016, 10, 861-870.	14.6	51
31	Distribution and Cellular Uptake of PEGylated Polymeric Particles in the Lung Towards Cell-Specific Targeted Delivery. Pharmaceutical Research, 2015, 32, 3248-3260.	3.5	36
32	Phase Behavior and Electrochemical Characterization of Blends of Perfluoropolyether, Poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	6.7	58
33	Controlled analysis of nanoparticle charge on mucosal and systemic antibody responses following pulmonary immunization. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 488-493.	7.1	124
34	Evaluation of drug loading, pharmacokinetic behavior, and toxicity of a cisplatin-containing hydrogel nanoparticle. Journal of Controlled Release, 2015, 204, 70-77.	9.9	43
35	Preparation and biological evaluation of synthetic and polymer-encapsulated congeners of the antitumor agent pactamycin: Insight into functional group effects and biological activity. Bioorganic and Medicinal Chemistry, 2015, 23, 1849-1857.	3.0	17
36	Silylated Precision Particles for Controlled Release of Proteins. ACS Applied Materials & Interfaces, 2015, 7, 5756-5767.	8.0	7

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37	Continuous liquid interface production of 3D objects. Science, 2015, 347, 1349-1352.	12.6	1,617
38	Biodistribution and Toxicity Studies of PRINT Hydrogel Nanoparticles in Mosquito Larvae and Cells. PLoS Neglected Tropical Diseases, 2015, 9, e0003735.	3.0	21
39	Calibration-Quality Cancer Nanotherapeutics. Cancer Treatment and Research, 2015, 166, 275-291.	0.5	8
40	Biodistribution and Trafficking of Hydrogel Nanoparticles in Adult Mosquitoes. PLoS Neglected Tropical Diseases, 2015, 9, e0003745.	3.0	19
41	Rapid and Persistent Delivery of Antigen by Lymph Node Targeting PRINT Nanoparticle Vaccine Carrier To Promote Humoral Immunity. Molecular Pharmaceutics, 2015, 12, 1356-1365.	4.6	96
42	Local iontophoretic administration of cytotoxic therapies to solid tumors. Science Translational Medicine, 2015, 7, 273ra14.	12.4	56
43	Targeted PRINT Hydrogels: The Role of Nanoparticle Size and Ligand Density on Cell Association, Biodistribution, and Tumor Accumulation. Nano Letters, 2015, 15, 6371-6378.	9.1	87
44	Nanoparticulate immunotherapy for cancer. Journal of Controlled Release, 2015, 219, 167-180.	9.9	80
45	Analysis of human innate immune responses to PRINT fabricated nanoparticles with cross validation using a humanized mouse model. Nanomedicine: Nanotechnology, Biology, and Medicine, 2015, 11, 589-599.	3.3	12
46	Reductively Responsive Hydrogel Nanoparticles with Uniform Size, Shape, and Tunable Composition for Systemic siRNA Delivery in Vivo. Molecular Pharmaceutics, 2015, 12, 3518-3526.	4.6	31
47	Towards programming immune tolerance through geometric manipulation of phosphatidylserine. Biomaterials, 2015, 72, 1-10.	11.4	49
48	Nonflammable perfluoropolyether-based electrolytes for lithium batteries. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3327-3331.	7.1	182
49	Biomedical Nanopreparations with Controlled Geometry. Frontiers in Nanobiomedical Research, 2014, , 349-400.	0.1	0
50	Driving Convergence with Human Diversity. Science Translational Medicine, 2014, 6, 238ed11.	12.4	3
51	Metronomic Docetaxel in PRINT Nanoparticles and EZH2 Silencing Have Synergistic Antitumor Effect in Ovarian Cancer. Molecular Cancer Therapeutics, 2014, 13, 1750-1757.	4.1	31
52	Particle Replication in Nonwetting Templates Nanoparticles with Tumor Selective Alkyl Silyl Ether Docetaxel Prodrug Reduces Toxicity. Nano Letters, 2014, 14, 1472-1476.	9.1	42
53	Synthesis and characterization of monodisperse uniformly shaped respirable aerosols. AICHE Journal, 2013, 59, 3184-3194.	3.6	11
54	Nanoparticle drug loading as a design parameter to improve docetaxel pharmacokinetics and efficacy. Biomaterials, 2013, 34, 8424-8429.	11.4	101

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55	Plasma, tumor and tissue pharmacokinetics of Docetaxel delivered via nanoparticles of different sizes and shapes in mice bearing SKOV-3 human ovarian carcinoma xenograft. Nanomedicine: Nanotechnology, Biology, and Medicine, 2013, 9, 686-693.	3.3	141
56	Scalable Manufacture of Built-to-Order Nanomedicine: Spray-Assisted Layer-by-Layer Functionalization of PRINT Nanoparticles (Adv. Mater. 34/2013). Advanced Materials, 2013, 25, 4706-4706.	21.0	3
57	Analysis of the Murine Immune Response to Pulmonary Delivery of Precisely Fabricated Nano- and Microscale Particles. PLoS ONE, 2013, 8, e62115.	2.5	53
58	Nanoparticle clearance is governed by Th1/Th2 immunity and strain background. Journal of Clinical Investigation, 2013, 123, 3061-3073.	8.2	170
59	PEGylated PRINT Nanoparticles: The Impact of PEG Density on Protein Binding, Macrophage Association, Biodistribution, and Pharmacokinetics. Nano Letters, 2012, 12, 5304-5310.	9.1	530
60	Biomimetic microlens array with antireflective â€œmoth-eyeâ€•surface. Soft Matter, 2011, 7, 6404.	2.7	127
61	PRINT: A Novel Platform Toward Shape and Size Specific Nanoparticle Theranostics. Accounts of Chemical Research, 2011, 44, 990-998.	15.6	267
62	Photocurable Amphiphilic Perfluoropolyether/Poly(ethylene glycol) Networks for Fouling-Release Coatings. Macromolecules, 2011, 44, 878-885.	4.8	120
63	More Effective Nanomedicines through Particle Design. Small, 2011, 7, 1919-1931.	10.0	403
64	Novel platforms for vascular carriers with controlled geometry. IUBMB Life, 2011, 63, spcone.	3.4	0
65	Ultrathin Cross-Linked Perfluoropolyether Film Coatings from Liquid CO2 and Subsequent UV Curing. Chemistry of Materials, 2010, 22, 2411-2413.	6.7	16
66	Fluoropolymer Synthesis in Carbon Dioxide-Expanded Liquids: A Practical Approach to Avoid the Use of Perfluorooctanoic Acid. ACS Symposium Series, 2009, , 259-273.	0.5	1
67	Melt Rheology of Poly Vinilydene Fluoride: Evidence of Long Chain Branching and Microgel Formation. AIP Conference Proceedings, 2008, , .	0.4	0
68	The effect of particle design on cellular internalization pathways. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 11613-11618.	7.1	2,553
69	Nanoparticle Drug Delivery Platform. Polymer Reviews, 2007, 47, 321-327.	10.9	65
70	Copolymerization of Vinylidene Fluoride with Hexafluoropropylene in Supercritical Carbon Dioxide. Macromolecules, 2006, 39, 15-18.	4.8	31
71	Continuous precipitation polymerization of acrylic acid in supercritical carbon dioxide: The polymerization rate and the polymer molecular weight. Journal of Polymer Science Part A, 2005, 43, 2546-2555.	2.3	24
72	Advantages of Supercritical Carbon Dioxide for Composite Particle Synthesis Using Water-Soluble or Water-Reactive Monomers. Macromolecules, 2005, 38, 4542-4544.	4.8	9

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73	The Synthesis and Characterization of Energy-Conducting Polymers with Pendant Inorganic Chromophores. Materials Research Society Symposia Proceedings, 2004, 847, 411.	0.1	0
74	Macromolecular surfactants for supercritical carbon dioxide applications: Synthesis and characterization of fluorinated block copolymers prepared by nitroxide-mediated radical polymerization. Journal of Polymer Science Part A, 2004, 42, 3537-3552.	2.3	90
75	Applications of â€œDryâ€•Processing in the Microelectronics Industry Using Carbon Dioxide. Critical Reviews in Solid State and Materials Sciences, 2004, 29, 97-109.	12.3	55
76	Micro- and Nanoporous Materials Developed Using Supercritical CO2. ACS Symposium Series, 2004, , 223-235.	0.5	4
77	Improvement of silicone endothelialization by treatment with allylamine and/or acrylic acid low-pressure plasma. Journal of Applied Polymer Science, 2003, 87, 1794-1802.	2.6	17
78	HF Etchant Solutions in Supercritical Carbon Dioxide for â€œDryâ€•Etch Processing of Microelectronic Devices. Chemistry of Materials, 2003, 15, 2867-2869.	6.7	21
79	NMR Studies of Water Transport and Proton Exchange in Water-in-Carbon Dioxide Microemulsions. Journal of Physical Chemistry B, 2003, 107, 1962-1968.	2.6	23
80	Polysiloxanes in Compressed Carbon Dioxide. ACS Symposium Series, 2003, , 79-93.	0.5	0
81	Formation of Self-Assembled Monolayers of Semifluorinated and Hydrocarbon Chlorosilane Precursors on Silica Surfaces from Liquid Carbon Dioxide. Langmuir, 2002, 18, 6170-6179.	3.5	24
82	Structure of Phosphate Fluorosurfactant Based Reverse Micelles in Supercritical Carbon Dioxide. Langmuir, 2002, 18, 7371-7376.	3.5	78
83	Practical Approaches to Green Solvents. Science, 2002, 297, 799-803.	12.6	855
84	Effect of polymer coatings from CO2, on water-vapor transport in porous media. AICHE Journal, 2002, 48, 941-952.	3.6	18
85	Determination of the equilibrium constant for the reaction between bisphenol A and diphenyl carbonate. Journal of Polymer Science Part A, 2002, 40, 171-178.	2.3	19
86	A commentary on ?Carbon Dioxide-Poly(vinylidene Fluoride) Interactions at High Pressure?. Journal of Polymer Science, Part B: Polymer Physics, 2002, 40, 602-604.	2.1	1
87	Nucleophilic Displacements in Supercritical Carbon Dioxide Using Silica-Supported Phase-Transfer Agents. Journal of Organic Chemistry, 2001, 66, 4047-4049.	3.2	20
88	Reaction Kinetics of the Solid State Polymerization of Poly(bisphenol A carbonate). Macromolecules, 2001, 34, 2060-2064.	4.8	24
89	Well-defined glycopolymer amphiphiles for liquid and supercritical carbon dioxide applications. Journal of Polymer Science Part A, 2001, 39, 3841-3849.	2.3	33
90	High-pressure rheology and viscoelastic scaling predictions of polymer melts containing liquid and supercritical carbon dioxide. Journal of Polymer Science, Part B: Polymer Physics, 2001, 39, 3055-3066.	2.1	51

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91	Broadening of molecular-weight distribution in solid-state polymerization resulting from condensate diffusion. Journal of Applied Polymer Science, 2001, 79, 928-943.	2.6	15
92	CO2 Technology Platform: An Important Tool for Environmental Problem Solving. Angewandte Chemie - International Edition, 2001, 40, 518-527.	13.8	173
93	Developments in CO2 research. Pure and Applied Chemistry, 2001, 73, 1281-1285.	1.9	39
94	Designing Photoresist Systems for Microlithography in Carbon Dioxide. Materials Research Society Symposia Proceedings, 2001, 705, 781.	0.1	2
95	All CO2-Processed Fluoropolymer-Containing Photoresist Systems. Materials Research Society Symposia Proceedings, 2001, 705, 241.	0.1	0
96	Preparation of silicone-graft copolymers by homogeneous radical copolymerization in supercritical carbon dioxide. Journal of Polymer Science Part A, 2000, 38, 1139-1145.	2.3	20
97	Dispersion polymerization of styrene in supercritical carbon dioxide utilizing random copolymers containing a fluorinated acrylate for preparing micron-size polystyrene particles. Journal of Polymer Science Part A, 2000, 38, 1146-1153.	2.3	56
98	High-pressure rheology of polystyrene melts plasticized with CO2: Experimental measurement and predictive scaling relationships. Journal of Polymer Science, Part B: Polymer Physics, 2000, 38, 3168-3180.	2.1	117
99	Dispersion polymerization of 2-hydroxyethyl methacrylate in supercritical carbon dioxide. Journal of Polymer Science Part A, 2000, 38, 3783-3790.	2.3	42
100	OPPORTUNITIES FORPOLLUTIONPREVENTION ANDENERGYEFFICIENCYENABLED BY THECARBONDIOXIDETECHNOLOGYPLATFORM. Annual Review of Environment and Resources, 2000, 25, 115-146.	1.2	27
101	Frontiers in green chemistry utilizing carbon dioxide for polymer synthesis and applications. Pure and Applied Chemistry, 2000, 72, 1357-1363.	1.9	31
102	One-Pot Synthesis and Characterization of a Chromophoreâ^'Donorâ^'Acceptor Assembly. Inorganic Chemistry, 2000, 39, 71-75.	4.0	48
103	Synthesis of Sugar-Containing Amphiphiles for Liquid and Supercritical Carbon Dioxide. Industrial & Engineering Chemistry Research, 2000, 39, 4564-4566.	3.7	20
104	Dispersion Polymerization of 1-Vinyl-2-pyrrolidone in Supercritical Carbon Dioxide. Macromolecules, 2000, 33, 1917-1920.	4.8	62
105	An Equilibrium Model for Diffusion-Limited Solid-State Polycondensation. Industrial & Engineering Chemistry Research, 2000, 39, 2797-2806.	3.7	25
106	Step-Scan FTIR Time-Resolved Spectroscopy Study of Excited-State Dipole Orientation in Soluble Metallopolymers. Inorganic Chemistry, 2000, 39, 893-898.	4.0	26
107	Dispersion Polymerization of Acrylonitrile in Supercritical Carbon Dioxide. Macromolecules, 2000, 33, 1565-1569.	4.8	76
108	Preparation of micron-size polystyrene particles in supercritical carbon dioxide. Journal of Polymer Science Part A, 1999, 37, 2429-2437.	2.3	56

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109	Solid-State Polymerization of Polycarbonates Using Supercritical CO2. Macromolecules, 1999, 32, 3167-3169.	4.8	44
110	Atom Transfer Radical Polymerization in Supercritical Carbon Dioxide. Macromolecules, 1999, 32, 4802-4805.	4.8	204
111	Carbon Dioxide-Induced Swelling of Poly(dimethylsiloxane). Macromolecules, 1999, 32, 8965-8973.	4.8	104
112	Fluorocarbons Dissolved in Supercritical Carbon Dioxide. NMR Evidence for Specific Soluteâ^'Solvent Interactions. Journal of Physical Chemistry B, 1998, 102, 1775-1780.	2.6	153
113	Diffusion of Block Copolymers in Liquid CO2:â€‰ Evidence of Self-Assembly from Pulsed Field Gradient NMR. Journal of the American Chemical Society, 1998, 120, 9390-9391.	13.7	22
114	Flow system and 9.5 GHz microwave resonators for time-resolved and steady-state electron paramagnetic resonance spectroscopy in compressed and supercritical fluids. Review of Scientific Instruments, 1997, 68, 2505-2510.	1.3	12
115	XPS analysis of poly[(3-hydroxybutyric acid)-co-(3-hydroxyvaleric acid)] film surfaces exposed to an allylamine low-pressure plasma. Macromolecular Chemistry and Physics, 1997, 198, 3737-3752.	2.2	18
116	Dispersion polymerization of methyl methacrylate in supercritical carbon dioxide: Influence of helium concentration on particle size and particle size distribution. Journal of Polymer Science Part A, 1997, 35, 2009-2013.	2.3	29
117	Photoinduced graft polymerization of styrene onto polypropylene substrates. Journal of Applied Polymer Science, 1997, 64, 883-889.	2.6	27
118	A Direct Deposition Method for Coupling Matrix-assisted Laser Desorption/Ionization Mass Spectrometry with Gel Permeation Chromatography for Polymer Characterization. Rapid Communications in Mass Spectrometry, 1997, 11, 1134-1138.	1.5	50
119	An Investigation into the Importance of Polymer-Matrix Miscibility Using Surfactant Modified Matrix-assisted Laser Desorption/Ionization Mass Spectrometry. Rapid Communications in Mass Spectrometry, 1997, 11, 1462-1466.	1.5	29
120	Photoinduced graft polymerization of styrene onto polypropylene substrates. , 1997, 64, 883.		1
121	Ring-Opening Metathesis Polymerizations in Carbon Dioxide. Journal of Macromolecular Science - Pure and Applied Chemistry, 1996, 33, 953-960.	2.2	49
122	XPS Studies of Fluorinated Acrylate Polymers and Block Copolymers with Polystyrene. Macromolecules, 1996, 29, 3247-3254.	4.8	165
123	Homogeneous and heterogeneous free radical polymerizations in environmentally responsible supercritical carbon dioxide. Macromolecular Symposia, 1995, 98, 795-795.	0.7	1
124	Organic Nanoparticles: Adapting Emerging Techniques from the Electronics Industry for the Generation of Shape-Specific, Functionalized Carriers for Applications in Nanomedicine. , 0, , 285-303.		2