Jessica D Schiffman

List of Publications by Year in Descending Order

72 papers	5,928 citations	35 h-index	76 g-index
77 ext. papers	6,591 ext. citations	6.8 avg, IF	6.34 L-index

#	Paper	IF	Citations
72	Interfacing Electrospun Nanofibers with Microorganisms **2022**, 255-289		0
71	Epoxy Resin-Encapsulated Polymer Microparticles for Room-Temperature Cold Sprayable Coatings. *ACS Applied Materials & Interfaces*, **2021**, 13, 50358-50367	9.5	0
70	Electrospinning Fibers from Oligomeric Complex Coacervates: No Chain Entanglements Needed. *Macromolecules*, **2021**, 54, 5033-5042	5.5	2
69	Memristive Behavior of Mixed Oxide Nanocrystal Assemblies. *ACS Applied Materials & Interfaces*, **2021**, 13, 21635-21644	9.5	3
68	Robust, small diameter hydrophilic nanofibers improve the flux of ultrafiltration membranes. *Industrial & Engineering Chemistry Research*, **2021**, 60, 9179-9188	3.9	4
67	Beyond the Single-Nozzle: Coaxial Electrospinning Enables Innovative Nanofiber Chemistries, Geometries, and Applications. *ACS Applied Materials & Interfaces*, **2021**, 13, 48-66	9.5	33
66	Localized characterization of brain tissue mechanical properties by needle induced cavitation rheology and volume controlled cavity expansion. *Journal of the Mechanical Behavior of Biomedical Materials*, **2021**, 114, 104168	4.1	2
65	Encapsulating bacteria in alginate-based electrospun nanofibers. *Biomaterials Science*, **2021**, 9, 4364-4373	7.4	9
64	Sustainable Living Filtration Membranes. *Environmental Science and Technology Letters*, **2020**, 7, 213-218	11	11
63	High-Performance, UV-Curable Crosslinked Films via Grafting of Hydroxyethyl Methacrylate Methylene Malonate. *Industrial & Engineering Chemistry Research*, **2020**, 59, 4542-4548	3.9	2
62	A programmable chemical switch based on triggerable Michael acceptors. *Chemical Science*, **2020**, 11, 2103-2111	9.4	8
61	Spatially Organized Nanopillar Arrays Dissimilarly Affect the Antifouling and Antibacterial Activities of Escherichia coli and Staphylococcus aureus. *ACS Applied Nano Materials*, **2020**, 3, 977-984	5.6	8
60	Facile Postprocessing Alters the Permeability and Selectivity of Microbial Cellulose Ultrafiltration Membranes. *Environmental Science & Technology*, **2020**, 54, 13249-13256	10.3	1
59	In Vitro Reconstitution of an Intestinal Mucus Layer Shows That Cations and pH Control the Pore Structure That Regulates Its Permeability and Barrier Function. *ACS Applied Bio Materials*, **2020**, 3, 2897-2909	4.1	4
58	Photodynamically Active Electrospun Fibers for Antibiotic-Free Infection Control.. *ACS Applied Bio Materials*, **2019**, 2, 4258-4270	4.1	16
57	Predicting the performance of pressure filtration processes by coupling computational fluid dynamics and discrete element methods. *Chemical Engineering Science*, **2019**, 208, 115162-115162	4.4	7
56	Antifouling Ultrafiltration Membranes with Retained Pore Size by Controlled Deposition of Zwitterionic Polymers and Poly(ethylene glycol). *Langmuir*, **2019**, 35, 1872-1881	4	14

55	Bacteria-Resistant, Transparent, Free-Standing Films Prepared from Complex Coacervates. *ACS Applied Bio Materials*, **2019**, 2, 3926-3933	4.1	16
54	Electrospinning Nanofibers from Chitosan/Hyaluronic Acid Complex Coacervates. *Biomacromolecules*, **2019**, 20, 4191-4198	6.9	39
53	Anionic Polymerization of Methylene Malonate for High-Performance Coatings. *ACS Applied Polymer Materials*, **2019**, 1, 657-663	4.3	5
52	Polymer Particles with a Low Glass Transition Temperature Containing Thermoset Resin Enable Powder Coatings at Room Temperature. *Industrial & Engineering Chemistry Research*, **2019**, 58, 908-916	3.9	12
51	Mechanical Properties and Concentrations of Poly(ethylene glycol) in Hydrogels and Brushes Direct the Surface Transport of Staphylococcus aureus. *ACS Applied Materials & Interfaces*, **2019**, 11, 320-330	9.5	17
50	Bacterial Adhesion Is Affected by the Thickness and Stiffness of Poly(ethylene glycol) Hydrogels. *ACS Applied Materials & Interfaces*, **2018**, 10, 2275-2281	9.5	53
49	Gecko-Inspired Biocidal Organic Nanocrystals Initiated from a Pencil-Drawn Graphite Template. *Scientific Reports*, **2018**, 8, 11618	4.9	14
48	Current and Emerging Approaches to Engineer Antibacterial and Antifouling Electrospun Nanofibers. *Materials*, **2018**, 11,	3.5	48
47	Fouling-Resistant Hydrogels Prepared by the Swelling-Assisted Infusion and Polymerization of Dopamine. *ACS Applied Bio Materials*, **2018**, 1, 33-41	4.1	12
46	Quantum dots as fluorescent probes: Synthesis, surface chemistry, energy transfer mechanisms, and applications. *Sensors and Actuators B: Chemical*, **2018**, 258, 1191-1214	8.5	157
45	Electrospinning Cargo-Containing Polyelectrolyte Complex Fibers: Correlating Molecular Interactions to Complex Coacervate Phase Behavior and Fiber Formation. *Macromolecules*, **2018**, 51, 8821-8832	5.5	12
44	Cross-platform mechanical characterization of lung tissue. *PLoS ONE*, **2018**, 13, e0204765	3.7	36
43	Bioinspired Photocatalytic Shark-Skin Surfaces with Antibacterial and Antifouling Activity via Nanoimprint Lithography. *ACS Applied Materials & Interfaces*, **2018**, 10, 20055-20063	9.5	106
42	Complex Coacervation: Chemically Stable Fibers Electrospun from Aqueous Polyelectrolyte Solutions. *ACS Macro Letters*, **2017**, 6, 505-511	6.6	47
41	Ultrafiltration Membranes Enhanced with Electrospun Nanofibers Exhibit Improved Flux and Fouling Resistance. *Industrial & Engineering Chemistry Research*, **2017**, 56, 5724-5733	3.9	60
40	Antifouling Stripes Prepared from Clickable Zwitterionic Copolymers. *Langmuir*, **2017**, 33, 7028-7035	4	22
39	Antimicrobial Activity of Silver Ions Released from Zeolites Immobilized on Cellulose Nanofiber Mats. *ACS Applied Materials & Interfaces*, **2016**, 8, 3032-40	9.5	85
38	Electrospinning chitosan/poly(ethylene oxide) solutions with essential oils: Correlating solution rheology to nanofiber formation. *Carbohydrate Polymers*, **2016**, 139, 131-8	10.3	72

37	Preliminary study on mitigating steel reinforcement corrosion with bioactive agent. *Cement and Concrete Composites*, **2016**, 69, 9-17	8.6	6
36	Polyelectrolyte-Functionalized Nanofiber Mats Control the Collection and Inactivation of Escherichia coli. *Materials*, **2016**, 9,	3.5	16
35	Underwater Superoleophobic Surfaces Prepared from Polymer Zwitterion/Dopamine Composite Coatings. *Advanced Materials Interfaces*, **2016**, 3, 1500521	4.6	82
34	Graphene-based microfluidics for serial crystallography. *Lab on A Chip*, **2016**, 16, 3082-96	7.2	43
33	Antifouling Electrospun Nanofiber Mats Functionalized with Polymer Zwitterions. *ACS Applied Materials & Interfaces*, **2016**, 8, 27585-27593	9.5	62
32	Green materials science and engineering reduces biofouling: approaches for medical and membrane-based technologies. *Frontiers in Microbiology*, **2015**, 6, 196	5.7	20
31	Mechanics of intact bone marrow. *Journal of the Mechanical Behavior of Biomedical Materials*, **2015**, 50, 299-307	4.1	106
30	Thermal-Responsive Behavior of a Cell Compatible Chitosan/Pectin Hydrogel. *Biomacromolecules*, **2015**, 16, 1837-43	6.9	50
29	Scaling Up Nature: Large Area Flexible Biomimetic Surfaces. *ACS Applied Materials & Interfaces*, **2015**, 7, 23439-44	9.5	29
28	Fewer Bacteria Adhere to Softer Hydrogels. *ACS Applied Materials & Interfaces*, **2015**, 7, 19562-9	9.5	73
27	Encapsulation of cinnamaldehyde into nanostructured chitosan films. *Journal of Applied Polymer Science*, **2015**, 132, n/a-n/a	2.9	17
26	Characterization of self-assembled polyelectrolyte complex nanoparticles formed from chitosan and pectin. *Langmuir*, **2014**, 30, 3441-7	4	84
25	Electrospinning an essential oil: cinnamaldehyde enhances the antimicrobial efficacy of chitosan/poly(ethylene oxide) nanofibers. *Carbohydrate Polymers*, **2014**, 113, 561-8	10.3	168
24	Designing electrospun nanofiber mats to promote wound healing - a review. *Journal of Materials Chemistry B*, **2013**, 1, 4531-4541	7.3	339
23	Phosphate salts facilitate the electrospinning of hyaluronic acid fiber mats. *Journal of Materials Science*, **2013**, 48, 7805-7811	4.3	7
22	Crosslinking poly(allylamine) fibers electrospun from basic and acidic solutions. *Journal of Materials Science*, **2013**, 48, 7856-7862	4.3	8
21	Polycation-Tethered Micelles as Immobilized Detergents for NAPL Remediation. *ACS Symposium Series*, **2013**, 97-109	0.4	1
20	Nanofibers in thin-film composite membrane support layers: Enabling expanded application of forward and pressure retarded osmosis. *Desalination*, **2013**, 308, 73-81	10.3	125

19	Nanomanufacturing of biomaterials. *Materials Today*, **2012**, 15, 478-485	21.8	49
18	Biodegradable polymer (PLGA) coatings featuring cinnamaldehyde and carvacrol mitigate biofilm formation. *Langmuir*, **2012**, 28, 13993-9	4	61
17	Electrospinning of hyaluronic acid nanofibers from aqueous ammonium solutions. *Carbohydrate Polymers*, **2012**, 87, 926-929	10.3	89
16	Thin-film composite pressure retarded osmosis membranes for sustainable power generation from salinity gradients. *Environmental Science & Technology*, **2011**, 45, 4360-9	10.3	430
15	Biocidal activity of plasma modified electrospun polysulfone mats functionalized with polyethyleneimine-capped silver nanoparticles. *Langmuir*, **2011**, 27, 13159-64	4	64
14	Antibacterial activity of electrospun polymer mats with incorporated narrow diameter single-walled carbon nanotubes. *ACS Applied Materials & Interfaces*, **2011**, 3, 462-8	9.5	102
13	Relating performance of thin-film composite forward osmosis membranes to support layer formation and structure. *Journal of Membrane Science*, **2011**, 367, 340-352	9.6	489
12	Electrochemical multiwalled carbon nanotube filter for viral and bacterial removal and inactivation. *Environmental Science & Technology*, **2011**, 45, 3672-9	10.3	278
11	Carbon black immobilized in electrospun chitosan membranes. *Carbohydrate Polymers*, **2011**, 84, 1252-1257	3.3	23
10	High performance thin-film composite forward osmosis membrane. *Environmental Science & Technology*, **2010**, 44, 3812-8	10.3	738
9	Chitin and chitosan: Transformations due to the electrospinning process. *Polymer Engineering and Science*, **2009**, 49, 1918-1928	2.3	52
8	Solid state characterization of β-chitin from Vanessa cardui Linnaeus wings. *Materials Science and Engineering C*, **2009**, 29, 1370-1374	8.3	22
7	The natural transparency and piezoelectric response of the Greta oto butterfly wing. *Integrative Biology (United Kingdom)*, **2009**, 1, 324-9	3.7	42
6	Carboxymethyl chitosan as a matrix material for platinum, gold, and silver nanoparticles. *Biomacromolecules*, **2008**, 9, 2682-5	6.9	169
5	A Review: Electrospinning of Biopolymer Nanofibers and their Applications. *Polymer Reviews*, **2008**, 48, 317-352	14	619
4	Cross-linking chitosan nanofibers. *Biomacromolecules*, **2007**, 8, 594-601	6.9	345
3	One-step electrospinning of cross-linked chitosan fibers. *Biomacromolecules*, **2007**, 8, 2665-7	6.9	179
2	Optimizing the Packing Density and Chemistry of Cellulose Nanofilters for High-Efficiency Particulate Removal. *Industrial & Engineering Chemistry Research*,	3.9	2

1 Nanofibers: Electrospinning of Biopolymers5201-5225