

Jessica D Schiffman

List of Publications by Citations

Source: <https://exaly.com/author-pdf/3001114/jessica-d-schiffman-publications-by-citations.pdf>
Version: 2024-04-04

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

| | | | |
|-------------------|-------------------------|----------------|-----------------|
| 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 | High performance thin-film composite forward osmosis membrane. <i>Environmental Science & Technology</i> , 2010 , 44, 3812-8 | 10.3 | 738 |
| 71 | A Review: Electrospinning of Biopolymer Nanofibers and their Applications. <i>Polymer Reviews</i> , 2008 , 48, 317-352 | 14 | 619 |
| 70 | Relating performance of thin-film composite forward osmosis membranes to support layer formation and structure. <i>Journal of Membrane Science</i> , 2011 , 367, 340-352 | 9.6 | 489 |
| 69 | Thin-film composite pressure retarded osmosis membranes for sustainable power generation from salinity gradients. <i>Environmental Science & Technology</i> , 2011 , 45, 4360-9 | 10.3 | 430 |
| 68 | Cross-linking chitosan nanofibers. <i>Biomacromolecules</i> , 2007 , 8, 594-601 | 6.9 | 345 |
| 67 | Designing electrospun nanofiber mats to promote wound healing - a review. <i>Journal of Materials Chemistry B</i> , 2013 , 1, 4531-4541 | 7.3 | 339 |
| 66 | Electrochemical multiwalled carbon nanotube filter for viral and bacterial removal and inactivation. <i>Environmental Science & Technology</i> , 2011 , 45, 3672-9 | 10.3 | 278 |
| 65 | One-step electrospinning of cross-linked chitosan fibers. <i>Biomacromolecules</i> , 2007 , 8, 2665-7 | 6.9 | 179 |
| 64 | Carboxymethyl chitosan as a matrix material for platinum, gold, and silver nanoparticles. <i>Biomacromolecules</i> , 2008 , 9, 2682-5 | 6.9 | 169 |
| 63 | Electrospinning an essential oil: cinnamaldehyde enhances the antimicrobial efficacy of chitosan/poly(ethylene oxide) nanofibers. <i>Carbohydrate Polymers</i> , 2014 , 113, 561-8 | 10.3 | 168 |
| 62 | Quantum dots as fluorescent probes: Synthesis, surface chemistry, energy transfer mechanisms, and applications. <i>Sensors and Actuators B: Chemical</i> , 2018 , 258, 1191-1214 | 8.5 | 157 |
| 61 | Nanofibers in thin-film composite membrane support layers: Enabling expanded application of forward and pressure retarded osmosis. <i>Desalination</i> , 2013 , 308, 73-81 | 10.3 | 125 |
| 60 | Mechanics of intact bone marrow. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2015 , 50, 299-307 | 4.1 | 106 |
| 59 | Bioinspired Photocatalytic Shark-Skin Surfaces with Antibacterial and Antifouling Activity via Nanoimprint Lithography. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 20055-20063 | 9.5 | 106 |
| 58 | Antibacterial activity of electrospun polymer mats with incorporated narrow diameter single-walled carbon nanotubes. <i>ACS Applied Materials & Interfaces</i> , 2011 , 3, 462-8 | 9.5 | 102 |
| 57 | Electrospinning of hyaluronic acid nanofibers from aqueous ammonium solutions. <i>Carbohydrate Polymers</i> , 2012 , 87, 926-929 | 10.3 | 89 |
| 56 | Antimicrobial Activity of Silver Ions Released from Zeolites Immobilized on Cellulose Nanofiber Mats. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 3032-40 | 9.5 | 85 |

| | | | |
|----|---|------|----|
| 55 | Characterization of self-assembled polyelectrolyte complex nanoparticles formed from chitosan and pectin. <i>Langmuir</i> , 2014 , 30, 3441-7 | 4 | 84 |
| 54 | Underwater Superoleophobic Surfaces Prepared from Polymer Zwitterion/Dopamine Composite Coatings. <i>Advanced Materials Interfaces</i> , 2016 , 3, 1500521 | 4.6 | 82 |
| 53 | Fewer Bacteria Adhere to Softer Hydrogels. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 19562-9 | 9.5 | 73 |
| 52 | Electrospinning chitosan/poly(ethylene oxide) solutions with essential oils: Correlating solution rheology to nanofiber formation. <i>Carbohydrate Polymers</i> , 2016 , 139, 131-8 | 10.3 | 72 |
| 51 | Biocidal activity of plasma modified electrospun polysulfone mats functionalized with polyethyleneimine-capped silver nanoparticles. <i>Langmuir</i> , 2011 , 27, 13159-64 | 4 | 64 |
| 50 | Antifouling Electrospun Nanofiber Mats Functionalized with Polymer Zwitterions. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 27585-27593 | 9.5 | 62 |
| 49 | Biodegradable polymer (PLGA) coatings featuring cinnamaldehyde and carvacrol mitigate biofilm formation. <i>Langmuir</i> , 2012 , 28, 13993-9 | 4 | 61 |
| 48 | Ultrafiltration Membranes Enhanced with Electrospun Nanofibers Exhibit Improved Flux and Fouling Resistance. <i>Industrial & Engineering Chemistry Research</i> , 2017 , 56, 5724-5733 | 3.9 | 60 |
| 47 | Bacterial Adhesion Is Affected by the Thickness and Stiffness of Poly(ethylene glycol) Hydrogels. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 2275-2281 | 9.5 | 53 |
| 46 | Chitin and chitosan: Transformations due to the electrospinning process. <i>Polymer Engineering and Science</i> , 2009 , 49, 1918-1928 | 2.3 | 52 |
| 45 | Thermal-Responsive Behavior of a Cell Compatible Chitosan/Pectin Hydrogel. <i>Biomacromolecules</i> , 2015 , 16, 1837-43 | 6.9 | 50 |
| 44 | Nanomanufacturing of biomaterials. <i>Materials Today</i> , 2012 , 15, 478-485 | 21.8 | 49 |
| 43 | Current and Emerging Approaches to Engineer Antibacterial and Antifouling Electrospun Nanofibers. <i>Materials</i> , 2018 , 11, | 3.5 | 48 |
| 42 | Complex Coacervation: Chemically Stable Fibers Electrospun from Aqueous Polyelectrolyte Solutions. <i>ACS Macro Letters</i> , 2017 , 6, 505-511 | 6.6 | 47 |
| 41 | Graphene-based microfluidics for serial crystallography. <i>Lab on A Chip</i> , 2016 , 16, 3082-96 | 7.2 | 43 |
| 40 | The natural transparency and piezoelectric response of the Greta oto butterfly wing. <i>Integrative Biology (United Kingdom)</i> , 2009 , 1, 324-9 | 3.7 | 42 |
| 39 | Electrospinning Nanofibers from Chitosan/Hyaluronic Acid Complex Coacervates. <i>Biomacromolecules</i> , 2019 , 20, 4191-4198 | 6.9 | 39 |
| 38 | Cross-platform mechanical characterization of lung tissue. <i>PLoS ONE</i> , 2018 , 13, e0204765 | 3.7 | 36 |

- 37 Beyond the Single-Nozzle: Coaxial Electrospinning Enables Innovative Nanofiber Chemistries, Geometries, and Applications. *ACS Applied Materials & Interfaces*, **2021**, 13, 48-66 9.5 33
- 36 Scaling Up Nature: Large Area Flexible Biomimetic Surfaces. *ACS Applied Materials & Interfaces*, **2015**, 7, 23439-44 9.5 29
- 35 Carbon black immobilized in electrospun chitosan membranes. *Carbohydrate Polymers*, **2011**, 84, 1252-1257 5.3 23
- 34 Antifouling Stripes Prepared from Clickable Zwitterionic Copolymers. *Langmuir*, **2017**, 33, 7028-7035 4 22
- 33 Solid state characterization of E-chitin from *Vanessa cardui* Linnaeus wings. *Materials Science and Engineering C*, **2009**, 29, 1370-1374 8.3 22
- 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 Encapsulation of cinnamaldehyde into nanostructured chitosan films. *Journal of Applied Polymer Science*, **2015**, 132, n/a-n/a 2.9 17
- 30 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
- 29 Photodynamically Active Electrospun Fibers for Antibiotic-Free Infection Control.. *ACS Applied Bio Materials*, **2019**, 2, 4258-4270 4.1 16
- 28 Bacteria-Resistant, Transparent, Free-Standing Films Prepared from Complex Coacervates. *ACS Applied Bio Materials*, **2019**, 2, 3926-3933 4.1 16
- 27 Polyelectrolyte-Functionalized Nanofiber Mats Control the Collection and Inactivation of *Escherichia coli*. *Materials*, **2016**, 9, 3.5 16
- 26 Gecko-Inspired Biocidal Organic Nanocrystals Initiated from a Pencil-Drawn Graphite Template. *Scientific Reports*, **2018**, 8, 11618 4.9 14
- 25 Antifouling Ultrafiltration Membranes with Retained Pore Size by Controlled Deposition of Zwitterionic Polymers and Poly(ethylene glycol). *Langmuir*, **2019**, 35, 1872-1881 4 14
- 24 Fouling-Resistant Hydrogels Prepared by the Swelling-Assisted Infusion and Polymerization of Dopamine. *ACS Applied Bio Materials*, **2018**, 1, 33-41 4.1 12
- 23 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
- 22 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
- 21 Sustainable Living Filtration Membranes. *Environmental Science and Technology Letters*, **2020**, 7, 213-218 11 11
- 20 Encapsulating bacteria in alginate-based electrospun nanofibers. *Biomaterials Science*, **2021**, 9, 4364-4373 7.4 9

| | | | |
|----|--|------|---|
| 19 | Crosslinking poly(allylamine) fibers electrospun from basic and acidic solutions. <i>Journal of Materials Science</i> , 2013 , 48, 7856-7862 | 4.3 | 8 |
| 18 | A programmable chemical switch based on triggerable Michael acceptors. <i>Chemical Science</i> , 2020 , 11, 2103-2111 | 9.4 | 8 |
| 17 | Spatially Organized Nanopillar Arrays Dissimilarly Affect the Antifouling and Antibacterial Activities of Escherichia coli and Staphylococcus aureus. <i>ACS Applied Nano Materials</i> , 2020 , 3, 977-984 | 5.6 | 8 |
| 16 | Predicting the performance of pressure filtration processes by coupling computational fluid dynamics and discrete element methods. <i>Chemical Engineering Science</i> , 2019 , 208, 115162-115162 | 4.4 | 7 |
| 15 | Phosphate salts facilitate the electrospinning of hyaluronic acid fiber mats. <i>Journal of Materials Science</i> , 2013 , 48, 7805-7811 | 4.3 | 7 |
| 14 | Preliminary study on mitigating steel reinforcement corrosion with bioactive agent. <i>Cement and Concrete Composites</i> , 2016 , 69, 9-17 | 8.6 | 6 |
| 13 | Anionic Polymerization of Methylene Malonate for High-Performance Coatings. <i>ACS Applied Polymer Materials</i> , 2019 , 1, 657-663 | 4.3 | 5 |
| 12 | In Vitro Reconstitution of an Intestinal Mucus Layer Shows That Cations and pH Control the Pore Structure That Regulates Its Permeability and Barrier Function. <i>ACS Applied Bio Materials</i> , 2020 , 3, 2897-2909 | 4.1 | 4 |
| 11 | Robust, small diameter hydrophilic nanofibers improve the flux of ultrafiltration membranes. <i>Industrial & Engineering Chemistry Research</i> , 2021 , 60, 9179-9188 | 3.9 | 4 |
| 10 | Memristive Behavior of Mixed Oxide Nanocrystal Assemblies. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 21635-21644 | 9.5 | 3 |
| 9 | High-Performance, UV-Curable Crosslinked Films via Grafting of Hydroxyethyl Methacrylate Methylene Malonate. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 4542-4548 | 3.9 | 2 |
| 8 | Optimizing the Packing Density and Chemistry of Cellulose Nanofilters for High-Efficiency Particulate Removal. <i>Industrial & Engineering Chemistry Research</i> , | 3.9 | 2 |
| 7 | Electrospinning Fibers from Oligomeric Complex Coacervates: No Chain Entanglements Needed. <i>Macromolecules</i> , 2021 , 54, 5033-5042 | 5.5 | 2 |
| 6 | Localized characterization of brain tissue mechanical properties by needle induced cavitation rheology and volume controlled cavity expansion. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021 , 114, 104168 | 4.1 | 2 |
| 5 | Polycation-Tethered Micelles as Immobilized Detergents for NAPL Remediation. <i>ACS Symposium Series</i> , 2013 , 97-109 | 0.4 | 1 |
| 4 | Facile Postprocessing Alters the Permeability and Selectivity of Microbial Cellulose Ultrafiltration Membranes. <i>Environmental Science & Technology</i> , 2020 , 54, 13249-13256 | 10.3 | 1 |
| 3 | Epoxy Resin-Encapsulated Polymer Microparticles for Room-Temperature Cold Sprayable Coatings. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 50358-50367 | 9.5 | 0 |
| 2 | Interfacing Electrospun Nanofibers with Microorganisms 2022 , 255-289 | | 0 |

1 Nanofibers: Electrospinning of Biopolymers5201-5225