

# Jennifer A Lewis

## List of Publications by Year in descending order

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Version: 2024-02-01

242  
papers

44,077  
citations

2538

96  
h-index

1974

206  
g-index

250  
all docs

250  
docs citations

250  
times ranked

35135  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Biomimetic 4D printing. <i>Nature Materials</i> , 2016, 15, 413-418.  | 13.3 | 2,268     |
| 2  | 3D Bioprinting of Vascularized, Heterogeneous Cell-Laden Tissue Constructs. <i>Advanced Materials</i> , 2014, 26, 3124-3130.  | 11.1 | 1,686     |
| 3  | An integrated design and fabrication strategy for entirely soft, autonomous robots. <i>Nature</i> , 2016, 536, 451-455.   | 13.7 | 1,557     |
| 4  | Self-healing materials with microvascular networks. <i>Nature Materials</i> , 2007, 6, 581-585.   | 13.3 | 1,379     |
| 5  | Embedded 3D Printing of Strain Sensors within Highly Stretchable Elastomers. <i>Advanced Materials</i> , 2014, 26, 6307-6312.   | 11.1 | 1,314     |
| 6  | Direct Ink Writing of 3D Functional Materials. <i>Advanced Functional Materials</i> , 2006, 16, 2193-2204.  | 7.8  | 1,261     |
| 7  | 3D-Printing of Lightweight Cellular Composites. <i>Advanced Materials</i> , 2014, 26, 5930-5935.  | 11.1 | 1,258     |
| 8  | Three-dimensional bioprinting of thick vascularized tissues. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 3179-3184. | 3.3  | 1,187     |
| 9  | Printing soft matter in three dimensions. <i>Nature</i> , 2016, 540, 371-378.   | 13.7 | 1,134     |
| 10 | Colloidal Processing of Ceramics. <i>Journal of the American Ceramic Society</i> , 2000, 83, 2341-2359.   | 1.9  | 1,076     |
| 11 | 3D Printing of Interdigitated Ion Microbattery Architectures. <i>Advanced Materials</i> , 2013, 25, 4539-4543.  | 11.1 | 1,074     |
| 12 | Omnidirectional Printing of Flexible, Stretchable, and Spanning Silver Microelectrodes. <i>Science</i> , 2009, 323, 1590-1593.  | 6.0  | 1,072     |
| 13 | Instrumented cardiac microphysiological devices via multimaterial three-dimensional printing. <i>Nature Materials</i> , 2017, 16, 303-308.                                  | 13.3 | 652       |
| 14 | Voxelated soft matter via multimaterial multinozzle 3D printing. <i>Nature</i> , 2019, 575, 330-335.  | 13.7 | 644       |
| 15 | Omnidirectional Printing of 3D Microvascular Networks. <i>Advanced Materials</i> , 2011, 23, H178-83.   | 11.1 | 635       |
| 16 | Direct Ink Writing of Three-Dimensional Ceramic Structures. <i>Journal of the American Ceramic Society</i> , 2006, 89, 3599-3609.   | 1.9  | 631       |
| 17 | Chaotic mixing in three-dimensional microvascular networks fabricated by direct-write assembly. <i>Nature Materials</i> , 2003, 2, 265-271.                                 | 13.3 | 627       |
| 18 | Multistable Architected Materials for Trapping Elastic Strain Energy. <i>Advanced Materials</i> , 2015, 27, 4296-4301.  | 11.1 | 624       |

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|----|---|------|-----------|
| 19 | Penâ€“Paper Flexible Electronics. <i>Advanced Materials</i> , 2011, 23, 3426-3430.  | 11.1 | 619       |
| 20 | Ultrathin silicon solar microcells for semitransparent, mechanically flexible and microconcentrator module designs. <i>Nature Materials</i> , 2008, 7, 907-915. | 13.3 | 615       |
| 21 | Biomanufacturing of organ-specific tissues with high cellular density and embedded vascular channels. <i>Science Advances</i> , 2019, 5, eaaw2459.              | 4.7  | 563       |
| 22 | Colloidal Inks for Directed Assembly of 3-D Periodic Structures. <i>Langmuir</i> , 2002, 18, 5429-5437.   | 1.6  | 561       |
| 23 | Flow-enhanced vascularization and maturation of kidney organoids in vitro. <i>Nature Methods</i> , 2019, 16, 255-262.   | 9.0  | 559       |
| 24 | Hybrid 3D Printing of Soft Electronics. <i>Advanced Materials</i> , 2017, 29, 1703817.  | 11.1 | 501       |
| 25 | Conformal Printing of Electrically Small Antennas on Threeâ€“Dimensional Surfaces. <i>Advanced Materials</i> , 2011, 23, 1335-1340.                             | 11.1 | 499       |
| 26 | Bioprinting of 3D Convulated Renal Proximal Tubules on Perfusable Chips. <i>Scientific Reports</i> , 2016, 6, 34845.  | 1.6  | 496       |
| 27 | 3D Printing of Liquid Crystal Elastomeric Actuators with Spatially Programed Nematic Order. <i>Advanced Materials</i> , 2018, 30, 1706164.                      | 11.1 | 467       |
| 28 | Cellulose Nanocrystal Inks for 3D Printing of Textured Cellular Architectures. <i>Advanced Functional Materials</i> , 2017, 27, 1604619.                        | 7.8  | 447       |
| 29 | Soft Somatosensitive Actuators via Embedded 3D Printing. <i>Advanced Materials</i> , 2018, 30, e1706383.  | 11.1 | 398       |
| 30 | Topology Optimized Architectures with Programmable Poisson's Ratio over Large Deformations. <i>Advanced Materials</i> , 2015, 27, 5523-5527.                    | 11.1 | 380       |
| 31 | Reactive Silver Inks for Patterning High-Conductivity Features at Mild Temperatures. <i>Journal of the American Chemical Society</i> , 2012, 134, 1419-1421.    | 6.6  | 377       |
| 32 | Direct writing in three dimensions. <i>Materials Today</i> , 2004, 7, 32-39.  | 8.3  | 375       |
| 33 | Capacitive Soft Strain Sensors via Multicoreâ€“Shell Fiber Printing. <i>Advanced Materials</i> , 2015, 27, 2440-2446.   | 11.1 | 372       |
| 34 | Selfâ€“Healing Materials with Interpenetrating Microvascular Networks. <i>Advanced Materials</i> , 2009, 21, 4143-4147.   | 11.1 | 366       |
| 35 | Long range interactions in nanoscale science. <i>Reviews of Modern Physics</i> , 2010, 82, 1887-1944.   | 16.4 | 359       |
| 36 | Microperiodic structures: Direct writing of three-dimensional webs. <i>Nature</i> , 2004, 428, 386-386.   | 13.7 | 340       |

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|----|--|------|-----------|
| 37 | Directed Colloidal Assembly of 3D Periodic Structures. <i>Advanced Materials</i> , 2002, 14, 1279-1283.  | 11.1 | 324       |
| 38 | Biocompatible Silk Printed Optical Waveguides. <i>Advanced Materials</i> , 2009, 21, 2411-2415.  | 11.1 | 308       |
| 39 | 3D Printing of Customized Li-ion Batteries with Thick Electrodes. <i>Advanced Materials</i> , 2018, 30, e1703027.  | 11.1 | 304       |
| 40 | Untethered soft robotic matter with passive control of shape morphing and propulsion. <i>Science Robotics</i> , 2019, 4, .   | 9.9  | 268       |
| 41 | Direct-Write Assembly of 3D Hydrogel Scaffolds for Guided Cell Growth. <i>Advanced Materials</i> , 2009, 21, 2407-2410.  | 11.1 | 266       |
| 42 | Direct-Write Assembly of Microperiodic Silk Fibroin Scaffolds for Tissue Engineering Applications. <i>Advanced Functional Materials</i> , 2008, 18, 1883-1889.                                     | 7.8  | 261       |
| 43 | Delivery of Two-Part Self-Healing Chemistry via Microvascular Networks. <i>Advanced Functional Materials</i> , 2009, 19, 1399-1405.  | 7.8  | 260       |
| 44 | Rapid and Versatile Photonic Annealing of Graphene Inks for Flexible Printed Electronics. <i>Advanced Materials</i> , 2015, 27, 6683-6688.   | 11.1 | 258       |
| 45 | Microfluidic Printheads for Multimaterial 3D Printing of Viscoelastic Inks. <i>Advanced Materials</i> , 2015, 27, 3279-3284.   | 11.1 | 258       |
| 46 | Shape-shifting structured lattices via multimaterial 4D printing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 20856-20862.                 | 3.3  | 257       |
| 47 | Stable propagation of mechanical signals in soft media using stored elastic energy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 9722-9727. | 3.3  | 254       |
| 48 | Laser-assisted direct ink writing of planar and 3D metal architectures. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 6137-6142.             | 3.3  | 252       |
| 49 | Microfluidic Assembly of Homogeneous and Janus Colloid-Filled Hydrogel Granules. <i>Langmuir</i> , 2006, 22, 8618-8622.  | 1.6  | 251       |
| 50 | Renal reabsorption in 3D vascularized proximal tubule models. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 5399-5404.                       | 3.3  | 242       |
| 51 | Concentrated hydroxyapatite inks for direct-write assembly of 3-D periodic scaffolds. <i>Biomaterials</i> , 2005, 26, 5632-5639.   | 5.7  | 238       |
| 52 | Nanoparticle halos: A new colloid stabilization mechanism. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2001, 98, 8950-8954.                           | 3.3  | 222       |
| 53 | Fugitive Inks for Direct-Write Assembly of Three-Dimensional Microvascular Networks. <i>Advanced Materials</i> , 2005, 17, 395-399.  | 11.1 | 216       |
| 54 | Inkjet Printing of Conductive Inks with High Lateral Resolution on Omniphobic Paper-Based Electronics and MEMS. <i>Advanced Materials</i> , 2014, 26, 4677-4682.                                   | 11.1 | 216       |

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|----|--|------|-----------|
| 55 | Active mixing of complex fluids at the microscale. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 12293-12298.  | 3.3  | 210       |
| 56 | Three-dimensional printed electronics. Nature, 2015, 518, 42-43.   | 13.7 | 209       |
| 57 | 3D Microperiodic Hydrogel Scaffolds for Robust Neuronal Cultures. Advanced Functional Materials, 2011, 21, 47-54.  | 7.8  | 205       |
| 58 | Rotational 3D printing of damage-tolerant composites with programmable mechanics. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 1198-1203.                                 | 3.3  | 205       |
| 59 | Two- and three-dimensional folding of thin film single-crystalline silicon for photovoltaic power applications. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 20149-20154. | 3.3  | 198       |
| 60 | 3D Printable and Reconfigurable Liquid Crystal Elastomers with Light-Induced Shape Memory via Dynamic Bond Exchange. Advanced Materials, 2020, 32, e1905682.   | 11.1 | 195       |
| 61 | Architected cellular ceramics with tailored stiffness via direct foam writing. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 1832-1837.                                    | 3.3  | 187       |
| 62 | Sol-Gel Inks for Direct-Write Assembly of Functional Oxides. Advanced Materials, 2007, 19, 3485-3489.  | 11.1 | 185       |
| 63 | Direct-Write Assembly of Three-Dimensional Photonic Crystals: Conversion of Polymer Scaffolds to Silicon Hollow-Woodpile Structures. Advanced Materials, 2006, 18, 461-465.  | 11.1 | 179       |
| 64 | Direct-write assembly of ceramics from colloidal inks. Current Opinion in Solid State and Materials Science, 2002, 6, 245-250.   | 5.6  | 173       |
| 65 | Patterning Colloidal Films via Evaporative Lithography. Physical Review Letters, 2007, 98, 148301.   | 2.9  | 170       |
| 66 | In vivo bone response to 3D periodic hydroxyapatite scaffolds assembled by direct ink writing. Journal of Biomedical Materials Research - Part A, 2007, 83A, 747-758.  | 2.1  | 167       |
| 67 | Viscoplastic Matrix Materials for Embedded 3D Printing. ACS Applied Materials & Interfaces, 2018, 10, 23353-23361.   | 4.0  | 167       |
| 68 | Multidimensional Architectures for Functional Optical Devices. Advanced Materials, 2010, 22, 1084-1101.  | 11.1 | 166       |
| 69 | Encapsulated liquid sorbents for carbon dioxide capture. Nature Communications, 2015, 6, 6124.   | 5.8  | 161       |
| 70 | High-Power Aqueous Zinc-Ion Batteries for Customized Electronic Devices. ACS Nano, 2018, 12, 11838-11846.  | 7.3  | 158       |
| 71 | Nanoparticle Inks for Directed Assembly of Three-Dimensional Periodic Structures. Advanced Materials, 2003, 15, 1639-1643.   | 11.1 | 149       |
| 72 | Printed Origami Structures. Advanced Materials, 2010, 22, 2251-2254.   | 11.1 | 144       |

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|----|---|------|-----------|
| 73 | Binder Distribution in Ceramic Greenware During Thermolysis. <i>Journal of the American Ceramic Society</i> , 1989, 72, 1192-1199.  | 1.9  | 142       |
| 74 | BINDER REMOVAL FROM CERAMICS. <i>Annual Review of Materials Research</i> , 1997, 27, 147-173.   | 5.5  | 141       |
| 75 | Transparent conductive grids via direct writing of silver nanoparticle inks. <i>Nanoscale</i> , 2011, 3, 2700.  | 2.8  | 140       |
| 76 | Colloidal ribbons and rings from Janus magnetic rods. <i>Nature Communications</i> , 2013, 4, 1516.   | 5.8  | 140       |
| 77 | Direct-Write Assembly of 3D Silk/Hydroxyapatite Scaffolds for Bone Cell Cultures. <i>Advanced Healthcare Materials</i> , 2012, 1, 729-735.  | 3.9  | 136       |
| 78 | Structural optimization of 3D-printed synthetic spider webs for high strength. <i>Nature Communications</i> , 2015, 6, 7038.  | 5.8  | 136       |
| 79 | Acoustophoretic printing. <i>Science Advances</i> , 2018, 4, eaat1659.  | 4.7  | 133       |
| 80 | High-Throughput Printing via Microvascular Multinozzle Arrays. <i>Advanced Materials</i> , 2013, 25, 96-102.  | 11.1 | 132       |
| 81 | 3D Printing of Interdigitated Dielectric Elastomer Actuators. <i>Advanced Functional Materials</i> , 2020, 30, 1907375.   | 7.8  | 132       |
| 82 | Comb Polymer Architecture Effects on the Rheological Property Evolution of Concentrated Cement Suspensions. <i>Journal of the American Ceramic Society</i> , 2004, 87, 1643-1652.                               | 1.9  | 131       |
| 83 | Innervated, Self-Sensing Liquid Crystal Elastomer Actuators with Closed Loop Control. <i>Advanced Materials</i> , 2021, 33, e2101814.   | 11.1 | 128       |
| 84 | Architected Lattices with High Stiffness and Toughness via Multicore-Shell 3D Printing. <i>Advanced Materials</i> , 2018, 30, e1705001.   | 11.1 | 127       |
| 85 | Poly(acrylic acid)-Poly(ethylene oxide) Comb Polymer Effects on BaTiO <sub>3</sub> Nanoparticle Suspension Stability. <i>Journal of the American Ceramic Society</i> , 2004, 87, 181-186.                       | 1.9  | 116       |
| 86 | Screen Printing of Highly Loaded Silver Inks on Plastic Substrates Using Silicon Stencils. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 12619-12624.  | 4.0  | 114       |
| 87 | Nanoparticle Engineering of Complex Fluid Behavior. <i>Langmuir</i> , 2001, 17, 8414-8421.  | 1.6  | 113       |
| 88 | Redox Active Colloids as Discrete Energy Storage Carriers. <i>Journal of the American Chemical Society</i> , 2016, 138, 13230-13237.  | 6.6  | 111       |
| 89 | Direct-write assembly of biomimetic microvascular networks for efficient fluid transport. <i>Soft Matter</i> , 2010, 6, 739-742.  | 1.2  | 110       |
| 90 | Direct-Write Fabrication of Pb(Nb,Zr,Ti)O <sub>3</sub> Devices: Influence of Paste Rheology on Print Morphology and Component Properties. <i>Journal of the American Ceramic Society</i> , 2001, 84, 2462-2468. | 1.9  | 103       |

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|-----|---|------|-----------|
| 91  | Perovskite nanowire-block copolymer composites with digitally programmable polarization anisotropy. <i>Science Advances</i> , 2019, 5, eaav8141.                                  | 4.7  | 103       |
| 92  | Polyelectrolyte Effects on the Rheological Properties of Concentrated Cement Suspensions. <i>Journal of the American Ceramic Society</i> , 2000, 83, 1905-1913.                   | 1.9  | 102       |
| 93  | Nanoparticle-Mediated Epitaxial Assembly of Colloidal Crystals on Patterned Substrates. <i>Langmuir</i> , 2004, 20, 5262-5270.  | 1.6  | 100       |
| 94  | Microfabricated Deposition Nozzles for Direct-Write Assembly of Three-Dimensional Periodic Structures. <i>Advanced Materials</i> , 2005, 17, 289-293.                             | 11.1 | 99        |
| 95  | Printing mesoscale architectures. <i>MRS Bulletin</i> , 2015, 40, 943-950.  | 1.7  | 99        |
| 96  | Aggregation Effects on the Compressive Flow Properties and Drying Behavior of Colloidal Silica Suspensions. <i>Journal of the American Ceramic Society</i> , 1999, 82, 2345-2358. | 1.9  | 98        |
| 97  | Rheological Property and Stress Development during Drying of Tape-Cast Ceramic Layers. <i>Journal of the American Ceramic Society</i> , 1996, 79, 3225-3234.                      | 1.9  | 94        |
| 98  | Accelerated Self-Healing Via Ternary Interpenetrating Microvascular Networks. <i>Advanced Functional Materials</i> , 2011, 21, 4320-4326.   | 7.8  | 91        |
| 99  | Controlling Material Reactivity Using Architecture. <i>Advanced Materials</i> , 2016, 28, 1934-1939.  | 11.1 | 91        |
| 100 | Chemorheology of Aqueous-Based Alumina-Poly(vinyl alcohol) Gelcasting Suspensions. <i>Journal of the American Ceramic Society</i> , 1999, 82, 521-528.                            | 1.9  | 88        |
| 101 | Solid Freeform Fabrication of Aqueous Alumina-Poly(vinyl alcohol) Gelcasting Suspensions. <i>Journal of the American Ceramic Society</i> , 2000, 83, 2409-2416.                   | 1.9  | 86        |
| 102 | Gigahertz Electromagnetic Structures via Direct Ink Writing for Radio-Frequency Oscillator and Transmitter Applications. <i>Advanced Materials</i> , 2017, 29, 1605198.           | 11.1 | 86        |
| 103 | Stop-Flow Lithography of Colloidal, Glass, and Silicon Microcomponents. <i>Advanced Materials</i> , 2008, 20, 4734-4739.  | 11.1 | 85        |
| 104 | The NIH Somatic Cell Genome Editing program. <i>Nature</i> , 2021, 592, 195-204.  | 13.7 | 84        |
| 105 | Towards enduring autonomous robots via embodied energy. <i>Nature</i> , 2022, 602, 393-402.   | 13.7 | 84        |
| 106 | Shape Evolution and Stress Development during Latex-Silica Film Formation. <i>Langmuir</i> , 2002, 18, 4689-4698.   | 1.6  | 83        |
| 107 | Effect of Nonadsorbed Polymer on the Stability of Weakly Flocculated Suspensions. <i>Langmuir</i> , 1996, 12, 3413-3424.  | 1.6  | 82        |
| 108 | Architected Polymer Foams via Direct Bubble Writing. <i>Advanced Materials</i> , 2019, 31, e1904668.  | 11.1 | 82        |

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|-----|--|------|-----------|
| 109 | A Germanium Inverse Woodpile Structure with a Large Photonic Band Gap. <i>Advanced Materials</i> , 2007, 19, 1567-1570.  | 11.1 | 77        |
| 110 | PAA/PEO comb polymer effects on rheological properties and interparticle forces in aqueous silica suspensions. <i>Journal of Colloid and Interface Science</i> , 2003, 262, 274-281.               | 5.0  | 76        |
| 111 | Marangoni Effects on Evaporative Lithographic Patterning of Colloidal Films. <i>Langmuir</i> , 2008, 24, 3681-3685.  | 1.6  | 76        |
| 112 | Photocurable Liquid Coreâ€Fugitive Shell Printing of Optical Waveguides. <i>Advanced Materials</i> , 2011, 23, 5055-5058.  | 11.1 | 76        |
| 113 | Biphasic Electrode Suspensions for Liâ€Ion Semiâ€Solid Flow Cells with High Energy Density, Fast Charge Transport, and Lowâ€Dissipation Flow. <i>Advanced Energy Materials</i> , 2015, 5, 1500535. | 10.2 | 76        |
| 114 | Janus Colloidal Matchsticks. <i>Journal of the American Chemical Society</i> , 2012, 134, 12901-12903.   | 6.6  | 75        |
| 115 | Piezoelectric properties of 3-Xperiodic Pb(ZrxTi1âˆx)O3â€ polymer composites. <i>Journal of Applied Physics</i> , 2002, 92, 6119-6127.   | 1.1  | 71        |
| 116 | Robocast Pb(Zr0.95Ti0.05)O3Ceramic Monoliths and Composites. <i>Journal of the American Ceramic Society</i> , 2001, 84, 872-874.   | 1.9  | 70        |
| 117 | Polymer Microvascular Network Composites. <i>Journal of Composite Materials</i> , 2010, 44, 2587-2603.   | 1.2  | 69        |
| 118 | Phase Behavior and Rheological Properties of Polyelectrolyte Inks for Direct-Write Assembly. <i>Langmuir</i> , 2005, 21, 457-464.  | 1.6  | 68        |
| 119 | Biomimetic silicification of 3D polyamine-rich scaffolds assembled by direct ink writing. <i>Soft Matter</i> , 2006, 2, 205.   | 1.2  | 68        |
| 120 | Design, fabrication, and inâ€vitro testing of novel three-dimensionally printed tympanic membrane grafts. <i>Hearing Research</i> , 2016, 340, 191-203.  | 0.9  | 68        |
| 121 | Engineered 3D-printed artificial axons. <i>Scientific Reports</i> , 2018, 8, 478.  | 1.6  | 67        |
| 122 | Printing Reconfigurable Bundles of Dielectric Elastomer Fibers. <i>Advanced Functional Materials</i> , 2021, 31, 2010643.  | 7.8  | 63        |
| 123 | Designing colloidal suspensions for directed materials assembly. <i>Current Opinion in Colloid and Interface Science</i> , 2011, 16, 71-79.  | 3.4  | 57        |
| 124 | Lightweight 3D cellular composites inspired by balsa. <i>Bioinspiration and Biomimetics</i> , 2017, 12, 026014.  | 1.5  | 56        |
| 125 | Directed Colloidal Assembly of Linear and Annular Lead Zirconate Titanate Arrays. <i>Journal of the American Ceramic Society</i> , 2004, 87, 293-295.  | 1.9  | 53        |
| 126 | Orthogonally induced differentiation of stem cells for the programmatic patterning of vascularized organoids and bioprinted tissues. <i>Nature Biomedical Engineering</i> , 2022, 6, 449-462.      | 11.6 | 52        |



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|-----|--|------|-----------|
| 127 | Stress development during drying of calcium carbonate suspensions containing carboxymethylcellulose and latex particles. <i>Journal of Colloid and Interface Science</i> , 2004, 272, 1-9. | 5.0  | 51        |
| 128 | Light-Regulated Electrostatic Interactions in Colloidal Suspensions. <i>Journal of the American Chemical Society</i> , 2005, 127, 14574-14575.   | 6.6  | 49        |
| 129 | Rheological Behavior of Fugitive Organic Inks for Direct-Write Assembly. <i>Applied Rheology</i> , 2007, 17, 10112-1-10112-8.  | 3.5  | 49        |
| 130 | Structure of Colloidal Gels during Microchannel Flow. <i>Langmuir</i> , 2008, 24, 7628-7634.   | 1.6  | 48        |
| 131 | Stretchable Optomechanical Fiber Sensors for Pressure Determination in Compressive Medical Textiles. <i>Advanced Healthcare Materials</i> , 2018, 7, e1800293.                             | 3.9  | 47        |
| 132 | Soft Robotic Fingers with Embedded Ionogel Sensors and Discrete Actuation Modes for Somatosensitive Manipulation. , 2019, , .  |      | 47        |
| 133 | Programming Cellular Alignment in Engineered Cardiac Tissue via Bioprinting Anisotropic Organ Building Blocks. <i>Advanced Materials</i> , 2022, 34, e2200217.                             | 11.1 | 46        |
| 134 | Electrostatically Tuned Interactions in Silica Microsphere~Polystyrene Nanoparticle Mixtures. <i>Langmuir</i> , 2005, 21, 8576-8579.   | 1.6  | 45        |
| 135 | Reconfigurable assemblies of Janus rods in AC electric fields. <i>Soft Matter</i> , 2014, 10, 1320-1324.   | 1.2  | 45        |
| 136 | 3D printed structures for modeling the Young's modulus of bamboo parenchyma. <i>Acta Biomaterialia</i> , 2018, 68, 90-98.  | 4.1  | 45        |
| 137 | Interparticle Interactions and Direct Imaging of Colloidal Phases Assembled from Microsphere~Nanoparticle Mixtures. <i>Langmuir</i> , 2005, 21, 9978-9989.                                 | 1.6  | 44        |
| 138 | Architected Multimaterial Lattices with Thermally Programmable Mechanical Response. <i>Advanced Functional Materials</i> , 2022, 32, 2105128.  | 7.8  | 44        |
| 139 | A Self~Aligned Strategy for Printed Electronics: Exploiting Capillary Flow on Microstructured Plastic Surfaces. <i>Advanced Electronic Materials</i> , 2015, 1, 1500137.                   | 2.6  | 43        |
| 140 | Observation of Poly{Vinyl Butyral}-Dibutyl Phthalate Binder Capillary Migration. <i>Journal of the American Ceramic Society</i> , 1989, 72, 1087-1090.                                     | 1.9  | 42        |
| 141 | Direct Laser Writing of Photoresponsive Colloids for Microscale Patterning of 3D Porous Structures. <i>Advanced Materials</i> , 2009, 21, 66-70.   | 11.1 | 42        |
| 142 | Direct-write assembly of microperiodic planar and spanning ITO microelectrodes. <i>Chemical Communications</i> , 2010, 46, 7118.   | 2.2  | 42        |
| 143 | Quantitative Measurement of Nanoparticle Halo Formation around Colloidal Microspheres in Binary Mixtures. <i>Langmuir</i> , 2008, 24, 6504-6508.   | 1.6  | 41        |
| 144 | High~Operating~Temperature Direct Ink Writing of Mesoscale Eutectic Architectures. <i>Advanced Materials</i> , 2017, 29, 1604778.  | 11.1 | 41        |

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|-----|--|------|-----------|
| 145 | Load partitioning in Al <sub>2</sub> O <sub>3</sub> -Al composites with three-dimensional periodic architecture. <i>Acta Materialia</i> , 2009, 57, 2362-2375.                           | 3.8  | 40        |
| 146 | High-Resolution, High-Aspect Ratio Conductive Wires Embedded in Plastic Substrates. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 1841-1847.                                  | 4.0  | 39        |
| 147 | Rheological, Structural, and Stress Evolution of Aqueous Al <sub>2</sub> O <sub>3</sub> :Latex Tape-Cast Layers. <i>Journal of the American Ceramic Society</i> , 2002, 85, 2409-2416.   | 1.9  | 37        |
| 148 | Structural Evolution of Colloidal Crystals with Increasing Ionic Strength. <i>Langmuir</i> , 2004, 20, 7045-7052.  | 1.6  | 37        |
| 149 | Comb Polymer Architecture, Ionic Strength, and Particle Size Effects on the BaTiO <sub>3</sub> Suspension Stability. <i>Journal of the American Ceramic Society</i> , 2009, 92, S42.     | 1.9  | 37        |
| 150 | Structural and Property Evolution of Aqueous-Based Lead Zirconate Titanate Tape-Cast Layers. <i>Journal of the American Ceramic Society</i> , 2001, 84, 2495-2500.                       | 1.9  | 36        |
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