

Robert Samuel Langer Jr

List of Publications by Year in descending order

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Version: 2024-02-01

367
papers

117,711
citations

293

139
h-index

130

335
g-index

377
all docs

377
docs citations

377
times ranked

92320
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Oral delivery of systemic monoclonal antibodies, peptides and small molecules using gastric auto-injectors. <i>Nature Biotechnology</i> , 2022, 40, 103-109. | 9.4 | 64 |
| 2 | Microfluidic Squeezing Enables MHC Class I Antigen Presentation by Diverse Immune Cells to Elicit CD8+ T Cell Responses with Antitumor Activity. <i>Journal of Immunology</i> , 2022, 208, 929-940. | 0.4 | 11 |
| 3 | Oral mRNA delivery using capsule-mediated gastrointestinal tissue injections. <i>Matter</i> , 2022, 5, 975-987. | 5.0 | 48 |
| 4 | Bioplastics for a circular economy. <i>Nature Reviews Materials</i> , 2022, 7, 117-137. | 23.3 | 550 |
| 5 | Dynamic omnidirectional adhesive microneedle system for oral macromolecular drug delivery. <i>Science Advances</i> , 2022, 8, eabk1792. | 4.7 | 54 |
| 6 | Role of drug delivery technologies in the success of COVID-19 vaccines: a perspective. <i>Drug Delivery and Translational Research</i> , 2022, 12, 2581-2588. | 3.0 | 17 |
| 7 | Engineered nanoparticles enable deep proteomics studies at scale by leveraging tunable nano-bio interactions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2106053119. | 3.3 | 29 |
| 8 | Screening for modulators of the cellular composition of gut epithelia via organoid models of intestinal stem cell differentiation. <i>Nature Biomedical Engineering</i> , 2022, 6, 476-494. | 11.6 | 24 |
| 9 | Development of oil-based gels as versatile drug delivery systems for pediatric applications. <i>Science Advances</i> , 2022, 8, . | 4.7 | 19 |
| 10 | Micromolding of Thermoplastic Polymers for Direct Fabrication of Discrete, Multilayered Microparticles. <i>Small Methods</i> , 2022, 6, . | 4.6 | 6 |
| 11 | Delivery of therapeutic carbon monoxide by gas-entrapping materials. <i>Science Translational Medicine</i> , 2022, 14, . | 5.8 | 21 |
| 12 | Experimental and computational understanding of pulsatile release mechanism from biodegradable core-shell microparticles. <i>Science Advances</i> , 2022, 8, . | 4.7 | 16 |
| 13 | Microgel encapsulated nanoparticles for glucose-responsive insulin delivery. <i>Biomaterials</i> , 2021, 267, 120458. | 5.7 | 32 |
| 14 | Analysis of the Human Plasma Proteome Using Multi-Nanoparticle Protein Corona for Detection of Alzheimer's Disease. <i>Advanced Healthcare Materials</i> , 2021, 10, e2000948. | 3.9 | 19 |
| 15 | Engineering precision nanoparticles for drug delivery. <i>Nature Reviews Drug Discovery</i> , 2021, 20, 101-124. | 21.5 | 3,154 |
| 16 | Inverse Pneumatic Artificial Muscles for Application in Low-Cost Ventilators. <i>Advanced Intelligent Systems</i> , 2021, 3, 2000200. | 3.3 | 6 |
| 17 | Microtechnologies and Nanotechnologies in Drug Delivery. , 2021, , . | | 0 |
| 18 | A microneedle platform for buccal macromolecule delivery. <i>Science Advances</i> , 2021, 7, . | 4.7 | 70 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Exhaled aerosol increases with COVID-19 infection, age, and obesity. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, . | 3.3 | 161 |
| 20 | Improved Speech Intelligibility in Subjects With Stable Sensorineural Hearing Loss Following Intratympanic Dosing of FX-322 in a Phase 1b Study. Otology and Neurotology, 2021, 42, e849-e857. | 0.7 | 34 |
| 21 | Nanotechnology approaches for global infectious diseases. Nature Nanotechnology, 2021, 16, 369-384. | 15.6 | 232 |
| 22 | Computationally guided high-throughput design of self-assembling drug nanoparticles. Nature Nanotechnology, 2021, 16, 725-733. | 15.6 | 64 |
| 23 | Engineered drug delivery devices to address Global Health challenges. Journal of Controlled Release, 2021, 331, 503-514. | 4.8 | 35 |
| 24 | The surface topography of silicone breast implants mediates the foreign body response in mice, rabbits and humans. Nature Biomedical Engineering, 2021, 5, 1115-1130. | 11.6 | 126 |
| 25 | Reply to Stohner: On the significance of BMI-age dependence of exhaled aerosol. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, e2107559118. | 3.3 | 0 |
| 26 | Facts and Figures on Materials Science and Nanotechnology Progress and Investment. ACS Nano, 2021, 15, 15940-15952. | 7.3 | 48 |
| 27 | Stimuli-responsive transdermal microneedle patches. Materials Today, 2021, 47, 206-222. | 8.3 | 129 |
| 28 | Wireless on-demand drug delivery. Nature Electronics, 2021, 4, 464-477. | 13.1 | 91 |
| 29 | Lipid nanoparticles for mRNA delivery. Nature Reviews Materials, 2021, 6, 1078-1094. | 23.3 | 1,256 |
| 30 | Additive manufacturing in drug delivery: Innovative drug product design and opportunities for industrial application. Advanced Drug Delivery Reviews, 2021, 178, 113990. | 6.6 | 28 |
| 31 | A technology evaluation of CVT-301 (Inbrija): an inhalable therapy for treatment of Parkinson's disease. Expert Opinion on Drug Delivery, 2021, 18, 1559-1569. | 2.4 | 7 |
| 32 | Nucleic acid delivery for therapeutic applications. Advanced Drug Delivery Reviews, 2021, 178, 113834. | 6.6 | 122 |
| 33 | A therapeutic convection-enhanced macroencapsulation device for enhancing β cell viability and insulin secretion. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, . | 3.3 | 29 |
| 34 | Engineered insulin-polycation complexes for glucose-responsive delivery with high insulin loading. Journal of Controlled Release, 2021, 338, 71-79. | 4.8 | 14 |
| 35 | BBB pathophysiology-independent delivery of siRNA in traumatic brain injury. Science Advances, 2021, 7, . | 4.7 | 67 |
| 36 | Implantable system for chronotherapy. Science Advances, 2021, 7, eabj4624. | 4.7 | 9 |

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|----|---|------|-----------|
| 37 | Controlled delivery of gold nanoparticle-coupled miRNA therapeutics via an injectable self-healing hydrogel. <i>Nanoscale</i> , 2021, 13, 20451-20461. | 2.8 | 15 |
| 38 | Biohybrid Design Gets Personal: New Materials for Patient-Specific Therapy. <i>Advanced Materials</i> , 2020, 32, e1901969. | 11.1 | 21 |
| 39 | Outlooks on Three-Dimensional Printing for Ocular Biomaterials Research. <i>Journal of Ocular Pharmacology and Therapeutics</i> , 2020, 36, 7-17. | 0.6 | 16 |
| 40 | Chiral Supraparticles for Controllable Nanomedicine. <i>Advanced Materials</i> , 2020, 32, e1903878. | 11.1 | 118 |
| 41 | From Molecule to Patient: A Biotech Perspective. <i>Clinical Pharmacology and Therapeutics</i> , 2020, 107, 65-67. | 2.3 | 3 |
| 42 | Glucose-Responsive Nanoparticles for Rapid and Extended Self-Regulated Insulin Delivery. <i>ACS Nano</i> , 2020, 14, 488-497. | 7.3 | 113 |
| 43 | Platform for micro-invasive membrane-free biochemical sampling of brain interstitial fluid. <i>Science Advances</i> , 2020, 6, . | 4.7 | 11 |
| 44 | Dopamine and beta-band oscillations differentially link to striatal value and motor control. <i>Science Advances</i> , 2020, 6, . | 4.7 | 23 |
| 45 | Nasal Calcium-Rich Salts for Cleaning Airborne Particles from the Airways of Essential Workers, Students, and a Family in Quarantine. <i>Molecular Frontiers Journal</i> , 2020, 04, 36-45. | 0.9 | 9 |
| 46 | A materials-science perspective on tackling COVID-19. <i>Nature Reviews Materials</i> , 2020, 5, 847-860. | 23.3 | 228 |
| 47 | Nanoparticle-encapsulated siRNAs for gene silencing in the haematopoietic stem-cell niche. <i>Nature Biomedical Engineering</i> , 2020, 4, 1076-1089. | 11.6 | 80 |
| 48 | Delivery of Tissue-Targeted Scalpels: Opportunities and Challenges for In Vivo CRISPR/Cas-Based Genome Editing. <i>ACS Nano</i> , 2020, 14, 9243-9262. | 7.3 | 69 |
| 49 | Rapid, deep and precise profiling of the plasma proteome with multi-nanoparticle protein corona. <i>Nature Communications</i> , 2020, 11, 3662. | 5.8 | 175 |
| 50 | Modeling, design, and machine learning-based framework for optimal injectability of microparticle-based drug formulations. <i>Science Advances</i> , 2020, 6, eabb6594. | 4.7 | 42 |
| 51 | Computationally Guided Intracerebral Drug Delivery via Chronically Implanted Microdevices. <i>Cell Reports</i> , 2020, 31, 107734. | 2.9 | 5 |
| 52 | Trends in Therapeutic Conjugates: Bench to Clinic. <i>Bioconjugate Chemistry</i> , 2020, 31, 462-473. | 1.8 | 21 |
| 53 | Advances in oligonucleotide drug delivery. <i>Nature Reviews Drug Discovery</i> , 2020, 19, 673-694. | 21.5 | 1,036 |
| 54 | Engineered PLGA microparticles for long-term, pulsatile release of STING agonist for cancer immunotherapy. <i>Science Translational Medicine</i> , 2020, 12, . | 5.8 | 117 |

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|----|--|------|-----------|
| 55 | Chemical Tuning of Fibers Drawn from Extensible Hyaluronic Acid Networks. <i>Journal of the American Chemical Society</i> , 2020, 142, 19715-19721. | 6.6 | 24 |
| 56 | Ingestible transiently anchoring electronics for microstimulation and conductive signaling. <i>Science Advances</i> , 2020, 6, eaaz0127. | 4.7 | 35 |
| 57 | Development of a long-acting direct-acting antiviral system for hepatitis C virus treatment in swine. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 11987-11994. | 3.3 | 15 |
| 58 | A rapidly deployable individualized system for augmenting ventilator capacity. <i>Science Translational Medicine</i> , 2020, 12, . | 5.8 | 23 |
| 59 | Polymer Nanocomposite Microactuators for On-Demand Chemical Release via High-Frequency Magnetic Field Excitation. <i>Nano Letters</i> , 2020, 20, 4816-4822. | 4.5 | 12 |
| 60 | Parallel evolution of polymer chemistry and immunology: Integrating mechanistic biology with materials design. <i>Advanced Drug Delivery Reviews</i> , 2020, 156, 65-79. | 6.6 | 15 |
| 61 | Machine Learning Uncovers Food- and Excipient-Drug Interactions. <i>Cell Reports</i> , 2020, 30, 3710-3716.e4. | 2.9 | 37 |
| 62 | A retrievable implant for the long-term encapsulation and survival of therapeutic xenogeneic cells. <i>Nature Biomedical Engineering</i> , 2020, 4, 814-826. | 11.6 | 90 |
| 63 | Magnetic Retrieval of Encapsulated Beta Cell Transplants from Diabetic Mice Using Dual-Function MRI Visible and Retrievable Microcapsules. <i>Advanced Materials</i> , 2020, 32, e1904502. | 11.1 | 15 |
| 64 | Simultaneous recording and marking of brain microstructures. <i>Journal of Neural Engineering</i> , 2020, 17, 044001. | 1.8 | 1 |
| 65 | Light-degradable hydrogels as dynamic triggers for gastrointestinal applications. <i>Science Advances</i> , 2020, 6, eaay0065. | 4.7 | 71 |
| 66 | A Nanoprimer To Improve the Systemic Delivery of siRNA and mRNA. <i>Nano Letters</i> , 2020, 20, 4264-4269. | 4.5 | 51 |
| 67 | Robotically handled whole-tissue culture system for the screening of oral drug formulations. <i>Nature Biomedical Engineering</i> , 2020, 4, 544-559. | 11.6 | 35 |
| 68 | Clinical Opportunities for Continuous Biosensing and Closed-Loop Therapies. <i>Trends in Chemistry</i> , 2020, 2, 319-340. | 4.4 | 39 |
| 69 | Actuation of untethered pneumatic artificial muscles and soft robots using magnetically induced liquid-to-gas phase transitions. <i>Science Robotics</i> , 2020, 5, . | 9.9 | 101 |
| 70 | Glucose-responsive insulin patch for the regulation of blood glucose in mice and minipigs. <i>Nature Biomedical Engineering</i> , 2020, 4, 499-506. | 11.6 | 353 |
| 71 | Nanofibrillar Patches of Commensal Skin Bacteria. <i>Biomacromolecules</i> , 2019, 20, 102-108. | 2.6 | 10 |
| 72 | Injectable Polymer-Nanoparticle Hydrogels for Local Immune Cell Recruitment. <i>Biomacromolecules</i> , 2019, 20, 4430-4436. | 2.6 | 58 |

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|----|--|------|-----------|
| 73 | A heat-stable microparticle platform for oral micronutrient delivery. <i>Science Translational Medicine</i> , 2019, 11, . | 5.8 | 20 |
| 74 | A New Approach for Microfabrication of Printed Circuit Boards with Ultrafine Traces. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 35376-35381. | 4.0 | 5 |
| 75 | Can Fish and Cell Phones Teach Us about Our Health?. <i>ACS Sensors</i> , 2019, 4, 2566-2570. | 4.0 | 2 |
| 76 | A luminal unfolding microneedle injector for oral delivery of macromolecules. <i>Nature Medicine</i> , 2019, 25, 1512-1518. | 15.2 | 167 |
| 77 | Blocking CXCR4 alleviates desmoplasia, increases T-lymphocyte infiltration, and improves immunotherapy in metastatic breast cancer. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 4558-4566. | 3.3 | 274 |
| 78 | Long-term implant fibrosis prevention in rodents and non-human primates using crystallized drug formulations. <i>Nature Materials</i> , 2019, 18, 892-904. | 13.3 | 114 |
| 79 | Steerable Microinvasive Probes for Localized Drug Delivery to Deep Tissue. <i>Small</i> , 2019, 15, e1901459. | 5.2 | 17 |
| 80 | Controlling the movement of molecules. <i>Quarterly Reviews of Biophysics</i> , 2019, 52, . | 2.4 | 8 |
| 81 | Reprogramming the microenvironment with tumor-selective angiotensin blockers enhances cancer immunotherapy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 10674-10680. | 3.3 | 150 |
| 82 | Temperature-responsive biometamaterials for gastrointestinal applications. <i>Science Translational Medicine</i> , 2019, 11, . | 5.8 | 51 |
| 83 | Ultra-rapid drug delivery in the oral cavity using ultrasound. <i>Journal of Controlled Release</i> , 2019, 304, 1-6. | 4.8 | 12 |
| 84 | A gastric resident drug delivery system for prolonged gram-level dosing of tuberculosis treatment. <i>Science Translational Medicine</i> , 2019, 11, . | 5.8 | 38 |
| 85 | Polymers for extended-release administration. <i>Biomedical Microdevices</i> , 2019, 21, 45. | 1.4 | 21 |
| 86 | Making the case: developing innovative adherence solutions for the treatment of tuberculosis. <i>BMJ Global Health</i> , 2019, 4, e001323. | 2.0 | 10 |
| 87 | An ingestible self-orienting system for oral delivery of macromolecules. <i>Science</i> , 2019, 363, 611-615. | 6.0 | 287 |
| 88 | Simultaneous spatiotemporal tracking and oxygen sensing of transient implants in vivo using hot-spot MRI and machine learning. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 4861-4870. | 3.3 | 18 |
| 89 | Biocompatible near-infrared quantum dots delivered to the skin by microneedle patches record vaccination. <i>Science Translational Medicine</i> , 2019, 11, . | 5.8 | 95 |
| 90 | Delivery of mRNA vaccines with heterocyclic lipids increases anti-tumor efficacy by STING-mediated immune cell activation. <i>Nature Biotechnology</i> , 2019, 37, 1174-1185. | 9.4 | 398 |

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|-----|---|------|-----------|
| 91 | A once-a-month oral contraceptive. <i>Science Translational Medicine</i> , 2019, 11, . | 5.8 | 33 |
| 92 | Ingestible electronics for diagnostics and therapy. <i>Nature Reviews Materials</i> , 2019, 4, 83-98. | 23.3 | 146 |
| 93 | Inhaled Nanoformulated mRNA Polyplexes for Protein Production in Lung Epithelium. <i>Advanced Materials</i> , 2019, 31, e1805116. | 11.1 | 212 |
| 94 | Delivery technologies for cancer immunotherapy. <i>Nature Reviews Drug Discovery</i> , 2019, 18, 175-196. | 21.5 | 1,562 |
| 95 | 3D-Printed Gastric Resident Electronics. <i>Advanced Materials Technologies</i> , 2019, 4, 1800490. | 3.0 | 72 |
| 96 | Drug delivery across length scales. <i>Journal of Drug Targeting</i> , 2019, 27, 229-243. | 2.1 | 20 |
| 97 | Biocompatible Semiconductor Quantum Dots as Cancer Imaging Agents. <i>Advanced Materials</i> , 2018, 30, e1706356. | 11.1 | 227 |
| 98 | Convergence for Translation: Drug Delivery Research in Multidisciplinary Teams. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 4156-4163. | 7.2 | 8 |
| 99 | Translation durch Konvergenz: Drug Delivery-Forschung in multidisziplinären Teams. <i>Angewandte Chemie</i> , 2018, 130, 4226-4234. | 1.6 | 2 |
| 100 | Controlling the Growth of <i>Staphylococcus epidermidis</i> by Layer-By-Layer Encapsulation. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 16250-16259. | 4.0 | 23 |
| 101 | Nanoparticles for Immune Cytokine TRAIL-Based Cancer Therapy. <i>ACS Nano</i> , 2018, 12, 912-931. | 7.3 | 107 |
| 102 | Partial DNA-guided Cas9 enables genome editing with reduced off-target activity. <i>Nature Chemical Biology</i> , 2018, 14, 311-316. | 3.9 | 186 |
| 103 | Miniaturized neural system for chronic, local intracerebral drug delivery. <i>Science Translational Medicine</i> , 2018, 10, . | 5.8 | 71 |
| 104 | Development of an oral once-weekly drug delivery system for HIV antiretroviral therapy. <i>Nature Communications</i> , 2018, 9, 2. | 5.8 | 180 |
| 105 | Design and Synthesis of Waterborne Polyurethanes. <i>Advanced Materials</i> , 2018, 30, e1706237. | 11.1 | 131 |
| 106 | Surface tension-assisted additive manufacturing. <i>Nature Communications</i> , 2018, 9, 1184. | 5.8 | 47 |
| 107 | Immunogenicity of pulsatile-release PLGA microspheres for single-injection vaccination. <i>Vaccine</i> , 2018, 36, 3161-3168. | 1.7 | 41 |
| 108 | Towards a defined ECM and small molecule based monolayer culture system for the expansion of mouse and human intestinal stem cells. <i>Biomaterials</i> , 2018, 154, 60-73. | 5.7 | 35 |

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|-----|---|------|-----------|
| 109 | Molecular Rotors for Universal Quantitation of Nanoscale Hydrophobic Interfaces in Microplate Format. <i>Nano Letters</i> , 2018, 18, 618-628. | 4.5 | 3 |
| 110 | Prediction of Broad-Spectrum Pathogen Attachment to Coating Materials for Biomedical Devices. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 139-149. | 4.0 | 43 |
| 111 | The development of bioresorbable composite polymeric implants with high mechanical strength. <i>Nature Materials</i> , 2018, 17, 96-103. | 13.3 | 112 |
| 112 | Nanomaterial Interactions with Human Neutrophils. <i>ACS Biomaterials Science and Engineering</i> , 2018, 4, 4255-4265. | 2.6 | 47 |
| 113 | Smart Biomaterials: Recent Advances and Future Directions. <i>ACS Biomaterials Science and Engineering</i> , 2018, 4, 3809-3817. | 2.6 | 135 |
| 114 | Biofilm-Inspired Encapsulation of Probiotics for the Treatment of Complex Infections. <i>Advanced Materials</i> , 2018, 30, e1803925. | 11.1 | 93 |
| 115 | Î²-Aminoacrylate Synthetic Hydrogels: Easily Accessible and Operationally Simple Biomaterials Networks. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 16026-16029. | 7.2 | 37 |
| 116 | Cellular-scale probes enable stable chronic subsecond monitoring of dopamine neurochemicals in a rodent model. <i>Communications Biology</i> , 2018, 1, 144. | 2.0 | 52 |
| 117 | Î²-Aminoacrylate Synthetic Hydrogels: Easily Accessible and Operationally Simple Biomaterials Networks. <i>Angewandte Chemie</i> , 2018, 130, 16258-16261. | 1.6 | 9 |
| 118 | Restoration of tumour-growth suppression in vivo via systemic nanoparticle-mediated delivery of PTEN mRNA. <i>Nature Biomedical Engineering</i> , 2018, 2, 850-864. | 11.6 | 214 |
| 119 | Stabilized single-injection inactivated polio vaccine elicits a strong neutralizing immune response. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E5269-E5278. | 3.3 | 44 |
| 120 | An ingestible bacterial-electronic system to monitor gastrointestinal health. <i>Science</i> , 2018, 360, 915-918. | 6.0 | 380 |
| 121 | Ionizable Amino-Polyesters Synthesized via Ring Opening Polymerization of Tertiary Amino-Alcohols for Tissue Selective mRNA Delivery. <i>Advanced Materials</i> , 2018, 30, e1801151. | 11.1 | 95 |
| 122 | Endothelial siRNA delivery in nonhuman primates using ionizable low-molecular weight polymeric nanoparticles. <i>Science Advances</i> , 2018, 4, eaar8409. | 4.7 | 81 |
| 123 | Focal, remote-controlled, chronic chemical modulation of brain microstructures. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 7254-7259. | 3.3 | 18 |
| 124 | Reduction of measurement noise in a continuous glucose monitor by coating the sensor with a zwitterionic polymer. <i>Nature Biomedical Engineering</i> , 2018, 2, 894-906. | 11.6 | 150 |
| 125 | Genotype-targeted local therapy of glioma. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E8388-E8394. | 3.3 | 40 |
| 126 | Intracellular Delivery by Membrane Disruption: Mechanisms, Strategies, and Concepts. <i>Chemical Reviews</i> , 2018, 118, 7409-7531. | 23.0 | 490 |

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|-----|---|------|-----------|
| 127 | Harnessing single-cell genomics to improve the physiological fidelity of organoid-derived cell types. <i>BMC Biology</i> , 2018, 16, 62. | 1.7 | 35 |
| 128 | Evaporative Cooling Hydrogel Packaging for Storing Biologics Outside of the Cold Chain. <i>Advanced Healthcare Materials</i> , 2018, 7, e1800220. | 3.9 | 19 |
| 129 | Alginate encapsulation as long-term immune protection of allogeneic pancreatic islet cells transplanted into the omental bursa of macaques. <i>Nature Biomedical Engineering</i> , 2018, 2, 810-821. | 11.6 | 242 |
| 130 | Scalable Gastric Resident Systems for Veterinary Application. <i>Scientific Reports</i> , 2018, 8, 11816. | 1.6 | 8 |
| 131 | Advances in Biomaterials for Drug Delivery. <i>Advanced Materials</i> , 2018, 30, e1705328. | 11.1 | 565 |
| 132 | Ultrasound-Mediated Delivery of RNA to Colonic Mucosa of Live Mice. <i>Gastroenterology</i> , 2017, 152, 1151-1160. | 0.6 | 46 |
| 133 | Subcellular probes for neurochemical recording from multiple brain sites. <i>Lab on A Chip</i> , 2017, 17, 1104-1115. | 3.1 | 51 |
| 134 | High-throughput nuclear delivery and rapid expression of DNA via mechanical and electrical cell-membrane disruption. <i>Nature Biomedical Engineering</i> , 2017, 1, . | 11.6 | 158 |
| 135 | Barcoded nanoparticles for high throughput in vivo discovery of targeted therapeutics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 2060-2065. | 3.3 | 185 |
| 136 | Prolonged energy harvesting for ingestible devices. <i>Nature Biomedical Engineering</i> , 2017, 1, . | 11.6 | 148 |
| 137 | Correction to "Living Biomaterials". <i>Accounts of Chemical Research</i> , 2017, 50, 1493-1493. | 7.6 | 0 |
| 138 | Wireless Power Transfer to Millimeter-Sized Gastrointestinal Electronics Validated in a Swine Model. <i>Scientific Reports</i> , 2017, 7, 46745. | 1.6 | 45 |
| 139 | Characterization of Mechanically Matched Hydrogel Coatings to Improve the Biocompatibility of Neural Implants. <i>Scientific Reports</i> , 2017, 7, 1952. | 1.6 | 126 |
| 140 | Investigating the Cellular Specificity in Tumors of a Surface-Converting Nanoparticle by Multimodal Imaging. <i>Bioconjugate Chemistry</i> , 2017, 28, 1413-1421. | 1.8 | 13 |
| 141 | Polymeric mechanical amplifiers of immune cytokine-mediated apoptosis. <i>Nature Communications</i> , 2017, 8, 14179. | 5.8 | 26 |
| 142 | Colony stimulating factor-1 receptor is a central component of the foreign body response to biomaterial implants in rodents and non-human primates. <i>Nature Materials</i> , 2017, 16, 671-680. | 13.3 | 214 |
| 143 | Living Biomaterials. <i>Accounts of Chemical Research</i> , 2017, 50, 508-513. | 7.6 | 54 |
| 144 | Poly(glycoamidoamine) brush nanomaterials for systemic siRNA delivery in vivo. <i>Biomaterials Science</i> , 2017, 5, 38-40. | 2.6 | 17 |

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|-----|--|------|-----------|
| 145 | Mechanistic understanding of in vivo protein corona formation on polymeric nanoparticles and impact on pharmacokinetics. <i>Nature Communications</i> , 2017, 8, 777. | 5.8 | 507 |
| 146 | Engineering and physical sciences in oncology: challenges and opportunities. <i>Nature Reviews Cancer</i> , 2017, 17, 659-675. | 12.8 | 204 |
| 147 | Fabrication of fillable microparticles and other complex 3D microstructures. <i>Science</i> , 2017, 357, 1138-1142. | 6.0 | 163 |
| 148 | Glucose-responsive insulin by molecular and physical design. <i>Nature Chemistry</i> , 2017, 9, 937-944. | 6.6 | 106 |
| 149 | Synthesis and Biological Evaluation of Ionizable Lipid Materials for the In Vivo Delivery of Messenger RNA to B Lymphocytes. <i>Advanced Materials</i> , 2017, 29, 1606944. | 11.1 | 174 |
| 150 | Evolution of macromolecular complexity in drug delivery systems. <i>Nature Reviews Chemistry</i> , 2017, 1, . | 13.8 | 233 |
| 151 | Applications of ethylene vinyl acetate copolymers (EVA) in drug delivery systems. <i>Journal of Controlled Release</i> , 2017, 262, 284-295. | 4.8 | 134 |
| 152 | Oral delivery of biologics using drug-device combinations. <i>Current Opinion in Pharmacology</i> , 2017, 36, 8-13. | 1.7 | 41 |
| 153 | Triggerable tough hydrogels for gastric resident dosage forms. <i>Nature Communications</i> , 2017, 8, 124. | 5.8 | 106 |
| 154 | Long-term dopamine neurochemical monitoring in primates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 13260-13265. | 3.3 | 80 |
| 155 | Multiplexed RNAi therapy against brain tumor-initiating cells via lipopolymeric nanoparticle infusion delays glioblastoma progression. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E6147-E6156. | 3.3 | 102 |
| 156 | Bioresponsive materials. <i>Nature Reviews Materials</i> , 2017, 2, . | 23.3 | 1,117 |
| 157 | Lipid Nanoparticle Assisted mRNA Delivery for Potent Cancer Immunotherapy. <i>Nano Letters</i> , 2017, 17, 1326-1335. | 4.5 | 506 |
| 158 | Cytosolic delivery of siRNA by ultra-high affinity dsRNA binding proteins. <i>Nucleic Acids Research</i> , 2017, 45, 7602-7614. | 6.5 | 11 |
| 159 | Structure-guided chemical modification of guide RNA enables potent non-viral in vivo genome editing. <i>Nature Biotechnology</i> , 2017, 35, 1179-1187. | 9.4 | 375 |
| 160 | Ly6Clo monocytes drive immunosuppression and confer resistance to anti-VEGFR2 cancer therapy. <i>Journal of Clinical Investigation</i> , 2017, 127, 3039-3051. | 3.9 | 124 |
| 161 | Dendrimer-RNA nanoparticles generate protective immunity against lethal Ebola, H1N1 influenza, and <i>Toxoplasma gondii</i> challenges with a single dose. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E4133-42. | 3.3 | 320 |
| 162 | Thermostabilization of inactivated polio vaccine in PLGA-based microspheres for pulsatile release. <i>Journal of Controlled Release</i> , 2016, 233, 101-113. | 4.8 | 48 |

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