Molly M Stevens

List of Publications by Year
in descending order

227 papers	18,955 citations	15504 65 h-index	13771 129 g-index
233 all docs	233 docs citations	233 times ranked	27821 citing authors

#	Article	IF	Citations
1	Exploring and Engineering the Cell Surface Interface. Science, 2005, 310, 1135-1138.	12.6	2,383
2	Diverse Applications of Nanomedicine. ACS Nano, 2017, 11, 2313-2381.	14.6	976
3	Colloidal nanoparticles as advanced biological sensors. Science, 2014, 346, 1247390.	12.6	842
4	Digital technologies in the public-health response to COVID-19. Nature Medicine, 2020, 26, 1183-1192.	30.7	695
5	Controlling Shear Stress in 3D Bioprinting is a Key Factor to Balance Printing Resolution and Stem Cell Integrity. Advanced Healthcare Materials, 2016, 5, 326-333.	7.6	571
6	Peptide-based stimuli-responsive biomaterials. Soft Matter, 2006, 2, 822.	2.7	548
7	Active loading into extracellular vesicles significantly improves the cellular uptake and photodynamic effect of porphyrins. Journal of Controlled Release, 2015, 205, 35-44.	9.9	511
8	Re-Engineering Extracellular Vesicles as Smart Nanoscale Therapeutics. ACS Nano, 2017, 11, 69-83.	14.6	432
9	Fractal-like hierarchical organization of bone begins at the nanoscale. Science, 2018, 360, .	12.6	390
10	Renal clearable catalytic gold nanoclusters for in vivo disease monitoring. Nature Nanotechnology, 2019, 14, 883-890.	31.5	333
11	Cubosomes: The Next Generation of Smart Lipid Nanoparticles?. Angewandte Chemie - International Edition, 2019, 58, 2958-2978.	13.8	313
12	Platinum Nanocatalyst Amplification: Redefining the Gold Standard for Lateral Flow Immunoassays with Ultrabroad Dynamic Range. ACS Nano, 2018, 12, 279-288.	14.6	284
13	Accelerating the Translation of Nanomaterials in Biomedicine. ACS Nano, 2015, 9, 6644-6654.	14.6	279
14	Material Cues as Potent Regulators of Epigenetics and Stem Cell Function. Cell Stem Cell, 2016, 18, 39-52.	11.1	222
15	Silicaâ€Gelatin Hybrids with Tailorable Degradation and Mechanical Properties for Tissue Regeneration. Advanced Functional Materials, 2010, 20, 3835-3845.	14.9	213
16	The Future of Layer-by-Layer Assembly: A Tribute to ACS Nano Associate Editor Helmuth MÃ¶hwald. ACS Nano, 2019, 13, 6151-6169.	14.6	211
17	Hypoxia-mimicking bioactive glass/collagen glycosaminoglycan composite scaffolds to enhance angiogenesis and bone repair. Biomaterials, 2015, 52, 358-366.	11.4	200
18	Highly porous scaffolds of PEDOT:PSS for bone tissue engineering. Acta Biomaterialia, 2017, 62, 91-101.	8.3	198

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19	Highly Controlled Open Vessel RAFT Polymerizations by Enzyme Degassing. Macromolecules, 2014, 47, 8541-8547.	4.8	177
20	Colistin kills bacteria by targeting lipopolysaccharide in the cytoplasmic membrane. ELife, 2021, 10, .	6.0	177
21	A conducting polymer with enhanced electronic stability applied in cardiac models. Science Advances, 2016, 2, e1601007.	10.3	173
22	Strategic design of extracellular vesicle drug delivery systems. Advanced Drug Delivery Reviews, 2018, 130, 12-16.	13.7	171
23	Enzymeâ€Responsive Nanoparticle Systems. Advanced Materials, 2008, 20, 4359-4363.	21.0	169
24	Auxetic Cardiac Patches with Tunable Mechanical and Conductive Properties toward Treating Myocardial Infarction. Advanced Functional Materials, 2018, 28, 1800618.	14.9	167
25	Achieving Controlled Biomoleculeâ€“Biomaterial Conjugation. Chemical Reviews, 2018, 118, 7702-7743.	47.7	165
26	A Serological Point-of-Care Test for the Detection of IgG Antibodies against Ebola Virus in Human Survivors. ACS Nano, 2018, 12, 63-73.	14.6	163
27	Expanding and optimizing 3D bioprinting capabilities using complementary network bioinks. Science Advances, 2020, 6, .	10.3	156
28	Tailoring Gelation Mechanisms for Advanced Hydrogel Applications. Advanced Functional Materials, 2020, 30, 2002759.	14.9	148
29	Physical stimuli-responsive vesicles in drug delivery: Beyond liposomes and polymersomes. Advanced Drug Delivery Reviews, 2019, 138, 259-275.	13.7	146
30	Self-Healing, Self-Assembled Î²-Sheet Peptideâ€“Poly(Î³-glutamic acid) Hybrid Hydrogels. Journal of the American Chemical Society, 2017, 139, 7250-7255.	13.7	143
31	Engineering Anisotropic Muscle Tissue using Acoustic Cell Patterning. Advanced Materials, 2018, 30, e1802649.	21.0	140
32	Collagen-mimetic peptide-modifiable hydrogels for articular cartilage regeneration. Biomaterials, 2015, 54, 213-225.	11.4	139
33	In vitro and in vivo bone formation potential of surface calcium phosphate-coated polycaprolactone and polycaprolactone/bioactive glass composite scaffolds. Acta Biomaterialia, 2016, 30, 319-333.	8.3	137
34	Colorimetric Detection of Small Molecules in Complex Matrixes via Target-Mediated Growth of Aptamer-Functionalized Gold Nanoparticles. Analytical Chemistry, 2015, 87, 7644-7652.	6.5	134
35	Cell-derived vesicles for drug therapy and diagnostics: Opportunities and challenges. Nano Today, 2015, 10, 397-409.	11.9	124
36	Micro and nanoscale technologies in oral drug delivery. Advanced Drug Delivery Reviews, 2020, 157, 37-62.	13.7	123

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37	Combinatorial Lowâ€Volume Synthesis of Wellâ€Defined Polymers by Enzyme Degassing. Angewandte Chemie - International Edition, 2016, 55, 4500-4503.	13.8	117
38	Goldâ€“silica quantum rattles for multimodal imaging and therapy. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 1959-1964.	7.1	107
39	Oneâ€Pot Synthesis of Multiple Proteinâ€Encapsulated DNA Flowers and Their Application in Intracellular Protein Delivery. Advanced Materials, 2017, 29, 1701086.	21.0	105
40	Raman Spectroscopy Reveals New Insights into the Zonal Organization of Native and Tissue-Engineered Articular Cartilage. ACS Central Science, 2016, 2, 885-895.	11.3	103
41	Human Induced Pluripotent Stem Cell-Derived Cardiomyocyte Encapsulating Bioactive Hydrogels Improve Rat Heart Function Post Myocardial Infarction. Stem Cell Reports, 2017, 9, 1415-1422.	4.8	103
42	Advances in the Fabrication of Biomaterials for Gradient Tissue Engineering. Trends in Biotechnology, 2021, 39, 150-164.	9.3	98
43	Multivalent Nanoparticle Networks Enable Point-of-Care Detection of Human Phospholipase-A2 in Serum. ACS Nano, 2015, 9, 2565-2573.	14.6	97
44	Electroconductive Hydrogel Based on Functional Poly(Ethylenedioxy Thiophene). Chemistry of Materials, 2016, 28, 6080-6088.	6.7	96
45	Voidâ€Free 3D Bioprinting for In Situ Endothelialization and Microfluidic Perfusion. Advanced Functional Materials, 2020, 30, 1908349.	14.9	96
46	Elucidating the deprotonation of polyaniline films by X-ray photoelectron spectroscopy. Journal of Materials Chemistry C, 2015, 3, 7180-7186.	5.5	95
47	Self-Assembled 2D Free-Standing Janus Nanosheets with Single-Layer Thickness. Journal of the American Chemical Society, 2017, 139, 13592-13595.	13.7	93
48	Surface enhanced Raman scattering artificial nose for high dimensionality fingerprinting. Nature Communications, 2020, 11, 207.	12.8	93
49	A low friction, biphasic and boundary lubricating hydrogel for cartilage replacement. Acta Biomaterialia, 2018, 65, 102-111.	8.3	92
50	Glycosylated superparamagnetic nanoparticle gradients for osteochondral tissue engineering. Biomaterials, 2018, 176, 24-33.	11.4	92
51	Big Is Beautiful: Enhanced saRNA Delivery and Immunogenicity by a Higher Molecular Weight, Bioreducible, Cationic Polymer. ACS Nano, 2020, 14, 5711-5727.	14.6	92
52	Circular Dichroism of Amino Acids: Following the Structural Formation of Phenylalanine. ChemPhysChem, 2015, 16, 2768-2774.	2.1	91
53	Engineering the drug carrier biointerface to overcome biological barriers to drug delivery. Advanced Drug Delivery Reviews, 2020, 167, 89-108.	13.7	91
54	Extracellular vesicles for tissue repair and regeneration: Evidence, challenges and opportunities. Advanced Drug Delivery Reviews, 2021, 175, 113775.	13.7	86

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55	Localized and Controlled Delivery of Nitric Oxide to the Conventional Outflow Pathway via Enzyme Biocatalysis: Toward Therapy for Glaucoma. Advanced Materials, 2017, 29, 1604932.	21.0	85
56	The design and in vivo testing of a locally stiffness-matched porous scaffold. Applied Materials Today, 2019, 15, 377-388.	4.3	84
57	Enhanced efficiency of genetic programming toward cardiomyocyte creation through topographical cues. Biomaterials, 2015, 70, 94-104.	11.4	81
58	Mapping Local Cytosolic Enzymatic Activity in Human Esophageal Mucosa with Porous Silicon Nanoneedles. Advanced Materials, 2015, 27, 5147-5152.	21.0	80
59	Scarring vs. functional healing: Matrix-based strategies to regulate tissue repair. Advanced Drug Delivery Reviews, 2018, 129, 407-419.	13.7	80
60	Glycosaminoglycan-based biomaterials for growth factor and cytokine delivery: Making the right choices. Journal of Controlled Release, 2019, 313, 131-147.	9.9	80
61	Engineering Extracellular Vesicles with the Tools of Enzyme Prodrug Therapy. Advanced Materials, 2018, 30, e1706616.	21.0	77
62	Assembling Living Building Blocks to Engineer Complex Tissues. Advanced Functional Materials, 2020, 30, 1909009.	14.9	76
63	Natural Biomaterials for Cardiac Tissue Engineering: A Highly Biocompatible Solution. Frontiers in Cardiovascular Medicine, 2020, 7, 554597.	2.4	74
64	Delivery of Oligonucleotide Therapeutics: Chemical Modifications, Lipid Nanoparticles, and Extracellular Vesicles. ACS Nano, 2021, 15, 13993-14021.	14.6	74
65	Remote Magnetic Nanoparticle Manipulation Enables the Dynamic Patterning of Cardiac Tissues. Advanced Materials, 2020, 32, e1904598.	21.0	70
66	Effect of Formulation Method, Lipid Composition, and PEGylation on Vesicle Lamellarity: A Small-Angle Neutron Scattering Study. Langmuir, 2019, 35, 6064-6074.	3.5	69
67	Photoswitchable gRNAs for Spatiotemporally Controlled CRISPR-Cas-Based Genomic Regulation. ACS Central Science, 2020, 6, 695-703.	11.3	69
68	Fibres and cellular structures preserved in 75-millionâ€“year-old dinosaur specimens. Nature Communications, 2015, 6, 7352.	12.8	67
69	Neutrophils Enable Local and Nonâ€Invasive Liposome Delivery to Inflamed Skeletal Muscle and Ischemic Heart. Advanced Materials, 2020, 32, e2003598.	21.0	66
70	Longâ€Range Proton Conduction across Freeâ€Standing Serum Albumin Mats. Advanced Materials, 2016, 28, 2692-2698.	21.0	65
71	Individual response variations in scaffold-guided bone regeneration are determined by independent strain- and injury-induced mechanisms. Biomaterials, 2019, 194, 183-194.	11.4	63
72	Integrative Selfâ€Assembly of Graphene Quantum Dots and Biopolymers into a Versatile Biosensing Toolkit. Advanced Functional Materials, 2015, 25, 3183-3192.	14.9	62

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73	Harnessing the secreted extracellular matrix to engineer tissues. Nature Biomedical Engineering, 2020, 4, 357-363.	22.5	62
74	Sparse feature selection methods identify unexpected global cellular response to strontium-containing materials. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4280-4285.	7.1	61
75	Buoyancyâ€Driven Gradients for Biomaterial Fabrication and Tissue Engineering. Advanced Materials, 2019, 31, e1900291.	21.0	61
76	Using Remote Fields for Complex Tissue Engineering. Trends in Biotechnology, 2020, 38, 254-263.	9.3	60
77	Duplex-Specific Nuclease-Amplified Detection of MicroRNA Using Compact Quantum Dotâ€“DNA Conjugates. ACS Applied Materials & Interfaces, 2018, 10, 28290-28300.	8.0	59
78	Combinatorial Lowâ€Volume Synthesis of Wellâ€Defined Polymers by Enzyme Degassing. Angewandte Chemie, 2016, 128, 4576-4579.	2.0	58
79	Bioinspired Fabrication of DNAâ€“Inorganic Hybrid Composites Using Synthetic DNA. ACS Nano, 2019, 13, 2888-2900.	14.6	57
80	Temporally degradable collagenâ€“mimetic hydrogels tuned to chondrogenesis of human mesenchymal stem cells. Biomaterials, 2016, 99, 56-71.	11.4	56
81	Driving Hierarchical Collagen Fiber Formation for Functional Tendon, Ligament, and Meniscus Replacement. Biomaterials, 2021, 269, 120527.	11.4	56
82	Iodideâ€Mediated Rapid and Sensitive Surface Etching of Gold Nanostars for Biosensing. Angewandte Chemie - International Edition, 2021, 60, 9891-9896.	13.8	55
83	Surface Dynamics and Ligandâ€“Core Interactions of Quantum Sized Photoluminescent Gold Nanoclusters. Journal of the American Chemical Society, 2018, 140, 18217-18226.	13.7	54
84	Toward Regeneration of the Heart: Bioengineering Strategies for Immunomodulation. Frontiers in Cardiovascular Medicine, 2019, 6, 26.	2.4	54
85	Fabrication of Hemin-Doped Serum Albumin-Based Fibrous Scaffolds for Neural Tissue Engineering Applications. ACS Applied Materials & Interfaces, 2018, 10, 5305-5317.	8.0	53
86	Polymeric and lipid nanoparticles for delivery of self-amplifying RNA vaccines. Journal of Controlled Release, 2021, 338, 201-210.	9.9	53
87	Enhanced articular cartilage by human mesenchymal stem cells in enzymatically mediated transiently RGDS-functionalized collagen-mimetic hydrogels. Acta Biomaterialia, 2017, 51, 75-88.	8.3	49
88	Nanoceria provides antioxidant and osteogenic properties to mesoporous silica nanoparticles for osteoporosis treatment. Acta Biomaterialia, 2021, 122, 365-376.	8.3	49
89	Amphiphilic amino acids: a key to adsorbing proteins to nanopatterned surfaces?. Chemical Science, 2013, 4, 928-937.	7.4	48
90	Sequence-Dependent Self-Assembly and Structural Diversity of Islet Amyloid Polypeptide-Derived Î²-Sheet Fibrils. ACS Nano, 2017, 11, 8579-8589.	14.6	48

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91	Tailoring Mechanical Properties of Solâ€“Gel Hybrids for Bone Regeneration through Polymer Structure. Chemistry of Materials, 2016, 28, 6127-6135.	6.7	46
92	Bouncing and 3D printable hybrids with self-healing properties. Materials Horizons, 2018, 5, 849-860.	12.2	44
93	Changing the Mindset in Life Sciences Toward Translation: A Consensus. Science Translational Medicine, 2014, 6, 264cm12.	12.4	42
94	Online quantitative monitoring of live cell engineered cartilage growth using diffuse fiber-optic Raman spectroscopy. Biomaterials, 2017, 140, 128-137.	11.4	41
95	Elastic serum-albumin based hydrogels: mechanism of formation and application in cardiac tissue engineering. Journal of Materials Chemistry B, 2018, 6, 5604-5612.	5.8	40
96	Multi-Amplified Sensing of MicroRNA by a Small DNA Fragment-Driven Enzymatic Cascade Reaction. ACS Sensors, 2017, 2, 111-118.	7.8	38
97	Rheological Characterization of Biomaterials Directs Additive Manufacturing of Strontiumâ€Substituted Bioactive Glass/Polycaprolactone Microfibers. Macromolecular Rapid Communications, 2019, 40, e1900019.	3.9	38
98	Ultrasoundâ€Triggered Enzymatic Gelation. Advanced Materials, 2020, 32, e1905914.	21.0	38
99	Organic Bioelectronics: Using Highly Conjugated Polymers to Interface with Biomolecules, Cells, and Tissues in the Human Body. Advanced Materials Technologies, 2020, 5, 2000384.	5.8	38
100	Fiber-Based Electrochemical Biosensors for Monitoring pH and Transient Neurometabolic Lactate. Analytical Chemistry, 2021, 93, 6646-6655.	6.5	38
101	High-Throughput Molecular Imaging via Deep-Learning-Enabled Raman Spectroscopy. Analytical Chemistry, 2021, 93, 15850-15860.	6.5	38
102	Assembly of emulsion droplets into fibers by microfluidic wet spinning. Journal of Materials Chemistry A, 2016, 4, 813-818.	10.3	37
103	p24 revisited. Aids, 2018, 32, 2089-2102.	2.2	37
104	Single Particle Automated Raman Trapping Analysis. Nature Communications, 2018, 9, 4256.	12.8	37
105	Scaffold channel size influences stem cell differentiation pathway in 3-D printed silica hybrid scaffolds for cartilage regeneration. Biomaterials Science, 2020, 8, 4458-4466.	5.4	37
106	Controlled Sub-Nanometer Epitope Spacing in a Three-Dimensional Self-Assembled Peptide Hydrogel. ACS Nano, 2016, 10, 11096-11104.	14.6	36
107	In vivo biomolecular imaging of zebrafish embryos using confocal Raman spectroscopy. Nature Communications, 2020, 11, 6172.	12.8	36
108	Hybrid gelation processes in enzymatically gelled gelatin: impact on nanostructure, macroscopic properties and cellular response. Soft Matter, 2013, 9, 6986-6999.	2.7	35

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109	Modular and Versatile Spatial Functionalization of Tissue Engineering Scaffolds through Fiberâ€Initiated Controlled Radical Polymerization. Advanced Functional Materials, 2015, 25, 5748-5757.	14.9	35
110	Selective etching of injection molded zirconia-toughened alumina: Towards osseointegrated and antibacterial ceramic implants. Acta Biomaterialia, 2016, 46, 308-322.	8.3	35
111	Facet-Dependent Interactions of Islet Amyloid Polypeptide with Gold Nanoparticles: Implications for Fibril Formation and Peptide-Induced Lipid Membrane Disruption. Chemistry of Materials, 2017, 29, 1550-1560.	6.7	35
112	MicroRNA Detection by DNAâ€Mediated Liposome Fusion. ChemBioChem, 2018, 19, 434-438.	2.6	35
113	Tumorâ€Targeting Cholesterolâ€Decorated DNA Nanoflowers for Intracellular Ratiometric Aptasensing. Advanced Materials, 2021, 33, e2007738.	21.0	34
114	Kinetics of RNA and RNA:DNA Hybrid Strand Displacement. ACS Synthetic Biology, 2021, 10, 3066-3073.	3.8	34
115	Pericyte Seeded Dual Peptide Scaffold with Improved Endothelialization for Vascular Graft Tissue Engineering. Advanced Healthcare Materials, 2016, 5, 3046-3055.	7.6	33
116	Enzyme Prodrug Therapy Engineered into Electrospun Fibers with Embedded Liposomes for Controlled, Localized Synthesis of Therapeutics. Advanced Healthcare Materials, 2017, 6, 1700385.	7.6	33
117	Layer-by-Layer Self-Assembly of Polymer Films and Capsules through Coiled-Coil Peptides. Chemistry of Materials, 2015, 27, 5820-5824.	6.7	32
118	Plasmonic Chirality Imprinting on Nucleobaseâ€Displaying Supramolecular Nanohelices by Metalâ€“Nucleobase Recognition. Angewandte Chemie - International Edition, 2017, 56, 2361-2365.	13.8	32
119	An Electroactive Oligoâ€EDOT Platform for Neural Tissue Engineering. Advanced Functional Materials, 2020, 30, 2003710.	14.9	32
120	Advances in high-resolution microscopy for the study of intracellular interactions with biomaterials. Biomaterials, 2020, 226, 119406.	11.4	30
121	Noble Metal Nanoparticle Biosensors: From Fundamental Studies toward Point-of-Care Diagnostics. Accounts of Chemical Research, 2022, 55, 593-604.	15.6	30
122	c-Kit+ progenitors generate vascular cells for tissue-engineered grafts through modulation of the Wnt/Klf4 pathway. Biomaterials, 2015, 60, 53-61.	11.4	29
123	Enzyme Prodrug Therapy Achieves Site-Specific, Personalized Physiological Responses to the Locally Produced Nitric Oxide. ACS Applied Materials & Interfaces, 2018, 10, 10741-10751.	8.0	29
124	Controlled Dendrimersome Nanoreactor System for Localized Hypochlorite-Induced Killing of Bacteria. ACS Nano, 2020, 14, 17333-17353.	14.6	29
125	Design and clinical application of injectable hydrogels for musculoskeletal therapy. Bioengineering and Translational Medicine, 2022, 7, .	7.1	29
126	A structural and physical study of solâ€“gel methacrylateâ€“silica hybrids: intermolecular spacing dictates the mechanical properties. Physical Chemistry Chemical Physics, 2015, 17, 29124-29133.	2.8	27

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127	Label-Free Detection of Tumor Angiogenesis Biomarker Angiopoietin 2 Using Bloch Surface Waves on One Dimensional Photonic Crystals. Journal of Lightwave Technology, 2015, 33, 3385-3393.	4.6	26
128	Electron Hopping Across Heminâ€Doped Serum Albumin Mats on Centimeterâ€Length Scales. Advanced Materials, 2017, 29, 1700810.	21.0	26
129	Emerging Technologies for Tissue Engineering: From Gene Editing to Personalized Medicine. Tissue Engineering - Part A, 2019, 25, 688-692.	3.1	26
130	Tailoring Cellular Uptake of Conjugated Polymer Nanoparticles Using Modular Amphiphilic Peptide Capping Ligands. Chemistry of Materials, 2015, 27, 6879-6889.	6.7	25
131	Quantitative multiâ€image analysis for biomedical Raman spectroscopic imaging. Journal of Biophotonics, 2016, 9, 542-550.	2.3	25
132	Multimodal Hydrogel-Based Platform To Deliver and Monitor Cardiac Progenitor/Stem Cell Engraftment. ACS Central Science, 2017, 3, 338-348.	11.3	25
133	Bloch surface wave label-free and fluorescence platform for the detection of VEGF biomarker in biological matrices. Sensors and Actuators B: Chemical, 2018, 255, 2143-2150.	7.8	25
134	A Dual Wavelength Polymerization and Bioconjugation Strategy for High Throughput Synthesis of Multivalent Ligands. Journal of the American Chemical Society, 2019, 141, 19823-19830.	13.7	25
135	Key elements for nourishing the translational research environment. Science Translational Medicine, 2015, 7, 282cm2.	12.4	24
136	Biodegradable inorganic-organic hybrids of methacrylate star polymers for bone regeneration. Acta Biomaterialia, 2017, 54, 411-418.	8.3	24
137	Multifunctional hyaluronate â€“ nanoparticle hybrid systems for diagnostic, therapeutic and theranostic applications. Journal of Controlled Release, 2019, 303, 55-66.	9.9	24
138	In vivo biocompatibility and immunogenicity of metalâ€“phenolic gelation. Chemical Science, 2019, 10, 10179-10194.	7.4	24
139	Surfactant Protein B Promotes Cytosolic SiRNA Delivery by Adopting a Virus-like Mechanism of Action. ACS Nano, 2021, 15, 8095-8109.	14.6	24
140	Angular Approach Scanning Ion Conductance Microscopy. Biophysical Journal, 2016, 110, 2252-2265.	0.5	23
141	Culturing functional pancreatic islets on Î±5-laminins and curative transplantation to diabetic mice. Matrix Biology, 2018, 70, 5-19.	3.6	23
142	Modeling the transport of nuclear proteins along single skeletal muscle cells. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 2978-2986.	7.1	23
143	Nanoscale Molecular Quantification of Stem Cellâ€“Hydrogel Interactions. ACS Nano, 2020, 14, 17321-17332.	14.6	22
144	3D printed silica-gelatin hybrid scaffolds of specific channel sizes promote collagen Type II, Sox9 and Aggrecan production from chondrocytes. Materials Science and Engineering C, 2021, 123, 111964.	7.3	22

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145	Substrate Stiffness-Driven Membrane Tension Modulates Vesicular Trafficking via Caveolin-1. ACS Nano, 2022, 16, 4322-4337.	14.6	22
146	Harnessing the Versatility of Bacterial Collagen to Improve the Chondrogenic Potential of Porous Collagen Scaffolds. Advanced Healthcare Materials, 2016, 5, 1656-1666.	7.6	21
147	Point of care testing of phospholipase A2 group IIA for serological diagnosis of rheumatoid arthritis. Nanoscale, 2016, 8, 4482-4485.	5.6	21
148	Synthesis of Hetero-bifunctional, End-Capped Oligo-EDOT Derivatives. CheM, 2017, 2, 125-138.	11.7	21
149	Hybrids of Silica/Poly(caprolactone coglycidoxypropyl trimethoxysilane) as Biomaterials. Chemistry of Materials, 2018, 30, 3743-3751.	6.7	21
150	Activatable cellâ€“biomaterial interfacing with photo-caged peptides. Chemical Science, 2019, 10, 1158-1167.	7.4	21
151	Biomedical hydrogels. , 2005, , 107-115.		19
152	Lactide polymerization coâ€initiated by carbohydrate esters and pyranoses. Journal of Polymer Science Part A, 2008, 46, 4352-4362.	2.3	19
153	Tunable Microgelâ€Templated Porogel (MTP) Bioink for 3D Bioprinting Applications. Advanced Healthcare Materials, 2022, 11, e2200027.	7.6	19
154	In vitro and in vivo investigation of a zonal microstructured scaffold for osteochondral defect repair. Biomaterials, 2022, 286, 121548.	11.4	19
155	Fate of Liposomes in the Presence of Phospholipase C and D: From Atomic to Supramolecular Lipid Arrangement. ACS Central Science, 2018, 4, 1023-1030.	11.3	18
156	Detection of microRNA biomarkers via inhibition of DNA-mediated liposome fusion. Nanoscale Advances, 2019, 1, 532-536.	4.6	18
157	Molecular imaging of extracellular vesicles in vitro via Raman metabolic labelling. Journal of Materials Chemistry B, 2020, 8, 4447-4459.	5.8	18
158	Dynamic pH responsivity of triazole-based self-immolative linkers. Chemical Science, 2020, 11, 3713-3718.	7.4	18
159	Synthesis and self-assembly of temperature-responsive copolymers based on N-vinylpyrrolidone and triethylene glycol methacrylate. Polymer Chemistry, 2015, 6, 4116-4122.	3.9	17
160	Exploring the binding sites and proton diffusion on insulin amyloid fibril surfaces by naphthol-based photoacid fluorescence and molecular simulations. Scientific Reports, 2017, 7, 6245.	3.3	17
161	Rolling Circle Transcription-Amplified Hierarchically Structured Organicâ€“Inorganic Hybrid RNA Flowers for Enzyme Immobilization. ACS Applied Materials & Interfaces, 2019, 11, 22932-22940.	8.0	17
162	Tissue Engineering Cartilage with Deep Zone Cytoarchitecture by Highâ€Resolution Acoustic Cell Patterning. Advanced Healthcare Materials, 2022, 11, .	7.6	17

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163	On the dynamic behaviour of the forced dissociation of ligandâ€“receptor pairs. Perkin Transactions II RSC, 2000, , 5-8.	1.1	16
164	Designing dapsone polymer conjugates for controlled drug delivery. Acta Biomaterialia, 2015, 27, 32-41.	8.3	16
165	Immunogold FIBâ€SEM: Combining Volumetric Ultrastructure Visualization with 3D Biomolecular Analysis to Dissect Cellâ€“Environment Interactions. Advanced Materials, 2019, 31, 1900488.	21.0	16
166	Microwave Dielectric Sensing of Free-Flowing, Single, Living Cells in Aqueous Suspension. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2020, 4, 97-108.	3.4	16
167	Functional Adaptation of the Calcaneus in Historical Foot Binding. Journal of Bone and Mineral Research, 2017, 32, 1915-1925.	2.8	15
168	Versailles project on advanced materials and standards (VAMAS) interlaboratory study on measuring the number concentration of colloidal gold nanoparticles. Nanoscale, 2022, 14, 4690-4704.	5.6	15
169	Designing Fluorescent Peptide Sensors with Dual Specificity for the Detection of HIV-1 Protease. Chemistry of Materials, 2015, 27, 7187-7195.	6.7	14
170	Improving the image of nanoparticles. Nature, 2016, 539, 505-506.	27.8	14
171	Synthesis of Phospho-Amino Acid Analogues as Tissue Adhesive Cement Additives. ACS Central Science, 2020, 6, 226-231.	11.3	14
172	Presentation of antigen on extracellular vesicles using transmembrane domains from viral glycoproteins for enhanced immunogenicity. Journal of Extracellular Vesicles, 2022, 11, e12199.	12.2	14
173	Tailoring of mechanical properties of derivatized natural polyamino acids through esterification and tensile deformation. RSC Advances, 2014, 4, 2096-2102.	3.6	13
174	Distinct Bimodal Roles of Aromatic Molecules in Controlling Gold Nanorod Growth for Biosensing. Advanced Functional Materials, 2017, 27, 1700523.	14.9	13
175	Latent Transforming Growth Factor-beta1 Functionalised Electrospun Scaffolds Promote Human Cartilage Differentiation: Towards an Engineered Cartilage Construct. Archives of Plastic Surgery, 2013, 40, 676-686.	0.9	13
176	Bio-inspired materials for biosensing and tissue engineering. Polymer International, 2012, 61, 680-685.	3.1	12
177	Probing amylin fibrillation at an early stage via a tetracysteine-recognising fluorophore. Talanta, 2017, 173, 44-50.	5.5	12
178	Cubosomen: die nÃchste Generation intelligenter Lipidâ€Nanopartikel?. Angewandte Chemie, 2019, 131, 2984-3006.	2.0	11
179	Gold Nanocluster Extracellular Vesicle Supraparticles: Self-Assembled Nanostructures for Three-Dimensional Uptake Visualization. Langmuir, 2020, 36, 3912-3923.	3.5	11
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