Andrea J O'connor

List of Publications by Year
in descending order

100 papers	4,198 citations	101543 36 h-index	123424 61 g-index
102 all docs	102 docs citations	102 times ranked	6160 citing authors

#	Article	IF	Citations
1	The Challenge of Cartilage Integration: Understanding a Major Barrier to Chondral Repair. Tissue Engineering - Part B: Reviews, 2022, 28, 114-128.	4.8	25
2	Improvement of Mesenchymal Stromal Cell Proliferation and Differentiation via Decellularized Extracellular Matrix on Substrates With a Range of Surface Chemistries. Frontiers in Medical Technology, 2022, 4, 834123.	2.5	2
3	Biomaterials functionalized with nanoclusters of integrinâ€•and syndecanâ€binding ligands improve cell adhesion and mechanosensing under shear flow conditions. Journal of Biomedical Materials Research - Part A, 2021, 109, 313-325.	4.0	4
4	Effects of External Stimulators on Engineered Skeletal Muscle Tissue Maturation. Advanced Materials Interfaces, 2021, 8, 2001167.	3.7	40
5	Amphiphilic Core Cross-Linked Star Polymers for the Delivery of Hydrophilic Drugs from Hydrophobic Matrices. Biomacromolecules, 2021, 22, 2554-2562.	5.4	4
6	Microbial Transglutaminase Improves ex vivo Adhesion of Gelatin Methacryloyl Hydrogels to Human Cartilage. Frontiers in Medical Technology, 2021, 3, 773673.	2.5	10
7	Antimicrobial nanoparticle coatings for medical implants: Design challenges and prospects. Biointerphases, 2020, 15, 060801.	1.6	13
8	Personalized, Mechanically Strong, and Biodegradable Coronary Artery Stents via Melt Electrowriting. ACS Macro Letters, 2020, 9, 1732-1739.	4.8	27
9	Multifunctional Antimicrobial Polypeptide-Selenium Nanoparticles Combat Drug-Resistant Bacteria. ACS Applied Materials & Interfaces, 2020, 12, 55696-55709.	8.0	40
10	Enhanced Antibacterial Activity of Se Nanoparticles Upon Coating with Recombinant Spider Silk Protein eADF4(Îº16) . International Journal of Nanomedicine, 2020, Volume 15, 4275-4288.	6.7	31
11	Spider-silk inspired polymeric networks by harnessing the mechanical potential of Î²-sheets through network guided assembly. Nature Communications, 2020, 11, 1630.	12.8	49
12	Continuous production of hierarchically porous silica beads using co-axial flow. Microporous and Mesoporous Materials, 2019, 288, 109612.	4.4	0
13	Development of Macroporous Chitosan Scaffolds for Eyelid Tarsus Tissue Engineering. Tissue Engineering and Regenerative Medicine, 2019, 16, 595-604.	3.7	14
14	Engineering highly effective antimicrobial selenium nanoparticles through control of particle size. Nanoscale, 2019, 11, 14937-14951.	5.6	138
15	Selenium nanoparticles as anti-infective implant coatings for trauma orthopedics against methicillin-resistant Staphylococcus aureus and epidermidis: in vitro and in vivo assessment . International Journal of Nanomedicine, 2019, Volume 14, 4613-4624.	6.7	67
16	Biocompatible and Biodegradable Magnesium Oxide Nanoparticles with In Vitro Photostable Near-Infrared Emission: Short-Term Fluorescent Markers. Nanomaterials, 2019, 9, 1360.	4.1	25
17	Evaluation of sterilisation methods for bio-ink components: gelatin, gelatin methacryloyl, hyaluronic acid and hyaluronic acid methacryloyl. Biofabrication, 2019, 11, 035003.	7.1	44
18	Remote Control in Formation of 3D Multicellular Assemblies Using Magnetic Forces. ACS Biomaterials Science and Engineering, 2019, 5, 2532-2542.	5.2	29

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19	The matrix: building more bioactive extracellular matrices via tuning of substrate stiffness. Cytotherapy, 2019, 21, e10-e11.	0.7	0
20	Improved <i>ex vivo</i> expansion of mesenchymal stem cells on solubilized acellular fetal membranes. Journal of Biomedical Materials Research - Part A, 2019, 107, 232-242.	4.0	11
21	Synthesis of ultra small nanoparticles (<â€‰50Ânm) of mesoporous MCM-48 for bio-adsorption. Journal of Porous Materials, 2019, 26, 839-846.	2.6	11
22	Transferable Matrixes Produced from Decellularized Extracellular Matrix Promote Proliferation and Osteogenic Differentiation of Mesenchymal Stem Cells and Facilitate Scale-Up. ACS Biomaterials Science and Engineering, 2018, 4, 1760-1769.	5.2	20
23	On-Demand Cascade Release of Hydrophobic Chemotherapeutics from a Multicomponent Hydrogel System. ACS Biomaterials Science and Engineering, 2018, 4, 1696-1707.	5.2	8
24	Integrin Clustering Matters: A Review of Biomaterials Functionalized with Multivalent Integrinâ€Binding Ligands to Improve Cell Adhesion, Migration, Differentiation, Angiogenesis, and Biomedical Device Integration. Advanced Healthcare Materials, 2018, 7, e1701324.	7.6	81
25	Comparative study of novel in situ decorated porous chitosan-selenium scaffolds and porous chitosan-silver scaffolds towards antimicrobial wound dressing application. Journal of Colloid and Interface Science, 2018, 515, 78-91.	9.4	71
26	Interaction of preservation methods and radiation sterilization in human skin processing, with particular insight on the impact of the final water content and collagen disruption. Part I: process validation, water activity and collagen changes in tissues cryopreserved or processed using 50, 85 or 98% glycerol solutions. Cell and Tissue Banking, 2018, 19, 215-227.	1.1	5
27	Beyond RGD; nanoclusters of syndecan- and integrin-binding ligands synergistically enhance cell/material interactions. Biomaterials, 2018, 187, 81-92.	11.4	22
28	Multivalent Ligands: Integrin Clustering Matters: A Review of Biomaterials Functionalized with Multivalent Integrin-Binding Ligands to Improve Cell Adhesion, Migration, Differentiation,		

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37	Decellularized extracellular matrices produced from immortal cell lines derived from different parts of the placenta support primary mesenchymal stem cell expansion. PLoS ONE, 2017, 12, e0171488.	2.5	40
38	Creation of a Large Adipose Tissue Construct in Humans Using a Tissue-engineering Chamber: A Step Forward in the Clinical Application of Soft Tissue Engineering. EBioMedicine, 2016, 6, 238-245.	6.1	59
39	An enzyme-responsive controlled release system based on a dual-functional peptide. Chemical Communications, 2016, 52, 5112-5115.	4.1	15
40	Low cytotoxic trace element selenium nanoparticles and their differential antimicrobial properties against<i>S</i>.<i>aureus</i>and<i>E. coli</i>. Nanotechnology, 2016, 27, 045101.	2.6	98
41	Intrinsic fluorescence of selenium nanoparticles for cellular imaging applications. Nanoscale, 2016, 8, 3376-3385.	5.6	39
42	Porous <scp>PLGA</scp> microspheres tailored for dual delivery of biomolecules via layerâ€byâ€layer assembly. Journal of Biomedical Materials Research - Part A, 2015, 103, 1849-1863.	4.0	25
43	Amphiphilic core cross-linked star polymers as water-soluble, biocompatible and biodegradable unimolecular carriers for hydrophobic drugs. Polymer Chemistry, 2015, 6, 6475-6487.	3.9	23
44	The Biomechanics of eyelid tarsus tissue. Journal of Biomechanics, 2015, 48, 3455-3459.	2.1	16
45	Formation and characterisation of a modifiable soft macro-porous hyaluronic acid cryogel platform. Journal of Biomaterials Science, Polymer Edition, 2015, 26, 881-897.	3.5	12
46	Physicochemical and cytotoxicity analysis of glycerol monoolein-based nanoparticles. RSC Advances, 2015, 5, 26543-26549.	3.6	19
47	Cubosomes and other potential ocular drug delivery vehicles for macromolecular therapeutics. Expert Opinion on Drug Delivery, 2015, 12, 1513-1526.	5.0	25
48	In situ formation of antimicrobial silver nanoparticles and the impregnation of hydrophobic polycaprolactone matrix for antimicrobial medical device applications. Materials Science and Engineering C, 2015, 47, 63-69.	7.3	55
49	A Simple, Scalable Process for the Production of Porous Polymer Microspheres by Inkâ€Jetting Combined with Thermally Induced Phase Separation. Particle and Particle Systems Characterization, 2014, 31, 685-698.	2.3	22
50	Development of functionalized mesoporous silica for adsorption and separation of dairy proteins. Chemical Engineering Journal, 2014, 235, 244-251.	12.7	38
51	Simple one-step method to produce titanium dioxideâ€"polycaprolactone composite films with increased hydrophilicity, enhanced cellular interaction and improved degradation for skin tissue engineering. Journal of Materials Science, 2014, 49, 6373-6382.	3.7	7
52	Size and Phase Control of Cubic Lyotropic Liquid Crystal Nanoparticles. Journal of Physical Chemistry B, 2014, 118, 7430-7439.	2.6	34
53	Porous Microspheres: A Simple, Scalable Process for the Production of Porous Polymer Microspheres by Ink-Jetting Combined with Thermally Induced Phase Separation (Part. Part. Syst. Charact. 6/2014). Particle and Particle Systems Characterization, 2014, 31, 614-614.	2.3	0
54	To bind or not to bind. Nature, 2013, 502, 313-314.	27.8	2

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55	Cryogels for biomedical applications. Journal of Materials Chemistry B, 2013, 1, 2682.	5.8	236
56	Use of a Short Peptide as a Building Block in the Layer-by-Layer Assembly of Biomolecules on Polymeric Surfaces. Journal of Physical Chemistry B, 2012, 116, 1120-1133.	2.6	13
57	The co-micelle/emulsion templating route to tailor nano-engineered hierarchically porous macrospheres. Microporous and Mesoporous Materials, 2012, 149, 101-105.	4.4	14
58	Coating and release of an antiâ€inflammatory hormone from PLGA microspheres for tissue engineering. Journal of Biomedical Materials Research - Part A, 2012, 100A, 507-517.	4.0	16
59	Designing <I>In</I> <I>Vivo</I> Bioreactors for Soft Tissue Engineering. Journal of Biomaterials and Tissue Engineering, 2012, 2, 1-13.	0.1	11
60	Multilayered Microspheres for the Controlled Release of Growth Factors in Tissue Engineering. Biomacromolecules, 2011, 12, 1494-1503.	5.4	48
61	Long-Term Stability of Adipose Tissue Generated from a Vascularized Pedicled Fat Flap inside a Chamber. Plastic and Reconstructive Surgery, 2011, 127, 2283-2292.	1.4	78
62	The influence of dairy salts on nanofiltration membrane charge. Journal of Food Engineering, 2011, 107, 164-172.	5.2	25
63	Rejection of dairy salts by a nanofiltration membrane. Separation and Purification Technology, 2011, 79, 92-102.	7.9	22
64	A comparison between ceramic and polymeric membrane systems for casein concentrate manufacture. International Journal of Dairy Technology, 2010, 63, 284-289.	2.8	31
65	A theoretical and experimental analysis of calcium speciation and precipitation in dairy ultrafiltration permeate. International Dairy Journal, 2010, 20, 694-706.	3.0	15
66	Fouling of NF membranes by dairy ultrafiltration permeates. Journal of Membrane Science, 2009, 330, 117-126.	8.2	61
67	Cell migration and proliferation during monolayer formation and wound healing. Chemical Engineering Science, 2009, 64, 247-253.	3.8	105
68	Analysis of separation and fouling behaviour during nanofiltration of dairy ultrafiltration permeates. Desalination, 2009, 236, 23-29.	8.2	22
69	Micropore Characterization of Mesocellular Foam and Hybrid Organic Functional Mesocellular Foam Materials. Journal of Physical Chemistry C, 2009, 113, 21283-21292.	3.1	7
70	Microfiltration of skim milk using polymeric membranes for casein concentrate manufacture. Separation and Purification Technology, 2008, 60, 237-244.	7.9	86
71	Adipose differentiation of bone marrow-derived mesenchymal stem cells using Pluronic F-127 hydrogel in vitro. Biomaterials, 2008, 29, 573-579.	11.4	102
72	Hierarchical mesoporous silica materials for separation of functional food ingredients â€" A review. Innovative Food Science and Emerging Technologies, 2008, 9, 243-248.	5.6	76

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73	Innovative use of silvichemical biomass and its derivatives for heavy metal sorption from wastewater. International Journal of Environment and Pollution, 2008, 34, 427.	0.2	11
74	Adipose Tissue Engineering Based on the Controlled Release of Fibroblast Growth Factor-2 in a Collagen Matrix. Tissue Engineering, 2006, 12, 3035-3043.	4.6	96
75	Systematic selection of solvents for the fabrication of 3D combined macro- and microporous polymeric scaffolds for soft tissue engineering. Journal of Biomaterials Science, Polymer Edition, 2006, 17, 369-402.	3.5	41
76	A Blank Slate? Layer-by-Layer Deposition of Hyaluronic Acid and Chitosan onto Various Surfaces. Biomacromolecules, 2006, 7, 1610-1622.	5.4	137
77	Probing the microporous nature of hierarchically templated mesoporous silica via positron annihilation spectroscopy. Progress in Solid State Chemistry, 2006, 34, 67-75.	7.2	17
78	Fouling behaviour during the nanofiltration of dairy ultrafiltration permeate. Desalination, 2006, 199, 239-241.	8.2	22
79	Microfiltration of skim milk for casein concentrate manufacture. Desalination, 2006, 200, 305-306.	8.2	7
80	Amino acid adsorption onto mesoporous silica molecular sieves. Separation and Purification Technology, 2006, 48, 197-201.	7.9	81
81	The influence of architecture on degradation and tissue ingrowth into three-dimensional poly(lactic-co-glycolic acid) scaffolds in vitro and in vivo. Biomaterials, 2006, 27, 2854-2864.	11.4	130
82	Modelling oxygen diffusion and cell growth in a porous, vascularising scaffold for soft tissue engineering applications. Chemical Engineering Science, 2005, 60, 4924-4934.	3.8	74
83	Postsynthesis Vapor-Phase Functionalization of MCM-48 with Hexamethyldisilazane and 3-Aminopropyldimethylethoxylsilane for Bioseparation Applications. Journal of Physical Chemistry B, 2005, 109, 16263-16271.	2.6	16
84	Production and Surface Modification of Polylactide-Based Polymeric Scaffolds for Soft-Tissue Engineering. , 2004, 238, 87-112.		28
85	Architecture control of three-dimensional polymeric scaffolds for soft tissue engineering. I. Establishment and validation of numerical models. Journal of Biomedical Materials Research Part B, 2004, 71A, 81-89.	3.1	21
86	Controllable Surface Modification of Poly(lactic-co-glycolic acid) (PLGA) by Hydrolysis or Aminolysis I:Â Physical, Chemical, and Theoretical Aspects. Biomacromolecules, 2004, 5, 463-473.	5.4	373
87	BIOADSORPTION AND SEPARATION WITH NANOPOROUS MATERIALS. Series on Chemical Engineering, 2004, , 812-848.	0.2	2
88	Comparative Study of Silylation Methods to Improve the Stability of Silicate MCM-41 in Aqueous Solutions. Chemistry of Materials, 2003, 15, 619-624.	6.7	55
89	Adsorption of lysozyme and trypsin onto mesoporous silica materials. Studies in Surface Science and Catalysis, 2003, , 775-778.	1.5	13
90	Increasing the Volume of Vascularized Tissue Formation in Engineered Constructs: An Experimental Study in Rats. Plastic and Reconstructive Surgery, 2003, 111, 1186-1192.	1.4	80

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91	Surface coating of MCM-48 via a gas phase reaction with hexamethyldisilazane (HMDS). Studies in Surface Science and Catalysis, 2003, , 493-496.	1.5	0
92	Primary Study on Capturing Behavior for Transition Metal Ions on Mesoporous Silicate (MCM-41). Journal of Ion Exchange, 2003, 14, 173-176.	0.3	8
93	Improving the Hydro-stability of MCM-41 by Post-Synthesis Treatment and Hexamethyldisilazane Coating. Studies in Surface Science and Catalysis, 2002, , 221-228.	1.5	6
94	Hydrophobic Domains in Thermogelling Solutions of Polyether-Modified Poly(Acrylic Acid). Langmuir, 2002, 18, 3005-3013.	3.5	19
95	Solute Diffusion in Associative Copolymer Solutions. Langmuir, 2001, 17, 3538-3544.	3.5	15
96	Separation of biological molecules using mesoporous molecular sieves. Microporous and Mesoporous Materials, 2001, 44-45, 769-774.	4.4	132
97	Effect of rheology on coalescence rates and emulsion stability. AICHE Journal, 1999, 45, 1182-1190.	3.6	59
98	Dynamics of Micelleâˆ’Vesicle Transitions in Aqueous Anionic/Cationic Surfactant Mixtures. Langmuir, 1997, 13, 6931-6940.	3.5	113
99	Electrophoretic mobilities of proteins and protein mixtures in porous membranes. Chemical Engineering Science, 1996, 51, 3459-3477.	3.8	27
100	Facile <i>In Situ</i> Synthesis and Impregnation of Silver Nanoparticles in a Hydrophobic Polymer for Antimicrobial Biomaterials. Advances in Science and Technology, 0, , .	0.2	0