Jie Song

List of Publications by Year in descending order

64 papers	3,437 citations	159525 30 h-index	138417 58 g-index
65 all docs	65 docs citations	65 times ranked	5253 citing authors

#	Article	IF	Citations
1	(Î±-NaYbF₄:Tm³⁺)/CaF₂ Core/Shell Nanoparticles with Efficient Near-Infrared to Near-Infrared Upconversion for High-Contrast Deep Tissue Bioimaging. ACS Nano, 2012, 6, 8280-8287.	7.3	647
2	A New Approach to Mineralization of Biocompatible Hydrogel Scaffolds:Â An Efficient Process toward 3-Dimensional Bonelike Composites. Journal of the American Chemical Society, 2003, 125, 1236-1243.	6.6	245
3	Mineralization of Synthetic Polymer Scaffolds:Â A Bottom-Up Approach for the Development of Artificial Bone. Journal of the American Chemical Society, 2005, 127, 3366-3372.	6.6	203
4	Modulating Artificial Membrane Morphology:Â pH-Induced Chromatic Transition and Nanostructural Transformation of a Bolaamphiphilic Conjugated Polymer from Blue Helical Ribbons to Red Nanofibers. Journal of the American Chemical Society, 2001, 123, 3205-3213.	6.6	164
5	Biodegradable PEG-Based Amphiphilic Block Copolymers for Tissue Engineering Applications. ACS Biomaterials Science and Engineering, 2015, 1, 463-480.	2.6	139
6	High performance shape memory polymer networks based on rigid nanoparticle cores. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 7652-7657.	3.3	122
7	Functional Self-Assembling Bolaamphiphilic Polydiacetylenes as Colorimetric Sensor Scaffolds. Journal of the American Chemical Society, 2004, 126, 8459-8465.	6.6	104
8	Cytocompatible Poly(ethylene glycol)â€coâ€polycarbonate Hydrogels Crossâ€Linked by Copperâ€Free, Strainâ€Promoted Click Chemistry. Chemistry - an Asian Journal, 2011, 6, 2730-2737.	1.7	87
9	Renaissance of aliphatic polycarbonates: New techniques and biomedical applications. Journal of Applied Polymer Science, 2014, 131, .	1.3	87
10	In vivo tissue responses to thermal-responsive shape memory polymer nanocomposites. Biomaterials, 2011, 32, 985-991.	5.7	86
11	A Versatile Monomer for Preparing Well-Defined Functional Polycarbonates and Poly(esterâ^carbonates). Macromolecules, 2011, 44, 2660-2667.	2.2	84
12	Stem Cell Labeling using Polyethylenimine Conjugated (Î±-NaYbF₄:Tm³⁺)/CaF₂ Upconversion Nanoparticles. Theranostics, 2013, 3, 249-257.	4.6	82
13	Evolutionary Screening of Collagen-like Peptides That Nucleate Hydroxyapatite Crystals. Langmuir, 2011, 27, 7620-7628.	1.6	75
14	Title is missing!. Biomedical Microdevices, 2002, 4, 213-221.	1.4	73
15	Age-dependent Changes in the Articular Cartilage and Subchondral Bone of C57BL/6 Mice after Surgical Destabilization of Medial Meniscus. Scientific Reports, 2017, 7, 42294.	1.6	60
16	An amphiphilic degradable polymer/hydroxyapatite composite with enhanced handling characteristics promotes osteogenic gene expression in bone marrow stromal cells. Acta Biomaterialia, 2013, 9, 8354-8364.	4.1	59
17	Elastomeric highâ€mineral content hydrogelâ€hydroxyapatite composites for orthopedic applications. Journal of Biomedical Materials Research - Part A, 2009, 89A, 1098-1107.	2.1	55
18	Modification of Ti6Al4V Substrates with Well-defined Zwitterionic Polysulfobetaine Brushes for Improved Surface Mineralization. ACS Applied Materials & Interfaces, 2014, 6, 7141-7152.	4.0	53

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19	Templated Repair of Long Bone Defects in Rats with Bioactive Spiral-Wrapped Electrospun Amphiphilic Polymer/Hydroxyapatite Scaffolds. ACS Applied Materials & Interfaces, 2015, 7, 4890-4901.	4.0	53
20	Bioorthogonally Cross-Linked Hydrogel Network with Precisely Controlled Disintegration Time over a Broad Range. Journal of the American Chemical Society, 2014, 136, 4105-4108.	6.6	48
21	Multifunctional scaffolds for facile implantation, spontaneous fixation, and accelerated long bone regeneration in rodents. Science Translational Medicine, 2019, 11, .	5.8	41
22	Rapid Prototyping Amphiphilic Polymer/Hydroxyapatite Composite Scaffolds with Hydration-Induced Self-Fixation Behavior. Tissue Engineering - Part C: Methods, 2015, 21, 229-241.	1.1	40
23	Chemically modified cellulose fibrous meshes for use as tissue engineering scaffolds. Bioorganic and Medicinal Chemistry Letters, 2011, 21, 5067-5070.	1.0	39
24	Preparation of pHEMAâ€“CP composites with high interfacial adhesion via template-driven mineralization. Journal of the European Ceramic Society, 2003, 23, 2905-2919.	2.8	38
25	Sulfobetaine as a zwitterionic mediator for 3D hydroxyapatite mineralization. Biomaterials, 2013, 34, 2442-2454.	5.7	36
26	Facile Stem Cell Delivery to Bone Grafts Enabled by Smart Shape Recovery and Stiffening of Degradable Synthetic Periosteal Membranes. Advanced Functional Materials, 2017, 27, 1604784.	7.8	35
27	Micrococcal-Nuclease-Triggered On-Demand Release of Vancomycin from Intramedullary Implant Coating Eradicates Staphylococcus aureus Infection in Mouse Femoral Canals. ACS Central Science, 2019, 5, 1929-1936.	5.3	35
28	Anti-Periprosthetic Infection Strategies: From Implant Surface Topographical Engineering to Smart Drug-Releasing Coatings. ACS Applied Materials & Interfaces, 2021, 13, 20921-20937.	4.0	35
29	Shapeâ€Memory Performance of Thermoplastic Amphiphilic Triblock Copolymer Poly(<scp>d,l</scp>â€lactic acidâ€coâ€ethylene glycolâ€coâ€<scp>d,l</scp>â€lactic acid) (PELA)/Hydroxyapatite Composites. Macromolecular Chemistry and Physics, 2014, 215, 2482-2490.	1.1	34
30	Modulating Viscoelasticity, Stiffness, and Degradation of Synthetic Cellular Niches via Stoichiometric Tuning of Covalent versus Dynamic Noncovalent Cross-Linking. ACS Central Science, 2018, 4, 971-981.	5.3	33
31	Flow accelerates adhesion between functional polyethylene and polyurethane. AICHE Journal, 2011, 57, 3496-3506.	1.8	31
32	Shape Recovery with Concomitant Mechanical Strengthening of Amphiphilic Shape Memory Polymers in Warm Water. ACS Applied Materials & Interfaces, 2017, 9, 4450-4456.	4.0	31
33	Elastomeric Osteoconductive Synthetic Scaffolds with Acquired Osteoinductivity Expedite the Repair of Critical Femoral Defects in Rats. Tissue Engineering - Part A, 2011, 17, 503-511.	1.6	30
34	Functional lipid microstructures immobilized on a gold electrode for voltammetric biosensing of cholera toxin. Analyst, The, 2004, 129, 309.	1.7	29
35	Sustained and localized in vitro release of BMPâ€2/7, RANKL, and tetracycline from Flexbone, an elastomeric osteoconductive bone substitute. Journal of Orthopaedic Research, 2009, 27, 1306-1311.	1.2	29
36	Polyethylene/polyurethane blends for improved paint adhesion. Progress in Organic Coatings, 2011, 72, 492-497.	1.9	27

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37	Significant Suppression of Staphylococcus aureus Colonization on Intramedullary Ti6Al4V Implants Surface-Grafted with Vancomycin-Bearing Polymer Brushes. ACS Applied Materials & Interfaces, 2019, 11, 28641-28647.	4.0	27
38	Polylactic acid (PLA)-based shape-memory materials for biomedical applications. , 2015, , 197-217.		25
39	Homochiral 4-hydroxy-5-hexenoic acids and their derivatives and homologues from carbohydrates. Tetrahedron: Asymmetry, 2001, 12, 387-391.	1.8	24
40	Morphological manipulation of bolaamphiphilic polydiacetylene assemblies by controlled lipid doping. Chemistry and Physics of Lipids, 2002, 114, 203-214.	1.5	23
41	Impaired osteogenesis of T1DM bone marrow-derived stromal cells and periosteum-derived cells and their differential in-vitro responses to growth factor rescue. Stem Cell Research and Therapy, 2017, 8, 65.	2.4	23
42	3Dâ€Printed Biomaterials for Guided Tissue Regeneration. Small Methods, 2018, 2, 1700306.	4.6	23
43	Surface mineralization of Ti6Al4V substrates with calcium apatites for the retention and local delivery of recombinant human bone morphogenetic protein-2. Acta Biomaterialia, 2011, 7, 3488-3495.	4.1	21
44	Three-dimensionally presented anti-fouling zwitterionic motifs sequester and enable high-efficiency delivery of therapeutic proteins. Acta Biomaterialia, 2014, 10, 4296-4303.	4.1	20
45	Synthesis, Conformational Analysis, and Phase Characterization of a Versatile Self-Assembling Monoglucosyl Diacylglycerol Analog. Journal of the American Chemical Society, 1999, 121, 1851-1861.	6.6	19
46	Nanomechanical analysis of bone tissue engineering scaffolds. Journal of Biomedical Materials Research - Part A, 2007, 81A, 611-623.	2.1	19
47	Effects of poly(2-hydroxyethyl methacrylate) and poly(vinyl-pyrrolidone) hydrogel implants on myopic and normal chick sclera. Experimental Eye Research, 2009, 88, 445-457.	1.2	19
48	Skeletal Characterization of Smurf2-Deficient Mice and In Vitro Analysis of Smurf2-Deficient Chondrocytes. PLoS ONE, 2016, 11, e0148088.	1.1	18
49	pHEMA-nHA Encapsulation and Delivery of Vancomycin and rhBMP-2 Enhances its Role as a Bone Graft Substitute. Clinical Orthopaedics and Related Research, 2013, 471, 2540-2547.	0.7	14
50	Vancomycin-bearing Synthetic Bone Graft Delivers rhBMP-2 and Promotes Healing of Critical Rat Femoral Segmental Defects. Clinical Orthopaedics and Related Research, 2014, 472, 4015-4023.	0.7	14
51	A comparative study of zwitterionic ligands-mediated mineralization and the potential of mineralized zwitterionic matrices for bone tissue engineering. Journal of Materials Chemistry B, 2014, 2, 7524-7533.	2.9	14
52	Modulating Mechanical and Shape-Memory Properties while Mitigating Degradation-Induced Inflammation of Polylactides by Pendant Aspirin Incorporation. ACS Applied Materials & Interfaces, 2021, 13, 22271-22281.	4.0	10
53	Amphiphilic degradable polymers for immobilization and sustained delivery of sphingosine 1-phosphate. Acta Biomaterialia, 2014, 10, 3079-3090.	4.1	9
54	Surface-Grafted Zwitterionic Polymers Improve the Efficacy of a Single Antibiotic Injection in Suppressing Staphylococcus aureus Periprosthetic Infections. ACS Applied Bio Materials, 2020, 3, 5896-5904.	2.3	8

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55	Functional glass slides for in vitro evaluation of interactions between osteosarcoma TE85 cells and mineral-binding ligands. Journal of Materials Chemistry, 2004, 14, 2643.	6.7	7
56	Thermal Responsive Shape Memory Polymers for Biomedical Applications. , 0, , .		7
57	Anionic and Zwitterionic Residues Modulate Stiffness of Photo-Cross-Linked Hydrogels and Cellular Behavior of Encapsulated Chondrocytes. ACS Biomaterials Science and Engineering, 2018, 4, 1843-1851.	2.6	7
58	Wellâ€controlled ATRP of 2â€(2â€(2â€azidoethyoxy)ethoxy)ethyl methacrylate for highâ€density click functionalization of polymers and metallic substrates. Journal of Polymer Science Part A, 2016, 54, 1268-1277.	2.5	5
59	A Sulfated Nanofibrous Mesh Supporting the Osteogenic Differentiation of Periosteum-Derived Cells. Journal of Biomaterials and Tissue Engineering, 2013, 3, 486-493.	0.0	5
60	Experimental and numerical measurements of adhesion energies between PHEMA and PGLYMA with hydroxyapatite crystal. Bioinspiration and Biomimetics, 2015, 10, 046011.	1.5	3
61	Independent and Synergistic Modulations of Viscoelasticity and Stiffness of Dynamically Cross-Linked Cell-Encapsulating ClickGels by Covalently Tethered Polymer Brushes. Biomacromolecules, 2021, 22, 3408-3415.	2.6	2
62	Functional Hydrogel-Biomineral Composites Inspired by Natural Bone. ACS Symposium Series, 2005, , 96-106.	0.5	1
63	Scalable Functional Bone Substitutes: Strategic Integration of Key Structural Elements of Bone in Synthetic Biomaterials. , 0, , .		1
64	Functional Amphiphilic and Bolaamphiphilic Poly(diacetylene) Assemblies with Controlled Optical and Morphological Properties. ACS Symposium Series, 2004, , 96-109.	0.5	0