Kaili Lin

List of Publications by Year
in descending order

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103 papers	6,329 citations	57758 44 h-index	74163 75 g-index
103 all docs	103 docs citations	103 times ranked	6672 citing authors

#	Article	IF	Citations
1	Enhanced osteoporotic bone regeneration by strontium-substituted calcium silicate bioactive ceramics. Biomaterials, 2013, 34, 10028-10042.	11.4	311
2	The development of collagen based composite scaffolds for bone regeneration. Bioactive Materials, 2018, 3, 129-138.	15.6	310
3	Effects of strontium in modified biomaterials. Acta Biomaterialia, 2011, 7, 800-808.	8.3	249
4	Osteogenesis and angiogenesis induced by porous Î²-CaSiO3/PDLGA composite scaffold via activation of AMPK/ERK1/2 and PI3K/Akt pathways. Biomaterials, 2013, 34, 64-77.	11.4	245
5	Advanced Collagenâ€Based Biomaterials for Regenerative Biomedicine. Advanced Functional Materials, 2019, 29, 1804943.	14.9	219
6	Nanoparticles modified by polydopamine: Working as â€œdrugâ€•carriers. Bioactive Materials, 2020, 5, 522-541.	15.6	203
7	Tailoring the Nanostructured Surfaces of Hydroxyapatite Bioceramics to Promote Protein Adsorption, Osteoblast Growth, and Osteogenic Differentiation. ACS Applied Materials & Interfaces, 2013, 5, 8008-8017.	8.0	202
8	Quercetin alleviates rat osteoarthritis by inhibiting inflammation and apoptosis of chondrocytes, modulating synovial macrophages polarization to M2 macrophages. Free Radical Biology and Medicine, 2019, 145, 146-160.	2.9	173
9	Effect of nano-structured bioceramic surface on osteogenic differentiation of adipose derived stem cells. Biomaterials, 2014, 35, 8514-8527.	11.4	168
10	Strontium substituted hydroxyapatite porous microspheres: Surfactant-free hydrothermal synthesis, enhanced biological response and sustained drug release. Chemical Engineering Journal, 2013, 222, 49-59.	12.7	166
11	Recent advances in smart stimuli-responsive biomaterials for bone therapeutics and regeneration. Bone Research, 2022, 10, 17.	11.4	156
12	Magnetic Hyperthermiaâ€“Synergistic H₂O₂ Selfâ€Sufficient Catalytic Suppression of Osteosarcoma with Enhanced Boneâ€Regeneration Bioactivity by 3Dâ€Printing Composite Scaffolds. Advanced Functional Materials, 2020, 30, 1907071.	14.9	126
13	Enhanced osteogenesis through nano-structured surface design of macroporous hydroxyapatite bioceramic scaffolds via activation of ERK and p38 MAPK signaling pathways. Journal of Materials Chemistry B, 2013, 1, 5403.	5.8	124
14	Mussel-Inspired Polydopamine Coating: A General Strategy To Enhance Osteogenic Differentiation and Osseointegration for Diverse Implants. ACS Applied Materials & Interfaces, 2019, 11, 7615-7625.	8.0	111
15	A Facile One-Step Surfactant-Free and Low-Temperature Hydrothermal Method to Prepare Uniform 3D Structured Carbonated Apatite Flowers. Crystal Growth and Design, 2009, 9, 177-181.	3.0	106
16	Optimized BMSC-derived osteoinductive exosomes immobilized in hierarchical scaffold via lyophilization for bone repair through Bmpr2/Acvr2b competitive receptor-activated Smad pathway. Biomaterials, 2021, 272, 120718.	11.4	106
17	Multifunctional melanin-like nanoparticles for bone-targeted chemo-photothermal therapy of malignant bone tumors and osteolysis. Biomaterials, 2018, 183, 10-19.	11.4	105
18	Metal Speciesâ€“Encapsulated Mesoporous Silica Nanoparticles: Current Advancements and Latest Breakthroughs. Advanced Functional Materials, 2019, 29, 1902652.	14.9	104

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19	ZnO Nanomaterials: Current Advancements in Antibacterial Mechanisms and Applications. Frontiers in Chemistry, 2020, 8, 580.	3.6	96
20	Akermanite bioceramics promote osteogenesis, angiogenesis and suppress osteoclastogenesis for osteoporotic bone regeneration. Scientific Reports, 2016, 6, 22005.	3.3	93
21	Challenges and strategies for in situ endothelialization and long-term lumen patency of vascular grafts. Bioactive Materials, 2021, 6, 1791-1809.	15.6	92
22	The Effect of Quercetin on the Osteogenesic Differentiation and Angiogenic Factor Expression of Bone Marrow-Derived Mesenchymal Stem Cells. PLoS ONE, 2015, 10, e0129605.	2.5	88
23	Properties of Î²-Ca3(PO4)2 bioceramics prepared using nano-size powders. Ceramics International, 2007, 33, 979-985.	4.8	85
24	In situ modulation of crystallinity and nano-structures to enhance the stability and osseointegration of hydroxyapatite coatings on Ti-6Al-4V implants. Chemical Engineering Journal, 2018, 347, 711-720.	12.7	83
25	Effect of micro-nano-hybrid structured hydroxyapatite bioceramics on osteogenic and cementogenic differentiation of human periodontal ligament stem cell via Wnt signaling pathway. International Journal of Nanomedicine, 2015, 10, 7031.	6.7	69
26	Fabrication of nano-structured calcium silicate coatings with enhanced stability, bioactivity and osteogenic and angiogenic activity. Colloids and Surfaces B: Biointerfaces, 2015, 126, 358-366.	5.0	67
27	Bone marrow stromal cells stimulated by strontium-substituted calcium silicate ceramics: release of exosomal miR-146a regulates osteogenesis and angiogenesis. Acta Biomaterialia, 2021, 119, 444-457.	8.3	67
28	Î²â€CaSiO₃/Î²â€Ca₃(PO₄)₂ composite materials for hard tissue repair: In vitro studies. Journal of Biomedical Materials Research - Part A, 2008, 85A, 72-82.	4.0	66
29	Advance of Nano-Composite Electrospun Fibers in Periodontal Regeneration. Frontiers in Chemistry, 2019, 7, 495.	3.6	63
30	Synthesis of element-substituted hydroxyapatite with controllable morphology and chemical composition using calcium silicate as precursor. CrystEngComm, 2011, 13, 4850.	2.6	62
31	Designing ordered micropatterned hydroxyapatite bioceramics to promote the growth and osteogenic differentiation of bone marrow stromal cells. Journal of Materials Chemistry B, 2015, 3, 968-976.	5.8	62
32	Calcium silicate bioactive ceramics induce osteogenesis through oncostatin M. Bioactive Materials, 2021, 6, 810-822.	15.6	62
33	Dose-dependent Effects of Strontium Ranelate on Ovariectomy Rat Bone Marrow Mesenchymal Stem Cells and Human Umbilical Vein Endothelial Cells. International Journal of Biological Sciences, 2016, 12, 1511-1522.	6.4	59
34	Hydrothermal synthesis and characterization of Si and Sr co-substituted hydroxyapatite nanowires using strontium containing calcium silicate as precursors. Materials Science and Engineering C, 2014, 37, 286-291.	7.3	57
35	Osteotropic peptide-mediated bone targeting for photothermal treatment of bone tumors. Biomaterials, 2017, 114, 97-105.	11.4	57
36	A review on the biocompatibility and potential applications of graphene in inducing cell differentiation and tissue regeneration. Journal of Materials Chemistry B, 2017, 5, 3084-3102.	5.8	56

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37	Biological responses of human bone marrow mesenchymal stem cells to Srâ€Mâ€Si (M = Zn, Mg) silicate bioceramics. Journal of Biomedical Materials Research - Part A, 2012, 100A, 2979-2990.	4.0	54
38	The synergetic effect of nano-structures and silicon-substitution on the properties of hydroxyapatite scaffolds for bone regeneration. Journal of Materials Chemistry B, 2016, 4, 3313-3323.	5.8	53
39	Mechanically reinforced injectable bioactive nanocomposite hydrogels for in-situ bone regeneration. Chemical Engineering Journal, 2022, 433, 132799.	12.7	52
40	Enhanced osteogenic differentiation and bone regeneration of poly(lactic-co-glycolic acid) by grapheneviaactivation of PI3K/Akt/GSK-3Î²/Î²-catenin signal circuit. Biomaterials Science, 2018, 6, 1147-1158.	5.4	50
41	The effect of quercetin delivery system on osteogenesis and angiogenesis under osteoporotic conditions. Journal of Materials Chemistry B, 2017, 5, 612-625.	5.8	49
42	A novel multifunctional carbon aerogel-coated platform for osteosarcoma therapy and enhanced bone regeneration. Journal of Materials Chemistry B, 2020, 8, 368-379.	5.8	49
43	Gaseous sulfur trioxide induced controllable sulfonation promoting biomineralization and osseointegration of polyetheretherketone implants. Bioactive Materials, 2020, 5, 1004-1017.	15.6	49
44	Palladium Nanocrystalsâ€Engineered Metalâ€“Organic Frameworks for Enhanced Tumor Inhibition by Synergistic Hydrogen/Photodynamic Therapy. Advanced Functional Materials, 2021, 31, 2006853.	14.9	49
45	A comparative study of the osteogenic performance between the hierarchical micro/submicro-textured 3D-printed Ti6Al4V surface and the SLA surface. Bioactive Materials, 2020, 5, 9-16.	15.6	48
46	Antibacterial activity of silicate bioceramics. Journal Wuhan University of Technology, Materials Science Edition, 2011, 26, 226-230.	1.0	47
47	A novel biocompatible PDA/IR820/DAP coating for antibiotic/photodynamic/photothermal triple therapy to inhibit and eliminate Staphylococcus aureus biofilm. Chemical Engineering Journal, 2020, 394, 125017.	12.7	47
48	Improvement of mechanical properties of macroporous Î²-tricalcium phosphate bioceramic scaffolds with uniform and interconnected pore structures. Ceramics International, 2011, 37, 2397-2403.	4.8	46
49	Synergetic topography and chemistry cues guiding osteogenic differentiation in bone marrow stromal cells through ERK1/2 and p38 MAPK signaling pathway. Biomaterials Science, 2018, 6, 418-430.	5.4	45
50	Loading BMP-2 on nanostructured hydroxyapatite microspheres for rapid bone regeneration. International Journal of Nanomedicine, 2018, Volume 13, 4083-4092.	6.7	45
51	Metalâ€“Organic Framework-Based Nanoagents for Effective Tumor Therapy by Dual Dynamics-Amplified Oxidative Stress. ACS Applied Materials & Interfaces, 2021, 13, 45201-45213.	8.0	43
52	Strontium released bi-lineage scaffolds with immunomodulatory properties induce a pro-regenerative environment for osteochondral regeneration. Materials Science and Engineering C, 2019, 103, 109833.	7.3	42
53	Effects of strontium substitution on the structural distortion of hydroxyapatite by rietveld refinement and Raman Spectroscopy. Ceramics International, 2019, 45, 11073-11078.	4.8	42
54	Piezoelectric stimulation from electrospun composite nanofibers for rapid peripheral nerve regeneration. Nano Energy, 2022, 98, 107322.	16.0	42

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55	Evaluation of osteogenesis and angiogenesis of icariin loaded on micro/nano hybrid structured hydroxyapatite granules as a local drug delivery system for femoral defect repair. Journal of Materials Chemistry B, 2015, 3, 4871-4883.	5.8	41
56	The effects of alignment and diameter of electrospun fibers on the cellular behaviors and osteogenesis of BMSCs. Materials Science and Engineering C, 2021, 120, 111787.	7.3	38
57	Polydopamine nanoparticles as dual-task platform for osteoarthritis therapy: A scavenger for reactive oxygen species and regulator for cellular powerhouses. Chemical Engineering Journal, 2021, 417, 129284.	12.7	38
58	Small extracellular vesicles derived from hypoxic mesenchymal stem cells promote vascularized bone regeneration through the miR-210-3p/EFNA3/PI3K pathway. Acta Biomaterialia, 2022, 150, 413-426.	8.3	38
59	Borocarbonitrides nanosheets engineered 3D-printed scaffolds for integrated strategy of osteosarcoma therapy and bone regeneration. Chemical Engineering Journal, 2020, 401, 125989.	12.7	37
60	A host-coupling bio-nanogenerator for electrically stimulated osteogenesis. Biomaterials, 2021, 276, 120997.	11.4	37
61	Enhancement of osteoporotic bone regeneration by strontium-substituted 45S5 bioglassviatime-dependent modulation of autophagy and the Akt/mTOR signaling pathway. Journal of Materials Chemistry B, 2021, 9, 3489-3501.	5.8	36
62	A polydopamine-assisted strontium-substituted apatite coating for titanium promotes osteogenesis and angiogenesis via FAK/MAPK and PI3K/AKT signaling pathways. Materials Science and Engineering C, 2021, 131, 112482.	7.3	35
63	Enhancing the Osteogenic Differentiation and Rapid Osseointegration of 3D Printed Ti6Al4V Implants via Nano-Topographic Modification. Journal of Biomedical Nanotechnology, 2018, 14, 707-715.	1.1	30
64	Strontium (Sr) strengthens the silicon (Si) upon osteoblast proliferation, osteogenic differentiation and angiogenic factor expression. Journal of Materials Chemistry B, 2016, 4, 3632-3638.	5.8	29
65	The synergistic effect of 3D-printed microscale roughness surface and nanoscale feature on enhancing osteogenic differentiation and rapid osseointegration. Journal of Materials Science and Technology, 2021, 63, 18-26.	10.7	29
66	Advances of nanomaterial applications in oral and maxillofacial tissue regeneration and disease treatment. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2021, 13, e1669.	6.1	29
67	3D-printed surface promoting osteogenic differentiation and angiogenetic factor expression of BMSCs on Ti6Al4V implants and early osseointegration in vivo. Journal of Materials Science and Technology, 2019, 35, 336-343.	10.7	28
68	The synergistic promotion of osseointegration by nanostructure design and silicon substitution of hydroxyapatite coatings in a diabetic model. Journal of Materials Chemistry B, 2020, 8, 2754-2767.	5.8	28
69	An overview of polyester/hydroxyapatite composites for bone tissue repairing. Journal of Orthopaedic Translation, 2021, 28, 118-130.	3.9	27
70	Preparation and Characterization of Clinoenstatite Bioceramics. Journal of the American Ceramic Society, 2011, 94, 66-70.	3.8	26
71	The stimulation of osteogenic differentiation of mesenchymal stem cells and vascular endothelial growth factor secretion of endothelial cells by Î²â€CaSiO₃/Î²â€Ca₃(PO₄)₂ scaffolds. Journal of Biomedical Materials Research - Part A, 2014, 102, 2096-2104.	4.0	26
72	Tailoring Si-substitution level of Si-hydroxyapatite nanowires via regulating Si-content of calcium silicates as hydrothermal precursors. Ceramics International, 2014, 40, 11239-11243.	4.8	24

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73	Preparation of Macroporous Sol-Gel Bioglass Using PVA Particles as Pore Former. Journal of Sol-Gel Science and Technology, 2004, 30, 49-61.	2.4	23
74	In situconstruction of a nano-structured akermanite coating for promoting bone formation and osseointegration of Tiâ€“6Alâ€“4V implants in a rabbit osteoporosis model. Journal of Materials Chemistry B, 2021, 9, 9505-9513.	5.8	23
75	High mechanical strength bioactive wollastonite bioceramics sintered from nanofibers. RSC Advances, 2016, 6, 13867-13872.	3.6	22
76	Stimulatory Effects of Boron Containing Bioactive Glass on Osteogenesis and Angiogenesis of Polycaprolactone: In Vitro Study. BioMed Research International, 2019, 2019, 1-12.	1.9	22
77	Nano-Structure Designing Promotion Osseointegration of Hydroxyapatite Coated Tiâ€“6Alâ€“4V Alloy Implants in Diabetic Model. Journal of Biomedical Nanotechnology, 2019, 15, 1701-1713.	1.1	21
78	Amorphous carbon modification on implant surface: a general strategy to enhance osteogenic differentiation for diverse biomaterials via FAK/ERK1/2 signaling pathways. Journal of Materials Chemistry B, 2019, 7, 2518-2533.	5.8	19
79	Biodegradable hollow mesoporous organosilica-based nanosystems with dual stimuli-responsive drug delivery for efficient tumor inhibition by synergistic chemo- and photothermal therapy. Applied Materials Today, 2020, 19, 100655.	4.3	19
80	Dental Implants Loaded With Bioactive Agents Promote Osseointegration in Osteoporosis: A Review. Frontiers in Bioengineering and Biotechnology, 2021, 9, 591796.	4.1	19
81	Research Progress on Polydopamine Nanoparticles for Tissue Engineering. Frontiers in Chemistry, 2021, 9, 727123.	3.6	18
82	Enhanced growth and osteogenic differentiation of MC3T3-E1 cells on Ti6Al4V alloys modified with reduced graphene oxide. RSC Advances, 2017, 7, 14430-14437.	3.6	17
83	Development and challenges of cells- and materials-based tooth regeneration. Engineered Regeneration, 2022, 3, 163-181.	6.0	17
84	Coaxially Fabricated Dualâ€Đrug Loading Electrospinning Fibrous Mat with Programmed Releasing Behavior to Boost Vascularized Bone Regeneration. Advanced Healthcare Materials, 2022, 11, .	7.6	17
85	Construction of a Hierarchical Micro-/Submicro-/Nanostructured 3D-Printed Ti6Al4V Surface Feature to Promote Osteogenesis: Involvement of Sema7A through the ITGB1/FAK/ERK Signaling Pathway. ACS Applied Materials & Interfaces, 2022, 14, 30571-30581.	8.0	17
86	The Effects of Icariin on Enhancing Motor Recovery Through Attenuating Pro-inflammatory Factors and Oxidative Stress via Mitochondrial Apoptotic Pathway in the Mice Model of Spinal Cord Injury. Frontiers in Physiology, 2018, 9, 1617.	2.8	16
87	Injectable nano-structured silicon-containing hydroxyapatite microspheres with enhanced osteogenic differentiation and angiogenic factor expression. Ceramics International, 2018, 44, 20457-20464.	4.8	16
88	Maintenance and modulation of stem cells stemness based on biomaterial designing via chemical and physical signals. Applied Materials Today, 2020, 19, 100614.	4.3	16
89	In situ construction of flower-like nanostructured calcium silicate bioceramics for enhancing bone regeneration mediated via FAK/p38 signaling pathway. Journal of Nanobiotechnology, 2022, 20, 162.	9.1	16
90	Investigation for GSK3Î² expression in diabetic osteoporosis and negative osteogenic effects of GSK3Î² on bone marrow mesenchymal stem cells under a high glucose microenvironment. Biochemical and Biophysical Research Communications, 2021, 534, 727-733.	2.1	12

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91	Breaking the vicious cycle between tumor cell proliferation and bone resorption by chloroquine-loaded and bone-targeted polydopamine nanoparticles. Science China Materials, 2021, 64, 474-487.	6.3	12
92	HIF-1Î± Regulates Osteogenesis of Periosteum-Derived Stem Cells Under Hypoxia Conditions via Modulating POSTN Expression. Frontiers in Cell and Developmental Biology, 2022, 10, 836285.	3.7	11
93	Synergistic Effect of Micro-Nano-Hybrid Surfaces and Sr Doping on the Osteogenic and Angiogenic Capacity of Hydroxyapatite Bioceramics Scaffolds. International Journal of Nanomedicine, 2022, Volume 17, 783-797.	6.7	10
94	Library Screening to Identify Highly-Effective Autophagy Inhibitors for Improving Photothermal Cancer Therapy. Nano Letters, 2021, 21, 9476-9484.	9.1	9
95	Modifying a 3D-Printed Ti6Al4V Implant with Polydopamine Coating to Improve BMSCs Growth, Osteogenic Differentiation, and In Situ Osseointegration In Vivo. Frontiers in Bioengineering and Biotechnology, 2021, 9, 761911.	4.1	8
96	Mussel-Inspired Polydopamine-Based Multilayered Coatings for Enhanced Bone Formation. Frontiers in Bioengineering and Biotechnology, 0, 10, .	4.1	8
97	Two-Dimensional Borocarbonitride Nanosheet-Engineered Hydrogel as an All-In-One Platform for Melanoma Therapy and Skin Regeneration. Chemistry of Materials, 2022, 34, 6568-6581.	6.7	8
98	Cationic Nanoparticles Assembled from Natural-Based Steroid Lipid for Improved Intracellular Transport of siRNA and pDNA. Nanomaterials, 2016, 6, 69.	4.1	7
99	Comparison between mandibular and femur derived bone marrow stromal cells: osteogenic and angiogenic potentials in vitro and bone repairing ability in vivo. RSC Advances, 2017, 7, 56220-56228.	3.6	7
100	RNA-Seq investigation and in vivo study the effect of strontium ranelate on ovariectomized rat via the involvement of ROCK1. Artificial Cells, Nanomedicine and Biotechnology, 2018, 46, 629-641.	2.8	7
101	Novel bone tumor cell targeting nanosystem for chemo-photothermal therapy of malignant bone tumors. Chemical Engineering Journal, 2022, 446, 136905.	12.7	7
102	Synthesis of water-dispersible silicon-containing hydroxyapatite nanoparticles with adjustable degradation rates and their applications as pH-responsive drug carriers. RSC Advances, 2016, 6, 114852-114858.	3.6	5
103	Facile Synthesis of Elementâ€Substituted Hydroxyapatite Whiskers Using Î±â€Tricalcium Phosphate as Precursors. International Journal of Applied Ceramic Technology, 2015, 12, 1000-1007.	2.1	4