

# Jirun Sun

## List of Publications by Year in descending order

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Version: 2024-02-01

41  
papers

1,457  
citations

331670

21  
h-index

315739

38  
g-index

41  
all docs

41  
docs citations

41  
times ranked

2240  
citing authors

#	ARTICLE	IF	CITATIONS
1	Advanced smart biomaterials and constructs for hard tissue engineering and regeneration. <i>Bone Research</i> , 2018, 6, 31.	11.4	206
2	Bone tissue engineering via human induced pluripotent, umbilical cord and bone marrow mesenchymal stem cells in rat cranium. <i>Acta Biomaterialia</i> , 2015, 18, 236-248.	8.3	116
3	Improving performance of dental resins by adding titanium dioxide nanoparticles. <i>Dental Materials</i> , 2011, 27, 972-982.	3.5	96
4	3D mapping of polymerization shrinkage using X-ray micro-computed tomography to predict microleakage. <i>Dental Materials</i> , 2009, 25, 314-320.	3.5	91
5	X-ray microcomputed tomography for measuring polymerization shrinkage of polymeric dental composites. <i>Dental Materials</i> , 2008, 24, 228-234.	3.5	77
6	Preparation of Dental Resins Resistant to Enzymatic and Hydrolytic Degradation in Oral Environments. <i>Biomacromolecules</i> , 2015, 16, 3381-3388.	5.4	67
7	Design and development of self-healing dental composites. <i>Materials and Design</i> , 2016, 94, 295-302.	7.0	67
8	High performance dental resin composites with hydrolytically stable monomers. <i>Dental Materials</i> , 2018, 34, 228-237.	3.5	67
9	Evaluation of dental composite shrinkage and leakage in extracted teeth using X-ray microcomputed tomography. <i>Dental Materials</i> , 2009, 25, 1213-1220.	3.5	60
10	Stoichiometric analysis of competing intermolecular hydrogen bonds using infrared spectroscopy. <i>RSC Advances</i> , 2018, 8, 23481-23488.	3.6	43
11	Biophysical characterization of functionalized titania nanoparticles and their application in dental adhesives. <i>Acta Biomaterialia</i> , 2017, 53, 585-597.	8.3	40
12	Novel root canal sealer with dimethylaminohexadecyl methacrylate, nano-silver and nano-calcium phosphate to kill bacteria inside root dentin and increase dentin hardness. <i>Dental Materials</i> , 2019, 35, 1479-1489.	3.5	40
13	Nondestructive quantification of leakage at the tooth-composite interface and its correlation with material performance parameters. <i>Biomaterials</i> , 2009, 30, 4457-4462.	11.4	38
14	Novel pit and fissure sealant containing nano-CaF <sub>2</sub> and dimethylaminohexadecyl methacrylate with double benefits of fluoride release and antibacterial function. <i>Dental Materials</i> , 2020, 36, 1241-1253.	3.5	37
15	Exploring Cellular Contact Guidance Using Gradient Nanogratings. <i>Biomacromolecules</i> , 2010, 11, 3067-3072.	5.4	36
16	Thermodynamic Underpinnings of Cell Alignment on Controlled Topographies. <i>Advanced Materials</i> , 2011, 23, 421-425.	21.0	36
17	Bioactive low-shrinkage-stress nanocomposite suppresses <i>S. mutans</i> biofilm and preserves tooth dentin hardness. <i>Acta Biomaterialia</i> , 2020, 114, 146-157.	8.3	32
18	pH-Sensitive Compounds for Selective Inhibition of Acid-Producing Bacteria. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 8566-8573.	8.0	31

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19	Protein-repellent nanocomposite with rechargeable calcium and phosphate for long-term ion release. <i>Dental Materials</i> , 2018, 34, 1735-1747.	3.5	27
20	Novel endodontic sealer with dual strategies of dimethylaminohexadecyl methacrylate and nanoparticles of silver to inhibit root canal biofilms. <i>Dental Materials</i> , 2019, 35, 1117-1129.	3.5	27
21	Self-healing adhesive with antibacterial activity in water-aging for 12 months. <i>Dental Materials</i> , 2019, 35, 1104-1116.	3.5	26
22	Durability of self-healing dental composites: A comparison of performance under monotonic and cyclic loading. <i>Materials Science and Engineering C</i> , 2018, 93, 1020-1026.	7.3	21
23	Tuning photo-catalytic activities of TiO <sub>2</sub> nanoparticles using dimethacrylate resins. <i>Dental Materials</i> , 2016, 32, 363-372.	3.5	20
24	Novel Nano Calcium Fluoride Remineralizing and Antibacterial Dental Composites. <i>Journal of Dentistry</i> , 2021, 113, 103789.	4.1	18
25	A composition-controlled cross-linking resin network through rapid visible-light photo-copolymerization. <i>Polymer Chemistry</i> , 2016, 7, 5023-5030.	3.9	15
26	Preparation of Metalloporphyrin-Bound Superparamagnetic Silica Particles via "Click" Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 792-801.	8.0	14
27	Diffusion of Dextran Probes in a Self-Assembled Fibrous Gel Composed of Two-Dimensional Arborols. <i>Journal of Physical Chemistry B</i> , 2008, 112, 29-35.	2.6	13
28	High-Performance Dental Adhesives Containing an Ether-Based Monomer. <i>Journal of Dental Research</i> , 2020, 99, 189-195.	5.2	13
29	Surface Properties of a Series of Amphiphilic Dendrimers with Short Hydrophobic Chains. <i>Langmuir</i> , 2008, 24, 1858-1862.	3.5	10
30	Novel rechargeable calcium phosphate nanoparticle-filled dental cement. <i>Dental Materials Journal</i> , 2019, 38, 1-10.	1.8	10
31	Short-time dental resin biostability and kinetics of enzymatic degradation. <i>Acta Biomaterialia</i> , 2018, 74, 326-333.	8.3	9
32	Low-Shrinkage Resin Matrices in Restorative Dentistry-Narrative Review. <i>Materials</i> , 2022, 15, 2951.	2.9	9
33	Clinically Applicable Self-Healing Dental Resin Composites. <i>MRS Advances</i> , 2016, 1, 547-552.	0.9	8
34	Miniature specimens for fracture toughness evaluation of dental resin composites. <i>Dental Materials</i> , 2019, 35, 283-291.	3.5	8
35	Long-term antibacterial activity and cytocompatibility of novel low-shrinkage-stress, remineralizing composites. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2021, 32, 886-905.	3.5	7
36	Experimental and statistical methods to evaluate antibacterial activity of a quaternary pyridinium salt on planktonic, biofilm-forming, and biofilm states. <i>Biofouling</i> , 2017, 33, 222-234.	2.2	5

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37	Effect of EDTA Preparations on Rotary Root Canal Instrumentation. <i>Journal of Endodontics</i> , 2015, 41, 92-96.	3.1	4
38	A thick frame decreases the fracture toughness of veneering ceramics used for zirconia-based all-ceramic restorations. <i>Journal of Prosthodontic Research</i> , 2019, 63, 184-192.	2.8	4
39	Minimally-invasive dentistry via dual-function novel bioactive low-shrinkage-stress flowable nanocomposites. <i>Dental Materials</i> , 2022, 38, 409-420.	3.5	4
40	Some Structural Observations of Self-Assembled, Fibrillar Gels Composed of Two-Directional Bolaform Arborols. <i>ACS Symposium Series</i> , 2006, , 370-383.	0.5	3
41	Stoichiometry and Kinetics of Sequential Dimethacrylate Enzymolysis. <i>Journal of Dental Research</i> , 2019, 98, 1037-1044.	5.2	2