

# Guo-Xin Tan

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

63

papers

1,845

citations

23

h-index

41

g-index

66

ext. papers

2,563

ext. citations

8.6

avg, IF

4.89

L-index

#	Paper	IF	Citations
63	An injectable, self-healing, electroconductive extracellular matrix-based hydrogel for enhancing tissue repair after traumatic spinal cord injury. <i>Bioactive Materials</i> , <b>2022</b> , 7, 98-111	16.7	21
62	Tough and Highly Efficient Underwater Self-Repairing Hydrogels for Soft Electronics.. <i>Small Methods</i> , <b>2022</b> , e2101513	12.8	5
61	Exosomes-Loaded Electroconductive Hydrogel Synergistically Promotes Tissue Repair after Spinal Cord Injury via Immunoregulation and Enhancement of Myelinated Axon Growth.. <i>Advanced Science</i> , <b>2022</b> , e2105586	13.6	5
60	Wireless electrical stimulation at the nanoscale interface induces tumor vascular normalization.. <i>Bioactive Materials</i> , <b>2022</b> , 18, 399-408	16.7	5
59	Extracellular Matrix-Based Conductive Interpenetrating Network Hydrogels with Enhanced Neurovascular Regeneration Properties for Diabetic Wounds Repair. <i>Advanced Healthcare Materials</i> , <b>2021</b> , e2101556	10.1	9
58	Hybrid gelatin/oxidized chondroitin sulfate hydrogels incorporating bioactive glass nanoparticles with enhanced mechanical properties, mineralization, and osteogenic differentiation. <i>Bioactive Materials</i> , <b>2021</b> , 6, 890-904	16.7	31
57	Injectable Self-Healing Natural Biopolymer-Based Hydrogel Adhesive with Thermoresponsive Reversible Adhesion for Minimally Invasive Surgery. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2007457	15.6	54
56	Exosome-functionalized polyetheretherketone-based implant with immunomodulatory property for enhancing osseointegration. <i>Bioactive Materials</i> , <b>2021</b> , 6, 2754-2766	16.7	26
55	Self-curling electroconductive nerve dressing for enhancing peripheral nerve regeneration in diabetic rats. <i>Bioactive Materials</i> , <b>2021</b> , 6, 3892-3903	16.7	11
54	Ultrafast and On-Demand Oil/Water Separation Membrane System Based on Conducting Polymer Nanotip Arrays. <i>Nano Letters</i> , <b>2020</b> , 20, 4895-4900	11.5	15
53	Wireless Electrochemotherapy by Selenium-Doped Piezoelectric Biomaterials to Enhance Cancer Cell Apoptosis. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 34505-34513	9.5	11
52	Endogenous electric field as a bridge for antibacterial ion transport from implant to bacteria. <i>Science China Materials</i> , <b>2020</b> , 63, 1831-1841	7.1	3
51	Nanomaterials as photothermal therapeutic agents. <i>Progress in Materials Science</i> , <b>2019</b> , 99, 1-26	42.2	234
50	Polypyrrole Nanocones and Dynamic Piezoelectric Stimulation-Induced Stem Cell Osteogenic Differentiation. <i>ACS Biomaterials Science and Engineering</i> , <b>2019</b> , 5, 4386-4392	5.5	15
49	Bioactive glass functionalized chondroitin sulfate hydrogel with proangiogenic properties. <i>Biopolymers</i> , <b>2019</b> , 110, e23328	2.2	7
48	A Tough and Self-Powered Hydrogel for Artificial Skin. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 9850-9860	9.6	56
47	Antimicrobial Peptide Functionalized Conductive Nanowire Array Electrode as a Promising Candidate for Bacterial Environment Application. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1806353	15.6	8

46	The antibacterial effect of potassium-sodium niobate ceramics based on controlling piezoelectric properties. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2019</b> , 175, 463-468	6	23
45	Tunable Mechanical, Antibacterial, and Cytocompatible Hydrogels Based on a Functionalized Dual Network of Metal Coordination Bonds and Covalent Crosslinking. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 6190-6198	9.5	35
44	Incorporating catechol into electroactive polypyrrole nanowires on titanium to promote hydroxyapatite formation. <i>Bioactive Materials</i> , <b>2018</b> , 3, 74-79	16.7	8
43	A Multifunctional Metallohydrogel with Injectability, Self-Healing, and Multistimulus-Responsiveness for Bioadhesives. <i>Macromolecular Materials and Engineering</i> , <b>2018</b> , 303, 1800305	3.9	10
42	Directing Induced Pluripotent Stem Cell Derived Neural Stem Cell Fate with a Three-Dimensional Biomimetic Hydrogel for Spinal Cord Injury Repair. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 17742-17753	9.5	35
41	Electroactive polymers for tissue regeneration: Developments and perspectives. <i>Progress in Polymer Science</i> , <b>2018</b> , 81, 144-162	29.6	132
40	Large-scale functionalization of biomedical porous titanium scaffolds surface with TiO <sub>2</sub> nanostructures. <i>Science China Materials</i> , <b>2018</b> , 61, 557-564	7.1	7
39	Soft Conducting Polymer Hydrogels Cross-Linked and Doped by Tannic Acid for Spinal Cord Injury Repair. <i>ACS Nano</i> , <b>2018</b> , 12, 10957-10967	16.7	146
38	Facile Soaking Strategy Toward Simultaneously Enhanced Conductivity and Toughness of Self-Healing Composite Hydrogels Through Constructing Multiple Noncovalent Interactions. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 19133-19142	9.5	43
37	Bone-Inspired Spatially Specific Piezoelectricity Induces Bone Regeneration. <i>Theranostics</i> , <b>2017</b> , 7, 3387-3397	32.97	44
36	Palladium nanoparticles entrapped in a self-supporting nanoporous gold wire as sensitive dopamine biosensor. <i>Scientific Reports</i> , <b>2017</b> , 7, 7941	4.9	27
35	Spatial charge manipulated set-selective apatite deposition on micropatterned piezoceramic. <i>RSC Advances</i> , <b>2017</b> , 7, 32974-32981	3.7	6
34	A Dual-Bonded Approach for Improving Hydrogel Implant Stability in Cartilage Defects. <i>Materials</i> , <b>2017</b> , 10,	3.5	11
33	Fabrication of Biocompatible Potassium Sodium Niobate Piezoelectric Ceramic as an Electroactive Implant. <i>Materials</i> , <b>2017</b> , 10,	3.5	29
32	Periodic Nanoneedle and Buffer Zones Constructed on a Titanium Surface Promote Osteogenic Differentiation and Bone Calcification In Vivo. <i>Advanced Healthcare Materials</i> , <b>2016</b> , 5, 364-72	10.1	14
31	Polarization of an electroactive functional film on titanium for inducing osteogenic differentiation. <i>Scientific Reports</i> , <b>2016</b> , 6, 35512	4.9	23
30	Ti nanorod arrays with a medium density significantly promote osteogenesis and osteointegration. <i>Scientific Reports</i> , <b>2016</b> , 6, 19047	4.9	12
29	Built-in microscale electrostatic fields induced by anatase-rutile-phase transition in selective areas promote osteogenesis. <i>NPG Asia Materials</i> , <b>2016</b> , 8,	10.3	26

28	Polydopamine-Assisted Electrochemical Fabrication of Polypyrrole Nanofibers on Bone Implants to Improve Bioactivity. <i>Macromolecular Materials and Engineering</i> , <b>2016</b> , 301, 1288-1294	3.9	20
27	Surface-Selective Preferential Production of Reactive Oxygen Species on Piezoelectric Ceramics for Bacterial Killing. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 24306-9	9.5	38
26	Controllable Protein Adsorption and Bacterial Adhesion on Polypyrrole Nanocone Arrays. <i>Journal of Materials Science and Technology</i> , <b>2016</b> , 32, 950-955	9.1	8
25	Covalent Bonding of an Electroconductive Hydrogel to Gold-Coated Titanium Surfaces via Thiol-ene Click Chemistry. <i>Macromolecular Materials and Engineering</i> , <b>2016</b> , 301, 1423-1429	3.9	7
24	The synergistic antibacterial activity and mechanism of multicomponent metal ions-containing aqueous solutions against <i>Staphylococcus aureus</i> . <i>Journal of Inorganic Biochemistry</i> , <b>2016</b> , 163, 214-220	4.2	40
23	Osteogenic Differentiation: Periodic Nanoneedle and Buffer Zones Constructed on a Titanium Surface Promote Osteogenic Differentiation and Bone Calcification In Vivo (Adv. Healthcare Mater. 3/2016). <i>Advanced Healthcare Materials</i> , <b>2016</b> , 5, 300-300	10.1	
22	Concentration ranges of antibacterial cations for showing the highest antibacterial efficacy but the least cytotoxicity against mammalian cells: implications for a new antibacterial mechanism. <i>Chemical Research in Toxicology</i> , <b>2015</b> , 28, 1815-22	4	127
21	Chondroitin sulphate-guided construction of polypyrrole nanoarchitectures. <i>Materials Science and Engineering C</i> , <b>2015</b> , 48, 172-8	8.3	10
20	Influence of Surrounding Cations on the Surface Degradation of Magnesium Alloy Implants under a Compressive Pressure. <i>Langmuir</i> , <b>2015</b> , 31, 13561-70	4	9
19	Highly Water-Dispersible, Highly Conductive, and Biocompatible Polypyrrole-Coated Silica Particles Stabilized and Doped by Chondroitin Sulfate. <i>Particle and Particle Systems Characterization</i> , <b>2015</b> , 32, 1068-1077	3.1	10
18	Promoting Bone Mesenchymal Stem Cells and Inhibiting Bacterial Adhesion of Acid-Etched Nanostructured Titanium by Ultraviolet Functionalization. <i>Journal of Materials Science and Technology</i> , <b>2015</b> , 31, 182-190	9.1	17
17	Hydroxyapatite nanorods patterned ZrO <sub>2</sub> bilayer coating on zirconium for the application of percutaneous implants. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2015</b> , 127, 8-14	6	16
16	Modification of biomaterials surface by mimetic cell membrane to improve biocompatibility. <i>Frontiers of Materials Science</i> , <b>2014</b> , 8, 325-331	2.5	11
15	Tuning nano-architectures and improving bioactivity of conducting polypyrrole coating on bone implants by incorporating bone-borne small molecules. <i>Journal of Materials Chemistry B</i> , <b>2014</b> , 2014, 7872-7876	7.3	14
14	Ti nanorod arrays with periodic density fabricated via anodic technology. <i>Micro and Nano Letters</i> , <b>2014</b> , 9, 168-170	0.9	2
13	Biomimetic mineralization of anionic gelatin hydrogels: effect of degree of methacrylation. <i>RSC Advances</i> , <b>2014</b> , 4, 21997-22008	3.7	59
12	Cell-laden photocrosslinked GelMA-DexMA copolymer hydrogels with tunable mechanical properties for tissue engineering. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2014</b> , 25, 2173-83	4.5	55
11	Controlled oxidative nanopatterning of microrough titanium surfaces for improving osteogenic activity. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2014</b> , 25, 1875-84	4.5	14

10	Reversibly Controlling Preferential Protein Adsorption on Bone Implants by Using an Applied Weak Potential as a Switch. <i>Angewandte Chemie</i> , <b>2014</b> , 126, 13284-13288	3.6	7
9	Conducting Polypyrrole Nanotube Arrays as an Implant Surface: Fabricated on Biomedical Titanium with Fine-Tunability by Means of Template-Free Electrochemical Polymerization. <i>ChemPlusChem</i> , <b>2014</b> , 79, 524-530	2.8	6
8	Reversibly controlling preferential protein adsorption on bone implants by using an applied weak potential as a switch. <i>Angewandte Chemie - International Edition</i> , <b>2014</b> , 53, 13068-72	16.4	35
7	Corrosion mechanism of micro-arc oxidation treated biocompatible AZ31 magnesium alloy in simulated body fluid. <i>Progress in Natural Science: Materials International</i> , <b>2014</b> , 24, 516-522	3.6	15
6	Potential-induced reversible switching in the tubular structure of conducting polypyrrole nanotube arrays. <i>RSC Advances</i> , <b>2013</b> , 3, 14946	3.7	10
5	Biomimetically-mineralized composite coatings on titanium functionalized with gelatin methacrylate hydrogels. <i>Applied Surface Science</i> , <b>2013</b> , 279, 293-299	6.7	50
4	Effects of argon plasma treatment on surface characteristic of photopolymerization PEGDA/HEMA hydrogels. <i>Journal of Applied Polymer Science</i> , <b>2012</b> , 124, 459-465	2.9	8
3	Preparation, characterization, and drug-release properties of PEG-DA-based copolymer hydrogel microspheres. <i>Journal of Applied Polymer Science</i> , <b>2012</b> , 125, 3509-3516	2.9	9
2	Synthesis and Characterization of Injectable Photocrosslinking Poly (ethylene glycol) Diacrylate based Hydrogels. <i>Polymer Bulletin</i> , <b>2008</b> , 61, 91-98	2.4	41
1	The innovation of biomaterials: From bioactive to bioelectroactive. <i>Science China Materials</i> , <b>2011</b> , 4, 1-10	7.1	2