

# Javad Tavakoli

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2728404/publications.pdf>

Version: 2024-02-01

60  
papers

1,990  
citations

304368

22  
h-index

253896

43  
g-index

61  
all docs

61  
docs citations

61  
times ranked

2693  
citing authors

#	ARTICLE	IF	CITATIONS
1	Hyperbranched polymers tune the physicochemical, mechanical, and biomedical properties of alginate hydrogels. <i>Materials Today Chemistry</i> , 2022, 23, 100656.	1.7	10
2	Developing Novel Fabrication and Optimisation Strategies on Aggregation-Induced Emission Nanoprobe/Polyvinyl Alcohol Hydrogels for Bio-Applications. <i>Molecules</i> , 2022, 27, 1002.	1.7	2
3	Detailed mechanical characterization of the transition zone: New insight into the integration between the annulus and nucleus of the intervertebral disc. <i>Acta Biomaterialia</i> , 2022, 143, 87-99.	4.1	3
4	Understanding the lipid production mechanism in <i>Euglena gracilis</i> with a fast-response AI Egen bioprobe, DPAS. <i>Materials Chemistry Frontiers</i> , 2021, 5, 268-283.	3.2	11
5	Revisiting an ancient inorganic aggregation-induced emission system: An enlightenment to clusteroluminescence. <i>Aggregate</i> , 2021, 2, e36.	5.2	40
6	Aggregation-Induced Emission Fluorescent Gels: Current Trends and Future Perspectives. <i>Topics in Current Chemistry</i> , 2021, 379, 9.	3.0	12
7	Modeling of human intervertebral disc annulus fibrosus with complex multi-fiber networks. <i>Acta Biomaterialia</i> , 2021, 123, 208-221.	4.1	26
8	Magnetic resonance elastography: A non-invasive biomarker for low back pain studies. <i>Biomedical Engineering Advances</i> , 2021, 2, 100014.	2.2	0
9	Tuning aggregation-induced emission nanoparticle properties under thin film formation. <i>Materials Chemistry Frontiers</i> , 2020, 4, 537-545.	3.2	21
10	Mechanisms of Failure Following Simulated Repetitive Lifting. <i>Spine</i> , 2020, 45, 357-367.	1.0	7
11	Advanced Strategies for the Regeneration of Lumbar Disc Annulus Fibrosus. <i>International Journal of Molecular Sciences</i> , 2020, 21, 4889.	1.8	28
12	Elastic fibers: The missing key to improve engineering concepts for reconstruction of the Nucleus Pulposus in the intervertebral disc. <i>Acta Biomaterialia</i> , 2020, 113, 407-416.	4.1	20
13	The ultrastructural organization of elastic fibers at the interface of the nucleus and annulus of the intervertebral disk. <i>Acta Biomaterialia</i> , 2020, 114, 323-332.	4.1	15
14	Tuning Surface Morphology of Fluorescent Hydrogels Using a Vortex Fluidic Device. <i>Molecules</i> , 2020, 25, 3445.	1.7	4
15	Artificial intelligence enhanced mathematical modeling on rotary triboelectric nanogenerators under various kinematic and geometric conditions. <i>Nano Energy</i> , 2020, 75, 104993.	8.2	24
16	Vortex fluidic enabling and significantly boosting light intensity of graphene oxide with aggregation induced emission luminogen. <i>Materials Chemistry Frontiers</i> , 2020, 4, 2126-2130.	3.2	8
17	Synthetic fluorescent probes to apprehend calcium signalling in lipid droplet accumulation in microalgae—an updated review. <i>Science China Chemistry</i> , 2020, 63, 308-324.	4.2	5
18	A hyper-branched polymer tunes the size and enhances the fluorescent properties of aggregation-induced emission nanoparticles. <i>Nanoscale Advances</i> , 2020, 2, 633-641.	2.2	9

#	ARTICLE	IF	CITATIONS
19	Vortex fluidic mediated one-step fabrication of polyvinyl alcohol hydrogel films with tunable surface morphologies and enhanced self-healing properties. <i>Science China Materials</i> , 2020, 63, 1310-1317.	3.5	9
20	Natural-based Hydrogels: A Journey from Simple to Smart Networks for Medical Examination. <i>Current Medicinal Chemistry</i> , 2020, 27, 2704-2733.	1.2	13
21	Erythromycin Releasing PVA/sucrose and PVA/honey Hydrogels as Wound Dressings with Antibacterial Activity and Enhanced Bio-adhesion. <i>Iranian Journal of Pharmaceutical Research</i> , 2020, 19, 448-464.	0.3	10
22	AI Egen quantitatively monitoring the release of Ca <sup>2+</sup> during swelling and degradation process in alginate hydrogels. <i>Materials Science and Engineering C</i> , 2019, 104, 109951.	3.8	17
23	Simulation of high-output and lightweight sliding-mode triboelectric nanogenerators. <i>Nano Energy</i> , 2019, 66, 104115.	8.2	19
24	Bacterial cellulose production, properties and applications with different culture methods – A review. <i>Carbohydrate Polymers</i> , 2019, 219, 63-76.	5.1	444
25	Enlightening Freeze-Thaw Process of Physically Cross-Linked Poly(vinyl alcohol) Hydrogels by Aggregation-Induced Emission Fluorogens. <i>ACS Applied Polymer Materials</i> , 2019, 1, 1390-1398.	2.0	36
26	Aggregation-induced emission lights up the swelling process: a new technique for swelling characterisation of hydrogels. <i>Materials Chemistry Frontiers</i> , 2019, 3, 664-667.	3.2	25
27	Understanding interfacial interactions of polydopamine and glass fiber and their enhancement mechanisms in epoxy-based laminates. <i>Composites Part A: Applied Science and Manufacturing</i> , 2019, 116, 62-71.	3.8	45
28	Effect of Honey/PVA Hydrogel Loaded by Erythromycin on Full-Thickness Skin Wound Healing in Rats; Stereological Study. <i>Galen</i> , 2019, 8, e1362.	0.6	1
29	Surface morphology characterization of laser-induced titanium implants: lesson to enhance osseointegration process. <i>Biomedical Engineering Letters</i> , 2018, 8, 249-257.	2.1	24
30	Polydopamine as sizing on carbon fiber surfaces for enhancement of epoxy laminated composites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2018, 107, 626-632.	3.8	72
31	Ultrastructural organization of elastic fibres in the partition boundaries of the annulus fibrosus within the intervertebral disc. <i>Acta Biomaterialia</i> , 2018, 68, 67-77.	4.1	42
32	New findings confirm the viscoelastic behaviour of the inter-lamellar matrix of the disc annulus fibrosus in radial and circumferential directions of loading. <i>Acta Biomaterialia</i> , 2018, 71, 411-419.	4.1	32
33	Novel Bacterial Cellulose-Poly (Acrylic Acid) Hybrid Hydrogels with Controllable Antimicrobial Ability as Dressings for Chronic Wounds. <i>Polymers</i> , 2018, 10, 1323.	2.0	35
34	The Biomechanics of the Inter-Lamellar Matrix and the Lamellae During Progression to Lumbar Disc Herniation: Which is the Weakest Structure?. <i>Annals of Biomedical Engineering</i> , 2018, 46, 1280-1291.	1.3	24
35	A method for visualization and isolation of elastic fibres in annulus fibrosus of the disc. <i>Materials Science and Engineering C</i> , 2018, 93, 299-304.	3.8	29
36	Cost-Effective Double-Layer Hydrogel Composites for Wound Dressing Applications. <i>Polymers</i> , 2018, 10, 305.	2.0	39

#	ARTICLE	IF	CITATIONS
37	Novel Bacterial Cellulose/Gelatin Hydrogels as 3D Scaffolds for Tumor Cell Culture. <i>Polymers</i> , 2018, 10, 581.	2.0	43
38	New insights into the viscoelastic and failure mechanical properties of the elastic fiber network of the inter-lamellar matrix in the annulus fibrosus of the disc. <i>Acta Biomaterialia</i> , 2018, 77, 292-300.	4.1	21
39	Regionâ€‘media coupling in characterization and modelling of the disc annulus single lamella swelling. <i>Medical and Biological Engineering and Computing</i> , 2017, 55, 1483-1492.	1.6	2
40	<i>In situ</i> formed internal water channels improving water swelling and mechanical properties of water swellable rubber composites. <i>Journal of Applied Polymer Science</i> , 2017, 134, .	1.3	16
41	The ultra-structural organization of the elastic network in the intra- and inter-lamellar matrix of the intervertebral disc. <i>Acta Biomaterialia</i> , 2017, 58, 269-277.	4.1	57
42	In situ polymerized hyperbranched polymer reinforced poly(acrylic acid) hydrogels. <i>Materials Chemistry Frontiers</i> , 2017, 1, 1995-2004.	3.2	33
43	Honey/PVA hybrid wound dressings with controlled release of antibiotics: Structural, physico-mechanical and in-vitro biomedical studies. <i>Materials Science and Engineering C</i> , 2017, 77, 318-325.	3.8	105
44	Tissue Engineering of the Intervertebral Discâ€™s Annulus Fibrosus: A Scaffold-Based Review Study. <i>Tissue Engineering and Regenerative Medicine</i> , 2017, 14, 81-91.	1.6	22
45	Development of a rapid matrix digestion technique for ultrastructural analysis of elastic fibers in the intervertebral disc. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017, 71, 175-183.	1.5	15
46	Physico-mechanical, morphological and biomedical properties of a novel natural wound dressing material. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017, 65, 373-382.	1.5	32
47	Hydrogel Based Sensors for Biomedical Applications: An Updated Review. <i>Polymers</i> , 2017, 9, 364.	2.0	286
48	Structure and mechanical function of the interâ€‘lamellar matrix of the annulus fibrosus in the disc. <i>Journal of Orthopaedic Research</i> , 2016, 34, 1307-1315.	1.2	60
49	Enhancing water swelling ability and mechanical properties of waterâ€‘swellable rubber by PAA/SBS nanofiber mats. <i>Journal of Applied Polymer Science</i> , 2016, 133, .	1.3	4
50	Characterization and evaluation of acacia gum loaded PVA hybrid wound dressing. , 2013, , .		7
51	Evaluation of effectiveness of herbal medication in cancer care: a review study. <i>Iranian Journal of Cancer Prevention</i> , 2012, 5, 144-56.	0.7	25
52	Evaluation of water conservation system for sterilizer cooling mechanism: A preventive maintenance study. , 2008, , .		0
53	Risk management in integrated biomedical engineering preventive maintenance information network. , 2008, , .		0
54	Effect of Nd:Yttrium-aluminum-garnet laser radiation on Ti6Al4V alloy properties for biomedical applications. <i>Journal of Laser Applications</i> , 2008, 20, 209-217.	0.8	12

#	ARTICLE	IF	CITATIONS
55	Analysis of Bioadhesivity of Osteoblast Cells on Titanium Alloy Surface Modified by Nd:YAG Laser. Journal of Adhesion, 2007, 83, 151-172.	1.8	5
56	Evaluation of drug release from PLGA nanospheres containing bethametasone. Proceedings of SPIE, 2007, , .	0.8	0
57	Swelling characteristics of acrylic acid polyelectrolyte hydrogel in a dc electric field. Smart Materials and Structures, 2007, 16, 1614-1620.	1.8	41
58	Characterization of Ti6Al4V implant surface treated by Nd:YAG laser and emery paper for orthopaedic applications. Applied Surface Science, 2007, 253, 8772-8781.	3.1	39
59	Evaluation of drug release from PLGA nanospheres containing bethametasone. , 2007, , .		1
60	ALTEN: A Highâ€Fidelity Primary Tissueâ€Engineering Platform to Assess Cellular Responses Ex Vivo. Advanced Science, 0, , 2103332.	5.6	3