Javad Foroughi

List of Publications by Citations

88 papers	3,896 citations	30 h-index	61 g-index
97 ext. papers	4,773 ext. citations	7.8 avg, IF	5.58 L-index

#	Paper	IF	Citations
88	Artificial muscles from fishing line and sewing thread. *Science*, **2014**, 343, 868-72	33.3	724
87	Electrically, chemically, and photonically powered torsional and tensile actuation of hybrid carbon nanotube yarn muscles. *Science*, **2012**, 338, 928-32	33.3	462
86	Torsional carbon nanotube artificial muscles. *Science*, **2011**, 334, 494-7	33.3	407
85	Self-Healing Hydrogels: The Next Paradigm Shift in Tissue Engineering?. *Advanced Science*, **2019**, 6, 1801664	15.6	160
84	Knitted Carbon-Nanotube-Sheath/Spandex-Core Elastomeric Yarns for Artificial Muscles and Strain Sensing. *ACS Nano*, **2016**, 10, 9129-9135	16.7	147
83	Superelastic Hybrid CNT/Graphene Fibers for Wearable Energy Storage. *Advanced Energy Materials*, **2018**, 8, 1702047	21.8	126
82	Sheath-run artificial muscles. *Science*, **2019**, 365, 150-155	33.3	120
81	Biopolymers for Antitumor Implantable Drug Delivery Systems: Recent Advances and Future Outlook. *Advanced Materials*, **2018**, 30, e1706665	24	109
80	Highly Conductive Carbon Nanotube-Graphene Hybrid Yarn. *Advanced Functional Materials*, **2014**, 24, 5859-5865	15.6	95
79	Soft, Flexible Freestanding Neural Stimulation and Recording Electrodes Fabricated from Reduced Graphene Oxide. *Advanced Functional Materials*, **2015**, 25, 3551-3559	15.6	91
78	Self-Healable Hydrogels: Self-Healing Hydrogels: The Next Paradigm Shift in Tissue Engineering? (Adv. Sci. 16/2019). *Advanced Science*, **2019**, 6, 1970094	13.6	78
77	High-performance hybrid carbon nanotube fibers for wearable energy storage. *Nanoscale*, **2017**, 9, 5063-5071	7.9	74
76	Triaxial braided piezo fiber energy harvesters for self-powered wearable technologies. *Journal of Materials Chemistry A*, **2019**, 7, 8245-8257	13	59
75	Sulfated polysaccharide-based scaffolds for orthopaedic tissue engineering. *Biomaterials*, **2019**, 214, 119214	15.6	58
74	Production of polypyrrole fibres by wet spinning. *Synthetic Metals*, **2008**, 158, 104-107	3.6	52
73	Developments in conducting polymer fibres: from established spinning methods toward advanced applications. *RSC Advances*, **2016**, 6, 44687-44716	3.7	51
72	Carbon Nanotube Based Fiber Supercapacitor as Wearable Energy Storage. *Frontiers in Materials*, **2019**, 6,	4	49

71	Preparation and characterization of hybrid conducting polymer-carbon nanotube yarn. *Nanoscale*, **2012**, 4, 940-5	7.7	49
70	Wearable Electronic Textiles from Nanostructured Piezoelectric Fibers. *Advanced Materials Technologies*, **2020**, 5, 1900900	6.8	45
69	A reactive wet spinning approach to polypyrrole fibres. *Journal of Materials Chemistry*, **2011**, 21, 6421		45
68	Controlled and scalable torsional actuation of twisted nylon 6 fiber. *Journal of Polymer Science, Part B: Polymer Physics*, **2016**, 54, 1278-1286	2.6	45
67	Piezofibers to smart textiles: a review on recent advances and future outlook for wearable technology. *Journal of Materials Chemistry A*, **2020**, 8, 9496-9522	13	44
66	Actuator Materials: Review on Recent Advances and Future Outlook for Smart Textiles. *Fibers*, **2019**, 7, 21	3.7	40
65	Unipolar stroke, electroosmotic pump carbon nanotube yarn muscles. *Science*, **2021**, 371, 494-498	33.3	34
64	Fabrication of a graphene coated nonwoven textile for industrial applications. *RSC Advances*, **2016**, 6, 73203-73209	3.7	33
63	The mechanical and the electrical properties of conducting polypyrrole fibers. *Journal of Applied Physics*, **2010**, 107, 103712	2.5	33
62	Simple and strong: twisted silver painted nylon artificial muscle actuated by Joule heating **2014**,		32
61	Fabrication of Coaxial Wet-Spun Graphene/Chitosan Biofibers. *Advanced Engineering Materials*, **2016**, 18, 284-293	3.5	32
60	Effect of synthesis conditions on the properties of wet spun polypyrrole fibres. *Synthetic Metals*, **2009**, 159, 1837-1843	3.6	31
59	Characterisation of torsional actuation in highly twisted yarns and fibres. *Polymer Testing*, **2015**, 46, 88-97	4.5	30
58	Electroactive nanostructured scaffold produced by controlled deposition of PPy on electrospun PCL fibres. *Research on Chemical Intermediates*, **2017**, 43, 1235-1251	2.8	28
57	Development and Characterization of Novel Hybrid Hydrogel Fibers. *Macromolecular Materials and Engineering*, **2015**, 300, 1217-1225	3.9	27
56	Probe Sensor Using Nanostructured Multi-Walled Carbon Nanotube Yarn for Selective and Sensitive Detection of Dopamine. *Sensors*, **2017**, 17,	3.8	26
55	Nanostructured Electrospun Hybrid Graphene/Polyacrylonitrile Yarns. *Nanomaterials*, **2017**, 7,	5.4	24
54	Smart Fabrics and Networked Clothing: Recent developments in CNT-based fibers and their continual refinement. *IEEE Consumer Electronics Magazine*, **2016**, 5, 105-111	3.2	21

53	Highly Stretchable Self-Powered Wearable Electrical Energy Generator and Sensors. *Advanced Materials Technologies*, **2021**, 6, 2000841	6.8	21
52	High strain electromechanical actuators based on electrodeposited polypyrrole doped with di-(2-ethylhexyl)sulfosuccinate. *Sensors and Actuators B: Chemical*, **2011**, 155, 278-284	8.5	20
51	Hybrid Graphene/Conducting Polymer Strip Sensors for Sensitive and Selective Electrochemical Detection of Serotonin. *ACS Omega*, **2019**, 4, 22169-22177	3.9	20
50	Development and Characterization of a Sucrose Microneedle Neural Electrode Delivery System. *Advanced Biology*, **2018**, 2, 1700187	3.5	18
49	Nanofibers-Based Piezoelectric Energy Harvester for Self-Powered Wearable Technologies. *Polymers*, **2020**, 12,	4.5	18
48	Short Oxygen Plasma Treatment Leading to Long-Term Hydrophilicity of Conductive PCL-PPy Nanofiber Scaffolds. *Polymers*, **2017**, 9,	4.5	17
47	Preparation and in vitro assessment of wet-spun gemcitabine-loaded polymeric fibers: Towards localized drug delivery for the treatment of pancreatic cancer. *Pancreatology*, **2017**, 17, 795-804	3.8	16
46	Estimation of mechanical property degradation of poly(lactic acid) and flax fibre reinforced poly(lactic acid) bio-composites during thermal processing. *Measurement: Journal of the International Measurement Confederation*, **2018**, 116, 367-372	4.6	16
45	Bending Analysis of Polymer-Based Flexible Antennas for Wearable, General IoT Applications: A Review. *Polymers*, **2021**, 13,	4.5	16
44	3D braided yarns to create electrochemical cells. *Electrochemistry Communications*, **2015**, 61, 27-31	5.1	14
43	Carbon nanotube and graphene fiber artificial muscles. *Nanoscale Advances*, **2019**, 1, 4592-4614	5.1	14
42	Twist coil coupling fibres for high stroke tensile artificial muscles. *Sensors and Actuators A: Physical*, **2018**, 283, 98-106	3.9	13
41	Effect of anisotropic thermal expansion on the torsional actuation of twist oriented polymer fibres. *Polymer*, **2017**, 129, 127-134	3.9	12
40	Brazing techniques for the fabrication of biocompatible carbon-based electronic devices. *Carbon*, **2016**, 107, 180-189	10.4	12
39	Electrically contractile polymers augment right ventricular output in the heart. *Artificial Organs*, **2014**, 38, 1034-9	2.6	12
38	Wet-Spun Biofiber for Torsional Artificial Muscles. *Soft Robotics*, **2017**, 4, 421-430	9.2	11
37	Electrically Conducting Hydrogel Graphene Nanocomposite Biofibers for Biomedical Applications. *Frontiers in Chemistry*, **2020**, 8, 88	5	11
36	Artificial Muscles from Hybrid Carbon Nanotube-Polypyrrole-Coated Twisted and Coiled Yarns. *Macromolecular Materials and Engineering*, **2020**, 305, 2000421	3.9	11

35	Coaxial mussel-inspired biofibers: making of a robust and efficacious depot for cancer drug delivery. *Journal of Materials Chemistry B*, **2020**, 8, 5064-5079	7.3	10
34	A bladder-free, non-fluidic, conductive McKibben artificial muscle operated electro-thermally. *Smart Materials and Structures*, **2017**, 26, 015011	3.4	9
33	Thermomechanical effects in the torsional actuation of twisted nylon 6 fiber. *Journal of Applied Polymer Science*, **2017**, 134, 45529	2.9	9
32	Fabrication of Aligned Biomimetic Gellan Gum-Chitosan Microstructures through 3D Printed Microfluidic Channels and Multiple In Situ Cross-Linking Mechanisms. *ACS Biomaterials Science and Engineering*, **2020**, 6, 3638-3648	5.5	8
31	Wet-Spun Trojan Horse Cell Constructs for Engineering Muscle. *Frontiers in Chemistry*, **2020**, 8, 18	5	8
30	Microwave Characterization of Carbon Nanotube Yarns For UWB Medical Wireless Body Area Networks. *IEEE Transactions on Microwave Theory and Techniques*, **2013**, 61, 3625-3631	4.1	8
29	Heterogeneous photoelectro-Fenton using ZnO and TiO2 thin film as photocatalyst for photocatalytic degradation Malachite Green. *Applied Surface Science Advances*, **2021**, 6, 100126	2.6	8
28	Conducting Polymer Fibers **2015**, 31-62		7
27	Dual high-stroke and high-work capacity artificial muscles inspired by DNA supercoiling. *Science Robotics*, **2021**, 6,	18.6	7
26	The charge transport mechanisms in conducting polymer polypyrrole films and fibers. *Materials Research Express*, **2018**, 5, 105701	1.7	6
25	Effect of conducting polypyrrole on the transport properties of carbon nanotube yarn. *Thin Solid Films*, **2012**, 520, 7049-7053	2.2	6
24	Effect of post-spinning on the electrical and electrochemical properties of wet spun graphene fibre. *RSC Advances*, **2016**, 6, 46427-46432	3.7	6
23	Triaxial Carbon Nanotube/Conducting Polymer Wet-Spun Fibers Supercapacitors for Wearable Electronics. *Nanomaterials*, **2020**, 11,	5.4	5
22	An octagonal-shaped conductive HC12 & LIBERATOR-40 thread embroidered chipless RFID for general IoT applications. *Sensors and Actuators A: Physical*, **2021**, 318, 112485	3.9	5
21	Magnetoresistance mechanisms in carbon-nanotube yarns. *Synthetic Metals*, **2018**, 242, 55-60	3.6	4
20	Dual Delivery of Gemcitabine and Paclitaxel by Wet-Spun Coaxial Fibers Induces Pancreatic Ductal Adenocarcinoma Cell Death, Reduces Tumor Volume, and Sensitizes Cells to Radiation. *Advanced Healthcare Materials*, **2020**, 9, e2001115	10.1	4
19	Transient Response & Electromagnetic Behaviour of Flexible Bow-Tie Shaped Chip-less RFID Tag for General IoT Applications. *Advances in Science, Technology and Engineering Systems*, **2020**, 5, 757-764	0.3	3
18	High Performance Artificial Muscles to Engineer a Ventricular Cardiac Assist Device and Future Perspectives of a Cardiac Sleeve. *Advanced Materials Technologies*, **2021**, 6, 2000894	6.8	3

17	Magnetoreresistance of carbon nanotube-polypyrrole composite yarns. *Physica C: Superconductivity and Its Applications*, **2018**, 548, 78-81	1.3	2
16	Enhancing crystal phase content in electrospun PVDF nanofibers		2
15	Implantable coaxial nanocomposite biofibers for local chemo-photothermal combinational cancer therapy. *Nano Select*,	3.1	2
14	Effects of Bending Bow-Tie Chipless RFID Tag for Different Polymer Substrates **2019**,		2
13	Twisted and coiled multi-ply yarns artificial muscles. *Sensors and Actuators A: Physical*, **2021**, 318, 112490	3.9	2
12	Hydrogels Fibers **2018**,		2
11	A Silver-Coated Conductive Fibre HC12 Sewed Chipless RFID Tag on Cotton Fabric for Wearable Applications **2020**,		1
10	A Fibre Embroidered Chipless RFID Tag on Cotton Fabrics for Wearable Applications **2020**,		1
9	Conducting Polymer Fibers **2014**, 1-27		1
8	Novel Bow-Tie Chip-less RFID Tag for Wearable Applications **2019**,		1
7	Carbon Nanotube-Graphene Composites Fibers **2018**, 61-86		1
6	A new approach to develop, characterise and model actuating textiles. *Smart Materials and Structures*, **2021**, 30, 025019	3.4	1
5	3D-Printed Coaxial Hydrogel Patches with Mussel-Inspired Elements for Prolonged Release of Gemcitabine.. *Polymers*, **2021**, 13,	4.5	1
4	Intelligent drug delivery systems **2020**, 163-184		
3	Electrothermally Driven Carbon-Based Materials as EAPs: Fundamentals and Device Configurations **2016**, 455-470		
2	Electrothermally Driven Carbon-Based Materials as EAPs: Fundamentals and Device Configurations **2016**, 1-16		
1	Advanced Nanostructured Semiconductor Materials: Morphology Controlled Synthesis and Application. *Journal of Nanomaterials*, **2017**, 2017, 1-1	3.2	