

# Jose G Martinez

## List of Publications by Citations

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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.

68 papers	2,107 citations	27 h-index	45 g-index
71 ext. papers	2,382 ext. citations	7.5 avg, IF	5.5 L-index

#	Paper	IF	Citations
68	Biomimetic electrochemistry from conducting polymers. A review. <i>Electrochimica Acta</i> , <b>2012</b> , 84, 112-128.	8.7	239
67	Fabrication of conductive electrospun silk fibroin scaffolds by coating with polypyrrole for biomedical applications. <i>Bioelectrochemistry</i> , <b>2012</b> , 85, 36-43	5.6	129
66	Sensing characteristics of a conducting polymer/hydrogel hybrid microfiber artificial muscle. <i>Sensors and Actuators B: Chemical</i> , <b>2011</b> , 160, 1180-1190	8.5	107
65	Physical and chemical awareness from sensing polymeric artificial muscles. Experiments and modeling. <i>Progress in Polymer Science</i> , <b>2015</b> , 44, 62-78	29.6	79
64	Effect of the electrolyte concentration and substrate on conducting polymer actuators. <i>Langmuir</i> , <b>2014</b> , 30, 3894-904	4	75
63	Conjugated Polymer Actuators and Devices: Progress and Opportunities. <i>Advanced Materials</i> , <b>2019</b> , 31, e1808210	24	74
62	Biomimetic Structural Electrochemistry From Conducting Polymers: Processes, Charges, and Energies. Coulovoltammetric Results from Films on Metals Revisited. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 3929-3940	15.6	72
61	Biomimetic intracellular matrix (ICM) materials, properties and functions. Full integration of actuators and sensors. <i>Journal of Materials Chemistry B</i> , <b>2013</b> , 1, 26-38	7.3	69
60	Biomimetic dual sensing-actuators based on conducting polymers. Galvanostatic theoretical model for actuators sensing temperature. <i>Journal of Physical Chemistry B</i> , <b>2012</b> , 116, 5279-90	3.4	65
59	Electrospun silk fibroin scaffolds coated with reduced graphene promote neurite outgrowth of PC-12 cells under electrical stimulation. <i>Materials Science and Engineering C</i> , <b>2017</b> , 79, 315-325	8.3	56
58	Biomimetic dual sensing-actuators: theoretical description. Sensing electrolyte concentration and driving current. <i>Journal of Physical Chemistry B</i> , <b>2012</b> , 116, 9223-30	3.4	55
57	Artificial Muscles: A Tool To Quantify Exchanged Solvent during Biomimetic Reactions. <i>Chemistry of Materials</i> , <b>2012</b> , 24, 4093-4099	9.6	55
56	Structural and Biomimetic Chemical Kinetics: Kinetic Magnitudes Include Structural Information. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 404-416	15.6	54
55	Structural Electrochemistry: Conductivities and Ionic Content from Rising Reduced Polypyrrole Films. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 1259-1264	15.6	53
54	Fabrication of electrospun silk fibroin scaffolds coated with graphene oxide and reduced graphene for applications in biomedicine. <i>Bioelectrochemistry</i> , <b>2016</b> , 108, 36-45	5.6	49
53	Actuating Textiles: Next Generation of Smart Textiles. <i>Advanced Materials Technologies</i> , <b>2018</b> , 3, 1700397.	7.8	49
52	Exchanged cations and water during reactions in polypyrrole macroions from artificial muscles. <i>ChemPhysChem</i> , <b>2014</b> , 15, 293-301	3.2	49

51	Polypyrrole Asymmetric Bilayer Artificial Muscle: Driven Reactions, Cooperative Actuation, and Osmotic Effects. <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 1535-1541	15.6	48
50	Ionic exchanges, structural movements and driven reactions in conducting polymers from bending artificial muscles. <i>Sensors and Actuators B: Chemical</i> , <b>2014</b> , 199, 27-30	8.5	47
49	Structural Electrochemistry from Freestanding Polypyrrole Films: Full Hydrogen Inhibition from Aqueous Solutions. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 1265-1274	15.6	41
48	Electro-chemo-biomimetics from conducting polymers: fundamentals, materials, properties and devices. <i>Journal of Materials Chemistry B</i> , <b>2016</b> , 4, 2069-2085	7.3	40
47	Activation energy for polypyrrole oxidation: film thickness influence. <i>Journal of Solid State Electrochemistry</i> , <b>2011</b> , 15, 1169-1178	2.6	39
46	Mechanical awareness from sensing artificial muscles: Experiments and modeling. <i>Sensors and Actuators B: Chemical</i> , <b>2014</b> , 195, 365-372	8.5	38
45	Polymeric actuators: Solvents tune reaction-driven cation to reaction-driven anion actuation. <i>Sensors and Actuators B: Chemical</i> , <b>2016</b> , 233, 328-336	8.5	37
44	Creeping and structural effects in Faradaic artificial muscles. <i>Journal of Solid State Electrochemistry</i> , <b>2015</b> , 19, 2683-2689	2.6	36
43	Electro-conductive double-network hydrogels. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , <b>2012</b> , 50, 790-796	2.6	31
42	Asymmetric Bilayer Muscles. Cooperative and Antagonist Actuation. <i>Electrochimica Acta</i> , <b>2016</b> , 195, 9-18	6.7	29
41	Type I Collagen-Derived Injectable Conductive Hydrogel Scaffolds as Glucose Sensors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 16244-16249	9.5	27
40	Fibroin/Polyaniline microfibrillar mat. Preparation and electrochemical characterization as reactive sensor. <i>Electrochimica Acta</i> , <b>2014</b> , 123, 501-510	6.7	27
39	Using reactive artificial muscles to determine water exchange during reactions. <i>Smart Materials and Structures</i> , <b>2013</b> , 22, 104019	3.4	26
38	Artificial Muscles Powered by Glucose. <i>Advanced Materials</i> , <b>2019</b> , 31, e1901677	24	25
37	Graphene electrochemical responses sense surroundings. <i>Electrochimica Acta</i> , <b>2012</b> , 81, 49-57	6.7	23
36	Electrochemistry of carbon nanotubes: reactive processes, dual sensing-actuating properties and devices. <i>ChemPhysChem</i> , <b>2012</b> , 13, 2108-14	3.2	23
35	Electrochemical characterization of PEDOT/PSS/Sorbitol electrodes. Sorbitol changes cation to anion interchange during reactions. <i>Journal of Electroanalytical Chemistry</i> , <b>2011</b> , 657, 23-27	4.1	23
34	Interpenetrated triple polymeric layer as electrochemomechanical actuator: Solvent influence and diffusion coefficient of counterions. <i>Electrochimica Acta</i> , <b>2017</b> , 230, 461-469	6.7	20

33	Polyurethane microfibrinous mat templated polypyrrole: Preparation and biomimetic reactive sensing capabilities. <i>Journal of Electroanalytical Chemistry</i> , <b>2014</b> , 719, 47-53	4.1	20
32	Electrochemo-dynamical characterization of polypyrrole actuators coated on gold electrodes. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 827-36	3.6	19
31	Structural electrochemistry. Chronopotentiometric responses from rising compacted polypyrrole electrodes: experiments and model. <i>RSC Advances</i> , <b>2014</b> , 4, 29139-29145	3.7	16
30	Graphene adsorbed on silk-fibroin meshes: Biomimetic and reversible conformational movements driven by reactions. <i>Electrochimica Acta</i> , <b>2016</b> , 209, 521-528	6.7	16
29	Investigation of electrically conducting yarns for use in textile actuators. <i>Smart Materials and Structures</i> , <b>2018</b> , 27, 074004	3.4	14
28	A chemical and electrochemical multivalent memory made from FeNi <sub>3</sub> -graphene nanocomposites. <i>Electrochemistry Communications</i> , <b>2014</b> , 39, 15-18	5.1	14
27	Artificial Muscles from Hybrid Carbon Nanotube-Polypyrrole-Coated Twisted and Coiled Yarns. <i>Macromolecular Materials and Engineering</i> , <b>2020</b> , 305, 2000421	3.9	11
26	Polypyrrole-amphiphile blend electrodes: new reaction-driven structural processes with possible formation of vesicles. <i>Electrochimica Acta</i> , <b>2017</b> , 246, 89-96	6.7	8
25	Faradaic and Capacitive Components of the CNT Electrochemical Responses. <i>Frontiers in Materials</i> , <b>2016</b> , 3,	4	8
24	Deep Reduced PEDOT Films Support Electrochemical Applications: Biomimetic Color Front. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2015</b> , 3, 15	5.8	7
23	Electrochemical Synthesis and Characterization of Flavin Mononucleotide-Exfoliated Pristine Graphene/Polypyrrole Composites. <i>ChemElectroChem</i> , <b>2017</b> , 4, 1487-1497	4.3	6
22	Biomimetic Sensing Actuators Based on Conducting Polymers <b>2012</b> ,		6
21	Conducting polymers are simultaneous sensing actuators <b>2013</b> ,		6
20	Soft parallel manipulator fabricated by additive manufacturing. <i>Sensors and Actuators B: Chemical</i> , <b>2020</b> , 305, 127355	8.5	6
19	Three electrochemical tools (motor-sensor-battery) with energy recovery work simultaneously in a trilayer artificial muscle. <i>Electrochimica Acta</i> , <b>2019</b> , 294, 126-133	6.7	6
18	A Biomimetic Approach to Increasing Soft Actuator Performance by Friction Reduction. <i>Polymers</i> , <b>2020</b> , 12,	4.5	4
17	Polypyrrol/chitosan hydrogel hybrid microfiber as sensing artificial muscle <b>2011</b> ,		4
16	Biohybrid Variable Stiffness Soft Actuators that Self-Create Bone. <i>Advanced Materials</i> , <b>2021</b> , e2107345	24	4

15	Fast and High-Strain Electrochemically Driven Yarn Actuators in Twisted and Coiled Configurations. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2008959	15.6	4
14	Asymmetric Bilayer Muscles: Cooperative Actuation, Dynamic Hysteresis, and Creeping in NaPF <sub>6</sub> Aqueous Solutions. <i>ChemistryOpen</i> , <b>2016</b> , 5, 369-74	2.3	3
13	One Actuator and Several Sensors in One Device with only Two Connecting Wires: Mimicking Muscle/Brain Feedback. <i>Advances in Science and Technology</i> , <b>2012</b> , 79, 16-25	0.1	3
12	Soft actuator materials for textile muscles and wearable bioelectronics <b>2020</b> , 201-218		2
11	Conducting Polymers as EAPs: Fundamentals and Materials <b>2016</b> , 237-255		2
10	Electrochemical Kinetics in Dense, Reactive and Wet Gels. Biomimicking Reactions and Devices. <i>Molecular Crystals and Liquid Crystals</i> , <b>2012</b> , 555, 295-305	0.5	2
9	Solvent effects on carbide-derived-carbon trilayer bending actuators. <i>Synthetic Metals</i> , <b>2019</b> , 247, 170-176	3.6	2
8	Chemo-ionic-conformational memory from reactive dense gels: a way to explore new multivalent memories and brain memory. <i>Materials Research Society Symposia Proceedings</i> , <b>2015</b> , 1729, 137-142		1
7	Enhancing the Conductivity of the Poly(3,4-ethylenedioxythiophene)-Poly(styrenesulfonate) Coating and Its Effect on the Performance of Yarn Actuators. <i>Advanced Intelligent Systems</i> , <b>2020</b> , 2, 1900184	6	1
6	Conducting Polymers as EAPs: How to Start Experimenting with Them <b>2016</b> , 413-436		1
5	Conducting Polymers as EAPs: Fundamentals and Materials <b>2016</b> , 1-19		0
4	Artificial Physical and Chemical Awareness (Proprioception) from Polymeric Motors. <i>Materials Research Society Symposia Proceedings</i> , <b>2015</b> , 1717, 27		
3	Polymeric Artificial Muscles are Linear Faradaic Motors. <i>Key Engineering Materials</i> , <b>2015</b> , 644, 137-144	0.4	
2	Conducting Polymers as EAPs: How to Start Experimenting with Them <b>2016</b> , 1-25		
1	Can Human Proprioception Be Described by Physical-Chemical Equations? Proprioceptive Artificial Muscles. <i>Key Engineering Materials</i> , <b>2015</b> , 644, 145-152	0.4	