Vishnu-Baba Sundaresan

List of Publications by Year
in descending order

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34	410	840585 11	752573 20
papers	citations	h-index	g-index

34	34	34	561
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Topical tissue nano-transfection mediates non-viral stroma reprogramming and rescue. Nature Nanotechnology, 2017, 12, 974-979.	15.6	122
2	Modeling and characterization of a chemomechanical actuator using protein transporter. Sensors and Actuators B: Chemical, 2008, 131, 384-393.	4.0	33
3	Biological transport processes for microhydraulic actuation. Sensors and Actuators B: Chemical, 2007, 123, 685-695.	4.0	28
4	Dynamic characterization of elastico-mechanoluminescence towards structural health monitoring. Journal of Intelligent Material Systems and Structures, 2017, 28, 2458-2464.	1.4	26
5	Chemo-mechanical Model for Actuation Based on Biological Membranes*. Journal of Intelligent Material Systems and Structures, 2006, 17, 863-870.	1.4	23
6	Bioenergetics and mechanical actuation analysis with membrane transport experiments for use in biomimetic nastic structures. Journal of Materials Research, 2006, 21, 2058-2067.	1.2	20
7	Mechanoelectrochemistry of PPy(DBS) from correlated characterization of electrochemical response and extensional strain. Physical Chemistry Chemical Physics, 2015, 17, 32268-32275.	1.3	20
8	Ionic redox transistor from pore-spanning PPy(DBS) membranes. Energy and Environmental Science, 2016, 9, 2555-2562.	15.6	19
9	Phospholipid vesicles as soft templates for electropolymerization of nanostructured polypyrrole membranes with long range order. Journal of Materials Chemistry A, 2014, 2, 11784.	5.2	17
10	Self-Healing of Ionomeric Polymers with Carbon Fibers from Medium-Velocity Impact and Resistive Heating. Smart Materials Research, 2013, 2013, 1-12.	0.5	13
11	Controlled fluid transport using ATP-powered protein pumps. Smart Materials and Structures, 2007, 16, S207-S213.	1.8	12
12	Smart Self-Healing Material Systems Using Inductive and Resistive Heating. ACS Symposium Series, 2010, , 45-60.	0.5	11
13	Nanoscale polypyrrole sensors for near-field electrochemical measurements. Sensors and Actuators B: Chemical, 2017, 242, 1193-1200.	4.0	11
14	Conducting polymer supported bilayer lipid membrane reconstituted with alamethicin. Smart Materials and Structures, 2011, 20, 094020.	1.8	8
15	Polypyrrole-based amperometric cation sensor with tunable sensitivity. Journal of Intelligent Material Systems and Structures, 2016, 27, 1702-1709.	1.4	7
16	Chemoelectrical Energy Conversion of Adenosine Triphosphate using ATPases. Journal of Intelligent Material Systems and Structures, 2010, 21, 201-212.	1.4	6
17	Design and analysis of a synthetic jet actuator-based fluid atomization device. Journal of Intelligent Material Systems and Structures, 2017, 28, 2307-2316.	1.4	6
18	Mass and charge density effects on the saturation kinetics of polypyrrole doped with dodecylbenzene sulfonate. Journal of Intelligent Material Systems and Structures, 2017, 28, 760-771.	1.4	6

#	Article	IF	Citations
19	Polypyrrole membranes as scaffolds for biomolecule immobilization. Smart Materials and Structures, 2016, 25, 125033.	1.8	5
20	Dynamic mechanoelectrochemistry of polypyrrole membranes via shear-force tracking. Physical Chemistry Chemical Physics, 2016, 18, 17366-17372.	1.3	4
21	A structural model of ultra-microelectrodes for shear-force based scanning electrochemical microscopy. Journal of Intelligent Material Systems and Structures, 2018, 29, 3562-3571.	1.4	4
22	Surface-tracked scanning ion conductance microscopy: A novel imaging technique for measuring topography-correlated transmembrane ion transport through porous substrates. Micron, 2019, 120, 57-65.	1.1	4
23	Chemo-mechanical model of biological membranes for actuation mechanisms. , 2005, 5761, 108.		2
24	Fabrication and characterization of an integrated ionic device from suspended polypyrrole and alamethicin-reconstituted lipid bilayer membranes. Smart Materials and Structures, 2012, 21, 094022.	1.8	2
25	Electrode Fabrication for Scanning Electrochemical Microscopy and Shear Force Imaging. , 2016, , .		1
26	Integrated Bioderived-Conducting Polymer Membrane Nanostructures for Energy Conversion and Storage. , 2012, , .		0
27	Characterization of Electrochemical Capacity of a Biotemplated Polypyrrole Membrane. , 2013, , .		0
28	Development of an Android OS Based Controller of a Double Motor Propulsion System for Connected Electric Vehicles and Communication Delays Analysis. Mathematical Problems in Engineering, 2015, 2015, 1-12.	0.6	0
29	Investigating Secondary Equilibration in Thermoplastic Ionomers Under a Thermo-Electric Field. , 2016, , .		0
30	Pore-Spanning PPy(DBS) as a Voltage-Gated Synthetic Membrane Ion Channel. , 2016, , .		0
31	Investigating the Effect of Thermoelectric Processing on Ionic Aggregation in Thermoplastic Ionomers. , 2017, , .		0
32	Redox Transistor Battery: An Emerging Architecture for Electrochemical Energy Storage. , 2017, , .		0
33	Polypyrrole Bridge as a Support for Alamethicin-Reconstituted Planar Bilayer Lipid Membranes. , 2011, , .		0
34	Frequency Dependent Ion Rejection Properties of Active Nanoporous Membranes. , 2013, , .		0