Rudolf Kiefer

List of Publications by Year
in descending order

95 papers	1,141 citations	331670 21 h-index	477307 29 g-index
95 all docs	95 docs citations	95 times ranked	903 citing authors

#	Article	IF	Citations
1	The importance of potential range choice on the electromechanical response of cellulose - carbon nanotube fibers. Synthetic Metals, 2022, 283, 116966.	3.9	3
2	Polypyrrole Polyethylene Composite for Controllable Linear Actuators in Different Organic Electrolytes. Materials, 2022, 15, 540.	2.9	1
3	Electrochemical performance of composite electrodes based on rGO, Mn/Cu metalâ€“organic frameworks, and PANI. Scientific Reports, 2022, 12, 664.	3.3	26
4	Artificial muscle like behavior of polypyrrole polyethylene oxide independent of applied potential ranges. Journal of Applied Polymer Science, 2022, 139, .	2.6	6
5	Isolation and optimization of a glyphosate-degrading Rhodococcus soli G41 for bioremediation. Archives of Microbiology, 2022, 204, 252.	2.2	5
6	Cardiovascular Disease and Possible Ways in Which Lycopene Acts as an Efficient Cardio-Protectant against Different Cardiovascular Risk Factors. Molecules, 2022, 27, 3235.	3.8	10
7	Role of Polyoxometalate Contents in Polypyrrole: Linear Actuation and Energy Storage. Materials, 2022, 15, 3619.	2.9	0
8	Tuning the linear actuation of multiwall carbon nanotube fibers with carbide-derived carbon. Synthetic Metals, 2022, 288, 117099.	3.9	1
9	Polypyrrole and poly(3,4-ethylenedioxythiophene) on silicon cantilever: Role of formation potential in bending displacement. Synthetic Metals, 2021, 271, 116653.	3.9	3
10	Antagonist Concepts of Polypyrrole Actuators: Bending Hybrid Actuator and Mirrored Trilayer Linear Actuator. Polymers, 2021, 13, 861.	4.5	5
11	The Use of Laminates of Commercially Available Fabrics for Anti-Stab Body-Armor. Polymers, 2021, 13, 1077.	4.5	9
12	Identification and Biodegradation Potential of a Novel Strain of Kosakonia oryzae Isolated from a Polyoxyethylene Tallow Amine Paddy Soil. Current Microbiology, 2021, 78, 3173-3180.	2.2	3
13	Ion Mobility in Thick and Thin Poly-3,4 Ethylenedioxythiophene Filmsâ€”From EQCM to Actuation. Polymers, 2021, 13, 2448.	4.5	0
14	Review of Danshen: From its metabolism to possible mechanisms of its biological activities. Journal of Functional Foods, 2021, 85, 104613.	3.4	11
15	Polypyrrole with Phosphor Tungsten Acid and Carbide-Derived Carbon: Change of Solvent in Electropolymerization and Linear Actuation. Materials, 2021, 14, 6302.	2.9	8
16	Solvent Effect in Imidazole-Based Poly(Ionic liquid) Membranes: Energy Storage and Sensing. Polymers, 2021, 13, 3466.	4.5	4
17	A Kirigami Approach of Patterning Membrane Actuators. Polymers, 2021, 13, 125.	4.5	2
18	Wider Potential Windows of Cellulose Multiwall Carbon Nanotube Fibers Leading to Qualitative Multifunctional Changes in an Organic Electrolyte. Polymers, 2021, 13, 4439.	4.5	4

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19	Hydrogen production from the tannery wastewater treatment by using agriculture supports membrane/adsorbents electrochemical system. International Journal of Hydrogen Energy, 2020, 45, 3699-3711.	7.1	14
20	Polypyrroleâ€coated fiberâ€scaffolds: Concurrent linear actuation and sensing. Journal of Applied Polymer Science, 2020, 137, 48533.	2.6	15
21	Cellulose-Multiwall Carbon Nanotube Fiber Actuator Behavior in Aqueous and Organic Electrolyte. Materials, 2020, 13, 3213.	2.9	9
22	Consistent response from conducting polymer actuators: Potential window and embedded charges to avoid mixed ion transport. Synthetic Metals, 2020, 268, 116502.	3.9	8
23	Multifunctionality of Polypyrrole Polyethyleneoxide Composites: Concurrent Sensing, Actuation and Energy Storage. Polymers, 2020, 12, 2060.	4.5	8
24	A Biomimetic Approach to Increasing Soft Actuator Performance by Friction Reduction. Polymers, 2020, 12, 1120.	4.5	4
25	Concept of an artificial muscle design on polypyrrole nanofiber scaffolds. PLoS ONE, 2020, 15, e0232851.	2.5	19
26	Effect of walnut shell biochars on soil quality, crop yields, and weed dynamics in a 4-year field experiment. Environmental Science and Pollution Research, 2020, 27, 18510-18520.	5.3	9
27	Printed PEDOT:PSS Trilayer: Mechanism Evaluation and Application in Energy Storage. Materials, 2020, 13, 491.	2.9	4
28	Role of polyethylene oxide content in polypyrrole linear actuators. Materials Today Communications, 2020, 23, 100908.	1.9	11
29	Improving the Electrochemical Performance and Stability of Polypyrrole by Polymerizing Ionic Liquids. Polymers, 2020, 12, 136.	4.5	7
30	Concept of an artificial muscle design on polypyrrole nanofiber scaffolds. , 2020, 15, e0232851.		0
31	Concept of an artificial muscle design on polypyrrole nanofiber scaffolds. , 2020, 15, e0232851.		0
32	Concept of an artificial muscle design on polypyrrole nanofiber scaffolds. , 2020, 15, e0232851.		0
33	Concept of an artificial muscle design on polypyrrole nanofiber scaffolds. , 2020, 15, e0232851.		0
34	Electrochemomechanical Behavior of Polypyrrole-Coated Nanofiber Scaffolds in Cell Culture Medium. Polymers, 2019, 11, 1043.	4.5	9
35	Hardware and Software Development for Isotonic Strain and Isometric Stress Measurements of Linear Ionic Actuators. Polymers, 2019, 11, 1054.	4.5	18
36	Comparative Analysis of Fluorinated Anions for Polypyrrole Linear Actuator Electrolytes. Polymers, 2019, 11, 849.	4.5	25

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37	Solvent effects on carbide-derived-carbon trilayer bending actuators. Synthetic Metals, 2019, 247, 170-176.	3.9	4
38	Role of polymerization temperature on the performance of polypyrrole/dodecylbenzenesulphonate linear actuators. Synthetic Metals, 2019, 247, 53-58.	3.9	15
39	Impact of biochar and compost amendment on soil quality, growth and yield of a replanted apple orchard in a 4â€year field study. Journal of the Science of Food and Agriculture, 2019, 99, 1862-1869.	3.5	50
40	Production of Novel Bio-Flocculants from <i>Klebsiella variicola</i> BF1 using Cassava Starch Wastewater and its Application. Current Science, 2019, 117, 121.	0.8	5
41	Cordycepin Downregulates Cdk-2 to Interfere with Cell Cycle and Increases Apoptosis by Generating ROS in Cervical Cancer Cells: in vitro and in silico Study. Current Cancer Drug Targets, 2019, 19, 152-159.	1.6	19
42	Potential risk of weed outbreak by increasing biochar's application rates in slowâ€growth legume, lentil (<scp>Lens culinaris</scp> Medik.). Journal of the Science of Food and Agriculture, 2018, 98, 2080-2088.	3.5	27
43	Thin ink-jet printed trilayer actuators composed of PEDOT:PSS on interpenetrating polymer networks. Sensors and Actuators B: Chemical, 2018, 258, 1072-1079.	7.8	40
44	Optimal phosphotungstinate concentration for polypyrrole linear actuation and energy storage. Multifunctional Materials, 2018, 1, 014003.	3.7	9
45	Poly(ethylene oxide) in polypyrrole doped dodecylbenzenesulfonate: characterisation and linear actuation. International Journal of Nanotechnology, 2018, 15, 689.	0.2	2
46	Influence of solvent on linear polypyrroleâ€“polyethylene oxide actuators. Journal of Applied Polymer Science, 2018, 135, 46831.	2.6	9
47	Actuation increase in polypyrrole bilayer by photo-activated dopants. Synthetic Metals, 2018, 246, 57-63.	3.9	2
48	Mechanical and electro-mechanical properties of EAP actuators with inkjet printed electrodes. Synthetic Metals, 2018, 246, 122-127.	3.9	8
49	Polypyrrole/carbide-derived carbon composite in organic electrolyte: Characterization as a linear actuator. Reactive and Functional Polymers, 2018, 131, 414-419.	4.1	8
50	Carbide-derived carbon and poly-3,4-ethylenedioxythiphene composite laminate: linear and bending actuation. Synthetic Metals, 2018, 245, 67-73.	3.9	2
51	Solvent change in polymerization influence linear actuation of polypyrrole carbide-derived carbon films. , 2018, , .		0
52	Poly-3,4-ethylenedixoythiophene on carbide-derived carbon trilayer: combined linear actuation characterization. , 2018, , .		0
53	Polypyrrole polymerized in polyethylene oxide: linear actuation in organic and aqueous electrolytes. , 2018, , .		0
54	Interpenetrated triple polymeric layer as electrochemomechanical actuator: Solvent influence and diffusion coefficient of counterions. Electrochimica Acta, 2017, 230, 461-469.	5.2	22

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55	Inkjetâ€printed hybrid conducting polymer-activated carbon aerogel linear actuators driven in an organic electrolyte. Sensors and Actuators B: Chemical, 2017, 250, 44-51.	7.8	21
56	Polypyrrole linear actuation tuned by phosphotungstic acid. Sensors and Actuators B: Chemical, 2017, 247, 742-748.	7.8	21
57	Polypyrrole coatings on gelatin fiber scaffolds: Material and electrochemical characterizations in organic and aqueous electrolyte. Synthetic Metals, 2017, 232, 25-30.	3.9	6
58	Enhancement of polypyrrole linear actuation with poly(ethylene oxide). Synthetic Metals, 2017, 232, 1-7.	3.9	21
59	Polymeric actuators: Solvents tune reaction-driven cation to reaction-driven anion actuation. Sensors and Actuators B: Chemical, 2016, 233, 328-336.	7.8	46
60	Electro-chemo-mechanical deformation properties of polypyrrole/dodecylbenzenesulfate linear actuators in aqueous and organic electrolyte. RSC Advances, 2016, 6, 96484-96489.	3.6	28
61	Embedded Carbide-derived Carbon (CDC) particles in polypyrrole (PPy) for linear actuator. Proceedings of SPIE, 2016, , .	0.8	1
62	Carbide-derived carbon in polypyrrole changing the elastic modulus with a huge impact on actuation. RSC Advances, 2016, 6, 26380-26385.	3.6	25
63	MEJORA DE LA IMAGEN DE SATÃ‰LITE: ENFOQUE SISTEMÃTICO PARA REDUCCIÃ“N DE RUIDO Y MEJORA DE RESOLUCIÃ“N. Dyna (Spain), 2016, 91, 326-329.	0.2	0
64	Dielectric elastomer stack actuator-based autofocus fluid lens. Applied Optics, 2015, 54, 9976.	2.1	22
65	Electrochemical actuation of multiwall carbon nanotube fiber with embedded carbide-derived carbon particles. Carbon, 2015, 94, 911-918.	10.3	23
66	Solvent and electrolyte effects in PPyDBS free standing films. , 2015, , .		1
67	Electrolyte and solvent effects in PPy/DBS linear actuators. Sensors and Actuators B: Chemical, 2015, 216, 24-32.	7.8	44
68	A passive autofocus system by using standard deviation of the image on a liquid lens. , 2015, , .		4
69	Autofocus liquid lens by using sharpness measurement. , 2015, , .		1
70	Wavelet transform based new interpolation technique for satellite image resolution enhancement. , 2014, , .		11
71	Autofocus fluid lens device construction and implementation of modified ionic polymer metal composite (IPMC) membrane actuators. , 2014, , .		0
72	In situmeasurements with CPC micro-actuators using SEM. , 2014, , .		0

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73	PEDOT-PSS/MWCNT coatings on PET for conducting polymer actuators. International Journal of Nanotechnology, 2014, 11, 477.	0.2	3
74	Electrochemomechanical deformation (ECMD) of PPyDBS in free standing film formation and trilayer designs. , 2014, , .		3
75	Carbide-derived carbon (CDC) linear actuator properties in combination with conducting polymers. Proceedings of SPIE, 2014, , .	0.8	0
76	Modified Back Projection Kernel Based Image Super Resolution. , 2014, , .		1
77	Chitosan Combined with Conducting Polymers for Novel Functionality: Antioxidant and Antibacterial Activity. Key Engineering Materials, 2014, 605, 428-431.	0.4	9
78	Carbide-derived carbon as active interlayer of polypyrrole tri-layer linear actuator. Sensors and Actuators B: Chemical, 2014, 201, 100-106.	7.8	14
79	Electrochemistry of interlayer supported polypyrrole tri-layer linear actuators. Electrochimica Acta, 2014, 122, 322-328.	5.2	14
80	Conducting polymer actuators formed on MWCNT and PEDOT-PSS conductive coatings. Synthetic Metals, 2013, 171, 69-75.	3.9	27
81	Two formation mechanisms and renewable antioxidant properties of suspensible chitosanâ€“PPy and chitosanâ€“PPyâ€“BTDA composites. Synthetic Metals, 2013, 164, 6-11.	3.9	15
82	Direct chemical synthesis of pristine polypyrrole hydrogels and their derived aerogels for high power density energy storage applications. Journal of Materials Chemistry A, 2013, 1, 15216.	10.3	24
83	Dependence of polypyrrole bilayer deflection upon polymerization potential. Synthetic Metals, 2013, 172, 37-43.	3.9	18
84	Renewable antioxidant properties of suspensible chitosanâ€“polypyrrole composites. Reactive and Functional Polymers, 2013, 73, 1072-1077.	4.1	41
85	PEDOT/TBACF3SO3bending actuators based on a PEDOT-PEDOT sandwich complex. , 2013, , .		0
86	Effect of polymerization potential on the actuation of free standing poly-3,4-ethylenedioxythiophene films in a propylene carbonate electrolyte. Electrochimica Acta, 2010, 55, 681-688.	5.2	30
87	Cation driven actuation for free standing PEDOT films prepared from propylene carbonate electrolytes containing TBACF3SO3. Electrochimica Acta, 2008, 53, 2593-2599.	5.2	45
88	Electrochemomechanical behaviour of free standing PEDOT films in organic and aqueous electrolytes. , 2008, , .		2
89	The application of polypyrrole trilayer actuators in microfluidics and robotics. , 2008, , .		10
90	Mixed-ion linear actuation of PPy and PEDOT in propylene carbonate-triflate electrolytes. , 2007, , .		8

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91	Mixed-ion linear actuation behaviour of polypyrrole. Electrochimica Acta, 2007, 52, 2386-2391.	5.2	70
92	Effect of electrochemical synthesis conditions on deflection of PEDOT bilayers. Sensors and Actuators B: Chemical, 2007, 123, 379-383.	7.8	21
93	Actuation of polypyrrole films in propylene carbonate electrolytes. Sensors and Actuators B: Chemical, 2007, 125, 628-634.	7.8	27
94	Polypyrrole actuators for micropump applications. , 2006, , .		0
95	Dual function composite fibers of cellulose with activated carbon aerogel and carbide derived carbon. Journal of Applied Polymer Science, 0, , 52297.	2.6	1