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	Mixed-ion linear actuation behaviour of polypyrrole. Electrochimica Acta, 2007, 52, 2386-2391.	5.2	70
2	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
3	Polymeric actuators: Solvents tune reaction-driven cation to reaction-driven anion actuation. Sensors and Actuators B: Chemical, 2016, 233, 328-336.	7.8	46
4	Cation driven actuation for free standing PEDOT films prepared from propylene carbonate electrolytes containing TBACF3SO3. Electrochimica Acta, 2008, 53, 2593-2599.	5.2	45
5	Electrolyte and solvent effects in PPy/DBS linear actuators. Sensors and Actuators B: Chemical, 2015, 216, 24-32.	7.8	44
6	Renewable antioxidant properties of suspensible chitosanâ€“polypyrrole composites. Reactive and Functional Polymers, 2013, 73, 1072-1077.	4.1	41
7	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
8	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
9	Electro-chemo-mechanical deformation properties of polypyrrole/dodecylbenzenesulfate linear actuators in aqueous and organic electrolyte. RSC Advances, 2016, 6, 96484-96489.	3.6	28
10	Actuation of polypyrrole films in propylene carbonate electrolytes. Sensors and Actuators B: Chemical, 2007, 125, 628-634.	7.8	27
11	Conducting polymer actuators formed on MWCNT and PEDOT-PSS conductive coatings. Synthetic Metals, 2013, 171, 69-75.	3.9	27
12	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
13	Electrochemical performance of composite electrodes based on rGO, Mn/Cu metalâ€“organic frameworks, and PANI. Scientific Reports, 2022, 12, 664.	3.3	26
14	Carbide-derived carbon in polypyrrole changing the elastic modulus with a huge impact on actuation. RSC Advances, 2016, 6, 26380-26385.	3.6	25
15	Comparative Analysis of Fluorinated Anions for Polypyrrole Linear Actuator Electrolytes. Polymers, 2019, 11, 849.	4.5	25
16	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
17	Electrochemical actuation of multiwall carbon nanotube fiber with embedded carbide-derived carbon particles. Carbon, 2015, 94, 911-918.	10.3	23
18	Dielectric elastomer stack actuator-based autofocus fluid lens. Applied Optics, 2015, 54, 9976.	2.1	22

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19	Interpenetrated triple polymeric layer as electrochemomechanical actuator: Solvent influence and diffusion coefficient of counterions. Electrochimica Acta, 2017, 230, 461-469.	5.2	22
20	Effect of electrochemical synthesis conditions on deflection of PEDOT bilayers. Sensors and Actuators B: Chemical, 2007, 123, 379-383.	7.8	21
21	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
22	Polypyrrole linear actuation tuned by phosphotungstic acid. Sensors and Actuators B: Chemical, 2017, 247, 742-748.	7.8	21
23	Enhancement of polypyrrole linear actuation with poly(ethylene oxide). Synthetic Metals, 2017, 232, 1-7.	3.9	21
24	Concept of an artificial muscle design on polypyrrole nanofiber scaffolds. PLoS ONE, 2020, 15, e0232851.	2.5	19
25	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
26	Dependence of polypyrrole bilayer deflection upon polymerization potential. Synthetic Metals, 2013, 172, 37-43.	3.9	18
27	Hardware and Software Development for Isotonic Strain and Isometric Stress Measurements of Linear Ionic Actuators. Polymers, 2019, 11, 1054.	4.5	18
28	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
29	Role of polymerization temperature on the performance of polypyrrole/dodecylbenzenesulphonate linear actuators. Synthetic Metals, 2019, 247, 53-58.	3.9	15
30	Polypyrroleâ€coated fiberâ€scaffolds: Concurrent linear actuation and sensing. Journal of Applied Polymer Science, 2020, 137, 48533.	2.6	15
31	Carbide-derived carbon as active interlayer of polypyrrole tri-layer linear actuator. Sensors and Actuators B: Chemical, 2014, 201, 100-106.	7.8	14
32	Electrochemistry of interlayer supported polypyrrole tri-layer linear actuators. Electrochimica Acta, 2014, 122, 322-328.	5.2	14
33	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
34	Wavelet transform based new interpolation technique for satellite image resolution enhancement. , 2014, , .		11
35	Role of polyethylene oxide content in polypyrrole linear actuators. Materials Today Communications, 2020, 23, 100908.	1.9	11
36	Review of Danshen: From its metabolism to possible mechanisms of its biological activities. Journal of Functional Foods, 2021, 85, 104613.	3.4	11

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37	The application of polypyrrole trilayer actuators in microfluidics and robotics. , 2008, , .		10
38	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
39	Chitosan Combined with Conducting Polymers for Novel Functionality: Antioxidant and Antibacterial Activity. Key Engineering Materials, 2014, 605, 428-431.	0.4	9
40	Optimal phosphotungstinate concentration for polypyrrole linear actuation and energy storage. Multifunctional Materials, 2018, 1, 014003.	3.7	9
41	Influence of solvent on linear polypyrroleâ€“polyethylene oxide actuators. Journal of Applied Polymer Science, 2018, 135, 46831.	2.6	9
42	Electrochemomechanical Behavior of Polypyrrole-Coated Nanofiber Scaffolds in Cell Culture Medium. Polymers, 2019, 11, 1043.	4.5	9
43	Cellulose-Multiwall Carbon Nanotube Fiber Actuator Behavior in Aqueous and Organic Electrolyte. Materials, 2020, 13, 3213.	2.9	9
44	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
45	The Use of Laminates of Commercially Available Fabrics for Anti-Stab Body-Armor. Polymers, 2021, 13, 1077.	4.5	9
46	Mixed-ion linear actuation of PPy and PEDOT in propylene carbonate-triflate electrolytes. , 2007, , .		8
47	Mechanical and electro-mechanical properties of EAP actuators with inkjet printed electrodes. Synthetic Metals, 2018, 246, 122-127.	3.9	8
48	Polypyrrole/carbide-derived carbon composite in organic electrolyte: Characterization as a linear actuator. Reactive and Functional Polymers, 2018, 131, 414-419.	4.1	8
49	Consistent response from conducting polymer actuators: Potential window and embedded charges to avoid mixed ion transport. Synthetic Metals, 2020, 268, 116502.	3.9	8
50	Multifunctionality of Polypyrrole Polyethyleneoxide Composites: Concurrent Sensing, Actuation and Energy Storage. Polymers, 2020, 12, 2060.	4.5	8
51	Polypyrrole with Phosphor Tungsten Acid and Carbide-Derived Carbon: Change of Solvent in Electropolymerization and Linear Actuation. Materials, 2021, 14, 6302.	2.9	8
52	Improving the Electrochemical Performance and Stability of Polypyrrole by Polymerizing Ionic Liquids. Polymers, 2020, 12, 136.	4.5	7
53	Polypyrrole coatings on gelatin fiber scaffolds: Material and electrochemical characterizations in organic and aqueous electrolyte. Synthetic Metals, 2017, 232, 25-30.	3.9	6
54	Artificial muscle like behavior of polypyrrole polyethylene oxide independent of applied potential ranges. Journal of Applied Polymer Science, 2022, 139, .	2.6	6

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55	Antagonist Concepts of Polypyrrole Actuators: Bending Hybrid Actuator and Mirrored Trilayer Linear Actuator. Polymers, 2021, 13, 861.	4.5	5
56	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
57	Isolation and optimization of a glyphosate-degrading Rhodococcus soli G41 for bioremediation. Archives of Microbiology, 2022, 204, 252.	2.2	5
58	A passive autofocus system by using standard deviation of the image on a liquid lens. , 2015, , .		4
59	Solvent effects on carbide-derived-carbon trilayer bending actuators. Synthetic Metals, 2019, 247, 170-176.	3.9	4
60	A Biomimetic Approach to Increasing Soft Actuator Performance by Friction Reduction. Polymers, 2020, 12, 1120.	4.5	4
61	Printed PEDOT:PSS Trilayer: Mechanism Evaluation and Application in Energy Storage. Materials, 2020, 13, 491.	2.9	4
62	Solvent Effect in Imidazole-Based Poly(Ionic liquid) Membranes: Energy Storage and Sensing. Polymers, 2021, 13, 3466.	4.5	4
63	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
64	PEDOT-PSS/MWCNT coatings on PET for conducting polymer actuators. International Journal of Nanotechnology, 2014, 11, 477.	0.2	3
65	Electrochemomechanical deformation (ECMD) of PPyDBS in free standing film formation and trilayer designs. , 2014, , .		3
66	Polypyrrole and poly(3,4-ethylenedioxythiophene) on silicon cantilever: Role of formation potential in bending displacement. Synthetic Metals, 2021, 271, 116653.	3.9	3
67	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
68	The importance of potential range choice on the electromechanical response of cellulose - carbon nanotube fibers. Synthetic Metals, 2022, 283, 116966.	3.9	3
69	Electrochemomechanical behaviour of free standing PEDOT films in organic and aqueous electrolytes. , 2008, , .		2
70	Poly(ethylene oxide) in polypyrrole doped dodecylbenzenesulfonate: characterisation and linear actuation. International Journal of Nanotechnology, 2018, 15, 689.	0.2	2
71	Actuation increase in polypyrrole bilayer by photo-activated dopants. Synthetic Metals, 2018, 246, 57-63.	3.9	2
72	Carbide-derived carbon and poly-3,4-ethylenedioxythiphene composite laminate: linear and bending actuation. Synthetic Metals, 2018, 245, 67-73.	3.9	2

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73	A Kirigami Approach of Patterning Membrane Actuators. Polymers, 2021, 13, 125.	4.5	2
74	Modified Back Projection Kernel Based Image Super Resolution. , 2014, , .		1
75	Solvent and electrolyte effects in PPyDBS free standing films. , 2015, , .		1
76	Autofocus liquid lens by using sharpness measurement. , 2015, , .		1
77	Embedded Carbide-derived Carbon (CDC) particles in polypyrrole (PPy) for linear actuator. Proceedings of SPIE, 2016, , .	0.8	1
78	Polypyrrole Polyethylene Composite for Controllable Linear Actuators in Different Organic Electrolytes. Materials, 2022, 15, 540.	2.9	1
79	Dual function composite fibers of cellulose with activated carbon aerogel and carbide derived carbon. Journal of Applied Polymer Science, 0, , 52297.	2.6	1
80	Tuning the linear actuation of multiwall carbon nanotube fibers with carbide-derived carbon. Synthetic Metals, 2022, 288, 117099.	3.9	1
81	Polypyrrole actuators for micropump applications. , 2006, , .		0
82	PEDOT/TBACF3SO3bending actuators based on a PEDOT-PEDOT sandwich complex. , 2013, , .		0
83	Autofocus fluid lens device construction and implementation of modified ionic polymer metal composite (IPMC) membrane actuators. , 2014, , .		0
84	In situmeasurements with CPC micro-actuators using SEM. , 2014, , .		0
85	Carbide-derived carbon (CDC) linear actuator properties in combination with conducting polymers. Proceedings of SPIE, 2014, , .	0.8	0
86	Ion Mobility in Thick and Thin Poly-3,4 Ethylenedioxythiophene Filmsâ€"From EQCM to Actuation. Polymers, 2021, 13, 2448.	4.5	0
87	MEJORA DE LA IMAGEN DE SATÃ‰LITE: ENFOQUE SISTEMÃ•TICO PARA REDUCCIÃ“N DE RUIDO Y MEJORA DE RESOLUCIÃ“N. Dyna (Spain), 2016, 91, 326-329.	0.2	0
88	Solvent change in polymerization influence linear actuation of polypyrrole carbide-derived carbon films. , 2018, , .		0
89	Poly-3,4-ethylenedixoythiophene on carbide-derived carbon trilayer: combined linear actuation characterization. , 2018, , .		0
90	Polypyrrole polymerized in polyethylene oxide: linear actuation in organic and aqueous electrolytes. , 2018, , .		0

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91	Concept of an artificial muscle design on polypyrrole nanofiber scaffolds. , 2020, 15, e0232851.		0
92	Concept of an artificial muscle design on polypyrrole nanofiber scaffolds. , 2020, 15, e0232851.		0
93	Concept of an artificial muscle design on polypyrrole nanofiber scaffolds. , 2020, 15, e0232851.		0
94	Concept of an artificial muscle design on polypyrrole nanofiber scaffolds. , 2020, 15, e0232851.		0
95	Role of Polyoxometalate Contents in Polypyrrole: Linear Actuation and Energy Storage. Materials, 2022, 15, 3619.	2.9	0