

Sahika inal

List of Publications by Year in descending order

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107
papers

10,024
citations

44444

50
h-index

40945

97
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116
all docs

116
docs citations

116
times ranked

9966
citing authors

#	ARTICLE	IF	CITATIONS
1	Tailoring Electropolymerized Poly(3,4-ethylenedioxythiophene) Films for Oxygen Reduction Reaction. <i>Advanced Materials Technologies</i> , 2022, 7, 2100277.	3.0	7
2	Organic Bioelectronic Devices for Metabolite Sensing. <i>Chemical Reviews</i> , 2022, 122, 4581-4635.	23.0	55
3	Ionic-Liquid Induced Morphology Tuning of PEDOT:PSS for High-Performance Organic Electrochemical Transistors. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	43
4	Oligoethylene Glycol Side Chains Increase Charge Generation in Organic Semiconductor Nanoparticles for Enhanced Photocatalytic Hydrogen Evolution. <i>Advanced Materials</i> , 2022, 34, e2105007.	11.1	33
5	Propylene and butylene glycol: new alternatives to ethylene glycol in conjugated polymers for bioelectronic applications. <i>Materials Horizons</i> , 2022, 9, 973-980.	6.4	23
6	Fast and sensitive electromechanical sensing. <i>Nature Biomedical Engineering</i> , 2022, 6, 223-224.	11.6	2
7	Hydroxymethyl PEDOT microstructure-based electrodes for high-performance supercapacitors. <i>APL Materials</i> , 2022, 10, .	2.2	11
8	Pathogen and Protein Detection using Organic Electronics. , 2022, , .		0
9	A Peculiar Binding Characterization of DNA (RNA) Nucleobases at MoOS-Based Janus Biosensor: Dissimilar Facets Role on Selectivity and Sensitivity. <i>Biosensors</i> , 2022, 12, 442.	2.3	2
10	Performance of PEDOTOH/PEO-based Supercapacitors in Agarose Gel Electrolyte. <i>Chemistry - an Asian Journal</i> , 2022, 17, .	1.7	3
11	Operation Mechanism of n-Type Organic Electronic Metabolite Sensors. <i>Advanced Electronic Materials</i> , 2022, 8, .	2.6	12
12	Conjugated Polymer based Electronics for Diagnostics in Physiological Media. , 2022, , .		0
13	Convection Driven Ultrarapid Protein Detection via Nanobody-Functionalized Organic Electrochemical Transistors. <i>Advanced Materials</i> , 2022, 34, .	11.1	36
14	Polaron Delocalization in Donor-Acceptor Polymers and its Impact on Organic Electrochemical Transistor Performance. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 7777-7785.	7.2	84
15	Polaron Delocalization in Donor-Acceptor Polymers and its Impact on Organic Electrochemical Transistor Performance. <i>Angewandte Chemie</i> , 2021, 133, 7856-7864.	1.6	16
16	Influence of Side Chains on the n-Type Organic Electrochemical Transistor Performance. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 4253-4266.	4.0	76
17	Microfluidics integrated n-type organic electrochemical transistor for metabolite sensing. <i>Sensors and Actuators B: Chemical</i> , 2021, 329, 129251.	4.0	35
18	Microfluidic Integrated Organic Electrochemical Transistor with a Nanoporous Membrane for Amyloid- β^2 Detection. <i>ACS Nano</i> , 2021, 15, 8130-8141.	7.3	59

#	ARTICLE	IF	CITATIONS
19	Mixed Conduction in an n-Type Organic Semiconductor in the Absence of Hydrophilic Side Chains. <i>Advanced Functional Materials</i> , 2021, 31, 2010165.	7.8	71
20	Controlling Electrochemically Induced Volume Changes in Conjugated Polymers by Chemical Design: from Theory to Devices. <i>Advanced Functional Materials</i> , 2021, 31, 2100723.	7.8	35
21	Rapid single-molecule detection of COVID-19 and MERS antigens via nanobody-functionalized organic electrochemical transistors. <i>Nature Biomedical Engineering</i> , 2021, 5, 666-677.	11.6	235
22	Regiochemistry-Driven Organic Electrochemical Transistor Performance Enhancement in Ethylene Glycol-Functionalized Polythiophenes. <i>Journal of the American Chemical Society</i> , 2021, 143, 11007-11018.	6.6	74
23	Advances in bioelectronics: Materials, devices, and translational applications. <i>APL Materials</i> , 2021, 9, 070402.	2.2	2
24	Integration of Organic Electrochemical Transistors with Implantable Probes. <i>Advanced Materials Technologies</i> , 2021, 6, 2100763.	3.0	16
25	Decoding Electrophysiological Signals with Organic Electrochemical Transistors. <i>Macromolecular Bioscience</i> , 2021, 21, e2100187.	2.1	11
26	Reversible Electrochemical Charging of n-Type Conjugated Polymer Electrodes in Aqueous Electrolytes. <i>Journal of the American Chemical Society</i> , 2021, 143, 14795-14805.	6.6	62
27	The effect of the donor moiety of DPP based polymers on the performance of organic electrochemical transistors. <i>Journal of Materials Chemistry C</i> , 2021, 9, 13338-13346.	2.7	28
28	The Effect of Alkyl Spacers on the Mixed Ionic-Electronic Conduction Properties of n-Type Polymers. <i>Advanced Functional Materials</i> , 2021, 31, 2008718.	7.8	67
29	Muscle Fatigue Sensor Based on Ti_3C_2Tx MXene Hydrogel. <i>Small Methods</i> , 2021, 5, e2100819.	4.6	49
30	Dual Mode Sensing of Binding and Blocking of Cancer Exosomes to Biomimetic Human Primary Stem Cell Surfaces. <i>ACS Biomaterials Science and Engineering</i> , 2021, , .	2.6	1
31	Laser-Scribed Graphene Electrodes Derived from Lignin for Biochemical Sensing. <i>ACS Applied Nano Materials</i> , 2020, 3, 1166-1174.	2.4	74
32	A paper-based inkjet-printed PEDOT:PSS/ZnO sol-gel hydrazine sensor. <i>Sensors and Actuators B: Chemical</i> , 2020, 306, 127539.	4.0	72
33	Biofuel powered glucose detection in bodily fluids with an n-type conjugated polymer. <i>Nature Materials</i> , 2020, 19, 456-463.	13.3	187
34	In Situ Electrochemical Synthesis of a Conducting Polymer Composite for Multimetabolite Sensing. <i>Advanced Materials Technologies</i> , 2020, 5, 1900943.	3.0	39
35	Organic Bioelectronics: From Functional Materials to Next-Generation Devices and Power Sources. <i>Advanced Materials</i> , 2020, 32, e2001439.	11.1	101
36	Side Chain Redistribution as a Strategy to Boost Organic Electrochemical Transistor Performance and Stability. <i>Advanced Materials</i> , 2020, 32, e2002748.	11.1	181

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37	Ethylene Glycol-Based Side Chain Length Engineering in Polythiophenes and its Impact on Organic Electrochemical Transistor Performance. <i>Chemistry of Materials</i> , 2020, 32, 6618-6628.	3.2	92
38	A Self-standing Organic Supercapacitor to Power Bioelectronic Devices. <i>ACS Applied Energy Materials</i> , 2020, 3, 7896-7907.	2.5	24
39	Benchmarking the Performance of Electropolymerized Poly(3,4-ethylenedioxythiophene) Electrodes for Neural Interfacing. <i>Macromolecular Bioscience</i> , 2020, 20, e2000215.	2.1	15
40	Water stable molecular n-doping produces organic electrochemical transistors with high transconductance and record stability. <i>Nature Communications</i> , 2020, 11, 3004.	5.8	82
41	Fully Inkjet-Printed, Ultrathin and Conformable Organic Photovoltaics as Power Source Based on Cross-Linked PEDOT:PSS Electrodes. <i>Advanced Materials Technologies</i> , 2020, 5, 2000226.	3.0	50
42	Monitoring supported lipid bilayers with n-type organic electrochemical transistors. <i>Materials Horizons</i> , 2020, 7, 2348-2358.	6.4	42
43	Biomembrane-based organic electronic devices for ligand-receptor binding studies. <i>Analytical and Bioanalytical Chemistry</i> , 2020, 412, 6265-6273.	1.9	14
44	Tailoring PEDOT properties for applications in bioelectronics. <i>Materials Science and Engineering Reports</i> , 2020, 140, 100546.	14.8	140
45	The Key Role of Side Chain Linkage in Structure Formation and Mixed Conduction of Ethylene Glycol Substituted Polythiophenes. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 13029-13039.	4.0	78
46	Balancing Ionic and Electronic Conduction for High-Performance Organic Electrochemical Transistors. <i>Advanced Functional Materials</i> , 2020, 30, 1907657.	7.8	131
47	MXene improves the stability and electrochemical performance of electropolymerized PEDOT films. <i>APL Materials</i> , 2020, 8, .	2.2	25
48	Inkjet-printed Ti_3C_2 MXene electrodes for multimodal cutaneous biosensing. <i>JPhys Materials</i> , 2020, 3, 044004.	1.8	30
49	Redox-active Polymers in Biofuel Cells. <i>RSC Polymer Chemistry Series</i> , 2020, , 332-382.	0.1	1
50	Enzyme-Free Detection of Glucose with a Hybrid Conductive Gel Electrode. <i>Advanced Materials Interfaces</i> , 2019, 6, 1800928.	1.9	51
51	An organic electrochemical transistor integrated with a molecularly selective isoporous membrane for amyloid- β^2 detection. <i>Biosensors and Bioelectronics</i> , 2019, 143, 111561.	5.3	36
52	On the Role of Contact Resistance and Electrode Modification in Organic Electrochemical Transistors. <i>Advanced Materials</i> , 2019, 31, e1902291.	11.1	52
53	High-Performance Organic Electrochemical Transistors Based on Conjugated Polyelectrolyte Copolymers. <i>Chemistry of Materials</i> , 2019, 31, 5286-5295.	3.2	56
54	Facile Generation of Biomimetic-Supported Lipid Bilayers on Conducting Polymer Surfaces for Membrane Biosensing. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 43799-43810.	4.0	41

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55	Enhancing the Charge Extraction and Stability of Perovskite Solar Cells Using Strontium Titanate (SrTiO ₃) Electron Transport Layer. <i>ACS Applied Energy Materials</i> , 2019, 2, 8090-8097.	2.5	51
56	Membrane-Free Detection of Metal Cations with an Organic Electrochemical Transistor. <i>Advanced Functional Materials</i> , 2019, 29, 1904403.	7.8	80
57	Solvent Engineering for High-Performance n-Type Organic Electrochemical Transistors. <i>Advanced Electronic Materials</i> , 2019, 5, 1900249.	2.6	59
58	Highly selective chromoionophores for ratiometric Na ⁺ sensing based on an oligoethyleneglycol bridged bithiophene detection unit. <i>Journal of Materials Chemistry C</i> , 2019, 7, 5359-5365.	2.7	13
59	Digital Inkjet Printing of High-Efficiency Large-Area Nonfullerene Organic Solar Cells. <i>Advanced Materials Technologies</i> , 2019, 4, 1900040.	3.0	69
60	BMP-2 functionalized PEDOT:PSS-based OECTs for stem cell osteogenic differentiation monitoring. <i>Flexible and Printed Electronics</i> , 2019, 4, 044006.	1.5	11
61	Role of the Anion on the Transport and Structure of Organic Mixed Conductors. <i>Advanced Functional Materials</i> , 2019, 29, 1807034.	7.8	116
62	An Electrocardiography Device with an Integrated Microfluidic Ion Pump for Simultaneous Neural Recording and Electrophoretic Drug Delivery In Vivo. <i>Advanced Biology</i> , 2019, 3, e1800270.	3.0	63
63	Influence of Water on the Performance of Organic Electrochemical Transistors. <i>Chemistry of Materials</i> , 2019, 31, 927-937.	3.2	140
64	The Role of the Side Chain on the Performance of N-type Conjugated Polymers in Aqueous Electrolytes. <i>Chemistry of Materials</i> , 2018, 30, 2945-2953.	3.2	199
65	Organic electrochemical transistors. <i>Nature Reviews Materials</i> , 2018, 3, .	23.3	1,143
66	Lipid bilayer formation on organic electronic materials. <i>Journal of Materials Chemistry C</i> , 2018, 6, 5218-5227.	2.7	12
67	Smaller Counter Cation for Higher Transconductance in Anionic Conjugated Polyelectrolytes. <i>Macromolecular Chemistry and Physics</i> , 2018, 219, 1700374.	1.1	22
68	A fully inkjet-printed disposable glucose sensor on paper. <i>Npj Flexible Electronics</i> , 2018, 2, .	5.1	136
69	Transistor in a tube: A route to three-dimensional bioelectronics. <i>Science Advances</i> , 2018, 4, eaat4253.	4.7	78
70	Visualizing the Solid-Liquid Interface of Conjugated Copolymer Films Using Fluorescent Liposomes. <i>ACS Applied Bio Materials</i> , 2018, 1, 1348-1354.	2.3	12
71	Direct metabolite detection with an n-type accumulation mode organic electrochemical transistor. <i>Science Advances</i> , 2018, 4, eaat0911.	4.7	183
72	Ionic-to-electronic coupling efficiency in PEDOT:PSS films operated in aqueous electrolytes. <i>Journal of Materials Chemistry C</i> , 2018, 6, 12023-12030.	2.7	108

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73	Improving the Compatibility of Diketopyrrolopyrrole Semiconducting Polymers for Biological Interfacing by Lysine Attachment. <i>Chemistry of Materials</i> , 2018, 30, 6164-6172.	3.2	37
74	Fully printed all-polymer tattoo/textile electronics for electromyography. <i>Flexible and Printed Electronics</i> , 2018, 3, 034004.	1.5	46
75	Conjugated Polymers in Bioelectronics. <i>Accounts of Chemical Research</i> , 2018, 51, 1368-1376.	7.6	361
76	Tailoring the Electrochemical and Mechanical Properties of PEDOT:PSS Films for Bioelectronics. <i>Macromolecular Materials and Engineering</i> , 2017, 302, 1600497.	1.7	127
77	Polyelectrolyte Layer-by-Layer Assembly on Organic Electrochemical Transistors. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 10427-10434.	4.0	43
78	A Microfluidic Ion Pump for In Vivo Drug Delivery. <i>Advanced Materials</i> , 2017, 29, 1701217.	11.1	97
79	Conducting Polymer Scaffolds for Hosting and Monitoring 3D Cell Culture. <i>Advanced Biology</i> , 2017, 1, 1700052.	3.0	89
80	Benchmarking organic mixed conductors for transistors. <i>Nature Communications</i> , 2017, 8, 1767.	5.8	343
81	Organic electrochemical transistors based on PEDOT with different anionic polyelectrolyte dopants. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2016, 54, 147-151.	2.4	63
82	Supported Lipid Bilayer Assembly on PEDOT:PSS Films and Transistors. <i>Advanced Functional Materials</i> , 2016, 26, 7304-7313.	7.8	62
83	Controlling the mode of operation of organic transistors through side-chain engineering. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 12017-12022.	3.3	364
84	Bioelectronic neural pixel: Chemical stimulation and electrical sensing at the same site. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 9440-9445.	3.3	107
85	Autoclave Sterilization of PEDOT:PSS Electrophysiology Devices. <i>Advanced Healthcare Materials</i> , 2016, 5, 3094-3098.	3.9	46
86	Electroconductive Hydrogel Based on Functional Poly(Ethylenedioxy Thiophene). <i>Chemistry of Materials</i> , 2016, 28, 6080-6088.	3.2	96
87	N-type organic electrochemical transistors with stability in water. <i>Nature Communications</i> , 2016, 7, 13066.	5.8	242
88	Conducting polymer scaffolds for electrical control of cellular functions (Conference) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 142 Td (Pres		
89	Structural control of mixed ionic and electronic transport in conducting polymers. <i>Nature Communications</i> , 2016, 7, 11287.	5.8	627
90	Optical study of electrochromic moving fronts for the investigation of ion transport in conducting polymers. <i>Journal of Materials Chemistry C</i> , 2016, 4, 3942-3947.	2.7	44

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91	3D conducting polymer platforms for electrical control of protein conformation and cellular functions. <i>Journal of Materials Chemistry B</i> , 2015, 3, 5040-5048.	2.9	116
92	Controlling Epileptiform Activity with Organic Electronic Ion Pumps. <i>Advanced Materials</i> , 2015, 27, 3138-3144.	11.1	138
93	SiO ₂ /carbon nitride composite materials: The role of surfaces for enhanced photocatalysis. <i>Catalysis Today</i> , 2014, 225, 185-190.	2.2	56
94	<i>In Situ</i> Formation of Heterojunctions in Modified Graphitic Carbon Nitride: Synthesis and Noble Metal Free Photocatalysis. <i>Chemistry of Materials</i> , 2014, 26, 5812-5818.	3.2	192
95	A High Transconductance Accumulation Mode Electrochemical Transistor. <i>Advanced Materials</i> , 2014, 26, 7450-7455.	11.1	151
96	A water soluble fluorescent polymer as a dual colour sensor for temperature and a specific protein. <i>Journal of Materials Chemistry B</i> , 2013, 1, 6373.	2.9	38
97	Temperature-Regulated Fluorescence Characteristics of Supramolecular Assemblies Formed By a Smart Polymer and a Conjugated Polyelectrolyte. <i>Macromolecular Chemistry and Physics</i> , 2013, 214, 435-445.	1.1	13
98	Improving Carbon Nitride Photocatalysis by Supramolecular Preorganization of Monomers. <i>Journal of the American Chemical Society</i> , 2013, 135, 7118-7121.	6.6	781
99	Structure-related differences in the temperature-regulated fluorescence response of LCST type polymers. <i>Journal of Materials Chemistry C</i> , 2013, 1, 6603.	2.7	31
100	Temperature-Regulated Fluorescence and Association of an Oligo(ethyleneglycol)methacrylate-Based Copolymer with a Conjugated Polyelectrolyte—The Effect of Solution Ionic Strength. <i>Journal of Physical Chemistry B</i> , 2013, 117, 14576-14587.	1.2	7
101	Fluorinated Copolymer PCPDTBT with Enhanced Open-Circuit Voltage and Reduced Recombination for Highly Efficient Polymer Solar Cells. <i>Journal of the American Chemical Society</i> , 2012, 134, 14932-14944.	6.6	361
102	The Relationship between the Electric Field-Induced Dissociation of Charge Transfer Excitons and the Photocurrent in Small Molecular/Polymeric Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 982-986.	2.1	50
103	Relationship of Photophysical Properties and the Device Performance of Novel Hybrid Small-Molecular/Polymeric Solar Cells. <i>Macromolecular Rapid Communications</i> , 2009, 30, 1263-1268.	2.0	10
104	Understanding the effect of polymer hydration on n-type organic mixed semiconductor transistors. , 0, , .		0
105	Conjugated Polymer based Electronics for Diagnostics in Physiological Media. , 0, , .		0
106	Operation mechanism of n-type organic electronic metabolite sensors. , 0, , .		0
107	Influence of side chains on the n-type organic electrochemical transistor performance. , 0, , .		0