Ana Claudia Arias

List of Publications by Year
in descending order

76	8,729	76196 40	82410 72
papers	citations	h-index	g-index

79	79	79	12409
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Materials and Applications for Large Area Electronics: Solution-Based Approaches. Chemical Reviews, 2010, 110, 3-24.	23.0	1,646
2	Monitoring of Vital Signs with Flexible and Wearable Medical Devices. Advanced Materials, 2016, 28, 4373-4395.	11.1	1,033
3	All-organic optoelectronic sensor for pulse oximetry. Nature Communications, 2014, 5, 5745.	5.8	555
4	A New Frontier of Printed Electronics: Flexible Hybrid Electronics. Advanced Materials, 2020, 32, e1905279.	11.1	475
5	Flexible and stretchable power sources for wearable electronics. Science Advances, 2017, 3, e1602051.	4.7	323
6	A wearable biosensing system with in-sensor adaptive machine learning for hand gesture recognition. Nature Electronics, 2021, 4, 54-63.	13.1	317
7	Flexible Hybrid Electronics: Direct Interfacing of Soft and Hard Electronics for Wearable Health Monitoring. Advanced Functional Materials, 2016, 26, 8764-8775.	7.8	236
8	Highly Flexible, Printed Alkaline Batteries Based on Meshâ€Embedded Electrodes. Advanced Materials, 2011, 23, 3251-3255.	11.1	227
9	Charge Generation Kinetics and Transport Mechanisms in Blended Polyfluorene Photovoltaic Devices. Nano Letters, 2002, 2, 1353-1357.	4.5	214
10	Allâ€Printed Flexible Organic Transistors Enabled by Surface Tensionâ€Guided Blade Coating. Advanced Materials, 2014, 26, 5722-5727.	11.1	204
11	A flexible organic reflectance oximeter array. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E11015-E11024.	3.3	201
12	High-performance flexible energy storage and harvesting system for wearable electronics. Scientific Reports, 2016, 6, 26122.	1.6	182
13	Impedance sensing device enables early detection of pressure ulcers in vivo. Nature Communications, 2015, 6, 6575.	5.8	176
14	High Detectivity Allâ€Printed Organic Photodiodes. Advanced Materials, 2015, 27, 6411-6417.	11.1	174
15	A High Areal Capacity Flexible Lithiumâ€Ion Battery with a Strainâ€Compliant Design. Advanced Energy Materials, 2015, 5, 1401389.	10.2	174
16	Organic solar cells and fully printed super-capacitors optimized for indoor light energy harvesting. Nano Energy, 2016, 26, 631-640.	8.2	167
17	Recent Progress on Printed Flexible Batteries: Mechanical Challenges, Printing Technologies, and Future Prospects. Energy Technology, 2015, 3, 305-328.	1.8	154
18	Screen-printed flexible MRI receive coils. Nature Communications, 2016, 7, 10839.	5.8	152

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19	Inkjetâ€Printed Flexible Gold Electrode Arrays for Bioelectronic Interfaces. Advanced Functional Materials, 2016, 26, 1004-1013.	7.8	133
20	Charge-integrating organic heterojunction phototransistors for wide-dynamic-range image sensors. Nature Photonics, 2017, 11, 193-199.	15.6	128
21	Identifying orthogonal solvents for solution processed organic transistors. Organic Electronics, 2016, 30, 18-29.	1.4	90
22	Screen printed passive components for flexible power electronics. Scientific Reports, 2015, 5, 15959.	1.6	87
23	Printed and flexible biosensor for antioxidants using interdigitated ink-jetted electrodes and gravure-deposited active layer. Biosensors and Bioelectronics, 2015, 67, 553-559.	5.3	84
24	Flexible Bladeâ€Coated Multicolor Polymer Lightâ€Emitting Diodes for Optoelectronic Sensors. Advanced Materials, 2017, 29, 1606206.	11.1	84
25	Organic inkjet-patterned memory array based on ferroelectric field-effect transistors. Organic Electronics, 2011, 12, 2012-2018.	1.4	72
26	Fabrication of a Highâ€Performance Flexible Silverâ€“Zinc Wire Battery. Advanced Electronic Materials, 2016, 2, 1500296.	2.6	69
27	A potentiometric mechanotransduction mechanism for novel electronic skins. Science Advances, 2020, 6, eaba1062.	4.7	68
28	Printed, Flexible Lactate Sensors: Design Considerations Before Performing On-Body Measurements. Scientific Reports, 2019, 9, 13720.	1.6	62
29	A robust, gravure-printed, silver nanowire/metal oxide hybrid electrode for high-throughput patterned transparent conductors. Journal of Materials Chemistry C, 2016, 4, 3248-3255.	2.7	60
30	Organic Multi-Channel Optoelectronic Sensors for Wearable Health Monitoring. IEEE Access, 2019, 7, 128114-128124.	2.6	60
31	Understanding the Effects of Electrode Formulation on the Mechanical Strength of Composite Electrodes for Flexible Batteries. ACS Applied Materials & Interfaces, 2017, 9, 6390-6400.	4.0	57
32	Efficient light harvesting in a photovoltaic diode composed of a semiconductor conjugated copolymer blend. Applied Physics Letters, 2002, 80, 2204-2206.	1.5	55
33	All-printed full-color pixel organic photodiode array with a single active layer. Organic Electronics, 2018, 56, 139-145.	1.4	55
34	Perylene Polyimide-Polyether Anodes for Aqueous All-Organic Polymer Batteries. ACS Applied Energy Materials, 2018, 1, 7199-7205.	2.5	54
35	Solution-Processed Memristive Junctions Used in a Threshold Indicator. IEEE Transactions on Electron Devices, 2011, 58, 3435-3443.	1.6	53
36	Largeâ€Area Fabrication of Highâ€Performance Flexible and Wearable Pressure Sensors. Advanced Electronic Materials, 2020, 6, 1901310.	2.6	53

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37	Pulse Oximetry Using Organic Optoelectronics under Ambient Light. Advanced Materials Technologies, 2020, 5, 1901122.	3.0	50
38	All ink-jet printed polyfluorene photosensor for high illuminance detection. Organic Electronics, 2011, 12, 682-685.	1.4	47
39	Exciton and polaron dynamics in a step-ladder polymeric semiconductor: the influence of interchain order. Journal of Physics Condensed Matter, 2002, 14, 9803-9824.	0.7	42
40	All-additive ink-jet-printed display backplanes: Materials development and integration. Journal of the Society for Information Display, 2007, 15, 485.	0.8	42
41	A Potentiometric Electronic Skin for Thermosensation and Mechanosensation. Advanced Functional Materials, 2021, 31, 2010824.	7.8	42
42	A Singleâ€Mode, Selfâ€Adapting, and Selfâ€Powered Mechanoreceptor Based on a Potentiometricâ€“Triboelectric Hybridized Sensing Mechanism for Resolving Complex Stimuli. Advanced Materials, 2020, 32, e2005970.	11.1	41
43	Wireless User-Generic Ear EEG. IEEE Transactions on Biomedical Circuits and Systems, 2020, 14, 727-737.	2.7	37
44	Single-walled carbon nanotube transparent conductive films fabricated by reductive dissolution and spray coating for organic photovoltaics. Applied Physics Letters, 2014, 105, .	1.5	35
45	Evaluation of a Flexible 12-Channel Screen-printed Pediatric MRI Coil. Radiology, 2019, 291, 180-185.	3.6	35
46	Optimization of printed sensors to monitor sodium, ammonium, and lactate in sweat. APL Materials, 2020, 8, .	2.2	33
47	Materials and methods for higher performance screen-printed flexible MRI receive coils. Magnetic Resonance in Medicine, 2017, 78, 775-783.	1.9	32
48	Stencil-printed Lithium-ion micro batteries for IoT applications. Nano Energy, 2021, 82, 105666.	8.2	32
49	Emission Area Patterning of Organic Lightâ€Emitting Diodes (OLEDs) via Printed Dielectrics. Advanced Functional Materials, 2018, 28, 1802986.	7.8	29
50	Tin Oxide as a Cathode in Organic Light-Emitting Diodes. Advanced Materials, 1998, 10, 392-394.	11.1	27
51	Characterization and Comparison of Biodegradable Printed Capacitive Humidity Sensors. Sensors, 2021, 21, 6557.	2.1	22
52	Jet-Printed Active-Matrix Backplanes and Electrophoretic Displays. Japanese Journal of Applied Physics, 2007, 46, 1363-1369.	0.8	20
53	Printed Receive Coils with High Acoustic Transparency for Magnetic Resonance Guided Focused Ultrasound. Scientific Reports, 2018, 8, 3392.	1.6	19
54	A conjugated polymer-based voltage-regulator device. Advanced Materials, 1997, 9, 972-974.	11.1	17

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55	High efficiency polymer photodiodes. Synthetic Metals, 1999, 102, 957-958.	2.1	17
56	Highly Flexible Transparent Micromesh Electrodes via Blade-Coated Polymer Networks for Organic Light-Emitting Diodes. ACS Applied Materials & Interfaces, 2020, 12, 31687-31695.	4.0	17
57	Synthesis and Solar Cell Application of New Alternating Donorâ€“Acceptor Copolymers Based on Variable Units of Fluorene, Thiophene, and Phenylene. Journal of Physical Chemistry C, 2012, 116, 18641-18648.	1.5	16
58	Fabrication and Characterization of Flexible Spray-Coated Antennas. IEEE Access, 2018, 6, 62050-62061.	2.6	16
59	A Platform to Study the Effects of Electrical Stimulation on Immune Cell Activation During Wound Healing. Advanced Biology, 2019, 3, e1900106.	3.0	16
60	Tuning Strain Sensor Performance via Programmed Thin-Film Crack Evolution. ACS Applied Materials & Interfaces, 2021, 13, 38105-38113.	4.0	16
61	Empirically based device modeling of bulk heterojunction organic photovoltaics. Journal of Applied Physics, 2013, 113, 154506.	1.1	15
62	Printed Flexible Organic Transistors with Tunable Aspect Ratios. Advanced Electronic Materials, 2020, 6, 1901207.	2.6	13
63	Electrode Composite for Flexible Zincâ€“Manganese Dioxide Batteries through In Situ Polymerization of Polymer Hydrogel. Energy Technology, 2020, 8, 1901165.	1.8	10
64	Printed Potentiometric Nitrate Sensors for Use in Soil. Sensors, 2022, 22, 4095.	2.1	10
65	Local electrochemical control of hydrogel microactuators in microfluidics. Journal of Micromechanics and Microengineering, 2018, 28, 105005.	1.5	9
66	System design for organic pulse oximeter. , 2015, , .		8
67	Quantitative anatomy mimicking slice phantoms. Magnetic Resonance in Medicine, 2021, 86, 1159-1166.	1.9	7
68	The Road Towards Large-Area Electronics Without Vacuum Tools. ECS Transactions, 2006, 3, 229-236.	0.3	4
69	A Wireless, Multielectrode, User-generic Ear EEG Recording System. , 2019, , .		4
70	Flexible Bladeâ€Coated Optoelectronic Devices: Dual Functionality via Simultaneous Deposition. Advanced Functional Materials, 2022, 32, .	7.8	4
71	Multicycle Testing of Commercial Coin Cells for Buffering of Harvested Energy for the IoT. IEEE Internet of Things Journal, 2021, 8, 10047-10051.	5.5	3
72	Towards Wireless Flexible Printed Wearable Sensors. , 2019, , .		2

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73	Timing Randomly Spaced Events Using the Threshold-Voltage Shift in Disordered Semiconductors. IEEE Transactions on Electron Devices, 2008, 55, 3367-3374.	1.6	1
74	High-detectivity printed organic photodiodes for large area flexible imagers. , 2016, , .		1
75	High-Conductivity Solution-Processed Carbon Nanotube Networks as Transparent Electrodes in Organic Solar Cells. Materials Research Society Symposia Proceedings, 2013, 1537, 1.	0.1	0
76	Vacuum Formed Coils for Magnetic Resonance Imaging. , 2021, , .		0