Trisha L Andrew

List of Publications by Year
in descending order

84 papers	2,554 citations	279798 23 h-index	206112 48 g-index
86 all docs	86 docs citations	86 times ranked	4080 citing authors

#	Article	IF	Citations
1	Effect of synthetic accessibility on the commercial viability of organic photovoltaics. Energy and Environmental Science, 2013, 6, 711.	30.8	288
2	Confining Light to Deep Subwavelength Dimensions to Enable Optical Nanopatterning. Science, 2009, 324, 917-921.	12.6	220
3	A Fluorescence Turn-On Mechanism to Detect High Explosives RDX and PETN. Journal of the American Chemical Society, 2007, 129, 7254-7255.	13.7	214
4	Transforming Commercial Textiles and Threads into Sewable and Weavable Electric Heaters. ACS Applied Materials & Interfaces, 2017, 9, 32299-32307.	8.0	128
5	Improving the Performance of P3HTâ€“Fullerene Solar Cells with Side-Chain-Functionalized Poly(thiophene) Additives: A New Paradigm for Polymer Design. ACS Nano, 2012, 6, 3044-3056.	14.6	123
6	Towards seamlessly-integrated textile electronics: methods to coat fabrics and fibers with conducting polymers for electronic applications. Chemical Communications, 2017, 53, 7182-7193.	4.1	118
7	Wearable Sensors for Monitoring Human Motion: A Review on Mechanisms, Materials, and Challenges. SLAS Technology, 2020, 25, 9-24.	1.9	106
8	A Wearable Allâ€Fabric Thermoelectric Generator. Advanced Materials Technologies, 2019, 4, 1800615.	5.8	100
9	Structureâ€”Property relationships for exciton transfer in conjugated polymers. Journal of Polymer Science, Part B: Polymer Physics, 2011, 49, 476-498.	2.1	91
10	A Strategy for Accessing Nanobody-Based Electrochemical Sensors for Analyte Detection in Complex Media. , 2022, 1, 010601.		84
11	Rugged Textile Electrodes for Wearable Devices Obtained by Vapor Coating Offâ€theâ€Shelf, Plainâ€Woven Fabrics. Advanced Functional Materials, 2017, 27, 1700415.	14.9	76
12	Allâ€Textile Triboelectric Generator Compatible with Traditional Textile Process. Advanced Materials Technologies, 2016, 1, 1600147.	5.8	75
13	Detection of Explosives via Photolytic Cleavage of Nitroesters and Nitramines. Journal of Organic Chemistry, 2011, 76, 2976-2993.	3.2	65
14	Melding Vapor-Phase Organic Chemistry and Textile Manufacturing To Produce Wearable Electronics. Accounts of Chemical Research, 2018, 51, 850-859.	15.6	65
15	Vapor-printed polymer electrodes for long-term, on-demand health monitoring. Science Advances, 2019, 5, eaaw0463.	10.3	64
16	Synthesis, Reactivity, and Electronic Properties of 6,6-Dicyanofulvenes. Organic Letters, 2010, 12, 5302-5305.	4.6	59
17	Vapor phase organic chemistry to deposit conjugated polymer films on arbitrary substrates. Journal of Materials Chemistry C, 2017, 5, 5787-5796.	5.5	41
18	Perspectiveâ€”Challenges in Developing Wearable Electrochemical Sensors for Longitudinal Health Monitoring. Journal of the Electrochemical Society, 2020, 167, 037542.	2.9	35

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19	A critical review of reactive vapor deposition for conjugated polymer synthesis. Journal of Materials Chemistry C, 2019, 7, 7159-7174.	5.5	33
20	High Energy Density, Super-Deformable, Garment-Integrated Microsupercapacitors for Powering Wearable Electronics. ACS Applied Materials & Interfaces, 2018, 10, 36834-36840.	8.0	32
21	On-site identification of ozone damage in fruiting plants using vapor-deposited conducting polymer tattoos. Science Advances, 2020, 6, .	10.3	32
22	Phyjama. , 2019, 3, 1-29.		31
23	Multimodal Smart Eyewear for Longitudinal Eye Movement Tracking. Matter, 2020, 3, 1275-1293.	10.0	30
24	Integrating a Semitransparent, Fullerene-Free Organic Solar Cell in Tandem with a BiVO₄ Photoanode for Unassisted Solar Water Splitting. ACS Applied Materials & Interfaces, 2017, 9, 22449-22455.	8.0	24
25	High open-circuit voltage, high fill factor single-junction organic solar cells. Applied Physics Letters, 2014, 105, 083304.	3.3	23
26	Fabric as a Sensor. , 2018, , .		22
27	An Aqueous Eutectic Electrolyte for Low-Cost, Safe Energy Storage with an Operational Temperature Range of 150 Â°C, from â˜’70 to 80ÂÂ°C. Journal of Physical Chemistry C, 2021, 125, 246-251.	3.1	22
28	Photoluminescent energy transfer from poly(phenyleneethynylene)s to nearâ€infrared emitting fluorophores. Journal of Polymer Science Part A, 2010, 48, 3382-3391.	2.3	21
29	Thermally Polymerized Rylene Nanoparticles. Macromolecules, 2011, 44, 2276-2281.	4.8	19
30	Deposition Dependent Ion Transport in Doped Conjugated Polymer Films: Insights for Creating Highâ€Performance Electrochemical Devices. Advanced Materials Interfaces, 2017, 4, 1700873.	3.7	19
31	Vaporâ€Coated Monofilament Fibers for Embroidered Electrochemical Transistor Arrays on Fabrics. Advanced Electronic Materials, 2018, 4, 1800271.	5.1	18
32	Wash-stable, oxidation resistant conductive cotton electrodes for wearable electronics. RSC Advances, 2019, 9, 9198-9203.	3.6	17
33	The Future of Smart Textiles: User Interfaces and Health Monitors. Matter, 2020, 2, 794-795.	10.0	17
34	Orientation Control of Selected Organic Semiconductor Crystals Achieved by Monolayer Graphene Templates. Advanced Materials Interfaces, 2016, 3, 1600621.	3.7	16
35	ITO-Free Transparent Organic Solar Cell with Distributed Bragg Reflector for Solar Harvesting Windows. Energies, 2017, 10, 707.	3.1	16
36	PressION: An All-Fabric Piezoionic Pressure Sensor for Extracting Physiological Metrics in Both Static and Dynamic Contexts. Journal of the Electrochemical Society, 2021, 168, 017515.	2.9	15

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37	Enabling Longitudinal Respiration Monitoring Using Vapor-Coated Conducting Textiles. ACS Omega, 2021, 6, 31869-31875.	3.5	14
38	Flexible computational photodetectors for self-powered activity sensing. Npj Flexible Electronics, 2022, 6, .	10.7	14
39	Subwavelength nanopatterning of photochromic diarylethene films. Applied Physics Letters, 2012, 100, 183103.	3.3	11
40	Triplet exciton dissociation and electron extraction in graphene-templated pentacene observed with ultrafast spectroscopy. Physical Chemistry Chemical Physics, 2017, 19, 4809-4820.	2.8	11
41	Using the Surface Features of Plant Matter to Create All-Polymer Pseudocapacitors with High Areal Capacitance. ACS Applied Materials & Interfaces, 2018, 10, 38574-38580.	8.0	11
42	Observing Electron Extraction by Monolayer Graphene Using Time-Resolved Surface Photoresponse Measurements. ACS Nano, 2015, 9, 2510-2517.	14.6	10
43	Reverse-absorbance-modulation-optical lithography for optical nanopatterning at low light levels. AIP Advances, 2016, 6, 065312.	1.3	10
44	A comprehensive simulation model of the performance of photochromic films in absorbance-modulation-optical-lithography. AIP Advances, 2016, 6, .	1.3	9
45	Synthesis and Properties of Dithiocarbamate-Linked Acenes. Organic Letters, 2017, 19, 210-213.	4.6	8
46	Real-time and noninvasive detection of UV-Induced deep tissue damage using electrical tattoos. Biosensors and Bioelectronics, 2020, 150, 111909.	10.1	8
47	PhyMask: Robust Sensing of Brain Activity and Physiological Signals During Sleep with an All-textile Eye Mask. ACM Transactions on Computing for Healthcare, 2022, 3, 1-35.	5.0	8
48	Anomalous Paramagnetism in Closed-Shell Molecular Semiconductors. Journal of Physical Chemistry C, 2017, 121, 24929-24935.	3.1	7
49	Fluoropolymer-Wrapped Conductive Threads for Textile Touch Sensors Operating via the Triboelectric Effect. Fibers, 2018, 6, 41.	4.0	7
50	Self-discharge characteristics of vapor deposited polymer electrodes in an all-textile supercapacitor. Synthetic Metals, 2020, 268, 116483.	3.9	7
51	Immobilization of Nanobodies with Vapor-Deposited Polymer Encapsulation for Robust Biosensors. ACS Applied Polymer Materials, 2021, 3, 2561-2567.	4.4	7
52	Perspectiveâ€"Longitudinal Sleep Monitoring for All: Payoffs, Challenges and Outlook. , 2022, 1, 011602.		7
53	Nanopatterning of diarylethene films via selective dissolution of one photoisomer. Applied Physics Letters, 2013, 103, .	3.3	6
54	Improved photovoltaic response of a near-infrared sensitive solar cell by a morphology-controlling seed layer. Organic Electronics, 2016, 33, 135-141.	2.6	6

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55	Restricting the Ï‹ Torsion Angle Has Stereoelectronic Consequences on a Scissile Bond: An Electronic Structure Analysis. Biochemistry, 2015, 54, 5748-5756.	2.5	4
56	Origin of high open-circuit voltage in a planar heterojunction solar cell containing a non-fullerene acceptor. Applied Physics Letters, 2017, 111, .	3.3	4
57	Reactive Vapor Deposition of Conjugated Polymer Films on Arbitrary Substrates. Journal of Visualized Experiments, 2018, , .	0.3	4
58	Solvent-Free Reactive Vapor Deposition for Functional Fabrics: Separating Oilâ€“Water Mixtures with Fabrics. Fibers, 2019, 7, 2.	4.0	4
59	A vapor printed electron-accepting conjugated polymer for textile optoelectronics. Synthetic Metals, 2019, 250, 1-6.	3.9	3
60	Biosensor Encapsulation via Photoinitiated Chemical Vapor Deposition (piCVD). Journal of the Electrochemical Society, 2021, 168, 077518.	2.9	3
61	Phyjama. GetMobile (New York, N Y), 2020, 24, 33-37.	1.0	3
62	Largeâ€Area Heteroepitaxial Nanostructuring of Molecular Semiconductor Films for Enhanced Optoelectronic Response in Flexible Electronics. Advanced Functional Materials, 0, , 2113085.	14.9	2
63	FabToys. , 2022, , .		2
64	Oxidant aggregate-induced porosity in vapour-deposited polymer films and correlated impact on electrochemical properties. Supramolecular Chemistry, 2019, 31, 491-498.	1.2	1
65	1D nanowires of non-centrosymmetric molecular semiconductors grown by physical vapor deposition. Molecular Systems Design and Engineering, 2020, 5, 110-116.	3.4	1
66	Sustainable polymer materials for flexible light control and thermal management. Journal of Polymer Science, 0, , .	3.8	1
67	Facile Fabrication of Stable Enzyme-Based Colorimetric Glucose Biosensor on Cotton Using Polymer Entrapment. ECS Meeting Abstracts, 2021, MA2021-02, 1885-1885.	0.0	1
68	Guaiazulene revisited: a new material for green-processed optoelectronics. Polymer Chemistry, 2020, 11, 7656-7661.	3.9	0
69	Broadband-absorbing polycyclic aromatic hydrocarbon composite films on topologically complex substrates. Organic Electronics, 2020, 85, 105862.	2.6	0
70	(Invited) Fabric Pressure Sensors for Longitudinal Monitoring of Human Motion in Natural Environments. ECS Meeting Abstracts, 2021, MA2021-01, 1387-1387.	0.0	0
71	Chemometrics and Signal Processing-Assisted Design of a Textile-Based Colorimetric Sensing Platform for Real-Time Monitoring of Glucose. ECS Meeting Abstracts, 2021, MA2021-01, 1319-1319.	0.0	0
72	(IMCS First Place Best Poster Award) Encapsulation through Photoinitiated Chemical Vapor Phase Deposition (piCVD) for Obtaining Antifouling and Stabilized Biosensing Interface. ECS Meeting Abstracts, 2021, MA2021-01, 1655-1655.	0.0	0

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73	All-Fabric Piezoionic Sensor for Simultaneous Sensing of Static and Dynamic Pressures. ECS Meeting Abstracts, 2021, MA2021-01, 1354-1354.	0.0	0
74	On-Site Longitudinal Monitoring of Crop Health Using Vapor-Printed Polymer Tattoos. ECS Meeting Abstracts, 2021, MA2021-01, 1543-1543.	0.0	0
75	Patterning via Optical Saturable Transitions - Fabrication and Characterization. Journal of Visualized Experiments, 2014, , .	0.3	0
76	(Invited) Garment Integrated Sensors Created Using Reactive Vapor Deposition. ECS Meeting Abstracts, 2019, , .	0.0	0
77	(Invited) Electrical Properties of Vapor-Deposited Organic Semiconductor Nanowires By Conductive Atomic Force Microscopy. ECS Meeting Abstracts, 2020, MA2020-01, 1054-1054.	0.0	0
78	Vapor-Phase Dehydrogenative Synthesis of Polycyclic Aromatic Hydrocarbons for Garment-Integrated Solar Cells. ECS Meeting Abstracts, 2020, MA2020-01, 902-902.	0.0	0
79	Self-Discharge Characteristics of Vapor Deposited Polymer Electrodes in an All-Textile Supercapacitor. ECS Meeting Abstracts, 2020, MA2020-01, 2-2.	0.0	0
80	(Invited) Sensing Human Behavior with Smart Garments. ECS Meeting Abstracts, 2020, MA2020-01, 2005-2005.	0.0	0
81	An Aqueous Electrolyte for Fast Energy Storage at -70oC. ECS Meeting Abstracts, 2020, MA2020-02, 789-789.	0.0	0
82	(Invited) Immobilization of Nanobodies with Vapor-Deposited Polymer Encapsulation for Robust Biosensors. ECS Meeting Abstracts, 2021, MA2021-02, 1645-1645.	0.0	0
83	Materials Selection Principles for Sensing Human Motion and Physiological Signals Via Textiles. ECS Meeting Abstracts, 2021, MA2021-02, 1585-1585.	0.0	0
84	Garment-integrated thermoelectric generator arrays for wearable body heat harvesting. Flexible and Printed Electronics, 2021, 6, 044006.	2.7	0