Simone Fabiano

List of Publications by Year
in descending order

108 papers	6,519 citations	53794 45 h-index	69250 77 g-index
115 all docs	115 docs citations	115 times ranked	5853 citing authors

#	Article	IF	Citations
1	Thermoelectric Properties of Solutionâ€Processed nâ€Doped Ladderâ€Type Conducting Polymers. Advanced Materials, 2016, 28, 10764-10771.	21.0	245
2	Interfaces in organic electronics. Nature Reviews Materials, 2019, 4, 627-650.	48.7	237
3	Double doping of conjugated polymers with monomer molecular dopants. Nature Materials, 2019, 18, 149-155.	27.5	225
4	Wearable Thermoelectric Materials and Devices for Selfâ€Powered Electronic Systems. Advanced Materials, 2021, 33, e2102990.	21.0	221
5	Enhanced n-Doping Efficiency of a Naphthalenediimide-Based Copolymer through Polar Side Chains for Organic Thermoelectrics. ACS Energy Letters, 2018, 3, 278-285.	17.4	220
6	Complementary Logic Circuits Based on Highâ€Performance nâ€Type Organic Electrochemical Transistors. Advanced Materials, 2018, 30, 1704916.	21.0	206
7	Effect of (3â€glycidyloxypropyl)trimethoxysilane (GOPS) on the electrical properties of PEDOT:PSS films. Journal of Polymer Science, Part B: Polymer Physics, 2017, 55, 814-820.	2.1	190
8	Unconventional Thermoelectric Materials for Energy Harvesting and Sensing Applications. Chemical Reviews, 2021, 121, 12465-12547.	47.7	186
9	Experimental evidence that short-range intermolecular aggregation is sufficient for efficient charge transport in conjugated polymers. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 10599-10604.	7.1	175
10	Polymer gels with tunable ionic Seebeck coefficient for ultra-sensitive printed thermopiles. Nature Communications, 2019, 10, 1093.	12.8	174
11	A Chemically Doped Naphthalenediimideâ€Bithiazole Polymer for nâ€Type Organic Thermoelectrics. Advanced Materials, 2018, 30, e1801898.	21.0	165
12	All-printed large-scale integrated circuits based on organic electrochemical transistors. Nature Communications, 2019, 10, 5053.	12.8	156
13	Transition metal-catalysed molecular n-doping of organic semiconductors. Nature, 2021, 599, 67-73.	27.8	152
14	Role of photoactive layer morphology in high fill factor all-polymer bulk heterojunction solar cells. Journal of Materials Chemistry, 2011, 21, 5891.	6.7	146
15	An Evolvable Organic Electrochemical Transistor for Neuromorphic Applications. Advanced Science, 2019, 6, 1801339.	11.2	138
16	Thermoelectric Polymer Aerogels for Pressureâ€"Temperature Sensing Applications. Advanced Functional Materials, 2017, 27, 1703549.	14.9	133
17	n-Type organic electrochemical transistors: materials and challenges. Journal of Materials Chemistry C, 2018, 6, 11778-11784.	5.5	122
18	A high-conductivity n-type polymeric ink for printed electronics. Nature Communications, 2021, 12, 2354.	12.8	120

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19	Ion Electronâ€“Coupled Functionality in Materials and Devices Based on Conjugated Polymers. Advanced Materials, 2019, 31, e1805813.	21.0	118
20	A Multiparameter Pressureâ€“Temperatureâ€“Humidity Sensor Based on Mixed Ionicâ€“Electronic Cellulose Aerogels. Advanced Science, 2019, 6, 1802128.	11.2	114
21	Ground-state electron transfer in all-polymer donorâ€“acceptor heterojunctions. Nature Materials, 2020, 19, 738-744.	27.5	111
22	Aggregation control in natural brush-printed conjugated polymer films and implications for enhancing charge transport. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E10066-E10073.	7.1	110
23	Organic electrochemical neurons and synapses with ion mediated spiking. Nature Communications, 2022, 13, 901.	12.8	110
24	From Monolayer to Multilayer Nâ€Channel Polymeric Fieldâ€Effect Transistors with Precise Conformational Order. Advanced Materials, 2012, 24, 951-956.	21.0	109
25	Poly(ethylene imine) Impurities Induce nâ€doping Reaction in Organic (Semi)Conductors. Advanced Materials, 2014, 26, 6000-6006.	21.0	101
26	Ionic thermoelectric gating organic transistors. Nature Communications, 2017, 8, 14214.	12.8	99
27	Amphipathic Side Chain of a Conjugated Polymer Optimizes Dopant Location toward Efficient Nâ€Type Organic Thermoelectrics. Advanced Materials, 2021, 33, e2006694.	21.0	91
28	Single Crystalâ€Like Performance in Solutionâ€Coated Thinâ€Film Organic Fieldâ€Effect Transistors. Advanced Functional Materials, 2016, 26, 2379-2386.	14.9	87
29	Influence of Molecular Weight on the Organic Electrochemical Transistor Performance of Ladderâ€Type Conjugated Polymers. Advanced Materials, 2022, 34, e2106235.	21.0	86
30	Orientation-Dependent Electronic Structures and Charge Transport Mechanisms in Ultrathin Polymeric n-Channel Field-Effect Transistors. ACS Applied Materials & Interfaces, 2013, 5, 4417-4422.	8.0	74
31	Celluloseâ€Conducting Polymer Aerogels for Efficient Solar Steam Generation. Advanced Sustainable Systems, 2020, 4, 2000004.	5.3	74
32	A Freeâ€Standing Highâ€Output Power Density Thermoelectric Device Based on Structureâ€Ordered PEDOT:PSS. Advanced Electronic Materials, 2018, 4, 1700496.	5.1	73
33	Conductive polymer nanoantennas for dynamic organic plasmonics. Nature Nanotechnology, 2020, 15, 35-40.	31.5	70
34	Acene Ring Size Optimization in Fused Lactam Polymers Enabling High n-Type Organic Thermoelectric Performance. Journal of the American Chemical Society, 2021, 143, 260-268.	13.7	68
35	Charge Transport Orthogonality in Allâ€Polymer Blend Transistors, Diodes, and Solar Cells. Advanced Energy Materials, 2014, 4, 1301409.	19.5	64
36	Asymmetric electron and hole transport in a high-mobility<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>n</mml:mi></mml:math>-type conjugated polymer. Physical Review B, 2012, 86, .	3.2	63

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37	Naphthalenediimide Polymers with Finely Tuned Inâ€Chain Ï€â€Conjugation: Electronic Structure, Film Microstructure, and Charge Transport Properties. Advanced Materials, 2016, 28, 9169-9174.	21.0	63
38	Synthetic Nuances to Maximize n-Type Organic Electrochemical Transistor and Thermoelectric Performance in Fused Lactam Polymers. Journal of the American Chemical Society, 2022, 144, 4642-4656.	13.7	63
39	Fused Bithiophene Imide Dimerâ€Based nâ€Type Polymers for Highâ€Performance Organic Electrochemical Transistors. Angewandte Chemie - International Edition, 2021, 60, 24198-24205.	13.8	60
40	Organoboron Polymers for Photovoltaic Bulk Heterojunctions. Macromolecular Rapid Communications, 2010, 31, 1281-1286.	3.9	58
41	High Thermoelectric Performance in nâ€Type Perylene Bisimide Induced by the Soret Effect. Advanced Materials, 2020, 32, e2002752.	21.0	53
42	Ferroelectric Polarization Induces Electric Double Layer Bistability in Electrolyte-Gated Field-Effect Transistors. ACS Applied Materials & Interfaces, 2014, 6, 438-442.	8.0	52
43	High yield manufacturing of fully screen-printed organic electrochemical transistors. Npj Flexible Electronics, 2020, 4, .	10.7	52
44	Effect of Gate Electrode Workâ€Function on Source Charge Injection in Electrolyteâ€Gated Organic Fieldâ€Effect Transistors. Advanced Functional Materials, 2014, 24, 695-700.	14.9	50
45	Mixed Ionic-Electronic Transport in Polymers. Annual Review of Materials Research, 2021, 51, 73-99.	9.3	49
46	Naphthalene Bis(4,8-diamino-1,5-dicarboxyl)amide Building Block for Semiconducting Polymers. Journal of the American Chemical Society, 2017, 139, 14356-14359.	13.7	46
47	Ferroelectric polarization induces electronic nonlinearity in ion-doped conducting polymers. Science Advances, 2017, 3, e1700345.	10.3	46
48	Asymmetric Aqueous Supercapacitor Based on p- and n-Type Conducting Polymers. ACS Applied Energy Materials, 2019, 2, 5350-5355.	5.1	44
49	Effect of Backbone Regiochemistry on Conductivity, Charge Density, and Polaron Structure of n-Doped Donorâ€"Acceptor Polymers. Chemistry of Materials, 2019, 31, 3395-3406.	6.7	44
50	Sequential Doping of Ladder-Type Conjugated Polymers for Thermally Stable n-Type Organic Conductors. ACS Applied Materials & Interfaces, 2020, 12, 53003-53011.	8.0	41
51	Mapping the energy level alignment at donor/acceptor interfaces in non-fullerene organic solar cells. Nature Communications, 2022, 13, 2046.	12.8	41
52	Lowâ€Power/Highâ€Gain Flexible Complementary Circuits Based on Printed Organic Electrochemical Transistors. Advanced Electronic Materials, 2022, 8, .	5.1	39
53	Supramolecular Order of Solutionâ€Processed Perylenediimide Thin Films: Highâ€Performance Smallâ€Channel nâ€Type Organic Transistors. Advanced Functional Materials, 2011, 21, 4479-4486.	14.9	38
54	Energy Level Bending in Ultrathin Polymer Layers Obtained through Langmuirâ€"ShÃfer Deposition. Advanced Functional Materials, 2016, 26, 1077-1084.	14.9	38

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55	Selective Remanent Ambipolar Charge Transport in Polymeric Fieldâ€Effect Transistors For Highâ€Performance Logic Circuits Fabricated in Ambient. Advanced Materials, 2014, 26, 7438-7443.	21.0	34
56	Photovoltaic Blend Microstructure for High Efficiency Post-Fullerene Solar Cells. To Tilt or Not To Tilt?. Journal of the American Chemical Society, 2019, 141, 13410-13420.	13.7	33
57	Highâ€Performance Hole Transport and Quasiâ€Balanced Ambipolar OFETs Based on Dâ€“Aâ€“A Thienoâ€benzoâ€isoindigo Polymers. Advanced Electronic Materials, 2016, 2, 1500313.	5.1	32
58	Impact of Singly Occupied Molecular Orbital Energy on the n-Doping Efficiency of Benzimidazole Derivatives. ACS Applied Materials & Interfaces, 2019, 11, 37981-37990.	8.0	32
59	Modulating molecular aggregation by facile heteroatom substitution of diketopyrrolopyrrole based small molecules for efficient organic solar cells. Journal of Materials Chemistry A, 2015, 3, 24349-24357.	10.3	31
60	Mixed ion-electron transport in organic electrochemical transistors. Applied Physics Letters, 2020, 117, .	3.3	30
61	The effect of aromatic ring size in electron deficient semiconducting polymers for n-type organic thermoelectrics. Journal of Materials Chemistry C, 2020, 8, 15150-15157.	5.5	28
62	Negativelyâ€Doped Conducting Polymers for Oxygen Reduction Reaction. Advanced Energy Materials, 2021, 11, 2002664.	19.5	28
63	Synthesis and Aggregation Behavior of a Glycolated Naphthalene Diimide Bithiophene Copolymer for Application in Low-Level n-Doped Organic Thermoelectrics. Macromolecules, 2020, 53, 5158-5168.	4.8	27
64	A Biomimetic Evolvable Organic Electrochemical Transistor. Advanced Electronic Materials, 2021, 7, 2001126.	5.1	26
65	Lactone Backbone Density in Rigid Electronâ€Deficient Semiconducting Polymers Enabling High nâ€type Organic Thermoelectric Performance. Angewandte Chemie - International Edition, 2022, 61, .	13.8	26
66	One-Step Synthesis of Precursor Oligomers for Organic Photovoltaics: A Comparative Study between Polymers and Small Molecules. ACS Applied Materials & Interfaces, 2015, 7, 27106-27114.	8.0	25
67	Mo_{1.33}C MXene-Assisted PEDOT:PSS Hole Transport Layer for High-Performance Bulk-Heterojunction Polymer Solar Cells. ACS Applied Electronic Materials, 2020, 2, 163-169.	4.3	25
68	Bias stress effect in polyelectrolyte-gated organic field-effect transistors. Applied Physics Letters, 2013, 102, 113306.	3.3	24
69	Mixed-flow design for microfluidic printing of two-component polymer semiconductor systems. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 17551-17557.	7.1	24
70	Synthesis and Electronic Properties of Diketopyrrolopyrrole-Based Polymers with and without Ring-Fusion. Macromolecules, 2021, 54, 970-980.	4.8	23
71	Selecting speed-dependent pathways for a programmable nanoscale texture by wet interfaces. Chemical Society Reviews, 2012, 41, 6859.	38.1	22
72	Solution-processed bulk-heterojunction organic solar cells employing Ir complexes as electron donors. Journal of Materials Chemistry A, 2014, 2, 12390.	10.3	22

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73	Two-dimensional charge transport in molecularly ordered polymer field-effect transistors. Journal of Materials Chemistry C, 2016, 4, 11135-11142.	5.5	22
74	Monolithic integration of display driver circuits and displays manufactured by screen printing. Flexible and Printed Electronics, 2020, 5, 024001.	2.7	22
75	Polarons in Ï€-conjugated ladder-type polymers: a broken symmetry density functional description. Journal of Materials Chemistry C, 2019, 7, 12876-12885.	5.5	21
76	Charge transport in doped conjugated polymers for organic thermoelectrics. Chemical Physics Reviews, 2022, 3, .	5.7	19
77	On the Origin of Seebeck Coefficient Inversion in Highly Doped Conducting Polymers. Advanced Functional Materials, 2022, 32, .	14.9	18
78	Conductingâ€Polymer Bolometers for Lowâ€Cost IRâ€Detection Systems. Advanced Electronic Materials, 2019, 5, 1800975.	5.1	16
79	Processable High Electron Mobility Ï€â€Copolymers via Mesoscale Backbone Conformational Ordering. Advanced Functional Materials, 2021, 31, 2009359.	14.9	16
80	Engineering 3D ordered molecular thin films by nanoscale control. Physical Chemistry Chemical Physics, 2010, 12, 14848.	2.8	15
81	Hybrid Plasmonic and Pyroelectric Harvesting of Light Fluctuations. Advanced Optical Materials, 2018, 6, 1701051.	7.3	15
82	Investigation of the dimensionality of charge transport in organic field effect transistors. Physical Review B, 2017, 95, .	3.2	14
83	Thermodiffusionâ€Assisted Pyroelectricsâ€"Enabling Rapid and Stable Heat and Radiation Sensing. Advanced Functional Materials, 2019, 29, 1900572.	14.9	14
84	Fused Bithiophene Imide Dimerâ€Based nâ€Type Polymers for Highâ€Performance Organic Electrochemical Transistors. Angewandte Chemie, 2021, 133, 24400-24407.	2.0	14
85	Synergistic Effect of Multiâ€Walled Carbon Nanotubes and Ladderâ€Type Conjugated Polymers on the Performance of Nâ€Type Organic Electrochemical Transistors. Advanced Functional Materials, 2022, 32, 2106447.	14.9	14
86	Solution processed liquid metal-conducting polymer hybrid thin films as electrochemical pH-threshold indicators. Journal of Materials Chemistry C, 2015, 3, 7604-7611.	5.5	13
87	Polarization of ferroelectric films through electrolyte. Journal of Physics Condensed Matter, 2016, 28, 105901.	1.8	8
88	Light-sensitive charge storage medium with spironaphthooxazine molecule-polymer blends for dual-functional organic phototransistor memory. Organic Electronics, 2020, 78, 105554.	2.6	8
89	Enhanced ionic transport in ferroelectric polymer fiber mats. Journal of Materials Chemistry A, 2021, 9, 22418-22427.	10.3	8
90	Lactone Backbone Density in Rigid Electronâ€Deficient Semiconducting Polymers Enabling High nâ€type Organic Thermoelectric Performance. Angewandte Chemie, 2022, 134, .	2.0	8

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91	Two-in-One Device with Versatile Compatible Electrical Switching or Data Storage Functions Controlled by the Ferroelectricity of P(VDF-TrFE) via Photocrosslinking. ACS Applied Materials & Interfaces, 2019, 11, 25358-25368.	8.0	7
92	Natural Product Betulinâ€Based Insulating Polymer Filler in Organic Solar Cells. Solar Rrl, 2022, 6, .	5.8	7
93	Stretchable helix-structured fibre electronics. Nature Electronics, 2021, 4, 864-865.	26.0	6
94	Rational Materials Design for In Operando Electropolymerization of Evolvable Organic Electrochemical Transistors. Advanced Functional Materials, 2022, 32, .	14.9	6
95	Ferroelectric surfaces for cell release. Synthetic Metals, 2017, 228, 99-104.	3.9	5
96	Allâ€Solidâ€State Organic Schmitt Trigger Implemented by Twin Twoâ€inâ€One Ferroelectric Memory Transistors. Advanced Electronic Materials, 2020, 6, 1901263.	5.1	5
97	A ferroelectric polymer introduces addressability in electrophoretic display cells. Flexible and Printed Electronics, 2019, 4, 035004.	2.7	4
98	Organic Electrochemical Devices: Ion Electronâ€"Coupled Functionality in Materials and Devices Based on Conjugated Polymers (Adv. Mater. 22/2019). Advanced Materials, 2019, 31, 1970160.	21.0	2
99	Organogels from Diketopyrrolopyrrole Copolymer Ionene/Polythiophene Blends Exhibit Ground-State Single Electron Transfer in the Solid State. Macromolecules, 2022, 55, 4979-4994.	4.8	2
100	Organic Transistors: Supramolecular Order of Solution-Processed Perylenediimide Thin Films: High-Performance Small-Channel n-Type Organic Transistors (Adv. Funct. Mater. 23/2011). Advanced Functional Materials, 2011, 21, 4478-4478.	14.9	1
101	Naphthalene diimide-based polymeric semiconductors. Effect of chlorine incorporation and n-channel transistors operating in water- CORRIGENDUM. MRS Communications, 2016, 6, 69-69.	1.8	1
102	Heat Sensing: Thermodiffusionâ€Assisted Pyroelectricsâ€"Enabling Rapid and Stable Heat and Radiation Sensing (Adv. Funct. Mater. 28/2019). Advanced Functional Materials, 2019, 29, 1970194.	14.9	1
103	Thermoelectric Materials: High Thermoelectric Performance in nâ€Type Perylene Bisimide Induced by the Soret Effect (Adv. Mater. 45/2020). Advanced Materials, 2020, 32, 2070335.	21.0	1
104	Blowin' in the Wind - a Source of Energy: Hybrid Plasmonic and Pyroelectric Harvesting of Light Fluctuations (Advanced Optical Materials 11/2018). Advanced Optical Materials, 2018, 6, 1870043.	7.3	0
105	Lactone Maximization in Rigid Electron-Deficient Semiconducting Polymers Enabling High n-type Organic Thermoelectric Performance. , 0, , .		0
106	Towards mutual electrical doping in polymers. , 0, , .		0
107	Polarization of ferroelectric polymers through electrolytes. , 2022, , 441-455.		0
108	n-Type organic electrochemical transistors: materials and challenges. , 0, , .		0