Clara Santato

List of Publications by Year
in descending order

84 papers	4,651 citations	147801 31 h-index	98798 67 g-index
91 all docs	91 docs citations	91 times ranked	6530 citing authors

#	Article	IF	Citations
1	Crystallographically Oriented Mesoporous WO3 Films:â€‰ Synthesis, Characterization, and Applications. Journal of the American Chemical Society, 2001, 123, 10639-10649.	13.7	975
2	Photoelectrochemical Properties of Nanostructured Tungsten Trioxide Films. Journal of Physical Chemistry B, 2001, 105, 936-940.	2.6	464
3	Melanins and melanogenesis: from pigment cells toÂhuman health and technological applications. Pigment Cell and Melanoma Research, 2015, 28, 520-544.	3.3	347
4	Organic Light Emitting Field Effect Transistors: Advances and Perspectives. Advanced Functional Materials, 2007, 17, 3421-3434.	14.9	316
5	Enhanced Visible Light Conversion Efficiency Using Nanocrystalline WO3 Films. Advanced Materials, 2001, 13, 511-514.	21.0	162
6	Protonic and Electronic Transport in Hydrated Thin Films of the Pigment Eumelanin. Chemistry of Materials, 2015, 27, 436-442.	6.7	158
7	New opportunities for organic electronics and bioelectronics: ions in action. Chemical Science, 2013, 4, 1395.	7.4	140
8	Melanin-based flexible supercapacitors. Journal of Materials Chemistry C, 2016, 4, 9516-9525.	5.5	125
9	Flexible, Solid Electrolyte-Based Lithium Battery Composed of LiFePO₄Cathode and Li₄Ti₅O₁₂Anode for Applications in Smart Textiles. Journal of the Electrochemical Society, 2012, 159, A349-A356.	2.9	119
10	Morphology and Field-Effect-Transistor Mobility in Tetracene Thin Films. Advanced Functional Materials, 2005, 15, 375-380.	14.9	111
11	Tetracene-based organic light-emitting transistors: optoelectronic properties and electron injection mechanism. Synthetic Metals, 2004, 146, 329-334.	3.9	104
12	Organic Light-Emitting Transistors Based on Solution-Cast and Vacuum-Sublimed Films of a Rigid Core Thiophene Oligomer. Advanced Materials, 2006, 18, 169-174.	21.0	97
13	Tetracene light-emitting transistors on flexible plastic substrates. Applied Physics Letters, 2005, 86, 141106.	3.3	85
14	Natural melanin pigments and their interfaces with metal ions and oxides: emerging concepts and technologies. MRS Communications, 2017, 7, 141-151.	1.8	70
15	Eumelanin thin films: solution-processing, growth, and charge transport properties. Journal of Materials Chemistry B, 2013, 1, 3836.	5.8	69
16	Effect of multi-walled carbon nanotubes on the stability of dye sensitized solar cells. Journal of Power Sources, 2013, 233, 93-97.	7.8	66
17	Photoelectrolytic oxidation of organic species at mesoporous tungsten trioxide film electrodes under visible light illumination. Journal of Applied Electrochemistry, 2005, 35, 715-721.	2.9	64
18	Low voltage electrolyte-gated organic transistors making use of high surface area activated carbon gate electrodes. Journal of Materials Chemistry C, 2014, 2, 5690-5694.	5.5	50

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19	Environmentally stable light emitting field effect transistors based on 2-(4-pentylstyryl)tetracene. Journal of Materials Chemistry, 2008, 18, 158-161.	6.7	49
20	Organic electrochemical transistors monitoring micelle formation. Chemical Science, 2012, 3, 3432.	7.4	45
21	Electrolyte-Gated WO₃ Transistors: Electrochemistry, Structure, and Device Performance. Journal of Physical Chemistry C, 2015, 119, 21732-21738.	3.1	42
22	Good practice guide for papers on supercapacitors and related hybrid capacitors for the Journal of Power Sources. Journal of Power Sources, 2020, 450, 227636.	7.8	41
23	Charge-Carrier Transport in Thin Films of Ï€-Conjugated Thiopheno-Azomethines. Organic Electronics, 2012, 13, 3022-3031.	2.6	40
24	Melanin: A Greener Route To Enhance Energy Storage under Solar Light. ACS Omega, 2019, 4, 12244-12251.	3.5	40
25	Conducting Polymer Transistors Making Use of Activated Carbon Gate Electrodes. ACS Applied Materials & Interfaces, 2015, 7, 969-973.	8.0	39
26	Carbon nanotube electrodes in organic transistors. Nanoscale, 2013, 5, 4638.	5.6	38
27	Biodegradation of bio-sourced and synthetic organic electronic materials towards green organic electronics. Nature Communications, 2021, 12, 3167.	12.8	38
28	Electronic Transport in the Biopigment Sepia Melanin. ACS Applied Bio Materials, 2020, 3, 5244-5252.	4.6	36
29	In Situ Formation of Dendrites in Eumelanin Thin Films between Gold Electrodes. Advanced Functional Materials, 2013, 23, 5591-5598.	14.9	34
30	Organic light-emitting transistors using concentric source/drain electrodes on a molecular adhesion layer. Applied Physics Letters, 2006, 88, 163511.	3.3	33
31	An electrochemical study of natural and chemically controlled eumelanin. APL Materials, 2017, 5, 126108.	5.1	31
32	Spotlight on organic transistors. Nature Photonics, 2011, 5, 392-393.	31.4	30
33	Ionic liquidâ€“water mixtures and ion gels as electrolytes for organic electrochemical transistors. Journal of Materials Chemistry C, 2015, 3, 6549-6553.	5.5	29
34	Novel insights on the physicochemical properties of eumelanins and their DMSO derivatives. Polymer International, 2016, 65, 1315-1322.	3.1	25
35	Self-assembly of rubrene on Cu(111). Nanotechnology, 2008, 19, 424021.	2.6	24
36	Synthesis and characterization of polycrystalline Sn and SnO2 films with wire morphologies. Electrochemistry Communications, 2007, 9, 1519-1524.	4.7	23

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37	Resistive switching controlled by the hydration level in thin films of the biopigment eumelanin. Journal of Materials Chemistry C, 2016, 4, 9544-9553.	5.5	23
38	Electronic and protonic transport in bio-sourced materials: a new perspective on semiconductivity. Materials Advances, 2021, 2, 15-31.	5.4	22
39	Self-assembly of indole-2-carboxylic acid at graphite and gold surfaces. Journal of Chemical Physics, 2015, 142, 101923.	3.0	21
40	Structural investigation of thin tetracene films on flexible substrate by synchrotron X-ray diffraction. Applied Surface Science, 2006, 252, 8022-8027.	6.1	20
41	The correlation between gate dielectric, film growth, and charge transport in organic thin film transistors: the case of vacuum-sublimed tetracene thin films. Journal of Materials Chemistry C, 2013, 1, 967-976.	5.5	20
42	En route toward sustainable organic electronics. MRS Energy & Sustainability, 2020, 7, 1.	3.0	20
43	Photoredox pathways for the polymerization of a pyrrole-substituted ruthenium tris(bipyridyl) complex. New Journal of Chemistry, 1998, 22, 33-37.	2.8	18
44	Tin Dioxide Electrolyte-Gated Transistors Working in Depletion and Enhancement Modes. ACS Applied Materials & Interfaces, 2017, 9, 37013-37021.	8.0	17
45	Seeing both sides. Nature Chemistry, 2010, 2, 344-345.	13.6	16
46	Tungsten oxide ion gel-gated transistors: how structural and electrochemical properties affect the doping mechanism. Journal of Materials Chemistry C, 2018, 6, 1980-1987.	5.5	16
47	On the antioxidant activity of eumelanin biopigments: a quantitative comparison between free radical scavenging and redox properties. Natural Product Research, 2020, 34, 2465-2473.	1.8	16
48	Structure of the Electrical Double Layer at the Interface between an Ionic Liquid and Tungsten Oxide in Ion-Gated Transistors. Journal of Physical Chemistry Letters, 2020, 11, 3257-3262.	4.6	16
49	Photolithographically Patterned TiO₂ Films for Electrolyte-Gated Transistors. ACS Applied Materials & Interfaces, 2016, 8, 14855-14862.	8.0	15
50	Electrolyte-gated polymer thin film transistors making use of ionic liquids and ionic liquid-solvent mixtures. Journal of Applied Physics, 2015, 117, 112809.	2.5	14
51	Influence of the oxidation level on the electronic, morphological and charge transport properties of novel dithienothiophene S-oxide and S,S-dioxide inner core oligomers. Journal of Materials Chemistry, 2010, 20, 669-676.	6.7	13
52	Tungsten oxide ion-gated phototransistors using ionic liquid and aqueous gating media. Journal Physics D: Applied Physics, 2019, 52, 305102.	2.8	13
53	TransCap: a monolithically integrated supercapacitor and electrolyte-gated transistor. Journal of Materials Chemistry C, 2014, 2, 10273-10276.	5.5	12
54	Thermal properties of methyltrimethoxysilane aerogel thin films. AIP Advances, 2016, 6, .	1.3	12

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55	Eumelanin for natureâ€inspired UVâ€absorption enhancement of plastics. Polymer International, 2019, 68, 984-991.	3.1	12
56	Light-assisted melanin-based electrochemical energy storage: physicochemical aspects. Journal Physics D: Applied Physics, 2020, 53, 043003.	2.8	12
57	Ambipolar organic thin film transistors based on a soluble pentacene derivative. Applied Physics Letters, 2011, 99, 023304.	3.3	11
58	Electrolyte-gated transistors based on phenyl-C₆₁-butyric acid methyl ester (PCBM) films: bridging redox properties, charge carrier transport and device performance. Chemical Communications, 2018, 54, 5490-5493.	4.1	11
59	Ion-gated transistors based on porous and compact TiO2 films: Effect of Li ions in the gating medium. AIP Advances, 2020, 10, .	1.3	10
60	Eumelanin electrodes in buffered aqueous media at different pH values. Electrochimica Acta, 2020, 347, 136250.	5.2	10
61	Eumelanin: From Molecular State to Film. Journal of Physical Chemistry C, 2021, 125, 3567-3576.	3.1	9
62	Titanyl phthalocyanine ambipolar thin film transistors making use of carbon nanotube electrodes. Nanotechnology, 2014, 25, 485703.	2.6	7
63	Lateral Organic Semiconductor Photodetector. Part I: Use of an Insulating Layer for Low Dark Current. IEEE Transactions on Electron Devices, 2014, 61, 3465-3471.	3.0	7
64	Toward Biosourced Materials for Electrochemical Energy Storage: The Case of Tannins. ACS Sustainable Chemistry and Engineering, 2021, 9, 6079-6086.	6.7	7
65	The Global Challenge of Electronics: Managing the Present and Preparing the Future. Advanced Materials Technologies, 2022, 7, .	5.8	7
66	Ambient-stable, ion-gated poly[N-9â€²-heptadecanyl-2,7-carbazole-alt-5,5-(4â€²,7â€²-di-2-thienyl-2â€²,1â€²,3â€²-benzothiadiazole)] (PCDTBT) transistors and phototransistors. Organic Electronics, 2019, 74, 265-268.	2.6	6
67	On the interfaces between organic bio-sourced materials and metals for sustainable electronics: the eumelanin case. Japanese Journal of Applied Physics, 2019, 58, 051014.	1.5	6
68	Best practices in photoelectrochemistry. Journal of Power Sources, 2021, 482, 228958.	7.8	5
69	Combining Aqueous Solution Processing and Printing for Fabrication of Flexible and Sustainable Tin Dioxide Ionâ€Gated Transistors. Advanced Materials Technologies, 2022, 7, 2100843.	5.8	5
70	Blending organic building blocks. Nature Photonics, 2012, 6, 639-640.	31.4	4
71	An Electrochemical Study on the Effect of Metal Chelation and Reactive Oxygen Species on a Synthetic Neuromelanin Model. Frontiers in Bioengineering and Biotechnology, 2019, 7, 227.	4.1	4
72	Advances in high-resolution printed transistors: The case of bio-sourced organic materials. Current Opinion in Green and Sustainable Chemistry, 2022, 34, 100594.	5.9	4

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73	In situmicro Raman investigation of the laser crystallization in Si thin films plasma enhanced chemical vapor deposition-grown from He-diluted SiH4. Journal of Applied Physics, 2004, 95, 5366-5372.	2.5	3
74	Smart Packaging in the Sustainability Challenge: Eumelanin as a UV-Absorption Enhancer of Polymers. IEEE Nanotechnology Magazine, 2019, 18, 1160-1165.	2.0	3
75	Locating the bandgap edges of eumelanin thin films for applications in organic electronics. Journal of Chemical Technology and Biotechnology, 2022, 97, 837-843.	3.2	3
76	Flexible Ion-Gated Transistors Making Use of Poly-3-hexylthiophene (P3HT): Effect of the Molecular Weight on the Effectiveness of Gating and Device Performance. Journal of Electronic Materials, 2020, 49, 5302-5307.	2.2	2
77	3D Network of Sepia Melanin and Nâ€•and, Sâ€Doped Graphitic Carbon Quantum Dots for Sustainable Electrochemical Capacitors. Advanced Sustainable Systems, 2021, 5, 2100152.	5.3	2
78	Solution-Processed Titanium Dioxide Ion-Gated Transistors and Their Application for pH Sensing. Frontiers in Electronics, 2022, 3, .	3.2	2
79	Towards near-infrared photosensitization of tungsten trioxide nanostructured films by upconverting nanoparticles. RSC Advances, 2015, 5, 81875-81880.	3.6	1
80	Light-enhanced Electrochemical Energy Storage of Synthetic Melanin on Conductive Glass Substrates. MRS Advances, 2020, 5, 1441-1448.	0.9	1
81	Green Electronics. Advanced Sustainable Systems, 2022, 6, .	5.3	1
82	Films of Transition Metal Complexes Including Ionic Liquids: Dramatic Effects of Processing Parameters and Substrate on the Film Morphology. Journal of Electronic Materials, 2018, 47, 402-408.	2.2	0
83	Special Issue of Advanced Materials Technologies on Green Electronics. Advanced Materials Technologies, 2022, 7, .	5.8	0
84	Locating the bandgap edges of eumelanin thinfilms for applications in organic electronics. Journal of Chemical Technology and Biotechnology, 2022, 97, 1910-1910.	3.2	0