

# Jean Pierre Simonato

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2498751/publications.pdf>

Version: 2024-02-01

79  
papers

4,701  
citations

136950

32  
h-index

98798

67  
g-index

86  
all docs

86  
docs citations

86  
times ranked

6919  
citing authors

#	ARTICLE	IF	CITATIONS
1	Flexible transparent conductive materials based on silver nanowire networks: a review. <i>Nanotechnology</i> , 2013, 24, 452001.	2.6	613
2	Metallic Nanowire-Based Transparent Electrodes for Next Generation Flexible Devices: a Review. <i>Small</i> , 2016, 12, 6052-6075.	10.0	478
3	Progress in understanding structure and transport properties of PEDOT-based materials: A critical review. <i>Progress in Materials Science</i> , 2020, 108, 100616.	32.8	355
4	Highly flexible transparent film heaters based on random networks of silver nanowires. <i>Nano Research</i> , 2012, 5, 427-433.	10.4	256
5	Improvement of the Seebeck coefficient of PEDOT:PSS by chemical reduction combined with a novel method for its transfer using free-standing thin films. <i>Journal of Materials Chemistry C</i> , 2014, 2, 1278-1283.	5.5	247
6	Structure and Dopant Engineering in PEDOT Thin Films: Practical Tools for a Dramatic Conductivity Enhancement. <i>Chemistry of Materials</i> , 2016, 28, 3462-3468.	6.7	201
7	Metallic behaviour of acid doped highly conductive polymers. <i>Chemical Science</i> , 2015, 6, 412-417.	7.4	175
8	Transparent Heaters: A Review. <i>Advanced Functional Materials</i> , 2020, 30, 1910225.	14.9	156
9	Stability of silver nanowire based electrodes under environmental and electrical stresses. <i>Nanoscale</i> , 2015, 7, 2107-2115.	5.6	155
10	Assessment of Acetylcholinesterase Activity Using Indoxylacetate and Comparison with the Standard Ellman's Method. <i>International Journal of Molecular Sciences</i> , 2011, 12, 2631-2640.	4.1	125
11	Work Function Tuning for High-Performance Solution-Processed Organic Photodetectors with Inverted Structure. <i>Advanced Materials</i> , 2013, 25, 6534-6538.	21.0	125
12	Synthesis and purification of long copper nanowires. Application to high performance flexible transparent electrodes with and without PEDOT:PSS. <i>Nano Research</i> , 2014, 7, 315-324.	10.4	118
13	All-Polymeric Flexible Transparent Heaters. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 27250-27256.	8.0	108
14	Improvements in purification of silver nanowires by decantation and fabrication of flexible transparent electrodes. Application to capacitive touch sensors. <i>Nanotechnology</i> , 2013, 24, 215501.	2.6	96
15	Odd electron diffraction patterns in silicon nanowires and silicon thin films explained by microtwins and nanotwins. <i>Journal of Applied Crystallography</i> , 2009, 42, 242-252.	4.5	88
16	Electrical Mapping of Silver Nanowire Networks: A Versatile Tool for Imaging Network Homogeneity and Degradation Dynamics during Failure. <i>ACS Nano</i> , 2018, 12, 4648-4659.	14.6	78
17	Synthesis of Continuous Conductive PEDOT:PSS Nanofibers by Electrospinning: A Conformal Coating for Optoelectronics. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 950-957.	8.0	68
18	Oxidation of copper nanowire based transparent electrodes in ambient conditions and their stabilization by encapsulation: application to transparent film heaters. <i>Nanotechnology</i> , 2018, 29, 085701.	2.6	68

#	ARTICLE	IF	CITATIONS
19	An Integrated Approach to the Mid-Spin State ( $S = 3/2$ ) in Six-Coordinate Iron(III) Chiroporphyrins. <i>Inorganic Chemistry</i> , 2000, 39, 3978-3987.	4.0	57
20	Antagonistic metal-directed inductions in catalytic asymmetric aziridination by manganese and iron tetramethylchiroporphyrins. <i>Chemical Communications</i> , 1999, , 989-990.	4.1	54
21	Iridium-formic acid based system for hydroxycarbonylation without CO gas. <i>Journal of Molecular Catalysis A</i> , 2001, 171, 91-94.	4.8	53
22	[Ag <sub>6</sub> (PMo <sub>10</sub> V <sub>2</sub> O <sub>40</sub> )](CH <sub>3</sub> COO) <sub>6</sub> ·8H <sub>2</sub> O: A 3D Macrocationic Polyoxometallic Keggin Complex. <i>Inorganic Chemistry</i> , 2004, 43, 2240-2242.	4.0	48
23	Electrochemical signature of the grafting of diazonium salts: A probing parameter for monitoring the electro-addressed functionalization of devices. <i>Electrochimica Acta</i> , 2009, 54, 3078-3085.	5.2	47
24	Growth parameters and shape specific synthesis of silicon nanowires by the VLS method. <i>Journal of Nanoparticle Research</i> , 2008, 10, 1287-1291.	1.9	44
25	Direct Imaging of the Onset of Electrical Conduction in Silver Nanowire Networks by Infrared Thermography: Evidence of Geometrical Quantized Percolation. <i>Nano Letters</i> , 2016, 16, 7046-7053.	9.1	44
26	Self-assembled monolayers for electrode fabrication and efficient threshold voltage control of organic transistors with amorphous semiconductor layer. <i>Organic Electronics</i> , 2009, 10, 119-126.	2.6	40
27	New efficient catalytic system for hydroxycarbonylation without CO gas. <i>Journal of Molecular Catalysis A</i> , 2003, 197, 61-64.	4.8	39
28	Innovative direct synthesis of adipic acid by air oxidation of cyclohexane. <i>Green Chemistry</i> , 2006, 8, 556.	9.0	38
29	Doping efficiency of single and randomly stacked bilayer graphene by iodine adsorption. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	38
30	Conductive-probe atomic force microscopy characterization of silicon nanowire. <i>Nanoscale Research Letters</i> , 2011, 6, 110.	5.7	37
31	Work function tuning for flexible transparent electrodes based on functionalized metallic single walled carbon nanotubes. <i>Carbon</i> , 2012, 50, 3459-3464.	10.3	37
32	Sub-ppm Detection of Nerve Agents Using Chemically Functionalized Silicon Nanoribbon Field-Effect Transistors. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 4063-4066.	13.8	32
33	Chromogenic detection of Sarin by discolouring decomplexation of a metal coordination complex. <i>Chemical Communications</i> , 2013, 49, 8946.	4.1	32
34	A toxicology-informed, safer by design approach for the fabrication of transparent electrodes based on silver nanowires. <i>Environmental Science: Nano</i> , 2019, 6, 684-694.	4.3	31
35	Kinetic and Structural Factors Governing Chiral Recognition in Cobalt(III) Chiroporphyrin-Amino Alcohol Complexes. <i>Journal of the American Chemical Society</i> , 1998, 120, 7363-7364.	13.7	30
36	Innovative water management in micro air-breathing polymer electrolyte membrane fuel cells. <i>Journal of Power Sources</i> , 2010, 195, 1156-1162.	7.8	27

#	ARTICLE	IF	CITATIONS
37	Crumpling of silver nanowires by endolysosomes strongly reduces toxicity. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 14893-14898.	7.1	26
38	Evaluation of cobalt(III) tetramethylchiorporphyrin as an analytical reagent for the determination of enantiomer composition of primary amines and aziridines by <sup>1</sup> H NMR spectroscopy. New Journal of Chemistry, 2001, 25, 714-720.	2.8	25
39	Controlled in Situ n-Doping of Silicon Nanowires during VLS Growth and Their Characterization by Scanning Spreading Resistance Microscopy. Journal of Physical Chemistry C, 2010, 114, 760-765.	3.1	24
40	Transparent and Mechanically Resistant Silver-Nanowire-Based Low-Emissivity Coatings. ACS Applied Materials & Interfaces, 2021, 13, 21971-21978.	8.0	24
41	Improvement of water management in polymer electrolyte membrane fuel cell thanks to cathode cracks. Journal of Power Sources, 2010, 195, 5228-5234.	7.8	23
42	High Gain and Fast Detection of Warfare Agents Using Back-Gated Silicon-Nanowired MOSFETs. IEEE Electron Device Letters, 2011, 32, 976-978.	3.9	21
43	Insight into the Degradation Mechanisms of Highly Conductive Poly(3,4-ethylenedioxythiophene) Thin Films. ACS Applied Polymer Materials, 2020, 2, 2686-2695.	4.4	21
44	Spray-coated PEDOT:OTf films: thermoelectric properties and integration into a printed thermoelectric generator. Materials Chemistry Frontiers, 2020, 4, 2054-2063.	5.9	19
45	Rhodium(I)-catalyzed addition of phenols to dienes. A new convergent synthesis of vitamin E. Tetrahedron Letters, 2000, 41, 3339-3343.	1.4	18
46	Chemical functionalization of electrodes for detection of gaseous nerve agents with carbon nanotube field-effect transistors. Chemical Communications, 2011, 47, 6048.	4.1	18
47	Growth of one-dimensional Si/SiGe heterostructures by thermal CVD. Nanotechnology, 2008, 19, 335603.	2.6	17
48	The electrochemical signature of functionalized single-walled carbon nanotubes bearing electroactive groups. Nanotechnology, 2009, 20, 145705.	2.6	15
49	Chemical Functionalization of Silicon Nanowires by an Electroactive Group: A Direct Spectroscopic Characterization of the Hybrid Nanomaterial. Journal of Physical Chemistry C, 2010, 114, 3924-3931.	3.1	15
50	Development of an autonomous detector for sensing of nerve agents based on functionalized silicon nanowire field-effect transistors. Talanta, 2011, 85, 2542-2545.	5.5	14
51	D2-Symmetric Chiorporphyrins Derived from (1R)-cis-Hemicaronaldehydic Acid: Preparation and Spectral Characterization. European Journal of Organic Chemistry, 2000, 2000, 583-589.	2.4	13
52	High-temperature stability of copper nanoparticles through Cu@Ag nanostructures. Journal of Nanoparticle Research, 2019, 21, 1.	1.9	12
53	Carbon Substrate Functionalization with Diazonium Salts Toward Sensor Applications. Molecular Crystals and Liquid Crystals, 2008, 486, 271/[1313]-281/[1323].	0.9	11
54	A highly selective non-radical diazo coupling provides low cost semi-conducting carbon nanotubes. Carbon, 2014, 66, 246-258.	10.3	11

#	ARTICLE	IF	CITATIONS
55	Water content control during solution-based polymerization: a key to reach extremely high conductivity in PEDOT thin films. <i>Journal of Materials Chemistry C</i> , 2020, 8, 17254-17260.	5.5	11
56	Boron Nitride Nanotubes for Heat Dissipation in Polycaprolactone Composites. <i>ACS Applied Nano Materials</i> , 2021, 4, 4774-4780.	5.0	11
57	Iodorrhodium(III) tetramethylchiorporphyrin: potential reagent for chiral selection and analysis of amino compounds. <i>Inorganica Chimica Acta</i> , 2001, 315, 240-244.	2.4	10
58	Synthesis, characterization, and thermoelectric properties of superconducting (BEDT-TTF) <sub>2</sub> I <sub>3</sub> nanoparticles. <i>Journal of Materials Chemistry C</i> , 2016, 4, 7449-7454.	5.5	10
59	Electrical and Mechanical Properties of Intrinsically Flexible and Stretchable PEDOT Polymers for Thermo-therapy. <i>ACS Applied Polymer Materials</i> , 2021, 3, 5942-5949.	4.4	10
60	Highly end-doped silicon nanowires for field-effect transistors on flexible substrates. <i>Nanoscale</i> , 2010, 2, 677.	5.6	9
61	Assessment of ultrathin yttria-stabilized zirconia foils for biomedical applications. <i>Journal of Materials Science</i> , 2015, 50, 6197-6207.	3.7	9
62	Synthesis of 4-Tert-octylphenol and 4-Cumylphenol by Metal Triflate and Metal Triflimidate Catalysts. <i>Journal of Chemical Research</i> , 2006, 2006, 521-522.	1.3	7
63	Effects of p-doping on the thermal sensitivity of individual Si nanowires. <i>Applied Physics Letters</i> , 2008, 93, 193105.	3.3	6
64	Multiple Hydrogen-Bond-Assisted Self-Assembly of Semiconductor Nanocrystals on Silicon Surfaces and Nanowires. <i>Journal of Physical Chemistry C</i> , 2009, 113, 21389-21395.	3.1	6
65	Structure-Property Relationship of Cryogel-Based Fe-N-C Catalysts for the Oxygen Reduction Reaction. <i>Energy &amp; Fuels</i> , 2021, 35, 16814-16821.	5.1	6
66	High performance encapsulation of transparent conductive polymers by spatial atomic layer deposition. <i>Synthetic Metals</i> , 2022, 284, 116995.	3.9	6
67	Bis-aqua-cobalt(III)-tetramethylchiorporphyrin perchlorate: a selective water metallo-receptor. <i>Inorganica Chimica Acta</i> , 2000, 304, 288-292.	2.4	5
68	Transparent Film Heaters based on Silver Nanowire Random Networks. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1449, 107.	0.1	4
69	Long- to short-junction crossover and field-reentrant critical current in Al/Ag-nanowires/Al Josephson junctions. <i>Physical Review B</i> , 2020, 102, .	3.2	4
70	An electrochemical method to rapidly assess the environmental risk of silver release from nanowire transparent conductive films. <i>NanoImpact</i> , 2020, 18, 100217.	4.5	4
71	Functionalization of Silicon Nanowires for Specific Sensing. <i>ECS Transactions</i> , 2011, 35, 313-318.	0.5	3
72	Nanorobotic Strategies for Handling and Characterization of Metal-Assisted Etched Silicon Nanowires. <i>IEEE/ASME Transactions on Mechatronics</i> , 2013, 18, 887-894.	5.8	3

#	ARTICLE	IF	CITATIONS
73	Doping characteristics of iodine on as-grown chemical vapor deposited graphene on Pt. Ultramicroscopy, 2015, 159, 470-475.	1.9	3
74	High performance metallic joints from screen-printed Cu@Ag nanopastes. Materialia, 2020, 14, 100871.	2.7	3
75	Gram-scale carbon nanotubes as semiconducting material for highly versatile route of integration in plastic electronics. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 183-192.	1.8	2
76	CNTFET Gas Sensors Using SWCNT Mats: Method for Low-cost Fabrication, Solution to Improve Selectivity, Experimental Results using Interfering Agents. Materials Research Society Symposia Proceedings, 2009, 1204, 1.	0.1	1
77	TCAD study of the detection mechanisms in silicon nanoribbon-based gas sensors. , 2011, , .		1
78	New Chemically Functionalized Nanomaterials for Electrical Nerve Agents Sensors. Journal of Physics: Conference Series, 2011, 307, 012008.	0.4	1
79	[Ag <sub>6</sub> (PMo <sub>10</sub> V <sub>2</sub> O <sub>40</sub> )](CH <sub>3</sub> COO) <sup>-</sup> ·8H <sub>2</sub> O: A 3D Macrocationic Polyoxometallic Keggin Complex.. ChemInform, 2004, 35, no.	0.0	0