Stephane Lenfant

List of Publications by Year
in descending order

73 papers	2,813 citations	236612 25 h-index	174990 52 g-index
75 all docs	75 docs citations	75 times ranked	3906 citing authors

#	Article	IF	Citations
1	Nanoscale thermal conductivity of Kapton-derived carbonaceous materials. Journal of Applied Physics, 2022, 131, 065102.	1.1	5
2	Terphenylthiazole-based self-assembled monolayers on cobalt with high conductance photo-switching ratio for spintronics. Nanoscale, 2022, 14, 5725-5742.	2.8	2
3	Thermal and electrical cross-plane conductivity at the nanoscale in poly(3,4-ethylenedioxythiophene):trifluoromethanesulfonate thin films. Nanoscale, 2022, , .	2.8	4
4	Thermal conductivity of benzothieno-benzothiophene derivatives at the nanoscale. Nanoscale, 2021, 13, 3800-3807.	2.8	12
5	Conductance switching of azobenzene-based self-assembled monolayers on cobalt probed by UHV conductive-AFM. Nanoscale, 2021, 13, 6977-6990.	2.8	13
6	Long-range electron transport in Prussian blue analog nanocrystals. Nanoscale, 2020, 12, 20374-20385.	2.8	4
7	Conductance switching at the nanoscale of diarylethene derivative self-assembled monolayers on La_{0.7}Sr_{0.3}MnO₃. Nanoscale, 2020, 12, 8268-8276.	2.8	11
8	Electrical molecular switch addressed by chemical stimuli. Nanoscale, 2020, 12, 10127-10139.	2.8	14
9	Covalent Grafting of Polyoxometalate Hybrids onto Flat Silicon/Silicon Oxide: Insights from POMs Layers on Oxides. ACS Applied Materials & Interfaces, 2020, 12, 48109-48123.	4.0	12
10	Charge transport through redox active [H₇P₈W₄₈O₁₈₄]^{33â^'} polyoxometalates self-assembled onto gold surfaces and gold nanodots. Nanoscale, 2019, 11, 1863-1878.	2.8	25
11	Physical mechanisms involved in the formation and operation of memory devices based on a monolayer of gold nanoparticle-polythiophene hybrid materials. Nanoscale Advances, 2019, 1, 2718-2726.	2.2	8
12	Electron Transport through Self-Assembled Monolayers of Tripeptides. Journal of Physical Chemistry C, 2019, 123, 9600-9608.	1.5	13
13	Optimization of pentacene double floating gate memories based on charge injection regulated by SAM functionalization. AIP Advances, 2018, 8, 025110.	0.6	4
14	Electrical detection of plasmon-induced isomerization in moleculeâ€“nanoparticle network devices. Nanoscale, 2018, 10, 23122-23130.	2.8	5
15	Molecular signature of polyoxometalates in electron transport of silicon-based molecular junctions. Nanoscale, 2018, 10, 17156-17165.	2.8	37
16	Lightâ€Stimulatable Molecules/Nanoparticles Networks for Switchable Logical Functions and Reservoir Computing. Advanced Functional Materials, 2018, 28, 1801506.	7.8	14
17	N-type polymeric organic flash memory device: Effect of reduced graphene oxide floating gate. Organic Electronics, 2017, 45, 81-88.	1.4	16
18	Negative Differential Resistance, Memory, and Reconfigurable Logic Functions Based on Monolayer Devices Derived from Gold Nanoparticles Functionalized with Electropolymerizable TEDOT Units. Journal of Physical Chemistry C, 2017, 121, 10131-10139.	1.5	24

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19	New Photomechanical Molecular Switch Based on a Linear Ï€-Conjugated System. Journal of Physical Chemistry C, 2017, 121, 12416-12425.	1.5	15
20	Probing Frontier Orbital Energies of {Co₉(P₂W₁₅)₃} Polyoxometalate Clusters at Moleculeâ€“Metal and Moleculeâ€“Water Interfaces. Journal of the American Chemical Society, 2017, 139, 14501-14510.	6.6	30
21	Electron-transport polymeric gold nanoparticles memory device, artificial synapse for neuromorphic applications. Organic Electronics, 2017, 50, 499-506.	1.4	11
22	Traps and Interface Fixed Charge Effects on a Solution-Processed n-Type Polymeric-Based Organic Field-Effect Transistor. Journal of Electronic Materials, 2017, 46, 1128-1136.	1.0	4
23	Concentric-Electrode Organic Electrochemical Transistors: Case Study for Selective Hydrazine Sensing. Sensors, 2017, 17, 570.	2.1	12
24	Physical Study by Surface Characterizations of Sarin Sensor on the Basis of Chemically Functionalized Silicon Nanoribbon Field Effect Transistor. Journal of Physical Chemistry C, 2016, 120, 11180-11191.	1.5	11
25	Influence of Molecular Organization on the Electrical Characteristics of Ï€-Conjugated Self-Assembled Monolayers. Journal of Physical Chemistry C, 2015, 119, 5703-5713.	1.5	14
26	Low voltage and time constant organic synapse-transistor. Organic Electronics, 2015, 21, 47-53.	1.4	40
27	Charge Blinking Statistics of Semiconductor Nanocrystals Revealed by Carbon Nanotube Single Charge Sensors. Nano Letters, 2015, 15, 6349-6356.	4.5	11
28	High Conductance Ratio in Molecular Optical Switching of Functionalized Nanoparticle Self-Assembled Nanodevices. Journal of Physical Chemistry C, 2015, 119, 21173-21183.	1.5	15
29	Interface dipole: Effects on threshold voltage and mobility for both amorphous and poly-crystalline organic field effect transistors. Organic Electronics, 2014, 15, 729-737.	1.4	42
30	Langmuirâ€“Blodgett Films of Amphiphilic Thieno[3,4-c]pyrrole-4,6-dione-Based Alternating Copolymers. Macromolecules, 2013, 46, 6408-6418.	2.2	22
31	Integrating Multiple Resistive Memory Devices on a Single Carbon Nanotube. Advanced Functional Materials, 2013, 23, 5631-5637.	7.8	12
32	A Crownâ€Ether Loopâ€Derivatized Oligothiophene Doubly Attached on Gold Surface as Cationâ€Binding Switchable Molecular Junction. Advanced Materials, 2013, 25, 427-431.	11.1	21
33	Pavlov's Dog Associative Learning Demonstrated on Synaptic-Like Organic Transistors. Neural Computation, 2013, 25, 549-566.	1.3	76
34	Molecule/Electrode Interface Energetics in Molecular Junction: A â€œTransition Voltage Spectroscopyâ€• Study. Journal of Physical Chemistry C, 2012, 116, 20722-20730.	1.5	56
35	Chemical functionalization of electrodes for detection of gaseous nerve agents with carbon nanotube field-effect transistors. Chemical Communications, 2011, 47, 6048.	2.2	18
36	New Chemically Functionalized Nanomaterials for Electrical Nerve Agents Sensors. Journal of Physics: Conference Series, 2011, 307, 012008.	0.3	1

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37	Thiolate Chemistry: A Powerful and Versatile Synthetic Tool for Immobilization/Functionalization of Oligothiophenes on a Gold Surface. Chemistry - A European Journal, 2011, 17, 5628-5640.	1.7	11
38	An Organic Nanoparticle Transistor Behaving as a Biological Spiking Synapse. Advanced Functional Materials, 2010, 20, 330-337.	7.8	320
39	Twoâ€Terminal Carbon Nanotube Programmable Devices for Adaptive Architectures. Advanced Materials, 2010, 22, 702-706.	11.1	95
40	Subâ€ppm Detection of Nerve Agents Using Chemically Functionalized Silicon Nanoribbon Fieldâ€Effect Transistors. Angewandte Chemie - International Edition, 2010, 49, 4063-4066.	7.2	32
41	Highâ€Speed Programming of Nanowireâ€Gated Carbonâ€Nanotube Memory Devices. Small, 2010, 6, 2659-2663.	5.2	8
42	High Onâ^'Off Conductance Switching Ratio in Optically-Driven Self-Assembled Conjugated Molecular Systems. ACS Nano, 2010, 4, 2411-2421.	7.3	128
43	Synthesis and electrical properties of fullerene-based molecular junctions on silicon substrate. Journal of Materials Chemistry, 2010, 20, 2680.	6.7	15
44	Oligothiophene-derivatized azobenzene as immobilized photoswitchable conjugated systems. Chemical Communications, 2010, 46, 3657.	2.2	27
45	Self-assembled monolayers for electrode fabrication and efficient threshold voltage control of organic transistors with amorphous semiconductor layer. Organic Electronics, 2009, 10, 119-126.	1.4	40
46	Doping of poly(3-hexylthiophene) nanofibers: microscopic morphology and electrical properties. EPJ Applied Physics, 2009, 46, 12504.	0.3	2
47	Self-assembly of the 3-aminopropyltrimethoxysilane multilayers on Si and hysteretic currentâ€“voltage characteristics. Applied Physics A: Materials Science and Processing, 2008, 90, 581-589.	1.1	121
48	Electroactive Nanorods and Nanorings Designed by Supramolecular Association of Ï€â€Conjugated Oligomers. Chemistry - A European Journal, 2008, 14, 4201-4213.	1.7	26
49	Structural Control of the Horizontal Double Fixation of Oligothiophenes on Gold. Chemistry - A European Journal, 2008, 14, 6237-6246.	1.7	9
50	Electropolymerized Selfâ€Assembled Monolayers of a 3,4â€Ethylenedioxythopheneâ€Thiophene Hybrid System. Advanced Functional Materials, 2008, 18, 2163-2171.	7.8	32
51	Electronic structure of highly crystalline polyaniline by study of tunneling conduction in n+-Si/self-assembled monolayer/polyaniline heterostructures. Organic Electronics, 2008, 9, 602-608.	1.4	8
52	Gate pulse electrical method to characterize hysteresis phenomena in organic field effect transistor. Organic Electronics, 2008, 9, 979-984.	1.4	24
53	Nanotube Transistors as Direct Probes of the Trap Dynamics at Dielectricâ^'Organic Interfaces of Interest in Organic Electronics and Solar Cells. Nano Letters, 2008, 8, 3619-3625.	4.5	30
54	Self-assembled molecular monolayers as ultrathin gate dielectric in carbon nanotube transistors. Applied Physics Letters, 2008, 93, .	1.5	15

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55	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^•</mml:mo><mml:msup><mml:mi>f</mml:mi><mml:mi>Î³</mml:mi></mml:m current noise through Si-bound alkyl monolayers. Physical Review B, 2007, 76, .		27
56	Siliconâ^'Moleculesâ^'Metal Junctions by Transfer Printing:â€‰ Chemical Synthesis and Electrical Properties. Journal of Physical Chemistry C, 2007, 111, 7947-7956.	1.5	32
57	Low-Operating-Voltage Organic Transistors Made of Bifunctional Self-Assembled Monolayers. Advanced Functional Materials, 2007, 17, 597-604.	7.8	90
58	Directed assembly for carbon nanotube device fabrication. , 2006, , .		6
59	Electron Transport through Rectifying Self-Assembled Monolayer Diodes on Silicon:Â Fermi-Level Pinning at the Moleculeâ^'Metal Interface. Journal of Physical Chemistry B, 2006, 110, 13947-13958.	1.2	76
60	Role of interfaces on the direct tunneling and the inelastic tunneling behaviors through metal/alkylsilane/silicon junctions. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 1464-1469.	0.8	19
61	Self assembled monolayers on silicon for molecular electronics. Analytica Chimica Acta, 2006, 568, 84-108.	2.6	450
62	Study of thin calcium electrode degradation by ion beam analysis. Nuclear Instruments & Methods in Physics Research B, 2006, 251, 257-260.	0.6	49
63	Electronic properties of organic monolayers and molecular devices. Pramana - Journal of Physics, 2006, 67, 17-32.	0.9	6
64	Optoelectronic Switch and Memory Devices Based on Polymer-Functionalized Carbon Nanotube Transistors. Advanced Materials, 2006, 18, 2535-2540.	11.1	142
65	On the crucial role of the insulator-semiconductor interface in organic thin-film transistors. , 2006, , .		4
66	Organic field effect transistor based on a novel soluble pentacene precursor and operating at low voltages. Microelectronic Engineering, 2005, 80, 394-397.	1.1	17
67	Inelastic tunneling spectra of an alkyl self-assembled monolayer using a MOS tunnel junction as a test-bed. Microelectronic Engineering, 2005, 80, 398-401.	1.1	6
68	Deposition of TTF derivative on carboxyl terminated self-assembled monolayers. Applied Surface Science, 2005, 246, 392-396.	3.1	6
69	A Tunnel Current in Self-Assembled Monolayers of 3-Mercaptopropyltrimethoxysilane. Small, 2005, 1, 725-729.	5.2	53
70	Fowlerâ€“Nordheim tunnelling and electrically stressed breakdown of 3-mercaptopropyltrimethoxysilane self-assembled monolayers. Nanotechnology, 2005, 16, 3064-3068.	1.3	16
71	The metal/organic monolayer interface in molecular electronic devices. Microelectronic Engineering, 2003, 70, 539-550.	1.1	44
72	Molecular Rectifying Diodes from Self-Assembly on Silicon. Nano Letters, 2003, 3, 741-746.	4.5	157

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73	High anisotropic conductivity in organic insulator/semiconductor monolayer heterostructure. Applied Physics Letters, 2000, 76, 1339-1341.	1.5	35