Vincent Derycke

List of Publications by Year
in descending order

50 papers	5,683 citations	257357 24 h-index	206029 48 g-index
50 all docs	50 docs citations	50 times ranked	5604 citing authors

#	Article	IF	Citations
1	(Invited) Backside Absorbing Layer Microscopy: A New Tool to Study the Optical, Chemical and Electrochemical Properties of 2D Materials. ECS Meeting Abstracts, 2021, MA2021-01, 596-596.	0.0	0
2	(Invited) Backside Absorbing Layer Microscopy: A New Tool to Study the Optical, Chemical and Electrochemical Properties of 2D Materials. ECS Meeting Abstracts, 2020, MA2020-01, 742-742.	0.0	2
3	Effect of Halide Ion Migration on the Electrical Properties of Methylammonium Lead Tri-Iodide Perovskite Solar Cells. Journal of Physical Chemistry C, 2019, 123, 17728-17734.	1.5	41
4	Ideal optical contrast for 2D material observation using bi-layer antireflection absorbing substrates. Nanoscale, 2019, 11, 6129-6135.	2.8	7
5	Multiscaled Simulation Methodology for Neuro-Inspired Circuits Demonstrated with an Organic Memristor. IEEE Transactions on Multi-Scale Computing Systems, 2018, 4, 822-832.	2.5	6
6	Backside absorbing layer microscopy: Watching graphene chemistry. Science Advances, 2017, 3, e1601724.	4.7	18
7	Polarizationâ€Sensitive Singleâ€Wall Carbon Nanotubes Allâ€inâ€One Photodetecting and Emitting Device Working at 1.55 Âµm. Advanced Functional Materials, 2017, 27, 1702341.	7.8	17
8	Electronic Transport of MoS₂ Monolayered Flakes Investigated by Scanning Electrochemical Microscopy. ChemPhysChem, 2017, 18, 2777-2781.	1.0	7
9	Highly selective sorting of semiconducting single wall carbon nanotubes exhibiting light emission at telecom wavelengths. Nano Research, 2016, 9, 2478-2486.	5.8	6
10	Electrografted Fluorinated Organic Ultrathin Film as Efficient Gate Dielectric in MoS₂ Transistors. Journal of Physical Chemistry C, 2016, 120, 9506-9510.	1.5	8
11	Gramâ€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.	0.8	2
12	Physical Realization of a Supervised Learning System Built with Organic Memristive Synapses. Scientific Reports, 2016, 6, 31932.	1.6	47
13	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
14	Supervised learning with organic memristor devices and prospects for neural crossbar arrays. , 2015, , .		12
15	Versatile Wafer-Scale Technique for the Formation of Ultrasmooth and Thickness-Controlled Graphene Oxide Films Based on Very Large Flakes. ACS Applied Materials & Interfaces, 2015, 7, 21270-21277.	4.0	12
16	A highly selective non-radical diazo coupling provides low cost semi-conducting carbon nanotubes. Carbon, 2014, 66, 246-258.	5.4	11
17	Carbon Nanotube-Templated Synthesis of Covalent Porphyrin Network for Oxygen Reduction Reaction. Journal of the American Chemical Society, 2014, 136, 6348-6354.	6.6	231
18	New Insights into the Electronic Transport of Reduced Graphene Oxide Using Scanning Electrochemical Microscopy. Journal of Physical Chemistry Letters, 2014, 5, 4162-4166.	2.1	13

#	Article	IF	Citations
19	Localized Reduction of Graphene Oxide by Electrogenerated Naphthalene Radical Anions and Subsequent Diazonium Electrografting. Journal of the American Chemical Society, 2014, 136, 4833-4836.	6.6	27
20	Contactless Surface Conductivity Mapping of Graphene Oxide Thin Films Deposited on Glass with Scanning Electrochemical Microscopy. Analytical Chemistry, 2013, 85, 1812-1818.	3.2	19
21	Functionalization of Carbon Nanotubes through Polymerization in Micelles: A Bridge between the Covalent and Noncovalent Methods. Chemistry of Materials, 2013, 25, 2700-2707.	3.2	42
22	Integrating Multiple Resistive Memory Devices on a Single Carbon Nanotube. Advanced Functional Materials, 2013, 23, 5631-5637.	7.8	12
23	Neuromorphic function learning with carbon nanotube based synapses. Nanotechnology, 2013, 24, 384013.	1.3	37
24	Flexible Gigahertz Transistors Derived from Solution-Based Single-Layer Graphene. Nano Letters, 2012, 12, 1184-1188.	4.5	133
25	Labile Diazo Chemistry for Efficient Silencing of Metallic Carbon Nanotubes. Chemistry - A European Journal, 2011, 17, 1415-1418.	1.7	14
26	Twoâ€Terminal Carbon Nanotube Programmable Devices for Adaptive Architectures. Advanced Materials, 2010, 22, 702-706.	11.1	95
27	New Confinement Method for the Formation of Highly Aligned and Densely Packed Singleâ€Walled Carbon Nanotube Monolayers. Small, 2010, 6, 1488-1491.	5.2	17
28	Highâ€Speed Programming of Nanowireâ€Gated Carbonâ€Nanotube Memory Devices. Small, 2010, 6, 2659-2663.	5.2	8
29	Recent Advances in Molecular Electronics Based on Carbon Nanotubes. Chimia, 2010, 64, 414.	0.3	1
30	Carbon nanotube chemistry and assembly for electronic devices. Comptes Rendus Physique, 2009, 10, 330-347.	0.3	28
31	80 GHz field-effect transistors produced using high purity semiconducting single-walled carbon nanotubes. Applied Physics Letters, 2009, 94, .	1.5	153
32	Functional Model of Carbon Nanotube Programmable Resistors for Hybrid Nano/CMOS Circuit Design. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2009, , 105-110.	0.2	1
33	Nonlinear Characterization and Modeling of Carbon Nanotube Field-Effect Transistors. IEEE Transactions on Microwave Theory and Techniques, 2008, 56, 1505-1510.	2.9	6
34	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
35	Self-assembled molecular monolayers as ultrathin gate dielectric in carbon nanotube transistors. Applied Physics Letters, 2008, 93, .	1.5	15
36	Intrinsic current gain cutoff frequency of 30GHz with carbon nanotube transistors. Applied Physics Letters, 2007, 90, 233108.	1.5	102

#	Article	IF	Citations
37	Optoelectronic Switch and Memory Devices Based on Polymer-Functionalized Carbon Nanotube Transistors. Advanced Materials, 2006, 18, 2535-2540.	11.1	142
38	Atomic scale engineering of nanostructures at silicon carbide surfaces. Microelectronics Journal, 2005, 36, 969-976.	1.1	7
39	Self-assembled switches based on electroactuated multiwalled nanotubes. Applied Physics Letters, 2005, 87, 193107.	1.5	82
40	Chemical Optimization of Self-Assembled Carbon Nanotube Transistors. Nano Letters, 2005, 5, 451-455.	4.5	127
41	Room-temperature ferromagnetic nanotubes controlled by electron or hole doping. Nature, 2004, 431, 672-676.	13.7	231
42	Nanochemistry at the atomic scale revealed in hydrogen-induced semiconductor surface metallization. Nature Materials, 2003, 2, 253-258.	13.3	125
43	Carbon Nanotubes as Schottky Barrier Transistors. Physical Review Letters, 2002, 89, 106801.	2.9	1,111
44	Controlling doping and carrier injection in carbon nanotube transistors. Applied Physics Letters, 2002, 80, 2773-2775.	1.5	623
45	Catalyst-Free Growth of Ordered Single-Walled Carbon Nanotube Networks. Nano Letters, 2002, 2, 1043-1046.	4.5	110
46	Vertical scaling of carbon nanotube field-effect transistors using top gate electrodes. Applied Physics Letters, 2002, 80, 3817-3819.	1.5	622
47	Field-Modulated Carrier Transport in Carbon Nanotube Transistors. Physical Review Letters, 2002, 89, 126801.	2.9	384
48	Carbon nanotube electronics. IEEE Nanotechnology Magazine, 2002, 1, 184-189.	1.1	127
49	Carbon nanotube transistors and logic circuits. Physica B: Condensed Matter, 2002, 323, 6-14.	1.3	97
50	Ambipolar Electrical Transport in Semiconducting Single-Wall Carbon Nanotubes. Physical Review Letters, 2001, 87, 256805.	2.9	701