Franz Kreupl

List of Publications by Year
in descending order

48 papers	2,974 citations	257101 24 h-index	377514 34 g-index
49 all docs	49 docs citations	49 times ranked	2903 citing authors

#	Article	IF	Citations
1	Carbon nanotubes in interconnect applications. Microelectronic Engineering, 2002, 64, 399-408.	1.1	566
2	Reconfigurable Silicon Nanowire Transistors. Nano Letters, 2012, 12, 119-124.	4.5	343
3	Silicon-Nanowire Transistors with Intruded Nickel-Silicide Contacts. Nano Letters, 2006, 6, 2660-2666.	4.5	231
4	How do carbon nanotubes fit into the semiconductor roadmap?. Applied Physics A: Materials Science and Processing, 2005, 80, 1141-1151.	1.1	172
5	Chemical Vapor Deposition Growth of Single-Walled Carbon Nanotubes at 600 Â°C and a Simple Growth Model. Journal of Physical Chemistry B, 2004, 108, 1888-1893.	1.2	157
6	On the Applicability of Single-Walled Carbon Nanotubes as VLSI Interconnects. IEEE Nanotechnology Magazine, 2009, 8, 542-559.	1.1	156
7	High-Current Nanotube Transistors. Nano Letters, 2004, 4, 831-834.	4.5	143
8	Sub-20 nm Short Channel Carbon Nanotube Transistors. Nano Letters, 2005, 5, 147-150.	4.5	128
9	Electrochemical functionalization of multi-walled carbon nanotubes for solvation and purification. Current Applied Physics, 2002, 2, 107-111.	1.1	123
10	Towards the integration of carbon nanotubes in microelectronics. Diamond and Related Materials, 2004, 13, 1296-1300.	1.8	91
11	Carbon Nanotubes for Microelectronics?. Small, 2005, 1, 382-390.	5.2	90
12	Carbon nanotubes for microelectronics: status and future prospects. Materials Science and Engineering C, 2003, 23, 663-669.	3.8	80
13	Growth of Isolated Carbon Nanotubes with Lithographically Defined Diameter and Location. Nano Letters, 2003, 3, 257-259.	4.5	75
14	Ways towards the scaleable integration of carbon nanotubes into silicon based technology. Diamond and Related Materials, 2004, 13, 354-361.	1.8	65
15	Reconfigurable Nanowire Electronics-Enabling a Single CMOS Circuit Technology. IEEE Nanotechnology Magazine, 2014, 13, 1020-1028.	1.1	63
16	In-Situ Contacted Single-Walled Carbon Nanotubes and Contact Improvement by Electroless Deposition. Nano Letters, 2003, 3, 965-968.	4.5	60
17	The origin of the integral barrier height in inhomogeneous Au/Co/GaAs67P33-Schottky contacts: A ballistic electron emission microscopy study. Journal of Applied Physics, 1998, 83, 358-365.	1.1	44
18	Potential pinch-off effect in inhomogeneous Au/Co/GaAs67P33(100)-Schottky contacts. Applied Physics Letters, 1997, 70, 2559-2561.	1.5	37

#	Article	IF	Citations
19	Silicon to nickel-silicide axial nanowire heterostructures for high performance electronics. Physica Status Solidi (B): Basic Research, 2007, 244, 4170-4175.	0.7	34
20	Carbon nanotubes finally deliver. Nature, 2012, 484, 321-322.	13.7	32
21	Hydrogen evolution activity of individual mono-, bi-, and few-layer MoS 2 towards photocatalysis. Applied Materials Today, 2017, 8, 132-140.	2.3	32
22	High Performance X-Ray Transmission Windows Based on Graphenic Carbon. IEEE Transactions on Nuclear Science, 2015, 62, 588-593.	1.2	27
23	Silicon nanowires: catalytic growth and electrical characterization. Physica Status Solidi (B): Basic Research, 2006, 243, 3340-3345.	0.7	26
24	Carbon-based resistive memory. , 2008, , .		26
25	Low-Resistivity Long-Length Horizontal Carbon Nanotube Bundles for Interconnect Applicationsâ€"Part I: Process Development. IEEE Transactions on Electron Devices, 2013, 60, 2862-2869.	1.6	25
26	Nanoelectronics beyond silicon. Microelectronic Engineering, 2006, 83, 619-623.	1.1	18
27	The carbon-nanotube computer has arrived. Nature, 2013, 501, 495-496.	13.7	18
28	Low-Resistivity Long-Length Horizontal Carbon Nanotube Bundles for Interconnect Applicationsâ€"Part II: Characterization. IEEE Transactions on Electron Devices, 2013, 60, 2870-2876.	1.6	16
29	Design and properties of low-energy X-ray transmission windows based on graphenic carbon. Physica Status Solidi (B): Basic Research, 2015, 252, 2564-2573.	0.7	15
30	Tuning the Polarity of Si-Nanowire Transistors Without the Use of Doping. , 2008, , .		13
31	Carbon-based Materials as Key-enabler for â€œMore Than Mooreâ€. Materials Research Society Symposia Proceedings, 2011, 1303, 57.	0.1	13
32	Performance Improvement of Graphenic Carbon X-ray Transmission Windows. MRS Advances, 2016, 1, 1441-1446.	0.5	7
33	Energy of CDM Failure for ICs on Package-, Wafer-and Board-Level. , 2019, , .		7
34	Carbon-nanotube computer scaled up. Nature, 2019, 572, 588-589.	13.7	6
35	Graphenic carbon-silicon contacts for reliability improvement of metal-silicon junctions. , 2016, , .		5
36	A CMOS Temperature Stabilized 2-D Mechanical Stress Sensor With 11-bit Resolution. IEEE Journal of Solid-State Circuits, 2020, 55, 846-855.	3.5	5

#	Article	IF	Citations
37	A Cost-Effective, Impediometric Na⁺-Sensor in Fluids. , 2021, 5, 1-4.		5
38	Large-scale integration of carbon nanotubes into silicon-based microelectronics. , 2003, , .		2
39	A CMOS Temperature Stabilized 2-Dimensional Mechanical Stress Sensor with 11-bit Resolution. , 2019, , .		2
40	Carbon Nanotubes: Can they become a microelectronics technology?. AIP Conference Proceedings, 2004, , .	0.3	1
41	Advancing CMOS with carbon electronics. , 2014, , .		1
42	Advancing CMOS with carbon electronics. , 2014, , .		1
43	Catalytic CVD of SWCNTs at Low Temperatures and SWCNT Devices. AIP Conference Proceedings, 2004, , .	0.3	0
44	Session 7: Solid-state and nanoelectronic devices - spin devices, batteries and steep slope FETs. , 2008, , .		0
45	ã,«ãƒ¼ãƒœãƒ³ãƒŠãƒŽãƒãƒ¥ãƒ¼ãƒ–ã§ã,³ãƒ³ãƒ”ãƒ¥ãƒ¼ã,¿ãƒ¼ã,’è©¦ä½œ. Nature Digest, 2013, 10, 30-31.	0.0	0
46	Overview of Carbon Nanotube Processing Methods. , 2017, , 81-100.		0
47	Highly Reliable Contacts to Silicon Enabled by Low Temperature Sputtered Graphenic Carbon. IEEE Journal of the Electron Devices Society, 2019, 7, 252-260.	1.2	0
48	Simulation of the Transient Potential Distribution On-Chip During a Fast ESD Event Based on a Parametric Measurement Analysis. , 2020, , .		0