Isabelle Ferain

List of Publications by Year
in descending order

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41 papers	5,761 citations	361413 20 h-index	395702 33 g-index
41 all docs	41 docs citations	41 times ranked	2994 citing authors

#	Article	IF	Citations
1	Errata to â€œSurface-Potential-Based Drain Current Analytical Model for Triple-Gate Junctionless Nanowire Transistorsâ€•[Dec 12 3510-3518]. IEEE Transactions on Electron Devices, 2016, 63, 527-527.	3.0	1
2	Influence of channel material properties on performance of nanowire transistors. Journal of Applied Physics, 2012, 111, .	2.5	24
3	Emission and absorption of optical phonons in Multigate Silicon Nanowire MOSFETs. Journal of Computational Electronics, 2012, 11, 249-265.	2.5	16
4	Intrinsic gate delay and energy-delay product in junctionless nanowire transistors. , 2012, , .		6
5	Sensitivity analysis of steep subthreshold slope (S-slope) in Junctionless nanotransistors. , 2012, , .		0
6	Electron transport in germanium junctionless nanowire transistors. , 2012, , .		0
7	The zero temperature coefficient in junctionless nanowire transistors. Applied Physics Letters, 2012, 101, 062101.	3.3	27
8	Surface-Potential-Based Drain Current Analytical Model for Triple-Gate Junctionless Nanowire Transistors. IEEE Transactions on Electron Devices, 2012, 59, 3510-3518.	3.0	94
9	Mobility enhancement effect in heavily doped junctionless nanowire silicon-on-insulator metal-oxide-semiconductor field-effect transistors. Applied Physics Letters, 2012, 101, 213502.	3.3	45
10	Device Design and Estimated Performance for p-Type Junctionless Transistors on Bulk Germanium Substrates. IEEE Transactions on Electron Devices, 2012, 59, 2308-2313.	3.0	31
11	Influence of discrete dopant on quantum transport in silicon nanowire transistors. Solid-State Electronics, 2012, 70, 92-100.	1.4	15
12	Low-Temperature DirectWafer Bonding. , 2012, , 135-187.		0
13	Random dopant variation in junctionless nanowire transistors. , 2011, , .		9
14	Quantum Confinement Effects in Capacitance Behavior of Multigate Silicon Nanowire MOSFETs. IEEE Nanotechnology Magazine, 2011, 10, 300-309.	2.0	20
15	Improvement of carrier ballisticity in junctionless nanowire transistors. Applied Physics Letters, 2011, 98, .	3.3	43
16	Multigate transistors as the future of classical metalâ€“oxideâ€“semiconductor field-effect transistors. Nature, 2011, 479, 310-316.	27.8	788
17	Comprehensive investigation of Geâ€“Si bonded interfaces using oxygen radical activation. Journal of Applied Physics, 2011, 109, .	2.5	16
18	Characterization of a junctionless diode. Applied Physics Letters, 2011, 99, 013502.	3.3	6

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19	Nanowire to Single-Electron Transistor Transition in Trigate SOI MOSFETs. IEEE Transactions on Electron Devices, 2011, 58, 26-32.	3.0	9
20	Influence of Elastic and Inelastic Electronâ€“Phonon Interaction on Quantum Transport in Multigate Silicon Nanowire MOSFETs. IEEE Transactions on Electron Devices, 2011, 58, 1029-1037.	3.0	9
21	Junctionless Multiple-Gate Transistors for Analog Applications. IEEE Transactions on Electron Devices, 2011, 58, 2511-2519.	3.0	234
22	Surface activation using oxygen and nitrogen radical for Geâ€“Si Avalanche photodiode integration. Microelectronic Engineering, 2011, 88, 522-525.	2.4	2
23	Investigation of high-performance sub-50nm junctionless nanowire transistors. Microelectronics Reliability, 2011, 51, 1166-1171.	1.7	32
24	A Simulation Comparison between Junctionless and Inversion-Mode MuGFETs. ECS Transactions, 2011, 35, 63-72.	0.5	29
25	Junctionless Nanowire Transistor: Complementary Metal-Oxide-Semiconductor Without Junctions. Science of Advanced Materials, 2011, 3, 477-482.	0.7	36
26	Performance estimation of junctionless multigate transistors. Solid-State Electronics, 2010, 54, 97-103.	1.4	487
27	Nanowire transistors without junctions. Nature Nanotechnology, 2010, 5, 225-229.	31.5	1,993
28	Low temperature germanium to silicon direct wafer bonding using free radical exposure. Applied Physics Letters, 2010, 96, .	3.3	39
29	Effect of intravalley acoustic phonon scattering on quantum transport in multigate silicon nanowire metal-oxide-semiconductor field-effect transistors. Journal of Applied Physics, 2010, 108, 034510.	2.5	19
30	Fabrication of Germanium-on-Insulator by low temperature direct wafer bonding. , 2010, , .		6
31	Reduced electric field in junctionless transistors. Applied Physics Letters, 2010, 96, 073510.	3.3	269
32	Mobility improvement in nanowire junctionless transistors by uniaxial strain. Applied Physics Letters, 2010, 97, .	3.3	38
33	Low subthreshold slope in junctionless multigate transistors. Applied Physics Letters, 2010, 96, .	3.3	195
34	High-Temperature Performance of Silicon Junctionless MOSFETs. IEEE Transactions on Electron Devices, 2010, 57, 620-625.	3.0	359
35	Simulation of Quantum Current Oscillations in Trigate SOI MOSFETs. IEEE Transactions on Electron Devices, 2010, 57, 1102-1109.	3.0	15
36	Nanowire zero-capacitor DRAM transistors with and without junctions. , 2010, , .		17

#	Article	IF	Citations
37	Dissipative transport in Multigate silicon nanowire transistors. , 2010, , .		4
38	Velocity and Mobility Investigation in 1-nm-EOT HfSiON on Si (110) and (100)â€"Does the Dielectric Quality Matter?. IEEE Transactions on Electron Devices, 2009, 56, 3009-3017.	3.0	12
39	A new F(ast)-CMS NEGF algorithm for efficient 3D simulations ofÂswitching characteristics enhancement in constricted tunnel barrier silicon nanowire MuGFETs. Journal of Computational Electronics, 2009, 8, 287-306.	2.5	31
40	Junctionless multigate field-effect transistor. Applied Physics Letters, 2009, 94, .	3.3	768
41	Mobility and Dielectric Quality of 1-nm EOT HfSiON on Si(110) and (100). IEEE Transactions on Electron Devices, 2008, 55, 3414-3420.	3.0	17