

# 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	Nanowire transistors without junctions. Nature Nanotechnology, 2010, 5, 225-229.	31.5	1,993
2	Multigate transistors as the future of classical metal-oxide-semiconductor field-effect transistors. Nature, 2011, 479, 310-316.	27.8	788
3	Junctionless multigate field-effect transistor. Applied Physics Letters, 2009, 94, .	3.3	768
4	Performance estimation of junctionless multigate transistors. Solid-State Electronics, 2010, 54, 97-103.	1.4	487
5	High-Temperature Performance of Silicon Junctionless MOSFETs. IEEE Transactions on Electron Devices, 2010, 57, 620-625.	3.0	359
6	Reduced electric field in junctionless transistors. Applied Physics Letters, 2010, 96, 073510.	3.3	269
7	Junctionless Multiple-Gate Transistors for Analog Applications. IEEE Transactions on Electron Devices, 2011, 58, 2511-2519.	3.0	234
8	Low subthreshold slope in junctionless multigate transistors. Applied Physics Letters, 2010, 96, .	3.3	195
9	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
10	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
11	Improvement of carrier ballisticity in junctionless nanowire transistors. Applied Physics Letters, 2011, 98, .	3.3	43
12	Low temperature germanium to silicon direct wafer bonding using free radical exposure. Applied Physics Letters, 2010, 96, .	3.3	39
13	Mobility improvement in nanowire junctionless transistors by uniaxial strain. Applied Physics Letters, 2010, 97, .	3.3	38
14	Junctionless Nanowire Transistor: Complementary Metal-Oxide-Semiconductor Without Junctions. Science of Advanced Materials, 2011, 3, 477-482.	0.7	36
15	Investigation of high-performance sub-50nm junctionless nanowire transistors. Microelectronics Reliability, 2011, 51, 1166-1171.	1.7	32
16	A new F(ast)-CMS NEGF algorithm for efficient 3D simulations of switching characteristics enhancement in constricted tunnel barrier silicon nanowire MuGFETs. Journal of Computational Electronics, 2009, 8, 287-306.	2.5	31
17	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
18	A Simulation Comparison between Junctionless and Inversion-Mode MuGFETs. ECS Transactions, 2011, 35, 63-72.	0.5	29

#	ARTICLE	IF	CITATIONS
19	The zero temperature coefficient in junctionless nanowire transistors. Applied Physics Letters, 2012, 101, 062101.	3.3	27
20	Influence of channel material properties on performance of nanowire transistors. Journal of Applied Physics, 2012, 111, .	2.5	24
21	Quantum Confinement Effects in Capacitance Behavior of Multigate Silicon Nanowire MOSFETs. IEEE Nanotechnology Magazine, 2011, 10, 300-309.	2.0	20
22	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
23	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
24	Nanowire zero-capacitor DRAM transistors with and without junctions. , 2010, , .		17
25	Comprehensive investigation of Ge/Si bonded interfaces using oxygen radical activation. Journal of Applied Physics, 2011, 109, .	2.5	16
26	Emission and absorption of optical phonons in Multigate Silicon Nanowire MOSFETs. Journal of Computational Electronics, 2012, 11, 249-265.	2.5	16
27	Simulation of Quantum Current Oscillations in Trigate SOI MOSFETs. IEEE Transactions on Electron Devices, 2010, 57, 1102-1109.	3.0	15
28	Influence of discrete dopant on quantum transport in silicon nanowire transistors. Solid-State Electronics, 2012, 70, 92-100.	1.4	15
29	Velocity and Mobility Investigation in 1-nm-EOT HfSiON on Si (110) and (100) – Does the Dielectric Quality Matter?. IEEE Transactions on Electron Devices, 2009, 56, 3009-3017.	3.0	12
30	Random dopant variation in junctionless nanowire transistors. , 2011, , .		9
31	Nanowire to Single-Electron Transistor Transition in Trigate SOI MOSFETs. IEEE Transactions on Electron Devices, 2011, 58, 26-32.	3.0	9
32	Influence of Elastic and Inelastic Electron-Phonon Interaction on Quantum Transport in Multigate Silicon Nanowire MOSFETs. IEEE Transactions on Electron Devices, 2011, 58, 1029-1037.	3.0	9
33	Fabrication of Germanium-on-Insulator by low temperature direct wafer bonding. , 2010, , .		6
34	Characterization of a junctionless diode. Applied Physics Letters, 2011, 99, 013502.	3.3	6
35	Intrinsic gate delay and energy-delay product in junctionless nanowire transistors. , 2012, , .		6
36	Dissipative transport in Multigate silicon nanowire transistors. , 2010, , .		4

#	ARTICLE	IF	CITATIONS
37	Surface activation using oxygen and nitrogen radical for Ge/Si Avalanche photodiode integration. Microelectronic Engineering, 2011, 88, 522-525.	2.4	2
38	Errata to "Surface-Potential-Based Drain Current Analytical Model for Triple-Gate Junctionless Nanowire Transistors" [Dec 12 3510-3518]. IEEE Transactions on Electron Devices, 2016, 63, 527-527.	3.0	1
39	Sensitivity analysis of steep subthreshold slope (S-slope) in Junctionless nanotransistors. , 2012, , .		0
40	Electron transport in germanium junctionless nanowire transistors. , 2012, , .		0
41	Low-Temperature Direct Wafer Bonding. , 2012, , 135-187.		0