

# Gerhard Klimeck

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

411  
papers

12,559  
citations

56  
h-index

98  
g-index

472  
ext. papers

14,434  
ext. citations

4  
avg, IF

6.38  
L-index

#	Paper	IF	Citations
4 <sup>11</sup>	Doping Profile Engineered Triple Heterojunction TFETs With 12-nm Body Thickness. <i>IEEE Transactions on Electron Devices</i> , <b>2021</b> , 68, 3104-3111	2.9	2
4 <sup>10</sup>	Impact of Body Thickness and Scattering on III-V Triple Heterojunction TFET Modeled With Atomistic Mode-Space Approximation. <i>IEEE Transactions on Electron Devices</i> , <b>2020</b> , 67, 3478-3485	2.9	7
4 <sup>09</sup>	WSe Homojunction Devices: Electrostatically Configurable as Diodes, MOSFETs, and Tunnel FETs for Reconfigurable Computing. <i>Small</i> , <b>2019</b> , 15, e1902770	11	12
4 <sup>08</sup>	Superior Performance of 5-nm Gate Length GaN Nanowire nFET for Digital Logic Applications. <i>IEEE Electron Device Letters</i> , <b>2019</b> , 40, 874-877	4.4	11
4 <sup>07</sup>	Non-orthogonal tight-binding models: Problems and possible remedies for realistic nano-scale devices. <i>Journal of Applied Physics</i> , <b>2019</b> , 125, 144302	2.5	3
4 <sup>06</sup>	Microwave-induced capacitance resonances and anomalous magnetoresistance in double quantum wells. <i>Journal of Applied Physics</i> , <b>2019</b> , 125, 235707	2.5	
4 <sup>05</sup>	MoS for Enhanced Electrical Performance of Ultrathin Copper Films. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 28345-28351	9.5	14
4 <sup>04</sup>	Room-Temperature Graphene-Nanoribbon Tunneling Field-Effect Transistors. <i>Npj 2D Materials and Applications</i> , <b>2019</b> , 3,	8.8	18
4 <sup>03</sup>	Band-tail Formation and Band-gap Narrowing Driven by Polar Optical Phonons and Charged Impurities in Atomically Resolved III-V Semiconductors and Nanodevices. <i>Physical Review Applied</i> , <b>2019</b> , 12,	4.3	10
4 <sup>02</sup>	Thermal boundary resistance predictions with non-equilibrium Green's function and molecular dynamics simulations. <i>Applied Physics Letters</i> , <b>2019</b> , 115, 231601	3.4	7
4 <sup>01</sup>	Complementary Black Phosphorus Tunneling Field-Effect Transistors. <i>ACS Nano</i> , <b>2019</b> , 13, 377-385	16.7	78
4 <sup>00</sup>	Alloy Engineered Nitride Tunneling Field-Effect Transistor: A Solution for the Challenge of Heterojunction TFETs. <i>IEEE Transactions on Electron Devices</i> , <b>2019</b> , 66, 736-742	2.9	12
399	Grain-Boundary Resistance in Copper Interconnects: From an Atomistic Model to a Neural Network. <i>Physical Review Applied</i> , <b>2018</b> , 9,	4.3	16
398	Dramatic Impact of Dimensionality on the Electrostatics of P-N Junctions and Its Sensing and Switching Applications. <i>IEEE Nanotechnology Magazine</i> , <b>2018</b> , 17, 293-298	2.6	25
397	Optimization of edge state velocity in the integer quantum Hall regime. <i>Physical Review B</i> , <b>2018</b> , 97,	3.3	7
396	Robust mode space approach for atomistic modeling of realistically large nanowire transistors. <i>Journal of Applied Physics</i> , <b>2018</b> , 123, 044303	2.5	8
395	Quantitative Multi-Scale, Multi-Physics Quantum Transport Modeling of GaN-Based Light Emitting Diodes. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2018</b> , 215, 1700662	1.6	13

394	Two-electron states of a group-V donor in silicon from atomistic full configuration interactions. <i>Physical Review B</i> , <b>2018</b> , 97,	3.3	11
393	Sensitivity Challenge of Steep Transistors. <i>IEEE Transactions on Electron Devices</i> , <b>2018</b> , 65, 1633-1639	2.9	13
392	Explicit screening full band quantum transport model for semiconductor nanodevices. <i>Journal of Applied Physics</i> , <b>2018</b> , 123, 244501	2.5	2
391	Atomistic modeling trap-assisted tunneling in hole tunnel field effect transistors. <i>Journal of Applied Physics</i> , <b>2018</b> , 123, 174504	2.5	5
390	Channel Thickness Optimization for Ultrathin and 2-D Chemically Doped TFETs. <i>IEEE Transactions on Electron Devices</i> , <b>2018</b> , 65, 4614-4621	2.9	11
389	Atomistic Tight-Binding Study of Contact Resistivity in Si/SiGe PMOS Schottky Contacts. <i>IEEE Nanotechnology Magazine</i> , <b>2018</b> , 17, 968-973	2.6	4
388	Interface-induced spin-orbit interaction in silicon quantum dots and prospects for scalability. <i>Physical Review B</i> , <b>2018</b> , 97,	3.3	29
387	NemoViz: a visual interactive system for atomistic simulations design. <i>Visualization in Engineering</i> , <b>2018</b> , 6,	3	1
386	Theoretical study of strain-dependent optical absorption in a doped self-assembled InAs/InGaAs/GaAs/AlGaAs quantum dot. <i>Beilstein Journal of Nanotechnology</i> , <b>2018</b> , 9, 1075-1084	3	1
385	Switching Mechanism and the Scalability of Vertical-TFETs. <i>IEEE Transactions on Electron Devices</i> , <b>2018</b> , 65, 3065-3068	2.9	19
384	Insights from simple models for surface states in nanostructures. <i>European Journal of Physics</i> , <b>2017</b> , 38, 025501	0.8	
383	NEMO5: realistic and efficient NEGF simulations of GaN light-emitting diodes <b>2017</b> ,		2
382	Combination of Equilibrium and Nonequilibrium Carrier Statistics Into an Atomistic Quantum Transport Model for Tunneling Heterojunctions. <i>IEEE Transactions on Electron Devices</i> , <b>2017</b> , 64, 2512-2518	2.9	13
381	A Multiscale Modeling of Triple-Heterojunction Tunneling FETs. <i>IEEE Transactions on Electron Devices</i> , <b>2017</b> , 64, 2728-2735	2.9	12
380	A high-current InP-channel triple heterojunction tunnel transistor design <b>2017</b> ,		4
379	Transport in vertically stacked hetero-structures from 2D materials. <i>Journal of Physics: Conference Series</i> , <b>2017</b> , 864, 012053	0.3	5
378	Low-temperature thermal transport and thermopower of monolayer transition metal dichalcogenide semiconductors. <i>Journal of Physics Condensed Matter</i> , <b>2017</b> , 29, 405701	1.8	4
377	Silicon quantum processor with robust long-distance qubit couplings. <i>Nature Communications</i> , <b>2017</b> , 8, 450	17.4	89

376	Thickness Engineered Tunnel Field-Effect Transistors Based on Phosphorene. <i>IEEE Electron Device Letters</i> , <b>2017</b> , 38, 130-133	4.4	43
375	Scalable GaSb/InAs Tunnel FETs With Nonuniform Body Thickness. <i>IEEE Transactions on Electron Devices</i> , <b>2017</b> , 64, 96-101	2.9	15
374	The Drift-Diffusion Equations and Their Numerical Solution <b>2017</b> , 151-192		
373	Particle-Based Device Simulation Methods <b>2017</b> , 241-334		
372	Quantum Corrections to Semiclassical Approaches <b>2017</b> , 367-444		
371	Quantum Transport in Semiconductor Systems <b>2017</b> , 445-492		
370	Creating impact in the digital space: digital practice dependency in communities of digital scientific innovations. <i>Scientometrics</i> , <b>2017</b> , 110, 417-442	3	7
369	Sb- and Al-free ultra-high-current tunnel FET designs <b>2017</b> ,		1
368	Control of interlayer physics in 2H transition metal dichalcogenides. <i>Journal of Applied Physics</i> , <b>2017</b> , 122, 224302	2.5	17
367	Introduction to Computational Electronics <b>2017</b> , 1-22		
366	Numerical Integral Eigensolver for a Ring Region on the Complex Plane. <i>Lecture Notes in Computational Science and Engineering</i> , <b>2017</b> , 19-30	0.3	
365	Numerical guidelines for setting up a k.p simulator with applications to quantum dot heterostructures and topological insulators. <i>Journal of Computational Electronics</i> , <b>2016</b> , 15, 115-128	1.8	11
364	<b>2016</b> ,		1
363	Transferable tight-binding model for strained group IV and III-V materials and heterostructures. <i>Physical Review B</i> , <b>2016</b> , 94,	3.3	37
362	<b>2016</b> ,		7
361	P-Type Tunnel FETs With Triple Heterojunctions. <i>IEEE Journal of the Electron Devices Society</i> , <b>2016</b> , 4, 410-415	2.3	11
360	Grain boundary resistance in nanoscale copper interconnections <b>2016</b> ,		2
359	Characterizing Si:P quantum dot qubits with spin resonance techniques. <i>Scientific Reports</i> , <b>2016</b> , 6, 31830.9		8

358	Multi-scale, multi-physics NEGF quantum transport for nitride LEDs <b>2016</b> ,		2
357	Saving Moore's Law Down To 1 nm Channels With Anisotropic Effective Mass. <i>Scientific Reports</i> , <b>2016</b> , 6, 31501	4.9	54
356	Highly tunable exchange in donor qubits in silicon. <i>Npj Quantum Information</i> , <b>2016</b> , 2,	8.6	31
355	Universal Behavior of Atomistic Strain in Self-Assembled Quantum Dots. <i>IEEE Journal of Quantum Electronics</i> , <b>2016</b> , 52, 1-8	2	11
354	Incoherent transport in NEMO5: realistic and efficient scattering on phonons. <i>Journal of Computational Electronics</i> , <b>2016</b> , 15, 1123-1129	1.8	14
353	Design Rules for High Performance Tunnel Transistors From 2-D Materials. <i>IEEE Journal of the Electron Devices Society</i> , <b>2016</b> , 4, 260-265	2.3	17
352	Can Homojunction Tunnel FETs Scale Below 10 nm?. <i>IEEE Electron Device Letters</i> , <b>2016</b> , 37, 115-118	4.4	29
351	Surface Passivation in Empirical Tight Binding. <i>IEEE Transactions on Electron Devices</i> , <b>2016</b> , 63, 954-958	2.9	5
350	High-Current Tunneling FETs With ( $\{1\}0\{1\}$ ) Orientation and a Channel Heterojunction. <i>IEEE Electron Device Letters</i> , <b>2016</b> , 37, 345-348	4.4	19
349	Design and Simulation of GaSb/InAs 2D Transmission-Enhanced Tunneling FETs. <i>IEEE Electron Device Letters</i> , <b>2016</b> , 37, 107-110	4.4	14
348	Unfolding and effective bandstructure calculations as discrete real- and reciprocal-space operations. <i>Physica B: Condensed Matter</i> , <b>2016</b> , 491, 22-30	2.8	3
347	Few-layer Phosphorene: An Ideal 2D Material For Tunnel Transistors. <i>Scientific Reports</i> , <b>2016</b> , 6, 28515	4.9	78
346	General Retarded Contact Self-energies in and beyond the Non-equilibrium Green's Functions Method. <i>Journal of Physics: Conference Series</i> , <b>2016</b> , 696, 012019	0.3	3
345	Optimum High-k Oxide for the Best Performance of Ultra-Scaled Double-Gate MOSFETs. <i>IEEE Nanotechnology Magazine</i> , <b>2016</b> , 15, 904-910	2.6	36
344	Buttiker probes for dissipative phonon quantum transport in semiconductor nanostructures. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 113107	3.4	18
343	Novel III-N heterostructure devices for low-power logic and more <b>2016</b> ,		3
342	High-current InP-based triple heterojunction tunnel transistors <b>2016</b> ,		5
341	Performance degradation of superlattice MOSFETs due to scattering in the contacts. <i>Journal of Applied Physics</i> , <b>2016</b> , 120, 224501	2.5	5

340	<b>2016,</b>		6
339	Quantum simulation of the Hubbard model with dopant atoms in silicon. <i>Nature Communications</i> , <b>2016</b> , 7, 11342	17.4	54
338	From Fowler-Nordheim to Nonequilibrium Green's Function Modeling of Tunneling. <i>IEEE Transactions on Electron Devices</i> , <b>2016</b> , 63, 2871-2878	2.9	25
337	Categorizing Users of Cloud Services. <i>Service Science</i> , <b>2016</b> , 8, 59-70	2.2	6
336	. <i>IEEE Journal of the Electron Devices Society</i> , <b>2016</b> , 4, 124-128	2.3	29
335	Quantum Transport Simulation of III-V TFETs with Reduced-Order ( $\text{varvec{k}} \cdot \text{varvec{p}}$ ) Method <b>2016</b> , 151-180		4
334	Transport of spin qubits with donor chains under realistic experimental conditions. <i>Physical Review B</i> , <b>2016</b> , 94,	3.3	14
333	The influence of proximity induced ferromagnetism, superconductivity and Fermi-velocity on evolution of Berry phase in Bi <sub>2</sub> Se <sub>3</sub> topological insulator. <i>Semiconductor Science and Technology</i> , <b>2015</b> , 30, 045004	1.8	6
332	The evaluation of non-topological components in Berry phase and momentum relaxation time in a gapped 3D topological insulator. <i>Journal of Physics Condensed Matter</i> , <b>2015</b> , 27, 335505	1.8	1
331	Scaling Theory of Electrically Doped 2D Transistors. <i>IEEE Electron Device Letters</i> , <b>2015</b> , 36, 726-728	4.4	32
330	nanoHUB.org: A Gateway to Undergraduate Simulation-Based Research in Materials Science and Related Fields. <i>Materials Research Society Symposia Proceedings</i> , <b>2015</b> , 1762, 7		
329	Tunnel Field-Effect Transistors in 2-D Transition Metal Dichalcogenide Materials. <i>IEEE Journal on Exploratory Solid-State Computational Devices and Circuits</i> , <b>2015</b> , 1, 12-18	2.4	122
328	Tunneling and Short Channel Effects in Ultrascaled InGaAs Double Gate MOSFETs. <i>IEEE Transactions on Electron Devices</i> , <b>2015</b> , 62, 525-531	2.9	8
327	Electrically controlling single-spin qubits in a continuous microwave field. <i>Science Advances</i> , <b>2015</b> , 1, e1500922	4.9	96
326	Electrically doped WTe <sub>2</sub> tunnel transistors <b>2015</b> ,		1
325	Polarization-Engineered III-Nitride Heterojunction Tunnel Field-Effect Transistors. <i>IEEE Journal on Exploratory Solid-State Computational Devices and Circuits</i> , <b>2015</b> , 1, 28-34	2.4	54
324	Electrically doped 2D material tunnel transistor <b>2015</b> ,		8
323	Proximity induced ferromagnetism, superconductivity, and finite-size effects on the surface states of topological insulator nanostructures. <i>Journal of Applied Physics</i> , <b>2015</b> , 117, 044304	2.5	4

322	Optimal Ge/SiGe nanofin geometries for hole mobility enhancement: Technology limit from atomic simulations. <i>Journal of Applied Physics</i> , <b>2015</b> , 117, 174312	2.5	1
321	Quantum Transport in AlGaSb/InAs TFETs With Gate Field In-Line With Tunneling Direction. <i>IEEE Transactions on Electron Devices</i> , <b>2015</b> , 62, 2445-2449	2.9	10
320	Achieving a higher performance in bilayer graphene FET - strain engineering <b>2015</b> ,		7
319	Dielectric Engineered Tunnel Field-Effect Transistor. <i>IEEE Electron Device Letters</i> , <b>2015</b> , 36, 1097-1100	4.4	61
318	Interface-induced heavy-hole/light-hole splitting of acceptors in silicon. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 203110	3.4	10
317	Donor hyperfine Stark shift and the role of central-cell corrections in tight-binding theory. <i>Journal of Physics Condensed Matter</i> , <b>2015</b> , 27, 154207	1.8	13
316	A tight-binding study of single-atom transistors. <i>Small</i> , <b>2015</b> , 11, 374-81	11	11
315	Strain and electric field control of hyperfine interactions for donor spin qubits in silicon. <i>Physical Review B</i> , <b>2015</b> , 91,	3.3	12
314	Tight-binding analysis of Si and GaAs ultrathin bodies with subatomic wave-function resolution. <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	40
313	Nanohub as a Platform for Implementing ICME Simulations in Research and Education <b>2015</b> , 269-276		
312	A predictive analytic model for high-performance tunneling field-effect transistors approaching non-equilibrium Green's function simulations. <i>Journal of Applied Physics</i> , <b>2015</b> , 118, 164305	2.5	20
311	In-surface confinement of topological insulator nanowire surface states. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 121605	3.4	13
310	Atomistic quantum transport approach to time-resolved device simulations <b>2015</b> ,		3
309	2D tunnel transistors for ultra-low power applications: Promises and challenges <b>2015</b> ,		1
308	Electrically Tunable Bandgaps in Bilayer MoS <sub>2</sub> <i>Nano Letters</i> , <b>2015</b> , 15, 8000-7	11.5	127
307	Mode space tight binding model for ultra-fast simulations of III-V nanowire MOSFETs and heterojunction TFETs <b>2015</b> ,		4
306	<b>2015</b> ,		3
305	<b>2015</b> ,		2

304	Design Guidelines for Sub-12 nm Nanowire MOSFETs. <i>IEEE Nanotechnology Magazine</i> , <b>2015</b> , 14, 210-213	2.6	29
303	nanoHUB as a Platform for Implementing ICME Simulations in Research and Education <b>2015</b> , 269-276		1
302	In the Flow: Evolving from Utility Based Social Medium to Community Peer <b>2015</b> , 183-196		
301	Spatially resolving valley quantum interference of a donor in silicon. <i>Nature Materials</i> , <b>2014</b> , 13, 605-10	27	68
300	Brillouin zone unfolding method for effective phonon spectra. <i>Physical Review B</i> , <b>2014</b> , 90,	3-3	16
299	Design and Simulation of Two-Dimensional Superlattice Steep Transistors. <i>IEEE Electron Device Letters</i> , <b>2014</b> , 35, 1212-1214	4-4	5
298	Effect of diameter variation on electrical characteristics of Schottky barrier indium arsenide nanowire field-effect transistors. <i>ACS Nano</i> , <b>2014</b> , 8, 6281-7	16.7	20
297	Computational study of heterojunction graphene nanoribbon tunneling transistors with p-d orbital tight-binding method. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 243113	3-4	5
296	Spin blockade and exchange in Coulomb-confined silicon double quantum dots. <i>Nature Nanotechnology</i> , <b>2014</b> , 9, 430-5	28.7	89
295	Designing a large scale quantum computer with atomistic simulations <b>2014</b> ,		1
294	Spin-lattice relaxation times of single donors and donor clusters in silicon. <i>Physical Review Letters</i> , <b>2014</b> , 113, 246406	7-4	15
293	More Moore landscape for system readiness - ITRS2.0 requirements <b>2014</b> ,		3
292	Non-equilibrium Green's functions method: Non-trivial and disordered leads. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 213502	3-4	7
291	Limits to metallic conduction in atomic-scale quasi-one-dimensional silicon wires. <i>Physical Review Letters</i> , <b>2014</b> , 113, 246802	7-4	19
290	Performance degradation due to thicker physical layer of high k oxide in ultra-scaled MOSFETs and mitigation through electrostatics design <b>2014</b> ,		2
289	Atomistic simulation of steep subthreshold slope Bi-layer MoS <sub>2</sub> transistors <b>2014</b> ,		1
288	An environment-dependent semi-empirical tight binding model suitable for electron transport in bulk metals, metal alloys, metallic interfaces, and metallic nanostructures. I. Model and validation. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 123703	2.5	12
287	Anisotropic strain in SmSe and SmTe: Implications for electronic transport. <i>Physical Review B</i> , <b>2014</b> , 90,	3-3	6

286	Design, fabrication, and analysis of p-channel arsenide/antimonide hetero-junction tunnel transistors. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 044502	2.5	17
285	Transistor roadmap projection using predictive full-band atomistic modeling. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 083508	3.4	10
284	An environment-dependent semi-empirical tight binding model suitable for electron transport in bulk metals, metal alloys, metallic interfaces, and metallic nanostructures. II. Application of quantum confinement and homogeneous strain on Cu conductance. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 123704	2.5	8
283	Coherent control of a single <sup>151</sup> Bi nuclear spin qubit. <i>Physical Review Letters</i> , <b>2014</b> , 113, 246801	7.4	37
282	Quantum transport in NEMO5: Algorithm improvements and high performance implementation <b>2014</b> ,		2
281	nanoHUB.org: Experiences and Challenges in Software Sustainability for a Large Scientific Community. <i>Journal of Open Research Software</i> , <b>2014</b> , 2,	2.3	4
280	Silicon quantum electronics. <i>Reviews of Modern Physics</i> , <b>2013</b> , 85, 961-1019	40.5	679
279	Optical TCAD on the Net: A tight-binding study of inter-band light transitions in self-assembled InAs/GaAs quantum dot photodetectors. <i>Mathematical and Computer Modelling</i> , <b>2013</b> , 58, 288-299		4
278	. <i>IEEE Transactions on Electron Devices</i> , <b>2013</b> , 60, 2171-2177	2.9	35
277	Giant quasiparticle bandgap modulation in graphene nanoribbons supported on weakly interacting surfaces. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 133107	3.4	28
276	Learning and research in the cloud. <i>Nature Nanotechnology</i> , <b>2013</b> , 8, 786-9	28.7	19
275	Design principles for HgTe based topological insulator devices. <i>Journal of Applied Physics</i> , <b>2013</b> , 114, 043702	2.5	22
274	Efficient and realistic device modeling from atomic detail to the nanoscale. <i>Journal of Computational Electronics</i> , <b>2013</b> , 12, 592-600	1.8	78
273	Atomistic modeling of metallic nanowires in silicon. <i>Nanoscale</i> , <b>2013</b> , 5, 8666-74	7.7	16
272	Noninvasive spatial metrology of single-atom devices. <i>Nano Letters</i> , <b>2013</b> , 13, 1903-9	11.5	25
271	Utilizing the unique properties of nanowire MOSFETs for RF applications. <i>Nano Letters</i> , <b>2013</b> , 13, 1549-54	11.5	10
270	Empirical tight binding parameters for GaAs and MgO with explicit basis through DFT mapping. <i>Journal of Computational Electronics</i> , <b>2013</b> , 12, 56-60	1.8	18
269	Low rank approximation method for efficient Green's function calculation of dissipative quantum transport. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 213707	2.5	9

268	Electron transport in nano-scaled piezoelectronic devices. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 193501	3.4	9
267	Spin-valley lifetimes in a silicon quantum dot with tunable valley splitting. <i>Nature Communications</i> , <b>2013</b> , 4, 2069	17.4	179
266	Probing scattering mechanisms with symmetric quantum cascade lasers. <i>Optics Express</i> , <b>2013</b> , 21, 7209-153	3.3	31
265	Scaling effect on specific contact resistivity in nano-scale metal-semiconductor contacts <b>2013</b> ,		4
264	Simulation Study of Thin-Body Ballistic n-MOSFETs Involving Transport in Mixed $\Gamma$ -L Valleys. <i>IEEE Electron Device Letters</i> , <b>2013</b> , 34, 1196-1198	4.4	21
263	Investigation of ripple-limited low-field mobility in large-scale graphene nanoribbons. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 253506	3.4	4
262	nanoHUB.org: cloud-based services for nanoscale modeling, simulation, and education. <i>Nanotechnology Reviews</i> , <b>2013</b> , 2, 107-117	6.3	31
261	Atomistic simulation of phonon and alloy limited hole mobility in Si <sub>1-x</sub> Ge <sub>x</sub> nanowires. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2013</b> , 7, 903-906	2.5	4
260	A two-dimensional domain decomposition technique for the simulation of quantum-scale devices. <i>Journal of Computational Physics</i> , <b>2012</b> , 231, 1293-1313	4.1	7
259	. <i>IEEE Transactions on Electron Devices</i> , <b>2012</b> , 59, 2107-2114	2.9	64
258	Material Selection for Minimizing Direct Tunneling in Nanowire Transistors. <i>IEEE Transactions on Electron Devices</i> , <b>2012</b> , 59, 2064-2069	2.9	38
257	Observation of 1D behavior in Si nanowires: toward high-performance TFETs. <i>Nano Letters</i> , <b>2012</b> , 12, 5571-5	11.5	8
256	Design of high-current L-valley GaAs=AlAs <sub>0.56</sub> Sb <sub>0.44</sub> /InP (111) ultra-thin-body nMOSFETs <b>2012</b> ,		1
255	Archimedes, the free Monte Carlo simulator: A GNU package for submicron semiconductor devices on nanoHUB <b>2012</b> ,		3
254	Spectroscopy of a deterministic single-donor device in silicon <b>2012</b> ,		3
253	Ohm's law survives to the atomic scale. <i>Science</i> , <b>2012</b> , 335, 64-7	33.3	246
252	Effects of interface disorder on valley splitting in SiGe/Si/SiGe quantum wells. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 103502	3.4	14
251	A single-atom transistor. <i>Nature Nanotechnology</i> , <b>2012</b> , 7, 242-6	28.7	587

250	The polarization response in InAs quantum dots: theoretical correlation between composition and electronic properties. <i>Nanotechnology</i> , <b>2012</b> , 23, 165202	3.4	19
249	An efficient algorithm to calculate intrinsic thermoelectric parameters based on Landauer approach. <i>Journal of Computational Electronics</i> , <b>2012</b> , 11, 56-66	1.8	5
248	Calculation of phonon spectrum and thermal properties in suspended <100> In X Ga <sub>1-X</sub> As nanowires. <i>Journal of Computational Electronics</i> , <b>2012</b> , 11, 22-28	1.8	5
247	Indirectly pumped 3.7 THz InGaAs/InAlAs quantum-cascade lasers grown by metal-organic vapor-phase epitaxy. <i>Optics Express</i> , <b>2012</b> , 20, 20647-58	3.3	20
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