# Ferdinand Kuemmeth

## List of Publications by Year in Descending Order



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|---|---|---|---|
| 45 papers | 3,778 citations | 28 h-index | 48 g-index |
| 48 ext. papers | 4,521 ext. citations | 12.7 avg, IF | 5.33 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 45 | Simultaneous Operations in a Two-Dimensional Array of Singlet-Triplet Qubits. *PRX Quantum*, **2021**, 2, | 6.1 | 3 |
| 44 | Roadmap on quantum nanotechnologies. *Nanotechnology*, **2021**, 32, 162003 | 3.4 | 12 |
| 43 | Semiconductor qubits in practice. *Nature Reviews Physics*, **2021**, 3, 157-177 | 23.6 | 38 |
| 42 | Protected solid-state qubits. *Applied Physics Letters*, **2021**, 119, 260502 | 3.4 | 0 |
| 41 | Parity-Protected Superconductor-Semiconductor Qubit. *Physical Review Letters*, **2020**, 125, 056801 | 7.4 | 9 |
| 40 | Single-electron operations in a foundry-fabricated array of quantum dots. *Nature Communications*, **2020**, 11, 6399 | 17.4 | 14 |
| 39 | Fast spin exchange across a multielectron mediator. *Nature Communications*, **2019**, 10, 1196 | 17.4 | 25 |
| 38 | Voltage-controlled superconducting quantum bus. *Physical Review B*, **2019**, 99, | 3.3 | 14 |
| 37 | Radio-Frequency Methods for Majorana-Based Quantum Devices: Fast Charge Sensing and Phase-Diagram Mapping. *Physical Review Applied*, **2019**, 11, | 4.3 | 9 |
| 36 | Fast Charge Sensing of Si/SiGe Quantum Dots via a High-Frequency Accumulation Gate. *Nano Letters*, **2019**, 19, 5628-5633 | 11.5 | 12 |
| 35 | Gate reflectometry for probing charge and spin states in linear Si MOS split-gate arrays **2019**, | | 5 |
| 34 | Anharmonicity of a superconducting qubit with a few-mode Josephson junction. *Physical Review B*, **2018**, 97, | 3.3 | 27 |
| 33 | Spin of a Multielectron Quantum Dot and Its Interaction with a Neighboring Electron. *Physical Review X*, **2018**, 8, | 9.1 | 13 |
| 32 | Superconducting gatemon qubit based on a proximitized two-dimensional electron gas. *Nature Nanotechnology*, **2018**, 13, 915-919 | 28.7 | 68 |
| 31 | Transport Signatures of Quasiparticle Poisoning in a Majorana Island. *Physical Review Letters*, **2017**, 118, 137701 | 7.4 | 62 |
| 30 | Symmetric operation of the resonant exchange qubit. *Physical Review B*, **2017**, 96, | 3.3 | 21 |
| 29 | Negative Spin Exchange in a Multielectron Quantum Dot. *Physical Review Letters*, **2017**, 119, 227701 | 7.4 | 14 |

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|---|---|---|---|
| 28 | Notch filtering the nuclear environment of a spin qubit. *Nature Nanotechnology*, **2017**, 12, 16-20 | 28.7 | 55 |
| 27 | Spectrum of the Nuclear Environment for GaAs Spin Qubits. *Physical Review Letters*, **2017**, 118, 177702 | 7.4 | 40 |
| 26 | Filter function formalism beyond pure dephasing and non-Markovian noise in singlet-triplet qubits. *Physical Review B*, **2016**, 93, | 3.3 | 19 |
| 25 | Gatemon Benchmarking and Two-Qubit Operations. *Physical Review Letters*, **2016**, 116, 150505 | 7.4 | 46 |
| 24 | Noise Suppression Using Symmetric Exchange Gates in Spin Qubits. *Physical Review Letters*, **2016**, 116, 116801 | 7.4 | 145 |
| 23 | Exponential protection of zero modes in Majorana islands. *Nature*, **2016**, 531, 206-9 | 50.4 | 675 |
| 22 | Quantum transport in carbon nanotubes. *Reviews of Modern Physics*, **2015**, 87, 703-764 | 40.5 | 229 |
| 21 | Parity lifetime of bound states in a proximitized semiconductor nanowire. *Nature Physics*, **2015**, 11, 1017-1021 | 16.2 | 129 |
| 20 | Semiconductor-Nanowire-Based Superconducting Qubit. *Physical Review Letters*, **2015**, 115, 127001 | 7.4 | 187 |
| 19 | Hard gap in epitaxial semiconductor-superconductor nanowires. *Nature Nanotechnology*, **2015**, 10, 232-6 | 28.7 | 259 |
| 18 | Coherent operations and screening in multielectron spin qubits. *Physical Review Letters*, **2014**, 112, 026801 | 7.4 | 36 |
| 17 | Hole spin coherence in a Ge/Si heterostructure nanowire. *Nano Letters*, **2014**, 14, 3582-6 | 11.5 | 61 |
| 16 | Antilocalization of Coulomb Blockade in a Ge/Si Nanowire. *Physical Review Letters*, **2014**, 112, | 7.4 | 33 |
| 15 | Observation and spectroscopy of a two-electron Wigner molecule in an ultraclean carbon nanotube. *Nature Physics*, **2013**, 9, 576-581 | 16.2 | 63 |
| 14 | Hole spin relaxation in Ge-Si core-shell nanowire qubits. *Nature Nanotechnology*, **2011**, 7, 47-50 | 28.7 | 151 |
| 13 | Spin-orbit effects in carbon-nanotube double quantum dots. *Physical Review B*, **2010**, 82, | 3.3 | 32 |
| 12 | Carbon nanotubes for coherent spintronics. *Materials Today*, **2010**, 13, 18-26 | 21.8 | 60 |
| 11 | Giant spin rotation under quasiparticle-photoelectron conversion: Joint effect of sublattice interference and spin-orbit coupling. *Physical Review B*, **2009**, 80, | 3.3 | 23 |

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| 10 | Relaxation and dephasing in a two-electron 13C nanotube double quantum dot. *Physical Review Letters*, **2009**, 102, 166802 | 7.4 | 110 |
| 9 | Electron–nuclear interaction in 13C nanotube double quantum dots. *Nature Physics*, **2009**, 5, 321-326 | 16.2 | 139 |
| 8 | Coupling of spin and orbital motion of electrons in carbon nanotubes. *Nature*, **2008**, 452, 448-52 | 50.4 | 467 |
| 7 | Measurement of discrete energy-level spectra in individual chemically synthesized gold nanoparticles. *Nano Letters*, **2008**, 8, 4506-12 | 11.5 | 72 |
| 6 | Imaging electromigration during the formation of break junctions. *Nano Letters*, **2007**, 7, 652-6 | 11.5 | 106 |
| 5 | Temperature dependence of anisotropic magnetoresistance and atomic rearrangements in ferromagnetic metal break junctions. *Physical Review B*, **2007**, 76, | 3.3 | 15 |
| 4 | Anisotropic magnetoresistance and anisotropic tunneling magnetoresistance due to quantum interference in ferromagnetic metal break junctions. *Physical Review Letters*, **2006**, 97, 127202 | 7.4 | 54 |
| 3 | From ballistic transport to tunneling in electromigrated ferromagnetic breakjunctions. *Nano Letters* , **2006**, 6, 123-7 | 11.5 | 49 |
| 2 | Metal-nanoparticle single-electron transistors fabricated using electromigration. *Applied Physics Letters*, **2004**, 84, 3154-3156 | 3.4 | 127 |
| 1 | Nanometer-scale scanning sensors fabricated using stencil lithography. *Applied Physics Letters*, **2003**, 82, 1111-1113 | 3.4 | 50 |