

Susan Coppersmith

List of Publications by Year in descending order

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210
papers

11,645
citations

25034

57
h-index

30922

102
g-index

215
all docs

215
docs citations

215
times ranked

6988
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Silicon quantum electronics. <i>Reviews of Modern Physics</i> , 2013, 85, 961-1019. | 45.6 | 892 |
| 2 | Force Fluctuations in Bead Packs. <i>Science</i> , 1995, 269, 513-515. | 12.6 | 754 |
| 3 | A programmable two-qubit quantum processor in silicon. <i>Nature</i> , 2018, 555, 633-637. | 27.8 | 534 |
| 4 | Electrical control of a long-lived spin qubit in a Si/SiGe quantum dot. <i>Nature Nanotechnology</i> , 2014, 9, 666-670. | 31.5 | 394 |
| 5 | Model for force fluctuations in bead packs. <i>Physical Review E</i> , 1996, 53, 4673-4685. | 2.1 | 393 |
| 6 | Entangled quantum state of magnetic dipoles. <i>Nature</i> , 2003, 425, 48-51. | 27.8 | 305 |
| 7 | Quantum control and process tomography of a semiconductor quantum dot hybrid qubit. <i>Nature</i> , 2014, 511, 70-74. | 27.8 | 242 |
| 8 | Dislocations and the commensurate-incommensurate transition in two dimensions. <i>Physical Review B</i> , 1982, 25, 349-363. | 3.2 | 238 |
| 9 | Controllable valley splitting in silicon quantum devices. <i>Nature Physics</i> , 2007, 3, 41-45. | 16.7 | 218 |
| 10 | Dislocations and the Commensurate-Incommensurate Transition in Two Dimensions. <i>Physical Review Letters</i> , 1981, 46, 549-552. | 7.8 | 198 |
| 11 | Fast Hybrid Silicon Double-Quantum-Dot Qubit. <i>Physical Review Letters</i> , 2012, 108, 140503. | 7.8 | 187 |
| 12 | Mechanism of Calcite Co-Orientation in the Sea Urchin Tooth. <i>Journal of the American Chemical Society</i> , 2009, 131, 18404-18409. | 13.7 | 181 |
| 13 | A Microfluidic System for Large DNA Molecule Arrays. <i>Analytical Chemistry</i> , 2004, 76, 5293-5301. | 6.5 | 175 |
| 14 | Boolean Dynamics with Random Couplings. , 2003, , 23-89. | | 149 |
| 15 | Spin blockade and lifetime-enhanced transport in a few-electron Si/SiGe double quantum dot. <i>Nature Physics</i> , 2008, 4, 540-544. | 16.7 | 148 |
| 16 | Two-axis control of a singletâ€“triplet qubit with an integrated micromagnet. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 11938-11942. | 7.1 | 147 |
| 17 | Valley splitting in strained silicon quantum wells. <i>Applied Physics Letters</i> , 2004, 84, 115-117. | 3.3 | 142 |
| 18 | Valley splitting theory of SiGeâ€“Siâ€“SiGe quantum wells. <i>Physical Review B</i> , 2007, 75, . | 3.2 | 142 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Nanoscale Transforming Mineral Phases in Fresh Nacre. <i>Journal of the American Chemical Society</i> , 2015, 137, 13325-13333. | 13.7 | 138 |
| 20 | Tunable Spin Loading and $T < 1$ of a Silicon Spin Qubit Measured by Single-Shot Readout. <i>Physical Review Letters</i> , 2011, 106, 156804. | 7.8 | 133 |
| 21 | Gradual Ordering in Red Abalone Nacre. <i>Journal of the American Chemical Society</i> , 2008, 130, 17519-17527. | 13.7 | 126 |
| 22 | Quantum stochastic resonance. <i>Physical Review Letters</i> , 1994, 72, 1947-1950. | 7.8 | 124 |
| 23 | Pinning and thermal fluctuations of a flux line in high-temperature superconductors. <i>Physical Review Letters</i> , 1989, 63, 2421-2424. | 7.8 | 121 |
| 24 | Phase slips and the instability of the Fukuyama-Lee-Rice model of charge-density waves. <i>Physical Review Letters</i> , 1990, 65, 1044-1047. | 7.8 | 119 |
| 25 | Gate fidelity and coherence of an electron spin in an Si/SiGe quantum dot with micromagnet. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 11738-11743. | 7.1 | 119 |
| 26 | Performance Limitations of Flat-Histogram Methods. <i>Physical Review Letters</i> , 2004, 92, 097201. | 7.8 | 115 |
| 27 | Valley splitting in low-density quantum-confined heterostructures studied using tight-binding models. <i>Physical Review B</i> , 2004, 70, . | 3.2 | 108 |
| 28 | Two-particle quantum walks applied to the graph isomorphism problem. <i>Physical Review A</i> , 2010, 81, . | 2.5 | 108 |
| 29 | Nacre Protein Fragment Templates Lamellar Aragonite Growth. <i>Journal of the American Chemical Society</i> , 2010, 132, 6329-6334. | 13.7 | 108 |
| 30 | Microwave-driven coherent operation of a semiconductor quantum dot charge qubit. <i>Nature Nanotechnology</i> , 2015, 10, 243-247. | 31.5 | 107 |
| 31 | Phase organization. <i>Physical Review Letters</i> , 1987, 58, 1161-1164. | 7.8 | 98 |
| 32 | Theory of valley-orbit coupling in a Si/SiGe quantum dot. <i>Physical Review B</i> , 2010, 81, . | 3.2 | 98 |
| 33 | Dissipative quantum tunneling of a single microscopic defect in a mesoscopic metal. <i>Physical Review Letters</i> , 1992, 68, 998-1001. | 7.8 | 96 |
| 34 | One-dimensional quantum walks with absorbing boundaries. <i>Journal of Computer and System Sciences</i> , 2004, 69, 562-592. | 1.2 | 93 |
| 35 | Comment on "Experimental evidence for vortex-glass superconductivity in Y-Ba-Cu-O". <i>Physical Review Letters</i> , 1990, 64, 2585-2585. | 7.8 | 90 |
| 36 | Architecture of Columnar Nacre, and Implications for Its Formation Mechanism. <i>Physical Review Letters</i> , 2007, 98, 268102. | 7.8 | 90 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 37 | Charge Sensing and Controllable Tunnel Coupling in a Si/SiGe Double Quantum Dot. Nano Letters, 2009, 9, 3234-3238. | 9.1 | 86 |
| 38 | Pinning transition of the discrete sine-Gordon equation. Physical Review B, 1983, 28, 2566-2581. | 3.2 | 85 |
| 39 | Pulse-duration memory effect and deformable charge-density waves. Physical Review B, 1987, 36, 311-317. | 3.2 | 85 |
| 40 | Benchmarking Gate Fidelities in a Si/SiGe Two-Qubit Device. Physical Review X, 2019, 9, . | 8.9 | 84 |
| 41 | Spin-Based Quantum Dot Quantum Computing in Silicon. Quantum Information Processing, 2004, 3, 133-146. | 2.2 | 83 |
| 42 | Coherent quantum oscillations and echo measurements of a Si charge qubit. Physical Review B, 2013, 88, . | 3.2 | 83 |
| 43 | Fast coherent manipulation of three-electron states in a double quantum dot. Nature Communications, 2014, 5, 3020. | 12.8 | 82 |
| 44 | High-fidelity resonant gating of a silicon-based quantum dot hybrid qubit. Npj Quantum Information, 2015, 1, . | 6.7 | 80 |
| 45 | Interference Phenomena and Mode Locking in the Model of Deformable Sliding Charge-Density Waves. Physical Review Letters, 1986, 57, 1927-1930. | 7.8 | 79 |
| 46 | Single-Shot Measurement of Triplet-Singlet Relaxation in a Si/SiGe Double Quantum Dot. Physical Review Letters, 2012, 108, 046808. | 7.8 | 78 |
| 47 | Magnetic field dependence of valley splitting in realistic $\text{Si}^{\wedge}\text{SiGe}$ quantum wells. Applied Physics Letters, 2006, 89, 202106. | 3.3 | 75 |
| 48 | Measurement of <i>c</i> -axis angular orientation in calcite (CaCO_3) nanocrystals using X-ray absorption spectroscopy. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 11350-11355. | 7.1 | 75 |
| 49 | Pulse-Gated Quantum-Dot Hybrid Qubit. Physical Review Letters, 2012, 109, 250503. | 7.8 | 75 |
| 50 | Frustrated Interactions and Tunneling: Two-Level Systems in Glasses. Physical Review Letters, 1991, 67, 2315-2318. | 7.8 | 72 |
| 51 | Single-electron quantum dot in $\text{Si}^{\wedge}\text{SiGe}$ with integrated charge sensing. Applied Physics Letters, 2007, 91, . | 3.3 | 72 |
| 52 | Self-Sharpening Mechanism of the Sea Urchin Tooth. Advanced Functional Materials, 2011, 21, 682-690. | 14.9 | 72 |
| 53 | Extending the coherence of a quantum dot hybrid qubit. Npj Quantum Information, 2017, 3, . | 6.7 | 68 |
| 54 | High frequency conductivity in silicon inversion layers: Drude relaxation, 2D plasmons and minigaps in a surface superlattice. Surface Science, 1978, 73, 419-433. | 1.9 | 67 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 55 | Probing the Organic-Mineral Interface at the Molecular Level in Model Biominerals. <i>Langmuir</i> , 2008, 24, 2680-2687. | 3.5 | 64 |
| 56 | Threshold behavior of a driven incommensurate harmonic chain. <i>Physical Review A</i> , 1988, 38, 6338-6350. | 2.5 | 59 |
| 57 | Stochastic resonance: Nonperturbative calculation of power spectra and residence-time distributions. <i>Physical Review E</i> , 1994, 49, 4821-4831. | 2.1 | 58 |
| 58 | Spectroscopically Determined Collagen Pyr/deH-DHLNL Cross-Link Ratio and Crystallinity Indices Differ Markedly in Recombinant Congenic Mice with Divergent Calculated Bone Tissue Strength. <i>Connective Tissue Research</i> , 2003, 44, 134-142. | 2.3 | 57 |
| 59 | Tunable singlet-triplet splitting in a few-electron Si/SiGe quantum dot. <i>Applied Physics Letters</i> , 2011, 99, . | 3.3 | 56 |
| 60 | Coulomb blockade in a silicon/silicon-germanium two-dimensional electron gas quantum dot. <i>Applied Physics Letters</i> , 2004, 84, 4047-4049. | 3.3 | 55 |
| 61 | Polarization-dependent imaging contrast in abalone shells. <i>Physical Review B</i> , 2008, 77, . | 3.2 | 54 |
| 62 | Interaction and doping dependence of optical spectral weight of the two-dimensional Hubbard model. <i>Physical Review B</i> , 1990, 42, 10807-10810. | 3.2 | 52 |
| 63 | Theory of hole-spin qubits in strained germanium quantum dots. <i>Physical Review B</i> , 2021, 103, . | 3.2 | 50 |
| 64 | Diverging strains in the phase-deformation model of sliding charge-density waves. <i>Physical Review B</i> , 1991, 44, 7799-7807. | 3.2 | 49 |
| 65 | Valley dependent anisotropic spin splitting in silicon quantum dots. <i>Npj Quantum Information</i> , 2018, 4, . | 6.7 | 49 |
| 66 | Low-temperature phase of a stacked triangular Ising antiferromagnet. <i>Physical Review B</i> , 1985, 32, 1584-1594. | 3.2 | 47 |
| 67 | Inductive response from nonlinear mixing in sliding charge-density waves. <i>Physical Review B</i> , 1985, 31, 4049-4052. | 3.2 | 47 |
| 68 | Positioning and guidance of neurons on gold surfaces by directed assembly of proteins using Atomic Force Microscopy. <i>Biomaterials</i> , 2009, 30, 3397-3404. | 11.4 | 45 |
| 69 | A decoherence-free subspace in a charge quadrupole qubit. <i>Nature Communications</i> , 2017, 8, 15923. | 12.8 | 45 |
| 70 | Disorder-induced valley-orbit hybrid states in Si quantum dots. <i>Physical Review B</i> , 2013, 88, . | 3.2 | 44 |
| 71 | Variational wave functions and the Mott transition. <i>Physical Review B</i> , 1991, 43, 13770-13773. | 3.2 | 43 |
| 72 | Properties of layer-by-layer vector stochastic models of force fluctuations in granular materials. <i>Physical Review E</i> , 1999, 59, 5870-5880. | 2.1 | 40 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 73 | Overdamped Frenkel-Kontorova model with randomness as a dynamical system: Mode locking and derivation of discrete maps. <i>Physical Review A</i> , 1987, 36, 3375-3382. | 2.5 | 39 |
| 74 | Virtual-photon-mediated spin-qubitâ€“transmon coupling. <i>Nature Communications</i> , 2019, 10, 5037. | 12.8 | 39 |
| 75 | Achieving high-fidelity single-qubit gates in a strongly driven charge qubit with $1/f$ charge noise. <i>Npj Quantum Information</i> , 2019, 5, . | 6.7 | 39 |
| 76 | Entanglement and collective flavor oscillations in a dense neutrino gas. <i>Physical Review D</i> , 2019, 100, . | 4.7 | 39 |
| 77 | Autotuning of Double-Dot Devices <i><i>In Situ</i></i> with Machine Learning. <i>Physical Review Applied</i> , 2020, 13, . | 3.8 | 38 |
| 78 | High-fidelity gates in quantum dot spin qubits. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 19695-19700. | 7.1 | 37 |
| 79 | State-conditional coherent charge qubit oscillations in a Si/SiGe quadruple quantum dot. <i>Npj Quantum Information</i> , 2016, 2, . | 6.7 | 37 |
| 80 | Two-electron dephasing in single Si and GaAs quantum dots. <i>Physical Review B</i> , 2012, 86, . | 3.2 | 36 |
| 81 | Pauli Blockade in Silicon Quantum Dots with Spin-Orbit Control. <i>PRX Quantum</i> , 2021, 2, . | 9.2 | 36 |
| 82 | Fast tunnel rates in Si/SiGe one-electron single and double quantum dots. <i>Applied Physics Letters</i> , 2010, 96, . | 3.3 | 35 |
| 83 | Nanoscale Distortions of Si Quantum Wells in Si/SiGe Quantumâ€“Electronic Heterostructures. <i>Advanced Materials</i> , 2012, 24, 5217-5221. | 21.0 | 35 |
| 84 | Ground states of two-dimensionalâ€“Edwards-Anderson spin glasses. <i>Physical Review B</i> , 2002, 65, . | 3.2 | 31 |
| 85 | Noninteracting multiparticle quantum random walks applied to the graph isomorphism problem for strongly regular graphs. <i>Physical Review A</i> , 2012, 86, . | 2.5 | 31 |
| 86 | Dynamics of an incommensurate harmonic chain. <i>Physical Review B</i> , 1984, 30, 410-412. | 3.2 | 30 |
| 87 | Second-Harmonic Coherent Driving of a Spin Qubit in a Si/SiGe Quantum Dot. <i>Physical Review Letters</i> , 2015, 115, 106802. | 7.8 | 30 |
| 88 | Quantum dots in Si/SiGe 2DEGs with Schottky top-gated leads. <i>New Journal of Physics</i> , 2005, 7, 246-246. | 2.9 | 28 |
| 89 | Distance Dependence of Neuronal Growth on Nanopatterned Gold Surfaces. <i>Langmuir</i> , 2011, 27, 233-239. | 3.5 | 28 |
| 90 | Integration of on-chip field-effect transistor switches with dopantless Si/SiGe quantum dots for high-throughput testing. <i>Applied Physics Letters</i> , 2013, 102, . | 3.3 | 28 |

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|-----|--|------|-----------|
| 91 | Lipkin model on a quantum computer. <i>Physical Review C</i> , 2021, 104, . | 2.9 | 28 |
| 92 | Self-Organized Short-Term Memories. <i>Physical Review Letters</i> , 1997, 78, 3983-3986. | 7.8 | 27 |
| 93 | Characterizing gate operations near the sweet spot of an exchange-only qubit. <i>Physical Review B</i> , 2015, 91, . | 3.2 | 27 |
| 94 | The critical role of substrate disorder in valley splitting in Si quantum wells. <i>Applied Physics Letters</i> , 2018, 112, . | 3.3 | 27 |
| 95 | Strong electron-electron interactions in Si/SiGe quantum dots. <i>Physical Review B</i> , 2021, 104, . | 3.2 | 27 |
| 96 | Anderson localization and breakdown of hydrodynamics in random ferromagnets. <i>Physical Review B</i> , 1986, 33, 6541-6544. | 3.2 | 26 |
| 97 | Physically-motivated dynamical algorithms for the graph isomorphism problem. <i>Quantum Information and Computation</i> , 2005, 5, 492-506. | 0.3 | 26 |
| 98 | Assignment of Polarization-Dependent Peaks in Carbon K-Edge Spectra from Biogenic and Geologic Aragonite. <i>Journal of Physical Chemistry B</i> , 2008, 112, 13128-13135. | 2.6 | 25 |
| 99 | Scalar model of inhomogeneous elastic and granular media. <i>Physical Review E</i> , 2000, 62, 5248-5262. | 2.1 | 24 |
| 100 | Electron spin coherence in Si. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2006, 35, 257-263. | 2.7 | 24 |
| 101 | Ultrasonic Attenuation in Clean Anisotropic Superconductors. <i>Physical Review Letters</i> , 1986, 56, 1870-1873. | 7.8 | 23 |
| 102 | Pauli spin blockade and lifetime-enhanced transport in a Si/SiGe double quantum dot. <i>Physical Review B</i> , 2010, 82, . | 3.2 | 23 |
| 103 | Dressed photon-orbital states in a quantum dot: Intervalley spin resonance. <i>Physical Review B</i> , 2017, 95, . | 3.2 | 23 |
| 104 | Strong photon coupling to the quadrupole moment of an electron in a solid-state qubit. <i>Nature Physics</i> , 2020, 16, 642-646. | 16.7 | 23 |
| 105 | Coherent Control and Spectroscopy of a Semiconductor Quantum Dot Wigner Molecule. <i>Physical Review Letters</i> , 2021, 127, 127701. | 7.8 | 23 |
| 106 | Achieving high-fidelity single-qubit gates in a strongly driven silicon-quantum-dot hybrid qubit. <i>Physical Review A</i> , 2017, 95, . | 2.5 | 22 |
| 107 | A simpler derivation of Feigenbaum's renormalization group equation for the period-doubling bifurcation sequence. <i>American Journal of Physics</i> , 1999, 67, 52-54. | 0.7 | 20 |
| 108 | Reversible Boolean networks I: distribution of cycle lengths. <i>Physica D: Nonlinear Phenomena</i> , 2001, 149, 11-29. | 2.8 | 20 |

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|-----|---|------|-----------|
| 109 | Adiabatic two-qubit gates in capacitively coupled quantum dot hybrid qubits. Npj Quantum Information, 2019, 5, . | 6.7 | 20 |
| 110 | Spatial noise correlations in a Si/SiGe two-qubit device from Bell state coherences. Physical Review B, 2020, 101, . | 3.2 | 20 |
| 111 | Valley splittings in Si/SiGe quantum dots with a germanium spike in the silicon well. Physical Review B, 2021, 104, . | 3.2 | 20 |
| 112 | Pinning energies and phase slips in weakly pinned charge-density waves. Physical Review B, 1991, 44, 2887-2894. | 3.2 | 19 |
| 113 | Single-shot measurement and tunnel-rate spectroscopy of a Si/SiGe few-electron quantum dot. Physical Review B, 2011, 84, . | 3.2 | 19 |
| 114 | Measurements of Capacitive Coupling Within a Quadruple-Quantum-Dot Array. Physical Review Applied, 2019, 12, . | 3.8 | 19 |
| 115 | Phase diagram of the Hubbard model: A variational wave-function approach. Physical Review B, 1989, 39, 11464-11474. | 3.2 | 18 |
| 116 | Pulse sequences for suppressing leakage in single-qubit gate operations. Physical Review B, 2017, 95, . | 3.2 | 18 |
| 117 | Enhancing the dipolar coupling of a S-TO qubit with a transverse sweet spot. Nature Communications, 2019, 10, 5641. | 12.8 | 18 |
| 118 | Repetitive Quantum Nondemolition Measurement and Soft Decoding of a Silicon Spin Qubit. Physical Review X, 2020, 10, . | 8.9 | 18 |
| 119 | Semiconductor quantum dot qubits. MRS Bulletin, 2013, 38, 794-801. | 3.5 | 17 |
| 120 | Signatures of atomic-scale structure in the energy dispersion and coherence of a Si quantum-dot qubit. Physical Review B, 2018, 98, . | 3.2 | 17 |
| 121 | High-fidelity single-qubit gates in a strongly driven quantum-dot hybrid qubit with noise. Physical Review A, 2019, 100, . | 3.2 | 17 |
| 122 | Shift in the longitudinal sound velocity due to sliding charge-density waves. Physical Review B, 1984, 30, 3566-3568. | 3.2 | 16 |
| 123 | Noise stabilization of self-organized memories. Physical Review E, 1999, 59, 4970-4982. | 2.1 | 16 |
| 124 | Comparing Algorithms for Graph Isomorphism Using Discrete- and Continuous-Time Quantum Random Walks. Journal of Computational and Theoretical Nanoscience, 2013, 10, 1653-1661. | 0.4 | 16 |
| 125 | High-fidelity singlet-triplet in inhomogeneous magnetic fields. Physical Review B, 2015, 92, . | 3.2 | 16 |
| 126 | Electrode-stress-induced nanoscale disorder in Si quantum electronic devices. APL Materials, 2016, 4, 066102. | 5.1 | 16 |

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|-----|--|-----|-----------|
| 127 | Fabrication process and failure analysis for robust quantum dots in silicon. <i>Nanotechnology</i> , 2020, 31, 505001. | 2.6 | 16 |
| 128 | Collective neutrino oscillations with tensor networks using a time-dependent variational principle. <i>Physical Review D</i> , 2022, 105, . | 4.7 | 16 |
| 129 | Dislocations and the Commensurate-Incommensurate Transition in two Dimensions. <i>Physical Review Letters</i> , 1981, 46, 869-869. | 7.8 | 15 |
| 130 | Overdamped Frenkel-Kontorova model with randomness as a dynamical system. II. Numerical studies of mode locking. <i>Physical Review A</i> , 1988, 38, 375-381. | 2.5 | 15 |
| 131 | Progress toward a capacitively mediated CNOT between two charge qubits in Si/SiGe. <i>Npj Quantum Information</i> , 2020, 6, . | 6.7 | 15 |
| 132 | How Valley-Orbit States in Silicon Quantum Dots Probe Quantum Well Interfaces. <i>Physical Review Letters</i> , 2022, 128, 146802. | 7.8 | 15 |
| 133 | Normal and antiferromagnetic states of an extended Hubbard model. <i>Physical Review B</i> , 1990, 41, 8711-8722. | 3.2 | 14 |
| 134 | Perturbative and variational calculations of charge fluctuations of an extended Hubbard model. <i>Physical Review B</i> , 1990, 41, 2646-2649. | 3.2 | 14 |
| 135 | Identifying single electron charge sensor events using wavelet edge detection. <i>Nanotechnology</i> , 2015, 26, 215201. | 2.6 | 14 |
| 136 | Studies with mechanism-based inactivators of lysine .epsilon.-transaminase from <i>Achromobacter liquidum</i> . <i>Biochemistry</i> , 1979, 18, 3917-3920. | 2.5 | 13 |
| 137 | The instability of long-period commensurate phases in the presence of quenched impurities. <i>Journal of Physics C: Solid State Physics</i> , 1985, 18, 3911-3918. | 1.5 | 13 |
| 138 | Low-temperature acoustic properties of metallic glasses. <i>Physical Review B</i> , 1993, 47, 4922-4936. | 3.2 | 13 |
| 139 | Analysis of a Population Genetics Model with Mutation, Selection, and Pleiotropy. <i>Journal of Statistical Physics</i> , 1999, 97, 429-457. | 1.2 | 13 |
| 140 | Quantum dots and etch-induced depletion of a silicon two-dimensional electron gas. <i>Journal of Applied Physics</i> , 2006, 99, 023509. | 2.5 | 13 |
| 141 | Theoretical characterization of a model of aragonite crystal orientation in red abalone nacre. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2009, 42, 125101. | 2.1 | 13 |
| 142 | Transport through an impurity tunnel coupled to a Si/SiGe quantum dot. <i>Applied Physics Letters</i> , 2015, 107, . | 3.3 | 13 |
| 143 | Response of a purely dissipative incommensurate chain to large driving pulses. <i>Physical Review B</i> , 1986, 34, 2073-2079. | 3.2 | 12 |
| 144 | A simple illustration of "œphase organization"œ. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1987, 125, 473-475. | 2.1 | 11 |

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|-----|---|------|-----------|
| 145 | Reversible Boolean networks. <i>Physica D: Nonlinear Phenomena</i> , 2001, 157, 54-74. | 2.8 | 11 |
| 146 | Superconducting states of an extended Hubbard model. <i>Physical Review B</i> , 1990, 42, 2259-2267. | 3.2 | 10 |
| 147 | Weak long-ranged Casimir attraction in colloidal crystals. <i>Europhysics Letters</i> , 2002, 57, 451-457. | 2.0 | 10 |
| 148 | Multiscale theory of valley splitting in the conduction band of a quantum well. <i>Physical Review B</i> , 2008, 77, . | 3.2 | 10 |
| 149 | Electronic Transport Properties of Epitaxial Si/SiGe Heterostructures Grown on Single-Crystal SiGe Nanomembranes. <i>ACS Nano</i> , 2015, 9, 4891-4899. | 14.6 | 10 |
| 150 | Effects of charge noise on a pulse-gated singlet-triplet S qubit. <i>Physical Review B</i> , 2017, 96, . | 3.2 | 10 |
| 151 | Effect of Quantum Hall Edge Strips on Valley Splitting in Silicon Quantum Wells. <i>Physical Review Letters</i> , 2020, 125, 186801. | 7.8 | 10 |
| 152 | High-fidelity entangling gates for quantum-dot hybrid qubits based on exchange interactions. <i>Physical Review A</i> , 2020, 101, . | 2.5 | 10 |
| 153 | Evidence for glass and spin-glass phase transitions from the dynamic susceptibility. <i>Journal of Research of the National Institute of Standards and Technology</i> , 1997, 102, 207. | 1.2 | 10 |
| 154 | Force fluctuations in granular media. <i>Physica D: Nonlinear Phenomena</i> , 1997, 107, 183-185. | 2.8 | 9 |
| 155 | Valley splitting in a Si/SiGe quantum point contact. <i>New Journal of Physics</i> , 2010, 12, 033039. | 2.9 | 9 |
| 156 | Charge qubit in a triple quantum dot with tunable coherence. <i>Physical Review Research</i> , 2021, 3, . | 3.6 | 9 |
| 157 | Comment on "Dynamics of Charge-Density Waves Pinned by Impurities". <i>Physical Review Letters</i> , 1984, 52, 481-481. | 7.8 | 8 |
| 158 | Search for superconductivity in an extended Hubbard model. <i>Physical Review B</i> , 1989, 39, 9671-9674. | 3.2 | 8 |
| 159 | Characterization of a gate-defined double quantum dot in a Si/SiGe nanomembrane. <i>Nanotechnology</i> , 2016, 27, 154002. | 2.6 | 8 |
| 160 | Combining experiment and optical simulation in coherent X-ray nanobeam characterization of Si/SiGe semiconductor heterostructures. <i>Journal of Applied Physics</i> , 2016, 120, 015304. | 2.5 | 8 |
| 161 | Microwave engineering for semiconductor quantum dots in a cQED architecture. <i>Applied Physics Letters</i> , 2020, 117, . | 3.3 | 8 |
| 162 | Quantum stochastic resonance of individual Fe atoms. <i>Science Advances</i> , 2021, 7, . | 10.3 | 8 |

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|-----|--|-----|-----------|
| 163 | Nonlinear dynamics of sliding charge density waves. <i>Physica D: Nonlinear Phenomena</i> , 1991, 51, 131-137. | 2.8 | 7 |
| 164 | Vortex telegraph noise in high magnetic fields. <i>Physical Review B</i> , 1997, 56, R11431-R11434. | 3.2 | 7 |
| 165 | Complexity of the predecessor problem in Kauffman networks. <i>Physical Review E</i> , 2007, 75, 051108. | 2.1 | 7 |
| 166 | Spectroscopically Determined Collagen Pyr/deH-DHLNL Cross-Link Ratio and Crystallinity Indices Differ Markedly in Recombinant Congenic Mice with Divergent Calculated Bone Tissue Strength. <i>Connective Tissue Research</i> , 2003, 44, 134-142. | 2.3 | 7 |
| 167 | Compressed Optimization of Device Architectures for Semiconductor Quantum Devices. <i>Physical Review Applied</i> , 2019, 11, . | 3.8 | 6 |
| 168 | Unconventional Transport in the "Hole" Regime of a Si Double Quantum Dot. <i>Physical Review Letters</i> , 2011, 106, 186801. | 7.8 | 5 |
| 169 | Measurement-free implementations of small-scale surface codes for quantum-dot qubits. <i>Physical Review A</i> , 2018, 97, . | 2.5 | 5 |
| 170 | Phonon-induced decoherence of a charge quadrupole qubit. <i>New Journal of Physics</i> , 2018, 20, 103048. | 2.9 | 5 |
| 171 | Majorana bound states in nanowire-superconductor hybrid systems in periodic magnetic fields. <i>Physical Review B</i> , 2020, 101, . | 3.2 | 5 |
| 172 | Defect interactions in metallic glasses: Acoustic probes. <i>Physical Review B</i> , 1993, 48, 142-148. | 3.2 | 4 |
| 173 | Determining pair interactions from structural correlations. <i>Physical Review B</i> , 1998, 58, 14588-14593. | 3.2 | 4 |
| 174 | Long-range two-hybrid-qubit gates mediated by a microwave cavity with red sidebands. <i>Physical Review A</i> , 2021, 104, . | 2.5 | 4 |
| 175 | Charge-Noise Resilience of Two-Electron Quantum Dots in Si/SiGe Heterostructures. <i>Physical Review Letters</i> , 2022, 128, . | 7.8 | 4 |
| 176 | Comment on "NMR Study of the Structure and Motion of Charge-Density Waves in NbSe_3 ". <i>Physical Review Letters</i> , 1986, 57, 1191-1191. | 7.8 | 3 |
| 177 | Comparison of mean-field theories of an extended Hubbard model. <i>Physical Review B</i> , 1990, 42, 3966-3970. | 3.2 | 3 |
| 178 | Top-gated few-electron double quantum dot in Si/SiGe . <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2008, 40, 520-523. | 2.7 | 3 |
| 179 | Incommensurate phases of a supported nanoparticle film subjected to uniaxial compression. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 824-831. | 7.1 | 3 |
| 180 | The effect of external electric fields on silicon with superconducting gallium nano-precipitates. <i>Journal of Applied Physics</i> , 2020, 127, 215102. | 2.5 | 3 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 181 | Lifting of spin blockade by charged impurities in Si-MOS double quantum dot devices. <i>Physical Review B</i> , 2020, 101, . | 3.2 | 3 |
| 182 | Nonlinear effects and "inductive" response of a purely dissipative incommensurate chain. <i>Physica D: Nonlinear Phenomena</i> , 1986, 23, 54-61. | 2.8 | 2 |
| 183 | Nonconvergence of the t/U expansion in the metallic phase of the Hubbard model. <i>Solid State Communications</i> , 1991, 79, 1043-1046. | 1.9 | 2 |
| 184 | Cooling of cryogenic electron bilayers via the Coulomb interaction. <i>Physical Review B</i> , 2011, 84, . | 3.2 | 2 |
| 185 | Power-law scaling for the adiabatic algorithm for search-engine ranking. <i>Physical Review A</i> , 2013, 88, . | 2.5 | 2 |
| 186 | Leo P. Kadanoff (1937"2015): An appreciation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 471-472. | 7.1 | 2 |
| 187 | Si/SiGe Quantum Devices, Quantum Wells, and Electron-Spin Coherence. <i>Topics in Applied Physics</i> , 2009, , 101-127. | 0.8 | 2 |
| 188 | Gravity-induced flow of a structural glass at zero temperature. <i>Journal of Non-Crystalline Solids</i> , 1991, 131-133, 476-478. | 3.1 | 1 |
| 189 | Chaos, Complexity, and Computers: Object-Oriented Programming and Physics Concepts for Undergraduates. <i>Journal of Statistical Physics</i> , 1998, 93, 1009-1018. | 1.2 | 1 |
| 190 | Quantum properties of a strongly interacting frustrated disordered magnet. <i>Physical Review B</i> , 2004, 69, . | 3.2 | 1 |
| 191 | Spin-based Quantum Dot Quantum Computing in Silicon. , 2005, , 133-146. | | 1 |
| 192 | Renormalization group approach to satisfiability. <i>Europhysics Letters</i> , 2007, 77, 30006. | 2.0 | 1 |
| 193 | XANES in Nanobiology. <i>AIP Conference Proceedings</i> , 2007, , . | 0.4 | 1 |
| 194 | Using the Renormalization Group to Classify Boolean Functions. <i>Journal of Statistical Physics</i> , 2008, 130, 1063-1085. | 1.2 | 1 |
| 195 | Controlling Neuronal Growth on Au Surfaces by Directed Assembly of Proteins. <i>Materials Research Society Symposia Proceedings</i> , 2009, 1236, 1. | 0.1 | 1 |
| 196 | Violation of Bell's inequality in Si. <i>Nature Nanotechnology</i> , 2016, 11, 216-217. | 31.5 | 1 |
| 197 | Collective Effects in Charge Density Waves. <i>NATO ASI Series Series B: Physics</i> , 1987, , 425-432. | 0.2 | 1 |
| 198 | Ultrasonic attenuation in clean anisotropic superconductors. <i>Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics</i> , 1985, 135, 27-29. | 0.9 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 199 | Ultrasonic attenuation in clean anisotropic superconductors. Journal of Magnetism and Magnetic Materials, 1986, 54-57, 1539-1540. | 2.3 | 0 |
| 200 | Effect of thermal fluctuation on magnetic flux depinning and the crossover from flux creep to flux flow. Physica C: Superconductivity and Its Applications, 1989, 162-164, 237-238. | 1.2 | 0 |
| 201 | Sound propagation in disordered metals at low temperatures. , 0, , . | | 0 |
| 202 | Charge Density Waves, Phase Slips, and Instabilities. , 1993, , 317-334. | | 0 |
| 203 | Controlling Neuronal Growth on Au Surfaces by Directed Assembly of Extracellular Matrix Proteins. Biophysical Journal, 2009, 96, 395a. | 0.5 | 0 |
| 204 | (Invited) Toward Si/SiGe Quantum Dot Spin Qubits: Gated Si/SiGe Single and Double Quantum Dots. ECS Transactions, 2010, 33, 639-647. | 0.5 | 0 |
| 205 | Single-Shot Measurement of One and Two-Electron Spin States in Si/SiGe Gated Quantum Dots. , 2012, , . | | 0 |
| 206 | (Invited) Single-Shot Readout of Singlet-Triplet Qubit States in a Si/SiGe Double Quantum Dot. ECS Transactions, 2013, 50, 655-662. | 0.5 | 0 |
| 207 | (Invited) Integrating Classical Semiconductor Devices with Si/SiGe Quantum Dots. ECS Transactions, 2014, 64, 915-922. | 0.5 | 0 |
| 208 | Marginal Stability, Memory and Nonlinear Dynamics of Charge Density Waves. Springer Series in Synergetics, 1989, , 280-287. | 0.4 | 0 |
| 209 | Thoughts on Using Variational Wavefunctions to Study Hubbard Models. Springer Proceedings in Physics, 1993, , 145-156. | 0.2 | 0 |
| 210 | SCALING BEHAVIOR NEAR THE PINNING TRANSITION OF THE DISCRETE FRENKEL-KONTOROVA MODEL. Journal De Physique Colloque, 1983, 44, C3-1579-C3-1582. | 0.2 | 0 |