Christopher Bauerle

List of Publications by Year
in descending order

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93	3,198	147801	155660
papers	citations	31 h-index	55 g-index

94	94	94	2622
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Laboratory simulation of cosmic string formation in the early Universe using superfluid 3He. Nature, 1996, 382, 332-334.	27.8	451
2	Electrons surfing on a sound wave as a platform for quantum optics with flying electrons. Nature, 2011, 477, 435-438.	27.8	263
3	The 2019 surface acoustic waves roadmap. Journal Physics D: Applied Physics, 2019, 52, 353001.	2.8	236
4	Coherent control of single electrons: a review of current progress. Reports on Progress in Physics, 2018, 81, 056503.	20.1	180
5	Multiple-Spin Exchange on a Triangular Lattice: A Quantitative Interpretation of Thermodynamic Properties of Two-Dimensional SolidH3e. Physical Review Letters, 1998, 80, 1308-1311.	7.8	161
6	Electrical control of a solid-state flying qubit. Nature Nanotechnology, 2012, 7, 247-251.	31.5	105
7	Two-dimensional Fermi liquid in the highly correlated regime: The second layer ofHe3adsorbed on graphite. Physical Review B, 1996, 53, 2658-2661.	3.2	96
8	Gate-based high fidelity spin readout in a CMOS device. Nature Nanotechnology, 2019, 14, 737-741.	31.5	91
9	Kondo Decoherence: Finding the Right Spin Model for Iron Impurities in Gold and Silver. Physical Review Letters, 2009, 102, 056802.	7.8	77
10	Fast spin information transfer between distant quantum dots using individual electrons. Nature Nanotechnology, 2016, 11, 672-676.	31.5	71
11	Some Structural Properties of Solid He Films: Consequences on 3He Film Ferromagnetism. Journal of Low Temperature Physics, 1998, 112, 451-478.	1.4	68
12	Temperature scale and heat capacity of superfluid3Heâ^'Bin the100Î¼Krange. Physical Review B, 1998, 57, 14381-14386.	3.2	60
13	Quantum Manipulation of Two-Electron Spin States in Isolated Double Quantum Dots. Physical Review Letters, 2015, 115, 096801.	7.8	57
14	Coherent long-distance displacement of individual electron spins. Nature Communications, 2017, 8, 501.	12.8	55
15	The Diamond Superconducting Quantum Interference Device. ACS Nano, 2011, 5, 7144-7148.	14.6	54
16	Nuclear Magnetic Properties of Solid 3He Films. Journal of Low Temperature Physics, 1998, 113, 249-258.	1.4	50
17	A few-electron quadruple quantum dot in a closed loop. Applied Physics Letters, 2012, 101, .	3.3	50
18	Sound-driven single-electron transfer in a circuit of coupled quantum rails. Nature Communications, 2019, 10, 4557.	12.8	50

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19	Anomalous Temperature Dependence of the Dephasing Time in Mesoscopic Kondo Wires. Physical Review Letters, 2003, 90, 056801.	7.8	48
20	Coherent control of individual electron spins in a two-dimensional quantum dot array. Nature Nanotechnology, 2021, 16, 296-301.	31.5	47
21	Quantum Frustration in the â€œSpin Liquidâ€•Phase of Two-DimensionalH3e. Physical Review Letters, 2001, 86, 2447-2450.	7.8	46
22	Scaling of the Low-Temperature Dephasing Rate in Kondo Systems. Physical Review Letters, 2006, 97, 226804.	7.8	44
23	Charge Detection in an Array of CMOS Quantum Dots. Physical Review Applied, 2020, 14, .	3.8	40
24	A detailed analysis of the Raman spectra in superconducting boron doped nanocrystalline diamond. Physica Status Solidi (B): Basic Research, 2012, 249, 2656-2659.	1.5	38
25	Transmission Phase in the Kondo Regime Revealed in a Two-Path Interferometer. Physical Review Letters, 2014, 113, 126601.	7.8	38
26	Ultra-Low Temperature Magnetic Properties of Liquid 3He Films. Journal of Low Temperature Physics, 1998, 110, 333-338.	1.4	37
27	Distant spin entanglement via fast and coherent electron shuttling. Nature Nanotechnology, 2021, 16, 570-575.	31.5	36
28	Experimental Test of the Numerical Renormalization-Group Theory for Inelastic Scattering from Magnetic Impurities. Physical Review Letters, 2005, 95, 266805.	7.8	34
29	Quantum coherence at low temperatures in mesoscopic systems: Effect of disorder. Physical Review B, 2010, 81, .	3.2	34
30	Theoretical, numerical, and experimental study of a flying qubit electronic interferometer. Physical Review B, 2014, 89, .	3.2	34
31	Nanostructures made from superconducting boron-doped diamond. Nanotechnology, 2010, 21, 195303.	2.6	31
32	Unveiling the bosonic nature of an ultrashort few-electron pulse. Nature Communications, 2018, 9, 2811.	12.8	28
33	Superconducting nano-mechanical diamond resonators. Carbon, 2014, 72, 100-105.	10.3	26
34	Electron coherence at low temperatures: The role of magnetic impurities. Physica E: Low-Dimensional Systems and Nanostructures, 2007, 40, 12-24.	2.7	24
35	Effect of Disorder on the Quantum Coherence in Mesoscopic Wires. Physical Review Letters, 2009, 102, 226801.	7.8	21
36	Transport through side-coupled double quantum dots: From weak to strong interdot coupling. Physical Review B, 2012, 85, .	3.2	21

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37	Iron impurities in gold and silver: Comparison of transport measurements to numerical renormalization group calculations exploiting non-Abelian symmetries. Physical Review B, 2013, 88, .	3.2	21
38	Title is missing!. Journal of Low Temperature Physics, 1998, 110, 345-350.	1.4	19
39	Condensation ofHe3in 21/2 dimensions and indirect exchange in adsorbed films. Physical Review B, 1994, 49, 12377-12380.	3.2	18
40	A linear triple quantum dot system in isolated configuration. Applied Physics Letters, 2017, 110, .	3.3	17
41	Non-universal transmission phase behaviour of a large quantum dot. Nature Communications, 2017, 8, 1710.	12.8	16
42	Injection of a single electron from static to moving quantum dots. Nanotechnology, 2016, 27, 214001.	2.6	15
43	Dimensional Crossover in Quantum Networks: From Macroscopic to Mesoscopic Physics. Physical Review Letters, 2007, 98, 026807.	7.8	14
44	Measurement of the transmission phase of an electron in a quantum two-path interferometer. Applied Physics Letters, 2015, 107, .	3.3	14
45	Ultra-Low Temperature Susceptibility of a Highly Frustrated Two-Dimensional Solid 3He Magnet. Journal of Low Temperature Physics, 1998, 113, 287-292.	1.4	13
46	Observation of conduction electron spin resonance in boron-doped diamond. Physical Review B, 2013, 87, .	3.2	13
47	All-Electrical Control of a Hybrid Electron Spin/Valley Quantum Bit in SOI CMOS Technology. IEEE Transactions on Electron Devices, 2018, 65, 5151-5156.	3.0	13
48	Enhanced Spin Coherence while Displacing Electron in a Two-Dimensional Array of Quantum Dots. PRX Quantum, 2021, 2, .	9.2	13
49	Superfluid 3He Simulation of Cosmic String Creation in the Early Universe. Journal of Low Temperature Physics, 1998, 110, 13-22.	1.4	10
50	Microfabrication of silicon vibrating wires. Physica B: Condensed Matter, 2000, 284-288, 2141-2142.	2.7	10
51	Magnetic Dephasing in Mesoscopic Spin Glasses. Physical Review Letters, 2013, 111, 187203.	7.8	10
52	In-flight distribution of an electron within a surface acoustic wave. Applied Physics Letters, 2021, 119, .	3.3	10
53	The origin of nuclear magnetism in solid 3He films: determination of multi-spin exchange frequencies. Physica B: Condensed Matter, 2000, 280, 95-99.	2.7	9
54	Detailed study of superconductivity in nanostructured nanocrystalline boron doped diamond thin films. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 2017-2022.	1.8	9

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55	Low-temperature behavior of transmission phase shift across a Kondo correlated quantum dot. Physical Review B, 2016, 94, .	3.2	9
56	Efficient Three-Dimensional Photonicâ€“Plasmonic Photoconductive Switches for Picosecond THz Pulses. ACS Photonics, 2020, 7, 1444-1451.	6.6	9
57	Experimental apparatus for heat capacity measurements of 2D in magnetic fields. Physica B: Condensed Matter, 2003, 329-333, 146-147.	2.7	8
58	Efficient radio frequency filters for space constrained cryogenic setups. Review of Scientific Instruments, 2011, 82, 024704.	1.3	8
59	Fast and efficient single electron transfer between distant quantum dots. Journal of Applied Physics, 2013, 113, .	2.5	8
60	STM Observations of Helium Atoms Adsorbed on Graphite Surfaces. Journal of Low Temperature Physics, 1998, 110, 641-646.	1.4	7
61	Field dependence of the magnetization of adsorbed3He films at ultra low temperatures. Journal of Low Temperature Physics, 1995, 101, 457-462.	1.4	6
62	Magnetic field dependence of the nuclear magnetization of3He films adsorbed on graphite in the ferromagnetic regime. European Physical Journal D, 1996, 46, 403-404.	0.4	6
63	Studies of 2D Cryocrystals by STM Techniques. Journal of Low Temperature Physics, 1998, 113, 927-932.	1.4	6
64	Ferromagnetic nanoclusters in two-dimensionalHe3. Physical Review B, 2006, 73, .	3.2	6
65	Low-temperature dephasing in irradiated metallic wires. Physical Review B, 2008, 77, .	3.2	6
66	Interplay between exchange interaction and magnetic field gradient in a double quantum dot with two individual electron spin qubits. Physical Review B, 2014, 90, .	3.2	6
67	2D liquid3He near solidification: a highly correlated Fermi liquid. Journal of Low Temperature Physics, 1995, 101, 161-166.	1.4	5
68	Do not try this at home. Nature, 1996, 383, 570-571.	27.8	5
69	3He/graphite commensurate bilayer films in the antiferromagnetic regime. European Physical Journal D, 1996, 46, 401-402.	0.4	5
70	A microstructural study of superconductive nanocrystalline diamond. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 1986-1990.	1.8	5
71	Mesoscopic phase behavior in a quantum dot around crossover between single-level and multilevel transport regimes. Physical Review B, 2017, 95, .	3.2	5
72	Spin-Valley Coupling Anisotropy and Noise in CMOS Quantum Dots. Physical Review Applied, 2022, 17, .	3.8	5

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73	Simulated cosmic strings in a â€œbig bangâ€•in superfluid3He at 100 Î¼K. European Physical Journal D, 1996, 46, 5-6.	0.4	4
74	The new grenoble 100 Î¼K refrigerator. European Physical Journal D, 1996, 46, 2791-2792.	0.4	4
75	Remanence effects in the electrical resistivity of spin glasses. Europhysics Letters, 2011, 93, 27001.	2.0	4
76	Systematic study of3He adsorbed on graphite by NMR techniques. European Physical Journal D, 1996, 46, 399-400.	0.4	3
77	Characterization of ZYX graphite for studies of two-dimensional at ultra-low temperatures. Physica B: Condensed Matter, 2003, 329-333, 144-145.	2.7	3
78	Electron Coherence in Mesoscopic Kondo Wires. Advances in Solid State Physics, 0, , 181-192.	0.8	3
79	Remotely Pumped GHz Antibunched Emission from Single Exciton Centers in GaAs. ACS Photonics, 2021, 8, 758-764.	6.6	3
80	The â€˜Grenobleâ€™ Cosmological Experiment. , 2000, , 105-120.		3
81	A geometry dependent thermal resistance between a saturated dilute3He-4He solution and sintered silver powder. Journal of Low Temperature Physics, 1995, 101, 259-264.	1.4	2
82	Classical information transfer between distant quantum dots using individual electrons in fast moving quantum dots. Physica Status Solidi (B): Basic Research, 2017, 254, 1600673.	1.5	2
83	Heat-Driven Electron-Motion in a Nanoscale Electronic Circuit. Journal of the Physical Society of Japan, 2021, 90, .	1.6	2
84	Structure and Magnetism of Second-Layer Solid 3He Films in the Intermediate Regime. Journal of Low Temperature Physics, 1998, 113, 259-264.	1.4	1
85	Superfluidity of 3He contained in aerogel. Physica B: Condensed Matter, 2000, 284-288, 311-312.	2.7	1
86	Preliminary Heat-Capacity Measurements of 2D Solid3He Adsorbed on Graphite Preplated with4He. Journal of Low Temperature Physics, 2004, 134, 61-66.	1.4	1
87	Quantum coherence and magnetic scattering. International Journal of Nanotechnology, 2010, 7, 403.	0.2	1
88	NMR of adsorbed3He: Surface physics at millikelvin temperatures. Applied Magnetic Resonance, 1995, 8, 401-414.	1.2	0
89	Einzelne Elektronen surfen auf einer Schallwelle. Physik in Unserer Zeit, 2012, 43, 7-8.	0.0	0
90	PERSISTENT CURRENTS IN A NETWORK OF CONNECTED MESOSCOPIC RINGS. , 2003, , .		0

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91	DEPHASING IN KONDO SYSTEMS: COMPARISON BETWEEN THEORY AND EXPERIMENT. , 2008, , .		0
92	ENSEMBLE AVERAGING IN METALLIC QUANTUM NETWORKS. , 2008, , .		0
93	Un Ã©lectron surfeur. , 2014, , 10-14.	0.1	0