

# Christopher Bauerle

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1145613/publications.pdf>

Version: 2024-02-01

93  
papers

3,198  
citations

147801

31  
h-index

155660

55  
g-index

94  
all docs

94  
docs citations

94  
times ranked

2622  
citing authors

#	ARTICLE	IF	CITATIONS
1	Spin-Valley Coupling Anisotropy and Noise in CMOS Quantum Dots. <i>Physical Review Applied</i> , 2022, 17, .	3.8	5
2	Coherent control of individual electron spins in a two-dimensional quantum dot array. <i>Nature Nanotechnology</i> , 2021, 16, 296-301.	31.5	47
3	Distant spin entanglement via fast and coherent electron shuttling. <i>Nature Nanotechnology</i> , 2021, 16, 570-575.	31.5	36
4	Remotely Pumped GHz Antibunched Emission from Single Exciton Centers in GaAs. <i>ACS Photonics</i> , 2021, 8, 758-764.	6.6	3
5	Enhanced Spin Coherence while Displacing Electron in a Two-Dimensional Array of Quantum Dots. <i>PRX Quantum</i> , 2021, 2, .	9.2	13
6	In-flight distribution of an electron within a surface acoustic wave. <i>Applied Physics Letters</i> , 2021, 119, .	3.3	10
7	Heat-Driven Electron-Motion in a Nanoscale Electronic Circuit. <i>Journal of the Physical Society of Japan</i> , 2021, 90, .	1.6	2
8	Charge Detection in an Array of CMOS Quantum Dots. <i>Physical Review Applied</i> , 2020, 14, .	3.8	40
9	Efficient Three-Dimensional Photonicâ€“Plasmonic Photoconductive Switches for Picosecond THz Pulses. <i>ACS Photonics</i> , 2020, 7, 1444-1451.	6.6	9
10	The 2019 surface acoustic waves roadmap. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 353001.	2.8	236
11	Sound-driven single-electron transfer in a circuit of coupled quantum rails. <i>Nature Communications</i> , 2019, 10, 4557.	12.8	50
12	Gate-based high fidelity spin readout in a CMOS device. <i>Nature Nanotechnology</i> , 2019, 14, 737-741.	31.5	91
13	Coherent control of single electrons: a review of current progress. <i>Reports on Progress in Physics</i> , 2018, 81, 056503.	20.1	180
14	All-Electrical Control of a Hybrid Electron Spin/Valley Quantum Bit in SOI CMOS Technology. <i>IEEE Transactions on Electron Devices</i> , 2018, 65, 5151-5156.	3.0	13
15	Unveiling the bosonic nature of an ultrashort few-electron pulse. <i>Nature Communications</i> , 2018, 9, 2811.	12.8	28
16	Classical information transfer between distant quantum dots using individual electrons in fast moving quantum dots. <i>Physica Status Solidi (B): Basic Research</i> , 2017, 254, 1600673.	1.5	2
17	Mesoscopic phase behavior in a quantum dot around crossover between single-level and multilevel transport regimes. <i>Physical Review B</i> , 2017, 95, .	3.2	5
18	Coherent long-distance displacement of individual electron spins. <i>Nature Communications</i> , 2017, 8, 501.	12.8	55

#	ARTICLE	IF	CITATIONS
19	Non-universal transmission phase behaviour of a large quantum dot. Nature Communications, 2017, 8, 1710.	12.8	16
20	A linear triple quantum dot system in isolated configuration. Applied Physics Letters, 2017, 110, .	3.3	17
21	Injection of a single electron from static to moving quantum dots. Nanotechnology, 2016, 27, 214001.	2.6	15
22	Low-temperature behavior of transmission phase shift across a Kondo correlated quantum dot. Physical Review B, 2016, 94, .	3.2	9
23	Fast spin information transfer between distant quantum dots using individual electrons. Nature Nanotechnology, 2016, 11, 672-676.	31.5	71
24	Quantum Manipulation of Two-Electron Spin States in Isolated Double Quantum Dots. Physical Review Letters, 2015, 115, 096801.	7.8	57
25	Measurement of the transmission phase of an electron in a quantum two-path interferometer. Applied Physics Letters, 2015, 107, .	3.3	14
26	Theoretical, numerical, and experimental study of a flying qubit electronic interferometer. Physical Review B, 2014, 89, .	3.2	34
27	Transmission Phase in the Kondo Regime Revealed in a Two-Path Interferometer. Physical Review Letters, 2014, 113, 126601.	7.8	38
28	Superconducting nano-mechanical diamond resonators. Carbon, 2014, 72, 100-105.	10.3	26
29	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
30	Un Ã©lectron surfeur. , 2014, , 10-14.	0.1	0
31	Magnetic Dephasing in Mesoscopic Spin Glasses. Physical Review Letters, 2013, 111, 187203.	7.8	10
32	Fast and efficient single electron transfer between distant quantum dots. Journal of Applied Physics, 2013, 113, .	2.5	8
33	Observation of conduction electron spin resonance in boron-doped diamond. Physical Review B, 2013, 87, .	3.2	13
34	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
35	A few-electron quadruple quantum dot in a closed loop. Applied Physics Letters, 2012, 101, .	3.3	50
36	Transport through side-coupled double quantum dots: From weak to strong interdot coupling. Physical Review B, 2012, 85, .	3.2	21

#	ARTICLE	IF	CITATIONS
37	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
38	Einzelne Elektronen surfen auf einer Schallwelle. Physik in Unserer Zeit, 2012, 43, 7-8.	0.0	0
39	Electrical control of a solid-state flying qubit. Nature Nanotechnology, 2012, 7, 247-251.	31.5	105
40	The Diamond Superconducting Quantum Interference Device. ACS Nano, 2011, 5, 7144-7148.	14.6	54
41	Electrons surfing on a sound wave as a platform for quantum optics with flying electrons. Nature, 2011, 477, 435-438.	27.8	263
42	Remanence effects in the electrical resistivity of spin glasses. Europhysics Letters, 2011, 93, 27001.	2.0	4
43	Efficient radio frequency filters for space constrained cryogenic setups. Review of Scientific Instruments, 2011, 82, 024704.	1.3	8
44	Quantum coherence and magnetic scattering. International Journal of Nanotechnology, 2010, 7, 403.	0.2	1
45	Detailed study of superconductivity in nanostructured nanocrystalline boron doped diamond thin films. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 1017-1022.	1.8	9
46	Quantum coherence at low temperatures in mesoscopic systems: Effect of disorder. Physical Review B, 2010, 81, .	3.2	34
47	Nanostructures made from superconducting boron-doped diamond. Nanotechnology, 2010, 21, 195303.	2.6	31
48	Kondo Decoherence: Finding the Right Spin Model for Iron Impurities in Gold and Silver. Physical Review Letters, 2009, 102, 056802.	7.8	77
49	Effect of Disorder on the Quantum Coherence in Mesoscopic Wires. Physical Review Letters, 2009, 102, 226801.	7.8	21
50	A microstructural study of superconductive nanocrystalline diamond. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 1986-1990.	1.8	5
51	Low-temperature dephasing in irradiated metallic wires. Physical Review B, 2008, 77, .	3.2	6
52	DEPHASING IN KONDO SYSTEMS: COMPARISON BETWEEN THEORY AND EXPERIMENT. , 2008, , .		0
53	ENSEMBLE AVERAGING IN METALLIC QUANTUM NETWORKS. , 2008, , .		0
54	Dimensional Crossover in Quantum Networks: From Macroscopic to Mesoscopic Physics. Physical Review Letters, 2007, 98, 026807.	7.8	14

#	ARTICLE	IF	CITATIONS
55	Electron coherence at low temperatures: The role of magnetic impurities. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2007, 40, 12-24.	2.7	24
56	Scaling of the Low-Temperature Dephasing Rate in Kondo Systems. <i>Physical Review Letters</i> , 2006, 97, 226804.	7.8	44
57	Ferromagnetic nanoclusters in two-dimensional He <sup>3</sup> . <i>Physical Review B</i> , 2006, 73, .	3.2	6
58	Experimental Test of the Numerical Renormalization-Group Theory for Inelastic Scattering from Magnetic Impurities. <i>Physical Review Letters</i> , 2005, 95, 266805.	7.8	34
59	Preliminary Heat-Capacity Measurements of 2D Solid <sup>3</sup> He Adsorbed on Graphite Preplated with <sup>4</sup> He. <i>Journal of Low Temperature Physics</i> , 2004, 134, 61-66.	1.4	1
60	Characterization of ZYX graphite for studies of two-dimensional at ultra-low temperatures. <i>Physica B: Condensed Matter</i> , 2003, 329-333, 144-145.	2.7	3
61	Experimental apparatus for heat capacity measurements of 2D in magnetic fields. <i>Physica B: Condensed Matter</i> , 2003, 329-333, 146-147.	2.7	8
62	Anomalous Temperature Dependence of the Dephasing Time in Mesoscopic Kondo Wires. <i>Physical Review Letters</i> , 2003, 90, 056801.	7.8	48
63	PERSISTENT CURRENTS IN A NETWORK OF CONNECTED MESOSCOPIC RINGS. , 2003, , .		0
64	Quantum Frustration in the "Spin Liquid" Phase of Two-Dimensional <sup>3</sup> He. <i>Physical Review Letters</i> , 2001, 86, 2447-2450.	7.8	46
65	The origin of nuclear magnetism in solid <sup>3</sup> He films: determination of multi-spin exchange frequencies. <i>Physica B: Condensed Matter</i> , 2000, 280, 95-99.	2.7	9
66	Superfluidity of <sup>3</sup> He contained in aerogel. <i>Physica B: Condensed Matter</i> , 2000, 284-288, 311-312.	2.7	1
67	Microfabrication of silicon vibrating wires. <i>Physica B: Condensed Matter</i> , 2000, 284-288, 2141-2142.	2.7	10
68	The "Grenoble"™ Cosmological Experiment. , 2000, , 105-120.		3
69	Some Structural Properties of Solid He Films: Consequences on <sup>3</sup> He Film Ferromagnetism. <i>Journal of Low Temperature Physics</i> , 1998, 112, 451-478.	1.4	68
70	Studies of 2D Cryocrystals by STM Techniques. <i>Journal of Low Temperature Physics</i> , 1998, 113, 927-932.	1.4	6
71	Structure and Magnetism of Second-Layer Solid <sup>3</sup> He Films in the Intermediate Regime. <i>Journal of Low Temperature Physics</i> , 1998, 113, 259-264.	1.4	1
72	Ultra-Low Temperature Magnetic Properties of Liquid <sup>3</sup> He Films. <i>Journal of Low Temperature Physics</i> , 1998, 110, 333-338.	1.4	37

#	ARTICLE	IF	CITATIONS
73	STM Observations of Helium Atoms Adsorbed on Graphite Surfaces. Journal of Low Temperature Physics, 1998, 110, 641-646.	1.4	7
74	Title is missing!. Journal of Low Temperature Physics, 1998, 110, 345-350.	1.4	19
75	Superfluid $^3\text{He}$ Simulation of Cosmic String Creation in the Early Universe. Journal of Low Temperature Physics, 1998, 110, 13-22.	1.4	10
76	Ultra-Low Temperature Susceptibility of a Highly Frustrated Two-Dimensional Solid $^3\text{He}$ Magnet. Journal of Low Temperature Physics, 1998, 113, 287-292.	1.4	13
77	Nuclear Magnetic Properties of Solid $^3\text{He}$ Films. Journal of Low Temperature Physics, 1998, 113, 249-258.	1.4	50
78	Temperature scale and heat capacity of superfluid $^3\text{He}$ in the $100\text{ mK}$ range. Physical Review B, 1998, 57, 14381-14386.	3.2	60
79	Multiple-Spin Exchange on a Triangular Lattice: A Quantitative Interpretation of Thermodynamic Properties of Two-Dimensional Solid $^3\text{He}$ . Physical Review Letters, 1998, 80, 1308-1311.	7.8	161
80	Do not try this at home. Nature, 1996, 383, 570-571.	27.8	5
81	Simulated cosmic strings in a $\text{big bang}$ in superfluid $^3\text{He}$ at $100\text{ mK}$ . European Physical Journal D, 1996, 46, 5-6.	0.4	4
82	Systematic study of $^3\text{He}$ adsorbed on graphite by NMR techniques. European Physical Journal D, 1996, 46, 399-400.	0.4	3
83	$^3\text{He}$ /graphite commensurate bilayer films in the antiferromagnetic regime. European Physical Journal D, 1996, 46, 401-402.	0.4	5
84	Magnetic field dependence of the nuclear magnetization of $^3\text{He}$ films adsorbed on graphite in the ferromagnetic regime. European Physical Journal D, 1996, 46, 403-404.	0.4	6
85	The new grenoble $100\text{ mK}$ refrigerator. European Physical Journal D, 1996, 46, 2791-2792.	0.4	4
86	Laboratory simulation of cosmic string formation in the early Universe using superfluid $^3\text{He}$ . Nature, 1996, 382, 332-334.	27.8	451
87	Two-dimensional Fermi liquid in the highly correlated regime: The second layer of $^3\text{He}$ adsorbed on graphite. Physical Review B, 1996, 53, 2658-2661.	3.2	96
88	Field dependence of the magnetization of adsorbed $^3\text{He}$ films at ultra low temperatures. Journal of Low Temperature Physics, 1995, 101, 457-462.	1.4	6
89	2D liquid $^3\text{He}$ near solidification: a highly correlated Fermi liquid. Journal of Low Temperature Physics, 1995, 101, 161-166.	1.4	5
90	A geometry dependent thermal resistance between a saturated dilute $^3\text{He}$ - $^4\text{He}$ solution and sintered silver powder. Journal of Low Temperature Physics, 1995, 101, 259-264.	1.4	2

#	ARTICLE	IF	CITATIONS
91	NMR of adsorbed $^3\text{He}$ : Surface physics at millikelvin temperatures. Applied Magnetic Resonance, 1995, 8, 401-414.	1.2	0
92	Condensation of $^3\text{He}$ in 2 1/2 dimensions and indirect exchange in adsorbed films. Physical Review B, 1994, 49, 12377-12380.	3.2	18
93	Electron Coherence in Mesoscopic Kondo Wires. Advances in Solid State Physics, 0, , 181-192.	0.8	3