

# John Schliemann

## List of Publications by Year in descending order

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73  
papers

4,323  
citations

117625

34  
h-index

102487

66  
g-index

73  
all docs

73  
docs citations

73  
times ranked

3013  
citing authors

#	ARTICLE	IF	CITATIONS
1	Nonballistic Spin-Field-Effect Transistor. Physical Review Letters, 2003, 90, 146801.	7.8	763
2	Quantum correlations in two-fermion systems. Physical Review A, 2001, 64, .	2.5	323
3	Zitterbewegung of Electronic Wave Packets in III-V Zinc-Blende Semiconductor Quantum Wells. Physical Review Letters, 2005, 94, 206801.	7.8	204
4	Electron spin dynamics in quantum dots and related nanostructures due to hyperfine interaction with nuclei. Journal of Physics Condensed Matter, 2003, 15, R1809-R1833.	1.8	198
5	Anisotropic transport in a two-dimensional electron gas in the presence of spin-orbit coupling. Physical Review B, 2003, 68, .	3.2	182
6	Dissipation effects in spin-Hall transport of electrons and holes. Physical Review B, 2004, 69, .	3.2	132
7	<i>Colloquium</i> : Persistent spin textures in semiconductor nanostructures. Reviews of Modern Physics, 2017, 89, .	45.6	130
8	Spin-Hall transport of heavy holes in III-V semiconductor quantum wells. Physical Review B, 2005, 71, .	3.2	124
9	Spin-Orbit Interaction in Symmetric Wells with Two Subbands. Physical Review Letters, 2007, 99, 076603.	7.8	111
10	Monte Carlo study of ferromagnetism in (III,Mn)V semiconductors. Physical Review B, 2001, 64, .	3.2	110
11	Plasmons and screening in a monolayer of MoS <sub>2</sub> . Physical Review B, 2013, 88, .	3.2	106
12	Spin decay and quantum parallelism. Physical Review B, 2002, 66, .	3.2	105
13	Minimum Electrical and Thermal Conductivity of Graphene: A Quasiclassical Approach. Physical Review Letters, 2007, 99, 216602.	7.8	95
14	Strong Correlation to Weak Correlation Phase Transition in Bilayer Quantum Hall Systems. Physical Review Letters, 2001, 86, 1849-1852.	7.8	86
15	SPIN HALL EFFECT. International Journal of Modern Physics B, 2006, 20, 1015-1036.	2.0	84
16	Anisotropic current-induced spin accumulation in the two-dimensional electron gas with spin-orbit coupling. Physical Review B, 2007, 75, .	3.2	82
17	Zitterbewegung of electrons and holes in III-V semiconductor quantum wells. Physical Review B, 2006, 73, .	3.2	81
18	Limits on the Curie temperature of (III,Mn)V ferromagnetic semiconductors. Applied Physics Letters, 2001, 78, 1550-1552.	3.3	75

#	ARTICLE	IF	CITATIONS
19	Spin susceptibilities, spin densities, and their connection to spin currents. <i>Physical Review B</i> , 2005, 71, .	3.2	69
20	Noncollinear Ferromagnetism in (III,Mn)V Semiconductors. <i>Physical Review Letters</i> , 2002, 88, 137201.	7.8	64
21	Anisotropic magnetoresistance of spin-orbit coupled carriers scattered from polarized magnetic impurities. <i>Physical Review B</i> , 2009, 80, .	3.2	61
22	Variational study of the $\hat{1}/2=1$ quantum Hall ferromagnet in the presence of spin-orbit interaction. <i>Physical Review B</i> , 2003, 67, .	3.2	59
23	Cyclotron motion in graphene. <i>New Journal of Physics</i> , 2008, 10, 043024.	2.9	57
24	Electronic properties of graphene and graphene nanoribbons with $\hat{\epsilon}$ pseudo-Rashba <sup>TM</sup> spin-orbit coupling. <i>New Journal of Physics</i> , 2009, 11, 115003.	2.9	56
25	Pseudospin in Optical and Transport Properties of Graphene. <i>Physical Review Letters</i> , 2011, 107, 156801.	7.8	53
26	Entanglement spectrum and entanglement thermodynamics of quantum Hall bilayers at $\hat{1}/2=1$ . <i>Physical Review B</i> , 2011, 83, .	3.2	51
27	Entanglement spectra of coupled $S=1/2$ spin chains in a ladder geometry. <i>Physical Review B</i> , 2012, 85, .	3.2	49
28	Interplay between spin-orbit interactions and a time-dependent electromagnetic field in monolayer graphene. <i>Physical Review B</i> , 2013, 88, .	3.2	48
29	Photoinduced pseudospin effects in silicene beyond the off-resonant condition. <i>Physical Review B</i> , 2015, 91, .	3.2	48
30	Finite conductivity minimum in bilayer graphene without charge inhomogeneities. <i>Physical Review B</i> , 2010, 82, .	3.2	47
31	Shot noise and spin-orbit coherent control of entangled and spin-polarized electrons. <i>Physical Review B</i> , 2005, 72, .	3.2	46
32	Dielectric function, screening, and plasmons of graphene in the presence of spin-orbit interactions. <i>Physical Review B</i> , 2012, 86, .	3.2	44
33	Bilayer Quantum Hall Systems at Filling Factor $\hat{1}/2=2$ : An Exact Diagonalization Study. <i>Physical Review Letters</i> , 2000, 84, 4437-4440.	7.8	40
34	Control of Spin Helix Symmetry in Semiconductor Quantum Wells by Crystal Orientation. <i>Physical Review Letters</i> , 2016, 117, 236801.	7.8	38
35	Disorder-induced noncollinear ferromagnetism in models for (III,Mn)V semiconductors. <i>Physical Review B</i> , 2003, 67, .	3.2	32
36	Spin dynamics in rolled-up two-dimensional electron gases. <i>New Journal of Physics</i> , 2007, 9, 346-346.	2.9	32

#	ARTICLE	IF	CITATIONS
37	Cyclotron motion and magnetic focusing in semiconductor quantum wells with spin-orbit coupling. Physical Review B, 2008, 77, .	3.2	28
38	Energy spectrum and Landau levels in bilayer graphene with spin-orbit interaction. New Journal of Physics, 2012, 14, 093026.	2.9	27
39	Theoretical study of interacting hole gas in p-doped bulk III-V semiconductors. Physical Review B, 2006, 74, .	3.2	24
40	Weak (anti)localization in tubular semiconductor nanowires with spin-orbit coupling. Physical Review B, 2016, 93, .	3.2	24
41	Quantum-Hall quantum bits. Physical Review B, 2002, 66, .	3.2	18
42	Ballistic side-jump motion of electrons and holes in semiconductor quantum wells. Physical Review B, 2007, 75, .	3.2	17
43	Entanglement spectra of Heisenberg ladders of higher spin. Journal of Statistical Mechanics: Theory and Experiment, 2012, 2012, P11021.	2.3	17
44	Ultralong spin decoherence times in graphene quantum dots with a small number of nuclear spins. Physical Review B, 2013, 88, .	3.2	17
45	Polarization-sensitive absorption of THz radiation by interacting electrons in chirally stacked multilayer graphene. New Journal of Physics, 2012, 14, 095005.	2.9	16
46	Trigonal warping in bilayer graphene: Energy versus entanglement spectrum. Physical Review B, 2016, 93, .	3.2	16
47	Entanglement spectra and entanglement thermodynamics of Hofstadter bilayers. New Journal of Physics, 2013, 15, 053017.	2.9	15
48	Entanglement thermodynamics. Journal of Statistical Mechanics: Theory and Experiment, 2014, 2014, P09011.	2.3	15
49	Laser-induced modulation of the Landau level structure in single-layer graphene. Physical Review B, 2015, 92, .	3.2	15
50	Spins coupled to a spin bath: From integrability to chaos. Physical Review B, 2010, 81, .	3.2	13
51	Conserved spin quantity in strained hole systems with Rashba and Dresselhaus spin-orbit coupling. Physical Review B, 2016, 93, .	3.2	13
52	Signatures of spin-preserving symmetries in two-dimensional hole gases. Physical Review B, 2014, 90, .	3.2	12
53	Persistent spin textures and currents in wurtzite nanowire-based quantum structures. Physical Review B, 2020, 101, .	3.2	12
54	Phase transition and spin-wave dispersion in quantum Hall bilayers at filling factor $\nu=1$ . Physica E: Low-Dimensional Systems and Nanostructures, 2002, 12, 28-31.	2.7	11

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55	Double occupancy errors in quantum computing operations: Corrections to adiabaticity. Physical Review B, 2005, 71, .	3.2	11
56	Dielectric function of the semiconductor hole liquid: Full frequency and wave-vector dependence. Physical Review B, 2011, 84, .	3.2	11
57	Coherent quantum dynamics: What fluctuations can tell. Physical Review A, 2015, 92, .	2.5	11
58	Correlation energy, quantum phase transition, and bias potential effects in quantum Hall bilayers at $\nu=1$ . Physical Review B, 2003, 67, .	3.2	10
59	Magnetoconductance correction in zinc-blende semiconductor nanowires with spin-orbit coupling. Physical Review B, 2017, 96, .	3.2	10
60	Spin relaxation in wurtzite nanowires. Physical Review B, 2018, 98, .	3.2	10
61	Ultralong spin lifetimes in one-dimensional semiconductor nanowires. Applied Physics Letters, 2019, 114, 202101.	3.3	10
62	Semiclassical description of Heisenberg models via spin-coherent states. Journal of Physics Condensed Matter, 1998, 10, 1091-1102.	1.8	9
63	Spin orbit interaction and zitterbewegung in symmetric wells. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 4330-4333.	0.8	9
64	Coherent states of $su(1,1)$ : correlations, fluctuations, and the pseudoharmonic oscillator. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 135303.	2.1	8
65	Many-body localization: Transitions in spin models. Physical Review B, 2021, 103, .	3.2	6
66	Quantum theory of bilayer quantum Hall smectics. Physical Review B, 2003, 67, .	3.2	5
67	Graphene in a strong magnetic field: Massless Dirac particles versus skyrmions. Physical Review B, 2008, 78, .	3.2	5
68	On the semiclassical treatment of anharmonic quantum oscillators via coherent states - the Toda chain revisited. Journal of Physics A, 1999, 32, 5823-5833.	1.6	4
69	Spin dynamics in rolled-up two-dimensional electron gases. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 1446-1447.	2.7	4
70	Collective spin fluctuations in diluted magnetic semiconductors. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 12, 379-382.	2.7	3
71	Entanglement spectra of superconductivity ground states on the honeycomb lattice. European Physical Journal B, 2017, 90, 1.	1.5	2
72	Sublattice-Spin Coherent Contribution to the Conductivity of Graphene Within Quasiclassical Approach. Journal of Superconductivity and Novel Magnetism, 2010, 23, 57-59.	1.8	0

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73	Transport in 2DEGs and Graphene: Electron Spin vs. Sublattice Spin. <i>Advances in Solid State Physics</i> , 0, , 129-141.	0.8	0