

# Michael Oestreich

## List of Publications by Year in descending order

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115  
papers

3,917  
citations

126907

33  
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123424

61  
g-index

119  
all docs

119  
docs citations

119  
times ranked

2417  
citing authors

#	ARTICLE	IF	CITATIONS
1	Spin injection into semiconductors. Applied Physics Letters, 1999, 74, 1251-1253.	3.3	218
2	Spin transport in GaAs. Applied Physics Letters, 1998, 73, 1580-1582.	3.3	203
3	Carrier relaxation and electronic structure in InAs self-assembled quantum dots. Physical Review B, 1996, 54, 11346-11353.	3.2	200
4	Laser threshold reduction in a spintronic device. Applied Physics Letters, 2003, 82, 4516-4518.	3.3	178
5	Spin Noise Spectroscopy in GaAs. Physical Review Letters, 2005, 95, 216603.	7.8	159
6	Dispersive Relaxation Dynamics of Photoexcitations in a Polyfluorene Film Involving Energy Transfer: Experiment and Monte Carlo Simulations. Journal of Physical Chemistry B, 2001, 105, 9139-9149.	2.6	154
7	Anomalous Spin Dephasing in (110) GaAs Quantum Wells: Anisotropy and Intersubband Effects. Physical Review Letters, 2004, 93, 147405.	7.8	146
8	Manifestation of coherent spin precession in stimulated semiconductor emission dynamics. Physical Review B, 1997, 56, R7076-R7079.	3.2	125
9	Temperature Dependence of the Electron Landé g Factor in GaAs. Physical Review Letters, 1995, 74, 2315-2318.	7.8	124
10	Temperature and density dependence of the electron Landé g factor in semiconductors. Physical Review B, 1996, 53, 7911-7916.	3.2	119
11	Spin Noise Spectroscopy in GaAs (110) Quantum Wells: Access to Intrinsic Spin Lifetimes and Equilibrium Electron Dynamics. Physical Review Letters, 2008, 101, 206601.	7.8	111
12	Semiconductor spin noise spectroscopy: Fundamentals, accomplishments, and challenges. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 43, 569-587.	2.7	102
13	Electron g factor in quantum wells determined by spin quantum beats. Solid State Communications, 1995, 93, 313-317.	1.9	95
14	Room-temperature threshold reduction in vertical-cavity surface-emitting lasers by injection of spin-polarized electrons. Applied Physics Letters, 2005, 87, 241117.	3.3	94
15	Optical orientation of electron spins in GaAs quantum wells. Physical Review B, 2005, 71, .	3.2	83
16	The rise of spin noise spectroscopy in semiconductors: From acoustic to GHz frequencies. Physica Status Solidi (B): Basic Research, 2014, 251, 1824-1838.	1.5	78
17	Injecting spin into electronics. Nature, 1999, 402, 735-736.	27.8	77
18	Separating the two polarities of the POLO contacts of an 26.1%-efficient IBC solar cell. Scientific Reports, 2020, 10, 658.	3.3	66

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19	Electron-spin relaxation in bulk GaAs for doping densities close to the metal-to-insulator transition. <i>Physical Review B</i> , 2010, 81, .	3.2	64
20	Magnetoluminescence studies of In <sub>1-x</sub> Al <sub>x</sub> As self-assembled quantum dots in Al <sub>x</sub> Ga <sub>1-x</sub> As matrices. <i>Physical Review B</i> , 1996, 53, 16458-16461.	3.2	63
21	Spin noise spectroscopy in semiconductors. <i>Review of Scientific Instruments</i> , 2007, 78, 103903.	1.3	63
22	Circular photogalvanic effect at inter-band excitation in semiconductor quantum wells. <i>Solid State Communications</i> , 2003, 128, 283-286.	1.9	61
23	Time-resolved fluorescence studies and Monte Carlo simulations of relaxation dynamics of photoexcitations in a polyfluorene film. <i>Chemical Physics Letters</i> , 2001, 339, 223-228.	2.6	58
24	Optical Spin Noise of a Single Hole Spin Localized in an (InGa)As Quantum Dot. <i>Physical Review Letters</i> , 2014, 112, 156601.	7.8	55
25	Disorder influenced optical properties of 1,4-dithiophene single crystals and thin evaporated films. <i>Chemical Physics</i> , 1998, 227, 49-56.	1.9	54
26	High temperature electron spin relaxation in bulk GaAs. <i>Applied Physics Letters</i> , 2008, 93, .	3.3	52
27	Spin injection, spin transport and spin coherence. <i>Semiconductor Science and Technology</i> , 2002, 17, 285-297.	2.0	49
28	Spin quantum beats in semiconductors. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 1996, 2, 747-755.	2.9	48
29	Spin-orbit fields in asymmetric (001)-oriented GaAs/Al <sub>x</sub> Ga <sub>1-x</sub> As quantum wells. <i>Physical Review B</i> , 2011, 83, .	3.2	47
30	Exciton radiative decay and homogeneous broadening in CdTe/Cd <sub>0.85</sub> Mn <sub>0.15</sub> Te multiple quantum wells. <i>Physical Review B</i> , 1993, 48, 8980-8985.	3.2	46
31	Temperature-dependent electron Landé factor and the interband matrix element of GaAs. <i>Physical Review B</i> , 2009, 79, .	3.2	44
32	Measurement of heavy-hole spin dephasing in (InGa)As quantum dots. <i>Applied Physics Letters</i> , 2012, 100, 031906.	3.3	41
33	Reduced exciton-exciton scattering in quantum wires. <i>Physical Review Letters</i> , 1993, 70, 1682-1684.	7.8	34
34	Spatially resolved doping concentration measurement in semiconductors via spin noise spectroscopy. <i>Applied Physics Letters</i> , 2009, 94, 112105.	3.3	34
35	Interplay of Electron and Nuclear Spin Noise in n-Type GaAs. <i>Physical Review Letters</i> , 2015, 115, 176601.	7.8	33
36	The dynamics of gain-narrowing in a ladder-type $\pi$ -conjugated polymer. <i>Chemical Physics Letters</i> , 1999, 312, 376-384.	2.6	31

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37	Gigahertz spin noise spectroscopy in $n$ -doped bulk GaAs. Physical Review B, 2010, 81, .	3.2	31
38	Extreme Anisotropy of the $g$ -Factor in Quantum Wires. Europhysics Letters, 1995, 31, 399-404.	2.0	30
39	Growth and characterization of sidewall graphene nanoribbons. Applied Physics Letters, 2015, 106, .	3.3	29
40	From PERC to Tandem: POLO- and $n$ -Poly-Si Tunneling Junction as Interface Between Bottom and Top Cell. IEEE Journal of Photovoltaics, 2019, 9, 49-54.	2.5	29
41	Electron and hole $g$ -factors in CdTe/CdMgTe quantum wells. Applied Physics Letters, 1996, 69, 3704-3706.	3.3	28
42	Interchromophoric Coupling in Oligo( <i>p</i> -phenylenevinylene)-Substituted Poly(propyleneimine) Dendrimers. Journal of Physical Chemistry A, 2001, 105, 10220-10229.	2.5	28
43	Ultrahigh Bandwidth Spin-Noise Spectroscopy: Detection of Large $g$ -Factor Fluctuations in Highly- $n$ -Doped GaAs. Physical Review Letters, 2013, 111, 186602.	7.8	27
44	Spintronics: Spin Electronics and Optoelectronics in Semiconductors. , 2001, , 173-186.		26
45	Spin-noise spectroscopy under resonant optical probing conditions: Coherent and nonlinear effects. Physical Review A, 2011, 84, .	2.5	23
46	Relaxation dynamics of excitons in thin quaterthiophene films on different substrates. Chemical Physics Letters, 1999, 314, 9-15.	2.6	22
47	Cooling dynamics of excitons in GaN. Physical Review B, 1999, 59, R7797-R7800.	3.2	19
48	When do excitons really exist?. Physica B: Condensed Matter, 1999, 272, 328-330.	2.7	18
49	Electron Spin Relaxation in Semiconductors. , 0, , 253-261.		18
50	Spin and reoccupation noise in a single quantum dot beyond the fluctuation-dissipation theorem. Physical Review B, 2018, 97, .	3.2	18
51	Coherent dynamics of coupled electron and hole spins in semiconductors. Solid State Communications, 2001, 120, 73-78.	1.9	17
52	Design considerations for semiconductor spin lasers. Superlattices and Microstructures, 2005, 37, 306-312.	3.1	17
53	Spin noise spectroscopy of donor-bound electrons in ZnO. Physical Review B, 2013, 87, .	3.2	17
54	Rapid scanning of spin noise with two free running ultrafast oscillators. Optics Express, 2013, 21, 5872.	3.4	17

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55	Electron-factor anisotropy in symmetric (110)-oriented GaAs quantum wells. <i>Physical Review B</i> , 2011, 84, .	3.2	16
56	Spin-Dependent Energy Transfer from Exciton States into the Mn <sup>2+</sup> (3d <sup>5</sup> ) Internal Transitions. <i>Physica Status Solidi (B): Basic Research</i> , 2002, 229, 781-785.	1.5	14
57	Efficient data averaging for spin noise spectroscopy in semiconductors. <i>Applied Physics Letters</i> , 2010, 97, .	3.3	14
58	Thermodynamic origin of the slow free exciton photoluminescence rise in GaAs. <i>Physical Review B</i> , 2016, 93, .	3.2	14
59	Excitons, or No Excitons, That Is the Question. <i>Physica Status Solidi A</i> , 2000, 178, 27-32.	1.7	13
60	Strain-induced spin relaxation anisotropy in symmetric (001)-oriented GaAs quantum wells. <i>Physical Review B</i> , 2011, 84, .	3.2	13
61	Effect of symmetry reduction on the spin dynamics of (001)-oriented GaAs quantum wells. <i>Physical Review B</i> , 2013, 87, .	3.2	13
62	Direct observation of resonant tunneling dynamics in high magnetic fields. <i>Physical Review Letters</i> , 1994, 72, 1522-1525.	7.8	12
63	Closing the gap between spatial and spin dynamics of electrons at the metal-to-insulator transition. <i>Physical Review B</i> , 2017, 96, .	3.2	12
64	Optical Amplification of Spin Noise Spectroscopy via Homodyne Detection. <i>Physical Review Applied</i> , 2018, 9, .	3.8	12
65	Relaxation of excitons in corrugated GaAs/AlAs superlattices. <i>Physical Review B</i> , 1994, 49, 10786-10789.	3.2	11
66	Influence of carrier relaxation on the dynamics of stimulated emission in microcavity lasers. <i>Applied Physics Letters</i> , 1997, 71, 3761-3763.	3.3	11
67	Conjugated polymer lasers: emission characteristics and gain mechanism. <i>Physical Chemistry Chemical Physics</i> , 1999, 1, 1795-1800.	2.8	11
68	Time-Resolved Fluorescence in 3-Dimensional Ordered Columnar Discotic Materials. <i>Journal of Physical Chemistry B</i> , 2001, 105, 4596-4602.	2.6	10
69	Landau versus one-dimensional quantization in GaAs. <i>Journal of Luminescence</i> , 1994, 60-61, 390-392.	3.1	8
70	Relation between spin and momentum relaxation in ZnSe/ZnMgSSe quantum wells. <i>Physica B: Condensed Matter</i> , 1999, 272, 338-340.	2.7	8
71	Direct observation of the rotational direction of electron spin precession in semiconductors. <i>Solid State Communications</i> , 1998, 108, 753-758.	1.9	7
72	Comment on "Electrically injected spin-polarized vertical-cavity surface-emitting lasers" [Appl. Phys. Lett. 87, 091108 (2005)]. <i>Applied Physics Letters</i> , 2006, 88, 056101.	3.3	7

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73	Spin noise spectroscopy in semiconductors: from a billion down to single spins. Proceedings of SPIE, 2014, , .	0.8	7
74	Room Temperature Micro-Photoluminescence Studies of Colloidal WS <sub>2</sub> Nanosheets. Journal of Physical Chemistry C, 2021, 125, 18841-18848.	3.1	7
75	Dynamics of exciton relaxation and excitation transfer to donor-bound excitons in CdTe/CdMnTe quantum wells. Journal of Applied Physics, 1995, 78, 451-456.	2.5	6
76	Vacuum field induced mixing of light and heavy-hole excitons in a semiconductor microcavity. Applied Physics Letters, 1996, 69, 3465-3467.	3.3	5
77	Analyzing atomic noise with a consumer sound card. American Journal of Physics, 2012, 80, 240-245.	0.7	5
78	Hole-capture competition between a single quantum dot and an ionized acceptor. Physical Review B, 2018, 98, .	3.2	5
79	Ferromagnet/Semiconductor Heterostructures and Spininjection. Springer Tracts in Modern Physics, 2008, , 335-360.	0.1	5
80	Towards Bose-Einstein Condensation of Semiconductor Excitons: The Biexciton Polarization Effect. Physical Review Letters, 2009, 103, 146402.	7.8	4
81	Electron spin relaxation as tracer of excitons in a two-dimensional electron-hole plasma inside a (110)-GaAs quantum well. Europhysics Letters, 2011, 96, 67010.	2.0	4
82	Electron spin orientation under in-plane optical excitation in GaAs quantum wells. Physical Review B, 2012, 86, .	3.2	4
83	Electron g-factor fluctuations in highly n-doped GaAs at high temperatures detected by ultrafast spin noise spectroscopy. Physica Status Solidi (B): Basic Research, 2017, 254, 1600574.	1.5	3
84	Reduced exciton-exciton scattering in quantum wires. Journal of Luminescence, 1994, 58, 120-122.	3.1	2
85	Time-resolved luminescence of semiconductor heterostructures in high magnetic fields. Physica B: Condensed Matter, 1995, 204, 332-338.	2.7	2
86	<title>Excited states in InAs self-assembled quantum dots</title>. , 1996, 2694, 185.		2
87	Hanle-oscillations in the stimulated emission of microcavity laser. , 1998, , 245-255.		2
88	Spinquantenschwebungen in Halbleitern – der Hanle-Effekt zeitaufgelöst. Physik Journal, 1998, 54, 49-52.	0.1	2
89	Carrier-Relaxation Process in Time-Resolved Up-Converted Photoluminescence at Ordered (Al <sub>0.5</sub> Ga <sub>0.5</sub> ) <sub>0.5</sub> In <sub>0.5</sub> P and GaAs Heterointerface. Japanese Journal of Applied Physics, 1999, 38, 1001-1003.	1.5	2
90	Spinning electrons could lead electronics revolution. Physics World, 1999, 12, 22-22.	0.0	2

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91	Motional Narrowing in the Spin Relaxation of Free Excitons?. Physica Status Solidi A, 2000, 178, 531-534.	1.7	2
92	Quantifying the drift velocity of carrier ensembles in time-dependent electric fields. Journal of Applied Physics, 2002, 91, 9869.	2.5	2
93	Optical orientation in quantum wells. Semiconductor Science and Technology, 2008, 23, 114006.	2.0	2
94	Spin noise spectroscopy: hole spin dynamics in semiconductor quantum dots. , 2012, , .		2
95	Picosecond spectroscopy of plastically deformed GaAs. Journal of Luminescence, 1994, 58, 123-126.	3.1	1
96	Pulsed Vertical-Cavity-Laser Emission Synchronized to Electron Spin Precession. Physica Status Solidi (B): Basic Research, 1998, 206, 387-398.	1.5	1
97	Spin relaxation in n-doped GaAs/AlGaAs quantum wells. , 0, , .		1
98	Magneto-electronics enhance memory. Physics World, 2003, 16, 20-21.	0.0	1
99	Comment on "Two-Dimensional Optical Control of Electron Spin Orientation by Linearly Polarized Light in InGaAs". Physical Review Letters, 2016, 117, 139701.	7.8	1
100	Impact of optically induced carriers on the spin relaxation of localized electron spins in isotopically enriched silicon. Physical Review B, 2019, 99, .	3.2	1
101	Low Temperature Relaxation of Donor Bound Electron Spins in Si <sub>28</sub> :P. Physical Review Letters, 2021, 126, 137402.	7.8	1
102	Spin-Dependent Energy Transfer from Exciton States into the Mn <sup>2+</sup> (3d <sup>5</sup> ) Internal Transitions. , 2002, 229, 781.		1
103	Anomalous spin dephasing in (110) GaAs quantum wells. , 2004, , .		1
104	Non-equilibrium spin noise spectroscopy of a single quantum dot operating at fiber telecommunication wavelengths. Journal of Applied Physics, 2022, 131, 065703.	2.5	1
105	Influence of Carrier Cooling on the Emission Dynamics of Semiconductor Microcavity Lasers. Physica Status Solidi (B): Basic Research, 1997, 204, 548-551.	1.5	0
106	Pump geometry for resonant and quasi-resonant optical excitation of microcavity lasers. Optics Letters, 1998, 23, 849.	3.3	0
107	Injection of spin for electronics. Physics World, 2001, 14, 23-24.	0.0	0
108	Coherent dynamics of coupled electron and hole spins in semiconductors. , 0, , .		0

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109	Spin noise spectroscopy in semiconductors. Proceedings of SPIE, 2009, , .	0.8	0
110	Spin noise spectroscopy of ZnO. , 2013, , .		0
111	Time-Resolved Spin Dynamics and Spin Noise Spectroscopy. Springer Series in Solid-state Sciences, 2017, , 131-154.	0.3	0
112	p+/n+ polysilicon-on-oxide tunneling junctions as an interface of p-type PERC cells for tandem applications. , 2018, , .		0
113	Spintronics: Spin Electronics and Optoelectronics in Semiconductors. Lecture Notes in Physics, 2001, , 181-194.	0.7	0
114	Doping and temperature dependence of nuclear spin relaxation in n -type GaAs. Physical Review B, 2020, 102, .	3.2	0
115	How to Make Nanosheets Glow: An Innovative Route to Photoluminescent Colloidal 2D TMDCs. , 0, , .		0