Marc Assmann

List of Publications by Citations

64 papers	1,400 citations	20 h-index	36 g-index
75 ext. papers	1,733 ext. citations	6 avg, IF	4.51 L-index

#	Paper	IF	Citations
64	Direct observation of correlations between individual photon emission events of a microcavity laser. *Nature*, **2009**, 460, 245-9	50.4	167
63	Higher-order photon bunching in a semiconductor microcavity. *Science*, **2009**, 325, 297-300	33.3	91
62	Exciton and trion dynamics in atomically thin MoSe2 and WSe2: Effect of localization. *Physical Review B*, **2016**, 94,	3.3	88
61	Giant photon bunching, superradiant pulse emission and excitation trapping in quantum-dot nanolasers. *Nature Communications*, **2016**, 7, 11540	17.4	78
60	Compressive adaptive computational ghost imaging. *Scientific Reports*, **2013**, 3, 1545	4.9	72
59	Quantum chaos and breaking of all anti-unitary symmetries in Rydberg excitons. *Nature Materials*, **2016**, 15, 741-5	27	71
58	Observation of High Angular Momentum Excitons in Cuprous Oxide. *Physical Review Letters*, **2015**, 115, 027402	7.4	63
57	From polariton condensates to highly photonic quantum degenerate states of bosonic matter. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 1804-9	11.5	63
56	Deviations of the exciton level spectrum in Cu2O from the hydrogen series. *Physical Review B*, **2016** , 93,	3.3	55
55	Characterization of two-threshold behavior of the emission from a GaAs microcavity. *Physical Review B*, **2012**, 85,	3.3	51
54	Scaling laws of Rydberg excitons. *Physical Review B*, **2017**, 96,	3.3	44
53	Enhanced light-matter interaction in an atomically thin semiconductor coupled with dielectric nano-antennas. *Nature Communications*, **2019**, 10, 5119	17.4	42
52	High-resolution study of the yellow excitons in Cu2O subject to an electric field. *Physical Review B*, **2017**, 95,	3.3	38
51	Magnetoexcitons in cuprous oxide. *Physical Review B*, **2017**, 95,	3.3	35
50	All-optical flow control of a polariton condensate using nonresonant excitation. *Physical Review B*, **2015**, 91,	3.3	33
49	Measuring the dynamics of second-order photon correlation functions inside a pulse with picosecond time resolution. *Optics Express*, **2010**, 18, 20229-41	3.3	33
48	Ultrafast tracking of second-order photon correlations in the emission of quantum-dot microresonator lasers. *Physical Review B*, **2010**, 81,	3.3	32

47	Signatures of Quantum Coherences in Rydberg Excitons. *Physical Review Letters*, **2016**, 117, 133003	7.4	32
46	Realization of all-optical vortex switching in exciton-polariton condensates. *Nature Communications*, **2020**, 11, 897	17.4	22
45	All-optical control of quantized momenta on a polariton staircase. *Physical Review B*, **2012**, 85,	3.3	20
44	Rydberg Excitons in the Presence of an Ultralow-Density Electron-Hole Plasma. *Physical Review Letters*, **2018**, 121, 097401	7.4	18
43	Influence of interactions with noncondensed particles on the coherence of a one-dimensional polariton condensate. *Physical Review B*, **2014**, 89,	3.3	17
42	Quantum-memory effects in the emission of quantum-dot microcavities. *Physical Review Letters*, **2014**, 113, 093902	7.4	15
41	Photon-Statistics Excitation Spectroscopy of a Quantum-Dot Micropillar Laser. *Physical Review Letters*, **2015**, 115, 027401	7.4	15
40	Spectroscopy of fractional orbital angular momentum states. *Optics Express*, **2018**, 26, 32248-32258	3.3	15
39	Coupled valence band dispersions and the quantum defect of excitons in Cu2O. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2016**, 49, 134003	1.3	15
38	Temperature dependence of pulsed polariton lasing in a GaAs microcavity. *New Journal of Physics*, **2012**, 14, 083014	2.9	13
37	Experimental realization of a polariton beam amplifier. *Physical Review B*, **2016**, 93,	3.3	12
36	Nonlinearity sensing via photon-statistics excitation spectroscopy. *Physical Review A*, **2011**, 84,	2.6	12
35	Dissociation of excitons in Cu2O by an electric field. *Physical Review B*, **2018**, 98,	3.3	11
34	Magneto-Stark effect of yellow excitons in cuprous oxide. *Physical Review B*, **2018**, 98,	3.3	11
33	Eavesdropping attack on a trusted continuous-variable quantum random-number generator. *Physical Review A*, **2019**, 100,	2.6	11
32	Nonlinear spectroscopy of exciton-polaritons in a GaAs-based microcavity. *Physical Review B*, **2014**, 90,	3.3	10
31	Real time g monitoring with 100 kHz sampling rate. *Optics Express*, **2018**, 26, 24854-24863	3.3	9
30	Role of phonons in the quantum chaos of Rydberg excitons. *Physical Review B*, **2017**, 95,	3.3	7

29	Spatial dynamics of stepwise homogeneously pumped polariton condensates. *Physical Review B*, **2012**, 86,	3.3	7
28	Extrapolation of the intensity autocorrelation function of a quantum-dot micropillar laser into the thermal emission regime. *Journal of the Optical Society of America B: Optical Physics*, **2011**, 28, 1404	1.7	7
27	Semiconductor Rydberg Physics. *Advanced Quantum Technologies*, **2020**, 3, 1900134	4.3	7
26	Influence of Magnetic Confinement on the Yellow Excitons in Cuprous Oxide Subject to an Electric Field. *Physics of the Solid State*, **2018**, 60, 1595-1599	0.8	6
25	Determination of operating parameters for a GaAs-based polariton laser. *Applied Physics Letters*, **2013**, 102, 081115	3.4	6
24	Spin noise of a polariton laser. *Physical Review B*, **2016**, 93,	3.3	5
23	Dynamics of the optical spin Hall effect. *Physical Review B*, **2017**, 96,	3.3	5
22	Formation dynamics of exciton-polariton vortices created by nonresonant annular pumping. *Physical Review B*, **2020**, 101,	3.3	4
21	Streak camera imaging of single photons at telecom wavelength. *Applied Physics Letters*, **2018**, 112, 031110	3.4	4
20	Coherence time measurements using a single detector with variable time resolution. *Optics Letters*, **2012**, 37, 2811-3	3	4
19	Tracking Dark Excitons with Exciton Polaritons in Semiconductor Microcavities. *Physical Review Letters*, **2019**, 122, 047403	7.4	4
18	Conditional spectroscopy via nonstationary optical homodyne quantum state tomography. *Physical Review A*, **2020**, 101,	2.6	3
17	Degree of entanglement of photon pairs generated from V-type system in microcavity. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2009**, 6, 395-398		3
16	Experimental limitation in extending the exciton series in Cu2O towards higher principal quantum numbers. *Physical Review B*, **2020**, 101,	3.3	3
15	Stochastic pumping of a polariton fluid. *Physical Review A*, **2015**, 91,	2.6	2
14	Quantum-Optically Enhanced STORM (QUEST) for Multi-Emitter Localization. *Scientific Reports*, **2018**, 8, 7829	4.9	2
13	Magnetic field effects of Rydberg Excitons in Cu2O **2016**,		1
12	Influence of the Wavefunction Distribution on Exciton Dissociation in Electric Field. *Physics of the Solid State*, **2018**, 60, 1506-1509	0.8	1

List of Publications

11	Asymmetric Rydberg blockade of giant excitons in Cuprous Oxide. *Nature Communications*, **2021**, 12, 3556	17.4	1
10	Critical Dependence of the Excitonic Absorption in Cuprous Oxide on Experimental Parameters. *Physics of the Solid State*, **2018**, 60, 1618-1624	0.8	1
9	Landau-Level Quantization of the Yellow Excitons in Cuprous Oxide. *Physics of the Solid State*, **2018**, 60, 1625-1628	0.8	1
8	Quantifying Quantum Coherence in Polariton Condensates. *PRX Quantum*, **2021**, 2,	6.1	1
7	Analysis of the Fine Structure of the D-Exciton Shell in Cuprous Oxide. *Physica Status Solidi - Rapid Research Letters*,2100335	2.5	0
6	Oscillations of the Degree of Circular Polarization in the Optical Spin Hall Effect. *Physics of the Solid State*, **2018**, 60, 1606-1610	0.8	
5	Photon correlations in semiconductor nanostructures **2012**, 154-185		
4	Ultrafast intensity correlation measurements of quantum dot microcavity lasers. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2009**, 6, 399-402		
3	Distinguishing intrinsic photon correlations from external noise with frequency-resolved homodyne detection. *Scientific Reports*, **2020**, 10, 22411	4.9	
2	Quantum optics with quantum dot ensembles. *Semiconductors and Semimetals*, **2020**, 105, 235-267	0.6	
1	Rydberg States in Semiconductors **2018**, 40-51		