

# Sam G Carter

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1841038/publications.pdf>

Version: 2024-02-01

60  
papers

1,495  
citations

331670

21  
h-index

302126

39  
g-index

63  
all docs

63  
docs citations

63  
times ranked

1618  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ultrafast optical control of entanglement between two quantum-dot spins. Nature Physics, 2011, 7, 223-229.	16.7	200
2	Optical control of one and two hole spins in interacting quantum dots. Nature Photonics, 2011, 5, 702-708.	31.4	144
3	Quantum Coherence in an Optical Modulator. Science, 2005, 310, 651-653.	12.6	118
4	Quantum control of a spin qubit coupled to a photonic crystal cavity. Nature Photonics, 2013, 7, 329-334.	31.4	115
5	Scalable in operando strain tuning in nanophotonic waveguides enabling three-quantum-dot superradiance. Nature Materials, 2019, 18, 963-969.	27.5	80
6	Spin coherence and echo modulation of the silicon vacancy in $4\text{H-si}$ at room temperature. Physical Review B, 2015, 92, .		
7	Cavity-stimulated Raman emission from a single quantum dot spin. Nature Photonics, 2014, 8, 442-447.	31.4	65
8	Spin-cavity interactions between a quantum dot molecule and a photonic crystal cavity. Nature Communications, 2015, 6, 7665.	12.8	51
9	Directing Nuclear Spin Flips in InAs Quantum Dots Using Detuned Optical Pulse Trains. Physical Review Letters, 2009, 102, 167403.	7.8	50
10	Resonant Optical Spin Initialization and Readout of Single Silicon Vacancies in $4\text{H-si}$ . Physical Review Applied, 2019, 11, .	3.8	47
11	Picosecond pulse shaping of single photons using quantum dots. Nature Communications, 2018, 9, 115.	12.8	38
12	Terahertz electro-optic wavelength conversion in GaAs quantum wells: Improved efficiency and room-temperature operation. Applied Physics Letters, 2004, 84, 840-842.	3.3	37
13	Optical Measurement and Control of Spin Diffusion in Doped GaAs Quantum Wells. Physical Review Letters, 2006, 97, 136602.	7.8	37
14	Effects of disorder on electron spin dynamics in a semiconductor quantum well. Nature Physics, 2007, 3, 265-269.	16.7	35
15	Voltage-controlled wavelength conversion by terahertz electro-optic modulation in double quantum wells. Applied Physics Letters, 2002, 81, 1564-1566.	3.3	33
16	Strong hyperfine-induced modulation of an optically driven hole spin in an InAs quantum dot. Physical Review B, 2014, 89, .	3.2	27
17	Leveraging Crystal Anisotropy for Deterministic Growth of InAs Quantum Dots with Narrow Optical Linewidths. Nano Letters, 2013, 13, 4870-4875.	9.1	25
18	Electron spin polarization through interactions between excitons, trions, and the two-dimensional electron gas. Physical Review B, 2007, 75, .	3.2	24

#	ARTICLE	IF	CITATIONS
19	Optical excitation and control of electron spins in semiconductor quantum wells. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2010, 42, 1803-1819.	2.7	23
20	Echo peak-shift spectroscopy of non-Markovian exciton dynamics in quantum wells. <i>Physical Review B</i> , 2007, 76, .	3.2	22
21	A Spin-Photon Interface Using Charge-Tunable Quantum Dots Strongly Coupled to a Cavity. <i>Nano Letters</i> , 2019, 19, 7072-7077.	9.1	22
22	Ultrafast below-resonance Raman rotation of electron spins in $\text{GaAs}$ quantum wells. <i>Physical Review B</i> , 2007, 76, .	3.2	21
23	Enabling remote quantum emission in 2D semiconductors via porous metallic networks. <i>Nature Communications</i> , 2020, 11, 5.	12.8	20
24	Spin-Mechanical Coupling of an InAs Quantum Dot Embedded in a Mechanical Resonator. <i>Physical Review Letters</i> , 2018, 121, 246801.	7.8	19
25	Strong-field terahertz optical mixing in excitons. <i>Physical Review B</i> , 2003, 67, .	3.2	18
26	Terahertz optical mixing in biased GaAs single quantum wells. <i>Physical Review B</i> , 2004, 70, .	3.2	16
27	Arrays of Si vacancies in 4H-SiC produced by focused Li ion beam implantation. <i>Scientific Reports</i> , 2021, 11, 3561.	3.3	16
28	Electron spin coherence of silicon vacancies in proton-irradiated 4H-SiC. <i>Physical Review B</i> , 2017, 95, .	3.2	15
29	Terahertz-optical mixing in undoped and doped GaAs quantum wells: From excitonic to electronic intersubband transitions. <i>Physical Review B</i> , 2005, 72, .	3.2	12
30	Controlling the nuclear polarization in quantum dots using optical pulse shape with a modest bandwidth. <i>Physical Review B</i> , 2011, 83, .	3.2	11
31	Electron spin polarization and detection in InAs quantum dots through $p$ -shell trions. <i>Physical Review B</i> , 2010, 81, .	3.2	10
32	Sensing flexural motion of a photonic crystal membrane with InGaAs quantum dots. <i>Applied Physics Letters</i> , 2017, 111, 183101.	3.3	9
33	Tunable Coupling of a Double Quantum Dot Spin System to a Mechanical Resonator. <i>Nano Letters</i> , 2019, 19, 6166-6172.	9.1	9
34	Strong coupling of a quantum dot molecule to a photonic crystal cavity. <i>Physical Review B</i> , 2019, 99, .	3.2	9
35	Coherent Population Trapping Combined with Cycling Transitions for Quantum Dot Hole Spins Using Triplet Trion States. <i>Physical Review Letters</i> , 2021, 126, 107401.	7.8	9
36	Optical spectroscopy of site-controlled quantum dots in a Schottky diode. <i>Applied Physics Letters</i> , 2016, 108, .	3.3	5

#	ARTICLE	IF	CITATIONS
37	Enhanced Spin Coherence of a Self-Assembled Quantum Dot Molecule at the Optimal Electrical Bias. Physical Review Letters, 2022, 129, .	7.8	5
38	Processing of Cavities in SiC Material for Quantum Technologies. Materials Science Forum, 2018, 924, 905-908.	0.3	3
39	Spin-dependent quantum optics in a quantum dot molecule. Physical Review B, 2019, 100, .	3.2	3
40	On the doping concentration dependence and dopant selectivity of photogenerated carrier assisted etching of 4H-SiC epilayers. Electrochimica Acta, 2019, 323, 134778.	5.2	3
41	Spin coherence as a function of depth for high-density ensembles of silicon vacancies in proton-irradiated 4H-SiC. Solid State Communications, 2020, 320, 114014.	1.9	3
42	Photoexcited elastic waves in free-standing GaAs films. Physical Review B, 2020, 101, .	3.2	3
43	Orders of Magnitude Improvement in Coherence of Silicon-Vacancy Ensembles in Isotopically Purified $^4\text{SiC}$ . PRX Quantum, 2022, 3, .	9.2	3
44	Spin dynamics of InAs quantum dots with uniform height. Proceedings of SPIE, 2008, , .	0.8	2
45	Ultrafast optical control of electron spins in quantum wells and quantum dots. Proceedings of SPIE, 2010, , .	0.8	1
46	Ultrafast Optical Entanglement Control between two Quantum Dot Spins. , 2011, , .		1
47	Spectral broadening of optical transitions at tunneling resonances in InAs/GaAs coupled quantum dot pairs. Physical Review B, 2020, 102, .	3.2	1
48	Terahertz electro-optic modulation in biased GaAs quantum wells. , 0, , .		0
49	Excitonic Autler-Townes splitting induced by an intense terahertz field. , 0, , .		0
50	Transient spin-gratings of itinerant electrons in lightly-doped GaAs quantum wells. , 2006, , .		0
51	Spin Dynamics in n-doped CdTe quantum wells: Interplay of excitons, trions and two-dimensional electron gas. , 2006, , .		0
52	Coupling Spins in Quantum Dots to Photonic Crystal Cavities. , 2014, , .		0
53	Onset of dynamical localization in a semiconductor superlattice. , 2004, , .		0
54	Terahertz-optical mixing in n-doped GaAs quantum wells: suppression of excitonic resonances. , 2004, , .		0

#	ARTICLE	IF	CITATIONS
55	A Spin Qubit Coupled to a Photonic Crystal Cavity. , 2013, , .		0
56	Deterministic spectral tuning of InAs quantum dots in photonic crystal membrane diodes with laser annealing. , 2017, , .		0
57	Controlling the temporal behavior of photon emission from a quantum dot molecule. , 2017, , .		0
58	Quantum Optics of a Driven Quantum Dot Molecule. , 2019, , .		0
59	Quantum optics of superradiant QDs in a photonic crystal waveguide. , 2020, , .		0
60	Coherent Optical Control of Quantum Dot Hole Spins using Triplet Trion States. , 2020, , .		0