

# Bryce Gadway

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8755736/publications.pdf>

Version: 2024-02-01

32

papers

2,795

citations

279798

23

h-index

454955

30

g-index

32

all docs

32

docs citations

32

times ranked

2251

citing authors

#	ARTICLE	IF	CITATIONS
1	Observation of dipolar spin-exchange interactions with lattice-confined polar molecules. <i>Nature</i> , 2013, 501, 521-525.	27.8	671
2	Observation of the topological soliton state in the Suâ€“Schriefferâ€“Heeger model. <i>Nature Communications</i> , 2016, 7, 13986.	12.8	302
3	Observation of the topological Anderson insulator in disordered atomic wires. <i>Science</i> , 2018, 362, 929-933.	12.6	217
4	Creation of a low-entropy quantum gas of polar molecules in an optical lattice. <i>Science</i> , 2015, 350, 659-662.	12.6	164
5	Many-Body Dynamics of Dipolar Molecules in an Optical Lattice. <i>Physical Review Letters</i> , 2014, 113, 195302.	7.8	162
6	Superfluidity of Interacting Bosonic Mixtures in Optical Lattices. <i>Physical Review Letters</i> , 2010, 105, 045303.	7.8	120
7	Direct observation of chiral currents and magnetic reflection in atomic flux lattices. <i>Science Advances</i> , 2017, 3, e1602685.	10.3	113
8	Tunable Nonreciprocal Quantum Transport through a Dissipative Aharonov-Bohm Ring in Ultracold Atoms. <i>Physical Review Letters</i> , 2020, 124, 070402.	7.8	107
9	Glassy Behavior in a Binary Atomic Mixture. <i>Physical Review Letters</i> , 2011, 107, 145306.	7.8	94
10	Topological characterizations of an extended Suâ€“Schriefferâ€“Heeger model. <i>Npj Quantum Information</i> , 2019, 5, .	6.7	94
11	Engineering a Flux-Dependent Mobility Edge in Disordered Zigzag Chains. <i>Physical Review X</i> , 2018, 8, .	8.9	76
12	Interactions and Mobility Edges: Observing the Generalized Aubry-AndrÃ© Model. <i>Physical Review Letters</i> , 2021, 126, 040603.	7.8	74
13	Strongly interacting ultracold polar molecules. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2016, 49, 152002.	1.5	70
14	Atom-optics simulator of lattice transport phenomena. <i>Physical Review A</i> , 2016, 93, .	2.5	65
15	Atom-optics approach to studying transport phenomena. <i>Physical Review A</i> , 2015, 92, .	2.5	61
16	Correlated Dynamics in a Synthetic Lattice of Momentum States. <i>Physical Review Letters</i> , 2018, 120, 040407.	7.8	54
17	Evidence for a Quantum-to-Classical Transition in a Pair of Coupled Quantum Rotors. <i>Physical Review Letters</i> , 2013, 110, 190401.	7.8	52
18	Engineering tunable local loss in a synthetic lattice of momentum states. <i>New Journal of Physics</i> , 2019, 21, 045006.	2.9	52

#	ARTICLE	IF	CITATIONS
19	Synthetic dimensions in ultracold polar molecules. <i>Scientific Reports</i> , 2018, 8, 3422.	3.3	40
20	Analysis of Kapitza-Dirac diffraction patterns beyond the Raman-Nath regime. <i>Optics Express</i> , 2009, 17, 19173.	3.4	39
21	Exploring quantum signatures of chaos on a Floquet synthetic lattice. <i>Physical Review A</i> , 2019, 100, .	2.5	36
22	Framework for simulating gauge theories with dipolar spin systems. <i>Physical Review A</i> , 2020, 102, .	2.5	28
23	Diffusive and arrested transport of atoms under tailored disorder. <i>Nature Communications</i> , 2017, 8, 325.	12.8	24
24	Nonlinear Dynamics in a Synthetic Momentum-State Lattice. <i>Physical Review Letters</i> , 2021, 127, 130401.	7.8	24
25	Probing an ultracold-atom crystal with matterÂwaves. <i>Nature Physics</i> , 2012, 8, 544-549.	16.7	22
26	Strings of ultracold molecules in a synthetic dimension. <i>Physical Review A</i> , 2019, 99, .	2.5	11
27	Gray molasses cooling of $K$ atoms in optical tweezers. <i>Physical Review Research</i> , 2022, 4, .	3.6	9
28	Counterdiabatic control of transport in a synthetic tight-binding lattice. <i>Physical Review Research</i> , 2020, 2, .	3.6	7
29	Nondestructive dispersive imaging of rotationally excited ultracold molecules. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 20531-20544.	2.8	6
30	Simulating quantum mechanics with a $\hat{I}$ -term and an $\epsilon^{\text{TM}}$ Hooft anomaly on a synthetic dimension. <i>Physical Review D</i> , 2022, 105, .	4.7	1
31	Quantifying entanglement in cluster states built with error-prone interactions. <i>Physical Review Research</i> , 2021, 3, .	3.6	0
32	A shaking phase transition. <i>Nature Physics</i> , 2022, 18, 231-232.	16.7	0