

# Stefan Nimmrichter

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2186978/publications.pdf>

Version: 2024-02-01

46  
papers

2,272  
citations

279798

23  
h-index

302126

39  
g-index

48  
all docs

48  
docs citations

48  
times ranked

1504  
citing authors

#	ARTICLE	IF	CITATIONS
1	<i>Colloquium</i>: Quantum interference of clusters and molecules. Reviews of Modern Physics, 2012, 84, 157-173.	45.6	288
2	Quantum interference of large organic molecules. Nature Communications, 2011, 2, 263.	12.8	285
3	Near-field interferometry of a free-falling nanoparticle from a point-like source. Nature Communications, 2014, 5, 4788.	12.8	158
4	Quantum absorption refrigerator with trapped ions. Nature Communications, 2019, 10, 202.	12.8	157
5	Macroscopicity of Mechanical Quantum Superposition States. Physical Review Letters, 2013, 110, 160403.	7.8	145
6	Cavity cooling of free silicon nanoparticles in high vacuum. Nature Communications, 2013, 4, 2743.	12.8	117
7	Optomechanical Sensing of Spontaneous Wave-Function Collapse. Physical Review Letters, 2014, 113, 020405.	7.8	114
8	A universal matter-wave interferometer with optical ionization gratings in the time domain. Nature Physics, 2013, 9, 144-148.	16.7	88
9	Testing spontaneous localization theories with matter-wave interferometry. Physical Review A, 2011, 83, .	2.5	82
10	Theory and experimental verification of Kapitzaâ€“Diracâ€“Talbotâ€“Lau interferometry. New Journal of Physics, 2009, 11, 043032.	2.9	74
11	Cavity-Assisted Manipulation of Freely Rotating Silicon Nanorods in High Vacuum. Nano Letters, 2015, 15, 5604-5608.	9.1	62
12	Autonomous rotor heat engine. Physical Review E, 2017, 95, 062131.	2.1	59
13	Collisional Quantum Thermometry. Physical Review Letters, 2019, 123, 180602.	7.8	56
14	Rotranslational cavity cooling of dielectric rods and disks. Physical Review A, 2016, 94, .	2.5	48
15	Refrigeration beyond weak internal coupling. Physical Review E, 2018, 98, 012131.	2.1	43
16	Work production of quantum rotor engines. New Journal of Physics, 2018, 20, 043045.	2.9	40
17	Concept of an ionizing time-domain matter-wave interferometer. New Journal of Physics, 2011, 13, 075002.	2.9	38
18	Nonequilibrium dynamics with finite-time repeated interactions. Physical Review E, 2019, 99, 042103.	2.1	38

#	ARTICLE	IF	CITATIONS
19	Theory of near-field matter-wave interference beyond the eikonal approximation. <i>Physical Review A</i> , 2008, 78, .	2.5	37
20	Quantum Speed-Up in Collisional Battery Charging. <i>Physical Review Letters</i> , 2021, 127, 100601.	7.8	37
21	Influence of conformational molecular dynamics on matter wave interferometry. <i>Physical Review A</i> , 2010, 81, .	2.5	33
22	Master equation for the motion of a polarizable particle in a multimode cavity. <i>New Journal of Physics</i> , 2010, 12, 083003.	2.9	30
23	New Prospects for de Broglie Interferometry. <i>Foundations of Physics</i> , 2012, 42, 98-110.	1.3	23
24	Quantum and classical dynamics of a three-mode absorption refrigerator. <i>Quantum - the Open Journal for Quantum Science</i> , 0, 1, 37.	0.0	23
25	Maxwell's Lesser Demon: A Quantum Engine Driven by Pointer Measurements. <i>Physical Review Letters</i> , 2020, 124, 100603.	7.8	22
26	Macroscopic Matter Wave Interferometry. <i>Springer Theses</i> , 2014, , .	0.1	21
27	Absolute absorption spectroscopy based on molecule interferometry. <i>Physical Review A</i> , 2008, 78, .	2.5	18
28	Stochastic extensions of the regularized Schrödinger-Newton equation. <i>Physical Review D</i> , 2015, 91, .	4.7	18
29	An autonomous single-piston engine with a quantum rotor. <i>Quantum Science and Technology</i> , 2018, 3, 035008.	5.8	17
30	Coherence in the presence of absorption and heating in a molecule interferometer. <i>Nature Communications</i> , 2015, 6, 7336.	12.8	16
31	Macroscopicity of quantum mechanical superposition tests via hypothesis falsification. <i>Physical Review A</i> , 2019, 100, .	2.5	16
32	Quantum-classical hypothesis tests in macroscopic matter-wave interferometry. <i>Physical Review Research</i> , 2020, 2, .	3.6	15
33	Impact of Casimir-Polder interaction on Poisson-spot diffraction at a dielectric sphere. <i>Physical Review A</i> , 2016, 94, .	2.5	14
34	Uninformed Bayesian quantum thermometry. <i>Physical Review A</i> , 2021, 104, .	2.5	10
35	Squeezed comb states. <i>Physical Review A</i> , 2021, 103, .	2.5	9
36	Sensing spontaneous collapse and decoherence with interfering Bose-Einstein condensates. <i>Quantum Science and Technology</i> , 2017, 2, 044010.	5.8	5

#	ARTICLE	IF	CITATIONS
37	Full-field cavity enhanced microscopy techniques. JPhys Photonics, 2019, 1, 015007.	4.6	5
38	Almost thermal operations: Inhomogeneous reservoirs. Physical Review A, 2019, 100, .	2.5	4
39	Quantum gears from planar rotors. Physical Review E, 2019, 99, 042202.	2.1	4
40	Multiphoton absorption in optical gratings for matter waves. Physical Review A, 2016, 94, .	2.5	3
41	Matter wave interferometry: Exploring the importance of the internal molecular properties. , 2011, , .		0
42	Wann ist SchrÃ¶dingers Katze wirklich tot?. Physik in Unserer Zeit, 2013, 44, 214-215.	0.0	0
43	Quantum Rotor Engines. Fundamental Theories of Physics, 2018, , 227-245.	0.3	0
44	Near-Field Interference Techniques with Heavy Molecules and Nanoclusters. Springer Theses, 2014, , 85-159.	0.1	0
45	Classicalization and the Macroscopicity of Quantum Superposition States. Springer Theses, 2014, , 161-238.	0.1	0
46	Interaction of Polarizable Particles with Light. Springer Theses, 2014, , 9-83.	0.1	0