

# Jake Rochman

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/10740512/publications.pdf>

Version: 2024-02-01

20  
papers

1,145  
citations

840776

11  
h-index

1125743

13  
g-index

20  
all docs

20  
docs citations

20  
times ranked

1283  
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanophotonic rare-earth quantum memory with optically controlled retrieval. <i>Science</i> , 2017, 357, 1392-1395.	12.6	221
2	High quality-factor optical nanocavities in bulk single-crystal diamond. <i>Nature Communications</i> , 2014, 5, 5718.	12.8	196
3	Control and single-shot readout of an ion embedded in a nanophotonic cavity. <i>Nature</i> , 2020, 580, 201-204.	27.8	138
4	Optically Addressing Single Rare-Earth Ions in a Nanophotonic Cavity. <i>Physical Review Letters</i> , 2018, 121, 183603.	7.8	129
5	Diamond optomechanical crystals. <i>Optica</i> , 2016, 3, 1404.	9.3	125
6	On-chip coherent microwave-to-optical transduction mediated by ytterbium in YVO4. <i>Nature Communications</i> , 2020, 11, 3266.	12.8	87
7	Interfacing broadband photonic qubits to on-chip cavity-protected rare-earth ensembles. <i>Nature Communications</i> , 2017, 8, 14107.	12.8	54
8	Nanophotonic Quantum Storage at Telecommunication Wavelength. <i>Physical Review Applied</i> , 2019, 12, .	3.8	46
9	Nuclear spin-wave quantum register for a solid-state qubit. <i>Nature</i> , 2022, 602, 408-413.	27.8	46
10	Multifunctional on-chip storage at telecommunication wavelength for quantum networks. <i>Optica</i> , 2021, 8, 114.	9.3	43
11	High quality factor nanophotonic resonators in bulk rare-earth doped crystals. <i>Optics Express</i> , 2016, 24, 536.	3.4	39
12	Characterization of $O_4$ Er for microwave to optical transduction. <i>Physical Review B</i> , 2021, 104, .	3.2	10
13	Controlling rare-earth ions in a nanophotonic resonator using the ac Stark shift. <i>Physical Review A</i> , 2018, 97, .	2.5	9
14	On-chip quantum storage in a rare-earth-doped photonic nanocavity. , 2016, , .		1
15	50 GHz quantum photonic storage in a cavity-protected rare-earth ensemble. , 2016, , .		1
16	Towards an efficient nanophotonic platform integrating quantum memories and single qubits based on rare-earth ions. , 2017, , .		0
17	A nanophotonic platform integrating quantum memories and single rare-earth ions. , 2018, , .		0
18	Nanophotonic atomic-frequency-comb quantum memory based on a rare-earth doped photonic crystal cavity. , 2017, , .		0

#	ARTICLE	IF	CITATIONS
19	Toward Coherent Control of Single Yb <sup>3+</sup> Ions in a Nanophotonic Cavity. , 2019, , .		0
20	Single rare-earth ion spins in nanophotonic resonators. , 2020, , .		0