Eric Oelker

List of Publications by Year
in descending order

25 papers	8,203 citations	361045 20 h-index	676716 22 g-index
25 all docs	25 docs citations	25 times ranked	7010 citing authors

#	Article	IF	Citations
1	GW151226: Observation of Gravitational Waves from a 22-Solar-Mass Binary Black Hole Coalescence. Physical Review Letters, 2016, 116, 241103.	2.9	2,701
2	GW170104: Observation of a 50-Solar-Mass Binary Black Hole Coalescence at Redshift 0.2. Physical Review Letters, 2017, 118, 221101.	2.9	1,987
3	Enhanced sensitivity of the LIGO gravitational wave detector by using squeezed states of light. Nature Photonics, 2013, 7, 613-619.	15.6	825
4	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. Living Reviews in Relativity, 2018, 21, 3.	8.2	808
5	Quantum-Enhanced Advanced LIGO Detectors in the Era of Gravitational-Wave Astronomy. Physical Review Letters, 2019, 123, 231107.	2.9	359
6	Demonstration of 4.8â€‰Ã—â€‰10â ̂'17 stability at 1â€‰s for two independent optical clocks. Nature Photonics, 2019, 13, 714-719.	15.6	287
7	JILA SrI optical lattice clock with uncertainty of $2.0 imes 10^{-18}$. Metrologia, 2019, 56, 065004.	0.6	184
8	Resolving the gravitational redshift across a millimetre-scale atomic sample. Nature, 2022, 602, 420-424.	13.7	167
9	Crystalline optical cavity at 4â€‰â€‰K with thermal-noise-limited instability and ultralow drift. Optica, 2019, 6, 240.	4.8	111
10	Precision Metrology Meets Cosmology: Improved Constraints on Ultralight Dark Matter from Atom-Cavity Frequency Comparisons. Physical Review Letters, 2020, 125, 201302.	2.9	109
11	Half-minute-scale atomic coherence and high relative stability in a tweezer clock. Nature, 2020, 588, 408-413.	13.7	106
12	Seconds-scale coherence on an optical clock transition in a tweezer array. Science, 2019, 366, 93-97.	6.0	95
13	Audio-Band Frequency-Dependent Squeezing for Gravitational-Wave Detectors. Physical Review Letters, 2016, 116, 041102.	2.9	77
14	Ultrastable Silicon Cavity in a Continuously Operating Closed-Cycle Cryostat at 4ÂK. Physical Review Letters, 2017, 119, 243601.	2.9	77
15	The basic physics of the binary black hole merger GW150914. Annalen Der Physik, 2017, 529, 1600209.	0.9	69
16	Squeezed light for advanced gravitational wave detectors and beyond. Optics Express, 2014, 22, 21106.	1.7	56
17	Ultra-low phase noise squeezed vacuum source for gravitational wave detectors. Optica, 2016, 3, 682.	4.8	52
18	Search for Gravitational Waves Associated with Gamma-Ray Bursts during the First Advanced LIGO Observing Run and Implications for the Origin of GRB 150906B. Astrophysical Journal, 2017, 841, 89.	1.6	52

#	ARTICLE	IF	CITATIONS
19	Demonstration of a Timescale Based on a Stable Optical Carrier. Physical Review Letters, 2019, 123, 173201.	2.9	34
20	First joint observation by the underground gravitational-wave detector KAGRA with GEO 600. Progress of Theoretical and Experimental Physics, 2022, 2022, .	1.8	20
21	Optical atomic clock comparison through turbulent air. Physical Review Research, 2020, 2, .	1.3	16
22	Thermal noise and mechanical loss of SiO₂/Ta₂O₅ optical coatings at cryogenic temperatures. Optics Letters, 2021, 46, 592.	1.7	9
23	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. , 2018, 21, 1.		2
24	Demonstration of Frequency Dependent Squeezing in the Audio Frequency Band. , 2015, , .		0
25	A Squeezed light source for advanced gravitational wave detectors. , 2016, , .		0