Eric Oelker

List of Publications by Citations

22 papers	5,744 citations	17 h-index	25 g-index
25 ext. papers	6,973 ext. citations	14.4 avg, IF	4.02 L-index

#	Paper	IF	Citations
22	GW151226: Observation of Gravitational Waves from a 22-Solar-Mass Binary Black Hole Coalescence. *Physical Review Letters*, **2016**, 116, 241103	7.4	2136
21	GW170104: Observation of a 50-Solar-Mass Binary Black Hole Coalescence at Redshift 0.2. *Physical Review Letters*, **2017**, 118, 221101	7.4	1609
20	Enhanced sensitivity of the LIGO gravitational wave detector by using squeezed states of light. *Nature Photonics*, **2013**, 7, 613-619	33.9	572
19	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. *Living Reviews in Relativity*, **2018**, 21, 3	32.5	543
18	Quantum-Enhanced Advanced LIGO Detectors in the Era of Gravitational-Wave Astronomy. *Physical Review Letters*, **2019**, 123, 231107	7.4	182
17	Demonstration of 4.8 □10□7 stability at 1 s for two independent optical clocks. *Nature Photonics*, **2019**, 13, 714-719	33.9	143
16	JILA SrI optical lattice clock with uncertainty of $2.0 times 10^{-18}$. *Metrologia*, **2019**, 56, 065004	2.1	70
15	Audio-Band Frequency-Dependent Squeezing for Gravitational-Wave Detectors. *Physical Review Letters*, **2016**, 116, 041102	7.4	61
14	Crystalline optical cavity at 4 K with thermal-noise-limited instability and ultralow drift. *Optica*, **2019**, 6, 240	8.6	57
13	The basic physics of the binary black hole merger GW150914. *Annalen Der Physik*, **2017**, 529, 1600209	2.6	45
12	Seconds-scale coherence on an optical clock transition in a tweezer array. *Science*, **2019**, 366, 93-97	33.3	43
11	Ultra-low phase noise squeezed vacuum source for gravitational wave detectors. *Optica*, **2016**, 3, 682	8.6	43
10	Ultrastable Silicon Cavity in a Continuously Operating Closed-Cycle Cryostat at 4□K. *Physical Review Letters*, **2017**, 119, 243601	7.4	43
9	Squeezed light for advanced gravitational wave detectors and beyond. *Optics Express*, **2014**, 22, 21106-21	3.3	43
8	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	4.7	42
7	Precision Metrology Meets Cosmology: Improved Constraints on Ultralight Dark Matter from Atom-Cavity Frequency Comparisons. *Physical Review Letters*, **2020**, 125, 201302	7.4	37
6	Half-minute-scale atomic coherence and high relative stability in a tweezer clock. *Nature*, **2020**, 588, 408-413	5.4	33

List of Publications

5	Demonstration of a Timescale Based on a Stable Optical Carrier. *Physical Review Letters*, **2019**, 123, 173201	7.4	17
4	Resolving the gravitational redshift across a millimetre-scale atomic sample.. *Nature*, **2022**, 602, 420-424	50.4	15
3	Optical atomic clock comparison through turbulent air. *Physical Review Research*, **2020**, 2,	3.9	4
2	Thermal noise and mechanical loss of SiO/TaO optical coatings at cryogenic temperatures. *Optics Letters*, **2021**, 46, 592-595	3	4
1	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA **2018**, 21, 1		2