

# Daniel A Shaddock

## List of Publications by Year in descending order

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Version: 2024-02-01

102  
papers

2,801  
citations

201674

27  
h-index

182427

51  
g-index

102  
all docs

102  
docs citations

102  
times ranked

2140  
citing authors

#	ARTICLE	IF	CITATIONS
1	Improved cross-talk suppression for digitally enhanced interferometry using Golay complementary pairs. Optics Letters, 2022, 47, 1570.	3.3	0
2	Enhanced frequency noise suppression for LISA by combining cavity and arm locking control systems. Physical Review D, 2022, 105, .	4.7	10
3	Matched template analysis of continuous wave laser for space debris ranging application. Advances in Space Research, 2022, 70, 1979-1987.	2.6	2
4	Mitigation of phase noise and Doppler-induced frequency offsets in coherent random amplitude modulated continuous-wave LiDAR. Optics Express, 2021, 29, 9060.	3.4	22
5	Absolute frequency readout derived from ULE cavity for next generation geodesy missions. Optics Express, 2021, 29, 26014.	3.4	10
6	Coherent Beam Combining Using an Internally Sensed Optical Phased Array of Frequency-Offset Phase Locked Lasers. Photonics, 2020, 7, 118.	2.0	6
7	Automatic mode-matching of a Fabry-Pérot cavity with a single photodiode and spatial light modulation. Journal of Optics (United Kingdom), 2020, 22, 105605.	2.2	2
8	Crosstalk reduction for multi-channel optical phase metrology. Optics Express, 2020, 28, 10400.	3.4	19
9	Fast beam steering with an optical phased array. Optics Letters, 2020, 45, 3793.	3.3	27
10	Optical vortex beams with controllable orbital angular momentum using an optical phased array. OSA Continuum, 2020, 3, 3399.	1.8	11
11	In-Orbit Performance of the GRACE Follow-on Laser Ranging Interferometer. Physical Review Letters, 2019, 123, 031101.	7.8	161
12	Towards solid-state beam steering using a 7-emitter 1550 nm optical phased array. , 2019, , .		0
13	Multi-link laser interferometry architecture for interspacecraft displacement metrology. Journal of Geodesy, 2018, 92, 241-251.	3.6	5
14	Observation of Squeezed Light in the $\hat{m}^2$ Region. Physical Review Letters, 2018, 120, 203603.	7.8	29
15	Interferometric wavefront sensing with a single diode using spatial light modulation. Applied Optics, 2017, 56, 2353.	2.1	7
16	High power compatible internally sensed optical phased array. Optics Express, 2016, 24, 13467.	3.4	28
17	Algebraic cancellation of polarisation noise in fibre interferometers. Optics Express, 2016, 24, 10486.	3.4	1
18	A squeezed light source operated under high vacuum. Scientific Reports, 2016, 5, 18052.	3.3	18

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19	Suppressing Rayleigh backscatter and code noise from all-fiber digital interferometers. Optics Letters, 2016, 41, 84.	3.3	12
20	Tone-assisted time delay interferometry on GRACE Follow-On. Physical Review D, 2015, 92, .	4.7	10
21	Frequency dependence of thermal noise in gram-scale cantilever flexures. Physical Review D, 2015, 92, .	4.7	5
22	Coherent beam combining using a 2D internally sensed optical phased array. Applied Optics, 2014, 53, 4881.	1.8	10
23	An all optical fiber frequency reference using digital interferometry. , 2014, , .		0
24	Digitally enhanced optical fiber frequency reference. Optics Letters, 2014, 39, 1752.	3.3	12
25	Weak-light phase tracking with a low cycle slip rate. Optics Letters, 2014, 39, 5251.	3.3	27
26	Retroreflector for GRACE follow-on: Vertex vs point of minimal coupling. Optics Express, 2014, 22, 9324.	3.4	9
27	Laser link acquisition demonstration for the GRACE Follow-On mission. Optics Express, 2014, 22, 11351.	3.4	35
28	Homodyne digital interferometry for a sensitive fiber frequency reference. Optics Express, 2014, 22, 18168.	3.4	9
29	Measuring coalignment of retroreflectors with large lateral incoming-outgoing beam offset. Review of Scientific Instruments, 2014, 85, 035103.	1.3	8
30	Optical cavity enhanced real-time absorption spectroscopy of CO2 using laser amplitude modulation. Applied Physics Letters, 2014, 105, 053505.	3.3	5
31	Highspeed multiplexed heterodyne interferometry. Optics Express, 2014, 22, 24689.	3.4	13
32	Internally sensed optical phased array. Optics Letters, 2013, 38, 1137.	3.3	13
33	An Optical Fiber Interferometer as a Frequency Reference for Space-based Laser Ranging. , 2013, , .		0
34	Path length modulation technique for scatter noise immunity in squeezing measurements. Optics Letters, 2013, 38, 2265.	3.3	4
35	Frequency stabilization for space-based missions using optical fiber interferometry. Optics Letters, 2013, 38, 278.	3.3	17
36	Improved optical ranging for space based gravitational wave detection. Classical and Quantum Gravity, 2013, 30, 075008.	4.0	8

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37	Linearization and minimization of cyclic error with heterodyne laser interferometry. Optics Letters, 2012, 37, 2448.	3.3	15
38	Subfrequency noise signal extraction in fiber-optic strain sensors using postprocessing. Optics Letters, 2012, 37, 2169.	3.3	12
39	Arm-length stabilisation for interferometric gravitational-wave detectors using frequency-doubled auxiliary lasers. Optics Express, 2012, 20, 81.	3.4	29
40	Control and tuning of a suspended Fabry-Pérot cavity using digitally enhanced heterodyne interferometry. Optics Letters, 2012, 37, 4952.	3.3	7
41	Critical coupling control of a microresonator by laser amplitude modulation. Optics Express, 2012, 20, 12622.	3.4	23
42	Polarization speed meter for gravitational-wave detection. Physical Review D, 2012, 86, .	4.7	13
43	A passive frequency noise insensitive fiber strain sensor using post processing. Proceedings of SPIE, 2012, , .	0.8	0
44	A digital phasemeter for precision length measurements. , 2012, , .		0
45	Intersatellite laser ranging instrument for the GRACE follow-on mission. Journal of Geodesy, 2012, 86, 1083-1095.	3.6	232
46	All-sky search for periodic gravitational waves in the full S5 LIGO data. Physical Review D, 2012, 85, .	4.7	66
47	Digitally enhanced homodyne interferometry. Optics Express, 2012, 20, 22195.	3.4	27
48	All-Digital Radio-Frequency Signal Distribution Via Optical Fibers. IEEE Photonics Technology Letters, 2012, 24, 1015-1017.	2.5	22
49	Digital enhanced homodyne interferometry for high precision metrology. , 2011, , .		0
50	An optical fibre-based frequency dissemination network for Australia. , 2011, , .		0
51	Precision length measurement using an all-digital phasemeter for heterodyne laser interferometry. , 2011, , .		0
52	An optical fiber-based system for high-stability distribution of reference radio-frequencies. , 2011, , .		0
53	Laser frequency noise immunity in multiplexed displacement sensing. Optics Letters, 2011, 36, 672.	3.3	20
54	Backscatter tolerant squeezed light source for advanced gravitational-wave detectors. Optics Letters, 2011, 36, 4680.	3.3	46

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55	Multiplexed interferometric displacement sensing below the laser frequency noise limit. , 2011, , .		0
56	Quasi-static strain sensing using molecular spectroscopy. Proceedings of SPIE, 2011, , .	0.8	0
57	Progress in interferometry for LISA at JPL. Classical and Quantum Gravity, 2011, 28, 094007.	4.0	13
58	Directional Limits on Persistent Gravitational Waves Using LIGO S5 Science Data. Physical Review Letters, 2011, 107, 271102.	7.8	94
59	QUANTUM SQUEEZING IN ADVANCED GRAVITATIONAL WAVE DETECTORS. International Journal of Modern Physics D, 2011, 20, 2043-2049.	2.1	3
60	FIRST SEARCH FOR GRAVITATIONAL WAVES FROM THE YOUNGEST KNOWN NEUTRON STAR. Astrophysical Journal, 2010, 722, 1504-1513.	4.5	104
61	Digital Laser Frequency Stabilization Using an Optical Cavity. IEEE Journal of Quantum Electronics, 2010, 46, 1178-1183.	1.9	18
62	Experimental Demonstration of Time-Delay Interferometry for the Laser Interferometer Space Antenna. Physical Review Letters, 2010, 104, 211103.	7.8	65
63	Fiber optic strain sensing using an absolute frequency reference. , 2010, , .		0
64	Search for gravitational waves from compact binary coalescence in LIGO and Virgo data from S5 and VSR1. Physical Review D, 2010, 82, .	4.7	111
65	High-resolution absolute frequency referenced fiber optic sensor for quasi-static strain sensing. Applied Optics, 2010, 49, 4029.	2.1	52
66	Stable transfer of an optical frequency standard via a 46 km optical fiber. Optics Express, 2010, 18, 5213.	3.4	10
67	Laser ranging and communications for LISA. Optics Express, 2010, 18, 20759.	3.4	38
68	Subpicometer length measurement using heterodyne laser interferometry and all-digital rf phase meters. Optics Letters, 2010, 35, 4202.	3.3	36
69	Traceable nanoscale length metrology using a metrological Scanning Probe Microscope. Proceedings of SPIE, 2010, , .	0.8	2
70	Optical-Fiber Accelerometer Array: Nano-g Infrasonic Operation in a Passive 100 km Loop. IEEE Sensors Journal, 2010, 10, 1117-1124.	4.7	9
71	Performance of arm locking in LISA. Physical Review D, 2009, 80, .	4.7	26
72	Picometer level displacement metrology with digitally enhanced heterodyne interferometry. Optics Express, 2009, 17, 828.	3.4	46

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73	Pico-strain multiplexed fiber optic sensor array operating down to infra-sonic frequencies. Optics Express, 2009, 17, 11077.	3.4	34
74	Passive nano-g fiber-accelerometer array over 100 km. Proceedings of SPIE, 2009, , .	0.8	2
75	An Overview of the Laser Interferometer Space Antenna. Publications of the Astronomical Society of Australia, 2009, 26, 128-132.	3.4	7
76	A Comparison Between Digital and Analog Pound-Drever-Hall Laser Stabilization. , 2009, , .		1
77	Space-based gravitational wave detection with LISA. Classical and Quantum Gravity, 2008, 25, 114012.	4.0	40
78	Laser frequency stabilization by dual arm locking for LISA. Physical Review D, 2008, 78, .	4.7	21
79	Multiplexed fiber optic sensor array for geophysical survey. Proceedings of SPIE, 2008, , .	0.8	1
80	Range-gated metrology: an ultra-compact sensor for dimensional stabilization. , 2008, , .		0
81	The Big Bang Observer: High Laser Power for Gravitational Wave Astrophysics. , 2007, , .		0
82	Multiplexed fiber optic acoustic sensors in a 120 km loop using RF modulation. Proceedings of SPIE, 2007, , .	0.8	2
83	Coherent range-gated laser displacement metrology with compact optical head. Optics Letters, 2007, 32, 2933.	3.3	12
84	Digitally enhanced heterodyne interferometry. Optics Letters, 2007, 32, 3355.	3.3	76
85	Laser interferometry for the Big Bang Observer. Classical and Quantum Gravity, 2006, 23, 4887-4894.	4.0	253
86	Clock Noise Removal in LISA. AIP Conference Proceedings, 2006, , .	0.4	10
87	Operating LISA as a Sagnac interferometer. Physical Review D, 2004, 69, .	4.7	43
88	Electro-optic modulator capable of generating simultaneous amplitude and phase modulations. Applied Optics, 2004, 43, 5079.	2.1	13
89	Laser frequency stabilization by locking to a LISA arm. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 320, 9-21.	2.1	59
90	Sensing and control in dual-recycling laser interferometer gravitational-wave detectors. Applied Optics, 2003, 42, 1244.	2.1	47

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91	Power-recycled Michelson interferometer with resonant sideband extraction. Applied Optics, 2003, 42, 1283.	2.1	12
92	Implementation of time-delay interferometry for LISA. Physical Review D, 2003, 67, .	4.7	70
93	Data combinations accounting for LISA spacecraft motion. Physical Review D, 2003, 68, .	4.7	96
94	LISA laser noise cancellation test using time-delayed interferometry. , 2003, , .		0
95	Bench-top interferometric test bed for LISA. , 2003, 4856, 78.		1
96	Experimental Demonstration of a Squeezing-Enhanced Power-Recycled Michelson Interferometer for Gravitational Wave Detection. Physical Review Letters, 2002, 88, 231102.	7.8	181
97	Variable reflectivity signal mirrors and signal response measurements. Classical and Quantum Gravity, 2002, 19, 1561-1568.	4.0	11
98	Double pass locking and spatial mode locking for gravitational wave detectors. Classical and Quantum Gravity, 2002, 19, 1819-1824.	4.0	7
99	Experimental demonstration of variable-reflectivity signal recycling for interferometric gravitational-wave detectors. Optics Letters, 2002, 27, 1507.	3.3	6
100	Suppression of classic and quantum radiation pressure noise by electro-optic feedback. Optics Letters, 1999, 24, 259.	3.3	32
101	Experimental demonstration of resonant sideband extraction in a Sagnac interferometer. Applied Optics, 1998, 37, 7995.	2.1	16
102	Photodetector designs for low-noise, broadband, and high-power applications. Review of Scientific Instruments, 1998, 69, 3755-3762.	1.3	54