

Iain Martin

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1101217/publications.pdf>

Version: 2024-02-01

162
papers

41,924
citations

17440

63
h-index

6654

156
g-index

162
all docs

162
docs citations

162
times ranked

16897
citing authors

#	ARTICLE	IF	CITATIONS
1	Observation of Gravitational Waves from a Binary Black Hole Merger. <i>Physical Review Letters</i> , 2016, 116, 061102.	7.8	8,753
2	GW170817: Observation of Gravitational Waves from a Binary Neutron Star Inspiral. <i>Physical Review Letters</i> , 2017, 119, 161101.	7.8	6,413
3	GW151226: Observation of Gravitational Waves from a 22-Solar-Mass Binary Black Hole Coalescence. <i>Physical Review Letters</i> , 2016, 116, 241103.	7.8	2,701
4	GW170104: Observation of a 50-Solar-Mass Binary Black Hole Coalescence at Redshift 0.2. <i>Physical Review Letters</i> , 2017, 118, 221101.	7.8	1,987
5	Advanced LIGO. <i>Classical and Quantum Gravity</i> , 2015, 32, 074001.	4.0	1,929
6	GW170814: A Three-Detector Observation of Gravitational Waves from a Binary Black Hole Coalescence. <i>Physical Review Letters</i> , 2017, 119, 141101.	7.8	1,600
7	Tests of General Relativity with GW150914. <i>Physical Review Letters</i> , 2016, 116, 221101.	7.8	1,224
8	The Einstein Telescope: a third-generation gravitational wave observatory. <i>Classical and Quantum Gravity</i> , 2010, 27, 194002.	4.0	1,211
9	Characterization of the LIGO detectors during their sixth science run. <i>Classical and Quantum Gravity</i> , 2015, 32, 115012.	4.0	1,029
10	Predictions for the rates of compact binary coalescences observable by ground-based gravitational-wave detectors. <i>Classical and Quantum Gravity</i> , 2010, 27, 173001.	4.0	956
11	Binary Black Hole Mergers in the First Advanced LIGO Observing Run. <i>Physical Review X</i> , 2016, 6, .	8.9	898
12	Enhanced sensitivity of the LIGO gravitational wave detector by using squeezed states of light. <i>Nature Photonics</i> , 2013, 7, 613-619.	31.4	825
13	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. <i>Living Reviews in Relativity</i> , 2018, 21, 3.	26.7	808
14	A gravitational wave observatory operating beyond the quantum shot-noise limit. <i>Nature Physics</i> , 2011, 7, 962-965.	16.7	716
15	Properties of the Binary Black Hole Merger GW150914. <i>Physical Review Letters</i> , 2016, 116, 241102.	7.8	673
16	Sensitivity studies for third-generation gravitational wave observatories. <i>Classical and Quantum Gravity</i> , 2011, 28, 094013.	4.0	644
17	ASTROPHYSICAL IMPLICATIONS OF THE BINARY BLACK HOLE MERGER GW150914. <i>Astrophysical Journal Letters</i> , 2016, 818, L22.	8.3	633
18	GW150914: The Advanced LIGO Detectors in the Era of First Discoveries. <i>Physical Review Letters</i> , 2016, 116, 131103.	7.8	466

#	ARTICLE	IF	CITATIONS
19	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. <i>Living Reviews in Relativity</i> , 2020, 23, 3.	26.7	447
20	Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. <i>Living Reviews in Relativity</i> , 2016, 19, 1.	26.7	427
21	Scientific objectives of Einstein Telescope. <i>Classical and Quantum Gravity</i> , 2012, 29, 124013.	4.0	355
22	GW150914: First results from the search for binary black hole coalescence with Advanced LIGO. <i>Physical Review D</i> , 2016, 93, .	4.7	315
23	The third generation of gravitational wave observatories and their science reach. <i>Classical and Quantum Gravity</i> , 2010, 27, 084007.	4.0	287
24	Sensitivity of the Advanced LIGO detectors at the beginning of gravitational wave astronomy. <i>Physical Review D</i> , 2016, 93, .	4.7	286
25	Characterization of transient noise in Advanced LIGO relevant to gravitational wave signal GW150914. <i>Classical and Quantum Gravity</i> , 2016, 33, 134001.	4.0	225
26	LOCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914. <i>Astrophysical Journal Letters</i> , 2016, 826, L13.	8.3	210
27	Upper Limits on the Stochastic Gravitational-Wave Background from Advanced LIGO's First Observing Run. <i>Physical Review Letters</i> , 2017, 118, 121101.	7.8	194
28	Search for gravitational waves from low mass compact binary coalescence in LIGO's sixth science run and Virgo's science runs 2 and 3. <i>Physical Review D</i> , 2012, 85, .	4.7	185
29	Beating the Spin-Down Limit on Gravitational Wave Emission from the Crab Pulsar. <i>Astrophysical Journal</i> , 2008, 683, L45-L49.	4.5	160
30	A Gravitational-wave Measurement of the Hubble Constant Following the Second Observing Run of Advanced LIGO and Virgo. <i>Astrophysical Journal</i> , 2021, 909, 218.	4.5	144
31	Parameter estimation for compact binary coalescence signals with the first generation gravitational-wave detector network. <i>Physical Review D</i> , 2013, 88, .	4.7	132
32	GRAVITATIONAL WAVES FROM KNOWN PULSARS: RESULTS FROM THE INITIAL DETECTOR ERA. <i>Astrophysical Journal</i> , 2014, 785, 119.	4.5	125
33	Update on quadruple suspension design for Advanced LIGO. <i>Classical and Quantum Gravity</i> , 2012, 29, 235004.	4.0	123
34	Calibration of the LIGO gravitational wave detectors in the fifth science run. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2010, 624, 223-240.	1.6	120
35	Observing gravitational-wave transient GW150914 with minimal assumptions. <i>Physical Review D</i> , 2016, 93, .	4.7	119
36	Search for gravitational waves from compact binary coalescence in LIGO and Virgo data from S5 and VSR1. <i>Physical Review D</i> , 2010, 82, .	4.7	111

#	ARTICLE	IF	CITATIONS
37	All-sky search for gravitational-wave bursts in the first joint LIGO-GEO-Virgo run. <i>Physical Review D</i> , 2010, 81, .	4.7	107
38	All-sky search for gravitational-wave bursts in the second joint LIGO-Virgo run. <i>Physical Review D</i> , 2012, 85, .	4.7	107
39	FIRST SEARCH FOR GRAVITATIONAL WAVES FROM THE YOUNGEST KNOWN NEUTRON STAR. <i>Astrophysical Journal</i> , 2010, 722, 1504-1513.	4.5	104
40	SEARCH FOR GRAVITATIONAL WAVES ASSOCIATED WITH GAMMA-RAY BURSTS DURING LIGO SCIENCE RUN 6 AND VIRGO SCIENCE RUNS 2 AND 3. <i>Astrophysical Journal</i> , 2012, 760, 12.	4.5	104
41	Identification and mitigation of narrow spectral artifacts that degrade searches for persistent gravitational waves in the first two observing runs of Advanced LIGO. <i>Physical Review D</i> , 2018, 97, .	4.7	104
42	Directly comparing GW150914 with numerical solutions of Einstein's equations for binary black hole coalescence. <i>Physical Review D</i> , 2016, 94, .	4.7	102
43	Directional Limits on Persistent Gravitational Waves Using LIGO S5 Science Data. <i>Physical Review Letters</i> , 2011, 107, 271102.	7.8	94
44	Einstein@Home all-sky search for periodic gravitational waves in LIGO S5 data. <i>Physical Review D</i> , 2013, 87, .	4.7	91
45	Upper limit map of a background of gravitational waves. <i>Physical Review D</i> , 2007, 76, .	4.7	90
46	SEARCH FOR GRAVITATIONAL-WAVE INSPIRAL SIGNALS ASSOCIATED WITH SHORT GAMMA-RAY BURSTS DURING LIGO'S FIFTH AND VIRGO'S FIRST SCIENCE RUN. <i>Astrophysical Journal</i> , 2010, 715, 1453-1461.	4.5	90
47	BEATING THE SPIN-DOWN LIMIT ON GRAVITATIONAL WAVE EMISSION FROM THE VELA PULSAR. <i>Astrophysical Journal</i> , 2011, 737, 93.	4.5	89
48	Improved Upper Limits on the Stochastic Gravitational-Wave Background from 2009 to 2010 LIGO and Virgo Data. <i>Physical Review Letters</i> , 2014, 113, 231101.	7.8	86
49	Search for gravitational waves from binary black hole inspiral, merger, and ringdown. <i>Physical Review D</i> , 2011, 83, .	4.7	85
50	Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background. <i>Physical Review Letters</i> , 2018, 120, 201102.	7.8	85
51	Directional Limits on Persistent Gravitational Waves from Advanced LIGO's First Observing Run. <i>Physical Review Letters</i> , 2017, 118, 121102.	7.8	84
52	Implementation and testing of the first prompt search for gravitational wave transients with electromagnetic counterparts. <i>Astronomy and Astrophysics</i> , 2012, 539, A124.	5.1	84
53	All-Sky LIGO Search for Periodic Gravitational Waves in the Early Fifth-Science-Run Data. <i>Physical Review Letters</i> , 2009, 102, 111102.	7.8	83
54	Search for gravitational-wave bursts in the first year of the fifth LIGO science run. <i>Physical Review D</i> , 2009, 80, .	4.7	79

#	ARTICLE	IF	CITATIONS
55	First low-latency LIGO+Virgo search for binary inspirals and their electromagnetic counterparts. <i>Astronomy and Astrophysics</i> , 2012, 541, A155.	5.1	75
56	The characterization of Virgo data and its impact on gravitational-wave searches. <i>Classical and Quantum Gravity</i> , 2012, 29, 155002.	4.0	73
57	Effect of heat treatment on mechanical dissipation in Ta ₂ O ₅ coatings. <i>Classical and Quantum Gravity</i> , 2010, 27, 225020.	4.0	71
58	The basic physics of the binary black hole merger GW150914. <i>Annalen Der Physik</i> , 2017, 529, 1600209.	2.4	69
59	Constraints on Cosmic Strings from the LIGO-Virgo Gravitational-Wave Detectors. <i>Physical Review Letters</i> , 2014, 112, 131101.	7.8	68
60	First Search for Nontensorial Gravitational Waves from Known Pulsars. <i>Physical Review Letters</i> , 2018, 120, 031104.	7.8	68
61	All-sky search for periodic gravitational waves in the full S5 LIGO data. <i>Physical Review D</i> , 2012, 85, .	4.7	66
62	SEARCHES FOR CONTINUOUS GRAVITATIONAL WAVES FROM NINE YOUNG SUPERNOVA REMNANTS. <i>Astrophysical Journal</i> , 2015, 813, 39.	4.5	66
63	Directed search for continuous gravitational waves from the Galactic center. <i>Physical Review D</i> , 2013, 88, .	4.7	65
64	SWIFT FOLLOW-UP OBSERVATIONS OF CANDIDATE GRAVITATIONAL-WAVE TRANSIENT EVENTS. <i>Astrophysical Journal</i> , Supplement Series, 2012, 203, 28.	7.7	62
65	SEARCH FOR GRAVITATIONAL-WAVE BURSTS ASSOCIATED WITH GAMMA-RAY BURSTS USING DATA FROM LIGO SCIENCE RUN 5 AND VIRGO SCIENCE RUN 1. <i>Astrophysical Journal</i> , 2010, 715, 1438-1452.	4.5	60
66	IMPLICATIONS FOR THE ORIGIN OF GRB 051103 FROM LIGO OBSERVATIONS. <i>Astrophysical Journal</i> , 2012, 755, 2.	4.5	60
67	First all-sky search for continuous gravitational waves from unknown sources in binary systems. <i>Physical Review D</i> , 2014, 90, .	4.7	60
68	FIRST SEARCHES FOR OPTICAL COUNTERPARTS TO GRAVITATIONAL-WAVE CANDIDATE EVENTS. <i>Astrophysical Journal</i> , Supplement Series, 2014, 211, 7.	7.7	57
69	SEARCH FOR GRAVITATIONAL WAVE BURSTS FROM SIX MAGNETARS. <i>Astrophysical Journal Letters</i> , 2011, 734, L35.	8.3	55
70	Search for gravitational waves associated with the August 2006 timing glitch of the Vela pulsar. <i>Physical Review D</i> , 2011, 83, .	4.7	54
71	Comparison of the temperature dependence of the mechanical dissipation in thin films of Ta ₂ O ₅ and Ta ₂ O ₅ doped with TiO ₂ . <i>Classical and Quantum Gravity</i> , 2009, 26, 155012.	4.0	52
72	Search for Gravitational Waves Associated with Gamma-Ray Bursts during the First Advanced LIGO Observing Run and Implications for the Origin of GRB 150906B. <i>Astrophysical Journal</i> , 2017, 841, 89.	4.5	52

#	ARTICLE	IF	CITATIONS
73	Search for gravitational waves from intermediate mass binary black holes. Physical Review D, 2012, 85, .	4.7	48
74	Directed search for gravitational waves from Scorpius X-1 with initial LIGO data. Physical Review D, 2015, 91, .	4.7	47
75	Silicon-Based Optical Mirror Coatings for Ultrahigh Precision Metrology and Sensing. Physical Review Letters, 2018, 120, 263602.	7.8	47
76	Low temperature mechanical dissipation of an ion-beam sputtered silica film. Classical and Quantum Gravity, 2014, 31, 035019.	4.0	46
77	Upper limits on a stochastic gravitational-wave background using LIGO and Virgo interferometers at 600–1000 Hz. Physical Review D, 2012, 85, .	4.7	43
78	Correlations between the mechanical loss and atomic structure of amorphous TiO ₂ -doped Ta ₂ O ₅ coatings. Acta Materialia, 2013, 61, 1070-1077.	7.9	42
79	The NINJA-2 project: detecting and characterizing gravitational waveforms modelled using numerical binary black hole simulations. Classical and Quantum Gravity, 2014, 31, 115004.	4.0	42
80	Amorphous Silicon with Extremely Low Absorption: Beating Thermal Noise in Gravitational Astronomy. Physical Review Letters, 2018, 121, 191101.	7.8	40
81	Searching for stochastic gravitational waves using data from the two colocated LIGO Hanford detectors. Physical Review D, 2015, 91, .	4.7	39
82	Invited Article: CO ₂ laser production of fused silica fibers for use in interferometric gravitational wave detector mirror suspensions. Review of Scientific Instruments, 2011, 82, 011301.	1.3	37
83	Narrow-band search of continuous gravitational-wave signals from Crab and Vela pulsars in Virgo VSR4 data. Physical Review D, 2015, 91, .	4.7	37
84	Search for gravitational radiation from intermediate mass black hole binaries in data from the second LIGO-Virgo joint science run. Physical Review D, 2014, 89, .	4.7	35
85	Implementation of an F -statistic all-sky search for continuous gravitational waves in Virgo VSR1 data. Classical and Quantum Gravity, 2014, 31, 165014.	4.0	34
86	Thermal noise reduction and absorption optimization via multimaterial coatings. Physical Review D, 2015, 91, .	4.7	33
87	A first search for coincident gravitational waves and high energy neutrinos using LIGO, Virgo and ANTARES data from 2007. Journal of Cosmology and Astroparticle Physics, 2013, 2013, 008-008.	5.4	32
88	Search for Gravitational Waves Associated with $\dot{\Gamma}^3$ -ray Bursts Detected by the Interplanetary Network. Physical Review Letters, 2014, 113, 011102.	7.8	32
89	First low frequency all-sky search for continuous gravitational wave signals. Physical Review D, 2016, 93, .	4.7	32
90	Search for long-lived gravitational-wave transients coincident with long gamma-ray bursts. Physical Review D, 2013, 88, .	4.7	31

#	ARTICLE	IF	CITATIONS
91	Cryogenic measurements of mechanical loss of high-reflectivity coating and estimation of thermal noise. <i>Optics Letters</i> , 2013, 38, 5268.	3.3	31
92	Results of the deepest all-sky survey for continuous gravitational waves on LIGO S6 data running on the Einstein@Home volunteer distributed computing project. <i>Physical Review D</i> , 2016, 94, .	4.7	31
93	Silicon mirror suspensions for gravitational wave detectors. <i>Classical and Quantum Gravity</i> , 2014, 31, 025017.	4.0	30
94	Development of Mirror Coatings for Gravitational Wave Detectors. <i>Coatings</i> , 2016, 6, 61.	2.6	30
95	Multimessenger search for sources of gravitational waves and high-energy neutrinos: Initial results for LIGO-Virgo and IceCube. <i>Physical Review D</i> , 2014, 90, .	4.7	29
96	Methods and results of a search for gravitational waves associated with gamma-ray bursts using the GEO 600, LIGO, and Virgo detectors. <i>Physical Review D</i> , 2014, 89, .	4.7	29
97	All-sky search for long-duration gravitational wave transients with initial LIGO. <i>Physical Review D</i> , 2016, 93, .	4.7	29
98	High Precision Detection of Change in Intermediate Range Order of Amorphous Zirconia-Doped Tantalum Thin Films Due to Annealing. <i>Physical Review Letters</i> , 2019, 123, 045501.	7.8	29
99	Re-evaluation of the mechanical loss factor of hydroxide-catalysis bonds and its significance for the next generation of gravitational wave detectors. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2010, 374, 3993-3998.	2.1	28
100	Search for gravitational wave ringdowns from perturbed intermediate mass black holes in LIGO-Virgo data from 2005–2010. <i>Physical Review D</i> , 2014, 89, .	4.7	28
101	Ion-beam sputtered amorphous silicon films for cryogenic precision measurement systems. <i>Physical Review D</i> , 2015, 92, .	4.7	27
102	Medium range structural order in amorphous tantalum spatially resolved with changes to atomic structure by thermal annealing. <i>Journal of Non-Crystalline Solids</i> , 2016, 438, 10-17.	3.1	27
103	Measurement of the mechanical loss of prototype GaP/AlGaP crystalline coatings for future gravitational wave detectors. <i>Classical and Quantum Gravity</i> , 2015, 32, 035002.	4.0	26
104	Effect of elevated substrate temperature deposition on the mechanical losses in tantalum thin film coatings. <i>Classical and Quantum Gravity</i> , 2018, 35, 075001.	4.0	26
105	Investigation of mechanical losses of thin silicon flexures at low temperatures. <i>Classical and Quantum Gravity</i> , 2013, 30, 115008.	4.0	25
106	Strength testing and SEM imaging of hydroxide-catalysis bonds between silicon. <i>Classical and Quantum Gravity</i> , 2009, 26, 175007.	4.0	24
107	First Demonstration of Electrostatic Damping of Parametric Instability at Advanced LIGO. <i>Physical Review Letters</i> , 2017, 118, 151102.	7.8	24
108	Mirror Coating Solution for the Cryogenic Einstein Telescope. <i>Physical Review Letters</i> , 2019, 122, 231102.	7.8	24

#	ARTICLE	IF	CITATIONS
109	Application of a Hough search for continuous gravitational waves on data from the fifth LIGO science run. <i>Classical and Quantum Gravity</i> , 2014, 31, 085014.	4.0	21
110	Influence of temperature and hydroxide concentration on the settling time of hydroxy-catalysis bonds. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2007, 363, 341-345.	2.1	20
111	Investigation of mechanical dissipation in CO ₂ laser-drawn fused silica fibres and welds. <i>Classical and Quantum Gravity</i> , 2010, 27, 035013.	4.0	20
112	Optical absorption of ion-beam sputtered amorphous silicon coatings. <i>Physical Review D</i> , 2016, 93, .	4.7	20
113	First joint observation by the underground gravitational-wave detector KAGRA with GEO 600. <i>Progress of Theoretical and Experimental Physics</i> , 2022, 2022, .	6.6	20
114	Mechanical loss of a multilayer tantala/silica coating on a sapphire disk at cryogenic temperatures: Toward the KAGRA gravitational wave detector. <i>Physical Review D</i> , 2014, 90, .	4.7	19
115	Cryogenic mechanical loss measurements of heat-treated hafnium dioxide. <i>Classical and Quantum Gravity</i> , 2011, 28, 195017.	4.0	17
116	Calculation of thermal noise in grating reflectors. <i>Physical Review D</i> , 2013, 88, .	4.7	17
117	Investigation of the Young's modulus and thermal expansion of amorphous titania-doped tantala films. <i>Applied Optics</i> , 2014, 53, 3196.	1.8	17
118	Order within disorder: The atomic structure of ion-beam sputtered amorphous tantala (a-Ta ₂ O ₅). <i>APL Materials</i> , 2015, 3, .	5.1	17
119	Search of the Orion spur for continuous gravitational waves using a loosely coherent algorithm on data from LIGO interferometers. <i>Physical Review D</i> , 2016, 93, .	4.7	17
120	Optical absorption of silicon nitride membranes at 1064 nm and at 1550 nm. <i>Physical Review D</i> , 2017, 96, .	4.7	17
121	Cell Interactions at the Nanoscale: Piezoelectric Stimulation. <i>IEEE Transactions on Nanobioscience</i> , 2013, 12, 247-254.	3.3	16
122	Quantum correlation measurements in interferometric gravitational-wave detectors. <i>Physical Review A</i> , 2017, 95, .	2.5	16
123	Silicon nitride and silica quarter-wave stacks for low-thermal-noise mirror coatings. <i>Physical Review D</i> , 2018, 98, .	4.7	16
124	Enhanced characteristics of fused silica fibers using laser polishing. <i>Classical and Quantum Gravity</i> , 2014, 31, 105006.	4.0	15
125	Demonstration of the Multimaterial Coating Concept to Reduce Thermal Noise in Gravitational-Wave Detectors. <i>Physical Review Letters</i> , 2020, 125, 011102.	7.8	15
126	Exploration of co-sputtered Ta ₂ O ₅ /ZrO ₂ thin films for gravitational-wave detectors. <i>Classical and Quantum Gravity</i> , 2021, 38, 195021.	4.0	15

#	ARTICLE	IF	CITATIONS
127	Effect of Stress and Temperature on the Optical Properties of Silicon Nitride Membranes at 1,550 nm. <i>Frontiers in Materials</i> , 2018, 5, .	2.4	14
128	Experimental results for nulling the effective thermal expansion coefficient of fused silica fibres under a static stress. <i>Classical and Quantum Gravity</i> , 2014, 31, 065010.	4.0	12
129	Mapping the optical absorption of a substrate-transferred crystalline AlGaAs coating at 1.5 μ m. <i>Classical and Quantum Gravity</i> , 2015, 32, 105008.	4.0	12
130	Production of Nanoscale Vibration for Stimulation of Human Mesenchymal Stem Cells. <i>Journal of Biomedical Nanotechnology</i> , 2016, 12, 1478-1488.	1.1	11
131	Bulk and shear mechanical loss of titania-doped tantalum. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2018, 382, 2282-2288.	2.1	10
132	Order, disorder and mixing: The atomic structure of amorphous mixtures of titania and tantalum. <i>Journal of Non-Crystalline Solids</i> , 2016, 438, 59-66.	3.1	9
133	Thermal noise from icy mirrors in gravitational wave detectors. <i>Physical Review Research</i> , 2019, 1, .	3.6	9
134	Lowest observed surface and weld losses in fused silica fibres for gravitational wave detectors. <i>Classical and Quantum Gravity</i> , 2020, 37, 195019.	4.0	9
135	Comparison of Single-Layer and Double-Layer Anti-Reflection Coatings Using Laser-Induced Damage Threshold and Photothermal Common-Path Interferometry. <i>Coatings</i> , 2016, 6, 20.	2.6	8
136	Dependence of cryogenic strength of hydroxide catalysis bonded silicon on type of surface oxide. <i>Classical and Quantum Gravity</i> , 2013, 30, 025003.	4.0	7
137	Investigating the medium range order in amorphous Ta ₂ O ₅ coatings. <i>Journal of Physics: Conference Series</i> , 2014, 522, 012043.	0.4	7
138	Argon bubble formation in tantalum oxide-based films for gravitational wave interferometer mirrors. <i>Optical Materials Express</i> , 2021, 11, 707.	3.0	7
139	Acoustic losses in a thick quartz plate at low temperatures. <i>Journal of Applied Physics</i> , 2010, 107, 013504.	2.5	6
140	Effects of transients in LIGO suspensions on searches for gravitational waves. <i>Review of Scientific Instruments</i> , 2017, 88, 124501.	1.3	6
141	Cryogenic mechanical loss of a single-crystalline GaP coating layer for precision measurement applications. <i>Physical Review D</i> , 2017, 95, .	4.7	5
142	How can amorphous silicon improve current gravitational-wave detectors?. <i>Physical Review D</i> , 2021, 103, .	4.7	5
143	Investigating the relationship between material properties and laser-induced damage threshold of dielectric optical coatings at 1064 nm. <i>Proceedings of SPIE</i> , 2015, , .	0.8	4
144	High index top layer for multilayer coatings. <i>Physical Review D</i> , 2016, 93, .	4.7	4

#	ARTICLE	IF	CITATIONS
145	Anomalous optical surface absorption in nominally pure silicon samples at 1550 nm. Classical and Quantum Gravity, 2017, 34, 205013.	4.0	4
146	Coatings and surface treatments for enhanced performance suspensions for future gravitational wave detectors. Classical and Quantum Gravity, 2017, 34, 235012.	4.0	4
147	Epitaxial integration of monocrystalline III-V coatings on silicon for thermal noise reduction. , 2013, , .		4
148	Large-scale Monolithic Fused-Silica Mirror Suspension for Third-Generation Gravitational-Wave Detectors. Physical Review Applied, 2022, 17, .	3.8	4
149	Silica suspension and coating developments for Advanced LIGO. Journal of Physics: Conference Series, 2006, 32, 386-392.	0.4	3
150	The effects of heating on mechanical loss in tantala/silica optical coatings. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 87-90.	2.1	3
151	Silicate bonding properties: Investigation through thermal conductivity measurements. Journal of Physics: Conference Series, 2010, 228, 012019.	0.4	3
152	Low-temperature mechanical dissipation of thermally evaporated indium film for use in interferometric gravitational wave detectors. Classical and Quantum Gravity, 2015, 32, 115014.	4.0	3
153	Mechanical Spectroscopy of Silicon as a Low Loss Material for High Precision Mechanical and Optical Experiments. Solid State Phenomena, 0, 184, 443-448.	0.3	2
154	Concepts and research for future detectors. General Relativity and Gravitation, 2014, 46, 1.	2.0	2
155	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. , 2018, 21, 1.		2
156	The mechanical loss of tin (II) oxide thin-film coatings for charge mitigation in future gravitational wave detectors. Classical and Quantum Gravity, 2012, 29, 035002.	4.0	1
157	The promises of gravitational-wave astronomy. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20180105.	3.4	1
158	Time-evolution of NIR absorption in hydroxide-catalysis bonds. Materialia, 2019, 6, 100331.	2.7	1
159	Influence of deposition parameters on the optical absorption of amorphous silicon thin films. Physical Review Research, 2020, 2, .	3.6	1
160	Progress and Challenges Developing a Coating for Next Generation Gravitational-wave Detectors. , 2007, , .		0
161	Development of Ultra-low Optical and Mechanical Loss aSi Coatings Using Novel ECR Ion Beam Deposition. , 2016, , .		0
162	DEVELOPMENTS TOWARD MONOLITHIC SUSPENSIONS FOR ADVANCED GRAVITATIONAL WAVE DETECTORS. , 2008, , .		0