Daniel E Holz

List of Publications by Year
in descending order

140 papers	18,649 citations	15504 65 h-index	11607 135 g-index
141 all docs	141 docs citations	141 times ranked	8761 citing authors

#	Article	IF	Citations
1	Toward a Halo Mass Function for Precision Cosmology: The Limits of Universality. Astrophysical Journal, 2008, 688, 709-728.	4.5	1,387
2	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. Living Reviews in Relativity, 2018, 21, 3.	26.7	808
3	The first gravitational-wave source from the isolated evolution of two stars in the 40â€“100 solar mass range. Nature, 2016, 534, 512-515.	27.8	712
4	COMPACT REMNANT MASS FUNCTION: DEPENDENCE ON THE EXPLOSION MECHANISM AND METALLICITY. Astrophysical Journal, 2012, 749, 91.	4.5	695
5	The Electromagnetic Counterpart of the Binary Neutron Star Merger LIGO/Virgo GW170817. II. UV, Optical, and Near-infrared Light Curves and Comparison to Kilonova Models. Astrophysical Journal Letters, 2017, 848, L17.	8.3	656
6	DOUBLE COMPACT OBJECTS. I. THE SIGNIFICANCE OF THE COMMON ENVELOPE ON MERGER RATES. Astrophysical Journal, 2012, 759, 52.	4.5	613
7	Using Gravitationalâ€Wave Standard Sirens. Astrophysical Journal, 2005, 629, 15-22.	4.5	539
8	Precision Determination of the Mass Function of Dark Matter Halos. Astrophysical Journal, 2006, 646, 881-885.	4.5	448
9	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. Living Reviews in Relativity, 2020, 23, 3.	26.7	447
10	Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. Living Reviews in Relativity, 2016, 19, 1.	26.7	427
11	The Electromagnetic Counterpart of the Binary Neutron Star Merger LIGO/Virgo GW170817. I. Discovery of the Optical Counterpart Using the Dark Energy Camera. Astrophysical Journal Letters, 2017, 848, L16.	8.3	392
12	The Electromagnetic Counterpart of the Binary Neutron Star Merger LIGO/Virgo GW170817. IV. Detection of Near-infrared Signatures of r-process Nucleosynthesis with Gemini-South. Astrophysical Journal Letters, 2017, 848, L19.	8.3	390
13	Cosmology intertwined: A review of the particle physics, astrophysics, and cosmology associated with the cosmological tensions and anomalies. Journal of High Energy Astrophysics, 2022, 34, 49-211.	6.7	350
14	DOUBLE COMPACT OBJECTS. III. GRAVITATIONAL-WAVE DETECTION RATES. Astrophysical Journal, 2015, 806, 263.	4.5	336
15	DOUBLE COMPACT OBJECTS. II. COSMOLOGICAL MERGER RATES. Astrophysical Journal, 2013, 779, 72.	4.5	334
16	The Electromagnetic Counterpart of the Binary Neutron Star Merger LIGO/Virgo GW170817. III. Optical and UV Spectra of a Blue Kilonova from Fast Polar Ejecta. Astrophysical Journal Letters, 2017, 848, L18.	8.3	327
17	The Electromagnetic Counterpart of the Binary Neutron Star Merger LIGO/Virgo GW170817. V. Rising X-Ray Emission from an Off-axis Jet. Astrophysical Journal Letters, 2017, 848, L20.	8.3	313
18	The effect of pair-instability mass loss on black-hole mergers. Astronomy and Astrophysics, 2016, 594, A97.	5.1	289

#	Article	IF	Citations
19	EXPLORING SHORT GAMMA-RAY BURSTS AS GRAVITATIONAL-WAVE STANDARD SIRENS. Astrophysical Journal, 2010, 725, 496-514.	4.5	282
20	A two per cent Hubble constant measurement from standard sirens within five years. Nature, 2018, 562, 545-547.	27.8	282
21	Black hole shadows, photon rings, and lensing rings. Physical Review D, 2019, 100, .	4.7	271
22	The Electromagnetic Counterpart of the Binary Neutron Star Merger LIGO/Virgo GW170817. VI. Radio Constraints on a Relativistic Jet and Predictions for Late-time Emission from the Kilonova Ejecta. Astrophysical Journal Letters, 2017, 848, L21.	8.3	266
23	Consequences of Gravitational Radiation Recoil. Astrophysical Journal, 2004, 607, L9-L12.	4.5	260
24	Evolutionary roads leading to low effective spins, high black hole masses, and O1/O2 rates for LIGO/Virgo binary black holes. Astronomy and Astrophysics, 2020, 636, A104.	5.1	256
25	THE EFFECT OF METALLICITY ON THE DETECTION PROSPECTS FOR GRAVITATIONAL WAVES. Astrophysical Journal Letters, 2010, 715, L138-L141.	8.3	253
26	Snowmass2021 - Letter of interest cosmology intertwined II: The hubble constant tension. Astroparticle Physics, 2021, 131, 102605.	4.3	228
27	Short GRB and binary black hole standard sirens as a probe of dark energy. Physical Review D, 2006, 74, .	4.7	220
28	MISSING BLACK HOLES UNVEIL THE SUPERNOVA EXPLOSION MECHANISM. Astrophysical Journal, 2012, 757, 91.	4.5	209
29	COMPACT BINARY MERGER RATES: COMPARISON WITH LIGO/VIRGO UPPER LIMITS. Astrophysical Journal, 2016, 819, 108.	4.5	193
30	Are LIGO's Black Holes Made from Smaller Black Holes?. Astrophysical Journal Letters, 2017, 840, L24.	8.3	189
31	Ultrahigh precision cosmology from gravitational waves. Physical Review D, 2009, 80, .	4.7	179
32	First Measurement of the Hubble Constant from a Dark Standard Siren using the Dark Energy Survey Galaxies and the LIGO/Virgo Binaryâ€“Black-hole Merger GW170814. Astrophysical Journal Letters, 2019, 876, L7.	8.3	179
33	One Channel to Rule Them All? Constraining the Origins of Binary Black Holes Using Multiple Formation Pathways. Astrophysical Journal, 2021, 910, 152.	4.5	177
34	New method for determining cumulative gravitational lensing effects in inhomogeneous universes. Physical Review D, 1998, 58, .	4.7	162
35	Where Are LIGOâ€™s Big Black Holes?. Astrophysical Journal Letters, 2017, 851, L25.	8.3	160
36	Gravitational Wave Emission from Core Collapse of Massive Stars. Astrophysical Journal, 2002, 565, 430-446.	4.5	157

#	Article	IF	Citations
37	Does the Black Hole Merger Rate Evolve with Redshift?. Astrophysical Journal Letters, 2018, 863, L41.	8.3	157
38	How Black Holes Get Their Kicks: Gravitational Radiation Recoil Revisited. Astrophysical Journal, 2004, 607, L5-L8.	4.5	154
39	A Standard Siren Measurement of the Hubble Constant from GW170817 without the Electromagnetic Counterpart. Astrophysical Journal Letters, 2019, 871, L13.	8.3	145
40	A New Population of Highâ€Redshift Shortâ€Duration Gammaâ€Ray Bursts. Astrophysical Journal, 2007, 664, 1000-1010.	4.5	145
41	A Gravitational-wave Measurement of the Hubble Constant Following the Second Observing Run of Advanced LIGO and Virgo. Astrophysical Journal, 2021, 909, 218.	4.5	144
42	Safety in Numbers: Gravitational Lensing Degradation of the Luminosity Distanceâ€“Redshift Relation. Astrophysical Journal, 2005, 631, 678-688.	4.5	134
43	GOING THE DISTANCE: MAPPING HOST GALAXIES OF LIGO AND VIRGO SOURCES IN THREE DIMENSIONS USING LOCAL COSMOGRAPHY AND TARGETED FOLLOW-UP. Astrophysical Journal Letters, 2016, 829, L15.	8.3	126
44	SYMMETRY WITHOUT SYMMETRY: NUMERICAL SIMULATION OF AXISYMMETRIC SYSTEMS USING CARTESIAN GRIDS. International Journal of Modern Physics D, 2001, 10, 273-289.	2.1	121
45	Using Spin to Understand the Formation of LIGO and Virgoâ€™s Black Holes. Astrophysical Journal Letters, 2018, 854, L9.	8.3	108
46	Nonparametric inference of neutron star composition, equation of state, and maximum mass with GW170817. Physical Review D, 2020, 101, .	4.7	108
47	The Electromagnetic Counterpart of the Binary Neutron Star Merger LIGO/Virgo GW170817. VII. Properties of the Host Galaxy and Constraints on the Merger Timescale. Astrophysical Journal Letters, 2017, 848, L22.	8.3	107
48	A Future Percent-level Measurement of the Hubble Expansion at Redshift 0.8 with Advanced LIGO. Astrophysical Journal Letters, 2019, 883, L42.	8.3	106
49	The Electromagnetic Counterpart of the Binary Neutron Star Merger LIGO/Virgo GW170817. VIII. A Comparison to Cosmological Short-duration Gamma-Ray Bursts. Astrophysical Journal Letters, 2017, 848, L23.	8.3	103
50	A Precise Distance to the Host Galaxy of the Binary Neutron Star Merger GW170817 Using Surface Brightness Fluctuations^{âˆ—}. Astrophysical Journal Letters, 2018, 854, L31.	8.3	99
51	THE FORMATION AND GRAVITATIONAL-WAVE DETECTION OF MASSIVE STELLAR BLACK HOLE BINARIES. Astrophysical Journal, 2014, 789, 120.	4.5	98
52	Cosmological inference using gravitational wave standard sirens: A mock data analysis. Physical Review D, 2020, 101, .	4.7	95
53	Reducing the weak lensing noise for the gravitational wave Hubble diagram using the non-Gaussianity of the magnification distribution. Physical Review D, 2010, 81, .	4.7	89
54	OUTFLOWING GALACTIC WINDS IN POST-STARBURST AND ACTIVE GALACTIC NUCLEUS HOST GALAXIES AT 0.2 <<i>z</i>< 0.8. Astrophysical Journal, 2011, 743, 46.	4.5	89

#	Article	IF	Citations
55	Limits on the number of spacetime dimensions from GW170817. Journal of Cosmology and Astroparticle Physics, 2018, 2018, 048-048.	5.4	89
56	SUPERMASSIVE SEEDS FOR SUPERMASSIVE BLACK HOLES. Astrophysical Journal, 2013, 771, 116.	4.5	88
57	The Clustering of Massive Halos. Astrophysical Journal, 2007, 656, 139-147.	4.5	86
58	Lensing and High-[CLC][ITAL]z[/ITAL][/CLC] Supernova Surveys. Astrophysical Journal, 1998, 506, L1-L5.	4.5	83
59	LOCALIZING COMPACT BINARY INSPIRALS ON THE SKY USING GROUND-BASED GRAVITATIONAL WAVE INTERFEROMETERS. Astrophysical Journal, 2011, 739, 99.	4.5	81
60	Minding the Gap: GW190521 as a Straddling Binary. Astrophysical Journal Letters, 2020, 904, L26.	8.3	77
61	SEEING THE FIRST SUPERNOVAE AT THE EDGE OF THE UNIVERSE WITH <i>JWST</i>. Astrophysical Journal Letters, 2013, 762, L6.	8.3	74
62	FINDING THE FIRST COSMIC EXPLOSIONS. I. PAIR-INSTABILITY SUPERNOVAE. Astrophysical Journal, 2013, 777, 110.	4.5	74
63	A Statistical Standard Siren Measurement of the Hubble Constant from the LIGO/Virgo Gravitational Wave Compact Object Merger GW190814 and Dark Energy Survey Galaxies. Astrophysical Journal Letters, 2020, 900, L33.	8.3	74
64	Direct astrophysical tests of chiral effective field theory at supranuclear densities. Physical Review C, 2020, 102, .	2.9	73
65	Standard sirens with a running Planck mass. Physical Review D, 2019, 99, .	4.7	71
66	Black Hole Coagulation: Modeling Hierarchical Mergers in Black Hole Populations. Astrophysical Journal, 2020, 893, 35.	4.5	66
67	A Universal Probability Distribution Function for Weak-lensing Amplification. Astrophysical Journal, 2002, 572, L15-L18.	4.5	66
68	No evidence for dark energy dynamics from a global analysis of cosmological data. Physical Review D, 2009, 80, .	4.7	65
69	Explaining LIGOâ€™s observations via isolated binary evolution with natal kicks. Physical Review D, 2018, 97, .	4.7	65
70	Distance measures in gravitational-wave astrophysics and cosmology. Classical and Quantum Gravity, 2021, 38, 055010.	4.0	62
71	How Many Kilonovae Can Be Found in Past, Present, and Future Survey Data Sets?. Astrophysical Journal Letters, 2018, 852, L3.	8.3	60
72	Impact of inter-correlated initial binary parameters on double black hole and neutron star mergers. Astronomy and Astrophysics, 2018, 619, A77.	5.1	59

#	Article	IF	Citations
73	The Most Massive Binary Black Hole Detections and the Identification of Population Outliers. Astrophysical Journal Letters, 2020, 891, L31.	8.3	57
74	Retroâ€MACHOs: Ï€ in the Sky?. Astrophysical Journal, 2002, 578, 330-334.	4.5	53
75	Phase effects from strong gravitational lensing of gravitational waves. Physical Review D, 2021, 103, .	4.7	53
76	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.	4.5	52
77	NEUTRON STARS VERSUS BLACK HOLES: PROBING THE MASS GAP WITH LIGO/VIRGO. Astrophysical Journal Letters, 2015, 807, L24.	8.3	51
78	Shouts and Murmurs: Combining Individual Gravitational-wave Sources with the Stochastic Background to Measure the History of Binary Black Hole Mergers. Astrophysical Journal Letters, 2020, 896, L32.	8.3	51
79	Seeing Double: Strong Gravitational Lensing of High-Redshift Supernovae. Astrophysical Journal, 2001, 556, L71-L74.	4.5	50
80	Picky Partners: The Pairing of Component Masses in Binary Black Hole Mergers. Astrophysical Journal Letters, 2020, 891, L27.	8.3	50
81	Photon Statistics Limits for Earthâ€based Parallax Measurements of Events. Astrophysical Journal, 1996, 471, 64-67.	4.5	50
82	EVIDENCE FOR TYPE Ia SUPERNOVA DIVERSITY FROM ULTRAVIOLET OBSERVATIONS WITH THE<i>HUBBLE SPACE TELESCOPE</i>. Astrophysical Journal, 2012, 749, 126.	4.5	49
83	Gravitational Waves from Stellar Collapse: Correlations to Explosion Asymmetries. Astrophysical Journal, 2004, 609, 288-300.	4.5	48
84	When Are LIGO/Virgoâ€™s Big Black Hole Mergers?. Astrophysical Journal, 2021, 912, 98.	4.5	48
85	Jumping the Gap: Searching for LIGOâ€™s Biggest Black Holes. Astrophysical Journal Letters, 2021, 909, L23.	8.3	47
86	Corrective Lenses for High-Redshift Supernovae. Astrophysical Journal, 2003, 585, L11-L14.	4.5	46
87	FINDING THE FIRST COSMIC EXPLOSIONS. II. CORE-COLLAPSE SUPERNOVAE. Astrophysical Journal, 2013, 768, 95.	4.5	42
88	SUPPLEMENT: â€œGOING THE DISTANCE: MAPPING HOST GALAXIES OF LIGO AND VIRGO SOURCES IN THREE DIMENSIONS USING LOCAL COSMOGRAPHY AND TARGETED FOLLOW-UPâ€•(2016, ApJL, 829, L15). Astrophysical Journal, Supplement Series, 2016, 226, 10.	7.7	41
89	Cosmology with coalescing massive black holes. Classical and Quantum Gravity, 2003, 20, S65-S72.	4.0	40
90	Narrowing constraints with type Ia supernovae: converging on a cosmological constant. Journal of Cosmology and Astroparticle Physics, 2007, 2007, 004-004.	5.4	39

#	Article	IF	Citations
91	ILLUMINATING THE PRIMEVAL UNIVERSE WITH TYPE IIn SUPERNOVAE. Astrophysical Journal, 2013, 768, 195.	4.5	39
92	A DECAM SEARCH FOR AN OPTICAL COUNTERPART TO THE LIGO GRAVITATIONAL-WAVE EVENT GW151226. Astrophysical Journal Letters, 2016, 826, L29.	8.3	38
93	Does Matter Matter? Using the Mass Distribution to Distinguish Neutron Stars and Black Holes. Astrophysical Journal Letters, 2020, 899, L8.	8.3	38
94	Cosmology from Supernova Magnification Maps. Astrophysical Journal, 2006, 637, L77-L80.	4.5	37
95	The Origin of Inequality: Isolated Formation of a 30+10 M _{âŠ™} Binary Black Hole Merger. Astrophysical Journal Letters, 2020, 901, L39.	8.3	37
96	Gamma-Ray-Burst Beaming and Gravitational-Wave Observations. Physical Review Letters, 2013, 111, 181101.	7.8	36
97	Lensing and Supernovae: Quantifying the Bias on the Dark Energy Equation of State. Astrophysical Journal, 2008, 678, 1-5.	4.5	36
98	ON THE ORIGIN OF THE HIGHEST REDSHIFT GAMMA-RAY BURSTS. Astrophysical Journal, 2010, 708, 117-126.	4.5	35
99	Measuring dark energy spatial inhomogeneity with supernova data. Journal of Cosmology and Astroparticle Physics, 2010, 2010, 015-015.	5.4	34
100	A Search for Kilonovae in the Dark Energy Survey. Astrophysical Journal, 2017, 837, 57.	4.5	34
101	Hydrostatic Expansion and Spin Changes during Type I Xâ€Ray Bursts. Astrophysical Journal, 2002, 564, 343-352.	4.5	33
102	Beyond Two Dark Energy Parameters. Physical Review Letters, 2008, 100, 241302.	7.8	31
103	Problems with Small Area Surveys: Lensing Covariance of Supernova Distance Measurements. Physical Review Letters, 2006, 96, 021301.	7.8	28
104	Constraints on the Physical Properties of GW190814 through Simulations Based on DECam Follow-up Observations by the Dark Energy Survey. Astrophysical Journal, 2020, 901, 83.	4.5	28
105	THE MOST MASSIVE OBJECTS IN THE UNIVERSE. Astrophysical Journal Letters, 2012, 755, L36.	8.3	27
106	Cosmological impact of future constraints on <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>H</mml:mi></mml:mrow><mml:mrow><mml:mn>0</mml:mn></mm from gravitational-wave standard sirens. Physical Review D, 2018, 98, .	4.7	26
107	Please Repeat: Strong Lensing of Gravitational Waves as a Probe of Compact Binary and Galaxy Populations. Astrophysical Journal, 2022, 929, 9.	4.5	26
108	Bridging the Gap: Categorizing Gravitational-wave Events at the Transition between Neutron Stars and Black Holes. Astrophysical Journal, 2022, 931, 108.	4.5	25

#	Article	IF	Citations
109	Direct reconstruction of the dark energy scalar-field potential. Physical Review D, 2007, 75, .	4.7	23
110	Weak lensing and dark energy: The impact of dark energy on nonlinear dark matter clustering. Physical Review D, 2009, 80, .	4.7	23
111	Spin dynamics of the LAGEOS satellite in support of a measurement of the Earthâ€™s gravitomagnetism. Physical Review D, 1994, 50, 6068-6079.	4.7	21
112	Target-of-opportunity Observations of Gravitational-wave Events with Vera C. Rubin Observatory. Astrophysical Journal, Supplement Series, 2022, 260, 18.	7.7	21
113	Cosmology with Love: Measuring the Hubble constant using neutron star universal relations. Physical Review D, 2021, 104, .	4.7	20
114	First joint observation by the underground gravitational-wave detector KAGRA with GEO 600. Progress of Theoretical and Experimental Physics, 2022, 2022, .	6.6	20
115	Black Hole Leftovers: The Remnant Population from Binary Black Hole Mergers. Astrophysical Journal Letters, 2021, 914, L18.	8.3	19
116	The Gravity Collective: A Search for the Electromagnetic Counterpart to the Neutron Starâ€“Black Hole Merger GW190814. Astrophysical Journal, 2021, 923, 258.	4.5	19
117	CMB cluster lensing: Cosmography with the longest lever arm. Physical Review D, 2007, 76, .	4.7	18
118	The Binaryâ€“Host Connection: Astrophysics of Gravitational-Wave Binaries from Host Galaxy Properties. Astrophysical Journal, 2020, 905, 21.	4.5	17
119	On the remarkable spectrum of a non-Hermitian random matrix model. Journal of Physics A, 2003, 36, 3385-3400.	1.6	16
120	Probing Extremal Gravitational-wave Events with Coarse-grained Likelihoods. Astrophysical Journal, 2022, 926, 34.	4.5	15
121	Constant crunch coordinates for black hole simulations. Physical Review D, 2001, 63, .	4.7	14
122	A Search for Optical Emission from Binary Black Hole Merger GW170814 with the Dark Energy Camera. Astrophysical Journal Letters, 2019, 873, L24.	8.3	14
123	Gravitational Lensing Limits on the Average Redshift of Gammaâ€Ray Bursts. Astrophysical Journal, 1999, 510, 54-63.	4.5	13
124	Close Pairs as Proxies for Galaxy Cluster Mergers. Astrophysical Journal, 2008, 683, 1-11.	4.5	13
125	Facilitating Follow-up of LIGOâ€“Virgo Events Using Rapid Sky Localization. Astrophysical Journal, 2017, 840, 88.	4.5	13
126	Implications of Two Type Ia Supernova Populations for Cosmological Measurements. Astrophysical Journal, 2008, 684, L13-L16.	4.5	12

#	Article	IF	Citations
127	Counting on Short Gamma-Ray Bursts: Gravitational-wave Constraints of Jet Geometry. Astrophysical Journal, 2020, 895, 108.	4.5	12
128	Apparent horizons in simplicial Brill wave initial data. Classical and Quantum Gravity, 1999, 16, 1979-1985.	4.0	11
129	Calibrating gravitational-wave detectors with GW170817. Classical and Quantum Gravity, 2019, 36, 125002.	4.0	9
130	SOAR/Goodman Spectroscopic Assessment of Candidate Counterparts of the LIGO/Virgo Event GW190814*. Astrophysical Journal, 2022, 929, 115.	4.5	9
131	THE ISSUE OF TIME EVOLUTION IN QUANTUM GRAVITY. International Journal of Modern Physics A, 1996, 11, 2977-3002.	1.5	4
132	Stellar Collapse and Gravitational Waves. Astrophysics and Space Science Library, 2004, , 373-402.	2.7	4
133	Measuring cosmic distances with standard sirens. Physics Today, 2018, 71, 34-40.	0.3	2
134	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. , 2018, 21, 1.		2
135	Shedding light on dark matter. Nature, 1999, 400, 819-820.	27.8	1
136	An Accelerated History of the Universe. AIP Conference Proceedings, 2006, , .	0.4	1
137	Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. , 2016, 19, 1.		1
138	Gravitational waves from core collapse. , 2003, , .		0
139	B2(II): COSMOLOGY (II). LATE UNIVERSE AND GRAVITATIONAL LENSES. , 2005, , .		0
140	C7 multi-messenger astronomy of GW sources. General Relativity and Gravitation, 2014, 46, 1.	2.0	0