

Lawrence M Widrow

List of Publications by Year in descending order

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81
papers

7,161
citations

109321

35
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74163

75
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81
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81
docs citations

81
times ranked

4874
citing authors

#	ARTICLE	IF	CITATIONS
1	Estimate of the Mass and Radial Profile of the Orphanâ€‘Chenab Stream's Dwarf-galaxy Progenitor Using MilkyWay@home. <i>Astrophysical Journal</i> , 2022, 926, 106.	4.5	2
2	The stellar distribution function and local vertical potential from <i>Gaia</i> DR2. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 503, 1586-1598.	4.4	22
3	Inferring time-dependent distribution functions from kinematic snapshots. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 506, 3098-3110.	4.4	1
4	The Milky Wayâ€™s Shell Structure Reveals the Time of a Radial Collision. <i>Astrophysical Journal</i> , 2020, 902, 119.	4.5	27
5	Eigenfunctions of Galactic phase space spirals from dynamic mode decomposition. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 490, 114-123.	4.4	13
6	Emergence of the <i>Gaia</i> phase space spirals from bending waves. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 484, 1050-1056.	4.4	45
7	Can stellar discs in a cosmological setting avoid forming strong bars?. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 486, 523-537.	4.4	4
8	Warps, Waves, and Phase Spirals in the Milky Way. <i>Proceedings of the International Astronomical Union</i> , 2019, 14, 65-70.	0.0	1
9	Streams and the Milky Way dark matter halo. <i>Proceedings of the International Astronomical Union</i> , 2019, 14, 75-82.	0.0	0
10	The Large-scale Structure of the Halo of the Andromeda Galaxy. II. Hierarchical Structure in the Pan-Andromeda Archaeological Survey. <i>Astrophysical Journal</i> , 2018, 868, 55.	4.5	113
11	Formation of LISA Black Hole Binaries in Merging Dwarf Galaxies: The Imprint of Dark Matter. <i>Astrophysical Journal Letters</i> , 2018, 864, L19.	8.3	33
12	Bending waves in the Milky Wayâ€™s disc from halo substructure. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 480, 4244-4258.	4.4	48
13	Discâ€™halo interactions in Λ CDM. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 476, 198-209.	4.4	5
14	Galactoseismology and the local density of dark matter. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 464, 3775-3783.	4.4	33
15	Spontaneous generation of bending waves in isolated Milky Way-like discs. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 472, 2751-2763.	4.4	27
16	Galactoseismology in the Age of Gaia. <i>Proceedings of the International Astronomical Union</i> , 2017, 13, 189-194.	0.0	0
17	Simulating a slow bar in the low surface brightness galaxy UGC 628. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 463, 1751-1758.	4.4	6
18	Tracing the Galactic Halo: Obtaining Bayesian mass estimates of the Galaxy in the presence of incomplete data. <i>Proceedings of the International Astronomical Union</i> , 2015, 11, 296-297.	0.0	2

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19	Vertical oscillations of fluid and stellar discs. Monthly Notices of the Royal Astronomical Society, 2015, 450, 266-276.	4.4	23
20	ESTIMATING THE GALACTIC MASS PROFILE IN THE PRESENCE OF INCOMPLETE DATA. Astrophysical Journal, 2015, 806, 54.	4.5	33
21	Bending and breathing modes of the Galactic disc. Monthly Notices of the Royal Astronomical Society, 2014, 440, 1971-1981.	4.4	110
22	Incorporating streams into Milky Way models. Monthly Notices of the Royal Astronomical Society, 2014, 439, 2678-2686.	4.4	19
23	The effect of bars on the $M\text{-}\dot{M}$ relation: offset, scatter and residuals correlations. Monthly Notices of the Royal Astronomical Society, 2014, 441, 1243-1259.	4.4	30
24	Galaxy masses. Reviews of Modern Physics, 2014, 86, 47-119.	45.6	226
25	Galactic wave mechanics. Nature Physics, 2014, 10, 477-478.	16.7	0
26	A vast, thin plane of corotating dwarf galaxies orbiting the Andromeda galaxy. Nature, 2013, 493, 62-65.	27.8	396
27	The Sagittarius stream and halo triaxiality. Monthly Notices of the Royal Astronomical Society, 2013, 428, 912-922.	4.4	58
28	A NEW APPROACH TO DETAILED STRUCTURAL DECOMPOSITION FROM THE SPLASH AND PHAT SURVEYS: KICKED-UP DISK STARS IN THE ANDROMEDA GALAXY?. Astrophysical Journal, 2013, 779, 103.	4.5	49
29	GALACTOSEISMOLOGY: DISCOVERY OF VERTICAL WAVES IN THE GALACTIC DISK. Astrophysical Journal Letters, 2012, 750, L41.	8.3	245
30	The First Magnetic Fields. Space Science Reviews, 2012, 166, 37-70.	8.1	191
31	THE LUMINOSITY PROFILE AND STRUCTURAL PARAMETERS OF THE ANDROMEDA GALAXY. Astrophysical Journal, 2011, 739, 20.	4.5	156
32	Peaks above the Maxwellian Sea: a new approach to finding substructures in N-body haloes. Monthly Notices of the Royal Astronomical Society, 2011, 418, 320-335.	4.4	51
33	DYNAMICAL MODELS FOR NGC 6503 USING A MARKOV CHAIN MONTE CARLO TECHNIQUE. Astrophysical Journal, 2010, 715, 1152-1169.	4.5	15
34	THE PHOTOMETRIC PROPERTIES OF A VAST STELLAR SUBSTRUCTURE IN THE OUTSKIRTS OF M33. Astrophysical Journal, 2010, 723, 1038-1052.	4.5	55
35	The graininess of dark matter haloes. Monthly Notices of the Royal Astronomical Society, 2009, 394, 641-659.	4.4	64
36	Power spectrum for the small-scale Universe. Monthly Notices of the Royal Astronomical Society, 2009, 397, 1275-1285.	4.4	25

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37	Subhaloes in scale-free cosmologies. Monthly Notices of the Royal Astronomical Society, 2009, 395, 1950-1962.	4.4	20
38	The remnants of galaxy formation from a panoramic survey of the region around M31. Nature, 2009, 461, 66-69.	27.8	497
39	PAndAS TM CUBS: DISCOVERY OF TWO NEW DWARF GALAXIES IN THE SURROUNDINGS OF THE ANDROMEDA AND TRIANGULUM GALAXIES. Astrophysical Journal, 2009, 705, 758-765.	4.5	118
40	Dynamical Blueprints for Galaxies. Astrophysical Journal, 2008, 679, 1239-1259.	4.5	176
41	Dynamical Models for Disk Galaxies with Triaxial Halos. Astrophysical Journal, 2008, 679, 1232-1238.	4.5	13
42	The Bulge-Halo Connection in Galaxies: A Physical Interpretation of the $V_c - \dot{M}$ Relation. Astrophysical Journal, 2007, 655, L21-L24.	4.5	49
43	The $V_c - \dot{M}$ relation of galaxies. Proceedings of the International Astronomical Union, 2007, 3, 227-230.	0.0	0
44	Substructure around M31: Evolution and Effects. Astrophysical Journal, 2006, 653, 1180-1193.	4.5	48
45	On Universal Halos and the Radial Orbit Instability. Astrophysical Journal, 2006, 653, 43-52.	4.5	56
46	HST Imaging of MEGA Microlensing Candidates in M31. Astrophysical Journal, 2005, 633, L105-L108.	4.5	5
47	GALACTIC MODELS AND THE SEARCH FOR DARK MATTER. , 2005, , .		0
48	Equilibrium Disk+ Bulge+ Halo Models for the Milky Way and Andromeda Galaxies. Astrophysical Journal, 2005, 631, 838-855.	4.5	202
49	Fine Structure of Dark Matter Halos and its Effect on Terrestrial Detection Experiments. Physical Review Letters, 2003, 90, 211301.	7.8	27
50	Disk+ Bulge+ Halo Models for the Andromeda Galaxy. Astrophysical Journal, 2003, 588, 311-325.	4.5	59
51	HIERARCHICAL CLUSTERING MODELS AND THE DIRECT DETECTION OF WIMPS AND AXIONS. , 2003, , .		0
52	Origin of galactic and extragalactic magnetic fields. Reviews of Modern Physics, 2002, 74, 775-823.	45.6	724
53	Multiresolution Analysis of Substructure in Dark Matter Halos. Astrophysical Journal, 2002, 578, 689-701.	4.5	4
54	A Possible Mechanism for Generating Galactic Magnetic Fields. Astrophysical Journal, 2000, 540, 755-764.	4.5	51

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55	An Observational Test of Dark Matter as Cold Fractal Clouds. <i>Astrophysical Journal</i> , 2000, 529, 77-87.	4.5	8
56	Distribution Functions for Cuspy Dark Matter Density Profiles. <i>Astrophysical Journal, Supplement Series</i> , 2000, 131, 39-46.	7.7	85
57	Constraints on Cold H in the Halo of NGC 3079 from Absorption Measurements of Q0957+561. <i>Publications of the Astronomical Society of Australia</i> , 1999, 16, 89-94.	3.4	1
58	Searching for MACHOs (and Other Dark Matter Candidates) in a Simulated Galaxy. <i>Astrophysical Journal</i> , 1998, 504, 12-26.	4.5	14
59	Modeling collisionless matter in general relativity: A new numerical technique. <i>Physical Review D</i> , 1997, 55, 5997-6001.	4.7	7
60	Self-Similar Relaxation of Self-Gravitating Collisionless Particles. <i>Physical Review Letters</i> , 1997, 78, 3426-3429.	7.8	34
61	Testbed Simulations of Collisionless, Self-Gravitating Systems Using the Schrodinger Method. <i>Astrophysical Journal</i> , 1997, 485, 484-495.	4.5	21
62	Microlensing by a Prolate MACHO Halo. <i>Astrophysical Journal</i> , 1996, 473, 828-833.	4.5	2
63	Sterile neutrinos as dark matter. <i>Physical Review Letters</i> , 1994, 72, 17-20.	7.8	1,039
64	Using the Schroedinger Equation to Simulate Collisionless Matter. <i>Astrophysical Journal</i> , 1993, 416, L71.	4.5	172
65	Cosmological texture is sensitive to Planck-scale physics. <i>Physical Review Letters</i> , 1992, 69, 1489-1492.	7.8	34
66	Bubble nucleation in first-order inflation and other cosmological phase transitions. <i>Physical Review D</i> , 1992, 46, 2384-2403.	4.7	192
67	False-vacuum decay in time-dependent and two-field models. <i>Physical Review D</i> , 1991, 44, 2306-2313.	4.7	10
68	Microwave distortions from collapsing domain-wall bubbles. <i>Astrophysical Journal</i> , 1991, 367, L43.	4.5	19
69	Baryogenesis in a baryon-symmetric universe. <i>Physical Review D</i> , 1990, 42, 326-342.	4.7	49
70	Evolution of nonspherical bubbles. <i>Physical Review D</i> , 1990, 41, 347-353.	4.7	20
71	Baryon-symmetric baryogenesis. <i>Physical Review Letters</i> , 1990, 64, 340-343.	7.8	54
72	Gauged Qballs. <i>Physical Review D</i> , 1989, 39, 1665-1673.	4.7	144

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73	General-relativistic domain walls. Physical Review D, 1989, 39, 3571-3575.	4.7	69
74	Dynamics of thick domain walls. Physical Review D, 1989, 40, 1002-1010.	4.7	50
75	Collapse of nearly spherical domain walls. Physical Review D, 1989, 39, 3576-3578.	4.7	21
76	Inflation-produced, large-scale magnetic fields. Physical Review D, 1988, 37, 2743-2754.	4.7	819
77	Gravitational production of scalar particles in inflationary-universe models. Physical Review D, 1988, 37, 3428-3437.	4.7	25
78	Zero modes and anomalies in superconducting strings. Physical Review D, 1988, 38, 1684-1700.	4.7	5
79	Are cosmic strings frustrated?. Physical Review D, 1988, 38, 1100-1107.	4.7	12
80	Old inflation and anisotropy. Nature, 1987, 326, 206-206.	27.8	6
81	Homogeneous Cosmological Models and New Inflation. Physical Review Letters, 1986, 57, 2237-2240.	7.8	72