David Wittman

List of Publications by Citations

60 papers	2,235 citations	24 h-index	46 g-index
60 ext. papers	2,408 ext. citations	4.7 avg, IF	4.65 L-index

#	Paper	IF	Citations
60	The Shear Testing Programme I. Weak lensing analysis of simulated ground-based observations. *Monthly Notices of the Royal Astronomical Society*, **2006**, 368, 1323-1339	4.3	355
59	Weak-Lensing Results from the 75 Square Degree Cerro Tololo Inter-American Observatory Survey. *Astronomical Journal*, **2003**, 125, 1014-1032	4.9	153
58	First Results on Shear-selected Clusters from the Deep Lens Survey: Optical Imaging, Spectroscopy, and X-Ray Follow-up. *Astrophysical Journal*, **2006**, 643, 128-143	4.7	124
57	The case for electron re-acceleration at galaxy cluster shocks. *Nature Astronomy*, **2017**, 1,	12.1	114
56	COSMIC SHEAR RESULTS FROM THE DEEP LENS SURVEY. I. JOINT CONSTRAINTS ON Ω_M AND σ₈ WITH A TWO-DIMENSIONAL ANALYSIS. *Astrophysical Journal*, **2013**, 765, 74	4.7	102
55	DISCOVERY OF A DISSOCIATIVE GALAXY CLUSTER MERGER WITH LARGE PHYSICAL SEPARATION. *Astrophysical Journal Letters*, **2012**, 747, L42	7.9	97
54	Discovery of a Galaxy Cluster via Weak Lensing. *Astrophysical Journal*, **2001**, 557, L89-L92	4.7	89
53	Handbook for the GREAT08 Challenge: An image analysis competition for cosmological lensing. *Annals of Applied Statistics*, **2009**, 3,	2.1	84
52	COSMIC SHEAR RESULTS FROM THE DEEP LENS SURVEY. II. FULL COSMOLOGICAL PARAMETER CONSTRAINTS FROM TOMOGRAPHY. *Astrophysical Journal*, **2016**, 824, 77	4.7	80
51	The Deep Lens Survey Transient Search. I. Short Timescale and Astrometric Variability. *Astrophysical Journal*, **2004**, 611, 418-433	4.7	79
50	SHELS: The Hectospec Lensing Survey. *Astrophysical Journal*, **2005**, 635, L125-L128	4.7	54
49	The rise and fall of star formation in z ~ 0.2 merging galaxy clusters. *Monthly Notices of the Royal Astronomical Society*, **2015**, 450, 646-665	4.3	51
48	MC2: boosted AGN and star formation activity in CIZA J2242.8+5301, a massive post-merger cluster at z = 0.19. *Monthly Notices of the Royal Astronomical Society*, **2015**, 450, 630-645	4.3	49
47	In the wake of dark giants: new signatures of dark matter self-interactions in equal-mass mergers of galaxy clusters. *Monthly Notices of the Royal Astronomical Society*, **2017**, 469, 1414-1444	4.3	47
46	The Mismeasure of Mergers: Revised Limits on Self-interacting Dark Matter in Merging Galaxy Clusters. *Astrophysical Journal*, **2018**, 869, 104	4.7	39
45	MC2: CONSTRAINING THE DARK MATTER DISTRIBUTION OF THE VIOLENT MERGING GALAXY CLUSTER CIZA J2242.8+5301 BY PIERCING THROUGH THE MILKY WAY. *Astrophysical Journal*, **2015**, 802, 46	4.7	38
44	Weak-Lensing Discovery and Tomography of a Cluster atz= 0.68. *Astrophysical Journal*, **2003**, 597, 218-224	4.7	38

43	WHAT LIES BENEATH: USING p (z) TO REDUCE SYSTEMATIC PHOTOMETRIC REDSHIFT ERRORS. *Astrophysical Journal*, **2009**, 700, L174-L177	4.7	37
42	Results of the GREAT08 Challenge?: an image analysis competition for cosmological lensing. *Monthly Notices of the Royal Astronomical Society*, **2010**, no-no	4.3	35
41	MC2: GALAXY IMAGING AND REDSHIFT ANALYSIS OF THE MERGING CLUSTER CIZA J2242.8+5301. *Astrophysical Journal*, **2015**, 805, 143	4.7	33
40	Tomographic magnification of Lyman-break galaxies in the Deep Lens Survey. *Monthly Notices of the Royal Astronomical Society*, **2012**, 426, 2489-2499	4.3	33
39	HUBBLE SPACE TELESCOPEOBSERVATIONS OF FIELD ULTRACOOL DWARFS AT HIGH GALACTIC LATITUDE. *Astrophysical Journal*, **2011**, 739, 83	4.7	25
38	SHEAR-SELECTED CLUSTERS FROM THE DEEP LENS SURVEY. III. MASSES FROM WEAK LENSING. *Astrophysical Journal*, **2009**, 702, 603-613	4.7	25
37	MC2: DYNAMICAL ANALYSIS OF THE MERGING GALAXY CLUSTER MACS J1149.5+2223. *Astrophysical Journal*, **2016**, 831, 110	4.7	25
36	MC2: MAPPING THE DARK MATTER DISTRIBUTION OF THE TOOTHBRUSH CLUSTER RX J0603.3+4214 WITHHUBBLE SPACE TELESCOPEAND SUBARU WEAK LENSING. *Astrophysical Journal*, **2016**, 817, 179	4.7	23
35	The return of the merging galaxy subclusters of El Gordo?. *Monthly Notices of the Royal Astronomical Society*, **2015**, 453, 1531-1549	4.3	23
34	Bayesian cluster finder: clusters in the CFHTLS Archive Research Survey. *Monthly Notices of the Royal Astronomical Society*, **2012**, 420, 1167-1182	4.3	23
33	DARK MATTER STRUCTURES IN THE DEEP LENS SURVEY. *Astrophysical Journal*, **2009**, 702, 980-988	4.7	23
32	First results of an on-line adaptive optics system with atmospheric wavefront sensing by an artificial neural network. *Astrophysical Journal*, **1992**, 390, L41	4.7	23
31	Probing the Relation Between X-Ray-Derived and Weak-Lensing-Derived Masses for Shear-Selected Galaxy Clusters. I. A781. *Astrophysical Journal*, **2008**, 673, 163-175	4.7	21
30	MC2: Multiwavelength and Dynamical Analysis of the Merging Galaxy Cluster ZwCl 0008.8+5215: An Older and Less Massive Bullet Cluster. *Astrophysical Journal*, **2017**, 838, 110	4.7	19
29	Spurious Shear from the Atmosphere in Ground-based Weak-lensing Observations. *Astrophysical Journal*, **2005**, 632, L5-L8	4.7	19
28	Merging Cluster Collaboration: A Panchromatic Atlas of Radio Relic Mergers. *Astrophysical Journal*, **2019**, 882, 69	4.7	19
27	GALAXY-MASS CORRELATIONS ON 10 Mpc SCALES IN THE DEEP LENS SURVEY. *Astrophysical Journal*, **2012**, 759, 101	4.7	18
26	Weak-Lensing Detection of Cl 1604+4304 atz = 0.90. *Astronomical Journal*, **2005**, 129, 20-25	4.9	18

25	Merging Cluster Collaboration: Optical and Spectroscopic Survey of a Radio-selected Sample of 29 Merging Galaxy Clusters. *Astrophysical Journal, Supplement Series*, **2019**, 240, 39	8	17
24	Photometric Redshifts and Signal-to-Noise Ratios. *Astrophysical Journal*, **2008**, 679, 31-51	4.7	16
23	Wide-Field Weak Lensing by RX J1347−1145. *Astrophysical Journal*, **2005**, 625, 643-655	4.7	16
22	MC2: Subaru andHubble Space TelescopeWeak-lensing Analysis of the Double Radio Relic Galaxy Cluster PLCK G287.0+32.9. *Astrophysical Journal*, **2017**, 851, 46	4.7	14
21	Optical galaxy clusters in the Deep Lens Survey. *Monthly Notices of the Royal Astronomical Society*, **2014**, 439, 1980-1995	4.3	14
20	Three Gravitational Lenses for the Price of One: Enhanced Strong Lensing through Galaxy Clustering. *Astrophysical Journal*, **2006**, 651, 667-675	4.7	14
19	Constraints on Cosmology and Baryonic Feedback with the Deep Lens Survey Using Galaxy–Galaxy and Galaxy–Mass Power Spectra. *Astrophysical Journal*, **2019**, 870, 111	4.7	11
18	Ubercalibration of the Deep Lens Survey. *Monthly Notices of the Royal Astronomical Society*, **2012**, 421, 2251-2263	4.3	10
17	Adaptive optics experiments using sodium laser guide stars. *Astrophysical Journal*, **1995**, 439, 455	4.7	10
16	Direct 75 milliarcsecond images from the Multiple Mirror Telescope with adaptive optics. *Astrophysical Journal*, **1993**, 402, L81	4.7	9
15	Shedding light on the matter of Abell 781. *Monthly Notices of the Royal Astronomical Society*, **2014**, 437, 3578-3585	4.3	8
14	Simulated Analogs of Merging Galaxy Clusters Constrain the Viewing Angle. *Astrophysical Journal*, **2018**, 862, 160	4.7	8
13	Multiwavelength Analysis of the Merging Galaxy Cluster A115. *Astrophysical Journal*, **2019**, 874, 143	4.7	7
12	Brightest Cluster Galaxy Alignments in Merging Clusters. *Astrophysical Journal*, **2019**, 874, 84	4.7	7
11	Shaping Attitudes Toward Science in an Introductory Astronomy Course. *Physics Teacher*, **2009**, 47, 591-594	0.4	7
10	Photometric Redshifts and Photometry Errors. *Astrophysical Journal*, **2007**, 671, L109-L112	4.7	7
9	MC2: A Deeper Look at ZwCl 2341.1+0000 with Bayesian Galaxy Clustering and Weak Lensing Analyses. *Astrophysical Journal*, **2017**, 841, 7	4.7	5
8	STAR FORMATION IN THE CLUSTER MERGER DLSCL J0916.2+2953. *Astrophysical Journal*, **2017**, 834, 205	4.7	5

7	Chandra Observations of the Spectacular A3411112 Merger Event. *Astrophysical Journal*, **2019**, 887, 31	4.7	5
6	Dynamical Properties of Merging Galaxy Clusters from Simulated Analogs. *Astrophysical Journal*, **2019**, 881, 121	4.7	3
5	Exemplary Merging Clusters: Weak-lensing and X-Ray Analysis of the Double Radio Relic, Merging Galaxy Clusters MACS J1752.0+4440 and ZWCL 1856.8+6616. *Astrophysical Journal*, **2021**, 918, 72	4.7	3
4	High-Resolution V, I, and K-Band Imaging of Faint Field Galaxies from the HST Medium-Deep Survey. *Astronomical Journal*, **1997**, 113, 1537	4.9	2
3	CONSTRAINING SOURCE REDSHIFT DISTRIBUTIONS WITH GRAVITATIONAL LENSING. *Astrophysical Journal*, **2012**, 756, 140	4.7	1
2	Precision Weak Gravitational Lensing Using Velocity Fields: Fisher Matrix Analysis. *Astrophysical Journal*, **2021**, 908, 34	4.7	1
1	X-Ray Temperatures, Luminosities, and Masses fromXMM-NewtonFollow-upof the First Shear-selected Galaxy Cluster Sample. *Astrophysical Journal*, **2017**, 839, 124	4.7	0