

Steven R Furlanetto

List of Publications by Year in descending order

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84
papers

8,583
citations

61945

43
h-index

58549

82
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85
all docs

85
docs citations

85
times ranked

2930
citing authors

#	ARTICLE	IF	CITATIONS
1	Cosmology at low frequencies: The 21cm transition and the high-redshift Universe. Physics Reports, 2006, 433, 181-301.	10.3	1,059
2	COSMIC REIONIZATION AND EARLY STAR-FORMING GALAXIES: A JOINT ANALYSIS OF NEW CONSTRAINTS FROM PLANCK AND THE HUBBLE SPACE TELESCOPE. Astrophysical Journal Letters, 2015, 802, L19.	3.0	650
3	21cmfast: a fast, seminumerical simulation of the high-redshift 21-cm signal. Monthly Notices of the Royal Astronomical Society, 2011, 411, 955-972.	1.6	533
4	The Growth of HiiRegions During Reionization. Astrophysical Journal, 2004, 613, 1-15.	1.6	508
5	NEW CONSTRAINTS ON COSMIC REIONIZATION FROM THE 2012 HUBBLE ULTRA DEEP FIELD CAMPAIGN. Astrophysical Journal, 2013, 768, 71.	1.6	428
6	Cosmological Parameter Estimation Using 21 cm Radiation from the Epoch of Reionization. Astrophysical Journal, 2006, 653, 815-834.	1.6	385
7	21 Centimeter Fluctuations from Cosmic Gas at High Redshifts. Astrophysical Journal, 2004, 608, 622-635.	1.6	368
8	Efficient Simulations of Early Structure Formation and Reionization. Astrophysical Journal, 2007, 669, 663-675.	1.6	353
9	Simulations and Analytic Calculations of Bubble Growth during Hydrogen Reionization. Astrophysical Journal, 2007, 654, 12-26.	1.6	273
10	21-cm fluctuations from inhomogeneous X-ray heating before reionization. Monthly Notices of the Royal Astronomical Society, 2007, 376, 1680-1694.	1.6	218
11	THE UV LUMINOSITY FUNCTION OF STAR-FORMING GALAXIES VIA DROP-OUT SELECTION AT REDSHIFTS $z \sim 7$ AND 8 FROM THE 2012 ULTRA DEEP FIELD CAMPAIGN. Astrophysical Journal, 2013, 768, 196.	1.6	210
12	Statistical Probes of Reionization with 21 Centimeter Tomography. Astrophysical Journal, 2004, 613, 16-22.	1.6	177
13	Taxing the rich: recombinations and bubble growth during reionization. Monthly Notices of the Royal Astronomical Society, 2005, 363, 1031-1048.	1.6	176
14	THE 2012 HUBBLE ULTRA DEEP FIELD (UDF12): OBSERVATIONAL OVERVIEW. Astrophysical Journal, Supplement Series, 2013, 209, 3.	3.0	132
15	The Kinetic Sunyaev-Zel'dovich Effect from Reionization. Astrophysical Journal, 2005, 630, 643-656.	1.6	125
16	What does the first highly redshifted 21-cm detection tell us about early galaxies?. Monthly Notices of the Royal Astronomical Society, 2019, 483, 1980-1992.	1.6	121
17	$\text{Ly}\alpha$ Emission from Structure Formation. Astrophysical Journal, 2005, 622, 7-27.	1.6	114
18	Characteristic scales during reionization. Monthly Notices of the Royal Astronomical Society, 2006, 365, 115-126.	1.6	103

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19	Large fluctuations in the high-redshift metagalactic ionizing background. Monthly Notices of the Royal Astronomical Society, 2018, 473, 560-575.	1.6	99
20	Effects of dark matter decay and annihilation on the high-redshift 21Åcm background. Physical Review D, 2006, 74, .	1.6	97
21	The global 21-cm signal in the context of the high- z galaxy luminosity function. Monthly Notices of the Royal Astronomical Society, 2017, 464, 1365-1379.	1.6	95
22	PROBING REIONIZATION WITH THE 21 CM GALAXY CROSS-POWER SPECTRUM. Astrophysical Journal, 2009, 690, 252-266.	1.6	93
23	Large fluctuations in the hydrogen-ionizing background and mean free path following the epoch of reionization. Monthly Notices of the Royal Astronomical Society, 2016, 460, 1328-1339.	1.6	92
24	Observing the reionization epoch through 21-centimetre radiation. Monthly Notices of the Royal Astronomical Society, 2004, 347, 187-195.	1.6	90
25	First Results from HERA Phase I: Upper Limits on the Epoch of Reionization 21 cm Power Spectrum. Astrophysical Journal, 2022, 925, 221.	1.6	82
26	$\text{Ly}\alpha$ emitters during the early stages of reionization. Monthly Notices of the Royal Astronomical Society, 2008, 386, 1990-2002.	1.6	81
27	The History and Morphology of Helium Reionization. Astrophysical Journal, 2008, 681, 1-17.	1.6	79
28	PAPER-64 CONSTRAINTS ON REIONIZATION. II. THE TEMPERATURE OF THE $z \approx 8.4$ INTERGALACTIC MEDIUM. Astrophysical Journal, 2015, 809, 62.	1.6	79
29	Large-scale Structure Shocks at Low and High Redshifts. Astrophysical Journal, 2004, 611, 642-654.	1.6	70
30	Is Double Reionization Physically Plausible?. Astrophysical Journal, 2005, 634, 1-13.	1.6	70
31	Secondary ionization and heating by fast electrons. Monthly Notices of the Royal Astronomical Society, 2010, , .	1.6	67
32	Evidence for Large-scale Fluctuations in the Metagalactic Ionizing Background Near Redshift Six. Astrophysical Journal, 2018, 863, 92.	1.6	65
33	$\text{Ly}\alpha$ damping wing constraints on inhomogeneous reionization. Monthly Notices of the Royal Astronomical Society, 2008, 385, 1348-1358.	1.6	64
34	Have We Detected Patchy Reionization in Quasar Spectra?. Astrophysical Journal, 2006, 639, L47-L50.	1.6	63
35	HERA Phase I Limits on the Cosmic 21 cm Signal: Constraints on Astrophysics and Cosmology during the Epoch of Reionization. Astrophysical Journal, 2022, 924, 51.	1.6	63
36	A minimalist feedback-regulated model for galaxy formation during the epoch of reionization. Monthly Notices of the Royal Astronomical Society, 2017, 472, 1576-1592.	1.6	56

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37	THE TEMPERATURE-DENSITY RELATION OF THE INTERGALACTIC MEDIUM AFTER HYDROGEN REIONIZATION. <i>Astrophysical Journal</i> , 2009, 701, 94-104.	1.6	55
38	How Universal is the Gunn-Peterson Trough at $z \sim 6$? A Closer Look at the Quasar SDSS J1148+5251. <i>Astrophysical Journal</i> , 2005, 620, L9-L12.	1.6	54
39	Photoheating and the fate of hard photons during the reionization of He II by quasars. <i>Monthly Notices of the Royal Astronomical Society</i> , 2009, 395, 736-752.	1.6	54
40	The effects of population III radiation backgrounds on the cosmological 21-cm signal. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 493, 1217-1226.	1.6	52
41	The Cross-Correlation of High-Redshift 21 cm and Galaxy Surveys. <i>Astrophysical Journal</i> , 2007, 660, 1030-1038.	1.6	49
42	Unique signatures of Population III stars in the global 21-cm signal. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 478, 5591-5606.	1.6	46
43	Reionization through the lens of percolation theory. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 457, 1813-1827.	1.6	44
44	The ionizing background at the end of reionization. <i>Monthly Notices of the Royal Astronomical Society</i> , 2009, 394, 1667-1673.	1.6	43
45	The Persistence of Population III Star Formation. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 479, 4544-4559.	1.6	43
46	The inhomogeneous ionizing background following reionization. <i>Monthly Notices of the Royal Astronomical Society</i> , 2009, 400, 1461-1471.	1.6	41
47	The distribution of bubble sizes during reionization. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 461, 3361-3374.	1.6	40
48	Fluctuations in the high-redshift Lyman-Werner and Ly α radiation backgrounds. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 419, 718-731.	1.6	39
49	Inhomogeneous Helium Reionization and the Equation of State of the Intergalactic Medium. <i>Astrophysical Journal</i> , 2008, 682, 14-28.	1.6	38
50	FLUCTUATIONS IN THE IONIZING BACKGROUND DURING AND AFTER HELIUM REIONIZATION. <i>Astrophysical Journal</i> , 2009, 703, 702-716.	1.6	35
51	The 21-cm forest. <i>Monthly Notices of the Royal Astronomical Society</i> , 2006, 370, 1867-1875.	1.6	34
52	THE EVOLUTION OF THE HELIUM-IONIZING BACKGROUND AT $z \sim 2-3$. <i>Astrophysical Journal</i> , 2009, 706, 970-979.	1.6	33
53	A Space-based Observational Strategy for Characterizing the First Stars and Galaxies Using the Redshifted 21 cm Global Spectrum. <i>Astrophysical Journal</i> , 2017, 844, 33.	1.6	33
54	Determining the Nature of Late Gunn-Peterson Troughs with Galaxy Surveys. <i>Astrophysical Journal</i> , 2018, 860, 155.	1.6	33

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55	Redundant-baseline calibration of the hydrogen epoch of reionization array. Monthly Notices of the Royal Astronomical Society, 2020, 499, 5840-5861.	1.6	33
56	Quasar ionization front Ly α emission in an inhomogeneous intergalactic medium. Monthly Notices of the Royal Astronomical Society, 2016, 457, 3006-3023.	1.6	32
57	Reionization and the large-scale 21-cm cosmic microwave background cross-correlation. Monthly Notices of the Royal Astronomical Society, 2008, 384, 291-304.	1.6	28
58	The 21-cm Line as a Probe of Reionization. Astrophysics and Space Science Library, 2016, , 247-280.	1.0	28
59	The effect of fluctuations on the helium-ionizing background. Monthly Notices of the Royal Astronomical Society, 2014, 437, 1141-1154.	1.6	23
60	A self-consistent 3D model of fluctuations in the helium-ionizing background. Monthly Notices of the Royal Astronomical Society, 2017, 465, 2886-2894.	1.6	22
61	Revealing the formation histories of the first stars with the cosmic near-infrared background. Monthly Notices of the Royal Astronomical Society, 2021, 508, 1954-1972.	1.6	21
62	The HERA-19 Commissioning Array: Direction-dependent Effects. Astrophysical Journal, 2019, 882, 58.	1.6	20
63	The Predicament of Absorption-dominated Reionization: Increased Demands on Ionizing Sources. Astrophysical Journal Letters, 2021, 918, L35.	3.0	20
64	Bursty star formation during the Cosmic Dawn driven by delayed stellar feedback. Monthly Notices of the Royal Astronomical Society, 2022, 511, 3895-3909.	1.6	20
65	Fossil Ionized Bubbles around Dead Quasars during Reionization. Astrophysical Journal, 2008, 686, 25-40.	1.6	18
66	Detection of cosmic structures using the bispectrum phase. II. First results from application to cosmic reionization using the Hydrogen Epoch of Reionization Array. Physical Review D, 2020, 102, .	1.6	17
67	Constraints on the End of Reionization from the Density Fields Surrounding Two Highly Opaque Quasar Sightlines. Astrophysical Journal, 2021, 923, 87.	1.6	17
68	Deep Realistic Extragalactic Model (DREaM) Galaxy Catalogs: Predictions for a Roman Ultra-deep Field. Astrophysical Journal, 2022, 926, 194.	1.6	16
69	A flexible analytic model of cosmic variance in the first billion years. Monthly Notices of the Royal Astronomical Society, 2020, 499, 2401-2415.	1.6	14
70	The Detection of Ionized Carbon Emission at $z \approx 8^*$. Astrophysical Journal Letters, 2021, 917, L36.	3.0	13
71	Quasi-equilibrium models of high-redshift disc galaxy evolution. Monthly Notices of the Royal Astronomical Society, 2020, 500, 3394-3412.	1.6	11
72	Validation of the HERA Phase I Epoch of Reionization 21 cm Power Spectrum Software Pipeline. Astrophysical Journal, 2022, 924, 85.	1.6	11

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73	The flatness and sudden evolution of the intergalactic ionizing background. Monthly Notices of the Royal Astronomical Society, 2016, 455, 1385-1397.	1.6	10
74	Semi-numeric simulations of helium reionization and the fluctuating radiation background. Monthly Notices of the Royal Astronomical Society, 2014, 440, 987-1001.	1.6	9
75	Faint AGN in $z \approx 6$ Lyman-break galaxies powered by cold accretion and rapid angular momentum transport. Monthly Notices of the Royal Astronomical Society, 2012, 426, 3477-3489.	1.6	7
76	Improved treatments of the ionizing photon mean free path in seminumerical simulations of reionization. Monthly Notices of the Royal Astronomical Society, 2022, 514, 1302-1314.	1.6	6
77	A galaxy-free phenomenological model for the 21-cm power spectrum during reionization. Monthly Notices of the Royal Astronomical Society, 2022, 514, 2010-2030.	1.6	5
78	The kinetic Sunyaev-Zeldovich effect from reionization. New Astronomy Reviews, 2006, 50, 84-88.	5.2	4
79	A framework for simultaneously measuring field densities and the high- z luminosity function. Monthly Notices of the Royal Astronomical Society, 2022, 510, 4844-4856.	1.6	4
80	Bubble, bubble, toil, and trouble: 21cm measurements of the high-redshift universe. New Astronomy Reviews, 2006, 50, 157-161.	5.2	3
81	Effects of model incompleteness on the drift-scan calibration of radio telescopes. Monthly Notices of the Royal Astronomical Society, 2021, 506, 4578-4592.	1.6	2
82	Automated Detection of Antenna Malfunctions in Large N Interferometers: A Case Study With the Hydrogen Epoch of Reionization Array. Radio Science, 2022, 57, .	0.8	2
83	The Intergalactic Medium at High Redshifts. Thirty Years of Astronomical Discovery With UKIRT, 2009, , 357-384.	0.3	0
84	MAPPING THE COSMIC DAWN. , 2011, , 139-171.		0