Steven R Furlanetto

List of Publications by Year
in descending order

84 papers	8,583 citations	61945 43 h-index	58549 82 g-index
85 all docs	85 docs citations	85 times ranked	2930 citing authors

#	Article	IF	Citations
1	Automated Detection of Antenna Malfunctions in Largeâ€N Interferometers: A Case Study With the Hydrogen Epoch of Reionization Array. Radio Science, 2022, 57, .	0.8	2
2	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
3	Validation of the HERA Phase I Epoch of Reionization 21 cm Power Spectrum Software Pipeline. Astrophysical Journal, 2022, 924, 85.	1.6	11
4	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
5	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
6	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
7	Deep Realistic Extragalactic Model (DREaM) Galaxy Catalogs: Predictions for a Roman Ultra-deep Field. Astrophysical Journal, 2022, 926, 194.	1.6	16
8	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
9	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
10	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
11	The Detection of Ionized Carbon Emission at z âˆ¼ 8*. Astrophysical Journal Letters, 2021, 917, L36.	3.0	13
12	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
13	The Predicament of Absorption-dominated Reionization: Increased Demands on Ionizing Sources. Astrophysical Journal Letters, 2021, 918, L35.	3.0	20
14	Constraints on the End of Reionization from the Density Fields Surrounding Two Highly Opaque Quasar Sightlines. Astrophysical Journal, 2021, 923, 87.	1.6	17
15	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
16	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
17	The effects of population III radiation backgrounds on the cosmological 21-cm signal. Monthly Notices of the Royal Astronomical Society, 2020, 493, 1217-1226.	1.6	52
18	Redundant-baseline calibration of the hydrogen epoch of reionization array. Monthly Notices of the Royal Astronomical Society, 2020, 499, 5840-5861.	1.6	33

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19	Quasi-equilibrium models of high-redshift disc galaxy evolution. Monthly Notices of the Royal Astronomical Society, 2020, 500, 3394-3412.	1.6	11
20	The HERA-19 Commissioning Array: Direction-dependent Effects. Astrophysical Journal, 2019, 882, 58.	1.6	20
21	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
22	Large fluctuations in the high-redshift metagalactic ionizing background. Monthly Notices of the Royal Astronomical Society, 2018, 473, 560-575.	1.6	99
23	Determining the Nature of Late Gunnâ€“Peterson Troughs with Galaxy Surveys. Astrophysical Journal, 2018, 860, 155.	1.6	33
24	The Persistence of Population III Star Formation. Monthly Notices of the Royal Astronomical Society, 2018, 479, 4544-4559.	1.6	43
25	Unique signatures of Population III stars in the global 21-cm signal. Monthly Notices of the Royal Astronomical Society, 2018, 478, 5591-5606.	1.6	46
26	Evidence for Large-scale Fluctuations in the Metagalactic Ionizing Background Near Redshift Six. Astrophysical Journal, 2018, 863, 92.	1.6	65
27	A Space-based Observational Strategy for Characterizing the First Stars and Galaxies Using the Redshifted 21 cm Global Spectrum. Astrophysical Journal, 2017, 844, 33.	1.6	33
28	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
29	The global 21-cm signal in the context of the high-zgalaxy luminosity function. Monthly Notices of the Royal Astronomical Society, 2017, 464, 1365-1379.	1.6	95
30	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
31	The distribution of bubble sizes during reionization. Monthly Notices of the Royal Astronomical Society, 2016, 461, 3361-3374.	1.6	40
32	Quasar ionization front LyÎ± emission in an inhomogeneous intergalactic medium. Monthly Notices of the Royal Astronomical Society, 2016, 457, 3006-3023.	1.6	32
33	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
34	The flatness and sudden evolution of the intergalactic ionizing background. Monthly Notices of the Royal Astronomical Society, 2016, 455, 1385-1397.	1.6	10
35	Reionization through the lens of percolation theory. Monthly Notices of the Royal Astronomical Society, 2016, 457, 1813-1827.	1.6	44
36	The 21-cm Line as a Probe of Reionization. Astrophysics and Space Science Library, 2016, , 247-280.	1.0	28

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37	PAPER-64 CONSTRAINTS ON REIONIZATION. II. THE TEMPERATURE OF THEz= 8.4 INTERGALACTIC MEDIUM. Astrophysical Journal, 2015, 809, 62.	1.6	79
38	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
39	The effect of fluctuations on the helium-ionizing background. Monthly Notices of the Royal Astronomical Society, 2014, 437, 1141-1154.	1.6	23
40	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
41	THE UV LUMINOSITY FUNCTION OF STAR-FORMING GALAXIES VIA DROPOUT SELECTION AT REDSHIFTSzâˆ¼ 7 AND 8 FROM THE 2012 ULTRA DEEP FIELD CAMPAIGN. Astrophysical Journal, 2013, 768, 196.	1.6	210
42	NEW CONSTRAINTS ON COSMIC REIONIZATION FROM THE 2012 HUBBLE ULTRA DEEP FIELD CAMPAIGN. Astrophysical Journal, 2013, 768, 71.	1.6	428
43	THE 2012 HUBBLE ULTRA DEEP FIELD (UDF12): OBSERVATIONAL OVERVIEW. Astrophysical Journal, Supplement Series, 2013, 209, 3.	3.0	132
44	Faint AGN inzâ‰³ 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
45	Fluctuations in the high-redshift Lyman-Werner and LyÎ± radiation backgrounds. Monthly Notices of the Royal Astronomical Society, 2012, 419, 718-731.	1.6	39
46	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
47	MAPPING THE COSMIC DAWN. , 2011, , 139-171.		0
48	Secondary ionization and heating by fast electrons. Monthly Notices of the Royal Astronomical Society, 2010, , .	1.6	67
49	FLUCTUATIONS IN THE IONIZING BACKGROUND DURING AND AFTER HELIUM REIONIZATION. Astrophysical Journal, 2009, 703, 702-716.	1.6	35
50	THE TEMPERATURE-DENSITY RELATION OF THE INTERGALACTIC MEDIUM AFTER HYDROGEN REIONIZATION. Astrophysical Journal, 2009, 701, 94-104.	1.6	55
51	THE EVOLUTION OF THE HELIUM-IONIZING BACKGROUND ATzâˆ¼ 2-3. Astrophysical Journal, 2009, 706, 970-979.	1.6	33
52	PROBING REIONIZATION WITH THE 21 CM GALAXY CROSS-POWER SPECTRUM. Astrophysical Journal, 2009, 690, 252-266.	1.6	93
53	The ionizing background at the end of reionization. Monthly Notices of the Royal Astronomical Society, 2009, 394, 1667-1673.	1.6	43
54	The inhomogeneous ionizing background following reionization. Monthly Notices of the Royal Astronomical Society, 2009, 400, 1461-1471.	1.6	41

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55	Photoheating and the fate of hard photons during the reionization of Heâ€ƒii by quasars. Monthly Notices of the Royal Astronomical Society, 2009, 395, 736-752.	1.6	54
56	The Intergalactic Medium at High Redshifts. Thirty Years of Astronomical Discovery With UKIRT, 2009, , 357-384.	0.3	0
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	LyÎ± damping wing constraints on inhomogeneous reionization. Monthly Notices of the Royal Astronomical Society, 2008, 385, 1348-1358.	1.6	64
59	LyÎ± emitters during the early stages of reionization. Monthly Notices of the Royal Astronomical Society, 2008, 386, 1990-2002.	1.6	81
60	Inhomogeneous Helium Reionization and the Equation of State of the Intergalactic Medium. Astrophysical Journal, 2008, 682, 14-28.	1.6	38
61	Fossil Ionized Bubbles around Dead Quasars during Reionization. Astrophysical Journal, 2008, 686, 25-40.	1.6	18
62	The History and Morphology of Helium Reionization. Astrophysical Journal, 2008, 681, 1-17.	1.6	79
63	Efficient Simulations of Early Structure Formation and Reionization. Astrophysical Journal, 2007, 669, 663-675.	1.6	353
64	The Crossâ€Correlation of Highâ€Redshift 21 cm and Galaxy Surveys. Astrophysical Journal, 2007, 660, 1030-1038.	1.6	49
65	Simulations and Analytic Calculations of Bubble Growth during Hydrogen Reionization. Astrophysical Journal, 2007, 654, 12-26.	1.6	273
66	21-cm fluctuations from inhomogeneous X-ray heating before reionization. Monthly Notices of the Royal Astronomical Society, 2007, 376, 1680-1694.	1.6	218
67	Effects of dark matter decay and annihilation on the high-redshift 21Âcm background. Physical Review D, 2006, 74, .	1.6	97
68	Have We Detected Patchy Reionization in Quasar Spectra?. Astrophysical Journal, 2006, 639, L47-L50.	1.6	63
69	Characteristic scales during reionization. Monthly Notices of the Royal Astronomical Society, 2006, 365, 115-126.	1.6	103
70	The 21-cm forest. Monthly Notices of the Royal Astronomical Society, 2006, 370, 1867-1875.	1.6	34
71	The kinetic Sunyaevâ€“Zelâ€™dovich effect from reionization. New Astronomy Reviews, 2006, 50, 84-88.	5.2	4
72	Cosmology at low frequencies: The 21cm transition and the high-redshift Universe. Physics Reports, 2006, 433, 181-301.	10.3	1,059

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73	Bubble, bubble, toil, and trouble: 21cm measurements of the high-redshift universe. New Astronomy Reviews, 2006, 50, 157-161.	5.2	3
74	Cosmological Parameter Estimation Using 21 cm Radiation from the Epoch of Reionization. Astrophysical Journal, 2006, 653, 815-834.	1.6	385
75	The Kinetic Sunyaevâ€Zelâ€™dovich Effect from Reionization. Astrophysical Journal, 2005, 630, 643-656.	1.6	125
76	LyÎ± Emission from Structure Formation. Astrophysical Journal, 2005, 622, 7-27.	1.6	114
77	How Universal is the Gunn-Peterson Trough at z â€‰~â€‰6?: A Closer Look at the Quasar SDSS J1148+5251. Astrophysical Journal, 2005, 620, L9-L12.	1.6	54
78	Is Double Reionization Physically Plausible?. Astrophysical Journal, 2005, 634, 1-13.	1.6	70
79	Taxing the rich: recombinations and bubble growth during reionization. Monthly Notices of the Royal Astronomical Society, 2005, 363, 1031-1048.	1.6	176
80	Observing the reionization epoch through 21-centimetre radiation. Monthly Notices of the Royal Astronomical Society, 2004, 347, 187-195.	1.6	90
81	Statistical Probes of Reionization with 21 Centimeter Tomography. Astrophysical Journal, 2004, 613, 16-22.	1.6	177
82	21 Centimeter Fluctuations from Cosmic Gas at High Redshifts. Astrophysical Journal, 2004, 608, 622-635.	1.6	368
83	The Growth of HiiRegions During Reionization. Astrophysical Journal, 2004, 613, 1-15.	1.6	508
84	Largeâ€Scale Structure Shocks at Low and High Redshifts. Astrophysical Journal, 2004, 611, 642-654.	1.6	70