Volker Bromm

List of Publications by Year in descending order

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		126907	76900
89	5,944	33	74
papers	citations	h-index	g-index
90	90	90	2439
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Formation of the First Stars. I. The Primordial Starâ€forming Cloud. Astrophysical Journal, 2002, 564, 23-51.	4.5	853
2	SIMULATIONS ON A MOVING MESH: THE CLUSTERED FORMATION OF POPULATION III PROTOSTARS. Astrophysical Journal, 2011, 737, 75.	4.5	375
3	The First Galaxies. Annual Review of Astronomy and Astrophysics, 2011, 49, 373-407.	24.3	361
4	Generic Spectrum and Ionization Efficiency of a Heavy Initial Mass Function for the First Stars. Astrophysical Journal, 2001, 552, 464-472.	4.5	356
5	The Formation and Fragmentation of Disks Around Primordial Protostars. Science, 2011, 331, 1040-1042.	12.6	320
6	The first stars: formation of binaries and small multiple systems. Monthly Notices of the Royal Astronomical Society, 2010, 403, 45-60.	4.4	297
7	The formation of the first stars and galaxies. Nature, 2009, 459, 49-54.	27.8	275
8	Formation and evolution of primordial protostellar systems. Monthly Notices of the Royal Astronomical Society, 2012, 424, 399-415.	4.4	271
9	Formation of the first stars. Reports on Progress in Physics, 2013, 76, 112901.	20.1	246
10	THE FIRST GALAXIES: CHEMICAL ENRICHMENT, MIXING, AND STAR FORMATION. Astrophysical Journal, 2010, 716, 510-520.	4.5	208
11	The first galaxies: assembly, cooling and the onset of turbulence. Monthly Notices of the Royal Astronomical Society, 2008, 387, 1021-1036.	4.4	192
12	Building up the Population III initial mass function from cosmological initial conditions. Monthly Notices of the Royal Astronomical Society, 2016, 462, 1307-1328.	4.4	176
13	Two populations of metal-free stars in the early Universe. Monthly Notices of the Royal Astronomical Society, 2006, 373, 128-138.	4.4	135
14	EFFECT OF STREAMING MOTION OF BARYONS RELATIVE TO DARK MATTER ON THE FORMATION OF THE FIRST STARS. Astrophysical Journal Letters, 2011, 730, L1.	8.3	120
15	Titans of the early Universe: The Prato statement on the origin of the first supermassive black holes. Publications of the Astronomical Society of Australia, 2019, 36, .	3.4	114
16	The Formation of the First Globular Clusters in Dwarf Galaxies before the Epoch of Reionization. Astrophysical Journal, 2002, 566, L1-L4.	4.5	102
17	CONFINED POPULATION III ENRICHMENT AND THE PROSPECTS FOR PROMPT SECOND-GENERATION STAR FORMATION. Astrophysical Journal, 2012, 761, 56.	4.5	95
18	Radiative feedback from high-mass X-ray binaries on the formation of the first galaxies and early reionization. Monthly Notices of the Royal Astronomical Society, 2014, 440, 3778-3796.	4.4	83

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19	The physics of LymanÂα escape from high-redshift galaxies. Monthly Notices of the Royal Astronomical Society, 2019, 484, 39-59.	4.4	76
20	Formation and survival of Population III stellar systems. Monthly Notices of the Royal Astronomical Society, 2017, 470, 898-914.	4.4	74
21	Star formation in the first galaxies - I. Collapse delayed by Lyman-Werner radiation. Monthly Notices of the Royal Astronomical Society, 2012, 426, 1159-1177.	4.4	72
22	Recovery from Population III supernova explosions and the onset of second-generation star formation. Monthly Notices of the Royal Astronomical Society, 2014, 444, 3288-3300.	4.4	69
23	Metal transport and chemical heterogeneity in early star forming systems. Monthly Notices of the Royal Astronomical Society, 2015, 451, 1190-1198.	4.4	57
24	The Lyman \hat{l}_{\pm} signature of the first galaxies. Monthly Notices of the Royal Astronomical Society, 2015, 449, 4336-4362.	4.4	56
25	Baseline metal enrichment from Population III star formation in cosmological volume simulations. Monthly Notices of the Royal Astronomical Society, 2018, 475, 4396-4410.	4.4	56
26	Impact of cosmic rays on Population III star formation. Monthly Notices of the Royal Astronomical Society, 2007, 382, 229-238.	4.4	48
27	The Population III Origin of GW190521. Astrophysical Journal Letters, 2020, 903, L40.	8.3	46
28	Constraining First Star Formation with 21 cm Cosmology. Astrophysical Journal Letters, 2019, 877, L5.	8.3	44
29	When did PopulationÂlll star formation end?. Monthly Notices of the Royal Astronomical Society, 2020, 497, 2839-2854.	4.4	43
30	Evidence for a direct collapse black hole in the Lyman $\langle i \rangle \hat{l} \pm \langle i \rangle$ source CR7. Monthly Notices of the Royal Astronomical Society, 2016, 460, 3143-3151.	4.4	41
31	Legacy of star formation in the pre-reionization universe. Monthly Notices of the Royal Astronomical Society, 2019, 488, 2202-2221.	4.4	39
32	Exploring the nature of the Lyman- \hat{l}_{\pm} emitter CR7. Monthly Notices of the Royal Astronomical Society, 2016, 462, 2184-2202.	4.4	38
33	Gravitational waves from PopulationÂIII binary black holes formed by dynamical capture. Monthly Notices of the Royal Astronomical Society, 2020, 495, 2475-2495.	4.4	35
34	Detection strategies for the first supernovae with JWST. Monthly Notices of the Royal Astronomical Society, 2018, 479, 2202-2213.	4.4	33
35	Formation of the first low-mass stars from cosmological initial conditions. Monthly Notices of the Royal Astronomical Society: Letters, 2014, 440, L76-L80.	3.3	32
36	Dynamical evolution of population III stellar systems and the resulting binary statistics. Monthly Notices of the Royal Astronomical Society, 2020, 501, 643-663.	4.4	31

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37	Supermassive black holes in the early universe. Contemporary Physics, 2019, 60, 111-126.	1.8	27
38	The first supermassive black holes. Astronomy and Geophysics, 2017, 58, 3.22-3.26.	0.2	25
39	Star formation in the first galaxies $\hat{a} \in \mathbb{N}$ III. Formation, evolution, and characteristics of the first metal-enriched stellar cluster. Monthly Notices of the Royal Astronomical Society, 2016, 455, 3288-3302.	4.4	23
40	The role of faint population III supernovae in forming CEMP stars in ultra-faint dwarf galaxies. Monthly Notices of the Royal Astronomical Society, 2021, 502, 1-14.	4.4	22
41	The Ultimately Large Telescope: What Kind of Facility Do We Need to Detect Population III Stars?. Astrophysical Journal, 2020, 904, 145.	4.5	22
42	Radiative effects during the assembly of direct collapse black holes. Monthly Notices of the Royal Astronomical Society, 2017, 472, 205-216.	4.4	21
43	Low-energy Population III supernovae and the origin of extremely metal-poor stars. Monthly Notices of the Royal Astronomical Society, 2017, 467, 4731-4738.	4.4	21
44	First star formation in ultralight particle dark matter cosmology. Monthly Notices of the Royal Astronomical Society: Letters, 2018, 473, L6-L10.	3.3	21
45	Assembly of supermassive black hole seeds. Monthly Notices of the Royal Astronomical Society, 0, , .	4.4	19
46	Gamma-Ray Bursts and Population III Stars. Space Science Reviews, 2016, 202, 159-180.	8.1	17
47	Angular momentum transfer in primordial discs and the rotation of the first stars. Monthly Notices of the Royal Astronomical Society, 2018, 476, 3964-3973.	4.4	17
48	Signature of the first galaxies in JWST deep field observations. Monthly Notices of the Royal Astronomical Society, 2019, 485, 5939-5950.	4.4	17
49	Warm dark matter constraints from high-z direct collapse black holes using the JWST. Monthly Notices of the Royal Astronomical Society, 2017, 472, 4414-4421.	4.4	16
50	THE ORIGINS AND THE EARLY EVOLUTION OF QUASARS AND SUPERMASSIVE BLACK HOLES. , 2008, , .		16
51	Baryon-dark matter scattering and first star formation. Monthly Notices of the Royal Astronomical Society: Letters, 2018, 480, L85-L89.	3.3	15
52	Dust extinction in the first galaxies. Monthly Notices of the Royal Astronomical Society, 2018, 475, 3883-3888.	4.4	15
53	Highly r-process enhanced stars in ultra-faint dwarf galaxies. Monthly Notices of the Royal Astronomical Society, 2021, 506, 1850-1861.	4.4	15
54	Stellar winds and metal enrichment from fast-rotating PopulationÂIII stars. Monthly Notices of the Royal Astronomical Society, 2021, 506, 5247-5267.	4.4	14

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55	The first stars: formation under cosmic ray feedback. Monthly Notices of the Royal Astronomical Society, 2016, 460, 2432-2444.	4.4	13
56	Discrete diffusion Lyman < i> \hat{l}_{\pm} radiative transfer. Monthly Notices of the Royal Astronomical Society, 2018, 479, 2065-2078.	4.4	13
57	Probing the initial mass function of the first stars with transients. Monthly Notices of the Royal Astronomical Society, 2022, 511, 2505-2514.	4.4	12
58	Global radiation signature from early structure formation. Monthly Notices of the Royal Astronomical Society, 2019, 486, 3617-3635.	4.4	10
59	Minimum star-forming halo mass in axion cosmology. Monthly Notices of the Royal Astronomical Society: Letters, 2018, 481, L69-L73.	3.3	9
60	The Origin and Evolution of LyαÂBlobs in Cosmological Galaxy Formation Simulations. Astrophysical Journal, 2021, 909, 119.	4.5	9
61	Gravitational waves from the remnants of the first stars in nuclear star clusters. Monthly Notices of the Royal Astronomical Society, 2021, 506, 5451-5467.	4.4	9
62	Effect of lithium hydride on the cooling of primordial gas. Monthly Notices of the Royal Astronomical Society, 2018, 476, 1826-1834.	4.4	8
63	Globular Clusters and Streaming Velocities: Testing the New Formation Channel in High-resolution Cosmological Simulations. Astrophysical Journal, 2021, 922, 193.	4.5	8
64	Effects of stellar-mass primordial black holes on first star formation. Monthly Notices of the Royal Astronomical Society, 2022, 514, 2376-2396.	4.4	7
65	Effect of Population III multiplicity on dark star formation. Monthly Notices of the Royal Astronomical Society, 2012, , no-no.	4.4	6
66	Constraining the non-gravitational scattering of baryons and dark matter with early cosmic structure formation. Monthly Notices of the Royal Astronomical Society, 2019, 487, 4711-4720.	4.4	5
67	Formation of the First Stars. Proceedings of the International Astronomical Union, 2005, 1, 121-128.	0.0	3
68	To Cool or Not to Cool. Science, 2010, 329, 45-46.	12.6	3
69	Imprint of an ancient conflagration. Science, 2014, 345, 868-869.	12.6	3
70	GRB Cosmology and the First Stars. AIP Conference Proceedings, 2006, , .	0.4	2
71	The First Galaxies. Proceedings of the International Astronomical Union, 2008, 4, 337-342.	0.0	2
72	Formation of the first galaxies. , 2012, , .		2

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73	Lessons on early structure formation from a mature galaxy cluster observed at cosmic noon. Monthly Notices of the Royal Astronomical Society, 2020, 495, 1700-1705.	4.4	2
74	Detectability of PopulationÂIII stellar remnants as X-ray binaries from tidal captures in the local Universe. Monthly Notices of the Royal Astronomical Society, 2021, 508, 2169-2178.	4.4	2
75	The First Stars. Proceedings of the International Astronomical Union, 2007, 3, 471-482.	0.0	1
76	The Cosmic Rosetta Stone. Science, 2008, 321, 647-648.	12.6	1
77	Gamma-ray burst cosmology. , 0, , 291-310.		1
78	Embers of the Distant Past. Science, 2012, 338, 1160-1161.	12.6	1
79	From Darkness to Light. Science, 2007, 317, 1511-1512.	12.6	0
80	Stellar Archaeology: Using Metal-Poor Stars to Test Theories of the Early Universe. Proceedings of the International Astronomical Union, 2008, 4, 336-340.	0.0	0
81	The Very First Stars: Formation and Reionization of the Universe. Proceedings of the International Astronomical Union, 2009, 5, 27-33.	0.0	0
82	The Chemical Enrichment of the First Galaxies. , 2010, , .		0
83	Assembly of the First Dwarf Galaxies. , 2010, , .		0
84	The First Stars: Formation of Binaries and Small Multiples. , 2010, , .		0
85	Effects of Turbulence on Zero- and Low-Metallicity Star Formation. , 2010, , .		0
86	Assembly of the first disk galaxies under radiative feedback from pop III stars. , 2012, , .		0
87	Simulating the First Galaxies. Proceedings of the International Astronomical Union, 2012, 8, 3-12.	0.0	0
88	Impact of the First Stars to the First Galaxy Formation. Proceedings of the International Astronomical Union, 2012, 8, 21-21.	0.0	0
89	First Galaxies and Massive Black Hole Seeds. World Scientific Series in Astrophysics, 2018, , 125-145.	1.0	0