Beatriz Barbuy

List of Publications by Year in descending order

96 papers	7,309 citations	87888 38 h-index	54911 84 g-index
97 all docs	97 docs citations	97 times ranked	4207 citing authors

#	Article	IF	Citations
1	First stars V - Abundance patterns from C to Zn and supernova yields in the early Galaxy. Astronomy and Astrophysics, 2004, 416, 1117-1138.	5.1	870
2	VISTA Variables in the Via Lactea (VVV): The public ESO near-IR variability survey of the Milky Way. New Astronomy, 2010, 15, 433-443.	1.8	698
3	THEHUBBLE SPACE TELESCOPEUV LEGACY SURVEY OF GALACTIC GLOBULAR CLUSTERS. I. OVERVIEW OF THE PROJECT AND DETECTION OF MULTIPLE STELLAR POPULATIONS. Astronomical Journal, 2015, 149, 91.	4.7	395
4	First stars. I. The extremer-element rich, iron-poor halo giant CSÂ31082-001. Astronomy and Astrophysics, 2002, 387, 560-579.	5.1	392
5	TheHubble Space TelescopeUV Legacy Survey of Galactic globular clusters â€“ IX. The Atlas of multiple stellar populations. Monthly Notices of the Royal Astronomical Society, 2017, 464, 3636-3656.	4.4	328
6	VVV DR1: The first data release of the Milky Way bulge and southern plane from the near-infrared ESO public survey VISTA variables in the VÃa LÃ¡ctea. Astronomy and Astrophysics, 2012, 537, A107.	5.1	312
7	A library of high resolution synthetic stellar spectra from 300Ânm to 1.8Â${m mu}$m with solar andÎ±-enhanced composition. Astronomy and Astrophysics, 2005, 443, 735-746.	5.1	305
8	TheHubble Space TelescopeUV Legacy Survey of Galactic Globular Clusters â€“ V. Constraints on formation scenarios. Monthly Notices of the Royal Astronomical Society, 2015, 454, 4197-4207.	4.4	253
9	Near-coeval formation of the Galactic bulge and halo inferred from globular cluster ages. Nature, 1995, 377, 701-704.	27.8	246
10	First stars. Astronomy and Astrophysics, 2007, 476, 935-950.	5.1	242
11	First stars XII. Abundances in extremely metal-poor turnoff stars, and comparison with the giants. Astronomy and Astrophysics, 2009, 501, 519-530.	5.1	170
12	Oxygen, sodium, magnesium, and aluminium as tracers of the galactic bulge formation. Astronomy and Astrophysics, 2007, 465, 799-814.	5.1	160
13	Chemodynamical History of the Galactic Bulge. Annual Review of Astronomy and Astrophysics, 2018, 56, 223-276.	24.3	152
14	The Hubble Space Telescope UV legacy survey of galactic globular clusters â€“ XVI. The helium abundance of multiple populations. Monthly Notices of the Royal Astronomical Society, 2018, 481, 5098-5122.	4.4	146
15	Both accurate and precisegf-values for Feâ€‰ II lines. Astronomy and Astrophysics, 2009, 497, 611-617.	5.1	138
16	Globular cluster system and Milky Way properties revisited. Astronomy and Astrophysics, 2006, 450, 105-115.	5.1	134
17	From the bulge to the outer disc: StarHorse stellar parameters, distances, and extinctions for stars in APOGEE DR16 and other spectroscopic surveys. Astronomy and Astrophysics, 2020, 638, A76.	5.1	116
18	Imprints of fast-rotating massive stars in the Galactic Bulge. Nature, 2011, 472, 454-457.	27.8	108

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19	Oscillator Strengths and Damping Constants for Atomic Lines in the J and H Bands. Astrophysical Journal, Supplement Series, 1999, 124, 527-546.	7.7	93
20	First stars. Astronomy and Astrophysics, 2013, 550, A122.	5.1	70
21	Homogeneous metallicities and radial velocities for Galactic globular clusters. Astronomy and Astrophysics, 2012, 540, A27.	5.1	68
22	Globular Clusters in the Galactic Bulge. Publications of the Astronomical Society of Australia, 2016, 33, .	3.4	65
23	High-resolution abundance analysis of very metal-poor r-I stars. Astronomy and Astrophysics, 2014, 565, A93.	5.1	64
24	A grid of synthetic spectra and indices Fe5270, Fe5335, Mgb and Mg$_mathsf{2}$ as a function of stellar parameters and [$mathsf{alpha}$/Fe]. Astronomy and Astrophysics, 2003, 404, 661-668.	5.1	63
25	Distances of the bulge globular clusters TerzanÂ5, LillerÂ1, UKSÂ1, and TerzanÂ4 based on HST NICMOS photometry. Astronomy and Astrophysics, 2007, 470, 1043-1049.	5.1	62
26	FORS2/VLT survey of Milky Way globular clusters. Astronomy and Astrophysics, 2016, 590, A9.	5.1	62
27	The FeH Wingâ€Ford Band in Spectra of M Stars. Astrophysical Journal, 1997, 484, 499-510.	4.5	61
28	Discovery of VVVÂCL001. Astronomy and Astrophysics, 2011, 527, A81.	5.1	60
29	Keck NIRSPEC Infrared OH Lines: Oxygen Abundances in Metalâ€poor Stars down to [Fe/H] = â^'2.9. Astrophysical Journal, 2002, 575, 474-483.	4.5	59
30	Gemini-Phoenix infrared high-resolution abundance analysis ofÂfiveÂgiants in the bulge globular cluster NGCÂ6553. Astronomy and Astrophysics, 2003, 411, 417-426.	5.1	55
31	Oxygen Abundances in Metalâ€poor Stars (â^'2.2â€‰<â€‰[Fe/H]â€‰<â€‰â^'1.2) from Infrared OH Lines. Astrophysical Journal, 2001, 556, 858-871.	4.5	51
32	Proper motions and kinematics of selected bulge globular clusters. Monthly Notices of the Royal Astronomical Society, 2015, 450, 3270-3288.	4.4	48
33	High-resolution abundance analysis of red giants in the globular cluster NGC 6522. Astronomy and Astrophysics, 2014, 570, A76.	5.1	48
34	Ages of the Bulge Globular Clusters NGC 6522 and NGC 6626 (M28) from HST Proper-motion-cleaned Colorâ€"Magnitude Diagrams*. Astrophysical Journal, 2018, 853, 15.	4.5	45
35	VLT-UVES analysis of 5 giants in 47 Tucanae. Astronomy and Astrophysics, 2005, 435, 657-667.	5.1	45
36	VLT-UVES analysis of two giants in the bulge metal-poor globular cluster HP-1. Astronomy and Astrophysics, 2006, 449, 349-358.	5.1	42

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37	NGC 6558: A Blue Horizontal Branch Moderately Metal-Poor Globular Cluster in the Bulge. Astronomical Journal, 2007, 134, 1613-1625.	4.7	42
38	The Hubble Space Telescope UV Legacy Survey of Galactic Globular Clusters â€“ XII. The RGB bumps of multiple stellar populations. Monthly Notices of the Royal Astronomical Society, 2018, 475, 4088-4103.	4.4	40
39	First stars. Astronomy and Astrophysics, 2011, 534, A60.	5.1	36
40	A deep view of a fossil relic in the Galactic bulge: the Globular Cluster HPâ€‰1. Monthly Notices of the Royal Astronomical Society, 2019, 484, 5530-5550.	4.4	34
41	Abundance patterns of the light neutron-capture elements in very and extremely metal-poor stars. Astronomy and Astrophysics, 2018, 611, A30.	5.1	31
42	An Updated Small Magellanic Cloud and Magellanic Bridge Catalog of Star Clusters, Associations, and Related Objects. Astronomical Journal, 2020, 159, 82.	4.7	31
43	High-resolution abundance analysis of red giants in the metal-poor bulge globular cluster HP 1. Astronomy and Astrophysics, 2016, 591, A53.	5.1	30
44	The Temperature Scale of Metalâ€rich M Giants Based on TiO Bands: Population Synthesis in the Nearâ€Infrared. Astrophysical Journal, 1999, 510, 934-943.	4.5	30
45	SMC west halo: a slice of the galaxy that is being tidally stripped?. Astronomy and Astrophysics, 2016, 591, A11.	5.1	29
46	HP 1: a blue horizontal branch globular cluster in the bulge. Monthly Notices of the Royal Astronomical Society, 1997, 284, 692-698.	4.4	28
47	Globular clusters in the inner Galaxy classified from dynamical orbital criteria. Monthly Notices of the Royal Astronomical Society, 0, , .	4.4	26
48	Homogeneous metallicities and radial velocities for Galactic globular clusters. Astronomy and Astrophysics, 2018, 619, A13.	5.1	25
49	Self-consistent Analysis of Stellar Clusters: An Application to HST Data of the Halo Globular Cluster NGC 6752. Astrophysical Journal, 2020, 890, 38.	4.5	25
50	VVV CL001: Likely the Most Metal-poor Surviving Globular Cluster in the Inner Galaxy. Astrophysical Journal Letters, 2021, 908, L42.	8.3	25
51	Self-consistent physical parameters for five intermediate-age SMC stellar clusters from CMD modelling. Astronomy and Astrophysics, 2014, 561, A106.	5.1	24
52	FORS2/VLT survey of Milky Way globular clusters. Astronomy and Astrophysics, 2015, 573, A13.	5.1	24
53	High-resolution abundance analysis of HD 140283. Astronomy and Astrophysics, 2015, 584, A86.	5.1	24
54	[ITAL]VI[/ITAL] Photometry of the Postâ€“Core-Collapse Globular Cluster NGC 6558 and the Adjacent Bulge Field Population. Astronomical Journal, 1998, 116, 1295-1300.	4.7	23

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55	Iron-peak elements Sc, V, Mn, Cu, and Zn in Galactic bulge globular clusters. Astronomy and Astrophysics, 2018, 616, A18.	5.1	23
56	The VISCACHA survey â€“ I. Overview and first results. Monthly Notices of the Royal Astronomical Society, 2019, 484, 5702-5722.	4.4	22
57	The Hubble Space Telescope UV Legacy Survey of Galactic Globular Clusters. XX. Ages of Single and Multiple Stellar Populations in Seven Bulge Globular Clusters. Astrophysical Journal, 2020, 891, 37.	4.5	22
58	APOGEE spectroscopic evidence for chemical anomalies in dwarf galaxies: The case of M 54 and Sagittarius. Astronomy and Astrophysics, 2021, 648, A70.	5.1	22
59	The enigmatic globular cluster UKS 1 obscured by the bulge: H-band discovery of nitrogen-enhanced stars. Astronomy and Astrophysics, 2020, 643, A145.	5.1	22
60	AL 3 (BH 261): A New Globular Cluster in the Galaxy. Astrophysical Journal, 2006, 646, L115-L118.	4.5	21
61	High-resolution abundance analysis of four red giants in the globular cluster NGC 6558. Astronomy and Astrophysics, 2018, 619, A178.	5.1	21
62	Oxygen and zinc abundances in 417 Galactic bulge red giants. Astronomy and Astrophysics, 2018, 614, A149.	5.1	21
63	Orbits of Selected Globular Clusters in the Galactic Bulge. Publications of the Astronomical Society of Australia, 2018, 35, .	3.4	21
64	APOGEE discovery of a chemically atypical star disrupted from NGC 6723 and captured by the Milky Way bulge. Astronomy and Astrophysics, 2021, 647, A64.	5.1	20
65	Discovery of a Large Population of Nitrogen-enhanced Stars in the Magellanic Clouds. Astrophysical Journal Letters, 2020, 903, L17.	8.3	20
66	Trans-iron Ge, As, Se, and heavier elements in the dwarf metal-poor stars HD 19445, HD 84937, HD 94028, HD 140283, and HD 160617. Astronomy and Astrophysics, 2020, 638, A64.	5.1	18
67	VVVGaia discovery of a low luminosity globular cluster in the Milky Way disk. Astronomy and Astrophysics, 2020, 642, L19.	5.1	18
68	Bridge over troubled gas: clusters and associations under the SMC and LMC tidal stresses. Monthly Notices of the Royal Astronomical Society, 2015, 453, 3191-3203.	4.4	17
69	Looking for imprints of the first stellar generations in metal-poor bulge field stars. Astronomy and Astrophysics, 2016, 593, A79.	5.1	17
70	Another relic bulge globular cluster: ESO 456-SC38 (Djorgovski 2). Astronomy and Astrophysics, 2019, 627, A145.	5.1	16
71	CAPOS: The bulge Cluster APOgee Survey. Astronomy and Astrophysics, 2021, 652, A157.	5.1	16
72	Abundances of the light elements from UV (HST) and red (ESO) spectra in the very old star HD 84937. Astronomy and Astrophysics, 2017, 600, A26.	5.1	15

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73	Calculation of molecular line intensity in stellar atmospheres. Publications of the Astronomical Society of Australia, 2018, 35, .	3.4	15
74	The VISCACHA survey. Astronomy and Astrophysics, 2021, 647, L9.	5.1	15
75	CAPOS: The bulge Cluster APOgee Survey. Astronomy and Astrophysics, 2021, 652, A158.	5.1	13
76	SOARBVIphotometry of the metal-poor bulge globular cluster NGCÂ6642. Astronomy and Astrophysics, 2006, 449, 1019-1024.	5.1	13
77	The VISCACHA survey â€“ IV. The SMC West Halo in 8D. Monthly Notices of the Royal Astronomical Society, 2022, 512, 4334-4351.	4.4	13
78	Galactic ArchaeoLogIcaL ExcavatiOns (GALILEO). Astronomy and Astrophysics, 2022, 663, A126.	5.1	13
79	Colour-magnitude diagrams of the post-core collapse globular clusters NGC 6256 and NGC 6717 (Palomar 9). Astronomy and Astrophysics, 1999, 136, 237-243.	2.1	12
80	V, I photometry of the bulge metal-rich globular clusters NGC 6380 and Terzan 12. Astronomy and Astrophysics, 1998, 127, 471-477.	2.1	11
81	APOGEE-2S Discovery of Light- and Heavy-element Abundance Correlations in the Bulge Globular Cluster NGC 6380. Astrophysical Journal Letters, 2021, 918, L9.	8.3	9
82	Photo-chemo-dynamical analysis and the origin of the bulge globular cluster, Palomar 6. Astronomy and Astrophysics, 0, , .	5.1	9
83	CAPOS: The bulge Cluster APOgee Survey. Astronomy and Astrophysics, 2022, 658, A116.	5.1	8
84	UVES analysis of red giants in the bulge globular cluster NGC 6522. Astronomy and Astrophysics, 2021, 654, A29.	5.1	7
85	APOGEE-2 Discovery of a Large Population of Relatively High-metallicity Globular Cluster Debris. Astrophysical Journal Letters, 2021, 918, L37.	8.3	7
86	Gemini/Phoenix H-band analysis of the globular cluster AL 3. Astronomy and Astrophysics, 2021, 648, A16.	5.1	6
87	FSR 1776: A new globular cluster in the Galactic bulge?. Astronomy and Astrophysics, 2022, 657, A67.	5.1	5
88	Crisis in Brazil. Science, 2018, 361, 1293-1293.	12.6	4
89	Cobalt and copper abundances in 56 Galactic bulge red giants. Astronomy and Astrophysics, 2020, 640, A89.	5.1	4
90	Be, V, and Cu in the halo star CSÂ31082-001 from near-UV spectroscopy. Monthly Notices of the Royal Astronomical Society, 2022, 510, 5362-5375.	4.4	4

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91	Abundances from integrated spectra of 47 Tucanae (NGC 104). Monthly Notices of the Royal Astronomical Society, 2020, 498, 5834-5854.	4.4	3
92	Precise distances from OGLE-IV member RR Lyrae stars in six bulge globular clusters. Astronomy and Astrophysics, 0, , .	5.1	3
93	APOGEE-2S Mgâ€“Al anti-correlation of the metal-poor globular cluster NGC 2298. Astronomy and Astrophysics, 2022, 662, A47.	5.1	3
94	Symposium summary: stellar populations in bulges. Proceedings of the International Astronomical Union, 2007, 3, 459-462.	0.0	2
95	Simulated observations of heavy elements with CUBES. Experimental Astronomy, 0, , 1.	3.7	2
96	Integrated Spectra of Milky Way Globular Clusters. Astrophysical Journal, 2019, 885, 28.	4.5	1