

# Jorge Garc a-Rojas

## List of Publications by Year in descending order

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93  
papers

2,792  
citations

186265

28  
h-index

189892

50  
g-index

94  
all docs

94  
docs citations

94  
times ranked

1751  
citing authors

#	ARTICLE	IF	CITATIONS
1	A reappraisal of the chemical composition of the Orion nebula based on Very Large Telescope echelle spectrophotometry. <i>Monthly Notices of the Royal Astronomical Society</i> , 2004, 355, 229-247.	4.4	232
2	KECK HIRES SPECTROSCOPY OF EXTRAGALACTIC H II REGIONS: C AND O ABUNDANCES FROM RECOMBINATION LINES. <i>Astrophysical Journal</i> , 2009, 700, 654-678.	4.5	156
3	On the Abundance Discrepancy Problem in H<sup>ii</sup> Regions. <i>Astrophysical Journal</i> , 2007, 670, 457-470.	4.5	153
4	Carbon and Oxygen Galactic Gradients: Observational Values from H ii Region Recombination Lines. <i>Astrophysical Journal</i> , 2005, 618, L95-L98.	4.5	120
5	The Localized Chemical Pollution in NGC 5253 Revisited: Results from Deep Echelle Spectrophotometry. <i>Astrophysical Journal</i> , 2007, 656, 168-185.	4.5	116
6	Carbon, Nitrogen, and Oxygen Galactic Gradients: A Solution to the Carbon Enrichment Problem. <i>Astrophysical Journal</i> , 2005, 623, 213-224.	4.5	101
7	Faint Emission Lines and Temperature Fluctuations in M8. <i>Astrophysical Journal, Supplement Series</i> , 1999, 120, 113-129.	7.7	88
8	Properties of the ionized gas in HH 202 - II. Results from echelle spectrophotometry with Ultraviolet Visual Echelle Spectrograph. <i>Monthly Notices of the Royal Astronomical Society</i> , 2009, 395, 855-876.	4.4	81
9	BINARITY AND THE ABUNDANCE DISCREPANCY PROBLEM IN PLANETARY NEBULAE. <i>Astrophysical Journal</i> , 2015, 803, 99.	4.5	78
10	Faint emission lines in the Galactic H II regions M16, M20 and NGC 3603. <i>Monthly Notices of the Royal Astronomical Society</i> , 2006, 368, 253-279.	4.4	75
11	Carbon and oxygen abundances from recombination lines in low-metallicity star-forming galaxies. Implications for chemical evolution.... <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 443, 624-647.	4.4	74
12	Chemical Abundances of the Galactic H ii Region NGC 3576 Derived from Very Large Telescope Echelle Spectrophotometry. <i>Astrophysical Journal, Supplement Series</i> , 2004, 153, 501-522.	7.7	72
13	Carbon and oxygen in H&#x0002ii regions of the Magellanic Clouds: abundance discrepancy and chemical evolution. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 467, 3759-3774.	4.4	63
14	Deep echelle spectrophotometry of S 311, a Galactic H&#x0002ii region located outside the solar circle. <i>Monthly Notices of the Royal Astronomical Society</i> , 2005, 362, 301-312.	4.4	61
15	Confirmation of the link between central star binarity and extreme abundance discrepancy factors in planetary nebulae. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 480, 4589-4613.	4.4	60
16	Revisiting the radial abundance gradients of nitrogen and oxygen of the Milky Way. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 478, 2315-2336.	4.4	57
17	Carbon and oxygen abundance gradients in NGC&#x0002300 and M33 from optical recombination lines. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 458, 1866-1890.	4.4	54
18	NGC 6778: strengthening the link between extreme abundance discrepancy factors and central star binarity in planetary nebulae. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 455, 3263-3272.	4.4	54

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19	The Galactic radial abundance gradients of C, N, O, Ne, S, Cl, and Ar from deep spectra of H&#iII regions. Monthly Notices of the Royal Astronomical Society, 2020, 496, 1051-1076.	4.4	54
20	NGC 2579 and the carbon and oxygen abundance gradients beyond the solar circle~.... Monthly Notices of the Royal Astronomical Society, 2013, 433, 382-393.	4.4	52
21	Analysis of chemical abundances in planetary nebulae with [WC] central stars. Astronomy and Astrophysics, 2013, 558, A122.	5.1	44
22	The radial abundance gradient of oxygen towards the Galactic anti-centre. Monthly Notices of the Royal Astronomical Society, 2017, 471, 987-1004.	4.4	43
23	Analysis of chemical abundances in planetary nebulae with [WC] central stars. Astronomy and Astrophysics, 2012, 538, A54.	5.1	40
24	IMAGING THE ELUSIVE H-POOR GAS IN THE HIGH adf PLANETARY NEBULA NGC 6778. Astrophysical Journal Letters, 2016, 824, L27.	8.3	37
25	Faint recombination lines in Galactic PNe with a [WC] nucleus. Astronomy and Astrophysics, 2009, 496, 139-152.	5.1	36
26	s-process enrichment in the planetary nebula NGC 3918. Results from deep echelle spectrophotometry. Monthly Notices of the Royal Astronomical Society, 2015, 452, 2606-2640.	4.4	33
27	Small&#Escale Behavior of the Physical Conditions and the Abundance Discrepancy in the Orion Nebula. Astrophysical Journal, 2008, 675, 389-404.	4.5	32
28	Star formation and stellar populations in the Wolf-Rayet(?) luminous compact blue galaxy IRAS 08339+6517. Astronomy and Astrophysics, 2006, 449, 997-1017.	5.1	30
29	The radial abundance gradient of chlorine in the Milky Way. Monthly Notices of the Royal Astronomical Society, 2015, 452, 1553-1560.	4.4	29
30	Chemical behavior of the dwarf irregular galaxy NGC6822. Its PN and HII region abundances. Astronomy and Astrophysics, 2009, 505, 1027-1039.	5.1	26
31	Carbon, nitrogen and oxygen abundance gradients in M101 and M31. Monthly Notices of the Royal Astronomical Society, 0, , .	4.4	25
32	The planetary nebula IPHASXJ211420.0+434136 (Ou5): insights into common-envelope dynamical and chemical evolution. Monthly Notices of the Royal Astronomical Society, 2014, 441, 2799-2808.	4.4	24
33	On the radial abundance gradients of nitrogen and oxygen in the inner Galactic disc. Monthly Notices of the Royal Astronomical Society, 2021, 502, 225-241.	4.4	23
34	The Cocoon nebula and its ionizing star: do stellar and nebular abundances agree?. Astronomy and Astrophysics, 2014, 571, A93.	5.1	23
35	The chemical composition of Galactic ring nebulae around massive stars. Monthly Notices of the Royal Astronomical Society, 2016, 460, 4038-4062.	4.4	22
36	A detailed study of the H&#iII region M&#%43 and its ionizing star. Astronomy and Astrophysics, 2011, 530, A57&#.1	5.1	20

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37	Ionized gas diagnostics from protoplanetary discs in the Orion nebula and the abundance discrepancy problem. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 426, 614-634.	4.4	20
38	Integral field spectroscopy of selected areas of the Bright bar and Orion-S cloud in the Orion nebula~.... <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 417, 420-433.	4.4	19
39	Accretion and outflow in V404 Cyg. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 488, 1356-1365.	4.4	19
40	MUSE spectroscopy of planetary nebulae with high abundance discrepancies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 510, 5444-5463.	4.4	19
41	The planetary nebulae and H $\alpha$ regions in NGC 6822 revisited. Clues to AGB nucleosynthesis. <i>Astronomy and Astrophysics</i> , 2016, 586, A59.	5.1	18
42	The Fe/Ni ratio in ionized nebulae: clues on dust depletion patterns. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 456, 3855-3865.	4.4	18
43	The planetary nebula IC 4776 and its post-common-envelope binary central star. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 471, 3529-3546.	4.4	18
44	Atomic Data Assessment with PyNeb. <i>Atoms</i> , 2020, 8, 66.	1.6	17
45	Gradients of chemical abundances in the Milky Way from H $\alpha$ regions: distances derived from Gaia EDR3 parallaxes and temperature inhomogeneities. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 510, 4436-4455.	4.4	17
46	Properties of the ionized gas in HH 202 - I. Results from integral field spectroscopy with PMAS. <i>Monthly Notices of the Royal Astronomical Society</i> , 2009, 394, 693-703.	4.4	16
47	TEMPERATURE STRUCTURE AND METALLICITY IN H II REGIONS. <i>Astrophysical Journal</i> , 2010, 708, 1551-1559.	4.5	16
48	Neutron-capture Elements in Planetary Nebulae: First Detections of Near-infrared [Te iii] and [Br v] Emission Lines* <sup>â€</sup>. <i>Astrophysical Journal Letters</i> , 2018, 861, L8.	8.3	16
49	C/O ratios in planetary nebulae with dual-dust chemistry from faint optical recombination lines. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 473, 4476-4496.	4.4	15
50	About Metallicity Variations in the Local Galactic Interstellar Medium. <i>Astrophysical Journal</i> , 2022, 931, 92.	4.5	15
51	Identification of Near-infrared [Se iii] and [Kr vi] Emission Lines in Planetary Nebulae<sup>â€</sup>. <i>Astrophysical Journal</i> , 2017, 840, 80.	4.5	14
52	Long-term evolution of the aerosol debris cloud produced by the 2009 impact on Jupiter. <i>Icarus</i> , 2011, 214, 462-476.	2.5	13
53	Recent activity of the Be/X-ray binary system SAX J2103.5+4545. <i>Astronomy and Astrophysics</i> , 2014, 568, A115.	5.1	13
54	THE TRACE OF THE CNO CYCLE IN THE RING NEBULA NGC 6888. <i>Astrophysical Journal</i> , 2014, 785, 100.	4.5	13

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55	Photoionized Herbig-Haro objects in the Orion Nebula through deep high-spectral resolution spectroscopy. I. HH 529 and III. Monthly Notices of the Royal Astronomical Society, 2021, 502, 1703-1739.	4.4	13
56	Neutron-capture element abundances in the planetary nebula NGC 5315 from deep optical and near-infrared spectrophotometry. Monthly Notices of the Royal Astronomical Society, 2017, 471, 1341-1369.	4.4	11
57	First Evidence of Enhanced Recombination in Astrophysical Environments and the Implications for Plasma Diagnostics. Astrophysical Journal Letters, 2019, 887, L9.	8.3	11
58	The post-common-envelope binary central star of the planetary nebula ETHOS 1. Monthly Notices of the Royal Astronomical Society, 2020, 498, 6005-6012.	4.4	11
59	The kinematic behaviour of optical recombination lines and collisionally excited lines in Galactic planetary nebulae. Monthly Notices of the Royal Astronomical Society, 2017, 472, 1182-1194.	4.4	10
60	Helium abundances and its radial gradient from the spectra of H II regions and ring nebulae of the Milky Way. Monthly Notices of the Royal Astronomical Society, 2020, 496, 2726-2742.	4.4	10
61	The post-common-envelope binary central star of the planetary nebula PN G283.7+05.1. Astronomy and Astrophysics, 2020, 642, A108.	5.1	10
62	Exploring the effects of high-velocity flows in abundance determinations in H II regions: bidimensional spectroscopy of HH 204 in the Orion nebula. Monthly Notices of the Royal Astronomical Society, 2012, 421, 3399-3408.	4.4	9
63	Detection of a large Be circumstellar disk during X-ray quiescence of XTE J1946+274. Astronomy and Astrophysics, 2015, 582, A53.	5.1	9
64	MEGARA, the new intermediate-resolution optical IFU and MOS for GTC: getting ready for the telescope. Proceedings of SPIE, 2016, .	0.8	9
65	Photoionized Herbig-Haro Objects in the Orion Nebula through Deep High Spectral Resolution Spectroscopy. II. HH 204. Astrophysical Journal, 2021, 918, 27.	4.5	9
66	MEGARA, the R=6000-20000 IFU and MOS of GTC. , 2018, .		8
67	Spectroscopic analysis tool for integral field unit data cubes (<scp>satellite</scp>): case studies of NGC 7009 and NGC 6778 with MUSE. Monthly Notices of the Royal Astronomical Society, 2022, 512, 2202-2221.	4.4	8
68	The post-common-envelope binary central star of the planetary nebula Ou 5: a doubly eclipsing post-red-giant-branch system. Monthly Notices of the Royal Astronomical Society, 2022, 510, 3102-3110.	4.4	8
69	First scientific observations with MEGARA at GTC. , 2018, .		7
70	Chemistry in the dwarf galaxy Leo A. Monthly Notices of the Royal Astronomical Society, 2018, 481, 396-404.	4.4	6
71	The impact of strong recombination on temperature determination in planetary nebulae. Monthly Notices of the Royal Astronomical Society: Letters, 2020, 498, L82-L86.	3.3	6
72	Deep high spectral resolution spectroscopy and chemical composition of ionized nebulae. Astronomische Nachrichten, 2014, 335, 73-78.	1.2	5

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73	Ionization correction factors for sodium, potassium, and calcium in planetary nebulae. Monthly Notices of the Royal Astronomical Society, 2020, 492, 950-965.	4.4	5
74	On the most luminous planetary nebulae of M 31. Astronomy and Astrophysics, 2022, 657, A71.	5.1	5
75	Photoionized Herbig-Haro objects in the Orion Nebula through deep high-spectral resolution spectroscopy III. HH514. Monthly Notices of the Royal Astronomical Society, 2022, 514, 744-761.	4.4	5
76	Report on the Tenerife Workshop on Uncertainties in Atomic Data and How They Propagate in Chemical Abundances. Proceedings of the International Astronomical Union, 2011, 7, 139-143.	0.0	4
77	A study of extragalactic planetary nebulae populations based on spectroscopy. I. Data compilation and first findings. Monthly Notices of the Royal Astronomical Society, 2020, 498, 5367-5385.	4.4	4
78	Ionized and Neutral Gas in the Starburst Galaxy NGC 5253. Thirty Years of Astronomical Discovery With UKIRT, 2008, , 53-56.	0.3	4
79	Kinematic study of planetary nebulae in NGC 6822. Astronomy and Astrophysics, 2014, 568, A82.	5.1	4
80	Physical Conditions and Chemical Abundances in Photoionized Nebulae from Optical Spectra. , 2020, , 89-121.		3
81	Imaging the elusive H-poor gas in planetary nebulae with large abundance discrepancy factors. Proceedings of the International Astronomical Union, 2016, 12, 65-69.	0.0	2
82	Close binary central stars and the abundance discrepancy - new extreme objects. Proceedings of the International Astronomical Union, 2016, 12, 70-73.	0.0	2
83	Radial metallicity gradients with Galactic nebular probes. Proceedings of the International Astronomical Union, 2018, 14, 240-241.	0.0	2
84	Optical spectroscopy of 4U 1812-12. Astronomy and Astrophysics, 2020, 644, A63.	5.1	2
85	Abundance Analysis of the J4 Equatorial Knot of the Born-again Planetary Nebula A30. Research Notes of the AAS, 2022, 6, 4.	0.7	2
86	IRAS 04000+5052: A Not So Compact, Not So Metal-poor HiiRegion. Publications of the Astronomical Society of the Pacific, 2004, 116, 723-728.	3.1	1
87	Abundances and ADFs in planetary nebulae with [WC] central stars. Proceedings of the International Astronomical Union, 2011, 7, 364-365.	0.0	1
88	The kinematical behavior of ORLs and CELs in PNe with [WC] central star. Proceedings of the International Astronomical Union, 2016, 12, 60-64.	0.0	1
89	The kinematical behavior of Galactic PNe with [WC] central star. Proceedings of the International Astronomical Union, 2011, 7, 478-479.	0.0	0
90	The origin of the most luminous Planetary Nebulae. Proceedings of the International Astronomical Union, 2016, 12, 386-387.	0.0	0

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91	Close Binaries and the Abundance Discrepancy Problem in Planetary Nebulae. <i>Galaxies</i> , 2018, 6, 110.	3.0	0
92	Abundance determinations in the dlrr galaxy Leo A. <i>Proceedings of the International Astronomical Union</i> , 2018, 14, 217-219.	0.0	0
93	Close binaries and common envelopes. <i>Astronomy and Geophysics</i> , 2020, 61, 3.40-3.42.	0.2	0