Juliet C Pickering

List of Publications by Year
in descending order

64 papers	1,070 citations	430874 18 h-index	434195 31 g-index
64 all docs	64 docs citations	64 times ranked	980 citing authors

#	Article	IF	Citations
1	NLTE analysis of CoÃ¢Â€ÂƒiÃ¢Â€Âƒ/CoÃ¢Â€Âƒii lines in spectra of cool stars with new laboratory hyperfine splitting constants. Monthly Notices of the Royal Astronomical Society, 2010, 401, 1334-1346.	4.4	117
2	Fe i oscillator strengths for the Gaia-ESO survey. Monthly Notices of the Royal Astronomical Society, 2014, 441, 3127-3136.	4.4	88
3	Cross Sections and Reaction Rates for Comparative Planetary Aeronomy. Space Science Reviews, 2008, 139, 63-105.	8.1	74
4	Measurements of the Syperfine Structure of Atomic Energy Levels in Co I. Astrophysical Journal, Supplement Series, 1996, 107, 811-822.	7.7	53
5	The Spectrum and Term Analysis of Co I. Astrophysical Journal, Supplement Series, 1996, 107, 761-809.	7.7	49
6	High resolution Fourier transform spectroscopy with the Imperial College (IC) UV-FT spectrometer, and its applications to astrophysics and atmospheric physics: a review. Vibrational Spectroscopy, 2002, 29, 27-43.	2.2	48
7	Hyperfine Structure Measurements of Neutral Manganese with Fourier Transform Spectroscopy. Astrophysical Journal, Supplement Series, 2005, 157, 402-409.	7.7	48
8	The Spectrum and Term Analysis of Coii. Astrophysical Journal, Supplement Series, 1998, 117, 261-311.	7.7	45
9	Goddard Highâ€Resolution Spectrograph Observations of the BiiiResonance Doublet in Early B Stars: Abundances and Isotope Ratios. Astrophysical Journal, 1999, 516, 342-348.	4.5	30
10	Fe i Oscillator Strengths for Transitions from High-lying Odd-parity Levels. Astrophysical Journal, 2017, 848, 125.	4.5	29
11	Experimental Tiâ€ƒi oscillator strengths and their application to cool star analysis. Monthly Notices of the Royal Astronomical Society, 2006, 373, 1603-1609.	4.4	28
12	The effect of hydrogen and nitrogen on emission spectra of iron and titanium atomic lines in analytical glow discharges. Journal of Analytical Atomic Spectrometry, 2008, 23, 1223.	3.0	26
13	Recent advances in measurement of the water vapour continuum in the far-infrared spectral region. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2012, 370, 2637-2655.	3.4	26
14	INFRARED LABORATORY OSCILLATOR STRENGTHS OF Fe I IN THE<i>H</i>-BAND. Astrophysical Journal, 2013, 779, 17.	4.5	26
15	Experimental oscillator strengths for the spectrum of neutral manganese. Monthly Notices of the Royal Astronomical Society, 2005, 361, 1281-1286.	4.4	24
16	Extended Term Analysis of Mo II. Physica Scripta, 2003, 67, 223-233.	2.5	23
17	The role of oxygen in analytical glow discharges: GD-OES and GD-ToF-MS studies. Journal of Analytical Atomic Spectrometry, 2011, 26, 1746.	3.0	20
18	Transition rates and transition rate diagrams in atomic emission spectroscopy: A review. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2015, 110, 79-90.	2.9	18

#	Article	IF	Citations
19	Comparison of a sample containing oxide with a pure sample with argonâ€“oxygen mixtures. Journal of Analytical Atomic Spectrometry, 2012, 27, 1423.	3.0	17
20	Effects of traces of oxygen on Grimm-type glow discharges in argon. Journal of Analytical Atomic Spectrometry, 2011, 26, 766-775.	3.0	16
21	Selective and non-selective excitation/ionization processes in analytical glow discharges: excitation of the ionic spectra in argon/helium mixed plasmas. Journal of Analytical Atomic Spectrometry, 2014, 29, 681.	3.0	16
22	Analysis of 4dâ€“4f Transitions in Co II. Physica Scripta, 1998, 57, 385-394.	2.5	14
23	Transition rate diagrams â€” A new approach to the study of selective excitation processes: The spectrum of manganese in a Grimm-type glow discharge. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2014, 92, 70-83.	2.9	14
24	Asymmetric charge transfer involving the ions of added gases (oxygen or hydrogen) in Grimm-type glow discharges in argon or neon. Journal of Analytical Atomic Spectrometry, 2012, 27, 1264.	3.0	13
25	Effect of small quantities of oxygen in a neon glow discharge. Journal of Analytical Atomic Spectrometry, 2014, 29, 2027-2041.	3.0	13
26	EXPERIMENTALLY MEASURED RADIATIVE LIFETIMES AND OSCILLATOR STRENGTHS IN NEUTRAL VANADIUM. Astrophysical Journal, Supplement Series, 2016, 224, 35.	7.7	13
27	Excitation and transition rate diagrams of singly ionized iron in analytical glow discharges in argon, neon and an argonâ€“hydrogen mixture. Journal of Analytical Atomic Spectrometry, 2014, 29, 2078-2090.	3.0	12
28	Measurements of the Hyperfine Structure of Atomic Energy Levels in Co ii. Astrophysical Journal, Supplement Series, 2020, 251, 24.	7.7	12
29	New atomic data for the thoriumâ€“neodymium stellar chronometer. Monthly Notices of the Royal Astronomical Society, 1995, 274, L37-L42.	4.4	11
30	Retrievals of the Far Infrared Surface Emissivity Over the Greenland Plateau Using the Tropospheric Airborne Fourier Transform Spectrometer (TAFTS). Journal of Geophysical Research D: Atmospheres, 2017, 122, 12,152.	3.3	11
31	Transition rate diagrams and excitation of titanium in a glow discharge in argon and neon. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2018, 144, 20-28.	2.9	11
32	Excitation of higher levels of singly charged copper ions in argon and neon glow discharges. Journal of Analytical Atomic Spectrometry, 2014, 29, 2256-2261.	3.0	10
33	Analysis of far-infrared spectral radiance observations of the water vapor continuum in the Arctic. Journal of Quantitative Spectroscopy and Radiative Transfer, 2015, 155, 57-65.	2.3	10
34	Analysis of the Lowest 4f-5g Supermultiplet of Co II. Physica Scripta, 1998, 58, 457-463.	2.5	9
35	Hyperfine structure constants for singly ionized manganese (Mnâ€‰ii) using Fourier transform spectroscopy. Monthly Notices of the Royal Astronomical Society, 2016, 461, 73-78.	4.4	9
36	A test of the ability of current bulk optical models to represent the radiative properties of cirrus cloud across the mid- and far-infrared. Atmospheric Chemistry and Physics, 2020, 20, 12889-12903.	4.9	9

#	Article	IF	Citations
37	Laboratory Astrophysics: Improving the Atomic Data by Fourier Transform Spectrometry. Physica Scripta, 1999, T83, 27.	2.5	8
38	Enhancement of analyte atomic lines with excitation energies of about 5 eV in the presence of molecular gases in analytical glow discharges. Journal of Analytical Atomic Spectrometry, 2014, 29, 2022-2026.	3.0	8
39	THE SPECTRUM AND TERM ANALYSIS OF CO iii MEASURED USING FOURIER TRANSFORM AND GRATING SPECTROSCOPY. Astrophysical Journal, Supplement Series, 2016, 223, 12.	7.7	7
40	Cirrus Cloud Identification from Airborne Far-Infrared and Mid-Infrared Spectra. Remote Sensing, 2020, 12, 2097.	4.0	7
41	A glow discharge time-of-flight mass spectrometry (GD-TOFMS) study of the â€˜hydrogen effectâ€™ using copper, iron and titanium cathodes. Journal of Analytical Atomic Spectrometry, 2015, 30, 1774-1781.	3.0	6
42	Evidence for charge transfer from hydrogen molecular ions to copper atoms in a neonâ€“hydrogen analytical glow discharge. Journal of Analytical Atomic Spectrometry, 2016, 31, 2175-2181.	3.0	5
43	The Laboratory Astrophysics Spectroscopy Programme at Imperial College London. Galaxies, 2018, 6, 109.	3.0	5
44	Charge transfer from doubly charged ions of transition elements in a neon glow discharge: evidence based on emission spectra. Plasma Sources Science and Technology, 2020, 29, 045025.	3.1	5
45	The Spectrum and Term Analysis of Singly Ionized Manganese. Astrophysical Journal, Supplement Series, 2021, 252, 10.	7.7	5
46	Retrievals of Highâ€Latitude Surface Emissivity Across the Infrared From Highâ€Altitude Aircraft Flights. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD033672.	3.3	4
47	Comment on: â€œHyperfine structure measurements of CoÂI and CoÂII with Fourier transform spectroscopyâ€•by Fu etÂal. [JQSRT 2021, 107590]. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 288, 108240.	2.3	4
48	High resolution FTS studies of the effects of trace molecular gases on Glow Discharge spectra and industrial applications. , 2015, , .		3
49	Comprehensive atomic wavelengths, energy levels, and hyperfine structure for singly ionized iron-group elements. Canadian Journal of Physics, 2017, 95, 811-816.	1.1	3
50	Recent advances in experimental laboratory astrophysics for stellar astrophysics applications and future data needs. Proceedings of the International Astronomical Union, 2019, 15, 220-228.	0.0	2
51	Emission spectroscopic study of an analytical glow discharge with plane and hollow cathodes: Titanium and iron in argon discharge. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2021, 180, 106208.	2.9	2
52	New Ritz Wavelengths and Transition Probabilities of Parity-forbidden [Mn II] Lines of Astrophysical Interest. Astrophysical Journal, 2021, 907, 69.	4.5	2
53	Accurate atomic data for Galactic Surveys. Proceedings of the International Astronomical Union, 2017, 12, 203-205.	0.0	1
54	Sixty years of spectroscopic research: a tribute to Professor Edward B. M. Steers. Chemical Papers, 2019, 73, 2891-2896.	2.2	1

#	Article	IF	Citations
55	High Resolution UV Photoabsorption Cross Sections of SO2 at 198 K, 213â€“325 nm. , 2009, , .		0
56	New laboratory atomic data for neutral, singly, and doubly ionised iron group elements for astrophysics applications. Proceedings of the International Astronomical Union, 2015, 11, .	0.0	0
57	Atomic Oscillator Strengths for Atmospheric Models. Proceedings of the International Astronomical Union, 2015, 11, .	0.0	0
58	UV and VUV high resolution Fourier transform spectroscopy: laboratory atomic and molecular spectroscopy for astrophysics and atmospheric physics applications. , 2005, , .		0
59	UV and VUV high resolution Fourier transform spectroscopy: laboratory atomic spectroscopy for astrophysics applications. , 2007, , .		0
60	Atomic spectroscopy for astrophysics applications by high resolution UV and VUV Fourier transform spectrometry. , 2009, , .		0
61	High Resolution Molecular Spectroscopy with the Imperial College UV FT spectrometer. , 2011, , .		0
62	New Atomic Data for Astrophysics by High Resolution Fourier Transform Spectrometry. , 2011, , .		0
63	Accurate laboratory atomic and molecular data for astrophysics applications by high resolution Fourier transform spectrometry. , 2013, , .		0
64	High resolution Fourier transform spectrometry of astrophysically important elements from IR to VUV. , 2016, , .		0