Cristobal Colon Hernandez

List of Publications by Year
in descending order

53 papers	609 citations	687363 13 h-index	677142 22 g-index
56 all docs	56 docs citations	56 times ranked	430 citing authors

#	Article	IF	Citations
1	Measurement of the Stark broadening and shift parameters for several ultraviolet lines of singly ionized aluminum. Journal of Applied Physics, 1993, 73, 4752-4758.	2.5	129
2	Spectroscopic study of a laser-produced lead plasma: experimental atomic transition probabilities for Pb III lines. Journal of Physics B: Atomic, Molecular and Optical Physics, 1999, 32, 3887-3897.	1.5	39
3	Application of a laser produced plasma: Experimental Stark widths of single ionized lead lines. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2006, 61, 856-863.	2.9	33
4	Persistent UV phosphors for application in photo catalysis. Journal of Alloys and Compounds, 2010, 501, 193-197.	5.5	27
5	Experimentally determined transition probabilities for lines of Pb I and the 2203.5 Ã... line of Pb II. Journal of Quantitative Spectroscopy and Radiative Transfer, 2001, 68, 351-362.	2.3	26
6	Interpretation of the Spectrum of Sn II: Experimental and Theoretical Transition Probabilities. Physica Scripta, 2000, 61, 646-651.	2.5	23
7	Measured Stark Widths of Several Sn<scp>i</scp>and Sn<scp>ii</scp>Spectral Lines in a Laserâ€induced Plasma. Astrophysical Journal, 2008, 672, 1286-1291.	4.5	21
8	The Y2BaCuO5 oxide as green pigment in ceramics. Journal of Alloys and Compounds, 1998, 275-277, 750-753.	5.5	18
9	Correlation between Polymorphism and Optical Bandwidths in AgNd(WO4)2. Chemistry of Materials, 2005, 17, 6635-6643.	6.7	18
10	Theoretical Transition Probabilities of some Lines of 5s2(1S)nland 5s5p2Levels of Sn II. Physica Scripta, 2005, 71, 154-158.	2.5	15
11	Stark widths of several PbÂIII spectral lines in a laser-induced lead plasma. Astronomy and Astrophysics, 2007, 466, 399-402.	5.1	14
12	Core-polarization effects, oscillator strengths and radiative lifetimes of levels in Pbâ€ƒiii. Monthly Notices of the Royal Astronomical Society, 2009, 395, 567-579.	4.4	14
13	Transitions from Autoionized Singleâ€ionized Tin States: A Theoretical Study of the 5s5p(3Po)nl(nl= 5d,) Tj ETQq1 1 0.784314 rgBT /Ov	4.5	13
14	Stark broadening of PbÃ¢Â€Âƒiv spectral lines of astrophysical interest. Monthly Notices of the Royal Astronomical Society, 2010, 401, 1080-1090.	4.4	12
15	Measurement of plasma electron density generated in an experiment of Laser Shock Processing, utilizing the HÎ±-line. Journal of Materials Processing Technology, 2016, 232, 9-18.	6.3	12
16	Synthesis and characterization of a Ce3+ trivalent scheelite-type double tungstate by solid state method. Journal of Alloys and Compounds, 2017, 694, 345-353.	5.5	11
17	Study of CN emission from a laser induced plasma of graphite in air. Spectrochimica Acta Part A: Molecular Spectroscopy, 1993, 49, 509-516.	0.1	10
18	Theoretical transition probabilities, oscillator strengths, and radiative lifetimes of levels in Pb IV. Atomic Data and Nuclear Data Tables, 2011, 97, 36-49.	2.4	10

#	Article	IF	Citations
19	Stark broadening of Snâ€ƒiii spectral lines of astrophysical interest: predictions and regularities. Monthly Notices of the Royal Astronomical Society, 2011, 414, 713-726.	4.4	9
20	Theoretical Stark broadening parameters for spectral lines arising from the 2p5ns, 2p5np and 2p5nd electronic configurations of Mgâ€‰iii. Monthly Notices of the Royal Astronomical Society, 2013, 435, 1749-1757.	4.4	9
21	Stark broadening of Caâ€‰iv spectral lines of astrophysical interest. Monthly Notices of the Royal Astronomical Society, 2014, 445, 1567-1574.	4.4	9
22	Stark widths and shifts for spectral lines of Snâ€‰iv. Monthly Notices of the Royal Astronomical Society, 2016, 455, 1145-1155.	4.4	9
23	Stark width and shift parameter predictions and regularities of Sn II. Physica Scripta, 2006, 73, 410-419.	2.5	8
24	FT-Raman and FT-IR vibrational spectroscopic studies of Sr2RESbO6 (RE=La to Lu and Y) double perovskites. Journal of Alloys and Compounds, 2012, 538, 34-39.	5.5	8
25	Ab initio calculations of CaÂiii Stark broadening parameters, transition probabilities and radiative lifetimes. Monthly Notices of the Royal Astronomical Society, 2013, 431, 2703-2715.	4.4	7
26	Characterization and photoluminescence properties of AgLn(MoO4)(WO4): Novel silver based scheelite-type compounds. Journal of Luminescence, 2019, 210, 255-260.	3.1	7
27	Theoretical Stark Broadening Parameters for UVâ€“Blue Spectral Lines of Neutral Vanadium in the Solar and Metal-Poor Star HD 84937 Spectra. Atoms, 2020, 8, 64.	1.6	7
28	Lifetimes and oscillator strengths for the 5s5p6s, 5s5p5d and 5p$mathsf{^3}$ levels in single-ionized tin. Astronomy and Astrophysics, 2004, 422, 1109-1111.	5.1	7
29	Determination of Theoretical Transition Probabilities for the Pb III Spectrum. Physica Scripta, 2000, 62, 132-136.	2.5	6
30	Interpretation of the spectrum of Pb(II). Theoretical transition probabilities and lifetimes. Canadian Journal of Physics, 2001, 79, 999-1009.	1.1	6
31	Synthesis and characterization of LnAg(WO4)(MoO4). Journal of Alloys and Compounds, 2008, 451, 317-319.	5.5	6
32	Calculation of oscillator strengths, transition probabilities and radiative lifetimes of levels in Sn III. Journal of Physics B: Atomic, Molecular and Optical Physics, 2010, 43, 165001.	1.5	6
33	Paramagnetic susceptibility simulations from crystal field effects on Nd3+ in AgNd(WO4)2. Journal of Chemical Physics, 2003, 119, 13007-13011.	3.0	5
34	Theoretical study of the Stark width and shift parameters of Pbâ€ƒiii lines: predictions and regularities. Monthly Notices of the Royal Astronomical Society, 0, 385, 261-268.	4.4	5
35	Theoretical Stark broadening parameters of Pbâ€‰<scp>v</scp>spectral lines. Monthly Notices of the Royal Astronomical Society, 2012, 427, 1312-1321.	4.4	5
36	Theoretical Stark widths and shifts of spectral lines of 2p5nf and 2p55g configurations of Mg III. Physica Scripta, 2014, 89, 115401.	2.5	5

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37	Stark broadening of several Bi€‰iv spectral lines of astrophysical interest. Monthly Notices of the Royal Astronomical Society, 2017, 470, 2179-2189.	4.4	5
38	Stark broadening parameters and transition probabilities of persistent lines of Tl II. Monthly Notices of the Royal Astronomical Society, 2018, 476, 793-803.	4.4	5
39	Experimental Determination of Electronic Density and Temperature in Water-Confined Plasmas Generated by Laser Shock Processing. Metals, 2019, 9, 808.	2.3	5
40	Luminescence properties of AgTb(WO 4) 2 doped with Ce 3+ : Experimental determination of the Stern-Volmer quenching constant. Ceramics International, 2017, 43, 6163-6167.	4.8	4
41	Quenching cross sections of the B3Î+(Ou+) v€² = 14 level of I2 by H2, CO, and CH4. Journal of Molecular Spectroscopy, 1985, 112, 357-362.	1.2	3
42	Transition probabilities and radiative lifetimes of Mg III. Atomic Data and Nuclear Data Tables, 2015, 102, 64-78.	2.4	3
43	Interpretation of the spectrum of Pb(II). Theoretical transition probabilities and lifetimes. Canadian Journal of Physics, 2001, 79, 999-1009.	1.1	3
44	Comment on ÂStark broadening parameters predictions and regularities of singly ionized leadÂ. Journal of Physics B: Atomic, Molecular and Optical Physics, 2003, 36, 2139-2140.	1.5	2
45	Physical characterization of laser interaction and shock generation in laser shock processing: Coupled theoretical-experimental analysis. , 2012, , .		2
46	Theoretical oscillator strengths, transition probabilities, and radiative lifetimes of levels in Pb V. Atomic Data and Nuclear Data Tables, 2014, 100, 272-285.	2.4	2
47	Theoretical Study of Transition Probabilities and Stark Broadening Parameters and of Several Spectral Lines with Astrophysical Interest of Double-ionized Thallium. Astrophysical Journal, 2019, 870, 131.	4.5	2
48	Theoretical Study of Several Oscillator Strengths and Lifetimes of Germanium, Thallium and Bismuth. Measures of Some Relative Transition Probabilities. , 2008, , .		1
49	Theoretical study of the Stark broadening for Mg€‰iv spectral lines of astrophysical interest. Monthly Notices of the Royal Astronomical Society, 2016, 462, 4220-4226.	4.4	1
50	Theoretical lifetimes and Stark broadening parameters for visible-infrared spectral lines of V€‰<scp>i</scp> in Arcturus. Monthly Notices of the Royal Astronomical Society, 2021, 509, 4538-4554.	4.4	1
51	Study of the B(O+u)â†'X(1Î£+g) system of Au2 and of the A(1Î£+u)â†'X(1Ïƒ+g) system of Ag2. Spectrochimica Acta Part A: Molecular Spectroscopy, 1992, 48, 639-646.	0.1	0
52	Level Energies, Oscillator Strengths and Lifetimes for Transitions in Pb IV. , 2008, , .		0
53	Analysis of the core polarization effects in the calculated atomic parameters of Hg iii. Monthly Notices of the Royal Astronomical Society, 2020, 493, 288-298.	4.4	0