Carlos AragÃ³n

List of Publications by Year
in descending order

57 papers	2,986 citations	186265 28 h-index	161849 54 g-index
57 all docs	57 docs citations	57 times ranked	1379 citing authors

#	Article	IF	Citations
1	Characterization of laser induced plasmas by optical emission spectroscopy: A review of experiments and methods. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2008, 63, 893-916.	2.9	495
2	Characterization of a laser-induced plasma by spatially resolved spectroscopy of neutral atom and ion emissions.. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2004, 59, 1861-1876.	2.9	279
3	Improvements in Quantitative Analysis of Steel Composition by Laser-Induced Breakdown Spectroscopy at Atmospheric Pressure Using an Infrared Nd:YAG Laser. Applied Spectroscopy, 1999, 53, 1259-1267.	2.2	144
4	Multi-element Sahaâ€"Boltzmann and Boltzmann plots in laser-induced plasmas. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2007, 62, 378-385.	2.9	142
5	Influence of the optical depth on spectral line emission from laser-induced plasmas. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2001, 56, 619-628.	2.9	140
6	Determination of Carbon Content in Molten Steel Using Laser-Induced Breakdown Spectroscopy. Applied Spectroscopy, 1993, 47, 606-608.	2.2	128
7	A comparison of the temperatures and electron densities of laser-produced plasmas obtained in air, argon, and helium at atmospheric pressure. Applied Physics A: Materials Science and Processing, 1999, 69, S475-S478.	2.3	123
8	Plasma shielding effect in laser ablation of metallic samples and its influence on LIBS analysis. Applied Surface Science, 1998, 127-129, 309-314.	6.1	109
9	Determination of Carbon Content in Steel Using Laser-Induced Breakdown Spectroscopy. Applied Spectroscopy, 1992, 46, 1382-1387.	2.2	99
10	Curves of growth of spectral lines emitted by a laser-induced plasma: influence of the temporal evolution and spatial inhomogeneity of the plasma. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2003, 58, 221-237.	2.9	97
11	Application of calibration-free laser-induced breakdown spectroscopy to radially resolved spectra from a copper-based alloy laser-induced plasma. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2009, 64, 685-689.	2.9	83
12	Temperature and electron density distributions of laser-induced plasmas generated with an iron sample at different ambient gas pressures. Applied Surface Science, 2002, 197-198, 273-280.	6.1	65
13	Spatial characterization of laser-induced plasmas by deconvolution of spatially resolved spectra. Applied Optics, 2003, 42, 5938.	2.1	65
14	Determination of the local electron number density in laser-induced plasmas by Stark-broadened profiles of spectral lines. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2010, 65, 395-400.	2.9	60
15	CSigma graphs: A new approach for plasma characterization in laser-induced breakdown spectroscopy. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 149, 90-102.	2.3	58
16	Curves of growth of neutral atom and ion lines emitted by a laser induced plasma. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2005, 60, 879-887.	2.9	57
17	Characterization of laser-induced plasmas by emission spectroscopy with curve-of-growth measurements. Part I: Temporal evolution of plasma parameters and self-absorption. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2008, 63, 784-792.	2.9	57
18	Study of matrix effects in laser induced breakdown spectroscopy on metallic samples using plasma characterization by emission spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2009, 64, 993-998.	2.9	57

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19	Spatial characterization of laser induced plasmas obtained in air and argon with different laser focusing distances. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2004, 59, 461-469.	2.9	56
20	Application of laser-induced plasma spectroscopy to the measurement of Stark broadening parameters. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2006, 61, 69-80.	2.9	53
21	Characterization of laser-induced plasmas by emission spectroscopy with curve-of-growth measurements. Part II: Effect of the focusing distance and the pulse energy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2008, 63, 793-799.	2.9	46
22	Asymmetric Stark broadening of the Fe I 538.34 nm emission line in a laser induced plasma. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2005, 60, 897-904.	2.9	44
23	Direct analysis of aluminum alloys by CSigma laser-induced breakdown spectroscopy. Analytica Chimica Acta, 2018, 1009, 12-19.	5.4	39
24	Spatial characterization of laser-induced plasmas: distributions of neutral atom and ion densities. Applied Physics A: Materials Science and Processing, 2004, 79, 1145-1148.	2.3	34
25	Reproducible and controllable light induction of in vitro fruiting of the white-rot basidiomycete Pleurotus ostreatus. Mycological Research, 2009, 113, 552-558.	2.5	32
26	Space- and time-resolved measurements of temperatures and electron densities of plasmas formed during laser ablation of metallic samples. Applied Physics A: Materials Science and Processing, 1999, 69, S691-S694.	2.3	30
27	Quantitative analysis by laser-induced breakdown spectroscopy based on generalized curves of growth. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2015, 110, 124-133.	2.9	30
28	Application of laser-induced breakdown spectroscopy to the analysis of the composition of thin films produced by pulsed laser deposition. Applied Surface Science, 2002, 197-198, 217-223.	6.1	29
29	Total cross sections for electron scattering from CO in the energy range 380â€“5200 eV. Physical Review A, 1990, 42, 4400-4402.	2.5	28
30	Measurement of Stark broadening parameters of Fe II and Ni II spectral lines by laser induced breakdown spectroscopy using fused glass samples. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 134, 39-45.	2.3	27
31	Apparent excitation temperature in laser-induced plasmas. Journal of Physics: Conference Series, 2007, 59, 210-217.	0.4	26
32	Two-Dimensional Spatial Distribution of the Time-Integrated Emission from Laser-Produced Plasmas in Air at Atmospheric Pressure. Applied Spectroscopy, 1997, 51, 1632-1638.	2.2	25
33	Spatial and temporal scaling and common apparent excitation temperature of laser-induced plasmas generated at constant irradiance with different pulse energies. Journal of Applied Physics, 2008, 103, .	2.5	20
34	Determination of transition probabilities by laser-induced breakdown spectroscopy with curve-of-growth measurements. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 85-91.	2.3	18
35	Characterization of laser-induced plasma during its expansion in air by optical emission spectroscopy: Observation of strong explosion self-similar behavior. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2014, 97, 86-93.	2.9	18
36	Stark width measurements of Fe II lines with wavelengths in the range 260â€“300 nm. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 055002.	1.5	16

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37	Measurement of Stark widths and shifts of Caèˆi̇i spectral lines. Monthly Notices of the Royal Astronomical Society, 2014, 444, 1854-1858.	4.4	15
38	Experimental Stark widths and shifts of Ti ii spectral lines. Monthly Notices of the Royal Astronomical Society, 2016, 462, 1501-1507.	4.4	15
39	Spatial distributions of the number densities of neutral atoms and ions for the different elements in a laser induced plasma generated with a Ni-Fe-Al alloy. Analytical and Bioanalytical Chemistry, 2006, 385, 295-302.	3.7	14
40	Measurement of Stark widths of Ni II spectral lines by laser induced breakdown spectroscopy. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 114, 151-156.	2.3	13
41	Method for measurement of transition probabilities by laser-induced breakdown spectroscopy based on CSigma graphsâ€"Application to Ca II spectral lines. Journal of Quantitative Spectroscopy and Radiative Transfer, 2015, 160, 10-18.	2.3	13
42	Stark width measurements of Fe II lines with wavelengths in the range 230â€"260 nm. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 245701.	1.5	12
43	Analysis of rocks by CSigma laser-induced breakdown spectroscopy with fused glass sample preparation. Journal of Analytical Atomic Spectrometry, 2017, 32, 144-152.	3.0	11
44	Experimental transition probabilities for spectral lines of Re II. Journal of Physics B: Atomic, Molecular and Optical Physics, 2013, 46, 185702.	1.5	9
45	Measured oscillator strengths in singly ionized molybdenum. Journal of Physics B: Atomic, Molecular and Optical Physics, 2015, 48, 215002.	1.5	9
46	Transition probabilities of Ni II spectral lines measured by laser induced breakdown spectroscopy. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 120, 120-124.	2.3	8
47	Experimental Stark widths and shifts of Cr II spectral lines. Monthly Notices of the Royal Astronomical Society, 2014, 438, 841-845.	4.4	8
48	Experimental oscillator strengths of highly excited levels of Mo II. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 105003.	1.5	6
49	A simple and compact system for energy, charge and mass analysis of ions formed in laser-produced plasmas. Vacuum, 1994, 45, 923-927.	3.5	4
50	Experimental transition probabilities for Mn II spectral lines. Monthly Notices of the Royal Astronomical Society, 2018, 477, 1935-1939.	4.4	4
51	Experimental stark widths and shifts of V II spectral lines. Monthly Notices of the Royal Astronomical Society, 2020, 498, 2068-2074.	4.4	4
52	Ionization and excitation of 4p45plevels of Kr ii by electron impact. Physical Review A, 1993, 47, 2951-2956.	2.5	3
53	Laser-induced breakdown spectroscopy for Stark broadening and shift experiments: Measurement of Fe II and Ni II Stark shifts. Journal of Physics: Conference Series, 2014, 548, 012032.	0.4	3
54	Experimental Stark widths and shifts of Mnâ€‰iispectral lines. Monthly Notices of the Royal Astronomical Society, 2019, 482, 1931-1936.	4.4	3

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55	Corrigendum to â€œCSigma graphs: A new approach for plasma characterization in laser-induced breakdown spectroscopyâ€•[J. Quant. Spectrosc. Radiat. Transf. 149 (2014) 90â€“102]. Journal of Quantitative Spectroscopy and Radiative Transfer, 2015, 159, 94-95.	2.3	2
56	Spatial characterization of laser-induced plasmas by deconvolution of spatially resolved spectra. , 2002, , .		1
57	Experimental Stark parameters of Cr II spectral lines. Journal of Physics: Conference Series, 2014, 548, 012041.	0.4	0