Ricardo Florido

List of Publications by Year
in descending order

60	760	516710 16	552781 26
papers	citations	h-index	g-index

61	61	61	617
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Exploring extreme magnetization phenomena in directly driven imploding cylindrical targets. Plasma Physics and Controlled Fusion, 2022, 64, 025007.	2.1	17
2	Characterizing the Effect of Magnetization at >10 KT in Cylindrically Imploded Hot Dense Plasmas Using Dopant Spectroscopy Techniques and Benchmarked Simulations. , 2022, , .		0
3	Stark-Broadening of Ar K-Shell Lines: A Comparison between Molecular Dynamics Simulations and MERL Results. Atoms, 2021, 9, 9.	1.6	1
4	Kr L-shell spectroscopy as a plasma diagnostic for Inertial Confinement Fusion conditions. , 2021, , .		0
5	Experimental Validation of Low- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Z</mml:mi></mml:math> Ion-Stopping Formalisms around the Bragg Peak in High-Energy-Density Plasmas. Physical Review Letters, 2019, 122, 015002.	7.8	32
6	Classical molecular dynamics simulations of hydrogen plasmas and development of an analytical statistical model for computational validity assessment. Physical Review E, 2018, 98, .	2.1	10
7	Laser-driven strong magnetostatic fields with applications to charged beam transport and magnetized high energy-density physics. Physics of Plasmas, 2018, 25, .	1.9	58
8	Model uncertainties of local-thermodynamic-equilibrium K-shell spectroscopy. High Energy Density Physics, 2016, 20, 17-22.	1.5	21
9	An important criterion for reliable multi-monochromatic x-ray imager diagnostics and its impact on the reconstructed images. High Power Laser Science and Engineering, 2015, 3, .	4.6	4
10	Understanding reliability and some limitations of the images and spectra reconstructed from a multi-monochromatic x-ray imager. Review of Scientific Instruments, 2015, 86, 113505.	1.3	5
11	Assessment of transient effects on the x-ray spectroscopy of implosion cores at OMEGA. Journal of Physics B: Atomic, Molecular and Optical Physics, 2015, 48, 224006.	1.5	4
12	Direct asymmetry measurement of temperature and density spatial distributions in inertial confinement fusion plasmas from pinhole space-resolved spectra. Physics of Plasmas, 2014, 21, .	1.9	25
13	Time-resolved characterization and energy balance analysis of implosion core in shock-ignition experiments at OMEGA. Physics of Plasmas, 2014, 21, .	1.9	12
14	Radiative cooling of two-component wire-array Z-pinch plasma. Physics of Plasmas, 2014, 21, .	1.9	2
15	Calculation of radiative opacity of plasma mixtures using a relativistic screened hydrogenic model. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 140, 81-98.	2.3	6
16	Relativistic screened hydrogenic radial integrals. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 117, 123-132.	2.3	6
17	The effect of improved satellite line shapes on the argon HeÎ² spectral feature. High Energy Density Physics, 2013, 9, 731-736.	1.5	15
18	Analysis of the influence of the plasma thermodynamic regime in the spectrally resolved and mean radiative opacity calculations of carbon plasmas in a wide range of density and temperature. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 114, 136-150.	2.3	6

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19	Parametrization of the average ionization and radiative cooling rates of carbon plasmas in a wide range of density and temperature. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 125, 123-138.	2.3	5
20	Analysis of microscopic magnitudes of radiative blast waves launched in xenon clusters with collisional-radiative steady-state simulations. Journal of Quantitative Spectroscopy and Radiative Transfer, 2013, 125, 69-83.	2.3	5
21	Atomic Physics Modeling and Applications for ICF Plasmas. Plasma and Fusion Research, 2013, 8, 3404056-3404056.	0.7	0
22	Investigation of a polychromatic tomography method for the extraction of the three-dimensional spatial structure of implosion core plasmas. Physics of Plasmas, 2012, 19, 082705.	1.9	25
23	Determination and analysis of plasma parameters for simulations of radiative blast waves launched in clusters of xenon and krypton. Plasma Physics and Controlled Fusion, 2012, 54, 045012.	2.1	18
24	Modelling of spectral properties and population kinetics studies of inertial fusion and laboratory-astrophysical plasmas. Plasma Physics and Controlled Fusion, 2012, 54, 124004.	2.1	2
25	Processing of spectrally resolved x-ray images of inertial confinement fusion implosion cores recorded with multimonochromatic x-ray imagers. Journal of Applied Physics, 2011, 109, .	2.5	21
26	Determination and Analysis of the Thermodynamic Regimes of Xenon Plasmas. Contributions To Plasma Physics, 2011, 51, 863-876.	1.1	5
27	Determination of the average ionization and thermodynamic regimes of xenon plasmas with an application to the characterization of blast waves launched in xenon clusters. High Energy Density Physics, 2011, 7, 71-76.	1.5	6
28	A new set of relativistic screening constants for the screened hydrogenic model. High Energy Density Physics, 2011, 7, 169-179.	1.5	16
29	Measurements of core and compressed-shell temperature and density conditions in thick-wall target implosions at the OMEGA laser facility. Physical Review E, 2011, 83, 066408.	2.1	23
30	Analytical expressions for radiative opacities of low Z plasmas. Journal of Physics: Conference Series, 2010, 244, 042002.	0.4	0
31	Opacity calculations for ICF target physics using the ABAKO/RAPCAL code. Journal of Physics: Conference Series, 2010, 244, 042003.	0.4	0
32	Opacity calculation for target physics using the ABAKO/RAPCAL code. High Energy Density Physics, 2010, 6, 57-65.	1.5	13
33	Argon K-shell and bound-free emission from OMEGA direct-drive implosion cores. High Energy Density Physics, 2010, 6, 70-75.	1.5	20
34	Spectroscopic modeling of an argon-doped shock-ignition implosion. Review of Scientific Instruments, 2010, 81, 10E307.	1.3	9
35	Collisional-radiative Calculations of Optically Thin and Thick Plasmas Using the Computational Package ABAKO/RAPCAL. Communications in Computational Physics, 2010, 8, 185-210.	1.7	24
36	Modeling of population kinetics of plasmas that are not in local thermodynamic equilibrium, using a versatile collisional-radiative model based on analytical rates. Physical Review E, 2009, 80, 056402.	2.1	56

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37	Influence of the atomic description and configuration interaction effects on collisional-radiative calculations of low ionized carbon plasmas. Journal of Quantitative Spectroscopy and Radiative Transfer, 2009, 110, 2191-2207.	2.3	3
38	ABAKO: A new code for population kinetics and radiative properties of plasmas under NLTE conditions. Journal of Physics: Conference Series, 2008, 112, 042008.	0.4	6
39	RAPCAL code: A flexible package to compute radiative properties for optically thin and thick low and high-Z plasmas in a wide range of density and temperature. Laser and Particle Beams, 2008, 26, 433-448.	1.0	45
40	Determination of corona, LTE, and NLTE regimes of optically thin carbon plasmas. Laser and Particle Beams, 2008, 26, 21-32.	1.0	16
41	ABAKOâˆ•RAPCAL: A Flexible Computational Package to Perform Radiative Properties Calculations and Diagnostics in a Wide Range of Plasma Conditions. , 2008, , .		0
42	Spectrally Resolved Intensities of Ultra-Dense Hot Aluminum Plasmas. , 2008, , .		1
43	Comparison of genetic-algorithm and emissivity-ratio analyses of image data from OMEGA implosion cores. Review of Scientific Instruments, 2008, 79, 10E921.	1.3	20
44	Analysis of time-resolved argon line spectra from OMEGA direct-drive implosions. Review of Scientific Instruments, 2008, 79, 10E310.	1.3	20
45	Multifrequential and mean opacity calculation of carbon plasmas in a wide range of density and temperature. Journal of Physics: Conference Series, 2008, 112, 042007.	0.4	1
46	Analytical opacity formulas for low Z plasmas. Journal of Physics: Conference Series, 2008, 112, 042006.	0.4	2
47	Detailed-level-accounting approach calculation of radiative properties of aluminium plasmas in a wide range of density and temperature. Journal of Physics: Conference Series, 2008, 112, 042002.	0.4	2
48	Screening effects on the atomic magnitudes of non-hydrogenic ions in strongly coupled plasmas. Physica Scripta, 2007, 76, 418-427.	2.5	9
49	Photoionization cross section of non-hydrogenic levels for weakly coupled plasmas. Journal of Quantitative Spectroscopy and Radiative Transfer, 2007, 108, 239-255.	2.3	5
50	Review of the 4th NLTE Code Comparison Workshop. High Energy Density Physics, 2007, 3, 225-232.	1.5	98
51	Code to calculate optical properties for plasmas in a wide range of densities. European Physical Journal Special Topics, 2006, 133, 981-984.	0.2	11
52	Line photon transport in a non-homogeneous plasma using radiative coupling coefficients. European Physical Journal Special Topics, 2006, 133, 993-996.	0.2	2
53	Calculation of optical properties for hot plasmas using a screened hydrogenic model. European Physical Journal Special Topics, 2006, 133, 997-1000.	0.2	0
54	Calculation of opacities and emisivities for carbon plasmas under NLTE and LTE conditions. European Physical Journal Special Topics, 2006, 133, 1005-1008.	0.2	0

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55	Relativistic quantum mechanic calculation of photoionization cross-section of hydrogenic and non-hydrogenic states using analytical potentials. Journal of Quantitative Spectroscopy and Radiative Transfer, 2005, 91, 393-413.	2.3	6
56	Opacities and line transfer in high density plasma. Laser and Particle Beams, 2005, 23, 199-203.	1.0	3
57	Calculation of the radiative opacity of laser-produced plasmas using a relativistic-screened hydrogenic model. Journal of Quantitative Spectroscopy and Radiative Transfer, 2004, 83, 159-182.	2.3	16
58	A comparison of two atomic models for the radiative properties of dense hot low Z plasmas. Journal of Quantitative Spectroscopy and Radiative Transfer, 2003, 81, 301-309.	2.3	5
59	Locating Pollicott-Ruelle resonances in chaotic dynamical systems: A class of numerical schemes. Physical Review E, 2002, 66, 046208.	2.1	7
60	Development of an analytical potential to include excited configurations. Journal of Quantitative Spectroscopy and Radiative Transfer, 2002, 75, 723-739.	2.3	10