

# JesÃ³s GarcÃ-a-Rubiano

## List of Publications by Year in descending order

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papers

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docs citations

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times ranked

468  
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#	ARTICLE	IF	CITATIONS
1	Assessment of radon risk areas in the Eastern Canary Islands using soil radon gas concentration and gas permeability of soils. <i>Science of the Total Environment</i> , 2019, 664, 449-460.	8.0	37
2	Natural radioactivity in algae arrivals on the Canary coast and dosimetry assessment. <i>Science of the Total Environment</i> , 2019, 658, 122-131.	8.0	4
3	Automatic modeling using PENELOPE of two HPGe detectors used for measurement of environmental samples by $^{13}\text{C}$ -spectrometry from a few sets of experimental efficiencies. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2018, 880, 67-74.	1.6	4
4	Modeling of a HPGe well detector using PENELOPE for the calculation of full energy peak efficiencies for environmental samples. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2018, 908, 206-214.	1.6	5
5	Computational characterization of HPGe detectors usable for a wide variety of source geometries by using Monte Carlo simulation and a multi-objective evolutionary algorithm. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2017, 858, 113-122.	1.6	17
6	Influence of atomic kinetics in the simulation of plasma microscopic properties and thermal instabilities for radiative bow shock experiments. <i>Physical Review E</i> , 2017, 95, 033201.	2.1	13
7	Mapping natural radioactivity of soils in the eastern Canary Islands. <i>Journal of Environmental Radioactivity</i> , 2017, 166, 242-258.	1.7	40
8	Radon in Groundwater of the Northeastern Gran Canaria Aquifer. <i>Water (Switzerland)</i> , 2015, 7, 2575-2590.	2.7	29
9	Collisional radiative average atom code based on a relativistic Screened Hydrogenic Model. <i>High Energy Density Physics</i> , 2015, 14, 18-29.	1.5	5
10	Microscopic properties of xenon plasmas for density and temperature regimes of laboratory astrophysics experiments on radiative shocks. <i>Physical Review E</i> , 2015, 91, 053106.	2.1	6
11	A simple methodology for characterization of germanium coaxial detectors by using Monte Carlo simulation and evolutionary algorithms. <i>Journal of Environmental Radioactivity</i> , 2015, 149, 8-18.	1.7	21
12	Time-dependent and radiation field effects on collisional-radiative simulations of radiative properties of blast waves launched in clusters of xenon. <i>High Energy Density Physics</i> , 2015, 17, 119-128.	1.5	0
13	Collisional radiative simulations of a supersonic and radiatively cooled aluminum plasma jet. <i>High Energy Density Physics</i> , 2015, 17, 74-84.	1.5	8
14	Calculation of radiative opacity of plasma mixtures using a relativistic screened hydrogenic model. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2014, 140, 81-98.	2.3	6
15	Parametrization of Mean Radiative Properties of Optically Thin Steady-State Plasmas and Applications. <i>Communications in Computational Physics</i> , 2014, 16, 612-631.	1.7	10
16	Relativistic screened hydrogenic radial integrals. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2013, 117, 123-132.	2.3	6
17	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. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2013, 114, 136-150.	2.3	6
18	Parametrization of the average ionization and radiative cooling rates of carbon plasmas in a wide range of density and temperature. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2013, 125, 123-138.	2.3	5

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19	Analysis of microscopic magnitudes of radiative blast waves launched in xenon clusters with collisional-radiative steady-state simulations. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2013, 125, 69-83.	2.3	5
20	Natural radioactivity measurements of beach sands in Gran Canaria, Canary Islands (Spain). <i>Radiation Protection Dosimetry</i> , 2013, 156, 75-86.	0.8	17
21	Determination and analysis of plasma parameters for simulations of radiative blast waves launched in clusters of xenon and krypton. <i>Plasma Physics and Controlled Fusion</i> , 2012, 54, 045012.	2.1	18
22	Modelling of spectral properties and population kinetics studies of inertial fusion and laboratory-astrophysical plasmas. <i>Plasma Physics and Controlled Fusion</i> , 2012, 54, 124004.	2.1	2
23	Determination and Analysis of the Thermodynamic Regimes of Xenon Plasmas. <i>Contributions To Plasma Physics</i> , 2011, 51, 863-876.	1.1	5
24	Determination of the average ionization and thermodynamic regimes of xenon plasmas with an application to the characterization of blast waves launched in xenon clusters. <i>High Energy Density Physics</i> , 2011, 7, 71-76.	1.5	6
25	A new set of relativistic screening constants for the screened hydrogenic model. <i>High Energy Density Physics</i> , 2011, 7, 169-179.	1.5	16
26	Opacity calculation for target physics using the ABAKO/RAPCAL code. <i>High Energy Density Physics</i> , 2010, 6, 57-65.	1.5	13
27	Collisional-radiative Calculations of Optically Thin and Thick Plasmas Using the Computational Package ABAKO/RAPCAL. <i>Communications in Computational Physics</i> , 2010, 8, 185-210.	1.7	24
28	Modeling of population kinetics of plasmas that are not in local thermodynamic equilibrium, using a versatile collisional-radiative model based on analytical rates. <i>Physical Review E</i> , 2009, 80, 056402.	2.1	56
29	Influence of the atomic description and configuration interaction effects on collisional-radiative calculations of low ionized carbon plasmas. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2009, 110, 2191-2207.	2.3	3
30	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. <i>Laser and Particle Beams</i> , 2008, 26, 433-448.	1.0	45
31	Determination of corona, LTE, and NLTE regimes of optically thin carbon plasmas. <i>Laser and Particle Beams</i> , 2008, 26, 21-32.	1.0	16
32	Review of the 4th NLTE Code Comparison Workshop. <i>High Energy Density Physics</i> , 2007, 3, 225-232.	1.5	98
33	Relativistic quantum mechanic calculation of photoionization cross-section of hydrogenic and non-hydrogenic states using analytical potentials. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2005, 91, 393-413.	2.3	6
34	Opacities and line transfer in high density plasma. <i>Laser and Particle Beams</i> , 2005, 23, 199-203.	1.0	3
35	Calculation of the radiative opacity of laser-produced plasmas using a relativistic-screened hydrogenic model. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2004, 83, 159-182.	2.3	16
36	A method to obtain approximate solutions to the SchrÃ¶dinger equation. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2004, 83, 641-654.	2.3	0

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37	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
38	Low Z opacities at high densities. Journal of Quantitative Spectroscopy and Radiative Transfer, 2003, 81, 441-450.	2.3	9
39	Fast calculation of plasma prominent atomic magnitudes by using a new analytical potential for excited configurations. Laser and Particle Beams, 2002, 20, 139-144.	1.0	1
40	Calculation of the ionization state for LTE plasmas using a new relativistic-screened hydrogenic model based on analytical potentials. Laser and Particle Beams, 2002, 20, 145-151.	1.0	4
41	Analytical opacity formulas for ICF elements. Fusion Engineering and Design, 2002, 60, 17-25.	1.9	12
42	An effective analytical potential including plasma effects. Journal of Quantitative Spectroscopy and Radiative Transfer, 2002, 75, 539-557.	2.3	26
43	Development of an analytical potential to include excited configurations. Journal of Quantitative Spectroscopy and Radiative Transfer, 2002, 75, 723-739.	2.3	10
44	A screened hydrogenic model using analytical potentials. Journal of Quantitative Spectroscopy and Radiative Transfer, 2002, 72, 575-588.	2.3	16
45	Scaling law of radiative opacities for ICF elements. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 464, 218-224.	1.6	7
46	Calculation of the ionization state for LTE plasmas using analytical potentials. Laser and Particle Beams, 1999, 17, 635-647.	1.0	2
47	ANALYTICAL EXPRESSIONS FOR THE n-ORDER MOMENTA OF CHARGE DISTRIBUTION FOR IONS. Journal of Quantitative Spectroscopy and Radiative Transfer, 1998, 60, 623-633.	2.3	15
48	Developments and comparison of two denim opacity models. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1998, 415, 539-542.	1.6	7
49	Inertial fusion activities in Spain. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1998, 415, 35-43.	1.6	1