

Christopher Fontes

List of Publications by Year in descending order

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Version: 2024-02-01

48
papers

3,509
citations

218677

26
h-index

214800

47
g-index

50
all docs

50
docs citations

50
times ranked

3802
citing authors

#	ARTICLE	IF	CITATIONS
1	Understanding how minority relativistic electron populations may dominate charge state balance and radiative cooling of a post-thermal quench tokamak plasma. <i>Physics of Plasmas</i> , 2022, 29, 012504.	1.9	2
2	Interpolating detailed simulations of kilonovae: Adaptive learning and parameter inference applications. <i>Physical Review Research</i> , 2022, 4, .	3.6	13
3	Kilonova Detectability with Wide-field Instruments. <i>Astrophysical Journal</i> , 2022, 927, 163.	4.5	34
4	Charge state distributions in dense plasmas. <i>Physics of Plasmas</i> , 2022, 29, .	1.9	3
5	Sodium tracer measurements of an expanded dense aluminum plasma from e-beam isochoric heating. <i>Physics of Plasmas</i> , 2021, 28, .	1.9	1
6	Angular Distribution of Characteristic Radiation Following the Excitation of He-Like Uranium in Relativistic Collisions. <i>Atoms</i> , 2021, 9, 20.	1.6	3
7	Axisymmetric Radiative Transfer Models of Kilonovae. <i>Astrophysical Journal</i> , 2021, 910, 116.	4.5	67
8	Time-dependent density functional theory applied to average atom opacity. <i>Physical Review E</i> , 2021, 103, 043206.	2.1	6
9	A Broad Grid of 2D Kilonova Emission Models. <i>Astrophysical Journal</i> , 2021, 918, 10.	4.5	38
10	All-Order Full-Coulomb Quantum Spectral Line-Shape Calculations. <i>Physical Review Letters</i> , 2021, 127, 235001.	7.8	13
11	Effect of Electron Capture on Spectral Line Broadening in Hot Dense Plasmas. <i>Physical Review Letters</i> , 2020, 124, 055003.	7.8	16
12	Impact of a minority relativistic electron tail interacting with a thermal plasma containing high-atomic-number impurities. <i>Physics of Plasmas</i> , 2020, 27, 040702.	1.9	6
13	A line-binned treatment of opacities for the spectra and light curves from neutron star mergers. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 493, 4143-4171.	4.4	82
14	Composition Effects on Kilonova Spectra and Light Curves. I. <i>Astrophysical Journal</i> , 2020, 899, 24.	4.5	37
15	The Role of Inhomogeneities in Supernova Shock Breakout Emission. <i>Astrophysical Journal</i> , 2020, 898, 123.	4.5	10
16	Impact of Pulsar and Fallback Sources on Multifrequency Kilonova Models. <i>Astrophysical Journal</i> , 2019, 880, 22.	4.5	29
17	Full transport model of GW170817-like disk produces a blue kilonova. <i>Physical Review D</i> , 2019, 100, .	4.7	135
18	Laser-driven production of the antihydrogen molecular ion. <i>Physical Review A</i> , 2019, 100, .	2.5	9

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19	Systematic Study of $\langle \sigma_{\text{shell}} \rangle$ -Shell Opacity at Stellar Interior Temperatures. Physical Review Letters, 2019, 122, 235001.	7.8	78
20	Study of laser produced plasma in a longitudinal magnetic field. Physics of Plasmas, 2019, 26, .	1.9	12
21	Electron- and proton-impact excitation of heliumlike uranium in relativistic collisions. Physical Review A, 2019, 99, .	2.5	13
22	^{60}Fe in core-collapse supernovae and prospects for X-ray and gamma-ray detection in supernova remnants. Monthly Notices of the Royal Astronomical Society, 2019, 485, 4287-4310.	4.4	22
23	Impact of ejecta morphology and composition on the electromagnetic signatures of neutron star mergers. Monthly Notices of the Royal Astronomical Society, 2018, 478, 3298-3334.	4.4	145
24	Review of the 9th NLTE code comparison workshop. High Energy Density Physics, 2017, 23, 38-47.	1.5	35
25	The X-ray counterpart to the gravitational-wave event GW170817. Nature, 2017, 551, 71-74.	27.8	627
26	<i>Swift</i> and <i>NuSTAR</i> observations of GW170817: Detection of a blue kilonova. Science, 2017, 358, 1565-1570.	12.6	399
27	The Emergence of a Lanthanide-rich Kilonova Following the Merger of Two Neutron Stars. Astrophysical Journal Letters, 2017, 848, L27.	8.3	507
28	State-resolved Photodissociation and Radiative Association Data for the Molecular Hydrogen Ion. Astrophysical Journal, 2017, 851, 64.	4.5	13
29	A NEW GENERATION OF LOS ALAMOS OPACITY TABLES. Astrophysical Journal, 2016, 817, 116.	4.5	153
30	Self-consistent Large-Scale Collisional-Radiative Modeling. Springer Series on Atomic, Optical, and Plasma Physics, 2016, , 17-50.	0.2	8
31	Wider pulsation instability regions for $\hat{\nu}^2$ Cephei and SPB stars calculated using new Los Alamos opacities. Astronomy and Astrophysics, 2015, 580, L9.	5.1	31
32	Ground-state excitation of heavy highly-charged ions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2015, 48, 144006.	1.5	7
33	The Los Alamos suite of relativistic atomic physics codes. Journal of Physics B: Atomic, Molecular and Optical Physics, 2015, 48, 144014.	1.5	122
34	A higher-than-predicted measurement of iron opacity at solar interior temperatures. Nature, 2015, 517, 56-59.	27.8	321
35	Collisional-Radiative Modeling of Tungsten at Temperatures of 1200–2400 eV. Atoms, 2015, 3, 76-85.	1.6	7
36	Annotation of Hans Bethe's paper, Zeitschrift für Physik 76, 293 (1932), "Braking Formula for Electrons of Relativistic Speed". European Physical Journal H, 2014, 39, 517-536.	0.8	5

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37	THE LOS ALAMOS SUPERNOVA LIGHT-CURVE PROJECT: COMPUTATIONAL METHODS. <i>Astrophysical Journal, Supplement Series</i> , 2013, 204, 16.	7.7	41
38	Electron- and Proton-Impact Excitation of Hydrogenlike Uranium in Relativistic Collisions. <i>Physical Review Letters</i> , 2013, 110, 213201.	7.8	41
39	Light element opacities of astrophysical interest from ATOMIC. , 2013, , .		0
40	Calculation of the relativistic rise in electron-impact-excitation cross sections for highly charged ions. <i>Physical Review A</i> , 2013, 88, .	2.5	11
41	SPECTRA OF TYPE IA SUPERNOVAE FROM DOUBLE DEGENERATE MERGERS. <i>Astrophysical Journal</i> , 2010, 725, 296-308.	4.5	73
42	A fully relativistic approach for calculating atomic data for highly charged ions. <i>Physics Reports</i> , 2009, 477, 111-214.	25.6	76
43	SPECTRA AND LIGHT CURVES OF FAILED SUPERNOVAE. <i>Astrophysical Journal</i> , 2009, 707, 193-207.	4.5	49
44	Los Alamos Opacities: Transition from LEDCOP to ATOMIC. <i>AIP Conference Proceedings</i> , 2004, , .	0.4	37
45	Differential cross sections and cross-section ratios for the electron-impact excitation of the neon2p53sconfiguration. <i>Physical Review A</i> , 2002, 65, .	2.5	41
46	Fully relativistic calculations of and fits to 1sionization cross sections. <i>Physical Review A</i> , 1999, 59, 1329-1335.	2.5	55
47	Use of the factorized form for the collision strength in exploration of the effect of the generalized Breit interaction. <i>Physical Review A</i> , 1994, 49, 3704-3711.	2.5	14
48	Inclusion of the generalized Breit interaction in excitation of highly charged ions by electron impact. <i>Physical Review A</i> , 1993, 47, 1009-1022.	2.5	62