## **Christopher Fontes**

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7701622/publications.pdf

Version: 2024-02-01

218677 3,509 48 26 citations h-index papers

g-index 50 50 50 3802 docs citations times ranked citing authors all docs

214800

47

#	Article	IF	CITATIONS
1	The X-ray counterpart to the gravitational-wave event GW170817. Nature, 2017, 551, 71-74.	27.8	627
2	The Emergence of a Lanthanide-rich Kilonova Following the Merger of Two Neutron Stars. Astrophysical Journal Letters, 2017, 848, L27.	8.3	507
3	<i>Swift</i> and <i>NuSTAR</i> observations of GW170817: Detection of a blue kilonova. Science, 2017, 358, 1565-1570.	12.6	399
4	A higher-than-predicted measurement of iron opacity at solar interior temperatures. Nature, 2015, 517, 56-59.	27.8	321
5	A NEW GENERATION OF LOS ALAMOS OPACITY TABLES. Astrophysical Journal, 2016, 817, 116.	4.5	153
6	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
7	Full transport model of GW170817-like disk produces a blue kilonova. Physical Review D, 2019, 100, .	4.7	135
8	The Los Alamos suite of relativistic atomic physics codes. Journal of Physics B: Atomic, Molecular and Optical Physics, 2015, 48, 144014.	1.5	122
9	A line-binned treatment of opacities for the spectra and light curves from neutron star mergers. Monthly Notices of the Royal Astronomical Society, 2020, 493, 4143-4171.	4.4	82
10	Systematic Study of <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>L</mml:mi></mml:math> -Shell Opacity at Stellar Interior Temperatures. Physical Review Letters, 2019, 122, 235001.	7.8	78
11	A fully relativistic approach for calculating atomic data for highly charged ions. Physics Reports, 2009, 477, 111-214.	25.6	76
12	SPECTRA OF TYPE IA SUPERNOVAE FROM DOUBLE DEGENERATE MERGERS. Astrophysical Journal, 2010, 725, 296-308.	4.5	73
13	Axisymmetric Radiative Transfer Models of Kilonovae. Astrophysical Journal, 2021, 910, 116.	4.5	67
14	Inclusion of the generalized Breit interaction in excitation of highly charged ions by electron impact. Physical Review A, 1993, 47, 1009-1022.	2.5	62
15	Fully relativistic calculations of and fits to 1sionization cross sections. Physical Review A, 1999, 59, 1329-1335.	2.5	55
16	SPECTRA AND LIGHT CURVES OF FAILED SUPERNOVAE. Astrophysical Journal, 2009, 707, 193-207.	4.5	49
17	Differential cross sections and cross-section ratios for the electron-impact excitation of the neon2p53sconfiguration. Physical Review A, 2002, 65, .	2.5	41
18	THE LOS ALAMOS SUPERNOVA LIGHT-CURVE PROJECT: COMPUTATIONAL METHODS. Astrophysical Journal, Supplement Series, 2013, 204, 16.	7.7	41

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19	Electron- and Proton-Impact Excitation of Hydrogenlike Uranium in Relativistic Collisions. Physical Review Letters, 2013, 110, 213201.	7.8	41
20	A Broad Grid of 2D Kilonova Emission Models. Astrophysical Journal, 2021, 918, 10.	4.5	38
21	Los Alamos Opacities: Transition from LEDCOP to ATOMIC. AIP Conference Proceedings, 2004, , .	0.4	37
22	Composition Effects on Kilonova Spectra and Light Curves. I. Astrophysical Journal, 2020, 899, 24.	4.5	37
23	Review of the 9th NLTE code comparison workshop. High Energy Density Physics, 2017, 23, 38-47.	1.5	35
24	Kilonova Detectability with Wide-field Instruments. Astrophysical Journal, 2022, 927, 163.	4.5	34
25	Wider pulsation instability regions for (i) $\hat{l}^2$ (i) Cephei and SPB stars calculated using new Los Alamos opacities. Astronomy and Astrophysics, 2015, 580, L9.	5.1	31
26	Impact of Pulsar and Fallback Sources on Multifrequency Kilonova Models. Astrophysical Journal, 2019, 880, 22.	4.5	29
27	60Fe 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
28	Effect of Electron Capture on Spectral Line Broadening in Hot Dense Plasmas. Physical Review Letters, 2020, 124, 055003.	7.8	16
29	Use of the factorized form for the collision strength in exploration of the effect of the generalized Breit interaction. Physical Review A, 1994, 49, 3704-3711.	2.5	14
30	State-resolved Photodissociation and Radiative Association Data for the Molecular Hydrogen Ion. Astrophysical Journal, 2017, 851, 64.	4.5	13
31	Electron- and proton-impact excitation of heliumlike uranium in relativistic collisions. Physical Review A, 2019, 99, .	2.5	13
32	All-Order Full-Coulomb Quantum Spectral Line-Shape Calculations. Physical Review Letters, 2021, 127, 235001.	7.8	13
33	Interpolating detailed simulations of kilonovae: Adaptive learning and parameter inference applications. Physical Review Research, 2022, 4, .	3.6	13
34	Study of laser produced plasma in a longitudinal magnetic field. Physics of Plasmas, 2019, 26, .	1.9	12
35	Calculation of the relativistic rise in electron-impact-excitation cross sections for highly charged ions. Physical Review A, 2013, 88, .	2.5	11
36	The Role of Inhomogeneities in Supernova Shock Breakout Emission. Astrophysical Journal, 2020, 898, 123.	4.5	10

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37	Laser-driven production of the antihydrogen molecular ion. Physical Review A, 2019, 100, .	2.5	9
38	Self-consistent Large-Scale Collisional-Radiative Modeling. Springer Series on Atomic, Optical, and Plasma Physics, 2016, , 17-50.	0.2	8
39	Ground-state excitation of heavy highly-charged ions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2015, 48, 144006.	1.5	7
40	Collisional-Radiative Modeling of Tungsten at Temperatures of 1200–2400 eV. Atoms, 2015, 3, 76-85.	1.6	7
41	Impact of a minority relativistic electron tail interacting with a thermal plasma containing high-atomic-number impurities. Physics of Plasmas, 2020, 27, 040702.	1.9	6
42	Time-dependent density functional theory applied to average atom opacity. Physical Review E, 2021, 103, 043206.	2.1	6
43	Annotation of Hans Bethe's paper, Zeitschrift fýr Physik 76, 293 (1932), "Braking Formula for Electrons of Relativistic Speed― European Physical Journal H, 2014, 39, 517-536.	0.8	5
44	Angular Distribution of Characteristic Radiation Following the Excitation of He-Like Uranium in Relativistic Collisions. Atoms, 2021, 9, 20.	1.6	3
45	Charge state distributions in dense plasmas. Physics of Plasmas, 2022, 29, .	1.9	3
46	Understanding how minority relativistic electron populations may dominate charge state balance and radiative cooling of a post-thermal quench tokamak plasma. Physics of Plasmas, 2022, 29, 012504.	1.9	2
47	Sodium tracer measurements of an expanded dense aluminum plasma from e-beam isochoric heating. Physics of Plasmas, 2021, 28, .	1.9	1
48	Light element opacities of astrophysical interest from ATOMIC. , 2013, , .		0