

# Thomas Gorczyca

## List of Publications by Year in descending order

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55  
papers

1,490  
citations

304743

22  
h-index

302126

39  
g-index

55  
all docs

55  
docs citations

55  
times ranked

866  
citing authors

#	ARTICLE	IF	CITATIONS
1	Dielectronic recombination data for dynamic finite-density plasmas. <i>Astronomy and Astrophysics</i> , 2003, 406, 1151-1165.	5.1	191
2	Collisional Ionization Equilibrium for Optically Thin Plasmas. I. Updated Recombination Rate Coefficients for Bare through Sodium-like Ions. <i>Astrophysical Journal, Supplement Series</i> , 2006, 167, 343-356.	7.7	133
3	Inclusion of radiation damping in the close-coupling equations for electron-atom scattering. <i>Physical Review A</i> , 1995, 52, 1319-1333.	2.5	130
4	High-Resolution X-Ray Spectroscopy of the Interstellar Medium. II. Neon and Iron Absorption Edges. <i>Astrophysical Journal</i> , 2006, 648, 1066-1078.	4.5	93
5	K-shell Photoabsorption of Oxygen Ions. <i>Astrophysical Journal, Supplement Series</i> , 2005, 158, 68-79.	7.7	78
6	Photoionization - excitation of helium using an R-matrix with pseudostates method. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1997, 30, 3897-3911.	1.5	75
7	Probing confinement resonances by photoionizing Xe inside a C <sub>60</sub> molecular cage. <i>Physical Review A</i> , 2013, 88, .	2.5	69
8	Auger decay of the photoexcited 2p <sup>n</sup> 1n Rydberg series in argon. <i>Physical Review A</i> , 1999, 60, 1216-1225.	2.5	43
9	K-shell photodetachment from C <sup>4+</sup> : Experiment and theory. <i>Physical Review A</i> , 2003, 67, .	2.5	43
10	Postcollision recapture in the K-shell photodetachment of Li <sup>2+</sup> . <i>Physical Review A</i> , 2003, 68, .	2.5	42
11	Auger decay of the photoexcited 1s <sup>n</sup> 1np Rydberg series in neon. <i>Physical Review A</i> , 2000, 61, .	2.5	41
12	Elimination of electron-ion pseudoresonances associated with approximate target wave functions. <i>Physical Review A</i> , 1995, 52, 3877-3888.	2.5	37
13	Photoionization of endohedral atoms using R-matrix methods: Application to Xe@C <sub>60</sub> . <i>Physical Review A</i> , 2013, 86, .	2.5	37
14	ISMabs: A COMPREHENSIVE X-RAY ABSORPTION MODEL FOR THE INTERSTELLAR MEDIUM. <i>Astrophysical Journal</i> , 2015, 800, 29.	4.5	36
15	SUPPRESSION OF DIELECTRONIC RECOMBINATION DUE TO FINITE DENSITY EFFECTS. <i>Astrophysical Journal</i> , 2013, 768, 82.	4.5	34
16	Dielectronic recombination of ground-state and metastable Li <sup>+</sup> ions. <i>Physical Review A</i> , 1999, 60, R3350-R3353.	2.5	32
17	Elastic resonant and nonresonant differential scattering of quasifree electrons from B <sup>4+</sup> (1s) and B <sup>3+</sup> (1s <sup>2</sup> ) ions. <i>Physical Review A</i> , 2004, 69, .	2.5	30
18	A COMPREHENSIVE X-RAY ABSORPTION MODEL FOR ATOMIC OXYGEN. <i>Astrophysical Journal</i> , 2013, 779, 78.	4.5	29

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19	Photodetachment of He $1s2s2p^4$ in the region of the $1s$ threshold. Journal of Physics B: Atomic, Molecular and Optical Physics, 2002, 35, 4161-4178.	1.5	27
20	Importance of Spin-Orbit Effects in Parity-Unfavored Photoionization of Neon, Observed Using a Two-Dimensional Photoelectron Imaging Technique. Physical Review Letters, 1998, 80, 5085-5088.	7.8	26
21	PHYSICAL PROPERTIES OF THE INTERSTELLAR MEDIUM USING HIGH-RESOLUTION CHANDRA SPECTRA: O K-EDGE ABSORPTION. Astrophysical Journal, 2014, 790, 131.	4.5	25
22	K-SHELL PHOTOABSORPTION STUDIES OF THE CARBON ISONUCLEAR SEQUENCE. Astrophysical Journal, 2010, 724, 1296-1304.	4.5	24
23	Shape resonances in the absolute K-shell photodetachment of $B^{4+}$ . Physical Review A, 2007, 76, .	2.5	22
24	Large-angle elastic resonant and nonresonant scattering of electrons from $B^{3+}(1s^2)$ and $B^{4+}(1s)$ ions: Comparison of experiment and theory. Physical Review A, 2003, 68, .	2.5	17
25	Suppression of Dielectronic Recombination Due to Finite Density Effects. II. Analytical Refinement and Application to Density-dependent Ionization Balances and AGN Broad-line Emission. Astrophysical Journal, Supplement Series, 2018, 237, 41.	7.7	15
26	Relativistic effects in the photoionization of Ne-like iron. Physical Review A, 1999, 60, 4577-4581.	2.5	13
27	Inner-shell photoabsorption of $Fe^{14+}$ : Unimportance of correlation and relativistic effects. Physical Review A, 2000, 63, .	2.5	13
28	The XSTAR Atomic Database. Atoms, 2021, 9, 12.	1.6	12
29	Interference effects in the Auger decay of the $Ar^{16+} 2p^{13}$ resonances. Physical Review A, 2001, 64, .	2.5	11
30	K-SHELL PHOTOABSORPTION OF MAGNESIUM IONS. Astrophysical Journal, Supplement Series, 2014, 214, 8.	7.7	11
31	Silicon ISM X-ray absorption: the gaseous component. Monthly Notices of the Royal Astronomical Society: Letters, 2020, 498, L20-L24.	3.3	11
32	Investigation of photoelectron recapture in Ar using two-dimensional photoelectron spectroscopy. Physical Review A, 2005, 72, .	2.5	10
33	Inner-shell photodetachment from Fe $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\langle \text{mml:mrow} \langle \text{mml:msup} \langle \text{mml:mrow} / \rangle \langle \text{mml:mrow} \langle \text{mml:mo} \rangle \hat{\sim} \langle \text{mml:mo} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msup} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ . Physical Review A, 2010, 81, .	2.5	10
34	Carbon X-ray absorption in the local ISM: Fingerprints in X-ray Novae spectra. Monthly Notices of the Royal Astronomical Society, 2018, 479, 2457-2463.	4.4	10
35	Superelastic scattering of electrons from metastable He-like $C^{4+}$ and $O^{6+}$ ions. Physical Review A, 2002, 65, .	2.5	9
36	Nonmonotonic behavior as a function of nuclear charge of the K-shell Auger and radiative rates and fluorescence yields along the $1s2s2p^3$ isoelectronic sequence. Physical Review A, 2008, 78, .	2.5	9

#	ARTICLE	IF	CITATIONS
37	Photoionization of confined Ca in a spherical potential well. <i>Physical Review A</i> , 2013, 87, .	2.5	8
38	Orbital sensitivity in Mg <sup>2+</sup> dielectronic recombination calculations. <i>Physical Review A</i> , 2008, 77, .	2.5	7
39	Inner-shell photoionization of atomic chlorine. <i>Physical Review A</i> , 2013, 88, .	2.5	6
40	Inner-shell photodetachment from Ru <sup>+</sup> . <i>Physical Review A</i> , 2010, 82, .	2.5	5
41	Two-electron photoionization processes in He@C <sub>60</sub> using the R-matrix with pseudostates and time-dependent close-coupling methods. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2013, 46, 195201.	1.5	5
42	Frame-transformation methods for open-shell systems: Photoabsorption of Ni <sup>14+</sup> . <i>Physical Review A</i> , 2002, 66, .	2.5	2
43	<i>R</i> -matrix with pseudostates study of single photon double ionization of endohedral Be and Mg atoms. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2015, 48, 065201.	1.5	2
44	Inner-shell photodetachment from Ni <sup>+</sup> : A giant Feshbach resonance. <i>Physical Review A</i> , 2017, 96, .	2.5	2
45	Inner-Shell Photodetachment of Na <sup>+</sup> Using R-Matrix Methods. <i>Atoms</i> , 2020, 8, 60.	1.6	1
46	Photoionization of open-shell nitrogen confined in C <sub>60</sub> . <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2021, 54, 035202.	1.5	1
47	Double photoionization of atomic oxygen: Feshbach resonances in the two-electron continuum. <i>Physica Scripta</i> , 2021, 96, 064005.	2.5	1
48	K-Shell photoabsorption in Si <sup>11+</sup> : Relativistic contributions via Breit-Pauli R-matrix calculations. <i>Physica Scripta</i> , 2021, 96, 124024.	2.5	1
49	Outer-shell photodetachment of Li <sup>+</sup> near inner-shell thresholds. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2020, 53, 195203.	1.5	1
50	Non-perturbative vs. perturbative methods for photorecombination. , 1998, , .		0
51	Resonant (RTE) and Non Resonant (NTE) Transfer Excitation in 4 MeV B <sup>4+</sup> collisions with H <sub>2</sub> , He and Ar studied by zero-degree Auger projectile electron spectroscopy. <i>AIP Conference Proceedings</i> , 2003, , .	0.4	0
52	Production and Decay of Atomic Inner-Shell Vacancy States. , 2005, , .		0
53	M-Shell Dielectronic Recombination: Theoretical Study. , 2009, , .		0
54	Reverse-engineering laboratory astrophysics: Oxygen inner-shell absorption in the ISM. <i>AIP Conference Proceedings</i> , 2017, 1811, .	0.4	0

#	ARTICLE	IF	CITATIONS
55	Oleg Zatsarinny: Expert Atomic Theorist, Kind Man. Atoms, 2021, 9, 107.	1.6	0