

# Nabil Ben Nessim

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3545947/publications.pdf>

Version: 2024-02-01

61

papers

568

citations

759233

12

h-index

677142

22

g-index

62

all docs

62

docs citations

62

times ranked

261

citing authors

#	ARTICLE	IF	CITATIONS
1	Widths and Shifts of Isolated Lines of Neutral and Ionized Atoms Perturbed by Collisions With Electrons and Ions: An Outline of the Semiclassical Perturbation (SCP) Method and of the Approximations Used for the Calculations. <i>Atoms</i> , 2014, 2, 225-252.	1.6	55
2	The STARK-B database VAMDC node: a repository for spectral line broadening and shifts due to collisions with charged particles. <i>Physica Scripta</i> , 2015, 90, 054008.	2.5	47
3	Stark broadening calculations of neutral copper spectral lines and temperature dependence. <i>Physica Scripta</i> , 2010, 82, 055301.	2.5	41
4	Quantum model of emission in a weakly non ideal plasma. <i>European Physical Journal D</i> , 2004, 29, 391-395.	1.3	40
5	Quantum mechanical calculations of the electron-impact broadening of spectral lines for intermediate coupling. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2004, 37, 63-71.	1.5	35
6	Quantum Stark broadening of $3s-3p$ spectral lines in Li-like ions; Z-scaling and comparison with semi-classical perturbation theory. <i>European Physical Journal D</i> , 2009, 54, 51-64.	1.3	29
7	Atomic data and electron-impact broadening effect in DO white dwarf atmospheres: Si $\alpha$ . <i>Monthly Notices of the Royal Astronomical Society</i> , 2008, 387, 871-882.	4.4	22
8	Stark broadening of neutral oxygen lines in the impact and quasistatic approximations. <i>Physica Scripta</i> , 1996, 54, 608-613.	2.5	18
9	Stark-broadening calculations of singly ionized carbon spectral lines. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 423, 766-773.	4.4	17
10	Stark broadening of Pb $\alpha$ spectral lines. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 431, 1039-1047.	4.4	16
11	Stark broadening of the four times ionized silicon spectral lines. <i>Astronomy and Astrophysics</i> , 2004, 423, 397-400.	5.1	14
12	Electrical conductivity study of gamma-irradiated table sugar for high-dose dosimetry. <i>Radiation Measurements</i> , 2008, 43, 1254-1257.	1.4	14
13	Stark Widths of Ar II Spectral Lines in the Atmospheres of Subdwarf B Stars. <i>Atoms</i> , 2017, 5, 26.	1.6	12
14	Quantum Stark broadening data for the C $\alpha$ -fiv, N $\alpha$ -fv, O $\alpha$ -fvi, F $\alpha$ -fvii and Ne $\alpha$ -fviii resonance doublets. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 417, 2624-2630.	4.4	11
15	Stark widths of Ar III spectral lines in the atmospheres of subdwarf B stars. <i>Advances in Space Research</i> , 2014, 54, 1223-1230.	2.6	11
16	Semi-Classical Calculations of Stark Broadening Impact Theory of Singly-Ionized Carbon, Nitrogen and Oxygen Spectral Lines. <i>Physica Scripta</i> , 2004, 70, 142-152.	2.5	10
17	Stark Broadening of the Spectral Lines of Ne v. <i>Astrophysical Journal, Supplement Series</i> , 2007, 170, 243-250.	7.7	10
18	Stark broadening of isolated lines: calculation of the diagonal multiplet factor for complex configurations ( $n_1l_1 n_2l_2 m_3l_3 p$ ). <i>European Physical Journal D</i> , 2008, 47, 7-10.	1.3	10

#	ARTICLE	IF	CITATIONS
19	Fine structure collision strengths for S VII lines. <i>Physica Scripta</i> , 2012, 85, 065302.	2.5	10
20	EPR study of table sugar rod and powder as high dose dosimeters. <i>Radiation Measurements</i> , 2012, 47, 988-991.	1.4	10
21	The STARK-B database as a resource for “STARK” widths and shifts data: State of advancement and program of development. <i>Advances in Space Research</i> , 2014, 54, 1148-1151.	2.6	10
22	Ab initio calculations of Stark broadening parameters. <i>New Astronomy Reviews</i> , 2009, 53, 255-258.	12.8	9
23	Semiclassical perturbation Stark widths of singly charged argon spectral lines. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 475, 800-813.	4.4	9
24	Stark broadening of $3s3P0 \rightarrow 3p3D$ and $3p3D \rightarrow 3d3F0$ transitions along carbon isoelectronic sequences of ions revisited. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2005, 38, 715-728.	1.5	8
25	Radiative and Collisional Atomic Data for Neon-like Silicon. <i>Physica Scripta</i> , 2005, 72, 23-30.	2.5	7
26	Temperature dependence of atomic spectral line widths in a plasma. <i>European Physical Journal D</i> , 2008, 48, 389-395.	1.3	7
27	Energy levels and oscillator strengths for carbon isoelectronic sequence from C I to Ne V. <i>European Physical Journal Plus</i> , 2018, 133, 1.	2.6	7
28	Semi-classical collisional functions in a strongly correlated plasma. <i>Astronomy and Astrophysics</i> , 2004, 419, 771-776.	5.1	7
29	Electron impact broadening of multicharged ion lines of astrophysical interest: Ne VII, Ne VIII and Si XI. <i>New Astronomy</i> , 2006, 12, 64-70.	1.8	6
30	pH-Metric study of gamma-irradiated table sugar for dosimetry purpose. <i>Radiation Measurements</i> , 2009, 44, 374-377.	1.4	6
31	Electron impact broadening of Si IV spectral lines: Comparison with recent experiments. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2012, 113, 1606-1611.	2.3	6
32	Semiclassical perturbation Stark shifts of singly charged argon spectral lines. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 488, 2473-2479.	4.4	6
33	Observations and analysis of NOAA AR 11429 at KSU-Astronomical Observatory. <i>New Astronomy</i> , 2013, 23-24, 73-81.	1.8	5
34	Stark broadening of Fe V spectral lines: $4s \rightarrow 4p$ transitions. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 504, 1320-1330.	4.4	5
35	Modified semiempirical electron width calculations of singly-ionized oxygen spectral lines. <i>Astronomy and Astrophysics</i> , 2005, 434, 773-778.	5.1	4
36	The OIV 1407.3 Å / 1401.1 Å emission-line ratio in a plasma. <i>Advances in Space Research</i> , 2014, 54, 1190-1194.	2.6	4

#	ARTICLE	IF	CITATIONS
37	Stark Broadening Parameters for Neutral Oxygen Spectral Lines. <i>Journal of Astrophysics and Astronomy</i> , 2015, 36, 661.	1.0	4
38	Semi-Classical Impact Stark Shift Calculations of Singly-Ionized Carbon, Nitrogen and Oxygen Spectral Lines. <i>Physica Scripta</i> , 2005, 71, 190-192.	2.5	3
39	Atomic Structure Calculations for Neutral Oxygen. <i>International Journal of Spectroscopy</i> , 2016, 2016, 1-7.	1.6	3
40	Stark widths dependence on electron temperature for neutral chromium spectral lines. <i>European Physical Journal Plus</i> , 2016, 131, 1.	2.6	3
41	Semi-classical collisional functions in a strongly correlated plasma. <i>Astronomy and Astrophysics</i> , 2005, 433, 1153-1154.	5.1	3
42	Semi-classical Stark broadening calculations of He I lines in a non-ideal plasma. <i>Astronomy and Astrophysics</i> , 2007, 465, 651-665.	5.1	2
43	Ab Initio Determination of Atomic Structure and Stark Broadening Parameters: Pb IV and Recent Results. <i>Open Astronomy</i> , 2011, 20, .	0.6	2
44	Stark Broadening of Carbon and Oxygen Lines in Hot DQ White Dwarf Stars: Recent Results and Applications. <i>Open Astronomy</i> , 2011, 20, .	0.6	2
45	Expectation Values of the Neutral Chromium Radius. <i>Atoms</i> , 2018, 6, 51.	1.6	2
46	Atomic structure for carbon-like ions from Na $\alpha\alpha\alpha</math> to Ar\alpha\alpha\alpha</math>. Monthly Notices of the Royal Astronomical Society, 2021, 507, 3228-3237.$	4.4	2
47	The STARK-B database VAMDC node. <i>AIP Conference Proceedings</i> , 2017, , .	0.4	1
48	Energy levels of the singly ionized titanium: Ti $\alpha\alpha\alpha</math> ion. Astronomische Nachrichten, 2022, 343, .$	1.2	1
49	Stark broadening effect in hot DA white dwarfs: Ultraviolet lines of Fe V. <i>Astronomische Nachrichten</i> , 2022, 343, .	1.2	1
50	Stark broadening parameters of the singly ionized sulfur: S II. <i>Advances in Space Research</i> , 2023, 71, 1281-1286.	2.6	1
51	Simple convergent formula for estimating stark widths of neutral atom lines. <i>AIP Conference Proceedings</i> , 1990, , .	0.4	0
52	Collision width function in a correlated plasma. <i>AIP Conference Proceedings</i> , 1990, , .	0.4	0
53	Stark broadening calculations of 3d-5f transition in Al XI. <i>AIP Conference Proceedings</i> , 1995, , .	0.4	0
54	Electron-Impact Broadening of C II Spectral Lines. <i>Journal of Physics: Conference Series</i> , 2012, 397, 012056.	0.4	0

#	ARTICLE	IF	CITATIONS
55	Radiative atomic data and fine-structure collision strengths for neon-like sulfur. <i>Journal of Physics: Conference Series</i> , 2012, 388, 062006.	0.4	0
56	The fully relativistic multi-configuration Diracâ€“Hartreeâ€“Fock method for atomic structure calculations for multiply charged ions: the example of Ca XV. <i>European Physical Journal D</i> , 2021, 75, 1.	1.3	0
57	On the applications of the modified semiempirical method for Stark broadening: the example of the alkali-like ion Sr II. <i>European Physical Journal D</i> , 2021, 75, 1.	1.3	0
58	Impact of Stark broadening on Co II spectral line modelling in hot stars. <i>European Physical Journal D</i> , 2021, 75, 1.	1.3	0
59	Influence of Stark broadening of ionized chromium spectral lines in Ap-star atmospheres. <i>European Physical Journal D</i> , 2021, 75, 1.	1.3	0
60	Ab initio and semi-empirical atomic structure calculations: Applications to the 5pâ€“6s transitions for the Mo II ion. <i>Astronomische Nachrichten</i> , 0, , .	1.2	0
61	Atomic structure of the doubly ionized titanium Ti III ion. <i>Advances in Space Research</i> , 2022, , .	2.6	0