Yuri Ralchenko

List of Publications by Year
in descending order

137	3,081	186265	182427
papers	citations	28 h-index	51 g-index

141	141	141	1830
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Virtual atomic and molecular data centre. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 2151-2159.	2.3	164
2	Development of NIST Atomic Databases and Online Tools. Atoms, 2020, 8, 56.	1.6	154
3	Accelerated recombination due to resonant deexcitation of metastable states. Journal of Quantitative Spectroscopy and Radiative Transfer, 2001, 71, 609-621.	2.3	153
4	Electron-impact excitation and ionization cross sections for ground state and excited helium atoms. Atomic Data and Nuclear Data Tables, 2008, 94, 603-622.	2.4	123
5	The virtual atomic and molecular data centre (VAMDC) consortium. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 074003.	1.5	120
6	EUV spectra of highly-charged ions W⁵⁴⁺â€“W⁶³⁺relevant to ITER diagnostics. Journal of Physics B: Atomic, Molecular and Optical Physics, 2008, 41, 021003.	1.5	110
7	Review of the 4th NLTE Code Comparison Workshop. High Energy Density Physics, 2007, 3, 225-232.	1.5	98
8	Spectroscopy of diagnostically important magnetic-dipole lines in highly charged<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>3</mml:mn><mml:msup><mml:mi>d</mml:mi><mml:mrow><mml:mi>n</mml:mi></mml:mrow of tungsten. Physical Review A, 2011, 83, .	2.5	96
9	Review of the NLTE kinetics code workshop. Journal of Quantitative Spectroscopy and Radiative Transfer, 1997, 58, 737-742.	2.3	90
10	Spectra of W³⁹⁺â€“W⁴⁷⁺in the 12â€“20 nm region observed with an EBIT light source. Journal of Physics B: Atomic, Molecular and Optical Physics, 2007, 40, 3861-3875.	1.5	90
11	Review of the NLTE-5 kinetics workshop. High Energy Density Physics, 2009, 5, 15-22.	1.5	85
12	Comparing plasma population kinetics codes: Review of the NLTE-3 Kinetics Workshop. Journal of Quantitative Spectroscopy and Radiative Transfer, 2006, 99, 102-119.	2.3	82
13	Review of the NLTE emissivities code comparison virtual workshop. Journal of Quantitative Spectroscopy and Radiative Transfer, 2003, 81, 71-84.	2.3	73
14	Accurate modeling of benchmark x-ray spectra from highly charged ions of tungsten. Physical Review A, 2006, 74, .	2.5	71
15	A scaling of multiple ionization cross sections. Journal of Physics B: Atomic, Molecular and Optical Physics, 1995, 28, 3027-3046.	1.5	60
16	Empirical formula for cross section of direct electron-impact ionization of ions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2000, 33, 5025-5032.	1.5	54
17	A Decade with VAMDC: Results and Ambitions. Atoms, 2020, 8, 76.	1.6	53
18	Comparison and analysis of collisional-radiative models at the NLTE-7 workshop. High Energy Density Physics, 2013, 9, 645-652.	1.5	51

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19	Consistency of atomic data for the interpretation of beam emission spectra. Plasma Physics and Controlled Fusion, 2010, 52, 125008.	2.1	46
20	Stark broadening of the B III2sâ^'2plines. Physical Review E, 1997, 56, 7186-7192.	2.1	40
21	Measurement of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>D</mml:mi></mml:math>-line doublet in high-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Z</mml:mi></mml:math>highly charged sodiumlike ions. Physical Review A, 2009, 80, .	2.5	38
22	Review of the 9th NLTE code comparison workshop. High Energy Density Physics, 2017, 23, 38-47.	1.5	35
23	Electron-impact-excitation cross sections of hydrogenlike ions. Physical Review A, 1997, 55, 329-334.	2.5	34
24	Spectroscopic investigations of a dielectric-surface-discharge plasma source. Physics of Plasmas, 2000, 7, 3797-3807.	1.9	32
25	Density dependence of the forbidden lines in Ni-like tungsten. Journal of Physics B: Atomic, Molecular and Optical Physics, 2007, 40, F175-F180.	1.5	32
26	Collisional excitation and emission ofHÎ±Stark multiplet in fusion plasmas. Journal of Physics B: Atomic, Molecular and Optical Physics, 2010, 43, 011002.	1.5	31
27	EUV spectra of Rb-like to Cu-like gadolinium ions in an electron-beam ion trap. Physical Review A, 2012, 86, .	2.5	29
28	Temperature andKÎ±-yield radial distributions in laser-produced solid-density plasmas imaged with ultrahigh-resolution x-ray spectroscopy. Physical Review E, 2010, 81, 026406.	2.1	28
29	Multi-configuration Dirac–Hartree–Fock calculations of forbidden transitions within the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si5168.gif" display="inline" overflow="scroll"><mml:mn>3</mml:mn><mml:msup><mml:mrow><mml:mstyle mathvariant="normal"><mml:mi>d</mml:mi></mml:mstyle></mml:mrow><mml:mrow><mml:mi>k</mml:mi></mml:mrow></mml:msup>		

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37	VAMDCâ€"The Virtual Atomic and Molecular Data Centreâ€"A New Way to Disseminate Atomic and Molecular Dataâ€"VAMDC Level 1 Release. AIP Conference Proceedings, 2011, , .	0.4	24
38	Non-statistical population distributions for hydrogen beams in fusion plasmas. Plasma Physics and Controlled Fusion, 2012, 54, 095010.	2.1	24
39	Complete collision data set for electrons scattering on molecular hydrogen and its isotopologues: I. Fully vibrationally-resolved electronic excitation of H<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e3985" altimg="si24.svg"><mml:mrow><mml:msub><mml:mrow		

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55	Large-scale calculation of dielectronic recombination parameters for Mg-like Fe. Journal of Physics B: Atomic, Molecular and Optical Physics, 2006, 39, 2917-2937.	1.5	15
56	Extreme ultraviolet spectra of highly charged xenon observed with an electron beam ion trap. Journal of Physics B: Atomic, Molecular and Optical Physics, 2012, 45, 245001.	1.5	15
57	Some corrections to GRASP92. Computer Physics Communications, 2006, 175, 738-744.	7.5	14
58	Electron-impact-excitation cross sections of lithiumlike ions. Physical Review A, 1997, 56, 3726-3733.	2.5	13
59	Measurement of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mmultiscripts><mml:mi>P</mml:mi><mml:mrow><mml:m /><mml:mprescripts /><mml:none /><mml:mn>2</mml:mn></mml:mmultiscripts><mml:mtext>â^'</mml:mtext><mml:mmultiscripts><mml:mi>P</mml:mi><mml:mrow /><mml:mprescripts /><mml:none /><mml:mn>2</mml:mn></mml:mmultiscripts></mml:mrow></mml: Physical Review A, 2020, 102.	2.5	13
60	EXCITATION AND IONIZATION CROSS SECTIONS FOR HE I FROM NORMALIZED BORN AND K-MATRIX CALCULATIONS: Î”S = 0 TRANSITIONS FROM n = 2, 3 EXCITED STATES. Atomic Data and Nuclear Data Tables, 2000, 74, 123-153.	2.4	12
61	Atomic data for dielectronic recombination into C-like oxygen. Physica Scripta, 2006, 73, 143-159.	2.5	12
62	Multi-Code Ab Initio Calculation of Ionization Distributions and Radiation Losses for Tungsten in Tokamak Plasmas. , 2009, , .		11
63	Extreme ultraviolet spectra fromN-shell ions of Gd, Dy and W. Physica Scripta, 2013, T156, 014012.	2.5	11
64	Measurement and calculation of absolute single- and double-charge-exchange cross sections for<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mrow><mml:mi mathvariant="normal">O</mml:mi></mml:mrow><mml:mrow><mml:mn>6</mml:mn><mml:mo>+</mml:mo></mml:mrow></mml:msu at 1.17 and 2.33 keV/u impacting He and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">H</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review A,	2.5	11
65	Complete collision data set for electrons scattering on molecular hydrogen and its isotopologues: II. Fully vibrationally-resolved electronic excitation of the isotopologues of H2 (X1Î£g+). Atomic Data and Nuclear Data Tables, 2021, 139, 101403.	2.4	11
66	Measurements of linear polarization of satellite transitions from Li- and Be-like Ar ions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2020, 53, 145004.	1.5	10
67	Electron collisional broadening of 2s3sâ€“2s3p lines in Be-like ions. Journal of Quantitative Spectroscopy and Radiative Transfer, 2001, 71, 595-607.	2.3	9
68	Nonthermal Electron Measurements in Solar Flares withHinodeEIS. Astrophysical Journal, 2008, 684, 707-714.	4.5	9
69	Online databases and computational tools for non-LTE spectroscopy. Physica Scripta, 2009, 2009, 014025.	2.5	9
70	Kinetics of highly excited states in Ar17+charge exchange recombination fusion plasma spectroscopy. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 165701.	1.5	9
71	EUV spectral lines of highly-charged Hf, Ta and Au ions observed with an electron beam ion trap. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 179801.	1.5	9
72	SOLAR-WIND ION-DRIVEN X-RAY EMISSION FROM COMETARY AND PLANETARY ATMOSPHERES: MEASUREMENTS AND THEORETICAL PREDICTIONS OF CHARGE-EXCHANGE CROSS-SECTIONS AND EMISSION SPECTRA FOR O⁶⁺+ H₂O, CO, CO₂, CH₄, N₂, NO, N₂O, AND Ar. Astrophysical Journal, 2015, 809, 75.	4.5	9

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73	Measuring the difference in nuclear charge radius of Xe isotopes by EUV spectroscopy of highly charged Na-like ions. Physical Review A, 2018, 98, .	2.5	9
74	Recommended electron-impact excitation and ionization cross sections for Be I. Atomic Data and Nuclear Data Tables, 2019, 127-128, 1-21.	2.4	9
75	On Low-Energy Tail Distortions in the Detector Response Function of X-Ray Microcalorimeter Spectrometers. Journal of Low Temperature Physics, 2020, 199, 1046-1054.	1.4	9
76	Linear polarization of anisotropically excited x-ray lines from the n = 2 complex in He-like Ar¹⁶⁺. Journal of Physics B: Atomic, Molecular and Optical Physics, 2020, 53, 115701.	1.5	9
77	Zscaling of the 3P-3SLi isoelectronic series transition: Quadrupole Stark broadening and resonances. Physical Review A, 1994, 49, 3086-3088.	2.5	8
78	Investigation of Ne IX and Ne X line emission from dense plasma using Ross-filter systems. Journal of Applied Physics, 2002, 92, 4947-4951.	2.5	8
79	A guide to Internet atomic databases for hot plasmas. Journal of Quantitative Spectroscopy and Radiative Transfer, 2006, 99, 499-510.	2.3	8
80	AnisotropicLMNdielectronic resonances from ratios of magnetic-dipole lines. Physical Review A, 2013, 88, .	2.5	8
81	Characterization of inductively coupled plasma generated by a quadruple antenna. Plasma Sources Science and Technology, 2017, 26, 025005.	3.1	8
82	Analysis of EUV spectra from N-shell tungsten ions observed with an electron beam ion trap. European Physical Journal D, 2018, 72, 1.	1.3	8
83	EBIT Observation of Ar Dielectronic Recombination Lines near the Unknown Faint X-Ray Feature Found in the Stacked Spectrum of Galaxy Clusters. Astrophysical Journal, 2019, 872, 194.	4.5	8
84	Dielectronic recombination of the Xe⁸⁺ion and satellite lines of the Xe⁷⁺ion. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 015001.	1.5	7
85	A non-statistical atomic model for beam emission and motional Stark effect diagnostics in fusion plasmas. Review of Scientific Instruments, 2012, 83, 10D504.	1.3	6
86	Measurement of high-energy (10â€“60 keV) x-ray spectral line widths with eV accuracy. Review of Scientific Instruments, 2014, 85, 11D618.	1.3	6
87	Spectroscopic analysis of N-intrashell transitions in Rb-like to Ni-like Yb ions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2020, 53, 145002.	1.5	6
88	Identifications of extreme ultraviolet spectra of Br-like to Ni-like neodymium ions using an electron beam ion trap. Journal of Physics B: Atomic, Molecular and Optical Physics, 2020, 54, 015001.	1.5	6
89	Excitation Cross Sections for Li-like Ions of Beryllium and Boron. Physica Scripta, 2003, 67, 500-504.	2.5	5
90	Relativistic all-order and multiconfiguration Hartree-Fock calculations of the4dâ^'4fenergy separation in Li I. Physical Review A, 2007, 76, .	2.5	5

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91	Multiconfiguration Diracâ€“Hartreeâ€“Fock energies and transition probabilities for transitions in Ne II. International Journal of Mass Spectrometry, 2008, 271, 85-92.	1.5	5
92	Non-statistical simulations for neutral beam spectroscopy in fusion plasmas. , 2012, , .		5
93	Measurement and interpretation of the low-energy wing of Fe KÎ²1,3 characteristic X-ray line. Journal of Quantitative Spectroscopy and Radiative Transfer, 2001, 69, 103-106.	2.3	4
94	Review of the Third Non-LTE Code Comparison Workshop. AIP Conference Proceedings, 2004, , .	0.4	4
95	High-electron-temperature diagnostics of transient ionizing plasma using near-uv transitions. Physical Review E, 2008, 78, 036410.	2.1	4
96	Development of new standards for exchange of atomic and molecular data. , 2009, , .		4
97	THE EFFECT OF HOT CORONAL ELECTRONS ON EXTREME-ULTRAVIOLET SPECTRAL LINES OF He II EMITTED BY SOLAR TRANSITION REGION PLASMAS. Astrophysical Journal, 2010, 708, 244-252.	4.5	4
98	Non-statistical populations of magnetic sublevels of hydrogen beam atoms in fusion plasmas. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 623, 738-740.	1.6	4
99	Magnetic-dipole lines in 3dnions of high-Zelements: identification, diagnostic potential and dielectronic resonances. Physica Scripta, 2013, T156, 014082.	2.5	4
100	Measurement of the O2O3O4 and O3O4O5 super Costerâ€“Kronig rates in tungsten via asymmetric diffraction spectrometry. Journal of Physics B: Atomic, Molecular and Optical Physics, 2014, 47, 115004.	1.5	4
101	Infrared and visible laser spectroscopy for highly-charged Ni-like ions. Nuclear Instruments & Methods in Physics Research B, 2017, 408, 38-41.	1.4	4
102	Determination of the isotopic change in nuclear charge radius from extreme-ultraviolet spectroscopy of highly charged ions of Xe. Physical Review A, 2020, 101, .	2.5	4
103	Reply to â€œLine shape measurement and isolated line width calculations: Quantal versus semiclassical methodsâ€• Physical Review E, 1999, 60, 6241-6241.	2.1	3
104	New Generation of the NIST Atomic Spectroscopic Databases. AIP Conference Proceedings, 2005, , .	0.4	3
105	Total and Partial Dielectronic and Radiative Recombination of Xe¹⁰⁺ Ions. Journal of the Physical Society of Japan, 2008, 77, 064302.	1.6	3
106	Effect of radiative cascades on intensities of dielectronic satellites to He_{Î±}. Physica Scripta, 2009, 79, 035303.	2.5	3
107	Magnetic-dipole transitions in tungsten and other heavy elements observed with the NIST EBIT. , 2012, , .		3
108	Benchmark of collisionalâ€“radiative models for ITER beams at the Alcator C-Mod tokamak. Nuclear Fusion, 2013, 53, 123010.	3.5	3

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109	Atomic data for beam-stimulated plasma spectroscopy in fusion plasmas. AIP Conference Proceedings, 2013, , .	0.4	3
110	NIST program of spectroscopic data for light elements of fusion interest. Journal of Physics: Conference Series, 2015, 576, 012007.	0.4	3
111	Properties of laser-produced GaAs plasmas measured from highly resolved X-ray line shapes and ratios. High Energy Density Physics, 2018, 26, 73-80.	1.5	3
112	Charge exchange recombination spectra for 100 keV/u and 500 keV/u atomic hydrogen beam colliding with W64+. Plasma Physics and Controlled Fusion, 2019, 61, 125007.	2.1	3
113	Dielectronic resonances of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>L</mml:mi><mml:mi>M</mml:mi><mml:mi>n</mml:mi><mml:mi>n</mml:mi></mml:mrow></mml:math>-<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>L</mml:mi><mml:mi>N</mml:mi><mml:mi>n</mml:mi><mml:mi>n</mml:mi></mml:mrow></mml:math> series in highly charged<mml:math xmlns:mml="http://. Physical Review A, 2020, 101, .	2.8	3
114	Validation and Verification of Collisional-Radiative Models. Springer Series on Atomic, Optical, and Plasma Physics, 2016, , 181-208.	0.2	3
115	Population Kinetics Modeling of Low-Temperature Argon Plasma. Atoms, 2021, 9, 100.	1.6	3
116	High-resolution spectroscopic X-ray diagnostics for studying the ion kinetic energy and plasma properties in a Z-pinch at stagnation. , 0, , .		2
117	Wavelength calibration sources for instruments on extremely large telescopes. Proceedings of SPIE, 2008, , .	0.8	2
118	Spectroscopic diagnostics of magnetic fusion plasmas. Journal of Physics B: Atomic, Molecular and Optical Physics, 2010, 43, 140201.	1.5	2
119	Dielectronic resonances in highly-charged heavy ions observed in ion traps. Journal of Physics: Conference Series, 2017, 875, 052026.	0.4	2
120	Spectroscopic analysis of M- and N-intrashell transitions in Co-like to Na-like Yb ions. Journal of Physics B: Atomic, Molecular and Optical Physics, 0, , .	1.5	2
121	High-resolution spectroscopic X-ray diagnostics for studying the ion-lunetic energies at the stagnation of a Z-pinch plasma. , 0, , .		1
122	Are the Discrepancies Between Measured and Calculated Electron Impact Widths of Isolated Ion Lines Due to Non-Equilibrium Level Populations?. AIP Conference Proceedings, 2006, , .	0.4	1
123	New parametrization for differences between plasma kinetic codes. High Energy Density Physics, 2006, 2, 77-82.	1.5	1
124	â€œElectron impact ionization of helium isoelectronic systemsâ€• European Physical Journal D, 2009, 51, 319-320.	1.3	1
125	Kinetics of highly excited states in Ar17+charge exchange recombination fusion plasma spectroscopy. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 189801-189801.	1.5	1
126	Spectroscopy of highly charged ions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2015, 48, 140201.	1.5	1

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127	Atomic Data for Calculation of the Intensities of Stark Components of Excited Hydrogen Atoms in Fusion Plasmas. Atoms, 2020, 8, 8.	1.6	1
128	Atomic Physics and Spectroscopy During the First 50 Years of JPCRD. Journal of Physical and Chemical Reference Data, 2022, 51, 013101.	4.2	1
129	Selective excitation of metastable atomic states by femto- and attosecond laser pulses. Physical Review A, 2006, 74, .	2.5	0
130	Database Demonstration Sessions at ICAMDATA-5. AIP Conference Proceedings, 2007, , .	0.4	0
131	An EUV narrow band imaging technique for diagnosing 10â€“30 keV ITER plasmas. AIP Conference Proceedings, 2008, , .	0.4	0
132	Astronomical Spectroscopy: Calibration Sources for the Near Infrared. , 2009, , .		0
133	X-ray spectroscopy of high-z elements on nike. , 2014, , .		0
134	Atomic data and collisionalâ€“radiative model for beryllium and its ions. Physica Scripta, 2014, T161, 014007.	2.5	0
135	Measurements and Theoretical Predictions of Charge Exchange Cross Sections and Emission Spectra for O⁶⁺with H₂O, CO, CO₂, CH₄, N₂, NO, N₂O and Ar. Journal of Physics: Conference Series, 2015, 635, 022076.	0.4	0
136	Spectroscopic study of impurity ion radial distribution in an advanced beam-driven field reversed configuration. , 2016, , .		0
137	Charge exchange recombination spectroscopy of W q+ (q = 61â€“66) for application to ITER neutral hydrogen beam diagnostics. Plasma Physics and Controlled Fusion, 2021, 63, 115010.	2.1	0