

Yuri Ralchenko

List of Publications by Year in descending order

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137
papers

3,081
citations

186265

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182427

51
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141
all docs

141
docs citations

141
times ranked

1830
citing authors

#	ARTICLE	IF	CITATIONS
1	Atomic Physics and Spectroscopy During the First 50 Years of JPCRD. Journal of Physical and Chemical Reference Data, 2022, 51, 013101. Complete collision data set for electrons scattering on molecular hydrogen and its isotopologues: I. Fully vibrationally-resolved electronic excitation of H	4.2	1
2	H^{24}		

#	ARTICLE	IF	CITATIONS
19	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
20	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
21	A transition-edge sensor-based x-ray spectrometer for the study of highly charged ions at the National Institute of Standards and Technology electron beam ion trap. Review of Scientific Instruments, 2019, 90, 123107.	1.3	23
22	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
23	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
24	Relativistic all-order many-body calculation of energies, wavelengths, and transition rates for the M^1 and E^2 transitions in M^{Z-1} ions. Each calculation of forbidden transitions within the $2s^2$ configuration of M^{Z-1} ions. M^1 and E^2 transitions in M^{Z-1} ions. M^1 and E^2 transitions in M^{Z-1} ions.	2.5	18
25	Transition rates for the M^1 and E^2 transitions in M^{Z-1} ions. Each calculation of forbidden transitions within the $2s^2$ configuration of M^{Z-1} ions. M^1 and E^2 transitions in M^{Z-1} ions. M^1 and E^2 transitions in M^{Z-1} ions.	1.68	3

#	ARTICLE	IF	CITATIONS
37	Measurements and Theoretical Predictions of Charge Exchange Cross Sections and Emission Spectra for O^{6+} with H^{2+} , CO , CO^{2+} , CH^{4+} , N^{2+} , NO , $N^{2+}O$ and Ar. Journal of Physics: Conference Series, 2015, 635, 022076.	0.4	0
38	NIST program of spectroscopic data for light elements of fusion interest. Journal of Physics: Conference Series, 2015, 576, 012007.	0.4	3
39	Measurements and identifications of extreme ultraviolet spectra of highly-charged Sm and Er. Journal of Physics B: Atomic, Molecular and Optical Physics, 2015, 48, 025002.	1.5	21
40	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 $O^{6+} + H^{2+}$, CO , CO^{2+} , CH^{4+} , N^{2+} , NO , $N^{2+}O$, AND Ar. Astrophysical Journal, 2015, 809, 75.	4.5	9
41	Measurement of high-energy (10–60 keV) x-ray spectral line widths with eV accuracy. Review of Scientific Instruments, 2014, 85, 11D618.	1.3	6
42	X-ray spectroscopy of high-z elements on nife. , 2014, , .		0
43	Measurement and calculation of absolute single- and double-charge-exchange cross sections for O^{6+} at 1.17 and 2.33 keV/u impacting He and H^{2+} . Physical Review A, 2014, 89, 053407.	2.5	11
44	EUV measurements of Kr XXI–Kr XXXIV and the effect of a magnetic-dipole line on allowed transitions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2014, 47, 095702.	1.5	26
45	Measurement of the $O^{2+}O^{3+}O^{4+}$ and $O^{3+}O^{4+}O^{5+}$ super Coster–Kronig rates in tungsten via asymmetric diffraction spectrometry. Journal of Physics B: Atomic, Molecular and Optical Physics, 2014, 47, 115004.	1.5	4
46	Extreme ultraviolet spectra and analysis of $n = 0$ transitions in highly charged barium. Journal of Physics B: Atomic, Molecular and Optical Physics, 2014, 47, 145003.	1.5	17
47	Atomic data and collisional–radiative model for beryllium and its ions. Physica Scripta, 2014, T161, 014007.	2.5	0
48	EUV spectra of Rb-like to Ni-like dysprosium ions in an electron beam ion trap. European Physical Journal D, 2014, 68, 1.	1.3	16
49	Comparison and analysis of collisional-radiative models at the NLTE-7 workshop. High Energy Density Physics, 2013, 9, 645-652.	1.5	51
50	Testing the reliability of non-LTE spectroscopic models for complex ions. High Energy Density Physics, 2013, 9, 523-527.	1.5	21
51	Benchmark of collisional–radiative models for ITER beams at the Alcator C-Mod tokamak. Nuclear Fusion, 2013, 53, 123010.	3.5	3
52	Atomic data for beam-stimulated plasma spectroscopy in fusion plasmas. AIP Conference Proceedings, 2013, , .	0.4	3
53	Extreme ultraviolet spectra from N -shell ions of Gd, Dy and W. Physica Scripta, 2013, T156, 014012.	2.5	11
54	Magnetic-dipole lines in 3d-nions of high-Z elements: identification, diagnostic potential and dielectronic resonances. Physica Scripta, 2013, T156, 014082.	2.5	4

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55	Anisotropic LMN dielectronic resonances from ratios of magnetic-dipole lines. Physical Review A, 2013, 88, .	2.5	8
56	Transition energies of the D lines in Na-like ions. Physical Review A, 2013, 87, .	2.5	27
57	Collisional-Radiative Modeling for Highly-Charged Ions of Tungsten. Plasma and Fusion Research, 2013, 8, 2503024-2503024.	0.7	27
58	Magnetic-dipole transitions in tungsten and other heavy elements observed with the NIST EBIT. , 2012, , .		3
59	EUV spectra of Rb-like to Cu-like gadolinium ions in an electron-beam ion trap. Physical Review A, 2012, 86, .	2.5	29
60	Non-statistical population distributions for hydrogen beams in fusion plasmas. Plasma Physics and Controlled Fusion, 2012, 54, 095010.	2.1	24
61	EUV magnetic-dipole lines from highly-charged high-Z ions with an open 3d shell. European Physical Journal D, 2012, 66, 1.	1.3	18
62	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
63	Non-statistical simulations for neutral beam spectroscopy in fusion plasmas. , 2012, , .		5
64	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
65	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
66	VAMDC – The Virtual Atomic and Molecular Data Centre – A New Way to Disseminate Atomic and Molecular Data – VAMDC Level 1 Release. AIP Conference Proceedings, 2011, , .	0.4	24
67	Spectroscopy of diagnostically important magnetic-dipole lines in highly charged d of tungsten. Physical Review A, 2011, 83, .	2.5	96
68	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, 025001.	1.5	17
69	Spectroscopic diagnostics of magnetic fusion plasmas. Journal of Physics B: Atomic, Molecular and Optical Physics, 2010, 43, 140201.	1.5	2
70	Collisional excitation and emission of $H\pm$ Stark multiplet in fusion plasmas. Journal of Physics B: Atomic, Molecular and Optical Physics, 2010, 43, 011002.	1.5	31
71	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
72	Virtual atomic and molecular data centre. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 2151-2159.	2.3	164

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73	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
74	Consistency of atomic data for the interpretation of beam emission spectra. Plasma Physics and Controlled Fusion, 2010, 52, 125008.	2.1	46
75	Temperature and $K\alpha$ -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
76	Measurement of the D -line doublet in high- Z highly charged sodiumlike ions. Physical Review A, 2009, 80, .	2.5	38
77	Online databases and computational tools for non-LTE spectroscopy. Physica Scripta, 2009, 2009, 014025.	2.5	9
78	Astronomical Spectroscopy: Calibration Sources for the Near Infrared. , 2009, , .		0
79	Multi-Code Ab Initio Calculation of Ionization Distributions and Radiation Losses for Tungsten in Tokamak Plasmas. , 2009, , .		11
80	Dielectronic recombination of the Xe^{8+} ion and satellite lines of the Xe^{7+} ion. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 015001.	1.5	7
81	Kinetics of highly excited states in Ar ¹⁷⁺ charge exchange recombination fusion plasma spectroscopy. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 165701.	1.5	9
82	Effect of radiative cascades on intensities of dielectronic satellites to $He^{1\pm}$. Physica Scripta, 2009, 79, 035303.	2.5	3
83	Development of new standards for exchange of atomic and molecular data. , 2009, , .		4
84	Review of the NLTE-5 kinetics workshop. High Energy Density Physics, 2009, 5, 15-22.	1.5	85
85	Electron impact ionization of helium isoelectronic systems. European Physical Journal D, 2009, 51, 319-320.	1.3	1
86	Progress in line-shape modeling of K-shell transitions in warm dense titanium plasmas. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 214056.	2.1	18
87	Kinetics of highly excited states in Ar ¹⁷⁺ charge exchange recombination fusion plasma spectroscopy. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 189801-189801.	1.5	1
88	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
89	Multiconfiguration Dirac-Hartree-Fock energies and transition probabilities for transitions in Ne II. International Journal of Mass Spectrometry, 2008, 271, 85-92.	1.5	5
90	Wavelength calibration sources for instruments on extremely large telescopes. Proceedings of SPIE, 2008, , .	0.8	2

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91	EUV spectra of highly-charged ions W^{54+} – W^{63+} relevant to ITER diagnostics. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2008, 41, 021003.	1.5	110
92	An EUV narrow band imaging technique for diagnosing 10–30 keV ITER plasmas. <i>AIP Conference Proceedings</i> , 2008, , .	0.4	0
93	Bright EUV lines emitted by highly ionized tungsten ions as diagnostic indicators of the tungsten transport in ITER core plasmas (T_e > 7 keV). <i>Nuclear Fusion</i> , 2008, 48, 045004.	3.5	20
94	High-electron-temperature diagnostics of transient ionizing plasma using near-uv transitions. <i>Physical Review E</i> , 2008, 78, 036410.	2.1	4
95	Nonthermal Electron Measurements in Solar Flares with <i>Hinode</i> EIS. <i>Astrophysical Journal</i> , 2008, 684, 707-714.	4.5	9
96	Total and Partial Dielectronic and Radiative Recombination of Xe^{10+} Ions. <i>Journal of the Physical Society of Japan</i> , 2008, 77, 064302.	1.6	3
97	Spectra of W^{39+} – W^{47+} in the 12–20 nm region observed with an EBIT light source. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2007, 40, 3861-3875.	1.5	90
98	Density dependence of the forbidden lines in Ni-like tungsten. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2007, 40, F175-F180.	1.5	32
99	Database Demonstration Sessions at ICAMDATA-5. <i>AIP Conference Proceedings</i> , 2007, , .	0.4	0
100	Is There a High-Energy Particle Population in the Quiet Solar Corona?. <i>Astrophysical Journal</i> , 2007, 659, 1682-1692.	4.5	24
101	Relativistic all-order and multiconfiguration Hartree-Fock calculations of the $4d^4$ energy separation in Li I. <i>Physical Review A</i> , 2007, 76, .	2.5	5
102	Review of the 4th NLTE Code Comparison Workshop. <i>High Energy Density Physics</i> , 2007, 3, 225-232.	1.5	98
103	Are the Discrepancies Between Measured and Calculated Electron Impact Widths of Isolated Ion Lines Due to Non-Equilibrium Level Populations?. <i>AIP Conference Proceedings</i> , 2006, , .	0.4	1
104	Comparing plasma population kinetics codes: Review of the NLTE-3 Kinetics Workshop. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2006, 99, 102-119.	2.3	82
105	A guide to Internet atomic databases for hot plasmas. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2006, 99, 499-510.	2.3	8
106	Some corrections to GRASP92. <i>Computer Physics Communications</i> , 2006, 175, 738-744.	7.5	14
107	New parametrization for differences between plasma kinetic codes. <i>High Energy Density Physics</i> , 2006, 2, 77-82.	1.5	1
108	Large-scale calculation of dielectronic recombination parameters for Mg-like Fe. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2006, 39, 2917-2937.	1.5	15

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109	Atomic data for dielectronic recombination into C-like oxygen. <i>Physica Scripta</i> , 2006, 73, 143-159.	2.5	12
110	Accurate modeling of benchmark x-ray spectra from highly charged ions of tungsten. <i>Physical Review A</i> , 2006, 74, .	2.5	71
111	Selective excitation of metastable atomic states by femto- and attosecond laser pulses. <i>Physical Review A</i> , 2006, 74, .	2.5	0
112	New Generation of the NIST Atomic Spectroscopic Databases. <i>AIP Conference Proceedings</i> , 2005, , .	0.4	3
113	Review of the Third Non-LTE Code Comparison Workshop. <i>AIP Conference Proceedings</i> , 2004, , .	0.4	4
114	Plasma dynamics in pulsed strong magnetic fields. <i>Physics of Plasmas</i> , 2004, 11, 2411-2418.	1.9	20
115	Review of the NLTE emissivities code comparison virtual workshop. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2003, 81, 71-84.	2.3	73
116	Electron-impact broadening of the $3s \rightarrow 3p$ lines in low-Z Li-like ions. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2003, 81, 371-384.	2.3	27
117	Excitation Cross Sections for Li-like Ions of Beryllium and Boron. <i>Physica Scripta</i> , 2003, 67, 500-504.	2.5	5
118	Investigation of Ne IX and Ne X line emission from dense plasma using Ross-filter systems. <i>Journal of Applied Physics</i> , 2002, 92, 4947-4951.	2.5	8
119	Measurement and interpretation of the low-energy wing of Fe $K\alpha_{1,3}$ characteristic X-ray line. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2001, 69, 103-106.	2.3	4
120	Electron collisional broadening of $2s3s \rightarrow 2s3p$ lines in Be-like ions. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2001, 71, 595-607.	2.3	9
121	Accelerated recombination due to resonant deexcitation of metastable states. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2001, 71, 609-621.	2.3	153
122	EXCITATION AND IONIZATION CROSS SECTIONS FOR HE I FROM NORMALIZED BORN AND K-MATRIX CALCULATIONS: $\hat{P}^S = 0$ TRANSITIONS FROM $n = 2, 3$ EXCITED STATES. <i>Atomic Data and Nuclear Data Tables</i> , 2000, 74, 123-153.	2.4	12
123	Electron collisional broadening of isolated lines from multiply-ionized atoms. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2000, 65, 287-296.	2.3	16
124	Empirical formula for cross section of direct electron-impact ionization of ions. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2000, 33, 5025-5032.	1.5	54
125	Spectroscopic investigations of a dielectric-surface-discharge plasma source. <i>Physics of Plasmas</i> , 2000, 7, 3797-3807.	1.9	32
126	Reply to "Line shape measurement and isolated line width calculations: Quantal versus semiclassical methods". <i>Physical Review E</i> , 1999, 60, 6241-6241.	2.1	3

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127	Quantum-mechanical calculation of Stark widths of Ne VII $n=3, \hat{l} \rightarrow n=0$ transitions. <i>Physical Review A</i> , 1999, 59, 1890-1895.	2.5	15
128	Stark broadening of the B III $2s^2$ p lines. <i>Physical Review E</i> , 1997, 56, 7186-7192.	2.1	40
129	Electron-impact-excitation cross sections of lithiumlike ions. <i>Physical Review A</i> , 1997, 56, 3726-3733.	2.5	13
130	Electron-impact-excitation cross sections of hydrogenlike ions. <i>Physical Review A</i> , 1997, 55, 329-334.	2.5	34
131	Review of the NLTE kinetics code workshop. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 1997, 58, 737-742.	2.3	90
132	Intercombination transitions in Be-like ions. <i>Physical Review A</i> , 1995, 52, 2449-2452.	2.5	25
133	A scaling of multiple ionization cross sections. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1995, 28, 3027-3046.	1.5	60
134	Z-scaling of the 3P-3S Li isoelectronic series transition: Quadrupole Stark broadening and resonances. <i>Physical Review A</i> , 1994, 49, 3086-3088.	2.5	8
135	High-resolution spectroscopic X-ray diagnostics for studying the ion kinetic energy and plasma properties in a Z-pinch at stagnation. , 0, , .		2
136	High-resolution spectroscopic X-ray diagnostics for studying the ion-kinetic energies at the stagnation of a Z-pinch plasma. , 0, , .		1
137	Spectroscopic analysis of M- and N-intrashell transitions in Co-like to Na-like Yb ions. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 0, , .	1.5	2