

# Pierre-Michel Hillenbrand

## List of Publications by Year in descending order

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Version: 2024-02-01

89

papers

2,784

citations

293460

24

h-index

198040

52

g-index

89

all docs

89

docs citations

89

times ranked

1559

citing authors

#	ARTICLE	IF	CITATIONS
1	Single and double $K$ -shell vacancy production in slow $Xe$ collisions. <i>Physical Review A</i> , 2022, 105, .	1.0	5
2	Branching Ratio for $O + H_3 \rightarrow OH + H_2$ and $O_2 + H$ . <i>Astrophysical Journal</i> , 2022, 927, 47.	1.6	0
3	Screening effects in the electron bremsstrahlung from heavy ions. <i>Physical Review A</i> , 2022, 105, .	1.0	0
4	X-ray emission associated with radiative recombination for $Pb$ ions at threshold energies. <i>Physical Review A</i> , 2022, 105, .	1.0	8
5	Dynamics of the isotope exchange reaction of $D$ with $H_3^+$ , $H_2D^+$ , and $D_2H^+$ . <i>Journal of Chemical Physics</i> , 2021, 154, 084307.	1.2	3
6	Angular Distribution of Characteristic Radiation Following the Excitation of He-Like Uranium in Relativistic Collisions. <i>Atoms</i> , 2021, 9, 20.	0.7	3
7	Electron loss for cold atom dispersions in collisions of $U$ with $N$ and $X$ .	1.0	3
8	Towards experiments with highly charged ions at HESR. <i>X-Ray Spectrometry</i> , 2020, 49, 33-36.	0.9	3
9	A magnetic spectrometer for electron-positron pair spectroscopy in storage rings. <i>X-Ray Spectrometry</i> , 2020, 49, 115-119.	0.9	0
10	High-resolution wavelength-dispersive spectroscopy of $K$ -shell transitions in hydrogen-like gold. <i>X-Ray Spectrometry</i> , 2020, 49, 204-208.	0.9	1
11	Experimental study of the proton-transfer reaction $C + H_2 \rightarrow CH + H$ and its isotopic variant ( $D_2 + H \rightarrow CD + H$ ). <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 27364-27384.	1.3	4
12	Determination of luminosity for in-ring reactions: A new approach for the low-energy domain. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2020, 982, 164367.	0.7	2
13	Coincident mapping of $e^-$ and $e^+$ from free-free pair production in a magnetic toroidal lepton spectrometer. <i>Journal of Physics: Conference Series</i> , 2020, 1412, 232004.	0.3	0
14	Electron capture of $Xe$ in collisions with $H$ .	1.0	7
15	/ molecules in the energy range between Impact parameter sensitive study of inner-shell atomic processes in $Xe^{54+}$ , $Xe^{52+}$ $\rightarrow Xe$ collisions. <i>Journal of Physics: Conference Series</i> , 2020, 1412, 142015.	0.3	0
16	Radiative electron capture to the continuum in $Xe$ collisions: Experiment and theory. <i>Physical Review A</i> , 2020, 101, .	0.7	0
17	The magnetic toroidal sector as a broad-band electron-positron pair spectrometer I: lepton trajectories. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2019, 946, 162641.	0.7	1
18	QED tests with highly charged ions. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2019, 52, 232001.	0.6	60

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19	New test of modulated electron capture decay of hydrogen-like $^{142}\text{Pm}$ ions: Precision measurement of purely exponential decay. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2019, 797, 134800.	1.5	13
20	Experimental and Theoretical Studies of the Isotope Exchange Reaction. <i>Astrophysical Journal</i> , 2019, 877, 38.	1.6	12
21	Radiative electron capture as a tunable source of highly linearly polarized x rays. <i>Physical Review A</i> , 2019, 99, .	1.0	8
22	Approaching the Gamow Window with Stored Ions: Direct Measurement of $\text{Xe}^{124}(\text{p},\gamma)$ in the ESR Storage Ring. <i>Physical Review Letters</i> , 2019, 122, 092701.	2.9	38
23	Electron- and proton-impact excitation of heliumlike uranium in relativistic collisions. <i>Physical Review A</i> , 2019, 99, .	1.0	13
24	Astrophysically motivated laboratory measurements of deuterium reacting with isotopologues of H. <i>Proceedings of the International Astronomical Union</i> , 2019, 15, 114-115.	0.0	0
25	All the fun of the FAIR: fundamental physics at the facility for antiproton and ion research. <i>Physica Scripta</i> , 2019, 94, 033001.	1.2	79
26	High-precision measurements of $\text{He}^+$ and $\text{Be}^+$ transition energies and level widths in argon ions. <i>Physical Review A</i> , 2018, 97, .		
27	High-precision measurements of $\text{He}^+$ and $\text{Be}^+$ transition energies and level widths in argon ions. <i>Physical Review A</i> , 2018, 97, .		

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37	Coherent population of magnetic sublevels of $2\{m\{p\}\}_{3/2}$ state in hydrogenlike uranium by radiative recombination. <i>Physica Scripta</i> , 2015, T166, 014027.	1.2	3
38	Forward-angle electron spectroscopy in heavy-ion atom collisions studied at the ESR. <i>Journal of Physics: Conference Series</i> , 2015, 635, 022005.	0.3	0
39	A lepton spectrometer for studies of fundamental atomic processes at HESR at FAIR. <i>Journal of Physics: Conference Series</i> , 2015, 635, 022087.	0.3	0
40	First observation of coherence in a highly charged ion. <i>Journal of Physics: Conference Series</i> , 2015, 635, 022096.	0.3	0
41	The magnetic toroidal sector: a broad-band electron-positron pair spectrometer. <i>Journal of Physics: Conference Series</i> , 2015, 635, 022046.	0.3	0
42	Radioactive decays of highly-charged ions. <i>EPJ Web of Conferences</i> , 2015, 93, 05003.	0.1	0
43	Crystal optics for precision x-ray spectroscopy on highly charged ions—conception and proof. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2015, 48, 144010.	0.6	20
44	Between atomic and nuclear physics: radioactive decays of highly-charged ions. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2015, 48, 144024.	0.6	16
45	Experimental study of the dielectronic recombination into Li-like uranium. <i>Physica Scripta</i> , 2015, T166, 014024.	1.2	2
46	Forward-angle electron spectroscopy in heavy-ion atom collisions studied at the ESR. <i>Journal of Physics: Conference Series</i> , 2015, 635, 012011.	0.3	4
47	Electron emission spectra of U <sup>28+</sup> -ions colliding with gaseous targets. <i>Journal of Physics: Conference Series</i> , 2015, 635, 022049.	0.3	1
48	Relativistic effects in electron-capture to the continuum in 90 MeV/u U <sup>88++</sup> N <sub>2</sub> collisions. <i>Journal of Physics: Conference Series</i> , 2015, 635, 022065.	0.3	0
49	Electron-capture-to-continuum cusp in $\text{U}^{88+} + \text{N}_2$ collisions. <i>Physical Review A</i> , 2015, 91, 012502.	0.6	20
50	Total projectile electron loss cross sections of $\text{U}^{88+}$ in collisions with gaseous targets ranging from hydrogen to krypton. <i>Physical Review Special Topics: Accelerators and Beams</i> , 2015, 18, 021301.	1.8	8
51	First observation of correlated photons emitted by heavy highly charged ions in the process of radiative recombination. <i>Journal of Physics: Conference Series</i> , 2014, 488, 082023.	0.3	0
52	Metal vapor target for precise studies of ion-atom collisions. <i>Review of Scientific Instruments</i> , 2014, 85, 053513.	0.6	0
53	Radiative-electron-capture-to-continuum cusp in U <sup>88++</sup> N <sub>2</sub> collisions and the high-energy endpoint of electron-nucleus bremsstrahlung. <i>Physical Review A</i> , 2014, 90, 012502.	1.0	25
54	Electron-loss-to-continuum cusp in U <sup>88++</sup> N <sub>2</sub> collisions. <i>Physical Review A</i> , 2014, 90, 012503.	1.0	17

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55	Electron-impact ionization of 4d-shell xenon and tin ions. <i>Journal of Physics: Conference Series</i> , 2014, 488, 062025.	0.3	0
56	Observation of Coherence in the Time-Reversed Relativistic Photoelectric Effect. <i>Physical Review Letters</i> , 2014, 113, 113001.	2.9	28
57	Probing nuclear properties by resonant atomic collisions between electrons and ions. <i>Physica Scripta</i> , 2013, T156, 014050.	1.2	23
58	Proton Structure from the Measurement of 2S-2P Transition Frequencies of Muonic Hydrogen. <i>Science</i> , 2013, 339, 417-420.	6.0	676
59	Few-body quantum dynamics of high- $Z$ ions studied at the future relativistic high-energy storage ring. <i>Physica Scripta</i> , 2013, T156, 014086.	1.2	5
60	Future experiments using forward electron spectroscopy to study the quantum dynamics of high-Z ions at the ESR/CRYRING storage rings. <i>Physica Scripta</i> , 2013, T156, 014087.	1.2	8
61	Beta decay of highly charged ions. <i>Physica Scripta</i> , 2013, T156, 014025.	1.2	6
62	A study of radiative double electron capture in bare chromium ions at the ESR. <i>Physica Scripta</i> , 2013, T156, 014048.	1.2	7
63	Half-life measurements of highly charged radionuclides. <i>Physica Scripta</i> , 2013, T156, 014026.	1.2	6
64	Charge transfer of slow highly charged xenon ions in collisions with magnesium atoms. <i>Physical Review A</i> , 2013, 88, .	1.0	4
65	Observation of $\text{e}^+ + \text{Xe}^{+n} \rightarrow \text{e}^- + \text{Xe}^{+n-1}$ . <i>Nature</i> , 2013, 499, 350-353.	1.0	1

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73	Investigation of the Decay Properties of the 1s(2s)2 State in Li-Like Uranium. <i>Journal of Physics: Conference Series</i> , 2007, 58, 141-144.	0.3	9
74	The FOCAL spectrometer for accurate X-ray spectroscopy of fast heavy ions. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2006, 245, 67-71.	0.6	15
75	Relativistic quantum dynamics in strong fields: photon emission from heavy, few-electron ions. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2005, 38, S707-S726.	0.6	84
76	Dielectronic Resonance Method for Measuring Isotope Shifts. <i>Physical Review Letters</i> , 2005, 95, 183003.	2.9	46
77	Lifetime of the 23P0 state of He-like 197Au. <i>Physical Review A</i> , 2004, 69, .	1.0	27
78	Systematic calculation of total atomic energies of ground state configurations. <i>Atomic Data and Nuclear Data Tables</i> , 2004, 86, 117-233.	0.9	155
79	FOCAL: X-ray optics for accurate spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2004, 59, 1535-1542.	1.5	23
80	Spectroscopy of Ly- $\pm$ Lines at Storage Rings by Crystal Spectrometry and Absorption Edge Technique., , 2001, , 491-494.		1
81	Measurement of the ground-state lambshift of hydrogenlike uranium at the electron cooler of the ESR. <i>Zeitschrift fÃ¼r Physik D-Atoms Molecules and Clusters</i> , 1995, 35, 169-175.	1.0	91
82	Measurement of the 1sLamb shift in hydrogenlike nickel. <i>Physical Review A</i> , 1991, 43, 223-227.	1.0	45
83	Observation and measurement of $n=2 \rightarrow n=1$ transitions of hydrogenlike and heliumlike uranium. <i>Physical Review Letters</i> , 1990, 65, 2761-2764.	2.9	78
84	Multiconfiguration Dirac-Fock calculations of transition energies with QED corrections in three-electron ions. <i>Physical Review A</i> , 1990, 42, 5139-5149.	1.0	218
85	Spectroscopic Study of Hydrogenlike and Heliumlike Xenon Ions. <i>Europhysics Letters</i> , 1989, 9, 225-230.	0.7	52
86	Multiconfigurational Dirac-Fock studies of two-electron ions. II. Radiative corrections and comparison with experiment. <i>Journal of Physics B: Atomic and Molecular Physics</i> , 1987, 20, 651-663.	1.6	225
87	Observation of hydrogenlike and heliumlike krypton spectra. <i>Zeitschrift fÃ¼r Physik A</i> , 1984, 318, 1-5.	1.4	44
88	Spectroscopy of hydrogenlike and heliumlike argon. <i>Physical Review A</i> , 1983, 28, 1413-1417.	1.0	85
89	High-Precision Spectroscopic Studies of Lyman- $\pm$ Lines of Hydrogenlike Iron: A Measurement of the 1sLamb Shift. <i>Physical Review Letters</i> , 1983, 50, 832-835.	2.9	81