

# Michael Hahn

## List of Publications by Year in descending order

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64

papers

932

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430874

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h-index

477307

29

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65

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65

docs citations

65

times ranked

806

citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Ion energy distribution in an electron beam ion trap inferred from simulations of the trapped ion cloud. <i>Physical Review E</i> , 2022, 105, 015204.   | 2.1  | 1         |
| 2  | Evidence for Parametric Decay Instability in the Lower Solar Atmosphere. <i>Astrophysical Journal</i> , 2022, 933, 52.   | 4.5  | 3         |
| 3  | Physical Characteristics of Unstructured Coronal Clouds. <i>Astrophysical Journal</i> , 2021, 910, 113.  | 4.5  | 3         |
| 4  | Critical Science Plan for the Daniel K. Inouye Solar Telescope (DKIST). <i>Solar Physics</i> , 2021, 296, 1.   | 2.5  | 65        |
| 5  | Effects of Density Fluctuations on Alfvén Wave Turbulence in a Coronal Hole. <i>Astrophysical Journal</i> , 2021, 911, 63.   | 4.5  | 10        |
| 6  | Roadmap on cosmic EUV and x-ray spectroscopy. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2020, 53, 092001.   | 1.5  | 2         |
| 7  | Tracing the origins of the solar wind with helium. <i>Nature Astronomy</i> , 2020, 4, 1128-1129.   | 10.1 | 0         |
| 8  | Laboratory Calibrations of Fe xii–xiv Line-intensity Ratios for Electron Density Diagnostics. <i>Astrophysical Journal</i> , 2020, 890, 77.  | 4.5  | 14        |
| 9  | Measured Reduction in Alfvén Wave Energy Propagating through Longitudinal Gradients Scaled to Match Solar Coronal Holes. <i>Astrophysical Journal</i> , 2019, 882, 183.  | 4.5  | 5         |
| 10 | Spectroscopic Measurements of the Ion Velocity Distribution at the Base of the Fast Solar Wind. <i>Astrophysical Journal Letters</i> , 2018, 855, L13.   | 8.3  | 8         |
| 11 | Density Fluctuations in a Polar Coronal Hole. <i>Astrophysical Journal</i> , 2018, 860, 34.  | 4.5  | 15        |
| 12 | Electron-impact Multiple-ionization Cross Sections for Atoms and Ions of Helium through Zinc. <i>Astrophysical Journal</i> , 2017, 850, 122.   | 4.5  | 20        |
| 13 | Recombination of atoms and ions of Helium through Zinc. <i>Astrophysical Journal</i> , 2016, 829, 42.<br>with electrons: Absolute rate coefficients from a storage-ring experiment and from theoretical calculations. <i>Physical Review A</i> , 2016, 93, | 4.5  | 10        |
| 14 | Storage ring cross section measurements for electron impact ionization of Fe <sup>8+</sup> . <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2016, 49, 084006.  | 1.5  | 6         |
| 15 | Absolute rate coefficients for photorecombination of beryllium-like and boron-like silicon ions. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2016, 49, 074004.  | 1.5  | 5         |
| 16 | INFERRING THE CORONAL DENSITY IRREGULARITY FROM EUV SPECTRA. <i>Astrophysical Journal</i> , 2016, 829, 42.   | 4.5  | 3         |
| 17 | A SIMPLE METHOD FOR MODELING COLLISION PROCESSES IN PLASMAS WITH A KAPPA ENERGY DISTRIBUTION. <i>Astrophysical Journal</i> , 2015, 809, 178.   | 4.5  | 30        |
| 18 | Simultaneous measurement of photorecombination and electron-impact ionization of Fe <sup>14+</sup> ions. <i>Journal of Physics: Conference Series</i> , 2015, 635, 052002.   | 0.4  | 0         |

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|----|--|-----|-----------|
| 19 | Electron-ion recombination of the open-4f-shell ion W <sup>19+</sup> . Journal of Physics: Conference Series, 2015, 635, 052003.   | 0.4 | 0         |
| 20 | Influence of Multiple Ionization on Charge State Distributions. Journal of Physics: Conference Series, 2015, 635, 052010.  | 0.4 | 0         |
| 21 | STORAGE RING CROSS SECTION MEASUREMENTS FOR ELECTRON IMPACT IONIZATION OF Fe <sup>7+</sup> . Astrophysical Journal, 2015, 813, 16.   | 4.5 | 12        |
| 22 | INFLUENCE OF ELECTRON-IMPACT MULTIPLE IONIZATION ON EQUILIBRIUM AND DYNAMIC CHARGE STATE DISTRIBUTIONS: A CASE STUDY USING IRON. Astrophysical Journal, 2015, 800, 68.   | 4.5 | 16        |
| 23 | RELATIVE ABUNDANCE MEASUREMENTS IN PLUMES AND INTERPLUMES. Astrophysical Journal, 2015, 807, 145.  | 4.5 | 7         |
| 24 | Dielectronic recombination of berylliumlike Si <sup>10+</sup> ions at the heavy-ion storage ring TSR. Journal of Physics: Conference Series, 2014, 488, 062012.  | 0.4 | 0         |
| 25 | Electron impact ionization of stored highly charged ions. Journal of Physics: Conference Series, 2014, 488, 012050.  | 0.4 | 10        |
| 26 | Storage-ring measurement of the hyperfine induced 2s2p <sup>3</sup> P <sub>0</sub> → 2s <sup>2</sup> S <sub>1/2</sub> transition rate in berylliumlike sulfur. Journal of Physics: Conference Series, 2014, 488, 062016. | 0.4 | 0         |
| 27 | EVIDENCE FOR WAVE HEATING OF THE QUIET-SUN CORONA. Astrophysical Journal, 2014, 795, 111.  | 4.5 | 37        |
| 28 | Recombination of W <sup>18+</sup> ions with electrons: Absolute rate coefficients from a storage-ring experiment and from theoretical calculations. Physical Review A, 2014, 90, .                                       | 2.5 | 40        |
| 29 | Absolute rate coefficients for the recombination of open f-shell tungsten ions. Journal of Physics: Conference Series, 2014, 488, 012051.  | 0.4 | 10        |
| 30 | Dielectronic recombination of boronlike Si <sup>9+</sup> ions at the heavy-ion storage ring TSR. Journal of Physics: Conference Series, 2014, 488, 062011.   | 0.4 | 0         |
| 31 | Recombination of open-4f-shell W <sup>18+</sup> ions with free electrons. Journal of Physics: Conference Series, 2014, 488, 062015.  | 0.4 | 0         |
| 32 | STORAGE RING CROSS SECTION MEASUREMENTS FOR ELECTRON IMPACT SINGLE AND DOUBLE IONIZATION OF Fe <sup>13+</sup> AND SINGLE IONIZATION OF Fe <sup>16+</sup> AND Fe <sup>17+</sup> . Astrophysical Journal, 2013, 767, 47.   | 4.5 | 18        |
| 33 | Evidence for wave heating in the solar corona. Annals of the New York Academy of Sciences, 2013, 1293, 45-53.  | 3.8 | 1         |
| 34 | OBSERVATIONAL QUANTIFICATION OF THE ENERGY DISSIPATED BY ALFVÉN WAVES IN A POLAR CORONAL HOLE: EVIDENCE THAT WAVES DRIVE THE FAST SOLAR WIND. Astrophysical Journal, 2013, 776, 78.                                      | 4.5 | 60        |
| 35 | MEASUREMENTS OF ANISOTROPIC ION TEMPERATURES, NON-THERMAL VELOCITIES, AND DOPPLER SHIFTS IN A CORONAL HOLE. Astrophysical Journal, 2013, 763, 106.   | 4.5 | 14        |
| 36 | Electron-impact-ionization measurements using hyperfine-assisted state preparation of ground-state berylliumlike sulfur. Physical Review A, 2012, 85, .  | 2.5 | 10        |

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|----|--|-----|-----------|
| 37 | ring measurement of the hyperfine-induced $\langle mml:math display="block">\frac{\text{display="block">\langle mml:mrow}\langle mml:mn>2\langle mml:mn>\langle mml:mi>s\langle mml:mi>2\langle mml:mn>\langle mml:mi>p\langle mml:mi>\langle mml:mrow>\langle mml:mn>3\langle mml:mn>\langle mml:msup>\langle mml:mrow>\langle mml:mspace width="-0.16em" href="#">[arXiv:1204.0463]$ | 2.5 | 33        |
| 38 | ELECTRON-ION RECOMBINATION OF Fe XII FORMING Fe XI: LABORATORY MEASUREMENTS AND THEORETICAL CALCULATIONS. <i>Astrophysical Journal</i> , 2012, 753, 57.  | 4.5 | 19        |
| 39 | Electron impact ionization measurements at the Heidelberg heavy ion storage ring TSR. <i>Journal of Physics: Conference Series</i> , 2012, 388, 062021.  | 0.4 | 0         |
| 40 | ADDENDUM: "STORAGE RING MEASUREMENT OF ELECTRON IMPACT IONIZATION FOR Mg <sup>7+</sup> FORMING Mg <sup>8+</sup> " (2010, <i>ApJ</i> , 712, 1166). <i>Astrophysical Journal</i> , 2012, 761, 77.  | 4.5 | 0         |
| 41 | ADDENDUM: "STORAGE RING CROSS SECTION MEASUREMENTS FOR ELECTRON IMPACT IONIZATION OF Fe <sup>11+</sup> FORMING Fe <sup>12+</sup> AND Fe <sup>13+</sup> " (2011, <i>ApJ</i> , 729, 76). <i>Astrophysical Journal</i> , 2012, 761, 78.   | 4.5 | 0         |
| 42 | ADDENDUM: "STORAGE RING CROSS-SECTION MEASUREMENTS FOR ELECTRON IMPACT IONIZATION OF Fe <sup>12+</sup> FORMING Fe <sup>13+</sup> AND Fe <sup>14+</sup> " (2011, <i>ApJ</i> , 735, 105). <i>Astrophysical Journal</i> , 2012, 761, 79.  | 4.5 | 2         |
| 43 | EVIDENCE OF WAVE DAMPING AT LOW HEIGHTS IN A POLAR CORONAL HOLE. <i>Astrophysical Journal</i> , 2012, 753, 36.   | 4.5 | 68        |
| 44 | ELECTRON-ION RECOMBINATION OF Mg <sup>6+</sup> FORMING Mg <sup>5+</sup> AND OF Mg <sup>7+</sup> FORMING Mg <sup>6+</sup> : LABORATORY MEASUREMENTS AND THEORETICAL CALCULATIONS. <i>Astrophysical Journal</i> , 2012, 758, 40.   | 4.5 | 20        |
| 45 | STORAGE RING CROSS-SECTION MEASUREMENTS FOR ELECTRON IMPACT SINGLE AND DOUBLE IONIZATION OF Fe <sup>9+</sup> AND SINGLE IONIZATION OF Fe <sup>10+</sup> . <i>Astrophysical Journal</i> , 2012, 760, 80.  | 4.5 | 17        |
| 46 | Recombination of Au <sup>20+</sup> at low electron-ion collision energies. <i>Physica Scripta</i> , 2011, T144, 014039.  | 2.5 | 9         |
| 47 | STORAGE RING CROSS SECTION MEASUREMENTS FOR ELECTRON IMPACT IONIZATION OF Fe <sup>12+</sup> FORMING Fe <sup>13+</sup> AND Fe <sup>14+</sup> . <i>Astrophysical Journal</i> , 2011, 735, 105.   | 4.5 | 25        |
| 48 | DIFFERENTIAL EMISSION MEASURE ANALYSIS OF A POLAR CORONAL HOLE DURING THE SOLAR MINIMUM IN 2007. <i>Astrophysical Journal</i> , 2011, 736, 101.  | 4.5 | 24        |
| 49 | STORAGE RING CROSS SECTION MEASUREMENTS FOR ELECTRON IMPACT IONIZATION OF Fe <sup>11+</sup> FORMING Fe <sup>12+</sup> AND Fe <sup>13+</sup> . <i>Astrophysical Journal</i> , 2011, 729, 76.  | 4.5 | 31        |
| 50 | Dielectronic recombination of xenonlike tungsten ions. <i>Physical Review A</i> , 2011, 83, .  | 2.5 | 67        |
| 51 | STORAGE RING MEASUREMENT OF ELECTRON IMPACT IONIZATION FOR Mg <sup>7+</sup> FORMING Mg <sup>8+</sup> . <i>Astrophysical Journal</i> , 2010, 712, 1166-1171.  | 4.5 | 20        |
| 52 | PROPERTIES OF A POLAR CORONAL HOLE DURING THE SOLAR MINIMUM IN 2007. <i>Astrophysical Journal</i> , 2010, 725, 774-786.  | 4.5 | 10        |
| 53 | Confinement Studies in the Columbia Non-Neutral Torus. <i>Contributions To Plasma Physics</i> , 2010, 50, 678-682.   | 1.1 | 5         |
| 54 | First Observations of Partially Neutralized and Quasineutral Plasmas in the Columbia Non-Neutral Torus. <i>Contributions To Plasma Physics</i> , 2010, 50, 673-677.  | 1.1 | 2         |

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|----|---|-----|-----------|
| 55 | Confinement jumps in a non-neutral plasma. <i>Physics of Plasmas</i> , 2009, 16, .  | 1.9 | 1         |
| 56 | Thermal equilibrium of pure electron plasmas across a central region of magnetic surfaces. <i>Physics of Plasmas</i> , 2009, 16, 062104.            | 1.9 | 2         |
| 57 | Magnetic Surface Visualizations in the Columbia Non-Neutral Torus. <i>IEEE Transactions on Plasma Science</i> , 2008, 36, 1108-1109.                | 1.3 | 11        |
| 58 | Confirmation of a large density variation along the magnetic axis of the Columbia Non-neutral Torus. <i>Physics of Plasmas</i> , 2008, 15, 020701.  | 1.9 | 5         |
| 59 | Observations of an Ion-Driven Instability in Non-Neutral Plasmas Confined on Magnetic Surfaces. <i>Physical Review Letters</i> , 2008, 100, 065002. | 7.8 | 18        |
| 60 | Equilibrium, stability, and transport of electron plasmas in the Columbia Non-neutral Torus. , 2007, , .  |     | 0         |
| 61 | Diagnosing pure-electron plasmas with internal particle flux probes. <i>Review of Scientific Instruments</i> , 2007, 78, 013503.                    | 1.3 | 19        |
| 62 | Confinement of pure electron plasmas in the Columbia Non-neutral Torus. <i>Physics of Plasmas</i> , 2007, 14, 062503.                               | 1.9 | 16        |
| 63 | Spatial Relationship between Twist in Active Region Magnetic Fields and Solar Flares. <i>Astrophysical Journal</i> , 2005, 629, 1135-1140.          | 4.5 | 25        |
| 64 | Detection of a Taylor-like Plasma Relaxation Process in the Sun. <i>Astrophysical Journal</i> , 2003, 597, L73-L76.                                 | 4.5 | 37        |