

Abstract Submitted
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Current Status of Atomic Spectroscopy Databases at NIST¹

ALEXANDER KRAMIDA, YURI RALCHENKO, JOSEPH READER, National Institute of Standards and Technology — NIST's Atomic Spectroscopy Data Center maintains several online databases on atomic spectroscopy. These databases can be accessed via the <http://physics.nist.gov/PhysRefData> web page. Our main database, Atomic Spectra Database (ASD) has recently been upgraded to v. 4.1.1, which contains critically evaluated data for about 174,000 spectral lines and 92,000 energy levels of almost all elements in the periodic table. A new version 5.0 is to be released this year. It will be extended to include the ground states and ionization energies of all elements up to Ds ($Z=110$) in all ionization stages with a new Web interface for displaying them. We continue maintaining and regularly updating our bibliography databases, ensuring comprehensive coverage of current literature on atomic spectra, including energy levels, spectral lines, transition probabilities, hyperfine structure, isotope shifts, Zeeman and Stark effects. We continue maintaining other popular databases such as the Handbook of Basic Atomic Spectroscopy Data, searchable atlases of spectra of Pt-Ne and Th-Ne lamps, and non-LTE plasma-kinetics code comparisons.

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Alexander Kramida
National Institute of Standards and Technology

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