

Abstract Submitted
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Current Status of Atomic Spectroscopy Databases at NIST
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READER, NIST - Natl Inst of Stds Tech — NIST's Atomic Spec-
troscopy Group maintains several online databases that can be accessed via
<https://www.nist.gov/pml/atomic-spectroscopy-databases>. Our main Atomic Spec-
tra Database (ASD), now v. 5.5.2, contains critically evaluated data for >270,000
spectral lines and 111,000 energy levels of almost all elements in the periodic table.
Several thousand spectral lines and energy levels of C I, Cu II, V I-II, Y V, Sn III,
Pt VI-VIII have been added. Most of these additions are important for astrophysics,
technology, and fusion research. A new LIBS interface to ASD is designed for mod-
eling laser-induced breakdown plasma spectra. The Grotrian diagram interface has
been re-implemented with enhanced interactive features. We continue weekly up-
dates of our bibliography databases ensuring comprehensive coverage of current
literature on atomic spectra. Our other popular databases, such as the Handbook of
Basic Atomic Spectroscopy Data, searchable atlases of spectra of Pt-Ne and Th-Ar
lamps, and non-LTE plasma-kinetics code simulations, continue to be maintained.
The Th-Ar spectrum atlas has been redesigned implementing interactive plots and
tables.

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