

CRITICAL COMPILATIONS OF ATOMIC ENERGY LEVELS*

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We have been publishing new compilations of energy levels for single elements in all stages of ionization as each is completed. Those now in print in the Journal of Physical and Chemical Reference Data are helium (1973), sodium (1981); magnesium (1980), aluminum (1979), silicon (1983), potassium (1979), calcium (1979), scandium (1980), titanium (1979), vanadium (1978), chromium (1977), manganese (1977), iron (1982), cobalt (1981) and nickel (1981). A volume containing atomic energy levels of all rare earth elements was issued in 1978. We have now updated our compilations for the iron period (K through Ni, 235 spectra), which will be published in a single volume.

We also publish bibliographies of references dealing with atomic energy level and wavelength data. The last bibliography appeared in 1980 and covered the period July 1975 through June 1979. Our next supplement will extend through Dec. 1983. Work continues on the table of wavelengths for atoms in the first five ionization stages, published as NSRDS-NBS 68, with updated tables given annually in the Handbook of Chemistry and Physics.

Our bibliographic files are kept up-to-date with the current literature, and we serve as an information center on atomic energy level and wavelength data. Our published compilations are kept in a computer data base, and selected portions may be made available on magnetic tape or hard copy.

*Partially supported by Division of Magnetic Fusion Energy,
Department of Energy, and by Astronomy/Relativity Branch, National
Aeronautics and Space Administration

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