
NUDAT 2.0: NUCLEAR STRUCTURE AND DECAY DATA ON THE INTERNET

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NuDat 2.0 is a software product developed by the National Nuclear Data Center (NNDC). It provides an interface between web users and several NNDC nuclear structure and decay databases. NuDat 2.0 is based on a fast Linux computer running the Apache Tomcat web server; it replaces an earlier, open VMS-based version. NuDat 2.0 can be used to search for ground and excited states level properties (energy, half-life, spin and parity, decay modes), gamma-ray information (energy, branching ratio, multipolarity, coincidences) and decay radiation information (energy, intensity, dose). In addition to the search capabilities, an interactive chart of nuclei is displayed. The basic data for NuDat 2, derived from the ENSDF and Nuclear Wallet Cards files, are stored in relational databases; a number of Java Server Pages files perform the interaction between the user and the databases. Different examples highlighting NuDat 2 search capabilities and display options are presented.