**Electron Internal Conversion In Nuclides And Dynamic Enhancement And Chaos Elements**

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# ELECTRON INTERNAL CONVERSION IN NUCLIDESAND DYNAMIC ENHANCEMENT AND CHAOS ELEMENTS

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We consider spectra of the barium isotopes and turn attention on definition of the corresponding internal conversion electron coefficients. The neutron- deficient nuclides of $^{125,127}$Ba are theoretically studied and the level structures for high-spin states is interpreted within the framework of the RMF model. The electron internal conversion coefficients in the $^{125,127}$Ba nuclides are calculated on the basis of the relativistic Dirac-Fock method. It is performed a comparison of the obtained theoretical data and data by Rossel et al, which are $1.110^{3}$ and $8.510^{4}$ for M2 and E3, respectively, the 24.0-keV transition can be considered mainly an M2 transition. The other $a_K$ values of the 79.4-, 114.3-, 128.7-, 134.3-, 220.4-, 243.0-, 253.3-,269.6-, 285.6-, and 318.7-keV transitions associated with the decay of $^{127}$La are deduced from the electron internal conversion measurements. It is confirmed that the E1 transitions between parity doublets are characterized by a two to four orders of magnitude enhancement compared to those of more normal cases. A possibility of manifestation of stochastic elements (dynamic enhancement) and quantum chaos is discussed.