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Pairing Isomers

The concept of configuration dependent pairing does not usually appear in the textbooks and is rarely considered in the literature. The resulting lowering of excited $0n^+$ states into the pairing gap in even-even deformed nuclei accounts for many states that have traditionally been assumed to arise from time-dependent “ β vibrations” of the nuclear shape along the symmetry axis. The experimental evidence that requires the low-lying $0n^+$ states to be re-evaluated will be reviewed from the early (p,t) work of Maher et al. [1] and Kolata and Oohoudt [2] to more recent γ -ray spectroscopy studies [3-5].

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