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THE IMPACT OF THE TENSOR INTERACTION ON THE β -DELAYED NEUTRON EMISSION OF THE NEUTRON-RICH NI ISOTOPES

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The neutron emission of the β -decay of ^{74,76,78,80}Ni are studied with the Skyrme interaction taking into account the tensor terms. Calculations are performed within the quasiparticle random phase approximation. The coupling between one- and two-phonon terms in the wave functions of the low-energy 1⁺ states of the daughter nuclei is taken into account. It is shown that the strength decrease of the neutron-proton tensor interaction leads to the substantial increase of the half-life and the neutron-emission probability.

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