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Reconstruction of single-shell states for mid-heavy Sn isotopes[1]
ERDAL DIKMEN, OGUZ OZTURK, Suleyman Demirel University, Department of Physics, Isparta, Turkey — A great exact truncation to construct single-shell states for the shell model description of mid-heavy Sn isotopes is offered in the framework of the Drexel University shell model approach. It is based on the occurrence of only one-column Young diagrams in building the multi-shell model states [1]. This truncation allows us to calculate the coefficient of fractional parentage (CFP) for the most stable Sn isotopes, e.g., ^{116,118,120}Sn, by reducing the calculation requirements. An application to ^{116,118,120}Sn isotopes in the *sdgh*-shell is presented.

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