Title

Shell Model Calculation of Po212

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DISCLAIMER

Shell Model Calculation of Po^{212}.* Norman K. Glendenning and Kichinosuke Harada†, Lawrence Radiation Laboratory, Berkeley.--So far there are a few shell model calculations[1-3] on Po^{212}, but unfortunately their results are more or less different from each other, owing to the use of different residual forces. A more realistic shell model calculation based on Glendenning's method is done for the lower lying levels and the high-spin isomer of Po^{212}. In this calculation we use the residual p-p, n-n and p-n interactions which are so determined as to reproduce the experimental Po^{210}, Pb^{210} and Bi^{210} spectra, and adopt different size parameters for proton- and neutron-oscillator potentials. The results will be discussed and compared with those of the previous works.

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†On leave of absence from Japan Atomic Energy Research Institute.

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