

LIST OF SYMBOLS, ABBREVIATIONS AND NOMENCLATURE

A	Atomic mass
Z	Proton number
N	Neutron number
N_B	Total nucleon pair number
N_P	Valence proton pair number
N_n	Valence neutron pair number
$N_P N_n$	Valence nucleons pair product
B(E2)	Transition probability
$E(2_1^+)$	Energy of first excited 2_1^+ level of ground state band
γ	γ -band
K^π	0_1^+ for g -band and 2_1^+ for γ -band
E_γ	γ -ray energy
Gsb	Ground state band energy
I_γ	γ -ray intensity
J	Moment of inertia (MoI)
L	Angular momentum
Q	Quadrupole moment
R_4	Energy ratio
γ_0	Asymmetry parameter
R_0	Average nuclear radius
RMSD	Root mean square deviation