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Interacting Boson Approximation (IBA-1) determinations for reduced transition probabilities of 152 ≤ A ≤ 248 nuclei

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The theoretical B(E2) ratios have been calculated on DF, DR and Krutov models. A simple method based on the work of Arima and Iachello is used to calculate the reduced transition probabilities within SU(3) limit of IBA-I framework. The reduced E2 transition probability ratios of 2-gamma/ 2-ground to 2-gamma/ 0-ground from second excited states of rare-earths and actinide even–even nuclei calculated from experimental energies and intensities from recent data compare better with those calculated on the Krutov model and the SU(3) limit of IBA than the DR and DF models.

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