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Dipole strength distributions in stable odd-mass nuclei in the vicinity of the N=82 isotones MARCUS SCHECK, University of Kentucky, INST. FUER STRAHLENPHYSIK, STUTTGART UNIVERSITY TEAM — The low-lying dipole strength distributions in the odd-mass nuclei ^{135}Ba , ^{137}Ba , ^{139}La and ^{141}Pr were studied in nuclear resonance fluorescence (NRF) experiments performed at the Stuttgart Dynamitron facility. experiments used bremsstrahlung beams with endpoint energies of 4.1 MeV. The spin selective NRF reaction allowed the excitation of states through dipole transitions, up to 4 MeV. A special focus is the fragmented E1-strength of transitions connecting the ground state to states of the $[2^+ \otimes 3^-] \otimes \textit{particle/hole}$ coupling. The summed strength of the odd-mass nuclei is compared with the E1-strength of the $[2^+ \otimes 3^-]_1$ - two-phonon states of the neighboring even-even core nuclei.

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