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## Recent Work

### Title

CONVERSION-.ELECTRON MEASUREMENTS IN THE DECAY OF 11.5 d Ba 131

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### Publication Date

1962-12-01

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ABSTRACTCONVERSION ELECTRON MEASUREMENTS IN THE DECAY OF  $^{131}\text{Ba}$  <sup>BA131</sup>

W. R. Kelly<sup>o</sup> and D. J. Horan<sup>oo</sup>, Lawrence Radiation Laboratory, Berkeley.-The internal conversion electron spectrum accompanying the decay of  $^{131}\text{Ba}$  has been reinvestigated, and a total of 32 <sup>gamma</sup> transitions observed. Previously unreported electron lines were found corresponding to the transition energies 82.4, 117.1, 156.9, 216.3, 294.0, 323.9, 350.3, 426.7, 452.0, 461.1, 480.4, 573.1, <sup>674.2</sup>674.2, 696.5, and 914.1 kev. On the basis of energy <sup>SUMS</sup> and relative intensities a consistent decay scheme is proposed with levels at 70.6, 123.7, 133.5, 215.6, 372.8, 504.8, 619.6, 696.3 and 1046.5 kev. These results clarify the coincidence data of other workers. The multipolarities of some of the transitions have been established by making use of experimentally determined L-subshell ratios, K/L ratios, and internal conversion coefficients. Delayed coincidence measurements tend to confirm the 13.3 ns half-life of the 133.5 kev level.

\* This work done under the auspices of the U. S. Atomic Energy Commission.

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For meeting American Physical Society - New York, Jan. 22-25, 1963

New York  
UCRL-10580