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High-spin states in ^{91,93}Y N. FOTIADES, LANL, J.A. CIZEWSKI, Rutgers, R. KRÜCKEN, TRIUMF, R.M. CLARK, P. FALLON, I.Y. LEE, A.O. MACCHIAVELLI, LBNL, W. YOUNES, LLNL — High-spin states in ^{91}Y and ^{93}Y were studied via prompt γ-ray spectroscopy. The data were obtained in two Gammasphere experiments at LBNL with reactions populating both isotopes as fission fragments following fission of much heavier compound nuclei. States with excitation energies up to 7 MeV were established in both isotopes above the previously known $9/2^+$ isomers. Candidates for medium-spin negative parity states in ^{91}Y are observed for the first time. The new states are compared with the first excited states in the neighboring N=52,54 isotones and with previous results on ^{91,93}Y from fusion-evaporation reactions[1] and multinucleon transfer reactions[2] which were significantly enriched by the present measurement. The experimental results are compared to predictions from shell-model calculations. This work is supported in part by the U.S. Department of Energy and the National Science Foundation.

[1]D. Bucurescu, *et al.*, Phys. Rev. C **71**, 034315 (2005).
[2]D. Bucurescu, *et al.*, Phys. Rev. C **76**, 064301 (2007).

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