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Negative g factor for the 4_1^+ state in ^{86}Sr: a test of the shell model near $N = 50$[1] G.J. KUMBARTZKI, N. BENCZER-KOLLER, Rutgers University, Piscataway, NJ, K.-H. SPEIDEL, University of Bonn, retired, D.A. TORRES, Y.Y. SHARON, Rutgers University, Piscataway, NJ, S.J.Q. ROBINSON, Millsaps College, Jackson, MS, L. ZAMICK, Rutgers University, Piscataway, NJ, G. GÜRDAL, DePaul University, Chicago, IL, T. AHN, V. ANAGNOSTATOU, CH. BERNARD, M. ELVERS, P. GODDARD, A. HEINZ, G. ILIE, E.A. MCCUTCHEON, J. QIAN, D. RADECK, D. SAVRAN, V. WERNER, E. WILLIAMS, Yale University, New Haven, CT — Lifetimes and g factors of several low-lying states have been measured by Coulomb excitation, in inverse kinematics. The $^{86}_{38}Sr_{48}$ nucleus lies near the $N = 50$ shell closure. ^{86}Sr is a particularly interesting case because ^{88}Sr is often taken as the core nucleus in shell model calculations in this region. Noteworthy results of the experiment include the negative g factor for the 4_1^+ state of ^{86}Sr, in contrast to the positive g factor of the 2_1^+ state, and similarities between the two isotones ^{86}Sr and ^{88}Zr. Large scale shell model calculations using the JJ4B and JUN45 interactions have been carried out. The results will be presented and compared to the data from the $^{84-102}$Zr and ^{84,88}Sr isotopes.

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