Unusual Quasiparticle Alignments in \(^{168,169}W\)\(^1\) S.L. MILLER, X. WANG, M.A. RILEY, Florida State University, D.J. HARTLEY, E. PEDICINI, J.R. VANHOY, US Naval Academy, L.L. RIEDINGER, University of Tennessee, R.V.F. JANSSENS, P. BERTONE, M.P. CARPENTER, C.J. CHIARA, G. GURDAL, F.G. KONDEV, T. LAURITSEN, E.A. MCCUTCHAN, S. ZHU, Argonne National Laboratory, A.D. AYANGEAKKA, U. GARG, J. MATTA, University of Notre Dame, W.C. MA, S. MUKHOPADHYAY, Mississippi State University, P. CHOWDHURY, S. HOTA, University of Massachusetts-Lowell — While the basic concepts of normal deformed low-spin quasiparticle excitations are thought to be well understood, unusual behavior may still be encountered. A recent data set obtained using the Gammasphere spectrometer on \(^{168}W\) and \(^{169}W\) is a case in point. Anomalies were observed between the expected [1] and observed alignment gains and crossing frequencies in the positive parity bands for both nuclei. Analysis of these structures will be discussed along with comparisons to neighboring nuclei [2, 3].


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