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**Coulomb Excitation of n-rich nuclei along the  $N = 50$  shell closure** E. PADILLA-RODAL, Instituto de Ciencias Nucleares, UNAM, A. GALINDO-URIBARRI , Oak Ridge National Laboratory, J.C. BATCHELDER, Oak Ridge Associated Universities, J.R. BEENE , Oak Ridge National Laboratory, C. BINGHAM , University of Tennessee, B.A. BROWN , Michigan State University, K.B. LAGERGREN , P.E. MUELLER , D.C. RADFORD , D.W. STRACENER , Oak Ridge National Laboratory, J.P. URREGO-BLANCO , University of Tennessee, R.L. VARNER , C.-H. YU, Oak Ridge National Laboratory — Recently, we have been investigating characteristics of nuclear states around the neutron-rich mass  $A=80$  region [1]. Using the Radioactive Ion Beams (RIBs) produced at HRIBF, we have successfully measured the  $B(E2)$  values for  $^{78,80,82}\text{Ge}$  , using Coulomb excitation in inverse kinematics. For the germanium isotopes, these data allow a study of the systematic trend between the subshell  $N= 40$  and the  $N=50$  shell. Using the same technique, we have measured the  $B(E2)$  value of various nuclei along the  $N=50$  shell including the radioactive nucleus  $^{84}\text{Se}$ . This value together with our previously measured  $^{82}\text{Ge}$ , and the recent result on  $^{80}\text{Zn}$  from ISOLDE [2] are providing basic experimental information needed for a better understanding of the neutron-rich nuclei around  $A \sim 80$ . We report the new results and compare with shell model calculations. [1] E. Padilla-Rodal *et al.*, Phys. Rev. Lett. **94** (2005) 122501. [2] J. Van de Walle *et al.*, Phys. Rev. Lett. **99** (2007) 142501.

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