

Coupled channels analysis of positive pion inelastic scattering from ^{28}Si at 50 MeV

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The 2_1^+ , 4_1^+ , and 0_2^+ states in ^{28}Si have been observed with π^+ scattering at 50 MeV. These data, along with existing data for ^{28}Si are compared to coupled channel calculations. This analysis produces a larger β_2 than previously found in low energy distorted wave calculations and is consistent with results from resonance energy studies. The interference of the one- and two-step contributions make the calculated 4^+ cross section quite sensitive to the sign of β_4 . The sensitivity to the πA optical model is discussed.