$^{1}H(^{8}He,^{8}He)$ 2004Ti06,1995Ko27

History

Type	Author	Citation	Literature Cutoff Date
Update	J. H. Kelley, J. L. Godwin, C. G. Sheu	ENSDF	31-Mar-2004

1993Ko34: $^{1}H(^{8}He,^{8}He)$, $(^{8}He,^{8}He')$ E≈72 MeV/nucleon, measured $\sigma(\theta)$, invariant mass spectra for projectile breakup. ^{8}He deduced level, Γ, possible J, π.

1995Ch19: $^{1}H(^{8}He,^{8}He)$, $(^{8}He,^{8}He')$ E=78 MeV/nucleon; $^{1}H(^{8}He,^{8}He)$ E=674 MeV/nucleon, analyzed $\sigma(\theta)$. ^{8}He deduced rms radius, neutron halo effects.

1995Go31: $^{1}H(^{8}He,^{8}He)$, $(^{8}He,^{8}He')$ E=73 MeV/nucleon, analyzed $\sigma(\theta)$. Deduced optical potential parameters. ^{8}He deduced levels possible J, π.

1995Go32: $^{1}H(^{8}He,^{8}He)$, $(^{8}He,^{8}He')$ E=72 MeV/nucleon, analyzed $\sigma(\theta)$. Deduced model parameters.

1995Ne04: $^{1}H(^{8}He,^{8}He)$ E=674 MeV/nucleon, measured differential σ vs four momentum transfer. ^{8}He deduced neutron skin evidence.

1997Al09: $^{1}H(^{8}He,^{8}He)$ E=674-699 MeV/nucleon, measured absolute differential σ. Deduced model parameters. ^{8}He deduced nuclear matter radii.

1997Co11: $^{1}H(^{8}He,^{8}He)$ E=72 MeV/nucleon, analyzed $\sigma(\theta)$. Optical potential related features.

1997Ko06: $^{1}H(^{8}He,^{8}He)$ E=66, 73, 32 MeV/nucleon; $^{1}H(^{8}He,^{8}He)$ E=800 MeV/nucleon, measured $\sigma(\theta)$. ^{8}He deduced extended neutron distributions.

1999Eg02: $^{1}H(^{8}He,^{8}He)$ E≈700 MeV/nucleon, measured $\sigma(\theta)$. ^{8}He deduced matter densities radii.

2001Te07: $^{1}H(^{8}He,^{8}He)$ E=26 MeV/nucleon, measured $\sigma(\theta)$.

2002Al26: $^{1}H(^{8}He,^{8}He)$ E≈0.7 GeV/nucleon, analyzed small-angle elastic scattering $\sigma(\theta)$. ^{8}He deduced density distributions, radii.

2002Eg02: $^{1}H(^{8}He,^{8}He)$ E≈700 MeV/nucleon, measured $\sigma(\theta)$. ^{8}He deduced radii.

2002Ne19: $^{1}H(^{8}He,^{8}He)$ E≈0.7 GeV/nucleon, measured small-angle elastic scattering $\sigma(\theta)$. Deduced integral elastic σ, total and reaction σ.

2002Wo08: $^{1}H(^{8}He,^{8}He)$ E=26 MeV/nucleon, measured $\sigma(\theta)$. Deduced reaction mechanism features. ^{8}He deduced radius, density distribution.

2003Ro07: $^{1}H(^{8}He,^{8}He)$ E(C.M.)=1.6-5.8 MeV, measured $\sigma(\theta)$, excitation function.

2004Go22: $^{1}H(^{8}He,^{8}He)$ E=50, 59 MeV, measured particle spectra, elastic scattering excitation function.

^{8}He Levels

E(level)	J^{π}	$T_{1/2}$	Comments
0.0			
3.55×10^{3} *15*	2^{+}	0.50 MeV *35*	E, π from (1995Ko27), Γα/Γ(^{6}He)≤0.05 (1995Ko27), β = 0.28 (2002Gu02).