

Table 4.23 from (1992TI02): Measurements and analyses of cross sections for deuteron scattering on ${}^4\text{He}$

E_d (MeV)	Measurement	$\theta_{\text{c.m.}}$ (deg) or $-t$ (GeV/c) 2	Description	Refs.
11.5 – 17	iT_{11}	51.8 – 158.9	Shows d- α scattering is a convenient analyzer for d vector polarization.	1973CH35
12, 14, 17	$\sigma(\theta), A_{\text{xx}}, A_{\text{yy}},$	30 – 145	Obtained abs. precision of ± 0.01 .	1973OH01
4.8. – 9.0	A, K	27 – 66 (lab)	Measured 4 analyzing tensors and ≈ 14 pol. transfer coefficients.	1973OH02
29.8, 32.3, 34.8, 37.8, 39.3	$\sigma(\theta, E)$	16 – 159	Avg. rel. error 2%.	1974WI13
4 – 5, 10 – 12.5	A_{yy}	20 – 180	Investigated analyzing power maxima.	1975GR10
2.38 – 13.60	iT_{11}	37.5, 45 (lab)	Absolute calibration.	1976SC15
6.04 – 7.05 (7 energies)	$\sigma(\theta), iT_{11}, T_{20}, T_{21},$ T_{22}	11 – 165	Deduced phase shifts, ${}^6\text{Li}$ resonance parameters.	1977HA34
0.870 – 1.430	$\sigma(\theta, E)$	38 – 125	Obtained resonance parameters.	1979BA30
12 – 17	$\sigma(\theta), A_y, A_{\text{xx}}$		Emphasis on backward angles. Phase-shift analysis.	1979GR13
1.8	A_y	$\theta_1 = 71^\circ 10', \theta_2 =$ $39^\circ 22', \theta_2 = 46^\circ 40'$	Measured left-right asymmetry for double d- ${}^4\text{He}$ scattering.	1980BA60
20	$\sigma(\theta), A_y, A_{\text{xx}}, A_{\text{yy}},$ A_{xz}	30 – 150	Optical model analysis. Needed tensor term.	1980FR01
17.0 – 42.8 (7 energies)	$A_y, A_{\text{yy}}, A_{\text{xx}}$	30 – 160	Compared with RGM and Faddeev calculations.	1980GR03
17 – 45 (7 energies)	$\sigma(\theta), A_{\text{yy}}, A_{\text{xx}}$	30 – 160	Used rapid spin-flip to reduce exp. errors.	1980ST01
8, 9, 10, 11, 12, 13	$\sigma(\theta), iT_{11}, T_{20}, T_{21},$ T_{22}	$\approx 10 – 160$	Phase-shift analysis. Deduced levels in ${}^6\text{Li}$.	1983JE03
3 – 43	T_{ij}, A_{ij}		Phase-shift analysis used to investigate states of maximum polarization.	1985JE04

Table 4.23 from (1992TI02): Measurements and analyses of cross sections for deuteron scattering on ^4He (continued)

E_d (MeV)	Measurement	$\theta_{\text{c.m.}}$ (deg) or $-t$ (GeV/c) ²	Description	Refs.
56	$\sigma(\theta), A_y, A_{xx}, A_{yy}, A_{xz}$	12 – 160	Deduced optical model parameters.	1985NI01
8 – 56	$\sigma(\theta), A_y, A_{xx}, A_{xz}A_{yy}, iT_{11}, T_{20}, T_{21}, T_{22}$	10 – 165	Reviewed polarization measurements, analyses.	1987GR08(S)
11.9	K	55.1	Measured six polarization transfer coefficients. Deduced scattering amplitudes.	1988EL01