## **List of Tables**

3.1 Best fit optical potential parameters from elastic scattering data and N represents the number
of data points
$3.2$ The normalization factors $N_R$ and $N_I$ for real and imaginary parts of the double folding
potential, determined with SFRESCO
4.1 Experimental direct $\alpha$ production and total deuteron production cross sections deduced from
integral of measured angular distributions, calculated cross sections for $\alpha$ production by
compound nuclear reactions, noncapture breakup, $1n$ transfer, $1p$ transfer, $1d$ transfer, ICF, and
total calculated direct $\alpha$ production. Transfer calculations are performed using FRESCO and
compound nuclear calculations are done with PACE code $\sigma_{pace}^{CF}$
5.1 Best fit optical potential parameters from elastic scattering data and N represents the number
of data points for the system <sup>7</sup> Li+ <sup>92</sup> Mo
$5.2$ The normalization factors $N_R$ and $N_I$ for real and imaginary parts of the SPP were determined
with SFRESCO for the system <sup>7</sup> Li+ <sup>92</sup> Mo
5.3 Best fit optical potential parameters from elastic scattering data and N represents the number
of data points for the system <sup>7</sup> Li+ <sup>100</sup> Mo
$5.4$ The normalization factors $N_R$ and $N_I$ for real and imaginary parts of the SPP were determined
with SFRESCO for the system <sup>7</sup> Li+ <sup>100</sup> Mo. 107
6.1 Best fit optical potential parameters from SFRESCO of elastic scattering data and N
represents the number of data points for the system <sup>6</sup> Li+ <sup>100</sup> Mo