

List of Tables

1.1	Isotopic Neutron Sources.....	17
1.2	Neutron productions through charged particle accelerator.....	19
3.1	Fission product yields in neutron-induced fission of ^{232}Th with average energy of 5.42 MeV.....	51
3.2	Fission product yields in neutron-induced fission of ^{232}Th with average energy of 7.75 MeV.....	52
3.3	Fission product yields in neutron-induced fission of ^{232}Th with average energy of 10.09 MeV.....	53
4.1	Different $p + {}^6,{}^7\text{Li}$ reactions to produce energetic neutrons.....	74
4.2	Nuclear spectroscopic data used in the calculation.....	87
4.3	$^{232}\text{Th}(n,\gamma)^{233}\text{Th}$ and $^{232}\text{Th}(n,2n)^{231}\text{Th}$ reaction cross-sections at different neutron energies.....	90
6.1	Nuclear Spectroscopic Data.....	136
6.2	Experimentally measured neutron cross-sections (σ) of Zr isotopes.....	138
7.1	Center Identification Characters.....	150
7.2	Newly created Exfor entries in IAEA-EXFOR database.....	154