List of tables

Table 1.1 The system of Adamantine compounds 12
Table 1.2 Crystal structure types within the Adamantine compound family 12
Table 4.1 WDS phase composition of bulk material of Cu$_2$Zn$_{1.5}$Sn$_{1.2}$S$_{4+x}$ (x=0, 0.2, 0.4, 0.6, 0.8) alloys 72
Table 5.1 WDS phase composition of bulk material of Cu$_2$Zn$_{1.5}$Sn$_{1.2}$Se$_{4+x}$ (x=0, 0.2, 0.4, 0.6, 0.8) alloys 94