

Figure 1 Comparison between calculated values and reported data in the full composition range of Mg-Al binary melts from 923 to 1073 K



Figure 2 Comparison between calculated mass cation concentration  of structural units as MgZn2, Mg2Zn11, Mg4Zn7 and MgZn in the full composition range of Mg-Zn from 880 to 1073 K, respectively.



Figure 3 Comparison between calculated values and reported data in the full composition range of Al-Zn binary melts at different temperature.



Figure 4 measured activities and mass action concentration dependence on the composition and temperature in the studied Mg-Al-Zn system: (a),(b),(c) section from the zinc corner; (d),(e),(f) section from the aluminum corner; (h),(i),(j) section from the zinc corner



Figure 5 Iso-activities diagrams for constitutive elements in the ternary Mg-Al-Zn system from 933 to 1100 K, respectively