

Supporting information

Formation of particles of bismuth-based binary alloys and intermetallic compounds by ultrasonic cavitation

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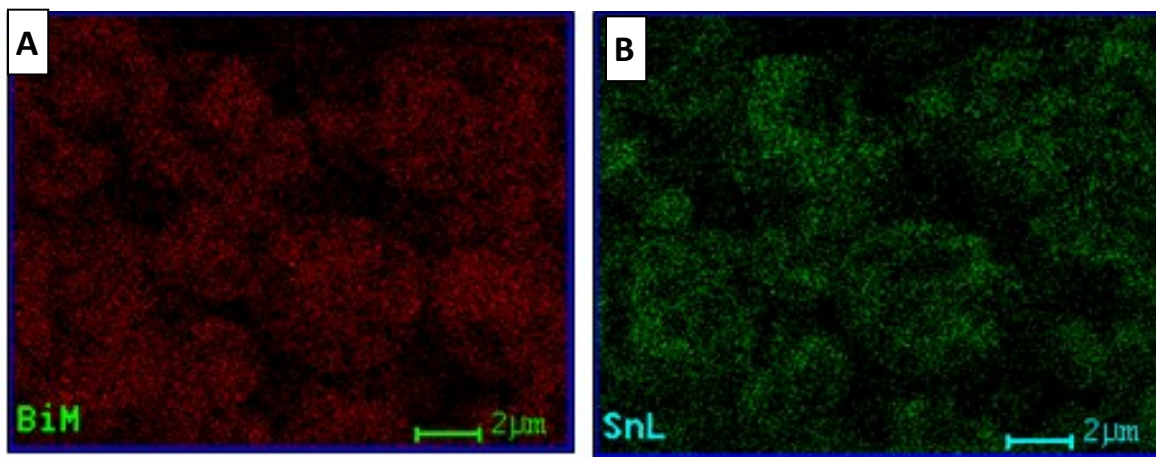


Fig. S1: Elemental mapping of bismuth and tin in the area shown in Fig. 1A.

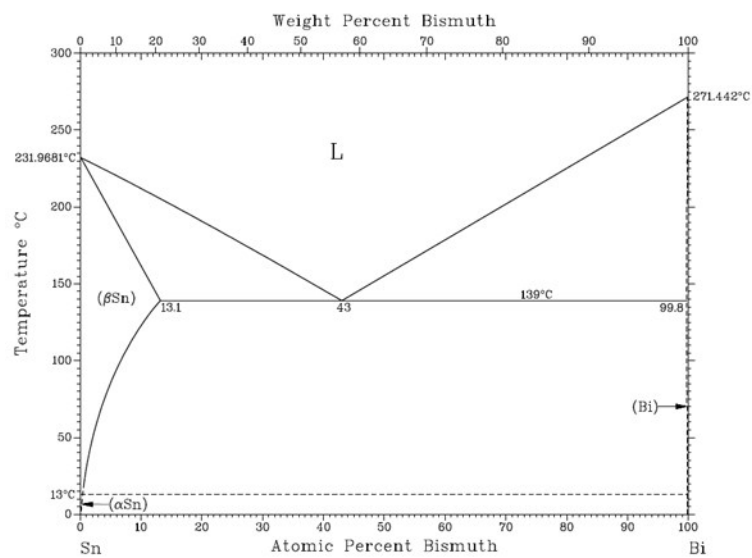


Figure S2: Equilibrium phase diagram of Sn-Bi

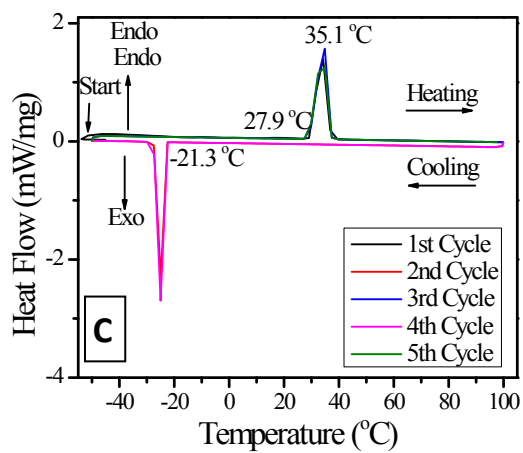
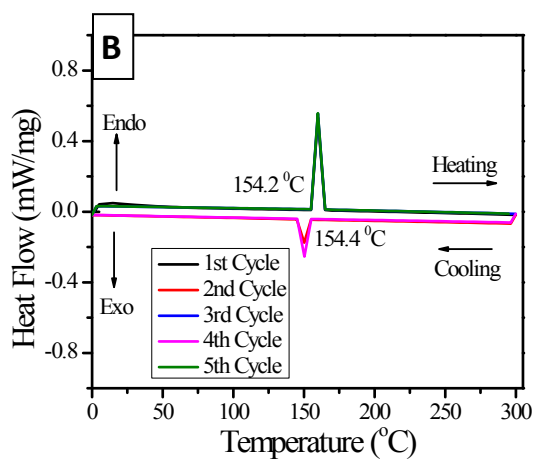
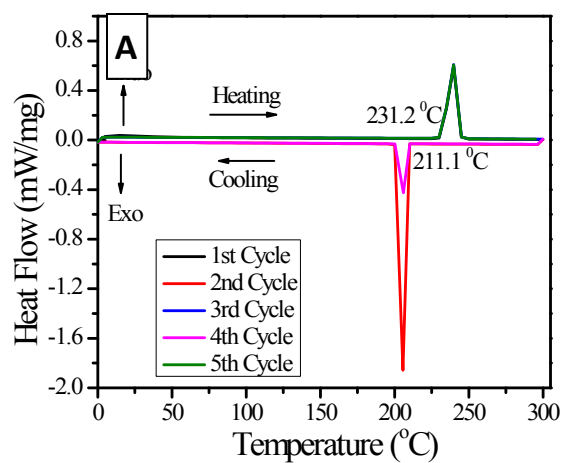


Figure S3. DSC analysis of (a) Tin (b) Indium and (c) Gallium micro-/nano-particles.

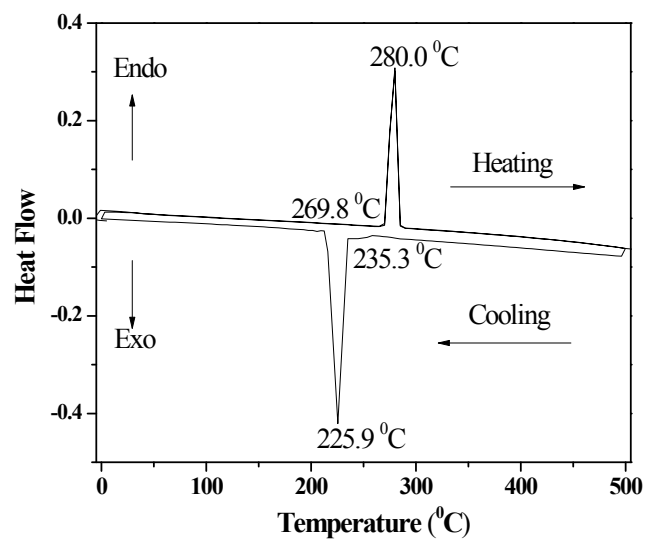
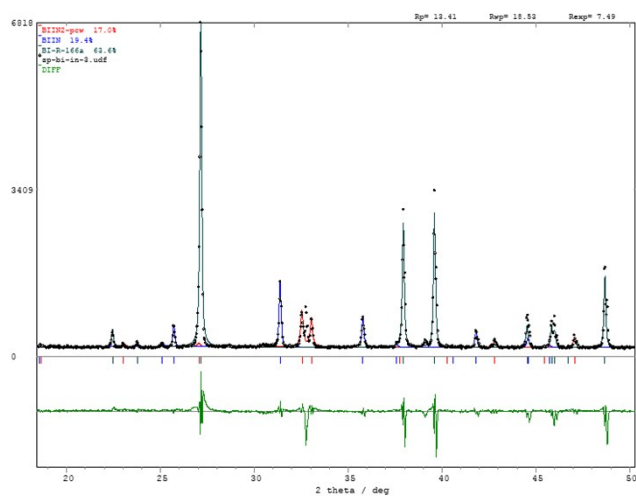
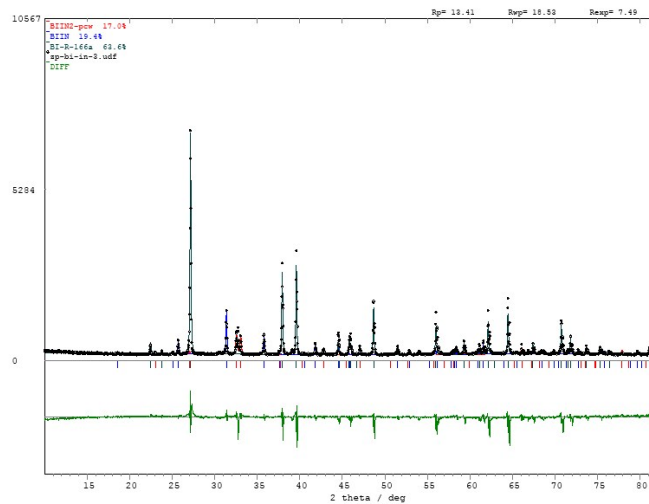


Fig: S4. DSC analysis of Bi micro-/nano-particles.

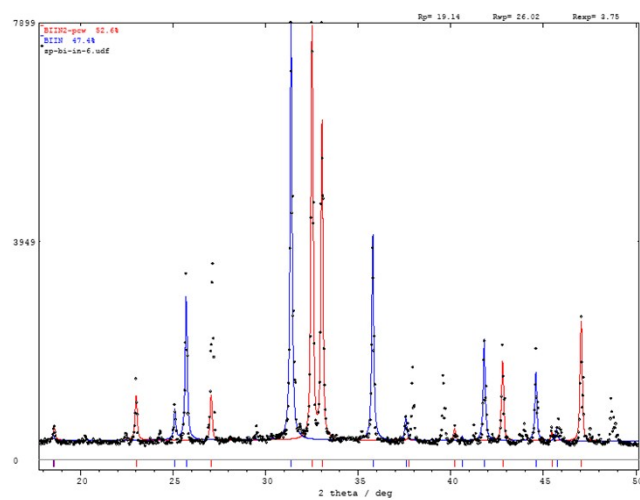
(1 Bi : 3 In)



(3 Bi : 1 In)



(1 Bi : 1 In)



(1 Bi : 2 In)

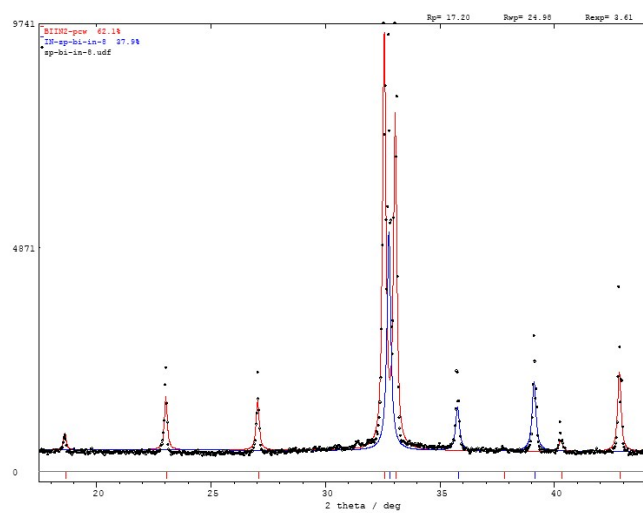


Figure S5: XRD of Bismuth indium particles which have been obtained with different ratio of Bi and In ratio.

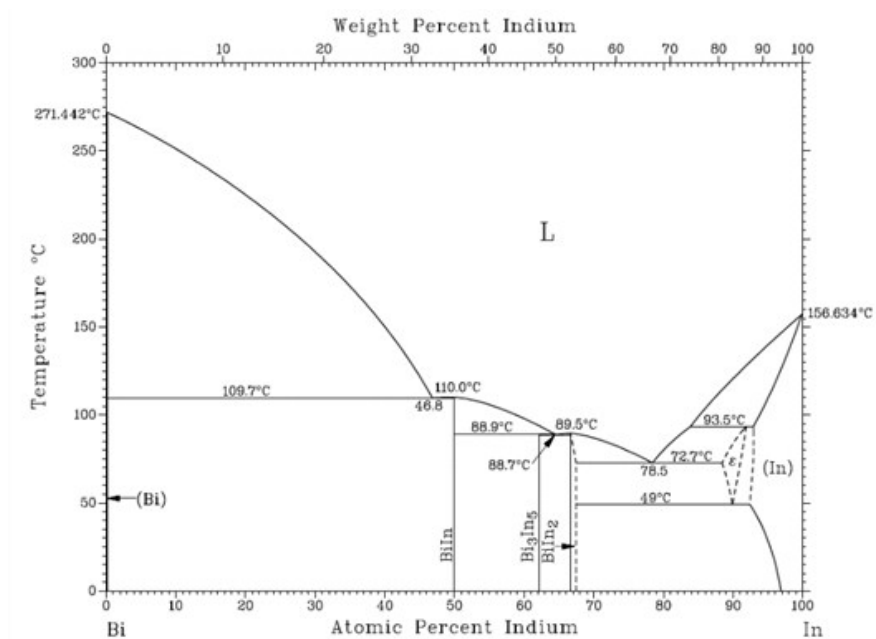


Figure S6: Equilibrium phase diagram of Bi-In

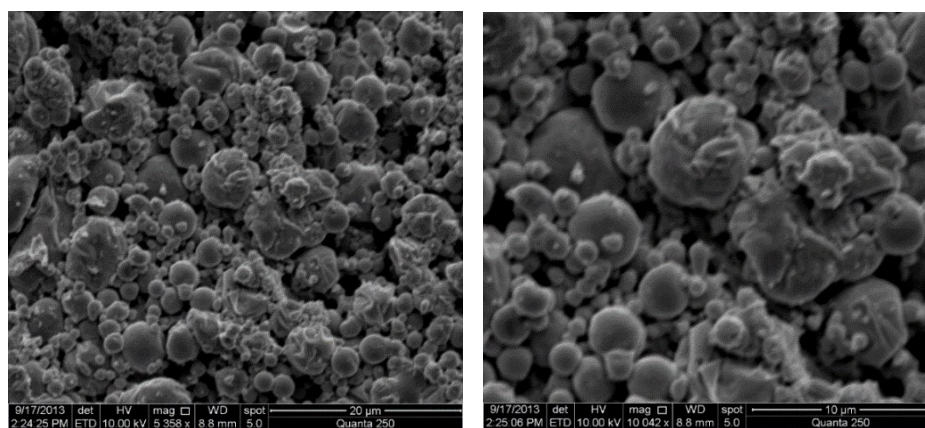


Figure S7: SEM images of the solidified Bi-Zn powder formed by ultrasonic cavitation.

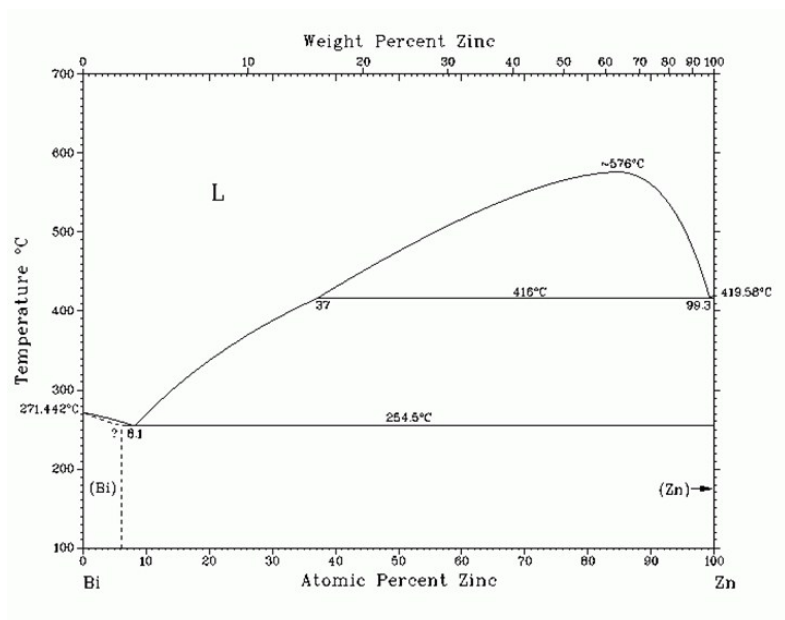


Fig. S8: Equilibrium phase diagram of Bi-Zn.

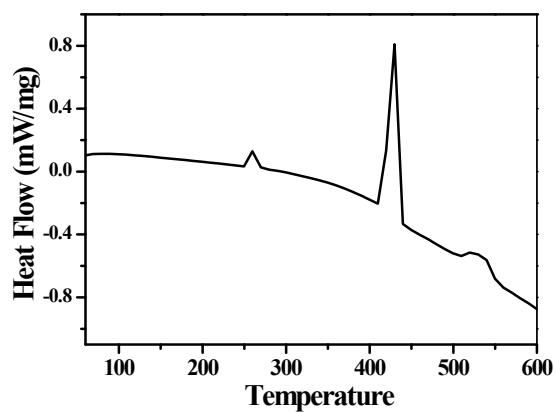


Fig. S 9: DSC curve of the heating scan for the powder sample of Bi-Zn after sonication.