## Supplementary material A

Coalescence of two microbubbles

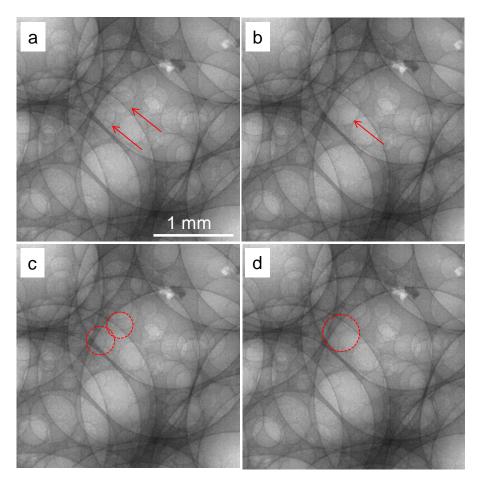


Figure S1: Coalescence of two microbubbles in a AlSi6Cu4 alloy foam. The two microbubbles shown by arrows in (a) have merged together and have become one microbubble shown by an arrow in (b). The time interval between (a) and (b) is 1.6 ms. For better visualization, the same micropores are marked by dashed circles in (c) and (d).

## Supplementary material B

Evolution of microbubbles in liquid foam

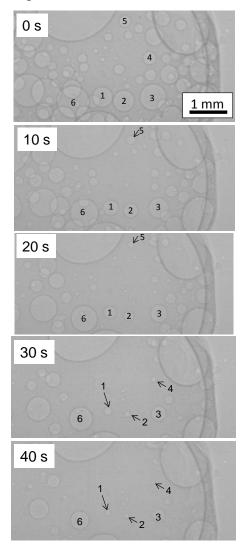


Figure S2: Evolution of microbubbles over a period of 40 s in Al foam in the liquid state imaged by synchrotron X-ray radioscopy. Six microbubbles are marked by numbers 1–6. Microbubble number 5 disappears after 20 s.