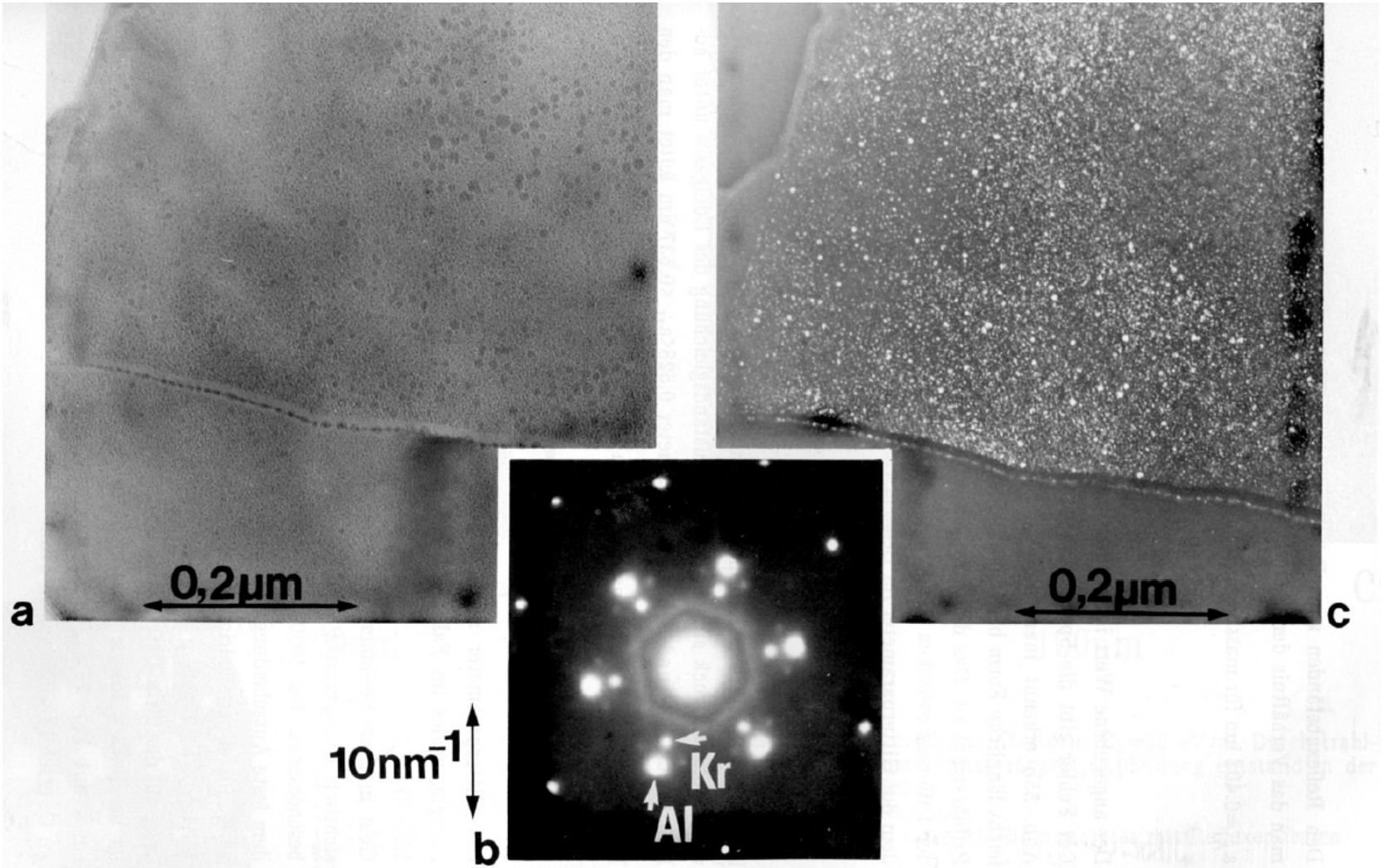
Solid Kr Precipates Formed in Ion Beam Assisted Deposition of Al



Kr–Ausscheidungen in Al–Körnern und an einer Korngrenze E_n=100 eV/at, Durchstrahlrichtung <111>, zur Oberfläche rückgedünnte Probe

a) Hellfeld, 0,8 µm Überfokus
b) <111>–SAD–Bild eines Al–Einkristallites mit Reflexen festen Kryptons
c) Dunkelfeldbild der Probenstelle aus a), g_{Kr}=<2$\bar{2}$0>

Fig. 4.3

Ostwald Ripening and Island Decay on Ag(111)

movie

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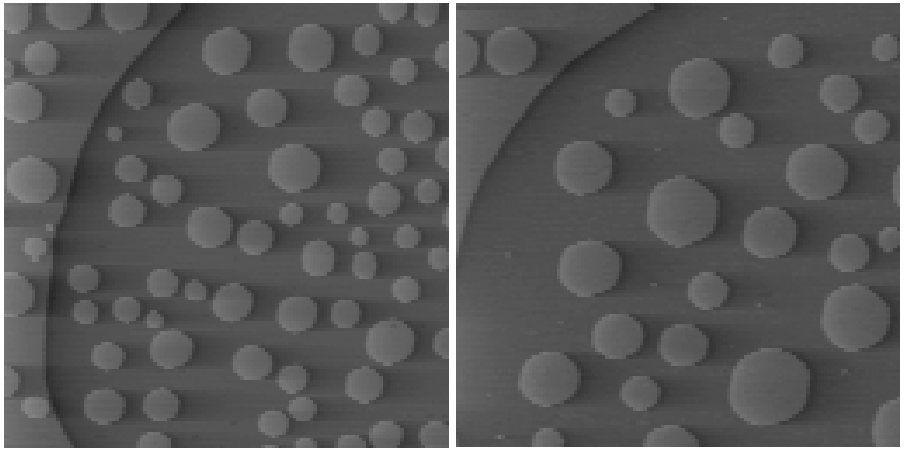

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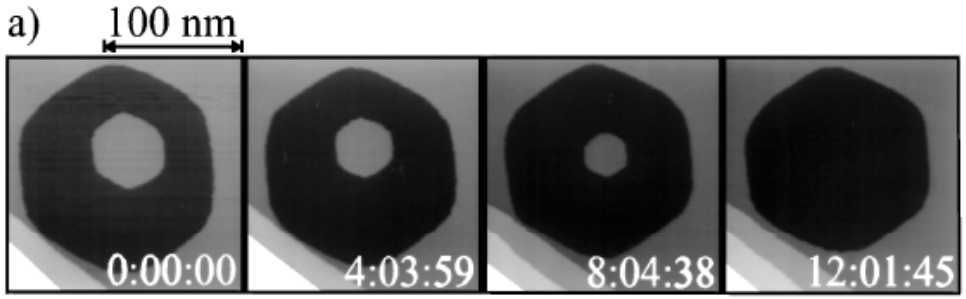

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Fig. 4.4

Sintering of Balls and Wires

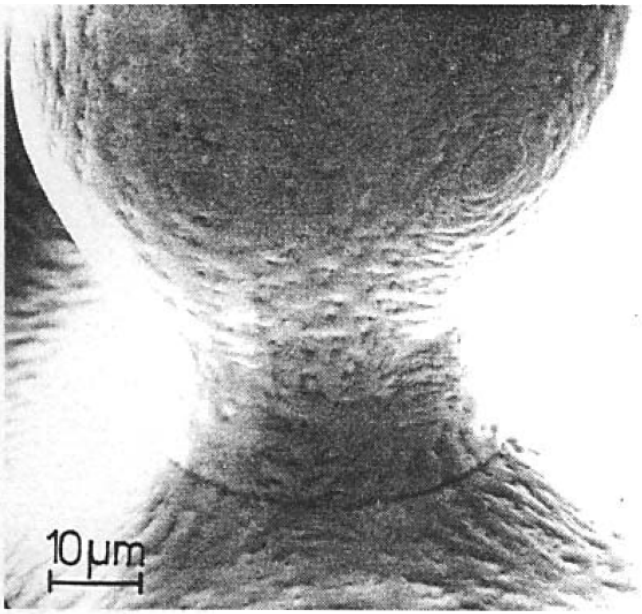

Fig. 3. Scanning electron micrograph of a ball sintered onto a single crystal plate.

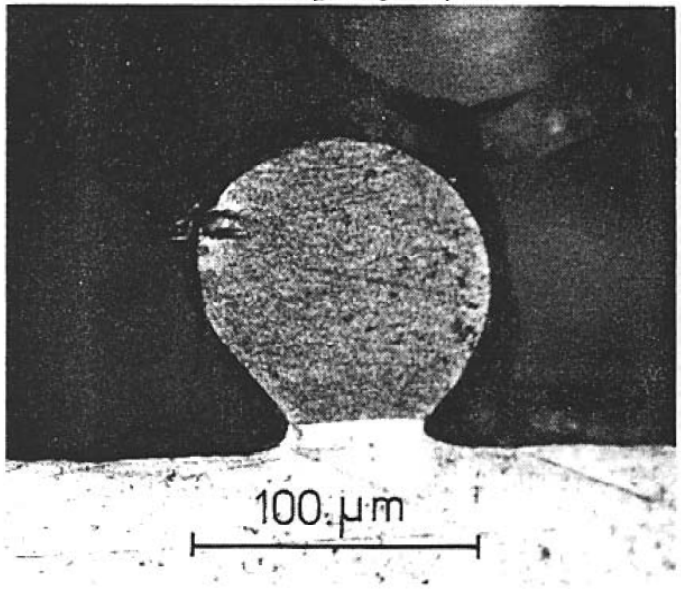

Fig. 5. Light micrograph of a cross sectioned and chemically etched, annealed specimen demonstrating the location of the grain boundary between ball and plate.

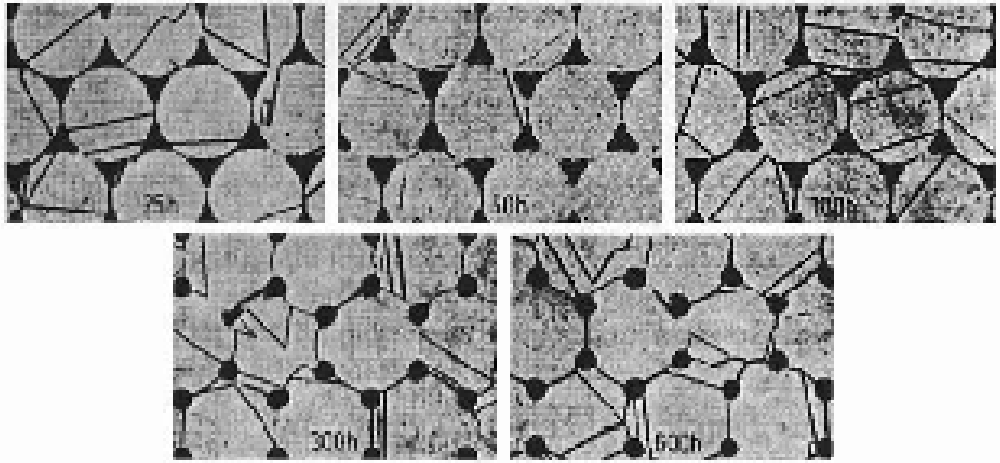

Fig. 8.19. Section through a bundle of copper wires (diameter 30 µm) after annealing at 900°C for the times given. The wires grow together at necks and the pores become rounded off.

Fig. 4.5

G. Herrmann, H. Gleiter, G. Bäro, Act. Metal. 24, (1976) 353

Coarsening During Ion Erosion

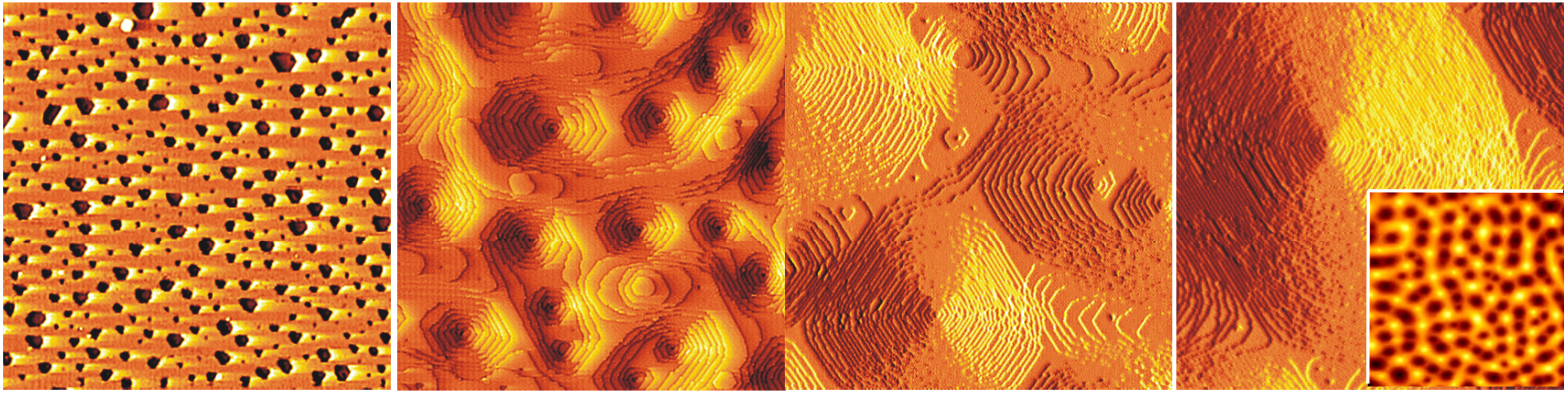

FIG. 1. STM topographs after erosion of (a) 0.26 ML, (b) 6.2 ML, (c) 66 ML, and (d) 333 ML at 600 K
Topograph width 810 Å for (a)–(d)

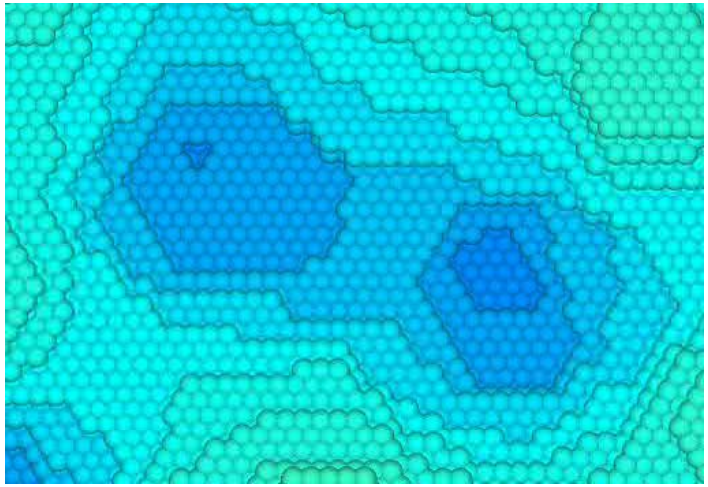

Fig. 4.6

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Grain Grooving and Grain Growth

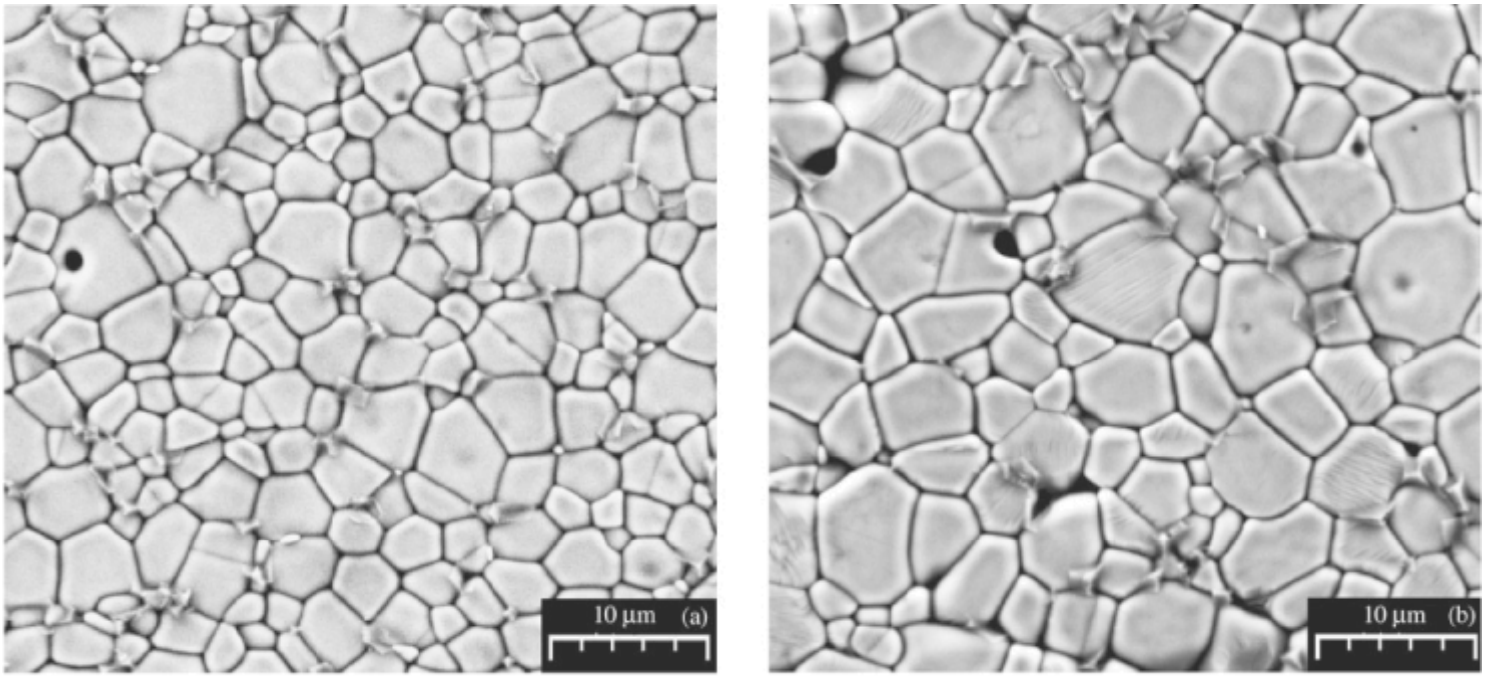

Figure 4. SEM micrographs of the SMNb0.2% composition sintered at 1300 °C for: (a) 1 h; (b) 4 h.

Fig. 4.7