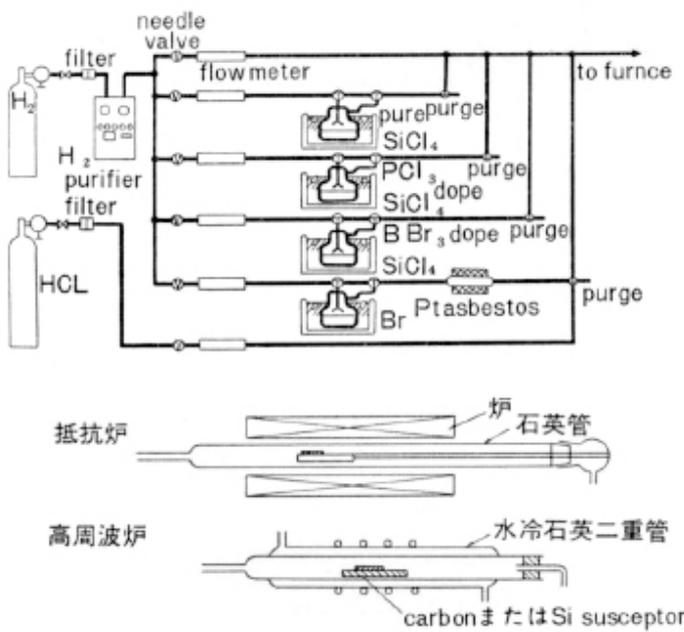
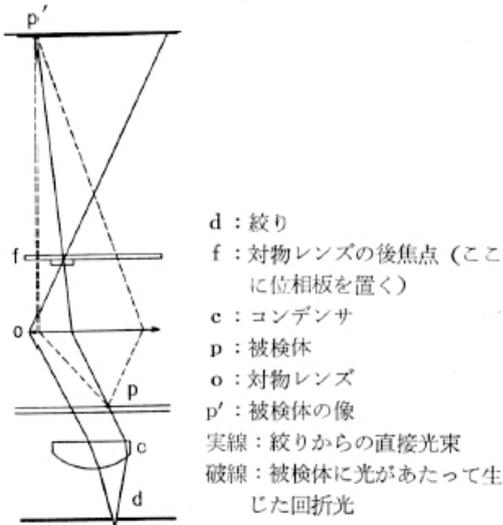


16 Si 気相エピタキシャル成長と欠陥の光学的検査 (半導体研究振興会)



Si 気相エピタキシャル成長装置 (配管部展示)



位相差法の原理



Reichert 社製 位相差顕微鏡

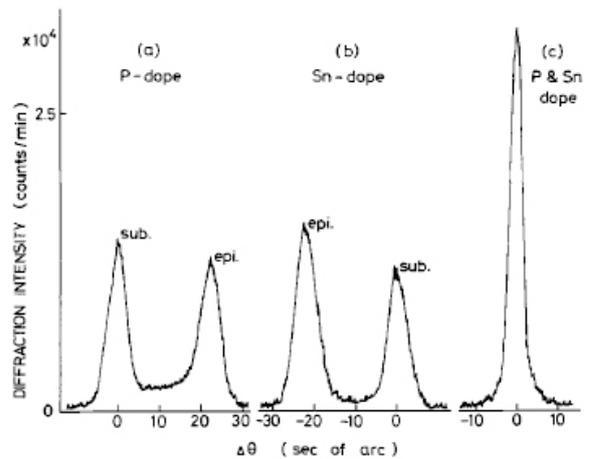


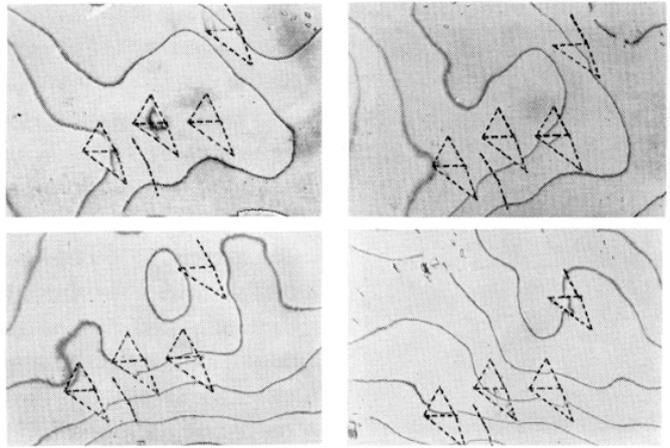
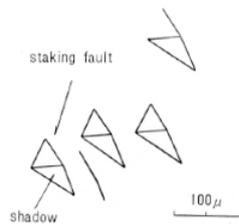
Fig. 10. X-ray rocking curves of $\{(511)^v, -(333)^s\}$ for compensated specimens by simultaneous doping of tin and phosphorus. (a) Phosphorus doping; $N_i = 4 \times 10^{19}$ atom/cm³; $t_f = 10\mu$. (b) Tin doping; $N_i = 2 \times 10^{19}$ atom/cm³; $t_f = 11.5\mu$. (c) Simultaneous doping of tin with phosphorus, concentrations of phosphorus and tin are 4×10^{19} atom/cm³ and 2×10^{19} atom/cm³, respectively; $t_f = 16\mu$.

Perfect Crystal Growth of Silicon by Vapor Deposition

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dark phase contrast (a) 位相差像



(b) 多重干渉像 (点線により積層欠陥および shadow の位相を示す)

stacking fault shadow の存在

位相差顕微鏡による結晶欠陥の観察 (寺崎健 : 5.欠陥の光学的方法による観察、半導体研究 7 (1971) 工業調査会)