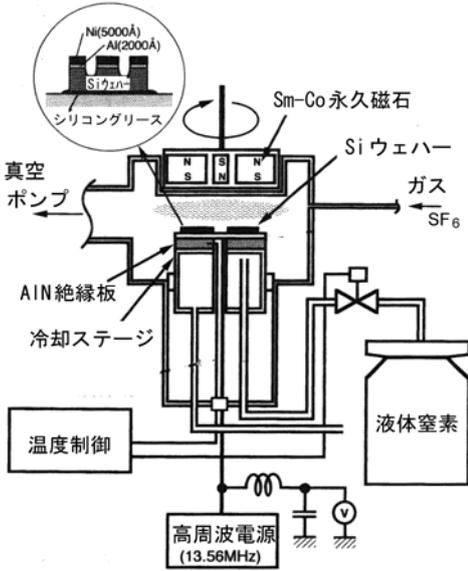


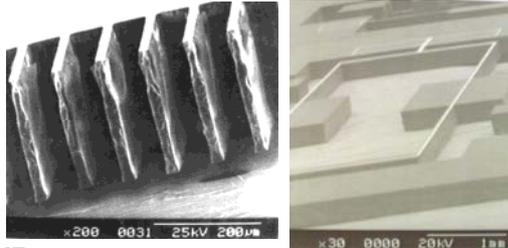
エッチング (Deep RIE, XeF₂ エッチング, エッチング中厚さモニタ)



(110)Si の結晶異方性
エッチング(200 μm
厚, 幅 25/50/100 μm)

Si Deep RIE
200 μm 厚, -120°C

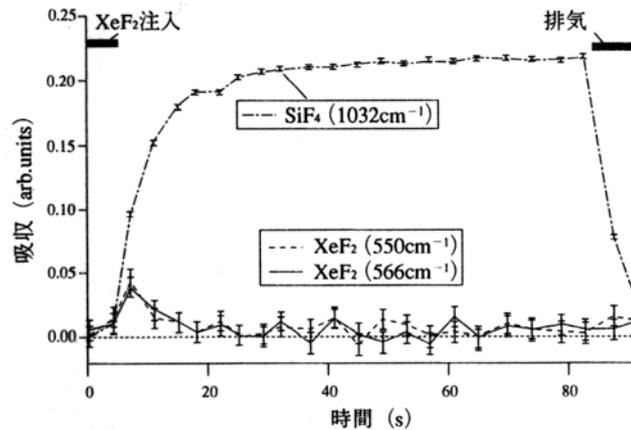
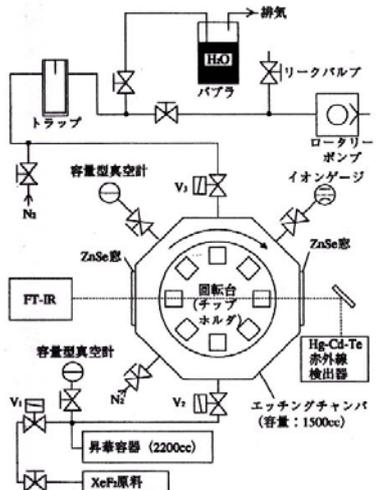
ポリイミド RIE
80 μm 厚, O₂ ガス



Deep RIE



参考文献 : M.Takinami, K.Minami and M.Esashi : High-Speed Directional Low-Temperature Dry Etching for Bulk Silicon Micromachining, Technical Digest of the 11th Sensor Symposium (1992) pp.15-18

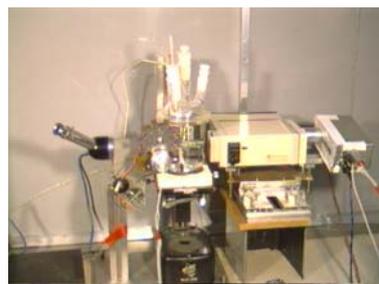
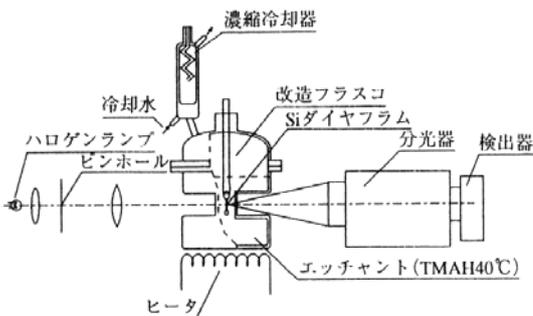


XeF₂による Siドライエッチング

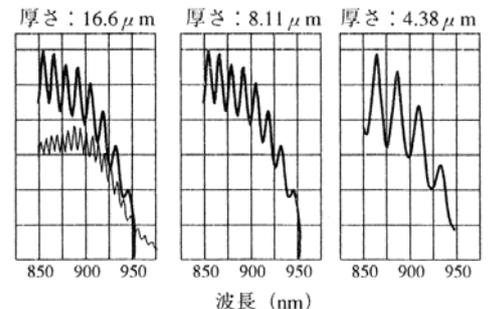


厚さ 上から 2/3/5/7 μm

参考文献 : R.Toda, K.Minami and M.Esashi, Thin Beam Bulk Micromachining Based on RIE and Xenon Difluoride Silicon Etching, Sensors and Actuators, A66 (1998) pp.268-272



ウェットエッチング中の膜厚モニタ



参考文献 : K.Minami, H.Tosaka and M.Esashi, Optical in-situ Monitoring of Silicon Diaphragm Thickness during Wet Etching, J. of Micromechanics and Microengineering, 5 (1995) pp.41-46