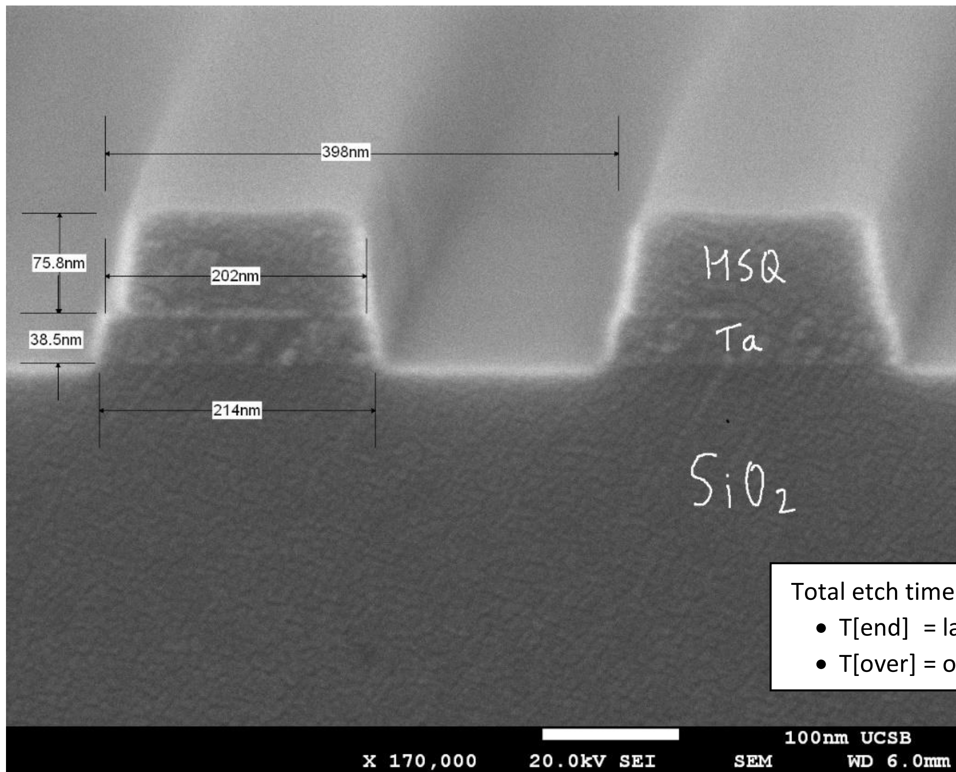
ICP1: recipe = #104 Ta Etch

(developed by Bill Mitchell, Nanofab process group)

Substrate structure	*Ta(35nm)/SiO2(300nm)/Si*
Masking resist	*HSQ(~120nm)*

Plasma Powers	
ICP	*500W*
CCP[bias]	*50W*
Gas Flows	
Cl2	*30sccm*
BCl3	*10sccm*
Ar	*0sccm*
Gas Pressures	
Etch step	*1Pa*
Ignition step	*1Pa (no Cl2 in initial step to avoid thermal etch component!)*

Etch Data	
Etch Rate (via laser monitor)	*Ta ~ 70nm/min, HSQ ~ 65nm/min*
Etch angle	*~81 degrees (<90º => tapered)*



Total etch time = T[end] + T[over] = 40s

- T[end] = laser monitor endpoint = 30s
- T[over] = over etch = 10s