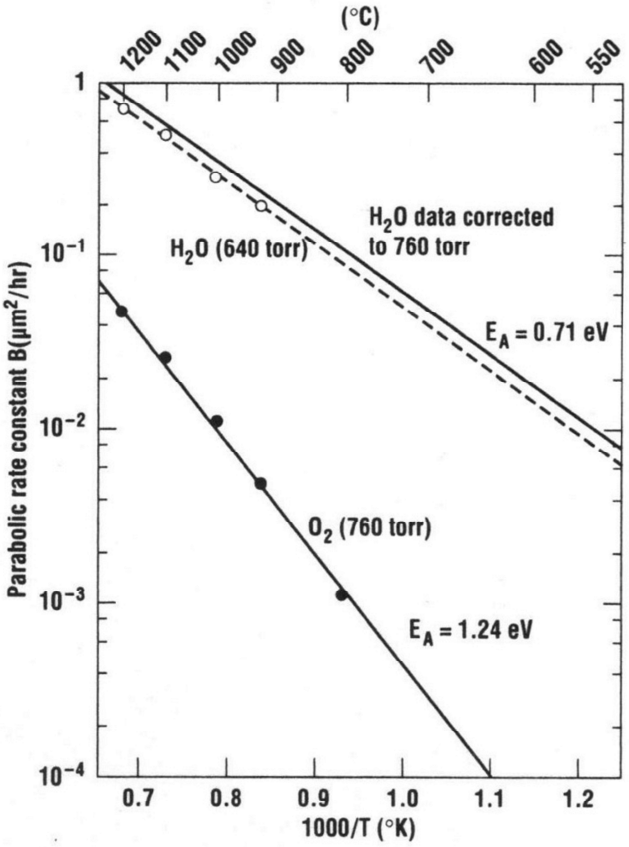

Figure 4.2 Arrhenius plot of the *B* oxidation coefficient. The wet parameters depend on the H_2O concentration and therefore on the gas flows and pyrolysis conditions *(after Deal and Grove)*.

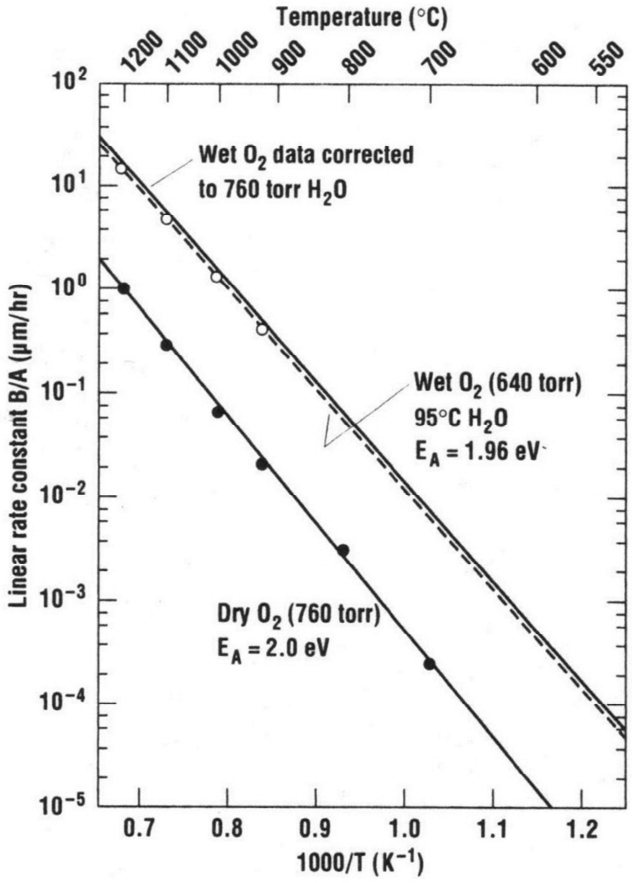

Figure 4.3 Arrhenius plot of the ratio *(B/A)* of the oxidation parameters *(after Deal and Grove)*.

Deal-Grove Model: $t_{ox}^2 + At_{ox} = B(t+\tau), \quad \tau = \frac{t_o^2 + At_o}{B}$

Table and Graphs from S. Campbell, *Fabrication Engineering at the Micro- and Nanoscale*, 3rd edition.

Table 4.1 Oxidation coefficients for silicon - For (111) silicon

	Dry			Wet (640 torr)	
Temperature (°C)	*A* (μm)	*B* (μm²/hr)	τ (hr)	*A* (μm)	*B* (μm²/hr)
800	0.370	0.0011	9	—	—
920	0.235	0.0049	1.4	0.50	0.203
1000	0.165	0.0117	0.37	0.226	0.287
1100	0.090	0.027	0.076	0.11	0.510
1200	0.040	0.045	0.027	0.05	0.720

The τ parameter is used to compensate for the rapid growth regime for thin oxides. *(After Deal and Grove.)*