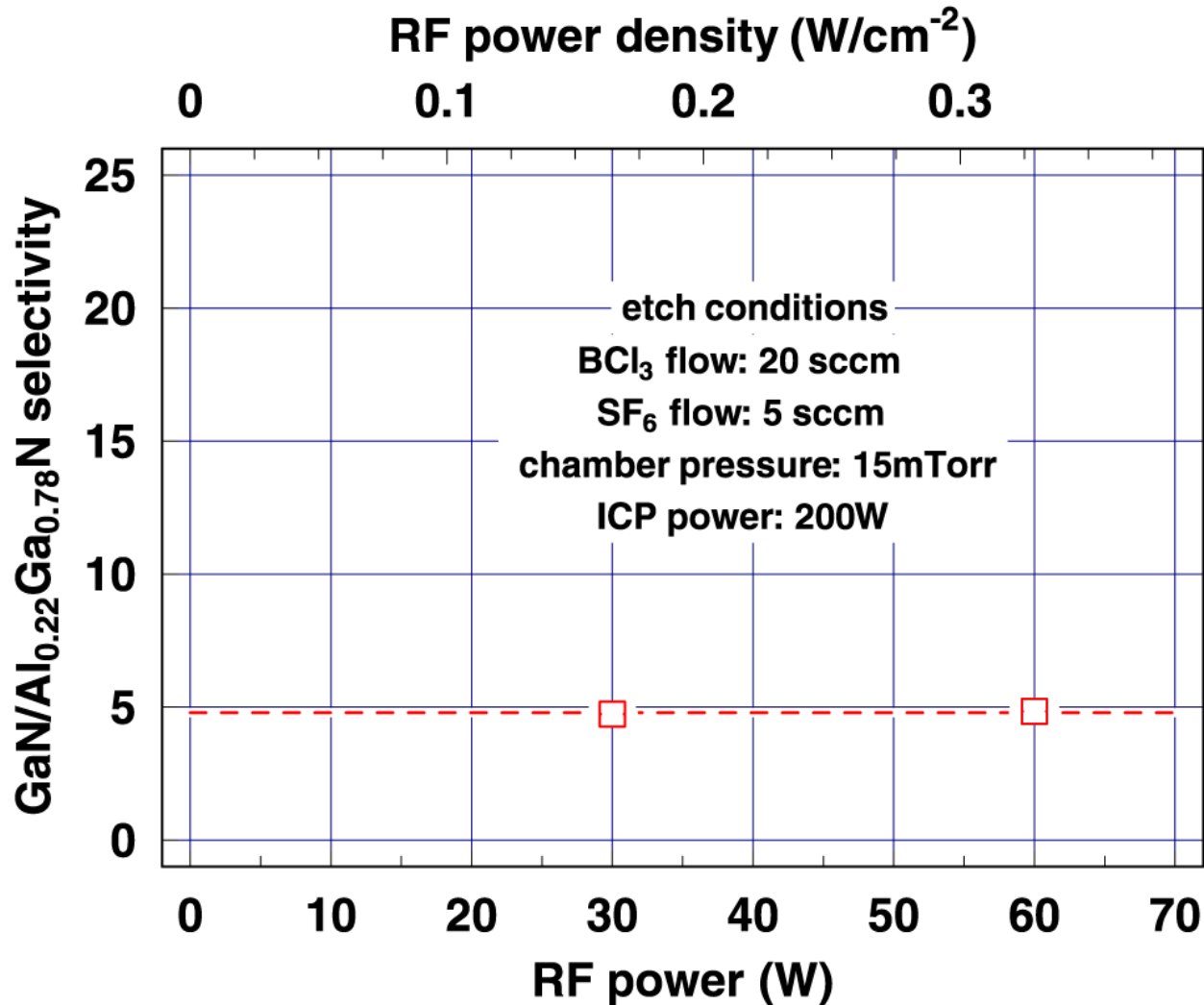


**Studying the influence of RF power on
selectivity**

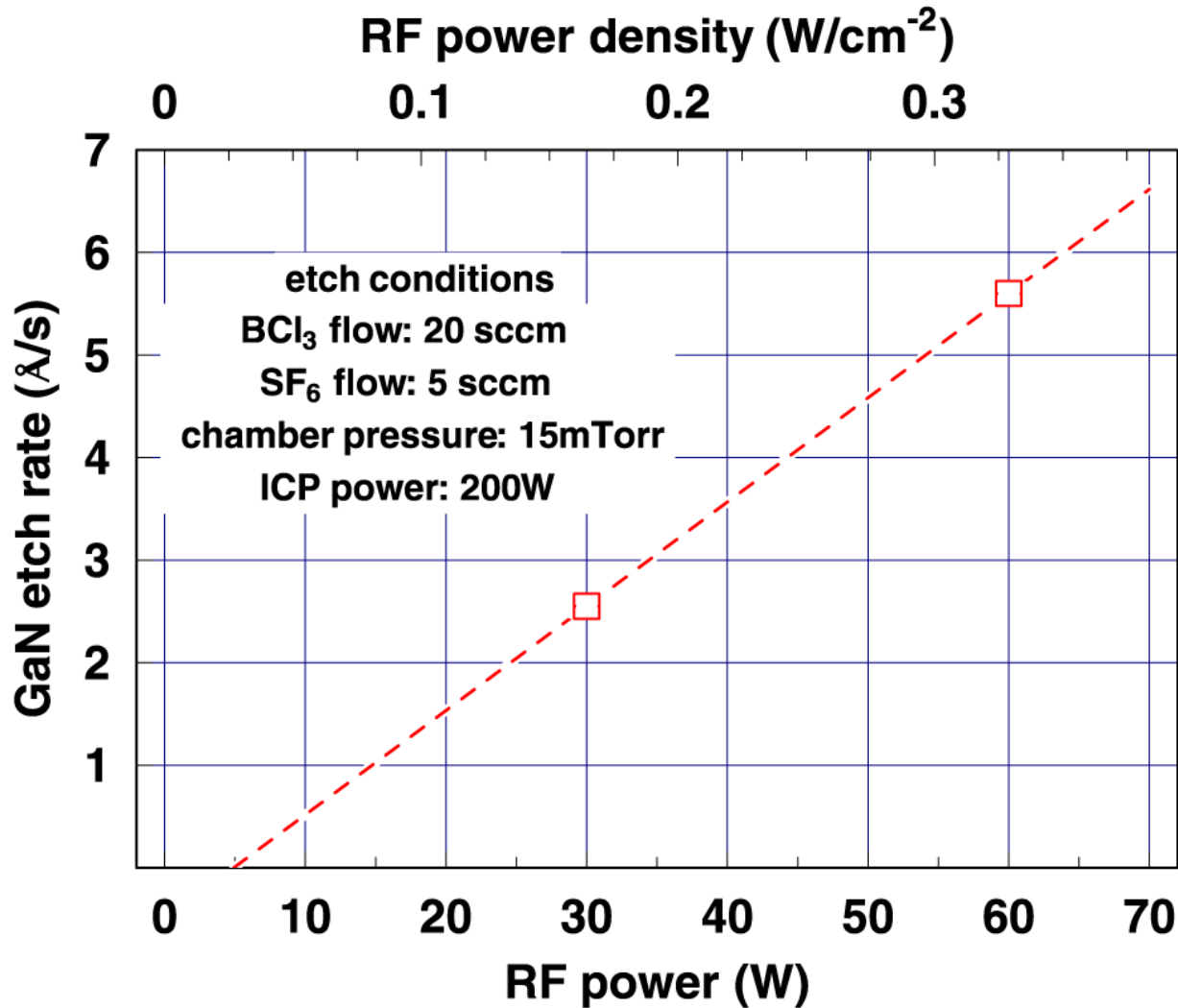
Data from D. Buttari

Selectivity vs. RF power



4000Å GaN/200Å $\text{Al}_{0.22}\text{Ga}_{0.78}\text{N}$ /GaN buffer on sapphire selectivity measured by laser interferometry

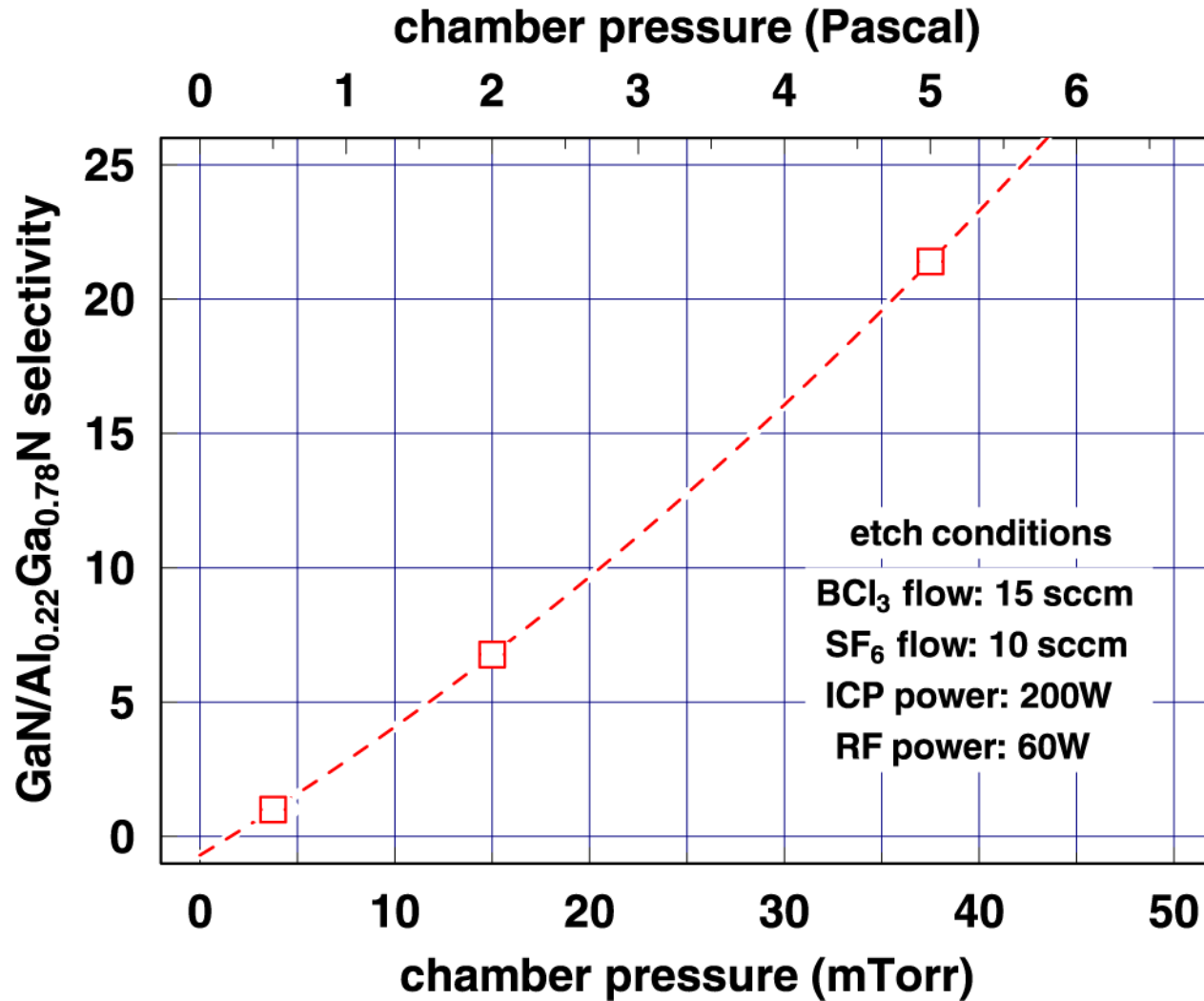
Etch rate vs. RF power



4000 \AA GaN/200 \AA $\text{Al}_{0.22}\text{Ga}_{0.78}\text{N}$ /GaN buffer on sapphire selectivity measured by laser interferometry

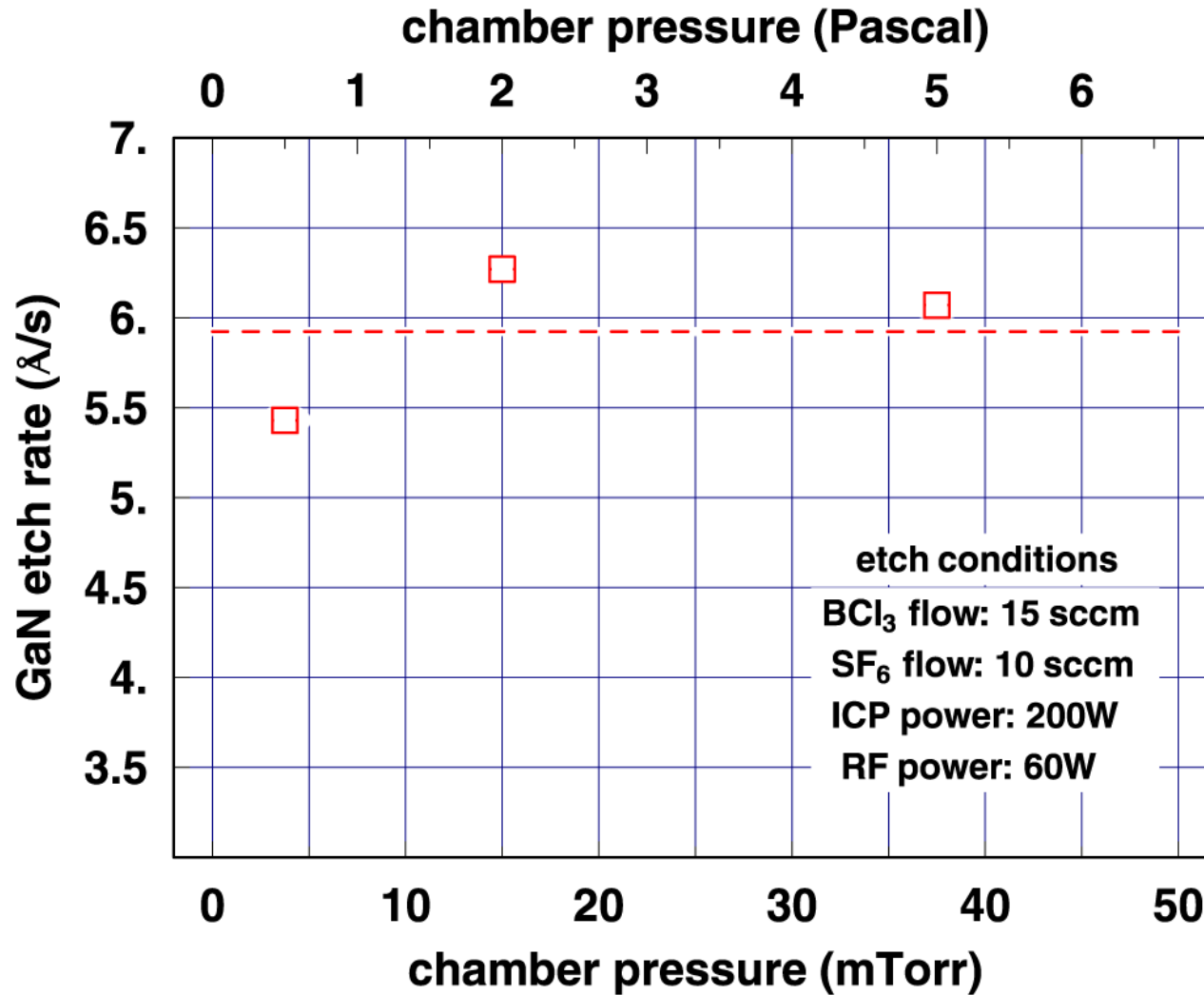
What about pressure?

Selectivity vs. Pressure



4000Å GaN/200Å Al_{0.22}Ga_{0.78}N/GaN buffer on sapphire selectivity measured by laser interferometry

Etch rate vs. Pressure



4000Å GaN/200Å $\text{Al}_{0.22}\text{Ga}_{0.78}\text{N}$ /GaN buffer on sapphire selectivity measured by laser interferometry

Chamber pressure has a strong impact on selectivity and little effect on etch rate