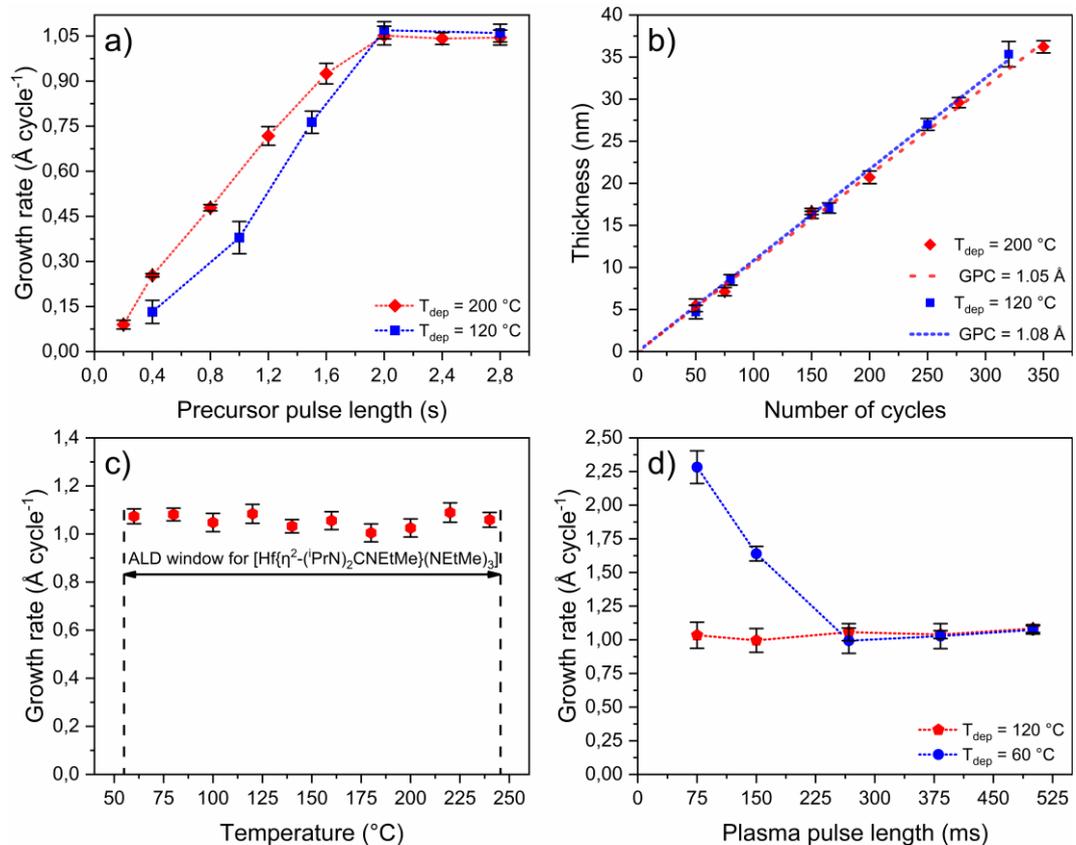


**Figure 1:** Vapor pressure - temperature correlations of a) [Hf{η<sup>2</sup>-(<sup>i</sup>PrN)<sub>2</sub>CNEtMe}(NEtMe)<sub>3</sub>] (1); b) [Hf{η<sup>2</sup>-(<sup>i</sup>PrN)<sub>2</sub>CNEt<sub>2</sub>(NEt<sub>2</sub>)<sub>3</sub>] (2); c) [Hf{η<sup>2</sup>-((EtN)(<sup>t</sup>BuN)CNEtMe)(NEtMe)<sub>3</sub>] (3) and d) [Hf{η<sup>2</sup>-((EtN)(<sup>t</sup>BuN)CNEt<sub>2</sub>(NEt<sub>2</sub>)<sub>3</sub>] (4) according to Langmuir equations estimated by stepped isothermal TGA. 1 Torr vapor pressures are denoted by the intersect of dashed lines. Grey solid lines illustrate the respective linear regression



**Figure 2:** PEALD film growth characteristics on Si(100) employing [Hf{η<sup>2</sup>-(<sup>i</sup>PrN)<sub>2</sub>CNEtMe}(NEtMe)<sub>3</sub>] (1) and oxygen plasma: a) Saturation study with varying precursor pulse lengths at 120 °C (blue) and 200 °C (red) substrate temperature; b) Film thickness vs. applied number of cycles; c) Dependency of film growth on the deposition temperature with a fixed precursor pulse of 2 s and d) influence of the plasma pulse length on the film growth at 60 °C (blue) and 120 °C (red). Dotted lines are shown to guide the eye.