

Temperature dependent kinetics of ALD reaction: SiN PEALD study

Conference: ALD2017; Submission # 85

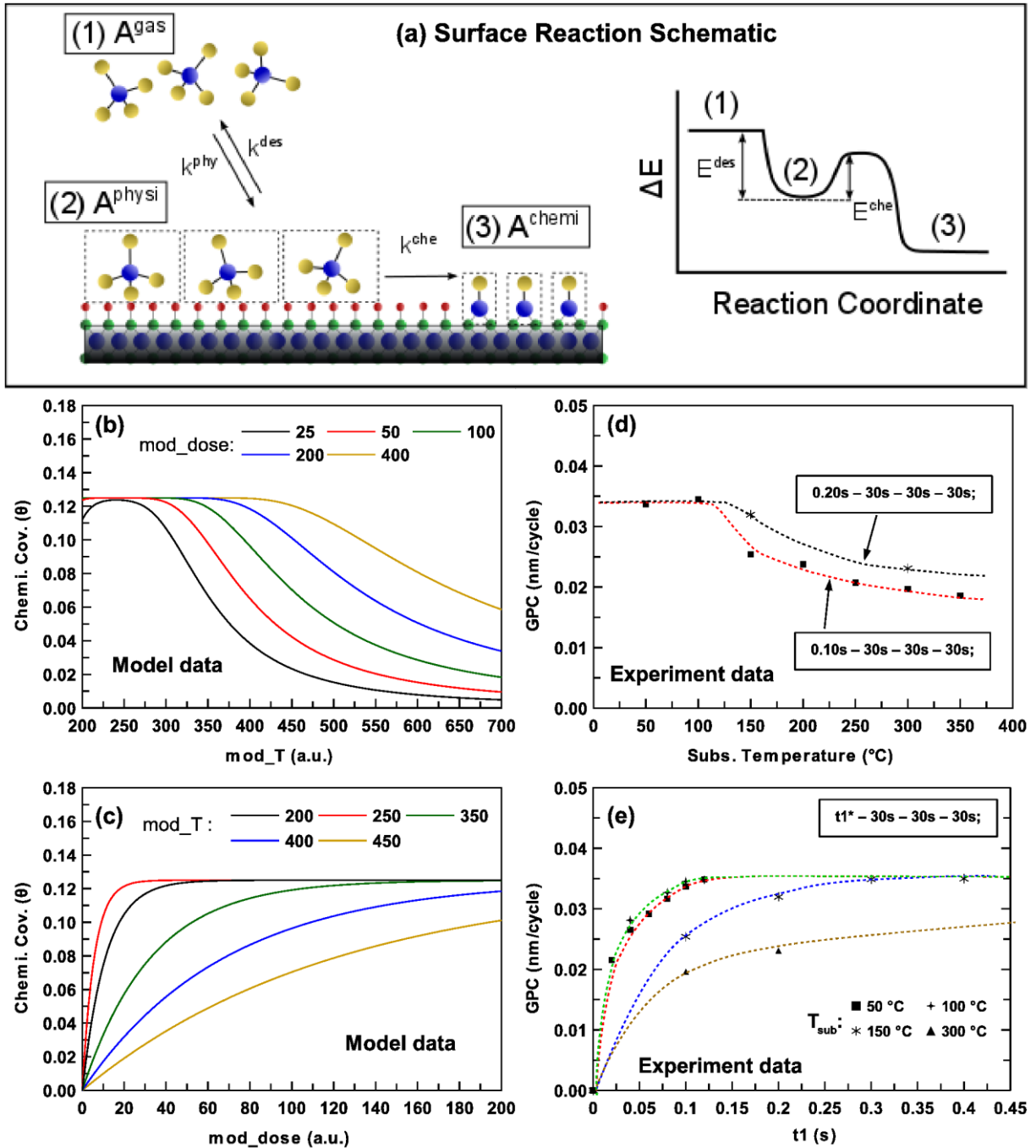


Fig. 1. (a) Schematic of ALD surface reaction illustrating physisorption (k^{phy}), desorption (k^{des}), and chemisorption (k^{che}) events. Modelled precursor coverage θ showing (b) θ vs. T_{sub} at increasing dose τ and (c) θ vs. dose τ at increasing T_{sub} . Experimental results for SiN PEALD process utilizing tris-dimethylamino-silane and forming gas plasma showing (d) GPC vs. T_{sub} and (e) GPC saturation curves at different T_{sub} .