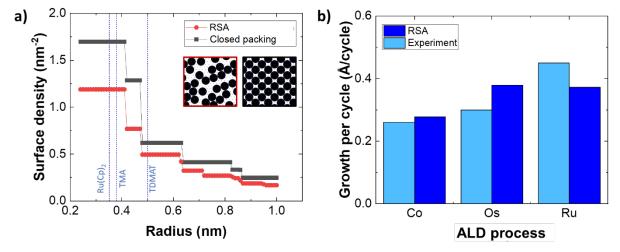


**Figure 1:** a) Random sequential adsorption algorithm used in the study, b) Progression of random sequential adsorption simulations.



**Figure 2:** a) Surface densities of precursor molecules as a function of molecular radius. The dashed lines show the radius representing some known precursor molecules. Insets show surface packing after random sequential adsorption of precursor molecules and the reference case representing closed packed ordering. b) Simulated and experimental GPC values of Co, Os, and Ru ALD processes using CoCp<sub>2</sub>, OsCp<sub>2</sub>, RuCp<sub>2</sub> precursors. (Since the uncertainty is less than 0.01, error bars are not included in the plots)