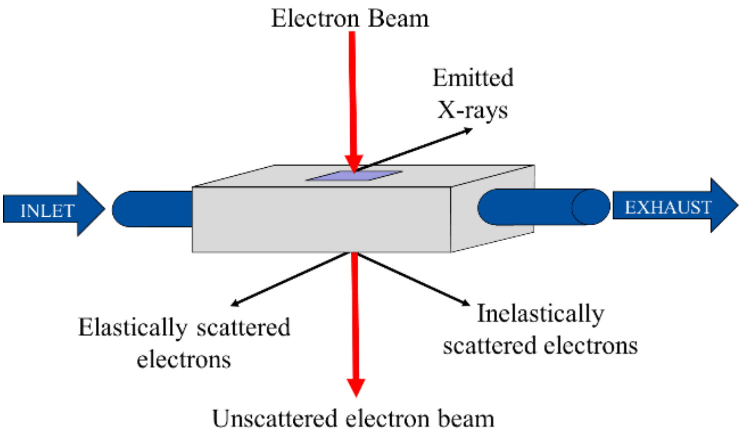

Figure 1. TEM characterization possibilities using the gas-cell reactor.

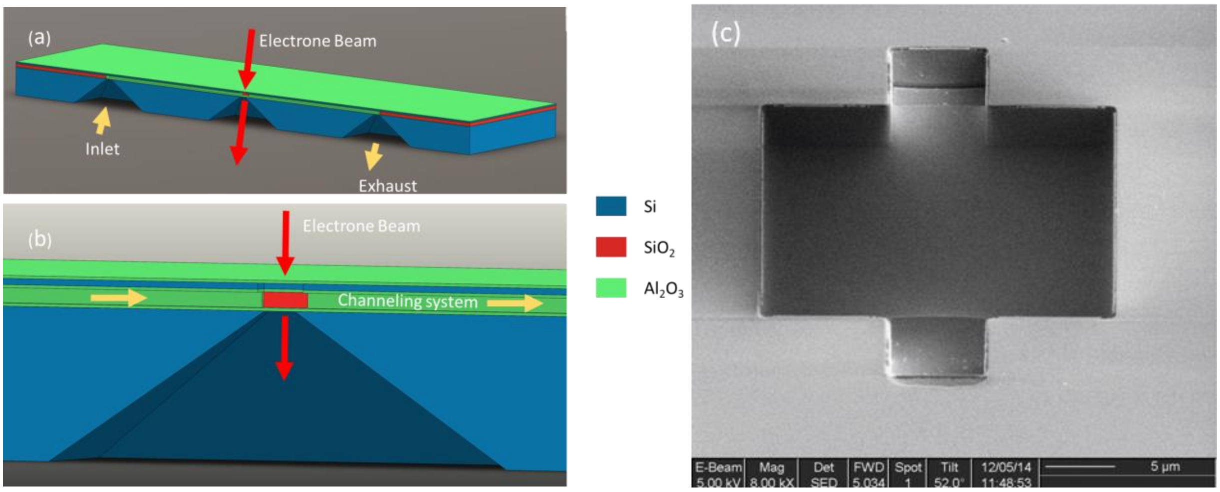

Figure 2. Design of the gas-cell reactor on a single wafer (a) 3D sectional view and (b) TEM windows with buried channeling system, and (c) Etched Sandbox with free standing membrane [1]

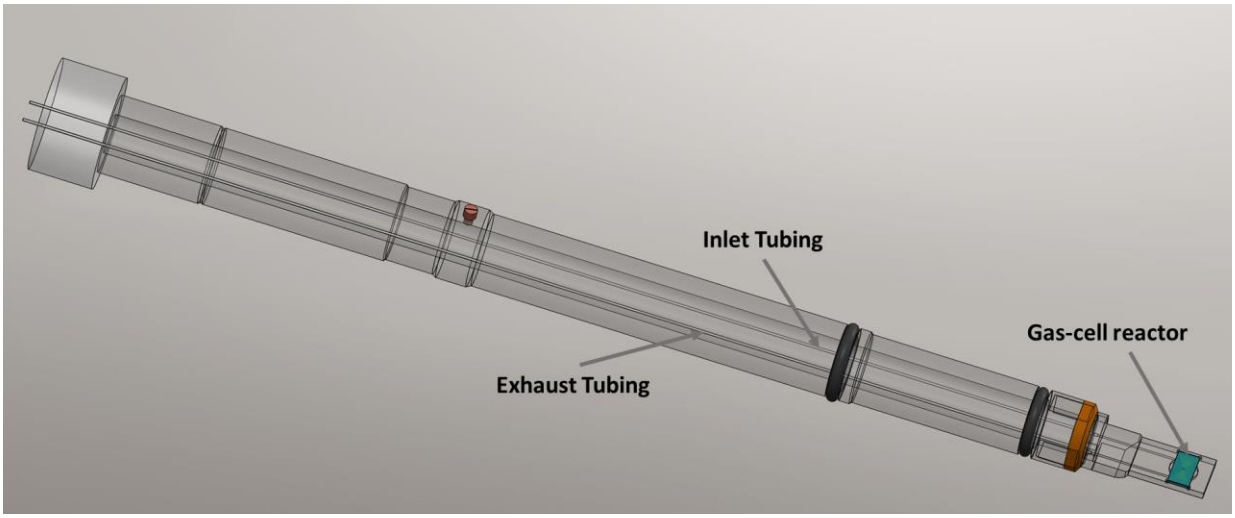

Figure 3. Model of a TEM holder with in-situ gas-cell reactor for ALD processes.

[1] M. M. Winterkorn, A. L. Dadlani, Y. Kim, J. Provine, and F. B. Prinz, “ETCH ‘sandbox’: Controlled release dimensions through atomic layer deposition etch stop with trench refill and polish,” in *2015 Transducers - 2015 18th International Conference on Solid-State Sensors, Actuators and Microsystems (TRANSDUCERS)*, 2015, pp. 2272–2275.