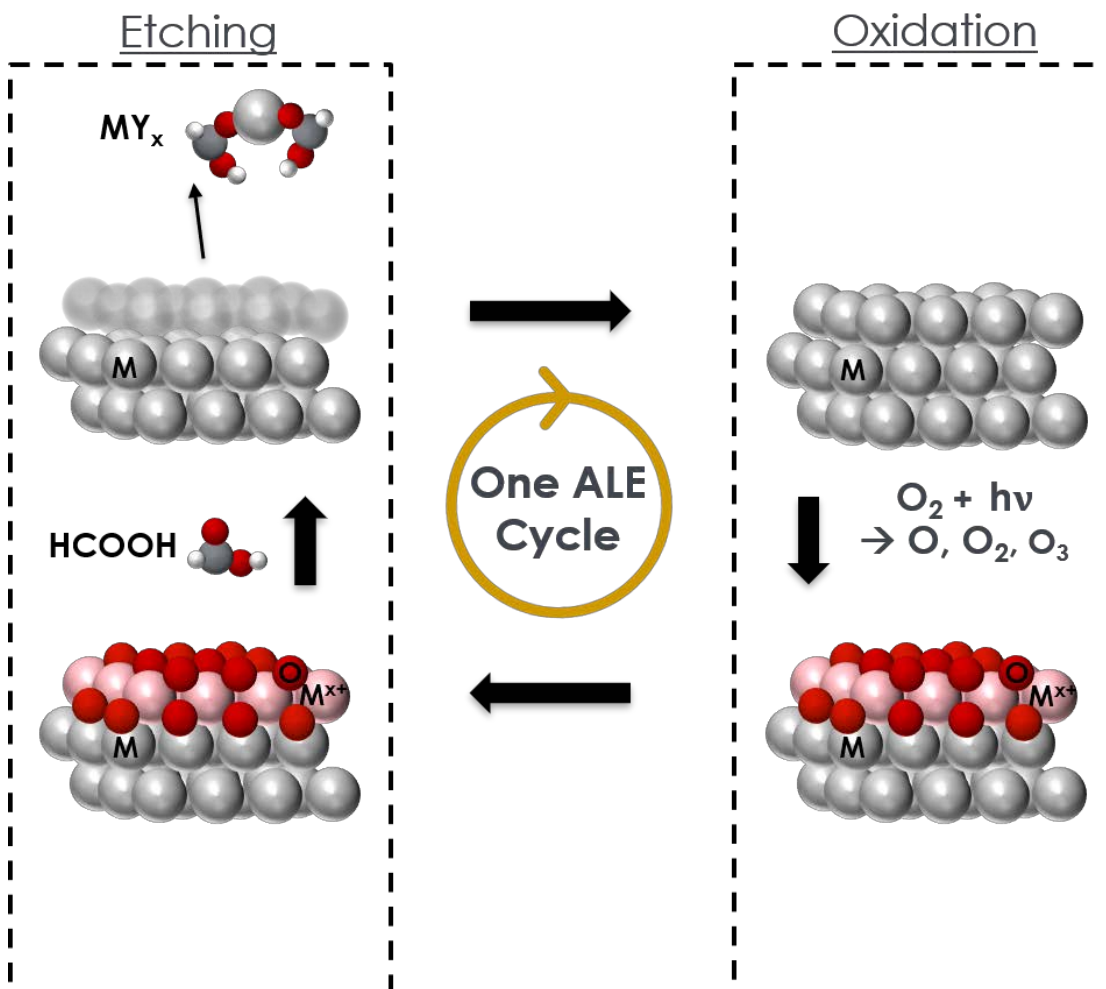
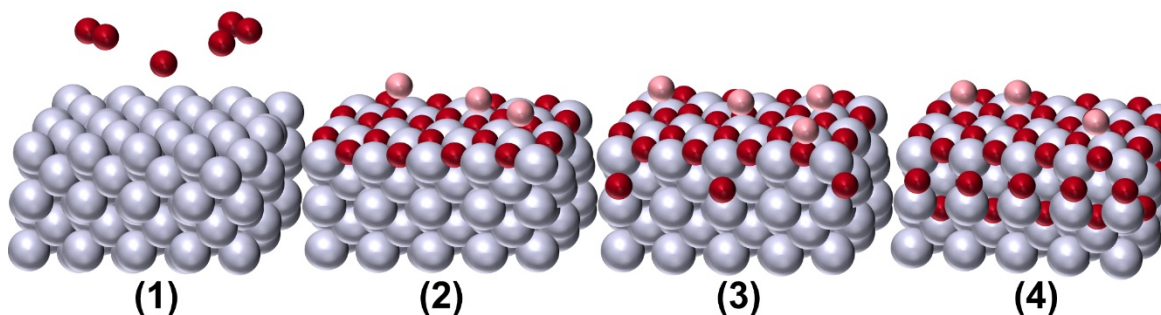


Photon-Activated Metal ALE



ALE scheme showing an etching half-cycle (left) and an oxidation half-cycle (right). A generic metal, M is oxidized after co-exposing O₂ with VUV light. The oxidized metal is then etched via exposure to HCOOH vapor. Both half-cycles constitute one ALE cycle.



A schematic representation of Pd oxidation by co-exposure to VUV/O₂ showing atomic oxygen adsorbing on the surface, diffusing to the subsurface region, and formation of the subsurface PdO_x oxide. B. M. Coffey et al., [10.1021/acsami.0c13898](https://doi.org/10.1021/acsami.0c13898) (2020).