Study of interface structure and dynamics using in-situ transmission electron microscopy

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Few techniques offer the resolution and sensitivity required to study the detailed structure and dynamics at a solid-solid interface. In-situ electron microscopy techniques have always been the tool of choice for such studies. Recent development in detector as well as holder technologies have enabled better controlled in-situ experiments with higher spatial and temporal resolution. In this work we present the dynamics of interface fluctuation at higher temperature and possibly due to the influence of the high-energy electron beam. The in-situ transmission electron microscopy images from experiments on different material system will be used to gain insight to the unit process responsible for such interfacial motion and effect of these fluctuation on the structure of the interface.

References:

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