

SURFACE DIFFUSION
IN LITHIUM SUBMONOLAYER FILMS
ON THE (112) SURFACE OF TUNGSTEN

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S u m m a r y

Making use of the method of contact potential difference, the kinetics of surface diffusion in lithium submonolayer films on the (112) surface of tungsten has been investigated. The experimental data evidence for the collective character of surface diffusion, which results in both the substantial modification of the diffusion parameters, as the surface concentration of adsorbed atoms varies, and the dynamical self-organization of the diffusion zone. The concentration dependences of the diffusion parameters of various electropositive adsorbates have been compared, and their common features and distinctions have been discussed. The influence of the electric field on the kinetics of surface diffusion has been discussed as well.