

EFFECT OF ULTRAVIOLET
RADIATION ON EVAPORATION
OF SUSPENDED ALCOHOL DROPLETS

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S u m m a r y

The influence of 390-nm ultraviolet radiation on the droplet evaporation under various pressures in the atmosphere of dry nitrogen has been studied for a series of homologous alcohols (*n*-propanol, *n*-butanol, *n*-pentanol, *n*-heptanol, *n*-octanol, and *n*-decanol). The alcohol evaporation rates under and without irradiation are calculated. A significant increase in the evaporation rate under low-power radiation is found for higher alcohols, and this growth is shown to be not associated with the heating of a droplet. The obtained results are analyzed by comparing them with experimental data on the slow neutron scattering.