

# Investigation of the process of spreading of a liquid droplet deposited on a substrate surface

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## **Abstract**

This paper proposes a model of the process of spreading of a liquid droplet on a substrate surface, based on the balance of the potential energy of a falling drop, the surface-tension energy, and the binding energy of molecules in liquids and solids. The experimental dependences of the droplet base radius and the duration of the spreading process on the degree of purity and roughness of the substrate surface purified by plasma-chemical etching coincide adequately with the calculated dependences.

**Keywords:** spreading of a liquid, energy of a falling drop, molecules, plasma-chemical etching.

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## **References**

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