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AUTHOR: ⑧ Namitkov, K. K.

TITLE: ⑥ Transfer phenomena in low-voltage pulses discharges

PERIODICAL: ⑤ Ukrayins'kyi fizychnyy zhurnal, v. 7: 10, 1962.

pp. 1141-1143

ASIA  
TEXT: Effects of the molecular properties of electrode surfaces, interelectrode distances and of surface changes following gas discharge are discussed. For instance, if the surface is covered by a thin layer of water, the transfer changes substantially. Interelectrode distance also affects transfer. There is an optimum distance for which the transfer effect is strongest (e.g. about 10  $\mu$  in air discharge of a 1200  $\mu$ F condenser at 200 V). Increase of the interelectrode distance decreases the total erosion of both cathode and anode. Breakdown of interelectrode gap occurs at distances about 10 - 100 times smaller if the electrodes have already been treated. This explains the fact that transfer ceases in spark treatment after reaching comparatively small coating thicknesses.

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Transfer phenomena in ...

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There is 1 table.

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