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# Theoretical study of micro/nano roughness effect on water-solid triboelectrification with experimental approach

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## **Abstract**

The application of micro and nano surface roughness in solid-solid contact electrification based triboelectric nanogenerators (TENGs) has been a widely accepted method for pursuing higher energy output. However, the roughness enhancement needs to be reconsidered in the case of TENGs based on water-solid contact electrification because water-solid contact has clearly different interfacial behavior from solid-solid contact. This study reports a theory for

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