

Abstract Submitted
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Plasma Wand Source for Surface Disinfection¹ JOHN FOSTER, MIRKO GAMBA, MARK KUSHNER, Univ of Michigan - Ann Arbor — Presented here are results from an atmospheric pressure plasma-to-surface applicator for contactless rapid surface disinfection that can be applied to both hard and soft surfaces, without damage the surface. The technology is envisioned for use in those areas frequented by the public or those areas that are used by many over the course of a day, and which are generally difficult to disinfect with quick turnover time. The source produces reactive oxygen species using a room temperature plasma that removes biological contaminants from the surfaces regardless of surface morphology. Discharge power consumption and reactive species production is accessed using diagnostics and a global model. Additionally, plasma driven surface reaction mechanisms are discussed.

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