

[電気システム工学]

30-30 OZONE GENERATION BY POSITIVE AND NEGATIVE
WIRE-TO-PLATE STREAMER DISCHARGES

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A UV absorption technique is used to investigate the ozone generation after a positive or negative streamer discharge in air at atmospheric pressure. The discharge apparatus consists of a 45cm long wire-to-plate configuration with an electrode gap distance of 2.5cm. After either positive or negative streamer discharges, the highest ozone density occurs in an area just below the wire electrode. Towards the ground plate, the ozone density decreases rapidly. Positive streamer discharges produce about twice as much ozone density as negative streamer discharges with the same pulse duration.

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