

## عنوان مقاله:

Water treatment by the AC gliding arc air plasma

## محل انتشار:

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تعداد صفحات اصل مقاله: 10

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## خلاصه مقاله:

In this study, the effects of gliding arc (G Arc) plasma system on the treatment of water have been investigated experimentally. An AC power supply of 15 kV potential difference at 50 Hz frequency was employed to generate plasma. Plasma density and temperature were measured using spectroscopic method. The water was contaminated with staphylococcus aureus (Gram-positive) and salmonella bacteria (Gram-negative), and Penicillium (mold fungus) individually. pH, hydrogen peroxide, and nitrite contents of treated water were measured after plasma treatment. Decontamination of treated water was determined using colony counting method. Results indicate that G Arc plasma is a powerful and green tool to decontaminate water without producing any byproducts.

## کلمات کلیدی:

G Arc discharge system Removing bacteria Complete sterilization Spectroscopy Salmonella Penicillium (mold fungus) staphylococcus aureus

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/763681>

