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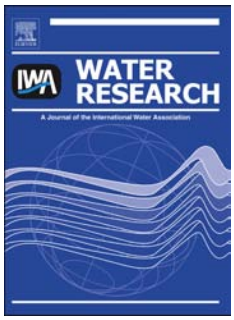

Disinfection of water by adsorption combined with electrochemical treatment

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DISINFECTION OF WATER BY ADSORPTION COMBINED WITH ELECTROCHEMICAL TREATMENT

HIGHLIGHTS:

- Adsorption using a graphite flake adsorbent led to 6.5-log10 reduction in *E. coli*
- Adsorption with electrochemical treatment achieved >8.5 log10 reduction in *E. coli*
- Electrochemical disinfection was achieved in a chloride free environment
- The energy consumption required to achieve >8.5-log10 disinfection was 2 - 7 kWh m^{-3}
- The adsorbent was effectively regenerated by electrochemical treatment enabling reuse