عنوان فارسی مقاله:
پتانسیل کاتالیستی Cu / Mg / Al-chitosan برای اوزون زنی شیرابه در محل دفن زباله

عنوان انگلیسی مقاله:
Catalytic potential of Cu/Mg/Al-chitosan for ozonation of real landfill leachate

توجه!
این فایل تنها قسمتی از ترجمه میباشد. برای تهیه مقاله ترجمه شده کامل با فرمت ورد (قابل ویرایش) همراه با نسخه انگلیسی مقاله، اینجا کلیک نمایید.
4. Conclusion

The present study reports the application of mesoporous CMA-chitosan for ozonation of landfill leachates. The COP with CMA-chitosan significantly improved COD removal from landfill leachate by generating •OH, resulting in more biodegradation of the effluent than in ozonation alone. Moreover, a significant degree of mineralization was observed for COD of the landfill leachate. The presence of metals in CMA-chitosan catalyzed O₃ decomposition to form •OH radicals or other reactive species. Ozone decomposition in the aqueous phase was controlled by the pH of landfill leachate and was significantly enhanced in the presence of CMA-chitosan. The reusability of CMA-chitosan over three consecutive runs was confirmed. Accordingly, the developed catalyst is an efficient and economically viable catalyst for the treatment of landfill leachates using the catalytic ozonation technique.