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| Titolo | Advanced oxidation processes in dye-containing wastewater . Volume 2 / / Subramanian Senthilkannan Muthu and Ali Khadir, editors |
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| ISBN | 981-19-0882-6 |
| Descrizione fisica | 1 online resource (412 pages) : illustrations (chiefly color) |
| Collana | Sustainable textiles : production, processing, manufacturing & chemistry |
| Disciplina | 628.3 |
| Soggetti | Sewage - Purification - Color removal<br>Sewage - Purification - Oxidation |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di bibliografia | Includes bibliographical references. |
| Nota di contenuto | Enhancement of anaerobic digestion and photodegradation treatment of textile wastewater through adsorption --Fenton Process in Dye Removal --Combination of Photocatalysis and Membrane Separation for Treatment of Dye Wastewater --Carbon Nitride Application on Advanced Oxidation Processes for Dye Removal --ZnO Nanocomposites in Dye Degradation --Electroflocculation for wastewater treatment of textile industry: Overview and process variables effects --Nanoceramic Based Composites for Removal of Dyes from Aqueous Stream -- Operational parameters in dye decolorization via sonochemical and sonoenzymatic treatment processes --Metal oxides-based nanomaterials for treatment of industrial dyes and colorants -- Nanomaterials In Advanced Oxidation Processes (Aops) In Anionic Dye Removal --Ozone Based Processes in Dye Removal --UV/H2O2 Processes for Dye Removal --Dyes Sonolysis: An Industrial View of Process Intensification Using Carbon Tetrachloride --Fenton-Like Processes for the Removal of Cationic Dyes --Plasma Degradation of Synthetic Dyes. |
| Sommario/riassunto | Textile industry wastewater contains toxic dyes as well as heavy metals and many other persistent organic compounds which are difficult to biodegrade using conventional biological methods. Advanced Oxidation Processes (AOPs) are one of the best alternatives for the effective |

degradation of such compounds. This Volume 2 starts with homogeneous and heterogeneous Fenton processes and reviews the application and variables that affect the process. It then discusses plasma technology- an emerging method in terms of its chemistry, treatment set-up, limitations, etc. The positive performance of carbon tetrachloride in process intensification of dye degradation is presented. The other chapters include topics such as sonoenzymatic treatment processes, electroflocculation versus textile wastewater, combination of photocatalysis and membrane Separation, and enhancement of anaerobic digestion and photodegradation through adsorption.