

NANOMATERIALS FOR WATER AND WASTEWATER TREATMENT

1. Nanotechnologies for wastewater treatment
2. Nanomaterials and nanoparticles: zero valent iron, bimetallic and magnetic nanoparticles, nanomembranes and nanofilters, carbon nanotubes, nanocomposites
3. Nanotechnologies based processes for wastewater treatment
 - 3.1 Biodegradation
 - 3.2 Enzyme and cell immobilization
 - 3.3 Photocatalysis and advanced oxidation processes
 - 3.4 Denitrification
 - 3.5 Chemical reduction
 - 3.6 Adsorption
 - 3.7 Encapsulation
 - 3.8 Disinfection
 - 3.9 Magnetic separation
 - 3.10 Filtration