

1. Record Nr.	UNINA9910298264203321
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Titolo	Microbial Styrene Degradation / / by Dirk Tischler
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
ISBN	3-319-24862-6
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (120 p.)
Collana	SpringerBriefs in Microbiology, , 2191-5385
Disciplina	570
Soggetti	Microbiology Enzymology Environmental engineering Biotechnology Applied Microbiology Environmental Engineering/Biotechnology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Styrene, an introduction -- Pathways for the degradation of styrene -- Molecular genetics of styrene degrading routes -- Selected enzymes of styrene catabolism -- Biotechnological applications of styrene degrading microorganisms or involved enzymes -- Conclusions and future perspectives.
Sommario/riassunto	This book describes the complex processes involved in styrene degradation by microbes, including highly adaptive microorganisms, the various enzymes involved in styrene biodegradation, new styrene-catabolic routes, novel regulatory mechanisms, and the genes coding for styrene metabolizing enzymes. Numerous biotechnological applications are discussed, such as the development of sustainable eco-friendly technologies as well as the use of styrene degrading microorganisms and their enzymes as a rich resource for biotechnology.