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	Titolo	Continuous strong Markov processes in dimension one : a stochastic calculus approach / / Sigurd Assing, Wolfgang M. Schmidt
	Pubbl/distr/stampa	Berlin : , : Springer, , [1998] ©1998
	ISBN	3-540-69786-1
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	Descrizione fisica	1 online resource (XII, 140 p.)
	Collana	Lecture notes in mathematics ; ; 1688
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	Soggetti	Markov processes Stochastic integral equations
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	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Bibliographic Level Mode of Issuance: Monograph
	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	Basic concepts and preparatory results -- Classification of the points of the state space -- Weakly additive functionals and time change of strong Markov processes -- Semimartingale decomposition of continuous strong Markov semimartingales -- Occupation time formula -- Construction of continuous strong Markov processes -- Continuous strong Markov semimartingales as solutions of stochastic differential equations.
	Sommario/riassunto	The book presents an in-depth study of arbitrary one-dimensional continuous strong Markov processes using methods of stochastic calculus. Departing from the classical approaches, a unified investigation of regular as well as arbitrary non-regular diffusions is provided. A general construction method for such processes, based on a generalization of the concept of a perfect additive functional, is developed. The intrinsic decomposition of a continuous strong Markov semimartingale is discovered. The book also investigates relations to stochastic differential equations and fundamental examples of irregular diffusions.