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Titolo	Continuous strong Markov processes in dimension one : a stochastic calculus approach // Sigurd Assing, Wolfgang M. Schmidt
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ISBN	3-540-69786-1
Edizione	[1st ed. 1998.]
Descrizione fisica	1 online resource (XII, 140 p.)
Collana	Lecture notes in mathematics ; ; 1688
Disciplina	519.233
Soggetti	Markov processes Stochastic integral equations
Lingua di pubblicazione	Inglese
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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.