



*Special Issue Reprint*

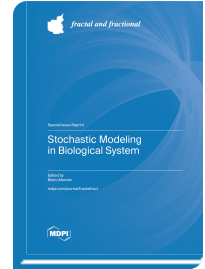
## Stochastic Modeling in Biological System

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This Reprint includes some research articles covering advances in the theory of stochastic modeling in Biology. In this framework, continuous- and discrete-time stochastic processes, as well as stochastic differential equations, fractional differential equations, correlated processes, first-passage-time problems, stochastic optimal controls, parameter estimation, and simulation techniques, are treated.

The topics include stochastic processes for neuronal activity, jump-diffusion processes, first-passage-time problems, Markov and semi-Markov processes, time-changed processes, Markov chains, fractional processes, and fractional Brownian motion.

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