

1. Record Nr.	UNINA9910557611303321
Autore	Hanschen Franziska S
Titolo	Advanced Research on Glucosinolates in Food Products
Pubbl/distr/stampa	Basel, : MDPI - Multidisciplinary Digital Publishing Institute, 2022
Descrizione fisica	1 online resource (238 p.)
Soggetti	Biology, life sciences Food & society Research & information: general
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Glucosinolate-containing foods, such as vegetables from the plant order Brassicales and its derivative products, are valued for their health-beneficial properties. The latter are linked to glucosinolate hydrolysis products, such as isothiocyanates. The book "Advanced Research on Glucosinolates in Food Products" collects the latest research on the impact of the whole food supply chain, including production, as well as domestic food preparation, on glucosinolates and the formation and chemistry of their breakdown products in vegetables and further foods. In this context, the consequences for human health are important, too. The book contains articles that cover research on the effect of pre-harvest factors on glucosinolates, their hydrolyzing enzymes, and the formation of volatile hydrolysis products. Further topics include the linkage between glucosinolates and sensory aspects, and the effects of food preparation and follow-up reactivity. Finally, research on the bioavailability and functional effects of isothiocyanates for human health is included.

2. Record Nr.	UNINA9910741175203321
Autore	Chorin Alexandre J
Titolo	Stochastic Tools in Mathematics and Science // by Alexandre J. Chorin, Ole H Hald
Pubbl/distr/stampa	New York, NY : , : Springer New York : , : Imprint : Springer, , 2013
ISBN	1-4614-6980-5
Edizione	[3rd ed. 2013.]
Descrizione fisica	1 online resource (209 p.)
Collana	Texts in Applied Mathematics, , 0939-2475 ; ; 58
Disciplina	519.2
Soggetti	Probabilities Statistical physics Dynamics Field theory (Physics) Applied mathematics Engineering mathematics Fluid mechanics Probability Theory and Stochastic Processes Complex Systems Classical and Continuum Physics Applications of Mathematics Engineering Fluid Dynamics Statistical Physics and Dynamical Systems
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 and index.
Nota di contenuto	Preliminary -- Probability -- Brownian Motion -- Stationary Stochastic Processes -- Statistical Mechanics -- Index -- Time-Dependent Statistical Mechanics.
Sommario/riassunto	"Stochastic Tools in Mathematics and Science" covers basic stochastic tools used in physics, chemistry, engineering and the life sciences. The topics covered include conditional expectations, stochastic processes, Brownian motion and its relation to partial differential equations, Langevin equations, the Liouville and Fokker-Planck equations, as well as Markov chain Monte Carlo algorithms, renormalization, basic statistical mechanics, and generalized Langevin equations and the

Mori-Zwanzig formalism. The applications include sampling algorithms, data assimilation, prediction from partial data, spectral analysis, and turbulence. The book is based on lecture notes from a class that has attracted graduate and advanced undergraduate students from mathematics and from many other science departments at the University of California, Berkeley. Each chapter is followed by exercises. The book will be useful for scientists and engineers working in a wide range of fields and applications. For this new edition the material has been thoroughly reorganized and updated, and new sections on scaling, sampling, filtering and data assimilation, based on recent research, have been added. There are additional figures and exercises. Review of earlier edition: "This is an excellent concise textbook which can be used for self-study by graduate and advanced undergraduate students and as a recommended textbook for an introductory course on probabilistic tools in science." Mathematical Reviews, 2006 .

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