1. Record Nr. UNINA9910299464503321

Titolo	Desiccant-assisted cooling : fundamentals and applications / / Carlos Eduardo Leme Nobrega, Nisio Carvalho Lobo Brum, editors
Pubbl/distr/stampa	London : , : Springer, , 2014
ISBN	1-4471-5565-3
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (vii, 281 pages) : illustrations (some color)
Collana	Gale eBooks
Disciplina	697.93
Soggetti	Air conditioning Drying agents Drying apparatus
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.
Nota di contenuto	An Introduction To Solid Desiccant Cooling Technology -- Status of Liquid Desiccant Technologies and Systems -- Mathematical Modeling of Heat and Mass Transfer in Regenerators with Desiccant Materials -- Influence of Altitude on the Behavior of Solid Desiccant Dehumidification System -- The Performance of Desiccant Wheels for Desiccant Air-Conditioning -- Separate Sensible and Latent Cooling -- Membrane-based liquid-to-air energy exchangers -- Adsorption/Desorption Characteristics of Solid Particles in Desiccant Bed for Different Design Configurations -- Desiccant dehumidification integrated with hydronic radiant cooling -- Desiccant Cooling.
Sommario/riassunto	The increasing concern with indoor air quality has led to air-quality standards with increased ventilation rates. Although increasing the volume flow rate of outside air is advisable from the perspective of air-quality, it is detrimental to energy consumption, since the outside air has to be brought to the comfort condition before it is insufflated to the conditioned ambient. Moreover, the humidity load carried within outside air has challenging HVAC engineers to design cooling units which are able to satisfactorily handle both sensible and latent contributions to the thermal load. This constitutes a favorable scenario for the use of solid desiccants to assist the cooling units. In fact, desiccant wheels have been increasingly applied by HVAC designers, allowing distinct processes for the air cooling and dehumidification. In

fact, the ability of solid desiccants in moisture removal is effective enough to allow the use of evaporative coolers, in opposition to the traditional vapor-compression cycle, resulting in an ecologically sound system which uses only water as the refrigerant. Desiccant Assisted Cooling: Fundamentals and Applications presents different approaches to the mathematical modeling and simulation of desiccant wheels, as well as applications in thermal comfort and humidity controlled environments. Experts in the field discuss topics from enthalpy, lumped models for heat and mass transfer, and desiccant assisted radiant cooling systems, among others. Aimed at air-conditioning engineers and thermal engineering researchers, this book can also be used by graduate level students and lecturers in the field.

2.	Record Nr.	UNINA9910966654003321
	Autore	Lee Peter M
	Titolo	Bayesian statistics : an introduction / / Peter M. Lee
	Pubbl/distr/stampa	Chichester, West Sussex ; ; Hoboken, N.J., 2012
	ISBN	9786613686152 9781280775765 1280775769 9781118359754 1118359755
	Edizione	[4th ed.]
	Descrizione fisica	xxiii, 462 p
	Classificazione	417
	Disciplina	519.5/42
	Soggetti	Bayesian statistical decision theory Mathematical statistics
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Includes bibliographical references (p. [439]-454) and index
	Nota di bibliografia	Includes bibliographical references and index.
	Nota di contenuto	Intro -- Bayesian Statistics -- Contents -- Preface -- Preface to the First Edition -- 1 Preliminaries -- 1.1 Probability and Bayes' Theorem -- 1.1.1 Notation -- 1.1.2 Axioms for probability -- 1.1.3 'Unconditional' probability -- 1.1.4 Odds -- 1.1.5 Independence -- 1.1.6 Some simple consequences of the axioms -- Bayes' Theorem --

Sommario/riassunto

Bayesian Statistics is the school of thought that combines prior beliefs with the likelihood of a hypothesis to arrive at posterior beliefs. The first edition of Peter Lee's book appeared in 1989, but the subject has moved ever onwards, with increasing emphasis on Monte Carlo based techniques. This new fourth edition looks at recent techniques such as variational methods, Bayesian importance sampling, approximate Bayesian computation and Reversible Jump Markov Chain Monte Carlo (RJMCMC), providing a concise account of the way in which the Bayesian approach to statistics develops as well as how it contrasts with the conventional approach. The theory is built up step by step, and important notions such as sufficiency are brought out of a discussion of the salient features of specific examples. This edition: Includes expanded coverage of Gibbs sampling, including more numerical examples and treatments of OpenBUGS, R2WinBUGS and R2OpenBUGS. Presents significant new material on recent techniques such as Bayesian importance sampling, variational Bayes, Approximate Bayesian Computation (ABC) and Reversible Jump Markov Chain Monte Carlo (RJMCMC). Provides extensive examples throughout the book to complement the theory presented. Accompanied by a supporting website featuring new material and solutions. More and more students are realizing that they need to learn Bayesian statistics to meet their academic and professional goals. This book is best suited for use as a main text in courses on Bayesian statistics for third and fourth year undergraduates and postgraduate students.