Record Nr. UNINA9910460469703321 Autore Morris Max <1950-> **Titolo** Design of experiments: an introduction based on linear models // by Max Morris Pubbl/distr/stampa Boca Raton, FL:,: Chapman and Hall/CRC, an imprint of Taylor and Francis, , 2010 **ISBN** 0-429-10898-2 1-4398-9490-6 Edizione [First edition.] Descrizione fisica 1 online resource (376 p.) Collana Chapman & Hall/CRC Texts in Statistical Science Disciplina 519.5/7 Soggetti Experimental design Linear models (Statistics) Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Front cover; Contents; Preface; CHAPTER 1: Introduction; CHAPTER 2: Linear statistical models; CHAPTER 2: Linear statistical models; CHAPTER 3: Completely randomized designs; CHAPTER 4: Randomized complete blocks and related designs; CHAPTER 5: Latin squares and related designs; CHAPTER 6: Some data analysis for CRDs andorthogonally blocked designs; CHAPTER 7: Balanced incomplete block designs; CHAPTER 8: Random block effects; CHAPTER 9: Factorial treatment structure; CHAPTER 10: Split-plot designs; CHAPTER 11: Two-level factorial experiments:basics CHAPTER 12: Two-level factorial experiments: blockingCHAPTER 13: Two-level factorial experiments: fractional factorials; CHAPTER 14: Factorial group screening experiments; CHAPTER 15: Regression experiments: first-order polynomial models: CHAPTER 16: Regression experiments: second-order polynomial models; CHAPTER 17: Introduction to optimal design; Appendix A: Calculations using R; Appendix B: Solution notes for selected exercises; References; Index; Back cover

Offering deep insight into the connections between design choice and

Introduction Based on Linear Models explores how experiments are

the resulting statistical analysis, Design of Experiments: An

Sommario/riassunto

designed using the language of linear statistical models. The book presents an organized framework for understanding the statistical aspects of experimental design as a whole within the structure provided by general linear models, rather than as a collection of seemingly unrelated solutions to unique problems.