Record Nr. UNINA9910141163703321 Design and analysis of experiments . Volume 3 Special designs and **Titolo** applications / / edited by Klaus Hinkelmann Pubbl/distr/stampa Hoboken, NJ,: Wiley-Interscience, 2012 **ISBN** 1-283-40958-5 9786613409584 1-118-14764-2 1-118-14763-4 1-118-14766-9 Edizione [1st ed.] Descrizione fisica 1 online resource (596 p.) Collana Wiley series in probability and statistics HinkelmannKlaus <1932-> Altri autori (Persone) Disciplina 001.434 532 Soggetti Experimental design Mathematical statistics 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 indexes. Nota di contenuto 1.9.1 Triallel or Three-Way Crosses1.9.2 Double- or Four-Way Crosses; 1.10 COMPUTATION; ACKNOWLEDGMENTS; REFERENCES; CHAPTER 2: Design of Gene Expression Microarray Experiments: 2.1 INTRODUCTION: 2.2 GENE EXPRESSION MICROARRAY TECHNOLOGY: 2.2.1 Introduction; 2.2.2 Definition of a Microarray; 2.2.3 Using Microarrays to Measure Gene Expression; 2.2.4 Types of Gene Expression in Microarrays; 2.3 PREPROCESSING OF MICROARRAY FLUORESCENCE INTENSITIES; 2.3.1 Introduction; 2.3.2 Background Correction; 2.3.3 Normalization; 2.3.4 Summarization 2.4 INTRODUCTION TO GENE EXPRESSION MICROARRAY EXPERIMENTAL DESIGN2.5 TWO-TREATMENT EXPERIMENTS USING TWO-COLOR MICROARRAYS; 2.6 TWO-COLOR MICROARRAY EXPERIMENTS INVOLVING MORE THAN TWO TREATMENTS; 2.7 MULTIFACTOR TWO-COLOR MICROARRAY EXPERIMENTS: 2.7.1 Introduction: 2.7.2 Admissible Designs; 2.7.3 w-Optimal Designs; 2.7.4 e-Efficiency; 2.8 PHASE 2 DESIGNS FOR COMPLEX PHASE 1 DESIGNS; REFERENCES;

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Provides timely applications, modifications, and extensions of experimental designs for a variety of disciplines Design and Analysis of Experiments, Volume 3: Special Designs and Applications continues building upon the philosophical foundations of experimental design by providing important, modern applications of experimental design to the many fields that utilize them. The book also presents optimal and efficient designs for practice and covers key topics in current statistical research. Featuring contributions from leading researchers and academics, the book demonstrates