

1. Record Nr.	UNINA9910458615403321
Titolo	Response surface methodology and related topics [[electronic resource] /] / editor, Andre I. Khuri
Pubbl/distr/stampa	Hacencsack, N.J., : World Scientific, c2006
ISBN	1-281-37898-4 9786611378981 981-277-473-4
Descrizione fisica	1 online resource (472 p.)
Altri autori (Persone)	KhuriAndre I. <1940->
Disciplina	519.5
Soggetti	Response surfaces (Statistics) Electronic books.
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	Contents ; Preface ; List of Contributors ; Chapter 1 Two-Level Factorial and Fractional Factorial Designs in Blocks of Size Two. Part 2 ; 1. Introduction ; 2. The Six Factor 64 Runs 26 Design ; 3. Definitions and Notation ; 4. Combination Design Selection Process 5. Case k = 6 d = 2 6. Case k = 6 d = 3 ; 7. Case k = 6 d = 4 ; 8. Case k = 6 d = 5 ; 9. Case k = 6 d = 6 ; 10. Sequential Designs for k = 7 Factors ; 11. Sequential Designs for k = 8 Factors ; References ; Chapter 2 Response Surface Experiments on Processes with High Variation 1. Introduction 2. Design Strategy ; 3. Choice of Size of Experiment ; 4. Choice of Treatments ; 5. Unit Structures ; 6. Multi-Stratum Designs ; 7. Data Analysis ; 8. Final Comments ; References Chapter 3 Random Run Order Randomization and Inadvertent Split- Plots in Response Surface Experiments 1. Introduction ; 2. Why Statistical Tests from RRO Experiments are Misleading ;

3. Examining the Split-Plotting Effect over All Randomizations
4. The Diagnostic Power to Retrospectively Detect the Randomization Restriction
5. The Expected Covariance Matrix for RRO Experiments
; 6. G-Efficiencies and Cost When an RRO is Used
; 7. Remarks ; References ; Chapter 4 Statistical Inference for Response Surface Optima
1. Introduction

Sommario/riassunto

This is the first edited volume on response surface methodology (RSM). It contains 17 chapters written by leading experts in the field and covers a wide variety of topics ranging from areas in classical RSM to more recent modeling approaches within the framework of RSM, including the use of generalized linear models. Topics covering particular aspects of robust parameter design, response surface optimization, mixture experiments, and a variety of new graphical approaches in RSM are also included. The main purpose of this volume is to provide an overview of the key ideas that have shaped RSM,
