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Nota di contenuto	Front Cover; Dedication; Contents; List of Figures; List of Tables; Preface; Author; Chapter 1 - INTRODUCTION; Chapter 2 - ROBUST FIRST-ORDER DESIGNS; Chapter 3 - ROBUST SECOND-ORDER DESIGNS; Chapter 4 - ROBUST REGRESSION DESIGNS FOR NON-NORMAL DISTRIBUTIONS; Chapter 5 - WEAKLY ROBUST ROTATABLE DESIGNS; Chapter 6 - ROBUST SECOND-ORDER SLOPE ROTATABLE DESIGNS; Chapter 6 - ROBUST SECOND-ORDER SLOPE ROTATABLE DESIGNS; Chapter 8 - ROBUST SECOND-ORDER SLOPE ROTATABLE DESIGNS; Chapter 9 - REGRESSION ANALYSES WITH CORRELATED ERRORS AND APPLICATIONS Chapter 10 - POSITIVE DATA ANALYSES VIA LOG-NORMAL AND GAMMA MODELSChapter 11 - GENERAL CONCLUSIONS AND DISCUSSIONS; APPENDIX; Bibliography; Back Cover
Sommario/riassunto	The present book initiates the concept of robust response surface designs, along with the relevant regression and positive data analysis techniques. Response surface methodology (RSM), well-known in literature, is widely used in every field of science and technology such as Biology, Natural (Physical/Chemical), Environmental, Medical, Agricultural, Quality engineering et cetera RSM is the most popular experimental data generating, modeling and optimization technique in

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every field of science. It is a particular case of robust response surface methodology (RRSM). RSM has many limitations, and RRSM aims to overcome many of such limitations. Thus, RRSM will be much better than RSM. It is intended for anyone who knows basic concepts of experimental designs and regression analysis. This is the first unique book on RRSM. Every chapter is unique regarding its contents, presentation and organization. Problems on robust response surface designs such as rotatability, slope-rotatability, weak rotatability, optimality, and along with the method of estimation of model parameters, positive data analysis techniques are considered in this book. Some real examples on lifetime responses, resistivity, replicated measures, medical, demography, hydrogeology data et cetera, are analysed. Some examples (considered in this book) on design of experiments do not satisfy the classical assumptions of response surface methodology.--