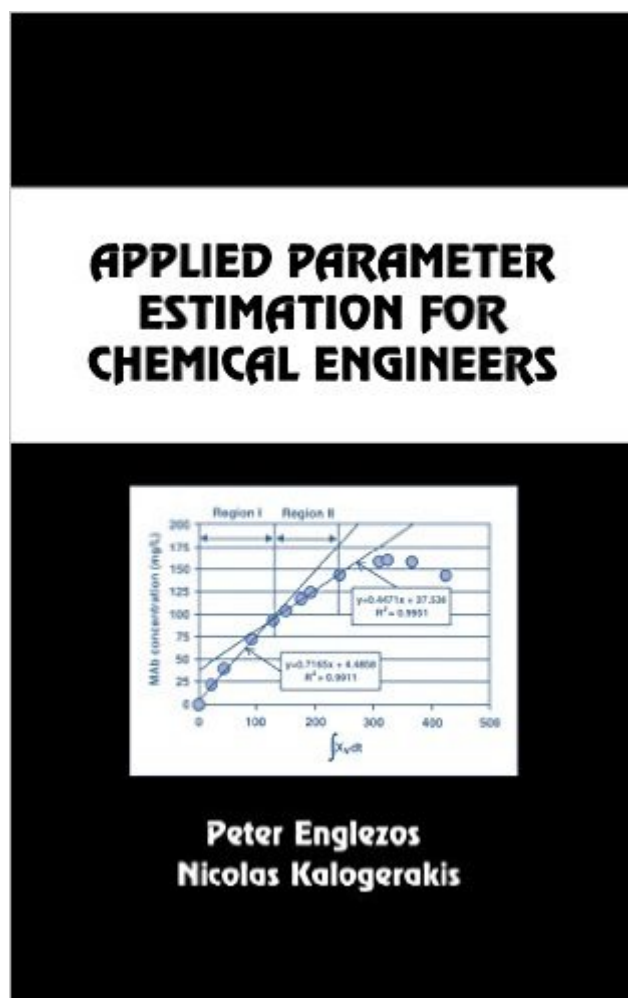


The book was found

Applied Parameter Estimation For Chemical Engineers (Chemical Industries)



Synopsis

This book determines adjustable parameters in mathematical models that describe steady state or dynamic systems, presenting the most important optimization methods used for parameter estimation. It focuses on the Gauss-Newton method and its modifications for systems and processes represented by algebraic or differential equation models.

Book Information

Series: Chemical Industries (Book 81)

Hardcover: 460 pages

Publisher: CRC Press; 1st edition (October 12, 2000)

Language: English

ISBN-10: 082479561X

ISBN-13: 978-0824795610

Product Dimensions: 6.1 x 1 x 9.2 inches

Shipping Weight: 1.7 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars [See all reviews](#) (1 customer review)

Best Sellers Rank: #1,983,061 in Books (See Top 100 in Books) #557 in [Books > Engineering & Transportation > Engineering > Energy Production & Extraction > Fossil Fuels > Petroleum](#) #777 in [Books > Science & Math > Chemistry > Industrial & Technical](#) #1230 in [Books > Textbooks > Engineering > Chemical Engineering](#)

Customer Reviews

For a long time I have been looking for a book like this one. Finally, I had found it. Just from the Table of Contents, you will see that includes a broad range of applications in parameter estimation such as: linear, non-linear, ODEs, PDEs and also algorithm's implementation. Special topics, such as sensitivity analysis in ODE models, Information index (where to do the measurements in order to maximize the content of information of the experimental data), and Statistical inference (i.e. parameters' inference, model adequacy test, etc.) are exposed with clarity. I particularly like the section of Solved Problems, where you can compare your own algorithms with the ones exposed in the book. I work with MATLAB (including my own algorithms), and I have done a couple of comparisons that match perfectly with the numerical results shown in the book. Many of the typical problems that I have faced in the area of parameter estimation were mentioned in the book; good recommendations or practices on how to avoid them are explained. In addition, there is a short section on shortcuts in the "bio" area. In summary, a good source of practical knowledge for those

ones interested in the topic.

[Download to continue reading...](#)

Applied Parameter Estimation for Chemical Engineers (Chemical Industries) Parameter Estimation and Inverse Problems, Second Edition (International Geophysics) Detection Estimation and Modulation Theory, Part I: Detection, Estimation, and Filtering Theory Fluid Mechanics for Chemical Engineers (McGraw-Hill Chemical Engineering) Lubricant Additives: Chemistry and Applications (Chemical Industries) Synthetic Lubricants and High-Performance Functional Fluids (Chemical Industries) Octane-Enhancing Zeolitic FCC Catalysts: Scientific and Technical Aspects (Chemical Industries) Handbook of Grignard Reagents (Chemical Industries) Catalysis of Organic Reactions (Chemical Industries) Process Chemistry of Petroleum Macromolecules (Chemical Industries) Measurement Made Simple with Arduino: 21 different measurements covers all physical and electrical parameter with code and circuit Vitrinite Reflectance As a Maturity Parameter: Applications and Limitations (ACS Symposium Series) Design of Amplifiers and Oscillators by the S-parameter Method The Polysynthesis Parameter (Oxford Studies in Comparative Syntax) Camping With the Corps of Engineers: The Complete Guide to Campgrounds Built and Operated by the U.S. Army Corps of Engineers (Wright Guides) Applied Economic Analysis for Technologists, Engineers, and Managers (2nd Edition) Software Estimation: Demystifying the Black Art (Developer Best Practices) Detection and Estimation for Communication and Radar Systems Narrowband Direction of Arrival Estimation for Antenna Arrays (Synthesis Lectures on Antennas) Angle of Arrival Estimation Using Radar Interferometry (Electromagnetics and Radar)

[Dmca](#)