

《Mems And Microsystems: Design, Manufacture, And  
Nanoscale Engineering, Second Edition  
9780470083017》

书籍信息

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## 编辑推荐

Technology/Engineering/Mechanical

A bestselling MEMS text...now better than ever.

An engineering design approach to Microelectromechanical Systems, MEMS and Microsystems remains the only available text to cover both the electrical and the mechanical aspects of the technology. In the five years since the publication of the first edition, there have been significant changes in the science and technology of miniaturization, including microsystems technology and nanotechnology. In response to the increasing needs of engineers to acquire basic knowledge and experience in these areas, this popular text has been carefully updated, including an entirely new section on the introduction of nanoscale engineering.

Following a brief introduction to the history and evolution of nanotechnology, the author covers the fundamentals in the engineering design of nanostructures, including fabrication techniques for producing nanoproducts, engineering design principles in molecular dynamics, and fluid flows and heat transmission in nanoscale substances.

Other highlights of the Second Edition include:

Expanded coverage of microfabrication plus assembly and packaging technologies

The introduction of microgyroscopes, miniature microphones, and heat pipes

Design methodologies for thermally actuated multilayered device components

The use of popular SU-8 polymer material

Supported by numerous examples, case studies, and applied problems to facilitate understanding and real-world application, the Second Edition will be of significant value for both professionals and senior-level mechanical or electrical engineering students.

## 内容简介

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## 作者简介

Tai – Ran Hsu, PhD, is a Professor in the Department of Mechanical and Aerospace Engineering, San Jose State University, California. Dr. Hsu is the author of the earlier edition of this book, which is considered one of the bestselling textbooks on the subject of MEMS.

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