Theoretical And Numerical Combustion, Second Edition
Synopsis

Presents basic techniques and recent progress in numerical combustion while establishing important connections with the underlying combustion basics. Fully updated to reflect the latest advances in combustion research. Mirrors evolution of unsteady simulation methods such as LES codes for partially premixed flames and complex geometry burners. Includes extended descriptions of wave equations in reacting flows, physics of combustion instabilities, acoustic/combustion coupling; and a new chapter devoted to LES in real combustors, including comparisons with experimental data.

Book Information

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Customer Reviews

Being one of the authors of this book, I won't criticize it... But the version sold by today is an old one. The third edition being now available, I advise readers to look for this one. It is actually surprising that is still selling this version, considering that its editor went bankrupt two years ago... I keep wondering where can buy new copies without the authors knowing about it?

Two experts on combustion share the knowledge and break difficult issues down to provide a deep understanding of the phenomena. I would recommend it as a text and reference book to anyone with basic knowledge in fluid dynamics. Only drawback: It won't tell you which turbulent combustion model to use in which application.
Written by 2 combustion experts from Ecole Centrale Paris (one of the top engineering schools of France and I'd say of the world). These two scientist work on the open field of numerical modeling of reacting, turbulent flows. These guys know what they are doing, not only get the math right but also are exposed to a great deal of experimental research carried on at Ecole Centrale. This is extremely important: they are able to validate their models and do not just produce numerical computations. It is a landmark book!!!!

Poor binding, the book falls apart after you open it a few times.

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