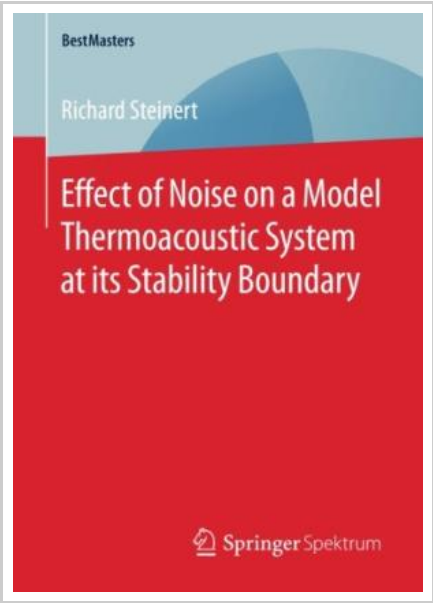

Effect of Noise on a Model Thermoacoustic System at its Stability Boundary

By Richard Steinert

Springer-Verlag Gmbh Mai 2016, 2016. Taschenbuch. Book Condition: Neu. 211x151x7 mm. Neuware - In experiments on a prototypical combustor, Richard Steinert identifies new insights on the impact of noise on the phenomenon known as thermoacoustic instability. The phenomenon is a concerning issue which creates a technical limit on the efficiency and environmental impact of fossil fuels combustion in industrial combustors. It poses a threat to the structural integrity of practical systems such as gas turbine combustors and rocket engines. The experiments demonstrate that thermoacoustic systems feature an interesting noise-induced behaviour known as coherence resonance - a coherent response of dynamical systems close to their stability boundary that is induced by stochastic excitation. The work contained in this publication is an example illustrating the importance of fundamental considerations in solving perplexing engineering issues. 44 pp. Englisch.

Reviews

Absolutely essential go through publication. It is filled with knowledge and wisdom Once you begin to read the book, it is extremely difficult to leave it before concluding.

-- ***Dr. Sierra Lowe Sr.***

A high quality book as well as the font applied was fascinating to see. It generally fails to charge excessive. I am just effortlessly could possibly get a enjoyment of studying a composed book.

-- ***Brant Dach***