Sebbah

Waves and Imaging Through Complex Media

Recent advances in wave propagation in random media are certainly consequences of new approaches to fundamental issues, as well as of a strong interest in potential applications. This text presents the state-of-the-art in fundamental concepts, as well as in biomedical imaging techniques. As an example, the recent introduction of wave chaos, and more specifically random matrix theory - an old tool from nuclear physics - to the study of multiple scattering, has pointed the way to a deeper understanding of wave coherence in complex media. At the same time, efficient new approaches for retrieving information from random media promise to allow wave imaging of small tumors in opaque tissues. Review chapters are written by experts in the field, with the aim of making the book accessible to the widest possible scientific audience: graduate students and research scientists in theoretical and applied physics, optics, acoustics, and biomedical physics.

Recent advances in wave propagation in random media are certainly consequences of new approaches to fundamental issues, as well as of a strong interest in potential applications. This text presents the state-of-the-art in fundamental concepts, as well as in biomedical imaging techniques. As an example, the recent introduction of wave chaos, and more specifically random matrix theory - an old tool from nuclear physics - to the study of multiple scattering, has pointed the way to a deeper understanding of wave coherence in complex media. At the same time, efficient new approaches for retrieving information from random media promise to allow wave imaging of small tumors in opaque tissues. Review chapters are written by experts in the field, with the aim of making the book accessible to the widest possible scientific audience: graduate students and research scientists in theoretical and applied physics, optics, acoustics, and biomedical physics.



101,50 €
101,50 € (zzgl. MwSt.)

Nicht mehr lieferbar

Artikelnummer: 9780792368144
Medium: Buch
ISBN: 978-0-7923-6814-4
Verlag: Springer
Erscheinungstermin: 31.03.2001
Sprache(n): Englisch
Auflage: Erscheinungsjahr 2001
Produktform: Gebunden
Seiten: 472

Kundenservice Verlag Dr. Otto Schmidt KG
Neumannstraße 10, 40235 Düsseldorf | kundenservice@otto-schmidt.de | 0221-93738-997 (Inland)