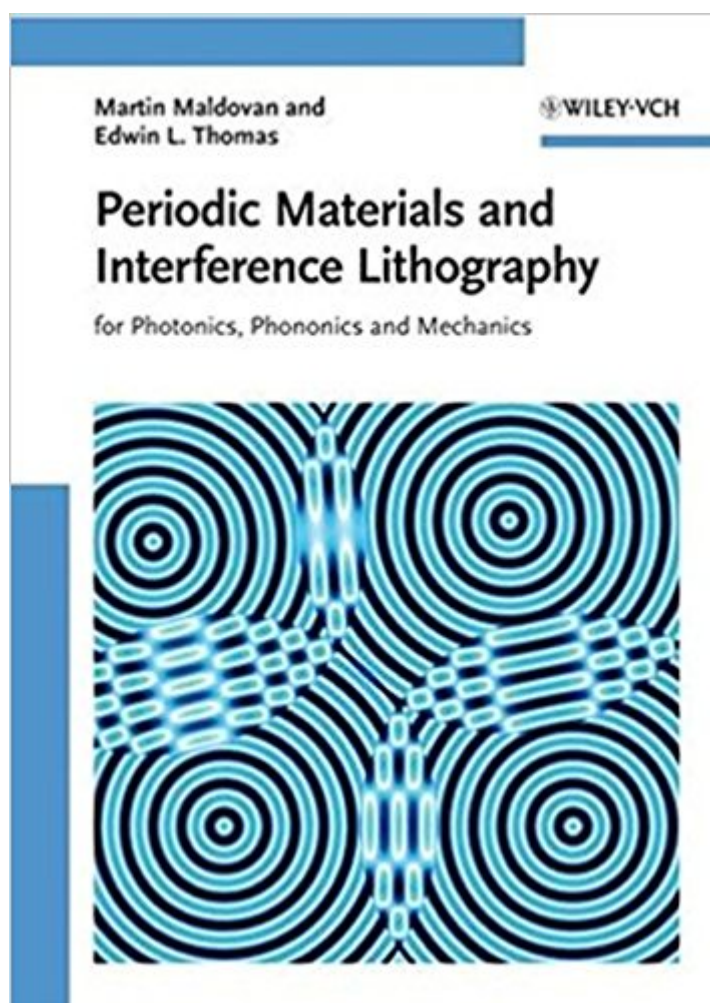


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Synopsis

Written by the department head of materials science and engineering at MIT, this concise and stringent introduction takes readers from the fundamental theory to in-depth knowledge. It sets out with a theoretical scheme for the design of desirable periodic structures, then presents the experimental techniques that allow for fabrication of the periodic structure and exemplary experimental data. Subsequently, theory and numerical data are used to demonstrate how these periodic structures control the photonic, acoustic, and mechanical properties of materials, concluding with examples from these three important fields of applications. The result is must-have knowledge for both beginners and veterans in the field.

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