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Autore	Bienvenido-Huertas David
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Nota di contenuto	The Influence of the Thermal Properties -- Methods to Assess the Thermal Properties -- Methodological Framework of Artificial Intelligence -- Estimation of Stationary Thermal Properties -- Estimation of Periodic Thermal Properties -- Analysis of Other Approaches to Experimental Thermal Characterization.
Sommario/riassunto	This book is about the optimization of the characterization of the thermal properties of building envelopes, through experimental tests and the use of artificial intelligence. It analyses periodic and stationary thermal properties using measurement approaches based on the heat flow meter method and the thermometric method. These measurements are then analysed using advanced artificial intelligence algorithms. The book is structured in four parts, beginning with a discussion of the importance of thermal properties in the energy performance of buildings. Secondly, theoretical and experimental methods for characterizing thermal properties are analysed. Then, the methodology is developed, and the characteristics and properties of the

algorithms used are explored. Finally, the results obtained with the algorithms are analysed and the most appropriate approaches are determined. This book is of interest to researchers, civil and industrial engineers, energy auditors and architects, by providing a resource which improves energy audit tasks in existing buildings.

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