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Autore	Lee Young Pak
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Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	I. Introduction -- II. Theoretical Backgrounds -- III. MMPA operating in different frequency ranges -- IV. MMPA, based on electromagnetically-induced transparency -- V. Broadband and tunable MMPA -- VI. Polarization-independent and wide-incident-angle MMPA -- VII. Perspectives and future works. Index. .
Sommario/riassunto	This book provides a comprehensive overview of the theory and practical development of metamaterial-based perfect absorbers (MMPAs). It begins with a brief history of MMPAs which reviews the various theoretical and experimental milestones in their development. The theoretical background and fundamental working principles of MMPAs are then discussed, providing the necessary background on how MMPAs work and are constructed. There then follows a section describing how different MMPAs are designed and built according to the operating frequency of the electromagnetic wave, and how their

behavior is changed. Methods of fabricating and characterizing MMPAs are then presented. The book elaborates on the performance and characteristics of MMPAs, including electromagnetically-induced transparency (EIT). It also covers recent advances in MMPAs and their applications, including multi-band, broadband, tunability, polarization independence and incidence independence. Suitable for graduate students in optical sciences and electronic engineering, it will also serve as a valuable reference for active researchers in these fields.