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Nota di contenuto	Cover -- Title Page -- Copyright Page -- Contents -- List of Contributors -- Overview of the Work -- Description -- Key Features -- Acknowledgments -- 1 Metal-Organic Framework-Based Electromagnetic Wave Absorption Materials -- 1.1 Brief Introduction to Metal-Organic Frameworks -- 1.2 Preparation Method of MOF Materials -- 1.2.1 Solvothermal Method -- 1.2.2 Microwave-Assisted Synthesis Method -- 1.2.3 Electrochemical Synthesis Method -- 1.2.4 Ultrasonic Method -- 1.2.5 Mechanochemistry Method -- 1.2.6 Steam-Assisted Conversion Method -- 1.2.7 Fluid Chemistry Method -- 1.3 MOF-Derived EMW Absorption Materials -- 1.3.1 Monometallic MOF-Derived Absorption Materials -- 1.3.2 Multi-metal MOF-Derived Absorption Materials -- 1.3.3 MOF-Carbon Composite Absorption Materials -- 1.3.4 MOF-MXene Composite Absorption Materials -- 1.3.5 MOF-Conductive Polymer Composite Absorption Materials -- 1.4

Sommario/riassunto

Wave Absorbing Materials: Fundamentals and Applications provides a comprehensive overview of the development, properties, and applications of materials designed to absorb electromagnetic waves (EMW). Edited by Hongjing Wu, Jun Luo, and Meiyin Yang, the book explores various types of materials, including metal-organic frameworks (MOFs), MXenes, and high-entropy materials, which are integral to advancing electronic applications. The work delves into the preparation methods, structural properties, and performance metrics of these materials, highlighting their potential in enhancing the efficiency of electronic devices. The book is targeted towards researchers, engineers, and professionals in materials science and electronic engineering, offering in-depth theoretical and practical insights into the future of wave-absorbing technologies.