

1. Record Nr.	UNINA9910555021103321
Autore	Jaroszewski Maciej
Titolo	Advanced materials for electromagnetic shielding : fundamentals, properties, and applications // edited by Maciej Jaroszewski, Sabu Thomas, Ajay V. Rane
Pubbl/distr/stampa	Hoboken, NJ : , : Wiley, , 2019
ISBN	1-119-12864-1 1-119-12863-3 1-119-12862-5
Edizione	[1st edition]
Descrizione fisica	1 online resource (459 pages)
Disciplina	621.38224
Soggetti	Shielding (Electricity)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	A comprehensive review of the field of materials that shield people and sensitive electronic devices from electromagnetic fields Advanced Materials for Electromagnetic Shielding offers a thorough review of the most recent advances in the processing and characterization of the electromagnetic shielding materials. In this groundbreaking book, the authors—noted experts in the field—discuss the fundamentals of shielding theory as well as the practice of electromagnetic field measuring techniques and systems. They also explore applications of shielding materials used as absorbers of electromagnetic radiation, or as magnetic shields and explore coverage of new advanced materials for EMI shielding in aerospace applications. In addition, the text contains methods of preparation and applicability of metal foams. This comprehensive text examines the influence of technology on the micro-and macrostructure of polymers enabling their use in screening technology, technologies of shielding materials based on textiles, and analyses of its effectiveness in screening. The book also details the method of producing nanowires and their applications in EM shielding. This important resource: Explores the burgeoning market of electromagnetic shielding materials as we create, depend upon, and are

exposed to more electronic devices than ever Addresses the most comprehensive issues relating to electromagnetic fields Contains information on the manufacturing, characterization methods, and properties of materials used to protect against them Discusses the important characterization techniques compared with one another, thus allowing scientists to select the best approach to a problem Written for materials scientists, electrical and electronics engineers, physicists, and industrial researchers, *Advanced Materials for Electromagnetic Shielding* explores all aspects in the area of electromagnetic shielding materials and examines the current state-of-the-art and new challenges in this rapidly growing area.

---