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| Autore | Panda Maheswar <1932-> |
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| Nota di contenuto | Chapter 1. Introduction -- Chapter 2. Fundamentals of the Models and Spectroscopic Techniques -- Chapter 3. Synthesis and Characterization of Polymer Composites -- Chapter 4. Percolation Behavior of Polymer Composites -- Chapter 5. Scaling Behavior of Percolative Polymer Composites -- Chapter 6. Relaxation Behavior of Percolative Polymer Composites -- Chapter 7. Impedance Spectroscopy of Percolative Polymer Composites -- Chapter 8. Magnetic and Rheological Behavior of Polymer Composites -- Chapter 9. Non-Percolative Polymer Composites -- Chapter 10. Ferroelectric Polymer Dielectrics. |
| Sommario/riassunto | This book provides a foundational understanding of polymer dielectrics |

based on percolative composites. It covers the microstructure and physical properties, such as dielectric, electrical, magnetic, and rheological properties, of polymer composites, as well as how these properties can be explained using various theoretical models and spectroscopy techniques, such as dielectric spectroscopy, impedance spectroscopy, and conductivity spectroscopy. The book also discusses non-percolative polymer composites and the suitability of polymer dielectrics for electrical energy storage in various devices. It is intended for graduate students and professionals in fields such as condensed matter physics, applied physics, statistical physics, materials science, polymer science and technology, chemistry, and engineering. It will be particularly useful for physicists, materials scientists, polymer scientists, chemists, engineers, and others interested in the physics and applications of percolative composites based on polymer matrix.