

ENHANCEMENT OF FLAT SPIRAL ANTENNA FOR NON-RADIATED INDUCTIVE WIRELESS ENERGY TRANSFER



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The book, "Enhancement of Flat Spiral Antenna for Non-Radiated Inductive Wireless Energy Transfer", offers a comprehensive study of inductive wireless energy transfer (WET) systems, emphasizing the enhancement of transfer efficiency through optimum flat spiral antenna designs. The primary methodology of the book focuses on theoretical modelling, various technique, simulation, and experimental validation to improve antenna performance in WET applications.

The book emphasizes the critical importance of antenna shape, material, distance and design structure in improving transfer efficiency. The improved flat spiral antenna demonstrates significant enhancements in energy transfer and size reduction, crucial for mobile and compact devices. Through the modification of the number of turns, loop gap, and material selection, the author achieves significant enhancements in efficiency without requiring larger antennas.

The book offers significant improvements to the advancement of inductive WET systems, namely in improving energy transfer efficiency while preserving compact and mobile-friendly designs. Ideal for researchers, engineers, and students, this book helps readers understand the fundamental principles and advanced techniques in wireless energy transfer.



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