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Titolo	Wireless Power Transfer : Using Magnetic and Electric Resonance Coupling Techniques // by Takehiro Imura
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2020
ISBN	981-15-4580-4
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (434 pages)
Disciplina	621.381044
Soggetti	Electronic circuits Microwaves Optical engineering Power electronics Energy systems Circuits and Systems Microwaves, RF and Optical Engineering Electronic Circuits and Devices Power Electronics, Electrical Machines and Networks Energy Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	About wireless power transfer -- Basic knowledge of electromagnetism electric circuit -- Basic phenomena of magnetic resonant coupling -- Basic resonant circuit topology (S-S) -- Comparison of electromagnetic induction and magnetic resonant coupling -- Other resonant circuit topologies (PS, PP, LCL, LCC) -- Open end and short end type coil -- System of magnetic resonant coupling -- Repeater and multiple coils -- Development of multiple coils.
Sommario/riassunto	This book describes systematically wireless power transfer technology using magnetic resonant coupling and electric resonant coupling and presents the latest theoretical and phenomenological approaches to its practical implementation, operation and its applications. It also discusses the difference between electromagnetic induction and magnetic resonant coupling, the characteristics of various types of

resonant circuit topologies and the unique features of magnetic resonant coupling methods. Designed to be self-contained, this richly illustrated book is a valuable resource for a broad readership, from researchers to engineers and anyone interested in cutting-edge technologies in wireless power transfer.
