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	Autore	Wu Tsai-Fu <1961->
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	Sommario/riassunto	"This book identifies the original converter before moving on to develop and model power converters systematically based on decoding and synthesizing approaches. The first part of the book presents an introduction, discovery of the original converter, and some fundamentals related to power converter synthesis and evolution. It also provides an illustration of converter synthesis approaches, synthesis of multi-stage/multi-level converters, extension of hard witching converters to soft-switching ones, and determination of switch-voltage stresses in the converters. In the second part of the book, the authors review conventional two-port network theory and state-space averaged (SSA) modeling approach, from which systematic modeling approaches based on the graft switch technique. The converter layer scheme and some fundamental circuit theories are also presented. A power converter is an electrical or electro-mechanical device for converting electrical energy. This could be as simple as a transformer to change the voltage of AC power, but also includes far more complex systems. The term can also refer to a class of electrical machinery that is used to convert one frequency of alternating current

into another frequency. Power conversion systems often incorporate
redundancy and voltage regulation. One way of classifying power
conversion systems is according to whether the input and output are
alternating current (AC) or direct current (DC)"