

Preface

In electrical engineering, power conversion is the process of converting electrical energy from one form to another. A power converter is an electrical device for converting electrical energy between alternating current (AC) and direct current (DC). It can also change the voltage or frequency of the current. Power converters include simple devices such as transformers, and more complex ones like resonant converters. The term can also refer to a class of electrical machinery that is used to convert one frequency of alternating current into another. Power conversion systems often incorporate redundancy and voltage regulation.¹

In the present book, ten typical literatures about power conversion published on international authoritative journals were selected to introduce the worldwide newest progress, which contains reviews or original researches on power conversion. We hope this book can demonstrate advances in power conversion as well as give references to the researchers, students and other related people.

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¹ https://en.wikipedia.org/wiki/Electric_power_conversion