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Sommario/riassunto

Power Electronics for Renewable Energy, Transportation, and Industrial Applications combines state-of-the-art global expertise to present the latest research on power electronics and its application in transportation, renewable energy, and different industrial applications. This timely book aims to facilitate the implementation of cutting-edge techniques to design problems offering innovative solutions to the growing power demands in small- and large-size industries. Application areas in the book range from smart homes and electric and plug-in hybrid electrical vehicles (PHEVs), to smart distribution and intelligence operation centers where significant energy efficiency improvements can be achieved through the appropriate use and design of power electronics and energy storage devices. Key features: . Discusses wide range of power electronics converters and control techniques to reduce energy waste and improve grid power quality.. Brings together power electronics technologies such as renewable energy conversion, electric transportation, and electric drives, which are prevalent in industry and at education and research stages.. Defines existing challenges, concerns, and selected problems complying with international trends, standards, and programs for electric power conversion, distribution, and sustainable energy development. . An imperative and far reaching learning resource for power electronics engineers, researchers, and students.