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Nota di contenuto	Intro -- Contents -- About the authors -- 1. Introduction to AI in power system Weihao Hu, Guozhou Zhang, Zhenyuan Zhang, Sayed Abulanwar and Frede Blaabjerg -- 2. Artificial intelligence for electric machine fault diagnosis Weihao Hu, Guozhou Zhang, Zhenyuan Zhang, Sayed Abulanwar and Frede Blaabjerg -- 3. Artificial intelligence in power electronic reliability, design, and control Shuai Zhao, Yi Zhang and Frede Blaabjerg -- 4. Application of artificial intelligence in dual-active-bridge (DAB) converters Weihao Hu, Guozhou Zhang, Zhenyuan Zhang, Sayed Abulanwar and Frede Blaabjerg -- 5. An active distribution network voltage control using artificial intelligence Weihao Hu, Guozhou Zhang, Zhenyuan Zhang, Sayed Abulanwar and Frede Blaabjerg -- 6. Energy management of hybrid systems using artificial intelligence Weihao Hu, Guozhou Zhang, Zhenyuan Zhang, Sayed Abulanwar and Frede Blaabjerg -- 7. Artificial intelligence in energy management of microgrid Weihao Hu, Guozhou Zhang, Zhenyuan Zhang, Sayed Abulanwar and Frede Blaabjerg -- 8. Artificial intelligence in renewable energy systems small signal stability control

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Sommario/riassunto

This structured monograph conveys the use of AI in managing emerging power systems with distributed renewables. Coverage includes electric machine fault diagnosis, reliability control, active distribution, and management of energy systems. Numerous examples help readers understand the principles.
