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Nota di contenuto	pt. 1. Introduction to corrosion in nuclear power applications pt. 2. Aqueous corrosion in nuclear power applications : fundamental science, materials and mechanisms pt. 3. Non-aqueous corrosion in nuclear power applications : fundamental science, materials and mechanisms pt. 4. Corrosion monitoring and control in nuclear power applications pt. 5. Corrosion issues in current nuclear reactors and applications pt. 6. Corrosion issues in next generation nuclear reactors and advanced applications.
Sommario/riassunto	Corrosion of nuclear materials, i.e. the interaction between these materials and their environments, is a major issue for plant safety as well as for operation and economic competitiveness. Understanding these corrosion mechanisms, the systems and materials they affect, and the methods to accurately measure their incidence is of critical importance to the nuclear industry. Combining assessment techniques and analytical models into this understanding allows operators to predict the service life of corrosion-affected nuclear plant materials, and to apply the most appropriate maintenance and miti