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Soggetti	Electric power systems - Reliability
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Power systems theories and practices. Essentials of electromagnetism -- Complex number notation (symbolic method) and Laplace-transform -- Transmission line matrices and symmetrical components -- Physics of transmission line and the line constants -- Per unit method -- Transformer modeling -- Fault analysis based on symmetrical components -- Fault analysis -- Power cable -- Synchronous generator. Part 1, Circuit theory -- Synchronous generator. Part 2, Characteristics as machinery -- Steady-state, transient, dynamic stability -- Induction generator and motor (induction machine: IM) -- Directional distance relay and R-X diagram -- Lightning, switching surge phenomena and breaker switching -- Overvoltage phenomena -- Insulation coordination -- Harmonics and waveform distortion -- Power electronics applications. Part 1, Devices -- Power electronics application. Part 2, Circuit theory -- Power electronics applications. Part 3, Control theory. Digital computations theories. Digital computation basics -- Power flow methods -- Short circuit methods -- Harmonics -- Reliability -- Numerical integration methods -- Power flow -- Analytical practices and examples. One-line diagram -- Load flow -- Short circuit; fault analysis -- Motor starting -- Harmonics -- Transient stability -- Reliability assessment -- Protective device coordination.

