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Nota di contenuto	Contents; List of figures; List of tables; Preface; Acronyms and constants; 1 Definitions, objectives and background; 2 Analysis of continuous and discrete systems; 3 State variable analysis; 4 Numerical integrator substitution; 5 The root-matching method; 6 Transmission lines and cables; 7 Transformers and rotating plant; 8 Control and protection; 9 Power electronic systems; 10 Frequency dependent network equivalents; 11 Steady state applications; 12 Mixed time-frame simulation; 13 Transient simulation in real time; A Structure of the PSCAD/EMTDC program; B System identification techniques C Numerical integrationD Test systems data; E Developing difference equations; F MATLAB code examples; G FORTRAN code for state variable analysis; H FORTRAN code for EMT simulation; Index
Sommario/riassunto	Accurate knowledge of electromagnetic power system transients is crucial to the operation of an economic, efficient and environmentally friendly power systems network without compromising on the reliability and quality of Electrical Power Supply. Electromagnetic transients simulation (EMTS) has become a universal tool for the analysis of power system electromagnetic transients in the range of nanoseconds to seconds. This book provides a thorough review of EMTS and many

simple examples are included to clarify difficult concepts. This book will be of particular value to advanced engineering students.