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Autore	Matsushita Teruo
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Nota di contenuto	Electric Phenomena in Vacuum -- Conductors and Dielectric Materials -- Steady Current -- Current and Magnetic Phenomena -- Superconductors and Magnetic Materials -- Time-Dependent Electromagnetic Phenomena -- Direct Current Circuit -- Transient and Steady Responses of Electrical Circuit -- Alternating Current Circuit -- Transformer Circuit -- Theorems for Electric Circuit.
Sommario/riassunto	This book leads students to learn electromagnetism and then moves to chapters about electric circuits. It aims to give an understanding of electromagnetism which gives a fast way to master the features of circuit elements such as resistors, capacitors, and coils that compose electric circuits. The author provides chapters on electromagnetism and electric circuits separately and gives a chapter explaining the correlation between them in detail. In the chapters for electric circuit, DC electric circuits, transient and steady response of AC electric circuits are treated. AC circuit theory is introduced for describing the phenomena in circuits. Theoretical treatments such as branch current method, closed current method, and node potential method are also introduced to show the validity of solution methods that have been

used in the book. The book can serve as a compact textbook for lectures, as an introduction for hardware system and electric control systems, and mechanical systems. Chapters for electromagnetism or ones for electric circuits are suitable for a lecture over a semester.