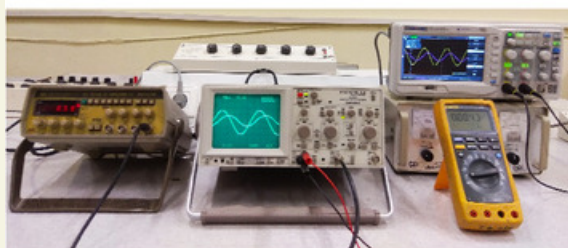


ΗΛΕΚΤΡΙΚΑ ΚΥΚΛΩΜΑΤΑ

Θεωρία – Πείραμα – Προσομοίωση

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Abstract

In this book, we present in detail, the basic principles of the theory of Electric Circuits, at a theoretical level, as well as at the level of experimental implementation in the laboratory. Its main aim is to enable the readers to understand the operation of simple but also more complex electric circuits, to learn to implement them in the laboratory and to study their behavior. This book also presents in detail, the operation of useful, in many applications, electric circuits, their theoretical study, as well as the comparison of their results with those obtained experimentally. This comparison helps the reader to understand better their function and allows a better study of them. Furthermore, this book presents

circuits and measurement procedures that can be implemented using the free online circuit simulation software MultisimLive. The use of this software aims to give the reader the possibility of first contact with how he can, before implementing an electric circuit in the laboratory, design and study it at a simulation level, using simple and free online simulation software. Circuits designed in MultisimLive are presented in the form of exercises, in which the reader is guided step by step to perform the circuit design and measurements. In addition, at the end of each chapter a section that includes a series of unsolved exercises, for the reader to check the possibility of assimilating the material offered, is cited.

