

1. Record Nr.	UNINA9910715532803321
Titolo	Armed national ships, Revolutionary War. Letter from the Secretary of War, transmitting a report and statement of the Commissioner of Pensions, relative to the armed national ships employed during the Revolutionary War, and the names of their commanders. May 13, 1834. Read, and laid upon the table
Pubbl/distr/stampa	[Washington, D.C.] : , : [publisher not identified], , 1834
Descrizione fisica	1 online resource (6 pages) : tables
Collana	House document / 23rd Congress, 1st session. House ; ; no. 394 [United States congressional serial set ] ; ; [serial no. 258]
Soggetti	Warships Navies - Officers Legislative materials. United States History Revolution, 1775-1783
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Batch processed record: Metadata reviewed, not verified. Some fields updated by batch processes. FDLP item number not assigned.

2. Record Nr.	UNINA9910784448903321
Autore	Moura Luis Miguel da Silva Carvalho de
Titolo	Introduction to linear circuit analysis and modelling [[electronic resource]] : from DC to RF // Luis Moura, Izzat Darwazeh
Pubbl/distr/stampa	Amsterdam ; ; Boston, : Newnes, 2005
ISBN	1-280-62908-8 9786610629084 0-08-045478-X
Descrizione fisica	1 online resource (374 p.)
Altri autori (Persone)	DarwazehIzzat
Disciplina	621.319/2
Soggetti	Electric circuits, Linear Electric circuit analysis Electric circuits - Mathematical models
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front cover; Title page; Copyright page; Table of contents; Preface; Acknowledgements; First chapter; 1 Elementary electrical circuit analysis; 1.1 Introduction; 1.2 Voltage and current; 1.2.1 Voltage sources; 1.2.2 Current sources; 1.3 Electrical passive elements; 1.3.1 Resistance and conductance; 1.3.2 Capacitance; 1.3.3 Inductance; 1.4 Kirchhoff's laws; 1.4.1 Series and parallel combinations of passive elements; 1.4.2 Other types of circuit element connections; 1.4.3 Electrical network analysis - Nodal analysis; 1.4.4 Resistive voltage and current dividers; 1.4.5 Controlled sources 1.5 Thevenin's theorem 1.6 Norton's theorem; 1.7 Super-position theorem; 1.8 Bibliography; 1.9 Problems; 2 Complex numbers: An introduction; 2.1 Introduction; 2.2 Definition; 2.3 Elementary algebra; 2.3.1 Addition; 2.3.2 Subtraction; 2.3.3 Multiplication; 2.3.4 Division; 2.3.5 Complex equations; 2.3.6 Quadratic equations; 2.4 Polar representation; 2.4.1 Multiplication and division; 2.5 The exponential form; 2.5.1 Trigonometric functions and the exponential form; 2.6 Powers and roots; 2.7 Bibliography; 2.8 Problems; 3 Frequency domain electrical signal and circuit analysis; 3.1 Introduction 3.2 Sinusoidal AC electrical analysis 3.2.1 Effective electrical values;

3.2.2 I-V characteristics for passive elements; 3.2.3 Phasor analysis; 3.2.4 The generalised impedance; 3.2.5 Maximum power transfer; 3.3 Generalised frequency domain analysis; 3.3.1 The Fourier series; 3.3.2 Fourier coefficients, phasors and line spectra; 3.3.3 Electrical signal and circuit bandwidths; 3.3.4 Linear distortion; 3.3.5 Bode plots; 3.3.6 The Fourier transform; 3.3.7 Transfer function and impulse response; 3.3.8 The convolution operation; 3.4 Bibliography; 3.5 Problems

4 Natural and forced responses circuit analysis 4.1 Introduction; 4.2 Time domain analysis; 4.3 Transient analysis using Fourier transforms; 4.3.1 Differentiation theorem; 4.3.2 Integration theorem; 4.3.3 I-V characteristics for passive elements; 4.4 The Laplace transform; 4.4.1 Theorems of the Laplace transform; 4.4.2 Partial-fraction expansion; 4.5 Analysis using Laplace transforms; 4.5.1 Solving differential equations; 4.5.2 I-V characteristics for passive elements; 4.5.3 Natural response; 4.5.4 Response to the step function; 4.6 Bibliography; 4.7 Problems

5 Electrical two-port network analysis 5.1 Introduction; 5.2 Electrical representations; 5.2.1 Electrical impedance representation; 5.2.2 Electrical admittance representation; 5.2.3 Electrical chain representation; 5.2.4 Conversion between electrical representations; 5.2.5 Miller's theorem; 5.3 Computer-aided electrical analysis; 5.4 Bibliography; 5.5 Problems; 6 Basic electronic amplifier building blocks; 6.1 Introduction; 6.2 Modelling the amplification process; 6.3 Operational amplifiers; 6.3.1 Open-loop and feedback concepts; 6.3.2 Other examples and applications; 6.4 Active devices

6.4.1 The junction or p-n diode

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#### Sommario/riassunto

Luis Moura and Izzat Darwazeh introduce linear circuit modelling and analysis applied to both electrical and electronic circuits, starting with DC and progressing up to RF, considering noise analysis along the way. Avoiding the tendency of current textbooks to focus either on the basic electrical circuit analysis theory (DC and low frequency AC frequency range), on RF circuit analysis theory, or on noise analysis, the authors combine these subjects into the one volume to provide a comprehensive set of the main techniques for the analysis of electric circuits in these areas.

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