Record Nr. UNINA9910423653703321 Autore Rahmani-Andebili Mehdi Titolo DC electrical circuit analysis: practice problems, methods, and solutions / / Mehdi Rahmani-Andebili Pubbl/distr/stampa Cham, Switzerland: ,: Springer, , [2020] ©2020 **ISBN** 3-030-50711-4 Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (IX, 262 p. 282 illus. in color.) 621.3815 Disciplina Electric circuits - Direct current Soggetti Electronic circuits Computer engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Nota di contenuto DC Circuits -- Nodal and Mesh Analyses -- First-order Circuits --Second-order Circuits.-Circuit Theorems -- AC Circuits -- Sinusoids and Phasors -- Sinusoidal Steady-state Analysis -- AC Power Analysis -- Magnetically Coupled Circuits -- Frequency Response -- Laplace Transform -- Applications of the Laplace Transform -- Two-port Networks.

Sommario/riassunto

This study guide is designed for students taking courses in electrical circuit analysis. The book includes examples, questions, and exercises that will help electrical engineering students to review and sharpen their knowledge of the subject and enhance their performance in the classroom. Offering detailed solutions, multiple methods for solving problems, and clear explanations of concepts, this hands-on guide will improve student's problem-solving skills and basic understanding of the topics covered in electric circuit analysis courses. Exercises cover a wide selection of basic and advanced questions and problems Categorizes and orders the problems based on difficulty level, hence suitable for both knowledgeable and under-prepared students Provides detailed and instructor-recommended solutions and methods, along with clear explanations Can be used along with the core textbooks in Electrical Circuits & Devices, Advanced Circuit Analysis, DC Electrical