Record Nr. UNINA9910484734803321 Autore Rahmani-Andebili Mehdi Titolo AC electrical circuit analysis: practice problems, methods, and solutions // Mehdi Rahmani-Andebili Pubbl/distr/stampa Cham, Switzerland: ,: Springer, , [2021] ©2021 **ISBN** 3-030-60986-3 Edizione [1st ed. 2021.] Descrizione fisica 1 online resource (IX, 229 p. 531 illus., 342 illus. in color.) Disciplina 004.678 Soggetti Internet of things Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia 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 textbook 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 AC circuit analysis and advanced electrical circuit

analysis.