1. Record Nr. UNISA996418260703316 Scientific Computing in Electrical Engineering: SCEE 2018, Taormina, **Titolo** Italy, September 2018 / / Giuseppe Nicosia, Vittorio Romano, editors Pubbl/distr/stampa Cham, Switzerland:,: Springer,, [2020] ©2020 **ISBN** 3-030-44101-6 Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (XVI, 288 p. 108 illus., 97 illus. in color.) The European Consortium for Mathematics in Industry;; 32 Collana Disciplina 004.0151 Computer science - Mathematics Soggetti Mathematical models Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Computational Electromagnetics -- Device Modeling and Simulation --Nota di contenuto Circuit Simulation -- Mathematical and Computational Methods --Model Order Reduction -- Index. Sommario/riassunto This collection of selected papers presented at the 12th International Conference on Scientific Computing in Electrical Engineering, SCEE 2018, held in Taormina, Sicily, Italy, in September 2018, showcases the state of the art in SCEE. The aim of the SCEE 2018 conference was to bring together scientists from academia and industry, mathematicians, electrical engineers, computer scientists, and physicists, and to promote intensive discussions on industrially relevant mathematical problems, with an emphasis on the modeling and numerical simulation of electronic circuits and of electromagnetic fields. This extensive reference work is divided into five parts: Computational Electromagnetics, Device Modeling and Simulation, Circuit Simulation, Mathematical and Computational Methods, Model Order Reduction. Each part starts with a general introduction, followed by the respective contributions. The book will appeal to mathematicians and electrical engineers. Further, it introduces algorithm and program developers to recent advances in the other fields, while industry experts will be

introduced to new programming tools and mathematical methods.