

1. Record Nr.	UNINA9910523807003321
Titolo	Graph-based modelling in science, technology and art // Stanisaw Zawislak, Jacek Rysinski, editors
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2022] ©2022
ISBN	3-030-76787-6
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (X, 310 p. 180 illus., 84 illus. in color.)
Collana	Mechanisms and machine science ; ; Volume 107
Disciplina	519.5
Soggetti	Graphical modeling (Statistics) Graph theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Graph-based modeling in technology especially in mechanical engineering and logistics -- Graph based-modelling in science especially in medicine and chemistry -- Graph-based modeling in art, design and network modeling.
Sommario/riassunto	This book presents interdisciplinary, cutting-edge and creative applications of graph theory and modeling in science, technology, architecture and art. Topics are divided into three parts: the first one examines mechanical problems related to gears, planetary gears and engineering installations; the second one explores graph-based methods applied to medical analyses as well as biological and chemical modeling; and the third part includes various topics e.g. drama analysis, aiding of design activities and network visualisation. The authors represent several countries in Europe and America, and their contributions show how different, useful and fruitful the utilization of graphs in modelling of engineering systems can be. The book has been designed to serve readers interested in the subject of graph modelling and those with expertise in related areas, as well as members of the worldwide community of graph modelers.