

1. Record Nr.	UNINA9910155157503321
Autore	Koziel Slawomir
Titolo	Multi-objective design of antennas using surrogate models // Slawomir Koziel, Adrian Bekasiewicz
Pubbl/distr/stampa	New Jersey : , : World Scientific, , 2017 ©2017
Descrizione fisica	1 online resource (361 pages)
Disciplina	621.382/4
Soggetti	Antennas (Electronics) - Simulation methods Antennas (Electronics) - Mathematical models Antennas (Electronics) - Design and construction Multiple criteria decision making
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from PDF file title page (viewed November 17, 2016).
Nota di bibliografia	Includes bibliographical references and index.
Sommario/riassunto	"This book addresses computationally-efficient multi-objective optimization of antenna structures using variable-fidelity electromagnetic simulations, surrogate modeling techniques, and design space reduction methods. Based on contemporary research, it formulates multi-objective design tasks, highlights related challenges in the context of antenna design, and discusses solution approaches. Specific focus is on providing methodologies for handling computationally expensive simulation models of antenna structures in the sense of their multi-objective optimization. Also given is a summary of recent developments in antenna design optimization using variable-fidelity simulation models. Numerous examples of real-world antenna design problems are provided along with discussions and recommendations for the readers interested in applying the considered methods in their design work. Written with researchers and students in mind, topics covered can also be applied across a broad spectrum of aeronautical, mechanical, electrical, biomedical and civil engineering. It is of particular interest to those dealing with optimization, computationally expensive design tasks and simulation-driven design."

--Publisher's website.

---