

1. Record Nr.	UNINA9911018916103321
Autore	Hinders Mark K
Titolo	A Data Engineering Approach to Wave Scattering Analysis with Applications in Radar, Sonar, Medical Diagnostics, Structural Flaw Detection and Intelligent Robotics
Pubbl/distr/stampa	Newark : , : John Wiley & Sons, Incorporated, , 2024 ©2025
ISBN	9781394271238 1394271239 9781394271245 1394271247 9781394271252 1394271255
Edizione	[1st ed.]
Descrizione fisica	1 online resource (369 pages)
Disciplina	531/.1133
Soggetti	Scattering (Physics) Surfaces (Physics)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Background -- Field Equations -- Boundary Conditions: Continuous and Discretized -- Reflection and Refraction -- Guided Waves -- Scattering from Spheres -- Scattering from Cylinders -- Scattering from Spheroids and Elliptic Cylinders -- Scattering from Parallelepipeds -- Inverse Scattering.
Sommario/riassunto	"When energy waves (such as light, sound, and various electromagnetic waves) are caused to depart from a straight path due to imperfections in the medium, it is called scattering. Scattering is unique in that the wave energy is generally deflected in multiple directions that are difficult to predict or calculate"--