

1. Record Nr.	UNINA9910984589503321
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Titolo	An Introduction to Materials Informatics : The Elements of Machine Learning // by Tongyi Zhang
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2025
ISBN	9789819979929 9819979927
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (677 pages)
Disciplina	620.110285631
Soggetti	Materials Materials science Statistics Machine learning Materials Engineering Materials Science Applied Statistics Machine Learning
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Linear Regression -- Linear Classification -- Support Vector Machine -- Decision Tree and K-Nearest-Neighbors (KNN) -- Ensemble Learning -- Bayesian Theorem and Expectation-Maximization (EM) Algorithm -- Symbolic Regression -- Neural Networks -- Hidden Markov Chains -- Data Preprocessing and Feature Selection -- Interpretative SHAP Value and Partial Dependence Plot.
Sommario/riassunto	This textbook educates current and future materials workers, engineers, and researchers on Materials Informatics. Volume I serves as an introduction, merging AI, ML, materials science, and engineering. It covers essential topics and algorithms in 11 chapters, including Linear Regression, Neural Networks, and more. Suitable for diverse fields like materials science, physics, and chemistry, it enables quick and easy learning of Materials Informatics for readers without prior AI and ML knowledge.

