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| Altri autori (Persone) | KushvahaVinod MadhushriPriyanka |
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| Nota di contenuto | Solar Cells and Relevant Machine Learning -- Machine learning-driven gas identification in gas sensors -- Recent advances in Machine Learning for electrochemical, optical, and gas sensors -- Machine Learning in Wearable Healthcare Devices -- A Machine Learning approach in wearable Technologies -- The application of novel functional materials to machine learning -- Potential of Machine Learning Algorithms in Material Science: Predictions in design, properties and applications of novel functional materials -- Perovskite Based Materials for Photovoltaic Applications: A Machine Learning |

Approach -- A review of the high-performance gas sensors using machine learning -- Machine Learning For NextGeneration Functional Materials -- Contemplation of Photocatalysis Through Machine Learning -- Discovery of Novel Photocatalysts using Machine Learning Approach -- Machine Learning In Impedance Based Sensors.

Sommario/riassunto

This book presents recent advancements of machine learning methods and their applications in material science and nanotechnologies. It provides an introduction to the field and for those who wish to explore machine learning in modeling as well as conduct data analyses of material characteristics. The book discusses ways to enhance the material's electrical and mechanical properties based on available regression methods for supervised learning and optimization of material attributes. In summary, the growing interest among academics and professionals in the field of machine learning methods in functional nanomaterials such as sensors, solar cells, and photocatalysis is the driving force for behind this book. This is a comprehensive scientific reference book on machine learning for advanced functional materials and provides an in-depth examination of recent achievements in material science by focusing on topical issues using machine learning methods.
