

Machine learning techniques to predict the characteristics of zeolite

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Machine learning can predict characteristics of material with high accuracy rates. Using Random Forest, we built a prediction model that depends on the geometric features, such as local geometry, structure, and porosity of the material, to predict the bulk and shear moduli of material with a high accuracy. The prediction model will be used on zeolites to predict the elastic response but can be extended to other materials. The proposed model is evaluated by comparing its predictive accuracy to those of extant methods.

Biography

Aiman Darwiche has completed his PhD from Nova Southeastern University in 2018. He is the Co-founder and Chief Data Scientist at Compu-House, a startup that emphasizes on building prediction models for life threatening health conditions before their occurrences. Besides, he teaches undergraduate courses at Northern Kentucky University. He has several papers.

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