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Modeling and Simulations of Construction Materials

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Message from the Guest Editors

In recent decades, the rapid development in numerical theories and computational techniques has greatly promoted the modeling and simulations of construction materials, including cementitious materials, wood, etc. Modeling methods, such as molecular dynamics simulation, multiscale modeling, thermodynamic modeling, reactive-transport modeling, deep learning, and so on, have already become powerful tools to simulate the modifications of construction materials (e.g., SCMs in cementitious systems, chemical admixtures in cement, multifunctional cementitious composites, high-performance cement-based material, functional wood scaffolds) and to investigate their performance (e.g., microstructures, mechanical properties, mass transport, chemical attack, corrosion, UV aging). Therefore, this Special Issue focuses on advances in the modeling and simulations of construction materials, and original research papers, communications, and reviews are all welcome.





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Message from the Editor-in-Chief

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