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Application Opportunities of Quantum Computing

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Message from the Guest Editors

Dear Colleagues,

The aim of this special issue is to assemble a collection of application opportunities that might benefit from the use of quantum computing in the (near) future.

We invite contributions from all scientific disciplines and application domains including but not limited to quantum chemistry, quantum biology, cryptography, quantum communications, quantum sensing, material design, and any other type of quantum-assisted simulation and/or optimization. We, in particular, encourage the submission of contributions from 'exotic' application areas where the opportunities of using quantum computers to speed up computations or enable unprecedented applications have hardly been explored so far.

Contributions should either demonstrate the successful realization of (prototypes of) quantum-assisted applications in software and/or on real quantum hardware, or present credible approaches to solve practical applications with the aid of quantum computers in the future.

Prof. Dr. Matthias Möller
Dr. Carmen G. Almudever
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Guest Editors



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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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