



Underwater Acoustic Communications and Networks

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Message from the Guest Editor

In general, acoustic waves are used for underwater wireless communications and networks. Underwater acoustic communications and networks should overcome (1) the limited data rate due to the narrow bandwidth and the extended multi-paths that change rapidly over time and (2) network throughput degradation induced by the long propagation delay of sound waves. Despite the ongoing efforts to improve the performance of underwater acoustic communications and network protocols, it is still a challenging area. This Special Issue solicits original research papers that address, but are not limited to, the following topics:

- Underwater acoustic channel modeling
- Information theoretic analysis of underwater wireless communications and networks
- Underwater acoustic modem design
- MIMO communications
- Network architecture
- Spatial reuse multiple access
- MAC and routing protocols
- Network localization
- Transport protocols
- Machine learning applications
- Underwater mobile platforms (AUV, ROV, etc.)
- Experimental verification





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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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