Special Issue

Advancing Global Connectivity: Efficient Transmission and Intelligent Sensing in Satellite Communications

Message from the Guest Editors

As global communication demands surge, existing satellite communication systems face challenges including signal attenuation, resource limitations, and inadequate data processing capabilities. The incorporation of intelligent sensing technology has significantly improved the adaptability and operational efficiency of satellite systems, offering robust data support for signal processing, and thereby enhancing communication quality and reliability. Additionally, emerging wireless communication technologies such as efficient antenna designs and advanced signal processing strategies are now at the forefront of research interest. These technologies demonstrate immense potential for achieving global seamless coverage and enhancing service quality. This Special Issue aims to collect state-of-the-art research on enhancing satellite communication efficiency and intelligent sensing, including but not limited to intelligent sensing applications, efficient antenna technology, and advanced signal processing technology.

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Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

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