

Special Issue

Remote Sensing for Urban Infrastructure: Intelligent Health and Safety Assessments

Message from the Guest Editors

Critical infrastructure (bridges, dams, pipelines, energy networks, buildings, etc.) faces escalating threats from aging, environmental stress, extreme weather, and natural hazards. Timely and accurate health assessment is essential for safety and resilience. This Special Issue in *Remote Sensing* highlights innovative applications of advanced remote sensing (RS) technologies specifically for infrastructure safety monitoring and structural health assessment. Recent advancements in satellite platforms (very-high-resolution optical, multispectral, hyperspectral, SAR/InSAR, including time-series analysis for millimeter-scale deformation), aerial platforms (UAV/ drone photogrammetry, LiDAR), and ground-based sensors (TLS, GB-SAR) provide unprecedented capabilities for non-contact, large-scale, and frequent monitoring. Moreover, the emergence of powerful AI/ML-driven algorithms, such as advanced convolutional and Transformer-based network architectures, multimodal large language models, AIGC, and foundation models, have achieved significant progress in visual and multimodal tasks, which can profoundly inspire researchers in infrastructure health and safety assessments.

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Deadline for manuscript submissions

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Message from the Editorial Board

Remote Sensing is now a prominent international journal of repute in the world of remote sensing and spatial sciences, as a pioneer and pathfinder in open access format. It has highly accomplished global remote sensing scientists on the editorial board and a dedicated team of associate editors. The journal emphasizes quality and novelty and has a rigorous peer-review process. It is now one of the top remote sensing journals with a significant Impact Factor, and a goal to become the best journal in remote sensing in the coming years. I strongly recommend *Remote Sensing* for your best research publications for a fast dissemination of your research.

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