Sensors and Materials
Special Issue on Multisource Sensors for Geographic Spatiotemporal Analysis and Social Sensing Technology

Call for papers

In recent years, with the rapid development of wireless sensors, handheld smart terminal devices, information communication, Internet of Things (IoT) technologies, and internet and mobile communication networks, a large amount of spatiotemporal big data has been generated with individual labels and spatiotemporal semantic information, which can facilitate the prolonged and highly accurate tracking and observation of individuals’ spatial movements. With the advent of the big data era, geospatial big data, comprehensively covering human activities and geographical environmental information, has surpassed the limitations of traditional purposeful sampling data in terms of data scope, spatiotemporal granularity, and information content. This transformative development has ushered in a new research paradigm for the comprehensive understanding of the human–environment relationship. Geospatial Intelligence (GeoAI), an interdisciplinary research field combining geographic spatial science and artificial intelligence, significantly enhances the capability for dynamic sensing, intelligent reasoning, and knowledge discovery of geographical phenomena and Earth science processes. Therefore, the rapid development of remote sensing sensors and information communication technology, along with the application of technologies such as intelligent sensors, remote sensing, artificial intelligence, social perception, and spatiotemporal big data in geographic information science, provides reliable methods and technological support for geographical research.

This special issue aims to elaborate on the research and applications of multisource sensor data, remote sensing technology, and geographic information technology in the analysis of spatiotemporal data and social perception. It focuses on theoretical and practical research related to natural resources, the ecological environment, climate change, and urban transportation at various scales, as well as dynamic monitoring and the investigation of changing trends in the spatiotemporal status, thus providing effective technical support for geospatial analysis and natural resource management.

Scope:

- Multisource sensors for geographic spatiotemporal analysis;
- Ecological environment monitoring/assessment based on sensor data;
- Urban traffic monitoring/perception based on sensor data;
- Application of multisource sensors in climatology;
- Application of multisource sensors in social sensing technology;
- Urban governance/assessment based on geographic spatiotemporal data;
- Monitoring and analysis of urban natural resources;
- Extraction/fusion methods for urban multisensor monitoring based on artificial intelligence technology;
- Integration and application of artificial intelligence technology and geospatial–temporal data technology;
- Technological methods and application services of intelligent surveying and mapping.
Submission due date: July 31, 2024
Publication date (planned): November 30, 2024
Journal website: http://myukk.org/

Guest Editors:
Prof. Xiang Lei Liu, Ph.D.
School of Geomatics and Urban Spatial Informatics, Beijing University of Civil Engineering and Architecture, China
E-Mail: liuxianglei@bucea.edu.cn
Interests: remote sensing sensors, intelligent sensors, remote sensing, geomatics, photogrammetry, infrastructure monitoring and evaluation

Prof. Bogang Yang, Ph.D.
Beijing Key Laboratory of Urban Spatial Information Engineering, Beijing Institute of Surveying and Mapping, China
E-Mail: bogangy@126.com
Interests: remote sensing sensors, geomatics, photogrammetry, remote sensing, surveying and mapping of cities, monitoring and evaluation of natural resources

Submit to:
1. Online Manuscript Submission System (https://myukk-org.ssl-xserver.jp/form/) or
2. Email to MYU K.K. (myukk@myu-inc.jp)

(Attention)
As stated in Instructions to Authors in the Guidelines, the author(s) will be obliged to pay the publication fee upon the acceptance of the manuscript for publication (for example, JPY 145200 for 10 pages in Sensors and Materials format). If the quality of the English of your manuscript does not satisfy the journal standards, the authors should bear the proofreading fee (JPY 11000–44000), which will be charged with the publication fee. If you have any questions, please feel free to contact the editorial staff at the address below.

Editorial Department of Sensors and Materials
MYU K.K.
1-23-3-303 Sendagi, Bunkyo-ku, Tokyo 113-0022, Japan
Tel: +81-3-3827-8549, Fax: +81-3-3827-8547
E-mail: myukk@myu-inc.jp