Special Issue

Artificial Intelligence (AI)/Machine Learning (ML)-Assisted Chemical Sensors

Message from the Guest Editors

The integration of Artificial Intelligence (AI) and Machine Learning (ML) techniques with chemical sensors has revolutionized the field of chemical sensing. This Special Issue explores the innovative applications and advancements in AI/ML-assisted chemical sensors. By harnessing the power of AI/ML algorithms, these sensors can achieve unparalleled levels of accuracy, sensitivity, and selectivity in detecting and identifying target molecules across various domains, including environmental monitoring, healthcare diagnostics, and industrial processes. This Special Issue highlights the fundamental principles and methodologies in AI/ML-assisted chemical sensing, including feature extraction, pattern recognition, and data fusion techniques. Furthermore, it discusses the benefits of employing AI/ML in enhancing sensor performance, such as real-time data analysis, adaptive learning, and predictive modelling. Through case studies and examples, this Special Issue demonstrates the transformative potential of AI/ML-assisted chemical sensors in addressing critical challenges and advancing scientific research and technological innovation in diverse applications.

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Chemosensors continues to grow as a forum for all manners of sensing that encompass chemistry. *Chemosensors* is published in open access format – all articles and content are released on the internet immediately following acceptance, thus allowing unlimited access to the content as soon as it is published. We would be happy to have you join our growing list of authors.

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