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Metal-Organic Frameworks-Based Hybrid Materials for Environmental Sensing and Monitoring

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ABSTRACT

With an unprecedented population boom and rapid industrial development, environmental pollution has become a severe problem for the ecosystem and public health. Classical techniques for sensing and determining environmental contaminants often require complex pretreatments, expensive equipment, and longer testing times. Therefore, new, and state-of-the-art sensing technologies possessing the advantages of excellent sensitivity, rapid detection, ease of use, and suitability for in situ, real-time, and continuous monitoring of environmental pollutants, are highly desirable.

Metal-Organic Frameworks-based Hybrid Materials for Environmental Sensing and Monitoring covers the current-state-of-the-art hybrid nanomaterials based on metal-organic frameworks for electrochemical monitoring purposes. Accomplished authors cover various synthetic routes, methods, and theories behind enhancing the electrochemical properties and applications of metal-organic frameworks-based hybrid nanomaterials for electrochemical sensing of environmental pollutants under one roof.

This book is essential reading for all academic and industrial researchers working in the fields of materials science and nanotechnology.

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