

Special Issue

Low-Back Pain: Assessment and Rehabilitation Research

Message from the Guest Editors

Low-back pain (LBP) remains one of the most prevalent and disabling musculoskeletal conditions globally. Despite extensive research, the complexity of its pathophysiology, ranging from mechanical and neurogenic factors to psychosocial influences, continues to challenge both diagnostic accuracy and treatment efficacy. In recent years, advances in bioengineering have opened new avenues for the assessment and rehabilitation of LBP, including wearable technologies, sensor-based functional assessments, computational modeling, and neuromechanical interventions. This Special Issue of *Bioengineering* aims to bring together original research articles, systematic reviews, and methodological advances focusing on innovative tools, technologies, and approaches for evaluating and rehabilitating LBP patients. Emphasis is placed on the integration of biomechanical analysis, imaging, machine learning algorithms, and assistive devices into clinical practice. Submissions exploring translational research and interdisciplinary strategies that enhance diagnostic precision, personalize rehabilitation protocols, or improve patient outcomes are especially encouraged.

Guest Editors

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Editor-in-Chief

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