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New Frontiers in Parallel Robots

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Message from the Guest Editors

Parallel robots have been proposed, developed on the basis of serial robots, with a core feature of the parallel configuration of drive/kinematic chains. The moving platform of a parallel robot is supported and driven simultaneously by two or more kinematic chains, which provide the parallel robot with the advantages of high speed, heavy-load-bearing ability, high stiffness, and compact architecture. Increased applications of and interests in parallel robots have driven the research community to carry out extensive investigations. On the one hand, research on the theories and methods of configuration analysis, optimization design and control has developed rapidly. On the other hand, interdisciplinary integration has brought a series of challenges and innovations, for example, cable, soft and various driving modes, serial and parallel hybrid configurations, rigid-flexible coupling/fusion, and artificial intelligence capabilities. This Special Issue will provide an international forum for professionals, academics, and researchers to present the latest developments on parallel robots.



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Special Issue



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Message from the Editor-in-Chief

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Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.

There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

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