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# Model Predictive Control: Advances in Sensor Technologies and Applications

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## **Message from the Guest Editor**

The synergy between model predictive control (MPC) and evolving sensor technologies represents a new era of intelligent control. This Special Issue, "Model Predictive Control: Advances in Sensor Technologies and Applications", explores the multi-faceted relationship between these two fields

The depth of sensor feedback loops, revealing the crucial role of sensors in MPC, highlights their integral function in feedback control. The fusion of different sensor data provides a broader perspective on MPC and enriches decision-making processes. In the era of data overload, techniques to control inconsistent or unreliable sensor data are becoming increasingly important in MPC. Moreover, the real-time applicability of MPC, when tested via the integration of wireless sensor networks, is both a challenge and a breakthrough. The introduction of soft sensors that can either complement or potentially replace traditional hardware is exciting. Finally, the transformative impact of self-calibrating sensors that redefine the adaptability of MPC is being explored.













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