1. Record Nr. UNINA9910557523703321 Autore Sunden Bengt Titolo Smart Flow Control Processes in Micro Scale Pubbl/distr/stampa Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2020 Descrizione fisica 1 electronic resource (334 p.) Soggetti History of engineering & technology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia In recent years, microfluidic devices with a large surface-to-volume Sommario/riassunto ratio have witnessed rapid development, allowing them to be successfully utilized in many engineering applications. A smart control process has been proposed for many years, while many new innovations and enabling technologies have been developed for smart flow control, especially concerning "smart flow control" at the microscale. This Special Issue aims to highlight the current research trends related to this topic, presenting a collection of 33 papers from leading scholars in this field. Among these include studies and demonstrations of flow characteristics in pumps or valves as well as dynamic performance in roiling mill systems or jet systems to the

optimal design of special components in smart control systems.