Special Issue

Computer-Aided Design of Lab-on-Chips, Sensors and Diagnostic Devices

Message from the Guest Editor

Computer-aided design (CAD) of lab-on-chips, sensors, and diagnostic devices has significantly progressed over the past twenty years. To date, many of these CAD tools are equipped with powerful design automation functions, e.g., automatic placement, automatic routing of micro-channels, automatic optimization of component feature sizes, scheduling of valve or electrode actuation, simulation and scheduling of flow/droplet movement, automatic light penetration compensation for 3D-printed hollow devices, and automatic design validation. This Special Issue calls for submissions that fall into any of the following categories: (1) original research on CAD tool development for LOC, sensors, and diagnostic devices; (2) original research on model/algorithm development for LOC, sensors, and diagnostic device design automation; (3) case study and performance analysis of specific CAD tool(s); and (4) review papers of CAD tools or design automation approaches for LOC, sensors, and diagnostic devices.

Guest Editor

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Editor-in-Chief

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