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*Special Issue Reprint*

## **Selected Papers from the ISTEIM'19**

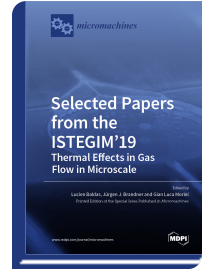
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This Special Issue compiles 11 scientific works that were presented during the International Symposium on Thermal Effects in Gas Flow in Microscale, ISTEIM 2019, held in Ettlingen, Germany, in October 2019. This symposium was organized in the framework of the MIGRATE Network, an H2020 Marie Skłodowska-Curie European Training Network that ran from November 2015 to October 2019 ([www.migrate2015.eu](http://www.migrate2015.eu)). MIGRATE intends to address some of the current challenges in innovation that face the European industry with regard to heat and mass transfer in gas-based microscale processes. The papers collected in this book focus on fundamental issues that are encountered in microfluidic systems involving gases, such as the analysis of gas–surface interactions under rarefied conditions, the development of innovative integrated microsensors for airborne pollutants, new experimental techniques for the measurement of local quantities in miniaturized devices and heat transfer issues inside microchannels. The variety of topics addressed in this book emphasizes that multi-disciplinarity is the real common thread of the current applied research in microfluidics. We hope that this book will help to stimulate early-stage researchers who are working in microfluidics all around the world. This book is dedicated to them!



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