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Editorial

Progress in Combustion Diagnostics, Science and Technology

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The role that combustion plays in energy systems remains crucial in supplying the world's ever-increasing power demands. In the never-ending quest for improving efficiency, additional knowledge is essential to develop new combustion technologies and appliances. Increasingly, there is more focus on the conservation of energy and on addressing environmental concerns, which together, necessitate cleaner and more efficient combustion processes using a range of fuel sources. This is essential to respond to global challenges in energy supplies and to continue to address issues of the decarbonization of the sector. In addition to power production, understanding combustion also plays a critical role in both managing fires and in the material synthesis sectors. To meet the objectives of evolution and innovation in combustion science, new experimental measurements are needed and complemented by computational approaches.

This book includes a series of seventeen research studies that reveal new knowledge about combustion and its application. The topics covered span many diverse areas associated with combustion including: fires [1–3], engines and applications [4–15], and acoustics [16,17].

In combination, these complementary contributions provide a substantial body of knowledge in the field of Progress in Combustion Diagnostics, Science and Technology, hence the apt name of this exciting publication.

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