SPRINGER NATURE

Fire Technology

FT is the interdisciplinary journal of the *National Fire Protection Association* (NFPA), the *Society of Fire Protection Engineers* (SFPE) and *SpringerNature*, spanning the whole range of fire safety science and engineering. It is the oldest fire journal, publishing continuously since 1965. *Its 2018 Impact Factor is 1.42.* The aims are to support and advocate for research and education in fire safety engineering and reduce the worldwide burden of fire hazards.

Paper Submission

Authors are encouraged to submit high-quality, original work that has neither appeared in, nor is under consideration by, other journals. All open submissions will be peer reviewed subject to the standards of the journal. Manuscripts based on previously published conference papers must be extended substantially.

The journal accepts three types of manuscripts (*full papers, case studies, and short communications*). Letters to the Editor are also considered.

Manuscripts should be submitted to: http://fire.edmgr.com. Please choose article type "**SI: Smart Systems in Fire Engineering**".

www.springer.com/10694

Call for Papers: Special Issue

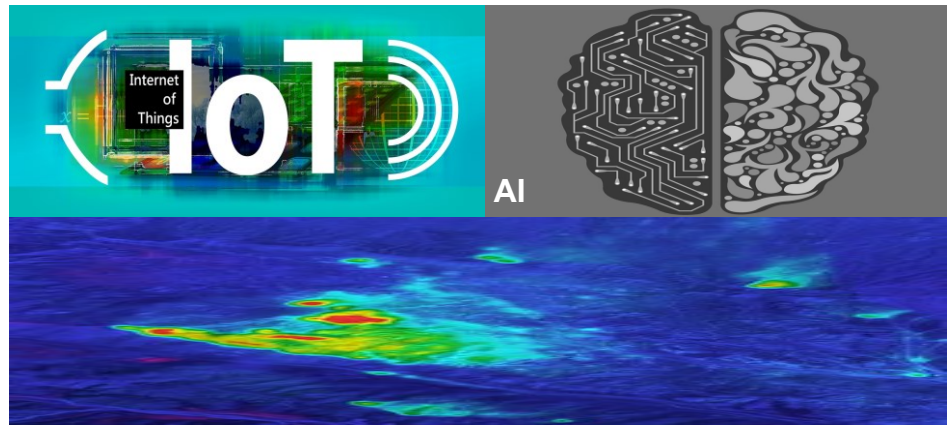# Smart Systems in Fire Engineering

Guest Editors:

Dr. M.Z. Naser, Clemson University, USA

Dr. Chris Lautenberger, Reax engineering, USA

Dr. Erica Kuligowski, National Institute of Standards and Technology (NIST), USA

Paper submission deadline: 5th June 2020

With the rise of transformative technologies and computational intelligence, it is a matter of time before the field of fire engineering and safety leaps into a new era that leverages modern concepts: such as artificial intelligence (AI), Internet-of-Things (IoT), robotics, sensors etc., towards realizing smart and fire-resilient structures and systems in the near future.

In support of recent calls to revolutionize our field, this special issue aims at gathering top-quality articles focusing on different aspects of smart-systems in fire engineering. Of interest are experimental, computational and theoretical research studies that may include but are not limited to the following themes:

1. Applications of AI and optimization algorithms to fire resistance, forensic fire reconstruction, materials sciences, performance-based design and other areas related to fire safety and fire protection engineering.
2. Frameworks for smart buildings and integrated intelligent firefighting measures and systems (i.e. IoT, sensors, autonomous firefighting robots, smart detection systems etc.).
3. Emergent/intelligent models of fires and/or human behavior during building fire and wildfire emergencies, including data/conceptual models.
4. Training of and/or communication with/among building occupants, community populations, first responders, or other decision-makers in fires.
5. Artificial intelligence in the realm of fire engineering (e.g., education, ethics, fairness, transparency, collaboration etc.)
6. Non-traditional data acquisition and distribution (e.g. social media)
7. Monitoring, detecting, and processing of remote sensing data for wildfires.

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