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Fire Risk Assessment and Management for Ships and Offshore Structures

Guest Editor:

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Message from the Guest Editor

Fire is a major risk for ships and offshore structures, with frequent accidents and severe losses. At present, the transportation industry is undergoing energy transformation, and the marine engineering industry is also conducting research on new energy resources. These new types of combustibles have never been widely used at sea, making their quantitative assessment and the prevention of fire risk increasingly urgent.

This Special Issue aims to explore the mechanisms, evolutionary paths, and isolation methods of fire risk in ships and offshore structures. Research areas may include but are not limited to:

- Enabling technologies for fire detection, such as smart sensors and instruments, communication technologies, and artificial intelligence;
- 2. Fire risk assessment methodology and practice for complex systems, such as PCTC, cruises, etc.;
- 3. Operation and maintenance strategies in terms of fire risk;
- 4. Risk-based design principles for novel offshore systems, such as offshore renewable energy hydrogen production systems;
- 5. Experimental techniques for ship and marine structure fires



