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# Investigation of the thermal hazardous effect of protective clothing caused by stored energy discharge

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## Highlights

- New indices were introduced to evaluate the thermal hazardous effect of protective clothing on human skin.
- The influences of fabric property, air gap under clothing and applied compression were examined.
- The thermal liner in a multilayer fabric system plays a key role in heat discharge to the skin.
- The correlation between heat storage and heat release of fabric systems has been established.

## Abstract

In addition to direct thermal energy from a heating source, a large amount of thermal energy stored in clothing will continuously discharge to skin after exposure. Investigating the

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