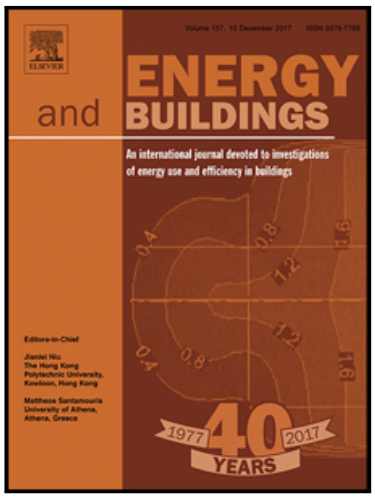

The incorporation of modified Sb_2O_3 and DBDPE: A new member of high solar-reflective particles and their simultaneous application in next-generation multifunctional cool material with improved flame retardancy and lower wetting behaviour

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Highlights

- Sb_2O_3 and DBDPE can be used as solar-reflective particles and flame retardants.
- The novel solar reflectance property improves as Sb_2O_3 combines with DBDPE.
- Multifunctional material performs excellent cooling property.
- Multifunctional material performs flame retardancy and a lower wetting behavior.
- Next-generation multifunctional cool material is successfully fabricated.