

as compared to the neat glass fabric target for knife threats.

Conclusions

A shear thickening fluid can be obtained by dispersing silica nanoparticles directly into polyethylene glycol under regular stirring. SEM results revealed that the glass fabrics were completely and uniformly coated with STF. The quasi-static stab-resistant tests results showed that the STF/glass fabric composites offer superior stab protection as compared to neat glass fabric targets for knife threats.

Acknowledgments

This work is supported by the Open Project Program of Key laboratory of Eco-Textiles, Ministry of Education, Jiangnan University, China (No. KLET0910), by the Youth Fund Project of Jiangnan University (2009LQN02) and by Fundamental Research Funds for the Central Universities (JUSRP21106 and JUSRP11101).

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Received 24.01.2011 Received 26.03.2012



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