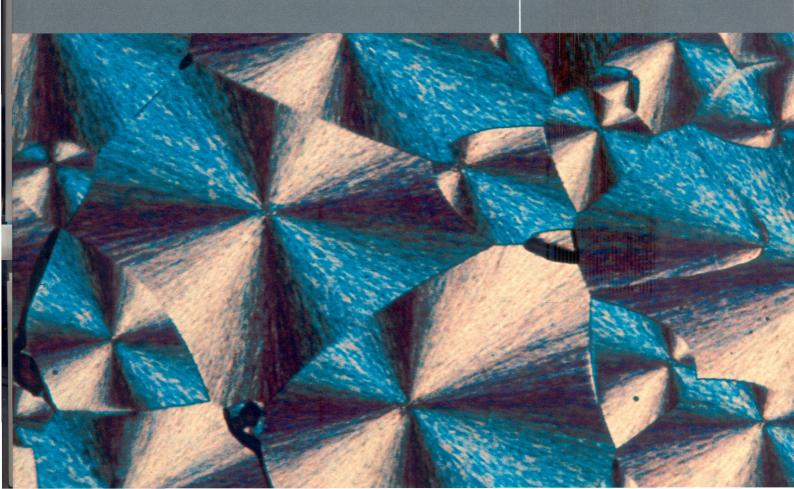


## Textile Research Journal

Volume 82 Issue 3 February 2012

http://trj.sagepub.com

**\$**SAGE Publications





## Textile Research Journal

Volume 82 Issue 3 February 2012

http://trj.sagepub.com

## Original articles

- **211** Statistical modeling of water vapor transport through woven fabrics *S Lee and SK Obendorf*
- 220 Structure-unit cell-based approach on three-dimensional representative braided preforms from four-step braiding: Experimental determination of effects of structure-process parameters on predetermined yarn path K Bilisik and N Sahbaz
- 242 Studies of three-dimensional trajectories of breast movement for better bra design J Zhou, W Yu and S-P Ng
- **255** Study of the dynamics of rotor-spun composite yarn spinning process in forced vibration *N Faraz and Y Khan*
- 259 Rapid measurement of cotton fiber maturity and fineness by image analysis microscopy using the Cottonscope®

  J Rodgers, C Delhom, C Fortier and D Thibodeaux
- 272 Improving fiber trapping with a contact surface during the ring twisting of two cotton yarns Z Xia, W Xu and X Wang
- **280** Impact tensile behavior and frequency response of 3D braided composites *X Gan, J Yan, B Gu and B Sun*
- 288 Flat-knitted innovative three-dimensional spacer fabrics: a competitive solution for lightweight composite applications

  MD Abounaim and C Cherif
- **299** Garment smoothness appearance evaluation through computer vision J Silvestre-Blanes, J Berenguer-Sebastiá, R Pérez-Lloréns, I Miralles and J Moreno