ON-CHIP TEMPERATURE MONITORING

On page 1118 Matthew Frenkel and Zhixiong Guo discuss the fabrication of a whispering gallery mode micro-sensor by utilizing polydimethylsiloxane (PDMS) micro-shells coated onto an electrical current-carrying wire. The sensor is capable of on-chip, dynamic, high-resolution temperature monitoring of an electrical wire and microelectronic chips/devices, and functions from room temperature to below 100 K. The use of PDMS allows for low-cost fabrication of sensors without risking thermal damage to the electronic component.

Fddd NETWORKS IN ABA COPOLYMERS

On page 1112 Wei Li, Kris T. Delaney and Glenn H. Fredrickson use self-consistent field theory to examine the stability of the orthorhombic Fddd network phase in ABA triblock copolymer melt systems. The variation in chain asymmetry significantly shifts the order-order phase boundaries, resulting in an appreciable Fddd phase region of O15 stability in the phase diagram of asymmetric ABA triblock copolymers.