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"The responsive nature and diversity of liquid crystals provide tremendous opportunities as well as challenges for insights in fundamental science, and opens the door to various applications. Most modern electronic displays are liquid crystal-based, but R&D is moving rapidly beyond into such areas as electro-optic devices, energy, molecular motors, tunable lasers, and biosensors. This unique reference guides readers to the advances and directions of liquid crystal research, helping spur continued progress in the field. It emphasizes the chemistry, physics, and applications of liquid crystals in photonics, power generators, lasers, molecular motors, carbon nanotubes, and biosensors"--