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9.2 Using Intensity Shaped Beams to Orient and Rotate Trapped Objects

Sommario/riassunto

New possibilities have recently emerged for producing optical beams with complex and intricate structures, and for the non-contact optical manipulation of matter. This book fully describes the electromagnetic theory, optical properties, methods and applications associated with this new technology. Detailed discussions are given of unique beam characteristics, such as optical vortices and other wavefront structures, the associated phase properties and photonic aspects, along with applications ranging from cold atom manipulation to optically driven micromachines. Features include:
