

## **Nematicons: Light Guiding and Routing Light**

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Spatial optical solitons are self-confined light beams resulting from a balance of self-focusing and diffraction. In the last decade, using the versatile platform offered by nematic liquid crystals, a number of fundamental and applied issues have been addressed, including the guiding and steering of optical signals, soliton-beam and soliton-soliton interactions and switching. We will review the most important advances in optical spatial solitons in nematic liquid crystals, or nematicons, with a brief outline of basic principles and properties, to be followed by experimental results and potential applications.