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Sommario/riassunto	The title explain new technique of secured and high capacity optical communication signals generation by using the micro and nano ring resonators. The pulses are known as soliton pulses which are more secured due to having the properties of chaotic and dark soliton signals with ultra short bandwidth. They have high capacity due to the fact that ring resonators are able to generate pulses in the form of solitons in

multiples and train form. These pulses generated by ring resonators are suitable in optical communication due to use the compact and integrated rings system, easy to control, flexibility, less loss, application in long distance communication and many other advantages. Using these pulses overcome the problems such as losses during the propagation, long distances, error detection, using many repeaters or amplifiers, undetectable received signals, pulse broadening, overlapping and so on. This book show how to generate soliton pulses using ring resonators in the micro and nano range which can be used in optical communication to improve the transmission technique and quality of received signals in networks such as WiFi and wireless communication.