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Title:Highly capacity RFID generated by a soliton pulse within a panda ring resonator
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Abstract:A new design of THz frequency carrier generation for radio frequency identification (RFID) application is presented. The dense wavelength division multiplexing can be generated and obtained by using a Gaussian or soliton pulses propagating within a modified add-drop filter known as a PANDA ring resonator. A system is consisted of a serial nonlinear microring resonator system. The broad bandwidth of THz signals can be obtained and available for useful applications. The selected signals can be filtered and obtained by using the add/drop filter. Results obtained have shown that the increasing in channel capacity can be obtained and useful for the large demand of RFID applications. © 2012 Wiley Periodicals, Inc.
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