Title: A review of secure routing approaches for current and next generation wireless multimedia sensor networks

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Abstract: Multimedia applications are gradually becoming an essential - and flourishing - part of our daily lives. The area of wireless sensor networks is not an exception to this trend, as multimedia data have attracted the attention of researchers. Their importance is due to the shift of focus from traditional scalar sensors to sensors equipped with multimedia devices, as well as to the next-generation wireless multimedia sensor networks (WMSNs). The highly sensitive nature of multimedia traffic makes data routing with security even more important in WMSNs. This paper discusses the challenges of secure routing in WMSNs, where most of the proposed works in the literature deal with routing and security as individual issues. A critical and comprehensive review of state-of-the-art routing and security approaches for WMSNs is presented, followed by the discussion of their limitations and features. It is hoped that this extensive review and discussion ultimately identifies the future research directions and the open challenges of secure routing approaches in WMSNs.