

“Optical control of microwave field effect transistors”

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Abstract – Optical-microwave interaction offers new potentials for improving optical and microwave systems. This paper addresses a new interface of these emerging technologies, namely the optical control of microwave transistors. The illumination creates a new input port and this way the microwave transistor can be controlled simultaneously by electronic and photonic signals. The optical illumination influences all elements in its circuit model. The results to be presented in this paper are based on detailed theoretical and experimental investigations.