

# **Simulation and Comparative Analysis of Junctionless Tunneling Field Effect Transistor (JLTFET) and Junctionless Field Effect Transistor (JLFET) with the aim of determining the degree of effectiveness of important indicators of gate engineering**

Mohammad Javad Kochehpour\*, Seyed Ali Sedigh Ziabari,

**In this research, a non-linkage tunnel field effect transistor (JLTFET) and a nonlinear field effect transistor (JLFET) have been presented. Using the simulation of gate engineering ideas: the use of multi-metal gate with the use of functions Multiple in different structures and the use of the idea of changing the genus oxide gate in the two transistors above and the quantum analysis. Because of the difference in their behavior, we tried to improve the digital parameters such as: light flow, off-flow, light-to-dye flow ratio, and so on. Finally, using the results of the simulations, we conclude that the changes applied in this study have been improved on the non-bonded tunnel field effect transistor compared to the non-bonded field effect transistor, including improved improvements.**

**Keywords : Junctionless FET - Junctionless tunneling FET - Gate Workfunction - Dielectric**

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