Au-Modified ZnO Thin Films for Higher-Performance Ultraviolet Photodetectors

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Table S1: *A brief literature survey research work carried out by various scientific groups using Au nanoparticles (NPs) on ZnO as the sensing layer for UV photoresponse characteristics.*

S. no.	Matrix	Method	(I_{off})	(I_{on})	(K)	(T_r)	(T_f)	Intensity/ Applied Bias	Ref.
1.	Au nps/ZnO	Sol-gel	7.29 nA	0.05 mA	7.79×10^3	15s	11s	24 μW/cm^2 /5V	Present work
2.	AuNps/ZnO nanofibres	Electrospinning/ Sputtering	-	-	460	<0.5s	-	-/5V	[1]
3.	Au+ZnAl2O4 nps/ZnO nanowires	Sol-gel	0.1μA	1.75×10^{-4} A	1750	-	-	-/5V	[2]
4.	Au/ZnO nanostructures	Magnetron Sputtering	3.28×10^{-9} A	4.33×10^{-6}A	1320	-	-	-/1V	[3]
5.	PEDOT/Au -ZnO nanoarrays	Chemical Route	0.75 μA	29.1 μA	39	0.32s	0.44s	0.32mW/cm^2/5V	[4]
6.	Au QDs/Sb doped ZnO nanostructures	Sol-gel+ Hydrothermal method	3.92 mA	148 mA	37.75	-	-	-/5V	[5]
7.	Au nps/ZnO/GaN	CVD	27.61 nA	13.23×10^{-7} A	176	-	-	-/2V	[6]
8.	ZnO/Au/Al_2O_3	Chemical Route	-	-	805	-	-	0.6 mW/cm^2	[7]
9.	Au nps/ZnO	PLD	1mA	10mA	10	-	-	18 mW cm^{-2}/5V	[8]
10.	Au nps/ZnO microrods	Solid state reaction	1.89 μA	8.39 μA	4.4	-	-	-/5V	[9]

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