

Supporting Information

Capacitive Spring Softening in Single-Walled Carbon Nanotube Nanoelectromechanical Resonators

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Parameter	Symbol	Value
Diameter	d	2nm
Length	L	3μm
Slack	s	1%
Elastic modulus	E	1TPa
Linear mass density	μ	5×10^{-15} (kg/m)
Moment of inertia	I	7×10^{-37}
Dielectric constant	ϵ_0	8.85×10^{-12}
Distance between CNT and BG	Z	1μm

Table S1 Key values of nanotube parameters used for numerical calculation

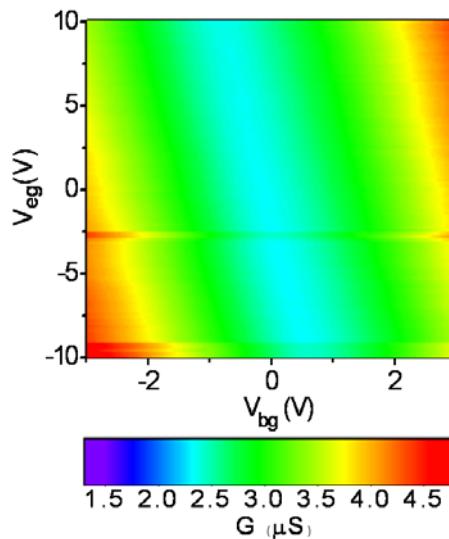


Fig. S1 Conductance (in color) vs. V_{bg} and V_{eg}

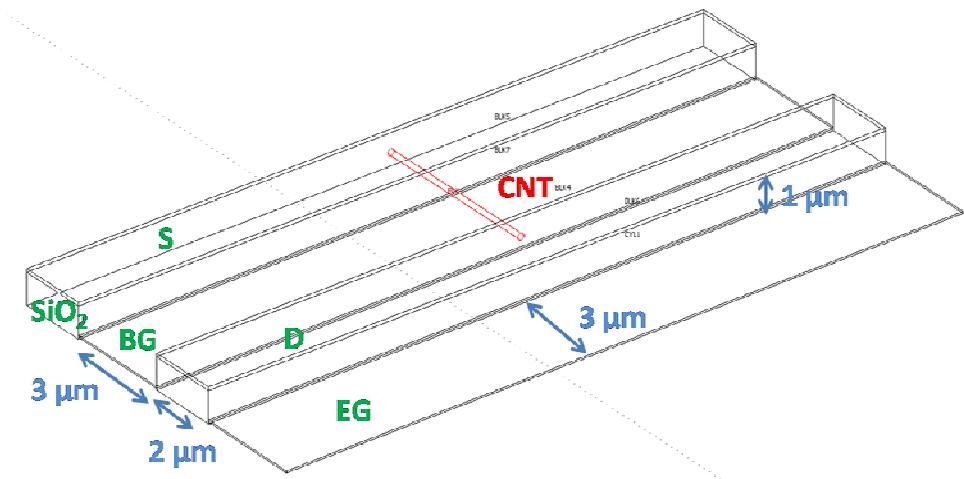


Fig. S2 Modeling geometry in COMSOL