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(54) Title: ELECTRONIC CONDUCTANCE IN BIOELECTRONIC DEVICES AND SYSTEMS

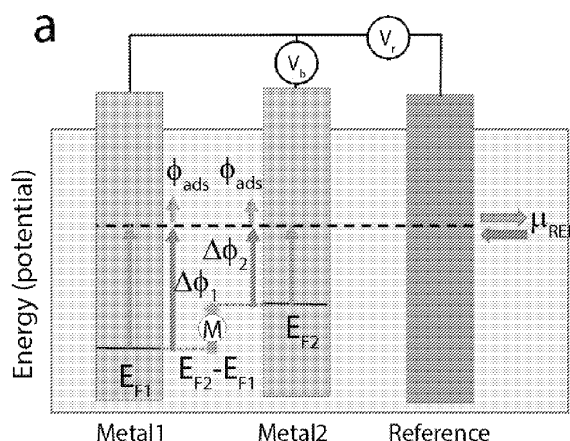


FIG 1A

(57) Abstract: The present disclosure provides devices, systems, and methods related to protein bioelectronics. In particular, the present disclosure provides bioelectronic devices, systems, and methods that utilize a defined electrical potential to maximize electrical conductance of a protein-of-interest, which can serve as a basis for the fabrication of enhanced bioelectronic devices for the direct measurement of protein activity.

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