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(54) Title: LOCALIZING NANOPORE FABRICATION ON A MEMBRANE BY LASER ILLUMINATION DURING CONTROLLED BREAKDOWN

(57) Abstract: A method for fabricating a nanopore at a particular location in a membrane includes controlling a dielectric strength of the membrane at a particular location on the membrane while applying one of an electric potential or an electric current to the membrane, monitoring an electrical property across the membrane while one of the electric potential or the electric current is being applied across the membrane, detecting an abrupt change in the electrical property across the membrane while one of the electric potential or the electric current is being applied across the membrane; and removing the electric potential or the electric current from the membrane in response to detecting the abrupt change in the electrical property.



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