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List of Abbreviation and Symbols

H-H	Hodgkin-Huxley
g_{Na}	Sodium Conductance
g_K	Potassium Conductance
g_l	Leakage Conductance
V	Membrane Potential
E_{Na}	Reverse potential of Sodium ions
E_K	Reverse potential of Potassium ions
E_l	Reverse potential of leakage ions
E_R	Resting potential
n	Gating variable of activation of potassium ions
m	Gating variables of activation of sodium ions
h	Gating variables of inactivation of sodium ions
Ach	Acetylcholine
Ache	Acetylcholine esterase
AchFET	Acetylcholine field effect transistor
ENFET	Enzyme modified field effect transistor
ISFET	Ion sensitive field effect transistor
MOSFET	Metal oxide semiconductor field effect transistor
CNT	Carbon nanotube
ITO	Indium tin oxide
ZnO	Zinc oxide
PEI	Polyethylene imine
HfO_2	Hafnium dioxide
PDMS	Polydimethysilxane
PBS	Phosphate buffer saline
NiO	Nickel oxide
CH	Chitosan
AgCl	Silver chloride
DMM	Digital Multimeter
E-MOSFET	Enhancement MOSFET

JLCNTFET	Junctionless Carbon nanotube Field effect transistor
GA	Genetic Algorithm
PSO	Particle Swarm Optimisation
FA	Firefly Algorithm
g_{ds}	Conductance
V_{DS}	Drain Source Voltage
V_{GS}	Gate voltage
I_D	Drain current
V_{TH}	Threshold voltage