**Code file legend**

CaTcustom: hpp file containing code for T type calcium current

HCurrentcustom: hpp file containing code for hyperpolarization-activated current

markovNA: hpp file containing code for transient Na current

NaP\_V2: hpp file containing code for persistent Na current

optifastK\_GHK: hpp file containing code for fast K current

optiSlowKV5: hpp file containing code for slow K current  
testcond: hpp file containing code for residual K current

These conductance files are written in C++ and can be added to xolotl neuron objects. Parameter values used for models are listed in Tables 4, 5, and 6.