Preface

Neuromodulation is the physiological process by which a given neuron uses one or more chemicals to regulate diverse populations of neurons. Neuromodulators typically bind to metabotropic, G-protein coupled receptors (GPCRs) to initiate a second messenger signaling cascade that induces a broad, long-lasting signal. This modulation can last for hundreds of milliseconds to several minutes. Some of the effects of neuromodulators include altering intrinsic firing activity, increasing or decreasing voltage-dependent currents, altering synaptic efficacy, increasing bursting activity and reconfiguring synaptic connectivity.[i]

In the present book, thirteen typical literatures about neuromodulation published on international authoritative journals were selected to introduce the worldwide newest progress, which contains reviews or original researches on neuromodulation. We hope this book can demonstrate advances in neuromodulation as well as give references to the researchers, students and other related people.

The Editorial Board of Academic Archives

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[i] https://en.wikipedia.org/wiki/Neuromodulation