Record Nr. UNINA9910964078803321 Autore Steriade Mircea Titolo Gating in cerebral networks / / Mircea Steriade, Denis Pare Cambridge:,: Cambridge University Press,, 2007 Pubbl/distr/stampa **ISBN** 1-107-16523-7 1-281-08542-1 9786611085421 1-139-13130-3 0-511-34234-9 0-511-34127-X 0-511-34125-3 0-511-54173-2 0-511-34287-X Edizione [1st ed.] 1 online resource (viii, 331 pages) : digital, PDF file(s) Descrizione fisica Disciplina 612.82 Soggetti Neural networks (Neurobiology) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Title from publisher's bibliographic system (viewed on 05 Oct 2015). Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Morphology and electroresponsive properties of thalamic neurons --Morphology and electroresponsive properties of neocortical cells --The amygdala -- Rhinal and medial prefrontal cortices --Neuromodulation and state-dependent activities in forebrain neuronal circuits -- Gating of signals in slow-wave sleep -- Neuronal processes and cognitive functions in brain-active states of waking and REM sleep -- Comparison of state-dependent activity patterns in the thalamocortical, hippocampal, and amygdalocortical systems --Neuronal substrates of some mental disorders. The correct functioning of the mammalian brain depends on the Sommario/riassunto integrated activity of myriad neuronal and non-neuronal cells. Discrete areas serve discrete functions, and dispersed or distributed communities of cells serve others. Throughout, these networks of activity are under the control of neuromodulatory systems. One goal of

current neuroscientific research is to elucidate the precise methods by

which these systems operate, especially during normal conscious behaviours and processes. Mircea Steriade and Denis Pare describe the neuronal properties and networks that exist within and between the cortex and two important sub-cortical structures: the thalamus and amygdala. The authors explore the changes in these properties, covering topics including morphology, electrophysiology, architecture and gating; and comparing regions and systems in both normal and diseased states. Aimed at graduates and postdoctoral researchers in neuroscience.