

1. Record Nr.	UNINA9910452093703321
Autore	Steriade Mircea
Titolo	Gating in cerebral networks // Mircea Steriade, Denis Pare [[electronic resource]]
Pubbl/distr/stampa	Cambridge : , : Cambridge University Press, , 2007
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
Descrizione fisica	1 online resource (viii, 331 pages) : digital, PDF file(s)
Disciplina	612.82
Soggetti	Neural networks (Neurobiology)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from publisher's bibliographic system (viewed on 05 Oct 2015).
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.
Sommario/riassunto	The correct functioning of the mammalian brain depends on the 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.
