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Nota di contenuto	1. Pioneering steps in studies on sleep and epilepsy 2. Neuronal types and circuits in sleep and epilepsy 3. Neuronal properties, network operations and behavioral signs during sleep states and wakefulness 4. Plastic changes in thalamocortical systems developing from low-frequency sleep oscillations 5. Neuronal mechanisms of seizures.
Sommario/riassunto	Different states of vigilance and various paroxysmal disorders that occur during slow-wave sleep can have the same neural bases. Conventional wisdom holds that sleep is a resting state of the brain, with negligible activity of cortical neurons. Here, the author brings new evidence favoring the idea that during this behavioral state memory traces acquired during waking are consolidated. The author focuses on the coalescence of different sleep rhythms in interacting

corticothalamic networks and on three types of paroxysmal disorders, namely spike-wave seizures as in absence epilepsy, Lennox-Gastaut seizures, and temporal-lobe epilepsy. Many physiological correlates of waking and sleep states as well as diverse types of epileptic seizures are also discussed. The book has copious illustrations with examples from in vivo, in vitro and 'in computo' studies, the majority coming from the author's own laboratory. Neuronal Substrates of Sleep and Epilepsy is essential reading for neuroscientists and clinical researchers.