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Autore	Jang Jaeson
Titolo	Emergence of Functional Circuits in the Early Visual Pathway // by Jaeson Jang, Se-Bum Paik
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Descrizione fisica	1 online resource (138 pages)
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Disciplina	612.82
Soggetti	Neurotechnology (Bioengineering) Neural circuitry Developmental neurobiology Computational neuroscience Learning - Physiological aspects Memory - Physiological aspects Neuroengineering Neural Circuits Development of the Nervous System Computational Neuroscience Learning and Memory
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Topographical consistency of cortical maps -- Orthogonal organization of visual cortex -- Parametric classifications of cortical organization -- Discussion: Biological plausibility of the model.
Sommario/riassunto	This book discusses the emergence of diverse functional organizations in the visual pathway which could be spontaneously and solely initiated by the random feedforward wiring of neural circuits. It demonstrates that the structure of ON and OFF retinal ganglion cell (RGC) mosaics is projected onto V1 by retino-cortical feedforward mapping to induce higher cognitive functions. This book will be beneficial for both theoretical and experimental neuroscientists, as well as for researchers using brain-inspired neural network models.

