

1. Record Nr.	UNISA996465830703316
Titolo	Biomimetic Neural Learning for Intelligent Robots [[electronic resource]] : Intelligent Systems, Cognitive Robotics, and Neuroscience // edited by Stefan Wermter, Günther Palm, Mark Elshaw
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2005
Edizione	[1st ed. 2005.]
Descrizione fisica	1 online resource (IX, 383 p.)
Collana	Lecture Notes in Artificial Intelligence ; ; 3575
Disciplina	629.8/92632
Soggetti	Robotics Automation Cognitive psychology Neurosciences Artificial intelligence Computer science Special purpose computers Robotics and Automation Cognitive Psychology Artificial Intelligence Computer Science, general Special Purpose and Application-Based Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Proceedings of the International AI-Workshop on NeuroBotics held in 2004.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Towards Biomimetic Neural Learning for Intelligent Robots -- Towards Biomimetic Neural Learning for Intelligent Robots -- I: Biomimetic Multimodal Learning in Neuron-Based Robots -- The Intentional Attunement Hypothesis The Mirror Neuron System and Its Role in Interpersonal Relations -- Sequence Detector Networks and Associative Learning of Grammatical Categories -- A Distributed Model of Spatial Visual Attention -- A Hybrid Architecture Using Cross-Correlation and Recurrent Neural Networks for Acoustic Tracking in Robots -- Image Invariant Robot Navigation Based on Self Organising Neural Place Codes

-- Detecting Sequences and Understanding Language with Neural Associative Memories and Cell Assemblies -- Combining Visual Attention, Object Recognition and Associative Information Processing in a NeuroBotic System -- Towards Word Semantics from Multi-modal Acoustico-Motor Integration: Application of the Bijama Model to the Setting of Action-Dependant Phonetic Representations -- Grounding Neural Robot Language in Action -- A Spiking Neural Network Model of Multi-modal Language Processing of Robot Instructions -- II: Biomimetic Cognitive Behaviour in Robots -- A Virtual Reality Platform for Modeling Cognitive Development -- Learning to Interpret Pointing Gestures: Experiments with Four-Legged Autonomous Robots -- Reinforcement Learning Using a Grid Based Function Approximator -- Spatial Representation and Navigation in a Bio-inspired Robot -- Representations for a Complex World: Combining Distributed and Localist Representations for Learning and Planning -- MaximumOne: An Anthropomorphic Arm with Bio-inspired Control System -- LARP, Biped Robotics Conceived as Human Modelling -- Novelty and Habituation: The Driving Forces in Early Stage Learning for Developmental Robotics -- Modular Learning Schemes for Visual Robot Control -- Neural Robot Detection in RoboCup -- A Scale Invariant Local Image Descriptor for Visual Homing.
