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Descrizione fisica	1 online resource (237 pages)
Collana	Communications in Computer and Information Science, , 1865-0937 ; ; 1692
Disciplina	006.3
Soggetti	Artificial intelligence Application software Image processing - Digital techniques Computer vision Computer science - Mathematics Artificial Intelligence Computer and Information Systems Applications Computer Imaging, Vision, Pattern Recognition and Graphics Mathematics of Computing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	AI for brain related data analysis -- Classification of EEG signals based on GA-ELM Optimization algorithm -- Delving into Temporal-Spectral Connections in Spike-LFP Decoding by Transformer Networks -- A Mask Image Recognition Attention Network Supervised by Eye Movement -- DFC-SNN: A new approach for the recognition of brain states by fusing brain dynamics and spiking neural network -- DSNet: EEG-Based Spatial Convolutional Neural Network for Detecting Major Depressive Disorder -- SE-1DCNN-LSTM: A Deep Learning Framework for EEG-based Automatic Diagnosis of Major Depressive Disorder and Bipolar Disorder -- Emotion Recognition from EEG Using All-Convolution Residual Neural Network -- Salient Object Detection With Fusion of RGB Image and Eye Tracking Data -- Multi-Source Domain

Adaptation Based on Data Selector with Soft Actor-Critic -- Transfer learning to decode brain states reflecting the relationship between cognitive tasks -- Aland brain interface -- Brain network analysis of hand motor execution and imagery based on conditional Granger causality -- A Hybrid Brain-Computer Interface for Smart Car Control -- A spiking neural network for brain-computer interface of four classes motor imagery -- Virtual Drone Control Using Brain-Computer Interface based on Motor Imagery Brain Magnetic Fields -- Brain controlled manipulator system based on improved target detection and Augmented Reality technology -- Optimization of stimulus color for SSVEP-based brain-computer interfaces in mixed reality -- Brain related research -- White matter maturation and hemispheric asymmetry during childhood based on Chinese population -- A Digital Gaming Intervention Combing Multitasking and Alternating Attention for ADHD: a preliminary study -- A BCI speller with 120 commands encoded by hybrid P300 and SSVEP features.

Sommario/riassunto

This book constitutes the refereed proceedings of the Third International Workshop on Human Brain and Artificial Intelligence, HBAI 2022, held in conjunction with IJCAI-ECAI 2022, Vienna, Austria, on July 23, 2022. The 19 full papers presented were carefully reviewed and selected from 21 submissions. The papers present most recent research in the fields of brain-inspired computing, brain-machine interfaces, computational neuroscience, brain-related health, neuroimaging, cognition and behavior, learning, and memory, neuron modulation, and closed-loop brain stimulation.
