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	Titolo	Brain-Computer Interface Research : A State-of-the-Art Summary 6 / / edited by Christoph Guger, Brendan Allison, Mikhail Lebedev
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	Descrizione fisica	1 online resource (134 pages) : illustrations (some color), photographs
	Collana	SpringerBriefs in Electrical and Computer Engineering, , 2191-8112
	Disciplina	610.28
	Soggetti	User interfaces (Computer systems) Neurosciences Medical physics Radiation Computational intelligence User Interfaces and Human Computer Interaction Medical and Radiation Physics Computational Intelligence
	Lingua di pubblicazione	Inglese
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	Livello bibliografico	Monografia
	Nota di bibliografia	Includes bibliographical references at the end of each chapters.
	Nota di contenuto	Introduction (C. Guger et al.) -- Advances in BCI: A Neural Bypass Technology to Reconnect the Brain to the Body (G. Sharma et al.) -- Re (con)volution: Accurate Response Prediction for Broad-Band Evoked Potential-Based BCIs (J. Thielen et al.) -- Intracortical Microstimulation as a Feedback Source for BCI Users (S. Flesher et al.) -- A Minimally Invasive Endovascular Stent-Electrode Array for Chronic Recordings of Cortical Neural Activity (T. J. Oxley et al.) -- Visual Cue-Guided Rat Cyborg (Y. Wang et al.) -- Predicting Motor Intentions with Closed-Loop BCIs (M. Schultze-Kraft et al.) -- Sixteen Commands and 40 Hz Carrier Frequency Code-Modulated Visual Evoked Potential BCI (D. Aminaka et al.) -- Precise and Reliable Activation of Cortex with Micro-Coils (S. Woo Lee et al.) -- Towards Online Functional Brain Mapping and Monitoring During Awake Craniotomy Surgery Using ECoG-Based Brain-Surgeon Interface (BSI) (L. Yao et al.).
	Sommario/riassunto	This book presents compact and informative descriptions of the most

promising new projects in brain-computer interface (BCI) research. As in earlier volumes in this series, the contributions come from many of the best-known groups in BCI research. Each of these chapters provides an overview of a project that was nominated for the most prestigious award in the BCI community: the Annual BCI Research Award. The book also contains an introduction and discussion with a review of major trends reflected in the awards. This volume also introduces a new type of contribution, namely a chapter"Trends in BCI Research" that summarizes a top trend in the BCI research community. This year's "Trends in BCI Research" addresses BCI technology to help patients with disorders of consciousness (DOC) and related conditions, including new work that goes beyond communication to diagnosis and even prediction.