1. Record Nr. UNINA9910254319203321

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Titolo	Industrial Neuroscience in Aviation : Evaluation of Mental States in Aviation Personnel / / by Gianluca Borghini, Pietro Aricò, Gianluca Di Flumeri, Fabio Babiloni
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-58598-3
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XIII, 147 p. 44 illus., 39 illus. in color.)
Collana	Biosystems & Biorobotics, , 2195-3562 ; ; 18
Disciplina	610.28
Soggetti	Biomedical engineering Quality control Reliability Industrial safety Psychology, Experimental Neurosciences Aerospace engineering Astronautics Biomedical Engineering and Bioengineering Quality Control, Reliability, Safety and Risk Experimental Psychology Aerospace Technology and Astronautics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	From the Content: Introduction -- Preliminary Concepts -- Mental States in Aviation.
Sommario/riassunto	This book discusses the emerging field of industrial neuroscience, and reports on the authors' cutting-edge findings in the evaluation of mental states, including mental workload, cognitive control and training of personnel involved either in the piloting of aircraft and helicopters, or in managing air traffic. It encompasses neuroimaging and cognitive psychology techniques and shows how they have been successfully applied in the evaluation of human performance and

human-machine interactions, and to guarantee a proper level of safety in such operational contexts. With an introduction to the most relevant concepts of neuroscience, neurophysiological techniques, simulators and case studies in aviation environments, it is a must-have for both students and scientists in the field of aeronautic and biomedical engineering, as well as for various professionals in the aviation world. This is the first book to intensively apply neurosciences to the evaluation of human factors and mental states in aviation.