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   Sommario/riassunto This reprint is dedicated to the study of brain activity related to emotional and attentional involvement as measured by Brain-computer interface (BCI) systems designed for different purposes. A BCI system can translate brain signals (e.g., electric or hemodynamic brain activity indicators) into a command to execute an action in the BCI application (e.g., a wheelchair, the cursor on the screen, a spelling device or a game). These tools have the advantage of having real-time access to the ongoing brain activity of the individual, which can provide insight into the user's emotional and attentional states by training a classification algorithm to recognize mental states. The success of BCI systems in contemporary neuroscientific research relies on the fact that they allow one to "think outside the lab". The integration of technological solutions, artificial intelligence and cognitive science allowed and will allow researchers to envision more and more applications for the future. The clinical and everyday uses are described with the aim to invite readers to open their minds to imagine potential further developments.