1. Record Nr.   UNINA9910299588003321

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   Titolo   Musicality of Human Brain through Fractal Analytics / / by Dipak Ghosh, Ranjan Sengupta, Shankha Sanyal, Archi Banerjee

   Pubbl/distr/stampa Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2018

   ISBN   981-10-6511-X

   Edizione   [1st ed. 2018.]

   Descrizione fisica 1 online resource (XVII, 232 p. 119 illus., 111 illus. in color.)

   Collana   Signals and Communication Technology, , 1860-4870

   Disciplina   621.382

   Soggetti   Signal processing
                     User interfaces (Computer systems)
                     Human-computer interaction
                     Neurosciences
                     Neuropsychology
                     Signal, Speech and Image Processing
                     User Interfaces and Human Computer Interaction
                     Neuroscience

   Lingua di pubblicazione Inglese

   Formato   Materiale a stampa

   Livello bibliografico Monografia

   Nota di bibliografia Includes bibliographical references.

   Nota di contenuto Introduction -- Methodology -- Emotions from Hindustani Classical Music: An EEG based study with evidence of neural hysteresis -- Musical perception and visual imagery: Do musicians visualize while performing? -- Tanpura drone and brain dynamics: How a simple acoustic signal affects brain rhythms -- In search of universality of music: effect of cross cultural instrumental clips -- Gestalt phenomenon in music: which frequencies do we hear? -- Quantification of musical emotion with neural jitter-shimmer: novel study with hindustani music -- An approach to encapsulate improvisation in hindustani classical music -- Ambiguity in hindustani classical music: development of an automated algorithm to asses ambiguity -- Computing the pitch of an EEG signal: a new paradigm in analysis of bio-signals -- Epilogue.

   Sommario/riassunto This book provides a comprehensive overview of how fractal analytics can lead to the extraction of interesting features from the complex electroencephalograph (EEG) signals generated by Hindustani classical

music. It particularly focuses on how the brain responses to the emotional attributes of Hindustani classical music that have been long been a source of discussion for musicologists and psychologists. Using robust scientific techniques that are capable of looking into the most intricate dynamics of the complex EEG signals, it deciphers the human brain's response to different ragas of Hindustani classical music, shedding new light on what happens inside the performer's brain when they are mentally composing the imagery of a particular raga. It also explores the much- debated issue in the musical fraternity of whether there are any universal cues in music that make it identifiable for people throughout the world, and if so, what are the neural correlates associated with the universalcues? This book is of interest to researchers and scholars of music and the brain, nonlinear science, music cognition, music signal processing and music information retrieval. In addition, researchers in the field of nonlinear biomedical signal processing and music signal analysis benefit from this book. .