Early Detection and Rehabilitation Technologies for Dementia: Neuroscience and Biomedical Applications

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Dementia is a progressive neurodegenerative disease, of which Alzheimer’s disease (AD) is the most frequent cause. AD is characterized by the progressive formation of insoluble amyloid plaques and vascular deposits of amyloid beta peptide in the brain. AD patients suffer from a loss of neurons and synapses in the cerebral cortex and certain sub-cortical regions.

Early Detection and Rehabilitation Technologies for Dementia: Neuroscience and Biomedical Applications provides a comprehensive collection for experts in the Neuroscience and Biomedical technology fields. Outlining various concepts from cognitive neuroscience and dementia to neural technology and rehabilitation; this book proves to bring together researchers and practitioners from diverse fields, in order to promote scientific research and industrial development in the field of early detection and rehabilitation technology of dementia.

Topics Covered:
- Alzheimer disease and other dementias
- Apraxia, dyslexia, and other neuron diseases
- Attention, memory, language, and other higher functions
- Brain-machine interface and rehabilitation
- Clinical technology for neurology
- Imaging and pathologic diagnosis
- Imaging cognitive neuroscience
- Neural and cognitive rehabilitations
- Rehabilitation robotics and biomechatronics
- Social medicine and dementia

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Market: This premier publication is essential for all academic and research library reference collections. It is a crucial tool for academicians, researchers, and practitioners and is ideal for classroom use.
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- Jiang Yinlai (Department of Intelligent Mechanical Systems Engineering, Kochi University of Technology, Japan)
- Wang Shuoyu (Department of Intelligent Mechanical Systems Engineering, Kochi University of Technology, Japan)

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