

【Engineering】

<b>Title of Project</b>	Identification of Epileptogenic Focus by Employing Softcomputing and Establishment of Minimally Invasive and Definitive Surgery
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<b>Abstract of Research Project</b> <b>Number of Researchers : 5</b> <b>Term of Project: 2008–2011</b>	Epilepsy is a chronic brain disorder characterized by recurrent seizures. The seizure is shot down by the surgical removal of the region which is so called “epileptogenic focus”. However, the accuracy to detect the focus is not good (order of cm). Thus the extirpation of origin with significant margin causes the removal of healthy brain and leads to the severe aftereffects such as restricted vision, motor dysfunction, disorder of memory, and so on. To cope with this problem, we should develop the technology of (1) detecting the epileptogenic focus, and (2) necrotizing the epileptogenic focus excluding healthy brain by (a) colliquative necrosis with flash freezing or (b) cauterizing by focused laser beam.