

عنوان مقاله:

Estimation of Feedback for Magneto Hydro Dynamics (MHD) Instability Controller of Plasma

محل انتشار:

سومین کنفرانس بین المللی مهندسی دانش بنیان و نوآوری (سال: 1395)

تعداد صفحات اصل مقاله: 5

نویسندگان:

Mehdi Davoudi - *Department of Electrical and Computer Engineering Buein Zahra Technical University, Buein Zahra, Qazvin, Iran*

Mohsen Davoudi - *Department of Electrical Engineering Imam Khomeini International University Qazvin, ۳۴۱۴۸-۹۶۸۱۸, Iran*

خلاصه مقاله:

Abstract—In this paper a Bayesian theory based method is presented to estimate how much Electron Cyclotron Heating (ECH) power is deposited accurately on the expected deposition area inside Tokamak. The deposition area is attributed by a minor radius (rDEP) and this paper introduces an innovative method for its estimation. It is done by processing the measurement signals that are gathered from Electron Cyclotron Emission (ECE) channels. The method observes the data from ECE channels for determining the amount of ECH power deposition on the expected deposition area in plasma. To show the efficiency of the method, it has been tested on a sample offline ECE channels data that has been acquired from the experimental shots at FTU in Frascati, Italy

کلمات کلیدی:

Estimation; Bayesian Filter; Plasma Control; Data Fusion; Tokamak

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/623021>

