

Abstract
Author
keywords

Scopus



Sustainable Development
Back to results | 1 of 1

Goals 2023
Download Print Save to PDF Add to List Create bibliography

SciVal

Topics **Advances in Electrical and Computer Engineering** • Open Access • Volume 22, Issue 3 • 2022

Metrics

Document type

Article • Gold Open Access

Source type

Journal

ISSN

15827445

DOI

10.4316/AECE.2022.03001

View more

On Board Neuro Fuzzy Inverse Optimal Control for Type 1 Diabetes Mellitus Treatment: In-Silico Testing

Rios, Yuliana^a; Garcia-Rodriguez, Julio^b ; Sanchez, Edgar^c; Alanis, Alma^d; Ruizvelazquez, Eduardo^d; Pardo-García, Aldo^e

Save all to author list

^a GAICO, Grupo de Automatización y Control, Universidad Tecnológica de Bolívar Cartagena de Indias, Bolívar, Colombia

^b CUSUR, División de Ciencias Exactas, Naturales y Tecnológicas, Universidad de Guadalajara, Jalisco, Ciudad Guzmán, Mexico

^c CINVESTAV, Departamento de Eléctrica y Electrónica, Jalisco, Zapopan, Mexico

^d CUCEI, División de Tecnologías para la Integración Ciber-Humana, Universidad de Guadajara, Jalisco, Guadalajara, Mexico

View additional affiliations

17

Views count

View all metrics

Cited by 0 documents

Inform me when this document is cited in Scopus:

Set citation alert

Related documents

Neuro-fuzzy control for artificial pancreas: In silico development and validation | Control neuro-fuzzy para páncreas artificial: Desarrollo y validación in-silico

Rios, Y. , Garcia-Rodríguez, J. , Sanchez, E. (2021) *RIAI - Revista Iberoamericana de Automatica e Informatica Industrial*

Neuro-fuzzy control for artificial pancreas: In silico development and validation | Control neuro-fuzzy para páncreas artificial: Desarrollo y validación in-silico

Rios, Y. , García-Rodríguez, J. , Sanchez, E. (2020) *RIAI - Revista Iberoamericana de Automatica e Informatica Industrial*

Treatment for T1DM patients by a neuro-fuzzy inverse optimal controller including multi-step prediction

Rios, Y.Y. , García-Rodríguez, J.A. , Sanchez, E.N. (2022) *ISA Transactions*

View all related documents based on references

Find more related documents in Scopus based on:

Authors > Keywords >

Abstract

Type 1 Diabetes Mellitus (T1DM) is one of the most adverse diseases in the modern era; its treatment is mainly based on exogenous insulin injections. The scientific community has formulated strategies to improve insulin supply using state-of-the-art technology. Therefore, this article develops a multi-age glycemic control scheme, which can be implemented in an Artificial Pancreas (AP) device to enhance diabetics treatment. The procedure is based on the implementation of a neuro-fuzzy inverse optimal control (NFIOC) algorithm on the Texas Instrument LAUNCHXL28069M development board; this