

# Web of Science

Search

Search Results

My Tools ▼

Search History

Marked List 10

 Look Up Full Text

Save to EndNote online ▼

Add to Marked List

22 of 27

## EXPERIMENTS IN FUZZY CONTROLLER TUNING BASED ON AN ADAPTIVE GRAVITATIONAL SEARCH ALGORITHM

By: [Precup, RE](#) (Precup, Radu-Emil)<sup>[1]</sup>; [David, RC](#) (David, Radu-Codrut)<sup>[1]</sup>; [Petriu, EM](#) (Petriu, Emil M.)<sup>[2]</sup>; [Preitl, S](#) (Preitl, Stefan)<sup>[1]</sup>; [Radac, MB](#) (Radac, Mircea-Bogdan)<sup>[1]</sup>

[View ResearcherID and ORCID](#)

PROCEEDINGS OF THE ROMANIAN ACADEMY SERIES A-MATHEMATICS PHYSICS TECHNICAL SCIENCES INFORMATION SCIENCE

Volume: 14 Issue: 4 Pages: 360-367

Published: OCT-DEC 2013

[View Journal Impact](#)

### Abstract

This paper presents aspects concerning the implementation of the Gravitational Search Algorithm (GSA) in the optimal tuning of fuzzy controllers (TSK PI-FCs) are designed and tuned. The adaptive GSA is based on five stages to solve the optimization problem. The results depend on output sensitivity functions. TSK PI-FCs were thus offered. A set of illustrative experiments is given for a laboratory servo system application.

### Keywords

Author Keywords: [experiments](#); [fuzzy controllers](#); [C](#)

### Citation Network

[4 Times Cited](#)[46 Cited References](#)[View Related Records](#)[Create Citation Alert](#)

(data from Web of Science Core Collection)

PROCEEDINGS OF THE ROMANIAN ACADEMY SERIES  
A-MATHEMATICS PHYSICS TECHNICAL SCIENCES INFORMATION  
SCIENCE

### Impact Factor

**1.623** **1.004**  
2016 5 year

JCR® Category	Rank in Category	Quartile in Category
MULTIDISCIPLINARY SCIENCES	<b>23 of 64</b>	<b>Q2</b>

Data from the 2016 edition of [Journal Citation Reports](#)

[Section](#)[Index](#)

**KeyWords Plus:** [MOBILE-ROBOT](#); [CONTROL-SYS](#)  
[OPTIMIZATION](#); [CAPABILITIES](#); [SIMULATION](#); [TRA](#)

## Author Information

**Reprint Address:** Precup, RE (reprint author)

+ Politehn Univ Timisoara, Dept Automat & Appl I  
Romania.

### Addresses:

+ [ 1 ] Politehn Univ Timisoara, Dept Automat & A

+ [ 2 ] Univ Ottawa, Sch Elect Engrn & Comp Sci, Ottawa, ON K1N 6N5, Canada

**E-mail Addresses:** [radu.precup@aut.upt.ro](mailto:radu.precup@aut.upt.ro)

## Funding

Funding Agency	Grant Number
Romanian National Authority for Scientific Research	
CNCS-UEFISCDI	
NSERC of Canada	
	PN-II-ID-PCE-2011-3-0109

[View funding text](#)

## Publisher

EDITURA ACAD ROMANE, CALEA 13 SEPTEMBRIE NR 13, SECTOR 5, BUCURESTI 050711,  
ROMANIA

## Categories / Classification

**Research Areas:** Science & Technology - Other Topics

**Web of Science Categories:** Multidisciplinary Sciences

## Document Information

### Publisher

EDITURA ACAD ROMANE, CALEA 13 SEPTEMBRIE NR 13, SECTOR 5, BUCURESTI  
050711, ROMANIA

**ISSN:** 1454-9069

### Research Domain

Science & Technology - Other Topics

Close Window

TECHNICAL SCIENCES  
INFORMATION SCIENCE, OCT-  
DEC 2014.

[View All](#)

**This record is from:**  
**Web of Science Core Collection**  
- Science Citation Index Expanded

### Suggest a correction

If you would like to improve the quality  
of the data in this record, please  
[suggest a correction](#).

**Document Type:** Article

**Language:** English

**Accession Number:** WOS:000328441500013

**ISSN:** 1454-9069

## Journal Information

**Impact Factor:** [Journal Citation Reports](#)

## Other Information

**IDS Number:** 272DW

**Cited References in Web of Science Core Collection:** [46](#)

**Times Cited in Web of Science Core Collection:** [4](#)

22 of 27