Extrica Lournals Engineering

December 2023 VOLUME 4 ISSUE 2 PAGES 47-132

Electrical and Electronic Engineering

Multidisciplinary Engineering

Mechanical Engineering

Journal of Mechatronics and Artificial Intelligence in Engineering



OPEN ACCESS JOURNALS

Editor in Chief

Sezgin Ersoy **Editorial Board** Kemal Adem Majida Ahmed Mehmet Akar Talha Boz Rafał Burdzik Ali El-Hafidi H. Ali Ertas Akın Emrecan Gök Jagannath Jadhav Durmuş Karayel Cemil Közkurt Sathish Kumar Hilmi Kuşçu Qing Li Pooyan Makvandi Ehsan Nazarzadeh Zare Grigory Panovko

Aydin Shishegaran Mücahit Soyaslan Ersin Toptaş Conka Yildiz Tuba Tayyab Waqar Oğuz Yakut Işil Yazar Sahin Yıldırım

Technische Universität Braunschweig, (Germany)

Aksaray University, (Turkey) University of Technology, (Iraq) Tokat Gaziosmanpaşa University, (Turkey) Marmara University, (Turkey) Silesian University of Technology, (Poland) Université de Bourgogne, (France) Sivas Cumhuriyet University, (Turkey) İstanbul University, (Turkey) KLE College of Engineering and Technology, (India) Sakarya University of Applied Science, (Turkey) Bandirma University, (Turkey) M. Kumarasamy College of Engineering, (India) Trakya University, (Turkey) Anhui Agricultural University, (China) National Research Council of Italy, (Italy) Damghan University, (Iran) Mechanical Engineering Research Institute of the Russian Academy of Sciences, (Russia) Bauhaus University Weimar,, (Iran) Sakarya University of Applied Science, (Turkey) Marmara University, (Turkey) European XFEL GmbH, (Germany) Marmara University, (Turkey) Firat University, (Turkey) Eskisehir Osmangazi University, (Turkey) Erciyes University, (Turkey)

sersoy@marmara.edu.tr

kemaladem@aksarav.edu.tr 50234@uotechnology.edu.iq mehmet.akar@gop.edu.tr talha.boz@marmara.edu.tr rafal.burdzik@polsl.pl ali.el-hafidi_isat@u-bourgogne.fr ertas@cumhuriyet.edu.tr agok@ogr.iu.edu.tr jagannathjadhav123@gmail.com dkarayel@subu.edu.tr ckozkurt@bandirma.edu.tr ssk@jit.ac.in hilmi@trakya.edu.tr qingli@ahau.edu.cn pooyan.makvandi@ipcb.cnr.it ehsan.nazarzadehzare@gmail.com gpanovko@yandex.ru

aydinshishegaranam@gmail.com msoyaslan@subu.edu.tr etoptas@marmara.edu.tr tuba.conka@xfel.eu tayyabwaqar@live.com oyakut@firat.edu.tr iyazar@ogu.edu.tr sahiny@erciyes.edu.tr

JMAI Journal of Mechatronics and Artificial Intelligence in Engineering

Aims and Scope

JMAI publishes original theoretical and/or experimental work and tutorial expositions of permanent reference value. The aim of the Journal is to present the state of the art, recent advances and practical applications of Mechatronics. Its scope encompasses all practical aspects of the theory and methods of mechatronics.

The list of principal topics:

- Automotive
- MEMS/NEMS
- Electronics
- Image processing
- Intelligent artificial
- Information theory
- Electrical systems
- Power electronics
- Control theory
- Embedded systems
- Robotics
- Motion control
- Stochastic modeling
- System design
- All published papers are peer reviewed and crosschecked by plagiarism detection tools.

More information is available online https://www.extrica.com/journal/jmai

The journal material is referred:

EBSCO: https://www.ebsco.com Scilit: https://www.scilit.net Dimensions: https://www.dimensions.ai Google Scholar: https://scholar.google.com JGate: https://jgateplus.com Scientific Indexing Services: https://www.sindexs.org ASOS Indeks: https://asosindex.com.tr CORE: https://core.ac.uk Ulrich's Periodicals Directory: https://ulrichsweb.serialssolutions.com CNKI Scholar: http://eng.scholar.cnki.net cnpLINKer (CNPIEC): http://cnplinker.cnpeak.com WanFang Data: https://www.wanfangdata.com.cn TDNet: https://www.tdnet.io CiteFactor: https://www.citefactor.org ResearchBib: https://journalseeker.researchbib.com Directory of Research Journals Indexing: http://olddrji.lbp.world EuroPub: https://europub.co.uk Advanced Sciences Index (ASI): https://www.journal-index.org WorldCat Discovery Services: https://www.oclc.org/en/worldcat-discovery.html MyScienceWork: https://www.mysciencework.com Crossref: https://search.crossref.org

Content is archived in Martynas Mazvydas National Library of Lithuania

Internet:	https://www.extrica.com
E-mail:	publish@extrica.com
Publisher:	Extrica

ISSN ONLINE 2669-1116

- Computer engineering
- Optical engineering
- Design optimization
- Material science
- Metamaterials
- Multidisciplinary engineering
- Design and manufacture of industrial products and processes
- 2D materials heat and mass transfer, kinematics
- Dynamics
- Thermo-dynamics
- Energy and applications, renewable energy
- Environmental impacts
- Structural analysis
- Fluid dynamics

JMAI Journal of Intelligence in Artificial Intelligence in Engineering Journal of Mechatronics and

DECEMBER 2023. VOLUME 4, ISSUE 2, PAGES (47-132), ISSN ONLINE 2669-1116

Contents

ELECTRO-EROSION FAULT IDENTIFICATION OF MOTOR BEARING BASED ON ASMOTE-CFR HUAN KE CHENG	47
THE AI VANTAGE: AN EXPOSITION OF GLOBAL DYNAMICS Rohan Kishor, Bhumeshwar Patle, Praveen Bhojane	58
CHALLENGES AND OPPORTUNITIES FOR ENHANCED PATIENT CARE WITH MOBILE ROBOTS IN HEALTHCARE Sushil Kumar Sahoo, Bibhuti Bhusan Choudhury	83
DESIGN AND ANALYSIS OF A 4-AXIS CARTESIAN ROBOT FOR UNLOADING PLASTIC INJECTION MACHINES IN INDUSTRIAL APPLICATIONS YIĞIT DAĞDELEN, FIKRET AKYÜZ, AHMET FEYZIOĞLU, ERSIN TOPTAŞ	104
THE OPTIMIZATION MODEL OF WHOLE PROCESS ENGINEERING CONSULTING CONSORTIUM MEMBERS BASED ON Z-NUMBER Zecheng Liu, Jianyu Chu, Jinjian Du	112
MATERIAL SELECTION IN SENSOR DESIGN FOR ADDITIVE MANUFACTURING Başak Aktaş, Talha Şahin, Ersin Toptaş, Aydın Güllü, Ahmet Feyzioğlu, Sezgin Ersoy	122

SHORT DESCRIPTION ABOUT THIS CATEGORY

Expositions of permanent reference value in the general area of mechatronics, including different applications in mechanical and electrical engineering based on artificial intelligence. The aim of the Journal is to present the state of the art, recent advances and practical applications of Mechatronics.





EXTRICA.COM