Special Issue

Intelligent Propulsion Systems and Energy Control

Message from the Guest Editors

The propulsion and energy management landscape is undergoing rapid transformation, driven by the need for sustainability, efficiency, and innovation. Traditional internal combustion engines (ICEs) face challenges such as knock detection, combustion optimization, and emission reduction, while emerging technologies like electric vehicles (EVs) and flying cars require advanced energy control systems. This Special Issue seeks to bridge these domains by highlighting interdisciplinary research that integrates machine learning (ML), electromechanical systems, and intelligent control to address current and future mobility challenges. This Special Issue aims to showcase cutting-edge advancements in propulsion technologies, focusing on two core areas: (1) the intelligent analysis and optimization of ICEs, including knock prediction, marine engine efficiency, and combustion dynamics, and (2) next-generation energy management strategies for intelligent EVs and flying cars.

Guest Editors

Dr. Hao Shi

Dr. Mohammad Alnajideen

Dr. Dongsheng Dong

Dr. Fuxing Wei

Deadline for manuscript submissions

28 February 2026

Machines

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 4.7

mdpi.com/si/238635

Machines
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
machines@mdpi.com

mdpi.com/journal/machines

Machines

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 4.7

mdpi.com/journal/machines

About the Journal

Message from the Editor-in-Chief

Machines is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications.
Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.
There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

Editor-in-Chief

Prof. Dr. Antonio J. Marques Cardoso
CISE - Electromechatronic Systems Research Centre, University of Beira Interior, Calçada Fonte do Lameiro, P-6201-001 Covilhã, Portugal

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Mechanical) / CiteScore - Q1 (Control and Optimization)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.9 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).