



Journal of Bioengineering, Technologies and Health

An Official Publication of
SENAI CIMATEC

XII SIINTEC

INTERNATIONAL SYMPOSIUM ON
INNOVATION AND TECHNOLOGY

 13th - 16th
OCT 2026

 Salvador, Bahia
Brazil



Currents of the Future:

ENERGY, CLIMATE,
AND GLOBAL
SUSTAINABILITY

JBTH

SIIN TEC XII

ISSN: 2764-5886 / e-ISSN 2764-622X

Volume 9 • Supplement 1 • October 2026



JOURNAL OF BIOENGINEERING TECHNOLOGIES AND HEALTH

An Official Publication of SENAI CIMATEC University

EDITOR-IN-CHIEF

Alex Álisson Bandeira Santos

XII SIINTEC

International Symposium on Innovation and Technology

13th - 16th October 2026 - Salvador / Bahia / Brazil

Currents of the Future: Energy, Climate, and Global Sustainability

PUBLISHED BY SENAI CIMATEC

Sistema FIEB



October 2026
Printed in Brazil

JOURNAL OF BIOENGINEERING TECHNOLOGIES AND HEALTH

An Official Publication of SENAI CIMATEC University

EDITOR-IN-CHIEF

Alex Álisson Bandeira Santos

DEPUTY EDITOR

Roberto Badaró

ASSISTANT DEPUTY EDITORS

Josiane Dantas Viana Barbosa (BR)

Lilian Lefol Nani Guarieiro (BR)

Valéria Loureiro (BR)

ASSOCIATE EDITORS

Alan Grodzinsky (US)

Bruna Aparecida Souza Machado (BR)

Carlos Coimbra (US)

Eduardo Mario Dias (BR)

Frank Kirchner (DE)

Jorge Almeida Guimarães (BR)

Milena Soares (BR)

Preston Mason (US)

Sanjay Singh (US)

Steven Reed (US)

Valter Estevão Beal (BR)

STATISTICAL ASSOCIATE EDITOR

Valter de Senna (BR)

EDITORIAL BOARD

Carlos Augusto Graboio Gadelha (BR)

Durvanei Augusto Maria (BR)

Eliane de Oliveira Silva (BR)

Erick Giovani Sperandio Nascimento (BR)

Fernando Pellegrini Pessoa (BR)

Francisco Uchoa Passos (BR)

George Tynan (US)

George Tynan (US)

Gilson Soares Feitosa (BR)

Gisele Olímpio da Rocha (BR)

Hercules Pereira (BR)

Herman Augusto Lepikson (BR)

Hermano Krebs (US)

Idelfonso Bessa dos Reis Nogueira (NO)

Immanuel Lerner (IR)

Ingrid Winkler (BR)

James Chong (KR)

Jeancarlo Pereira dos Anjos (BR)

José Elias Matieli (BR)

Joyce Batista Azevedo (BR)

Larissa da Silva Paes Cardoso (BR)

Lusiada Portugal (PT)

Luzia Aparecida Tofaneli (BR)

Maria Lúcia Rebello Pinho Dias (BR)

Mario de Seixas Rocha (BR)

Maximilian Serguei Mesquita (BR)

Regina de Jesus Santos (BR)

Renelson Ribeiro Sampaio (BR)

Roberto de Pinho (BR)

Rodrigo Santiago Coelho (BR)

Sanjay Mehta (US)

Vidal Augusto Zapparoli Castro Melo (BR)

Vilson Rosa de Almeida (BR)

PRODUCTION STAFF

Luciana Knop, Managing Editor

JOURNAL OF BIOENGINEERING TECHNOLOGIES AND HEALTH

Volume 9 • Supplement 1 • XII SIINTEC - International Symposium on Innovation and Technology • October 2026

PRESENTATION

The **XII International Symposium on Innovation and Technology (SIINTEC 2026)** — October 13 to 16, 2026, at SENAI CIMATEC, one of Latin America's leading centers for industrial research, education, and technological innovation in Salvador, Bahia, Brazil—brings together prominent experts from academia and industry to discuss technological advances and innovative solutions for a sustainable future.

Under the central theme “**Currents of the Future: Energy, Climate, and Global Sustainability**”, SIINTEC 2026 brings together researchers, industry leaders, policymakers, entrepreneurs, and students from around the world to discuss innovative solutions to some of the most pressing global challenges, including energy transition, climate change mitigation, sustainable industry, and digital transformation.

Since its creation in 2015, SIINTEC has become one of Brazil's most relevant forums for science, technology, and innovation, promoting strong collaboration between academia, industry, and government. Each edition gathers hundreds of researchers and professionals and has experienced continuous growth in international participation and scientific contributions.

SIINTEC 2026 features technical sessions with full-paper submissions, offering researchers the opportunity to present their latest scientific and technological advances. Accepted papers are presented during the symposium, and selected works are published in the scientific journal **The Journal of Bioengineering, Technologies and Health (JBTH)**:

<https://www.jbth.com.br/index.php/JBTH>

The symposium covers a broad range of multidisciplinary topics, including:

- Advanced Materials, Additive Manufacturing and Sustainable Engineering
- Digital Technologies and High Performance Computing
- Sustainable Energy, Storage, Environment and Decarbonization
- Sustainable Mobility, Aerospace Technologies and Intelligent Transportation Systems
- Health, Biotechnology and Health Technologies
- Urban Infrastructure and Smart Cities
- Automation, Robotics and Computational Intelligence
- Quantum Technologies and Secure Communication
- Ocean Technologies and Marine Sustainability
- Management, Entrepreneurship and Creative Innovation

Strategic Satellite Events

The 2026 edition features strategic satellite events, expanding the scope of the symposium and strengthening interdisciplinary collaboration. These events will bring specialized discussions, workshops, and forums addressing emerging technological and societal challenges, further enriching the SIINTEC program.

A Global Platform for Innovation

With keynote lectures, technical sessions, panels, workshops, and networking opportunities, SIINTEC 2026 provides a unique environment for knowledge exchange and partnership building, fostering innovation and technological solutions aligned with global sustainability goals.

Hosted by SENAI CIMATEC, a leading Brazilian institution recognized for excellence in engineering education, applied research, and industrial innovation, the symposium reinforces Brazil's role in advancing science, technology, and sustainable development on a global scale.

Researchers, professionals, startups, and students from around the world are invited to participate and contribute to shaping the currents that will drive the future of energy, climate, and global sustainability.

GENERAL PROGRAM

Access the complete SIINTEC 2026 program to explore the schedule of activities throughout the four days of the symposium at the webpage: <https://doity.com.br/siintec2026/blog/event-program>

Satellite Events

SIINTEC 2026 host several Satellite Events, expanding opportunities for specialized discussions, technical exchange, networking, and collaboration in strategic areas of science, technology, engineering, and innovation.

Each event has an individual page where participants can find its detailed program, speakers, schedule, and participation information.

Explore all SIINTEC 2026 Satellite Events

- **III FICC - Forum on Innovation, Culture and Creativity**
- **8th SAE BRASIL Symposium on Sustainable Mobility**
- **I National Innovation Meeting**
- **Energize Elas Training Day – Salvador**
- **Technical-Scientific Event – Space Technology and Cubesats Theme**
- **INCOSE Brazil Conference 2026**
- **Energy Transition and Technological Innovation**
- **GrandPrix 2026 SENAI CIMATEC**

Short Courses: 10/15/2026

09h00 - Cristiano Vasconcellos Ferreira
SHORT COURSE 1: Complexity in Product Development

09h00 - Larissa Ribeiro Martins
SHORT COURSE 2: Biofuel Production and Biomass Valorization Based on BIOFEMME's Scientific Experiences

09h00 - Rafael Bulcão Carvalho Lima
SHORT COURSE 3: Mapped Immersion: How to Plan Immersive Spaces

09h00 - Arthur João Reis Lima Rodovalho e Izamir Resende Junior Borges Miguel
SHORT COURSE 4: Additive Manufacturing of Biomaterials: From Bioengineering to Food Production

09h00 - Cristiane Gomes Almeida
SHORT COURSE 5: Green Chemistry: The Science Behind the Currents of the Future

09h00 - Jeancarlo Pereira dos Anjos

SHORT COURSE 6: Green Chemistry in the Preparation of Complex Samples

09h00 - Luiz Mario Nelson de Gois

SHORT COURSE 7: Liquid–Liquid Extraction in Chemical Engineering

09h00 - Thomas Buck

SHORT COURSE 8: Discovering Opportunities to Develop New Businesses

09h00 - Rodrigo de Oliveira Rodrigues

SHORT COURSE 9: Conception, Design, Integration, and Operation of Drones: Drone Missions in Industry and Innovation Opportunities Enabled by These Technologies

09h00 - Barbara Avancini Teixeira

SHORT COURSE 11: DOE in Practice: Experimental Design and Process Optimization

09h00 - Guilherme Pessoa Nogueira

SHORT COURSE 10: From Life Cycle Assessment to Decarbonization: Strategies and Applications

09h00 - Tatiana Conceição Machado Barretto

SHORT COURSE 12: Corrosion Prevention and Protection Methods for Metallic and Concrete Structures

09h00 - Eric Oliveira Santos

SHORT COURSE 13: Edge AI: Concepts, Tools, and Practical Demonstration with NVIDIA Jetson

The Journal of Bioengineering, Technologies and Health (JBTH) is an official publication of the SENAI CIMATEC University (Serviço Nacional de Aprendizagem Industrial - Universidade Centro Integrado de Manufatura e Tecnologia). It is published monthly (January to December) in English by SENAI CIMATEC University – Avenida Orlando Gomes, 1845, Piatã, Zip Code: 41650-010, Salvador-Bahia-Brazil; phone: (55 71) 3879-5501. The editorial offices are at SENAI CIMATEC University.

Editorial Office

Correspondence concerning subscriptions, advertisements, claims for missing issues, changes of address, and communications to the editors should be addressed to the Deputy Editor, Dr. Roberto Badaró, SENAI CIMATEC University (Journal of Bioengineering, Technologies and Health – JBTH) – Avenida Orlando Gomes, 1845, Piatã, Zip code: 41650-010, Salvador-Bahia-Brazil; phone: (55 71) 3879-5501; or sent by e-mail: jbth@fieb.org.br / jbth.cimatec@gmail.com.

Permissions

The permissions should be asked to the Editor in Chief of the Journal of Bioengineering, Technologies and Health and SENAI CIMATEC University. All rights reserved. Except as authorized in the accompanying statement, no part of the JBTH may be reproduced in any form or by any electronic or mechanic means, including information storage and retrieval systems, without the publisher's written

permission. Authorization to photocopy items for internal or personal use, or the internal or personal use by specific clients is granted by the Journal of Bioengineering, Technologies and Health and SENAI CIMATEC University for libraries and other users. This authorization does not extend to other kinds of copying such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale.

Postmaster

Send address changes to JBTH, Avenida Orlando Gomes, 1845, Piatã, Zip Code: 41650-010, Salvador-Bahia-Brazil.

Information by JBTH-SENAI CIMATEC University
Address: Avenida Orlando Gomes, 1845, Piatã, Zip Code: 41650-010, Salvador-Bahia-Brazil

Home-page: www.jbth.com.br

E-mail: jbth@fieb.org.br / jbth.cimatec@gmail.com

Phone: (55 71) 3879-5501 / 3879-5500 / 3879-9500

DOI:10.34178



ISSN: 2764-5886 / e-ISSN 2764-622X

Copyright

© 2026 by Journal of Bioengineering,
Technologies and Health
SENAI CIMATEC UNIVERSITY
All rights reserved.

The complete SIINTEC proceedings, including all accepted papers, are available at:

<https://doity.com.br/anais/jbth>

Advanced Materials, Additive Manufacturing and Sustainable Engineering

A comparative analysis of rammed earth, hyperadobe, and conventional masonry from a sustainability perspective: A literature review (<https://doity.com.br/anais/jbth/trabalho/546768>)

Elias Simas Brasil, Érica Almeida, Luis Claudio Alves Borja, Regina Maria Cunha Leite, Vinicius Marques Marchal dos Santos

Assessment of the corrosion behavior and biocidal potential of copper–beryllium and copper–chromium–zirconium alloys against sun coral (*Tubastraea* spp.) (<https://doity.com.br/anais/jbth/trabalho/546045>)

Jamile de Melo Carvalho, Lilian Lefol Nani Guarieiro, Natália Matos de Menezes, Tatiana Conceição Machado

Cementitious composite based on expanded vermiculite for vertical sealing systems in situ (<https://doity.com.br/anais/jbth/trabalho/552325>)

Germano Henrique Taques de Oliveira, Jocely Rosanna da Silva Nogueira, Thaynara Luany de Melo Julkovski

Design and additive manufacturing of functional supports for dimensional metrology equipment by material extrusion (<https://doity.com.br/anais/jbth/trabalho/553260>)

Frederico Garcia de Oliveira, Jhonderson Oliveira Brazil, Mateus Monteiro Rodrigues, Victor Emanuel Bitencourt Machado

Enhancing the hydrophobicity of ABS through graphene oxide reinforcement for automotive lighting applications (<https://doity.com.br/anais/jbth/trabalho/551255>)

Gustavo Chaves Peixoto, Sara Silva Ferreira de Dafê, Thiago da Silva Pinheiro Rosa, Weslei Patrick Teodósio Sousa

Evaluation of the incorporation of expanded vermiculite in self-compacting concrete (<https://doity.com.br/anais/jbth/trabalho/552167>)

Jocely Rosanna da Silva Nogueira, Josiane Dantas Viana, Luara Batalha Vieira

Evaluation of the variation of printing parameters in test specimens printed with filaments obtained from post-consumer PET bottles (<https://doity.com.br/anais/jbth/trabalho/544433>)

Carlos Gabriel Lobato Rocha, Hellen Katarine Ferreira da Silva, Igor Gabriel Paiva Barbosa, Joyce Batista Azevedo, Maria Clara Silva dos Santos, Paulo Andrey Neri Minas Novas, Pollyana da Silva Melo Cardoso, Talyta Silva Prado

From standards fragmentation to sectoral fit: A framework for selecting additive manufacturing standards (<https://doity.com.br/anais/jbth/trabalho/552203>)

Carlos César Ribeiro Santos, Ricardo Felipe Rodrigues

Glycerol swelling combined with extrusion as a pretreatment of peach palm fiber toward a sustainable route to produce cellulose nanofibrils (<https://doity.com.br/anais/jbth/trabalho/552147>)

Ana Paula Bispo Gonçalves, Joyce Batista Azevedo, Marina Reis de Andrade, Rodrigo Denizarte Oliveira Polkowski, Rosana Fialho

Influence of testing speed on the compression analysis of green iron ore pellets (<https://doity.com.br/anais/jbth/trabalho/553232>)

Bernardo Rohweder de Queiroz, Igor Ferreira Silva Melo, Marcus Vinicius Badaró, Pollyana da Silva Melo Cardoso

Lignin as a functional additive in polypropylene: Performance under accelerated thermal aging (<https://doity.com.br/anais/jbth/trabalho/552088>)

Ana Paula Bispo Gonçalves, Luciano Pisanu, Marcus Vinícius Badaró de Oliveira Ribeiro, Mariana Costa, Michele Mota Damiana Mota Martins

Methods for producing activated carbon from coconut biomass for filtration applications: A systematic review (<https://doity.com.br/anais/jbth/trabalho/552287>)

Débora Leal, Eduardo Fischer Kerche, Paulo Romano Correia, Rodrigo Polkowski, Ticiana de Oliveira Santiago

Morphological evaluation and dimensional accuracy of thermoplastic elastomers produced by pellet extrusion-based additive manufacturing (<https://doity.com.br/anais/jbth/trabalho/552158>)

Gustavo Brandão da Cunha, Jamile Almeida Vieira, Lucas Cruz da Silva, Mateus Barreto Santos de Lima, Paula do Patrocinio Dias

Nanobiotechnology green-synthesized carbon dots to climate-resilient agriculture used for crop protection and biostimulation (<https://doity.com.br/anais/jbth/trabalho/553401>)

Acsa Oliveira Magalhães, Angélica Maria Lucchese, Bruno Silva Vilela Rocha Barre, Danielle Figuerêdo da Silva, Domingos Rafael Oliveira Araujo, Ernando Silva Ferreira, Lucas Ezequiel da Costa Dias, Mariana Santana de Jesus, Marilza Neves do Nascimento, Taris Maria Macedo de Santana, Uasley Caldas de Oliveira

Optimization of organic Rankine cycles: Working fluid selection criteria and a proposal for new alternatives (<https://doity.com.br/anais/jbth/trabalho/552098>)

Eduardo Alves Bandeira Peres, Fernanda Ganem, Gisele Assunção Reis, Isis Santos Silva, Letícia Santos Carreira, Lucca Ribeiro da Silva Araújo Bastos

Potential of graphene oxide-reinforced recycled polypropylene composites for additive manufacturing applications: A literature review (<https://doity.com.br/anais/jbth/trabalho/551211>)

Caroline Henrique, Iara Nathyelle, Rodrigo Coelho, Thatiana Cristina

Preliminary experimental-numerical basis for forming limit curve prediction of CR06 HDG-GI interstitial-free steel (<https://doity.com.br/anais/jbth/trabalho/551259>)

Alysson Lucas Vieira, Jorge Augusto Pereira Rodrigues, Orlando Leon Garcia, Rafael Fagundes Ferreira, Sara Silva Ferreira de Dafê

Proposal for a compact device for efficient clothes drying in small domestic spaces: A systemic approach to product development (<https://doity.com.br/anais/jbth/trabalho/546705>)

Cristiano Vasconcellos Ferreira, Danilo Araujo Almeida, Frederico Garcia de Oliveira, Ivan João de Queiroz Filho, Matheus Dantas Sampaio, Rafael Barretto Arruda, Ricardo Felipe Rodrigues, Valter Estevão Beal

Sewage sludge-derived biochar: A bibliometric analysis of scientific production and research trends (<https://doity.com.br/anais/jbth/trabalho/552384>)

Lana Santos Silva Bezerra, Luiggi Cavalcanti Pessôa, Tereza Simonne Mascarenhas Santos

Structural simulation for determining the stress concentration factor in turboexpander blades (<https://doity.com.br/anais/jbth/trabalho/552442>)

Fernanda Guimaraes Ferreira, Lucas Lincoln Fonseca Soares

Study and characterization of jackfruit peel as a raw material for biotechnology production (<https://doity.com.br/anais/jbth/trabalho/552442>)

[com.br/anais/jbth/trabalho/551158](https://doity.com.br/anais/jbth/trabalho/551158))

Alison Borges Vitor, Antenildo Guirra Oliveira, Carine Tondo Alves, Fernanda Almeida dos Santos, José Emanuel Silva Costa, Larissa Ribeiro Martins

Sustainable HDPE/eucalyptus fiber composites: Rheological characterization for polymer processing using a plastometer (<https://doity.com.br/anais/jbth/trabalho/551984>)

Ilana Oliveira Almeida, Joyce Batista Azevedo, Lucas Nao Hourichi, Rosana Lopes Fialho, Talyta Silva Prado

Synthesis and characterization of biomass-derived porous carbonaceous materials for CO₂ capture applications (<https://doity.com.br/anais/jbth/trabalho/552102>)

Alice Guimarães Wendelstein, Carlos Pérez Bergmann, Tania Maria Basegio

Synthesis and microstructural analysis of silver-doped copper ferrite anchored in rGO surface (<https://doity.com.br/anais/jbth/trabalho/549158>)

Anderson Cazumba Vieira, Arquimedes Lopes Nunes Filho, Daysianne Kessy Mendes Isidorio, Luiz Eduardo Pizarro Borges, Valdir Florêncio Veiga-Junior, Wagner Anacleto Pinheiro

Technological capabilities in ATER organizations: Challenges for innovation in family farming (<https://doity.com.br/anais/jbth/trabalho/551892>)

Júlia Nunes Bahia, Priscila Coutinho Miranda, Soraia Vanessa Matarazzo, Thiago Barros Murari

The challenge of graphene incorporation in powder metallurgy: A brief review on dispersion methods and the impact on the metal microstructure (<https://doity.com.br/anais/jbth/trabalho/552278>)

Débora Abrantes Nunes Leal, Lucas Nao Horiuchi, Rodrigo Denizarte de Oliveira Polkowski, Talyta Silva Prado, Vinícius Pires de Oliveira

The evolution and technological maturity of nanocellulose: An analysis based on patent documents (<https://doity.com.br/anais/jbth/trabalho/552195>)

Ana Katherine de Carvalho Lima Lobato, Davi Vieira Rosa, Denilson de Jesus Assis, Isabel Cristina Rigoli, Rosângela Regia Lima Vidal

Topology optimization and structural redesign of a UAV wing for additive manufacturing (<https://doity.com.br/anais/jbth/trabalho/552469>)

Luã Fonseca Seixas, Lucas Lincoln Fonseca Soares, Gabriel Santos de Magalhães Souza, Icaro Figueiredo Vilasboas, João Pedro Cheloni, Rafael Lemos de Oliveira, Welton Gomes Freitas dos Santos

Tribology in hot stamping: A review of the parameters influencing the coefficient of friction (<https://doity.com.br/anais/jbth/trabalho/552176>)

Cássio Murilo de Oliveira Sobrinho, Luís Fernando Folle, Maria Cléa Soares de Albuquerque, Thiago Martins Teixeira Braga, Tiago Nunes Lima

UV-O₃ treatment of PET and PI substrates to improve wettability for flexible electrochemical skin pH sensors (<https://doity.com.br/anais/jbth/trabalho/552146>)

Antônio Ivan Messias Soares Júnior, Bianca Kurihara Yoshii, Caio Souza Rauh, Jonathan Costa Negri, Luã Malco da Conceição Souza, Willams Teles Barbosa

X-ray diffraction of a third-generation advanced steel subjected to dynamic deformation (<https://doity.com.br/anais/jbth/trabalho/553346>)

Calebe Alexander Bastos Borges, João Victor Marzinetti Cunha, Orlando Leon Garcia, Rafael Fagundes Ferreira, Sara Silva Ferreira de Dafé

Digital Technologies and High-Performance Computing

A digital planning framework for decision support in brownfield industrial projects under environmental and regulatory constraints (<https://doity.com.br/anais/jbth/trabalho/545548>)

Luiz Marcelo Fonseca Soares, Robson Carlos Souza Rosário Junior, Thiago Barros Murari

Advances in digital plant phenotyping using computer vision and sensors for biomass and carbon estimation: A bibliometric study and perspectives (<https://doity.com.br/anais/jbth/trabalho/552080>)

Danilo J. Romero, Ingrid Wrinkler, Jorge Lepikson Neto, Layna Gomes Santana Barbosa, Luiggi Cavalcanti Pessôa

Attention-based neural networks for seismic noise suppression: A systematic and bibliometric review (<https://doity.com.br/anais/jbth/trabalho/551085>)

Florêncio Mendes Oliveira Filho, Gabriel dos Santos Aquino, Oberdan Rocha Pinheiro

Bitcoin mining: An economic study on hardware operations within an innovative and economically sustainable business (<https://doity.com.br/anais/jbth/trabalho/552231>)

Jônatas Lima de Almeida

CatchNet: A prototype application for non-technical loss detection in power distribution networks (<https://doity.com.br/anais/jbth/trabalho/552385>)

Claudia Simões Pinto da Cunha Lima, Juliana Barretto Vilas Boas, Matheus Luiz Neves Johnsson, Rafael de Sales Cezimbra Rodrigues, Victor Barreto Andrade Gonçalves, Yasmin Queiroz Jorge da Silva

Comparative assessment of the Sandia Flame D using experimental data, ANSYS Fluent, and OpenFOAM–OpenSMOKE++ (<https://doity.com.br/anais/jbth/trabalho/552150>)

Alex Álisson Bandeira Santos, Eduardo Alves Bandeira Peres, Luzia Aparecida Tofaneli, Paulo Roberto Santana dos Reis

Computational modeling of spatiotemporal interaction and contextual dynamics in the formation of crime patterns: A systematic review (<https://doity.com.br/anais/jbth/trabalho/551469>)

Karina Costa dos Santos Copque, Marcelo Ferreira Leal

Convergence analysis between line-doublets and relative error through the analytic element method (<https://doity.com.br/anais/jbth/trabalho/545315>)

Antônio José da Silva Neto, Caio Araujo da Silva Leao, Davidson Martins Moreira, Sardar Muhammad Hussain

Development of an analytical methodology for the structural analysis of inclined turboexpander blades under centrifugal loading (<https://doity.com.br/anais/jbth/trabalho/552480>)

Alex Francisco dos Santos Ribeiro Junior, David Pablo Alves Primo, Fernanda Guimaraes Ferreira, Icaro Figueiredo Vilasboas, João Pedro Cheloni, Lucas Lincoln Fonseca Soares, Rodrigo Silveira de Santiago, Valter Estevão Beal

Disruption propagation in industrial supply networks: A conceptual framework for systemic fragility assessment (<https://doity.com.br/anais/jbth/trabalho/551441>)

Luiz Marcelo Fonseca Soares, Robson C. S. Rosário Junior, Thiago Barros Murari

Gamification in emerging technology education: A SWOT analysis of an educational game on digital twin (<https://doity.com.br/anais/jbth/trabalho/552010>)

Marcus Vinícius Oliveira Ribeiro Brandão, Ana Beatriz Batista Ribeiro, Cristiane Agra Pimentel, João Vitor Siqueira Fonseca, Lisandra Silva Conceição

Prediction of velocity fields in two-dimensional flows using a CNN U-Net surrogate model (<https://doity.com.br/anais/jbth/trabalho/552162>)

Alana Silva Lima, Luzia Aparecida Tofaneli, Marcelo Albano Moret Simões Gonçalves, Marcos Batista Figueredo, Taís Souza de Andrade Soares

Speech-driven context engineering (SDCE): An AI-assisted pipeline for requirements elicitation and PRD validation in mobile applications (<https://doity.com.br/anais/jbth/trabalho/551787>)

Danielle Teixeira Santana

Statistical validation of a laboratory-scale computational model for digital twin implementation (<https://doity.com.br/anais/jbth/trabalho/552129>)

Allan de Carvalho Vieira, Cristiane Agra Pimentel, Daniel Marques Santana Oliveira, João Vitor Siqueira Fonseca, Lisandra Silva Conceição, Marcus Vinicius Lemos da Silva, Marcus Vinícius Oliveira Ribeiro Brandão

Verification of the open-source software PrePoMax using finite element benchmarks (<https://doity.com.br/anais/jbth/trabalho/552491>)

Abner Gabriel Miranda Araújo, Bruno Soriano da Silva Fonseca, Fernanda Guimaraes Ferreira, Icaro Figueiredo Vilasboas, João Pedro Cheloni, Lucas Lincoln Fonseca Soares, Victor Hugo Porto Santos

Vibration signal preprocessing methodology for remaining useful life prediction of rolling bearings using deep learning (<https://doity.com.br/anais/jbth/trabalho/550781>)

Bruno da Cunha Diniz, Ingrid Isabele Hipolito Araujo, Maria Vitória dos Santos Alcântara e Figueiredo

Sustainable Energy, Storage, Environment and Decarbonization

A cascade architecture for defect detection and classification on printed circuit boards oriented toward edge processing (<https://doity.com.br/anais/jbth/trabalho/552459>)

Luiza Alves da Silva

A conceptual eco-industrial park model for a technological and industrial complex in Camaçari, Brazil (<https://doity.com.br/anais/jbth/trabalho/552979>)

João Victor Oliveira Gomes, José Luis Gonçalves Almeida, Luigi Cavalcanti Pessoa, Marcele Chagas de Oliveira Pimentel, Pedro Becker Pozzi

A proof of concept for a smart power strip architecture: Blackout prediction and equipment protection using weather data (<https://doity.com.br/anais/jbth/trabalho/552166>)

Celso Barreto da Silva, Fabio Fonseca Barbosa Gomes, Leonardo Santos Magalhães, Marcos Paulo Teles de Menezes Filho, Rafael Guerra de Oliveira, Rian Albert dos Santos Dutra, Vinicius Sousa Fernandes

A technical competency framework for the circular economy (<https://doity.com.br/anais/jbth/trabalho/553075>)

João Vitor Oliveira Gomes, José Luis Gonçalves de Almeida, Luciana Medeiros Silva, Luigi Cavalcanti Pessoa, Marcele

Chagas de Oliveira Pimentel, Pedro Becker Pozzi

A technology roadmap of solid sorbent systems and innovation pathways (<https://doity.com.br/anais/jbth/trabalho/546740>)

Chongyang Tian, Fernanda de Souza Cardoso, Lucas Adam Ferreira

Advances and research trends in cocoa pod husk valorization for second-generation bioethanol production: A bibliometric and critical review (<https://doity.com.br/anais/jbth/trabalho/549832>)

Ana Lúcia Barbosa de Souza, Gustavo de Souza dos Santos, Mailson Moreira Costa Silva, Yan Valdez Santos Rodrigues

Advances in sustainability in the automotive industry: A bibliographic study (<https://doity.com.br/anais/jbth/trabalho/552332>)

Liz Alves Porto, Lorena Silva Santos Jesus de Paiva, Michele Maia de Oliveira, Regina Jacqueline Brandão de Jesus

Advances in the use of metal-organic frameworks for CO₂ separation in industrial flue gases (<https://doity.com.br/anais/jbth/trabalho/552172>)

Amanda Lienthier, Jailson Cardoso Oliveira, Stephanny Cardoso

Bibliometric analysis of computational simulation of biogas production using Aspen Plus (<https://doity.com.br/anais/jbth/trabalho/545308>)

Alison Borges Vitor, Anderson Freitas Sales, Carine Tondo Alves, Larissa Ribeiro Martins, Leandro Freitas Sales

Applications and challenges of advanced oxidation processes in the treatment of industrial effluents (<https://doity.com.br/anais/jbth/trabalho/551690>)

Diniz Alves de Sant'Ana Silva, Elisson Andrade de Souza, Hector Fontes de Oliveira, Larissa Borges Ganz

Atmospheric dispersion modeling of port emissions in Salvador using the AERMOD and CALPUFF models (<https://doity.com.br/anais/jbth/trabalho/552007>)

Anderson da Silva Palmeira, Antônio José da Silva Neto, Davidson Martins Moreira, Georgynio Yossimar Rosales Aylas, Katty Santos da Silva Marques

Bias correction of MPAS-simulated global horizontal irradiance using machine learning techniques (<https://doity.com.br/anais/jbth/trabalho/552221>)

Diogo Nunes da Silva Ramos, Felipe Marcones dos Passos, Luana do Nascimento Vasconcelos, Robert Gabriel Oliveira dos Santos, Rosiberto Salustiano da Silva Junior

Bioethanol production from pineapple peel (<https://doity.com.br/anais/jbth/trabalho/550226>)

Alison Borges Vitor, Carine Tondo Alves, João Vitor Novais Carvalho, Larissa Ribeiro Martins, Lucas Silva dos Reis Salvador, Luciano Sergio Hoyer, Marcos Machado da Rocha

Bioreactor operation modes applied to ethanol production: A comparative review of fermentation strategies (<https://doity.com.br/anais/jbth/trabalho/552105>)

Ana Lucia Barbosa de Souza, Douglas José Faria, Júlia Alves de Oliveira Gribel, Rainy Teixeira Gonzaga, Tássia Cristina da Silva, Tatiane Oliveira do Vale, Wendel dos Santos Costa

Biorefineries and sustainable hydrogen: Biomass as a vector for industrial energy transition (<https://doity.com.br/anais/jbth/trabalho/552315>)

Consuelo Cristina Gomes Silva, Elias de Jesus Silva, Jaqueline de Freitas Silva, Leandro Freitas Sales, Malena Pinheiro Brandão

Bridging the regulatory gap: A connective and multidisciplinary legal diagnostics framework for industrial decarbonization and energy transition in Brazil (<https://doity.com.br/anais/jbth/trabalho/552149>)

André Alves Portella, Beatriz de Mattos Queiroz, Júlio César de Sá da Rocha, Lara Britto de Almeida Domingues Neves Calmon Borges, Luciana Fernandes Lopes, Milton José Deiró de Mello Neto, Raissa Pimentel Siqueira, Victoria Silva Rosa

Calculation of the theoretical potential for compressed air energy storage (CAES) generation in underground mine galleries (<https://doity.com.br/anais/jbth/trabalho/552227>)

George Augusto Batista Câmara, Pedro Henrique Virgens Almeida Nascimento, Roberto José Batista Câmara

Cellulose versus chitosan: Multi-criteria decision analysis of sustainable carbon aerogels for CO₂ capture (<https://doity.com.br/anais/jbth/trabalho/553071>)

Jade Spinola Avila, Lilian Lefol Nani Guarieiro, Marina Schwan, Rodrigo Santiago Coelho

Characterization of *Agave sisalana*, its industrial importance, and the production of powdered material for future extrusion applications (<https://doity.com.br/anais/jbth/trabalho/551041>)

Alana Maria Franco Teixeira, Alison Borges Vitor, Carine Tondo Alves, Larissa Ribeiro Martins, Luciano Sergio Rocevar, Marcos Machado da Rocha

Clipping due to maximum input current exceedance: A case study in the interior of Bahia (<https://doity.com.br/anais/jbth/trabalho/551744>)

Ana Quézia Ribeiro de Oliveira, Jair Urbanetz Junior, Joyce Mara Brandão Maia

Cocoa pod husk as a sustainable feedstock for second-generation bioethanol production: A comprehensive review (<https://doity.com.br/anais/jbth/trabalho/552165>)

Adrielle Oliveira da Cruz, Ana Lucia Barbosa de Souza, Fernando Luiz Pellegrini Pessoa, Kevin Wu Achan, Tatiana Oliveira do Vale

Comparative analysis of the geochemical signature of critical elements in soil and geogases (<https://doity.com.br/anais/jbth/trabalho/552121>)

Alexandre Pereira Wentz, Beatriz Almeida Santos Castro, Caio Assis Félix, Clara Rodrigues Pereira, Fabricio Dias Rodrigues, Jailson Bittencourt de Andrade, Jeancarlo Pereira dos Anjos, Larissa da Silva Paes Cardoso, Lílian Lefol Nani Guarieiro, Madson Moreira Nascimento, Maria das Graças Andrade Korn, Melise Lemos Nascimento, Paulo Marques Modesto, Pollyana da Silva Melo, Sara Silva Alves

Computational modeling and simulation applied to biofuel production: A bibliometric analysis of global scientific output from 2020 to 2026 (<https://doity.com.br/anais/jbth/trabalho/545295>)

Alison Borges Vitor, Carine Tondo Alves, Larissa Ribeiro Martins, Raily dos Santos Oliveira Carneiro

Computational solution for monitoring water consumption in residences (<https://doity.com.br/anais/jbth/trabalho/552644>)

Gustavo Maia de Jesus, Lucca Bellazzi Garcez de Melo, Márcio Renê Brandão Soussa, Pedro Henrique Cerqueira Gaspari Vieira, Pedro Henrique Mascarenhas de Andrade, Ulisses Rodrigues Telles Veiga

Conversion of babassu endocarp (*Orbignya phalerata*) into functional biochars for filtration and adsorption applications (<https://doity.com.br/anais/jbth/trabalho/552427>)

Débora Leal, Eduardo Kerche, Paulo Romano Correia, Rodrigo Polkowski, Ticiana Santiago

Defining the just energy transition: Bibliometric insights and future research agendas (<https://doity.com.br>)

[br/anais/jbth/trabalho/552405](https://doity.com.br/anais/jbth/trabalho/552405))

Carolina Crisostomo dos Santos, Fernanda Souza Cardoso, Gabriel Alves de Pinho, João Vitor Oliveira Gomes, Luiggi Cavalcanti Pessoa, Matheus Magalhães Fiscina, Rejane de Almeida Santana dos, Silvandira dos Santos Goes Pereira de Jesus

Determinant factors of logistics costs for decision-making on green hydrogen transportation (<https://doity.com.br/anais/jbth/trabalho/552281>)

Alcinei Lopes Ribeiro, Douglas Gomes de Magalhaes, Félix de Jesus Silva, Rosana Vieira Albuquerque

Digital models for sustainable agribusiness with a focus on the development of agroforestry systems: A bibliometric review and perspectives (<https://doity.com.br/anais/jbth/trabalho/548211>)

Danilo Jefferson Romero, Fabiano Silva Mendes, Luiggi Cavalcanti Pessôa, Pedro Afonso de Paula Pereira, Tiago Tosta Alves Cruz

Digital twin applications in oil and gas product development: A short review (<https://doity.com.br/anais/jbth/trabalho/552373>)

Gabriel de Brito Leal dos Santos, George A. B. Câmara, Ingrid Winkler, Márcio Renê Brandão Soussa

Emerging microbial platforms for sustainable agriculture: Integrating patent analytics, market intelligence, and biological potential (<https://doity.com.br/anais/jbth/trabalho/551891>)

Ana Lucia Barbosa de Souza, Felipe de Araújo Cabral, Gisele Beatriz Teles Góes, Monique Santos Sarly da Silva, Raissa Costa Guimarães, Tatiana Oliveira do Vale

Emulsions: A study of stability and key demulsifiers (<https://doity.com.br/anais/jbth/trabalho/552280>)

Igor Oliveira de Freitas Campos, Luis Augusto de Andrade, Michel Cardoso Natividade, Ruza Gabriela Medeiros de Araújo de Macedo, Thauane Selva Lima de Silva

Energy analysis of an off-grid photovoltaic system for remote monitoring with embedded computer vision (<https://doity.com.br/anais/jbth/trabalho/551377>)

Gabriela Gama da Silva Santos, Pedro Ricardo Nery Nunes Silva

Energy system vulnerability and solar energy potential: An indicator-based approach to climate adaptation in coastal regions (<https://doity.com.br/anais/jbth/trabalho/546277>)

Aloísio Santos Nascimento Filho, Diogo Antonio Queiroz Gomes, Filipe Cardoso Brito, Hugo Saba, Natália Silva Coimbra de Sá, Toni Alex Reis Borges

Estimating photovoltaic generation using the PVLlib library based on simulations with ERA5 and MPAS-A (<https://doity.com.br/anais/jbth/trabalho/552444>)

Ewerton Muniz Souza, Felipe Marcones dos Passos, Luana do Nascimento Vasconcelos, Robert Gabriel Oliveira dos Santos, Rosiberto Salustiano da Silva Junior

Evaluating the reuse of photovoltaic modules: A technical framework for life cycle assessment (<https://doity.com.br/anais/jbth/trabalho/545247>)

Abdon Campos dos Santos, Aloísio Santos Nascimento Filho, Celso Barreto da Silva, Diogo Antonio Queiroz Gomes, Filipe Cardoso Brito, Hugo Saba, Rafael Guimarães Oliveira dos Santos, Toni Alex Reis Borges

Evaluation of HPLC-RID, LC-MS, and FTIR techniques for the separation, determination, and quantification of sugars, organic acids, and inhibitors in agave (<https://doity.com.br/anais/jbth/trabalho/552169>)

Bárbara Avancini Teixeira, Morgana de Souza Nascimento, Tássia Cristina da Silva

Evaluation of overliming pH on the removal of potentially inhibitory compounds and the preservation of fermentable sugars in *Agave sisalana* acid hydrolysate (<https://doity.com.br/anais/jbth/trabalho/551651>)

Antônio Rimaci Miguel Júnior, Douglas José Faria, Elaynne Ayalla de Almeida Costa, Júlia Alves Gribel de Oliveira, Rainy Teixeira Gonzaga, Tássia Cristina da Silva, Wendel dos Santos Costa

Experimental pre-certification assessment of primary lithium battery pack protection mechanisms based on transport regulation criteria (<https://doity.com.br/anais/jbth/trabalho/552069>)

Alan Gramacho dos Santos, Breno Prazeres Barbosa, Frederico Garcia de Oliveira, Ruan Sávio Ferreira Zeferino

Extraction of bioactive compounds from licuri (*Syagrus coronata*) mesocarp for the valorization of an agro-industrial residue (<https://doity.com.br/anais/jbth/trabalho/553469>)

Adriana de Jesus Santos, César de Almeida Rodrigues, Cleide Mara Faria Soares, Josefa Patrícia Jesus dos Santos, Pedro Henrique Santos Rocha, Ranyere Lucena de Souza

Firefighting structure—waste requalification as a decarbonization strategy in the sustainable taxonomy and the influences of the EU–Mercosur agreement on the RMS (<https://doity.com.br/anais/jbth/trabalho/528853>)

Vicente Avelino dos Santos

Forecasting generative adversarial networks: A supervised learning framework for time-series prediction (<https://doity.com.br/anais/jbth/trabalho/546468>)

Angelo Marcio Oliveira Sant’Anna, Peterson Nogueira Santos, Rodrigo de Santana Santos

Formation of inhibitory compounds during the pretreatment of lignocellulosic biomass for second-generation ethanol production: A review (<https://doity.com.br/anais/jbth/trabalho/552137>)

Antonio Rimaci Miguel Junior, Douglas José Faria, Elaynne Ayalla de Almeida Costa, Lilian Lefol Nani Guarieiro, Tássia Cristina da Silva

From sustainable products to habitable proximity: A methodological framework based on Ezio Manzini’s thought (<https://doity.com.br/anais/jbth/trabalho/552417>)

Aloisio S. Nascimento Filho, Hugo Saba, Marlon Xavier

Geological storage of CO₂ in Brazil: Favorable sedimentary basins and a digital twin framework for reservoir characterization and monitoring (<https://doity.com.br/anais/jbth/trabalho/550817>)

Marcos Pimentel Mendes

Heavy metal immobilization strategies in sewage sludge for safe agricultural reuse: A narrative review from a circular economy perspective (<https://doity.com.br/anais/jbth/trabalho/552344>)

Denilson Santos Costa, Francisco Ramon Alves do Nascimento, Juliana Guerreiro Cezar, Najara Santana Pita, Sophia Chagas Santos

Industrial production and sustainability: Contemporary challenges and perspectives (<https://doity.com.br/anais/jbth/trabalho/552116>)

Caique Araújo Fiuza, Catharina Santana Graça Leite, Juan Carlos Rodrigues Bacelar, Julia Maryan Rodriguez Pessanha, Liz Frota Galtieri, Maria Eduarda Santos de Jesus, Mariane França Neves, Regina Jacqueline Brandão de Jesus

Influence of temperature on hydrodynamic cavitation intensity in triangular nozzles (<https://doity.com.br/anais/jbth/trabalho/550230>)

André Jackson Ramos Simões, André Luiz Andrade Simões, Antonio Samuel Bacelar de Freitas Devesa, Dainane Andrade dos

Santos Souza, Daniel Castro Hora Fontes, Fabrício Gabriel da Silva Correia, Geydison Gonzaga Demetino, Iuri Muniz Pepe, José Marcelo de Assis Santos, Juliane Grasiela de Carvalho Gomes, Leandro do Rozário Teixeira, Luis Gustavo Macedo West, Pedro Eduardo Gonçalves Oliveira, Rafaela Gomes Carigé, Teones Araújo Nascimento

Nanoparticles and artificial intelligence in biomethane production: Recent advances, applications, and prospects for integrated optimization (<https://doity.com.br/anais/jbth/trabalho/553501>)

Hugo Saba, Marcio L. V. Araújo, Paulo Roberto dos Santos

NiO and CeO₂ for ethanol steam reforming: A brief review (<https://doity.com.br/anais/jbth/trabalho/545175>)

Gerhard Ett, Iuri Dantas Passo

Sustainable Mobility, Aerospace Technologies and Intelligent Transportation Systems

A comparative analysis of management models for residential photovoltaic energy surpluses: A proposal for a Single Renewable Energy System (SUER) for Brazil (<https://doity.com.br/anais/jbth/trabalho/545292>)

Abdon Campos dos Santos, Aloísio Santos Nascimento Filho, Celso Barreto da Silva, Diogo Antônio Queiroz Gomes, Filipe Cardoso Brito, Guilherme Teixeira Pereira, Hugo Saba, Rafael Guimarães Oliveira dos Santos, Toni Alex Reis Borges

A hybrid quantum-classical warm-start framework for dynamic route reoptimization under simulated network disruptions (<https://doity.com.br/anais/jbth/trabalho/552294>)

David Franco Regalado, Felipe Dourado Figueiroa, Italo Ferreira da Silva, João Carlos Pereira Passos, Mabel Diz Marques Mota, Yuri Gonçalves Conrado Dantas

Analysis of cargo and parcel transportation in airport logistics using digital technologies (<https://doity.com.br/anais/jbth/trabalho/552317>)

Carlos Alberto de Arruda, Carlos César Ribeiro Santos, Daniel Rodrigues dos Santos, Herman Augusto Lepikson, Lucas de Freitas Gomes, Matheus Dantas Sampaio

Application of artificial intelligence in vehicle fault diagnosis: A theoretical framework (<https://doity.com.br/anais/jbth/trabalho/544549>)

Helio Pio Correia Lima Junior, Oberdan Rocha Pinheiro, Thiago Barros Murari

Argon actinometry for SF₆/O₂ RIE plasma characterization (<https://doity.com.br/anais/jbth/trabalho/553296>)

Eduardo Aragão, Maxson Souza Vieira, Michel Felipe Lima de Araújo, Ricardo Cotrin Teixeira

Design criteria for the miniaturization of an onboard ethanol-fueled solid oxide fuel cell system (<https://doity.com.br/anais/jbth/trabalho/552110>)

Francisco de Assis Oliveira Júnior, Guilherme Pessoa Nogueira, Gustavo Doubek, Silvia Fernanda Moya, Thiago Dias

Development of a mathematical model of an electric vehicle for longitudinal simulations (<https://doity.com.br/anais/jbth/trabalho/552070>)

Gabriel Aspera Sampaio, Gabriel Sodrê Borges, João Victor Freire da Silva, Pedro Augusto Ambrósio Almeida, Pedro Ventin, Ricardo Lima Travassos

Iron bird test bed for UAVs: Requirements, risks, and verifiability from a systems engineering perspective (<https://doity.com.br/anais/jbth/trabalho/552296>)

Aldalice Rodrigues Dias, Amanda Araújo Campos de Oliveira, Damylle Cristina Xavier Donati, Leonardo F. dos Santos, Raquel Viana Pinto Leal, Rodrigo Oliveira Rodrigues

Lean applications in the development of ground control stations for unmanned aerial vehicles (<https://doity.com.br/anais/jbth/trabalho/552151>)

Amanda Gama Lordello, Ariane Nogueira Vieira, Rosana Vieira Albuquerque

Magnetron sputtering: Bibliometric mapping of scientific production associated with thin films and solid oxide fuel cells (<https://doity.com.br/anais/jbth/trabalho/552245>)

Fernando Luiz Pellegrini Pessoa, Gerhard Ett, Iuri Dantas Passos da Mota, Marcos Makoto Toyama, Ricardo Lima Travassos

Microstructural response of AA7475-T761 aeronautical aluminum alloy to an in-service lightning strike (<https://doity.com.br/anais/jbth/trabalho/551404>)

Alexandre da Silva Alves, Anderson Junior dos Santos, Bruno Luiz Soares da Silva, Felipe Augusto Batista de Oliveira, Marcelo Araújo Câmara, Matheus Filipe da Silva, Nicole Catharine de Paiva, Sara Silva Ferreira de Dafê

Modeling and descriptive analysis of cyclist flow time series: Traffic behavior and dynamics before, during, and after the pandemic (<https://doity.com.br/anais/jbth/trabalho/552191>)

Gislaine A. Azevedo, Laisa Santos de Oliveira, Thiago Barros Murari

Performance evaluation of an FCEV heavy truck on an urban route (<https://doity.com.br/anais/jbth/trabalho/552083>)

Gabriel Sodrê Borges, João Victor Freire da Silva, Pedro Augusto Ambrósio Almeida, Pedro Bancillon Ventin Muniz, Ricardo Lima Travassos

Propulsion systems test benches: A review of the literature on architectures, instrumentation, and trends (<https://doity.com.br/anais/jbth/trabalho/552293>)

Aldalice Rodrigues Dias, Amanda Araújo Campos de Oliveira, Arthur Conceição Lula Machado, Guilherme Prazeres Matos de Souza, Hariel Dumont Dias Sousa, Jefferson dos Reis do Carmo, Kauan Dantas Brito da Silva, Leonardo Felipe Lima Santos dos Santos, Renato de Sousa Nascimento Júnior

Public bus mobility in São Paulo before and during the COVID-19 pandemic: A descriptive analysis of fare-paying and fare-exempt passengers (<https://doity.com.br/anais/jbth/trabalho/553287>)

Gislaine Alves Azevedo, Laisa Santos de Oliveira, Thiago Barros Murari

Representation of a 12 V low-voltage event using connected-vehicle telemetry (<https://doity.com.br/anais/jbth/trabalho/551995>)

Murilo Cesar Ponce Oliveira, Xisto Lucas Travassos Jr.

Technologies and optimization tools applied in drone flight routing (<https://doity.com.br/anais/jbth/trabalho/552329>)

Amanda Gama Lordello, Ariane Nogueira Vieira, Rosana Vieira Albuquerque

The red planet with a biosphere: Habitability, biosignature preservation, life-support infrastructure, and targeted ecopoiesis for seeding Mars with Earth-derived life (<https://doity.com.br/anais/jbth/trabalho/545850>)

Danubiano Davicy Guedes Motta, David Uzêda, Lucca Augusto Nascimento, Maria Vitória Colonnezi, Oluwafemi Johnson Akinlabi, Rodrigo Monteiro Sobreira

Towards interoperable V2V connectivity in mixed fleets: Challenges and guidelines for standardizing safety in mining (<https://doity.com.br/anais/jbth/trabalho/553128>)

Cristiano Vasconcellos Ferreira, Fabiana Caires Luz, Xisto Lucas Travassos Junior

Health, Biotechnology and Health Technologies

A mobile serious game for cognitive stimulation in older adults: A strategy for Alzheimer's disease prevention (<https://doity.com.br/anais/jbth/trabalho/552592>)

Celso Barreto da Silva, Fabio Fonseca Barbosa Gomes, Ryan Rafael Metzker Gois de Macedo Couto

Comparative analysis of the catalase enzyme in organisms of biomedical and environmental interest from a One Health perspective (<https://doity.com.br/anais/jbth/trabalho/552232>)

Alison Borges Vitor, Carine Tondo Alves, Ericleiton Santana de Oliveira, Larissa Ribeiro Martins

Computational model for dengue epidemiological scenarios: Hydrometeorological and climatic analyses (<https://doity.com.br/anais/jbth/trabalho/546240>)

Hugo Saba Pereira Cardoso, Luiz Carlos dos Santos Ferreira Sacramento

Concept proposition of an ergonomic cake-decorating apparatus (<https://doity.com.br/anais/jbth/trabalho/545785>)

Cristiano Vasconcellos Ferreira, Débora Lima Sacramento Ribeiro, Fernanda Ferraz de Castro, Jamile de Melo Carvalho, Lyna Maria Ferreira Malheiros, Patricia Silva Costa, Raimundo José Almeida Júnior, Valter Estevão Beal

Design, implementation, and clinical perspectives of a modular spring-loaded knee orthosis for rehabilitation (<https://doity.com.br/anais/jbth/trabalho/550665>)

Adriane Caroline Teixeira Portela, Adriano Almeida Gonçalves Siqueira, Gabriel Patti Sanches Coelho, Jonathan Campo Jaimes, José Marques Novo Júnior

Detection of cardiac arrhythmias in ECG signals using 1D and 2D convolutional neural network architectures (<https://doity.com.br/anais/jbth/trabalho/553461>)

João Vitor Mendes Pinto dos Santos, Thamiles Rodrigues de Melo

Development of a bioactive degreaser from lactic acid derived from whey and flavonoids extracted from red onion peel (<https://doity.com.br/anais/jbth/trabalho/552298>)

Eduarda Souza Barbosa, Giovana Rafaela Cerqueira Lima Souza Moisés, Jéssica Teles Souza, Lívia Araújo Oliveira, Luan Lucas Brito, Luiza Dias Lima

Development of a bioactive healing hydrogel based on ethanolic extract of aroeira fruit, green banana peels, and flaxseed (<https://doity.com.br/anais/jbth/trabalho/552351>)

Ayla Milena Lopes Santos, Érica Patrícia Lima Pereira, Gislane dos Santos e Santos, Iolanda dos Santos Romão, Jéssica Teles Souza, Maisa da Silva Costa, Suellen Santana de Jesus

Development of an integrated technical-operational compliance model for biosafety level 3 laboratories (<https://doity.com.br/anais/jbth/trabalho/549753>)

Bruna Aparecida Souza Machado, Hayna Malta Santos, Helena S. da Hora, Marilda de Souza Gonçalves, Roni Dias Vinhas, Saada Lima Chequer Fernandez

Economic potential of algaroba (*Prosopis juliflora*) byproducts: An integrated biorefinery approach for the production of biofuels and high-value-added bioproducts (<https://doity.com.br/anais/jbth/trabalho/552253>)

Fernando Luiz Pellegrini Pessoa, Geise Camila Ribeiro de Araújo, Lilian Lefol Nani Guarieiro, Luana Beatriz de Carvalho Embiruçu, Valmir da Cruz de Souza

Extraction of bioactive compounds from plant matrices: A bibliometric analysis of conventional and high-pressure methods (<https://doity.com.br/anais/jbth/trabalho/546679>)

Any Eduarda Nanes de Oliveira Farias, Elton Franceschi, Rayane Andrade Santana Freitas, Thiago Rodrigues Bjerk

Geometric refinement of interference-fit clamps for magnetic coupling in cardiopulmonary bypass machines: A numerical approach toward reusable assemblies (<https://doity.com.br/anais/jbth/trabalho/552448>)

Augusto Vitor Bomfim Silva Lima, Lucas Lincoln Fonseca Soares, Pedro da Gama Santos, Rafael Silva de Lima, Victor Vieira Rezende

Heimdall Audiometer: Development of an Android application for education and research in pure-tone audiometry (<https://doity.com.br/anais/jbth/trabalho/546395>)

Gabriel Barreto Teles Fonseca, Giovane Santos de Santana, João Bartolomeu dos Santos Junior, José Santos Damasceno

Hydraulic endodontic cements: A review of calcium silicate, calcium aluminate, and strontium aluminate systems (<https://doity.com.br/anais/jbth/trabalho/553419>)

Antonio Mauricio Cristal Pio, Arthur Joao Reis Lima Rodovalho, Caio Ribeiro Araújo, Izamir Resende Junior Borges Miguel, Josiane Dantas Viana Barbosa, Willams Teles Barbosa

Impact analysis of electromedical equipment according to ABNT NBR IEC 60601-1 using the explicit method (<https://doity.com.br/anais/jbth/trabalho/552554>)

Adriel Santana, Augusto Vitor Bomfim Silva Lima, Gabriel Aelo Ribeiro, Icaro Figueiredo Vilasboas, João Pedro Cheloni Monteiro, Lincoln Fonseca Soares, Rafael Silva de Lima, Victor Vieira Rezende

MicroDerme: Development of a sustainable deodorant serum based on bacterial cellulose (SCOBY) for palmar moisture management (<https://doity.com.br/anais/jbth/trabalho/552269>)

Milena Morais Lima, Paula Camille da Silva Souza Santana

Molecular hydrogen and intermittent hypoxia as a research hypothesis for erythropoietic modulation: A critical narrative review (<https://doity.com.br/anais/jbth/trabalho/555208>)

Isabele Carol de Freitas Moreira Menezes

Nutraceutical potential of stingless bee samburá: A bibliographic and bibliometric review (<https://doity.com.br/anais/jbth/trabalho/552382>)

Ana Lucia Barbosa de Souza, Emanuele Santana Bispo dos Santos, José Airton de Mattos Carneiro Junior, Lucas Baião de Almeida, Rogério Marcos de Oliveira, Rosana Fialho

Photogrammetry application for residual limb volume monitoring (<https://doity.com.br/anais/jbth/trabalho/551862>)

Hugo Saba, Josualdo Dias, Luísa Nascimento Sales

Proposal for the use of virtual reality (VR) in the treatment of children with attention-deficit/hyperactivity disorder (ADHD) (<https://doity.com.br/anais/jbth/trabalho/545329>)

Angie Gomes Biondi, Bernardo Mello Correia Lima, Celso Barreto da Silva, Fabio Fonseca Barbosa Gomes, José Henrique Ramos de Andrade, Patrick Guilherme da Silva

Recovering the anterior mitral leaflet deformation field via point tracking in two-dimensional pediatric echocardiography (<https://doity.com.br/anais/jbth/trabalho/552186>)

Airandes de Sousa Pinto, Bráulio Muzzi Ribeiro de Oliveira, Carlos Alberto Rodrigues, Maria do Carmo Pereira Nunes, Naila Suelle Mascarenhas Silva, Renata Fonseca Mendoza

Reducing medication administration errors: Proposal of a system concept with mobile closed-loop verification (<https://doity.com.br/anais/jbth/trabalho/543402>)

Adrielle Oliveira da Cruz, Bianca Cardoso, Cristiano Ferreira, Patrick Silva Ferraz, Rafael Bulcão Carvalho Lima, Renan Cardoso dos Santos, Uirá Menezes de Azevêdo, Valter Estevão Beal

Rotary blood pumps in mechanical circulatory support: A narrative review of ECMO and LVAD applications (<https://doity.com.br/anais/jbth/trabalho/552284>)

Ana Vitória da Anunciação Calmon, Elena Carvalho Sepulveda, José Santos Damasceno, Thamiles Rodrigues de Melo

Social technologies for welcoming and human sustainability: The role of NAAE in university mental health (<https://doity.com.br/anais/jbth/trabalho/552223>)

Cristina Aparecida da Silva, Jarsia de Melo Santos, Luani Oliveira dos Santos, Patricia Rocha Barbosa dos Santos, Sayonara Nobre de Brito Lordelo

Systematization of knowledge on the validation process of alternative methods: An analysis of the scientific and regulatory literature (<https://doity.com.br/anais/jbth/trabalho/552082>)

Alana Carolina Pereira Abreu, Aloísio dos Santos Nascimento Filho, Carolina Barbara Nogueira de Oliveira, Charles da Silva Bezerra, Cristiane Nogueira Caldeira, Eduardo Manuel de Freitas Jorge, Filipe Cardoso Brito, Gleidson de Meireles Costa, Hugo Saba, Octavio Augusto França Presgrave, Rafael do Nascimento Argôlo, Victor Hugo de Jesus Oliveira

Thickened water for dysphagia: A scientific and technological prospection (<https://doity.com.br/anais/jbth/trabalho/552462>)

Agnes Sophia Braga Alves, Antônio Henrique Gonçalves Rodrigues, Carine dos Reis Teixeira, Jeffrey Edmond Sidi, Katharine Valéria Saraiva Hodel, Marcos Vinicius Lima dos Santos, Thâmilla Thalline Batista de Oliveira

Upper-limb amputations due to workplace accidents in Bahia: Occurrences and challenges for rehabilitation (<https://doity.com.br/anais/jbth/trabalho/550870>)

Aloísio S. Nascimento Filho, Hugo Saba, Josualdo Dias, Luísa Sales, Toni Alex Reis Borges

Urban Infrastructure and Smart Cities

A preliminary study of low-cost LoRaWAN and NB-IoT prototypes for digital twin-based flood monitoring (<https://doity.com.br/anais/jbth/trabalho/552062>)

Bruno Magalhães Serrão Moraes, João Pedro de Passos Pacheco, Luara Batalha-Vieira, Moisés Ferreira Eleutério Silva, Raildo M. de Jesus

A review of the current state of 3D concrete printing in civil construction (<https://doity.com.br/anais/jbth/trabalho/552341>)

Henrique de Aguiar Lima, Joyce Batista Azevedo, Leticia Stavola Queiroz, Marianna Luna Sousa Rivetti

Analysis of operational response time in digital twins applied to facility management (<https://doity.com.br/anais/jbth/trabalho/552235>)

Alisson Souza Silva, Camila Dutra Pinheiro

Analysis of the use of digital technologies to support quality management systems during the construction phase (<https://doity.com.br/anais/jbth/trabalho/551875>)

Alexandre Porto de Souza, Alisson Souza Silva, Gleice Ribeiro

Biophilia and bioclimatic strategies in urban health infrastructure: A framework for the comparative analysis of hospitals in Salvador (<https://doity.com.br/anais/jbth/trabalho/552054>)

Isadora Novaes Scheffler B. Costa, João Victor Santos Souza, Luiza Rosario Amorim

Circular economy and building life cycle: Waste-free construction (<https://doity.com.br/anais/jbth/trabalho/551711>)

Alice Vieira Vaz Porto, Denise das Dores Nascimento Oliveira, Guilherme Dantas Duarte, Júlia Ramos Albuquerque Castelhana, Juliana Araújo Kolbe, Lis Teixeira Barbosa, Maria Eduarda Fraga Oliveira Silva, Maria Fernanda Almeida

Computer vision for the identification of pollutants in water bodies (<https://doity.com.br/anais/jbth/trabalho/552268>)

Alisson de Souza da Silva, Giulia Santos Soares, Maria Antônia Amado Lima, Mariana da Penha Novaes

Experimental evaluation of gradation stabilization using syenitic aggregate for granular pavement layers (<https://doity.com.br/anais/jbth/trabalho/552300>)

Bruna Bueno Mariani, Luara Batalha Vieira, Nilson Santana do Amorim Júnior, Patricia dos Santos Andrade, Sofia Rodriguez Rodriguez

Filler effect, heterogeneous nucleation, and dilution in the partial replacement of Portland cement by biochar: A review of the strength gain and loss mechanisms (<https://doity.com.br/anais/jbth/trabalho/552309>)

Edilson Oliveira Rangel Júnior, Kauã Gabriel do Carmo Ferreira, Kaylane Oliveira dos Santos, Keilla Kardinaly da Luz Santos, Venicius Rodrigo Pereira Sousa

Integration between BIM and AM: A scoping review (<https://doity.com.br/anais/jbth/trabalho/552210>)

Ariane Prevedello Rubin, Gabriel Garcia Oliveira de Medeiros, Lilian Lefol Nani Guariciro, Melyssa Lima dos Santos Silva, Thiago Rocha Ribeiro

Lighting design granularity for sustainable public lighting: A comparative study of standardized and pole-specific design approaches (<https://doity.com.br/anais/jbth/trabalho/547965>)

André L. O. Júnior, Eduardo Lazarini Fontana, Felipe M. Vasconcellos, Manuella A. Souza, Wild F. S. Santos

Low-cost water-level sensor for urban drainage systems in Salvador, Brazil (<https://doity.com.br/anais/jbth/trabalho/552097>)

João Pedro de Passos Pacheco, Luara Batalha Vieira, Moisés Ferreira Eleutério Silva, Raildo M. de Jesus

Machine learning architectures for public lighting photometric prediction: A comparative benchmark of tree-based and neural network approaches (<https://doity.com.br/anais/jbth/trabalho/551794>)

André L. O. Júnior, Eduardo Lazarini Fontana, Sinval Victor Agostinho Mota, Wild Freitas da Silva Santos

Solarpunk: An interdisciplinary approach to sustainability, energy, climate, and future models of bio-integrated community transition (<https://doity.com.br/anais/jbth/trabalho/546109>)

David Uzêda, Maria Vitória Colonnezi Bispo, Rodrigo Monteiro

Sustainable architectural strategies: A glued-laminated timber kiosk for school settings (<https://doity.com.br/anais/jbth/trabalho/546462>)

Erica Almeida, Luis Claudio Alves Borja, Michele Vitória Lima de Jesus, Regina Maria Cunha Leite

The implementation of the Silica Scientific, Technological, and Industrial Hub in Santa Maria Eterna, in

the extreme south of Bahia, as a vector for regional development within the framework of energy transition with social inclusion and ecological balance (<https://doity.com.br/anais/jbth/trabalho/550849>)

André Portella

Urban expansion and sustainable planning: A study of the Nova Brasília neighborhood in Salvador (<https://doity.com.br/anais/jbth/trabalho/549172>)

Bianca de Souza Fernandes, Denise das Dores Nascimento Oliveira, Enzo Felipe Silva Souza, João Vitor Muraiviechi Guimarães, Lara Gusmão Oliveira de Almeida, Larissa Silva Santos Ribeiro, Liz Alencar Costal, Maria Eduarda Lima Freeman, Natália Maria Silva Figueiredo

VibraShield (<https://doity.com.br/anais/jbth/trabalho/552395>)

Marcos Vinícius Almeida Queiroz de Souza, Rodrigo Carvalho dos Santos, Victor Henrique Freitas de Carvalho, Wild Freitas da Silva Santos

Automation, Robotics and Computational Intelligence

A comparison of thermal and two-dimensional vibration images for lubrication regime classification in bearings using convolutional neural networks (<https://doity.com.br/anais/jbth/trabalho/534983>)

Bruno da Cunha Diniz, Gabriel Sirelli de Andrade, Leonardo Lima Gusmão, Ranya Mota Carvalho, Rui Felipe Cardoso Queiroz

A proof of concept for evaluating DDoS-induced availability degradation in simulated operational technology networks (<https://doity.com.br/anais/jbth/trabalho/552314>)

Eduardo Lôbo Teixeira Filho, Thamiles Rodrigues de Melo

A short review of recent advances in underwater SLAM for autonomous underwater vehicles (<https://doity.com.br/anais/jbth/trabalho/552331>)

Alexandre Adonai Gama da Silva, Jhielson Montino Pimentel

A standardized benchmark of machine learning models for lithium-ion battery state-of-health estimation using charging and discharging data (<https://doity.com.br/anais/jbth/trabalho/546147>)

Marcos Toranosuke Morita, Roberto Luiz Souza Monteiro

A structured review of the integration of discrete-event simulation and reinforcement learning using FlexSim for industrial decision-making (<https://doity.com.br/anais/jbth/trabalho/552324>)

Andressa Clara Barbosa de Araujo, Guilherme Sobral Santos, Máira Andrade, Oberdan Rocha Pinheiro

Actuation mechanisms in soft and continuum robots for minimally invasive surgery: A narrative review (<https://doity.com.br/anais/jbth/trabalho/552228>)

Ademilson Lima da Silva Filho, Gabriel Auxêncio Silva Nunes, Gustavo Rebello de Carvalho, Joyce Karoline da Silva, Lucas Cruz da Silva, Rafael Aleluia Porto, Victor Santos Matos

An integrated IoT architecture for process management in seedling production nurseries: A case study at SENAI CIMATEC Sertão (<https://doity.com.br/anais/jbth/trabalho/553450>)

Alexandre da Silva Ribeiro, Antônio Brasil Lopes Júnior, Frederico Wergne de Castro Araujo Filho, Keisse Ellen Carvalho Costa

An interpretable unsupervised model for theme–text adherence in student essays (<https://doity.com.br/anais/jbth/trabalho/548202>)

Carolina Aparecida Pereira Alves, Edpaula Moitinho dos Anjos, Lizandra Santos Morais, Marcos Batista Figueredo, Roberto Luiz Souza Monteiro

Application of digital twins in bioethanol fermenters: A systematic literature review (<https://doity.com.br/anais/jbth/trabalho/546387>)

Alice Alves Soares, Herman Augusto Lepikson

Automated identification of buy and sell patterns in mini-index (WIN) and mini-dollar (WDO) via computer vision: A YOLOv8s- and moving average-based approach (<https://doity.com.br/anais/jbth/trabalho/552182>)

Carlos Alberto Rodrigues, Pedro Henrique Santos Silva

Automatic crack detection system in concrete structures using YOLOv8n-seg and Raspberry Pi 5 (<https://doity.com.br/anais/jbth/trabalho/552402>)

Caio Guilherme Costa Viterbo Sá, Celso Barreto da Silva, Fábio Fonseca Barbosa Gomes, Rodrigo Abade Nunes

Case study on the development of a wearable device for monitoring the emotional state of older patients with Alzheimer's disease (<https://doity.com.br/anais/jbth/trabalho/553408>)

Ana Júlia dos Santos Viana, Apolo Ferreira Costa, Brian Ferreira Costa, Lara de Jesus Silva, Lilian Moraes de Oliveira, Pedro Henrique Queirós Wagner, Witã dos Santos Rocha

Cyberthreat simulator for industrial environments: An academic tool for teaching industrial control system security (<https://doity.com.br/anais/jbth/trabalho/552135>)

Anna Lydia Azevedo Durval, Clariane Teixeira Pessoa Mamona, Jose Marcelo de Assis Santos, Ronaldo Costa Santos, Yan Campêlo das Chagas

Development of a digital shadow for monitoring and supervision of a coupled-tank system (<https://doity.com.br/anais/jbth/trabalho/552393>)

Andressa Clara Barbosa de Araujo, Dante Cerqueira Batista da Silva, Jonathan Sampaio Barreto, Miriele Carvalho Paim Monteiro

Development of an interoperable model for the integration of software with cyber-physical systems (<https://doity.com.br/anais/jbth/trabalho/552205>)

Herman Augusto Lepikson, Jhaidan Ribeiro Cruz, Pedro Henrique Araújo Fonseca

Digital twins in Industry 4.0: A systematic review of fundamentals, architectures, and applications in discrete manufacturing (<https://doity.com.br/anais/jbth/trabalho/551732>)

Carlos Alberto Tosta Machado, Herman Augusto Lepikson, Kevin Luis dos Santos

Distributed force localization using an OFDR-interrogated optical fiber embedded in silicone (<https://doity.com.br/anais/jbth/trabalho/551807>)

Bianca Kurihara Yoshii, Caio Souza Rauh, Emanuele Santos Diniz Penteado, Milena Ventura Castro Meira, Valéria Loureiro da Silva

Embedded machine learning for quantum-dot laser instrumentation: FPGA-based echo state networks (<https://doity.com.br/anais/jbth/trabalho/551998>)

Eduardo F. Simas Filho, Gabriel R. Souza, George A. P. Thé, Sinval V. A. Mota, Wild F. S. Santos

Evaluating PID control strategies for a 3-DoF marine vehicle under ocean disturbances (<https://doity.com.br/anais/jbth/trabalho/545726>)

Beatriz Ferreira Ribeiro de Castro, Herman Augusto Lepikson, João Vitor Mendes

Evaluating the impact of the FlexSim agent system on operator displacement and throughput in logistics simulation: A comparative study (<https://doity.com.br/anais/jbth/trabalho/551985>)

Jonathan Sampaio Barreto, Maíra Silva Andrade, Pedro Veiga Santos

Experimental evaluation of RGB-D- and LiDAR-based SLAM configurations using a TurtleBot2i platform (<https://doity.com.br/anais/jbth/trabalho/552112>)

Bruno Cunha Lima, Victor Santos Matos

Hybrid robotic vehicle for monitoring illegal fishing (<https://doity.com.br/anais/jbth/trabalho/552127>)

Raiana Santos Anunciação, Stephanie Francine Palmeira Bacelar Santos, Witã dos Santos Rocha

Impact of adaptive filtering on a multilayer perceptron for ECG signal analysis under different noise regimes (<https://doity.com.br/anais/jbth/trabalho/551438>)

Felipe Cauã Ribeiro Pardo Casas, Moisés Araujo Oliveira

Intelligent architecture for continuous monitoring and diagnosis of cooling systems in hydroelectric power plants (<https://doity.com.br/anais/jbth/trabalho/553544>)

Davi Muniz da Silva, Felipe Dermeval Alves Santos, Ikaro Gonzaga de Souza Araujo Campos, Lilian Moraes de Oliveira, Robson Maciel Cerqueira de Santana, Ruan Felix dos Santos Brasil

Inverse kinematics and control for non-destructive inspection with soft robots (<https://doity.com.br/anais/jbth/trabalho/552108>)

Franklin Andrade de Brito, Gabriel Santos Sousa, Lucas Cruz da Silva, Miguel Felipe Nery Vieira, Pedro Boaventura Ferraz de Oliveira, Taniel Silva Franklin

Modeling, Tustin discretization, and state-space control of a ball-and-beam system (<https://doity.com.br/anais/jbth/trabalho/552134>)

Arthur Santos Moreira, Emanuel Benicio de Almeida Cajueiro, Mailson Pereira de Assis Filho, Miguel Oliveira do Amaral

Optimized machine learning models for output power prediction in quantum-dot lasers (<https://doity.com.br/anais/jbth/trabalho/552378>)

Eduardo F. Simas Filho, George A. P. Thé, Sinval V. A. Mota, Wild Freitas da Silva Santos

Optimizing object detection models for edge devices in embedded systems (<https://doity.com.br/anais/jbth/trabalho/552065>)

Diego Perpétuo Andrade de Oliveira, Eric Oliveira Santos, João Paulo Barros Silva, Sandy Oliveira Santos Piropo, Taniel Silva Franklin

Process approach to the synthesis of optimization techniques and AI in electrical power generation via large-scale wind turbines, adhering to ANEEL's electromechanical and regulatory coupling constraints (<https://doity.com.br/anais/jbth/trabalho/546330>)

Leonardo Almeida Jacobina Mesquita, Marcelo Moreira West, Pedro Paulo Matos Barreto, Rafael Costa Varela

Proposal for a modular and interoperable automation architecture for RLWI systems (<https://doity.com.br/anais/jbth/trabalho/553410>)

Cristiano Dal'Pai, Gabriel Silvestre Souza Freitas, Jhaidan Ribeiro Cruz, Jorsiele Damasceno Cerqueira, Matheus Antonio

Nogueira de Andrade, Rodrigo Pinheiro da Silva Lobo, Talitha Evangelista Ferreira da Silva, Toni Antunes Ferraz

Rhythmic Lights: An application of the PBL methodology to the digital systems course (<https://doity.com.br/anais/jbth/trabalho/552079>)

André Luis Pires Wenceslau Soares, Gustavo Oliveira Ramos Cruz, João Vitor Fraga de Carvalho Santos, Thamiles Rodrigues de Melo, Yasmin da Silva Bonfim

Robotic tools for ship hull cleaning: A systematic bibliographic survey of methods and technologies (<https://doity.com.br/anais/jbth/trabalho/551064>)

Herman Augusto Lepikson, Ivan João de Queiroz Filho

Technological mapping and analysis of automated inspection systems for high-voltage connectors in electric vehicles (<https://doity.com.br/anais/jbth/trabalho/545230>)

Deivison Silveira, Lilian Guarieiro

Technological retrofit of a legacy robotic manipulator for the ROS 2 ecosystem: A case study with the PhantomX Reactor Arm (<https://doity.com.br/anais/jbth/trabalho/552184>)

Akin Silva Santos, Bruno Cunha Lima, Leonardo Felipe Lima Santos dos Santos

Toward replicable agentic VR tutors: A framework for behavior-responsive professional education (<https://doity.com.br/anais/jbth/trabalho/553477>)

Andre Grassi, Eric Borges Carneiro, Fabiane de Jesus Paz, Ingrid Winkler, Lucas Gregory Gomes de Almeida, Lucas Santos Lima, Márcio Fontana Catapan, Yasmim Thasla Santos Ferreira

Unsupervised edge AI visual drift detection for waste reduction in manufacturing (<https://doity.com.br/anais/jbth/trabalho/546347>)

Aloísio Santos Nascimento Filho, Hugo Saba, João Pedro R. Marcelino, Toni R. Borges

VIPER: A soft robotic tool for hard-to-reach areas in O&G inspection (<https://doity.com.br/anais/jbth/trabalho/553330>)

Lucas Cruz da Silva, Nailson Lantyer Cordeiro de Araujo Sobrinho, Pedro Xavier Alcantara, Victor Santos Matos

Virtualization of industrial automation infrastructures using VMware ESXi: A case study of deploying a high-availability OT environment (<https://doity.com.br/anais/jbth/trabalho/552126>)

Alexandre da Silva Ribeiro, Jose Marcelo de Assis Santos, Milton Bastos de Souza, Miriele Carvalho Paim Monteiro, Wander Oliveira da Paixão

Quantum Technologies and Secure Communication

A hybrid quantum-classical warm-start framework for dynamic route reoptimization under simulated network disruptions (<https://doity.com.br/anais/jbth/trabalho/552457>)

David Franco Regalado, Felipe Dourado Figueiroa, Italo Ferreira da Silva, João Carlos Pereira Passos, Mabel Diz Marques Mota, Yuri Gonçalves Conrado Dantas

Application of quantum machine learning in wind speed prediction at Brazilian wind farms (<https://doity.com.br/anais/jbth/trabalho/552370>)

Aloisio Santos Nascimento Filho, André Saimon Santos Sousa, Hugo Saba, Valéria Loureiro da Silva

Classification of vulnerabilities in the transition from classical to post-quantum cryptography: A taxonomy and experimental analysis (<https://doity.com.br/anais/jbth/trabalho/552199>)

Adriano Humberto de Oliveira Maia, Anderson Altair Tomkelski, Felipe de Santanna Paixão, Isys Nogueira de Sant'Anna, João Marcelo Silva Souza, Marcus Elias Silva Freire, Maycon Leone Maciel Peixoto, Ney Ricardo Lopez Junior, Reinan da Silva Salazar, Ricardo Parizotto, Thiago Luigi Marinho de Mello

Competition between nonlinearity and inhomogeneities in discrete-time quantum walks (<https://doity.com.br/anais/jbth/trabalho/552340>)

Anderson Rafael Correia Buarque da Silva, Nicolas Amaral Tenorio, Wandearley da Silva Dias

Cryptographic comparison of NIST post-quantum algorithms and Chinese candidates with a feasibility analysis at the edge (<https://doity.com.br/anais/jbth/trabalho/552363>)

Edmar C. Gurjão, Jaqueline P. Silva, Joseana M. Fachine

Direct and heralded dimension-witness violation via entanglement swapping (<https://doity.com.br/anais/jbth/trabalho/553669>)

Alexandre Tacla, Moisés Alves, Vitor Sena

Effects of quantum noise on Grover's algorithm: A comparative study of bit-flip and depolarizing channels (<https://doity.com.br/anais/jbth/trabalho/552029>)

Anderson R. C. Buarque, Frank Acasiete, Wandearley da Silva Dias

Finite-size parameter estimation for continuous-variable quantum key distribution with finite detection range (<https://doity.com.br/anais/jbth/trabalho/551465>)

John Alexander Mora Rodriguez, Maron Freitas Anka

Fixed-point error analysis of a hybrid Box-Muller datapath on RISC-V: A pre-synthesis study (<https://doity.com.br/anais/jbth/trabalho/552304>)

Davi Juvêncio Gomes de Sousa, Glenda Barbosa do Nascimento, José Batista de Souza Júnior, Nelson Alves Ferreira Neto, Valéria Loureiro da Silva

Fixed-point representation analysis for FFT in quantum communication: A proposal for a dedicated accelerator via instruction set extension (<https://doity.com.br/anais/jbth/trabalho/552342>)

Davi Juvêncio Gomes de Sousa, Glenda Barbosa do Nascimento, José Batista de Souza Júnior, Nelson Alves Ferreira Neto, Valéria Loureiro da Silva

FPGA-based RM-CW LiDAR with APD/TCSPC detection for remote gas sensing (<https://doity.com.br/anais/jbth/trabalho/552318>)

Alexandre A. C. de Almeida, Arismar Cerqueira Sodre Junior, Danie Felinto, Giovanni Sales Lemos Ribeiro, Greter C. Mastrapa, Mareli Rodigheri, Paulo Kiohara

Mapping the quantum technology ecosystem (<https://doity.com.br/anais/jbth/trabalho/552290>)

David Franco Regalado, Felipe Dourado Figueiroa, Italo Ferreira da Silva, João Carlos Pereira Passos, Mabel Diz Marques Mota, Yuri Gonçalves Conrado Dantas

Measurement-device-independent QKD under a semidefinite programming framework (<https://doity.com.br/anais/jbth/trabalho/552305>)

Alexandre Baron Tacla, John M. Rodriguez, Mario Augusto Curvo Tavares Ribeiro

Proposal for a quantum-based dual-use radio-over-fiber system for secure drone communications (<https://doity.com.br/anais/jbth/trabalho/552257>)

Arismar Cerqueira S. Jr., Evandro Conforti, Magdalena M. M. Mikue, Paulo Kyohara, Pedro A. B. Leão, S. B. Vasconcellos

Quantum key distribution with weak coherent pulses and decoy states: A study of commercially representative hardware parameters for the BB84 protocol (<https://doity.com.br/anais/jbth/trabalho/552356>)

A. R. C. Buarque, H. S. Ghizoni, W. S. Dias

Quantum random number generation as critical security infrastructure: Market structure, regulatory drivers, and Brazil's strategic position (<https://doity.com.br/anais/jbth/trabalho/553499>)

David Franco Regalado, Felipe Dourado Figueiroa, Italo Ferreira da Silva, João Carlos Pereira Passos, Mabel Diz Marques Mota, Raphael de Oliveira Silva, Yuri Gonçalves Conrado Dantas

Representation and classification of electrocardiograms using projective quantum feature maps (<https://doity.com.br/anais/jbth/trabalho/551684>)

Abner de Almeida Costa, Marcelo Albano Moret Simões Gonçalves, Thiago Barros Murari

UVM-based functional verification of a tightly coupled data memory interconnect for a DSP accelerator on FPGA (<https://doity.com.br/anais/jbth/trabalho/552274>)

Leonardo Rodrigues Soares da Conceição, Nelson Alves Ferreira Neto, Paulo Cezar da Paixão

Ocean Technologies and Marine Sustainability

Effects of dibenzothiophene on larvae of the native Brazilian coral *Favia gravida* (Cnidaria: Scleractinia) (<https://doity.com.br/anais/jbth/trabalho/552118>)

Igor Cristino Silva Cruz, Maria Elisabete Machado, Natália Matos de Menezes

Identification and assessment of interfaces in complex systems: A case study (<https://doity.com.br/anais/jbth/trabalho/549869>)

Breno Barbosa, Bruna Sampaio, Frederico Garcia de Oliveira, Herman Lepikson, Valter Beal

Marine biofouling: Characterization and development of artificial samples of sun coral (<https://doity.com.br/anais/jbth/trabalho/552067>)

Erick Cerqueira das Neves, Ivan João de Queiroz Filho, Juracy Ferreira da Silva, Leonardo Oliveira Passos da Silva, Lucas Sarmento Neves da Rocha, Rodrigo Santiago Coelho

Systematic and panoramic review of polycyclic aromatic hydrocarbons from petroleum sources in coral reefs along the Brazilian coast (<https://doity.com.br/anais/jbth/trabalho/553528>)

Ícaro Thiago Andrade Moreira, Igor Cristino Silva Cruz, Larissa Barbosa dos Santos, Natalia Menezes, Pablo Willems Ordonez de Souza

X-band polarimetric discrimination between pelagic *Sargassum* and oil slicks using monostatic radar (<https://doity.com.br/anais/jbth/trabalho/552188>)

Artur Ramos Azevedo, Túlio de Lima Pedrosa, Xisto Lucas Travassos Junior

Management, Entrepreneurship and Creative Innovation

A conceptual narrative review of the distinctions and intersections between maintenance, maintenance

engineering, and reliability engineering in Brazilian industrial asset management (<https://doity.com.br/anais/jbth/trabalho/546356>)

Alisson Jesus dos Santos, Arthur Gabriel Lima Paim, Bruno Santos Junqueira, Robson Carlos Souza Rosário Junior, Thiago da Fonseca Andrade, Tiago Oliveira de Souza

A dynamic model for risk management in a water supply system in the semiarid region of Bahia, taking into account water quantity and quality (<https://doity.com.br/anais/jbth/trabalho/552211>)

Meire Jane Lima de Oliveira, Xisto Lucas Travassos Junior

Application of pineapple peels for the development of sustainable food products (<https://doity.com.br/anais/jbth/trabalho/552122>)

Andrieli Gugel, Creciana Maria Endres, Cristiano Malagutti Bianchi, Crivian Pelisser, Elisa Sonza, Soline Marie Pierre Germain

Application of the product development process in the design of a device for biomechanical monitoring (<https://doity.com.br/anais/jbth/trabalho/546439>)

Antônio Brasil Lopes Júnior, Arthur João Reis Lima Rodovalho, Cristiano Vasconcellos Ferreira, Edilson Oliveira Rangel Júnior, Eurídice Boa Morte Costa, Henrique de Aguiar Lima, Patrícia Elaine dos Santos Ferreira, Valter Estevão Beal

Audiovisual records as a strategy for preserving organizational memory in Industry 5.0: An exploratory literature review (<https://doity.com.br/anais/jbth/trabalho/550989>)

Lynn Alves, Patricia Elaine dos Santos Ferreira

Bridging the green premium: Industrial decarbonization and cross-auction optimization via the Gap2Zero platform (<https://doity.com.br/anais/jbth/trabalho/553463>)

José Zloccowick, Luis F. Sivoilella, Roberto G. Velásquez

Competence intelligence in professional education for Industry 5.0: Proposition of the FIACI framework (<https://doity.com.br/anais/jbth/trabalho/552157>)

Clariane Teixeira Pessoa Mamona, José Marcelo de Assis Santos, Ronaldo Costa Santos, Tatiana G. de Almeida Ferraz

Decision support model for resource importation: Integrating the Cynefin framework into production planning and control (<https://doity.com.br/anais/jbth/trabalho/553271>)

Cristiano Vasconcellos Ferreira, Keyla do Bomfim Andreoni, Thiago Barros Murari

Definition of requirements for the development of new technologies to reduce energy consumption in devices operating in standby mode (<https://doity.com.br/anais/jbth/trabalho/548113>)

Ciro Calheira Menezes, Cristiane Maria Caldas Queiroz, Cristiano Vasconcellos Ferreira, Guilherme Teixeira Pereira, Hugo Emanuel de Menezes Borges, João Victor Carvalho de Mattos, Kevin Luis dos Santos, Valter Estevão Beal

Diagnosis and Lean roadmap proposal for R&D in a textile industry (<https://doity.com.br/anais/jbth/trabalho/552038>)

Djoille Denner Damm, Lucas Lima Gonçalves

Diagnosis for the proposal of basic electronics workshops in public schools in Salvador and its metropolitan region (<https://doity.com.br/anais/jbth/trabalho/552308>)

Henrique de Aguiar Lima, Ian Muri Caribé de Azevedo, João Edgar de Souza Carneiro

From waste to value: Lean tools for efficiency and sustainability in agribusiness (<https://doity.com.br/>)

[anais/jbth/trabalho/552212](https://doity.com.br/anais/jbth/trabalho/552212))

Leticia Bartilotti de Queiroz, Raquel Gomes Basto

Intelligent architecture to support real-time pedagogical decision-making using artificial intelligence and augmented reality (<https://doity.com.br/anais/jbth/trabalho/552249>)

Carla Melo Silva, Carlos César Ribeiro Santos, Daniel Rodrigues dos Santos, Fernanda de Souza Barbosa, Herman Augusto Lepikson, Leonardo Galdino Monteiro Silva, Márcio de Souza Bastos

Logistics inefficiencies and performance: A conceptual taxonomy of the sources of operational failures (<https://doity.com.br/anais/jbth/trabalho/551003>)

Carlos Alberto de Arruda, Carlos César Ribeiro Santos, Daniel Rodrigues dos Santos, Félix de Jesus Silva, João Pedro Oliveira de Melo Machado, Lucas de Freitas Gomes, Maira Silva Andrade

Logistics process innovation: Applying the Supply Chain Readiness Level to assess maturity in industrial supply chains (<https://doity.com.br/anais/jbth/trabalho/552246>)

Carlos César Ribeiro Santos, Leonardo Sanches de Carvalho, Lucas de Freitas Gomes

Microsoft Power BI as a visual management analytics layer for Lean metrics: A literature review (<https://doity.com.br/anais/jbth/trabalho/552388>)

Davi Ben Silvany, Douglas Gomes de Magalhaes, Guilherme Sobral Santos

Optimization of the supply system of automotive production lines with tugger trains through discrete-event simulation (<https://doity.com.br/anais/jbth/trabalho/552204>)

Catharina Santana Graça Leite, Gustavo Staar Ghignone, Maira Silva Andrade

Proposal and development of a digital ICT infrastructure record for observability and data-driven decision-making in corporate and industrial environments (<https://doity.com.br/anais/jbth/trabalho/546249>)

Hugo Emanuel de Menezes Borges, Oberdan Rocha Pinheiro, Valter Estevão Beal

Rainfall-to-decision: An automated geospatial intelligence framework for climate-ready reservoir management (<https://doity.com.br/anais/jbth/trabalho/553362>)

Alexandre Mendonça Lima, Arthur Amaral e Silva, Helder Guimaraes Aragao

Risk management and system dynamics in water supply companies: Alignment of the dynamic model with enterprise risk management frameworks (<https://doity.com.br/anais/jbth/trabalho/553515>)

Meire Jane Lima de Oliveira, Xisto Lucas Travassos Junior

SENAI CIMATEC integrated product and technology development methodology (<https://doity.com.br/anais/jbth/trabalho/551978>)

Patricia Silva Costa, Rafael Santana Queiroz, Valter Estevão Beal

Social transformation through university extension: Impacts of the Química Inspira Project on scientific literacy and citizenship education (<https://doity.com.br/anais/jbth/trabalho/551687>)

Diniz Alves de Sant'Ana Silva, Elisson Andrade de Souza, Enzo Eduardo de Melo Almeida, Larissa Borges Ganz, Maria Clara Carvalho Barbosa

The influence of B Corp certification on the financial growth of certified companies: An integrative literature review (<https://doity.com.br/anais/jbth/trabalho/551883>)

Arilma Oliveira do Carmo Tavares, Camila Pereira Guizzo, Maria Eduarda de Lima e Silva

VisuaSurface: A BLE-based single-cell Braille display prototype using ESP32 and transistor actuation (<https://doity.com.br/anais/jbth/trabalho/552414>)

Beatriz Ferreira Ribeiro de Castro, Daniela Ferreira Ribeiro de Castro, Gabriela Simone Vasquez Santiago, Wild Freitas da Silva Santos

Instructions for Authors

Statement of Editorial Policy

Checklist for Submitted Manuscripts

Instructions for Authors

The Authors must indicate in a cover letter the address, telephone number and e-mail of the corresponding author. The corresponding author will be asked to make a statement confirming that the content of the manuscript represents the views of the co-authors, that neither the corresponding author nor the co-authors have submitted duplicate or overlapping manuscripts elsewhere, and that the items indicated as personal communications in the text are supported by the referenced person. Also, the protocol letter with the number should be included in the submission article, as well as the name of sponsors (if applicable).

Manuscripts may be submitted within designated categories of communication, including:

- Original basic or clinical investigation (original articles on topics of broad interest in the field of bioengineering and biotechnology applied to health). We particularly welcome papers that discuss epidemiological aspects of international health, clinical reports, clinical trials and reports of laboratory investigations.
- Case presentation and discussion (case reports must be carefully documented and must be of importance because they illustrate or describe unusual features or have important practice implications).
- Brief reports of new methods or observations (short communications brief reports of unusual or preliminary findings).

- State-of-the-art presentations (reviews on protocols of importance to readers in diverse geographic areas. These should be comprehensive and fully referenced).
- Review articles (reviews on topics of importance with a new approach in the discussion). However, review articles only will be accepted after an invitation of the Editors.
- Letters to the editor or editorials concerning previous publications (correspondence relating to papers recently published in the Journal, or containing brief reports of unusual or preliminary findings).
- Editor's corner, containing ideas, hypotheses and comments (papers that advance a hypothesis or represent an opinion relating to a topic of current interest).
- Innovative medical products (description of new biotechnology and innovative products applied to health).
- Health innovation initiatives articles (innovative articles of technological production in Brazil and worldwide, national policies and directives related to technology applied to health in our country and abroad).

The authors should checklist comparing the text with the template of the Journal.

Supplements to the JBTH include articles under a unifying theme, such as those summarizing presentations of symposia or focusing on a specific subject. These will be added to the regular publication of the Journal as appropriate, and will be peer reviewed in the same manner as submitted manuscripts.

Statement of Editorial Policy

The editors of the Journal reserve the right to edit manuscripts for clarity, grammar and style. Authors will have an opportunity to review these changes prior to creation of galley proofs. Changes in content after galley proofs will be sent for reviewing and could be required charges to the author. The JBTH does not accept articles which duplicate or overlap publications elsewhere.

Peer-Review Process

All manuscripts are assigned to an Associate Editor by the Editor-in-Chief and Deputy

Editor, and sent to outside experts for peer review. The Associate Editor, aided by the reviewers' comments, makes a recommendation to the Editor-in-Chief regarding the merits of the manuscript. The Editor-in-Chief makes a final decision to accept, reject, or request revision of the manuscript. A request for revision does not guarantee ultimate acceptance of the revised manuscript.

Manuscripts may also be sent out for statistical review ou *ad hoc* reviewers. The average time from submission to first decision is three weeks.

Revisions

Manuscripts that are sent back to authors for revision must be returned to the editorial office by 15 days after the date of the revision request. Unless the decision letter specifically indicates otherwise, it is important not to increase the text length of the manuscript in responding to the comments. The cover letter must include a point-by-point response to the reviewers and Editors comments, and should indicate any additional changes made. Any alteration in authorship, including a change in order of authors, must be agreed upon by all authors, and a statement signed by all authors must be submitted to the editorial office.

Style

Manuscripts may be submitted only in electronic form by www.jbth.com.br. Each manuscript will be assigned a registration number, and the author notified that the manuscript is complete and appropriate to begin the review process. The submission file is in OpenOffice, Microsoft Word, or RTF document file format for texts and JPG (300dpi) for figures.

Authors must indicate in a cover letter the address, telephone number, fax number, and e-mail of the corresponding author. The corresponding author will be asked to make a statement confirming that the content of the manuscript represents the views of the co-authors, that neither the corresponding author nor the co-authors have submitted duplicate or overlapping manuscripts elsewhere, and that the items indicated as personal communications in the text are supported by the referenced person.

Manuscripts are to be typed as indicated in Guide for Authors, as well as text, tables, references, legends. All pages are to be numbered with the order of presentation as follows: title page, abstract, text, acknowledgements, references, tables, figure legends and figures. A running title of not more than 40 characters should be at the top of each page. References should be listed consecutively in the text and recorded as follows in the reference list, and must follow the format of the National

Library of Medicine as in Index Medicus and “Uniform Requirements for Manuscripts Submitted to Biomedical Journals” or in “Vancouver Citation Style”. Titles of journals not listed in Index Medicus should be spelled out in full.

Manuscript style will follow accepted standards. Please refer to the JBTH for guidance. The final style will be determined by the Editor-in-Chief as reviewed and accepted by the manuscript’s corresponding author.

Approval of the Ethics Committee

The JBTH will only accept articles that are approved by the ethics committees of the respective institutions (protocol number and/or approval certification should be sent after the references). The protocol number should be included in the end of the Introduction section of the article.

Publication Ethics

Authors should observe high standards with respect to publication ethics as set out by the International Committee of Medical Journal Editors (ICMJE). Falsification or fabrication of data, plagiarism, including duplicate publication of the authors’ own work without proper citation, and misappropriation of the work are all unacceptable practices. Any cases of ethical misconduct are treated very seriously and will be dealt with in accordance with the JBTH guidelines.

Conflicts of Interest

At the point of submission, each author should reveal any financial interests or connections, direct or indirect, or other situations that might raise the question of bias in the work reported or the conclusions, implications, or opinions stated - including pertinent commercial or other sources of funding for the individual author(s) or for the associated department(s) or organizations(s), and personal relationships. There is a potential conflict of interest when anyone involved in the publication process has a financial or other beneficial interest in

the products or concepts mentioned in a submitted manuscript or in competing products that might bias his or her judgment.

Material Disclaimer

The opinions expressed in JBTH are those of the authors and contributors, and do not necessarily reflect those of the SENAI CIMATEC, the editors,

the editorial board, or the organization with which the authors are affiliated.

Privacy Statement

The names and email addresses entered in this Journal site will be used exclusively for the stated purposes of this journal and will not be made available for any other purpose or to any other party.

Brief Policies of Style

Manuscript	Original	Review	Brief Communication	Case Report	Editorial ; Letter to the Editor; Editor' s Corner	Innovative Medical Products	State-of-the-Art	Health Innovation Initiatives
Font Type	Times or Arial	Times or Arial	Times or Arial	Times or Arial	Times or Arial	Times or Arial	Times or Arial	Times or Arial
Number of Words – Title	120	90	95	85	70	60	120	90
Font Size/Space-Title	12; double space	12; double space	12; double space	12; double space	12; double space	12; double space	12; double space	12; double space
Font Size/Space-Abstracts/Key Words and Abbreviations	10; single space	10; single space	10; single space	10; single space	-	-	10; single space	10; single space
Number of Words – Abstracts/Key Words	300/5	300/5	200/5	250/5	-	-	300/5	300/5
Font Size/Space-Text	12; Double space	12; Double space	12; Double space	12; Double space	12; Double space	12; Double space	12; Double space	12; Double space
Number of Words – Text	5,000 including spaces	5,500 including spaces	2,500 including spaces	1,000 including spaces	1,000 including spaces	550 including spaces	5,000 including spaces	5,500 including spaces
Number of Figures	8 (title font size 12, double space)	3 (title font size 12, double space)	2 (title font size 12, double space)	2 (title font size 12, double space)	-	2 (title font size 12, double space)	8 (title font size 12, double space)	8 (title font size 12, double space)
Number of Tables/Graphic	7 title font size 12, double space	2 title font size 12, double space	2(title font size 12, double space)	1(title font size 12, double space)	-	-	7 title font size 12, double space	4 title font size 12, double space
Number of Authors and Co-authors*	15	10	5	10	3	3	15	10
References	20 (font size 10,single space	30(font size 10,single space	15 (font size 10,single space)	10 (font size 10,single space)	10 (font size 10,single space	5(font size 10,single space	20 (font size 10,single space	20

*First and last name with a sequencing overwritten number. Corresponding author(s) should be identified with an asterisk; Type 10, Times or Arial, single space. Running title of not more than 40 characters should be at the top of each page. References should be listed consecutively in the text. References must be cited on (not above) the line of text and in brackets instead of parentheses, e.g., [7,8]. References must be numbered in the order in which they appear in the text. References not cited in the text cannot appear in the reference section. References only or first cited in a table or figures are numbered according to where the table or figure is cited in the text. For instance, if a table is placed after reference 8, a new reference cited in table 1 would be reference 9.1 would be reference 9.

Checklist for Submitted Manuscripts

- ☐1. Please provide a cover letter with your submission specifying the corresponding author as well as an address, telephone number and e-mail.
- ☐2. Submit your paper using our website www.jbth.com.br. Use Word Perfect/Word for Windows, each with a complete set of original illustrations.
- ☐3. The entire manuscript (including tables and references) must be typed according to the guidelines instructions.
- ☐4. The order of appearance of material in all manuscripts should be as follows: title page, abstract, text, acknowledgements, references, tables, figures/graphics/diagrams with the respective legends.
- ☐5. The title page must include a title of not more than three printed lines (please check the guidelines of each specific manuscript), authors (no titles or degrees), institutional affiliations, a running headline of not more than 40 letters with spaces.
- ☐6. Acknowledgements of persons who assisted the authors should be included on the page preceding the references.
- ☐7. References must begin on a separate page.
- ☐8. References must be cited on (not above) the line of text and in brackets instead of parentheses, e.g., [7,8].
- ☐9. References must be numbered in the order in which they appear in the text. References not cited in the text cannot appear in the reference section. References only or first cited in a table or figures are numbered according to where the table or figure is cited in the text. For instance, if a table is placed after reference 8, a new reference cited in table 1 would be reference 9.
- ☐10. Reference citations must follow the format established by the “Uniform Requirements for Manuscripts Submitted to Biomedical Journals” or in “Vancouver Citation Style”.
- ☐11. If you reference your own unpublished work (i.e., an “in press” article) in the manuscript that you are submitting, you must attach a file of the “in press” article and an acceptance letter from the journal.
- ☐12. If you cite unpublished data that are not your own, you must provide a letter of permission from the author of that publication.
- ☐13. Please provide each figure in high quality (minimum 300 dpi: JPG or TIF). Figure must be on a separate file.
- ☐14. If the study received a financial support, the name of the sponsors must be included in the cover letter and in the text, after the author’s affiliations.
- ☐15. Provide the number of the Ethics Committees (please check the guidelines for authors).