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In this issue

Research Article

Open Access Research Article PTZAID:JCEES-8-158

BIM methodology implementation in structural design: Adaptation of procedures and information management

Published On: October 21, 2022 | Pages: 093 - 099

Author(s): Gonçalo Ferreira Azevedo*

Building Information Modelling (BIM) is a methodology that accompanies technological evolution and consists of a set of processes and tools that allows the creation of a three-dimensional digital model. This model centralizes information, facilitating its access and exchange between the entities along the life cycle of a building. This study focuses on the applicatio ...

Abstract View Full Article View DOI: 10.17352/2455-488X.000058

Open Access Research Article PTZAID:JCEES-8-157

Wood-cement-steatite panels used in replacement of gypsum boards in residential and commercial buildings: contribution to the thermal mass

Published On: October 18, 2022 | Pages: 084 - 092

Author(s): Viet-Anh Vu, Benoit Bissonnette*, Alain Cloutier and Pierre Blanchet

This article reports the results of a study carried out to evaluate the influence of wood-cement-steatite partitions on the thermal performance of a small building. The interior walls of two identical 2.0 × 2.5 × 3.0 m experimental wooden frame huts (tiny houses, with one door and one window), designed and built following the National Building Code of Canada, were cov ...

Abstract View Full Article View DOI: 10.17352/2455-488X.000057

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Environmental awareness on solid waste management practices: A case study in Angolan secondary schools

Published On: September 05, 2022 | Pages: 076 - 081

Author(s): Talita Ima Panzo, José Carlos Góis* and José Manuel Mendes

This paper presents a case study on the environmental awareness of the students of secondary schools in Angola and analyses the environmental education programs in the two cycles. The study was carried out in the four largest provinces of Angola and the results were obtained from questionnaires to the students and interviews with the school coordinators and the waste ...

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Open Access Research Article PTZAID:JCEES-8-154

The protection of reinforced concrete structures: Active and passive systems

Published On: August 27, 2022 | Pages: 071 - 075

Author(s): Christian Paglia*

The conservation state, maintenance, repair, and complete restoration of reinforced concrete structures are recurring actions necessary to preserve the built infrastructure. A big issue related to enormous costs aimed at extending the service life of construction systems and addressed to sustainability. In the investigated cases of buildings and civil engineering stru ...

Abstract View | Full Article View | DOI: 10.17352/2455-488X.000054

Open Access Research Article PTZAID:JCEES-8-152

Structural health monitoring and modal parameters identification of Mezcala Bridge

Published On: July 29, 2022 | Pages: 062 - 067

Author(s): Miguel Anaya-Diaz, Francisco J Carrion-Viramontes, Juan A Quintana-Rodriguez, Luis A Martinez-Trujano and Jose M Machorro-Lopez*

Since 2016 the Instituto Mexicano del Transporte (Mexican Transport Institute) has continuously instrumented and performed the structural monitoring of the Mezcala Bridge, which is a cable-stayed bridge located in the State of Guerrero, Mexico. In order to identify early damage, several monitoring strategies based on changes in the bridge modal parameters have been im ...

Abstract View Full Article View DOI: 10.17352/2455-488X.000052

Mini Review

Open Access Mini Review PTZAID:JCEES-8-153

Membrane-assisted reactor for the direct conversion of CO2 to DME/MeOH

Published On: August 04, 2022 | Pages: 068 - 070

Author(s): Francesco Frusteri*, Giuseppe Bonura, Catia Cannilla, Serena Todaro and Alessandro Cajumi

Several strategies are currently underway to investigate alternative routes to efficiently use CO2 as a carbon source for the production of alternative fuels for energy end transportation [1,2]. ...

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Opinion

Open Access Opinion PTZAID:JCEES-8-156

Wildfires: A rising hazard for infrastructure resilience

Published On: October 14, 2022 | Pages: 082 - 083

Author(s): Liz Varga*

The latest wildfires around the globe are evidence of growing global temperatures that are a threat to infrastructure resilience. Wildfires are exacerbated by drought and parched conditions, disease, dry lightning and increased interaction between humans and forests leading to accidental as well as purposeful ignition. ...

Abstract View Full Article View DOI: 10.17352/2455-488X.000056