



HANOI UNIVERSITY OF CIVIL ENGINEERING

JOURNAL OF
SCIENCE AND TECHNOLOGY IN
CIVIL
ENGINEERING

p-ISSN 1859-2996
e-ISSN 2734-9268

(ACI Indexed Journal - www.stce.huce.edu.vn)

Vol.16 No.2
4 - 2022

Table of Contents

1. Experimental studies on behaviors of reinforced concrete column structures made of recycled aggregates under concentric loads <i>Nguyen Thanh Quang, Tran Viet Cuong, Nguyen Ngoc Tan, Nghiem Ha Tan, Ken Kawamoto, Nguyen Hoang Giang</i>	1
2. Influence of microfine-contaminated sand from Mandulog River system in Iligan City, Philippines on the performance of concrete <i>Joel Galupo Opon</i>	12
3. A hybrid arithmetic optimization algorithm and differential evolution for optimization of truss structures subjected to frequency constraints <i>Dieu T. T. Do, Tan-Tien Nguyen, Quoc-Hung Nguyen, Tinh Quoc Bui</i>	22
4. Modified AK-MCS method and its application on the reliability analysis of underground structures in the rock mass <i>Ngoc-Tuyen Tran, Duc-Phi Do, Dashnor Hoxha, Minh-Ngoc Vu, Gilles Armand</i>	38
5. The influence of PVA content on the flexural behavior of engineered cementitious composite using local materials <i>Nguyen Tat Thang, Nguyen Cong Thang, Nguyen Van Tuan, Pham Sy Dong, Vu Van Tham, Tran Minh Tu</i>	55
6. Optimum location of a single longitudinal stiffener with various cross-section shapes of steel plate girders under bending loading <i>George Papazafeiropoulos, Quang-Viet Vu, Viet-Son Nguyen, Viet-Hung Truong</i>	65
7. Evaluation of the suitability of pepper mild mottle virus (PMMoV) as an indicator virus for water safety and quality <i>Vu Duc Canh, Nguyen Thuy Lien, Tran Thi Viet Nga</i>	76
8. Small public spaces in the residential quarters of Hanoi's historical inner city-toward sustainable development <i>Ta Quynh Hoa</i>	89
9. Predicting dynamic responses of frame structures subjected to stochastic wind loads using temporal surrogate model <i>Dang Viet Hung, Nguyen Truong Thang</i>	106
10. Effects of lightweight particle content on the mechanical strength of cylindrical aggregates <i>Ho Van Nhat Phong, Vo Thanh Trung, Tran Dinh Minh, Nguyen Van My, Vu Thi Lo</i>	117
11. Lightweight foamed concrete reinforced with different polypropylene fiber contents <i>Si-Huy Ngo, Trong-Phuoc Huynh</i>	128