

## 5. Publication list 2022

### Belgium

#### **Universiteit Leuven**

Rutger Vrijdaghs and Els Verstrynghe

Kasteelpark Arenberg 40, Box 2448, Leuven, Belgium

**Probabilistic structural analysis of a real-life corroding concrete bridge girder incorporating stochastic material and damage variables in a finite element approach.** Engineering Structures. Volume 254, March 1, 2022, 113831.

### Brazil

#### **Universidade Federal de Goiás**

Jefferson Rosa de Souza and Daniel de Lima Araújo

Escola de Engenharia Civil e Ambiental, Universidade Federal de Goiás, Rua Universitária, n° 1488, Quadra 86, Setor Universitário, Goiânia, GO CEP: 74605-220, Brazil.

**Shear capacity of prestressed hollow core slabs in flexible support using computational modelling.**

Engineering Structures. Volume 260, 1 June 2022, 114243

### Canada

#### **University of Ottawa**

Sepideh Zaghian, Beatriz Martín-Pérez and Husham Almansour

Department of Civil Engineering, University of Ottawa, Ottawa, ON, Canada.

**Nonlinear finite element modeling of the impact of reinforcement corrosion on bridge piers under concentric loads.** Structural Concrete Journal of the *fib*, Volume 23, Issue 1, February 2022, Pages 138-153.

### Chili/USA

#### **Pontificia Universidad Católica de Chile and University of Colorado Boulder (USA)**

María J. Echeverría-Landeta<sup>1,2</sup>; Rosita Jünemann-Ureta<sup>3</sup>; Abbie B. Liel<sup>4</sup>

<sup>1</sup>Pontificia Universidad Católica de Chile, Departamento de Ingeniería Estructural y Geotécnica, Santiago – Chile

<sup>2</sup>University of Colorado Boulder, Department of Civil, Environmental, and Architectural Engineering, Boulder, CO – Estados Unidos

<sup>3</sup>Pontificia Universidad Católica de Chile, Departamento de Ingeniería Estructural y Geotécnica, Santiago – Chile

<sup>4</sup>University of Colorado Boulder, Department of Civil, Environmental, and Architectural Engineering, Boulder, CO – Estados Unidos

**Nonlinear modeling and analysis of reinforced concrete structural walls**

Research Gate Article · June 2022 DOI: 10.31243/id.v15.2022.1594

## China

### **Beijing University of Technology**

Liu Jin, Yanxi Li, Renbo Zhang and Xiuli Du

Key Laboratory of Urban Security and Disaster Engineering of Ministry of Education, Beijing University of Technology, Beijing, 100024, China

Mesoscopic investigation on seismic performance of corroded reinforced concrete columns. *Earthquake Engineering and Engineering Vibration* volume 21, pages 969–985 (2022). <https://doi.org/10.1007/s11803-022-2130-3>

### **Beijing Jiaotong University and Hunan University**

Guanyuan Zhao <sup>a</sup>, Li Zhu <sup>a</sup>, Suiwen Wu <sup>b</sup>, Wei Liu <sup>a</sup>, Shengjie Duan <sup>a</sup>

<sup>a</sup> School of Civil Engineering, Beijing Jiaotong University, Beijing, China

<sup>b</sup> Laboratory for Wind and Bridge Engineering of Hunan Province, College of Civil Engineering, Hunan University, Changsha 410082, China

**Experimental and numerical investigation on the cross-sectional mechanical behavior of prefabricated multi-cabin RC utility tunnels.** *Elsevier Structures*, Volume 42, August 2022, pages 466-479.

### **Guizhou University and Chongqing University**

Xun Ou<sup>1</sup>, Yuanming Liu<sup>1</sup>, Chao Li<sup>1</sup>, Xiaohan Zhou<sup>2</sup>, Qingzhi Chen<sup>1</sup>, Yuhang Zhou<sup>1</sup> and Quan Zhang<sup>1</sup>

<sup>1</sup> College of Civil Engineering, Guizhou University, Guiyang 550025, China

<sup>2</sup> College of Civil Engineering, Chongqing University, Chongqing 400044, China

Analysis of the Interaction Effects of Shield Structure Oblique Passing under an Existing Tunnel. *Applied Sc.* 2022, 12(11), 5569; <https://doi.org/10.3390/app12115569>

## China/United Kingdom

### **Zhejiang University (China), Ningbo Yizhong Concrete Pile Co. Ltd. (China) and University of Edinburgh (United Kingdom)**

Junwei Ren<sup>a</sup>, Quanbiao Xu<sup>b</sup>, Gang Chen<sup>b</sup>, Xiaodong Yu<sup>c</sup>, Shunfeng Gong<sup>a</sup>, Yong Lu<sup>d</sup>

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<sup>d</sup> Institute for Infrastructure and Environment, School of Engineering, The University of Edinburgh, Edinburgh, EH9 3JL, United Kingdom

**Full-scale experimental study of the seismic performance of pretensioned spun high-strength concrete piles.** *Soil Dynamics and Earthquake Engineering*. Volume 162, November 2022, 107467.

## Cyprus

### **Cyprus University of Technology**

Elpida Georgiou, Nicholas Kyriakides, Christis Z. Chrysostomou

Department of Civil Engineering and Geomatics, Cyprus University of Technology, 3036 Limassol, Cyprus.

**Numerical simulation of RC frames infilled with RC walls for seismic strengthening of existing structures.** *Bulletin of Earthquake Engineering*. January 2022.

<https://doi.org/10.1007/s10518-022-01319-w>

Elpida Georgiou, Nicholas Kyriakides & Christis Z. Chrysostomou.  
Department of Civil Engineering and Geomatics, Cyprus University of Technology,  
3036 Limassol, Cyprus. Elpida Georgiou

**Nonlinear numerical parametric study of the number and arrangement of dowels connecting the wall to the bounding frame for the seismic strengthening of RC frames with RC infill walls.** Bulletin of Earthquake Engineering volume 20, Pages 3821–3862 (2022).

## **Cyprus/Portugal**

### **Cyprus University of Technology (Cyprus) and University of Porto (Portugal)**

Christiana Filippou<sup>1</sup>, André Furtado<sup>2</sup>, Maria Teresa De Risi<sup>3</sup>, Nicholas Kyriakides<sup>1</sup> and Christis Z. Chrysostomou<sup>1</sup>

<sup>1</sup> Cyprus University of Technology

<sup>2</sup> University of Porto

<sup>3</sup> University of Napels

### **Behaviour of Masonry-Infilled RC Frames Strengthened Using Textile Reinforced Mortar: An Experimental and Numerical Studies Overview**

Pages 7743-7767 | Published online: 18 Jan 2022, Journal of Earthquake Engineering, Volume 26, 2022 – Issue 15. <https://doi.org/10.1080/13632469.2021.1988763>

## **Czech**

### **Czech Technical University**

Ingrid Bloem, Department of Concrete and Masonry Structures, Faculty of Civil Engineering, Czech Technical University, Thákurova 7, 166 29 Praha 6, Czech Republic  
**Masonry Elements Strengthened with TRM: A Review of Experimental, Design and Numerical Methods**

Buildings 2022, 12, 1307. <https://doi.org/10.3390/buildings12091307>

## **Denmark**

### **COWI A/S and The Technical University of Denmark**

M.E.M. Andersen & T.W. Jensen, Department of Bridges International, COWI A/S, Kongens Lyngby, Denmark. P.N. Poulsen, J.F. Olesen & L.C. Hoang, Department of Civil Engineering, The Technical University of Denmark, Kongens Lyngby, Denmark.

### **Validation of reinforced concrete pile caps using non-linear finite element analysis and finite element limit analysis.**

Computational Modelling of Concrete and Concrete Structures – Meschke, Pichler & Rots (Eds) © 2022 Copyright the Author(s), ISBN: 978-1-032-32724-2.

## **Egypt**

### **Cairo University, Higher Technological Institute (HTI) and Helwan University**

Ahmed Elbably<sup>1</sup>, Osman Ramadan<sup>1,2</sup>, Adel Akl<sup>1</sup> and Naser Zenhom<sup>3</sup>

<sup>1</sup> Structural Engineering Department, Cairo University, Cairo, Egypt

<sup>2</sup> Higher Technological Institute HTI at 10th of Ramadan City, Egypt

<sup>3</sup> Civil Engineering Department, Helwan University, Cairo, Egypt.

**Behavior of encased steel-high strength concrete columns against axial and cyclic loading.** Journal of Constructional Steel Research. Volume 191, April 2022, 107161

## Germany

### **Leibniz University of Hannover**

Sander van den Broek<sup>1</sup>, Johannes Wolff<sup>2</sup>, Sven Scheffler<sup>1</sup>, Christian Hühne<sup>2</sup>, Raimund Rolfes<sup>1</sup>

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<sup>2</sup> Deutsches Zentrum für Luft-und Raumfahrt (DLR), Lilienthalplatz 7, 38108 Brunswick, Germany.

### **Improving the fatigue life of printed structures using stochastic variations.**

Progress in Additive Manufacturing (2022) 7:1225–1238.

<https://doi.org/10.1007/s40964-022-00296-5>

### **Technische Universität Braunschweig**

Henrik Matz and Martin Empelmann

#### **Robustness of centrally loaded UHPC-columns**

Institute of Building Materials, Concrete Construction and Fire Safety, Division of Concrete Constructions, Technische Universität Braunschweig, Germany. Conference: HiPerMat 2020 - 5th International Symposium on Ultra High Performance Concrete and High Performance Construction Materials at Kassel, Germany.

Henrik Matz, Marcel Wichert, Martin Empelmann

#### **Grouted segment joints for structures made of ultra-high performance concrete**

iBMB, Division of Concrete Construction, TU Braunschweig, Germany  
Proceedings of the *fib* Symposium 2019. Concrete - Innovations in Materials, Design and Structures.

Henrik Matz, Martin Empelmann

iBMB, Division of Concrete Construction, TU Braunschweig, Germany

#### **Butt joints in prefabricated columns with high reinforcement ratios**

Conference paper, *fib* Congress Oslo, June 2022.

Jan-Paul Lanwer<sup>1</sup>, Hendrik Weigel<sup>1</sup>, Abtin Baghdadi<sup>2</sup>, Martin Empelman<sup>1</sup> and Harald Kloft<sup>2</sup>

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<sup>2</sup> ITE (Institute of Structural Design), TU Braunschweig, 38106 Braunschweig, Germany.

#### **Jointing Principles in AMC—Part 1: Design and Preparation of Dry Joints**

*Appl. Sci.* **2022**, *12*(9), 4138; <https://doi.org/10.3390/app12094138>

H. Matz, M. Wichert, M. Empelmann

iBMB, Division of Concrete Construction, TU Braunschweig, Germany

#### **Numerical investigations on grouted segment joints for UHPC-structures.**

Advances in Engineering Materials, Structures and Systems: Innovations, Mechanics and Applications – Zingoni (Ed.) Taylor & Francis Group, London, ISBN 978-1-138-38696-9.

## Technical University of Darmstadt

Dominik Müller, Lukas Bujotzek, Tilo Proske and Carl-Alexander Graubner

<sup>1</sup> Institute of Concrete and Masonry Structures, Technical University of Darmstadt, Franziska-Braun-Straße 3, 64287, Darmstadt, Germany.

**Influence of spatially variable material properties on the resistance of masonry walls under compression.** Materials and Structures volume 55, article number 84.

Published 8 March 2022. <https://doi.org/10.1617/s11527-022-01913-z>

## Germany/Netherlands

### Leibniz University of Hannover (Germany), Rotterdam University of Applied Sciences (The Netherlands)

Sander van den Broek<sup>a</sup>, Eelco Jansen<sup>b</sup>, Raimund Rolfes<sup>a</sup>

<sup>a</sup>Leibniz University Hannover, Germany

<sup>b</sup>Rotterdam University of Applied Sciences, the Netherlands

**Efficient generation of geodesic randomfields in finite elements with application to shell buckling.**

Article in *Thin-Walled Structures* · June 2022. DOI: 10.1016/j.tws.2022.109646

## India

### Mahindra University

Faisal Mehraj Wani, Mohd Ataullah Khan, Jayaprakash Vemuri. Department of Civil Engineering, Ecole Centrale College of Engineering, Mahindra University, Hyderabad, India.

**2D nonlinear finite element analysis of reinforced concrete beams using total strain crack model.** Materials Today: Proceedings 64 (2022) 1305–1313

Ruthviz Kodali, Faisal Mehraj Wani<sup>1</sup>, Tariq Anwar Aquib<sup>2</sup>, and Jayaprakash Vemuri<sup>1</sup>

<sup>1</sup>Department of Civil Engineering, Ecole Centrale College of Engineering, Mahindra University, India.

<sup>2</sup>King Abdullah University of Science and Technology.

**Numerical Modelling of an Unreinforced Masonry Wall with Central Window**

**Opening.** Recent Advances in Materials, Mechanics and Structures (pp.61-71), October 2022

## India/Saudi Arabia

### Mahindra University (India), King Abdullah University of Science and Technology (Saudi Arabia), Indian Institute of Technology Hyderabad (India)

Jayaprakash Vemuri<sup>1</sup>, Tariq Anwar<sup>2</sup> and KVL Subramaniam<sup>3</sup>

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<sup>3</sup> Department of Civil Engineering, Indian Institute of Technology Hyderabad, Telangana 502285, India

**Seismic fragility assessment of load-bearing soft-brick unreinforced masonry piers.**

Journal of Safety Science and Resilience. Volume 3, Issue 4, December 2022, Pages 277-287.

## Iran

### **Arak University and University of Guilan**

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<sup>2</sup> Department of Civil Engineering, University of Guilan, Rasht, Islamic Republic of Iran

**Comparative study on diagonal strut models for concrete sandwich panels in steel frames.** Asian Journal of Civil Engineering 23, 125-139 (2022).

## Iran/Germany/USA

### **K.N. Toosi University of Technology (Iran), Technical University of Munich (Germany) and Clemson University (USA)**

Ali Khansefid<sup>a b</sup>, Seyed MahmoudrezaYadollahi<sup>c</sup>, Gerhard Müller<sup>b</sup>, Francesca Taddei<sup>b</sup>

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<sup>b</sup> Civil Engineering Department, Technical University of Munich, Munich, Germany

<sup>c</sup> Civil Engineering Department, Clemson University, Clemson, USA

**Soil-structure-interaction effects on the seismic performance of a masonry building under geothermal power plants induced earthquakes.** Structures, volume 55,

September 2023, Pages 468-481

## Iraq

### **Al-Nahrain University**

Nabaa Safaa Hussein<sup>1</sup>, Sultan A. Daud<sup>2</sup>.

<sup>1</sup>MSC Student.

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**Cracks Performance of Lightweight Concrete Beams.** International Journal of Mechanical Engineering, Vol. 7 No 1. January, 2022. ISSN: 0974-5823

### **University of Technology, Iraq and University of Kerbala, Iraq.**

Mohammed Elwi<sup>1</sup>, Wameedh Ghassan Abdul-Hussein<sup>2</sup>, Ahlam Sader Mohammed<sup>3</sup>, Mustafa Amoori Kadhim<sup>4</sup>

<sup>1,2,3</sup>Civil Engineering Department, University of Technology, Iraq

<sup>4</sup>Civil Engineering Department, University of Kerbala, Iraq.

**Seismic behavior of a strengthened full scale reinforced concrete building using the finite element modelling approach.**

Periodicals of Engineering and Natural Sciences. Vol. 10, No.2, April 2022, pp.539-556.

## Italy

### **Masera Engineering Group and Politecnico di Torino**

Mattia Mairone<sup>1</sup>, Rebecca Asso<sup>2</sup>, Davide Masera<sup>3</sup>, Pietro Palumbo<sup>1</sup>

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<sup>3</sup>Masera Engineering Group S.r.l., Corso Re Umberto 8, Torino, Italy

**Behaviour and Analysis of Horizontally Curved Steel Box-Girder Bridges**

Open Journal of Civil Engineering, 2022, 12, 390-414.

<https://www.scirp.org/journal/ojce>. ISSN Online: 2164-3172. ISSN Print: 2164-3164.

24-01-003

**Politecnico Di Torino, Responsible, Risk, Resilience  
Interdepartmental Centre (R3C)**

Stefania Coccimiglio<sup>1</sup>, Giorgia Coletta<sup>1</sup>, Erica Lenticchia<sup>1,2</sup>, Gaetano Miraglia<sup>1,2</sup> and Rosario Ceravolo<sup>1,2</sup>.

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**Combining satellite geophysical data with continuous on-site measurements for monitoring the dynamic parameters of civil structures.** *Scientific Reports* volume 12, Article number: 2275 (2022)

**University of Bologna**

F. Ferretti & C. Mazzotti. *DICAM Department, University of Bologna, Bologna, Italy.*

**Numerical modeling of compression tests on masonry cores.**

Computational Modelling of Concrete and Concrete Structures – Meschke, Pichler & Rots (Eds). © 2022 Copyright the Author(s), ISBN: 978-1-032-32724-2.

**University of Florence**

Ambra Maramai and Michele Coppola. University of Florence, Italy  
Communication: Ambra Maramai.

**The Castle of Cerretaccio studies for the material history and conversation.**

FORMA CIVITATIS: International journal of urban and territorial morphological studies (IJUTMS), Vol. 2, N. 1, 2022.

**University of Genoa and University of Pavia (Italy)**

Serena Cattari<sup>1</sup> and Guido Magenes

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<sup>2</sup> Department of Civil and Architectural Engineering (DICAR), University of Pavia, Via Adolfo Ferrata 3, 27100, Pavia, Italy

**Benchmarking the software packages to model and assess the seismic response of unreinforced masonry existing buildings through nonlinear static analyses.** Bulletin of Earthquake Engineering 20, 1901-1936 (2022). <https://doi.org/10.1007/s10518-021-01078-0>

**University of Napels (Italy)**

F. Saviano, F. Parisi, G. P. Lignola, Department of Structures for Engineering and Architecture, University of Naples Federico II, via Claudio 21, 80125 Naples, Italy

**Material aging effects on the in-plane lateral capacity of tuff stone masonry walls: a numerical investigation.**

Materials and Structures (2022) 55:198. <https://doi.org/10.1617/s11527-022-02032-5>

**University of Padova**

Matteo Salvalaggio and Maria Rosa Valluzzi

Department of Cultural Heritage, University of Padova, Piazza Capitanato 7, 35139 Padova, Italy.

**Optimization of Intervention Strategies for Masonry Buildings Based on CLT Components.**

## **Italy/Chile**

### **Technical University of Milan (Italy) and Pontificia Universidad Católica de Chile (Chile)**

Sebastián Calderón<sup>1,2</sup>, Gabriele Milani<sup>1</sup>, Cristián Sandoval<sup>3</sup>

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<sup>3</sup>School of Architecture, Pontificia Universidad Católica de Chile, Santiago, Chile.

**Simplified micro-modeling of partially-grouted reinforced masonry shear walls of hollow concrete blocks.** AIP Conference Proceedings, Volume 2425, Issue 1, 6 April 2022.

## **Italy/Netherlands**

### **Sapienza Università di Roma and Delft University of Technology**

Daniela Fusco<sup>a</sup>, Francesco Messali<sup>b</sup>, Jan G. Rots<sup>b</sup>, Daniela Addessi<sup>a</sup>, Stefano Pampanin<sup>a</sup>.

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<sup>b</sup>Delft University of Technology, Department 3MD, Building 23, Stevinweg 1, 2628 CN Delft, the Netherlands.

**Numerical issues on brittle shear failure of pier-wall continuous vertical joints in URM Dutch buildings.** Engineering Structures. Volume 258, 1 May 2022, 114078.

### **University of Bologna, Delft University of Technology**

Francesca Ferretti<sup>1</sup>, Samira Jafari<sup>2</sup>, Rita Esposito<sup>2</sup>, Jan G. Rots<sup>2</sup> and Claudio Mazzotti<sup>1</sup>

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<sup>2</sup> Faculty of Civil Engineering and Geosciences, Delft University of Technology, Stevinweg 1, 2628 CN Delft, The Netherlands

**Critical analysis on the use of the shove test for investigating the shear-sliding behavior of brick masonry.** Engineering Structures. Volume 254, March 2022, 113860.

## **Italy/Spain**

### **University of Pisa (Italy) and Polytechnic University of Catalunya (Spain)**

Irene Puncello<sup>1</sup>, Sylvia Caprili<sup>1</sup> and Pere Roca<sup>2</sup>

<sup>1</sup>Department of Civil and Industrial Engineering (DICI), University of Pisa, Pisa, Italy

<sup>2</sup>Department of Civil and Environmental Engineering (DCEE), Polytechnic University of Catalunya, Barcelona, Spain

**Simplified numerical approach for the structural analysis of monumental historical aggregates: the case study of Certosa di Calci.** Bull Earthquake Eng. 20, 5269-5300 (2022).

## **Italy/Spain/Switzerland**

### **University of Florence (Italy), Universitat Politècnica de Catalunya (Spain) and École Polytechnique Fédérale de Lausanne (EPFL) (Switzerland)**

Francesca Marafini<sup>a</sup>, Sara Dimovska<sup>b</sup>, Savvas Saloustros<sup>b,c</sup>, Còssima Cornadó<sup>d</sup>, Pere Roca<sup>b</sup>.

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<sup>d</sup> Universitat Politècnica de Catalunya (UPC-BarcelonaTech), Department of Architectural Technology, Jordi Girona 1-3, 08034 Barcelona, Spain

#### **Historical development and seismic performance of unreinforced masonry buildings with vertical extensions in the city centre of Barcelona**

Article *in* International Journal of Architectural Heritage · August 2022 DOI: 10.1080/15583058.2022.2096513

## **Japan**

### **Muroran Institute of Technology**

Miki Matsubayashi<sup>a</sup>, Yuya Takase<sup>b</sup> and Mitsuo Mizoguchi<sup>b</sup>

<sup>a</sup>Division of Sustainable and Environmental Engineering, Muroran Institute of Technology, Muroran, Japan;

<sup>b</sup>College of Design and Manufacturing Technology, Muroran Institute of Technology, Muroran, Japan

#### **Shear strength and cracking behavior of reinforced concrete nonstructural walls**

Journal of Asian Architecture and Building engineering

<https://doi.org/10.1080/13467581.2020.1838290>

## **Lithuania**

### **Vilnius Gediminas Technical University (Lithuania)**

Juozas Masėnas

#### **Surenkamosios monolitinės gelžbetoninės perdangos plokštės su plastikiniaiis intarpais pleišėjimo analizė**

Mokslas – Lietuvos ateitis / Science – Future of Lithuania. ISSN 2029-2341 / eISSN 2029-2252. 2022 Volume 14, Article ID: mla.2022.15151, 1–5

<https://doi.org/10.3846/mla.2022.15151>.

Šarunas Skuodis<sup>1\*</sup>, Mykolas Daugevicius<sup>1</sup>, Jurgis Medzvieckas<sup>1</sup>, Arnoldas Šneideris<sup>1</sup>, Aidas Jokubaitis<sup>1</sup>, Justinas Rastenis<sup>2</sup> and Juozas Valivonis<sup>1</sup>

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#### **Gediminas Hill Slopes Behavior in 3D Finite Element Model**

Buildings 2022, 12, 1113. <https://doi.org/10.3390/buildings12081113>

## Nepal

### **Tribhuvan University Nepal**

Lalit Bhatt<sup>a</sup>, Kshitij Charana Shrestha<sup>b</sup>

<sup>a,b</sup>Department of Civil Engineering, Pulchowk Campus, IOE, Tribhuvan University, Nepal.

### **Fragility Function Generation for Masonry Residential Building for a Pilot Site in Hetauda.**

Proceedings of 12th IOE Graduate Conference. Peer Reviewed. ISSN: 2350-8914 (Online), 2350-8906 (Print). October 2022. Volume: 12

## Netherlands

### **Ane de Boer Consultancy & Municipality of Amsterdam**

Ane de Boer<sup>1</sup>, Long Ha<sup>2</sup> and Andrew Quansah<sup>2</sup>

<sup>1</sup> Ane de Boer Consultancy, Arnhem, the Netherlands & Municipality of Amsterdam, the Netherlands

<sup>2</sup> Engineering Office, Municipality of Amsterdam, Amsterdam, the Netherlands

### **Assessment by in-situ load tests of historical steel-concrete bridge decks**

EURO-C 2022, Vienna, Austria, Proceedings COMPUTATIONAL MODELLING OF CONCRETE AND CONCRETE STRUCTURES, *Edited by* Günther Meschke, Bernhard Pichler, Jan G. Rots, pg712-719

### **Delft University of Technology**

F. Messali, M. Longo, A. Singla & J.G. Rots, *Delft University of Technology, Delft, The Netherlands.*

### **A comparative computational study on the static pushover and dynamic time history response of a masonry building.**

Computational Modelling of Concrete and Concrete Structures – Meschke, Pichler & Rots (Eds). © 2022 Copyright the Author(s), ISBN: 978-1-032-32724-2

Rita Torres Guimaraes da Cunha Areias Hollebrandse, in partial fulfilment of the requirements for the degree of Master of Science in Building Engineering, Structural Design, Faculty of Civil Engineering Delft University of Technology, July 22, 2022  
**Exploring the possibilities of structural cast glass in the consolidation of historic Buildings.**

Daniel Alejandro Nuñez Enriquez, Master Thesis, Master of Science Civil Engineering Master track: Building Engineering – Structural Design, December 20th, 2022.

### **Seismic performance of glazed curtain walls. Connections: Experimental testing and finite element modelling.**

Marianthi Sousamli, Francesco Messali and Jan G. Rots, Faculty of Civil Engineering & Geosciences, TU Delft, Delft.

### **A total-strain based orthotropic continuum model for the cyclic nonlinear behavior of unreinforced brick masonry structures.**

© 2022 International Journal for Numerical Methods in Engineering published by John Wiley & Sons Ltd. Int J Numer. Methods Eng. 2022;123:1813–1840.

24-01-003

Catharina Johanna Backer (Karin). Delft, University of Technology, Architecture, Urbanism & Building Sciences. Graduation Plan. Glass Design & Sustainable Structures, Master of Science Architecture, Urbanism & Building Sciences.  
**A thin composite glass panel; a new design for monumental glass.**

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Tim van Driel<sup>a</sup>, Chris Noteboom<sup>b</sup>, Mauro Overend<sup>c</sup>

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Arjan de Putter<sup>1,2</sup>, Max A.N. Hendriks<sup>2,3</sup>, Jan G. Rots<sup>2</sup>, Yuguang Yang<sup>2</sup>, Morten Engen<sup>3,4</sup>, Ab A. van den Bos<sup>5</sup>

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<sup>5</sup>DIANA FEA BV, Delft, The Netherlands

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**Aurecon (New Zealand), Sapienza University of Rome (Italy),**

**University of Canterbury (New Zealand)**

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## Norway/Quatar

### **Oslo Metropolitan University (Norway) and Quatar University (Quatar)**

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## Poland

### **Cracow University and AGH University of Science and Technology**

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<sup>2</sup> AGH University of Science and Technology, Faculty of Civil Engineering and Resource Management, Cracow, Poland.

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### **University of Minho (Portugal)**

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Department of Civil Engineering, Institute for Sustainability and Innovation in Structural Engineering (ISISE), University of Minho, 4800-058 Guimarães, Portugal;

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## **Portugal/Ireland**

### **University of Minho (Portugal), Guimarães and Shay Murtagh Precast Ltd (Ireland)**

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## **Portugal/Italy**

### **University of Minho (Portugal), University of Napels, Politechnic University of Timisoara (Italy)**

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<sup>2</sup>University of Naples Federico II

<sup>3</sup>Polytechnic University of Timisoara

**Damage Assessment of Romanian Historical Masonry Building under Near-Field Earthquake**

### **University of Minho (Portugal) and University of Genova (Italy)**

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### **Portugal/Serbia/Australia**

#### **University of Minho (Portugal), University of Belgrade (Serbia), University of Porto (Portugal) and The University of Newcastle (Australia)**

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### **Portugal/Spain**

#### **University of Minho (Portugal), Instituto de Tecnologías Físicas y de la Información (ITEFI), Universidad de Granada and PROSKENE Conservation & Cultural Heritage (Spain).**

Annalaura Vuoto<sup>1</sup>, Javier Ortega<sup>1,2</sup>, Paulo B. Lourenço<sup>1</sup>, Francisco Javier Suárez<sup>3</sup>, Antonieta Claudia Núñez<sup>4</sup>

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Pavel Zvanut. Slovenian National Building and Civil Engineering Institute, Dimiceva 12, 1000 Ljubljana, Slovenia.

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## **Spain**

### **Universitat Politècnica de Valencia and Universitat Politècnica de Catalunya**

Nirvan Makoond<sup>1</sup>, Climent Molins<sup>2</sup>, Luca Pelà<sup>2</sup>

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## **Spain/Peru**

### **Universidad de Sevilla, Universidad Politécnica de Madrid Pontificia (Spain) and Universidad Católica del Perú (Peru)**

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## **Spain/Switzerland**

### **Universitat Politècnica de Catalunya (UPC-BarcelonaTech) (Spain) and Laboratory of Earthquake Engineering and Structural Dynamics (EESD) (Switzerland)**

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**Modelling of in-plane seismic behaviour of one-way steel or timber jack arch floors  
in existing buildings. Application to the Eixample district of Barcelona**

## Sweden

**Chalmers University of Technology and Bridge and analysis group**

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## United Arab Emirates/Egypt

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P.O. Box 31733, Egypt

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## United Kingdom

**Imperial College London and Durham University**

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**A macro-modelling continuum approach with embedded discontinuities for the assessment of masonry arch bridges under earthquake loading.**

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## United Kingdom/Australia

**University of Leeds (United Kingdom), University of Newcastle (Australia) and University of Technology Sydney (Australia).**

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## USA

**New Jersey Institute of Technology**

J. Fan, M.P. Adams & M.J. Bandelt

John A. Reif, Jr. Department of Civil and Environmental Engineering, New Jersey Institute of Technology, USA

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Computational Modelling of Concrete and Concrete Structures – Meschke, Pichler & Rots (Eds) © 2022 Copyright the Author(s), ISBN: 978-1-032-32724-2

J. Fan, M.J. Bandelt & M.P. Adams

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**Meso-scale simulation of non-uniform steel corrosion induced damage in recycled aggregate ductile concrete**

Computational Modelling of Concrete and Concrete Structures – Meschke, Pichler & Rots (Eds). © 2022 Copyright the Author(s), ISBN: 978-1-032-32724-2

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## Vietnam

**Hanoi University of Civil Engineering**

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**Assessing the shear behavior of corroded steel fiber reinforced concrete beams without shear reinforcement using nonlinear finite element analysis**