

TABLE OF CONTENTS

BUILDING STRUCTURES AND STRUCTURAL MECHANICS

Kozáková Kamila, Trávníček Lukáš, Klusák Jan, Poduška Jan, Hutař Pavel

The influence of different notches on fatigue lifetime of round bar specimens made of HDPE 1

Králik Juraj, Bočkaj Jozef

Fragility analysis of the reactor steel shaft door due to accidental extreme overpressure 5

Křížek Michael, Novák Lukáš

Uncertainty quantification of existing bridge using polynomial chaos expansion 13

Lallam Mostefa, Mammeri Abdelhamid

Fuzzy analytical hierarchy damage assessment in old reinforced concrete buildings:
Case study 20

Malíková Lucie, Benešová Anna, Al Khazali Mohammad S., Křivý Vít, Seitl Stanislav

Stress concentration factor on a corrosion pit 27

Mašek Jan, Miarka Petr

Dual discrete and continuous meso-scale modelling of concrete 31

Melcer Jozef, Valašková Veronika, Vlček Jozef

Dynamic analysis of block concrete foundation 37

Mlčoch Jan, Holický Milan, Sýkora Miroslav

Effect of climatic conditions on carbonation of concrete structures 41

Novák Lukáš, Novák Drahomír

Recent advances in polynomial chaos expansion: Theory, applications and software 47

Pilgr Milan, Karmazínová Marcela, Melcher Jindřich

Experimental analysis of actual behaviour of fiber cement boards 54

Šplíchal Bohumil, Lehký David

Damage identification using artificial neural network-aided
aimed multilevel sampling method 61