

**A generic method to optimize a redundant serial robotic manipulator's structure**

Kivelä, T., Mattila, J. & Puura, J., 1 Sep 2017, In : Automation in Construction. 81, p. 172-179 8 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Airtightness of residential buildings in Finland**

Vinha, J., Manelius, E., Korpi, M., Salminen, K., Kurnitski, J., Kiviste, M. & Laukkarinen, A., 1 Nov 2015, In : Building and Environment. 93, P2, p. 128-140 13 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**A life cycle assessment of two residential buildings using two different LCA database-software combinations: Recognizing uniformities and inconsistencies**

Emami, N., Heinonen, J., Marteinsson, B., Säynäjoki, A., Junnonen, J. M., Laine, J. & Junnila, S., 14 Jan 2019, In : Buildings. 9, 1, 20 p., 20.

Research output: Contribution to journal › Article › Scientific › peer-review

**Analysis of thermo-active pile structures and their performance under groundwater flow conditions**

Gashti, E. H. N., Malaska, M. & Kujala, K., 11 Aug 2015, In : Energy and Buildings. 105, p. 1-8 8 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**An approach to combining related notifications in large-scale building management systems with a rehabilitation facility case study**

Evchina, Y. & Martinez Lastra, J. L., 31 Mar 2018, In : Automation in Construction. 87, p. 106-116 11 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Assessing population vulnerability towards summer energy poverty: Case studies of Madrid and London**

Sanchez-Guevara, C., Núñez Peiró, M., Taylor, J., Mavrogianni, A. & Neila González, J., 1 May 2019, In : Energy and Buildings. 190, p. 132-143 12 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Assessing uncertainty in housing stock infiltration rates and associated heat loss: English and UK case studies**

Jones, B., Das, P., Chalabi, Z., Davies, M., Hamilton, I., Lowe, R., Mavrogianni, A., Robinson, D. & Taylor, J., 1 Oct 2015, In : Building and Environment. 92, p. 644-656 13 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Behaviour of riveted stringer-to-floorbeam connections in cyclic load tests to failure**

Tulonen, J., Siitonen, T. & Laaksonen, A., 1 Sep 2019, In : Journal of Constructional Steel Research. 160, p. 101-109 9 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Briefing: Initial findings from the urba project**

Krokfors, K., Ilmonen, M., Kangasoja, J., Lehtonen, H., Mälkki, M., Mäntysalo, R., Norvasuo, M., Nupponen, T. & Puustinen, S., Mar 2011, In : PROCEEDINGS OF THE ICE: URBAN DESIGN AND PLANNING. 164, 1, p. 15-17 3 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Carbon dioxide permeability of building materials and their impact on bedroom ventilation need**

Niemelä, T., Vinha, J., Lindberg, R., Ruuska, T. & Laukkarinen, A., 1 Jul 2017, In : Journal of Building Engineering. 12, p. 99-108 10 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Characterization of elastic constants of anisotropic composites in compression using digital image correlation**

Orell, O., Vuorinen, J., Jokinen, J., Kettunen, H., Hytönen, P., Turunen, J. & Kanerva, M., 2018, In : Composite Structures. 185, p. 176-185 10 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Cold-formed RHS T joints with initial geometrical imperfections**

Garifullin, M., Bronzova, M. K., Heinisuo, M., Mela, K. & Pajunen, S., 2018, In : Magazine of Civil Engineering. 80, 4, p. 81-94 14 p.

Research output: Contribution to journal › Article › Scientific › peer-review

#### **Commissioning for nearly zero-energy building projects**

Kantola, M. & Saari, A., 1 Jul 2014, In : Construction Innovation: Information, Process, Management. 14, 3, p. 370-382 13 p.

Research output: Contribution to journal › Article › Scientific › peer-review

#### **Computational design concept analysis: A Nordic comparison of four apartment buildings**

Saari, A., 2008, In : STRUCTURAL SURVEY. 26, 1, p. 29-37 9 p.

Research output: Contribution to journal › Article › Scientific › peer-review

#### **Condensation at the exterior surface of windows**

Laukkarinen, A., Kero, P. & Vinha, J., 1 Sep 2018, In : Journal of Building Engineering. 19, p. 592-601 10 p.

Research output: Contribution to journal › Article › Scientific › peer-review

#### **Consideration of energy consumption, energy costs, and space occupancy in Finnish daycare centres and school buildings**

Sekki, T., Andelin, M., Airaksinen, M. & Saari, A., 1 Oct 2016, In : Energy and Buildings. 129, p. 199-206 8 p.

Research output: Contribution to journal › Article › Scientific › peer-review

#### **Core Project Team As a Management Entity for Construction Projects**

Keinänen, M. & Kähkönen, K., 2018, In : In\_bo: Ricerche e progetti per il territorio, la città e l'architettura. Construction Management. 9, 13, p. 208-217 10 p.

Research output: Contribution to journal › Article › Scientific › peer-review

#### **Cost optimal and nearly zero (nZEB) energy performance calculations for residential buildings with REHVA definition for nZEB national implementation**

Kurnitski, J., Saari, A., Kalamees, T., Vuolle, M., Niemelä, J. & Tark, T., Nov 2011, In : Energy and Buildings. 43, 11, p. 3279-3288 10 p.

Research output: Contribution to journal › Article › Scientific › peer-review

#### **Debonding and impact damage in stainless steel fibre metal laminates prior to metal fracture**

Pärnänen, T., Kanerva, M., Sarlin, E. & Saarela, O., 2015, In : Composite Structures. 119, p. 777-786 10 p.

Research output: Contribution to journal › Article › Scientific › peer-review

#### **Designers' performance evaluation in construction projects**

Kärnä, S. & Junnonen, J. M., 1 Jan 2017, In : ENGINEERING, CONSTRUCTION AND ARCHITECTURAL MANAGEMENT. 24, 1, p. 154-169 16 p.

Research output: Contribution to journal › Article › Scientific › peer-review

#### **Divertor remote handling for DEMO: Concept design and preliminary FMECA studies**

Carfora, D., Di Gironimo, G., Järvenpää, J., Huhtala, K., Määttä, T. & Siuko, M., 9 Jul 2015, In : Fusion Engineering and Design. 98-99, p. 1437-1441 5 p.

Research output: Contribution to journal › Article › Scientific › peer-review

#### **Effect of energy measures on the values of energy efficiency indicators in Finnish daycare and school buildings**

Sekki, T., Airaksinen, M. & Saari, A., 15 Mar 2017, In : Energy and Buildings. 139, p. 124-132 9 p.

Research output: Contribution to journal › Article › Scientific › peer-review

#### **Effects of added glazing on Balcony indoor temperatures: Field measurements**

Hilliaho, K., Köliö, A., Pakkala, T., Lahdensivu, J. & Vinha, J., 2016, In : Energy and Buildings. 128, p. 458-472 15 p.

Research output: Contribution to journal › Article › Scientific › peer-review

#### **Effects of strain rate and confining pressure on the compressive behavior of Kuru granite**

Hokka, M., Black, J., Tkalich, D., Fourmeau, M., Kane, A., Hoang, N. H., Li, C. C., Chen, W. W. & Kuokkala, V-T., 1 May 2016, In : International Journal of Impact Engineering. 91, p. 183-193 11 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Energy saving and indoor climate effects of an added glazed facade to a brick wall building: Case study**

Hilliaho, K., Nordquist, B., Wallentèn, P., Hamid, A. A. & Lahdensivu, J., 1 Sep 2016, In : Journal of Building Engineering. 7, p. 246-262 17 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Energy saving in working hydraulics of long booms in heavy working vehicles**

Immonen, P., Ponomarev, P., Åman, R., Ahola, V., Uusi-Heikkilä, J., Laurila, L., Handroos, H., Niemelä, M., Pyrhönen, J. & Huhtala, K., 1 May 2016, In : Automation in Construction. 65, p. 125-132 8 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Evaluating retrofit options in a historical city center: Relevance of bio-based insulation and the need to consider complex urban form in decision-making**

Claude, S., Ginestet, S., Bonhomme, M., Escadeillas, G., Taylor, J., Marincioni, V., Korolija, I. & Altamirano, H., 1 Jan 2019, In : Energy and Buildings. 182, p. 196-204 9 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Evaluation of thermo-mechanical behaviour of composite energy piles during heating/cooling operations**

Hassani Nezhad Gashti, E., Malaska, M. & Kujala, K., 15 Sep 2014, In : Engineering Structures. 75, p. 363-373 11 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Experimental study on the behavior of wear resistant steels under high velocity single particle impacts**

Lindroos, M., Apostol, M., Kuokkala, V. T., Laukkanen, A., Valtonen, K., Holmberg, K. & Oja, O., 2015, In : International Journal of Impact Engineering. 78, p. 114-127 14 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Financial viability of energy-efficiency measures in a new detached house design in Finland**

Saari, A., Kalamees, T., Jokisalo, J., Michelsson, R., Alanne, K. & Kurnitski, J., Apr 2012, In : Applied Energy. 92, p. 76-83 8 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Heat protective properties of enclosure structure from thin-wall profiles with foamed concrete**

Rybakov, V. A., Ananeva, I. A., Pichugin, E. D. & Garifullin, M., 1 Mar 2020, In : Magazine of Civil Engineering. 94, 2, p. 11-20 10 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Hot-box measurements to investigate the internal convection of highly insulated loose-fill insulation roof structures**

Kivioja, H. & Vinha, J., 1 Jun 2020, In : Energy and Buildings. 216, 10 p., 109934.

Research output: Contribution to journal › Article › Scientific › peer-review

**Impact of building usage and occupancy on energy consumption in Finnish daycare and school buildings**

Sekki, T., Airaksinen, M. & Saari, A., 18 Aug 2015, In : Energy and Buildings. 105, p. 247-257 11 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Impacts of multiple refurbishment strategies on hygrothermal behaviour of basement walls**

Fedorik, F., Heiskanen, R., Laukkanen, A. & Vinha, J., Nov 2019, In : Journal of Building Engineering. 26, 9 p., 100902.

Research output: Contribution to journal › Article › Scientific › peer-review

**Implementation of a direct procedure for critical point computations using preconditioned iterative solvers**

Kouhia, R., Tüma, M., Mäkinen, J., Fedoroff, A. & Marjamäki, H., Oct 2012, In : Computers & Structures. 108-109, p. 110-117 8 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Improving the thermal performance of concrete-sandwich envelopes in relation to the moisture behaviour of building structures in boreal conditions**

Fedorik, F., Malaska, M., Hannila, R. & Haapala, A., 15 Nov 2015, In : Energy and Buildings. 107, p. 226-233 8 p.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Initial axial stiffness of welded RHS T joints**

Garifullin, M., Bronzova, M., Pajunen, S., Mela, K. & Heinisuo, M., 1 Feb 2019, In : Journal of Constructional Steel Research. 153, p. 459-472 14 p.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Initial in-plane rotational stiffness of welded RHS T joints with axial force in main member**

Garifullin, M., Pajunen, S., Mela, K., Heinisuo, M. & Havula, J., 1 Dec 2017, In : Journal of Constructional Steel Research. 139, p. 353-362 10 p.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Instrumentation and fe analysis of a large-span culvert built under a railway, in Finland**

Asp, O. & Laaksonen, A., 3 Nov 2016, In : Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering. 26, 4, p. 357-364 8 p.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Investigating the kinetics and biofuel properties of *Alstonia congensis* and *Ceiba pentandra* via torrefaction**

Oluoti, K., Doddapaneni, T. R. K. C. & Richards, T., 1 May 2018, In : Energy. 150, p. 134-141 8 p.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Mapping indoor overheating and air pollution risk modification across Great Britain: A modelling study**

Taylor, J., Davies, M., Mavrogianni, A., Shrubsole, C., Hamilton, I., Das, P., Jones, B., Oikonomou, E. & Biddulph, P., 1 Apr 2016, In : Building and Environment. 99, p. 1-12 12 p.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Measured energy consumption of educational buildings in a Finnish city**

Sekki, T., Airaksinen, M. & Saari, A., 1 Jan 2015, In : Energy and Buildings. 87, p. 105-115 11 p.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Modeling of hygrothermal behavior for green facade's concrete wall exposed to nordic climate using artificial intelligence and global sensitivity analysis**

May Tzuc, O., Rodríguez Gamboa, O., Aguilar Rosel, R., Che Poot, M., Edelman, H., Jiménez Torres, M. & Bassam, A., 2020, In : Journal of Building Engineering. 33, 101625.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Modelling the stressed skin effect by using shell elements with meta-material model**

Pajunen, S., Hautala, J. & Heinisuo, M., 2019, In : Magazine of Civil Engineering. 86, 2, p. 20-29 10 p.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Moment-rotation behavior of welded tubular high strength steel T joint**

Havula, J., Garifullin, M., Heinisuo, M., Mela, K. & Pajunen, S., 1 Oct 2018, In : Engineering Structures. 172, p. 523-537 15 p.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Multicriteria selection in concept design of a divertor remote maintenance port in the EU DEMO reactor using an AHP participative approach**

Carfora, D., Gironimo, G. D., Esposito, G., Huhtala, K., Määttä, T., Mäkinen, H., Micciché, G. & Mozzillo, R., 15 Nov 2016, In : Fusion Engineering and Design. 112, p. 324-331 8 p.  
Research output: Contribution to journal > Article > Scientific > peer-review

**Output power variation of different PV array configurations during irradiance transitions caused by moving clouds**

Lappalainen, K. & Valkealahti, S., 15 Mar 2017, In : Applied Energy. 190, p. 902-910 9 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Overheating in English dwellings: comparing modelled and monitored large-scale datasets**

Symonds, P., Taylor, J., Mavrogianni, A., Davies, M., Shrubsole, C., Hamilton, I. & Chalabi, Z., 17 Feb 2017, In : Building Research and Information. 45, 1-2, p. 195-208 14 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Parametric study on temperature distribution of square hollow section joints**

Bączkiewicz, J., Pajunen, S., Malaska, M. & Heinisuo, M., 1 Sep 2019, In : Journal of Constructional Steel Research. 160, p. 490-498 9 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Passive wireless antenna sensor for strain and crack sensing - Electromagnetic modeling, simulation, and testing**

Yi, X., Cho, C., Cooper, J., Wang, Y., Tentzeris, M. M. & Leon, R. T., Aug 2013, In : Smart Materials and Structures. 22, 8, 085009.

Research output: Contribution to journal › Article › Scientific › peer-review

**People's current mobility costs and willingness to pay for Mobility as a Service offerings**

Liljamo, T., Liimatainen, H., Pöllänen, M. & Utriainen, R., 1 Jun 2020, In : Transportation Research Part A: Policy and Practice. 136, p. 99-119 21 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Precision refurbishment of buildings: A façade refurbishment case study**

Saari, A., 2008, In : STRUCTURAL SURVEY. 26, 2, p. 108-119 12 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Pre-use phase LCA of a multi-story residential building: Can greenhouse gas emissions be used as a more general environmental performance indicator?**

Heinonen, J., Säynäjoki, A., Junnonen, J. M., Pöyry, A. & Junnila, S., 1 Jan 2016, In : Building and Environment. 95, p. 116-125 10 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Radon, fungal spores and MVOCs reduction in crawl space house: A case study and crawl space development by hygrothermal modelling**

Keskikuru, T., Salo, J., Huttunen, P., Kokotti, H., Hyttinen, M., Halonen, R. & Vinha, J., 15 Jun 2018, In : Building and Environment. 138, p. 1-10 10 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Recycling lithium mine tailings in the production of low temperature (700–900°C) ceramics: Effect of ladle slag and sodium compounds on the processing and final properties**

Lemougna, P. N., Yliniemi, J., Ismailov, A., Levänen, E., Tanskanen, P., Kinnunen, P., Roning, J. & Illikainen, M., 10 Oct 2019, In : Construction and building materials. 221, p. 332-344 13 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Relationships among Civil Engineering Students' Approaches to Learning, Perceptions of the Teaching-Learning Environment, and Study Success**

Salmisto, A., Postareff, L. & Nokelainen, P., 1 Oct 2017, In : Journal of Professional Issues in Engineering Education and Practice. 143, 4, 04017010.

Research output: Contribution to journal › Article › Scientific › peer-review

**Remote diagnostics application software for remote handling equipment**

Alanen, J., Ruiz Morales, E., Muhammad, A., Saarinen, H. & Minkkinen, J., 2019, In : Fusion Engineering and Design.

Research output: Contribution to journal › Article › Scientific › peer-review

**Role and nature of systemic innovations in construction and real estate sector**

Kähkönen, K., 7 Apr 2015, In : Construction Innovation: Information, Process, Management. 15, 2, p. 130-133 4 p.

Research output: Contribution to journal › Article › Scientific › peer-review

#### **Strategy formation in construction firms**

Junnonen, J. M., 1 Feb 1998, In : ENGINEERING, CONSTRUCTION AND ARCHITECTURAL MANAGEMENT. 5, 2, p. 107-114 8 p.

Research output: Contribution to journal › Article › Scientific › peer-review

#### **Stress relaxation in tempered glass caused by heat soak testing**

Schneider, J., Hilcken, J., Aronen, A., Karvinen, R., Olesen, J. F. & Nielsen, J., 1 Sep 2016, In : Engineering Structures. 122, p. 42-49 8 p.

Research output: Contribution to journal › Article › Scientific › peer-review

#### **Stretching risk management standards: Multi-organizational perspectives**

Lehtiranta, L. & Junnonen, J. M., 1 Jan 2014, In : BUILT ENVIRONMENT PROJECT AND ASSET MANAGEMENT. 4, 2, p. 128-145 18 p.

Research output: Contribution to journal › Article › Scientific › peer-review

#### **Surrogate modeling for initial rotational stiffness of welded tubular joints**

Garifullin, M. R., Barabash, A. V., Naumova, E. A., Zhuvak, O. V., Jokinen, T. & Heinisuo, M., 2016, In : Magazine of Civil Engineering. 63, 3, p. 53-76 24 p.

Research output: Contribution to journal › Article › Scientific › peer-review

#### **Techno-economic evaluation of integrating torrefaction with anaerobic digestion**

Doddapaneni, T. R. K. C., Praveenkumar, R., Tolvanen, H., Rintala, J. & Kontinen, J., 2018, In : Applied Energy. 213, p. 272-284 13 p.

Research output: Contribution to journal › Article › Scientific › peer-review

#### **The assessment of constructability: BIM cases**

Tauriainen, M. K., Puttonen, J. A. & Saari, A. J., 1 Jan 2015, In : Journal of Information Technology in Construction. 20, p. 51-67 17 p.

Research output: Contribution to journal › Article › Scientific › peer-review

#### **The corrosion rate in reinforced concrete facades exposed to outdoor environment**

Köliö, A., Pakkala, T. A., Hohti, H., Laukkarinen, A., Lahdensivu, J., Mattila, J. & Pentti, M., Feb 2017, In : Materials and Structures. 50, 23

Research output: Contribution to journal › Article › Scientific › peer-review

#### **The effect of matrix type on ageing of thick vinyl ester glass-fibre-reinforced laminates**

Sarlin, E., Sironen, R., Pärnänen, T., Lindgren, M., Kanerva, M. & Vuorinen, J., 15 May 2017, In : Composite Structures. 168, p. 840-850

Research output: Contribution to journal › Article › Scientific › peer-review

#### **The effect of steel grade on weight and cost of warren-type welded tubular trusses**

Tiainen, T., Mela, K., Jokinen, T. & Heinisuo, M., 1 Nov 2017, In : Proceedings of the Institution of Civil Engineers: Structures and Buildings. 170, 11, p. 855-873 19 p., 1600112.

Research output: Contribution to journal › Article › Scientific › peer-review

#### **The impact of occupancy patterns, occupant-controlled ventilation and shading on indoor overheating risk in domestic environments**

Mavrogianni, A., Davies, M., Taylor, J., Chalabi, Z., Biddulph, P., Oikonomou, E., Das, P. & Jones, B., 1 Jan 2014, In : Building and Environment. 78, p. 183-198 16 p.

Research output: Contribution to journal › Article › Scientific › peer-review

#### **The relative importance of input weather data for indoor overheating risk assessment in dwellings**

Taylor, J., Davies, M., Mavrogianni, A., Chalabi, Z., Biddulph, P., Oikonomou, E., Das, P. & Jones, B., 1 Jan 2014, In : Building and Environment. 76, p. 81-91 11 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Uncertainty in the early phase of a municipal building refurbishment project-A case study in Finland**

Uotila, U., Saari, A. & Junnonen, J. M., 1 Aug 2020, In : Buildings. 10, 8, 18 p., 137.

Research output: Contribution to journal › Article › Scientific › peer-review

**Understanding fundamental and practical ingredients of construction project data management**

Kähkönen, K. & Rannisto, J., 5 Jan 2015, In : Construction Innovation: Information, Process, Management. 15, 1, p. 7-23 17 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Using probabilistic sampling-based sensitivity analyses for indoor air quality modelling**

Das, P., Shrubsole, C., Jones, B., Hamilton, I., Chalabi, Z., Davies, M., Mavrogianni, A. & Taylor, J., 1 Jan 2014, In : Building and Environment. 78, p. 171-182 12 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Utilizing mixed-mineralogy ferroan magnesite tailings as the source of magnesium oxide in magnesium potassium phosphate cement**

Ismailov, A., Merilaita, N., Solismaa, S., Karhu, M. & Levänen, E., 20 Jan 2020, In : Construction and building materials. 231, 117098.

Research output: Contribution to journal › Article › Scientific › peer-review

**Utilizing the innovation potential of suppliers in construction projects**

Sariola, R., 2018, In : Construction Innovation. 18, 2

Research output: Contribution to journal › Article › Scientific › peer-review

**Variation of CPTu-based transformation models for undrained shear strength of Finnish clays**

Knuuti, M. & Länsivaara, T., 2 Oct 2019, In : Georisk. 13, 4, p. 262-270 9 p.

Research output: Contribution to journal › Article › Scientific › peer-review

**Behavior of capacitive humidity sensors in monitoring the drying of concrete walls**

Tuominen, E., Vinha, J. & Raunima, T., 2019, In : MATEC Web of Conferences. 282, 6 p., 02053.

Research output: Contribution to journal › Conference article › Scientific › peer-review

**Calculation method to determine capillary properties of building materials with automatic free water intake test**

Tuominen, E. & Vinha, J., 2019, In : MATEC Web of Conferences. 282, 6 p., 02037.

Research output: Contribution to journal › Conference article › Scientific › peer-review

**Comparison between calculated and billed building energy consumption values of schools and daycare centers**

Ruusala, A., Laukkarinen, A. & Vinha, J., 2019, In : MATEC Web of Conferences. 282, 6 p., 02085.

Research output: Contribution to journal › Conference article › Scientific › peer-review

**Thermal and moisture properties of calcium silicate insulation boards**

Tuominen, E., Tuominen, O., Vainio, M., Ruuska, T. & Vinha, J., 2019, In : MATEC Web of Conferences. 282, 7 p., 02065.

Research output: Contribution to journal › Conference article › Scientific › peer-review

**Reply to the discussion by koutsoftas on "evaluation of sample quality from different sampling methods in finnish soft sensitive clays"**

Di Buò, B., Selänpää, J., Länsivaara, T. T. & D'ignazio, M., 2020, In : Canadian Geotechnical Journal. 57, 8, p. 1261-1262 2 p.

Research output: Contribution to journal › Comment/debate › Scientific

**Editorial to "The best papers from the 32nd International Symposium on Automation and Robotics in Construction and Mining (ISARC 2015)"**

Malaska, M. & Heikkilä, R., 1 Nov 2016, In : Automation in Construction. 71, p. 1 1 p.

Research output: Contribution to journal › Editorial › Scientific

### **Practical experiences from several moisture performance assessments**

Annala, P. J., Lahdensivu, J., Suonketo, J. & Pentti, M., 2016, *Recent developments in building diagnosis techniques*. Delgado, J. (ed.). Porto, Portugal: Springer Science+Business Media, Vol. 5. p. 1-20 20 p. (Building Pathology and Rehabilitation; vol. 5).

Research output: Chapter in Book/Report/Conference proceeding › Chapter › Scientific › peer-review

### **Two models for hydraulic cylinders in flexible multibody simulations**

Ylinen, A., Mäkinen, J. & Kouhia, R., 2016, *Computational Methods for Solids and Fluids: Multiscale Analysis, Probability Aspects and Model Reduction*. Springer, p. 463-493 31 p. (Computational Methods in Applied Sciences; vol. 41).

Research output: Chapter in Book/Report/Conference proceeding › Chapter › Scientific › peer-review

### **Acoustics of vanished 19th century concert halls in Helsinki**

Niemi, H., Kylliäinen, M., Jäppinen, J. & Lindqvist, M., Oct 2015, *9th International conference on Auditorium Acoustics 2015*. Institute of Acoustics, Vol. 37. p. 182-189 8 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific

### **ÄKK-hankkeen suositukset tulevaisuuden ääneneristysmääräyksiä koskien**

Hongisto, V., Kylliäinen, M. & Hyönä, J., 22 Oct 2015, *Rakennusfysiikka 2015*. Tampere: Tampereen teknillinen yliopisto, rakennustekniikan laitos, rakennetekniikka, p. 561-566 6 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific

### **Auralization of vanished 19th century concert halls in Helsinki**

Niemi, H., Kylliäinen, M., Jäppinen, J. & Lindqvist, M., Oct 2015, *9th International Conference on Auditorium Acoustics 2015*. Institute of Acoustics, Vol. 37. p. 470-477 8 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific

### **Julkisivujen ja parvekkeiden talvikorjausohje**

Pakkala, T., Lahdensivu, J., Köliö, A. & Annala, P., Oct 2017, *Rakennusfysiikka 2017: Uusimmat tutkimustulokset ja hyvät käytännön ratkaisut, 24-26.10.2017, Tampere*. Vinha, J. & Kivioja, H. (eds.). Tampere: Tampereen teknillinen yliopisto, Rakennustekniikka, Rakennusfysiikka, p. 179-184 6 p. (Tampereen teknillinen yliopisto. Rakennustekniikka. Rakennusfysiikka.).

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific

### **Koko Julkisivua peittävän lasijulkisivun vaikutus Etelä-Ruotsissa sijaitsevan rakennuksen energiatehokkuuteen**

Translated title of the contribution: : The impact of the added façade glazing on the building energy consumption in the southern Sweden

Hilliaho, K., Nordquist, B. & Wallentén, P., 20 Oct 2015, *Rakennusfysiikka 2015. Uusimmat tutkimustulokset ja hyvät käytännön ratkaisut. 20.-22.10.2015, Tampere*. Vinha, J. & Ruuska, T. (eds.). Tampere: Tampereen teknillinen yliopisto, rakennustekniikan laitos, rakennetekniikka, p. 509-516 8 p. (Rakennustekniikan laitos. Rakennetekniikka. Seminaarijulkaisu 4; no. 4).

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific

### **Kosteusvaurioiden vakavuus kuntien rakennuksissa**

Annala, P., Lahdensivu, J., Suonketo, J., Pentti, M., Laukkarinen, A. & Vinha, J., 24 Oct 2017, *Rakennusfysiikka 2017. Uusimmat tutkimustulokset ja hyvät käytännön ratkaisut: 24.-26.10.2017, Tampere*. Vinha, J. & Kivioja, H. (eds.). Tampere: Tampereen teknillinen yliopisto, Rakennustekniikka, Rakennusfysiikka, Vol. 1. p. 135-140 6 p. (Tampereen teknillinen yliopisto. Rakennustekniikka. Rakennusfysiikka.).

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific

### **Lasitetun parvekkeen lämpötilan ja lämpöhäviöiden laskenta**

Laukkarinen, A. & Hilliaho, K., 20 Oct 2015, *Rakennusfysiikka 2015. Uusimmat tutkimustulokset ja hyvät käytännön ratkaisut. 20.-22.10.2015, Tampere*. Vinha, J. & Ruuska, T. (eds.). Tampereen teknillinen yliopisto, rakennustekniikan laitos, rakennetekniikka, p. 181-186 6 p. (Rakennustekniikan laitos. Rakennetekniikka. Seminaarijulkaisu; no. 4).

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific



#### **Maanvastaisten seinien lämpö- ja kosteustekninen toiminta**

Laukkarinen, A., Heiskanen, R. & Vinha, J., 24 Oct 2017, *Rakennusfysiikka 2017. Uusimmat tutkimustulokset ja hyvät käytännön ratkaisut: 24.-26.10.2017, Tampere*. Vinha, J. & Kivioja, H. (eds.). Tampere: Tampereen teknillinen yliopisto, Rakennustekniikka, Rakennusfysiikka, Vol. 1. p. 71-76 6 p. (Tampereen teknillinen yliopisto. Rakennustekniikka. Rakennusfysiikka.).

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific

#### **Menetelmä parvekelasien ääneneristävyyden mittaamiseksi liikennemelualueilla**

Kovalainen, V. & Kylliäinen, M., 22 Oct 2015, *Rakennusfysiikka 2015*. Tampereen teknillinen yliopisto, rakennustekniikan laitos, rakennetekniikka, p. 617-622 6 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific

#### **Paine-erot Pirkanmaan ja Helsingin julkisissa palvelurakennuksissa**

Kauppinen, A., Kiviste, M., Pirhonen, J. & Vinha, J., 24 Oct 2017, *Rakennusfysiikka 2017. Uusimmat tutkimustulokset ja hyvät käytännön ratkaisut: 24.-26.10.2017, Tampere*. Vinha, J. & Kivioja, H. (eds.). Tampere: Tampereen teknillinen yliopisto, Rakennustekniikka, Rakennusfysiikka, Vol. 1. p. 215-221 7 p. (Tampereen teknillinen yliopisto. Rakennustekniikka. Rakennusfysiikka.).

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific

#### **Puukerrostalon työmaavaiheen lämpö- ja kosteusolosuhteiden mittaukset**

Laukkarinen, A., Musakka, S., Penttilä, O., Teriö, O. & Vinha, J., 24 Oct 2017, *Rakennusfysiikka 2017. Uusimmat tutkimustulokset ja hyvät käytännön ratkaisut: 24.-26.10.2017, Tampere*. Vinha, J. & Kivioja, H. (eds.). Tampere: Tampereen teknillinen yliopisto, Rakennustekniikka, Rakennusfysiikka, Vol. 1. p. 167-172 6 p. (Tampereen teknillinen yliopisto. Rakennustekniikka. Rakennusfysiikka.).

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific

#### **Puukerrostalorakentamisen kosteudenhallinta**

Teriö, O., Penttilä, O., Laukkarinen, A., Musakka, S. & Vinha, J., 24 Oct 2017, *Rakennusfysiikka 2017. Uusimmat tutkimustulokset ja hyvät käytännön ratkaisut: 24.-26.10.2017, Tampere*. Vinha, J. & Kivioja, H. (eds.). Tampere: Tampereen teknillinen yliopisto, Rakennustekniikka, Rakennusfysiikka, Vol. 1. p. 173-178 6 p. (Tampereen teknillinen yliopisto. Rakennustekniikka. Rakennusfysiikka.).

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific

#### **Puurunkoisten tuuletettujen yläpohjien kosteustekninen toiminta**

Junttila, H., Laukkarinen, A. & Vinha, J., 22 Oct 2015, *Rakennusfysiikka 2015. Uusimmat tutkimustulokset ja hyvät käytännön ratkaisut. 20.-22.10.2015, Tampere..* Vinha, J. & Ruuska, T. (eds.). Tampere: Tampereen teknillinen yliopisto, rakennustekniikan laitos, rakennetekniikka, p. 77-82 6 p. (Rakennustekniikan laitos. Rakennetekniikka. Seminaarijulkaisu; no. 4).

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific

#### **Puuvälipohjien akustiset ominaisuudet**

Latvanne, P. & Kylliäinen, M., 22 Oct 2015, *Rakennusfysiikka 2015*. Tampereen teknillinen yliopisto, rakennustekniikan laitos, rakennetekniikka, p. 567-572 6 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific

#### **Raudotteiden korroosionopeuden määrittäminen betonijulkisivussa korkean aikaresoluution säädätan avulla**

Köliö, A., Hohti, H., Pakkala, T., Laukkarinen, A., Lahdensivu, J. & Mattila, J., 20 Oct 2015, *Rakennusfysiikka 2015. Uusimmat tutkimustulokset ja hyvät käytännön ratkaisut. 20.-22.10.2015, Tampere..* Tampereen teknillinen yliopisto, rakennustekniikan laitos, rakennetekniikka, p. 195-202 8 p. (Rakennustekniikan laitos. Rakennetekniikka. Seminaarijulkaisu; no. 4).

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific

#### **Uudessa COMBI-hankkeessa tutkitaan energiatehokkaan palvelurakentamisen haasteita ja ratkaisuja**

Vinha, J., Hedman, M., Sirén, K., Harsia, P., Pentti, M., Teriö, O., Heljo, J., Laukkarinen, A., Annala, P., Kaasalainen, H., Jokisalo, J. & Pihlajamaa, P., 20 Oct 2015, *Rakennusfysiikka 2015. Uusimmat tutkimustulokset ja hyvät käytännön ratkaisut. 20.-22.10.2015, Tampere..* Vinha, J. & Ruuska, T. (eds.). Tampereen teknillinen yliopisto, rakennustekniikan laitos, rakennetekniikka, p. 487-496 10 p. (Rakennustekniikan laitos. Rakennetekniikka. Seminaarijulkaisu; no. 4).

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific

#### **Alkali-silica reaction in finnish swimming pools**

Lahdensivu, J. & Kekäläinen, P., 2019, *Proceedings of the fib Symposium 2019: Concrete - Innovations in Materials, Design and Structures*. Derkowski, W., Krajewski, P., Gwozdziewicz, P., Pantak, M. & Hojdys, L. (eds.). International Federation for Structural Concrete, p. 2006-2013 8 p. (fib Symposium Proceedings).

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

#### **A slotted patch antenna for wireless strain sensing**

Yi, X., Cho, C., Cook, B., Wang, Y., Tentzeris, M. M. & Leon, R. T., 2014, *Structures Congress 2014 - Proceedings of the 2014 Structures Congress*. American Society of Civil Engineers ASCE, p. 2734-2743 10 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

#### **BIM based schedule control for precast concrete supply chain**

Nissilä, J., Heikkilä, R., Romo, I., Malaska, M. & Aho, T., 2014, *31st International Symposium on Automation and Robotics in Construction and Mining, ISARC 2014 - Proceedings*. University of Technology Sydney, p. 667-671 5 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

#### **Buckling length assessment with finite element approach**

Tiainen, T., Mela, K. & Heinisuo, M., 2019, *Stability and Ductility of Steel Structures - Proceedings of the International Colloquia on Stability and Ductility of Steel Structures, 2019*. Wald, F. & Jandera, M. (eds.). CRC Press/Balkema, p. 1145-1150 6 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

#### **Bus Transportation Accessibility - Does It Impact Housing Values?**

Kurvinen, A. & Sorri, J., 2016, *Proceedings of the CIB World Building Congress 2016: Understanding impacts and functioning of different solutions*. Nenonen, S. & Junnonen, J.-M. (eds.). Tampere: Tampere University of Technology. Department of Civil Engineering, Vol. IV. p. 321-331 11 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

#### **Crack propagation measurement using a battery-free slotted patch antenna sensor**

Yi, X., Cho, C., Wang, Y., Cook, B., Tentzeris, M. M. & Leon, R. T., 2014, *7th European Workshop on Structural Health Monitoring, EWSHM 2014 - 2nd European Conference of the Prognostics and Health Management (PHM) Society*. INRIA, p. 1040-1047 8 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

#### **Fatigue loading tests of concrete railway sleepers**

Rantala, T., Kerokoski, O., Nurmikolu, A. & Laaksonen, A., 2018, *High Tech Concrete: Where Technology and Engineering Meet - Proceedings of the 2017 fib Symposium*. Springer International Publishing, p. 1445-1452 8 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

#### **Integration of BIM and automation in high-rise building construction**

Heikkilä, R., Malaska, M., Törmänen, P. & Keyack, C., 2013, *ISARC 2013 - 30th International Symposium on Automation and Robotics in Construction and Mining, Held in Conjunction with the 23rd World Mining Congress*. p. 1171-1176 6 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

#### **Passive frequency doubling antenna sensor for wireless strain sensing**

Yi, X., Cho, C., Wang, Y., Cook, B. S., Cooper, J., Vyas, R., Tentzeris, M. M. & Leon, R. T., 2012, *ASME 2012 Conference on Smart Materials, Adaptive Structures and Intelligent Systems, SMASIS 2012*. Vol. 1. p. 625-632 8 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

#### **Performance of Variable Partial Factor approach in a slope design**

Knuuti, M. & Lämsävaara, T., 2019, *13th International Conference on Applications of Statistics and Probability in Civil Engineering (ICASP13), Seoul, South Korea, May 26-30, 2019*.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

### **Project feedback as a tool for learning**

Kärnä, S. & Junnonen, J. M., 2005, *Proceedings of the 13th Annual Conference of the International Group for Lean Construction (IGLC 2005)*. p. 47-55 9 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

### **Second-order analysis of prestressed concrete columns**

Haavisto, J., Kerokoski, O. & Laaksonen, A., 2019, *Proceedings of the fib Symposium 2019: Concrete - Innovations in Materials, Design and Structures*. Derkowski, W., Krajewski, P., Gwozdziewicz, P., Pantak, M. & Hojdys, L. (eds.). International Federation for Structural Concrete, p. 1068-1074 7 p. ( FIB symposium proceedings).

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

### **Sensing resolution and measurement range of a passive wireless strain sensor**

Yi, X., Wu, T., Lantz, G., Cooper, J., Cho, C., Wang, Y., Tentzeris, M. M. & Leon, R. T., 2011, *Structural Health Monitoring 2011: Condition-Based Maintenance and Intelligent Structures - Proceedings of the 8th International Workshop on Structural Health Monitoring*. Vol. 1. p. 759-766 8 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

### **Shear buckling and resistance of thin-walled steel plate at non-uniform elevated temperatures**

Salminen, M. & Heinisuo, M., 2011, *10th International Conference on Steel Space and Composite Structures*. CI-Premier Pte Ltd, p. 267-276 10 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

### **Societal impact as Cost-Benefit Analysis: Comparative analysis of two research infrastructures**

Magazinik, A., Bedolla, J. S., Lasheras, N. C. & Mäkinen, S., 1 Jun 2019, *2019 IEEE International Conference on Engineering, Technology and Innovation, ICE/ITMC 2019*. IEEE

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

### **Solar Panel Breakage During Heavy Rain Caused by Thermal Stress**

Mikkonen, A. & Karvinen, R., Oct 2016, *Engineered Transparency 2016: Glass in Architecture and Structural Engineering*. Wiley

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

### **Structural analysis of tubular truss in fire**

Diez Albero, J. A., Tiainen, T., Mela, K. & Heinisuo, M., 2015, *ISTS15, 15th International Symposium on Tubular Structures, : 27-29 May 2015*. CRC Press/Balkema, p. 181-187 7 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

### **Structural behaviour of long integral abutment bridges**

Laaksonen, A., 2012, *Global Thinking in Structural Engineering: Recent Achievements*. International Association for Bridge and Structural Engineering (IABSE)

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

### **The effect of climate change on the amount of wind driven rain on concrete facades**

Pakkala, T., Lemberg, A-M. & Lahdensivu, J., May 2016, *Proceedings of the CIB World Building Congress 2016: Vol 2 : Environmental opportunities and challenges, Constructing commitment and acknowledging human experiences*. Prins, M., Wamelink, H., Giddings, B., Ku, K. & Feenstra, M. (eds.). Tampere: Tampere University of Technology. Department of Civil Engineering, Vol. 2. p. 153-165 13 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

### **The target reliability of the eurocodes**

Poutanen, T., 2015, *Safety, Robustness and Condition Assessment of Structures*. International Association for Bridge and Structural Engineering (IABSE), p. 202-208 7 p. (IABSE Symposium Report).

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

### **Validation of the method to evaluate the corrosion propagation stage by hygrothermal simulation**

Ilomets, S., Kalamees, T. & Lahdensivu, J., 2016, *CESB 2016 - Central Europe Towards Sustainable Building 2016: Innovations for Sustainable Future*. Czech Technical University in Prague, p. 1113-1120 8 p.

### **Wireless crack sensing using an RFID-based folded patch antenna**

Yi, X., Wang, Y., Leon, R. T., Cooper, J. & Tentzeris, M. M., 2012, *Bridge Maintenance, Safety, Management, Resilience and Sustainability - Proceedings of the Sixth International Conference on Bridge Maintenance, Safety and Management*. p. 824-830 7 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

### **Betonin kosteustekniset materiaaliominaisuudet ja mittausmenetelmän kehittäminen**

Tuominen, E., Vinha, J., Tuominen, O., Vääntinen, K. & Vainio, M., 2019, *Rakennusfysiikka 2019: Uusimmat tutkimustulokset ja hyvät käytännön ratkaisut. 28.-30.10.2019, Tampere*. Vinha, J. & Raunima, T. (eds.). Tampere: Tampereen yliopisto, Rakennustekniikka, Vol. Seminaarijulkaisu 6. p. 111-116 6 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Professional

### **COMBI-hankkeen paine-eromittausten yhteenveto**

Tuominen, E., Laukkarinen, A., Kauppinen, A., Raunima, T. & Vinha, J., 2019, *Rakennusfysiikka 2019: Uusimmat tutkimustulokset ja hyvät käytännön ratkaisut. 28.-30.10.2019, Tampere*. Vinha, J. & Raunima, T. (eds.). Tampere: Tampereen yliopisto, Rakennustekniikka, Vol. Seminaarijulkaisu 6. p. 139-144

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Professional

### **COMBI-hankkeen suositukset korkeatasoisten ja kosteusturvallisten palvelurakennusten toteuttamiseksi - COMBI 8**

Vinha, J. & Laukkarinen, A., 2019, *Rakennusfysiikka 2019: Uusimmat tutkimustulokset ja hyvät käytännön ratkaisut. 28.-30.10.2019, Tampere*. Vinha, J. & Raunima, T. (eds.). Tampere: Tampereen yliopisto, Rakennustekniikka, Vol. Seminaarijulkaisu 6. p. 217-222

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Professional

### **Huokoisten puukuitu- ja kipsilevytuulensuojalevyjen homeutumisherkyys**

Tuominen, E., Ruusala, A., Laukkarinen, A., Pätsi, S., Pessi, A-M. & Vinha, J., 2019, *Rakennusfysiikka 2019: Uusimmat tutkimustulokset ja hyvät käytännön ratkaisut. 28.-30.10.2019, Tampere*. Vinha, J. & Raunima, T. (eds.). Tampere: Tampereen yliopisto, Rakennustekniikka, Vol. Seminaarijulkaisu 6. p. 517-524

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Professional

### **Ilmakehän pitkäaaltoinen säteily rakennusfysikaalisissa laskentatarkasteluissa**

Jokela, T., Laukkarinen, A. & Vinha, J., 2019, *Rakennusfysiikka 2019: Uusimmat tutkimustulokset ja hyvät käytännön ratkaisut. 28.-30.10.2019, Tampere*. Vinha, J. & Raunima, T. (eds.). Tampere: Tampereen yliopisto, Rakennustekniikka, Vol. Seminaarijulkaisu 6. p. 55-60

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Professional

### **Kapasitiivisten kosteusantureiden käyttäytyminen betoniseiniin ja kipsivalulattioiden kuivumisen seurannassa**

Tuominen, E., Raunima, T., Vinha, J. & Sekki, P., 2019, *Rakennusfysiikka 2019: Uusimmat tutkimustulokset ja hyvät käytännön ratkaisut. 28.-30.10.2019, Tampere*. Vinha, J. & Raunima, T. (eds.). Tampere: Tampereen yliopisto, Rakennustekniikka, Vol. Seminaarijulkaisu 6. p. 103-110

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Professional

### **Kipsilevytuulensuojallisten puurunkoisten ulkoseinärakenteiden rakennusfysikaalinen toiminta**

Jokela, T., Laukkarinen, A. & Vinha, J., 2019, *Rakennusfysiikka 2019: Uusimmat tutkimustulokset ja hyvät käytännön ratkaisut. 28.-30.10.2019, Tampere*. Vinha, J. & Raunima, T. (eds.). Tampere: Tampereen yliopisto, Rakennustekniikka, Vol. Seminaarijulkaisu 6. p. 61-66

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Professional

### **Koulujen ja päiväkotien sisäilman lämpötilan, suhteellisen kosteuden ja hiilidioksidipitoisuuden mittaukset COMBI-hankkeessa**

Laukkarinen, A., Kauppinen, A., Tuominen, E., Raunima, T. & Vinha, J., 2019, *Rakennusfysiikka 2019: Uusimmat tutkimustulokset ja hyvät käytännön ratkaisut. 28.-30.10.2019, Tampere*. Vinha, J. & Raunima, T. (eds.). Tampere: Tampereen yliopisto, Rakennustekniikka, Vol. Seminaarijulkaisu 6. p. 133-138

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Professional

#### **Puuelementtien välisen sauman tiivistys kumitiivisteellä**

Tuominen, E., Vinha, J. & Naskali, J., 2019, *Rakennusfysiikka 2019: Uusimmat tutkimustulokset ja hyvät käytännön ratkaisut. 28.-30.10.2019, Tampere*. Vinha, J. & Raunima, T. (eds.). Tampere: Tampereen yliopisto, Rakennustekniikka, Vol. Seminaarijulkaisu 6. p. 125-129

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Professional

#### **Puurunkoisten ulkoseinien liitosten lämpö- ja kosteustekninen toiminta**

Moisio, T., Laukkarinen, A. & Vinha, J., 2019, *Rakennusfysiikka 2019: Uusimmat tutkimustulokset ja hyvät käytännön ratkaisut. 28.-30.10.2019, Tampere*. Vinha, J. & Raunima, T. (eds.). Tampere: Tampereen yliopisto, Rakennustekniikka, Vol. Seminaarijulkaisu 6. p. 67-74

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Professional

#### **Rakennuksen ulkovaipan yli vaikuttavien paine-erojen määrittäminen rakennusfysikaalisia laskentatarkasteluja varten**

Moisio, T., Laukkarinen, A. & Vinha, J., 2019, *Rakennusfysiikka 2019: Uusimmat tutkimustulokset ja hyvät käytännön ratkaisut. 28.-30.10.2019, Tampere*. Vinha, J. & Raunima, T. (eds.). Tampere: Tampereen yliopisto, Rakennustekniikka, Vol. Seminaarijulkaisu 6. p. 49-54

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Professional

#### **The effect of climate change on freeze-thaw durability of concrete structures in Finland**

Pakkala, T., Lemberg, A-M. & Lahdensivu, J., Jun 2016, p. 53. 1 p.

Research output: Other conference contribution › Paper, poster or abstract › Scientific

#### **Eriste- ja levyrappaus 2016, by 57**

Lahdensivu, J., Annila, P. & Pikkuvirta, J., Jun 2016, Helsinki: Suomen Betoniyhdistys r.y. 145 p. (BY. Tekniset ohjeet; no. 57)

Research output: Book/Report › Book › Professional

#### **Julkisivujen ja parvekkeiden talvikorjaus 2018**

Pakkala, T., Lahdensivu, J., Köliö, A. & Annila, P., 2018, Vaasa: Suomen Betoniyhdistys r.y. (BY Tekniset ohjeet ; no. 70)

Research output: Book/Report › Book › Professional

#### **Liikennetekniikan perusteet: Opetusmoniste**

Mäntynen, J., Kallberg, H., Kalenoja, H., Rauhamäki, H., Pöllänen, M. M., Luukkonen, T. & Karhula, K., 2012, Tampere: Tampereen teknillinen yliopisto. Liikenteen tutkimuskeskus Verne. 216 p.

Research output: Book/Report › Book › Professional

#### **Tuulettuvat julkisivut 2016, by 64**

Annila, P., Lahdensivu, J., Lemberg, A-M., Pikkuvirta, J. & Pakkala, T., Apr 2016, Helsinki: Suomen Betoniyhdistys r.y. 121 p.

Research output: Book/Report › Book › Professional

#### **ÄKK Loppuraportti: rakennusten ääniolosuhteiden käyttäjälähtöinen kehittäminen**

Hongisto, V. & Kylliäinen, M., 2015, Helsinki: Finnish Institute of Occupational Health. 40 p.

Research output: Book/Report › Commissioned report › Professional

#### **Lähtökohtia tie- ja rataverkon peruspalvelutason määrittämiselle**

Translated title of the contribution: : Basis for defining the basic service level of road and rail network

Mäntynen, J., Pöllänen, M., Eskelinen, H., Lehtola, I., Perrels, A. & Johanna, K., 1 Dec 2002, Helsinki: Liikenne- ja viestintäministeriö. 134 p. (Liikenne- ja viestintäministeriön julkaisuja; no. 48/2002)

Research output: Book/Report › Commissioned report › Professional

#### **Pyörävylien tiedot ja laatutaso**

Laitinen, K., Mattila, K., Metsäpuro, P. & Nykänen, L., 2015, 2015 ed. Helsinki: Liikennevirasto. 72 p.

Research output: Book/Report › Commissioned report › Professional

**WIN-WINTER - Nordic winter road maintenance research program. Preliminary study: Project report**

Karhula, K., Pöllänen, M., Mäntynen, J., Rauhamäki, H., Leppäniemi, M. & Luukkonen, T., 2015, Tampere University of Technology. 15 p.

Research output: [Book/Report](#) › [Commissioned report](#) › [Professional](#)

**WIN-WINTER - Tie- ja katuverkon talvihoidon tutkimusohjelma. Esiselvitys: Raportti tuloksista**

Karhula, K., Pöllänen, M., Mäntynen, J., Rauhamäki, H., Leppäniemi, M. & Luukkonen, T., 2015, Tampereen teknillinen yliopisto. Liikenteen tutkimuskeskus Verne. 15 p.

Research output: [Book/Report](#) › [Commissioned report](#) › [Professional](#)

**Tuulettuvien yläpohjien lämpö- ja kosteustekninen toiminta nykyisessä ja tulevaisuuden ilmastossa**

Laukkarinen, A., Oct 2015, Tampereen teknillinen yliopisto, rakennustekniikan laitos, rakennetekniikka. 107 p.

Research output: [Book/Report](#) › [Master's Thesis](#) › [Scientific](#)

**Nano-structured optical fibers made of glass-ceramics, and phase separated and metallic particle-containing glasses**

Veber, A., Lu, Z., Vermillac, M., Pigeonneau, F., Blanc, W. & Petit, L., 2019, In : *Fibers*. 7, 12, 29 p.

Research output: [Contribution to journal](#) › [Review Article](#) › [Scientific](#) › [peer-review](#)

**Urban social housing resilience to excess summer heat**

Mavrogianni, A., Taylor, J., Davies, M., Thoua, C. & Kolm-Murray, J., 4 May 2015, In : *Building Research and Information*. 43, 3, p. 316-333 18 p.

Research output: [Contribution to journal](#) › [Review Article](#) › [Scientific](#) › [peer-review](#)