

#### **High-speed manufacturing of antimicrobial paper**

Brobbey, K. J., Haapanen, J., Gunell, M., Mäkelä, J. M., Eerola, E., Saarinen, J. J. & Toivakka, M., 2018, *Paper Conference and Trade Show, PaperCon 2018*. TAPPI Press, p. 564-566 3 p.

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

#### **Fermentative metabolism of an anaerobic, thermophilic consortium on plant polymers and commercial paper samples**

Carver, S. M., Nelson, M. C., Yu, Z. & Tuovinen, O. H., 1 Apr 2015, In : *Biomass & Bioenergy*. 75, p. 11-22 12 p.

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

#### **Finite element analysis of trees in the wind based on terrestrial laser scanning data**

Jackson, T., Shenkin, A., Wellpott, A., Calders, K., Origo, N., Disney, M., Burt, A., Raunonen, P., Gardiner, B., Herold, M., Fourcaud, T. & Malhi, Y., 15 Feb 2019, In : *Agricultural and Forest Meteorology*. 265, p. 137-144 8 p.

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

#### **How management intensity and neighborhood composition affect the structure of beech (*Fagus sylvatica* L.) trees**

Juchheim, J., Annighöfer, P., Ammer, C., Calders, K., Raunonen, P. & Seidel, D., 14 Jul 2017, In : *TREES-STRUCTURE AND FUNCTION*. 31, 5, p. 1723-1735 13 p.

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

#### **Applicability of portable tools in assessing the bearing capacity of forest roads**

Kaakkurivaara, T., Vuorimies, N., Kolisoja, P. & Uusitalo, J., 2015, In : *Silva Fennica*. 49, 2, 26 p., 1239.

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

#### **Fly ash in forest road rehabilitation**

Kaakkurivaara, T., Kolisoja, P., Uusitalo, J. & Vuorimies, N., 2016, In : *Croatian Journal of Forest Engineering*. 37, 1, p. 119-130 12 p.

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

#### **Terrestrial laser scanning for non-destructive estimates of liana stem biomass**

Krishna Moorthy, S. M., Raunonen, P., Van den Bulcke, J., Calders, K. & Verbeeck, H., 15 Jan 2020, In : *FOREST ECOLOGY AND MANAGEMENT*. 456, 14 p., 117751.

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

#### **Comparison of wood volume estimates of young trees from terrestrial laser scan data**

Kunz, M., Hess, C., Raunonen, P., Bienert, A., Hackenberg, J., Maas, H. G., Härdtle, W., Fichtner, A. & Von Oheimb, G., 1 Apr 2017, In : *iForest - Biogeosciences and Forestry*. 10, 2, p. 451-458 8 p.

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

#### **Planning land use for biogas energy crop production: The potential of cutaway peat production lands**

Laasasenaho, K., Lensu, A. & Rintala, J., 1 Feb 2016, In : *Biomass & Bioenergy*. 85, p. 355-362 8 p.

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

#### **Landowners' willingness to promote bioenergy production on wasteland – future impact on land use of cutaway peatlands**

Laasasenaho, K., Lensu, A., Rintala, J. & Lauhanen, R., 1 Dec 2017, In : *Land Use Policy*. 69, p. 167-175 9 p.

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

#### **Exposure to biological and chemical agents at biomass power plants**

Laitinen, S., Laitinen, J., Fagermäk, L., Korpiljärvi, K., Korpinen, L., Ojanen, K., Aatamila, M., Jumpponen, M., Koponen, H. & Jokiniemi, J., 1 Oct 2016, In : *Biomass & Bioenergy*. 93, p. 78-86 9 p.

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

#### **Quantifying branch architecture of tropical trees using terrestrial LiDAR and 3D modelling**

Lau, A., Bentley, L. P., Martius, C., Shenkin, A., Bartholomeus, H., Raunonen, P., Malhi, Y., Jackson, T. & Herold, M., Oct 2018, In : *Trees - Structure and Function*. 32, 5, p. 1219-1231 13 p.

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

### **Tree biomass equations from terrestrial LiDAR: A case study in Guyana**

Lau, A., Calders, K., Bartholomeus, H., Martius, C., Raunonen, P., Herold, M., Vicari, M., Sukhdeo, H., Singh, J. & Goodman, R. C., 1 Jun 2019, In : Forests. 10, 6, 527.

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

### **Screening boreal energy crops and crop residues for methane biofuel production**

Lehtomäki, A., Viinikainen, T. A. & Rintala, J. A., Jun 2008, In : Biomass & Bioenergy. 32, 6, p. 541-550 10 p.

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

### **Estimating tree stem diameters and volume from smartphone photogrammetric point clouds**

Marzulli, M. I., Raunonen, P., Greco, R., Persia, M. & Tartarino, P., 2020, In : FORESTRY. 93, 3, p. 411-429 19 p.

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

### **Classifying soil stoniness based on the excavator boom vibration data in mounding operations**

Melander, L., Ritala, R. & Strandström, M., 2019, In : Silva Fennica. 53, 2, 10068.

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

### **Fusion of open forest data and machine fieldbus data for performance analysis of forest machines**

Melander, L., Einola, K. & Ritala, R., 2019, In : EUROPEAN JOURNAL OF FOREST RESEARCH. 15 p.

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

### **Separating the impact of work environment and machine operation on harvester performance**

Melander, L. & Ritala, R., 2020, In : EUROPEAN JOURNAL OF FOREST RESEARCH. 15 p.

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

### **The role of base substrate on barrier and convertability properties of Water based barrier coated (WBBC) paper and paperboard**

Miettinen, P., Ahokas, M., Engström, T., Heinonen, J. & Auvinen, S., 2017, *Paper Conference and Trade Show, PaperCon 2017: Renew, Rethink, Redefine the Future, Minneapolis, Minnesota, USA, 23-26 April 2017*. TAPPI Press, Vol. 1. p. 220-232 13 p.

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

### **The economics of renewable CaC<sub>2</sub> and C<sub>2</sub>H<sub>2</sub> production from biomass and CaO**

Pääkkönen, A., Tolvanen, H. & Kokko, L., 1 Jan 2019, In : Biomass and Bioenergy. 120, p. 40-48 9 p.

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

### **One-stage H<sub>2</sub> and CH<sub>4</sub> and two-stage H<sub>2</sub> + CH<sub>4</sub> production from grass silage and from solid and liquid fractions of NaOH pre-treated grass silage**

Pakarinen, O. M., Tähti, H. P. & Rintala, J. A., Oct 2009, In : Biomass & Bioenergy. 33, 10, p. 1419-1427 9 p.

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

### **Data-based stochastic modeling of tree growth and structure formation**

Potapov, I., Järvenpää, M., Åkerblom, M., Raunonen, P. & Kaasalainen, M., 2016, In : Silva Fennica. 50, 1, 1413.

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

### **Influence of nutrient deprivations on lipid accumulation in a dominant indigenous microalga *Chlorella* sp., BUM11008: Evaluation for biodiesel production**

Praveenkumar, R., Shameera, K., Mahalakshmi, G., Akbarsha, M. A. & Thajuddin, N., Feb 2012, In : Biomass & Bioenergy. 37, p. 60-66 7 p.

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

### **How and why does willow biochar increase a clay soil water retention capacity?**

Rasa, K., Heikkinen, J., Hannula, M., Arstila, K., Kulju, S. & Hyväluoma, J., 1 Dec 2018, In : Biomass and Bioenergy. 119, p. 346-353 8 p.

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

**Online quality evaluation of tissue paper structure on new generation tissue machines**

Raunio, J-P., Löytyniemi, T. & Ritala, R., 26 Mar 2018, In : *Nordic Pulp and Paper Research Journal*. 33, 1, p. 133-141 9 p.

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

**Evaluating the contrast of planar periodic patterns on paper**

Raunio, J-P., Makela, I., Mäntylä, M. & Ritala, R., 2018, *Paper Conference and Trade Show, PaperCon 2018*. TAPPI Press, p. 294-302 9 p.

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

**Methane production from maize in Finland - Screening for different maize varieties and plant parts**

Seppälä, M., Pyykkönen, V., Laine, A. & Rintala, J., Nov 2012, In : *Biomass & Bioenergy*. 46, November, p. 282-290 9 p.

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

**Controlled wettability of paperboard by nanoparticles using liquid flame spray process**

Stepien, M., Saarinen, J. J., Teisala, H., Tuominen, M., Aromaa, M., Kuusipalo, J., Mäkelä, J. & Toivakka, M., 2010, *International Conference on Nanotechnology for the Forest Products Industry 2010*. p. 1390-1392 3 p.

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

**Customer-oriented approach in cadastral procedures – Case study from Finland**

Sulonen, K., Riekkinen, K. & Kotilainen, S., 2020, In : *Land Use Policy*. 90, 104209.

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

**Sustainability of bioenergy in finland and globally – fact check**

Vakkilainen, E., Konttinen, J., Orasuo, V. & Aalto, P., 2019, *27th European Biomass Conference and Exhibition, EUBCE 2019*. ETA-Florence Renewable Energies, p. 1634-1635 2 p. (European Biomass Conference and Exhibition Proceedings).

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