10 Selected Publications

Pasi Raumonen

Mönkkönen P, Ali-Löytty S, Raumonen P. (2024)
Monte Carlo Foliage Generation on 3D Tree Models.
To appear in the proceedings of 22nd ECMI Conference on Industrial and Applied Mathematics, 26-30 June 2023, Wrocław, Poland, 8 pages.

Nunes M, Vaz M, Camargo J, Laurance W, de Andrade A, Vicentini A, Laurance S, Raumonen P, Jackson T, Zuquim G, Wu J, Penuelas J, Chave J, Maeda E. (2023)
Edge effects on tree architecture exacerbate biomass loss of fragmented Amazonian forests.
Nature Communications, 14, 8129 (2023). https://doi.org/10.1038/s41467-023-44004-5

Su C, Kokosza A, Xie X, Pěnčík A, Zhang Y, Raumonen P, Shi X, Muranen S, Topcu M K, Immanen J, Hagqvist R, Safronov O, Alonso-Serra J, Eswaran G, Venegas M P, Ljung K, Ward S, Mähönen A, Himanen K, Salojärvi J, Fernie A R, Novák O, Leyser O, Pałubicki W, Helariutta Y, Nieminen K. (2023)
Tree architecture: A strigolactone-deficient mutant reveals a connection between branching order and auxin gradient along the tree stem
Proceedings of the National Academy of Sciences of the United States of America, 2023 Vol. 120 No. 48 e2308587120, https://doi.org/10.1073/pnas.2308587120

Han T, Raumonen P, Sánchez-Azofeifa G A. (2023)
A non-destructive approach to estimate buttress volume using 3D point cloud data.
Ecological Informatics, Volume 77, November 2023, 102218. https://doi.org/10.1016/j.ecoinf.2023.102218

Raumonen P, Brede B, Lau L, Bartholomeus H. (2021)
A Shortest Path Based Tree Isolation Method For Uav Lidar Data.
2021 IEEE International Geoscience and Remote Sensing Symposium IGARSS, 2021, pp. 724-727, https://doi.org/10.1109/IGARSS47720.2021.9554346

Raumonen P, Tarvainen T. (2018)
Segmentation of vessel structures from photoacoustic images with reliability assessment.
Biomedical Optics Express, Vol. 9, Issue 7, pp. 2887-2904, https://doi.org/10.1364/BOE.9.002887

Åkerblom M, Raumonen P, Mäkipää R, Kaasalainen M. (2017)
Automatic tree species recognition with quantitative structure models.
Remote Sensing of Environment, Vol. 191, 1-12, https://doi.org/10.1016/j.rse.2016.12.002

Calders K, Newnham G, Burt A, Murphy S, Raumonen P, Herold M, Culvenor D, Avitabile V, Disney M, Armston J, Kaasalainen M. (2015)
Non-destructive estimates of above-ground biomass using terrestrial laser scanning.
Methods in Ecology and Evolution, Vol. 6, No. 2, pp. 198-208, https://doi.org/10.1111/2041-210X.12301

Raumonen P, Kaasalainen M, Åkerblom M, Kaasalainen S, Kaartinen H, Vastaranta M, Holopainen M, Disney M, Lewis P. (2013)
Fast Automatic Precision Tree Models from Terrestrial Laser Scanner Data.
Remote Sensing, Vol. 5, No. 2, pp. 491-520, https://doi.org/10.3390/rs5020491

Raumonen P, Suuriniemi S, Kettunen L. (2011)
Dimensional Reduction of Electromagnetic Boundary Value Problems.
Boundary Value Problems 2011, 2011:9. https://doi.org/10.1186/1687-2770-2011-9