

John Sessions

List of Publications by Year in descending order

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Version: 2024-02-01

108
papers

1,959
citations

304368

22
h-index

301761

39
g-index

108
all docs

108
docs citations

108
times ranked

1809
citing authors

#	ARTICLE	IF	CITATIONS
1	Eight heuristic planning techniques applied to three increasingly difficult wildlife planning problems. <i>Silva Fennica</i> , 2002, 36, .	0.5	147
2	Using Tabu search to schedule timber harvests subject to spatial wildlife goals for big game. <i>Ecological Modelling</i> , 1997, 94, 111-123.	1.2	122
3	A review and future directions in techno-economic modeling and optimization of upstream forest biomass to bio-oil supply chains. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 67, 15-35.	8.2	106
4	Using sulfite chemistry for robust bioconversion of Douglas-fir forest residue to bioethanol at high titer and lignosulfonate: A pilot-scale evaluation. <i>Bioresource Technology</i> , 2015, 179, 390-397.	4.8	88
5	A mixed biomass-based energy supply chain for enhancing economic and environmental sustainability benefits: A multi-criteria decision making framework. <i>Applied Energy</i> , 2017, 206, 1088-1101.	5.1	79
6	A review of the challenges and opportunities in estimating above ground forest biomass using tree-level models. <i>Scandinavian Journal of Forest Research</i> , 0, , 1-10.	0.5	69
7	Intentional Systems Management. <i>Journal of Sustainable Forestry</i> , 1999, 9, 83-125.	0.6	66
8	An expert-based approach to forest road network planning by combining Delphi and spatial multi-criteria evaluation. <i>Environmental Monitoring and Assessment</i> , 2013, 185, 1767-1776.	1.3	64
9	A Combinatorial Heuristic Approach for Solving Real-Size Machinery Location and Road Design Problems in Forestry Planning. <i>Operations Research</i> , 2006, 54, 1017-1027.	1.2	54
10	An international review of the most productive and cost effective forest biomass recovery technologies and supply chains. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 74, 145-158.	8.2	50
11	Intensifying a heuristic forest harvest scheduling search procedure with 2-opt decision choices. <i>Canadian Journal of Forest Research</i> , 1999, 29, 1784-1792.	0.8	49
12	Economic Optimization of Forest Biomass Processing and Transport in the Pacific Northwest USA. <i>Forest Science</i> , 2015, 61, 220-234.	0.5	47
13	Applying the Decision Support System, TRACER, to Forest Road Design. <i>Western Journal of Applied Forestry</i> , 2005, 20, 184-191.	0.5	45
14	Methods to Manage and Optimize Forest Biomass Supply Chains: a Review. <i>Current Forestry Reports</i> , 2019, 5, 124-141.	3.4	42
15	Obstacles to Implementation. <i>Journal of Forestry</i> , 1994, 92, 42-42.	0.5	39
16	Robust enzymatic saccharification of a Douglas-fir forest harvest residue by SPORL. <i>Biomass and Bioenergy</i> , 2013, 59, 393-401.	2.9	37
17	Application of an airborne laser scanner to forest road design with accurate earthwork volumes. <i>Journal of Forest Research</i> , 2005, 10, 113-123.	0.7	34
18	Economic and Spatial Impacts of an Existing Reserve Network on Future Augmentation. <i>Environmental Modeling and Assessment</i> , 2002, 7, 99-105.	1.2	33

#	ARTICLE	IF	CITATIONS
19	Fractionation of Forest Residues of Douglas-fir for Fermentable Sugar Production by SPORL Pretreatment. <i>Bioenergy Research</i> , 2012, 5, 978-988.	2.2	31
20	Scheduling forest road maintenance using the analytic hierarchy process and heuristics. <i>Silva Fennica</i> , 2006, 40, .	0.5	29
21	Determining Productivity of Mechanized Harvesting Machines. <i>Journal of Applied Sciences</i> , 2003, 4, 100-105.	0.1	26
22	Heuristic planning techniques applied to forest road profiles. <i>Journal of Forest Research</i> , 2005, 10, 83-92.	0.7	25
23	The Economics of Biomass Logistics and Conversion Facility Mobility: An Oregon Case Study. <i>Applied Engineering in Agriculture</i> , 2018, 34, 57-72.	0.3	23
24	Applying LiDAR technology for tree measurements in burned landscapes. <i>International Journal of Wildland Fire</i> , 2010, 19, 104.	1.0	23
25	Stochastic simulation and optimization of mobile chipping economics in processing and transport of forest biomass from residues. <i>Silva Fennica</i> , 2013, 47, .	0.5	23
26	Economic Impact of Truck-Machine Interference in Forest Biomass Recovery Operations on Steep Terrain. <i>Forest Products Journal</i> , 2013, 63, 162-173.	0.2	22
27	Combinatorial optimization of elk habitat effectiveness and timber harvest volume. <i>Environmental Modeling and Assessment</i> , 1999, 4, 143-153.	1.2	21
28	The Analytic Hierarchy Process: A Tutorial for Use in Prioritizing Forest Road Investments to Minimize Environmental Effects. <i>International Journal of Forest Engineering</i> , 2006, 17, 51-69.	0.4	21
29	A review and future directions on enhancing sustainability benefits across food-energy-water systems: the potential role of biochar-derived products. <i>AIMS Environmental Science</i> , 2019, 6, 379-416.	0.7	21
30	Production Equations for Tower Yarders in Austria. <i>International Journal of Forest Engineering</i> , 2009, 20, 17-21.	0.4	20
31	Forest biomass feedstock cost sensitivity to grinding parameters for bio-jet fuel production. <i>Renewable Energy</i> , 2016, 99, 1082-1091.	4.3	19
32	Theoretical Stability and Traction of Steep Slope Tethered Feller-Bunchers. <i>Forest Science</i> , 2017, 63, 192-200.	0.5	19
33	Potential carbon storage in biochar made from logging residue: Basic principles and Southern Oregon case studies. <i>PLoS ONE</i> , 2018, 13, e0203475.	1.1	19
34	An Application of a Heuristic Network Algorithm to Cable Logging Layout Design. <i>International Journal of Forest Engineering</i> , 2004, 15, 11-24.	0.4	18
35	Forest road design with soil sediment evaluation using a high-resolution DEM. <i>Journal of Forest Research</i> , 2005, 10, 471-479.	0.7	18
36	Optimal road spacing of cable yarding using a tower yarder in Southern Austria. <i>European Journal of Forest Research</i> , 2010, 129, 409-416.	1.1	18

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37	Preliminary Planning of Road Systems Using Digital Terrain Models. <i>Journal of Forest Engineering</i> , 1993, 4, 27-32.	0.1	17
38	Engineering Considerations in Road Assessment for Biomass Operations in Steep Terrain. <i>Western Journal of Applied Forestry</i> , 2010, 25, 144-153.	0.5	16
39	Can biochar link forest restoration with commercial agriculture?. <i>Biomass and Bioenergy</i> , 2019, 123, 175-185.	2.9	16
40	Evaluating the Effects of Improving Forest Road Standards on Economic Value of Forest Products. <i>Croatian Journal of Forest Engineering</i> , 2021, 42, 245-258.	1.0	15
41	Forest planning in an Oregon case study: Defining the problem and attempting to meet goals with a spatial-analysis technique. <i>Environmental Management</i> , 1996, 20, 565-577.	1.2	14
42	Road Location and Construction Practices: Effects on Landslide Frequency and Size in the Oregon Coast Range. <i>Western Journal of Applied Forestry</i> , 1987, 2, 119-124.	0.5	13
43	Optimization of Road Spacing for Log Length Shovel Logging on Gentle Terrain. <i>International Journal of Forest Engineering</i> , 2006, 17, 67-75.	0.4	13
44	Estimating structural properties of riparian forests with airborne lidar data. <i>International Journal of Remote Sensing</i> , 2012, 33, 7010-7023.	1.3	11
45	Effect of grinder configuration on forest biomass bulk density, particle size distribution and fuel consumption. <i>Biomass and Bioenergy</i> , 2015, 81, 44-54.	2.9	11
46	Economic implications of moisture content and logging system in forest harvest residue delivery for energy production: a case study. <i>Canadian Journal of Forest Research</i> , 2017, 47, 458-466.	0.8	11
47	Optimal Policies for Managing Aggregate Resources on Temporary Forest Roads. <i>Western Journal of Applied Forestry</i> , 2006, 21, 207-216.	0.5	10
48	Forest Road Erosion Control Using Multiobjective Optimization. <i>Journal of the American Water Resources Association</i> , 2010, 46, 712-723.	1.0	10
49	Evaluating Global Positioning System Accuracy for Forest Biomass Transportation Tracking within Varying Forest Canopy. <i>Western Journal of Applied Forestry</i> , 2011, 26, 165-173.	0.5	10
50	Pricing Forest Biomass for Power Generation. <i>Western Journal of Applied Forestry</i> , 2013, 28, 51-56.	0.5	10
51	Safety in steep slope logging operations. <i>Journal of Agromedicine</i> , 2019, 24, 138-145.	0.9	10
52	Effect of High Speed Blowing on the Bulk Density of Ground Residues. <i>Forest Products Journal</i> , 2014, 64, 290-299.	0.2	10
53	Evaluating Economic and Wildlife Habitat Considerations for Snag Retention Policies in Burned Landscapes. <i>Western Journal of Applied Forestry</i> , 2009, 24, 67-75.	0.5	9
54	Are double trailers cost effective for transporting forest biomass on steep terrain?. <i>California Agriculture</i> , 2015, 69, 177-183.	0.5	9

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55	Optimal Policies for Aggregate Recycling from Decommissioned Forest Roads. <i>Environmental Management</i> , 2008, 42, 297-309.	1.2	8
56	Selection and Penalty Strategies for Genetic Algorithms Designed to Solve Spatial Forest Planning Problems. <i>International Journal of Forestry Research</i> , 2009, 2009, 1-14.	0.2	8
57	Economic implications of grinding, transporting, and pretreating fresh versus aged forest residues for biofuel production. <i>Canadian Journal of Forest Research</i> , 2017, 47, 269-276.	0.8	8
58	Cost and Productivity of Tethered Cut-to-Length Systems in a Dry-Forest Fuel-Reduction Treatment: A Case Study. <i>Forest Science</i> , 2019, 65, 581-592.	0.5	8
59	Calculating the Maximum Grade a Log Truck Can Climb. <i>Western Journal of Applied Forestry</i> , 1986, 1, 43-45.	0.5	7
60	Biomass supply curves for western juniper in Central Oregon, USA, under alternative business models and policy assumptions. <i>Forest Policy and Economics</i> , 2015, 59, 75-82.	1.5	7
61	Evaluating the Association Among Alternative Measures of Cumulative Watershed Effects on a Forested Watershed in Eastern Oregon. <i>Western Journal of Applied Forestry</i> , 1998, 13, 15-22.	0.5	6
62	Increasing Value and Reducing Costs through Hauling Longer Logs: Opportunities and Issues. <i>Western Journal of Applied Forestry</i> , 2009, 24, 157-162.	0.5	6
63	Analytical design for mobile anchor systems. <i>International Journal of Forest Engineering</i> , 2015, 26, 10-23.	0.4	6
64	Sliding Stability of Cable-Assisted Tracked Equipment on Steep Slopes. <i>Forest Science</i> , 2019, 65, 304-311.	0.5	6
65	Insight into the Productivity, Cost and Soil Impacts of Cable-assisted Harvester-forwarder Thinning in Western Oregon. <i>Forest Science</i> , 2020, 66, 82-96.	0.5	6
66	Characteristics of Forest-Derived Woody Biomass Collected and Processed in Oregon. <i>Forest Products Journal</i> , 2012, 62, 520-527.	0.2	6
67	Evaluating the Salvage Value of Fire-Killed Timber by Helicopter—Effects of Yarding Distance and Time Since Fire. <i>Western Journal of Applied Forestry</i> , 2006, 21, 102-107.	0.5	5
68	Exploring Environmental and Economic Trade-offs Associated with Aggregate Recycling from Decommissioned Forest Roads. <i>Environmental Modeling and Assessment</i> , 2010, 15, 419-432.	1.2	5
69	Modeling Biomass Transport on Single-Lane Forest Roads. <i>Forest Science</i> , 2015, 61, 763-773.	0.5	5
70	Finite Element Analysis to Predict In-Forest Stored Harvest Residue Moisture Content. <i>Forest Science</i> , 2017, 63, 362-376.	0.5	5
71	Machine Rate Estimates and Equipment Utilization. <i>Croatian Journal of Forest Engineering</i> , 2021, 42, .	1.0	5
72	Reducing Greenhouse Gas Emissions for Sustainable Bio-Oil Production Using a Mixed Supply Chain. , 2016, , .		4

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73	Subregional Comparison for Forest- to-Product Biomass Supply Chains on the Pacific West Coast, USA. Applied Engineering in Agriculture, 2018, 34, 157-174.	0.3	4
74	Productivity of a Portable Winch System Used in Salvage Logging of Storm-Damaged Timber. Croatian Journal of Forest Engineering, 2019, 40, 311-318.	1.0	4
75	Heuristic Optimization of Thinning Individual Douglas-Fir. Forests, 2021, 12, 280.	0.9	4
76	Potential Timber Availability for Mechanized Harvesting in Oregon. Western Journal of Applied Forestry, 1993, 8, 11-15.	0.5	3
77	IMPROVING AQUATIC HABITAT CONDITIONS OVER TIME WHILE PRODUCING WOOD PRODUCTS: AN EXAMINATION OF OPTIONS. Journal of the American Water Resources Association, 1998, 34, 891-907.	1.0	3
78	Simultaneous Optimization of Horizontal and Vertical Alignments of Forest Roads Using Tabu Search. International Journal of Forest Engineering, 2005, 16, 137-151.	0.4	3
79	The Evolution of Computer-Aided Road Design Systems. International Journal of Forest Engineering, 2005, 16, 73-79.	0.4	3
80	Incorporating Soil Surface Erosion Prediction into Forest Road Alignment Optimization. International Journal of Forest Engineering, 2007, 18, 24-32.	0.4	3
81	Ground-Based Thinning on Steep Slopes in Western Oregon: Soil Exposure and Strength Effects. Forest Science, 2014, 60, 1014-1020.	0.5	3
82	Accurate Geo-Referencing of Trees with No or Inaccurate Terrestrial Location Devices. Remote Sensing, 2019, 11, 1877.	1.8	3
83	Equipment replacement policy for forest machines in Brazil. International Journal of Forest Engineering, 2020, 31, 87-94.	0.4	3
84	Heuristics in Forest Planning. , 2007, , 431-448.		3
85	Case studies on sugar production from underutilized woody biomass using sulfite chemistry. Tappi Journal, 2015, 14, 577-583.	0.2	3
86	Can Income Tax Rules Affect Management Strategies for Forest Roads?. Western Journal of Applied Forestry, 1986, 1, 26-28.	0.5	2
87	Development of efficient cutting patterns to maximize value with a log-allocation constraint. International Journal of Forest Engineering, 2013, 24, 42-52.	0.4	2
88	Improving Large Trailer Access for Biomass Recovery in Steep Terrain. Forest Science, 2018, 64, 429-441.	0.5	2
89	Ensuring consistency between strategic plans and equipment replacement decisions. International Journal of Forest Engineering, 2020, 31, 211-223.	0.4	2
90	Design of continuous bridle multiple-stump anchors. International Journal of Forest Engineering, 2020, 31, 1-8.	0.4	2

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91	Economic Estimation of the Available Biomass Following Logging Operations in Western Oregon and Washington. <i>Forest Products Journal</i> , 0, , .	0.2	2
92	Effects of Pre-Bunching Trees With a Tethered Feller-Buncher on Cable Logging Productivity and Costs: A Case Study in Southern Oregon. <i>Forest Science</i> , 0, , .	0.5	2
93	Harvesting Factors Affecting Financial Feasibility of Thinning in Southwestern Idaho. <i>Western Journal of Applied Forestry</i> , 1987, 2, 105-110.	0.5	1
94	Uphill and Downhill Gradeability of Log Trucks with Short Log Trailers. <i>Western Journal of Applied Forestry</i> , 2004, 19, 88-94.	0.5	1
95	Developing a sustainable water-delivery system in rural El Salvador. <i>Sustainability: Science, Practice, and Policy</i> , 2007, 3, 72-78.	1.1	1
96	Intelligent Deployment of Forest Road Graders. <i>International Journal of Forest Engineering</i> , 2007, 18, 15-23.	0.4	1
97	Indian Forests and Forestry: Can They Play a Larger Role in Sustainable Forest Management?. <i>Journal of Forestry</i> , 2017, 115, 364-365.	0.5	1
98	Harvesting elevation potential from mountain forests. <i>International Journal of Forest Engineering</i> , 2018, 29, 192-198.	0.4	1
99	Seasonal Changes in Live Tree Branch Moisture in Oregon, USA: Four Case Studies. <i>Forest Science</i> , 2019, 65, 100-107.	0.5	1
100	Evaluating the Economic Incentives of Biomass Removal on Site Preparation for Different Harvesting Systems in Australia. <i>Forests</i> , 2020, 11, 1370.	0.9	1
101	Forest Bio-Hubs to Enhance Forest Health While Supporting the Emerging Bioeconomy—A Comparison between Three U.S. Regions. <i>Energies</i> , 2022, 15, 931.	1.6	1
102	Steep Slope Harvest System Models for Small to Large Trees. <i>Forests</i> , 2022, 13, 305.	0.9	1
103	Extending Strategies for Optimal Bucking to Harvesting and Site Preparation. <i>Western Journal of Applied Forestry</i> , 1990, 5, 12-15.	0.5	0
104	Estimating Biomass Availability and Cost When Implementing Forest Restoration with Tethered Harvest Systems. <i>Journal of Forestry</i> , 2019, 117, 323-339.	0.5	0
105	Maximizing the Standing Skyline Log Load Using a Variable Length Tagline. <i>Forests</i> , 2021, 12, 927.	0.9	0
106	ESPDS. <i>Croatian Journal of Forest Engineering</i> , 2022, 43, 99-108.	1.0	0
107	A mobility model for a tethered skidder. <i>International Journal of Forest Engineering</i> , 0, , 1-6.	0.4	0
108	Developing computer simulations for risk assessment by cable logging rigging crews. <i>International Journal of Forest Engineering</i> , 0, , 1-9.	0.4	0