

John Sessions

List of Publications by Year in descending order

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Version: 2024-02-01

108
papers

1,959
citations

304743

22
h-index

302126

39
g-index

108
all docs

108
docs citations

108
times ranked

1809
citing authors

#	ARTICLE	IF	CITATIONS
1	ESPDS. Croatian Journal of Forest Engineering, 2022, 43, 99-108.	1.9	0
2	Forest Bio-Hubs to Enhance Forest Health While Supporting the Emerging Bioeconomy—A Comparison between Three U.S. Regions. Energies, 2022, 15, 931.	3.1	1
3	Steep Slope Harvest System Models for Small to Large Trees. Forests, 2022, 13, 305.	2.1	1
4	Evaluating the Effects of Improving Forest Road Standards on Economic Value of Forest Products. Croatian Journal of Forest Engineering, 2021, 42, 245-258.	1.9	15
5	Machine Rate Estimates and Equipment Utilization. Croatian Journal of Forest Engineering, 2021, 42, .	1.9	5
6	Heuristic Optimization of Thinning Individual Douglas-Fir. Forests, 2021, 12, 280.	2.1	4
7	Maximizing the Standing Skyline Log Load Using a Variable Length Tagline. Forests, 2021, 12, 927.	2.1	0
8	Equipment replacement policy for forest machines in Brazil. International Journal of Forest Engineering, 2020, 31, 87-94.	0.8	3
9	Ensuring consistency between strategic plans and equipment replacement decisions. International Journal of Forest Engineering, 2020, 31, 211-223.	0.8	2
10	Design of continuous bridle multiple-stump anchors. International Journal of Forest Engineering, 2020, 31, 1-8.	0.8	2
11	Insight into the Productivity, Cost and Soil Impacts of Cable-assisted Harvester-forwarder Thinning in Western Oregon. Forest Science, 2020, 66, 82-96.	1.0	6
12	Evaluating the Economic Incentives of Biomass Removal on Site Preparation for Different Harvesting Systems in Australia. Forests, 2020, 11, 1370.	2.1	1
13	Cost and Productivity of Tethered Cut-to-Length Systems in a Dry-Forest Fuel-Reduction Treatment: A Case Study. Forest Science, 2019, 65, 581-592.	1.0	8
14	Accurate Geo-Referencing of Trees with No or Inaccurate Terrestrial Location Devices. Remote Sensing, 2019, 11, 1877.	4.0	3
15	Sliding Stability of Cable-Assisted Tracked Equipment on Steep Slopes. Forest Science, 2019, 65, 304-311.	1.0	6
16	Estimating Biomass Availability and Cost When Implementing Forest Restoration with Tethered Harvest Systems. Journal of Forestry, 2019, 117, 323-339.	1.0	0
17	Methods to Manage and Optimize Forest Biomass Supply Chains: a Review. Current Forestry Reports, 2019, 5, 124-141.	7.4	42
18	Can biochar link forest restoration with commercial agriculture?. Biomass and Bioenergy, 2019, 123, 175-185.	5.7	16

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19	Safety in steep slope logging operations. Journal of Agromedicine, 2019, 24, 138-145.	1.5	10
20	Seasonal Changes in Live Tree Branch Moisture in Oregon, USA: Four Case Studies. Forest Science, 2019, 65, 100-107.	1.0	1
21	Productivity of a Portable Winch System Used in Salvage Logging of Storm-Damaged Timber. Croatian Journal of Forest Engineering, 2019, 40, 311-318.	1.9	4
22	A review and future directions on enhancing sustainability benefits across food-energy-water systems: the potential role of biochar-derived products. AIMS Environmental Science, 2019, 6, 379-416.	1.4	21
23	Subregional Comparison for Forest- to-Product Biomass Supply Chains on the Pacific West Coast, USA. Applied Engineering in Agriculture, 2018, 34, 157-174.	0.7	4
24	Harvesting elevation potential from mountain forests. International Journal of Forest Engineering, 2018, 29, 192-198.	0.8	1
25	The Economics of Biomass Logistics and Conversion Facility Mobility: An Oregon Case Study. Applied Engineering in Agriculture, 2018, 34, 57-72.	0.7	23
26	Improving Large Trailer Access for Biomass Recovery in Steep Terrain. Forest Science, 2018, 64, 429-441.	1.0	2
27	Potential carbon storage in biochar made from logging residue: Basic principles and Southern Oregon case studies. PLoS ONE, 2018, 13, e0203475.	2.5	19
28	Economic implications of moisture content and logging system in forest harvest residue delivery for energy production: a case study. Canadian Journal of Forest Research, 2017, 47, 458-466.	1.7	11
29	An international review of the most productive and cost effective forest biomass recovery technologies and supply chains. Renewable and Sustainable Energy Reviews, 2017, 74, 145-158.	16.4	50
30	A mixed biomass-based energy supply chain for enhancing economic and environmental sustainability benefits: A multi-criteria decision making framework. Applied Energy, 2017, 206, 1088-1101.	10.1	79
31	Economic implications of grinding, transporting, and pretreating fresh versus aged forest residues for biofuel production. Canadian Journal of Forest Research, 2017, 47, 269-276.	1.7	8
32	A review and future directions in techno-economic modeling and optimization of upstream forest biomass to bio-oil supply chains. Renewable and Sustainable Energy Reviews, 2017, 67, 15-35.	16.4	106
33	Indian Forests and Forestry: Can They Play a Larger Role in Sustainable Forest Management?. Journal of Forestry, 2017, 115, 364-365.	1.0	1
34	Finite Element Analysis to Predict In-Forest Stored Harvest Residue Moisture Content. Forest Science, 2017, 63, 362-376.	1.0	5
35	Theoretical Stability and Traction of Steep Slope Tethered Feller-Bunchers. Forest Science, 2017, 63, 192-200.	1.0	19
36	Reducing Greenhouse Gas Emissions for Sustainable Bio-Oil Production Using a Mixed Supply Chain. , 2016, , .		4

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37	Forest biomass feedstock cost sensitivity to grinding parameters for bio-jet fuel production. Renewable Energy, 2016, 99, 1082-1091.	8.9	19
38	Analytical design for mobile anchor systems. International Journal of Forest Engineering, 2015, 26, 10-23.	0.8	6
39	Economic Optimization of Forest Biomass Processing and Transport in the Pacific Northwest USA. Forest Science, 2015, 61, 220-234.	1.0	47
40	Modeling Biomass Transport on Single-Lane Forest Roads. Forest Science, 2015, 61, 763-773.	1.0	5
41	Using sulfite chemistry for robust bioconversion of Douglas-fir forest residue to bioethanol at high titer and lignosulfonate: A pilot-scale evaluation. Bioresource Technology, 2015, 179, 390-397.	9.6	88
42	Effect of grinder configuration on forest biomass bulk density, particle size distribution and fuel consumption. Biomass and Bioenergy, 2015, 81, 44-54.	5.7	11
43	Biomass supply curves for western juniper in Central Oregon, USA, under alternative business models and policy assumptions. Forest Policy and Economics, 2015, 59, 75-82.	3.4	7
44	Case studies on sugar production from underutilized woody biomass using sulfite chemistry. Tappi Journal, 2015, 14, 577-583.	0.5	3
45	Are double trailers cost effective for transporting forest biomass on steep terrain?. California Agriculture, 2015, 69, 177-183.	0.8	9
46	Ground-Based Thinning on Steep Slopes in Western Oregon: Soil Exposure and Strength Effects. Forest Science, 2014, 60, 1014-1020.	1.0	3
47	Effect of High Speed Blowing on the Bulk Density of Ground Residues. Forest Products Journal, 2014, 64, 290-299.	0.4	10
48	Robust enzymatic saccharification of a Douglas-fir forest harvest residue by SPORL. Biomass and Bioenergy, 2013, 59, 393-401.	5.7	37
49	An expert-based approach to forest road network planning by combining Delphi and spatial multi-criteria evaluation. Environmental Monitoring and Assessment, 2013, 185, 1767-1776.	2.7	64
50	Development of efficient cutting patterns to maximize value with a log-allocation constraint. International Journal of Forest Engineering, 2013, 24, 42-52.	0.8	2
51	Pricing Forest Biomass for Power Generation. Western Journal of Applied Forestry, 2013, 28, 51-56.	0.5	10
52	Economic Impact of Truck-Machine Interference in Forest Biomass Recovery Operations on Steep Terrain. Forest Products Journal, 2013, 63, 162-173.	0.4	22
53	Stochastic simulation and optimization of mobile chipping economics in processing and transport of forest biomass from residues. Silva Fennica, 2013, 47, .	1.3	23
54	Estimating structural properties of riparian forests with airborne lidar data. International Journal of Remote Sensing, 2012, 33, 7010-7023.	2.9	11

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55	Fractionation of Forest Residues of Douglas-fir for Fermentable Sugar Production by SPORL Pretreatment. <i>Bioenergy Research</i> , 2012, 5, 978-988.	3.9	31
56	Characteristics of Forest-Derived Woody Biomass Collected and Processed in Oregon. <i>Forest Products Journal</i> , 2012, 62, 520-527.	0.4	6
57	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
58	Optimal road spacing of cable yarding using a tower yarder in Southern Austria. <i>European Journal of Forest Research</i> , 2010, 129, 409-416.	2.5	18
59	Exploring Environmental and Economic Trade-offs Associated with Aggregate Recycling from Decommissioned Forest Roads. <i>Environmental Modeling and Assessment</i> , 2010, 15, 419-432.	2.2	5
60	Forest Road Erosion Control Using Multiobjective Optimization ¹ . <i>Journal of the American Water Resources Association</i> , 2010, 46, 712-723.	2.4	10
61	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
62	Applying LiDAR technology for tree measurements in burned landscapes. <i>International Journal of Wildland Fire</i> , 2010, 19, 104.	2.4	23
63	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.	0.8	8
64	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
65	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
66	Production Equations for Tower Yarders in Austria. <i>International Journal of Forest Engineering</i> , 2009, 20, 17-21.	0.8	20
67	Optimal Policies for Aggregate Recycling from Decommissioned Forest Roads. <i>Environmental Management</i> , 2008, 42, 297-309.	2.7	8
68	Incorporating Soil Surface Erosion Prediction into Forest Road Alignment Optimization. <i>International Journal of Forest Engineering</i> , 2007, 18, 24-32.	0.8	3
69	Developing a sustainable water-delivery system in rural El Salvador. <i>Sustainability: Science, Practice, and Policy</i> , 2007, 3, 72-78.	1.9	1
70	Intelligent Deployment of Forest Road Graders. <i>International Journal of Forest Engineering</i> , 2007, 18, 15-23.	0.8	1
71	Heuristics in Forest Planning. , 2007, , 431-448.		3
72	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.	1.9	54

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73	The Analytic Hierarchy Process: A Tutorial for Use in Prioritizing Forest Road Investments to Minimize Environmental Effects. International Journal of Forest Engineering, 2006, 17, 51-69.	0.8	21
74	Evaluating the Salvage Value of Fire-Killed Timber by Helicopterâ€™ Effects of Yarding Distance and Time Since Fire. Western Journal of Applied Forestry, 2006, 21, 102-107.	0.5	5
75	Optimal Policies for Managing Aggregate Resources on Temporary Forest Roads. Western Journal of Applied Forestry, 2006, 21, 207-216.	0.5	10
76	Optimization of Road Spacing for Log Length Shovel Logging on Gentle Terrain. International Journal of Forest Engineering, 2006, 17, 67-75.	0.8	13
77	Scheduling forest road maintenance using the analytic hierarchy process and heuristics. Silva Fennica, 2006, 40, .	1.3	29
78	Heuristic planning techniques applied to forest road profiles. Journal of Forest Research, 2005, 10, 83-92.	1.4	25
79	Application of an airborne laser scanner to forest road design with accurate earthwork volumes. Journal of Forest Research, 2005, 10, 113-123.	1.4	34
80	Forest road design with soil sediment evaluation using a high-resolution DEM. Journal of Forest Research, 2005, 10, 471-479.	1.4	18
81	Applying the Decision Support System, TRACER, to Forest Road Design. Western Journal of Applied Forestry, 2005, 20, 184-191.	0.5	45
82	Simultaneous Optimization of Horizontal and Vertical Alignments of Forest Roads Using Tabu Search. International Journal of Forest Engineering, 2005, 16, 137-151.	0.8	3
83	The Evolution of Computer-Aided Road Design Systems. International Journal of Forest Engineering, 2005, 16, 73-79.	0.8	3
84	Uphill and Downhill Gradeability of Log Trucks with Short Log Trailers. Western Journal of Applied Forestry, 2004, 19, 88-94.	0.5	1
85	An Application of a Heuristic Network Algorithm to Cable Logging Layout Design. International Journal of Forest Engineering, 2004, 15, 11-24.	0.8	18
86	Determining Productivity of Mechanized Harvesting Machines. Journal of Applied Sciences, 2003, 4, 100-105.	0.3	26
87	Economic and Spatial Impacts of an Existing Reserve Network on Future Augmentation. Environmental Modeling and Assessment, 2002, 7, 99-105.	2.2	33
88	Eight heuristic planning techniques applied to three increasingly difficult wildlife planning problems. Silva Fennica, 2002, 36, .	1.3	147
89	Intentional Systems Management. Journal of Sustainable Forestry, 1999, 9, 83-125.	1.4	66
90	Combinatorial optimization of elk habitat effectiveness and timber harvest volume. Environmental Modeling and Assessment, 1999, 4, 143-153.	2.2	21

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91	Intensifying a heuristic forest harvest scheduling search procedure with 2-opt decision choices. Canadian Journal of Forest Research, 1999, 29, 1784-1792.	1.7	49
92	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.	2.4	3
93	Evaluating the Association Among Alternative Measures of Cumulative Watershed Effects on a Forested Watershed in Eastern Oregon. Western Journal of Applied Forestry, 1998, 13, 15-22.	0.5	6
94	Using Tabu search to schedule timber harvests subject to spatial wildlife goals for big game. Ecological Modelling, 1997, 94, 111-123.	2.5	122
95	Forest planning in an Oregon case study: Defining the problem and attempting to meet goals with a spatial-analysis technique. Environmental Management, 1996, 20, 565-577.	2.7	14
96	Obstacles to Implementation. Journal of Forestry, 1994, 92, 42-42.	1.0	39
97	Preliminary Planning of Road Systems Using Digital Terrain Models. Journal of Forest Engineering, 1993, 4, 27-32.	0.1	17
98	Potential Timber Availability for Mechanized Harvesting in Oregon. Western Journal of Applied Forestry, 1993, 8, 11-15.	0.5	3
99	Extending Strategies for Optimal Bucking to Harvesting and Site Preparation. Western Journal of Applied Forestry, 1990, 5, 12-15.	0.5	0
100	Road Location and Construction Practices: Effects on Landslide Frequency and Size in the Oregon Coast Range. Western Journal of Applied Forestry, 1987, 2, 119-124.	0.5	13
101	Harvesting Factors Affecting Financial Feasibility of Thinning in Southwestern Idaho. Western Journal of Applied Forestry, 1987, 2, 105-110.	0.5	1
102	Can Income Tax Rules Affect Management Strategies for Forest Roads?. Western Journal of Applied Forestry, 1986, 1, 26-28.	0.5	2
103	Calculating the Maximum Grade a Log Truck Can Climb. Western Journal of Applied Forestry, 1986, 1, 43-45.	0.5	7
104	A review of the challenges and opportunities in estimating above ground forest biomass using tree-level models. Scandinavian Journal of Forest Research, 0, , 1-10.	1.4	69
105	Economic Estimation of the Available Biomass Following Logging Operations in Western Oregon and Washington. Forest Products Journal, 0, , .	0.4	2
106	A mobility model for a tethered skidder. International Journal of Forest Engineering, 0, , 1-6.	0.8	0
107	Effects of Pre-Bunching Trees With a Tethered Feller-Buncher on Cable Logging Productivity and Costs: A Case Study in Southern Oregon. Forest Science, 0, , .	1.0	2
108	Developing computer simulations for risk assessment by cable logging rigging crews. International Journal of Forest Engineering, 0, , 1-9.	0.8	0