Petras RupÅ¡ys

List of Publications by Year
in descending order

31 papers	218 citations	840776 11 h-index	1058476 14 g-index
31 all docs	31 docs citations	31 times ranked	32 citing authors

#	Article	IF	Citations
1	A Linkage among Tree Diameter, Height, Crown Base Height, and Crown Width 4-Variate Distribution and Their Growth Models: A 4-Variate Diffusion Process Approach. Forests, 2017, 8, 479.	2.1	16
2	New Insights into Tree Height Distribution Based on Mixed Effects Univariate Diffusion Processes. PLoS ONE, 2016, 11, e0168507.	2.5	16
3	Generalized fixed-effects and mixed-effects parameters heightâ€"diameter models with diffusion processes. International Journal of Biomathematics, 2015, 08, 1550060.	2.9	15
4	Height-diameter models with stochastic differential equations and mixed-effects parameters. Journal of Forest Research, 2015, 20, 9-17.	1.4	15
5	A new paradigm in modelling the evolution of a stand via the distribution of tree sizes. Scientific Reports, 2017, 7, 15875.	3.3	15
6	Stochastic Mixed-Effects Parameters Bertalanffy Process, with Applications to Tree Crown Width Modeling. Mathematical Problems in Engineering, 2015, 2015, 1-10.	1.1	13
7	Modeling Dynamics of Structural Components of Forest Stands Based on Trivariate Stochastic Differential Equation. Forests, 2019, 10, 506.	2.1	13
8	Understanding the Evolution of Tree Size Diversity within the Multivariate Nonsymmetrical Diffusion Process and Information Measures. Mathematics, 2019, 7, 761.	2.2	13
9	Models for Tree Taper Form: The Gompertz and Vasicek Diffusion Processes Framework. Symmetry, 2020, 12, 80.	2.2	13
10	ANALYSIS OF HEIGHT CURVES BY STOCHASTIC DIFFERENTIAL EQUATIONS. International Journal of Biomathematics, 2012, 05, 1250045.	2.9	11
11	The use of copulas to practical estimation of multivariate stochastic differential equation mixed effects models. AIP Conference Proceedings, 2015, , .	0.4	11
12	QUANTIFYING TREE DIAMETER DISTRIBUTIONS WITH ONE-DIMENSIONAL DIFFUSION PROCESSES. Journal of Biological Systems, 2010, 18, 205-221.	1.4	10
13	Evolution of the bivariate tree diameter and height distributions via the stand age: von Bertalanffy bivariate diffusion process approach. Journal of Forest Research, 2019, 24, 16-26.	1.4	10
14	A Multivariate Hybrid Stochastic Differential Equation Model for Whole-Stand Dynamics. Mathematics, 2020, 8, 2230.	2.2	8
15	Construction of Reducible Stochastic Differential Equation Systems for Tree Heightâ€"Diameter Connections. Mathematics, 2020, 8, 1363.	2.2	7
16	Influence of noise on decay predictions in standing trees. AIP Conference Proceedings, 2017, , .	0.4	6
17	Stochastic Models to Qualify Stem Tapers. Algorithms, 2020, 13, 94.	2.1	6
18	Symmetric and Asymmetric Diffusions through Age-Varying Mixed-Species Stand Parameters. Symmetry, 2021, 13, 1457.	2.2	6

#	Article	IF	Citations
19	Modeling perspectives of forest growth and yield: Framework of multivariate diffusion process. AIP Conference Proceedings, 2019, , .	0.4	5
20	Analysis of Longitudinal Forest Data on Individual-Tree and Whole-Stand Attributes Using a Stochastic Differential Equation Model. Forests, 2022, 13, 425.	2.1	5
21	METHOD FOR INCREASING AN ACCURACY OF DETECTING DECAY BY THE ARBOTOMÂ® 3-D TREE TOMOGRAPH ON PICEA ABIES (L.) H. KARST TREES DAMAGED BY HETEROBASIDION ANNOSUM (FR.) BREF. , 2015, , .		2
22	A 4-variate gompertz type diffusion model: Computational aspects. AIP Conference Proceedings, 2018, , .	0.4	1
23	A von Bertalanffy Bivariate Diffusion Model: Computational Aspects and Application. , 2018, , .		1
24	Dynamic programming method for deterministic discrete processes of general form. Lithuanian Mathematical Journal, 1978, 18, 531-536.	0.4	0
25	Dynamic programming for discrete-time stochastic systems of a general type. Lithuanian Mathematical Journal, 1979, 19, 270-276.	0.4	0
26	Control functions in discrete-time optimal control systems. Lithuanian Mathematical Journal, 1979, 19, 546-551.	0.4	0
27	B-measurable and continuous multivalued mappings. Lithuanian Mathematical Journal, 1986, 26, 361-366.	0.4	0
28	Multivariate stochastic mechanisms and information measures in population growth processes. AIP Conference Proceedings, 2021, , .	0.4	0
29	Modeling of stem taper evolution using stochastic differential equations. Journal of Physics: Conference Series, 2021, 1854, 012002.	0.4	0
30	The Further Development of Stem Taper and Volume Models Defined by Stochastic Differential Equations. Lecture Notes in Electrical Engineering, 2013, , 121-133.	0.4	0
31	HEIGHT-DIAMETER CURVE ESTIMATION AND PREDICTION WITH VASICEK MODEL. , 2013, , .		0