Philippe GÃ©rardin

List of Publications by Year
in descending order

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62 papers	2,456 citations	201674 27 h-index	206112 48 g-index
62 all docs	62 docs citations	62 times ranked	1779 citing authors

#	Article	IF	Citations
1	Investigation of wood wettability changes during heat treatment on the basis of chemical analysis. Polymer Degradation and Stability, 2005, 89, 1-5.	5.8	285
2	Investigations of the reasons for fungal durability of heat-treated beech wood. Polymer Degradation and Stability, 2006, 91, 393-397.	5.8	252
3	New alternatives for wood preservation based on thermal and chemical modification of woodâ€" a review. Annals of Forest Science, 2016, 73, 559-570.	2.0	148
4	Control of wood thermal treatment and its effects on decay resistance: a review. Annals of Forest Science, 2016, 73, 571-583.	2.0	145
5	Investigation of the chemical modifications of beech wood lignin during heat treatment. Polymer Degradation and Stability, 2010, 95, 1721-1726.	5.8	131
6	Use of wood elemental composition to predict heat treatment intensity and decay resistance of different softwood and hardwood species. Polymer Degradation and Stability, 2010, 95, 2255-2259.	5.8	90
7	Wettability changes and mass loss during heat treatment of wood. Holzforschung, 2005, 59, 35-37.	1.9	77
8	Effect of chemical modifications caused by heat treatment on mechanical properties of Grevillea robusta wood. Polymer Degradation and Stability, 2008, 93, 401-405.	5.8	67
9	Evidence of char formation during wood heat treatment by mild pyrolysis. Polymer Degradation and Stability, 2007, 92, 997-1002.	5.8	61
10	Evaluation of thermally modified Grevillea robusta heartwood as an alternative to shortage of wood resource in Kenya: Characterisation of physicochemical properties and improvement of bio-resistance. Bioresource Technology, 2007, 98, 3478-3486.	9.6	59
11	Comparison of chemical composition and decay durability of heat treated wood cured under different inert atmospheres: Nitrogen or vacuum. Polymer Degradation and Stability, 2013, 98, 677-681.	5.8	56
12	Wettability of waterborne coatings on chemically and thermally modified pine wood. Journal of Coatings Technology Research, 2007, 4, 203-206.	2.5	55
13	Utilization of thermodesorption coupled to GCâ€"MS to study stability of different wood species to thermodegradation. Journal of Analytical and Applied Pyrolysis, 2011, 92, 376-383.	5.5	54
14	Effect of heat treatment intensity on some conferred properties of different European softwood and hardwood species. Wood Science and Technology, 2013, 47, 663-673.	3.2	48
15	Antioxidant activities, total phenolic contents and chemical compositions of extracts from four Cameroonian woods: Padouk (Pterocarpus soyauxii Taubb), tali (Erythrophleum suaveolens), moabi (Baillonella toxisperma), and movingui (Distemonanthus benthamianus). Industrial Crops and Products, 2013, 41, 71-77.	5.2	46
16	Quantification and characterization of knotwood extractives of 12 European softwood and hardwood species. Annals of Forest Science, 2015, 72, 277-284.	2.0	45
17	Elemental composition of wood as a potential marker to evaluate heat treatment intensity. Polymer Degradation and Stability, 2009, 94, 365-368.	5.8	42
18	Tartaric acid catalyzed furfurylation of beech wood. Wood Science and Technology, 2017, 51, 379-394.	3.2	41

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19	Comparison of teak wood properties according to forest management: short versus long rotation. Annals of Forest Science, 2018, 75, 1.	2.0	39
20	Molecular recognition of wood polyphenols by phase II detoxification enzymes of the white rot Trametes versicolor. Scientific Reports, 2018, 8, 8472.	3.3	38
21	Prediction of the decay resistance of heat treated wood on the basis of its elemental composition. Polymer Degradation and Stability, 2010, 95, 94-97.	5.8	37
22	Comparison of mechanical properties of heat treated beech wood cured under nitrogen or vacuum. Polymer Degradation and Stability, 2013, 98, 1762-1765.	5.8	36
23	Total phenolic and lignin contents, phytochemical screening, antioxidant and fungal inhibition properties of the heartwood extractives of ten Congo Basin tree species. Annals of Forest Science, 2016, 73, 287-296.	2.0	34
24	Effect of heat treatment intensity on wood chemical composition and decay durability of Pinus patula. European Journal of Wood and Wood Products, 2012, 70, 519-524.	2.9	32
25	Inhibition of fungi with wood extractives and natural durability of five Cameroonian wood species. Industrial Crops and Products, 2018, 123, 183-191.	5.2	30
26	Evidence of fungicidal and termicidal properties of Prunus africana heartwood extractives. Holzforschung, 2007, 61, 323-325.	1.9	29
27	Development of new wood treatments combining boron impregnation and thermo modification: effect of additives on boron leachability. European Journal of Wood and Wood Products, 2014, 72, 355-365.	2.9	29
28	Quantitative and qualitative composition of bark polyphenols changes longitudinally with bark maturity in Abies alba Mill.. Annals of Forest Science, 2020, 77, 1.	2.0	27
29	Phenolic and lipophilic extractives in Pinus merkusii Jungh. et de Vries knots and stemwood. Industrial Crops and Products, 2015, 69, 466-471.	5.2	26
30	Improvement of beech wood properties by in situ formation of polyesters of citric and tartaric acid in combination with glycerol. Holzforschung, 2018, 72, 291-299.	1.9	26
31	Modification of grape seed and wood tannins to lipophilic antioxidant derivatives. Industrial Crops and Products, 2010, 31, 509-515.	5.2	24
32	Characterization of bark extractives of different industrial Indonesian wood species for potential valorization. Industrial Crops and Products, 2017, 108, 121-127.	5.2	24
33	Effect of extractives on conferred and natural durability of Cupressus lusitanica heartwood. Annals of Forest Science, 2010, 67, 504-504.	2.0	23
34	Effect of furfurylation treatment on technological properties of short rotation teak wood. Journal of Materials Research and Technology, 2021, 12, 1689-1699.	5.8	22
35	Thermodesorption coupled to GCâ€“MS to characterize volatiles formation kinetic during wood thermodegradation. Journal of Analytical and Applied Pyrolysis, 2013, 101, 96-102.	5.5	20
36	Improvement of the durability of heat-treated wood against termites. Maderas: Ciencia Y Tecnologia, 2017, , 0-0.	0.7	20

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37	Decay and termite resistance of pine blocks impregnated with different additives and subjected to heat treatment. European Journal of Wood and Wood Products, 2016, 74, 37-42.	2.9	19
38	Variations in the natural density of European oak wood affect thermal degradation during thermal modification. Annals of Forest Science, 2016, 73, 277-286.	2.0	18
39	Resistance of thermally modified ash (Fraxinus excelsior L.) wood under steam pressure against rot fungi, soil-inhabiting micro-organisms and termites. European Journal of Wood and Wood Products, 2017, 75, 249-262.	2.9	16
40	The average carbon oxidation state of thermally modified wood as a marker for its decay resistance against Basidiomycetes. Polymer Degradation and Stability, 2013, 98, 2140-2145.	5.8	14
41	Furfurylation of wood from fast-growing tropical species to enhance their resistance to subterranean termite. European Journal of Wood and Wood Products, 2021, 79, 1007-1015.	2.9	14
42	Effects of monoglycerides on leachability and efficacy of boron wood preservatives against decay and termites. International Biodeterioration and Biodegradation, 2010, 64, 135-138.	3.9	12
43	Intraspecific variation of European oak wood thermal stability according to radial position. Wood Science and Technology, 2017, 51, 785-794.	3.2	12
44	Knot extractives: a model for analysing the eco-physiological factors that control the within and between-tree variability. Trees - Structure and Function, 2017, 31, 1619-1633.	1.9	12
45	Characterization of thermally modified short and long rotation teaks and the effects on coatings performance. Maderas: Ciencia Y Tecnologia, 2019, , 0-0.	0.7	11
46	Comparison of different treatments based on glycerol or polyglycerol additives to improve properties of thermally modified wood. European Journal of Wood and Wood Products, 2019, 77, 799-810.	2.9	10
47	Non-biocide antifungal and anti-termite wood preservation treatments based on combinations of thermal modification with different chemical additives. European Journal of Wood and Wood Products, 2019, 77, 1125-1136.	2.9	10
48	Synthesis of poly(glycerol methacrylate) and its application to dimensional stabilization of wood. Journal of Applied Polymer Science, 2003, 88, 743-749.	2.6	9
49	Yield and compositions of bark phenolic extractives from three commercially significant softwoods show intra- and inter-specific variation. Plant Physiology and Biochemistry, 2020, 155, 346-356.	5.8	9
50	Effect of glycerol-maleic anhydride treatment on technological properties of short rotation teak wood. Wood Science and Technology, 2021, 55, 1795-1819.	3.2	9
51	Natural durability of four TunisianEucalyptusspp. and their respective compositions in extractives. Holzforschung, 2020, 74, 260-274.	1.9	8
52	Resistance against subterranean termite of beech wood impregnated with different derivatives of glycerol or polyglycerol and maleic anhydride followed by thermal modification: a field test study. European Journal of Wood and Wood Products, 2020, 78, 387-392.	2.9	8
53	Intraspecific variability of quantity and chemical composition of ethanolic knotwood extracts along the stems of three industrially important softwood species: Abies alba, Picea abies and Pseudotsuga menziesii. Holzforschung, 2021, 75, 168-179.	1.9	8
54	Hydrogels obtained from an original catanionic system for efficient formulation of boron wood-preservatives. International Biodeterioration and Biodegradation, 2013, 77, 123-126.	3.9	7

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55	Anti-termite and anti-fungal bio-sourced wood preservation ingredients from Dacryodes edulis (G. Don) H.J. Lam resin. Holzforschung, 2020, 74, 745-753.	1.9	7
56	Relationships between chemical composition and decay durability of Coula edulis Baill as an alternative wood species in Gabon. Wood Science and Technology, 2020, 54, 329-348.	3.2	5
57	Feasibility study of utilization of commercially available polyurethane resins to develop non-biocidal wood preservation treatments. European Journal of Wood and Wood Products, 2017, 75, 877-884.	2.9	4
58	Thermal stability of Abies alba wood according to its radial position and forest management. European Journal of Wood and Wood Products, 2018, 76, 1669-1676.	2.9	4
59	Mechanical properties and biological durability in soil contact of chemically modified wood treated in an open or in a closed system using glycerol/maleic anhydride systems. Wood Material Science and Engineering, 0, , 1-10.	2.3	4
60	The effect of heat treatment on the characteristics of the short rotation teak. International Wood Products Journal, 2021, 12, 218-227.	1.1	4
61	Derivatives of the Lignan 7â€²-Hydroxymatairesinol with Antioxidant Properties and Enhanced Lipophilicity. Journal of Natural Products, 2017, 80, 1783-1790.	3.0	2
62	A generic information framework for decision-making in a forest-based bio-economy. Annals of Forest Science, 2021, 78, .	2.0	2