JosÃ© Paulo Molin

List of Publications by Year
in descending order

112	2,580	304743	214800
papers	citations	22 h-index	47 g-index

114	114	114	2430
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Visible and Near Infrared Spectroscopy in Soil Science. Advances in Agronomy, 2010, 107, 163-215.	5.2	953
2	Application of light detection and ranging and ultrasonic sensors to high-throughput phenotyping and precision horticulture: current status and challenges. Horticulture Research, 2018, 5, 35.	6.3	65
3	Comparison of crop canopy reflectance sensors used to identify sugarcane biomass and nitrogen status. Precision Agriculture, 2015, 16, 15-28.	6.0	62
4	Adoption and use of precision agriculture technologies in the sugarcane industry of SÃ£o Paulo state, Brazil. Precision Agriculture, 2011, 12, 67-81.	6.0	61
5	A Method to Obtain Orange Crop Geometry Information Using a Mobile Terrestrial Laser Scanner and 3D Modeling. Remote Sensing, 2017, 9, 763.	4.0	61
6	Variable rate fertilization in citrus: a long term study. Precision Agriculture, 2017, 18, 169-191.	6.0	58
7	Detection of biotic and abiotic stresses in crops by using hierarchical self organizing classifiers. Precision Agriculture, 2017, 18, 383-393.	6.0	55
8	Active crop sensor to detect variability of nitrogen supply and biomass on sugarcane fields. Precision Agriculture, 2012, 13, 33-44.	6.0	50
9	Establishing management zones using soil electrical conductivity and other soil properties by the fuzzy clustering technique. Scientia Agricola, 2008, 65, 567-573.	1.2	47
10	Machine Learning Based On-Line Prediction of Soil Organic Carbon after Removal of Soil Moisture Effect. Remote Sensing, 2020, 12, 1308.	4.0	41
11	Estimation of Secondary Soil Properties by Fusion of Laboratory and On-Line Measured Visâ€“NIR Spectra. Remote Sensing, 2019, 11, 2819.	4.0	37
12	Carrot Yield Mapping: A Precision Agriculture Approach Based on Machine Learning. AI, 2020, 1, 229-241.	3.8	36
13	Spatial and temporal variability of soil electrical conductivity related to soil moisture. Scientia Agricola, 2013, 70, 01-05.	1.2	35
14	Effect of X-Ray Tube Configuration on Measurement of Key Soil Fertility Attributes with XRF. Remote Sensing, 2020, 12, 963.	4.0	35
15	Detection, classification, and mapping of coffee fruits during harvest with computer vision. Computers and Electronics in Agriculture, 2021, 183, 106066.	7.7	35
16	Comportamento do NDVI obtido por sensor Ã³tico ativo em cereais. Pesquisa Agropecuaria Brasileira, 2008, 43, 1075-1083.	0.9	34
17	SENSOR SYSTEMS FOR MAPPING SOIL FERTILITY ATTRIBUTES: CHALLENGES, ADVANCES, AND PERSPECTIVES IN BRAZILIAN TROPICAL SOILS. Engenharia Agricola, 2019, 39, 126-147.	0.7	33
18	The Effectiveness of Three Vegetation Indices Obtained from a Canopy Sensor in Identifying Sugarcane Response to Nitrogen. Agronomy Journal, 2014, 106, 273-280.	1.8	27

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19	Cost of boundary manoeuvres in sugarcane production. Biosystems Engineering, 2015, 129, 112-126.	4.3	26
20	Sugarcane Yield Mapping Using High-Resolution Imagery Data and Machine Learning Technique. Remote Sensing, 2021, 13, 232.	4.0	26
21	Predicting the sugarcane yield in real-time by harvester engine parameters and machine learning approaches. Computers and Electronics in Agriculture, 2021, 181, 105945.	7.7	25
22	Mapeamento da condutividade elÃ©trica e relaÃ§Ã£o com a argila de Latossolo sob plantio direto. Pesquisa Agropecuaria Brasileira, 2006, 41, 1023-1031.	0.9	25
23	Test procedure for variable rate fertilizer on coffee. Acta Scientiarum - Agronomy, 2010, 32, .	0.6	23
24	Algorithm for Variableâ€Rate Nitrogen Application in Sugarcane Based on Active Crop Canopy Sensor. Agronomy Journal, 2015, 107, 1513-1523.	1.8	23
25	Simplifying Sample Preparation for Soil Fertility Analysis by X-ray Fluorescence Spectrometry. Sensors, 2019, 19, 5066.	3.8	23
26	RemoÃ§Ã£o de erros em mapas de produtividade via filtragem de dados brutos. Revista Brasileira De Engenharia Agricola E Ambiental, 2004, 8, 126-134.	1.1	23
27	Combined Use of Vis-NIR and XRF Sensors for Tropical Soil Fertility Analysis: Assessing Different Data Fusion Approaches. Sensors, 2021, 21, 148.	3.8	23
28	Planning machine paths and row crop patterns on steep surfaces to minimize soil erosion. Computers and Electronics in Agriculture, 2016, 124, 194-210.	7.7	22
29	Assessing Soil Key Fertility Attributes Using a Portable X-ray Fluorescence: A Simple Method to Overcome Matrix Effect. Agronomy, 2020, 10, 787.	3.0	20
30	Data processing within rows for sugarcane yield mapping. Scientia Agricola, 2020, 77, .	1.2	20
31	Canopy sensor placement for variable-rate nitrogen application in sugarcane fields. Precision Agriculture, 2018, 19, 147-160.	6.0	19
32	Laser-Induced Breakdown Spectroscopy (LIBS) for tropical soil fertility analysis. Soil and Tillage Research, 2022, 216, 105250.	5.6	19
33	Soybean Yield Estimation and Its Components: A Linear Regression Approach. Agriculture (Switzerland), 2020, 10, 348.	3.1	17
34	Estudos sobre a mensuraÃ§Ã£o da condutividade elÃ©trica do solo. Engenharia Agricola, 2011, 31, 90-101.	0.7	17
35	UtilizaÃ§Ã£o de sensor Ã³ptico ativo para detectar deficiÃªncia foliar de nitrogÃªnio em algodoeiro. Revista Brasileira De Engenharia Agricola E Ambiental, 2009, 13, 137-145.	1.1	16
36	3-D Soil Stratification Methodology for Geoelectrical Prospection. IEEE Transactions on Power Delivery, 2012, 27, 1636-1643.	4.3	16

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37	Spatial variability of soil fertility and its relationship with seed physiological potential in a soybean production area. Revista Brasileira De Sementes = Brazilian Seed Journal, 2012, 34, 193-201.	0.5	16
38	Spatial variability in commercial orange groves. Part 2: relating canopy geometry to soil attributes and historical yield. Precision Agriculture, 2019, 20, 805-822.	6.0	15
39	Multi-Sensor Approach for Tropical Soil Fertility Analysis: Comparison of Individual and Combined Performance of VNIR, XRF, and LIBS Spectroscopies. Agronomy, 2021, 11, 1028.	3.0	15
40	Colheita de citros e obtenÃ§Ã£o de dados para mapeamento da produtividade. Engenharia Agricola, 2007, 27, 259-266.	0.7	14
41	Yield mapping, soil fertility and tree gaps in an orange orchard. Revista Brasileira De Fruticultura, 2012, 34, 1256-1265.	0.5	14
42	Sugarcane Harvester for In-field Data Collection: State of the Art, Its Applicability and Future Perspectives. Sugar Tech, 2021, 23, 1-14.	1.8	14
43	Spatial variability of sugarcane row gaps: measurement and mapping. Ciencia E Agrotecnologia, 2016, 40, 347-355.	1.5	13
44	Estudos com penetrometria: novos equipamentos e amostragem correta. Revista Brasileira De Engenharia Agricola E Ambiental, 2012, 16, 584-590.	1.1	13
45	DESIGN AND EVALUATION OF A PUNCH PLANTER FOR NO-TILL SYSTEMS. Transactions of the American Society of Agricultural Engineers, 1998, 41, 307-314.	0.9	12
46	Capacidade de um sensor Ã³tico em quantificar a resposta da cana-de-aÃ§Ãºcar a doses de nitrogÃªnio. Revista Brasileira De Engenharia Agricola E Ambiental, 2010, 14, 1345-1349.	1.1	12
47	MensuraÃ§Ã£o da condutividade elÃ©trica do solo por induÃ§Ã£o e sua correlaÃ§Ã£o com fatores de produÃ§Ã£o. Engenharia Agricola, 2005, 25, 420-426.	0.7	11
48	Variable rate spraying application on cotton using an electronic flow controller. Precision Agriculture, 2018, 19, 912-928.	6.0	11
49	Assessing Damage Caused by Accidental Vehicle Traffic on Sugarcane Ratoon. Applied Engineering in Agriculture, 2013, 29, 161-169.	0.7	10
50	Spatial variability in commercial orange groves. Part 1: canopy volume and height. Precision Agriculture, 2019, 20, 788-804.	6.0	10
51	Identification and measurement of gaps within sugarcane rows for site-specific management: Comparing different sensor-based approaches. Biosystems Engineering, 2021, 209, 64-73.	4.3	10
52	A system for plant detection using sensor fusion approach based on machine learning model. Computers and Electronics in Agriculture, 2021, 189, 106382.	7.7	10
53	Ãndice de vegetaÃ§Ã£o no algodoeiro sob diferentes doses de nitrogÃªnio e regulador de crescimento. Semina:Ciencias Agrarias, 2014, 35, 169.	0.3	9
54	A statistical approach to static and dynamic tests for Global Navigation Satellite Systems receivers used in agricultural operations. Scientia Agricola, 2021, 78, .	1.2	9

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55	Sensor Fusion with NARX Neural Network to Predict the Mass Flow in a Sugarcane Harvester. Sensors, 2021, 21, 4530.	3.8	9
56	AnÃ¡lise espacial da ocorrÃªncia do Ãndice de cone em Ã¡rea sob semeadura direta e sua relaÃ§Ã£o com fatores do solo. Engenharia Agricola, 2006, 26, 442-452.	0.7	9
57	Mapeamento do Ãndice de vegetaÃ§Ã£o da diferenÃ§a normalizada em lavoura de algodÃ£o. Pesquisa Agropecuaria Tropical, 2012, 42, 112-118.	1.0	8
58	<b>A sampling plan and spatial distribution for site-specific control of <i>Sphenophorus levis</i> in sugarcane. Acta Scientiarum - Agronomy, 2016, 38, 279.	0.6	8
59	Estimation and Mapping of Soil Properties Based on Multi-Source Data Fusion. Remote Sensing, 2021, 13, 978.	4.0	8
60	Near-infrared spectroscopy as a tool for monitoring the spatial variability of sugarcane quality in the fields. Biosystems Engineering, 2021, 206, 150-161.	4.3	8
61	Sensor Ã³ptico no auxÃlio Ã recomendaÃ§Ã£o de adubaÃ§Ã£o nitrogenada em cana-de-aÃ§Ãºcar. Pesquisa Agropecuaria Brasileira, 2011, 46, 1633-1642.	0.9	8
62	Spatial variability of soil properties and cotton yield in the Brazilian Cerrado. Revista Brasileira De Engenharia Agricola E Ambiental, 2011, 15, 996-1003.	1.1	8
63	Mapeamento da distribuiÃ§Ã£o espacial da infestaÃ§Ã£o de Panicum maximum durante a colheita da cultura de milho. Planta Daninha, 2004, 22, 269-274.	0.5	7
64	A model to analyze as-applied reports from variable rate applications. Precision Agriculture, 2014, 15, 304-320.	6.0	7
65	A MEASUREMENT SYSTEM BASED ON LiDAR TECHNOLOGY TO CHARACTERIZE THE CANOPY OF SUGARCANE PLANTS. Engenharia Agricola, 2019, 39, 240-247.	0.7	7
66	Spatial distribution of sorption and desorption process of 14C-radiolabelled hexazinone and tebuthiuron in tropical soil. Chemosphere, 2021, 264, 128494.	8.2	7
67	Evaluation of Minimum Preparation Sampling Strategies for Sugarcane Quality Prediction by vis-NIR Spectroscopy. Sensors, 2021, 21, 2195.	3.8	7
68	UtilizaÃ§Ã£o de dados georreferenciados na determinaÃ§Ã£o de parÃ¢metros de desempenho em colheita mecanizada. Engenharia Agricola, 2006, 26, 759-767.	0.7	7
69	Uso de piloto automÃ¡tico na implantaÃ§Ã£o de pomares de citros. Engenharia Agricola, 2011, 31, 334-342.	0.7	7
70	Methodology to filter out outliers in high spatial density data to improve maps reliability. Scientia Agricola, 2022, 79, .	1.2	6
71	AvaliaÃ§Ã£o de intervenÃ§Ãµes em unidades de aplicaÃ§Ã£o localizada de fertilizantes e de populaÃ§Ãµes de milho. Engenharia Agricola, 2006, 26, 528-536.	0.7	6
72	Spectral data of tropical soils using dry-chemistry techniques (VNIR, XRF, and LIBS): A dataset for soil fertility prediction. Data in Brief, 2022, 41, 108004.	1.0	6

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73	Obtaining and Validating High-Density Coffee Yield Data. Horticulturae, 2022, 8, 421.	2.8	6
74	Field-testing of a sugar cane yield monitor in Brazil. , 2004, , .		5
75	Ensaios estÃ¡ticos e cinemÃ¡ticos de receptores de GPS. Revista Brasileira De Engenharia Agricola E Ambiental, 2011, 15, 981-988.	1.1	5
76	Sugarcane response to nitrogen rates, measured by a canopy reflectance sensor. Pesquisa Agropecuaria Brasileira, 2015, 50, 840-848.	0.9	5
77	Yield mapping methods for manually harvested crops. Computers and Electronics in Agriculture, 2020, 177, 105693.	7.7	5
78	Economic viability, energy and nutrient balances of site-specific fertilisation for citrus. Biosystems Engineering, 2020, 200, 138-156.	4.3	5
79	An Approach to Sugarcane Yield Estimation Using Sensors in the Harvester and ZigBee Technology. Sugar Tech, 2022, 24, 813-821.	1.8	5
80	Hastes instrumentadas para a mensuraÃ§Ã£o da resistÃªncia mecÃ¢nica do solo. Engenharia Agricola, 2006, 26, 161-169.	0.7	5
81	SegregaÃ§Ã£o de fertilizantes aplicados a lanÃ§o. Engenharia Agricola, 2009, 29, 614-622.	0.7	5
82	Metodologia para identificaÃ§Ã£o e caracterizaÃ§Ã£o de erros em mapas de produtividade. Revista Brasileira De Engenharia Agricola E Ambiental, 2003, 7, 367-374.	1.1	5
83	Precision agriculture and the digital contributions for site-specific management of the fields. Revista Ciencia Agronomica, 2020, 51, .	0.3	5
84	Proposta metodolÃ³gica para avaliaÃ§Ã£o de controlador automÃ¡tico de seÃ§Ãµes e pulverizaÃ§Ã£o. Engenharia Agricola, 2011, 31, 111-120.	0.7	4
85	MÃ©todo de avaliaÃ§Ã£o de equipamentos para direcionamento de veÃculos agrÃcolas e efeito de sinais de GNSS. Engenharia Agricola, 2011, 31, 121-129.	0.7	4
86	On-the-go tropical soil sensing for pH determination using ion-selective electrodes. Pesquisa Agropecuaria Brasileira, 2018, 53, 1189-1202.	0.9	4
87	<b>Soil penetration resistance mapping quality: effect of the number of subsamples. Acta Scientiarum - Agronomy, 2018, 40, 34989.	0.6	4
88	Potential use of hyperspectral data to monitor sugarcane nitrogen status. Acta Scientiarum - Agronomy, 0, 43, e47632.	0.6	4
89	PopulaÃ§Ã£o de plantas e alguns atributos do solo relacionados ao rendimento de grÃ£os de milho. Acta Scientiarum - Agronomy, 2006, 28, 483.	0.6	3
90	SPATIAL VARIABILITY MAPPING OF SUGARCANE QUALITATIVE ATTRIBUTES. Engenharia Agricola, 2019, 39, 109-117.	0.7	3

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91	PATH ERRORS IN SUGARCANE TRANSSHIPMENT TRAILERS. Engenharia Agricola, 2020, 40, 223-231.	0.7	3
92	AnÃ¡lise comparativa de sensores de velocidade de deslocamento em funÃ§Ã£o da superfÃcie. Engenharia Agricola, 2005, 25, 768-773.	0.7	3
93	Diagnose nutricional com o uso de sensor Ã³ptico ativo em algodoeiro. Revista Brasileira De Engenharia Agricola E Ambiental, 2012, 16, 1159-1165.	1.1	3
94	Energy Efficiency of Variable Rate Fertilizer Application in Coffee Production in Brazil. AgriEngineering, 2021, 3, 815-826.	3.2	3
95	Predictive Performance of Mobile Visâ€“NIR Spectroscopy for Mapping Key Fertility Attributes in Tropical Soils through Local Models Using PLS and ANN. Automation, 2022, 3, 116-131.	2.3	3
96	Penetration Forces at Different Soil Conditions for Punches Used on Punch Planters. Transactions of the American Society of Agricultural Engineers, 1996, 39, 423-429.	0.9	2
97	InfluÃªncia da utilizaÃ§Ã£o e do tipo de amortecedores de ricochete em ensaios de aplicadores a lanÃ§o. Revista Brasileira De Engenharia Agricola E Ambiental, 2000, 4, 281-285.	1.1	2
98	AvaliaÃ§Ã£o do desempenho de semeadoras manuais. Revista Brasileira De Engenharia Agricola E Ambiental, 2001, 5, 339-343.	1.1	2
99	Desempenho de colhedoras semimontadas para a colheita direta de milho. Engenharia Agricola, 2008, 28, 720-729.	0.7	2
100	Metodologia para avaliaÃ§Ã£o do desempenho de receptor de GPS de uso agrÃcola em condiÃ§Ã£o cinemÃ¡tica. Engenharia Agricola, 2010, 30, 121-129.	0.7	2
101	Energy flows in lowland soybean production system in Brazil. Ciencia Rural, 2016, 46, 1395-1400.	0.5	2
102	Carbon stocks of a Rhodic Ferralsol under no-tillage in Southern Brazil: spatial variability at a farm scale. Soil Research, 2009, 47, 253.	1.1	2
103	POPULATION RATE CHANGES AND OTHER EVALUATION PARAMETERS FOR A PUNCH PLANTER PROTOTYPE. Transactions of the American Society of Agricultural Engineers, 1998, 41, 1265-1270.	0.9	1
104	Scale and climate regulation as a conservation incentive. Frontiers in Ecology and the Environment, 2020, 18, 429-430.	4.0	1
105	Definition of Optimal Maize Seeding Rates Based on the Potential Yield of Management Zones. Agriculture (Switzerland), 2021, 11, 911.	3.1	1
106	3D Data Processing to Characterize the Spatial Variability of Sugarcane Fields. Sugar Tech, 0, , 1.	1.8	1
107	Uso de fotografias aÃ©reas coloridas 35 mm na avaliaÃ§Ã£o de produtividade de grÃ£os. Engenharia Agricola, 2004, 24, 695-703.	0.7	1
108	Mapping Soil Properties with Fixed Rank Kriging of Proximally Sensed Soil Data Fused with Sentinel-2 Biophysical Parameter. Remote Sensing, 2022, 14, 1639.	4.0	1

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109	Mapping coffee yield with computer vision. Precision Agriculture, 2022, 23, 2372-2387.	6.0	1
110	HIGH-RESOLUTION IMAGERY DATA TO ASSESS THE SPATIAL VARIABILITY OF SUGARCANE FIELDS/ DADOS DE IMAGENS DE ALTA RESOLUÃ‡ÃƒO PARA AVALIAÃ‡ÃƒO DA VARIABILIDADE ESPACIAL DE TALHÃ•ES DE CANA-DE-AÃ‡ÃšCAR. Brazilian Journal of Development, 2020, 6, 100266-100280.	0.1	0
111	Pendulum-action spreader for lime application. Brazilian Journal of Development, 2020, 6, 41211-42222.	0.1	0
112	Measuring apparent electrical conductivity in undisturbed soil samples / MensuraÃ§Ã£o da condutividade elÃ©trica aparente em amostras indeformadas de solo. Brazilian Journal of Development, 2021, 7, 73620-73632.	0.1	0