Alessandro Piccolo

List of Publications by Citations

212 papers	9,742 citations	51 h-index	89 g-index
216 ext. papers	10,982 ext. citations	5.5 avg, IF	6.66 L-index

#	Paper	IF	Citations
212	THE SUPRAMOLECULAR STRUCTURE OF HUMIC SUBSTANCES. *Soil Science*, **2001**, 166, 810-832	0.9	678
211	The supramolecular structure of humic substances: A novel understanding of humus chemistry and implications in soil science. *Advances in Agronomy*, **2002**, 75, 57-134	7.7	461
210	Molecular characterization of dissolved organic matter (DOM): a critical review. *Analytical and Bioanalytical Chemistry*, **2013**, 405, 109-24	4.4	392
209	Humic and fulvic acids as biostimulants in horticulture. *Scientia Horticulturae*, **2015**, 196, 15-27	4.1	352
208	Conformational Arrangement of Dissolved Humic Substances. Influence of Solution Composition on Association of Humic Molecules. *Environmental Science & Technology*, **1999**, 33, 1682-1690	10.3	236
207	Role of Hydrophobic Components of Soil Organic Matter in Soil Aggregate Stability. *Soil Science Society of America Journal*, **1999**, 63, 1801-1810	2.5	214
206	Increased soil organic carbon sequestration through hydrophobic protection by humic substances. *Soil Biology and Biochemistry*, **2002**, 34, 1839-1851	7.5	197
205	Soil remediation: humic acids as natural surfactants in the washings of highly contaminated soils. *Environmental Pollution*, **2005**, 135, 515-22	9.3	191
204	State of the art of CPMAS 13C-NMR spectroscopy applied to natural organic matter. *Progress in Nuclear Magnetic Resonance Spectroscopy*, **2004**, 44, 215-223	10.4	146
203	Structural characteristics of humic substances as related to nitrate uptake and growth regulation in plant systems. *Soil Biology and Biochemistry*, **1992**, 24, 373-380	7.5	144
202	Macromolecular changes of humic substances induced by interaction with organic acids. *European Journal of Soil Science*, **1996**, 47, 319-328	3.4	132
201	Compost amendments enhance peat suppressiveness to Pythium ultimum, Rhizoctonia solani and Sclerotinia minor. *Biological Control*, **2011**, 56, 115-124	3.8	128
200	Chemical composition and bioactivity properties of size-fractions separated from a vermicompost humic acid. *Chemosphere*, **2010**, 78, 457-66	8.4	126
199	Aggregation and disaggregation of humic supramolecular assemblies by NMR diffusion ordered spectroscopy (DOSY-NMR). *Environmental Science & Technology*, **2008**, 42, 699-706	10.3	126
198	Relationship between molecular characteristics of soil humic fractions and glycolytic pathway and krebs cycle in maize seedlings. *Soil Biology and Biochemistry*, **2007**, 39, 3138-3146	7.5	124
197	Adsorption of Glyphosate by Humic Substances *Journal of Agricultural and Food Chemistry*, **1996**, 44, 2442-2446	5.7	120
196	Reduced heterogeneity of a lignite humic acid by preparative HPSEC following interaction with an organic acid. Characterization of size-separates by Pyr-GC-MS and 1H-NMR spectroscopy. *Environmental Science & Technology*, **2002**, 36, 76-84	10.3	117

195	Agricultural waste-based composts exhibiting suppressivity to diseases caused by the phytopathogenic soil-borne fungi Rhizoctonia solani and Sclerotinia minor. *Applied Soil Ecology*, **2013**, 65, 43-51	5	109
194	Basis of a humeomics science: chemical fractionation and molecular characterization of humic biosuprastructures. *Biomacromolecules*, **2011**, 12, 1187-99	6.9	108
193	Molecular characteristics of humic acids extracted from compost at increasing maturity stages. *Soil Biology and Biochemistry*, **2009**, 41, 1164-1172	7.5	108
192	Bioactivity of chemically transformed humic matter from vermicompost on plant root growth. *Journal of Agricultural and Food Chemistry*, **2010**, 58, 3681-8	5.7	99
191	Changes of humic substances characteristics from forested to cultivated soils in Ethiopia. *Geoderma* , **2006**, 132, 9-19	6.7	98
190	H HRMAS-NMR metabolomic to assess quality and traceability of mozzarella cheese from Campania buffalo milk. *Food Chemistry*, **2012**, 132, 1620-1627	8.5	94
189	Effects of mineral and monocarboxylic acids on the molecular association of dissolved humic substances. *European Journal of Soil Science*, **1999**, 50, 687-694	3.4	94
188	Advances in humeomics: enhanced structural identification of humic molecules after size fractionation of a soil humic acid. *Analytica Chimica Acta*, **2012**, 720, 77-90	6.6	90
187	Sequestration of a Biologically Labile Organic Carbon in Soils by Humified Organic Matter. *Climatic Change*, **2004**, 67, 329-343	4.5	87
186	Electrospray ionization mass spectrometry of terrestrial humic substances and their size fractions. *Analytical and Bioanalytical Chemistry*, **2003**, 377, 1047-59	4.4	85
185	Atrazine Interactions with Soil Humic Substances of Different Molecular Structure. *Journal of Environmental Quality*, **1998**, 27, 1324-1333	3.4	85
184	Effects of coal derived humic substances on water retention and structural stability of Mediterranean soils. *Soil Use and Management*, **1996**, 12, 209-213	3.1	78
183	Conformational changes of humic substances induced by some hydroxy-, keto-, and sulfonic acids. *Soil Biology and Biochemistry*, **2001**, 33, 563-571	7.5	76
182	Effects of humic substances on the bioavailability and aerobic biodegradation of polychlorinated biphenyls in a model soil. *Biotechnology and Bioengineering*, **2002**, 77, 204-11	4.9	75
181	Quantitative aspects of solid-state 13C-NMR spectra of humic substances from soils of volcanic systems. *Geoderma*, **1997**, 80, 327-338	6.7	72
180	Polymerization of humic substances by an enzyme-catalyzed oxidative coupling. *Die Naturwissenschaften*, **2000**, 87, 391-4	2	72
179	CHROMATOGRAPHIC AND SPECTROPHOTOMETRIC PROPERTIES OF DISSOLVED HUMIC SUBSTANCES COMPARED WITH MACROMOLECULAR POLYMERS. *Soil Science*, **2001**, 166, 174-185	0.9	70
178	High-power gradient diffusion NMR spectroscopy for the rapid assessment of extra-virgin olive oil adulteration. *Food Chemistry*, **2010**, 118, 153-158	8.5	69

177	CHARACTERISTICS OF SOIL HUMIC EXTRACTS OBTAINED BY SOME ORGANIC AND INORGANIC SOLVENTS AND PURIFIED BY HCl-HF TREATMENT. *Soil Science*, **1988**, 146, 418-426	0.9	69
176	The molecular characteristics of compost affect plant growth, arbuscular mycorrhizal fungi, and soil microbial community composition. *Biology and Fertility of Soils*, **2016**, 52, 15-29	6.1	64
175	Molecular characterization of compost at increasing stages of maturity. 2. Thermochemolysis-GC-MS and 13C-CPMAS-NMR spectroscopy. *Journal of Agricultural and Food Chemistry*, **2007**, 55, 2303-11	5.7	64
174	Polymerization of dissolved humic substances catalyzed by peroxidase. Effects of pH and humic composition. *Organic Geochemistry*, **2002**, 33, 281-294	3.1	64
173	Increased sequestration of organic carbon in soil by hydrophobic protection. *Die Naturwissenschaften*, **1999**, 86, 496-9	2	64
172	Carbohydrates in water-stable aggregates and particle size fractions of forested and cultivated soils in two contrasting tropical ecosystems. *Biogeochemistry*, **2001**, 53, 1-22	3.8	63
171	On-farm compost: a useful tool to improve soil quality under intensive farming systems. *Applied Soil Ecology*, **2016**, 107, 13-23	5	63
170	Quantitative evaluation of noncovalent interactions between glyphosate and dissolved humic substances by NMR spectroscopy. *Environmental Science & Technology*, **2012**, 46, 5939-46	10.3	61
169	Binding of phenol and differently halogenated phenols to dissolved humic matter as measured by NMR spectroscopy. *Environmental Science & Technology*, **2009**, 43, 5377-82	10.3	61
168	NMR spectroscopy evaluation of direct relationship between soils and molecular composition of red wines from Aglianico grapes. *Analytica Chimica Acta*, **2010**, 673, 167-72	6.6	61
167	Molecular changes in particulate organic matter (POM) in a typical Chinese paddy soil under different long-term fertilizer treatments. *European Journal of Soil Science*, **2010**, 61, 231-242	3.4	60
166	Quantitative differences in evaluating soil humic substances by liquid- and solid-state 13C-NMR spectroscopy. *Geoderma*, **1997**, 80, 339-352	6.7	59
165	Impact of arbuscular mycorrhizal fungi applications on maize production and soil phosphorus availability. *Journal of Geochemical Exploration*, **2013**, 129, 40-44	3.8	58
164	Soil washing with solutions of humic substances from manure compost removes heavy metal contaminants as a function of humic molecular composition. *Chemosphere*, **2019**, 225, 150-156	8.4	52
163	Relationships Between Chemical Characteristics and Root Growth Promotion of Humic Acids Isolated From Brazilian Oxisols. *Soil Science*, **2009**, 174, 611-620	0.9	51
162	Effects of humic substances and soya lecithin on the aerobic bioremediation of a soil historically contaminated by polycyclic aromatic hydrocarbons (PAHs). *Biotechnology and Bioengineering*, **2004**, 88, 214-23	4.9	51
161	Influence of land use on the characteristics of humic substances in some tropical soils of Nigeria. *European Journal of Soil Science*, **2005**, 56, 343-352	3.4	50
160	Spectroscopic and conformational properties of size-fractions separated from a lignite humic acid. *Chemosphere*, **2007**, 69, 1032-9	8.4	48

159	Oligomerization of humic phenolic monomers by oxidative coupling under biomimetic catalysis. *Environmental Science & Technology*, **2006**, 40, 6955-62	10.3	46
158	Effects of on-farm composted tomato residues on soil biological activity and yields in a tomato cropping system. *Chemical and Biological Technologies in Agriculture*, **2015**, 2, 4	4.4	45
157	Effects of a humic acid and its size-fractions on the bacterial community of soil rhizosphere under maize (Zea mays L.). *Chemosphere*, **2009**, 77, 829-37	8.4	45
156	Polyphasic screening, homopolysaccharide composition, and viscoelastic behavior of wheat Sourdough from a Leuconostoc lactis and Lactobacillus curvatus exopolysaccharide-producing starter culture. *Applied and Environmental Microbiology*, **2012**, 78, 2737-47	4.8	45
155	Molecular characterization of compost at increasing stages of maturity. 1. Chemical fractionation and infrared spectroscopy. *Journal of Agricultural and Food Chemistry*, **2007**, 55, 2293-302	5.7	45
154	Increased conformational rigidity of humic substances by oxidative biomimetic catalysis. *Biomacromolecules*, **2005**, 6, 351-8	6.9	45
153	Optical microsensors for pesticides identification based on porous silicon technology. *Biosensors and Bioelectronics*, **2005**, 20, 2136-9	11.8	45
152	Effects of fractions of coal-derived humic substances on seed germination and growth of seedlings (Lactuga sativa and Lycopersicum esculentum). *Biology and Fertility of Soils*, **1993**, 16, 11-15	6.1	45
151	Physical□hemical characteristics of lignins separated from biomasses for second-generation ethanol. *Biomass and Bioenergy*, **2014**, 62, 58-67	5.3	44
150	Molecular rigidity and diffusivity of Al3+ and Ca2+ humates as revealed by NMR spectroscopy. *Environmental Science & Technology*, **2009**, 43, 2417-24	10.3	44
149	A molecular zoom into soil Humeome by a direct sequential chemical fractionation of soil. *Science of the Total Environment*, **2017**, 586, 807-816	10.2	42
148	Methylobacterium populi VP2: plant growth-promoting bacterium isolated from a highly polluted environment for polycyclic aromatic hydrocarbon (PAH) biodegradation. *Scientific World Journal, The*, **2014**, 2014, 931793	2.2	42
147	Elemental quantitation of natural organic matter by CPMAS 13C NMR spectroscopy. *Solid State Nuclear Magnetic Resonance*, **2002**, 21, 158-70	3.1	42
146	Metabolomics by Proton High-Resolution Magic-Angle-Spinning Nuclear Magnetic Resonance of Tomato Plants Treated with Two Secondary Metabolites Isolated from Trichoderma. *Journal of Agricultural and Food Chemistry*, **2016**, 64, 3538-45	5.7	42
145	Molecular characteristics of water-extractable organic matter from different composted biomasses and their effects on seed germination and early growth of maize. *Science of the Total Environment*, **2017**, 590-591, 40-49	10.2	41
144	The molecular properties of biochar carbon released in dilute acidic solution and its effects on maize seed germination. *Science of the Total Environment*, **2017**, 576, 858-867	10.2	41
143	Host-guest interactions between 2,4-dichlorophenol and humic substances as evaluated by 1H NMR relaxation and diffusion ordered spectroscopy. *Environmental Science & Technology*, **2008** , 42, 8440-5	10.3	41
142	Cerinolactone, a hydroxy-lactone derivative from Trichoderma cerinum. *Journal of Natural Products*, **2012**, 75, 103-6	4.9	40

141	Carbon deposition in soil rhizosphere following amendments with compost and its soluble fractions, as evaluated by combined soil-plant rhizobox and reporter gene systems. *Chemosphere*, **2008**, 73, 1292-9	8.4	40
140	Bioactivity of humic substances and water extracts from compost made by ligno-cellulose wastes from biorefinery. *Science of the Total Environment*, **2019**, 646, 792-800	10.2	39
139	Metabolomic by 1H NMR spectroscopy differentiates "Fiano di Avellino" white wines obtained with different yeast strains. *Journal of Agricultural and Food Chemistry*, **2013**, 61, 10816-22	5.7	39
138	Rates of oxidative coupling of humic phenolic monomers catalyzed by a biomimetic iron-porphyrin. *Environmental Science & Technology*, **2006**, 40, 1644-9	10.3	39
137	Conformational changes of dissolved humic and fulvic superstructures with progressive iron complexation. *Journal of Geochemical Exploration*, **2013**, 129, 1-5	3.8	38
136	Advanced CPMAS-13C NMR techniques for molecular characterization of size-separated fractions from a soil humic acid. *Analytical and Bioanalytical Chemistry*, **2006**, 386, 382-90	4.4	38
135	Cremenolide, a new antifungal, 10-member lactone from Trichoderma cremeum with plant growth promotion activity. *Natural Product Research*, **2016**, 30, 2575-2581	2.3	37
134	Effects of some dicarboxylic acids on the association of dissolved humic substances. *Biology and Fertility of Soils*, **2003**, 37, 255-259	6.1	37
133	Humic-like bioactivity on emergence and early growth of maize (Zea mays L.) of water-soluble lignins isolated from biomass for energy. *Plant and Soil*, **2016**, 402, 221-233	4.2	36
132	Rhizosphere microbial diversity as influenced by humic substance amendments and chemical composition of rhizodeposits. *Journal of Geochemical Exploration*, **2013**, 129, 82-94	3.8	36
131	Molecular changes in organic matter of a compost-amended soil. *European Journal of Soil Science*, **2009**, 60, 287-296	3.4	36
130	Effect of a compost and its water-soluble fractions on key enzymes of nitrogen metabolism in maize seedlings. *Journal of Agricultural and Food Chemistry*, **2009**, 57, 11267-76	5.7	36
129	Decomposition of maize straw in three European soils as revealed by DRIFT spectra of soil particle fractions. *Geoderma*, **2001**, 99, 245-260	6.7	36
128	Enhancing sustainability of a processing tomato cultivation system by using bioactive compost teas. *Scientia Horticulturae*, **2016**, 202, 117-124	4.1	34
127	Molecular evaluation of soil organic matter characteristics in three agricultural soils by improved off-line thermochemolysis: the effect of hydrofluoric acid demineralisation treatment. *Analytica Chimica Acta*, **2013**, 802, 46-55	6.6	34
126	Isolation and Characterization of Gramineae and Fabaceae Soda Lignins. *International Journal of Molecular Sciences*, **2017**, 18,	6.3	34
125	Effects of field managements for soil organic matter stabilization on water-stable aggregate distribution and aggregate stability in three agricultural soils. *Journal of Geochemical Exploration*, **2013**, 129, 45-51	3.8	34
124	Silica Treatments: A Fire Retardant Strategy for Hemp Fabric/Epoxy Composites. *Polymers*, **2016**, 8,	4.5	34

123	Potential of three microbial bio-effectors to promote maize growth and nutrient acquisition from alternative phosphorous fertilizers in contrasting soils. *Chemical and Biological Technologies in Agriculture*, **2017**, 4,	4.4	33
122	Unveiling the molecular composition of the unextractable soil organic fraction (humin) by humeomics. *Biology and Fertility of Soils*, **2015**, 51, 443-451	6.1	33
121	BIOACTIVITY AND CHEMICAL CHARACTERISTICS OF HUMIC ACIDS FROM TROPICAL SOILS SEQUENCE. *Soil Science*, **2008**, 173, 624-637	0.9	33
120	An alternative to mineral phosphorus fertilizers: The combined effects of Trichoderma harzianum and compost on Zea mays, as revealed by 1H NMR and GC-MS metabolomics. *PLoS ONE*, **2018**, 13, e0209664	2.7	33
119	Multivariate analysis of CPMAS 13C-NMR spectra of soils and humic matter as a tool to evaluate organic carbon quality in natural systems. *European Journal of Soil Science*, **2008**, 59, 496-504	3.4	32
118	Carbon, nitrogen and phosphorus concentrations in aggregates of organic waste-amended soils. *Biological Wastes*, **1990**, 31, 97-111		32
117	Humic substances stimulate maize nitrogen assimilation and amino acid metabolism at physiological and molecular level. *Chemical and Biological Technologies in Agriculture*, **2015**, 2, 5	4.4	31
116	Separation of molecular constituents from a humic acid by solid-phase extraction following a transesterification reaction. *Talanta*, **2006**, 68, 1135-42	6.2	30
115	Influence of the addition of organic residues on carbohydrate content and structural stability of some highland soils in Ethiopia. *Soil Use and Management*, **2002**, 18, 404-411	3.1	30
114	Limitations of electrospray ionization in the analysis of a heterogeneous mixture of naturally occurring hydrophilic and hydrophobic compounds. *Rapid Communications in Mass Spectrometry*, **2010**, 24, 3163-70	2.2	29
113	Molecular characterization of a compost and its water-soluble fractions. *Journal of Agricultural and Food Chemistry*, **2008**, 56, 1017-24	5.7	29
112	Water-Soluble Lignins from Different Bioenergy Crops Stimulate the Early Development of Maize (Zea mays, L.). *Molecules*, **2015**, 20, 19958-70	4.8	28
111	Phosphorus speciation and high-affinity transporters are influenced by humic substances. *Journal of Plant Nutrition and Soil Science*, **2016**, 179, 206-214	2.3	27
110	The molecular dynamics of soil humus as a function of tillage. *Land Degradation and Development*, **2018**, 29, 1792-1805	4.4	27
109	Spectroscopic Characterization of Compost at Different Maturity Stages. *Clean - Soil, Air, Water*, **2008**, 36, 152-157	1.6	27
108	Plant chemical priming by humic acids. *Chemical and Biological Technologies in Agriculture*, **2020**, 7,	4.4	27
107	Effects of Bacillus amyloliquefaciens and different phosphorus sources on Maize plants as revealed by NMR and GC-MS based metabolomics. *Plant and Soil*, **2018**, 429, 437-450	4.2	26
106	Molecular composition of the Humeome extracted from different green composts and their biostimulation on early growth of maize. *Plant and Soil*, **2018**, 429, 407-424	4.2	26

105	Evaluation of the factors affecting direct polarization solid state 31P-NMR spectroscopy of bulk soils. *European Journal of Soil Science*, **2008**, 59, 584-591	3.4	26
104	Carbon sequestration in soil by in situ catalyzed photo-oxidative polymerization of soil organic matter. *Environmental Science & Technology*, **2011**, 45, 6697-702	10.3	25
103	Enhanced molecular dimension of a humic acid induced by photooxidation catalyzed by biomimetic metalporphyrins. *Biomacromolecules*, **2005**, 6, 2120-5	6.9	25
102	Humic extracts of hydrochar and Amazonian Dark Earth: Molecular characteristics and effects on maize seed germination. *Science of the Total Environment*, **2020**, 708, 135000	10.2	25
101	Humic-Like Water-Soluble Lignins from Giant Reed (Arundo donax L.) Display Hormone-Like Activity on Plant Growth. *Journal of Plant Growth Regulation*, **2017**, 36, 995-1001	4.7	24
100	Biochars from olive mill waste have contrasting effects on plants, fungi and phytoparasitic nematodes. *PLoS ONE*, **2018**, 13, e0198728	3.7	24
99	Enhanced catechol oxidation by heterogeneous biomimetic catalysts immobilized on clay minerals. *Journal of Molecular Catalysis A*, **2013**, 371, 8-14		24
98	Fulvic acid affects proliferation and maturation phases in Abies cephalonica embryogenic cells. *Journal of Plant Physiology*, **2011**, 168, 1226-33	3.6	24
97	Interactions of three s-triazines with humic acids of different structure. *Journal of Agricultural and Food Chemistry*, **2008**, 56, 7360-6	5.7	24
96	In memoriam Prof. F.J. Stevenson and the Question of humic substances in soil. *Chemical and Biological Technologies in Agriculture*, **2016**, 3,	4.4	23
95	Chemical properties of humic substances in soils of an Italian volcanic system. *Geoderma*, **2003**, 117, 243-250	4.7	23
94	Induction of micronuclei in Vicia faba root tips treated in different soils with the herbicide alachlor. *Mutation Research - Genetic Toxicology Testing and Biomonitoring of Environmental Or Occupational Exposure*, **1990**, 241, 1-6		23
93	Interactions between natural organic matter and organic pollutants as revealed by NMR spectroscopy. *Magnetic Resonance in Chemistry*, **2015**, 53, 667-78	2.1	22
92	Molecular composition of water-soluble lignins separated from different non-food biomasses. *Fuel Processing Technology*, **2015**, 131, 175-181	7.2	22
91	Remediation of highly contaminated soils from an industrial site by employing a combined treatment with exogeneous humic substances and oxidative biomimetic catalysis. *Journal of Hazardous Materials*, **2013**, 261, 55-62	12.8	22
90	Oxidative and photoxidative polymerization of humic suprastructures by heterogeneous biomimetic catalysis. *Biomacromolecules*, **2013**, 14, 1645-52	6.9	22
89	Off-line TMAH-GC/MS and NMR characterization of humic substances extracted from river sediments of northwestern São Paulo under different soil uses. *Science of the Total Environment*, **2015**, 506-507, 234-40	10.2	21
88	Effective carbon sequestration in Italian agricultural soils by in situ polymerization of soil organic matter under biomimetic photocatalysis. *Land Degradation and Development*, **2018**, 29, 485-494	4.4	21

87	Molecular Characterization of Extracts from Biorefinery Wastes and Evaluation of Their Plant Biostimulation. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 9023-9031	8.3	21
86	OMDY: a new model of organic matter decomposition based on biomolecular content as assessed by 13C-CPMAS-NMR. *Plant and Soil*, **2017**, 411, 377-394	4.2	21
85	Metabolic profile of intact tissue from uterine leiomyomas using high-resolution magic-angle-spinning □H NMR spectroscopy. *NMR in Biomedicine*, **2010**, 23, 1137-45	4.4	21
84	Molecular size distribution of compost-derived humates as a function of concentration and different counterions. *Chemosphere*, **2008**, 73, 1162-6	8.4	21
83	Structural characterization of isomeric dimers from the oxidative oligomerization of catechol with a biomimetic catalyst. *Biomacromolecules*, **2007**, 8, 737-43	6.9	21
82	Molecular changes of soil organic matter induced by root exudates in a rice paddy under CO2 enrichment and warming of canopy air. *Soil Biology and Biochemistry*, **2019**, 137, 107544	7.5	20
81	Differences in fluorescence properties between humic acid and its size fractions separated by preparative HPSEC. *Journal of Geochemical Exploration*, **2013**, 129, 23-27	3.8	20
80	Reduction of 2,4-dichlorophenol toxicity to Pseudomonas putida after oxidative incubation with humic substances and a biomimetic catalyst. *Ecotoxicology and Environmental Safety*, **2007**, 66, 335-42	7	20
79	Formation and characterization of OHAl humate montmorillonite complexes. *Organic Geochemistry*, **1999**, 30, 461-468	3.1	20
78	Quantitative Structure-Activity Relationship of Humic-Like Biostimulants Derived From Agro-Industrial Byproducts and Energy Crops. *Frontiers in Plant Science*, **2020**, 11, 581	6.2	19
77	Disease suppressiveness of agricultural greenwaste composts as related to chemical and bio-based properties shaped by different on-farm composting methods. *Biological Control*, **2019**, 137, 104026	3.8	19
76	A comparison of acid hydrolyses for the determination of carbohydrate content in soils. *Communications in Soil Science and Plant Analysis*, **1996**, 27, 2909-2915	1.5	19
75	The Molecular Composition of Humus Carbon: Recalcitrance and Reactivity in Soils **2018**, 87-124		19
74	Effect of humic acids on phosphate level and energetic metabolism of tobacco BY-2 suspension cell cultures. *Environmental and Experimental Botany*, **2009**, 65, 287-295	5.9	18
73	HRMAS NMR spectroscopy applications in agriculture. *Chemical and Biological Technologies in Agriculture*, **2017**, 4,	4.4	17
72	Evaluation of molecular properties of humic acids from vermicompost by 13 C-CPMAS-NMR spectroscopy and thermochemolysis GC MS. *Journal of Analytical and Applied Pyrolysis*, **2019**, 141, 104634	6	17
71	Humeomics: A key to unravel the humusic pentagram. *Applied Soil Ecology*, **2018**, 123, 513-516	5	17
70	Decomposition of bio-degradable plastic polymer in a real on-farm composting process. *Chemical and Biological Technologies in Agriculture*, **2016**, 3,	4.4	16

69	Reduced activity of alkaline phosphatase due to host-guest interactions with humic superstructures. *Chemosphere*, **2013**, 93, 1972-9	8.4	16
68	Bioactivity and antimicrobial properties of chemically characterized compost teas from different green composts. *Waste Management*, **2021**, 120, 98-107	8.6	15
67	The Soil Humeome: Chemical Structure, Functions and Technological Perspectives **2019**, 183-222		14
66	The Wine: Typicality or Mere Diversity? The Effect of Spontaneous Fermentations and Biotic Factors on the Characteristics of Wine. *Agriculture and Agricultural Science Procedia*, **2016**, 8, 769-773		14
65	Humic acids increase the maize seedlings exudation yield. *Chemical and Biological Technologies in Agriculture*, **2019**, 6,	4.4	14
64	Europium(III) complexed by HPSEC size-fractions of a vertisol humic acid: small differences evidenced by time-resolved luminescence spectroscopy. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2011**, 78, 1173-9	4.4	13
63	Iron extractability from iron-humate complexes by a siderophore and a mixture of organic acids. *Canadian Journal of Soil Science*, **1993**, 73, 293-298	1.4	13
62	Replacing calcium with ammonium counterion in lignosulfonates from paper mills affects their molecular properties and bioactivity. *Science of the Total Environment*, **2018**, 645, 411-418	10.2	12
61	Co-polymerization of penta-halogenated phenols in humic substances by catalytic oxidation using biomimetic catalysis. *Environmental Science and Pollution Research*, **2012**, 19, 1485-93	5.1	12
60	Effects of a biomimetic iron-porphyrin on soil respiration and maize root morphology as by a microcosm experiment. *Journal of Plant Nutrition and Soil Science*, **2010**, 173, 399-406	2.3	12
59	Reduced toxicity of olive mill waste waters by oxidative coupling with biomimetic catalysis. *Environmental Science & Technology*, **2008**, 42, 4896-901	10.3	12
58	Integrated approach of metal removal and bioprecipitation followed by fungal degradation of organic pollutants from contaminated soils. *European Journal of Soil Biology*, **2007**, 43, 380-387	2.9	12
57	In situ photo-polymerization of soil organic matter by heterogeneous nano-TiO2 and biomimetic metal-porphyrin catalysts. *Biology and Fertility of Soils*, **2016**, 52, 585-593	6.1	12
56	Effective degradation of organic pollutants in aqueous media by microbial strains isolated from soil of a contaminated industrial site. *Chemical and Biological Technologies in Agriculture*, **2016**, 3,	4.4	12
55	Amendments with humified compost effectively sequester organic carbon in agricultural soils. *Land Degradation and Development*, **2020**, 31, 1206-1216	4.4	11
54	Structural characterization of carbon and nitrogen molecules in the Humeome of two different grassland soils. *Chemical and Biological Technologies in Agriculture*, **2018**, 5,	4.4	11
53	Optimized procedure for the determination of P species in soil by liquid-state 31P-NMR spectroscopy. *Chemical and Biological Technologies in Agriculture*, **2015**, 2, 7	4.4	10
52	Tuning Functional Behavior of Humic Acids through Interactions with StBer Silica Nanoparticles. *Polymers*, **2020**, 12,	4.5	10

51	Degradation of 2,4-dichlorophenol and coupling into humic matter by oxidative biomimetic catalysis with iron-porphyrin. *Journal of Geochemical Exploration*, **2013**, 129, 28-33	3.8	10
50	O-Alkylation of a lignite humic acid by phase-transfer catalysis. *Analytical and Bioanalytical Chemistry*, **2006**, 384, 994-1001	4.4	10
49	Genotoxic effect induced by herbicides atrazine glyphosate in plants of Vicia faba grown in different soils. *Science of the Total Environment*, **1992**, 123-124, 233-240	10.2	10
48	Carbon Sequestration in Soils by Hydrophobic Protection and In Situ Catalyzed Photo-Polymerization of Soil Organic Matter (SOM): Chemical and Physical Chemical Aspects of SOM in Field Plots **2012**, 61-105		10
47	Novel Humo-Pectic Hydrogels for Controlled Release of Agroproducts. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 10079-10088	8.3	9
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