Bahar S Razavi

List of Publications by Year
in descending order

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61	3,485	117571	149623
papers	citations	34 h-index	56 g-index

66	66	66	2600
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Co-localised phosphorus mobilization processes in the rhizosphere of field-grown maize jointly contribute to plant nutrition. Soil Biology and Biochemistry, 2022, 165, 108497.	4.2	27
2	Nutrients in the rhizosphere: A meta-analysis of content, availability, and influencing factors. Science of the Total Environment, 2022, 826, 153908.	3.9	60
3	Insights into the associations between soil quality and ecosystem multifunctionality driven by fertilization management: A case study from the North China Plain. Journal of Cleaner Production, 2022, 362, 132265.	4.6	48
4	Mutualistic interaction between arbuscular mycorrhiza fungi and soybean roots enhances drought resistant through regulating glucose exudation and rhizosphere expansion. Soil Biology and Biochemistry, 2022, 171, 108728.	4.2	14
5	Reduction in root active zones under drought stress controls spatial distribution and catalytic efficiency of enzyme activities in rhizosphere of wheat. Rhizosphere, 2022, 23, 100561.	1.4	7
6	Optimization of EDTA and citric acid for risk assessment in the remediation of lead contaminated soil. Rhizosphere, 2021, 17, 100277.	1.4	10
7	Rare microbial taxa rather than phoD gene abundance determine hotspots of alkaline phosphomonoesterase activity in the karst rhizosphere soil. Biology and Fertility of Soils, 2021, 57, 257-268.	2.3	32
8	Spatiotemporal Dynamics of Maize (Zea mays L.) Root Growth and Its Potential Consequences for the Assembly of the Rhizosphere Microbiota. Frontiers in Microbiology, 2021, 12, 619499.	1.5	21
9	The geographical scale dependence of diazotroph assembly and activity: Effect of a decade fertilization. Geoderma, 2021, 386, 114923.	2.3	18
10	Plant flavones enrich rhizosphere Oxalobacteraceae to improve maize performance under nitrogen deprivation. Nature Plants, 2021, 7, 481-499.	4.7	247
11	Improvement of dragonhead (<scp>Dracocephalum moldavica</scp> L.) yield quality through a coupled intercropping system and vermicompost application along with maintenance of soil microbial activity. Land Degradation and Development, 2021, 32, 2833-2848.	1.8	17
12	Effects of plastic and straw mulching on soil microbial P limitations in maize fields: Dependency on soil organic carbon demonstrated by ecoenzymatic stoichiometry. Geoderma, 2021, 388, 114928.	2.3	40
13	Root hairs and protein addition to soil promote leucine aminopeptidase activity of Hordeum vulgare L. Rhizosphere, 2021, 18, 100329.	1.4	13
14	Time-lapse approach to correct deficiencies of 2D soil zymography. Soil Biology and Biochemistry, 2021, 157, 108225.	4.2	21
15	Nitrous Oxide Emission from Forage Plantain and Perennial Ryegrass Swards Is Affected by Belowground Resource Allocation Dynamics. Agronomy, 2021, 11, 1936.	1.3	2
16	Resistance of microbial community and its functional sensitivity in the rhizosphere hotspots to drought. Soil Biology and Biochemistry, 2021, 161, 108360.	4.2	39
17	Maize genotype-specific exudation strategies: An adaptive mechanism to increase microbial activity in the rhizosphere. Soil Biology and Biochemistry, 2021, 162, 108426.	4.2	31
18	Croplands conversion to cash crops in dry regions: Consequences of nitrogen losses and decreasing nitrogen use efficiency for the food chain system. Land Degradation and Development, 2021, 32, 1103-1113.	1.8	10

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19	Bridging Microbial Functional Traits With Localized Process Rates at Soil Interfaces. Frontiers in Microbiology, 2021, 12, 625697.	1.5	12
20	Microbial growth and enzyme kinetics in rhizosphere hotspots are modulated by soil organics and nutrient availability. Soil Biology and Biochemistry, 2020, 141, 107662.	4.2	77
21	Comparable effects of manure and its biochar on reducing soil Cr bioavailability and narrowing the rhizosphere extent of enzyme activities. Environment International, 2020, 134, 105277.	4.8	31
22	How â€œhotâ€•are hotspots: Statistically localizing the high-activity areas on soil and rhizosphere images. Rhizosphere, 2020, 16, 100259.	1.4	25
23	Impact of manure on soil biochemical properties: A global synthesis. Science of the Total Environment, 2020, 745, 141003.	3.9	77
24	Rhizosphere hotspots: Root hairs and warming control microbial efficiency, carbon utilization and energy production. Soil Biology and Biochemistry, 2020, 148, 107872.	4.2	48
25	Combined biochar and nitrogen application stimulates enzyme activity and root plasticity. Science of the Total Environment, 2020, 735, 139393.	3.9	70
26	Effects of land use and elevation on the functional characteristics of soil enzymes at Mt. Kilimanjaro. European Journal of Soil Biology, 2020, 97, 103167.	1.4	13
27	Accelerated microbial activity, turnover and efficiency in the drilosphere is depth dependent. Soil Biology and Biochemistry, 2020, 147, 107852.	4.2	17
28	Reply to: â€œVariables in the effect of land use on soil extrapore enzymatic activity and carbon stabilizationâ€•by Glenn (2020). Nature Communications, 2020, 11, 6427.	5.8	3
29	Microbial spatial footprint as a driver of soil carbon stabilization. Nature Communications, 2019, 10, 3121.	5.8	124
30	Phenological Stage, Plant Biomass, and Drought Stress Affect Microbial Biomass and Enzyme Activities in the Rhizosphere of Enteropogon macrostachyus. Pedosphere, 2019, 29, 259-265.	2.1	12
31	Deciphering the rhizobium inoculation effect on spatial distribution of phosphatase activity in the rhizosphere of alfalfa under copper stress. Soil Biology and Biochemistry, 2019, 137, 107574.	4.2	47
32	Differentiated response of plant and microbial C: N: P stoichiometries to phosphorus application in phosphorus-limited paddy soil. European Journal of Soil Biology, 2019, 95, 103122.	1.4	19
33	C/P stoichiometry of dying rice root defines the spatial distribution and dynamics of enzyme activities in root-detritusphere. Biology and Fertility of Soils, 2019, 55, 251-263.	2.3	70
34	Soil zymography: Simple and reliable? Review of current knowledge and optimization of the method. Rhizosphere, 2019, 11, 100161.	1.4	53
35	Coupling zymography with pH mapping reveals a shift in lupine phosphorus acquisition strategy driven by cluster roots. Soil Biology and Biochemistry, 2019, 135, 420-428.	4.2	36
36	Spatial patterns of extracellular enzymes: Combining X-ray computed micro-tomography and 2D zymography. Soil Biology and Biochemistry, 2019, 135, 411-419.	4.2	40

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37	Rhizosphere size and shape: Temporal dynamics and spatial stationarity. Soil Biology and Biochemistry, 2019, 135, 343-360.	4.2	356
38	Labile carbon matters more than temperature for enzyme activity in paddy soil. Soil Biology and Biochemistry, 2019, 135, 134-143.	4.2	65
39	Spatial pattern of enzyme activities depends on root exudate composition. Soil Biology and Biochemistry, 2019, 133, 83-93.	4.2	65
40	Rare taxa of alkaline phosphomonoesterase-harboring microorganisms mediate soil phosphorus mineralization. Soil Biology and Biochemistry, 2019, 131, 62-70.	4.2	193
41	Expansion of rice enzymatic rhizosphere: temporal dynamics in response to phosphorus and cellulose application. Plant and Soil, 2019, 445, 169-181.	1.8	37
42	Calibration of 2â€Ð soil zymography for correct analysis of enzyme distribution. European Journal of Soil Science, 2019, 70, 715-726.	1.8	21
43	Spatial patterns of enzyme activities in the rhizosphere: Effects of root hairs and root radius. Soil Biology and Biochemistry, 2018, 118, 69-78.	4.2	86
44	Quantitative soil zymography: Mechanisms, processes of substrate and enzyme diffusion in porous media. Soil Biology and Biochemistry, 2018, 127, 156-167.	4.2	55
45	Spatiotemporal patterns of enzyme activities in the rhizosphere: effects of plant growth and root morphology. Biology and Fertility of Soils, 2018, 54, 819-828.	2.3	31
46	Effects of rhizosphere wettability on microbial biomass, enzyme activities and localization. Rhizosphere, 2018, 7, 35-42.	1.4	21
47	Effect of land use and management practices on microbial biomass and enzyme activities in subtropical top-and sub-soils. Applied Soil Ecology, 2017, 113, 22-28.	2.1	96
48	Warming increases hotspot areas of enzyme activity and shortens the duration of hot moments in the root-detritusphere. Soil Biology and Biochemistry, 2017, 107, 226-233.	4.2	62
49	Spatio-temporal patterns of enzyme activities after manure application reflect mechanisms of niche differentiation between plants and microorganisms. Soil Biology and Biochemistry, 2017, 112, 100-109.	4.2	72
50	Stability and dynamics of enzyme activity patterns in the rice rhizosphere: Effects of plant growth and temperature. Soil Biology and Biochemistry, 2017, 113, 108-115.	4.2	96
51	Visualization of Enzyme Activities in Earthworm Biopores by In Situ Soil Zymography. Methods in Molecular Biology, 2017, 1626, 229-238.	0.4	8
52	Hot experience for cold-adapted microorganisms: Temperature sensitivity of soil enzymes. Soil Biology and Biochemistry, 2017, 105, 236-243.	4.2	68
53	Mapping the footprint of nematodes in the rhizosphere: Cluster root formation and spatial distribution of enzyme activities. Soil Biology and Biochemistry, 2017, 115, 213-220.	4.2	22
54	Earthworm burrows: Kinetics and spatial distribution of enzymes of C-, N- and P- cycles. Soil Biology and Biochemistry, 2016, 99, 94-103.	4.2	110

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55	Hotspots of microbial activity induced by earthworm burrows, old root channels, and their combination in subsoil. Biology and Fertility of Soils, 2016, 52, 1105-1119.	2.3	73
56	Temperature selects for static soil enzyme systems to maintain high catalytic efficiency. Soil Biology and Biochemistry, 2016, 97, 15-22.	4.2	85
57	Spatial distribution and catalytic mechanisms of Î²-glucosidase activity at the root-soil interface. Biology and Fertility of Soils, 2016, 52, 505-514.	2.3	80
58	Land use affects soil biochemical properties in Mt. Kilimanjaro region. Catena, 2016, 141, 22-29.	2.2	69
59	Rhizosphere shape of lentil and maize: Spatial distribution of enzyme activities. Soil Biology and Biochemistry, 2016, 96, 229-237.	4.2	148
60	Nonlinear temperature sensitivity of enzyme kinetics explains canceling effectâ€"a case study on loamy haplic Luvisol. Frontiers in Microbiology, 2015, 6, 1126.	1.5	91
61	Microbial and enzymes response to nutrient additions in soils of Mt. Kilimanjaro region depending on land use. European Journal of Soil Biology, 2015, 69, 33-40.	1.4	37