Yanzheng Gao

List of Publications by Year
in descending order

131 papers	5,843 citations	57758 44 h-index	91884 69 g-index
133 all docs	133 docs citations	133 times ranked	5066 citing authors

#	Article	IF	Citations
1	Plant uptake, accumulation and translocation of phenanthrene and pyrene in soils. Chemosphere, 2004, 55, 1169-1178.	8.2	420
2	Distributions of polycyclic aromatic hydrocarbons in surface waters, sediments and soils of Hangzhou City, China. Water Research, 2004, 38, 3558-3568.	11.3	248
3	Cosorption of Phenanthrene and Mercury(II) from Aqueous Solution by Soybean Stalk-Based Biochar. Journal of Agricultural and Food Chemistry, 2011, 59, 12116-12123.	5.2	170
4	A PAH-degrading bacterial community enriched with contaminated agricultural soil and its utility for microbial bioremediation. Environmental Pollution, 2019, 251, 773-782.	7.5	160
5	Phenanthrene biodegradation by sphingomonads and its application in the contaminated soils and sediments: A review. International Biodeterioration and Biodegradation, 2015, 104, 333-349.	3.9	143
6	Distribution of polycyclic aromatic hydrocarbons in subcellular root tissues of ryegrass (Lolium) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 54	3.6	140
7	Contamination and health risk assessment of PAHs in soils and crops in industrial areas of the Yangtze River Delta region, China. Chemosphere, 2017, 168, 976-987.	8.2	137
8	Effects of organic acids on copper and cadmium desorption from contaminated soils. Environment International, 2003, 29, 613-618.	10.0	135
9	Desorption of phenanthrene and pyrene in soils by root exudates. Bioresource Technology, 2010, 101, 1159-1165.	9.6	126
10	Occurrence, formation, environmental fate and risks of environmentally persistent free radicals in biochars. Environment International, 2020, 134, 105172.	10.0	125
11	Arbuscular mycorrhizal phytoremediation of soils contaminated with phenanthrene and pyrene. Journal of Hazardous Materials, 2011, 185, 703-709.	12.4	106
12	Impact of low-molecular-weight organic acids on the availability of phenanthrene and pyrene in soil. Soil Biology and Biochemistry, 2009, 41, 2187-2195.	8.8	102
13	Arbuscular mycorrhizal fungal hyphae contribute to the uptake of polycyclic aromatic hydrocarbons by plant roots. Bioresource Technology, 2010, 101, 6895-6901.	9.6	101
14	Uptake Pathways of Polycyclic Aromatic Hydrocarbons in White Clover. Environmental Science & Technology, 2009, 43, 6190-6195.	10.0	95
15	Use of bentonite to control the release of copper from contaminated soils. Soil Research, 2007, 45, 618.	1.1	91
16	Influence of Dissolved Organic Matter on Tetracycline Bioavailability to an Antibiotic-Resistant Bacterium. Environmental Science & Technology, 2015, 49, 10903-10910.	10.0	86
17	Plant-accelerated dissipation of phenanthrene and pyrene from water in the presence of a nonionic-surfactant. Chemosphere, 2006, 63, 1560-1567.	8.2	75
18	Surfactant-Enhanced Phytoremediation of Soils Contaminated with Hydrophobic Organic Contaminants: Potential and Assessment. Pedosphere, 2007, 17, 409-418.	4.0	74

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19	Isolation, plant colonization potential and phenanthrene degradation performance of the endophytic bacterium Pseudomonas sp. Ph6-gfp. Scientific Reports, 2014, 4, 5462.	3.3	72
20	Sphingomonads in Microbe-Assisted Phytoremediation: Tackling Soil Pollution. Trends in Biotechnology, 2017, 35, 883-899.	9.3	72
21	Sorption of phenanthrene by soils contaminated with heavy metals. Chemosphere, 2006, 65, 1355-1361.	8.2	71
22	Application of biochar to soils may result in plant contamination and human cancer risk due to exposure of polycyclic aromatic hydrocarbons. Environment International, 2018, 121, 169-177.	10.0	71
23	Antibiotic-contaminated wastewater irrigated vegetables pose resistance selection risks to the gut microbiome. Environmental Pollution, 2020, 264, 114752.	7.5	66
24	Impact of exotic and inherent dissolved organic matter on sorption of phenanthrene by soils. Journal of Hazardous Materials, 2007, 140, 138-144.	12.4	64
25	Gradient Distribution of Root Exudates and Polycyclic Aromatic Hydrocarbons in Rhizosphere Soil. Soil Science Society of America Journal, 2011, 75, 1694-1703.	2.2	64
26	Rhamnolipid influences biosorption and biodegradation of phenanthrene by phenanthrene-degrading strain Pseudomonas sp. Ph6. Environmental Pollution, 2018, 240, 359-367.	7.5	63
27	Utilizing pyrene-degrading endophytic bacteria to reduce the risk of plant pyrene contamination. Plant and Soil, 2014, 374, 251-262.	3.7	61
28	Uptake of polycyclic aromatic hydrocarbons by Trifolium pretense L. from water in the presence of a nonionic surfactant. Chemosphere, 2008, 72, 636-643.	8.2	60
29	Polyaromatic hydrocarbons in biochars and human health risks of food crops grown in biochar-amended soils: A synthesis study. Environment International, 2019, 130, 104899.	10.0	60
30	Low-molecular-weight organic acids enhance the release of bound PAH residues in soils. Soil and Tillage Research, 2015, 145, 103-110.	5.6	59
31	Application of the partition-limited model for plant uptake of organic chemicals from soil and water. Science of the Total Environment, 2005, 336, 171-182.	8.0	58
32	Understanding the sorption mechanisms of aflatoxin B1 to kaolinite, illite, and smectite clays via a comparative computational study. Journal of Hazardous Materials, 2016, 320, 80-87.	12.4	58
33	Effects of Lowâ€Molecularâ€Weight Organic Acids on Sorptionâ€"Desorption of Phenanthrene in Soils. Soil Science Society of America Journal, 2010, 74, 51-59.	2.2	57
34	Metabolism and subcellular distribution of anthracene in tall fescue (Festuca arundinacea Schreb.). Plant and Soil, 2013, 365, 171-182.	3.7	57
35	Nano-MoO2 activates peroxymonosulfate for the degradation of PAH derivatives. Water Research, 2021, 192, 116834.	11.3	56
36	Fractionation of polycyclic aromatic hydrocarbon residues in soils. Journal of Hazardous Materials, 2009, 172, 897-903.	12.4	53

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37	Phytoavailability and mechanism of bound PAH residues in filed contaminated soils. Environmental Pollution, 2017, 222, 465-476.	7.5	53
38	Vanadium oxide activates persulfate for degradation of polycyclic aromatic hydrocarbons in aqueous system. Chemical Engineering Journal, 2019, 364, 79-88.	12.7	52
39	Dissolved organic matter enhances the sorption of atrazine by soil. Biology and Fertility of Soils, 2006, 42, 418-425.	4.3	51
40	Arbuscular Mycorrhizal Colonization Alters Subcellular Distribution and Chemical Forms of Cadmium in Medicago sativa L. and Resists Cadmium Toxicity. PLoS ONE, 2012, 7, e48669.	2.5	50
41	Biodegradation of Mixed PAHs by PAH-Degrading Endophytic Bacteria. International Journal of Environmental Research and Public Health, 2016, 13, 805.	2.6	48
42	Laccase-catalyzed reactions of 17Î²-estradiol in the presence of humic acid: Resolved by high-resolution mass spectrometry in combination with 13C labeling. Chemosphere, 2016, 145, 394-401.	8.2	48
43	A novel solubilization of phenanthrene using Winsor I microemulsion-based sodium castor oil sulfate. Journal of Hazardous Materials, 2005, 119, 205-211.	12.4	47
44	Availability of polycyclic aromatic hydrocarbons in aging soils. Journal of Soils and Sediments, 2010, 10, 799-807.	3.0	47
45	Distribution of Endophytic Bacteria in Alopecurus aequalis Sobol and Oxalis corniculata L. from Soils Contaminated by Polycyclic Aromatic Hydrocarbons. PLoS ONE, 2013, 8, e83054.	2.5	43
46	Low concentrations of polycyclic aromatic hydrocarbons promote the growth of Microcystis aeruginosa. Journal of Hazardous Materials, 2012, 237-238, 371-375.	12.4	41
47	Bioavailability of Soil-Sorbed Tetracycline to <i>Escherichia coli</i> under Unsaturated Conditions. Environmental Science & Technology, 2017, 51, 6165-6173.	10.0	41
48	Application of Endophytic Bacteria to Reduce Persistent Organic Pollutants Contamination in Plants. Clean - Soil, Air, Water, 2014, 42, 306-310.	1.1	40
49	Elimination of the risks of colistin resistance gene (mcr-1) in livestock manure during composting. Environment International, 2019, 126, 61-68.	10.0	40
50	Comparison for plant uptake of phenanthrene and pyrene from soil and water. Biology and Fertility of Soils, 2006, 42, 387-394.	4.3	39
51	Noncovalent Binding of Polycyclic Aromatic Hydrocarbons with Genetic Bases Reducing the <i>in Vitro</i> Lateral Transfer of Antibiotic Resistant Genes. Environmental Science & Technology, 2015, 49, 10340-10348.	10.0	38
52	Insights into the Applications of Extracellular Laccase-Aided Humification in Livestock Manure Composting. Environmental Science & Technology, 2022, 56, 7412-7425.	10.0	38
53	Sequestration of nanoparticles by an EPS matrix reduces the particle-specific bactericidal activity. Scientific Reports, 2016, 6, 21379.	3.3	37
54	Composite of PAH-degrading endophytic bacteria reduces contamination and health risks caused by PAHs in vegetables. Science of the Total Environment, 2017, 598, 471-478.	8.0	36

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55	Carbon dioxide as a carrier gas and biomass addition decrease the total and bioavailable polycyclic aromatic hydrocarbons in biochar produced from sewage sludge. Chemosphere, 2019, 228, 26-34.	8.2	36
56	Antibiotic resistance gene abundance and bacterial community structure in soils altered by Ammonium and Nitrate Concentrations. Soil Biology and Biochemistry, 2020, 149, 107965.	8.8	36
57	Partitioning of polycyclic aromatic hydrocarbons between plant roots and water. Plant and Soil, 2008, 311, 201-209.	3.7	35
58	Plasmid binding to metal oxide nanoparticles inhibited lateral transfer of antibiotic resistance genes. Environmental Science: Nano, 2019, 6, 1310-1322.	4.3	34
59	Extracellular Polymeric Substances Acting as a Permeable Barrier Hinder the Lateral Transfer of Antibiotic Resistance Genes. Frontiers in Microbiology, 2019, 10, 736.	3.5	33
60	Removal of Polycyclic Aromatic Hydrocarbons from Aqueous Solution on Soybean Stalkâ€“based Carbon. Journal of Environmental Quality, 2011, 40, 1737-1744.	2.0	32
61	The Impact of Different Root Exudate Components on Phenanthrene Availability in Soil. Soil Science Society of America Journal, 2012, 76, 2041-2050.	2.2	32
62	Colonization on Root Surface by a Phenanthrene-Degrading Endophytic Bacterium and Its Application for Reducing Plant Phenanthrene Contamination. PLoS ONE, 2014, 9, e108249.	2.5	32
63	Whole-cell paper strip biosensors to semi-quantify tetracycline antibiotics in environmental matrices. Biosensors and Bioelectronics, 2020, 168, 112528.	10.1	32
64	The convertion of sewage sludge to biochar as a sustainable tool of PAHs exposure reduction during agricultural utilization of sewage sludges. Journal of Hazardous Materials, 2020, 392, 122416.	12.4	32
65	Promoted dissipation of phenanthrene and pyrene in soils by amaranth (Amaranthus tricolor L.). Environmental Geology, 2004, 46, 553.	1.2	31
66	Prediction of phenanthrene uptake by plants with a partition-limited model. Environmental Pollution, 2004, 131, 505-508.	7.5	31
67	Occurrence, formation and environmental fate of polycyclic aromatic hydrocarbons in biochars. Fundamental Research, 2021, 1, 296-305.	3.3	31
68	Impact of Plastic Particles on the Horizontal Transfer of Antibiotic Resistance Genes to Bacterium: Dependent on Particle Sizes and Antibiotic Resistance Gene Vector Replication Capacities. Environmental Science & Technology, 2022, 56, 14948-14959.	10.0	31
69	Environmentally-relevant concentrations of Al(III) and Fe(III) cations induce aggregation of free DNA by complexation with phosphate group. Water Research, 2017, 123, 58-66.	11.3	30
70	Inhibition of Free DNA Degradation by the Deformation of DNA Exposed to Trace Polycyclic Aromatic Hydrocarbon Contaminants. Environmental Science & Technology, 2010, 44, 8891-8896.	10.0	28
71	Inoculation with arbuscular mycorrhizal fungi increases glomalin-related soil protein content and PAH removal in soils planted with Medicago sativa L.. Soil Biology and Biochemistry, 2017, 115, 148-151.	8.8	28
72	DNA Facilitates the Sorption of Polycyclic Aromatic Hydrocarbons on Montmorillonites. Environmental Science & Technology, 2018, 52, 2694-2703.	10.0	27

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73	Laccase-mediated transformation of triclosan in aqueous solution with metal cations and humic acid. Environmental Pollution, 2017, 220, 105-111.	7.5	26
74	A Fast and Easily Parallelizable Biosensor Method for Measuring Extractable Tetracyclines in Soils. Environmental Science & Technology, 2020, 54, 758-767.	10.0	26
75	Subcellular distribution and biotransformation of phenanthrene in pakchoi after inoculation with endophytic Pseudomonas sp. as probed using HRMS coupled with isotope-labeling. Environmental Pollution, 2018, 237, 858-867.	7.5	25
76	Inoculating plants with the endophytic bacterium Pseudomonas sp. Ph6-gfp to reduce phenanthrene contamination. Environmental Science and Pollution Research, 2015, 22, 19529-19537.	5.3	24
77	Transformation of 17Î²-estradiol in humic acid solution by Îµ-MnO2 nanorods as probed by high-resolution mass spectrometry combined with 13C labeling. Environmental Pollution, 2016, 214, 211-218.	7.5	24
78	Nonmonotonic Effect of Montmorillonites on the Horizontal Transfer of Antibiotic Resistance Genes to Bacteria. Environmental Science and Technology Letters, 2020, 7, 421-427.	8.7	24
79	Understanding the patterns and mechanisms of urban water ecosystem degradation: phytoplankton community structure and water quality in the Qinhuai River, Nanjing City, China. Environmental Science and Pollution Research, 2013, 20, 5003-5012.	5.3	23
80	Effects of water-saving irrigation on the residues and risk of polycyclic aromatic hydrocarbon in paddy field. Science of the Total Environment, 2018, 618, 736-745.	8.0	23
81	Non-covalent binding interaction between phthalic acid esters and DNA. Environment International, 2022, 161, 107095.	10.0	23
82	Glomalin-related soil protein enhances the availability of polycyclic aromatic hydrocarbons in soil. Soil Biology and Biochemistry, 2017, 107, 129-132.	8.8	22
83	Sources and health risks of polycyclic aromatic hydrocarbons during haze days in eastern China: A 1-year case study in Nanjing City. Ecotoxicology and Environmental Safety, 2017, 140, 76-83.	6.0	22
84	Glomalin-related soil protein influences the accumulation of polycyclic aromatic hydrocarbons by plant roots. Science of the Total Environment, 2018, 644, 465-473.	8.0	21
85	Oxidation of polycyclic aromatic hydrocarbons by horseradish peroxidase in water containing an organic cosolvent. Environmental Science and Pollution Research, 2014, 21, 10696-10705.	5.3	20
86	Enzymatic degradation of extracellular DNA exposed to chlorpyrifos and chlorpyrifos-methyl in an aqueous system. Environment International, 2019, 132, 105087.	10.0	20
87	Bacterial community and PAH-degrading genes in paddy soil and rice grain from PAH-contaminated area. Applied Soil Ecology, 2021, 158, 103789.	4.3	20
88	Ascorbic Acid Enhances the Accumulation of Polycyclic Aromatic Hydrocarbons (PAHs) in Roots of Tall Fescue (Festuca arundinacea Schreb.). PLoS ONE, 2012, 7, e50467.	2.5	19
89	Comparative Transcriptome Analysis Reveals the Mechanism Underlying 3,5-Dibromo-4-Hydroxybenzoate Catabolism via a New Oxidative Decarboxylation Pathway. Applied and Environmental Microbiology, 2018, 84, .	3.1	19
90	COMPARISON OF OSMOTIC REGULATION IN DEHYDRATION- AND SALINITY-STRESSED SUNFLOWER SEEDLINGS. Journal of Plant Nutrition, 2010, 33, 966-981.	1.9	18

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91	Polyphenol Oxidase Activity in Subcellular Fractions of Tall Fescue Contaminated by Polycyclic Aromatic Hydrocarbons. Journal of Environmental Quality, 2012, 41, 807-813.	2.0	18
92	Phytoavailability and Rhizospheric Gradient Distribution of Bound-Polycyclic Aromatic Hydrocarbon Residues in Soils. Soil Science Society of America Journal, 2013, 77, 1572-1583.	2.2	18
93	Elution of Polycyclic Aromatic Hydrocarbons in Soil Columns Using Lowâ€Molecularâ€Weight Organic Acids. Soil Science Society of America Journal, 2013, 77, 72-82.	2.2	18
94	Diversity and distribution of 16S rRNA and phenol monooxygenase genes in the rhizosphere and endophytic bacteria isolated from PAH-contaminated sites. Scientific Reports, 2015, 5, 12173.	3.3	18
95	Phenanthrene-degrading bacteria on root surfaces: a natural defense that protects plants from phenanthrene contamination. Plant and Soil, 2018, 425, 335-350.	3.7	18
96	PAHs Pass Through the Cell Wall and Partition into Organelles of Arbuscular Mycorrhizal Roots of Ryegrass. Journal of Environmental Quality, 2011, 40, 653-656.	2.0	17
97	Phenanthrene Removal from Aqueous Solution on Sesame Stalkâ€based Carbon. Clean - Soil, Air, Water, 2012, 40, 752-759.	1.1	17
98	Low-Molecular-Weight Organic Acids Influence the Sorption of Phenanthrene by Different Soil Particle Size Fractions. Journal of Environmental Quality, 2015, 44, 219-227.	2.0	17
99	The endophytic bacterium Serratia sp. PW7 degrades pyrene in wheat. Environmental Science and Pollution Research, 2017, 24, 6648-6656.	5.3	16
100	Removal of estrone, 17<i>Î²</i>-estradiol, and estriol from sewage and cow dung by immobilized <i>Novosphingobium</i> sp. ARI-1. Environmental Technology (United Kingdom), 2018, 39, 2423-2433.	2.2	16
101	Metabolism of 17Î²-estradiol by Novosphingobium sp. ES2-1 as probed via HRMS combined with 13C3-labeling. Journal of Hazardous Materials, 2020, 389, 121875.	12.4	16
102	Application of canonical correspondence analysis to determine the ecological contribution of phytoplankton to PCBs bioaccumulation in Qinhuai River, Nanjing, China. Environmental Science and Pollution Research, 2014, 21, 3091-3103.	5.3	15
103	Glomalin-related soil protein reduces the sorption of polycyclic aromatic hydrocarbons by soils. Chemosphere, 2020, 260, 127603.	8.2	15
104	Inoculation of a phenanthrene-degrading endophytic bacterium reduces the phenanthrene level and alters the bacterial community structure in wheat. Applied Microbiology and Biotechnology, 2017, 101, 5199-5212.	3.6	14
105	Amino and hydroxy substitution influences pyreneâ€“DNA binding. Science of the Total Environment, 2020, 725, 138542.	8.0	14
106	Alkaliâ€“earth metal bridges formed in biofilm matrices regulate the uptake of fluoroquinolone antibiotics and protect against bacterial apoptosis. Environmental Pollution, 2017, 220, 112-123.	7.5	13
107	Amino, nitro, chloro, hydroxyl and methyl substitutions may inhibit the binding of PAHs with DNA. Environmental Pollution, 2021, 268, 115798.	7.5	13
108	Humidity induces the formation of radicals and enhances photodegradation of chlorinated-PAHs on Fe(III)-montmorillonite. Journal of Hazardous Materials, 2022, 423, 127210.	12.4	13

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109	Ca2+ Promoted the Low Transformation Efficiency of Plasmid DNA Exposed to PAH Contaminants. PLoS ONE, 2013, 8, e58238.	2.5	13
110	New insights into humic acid-boosted conversion of bisphenol A by laccase-activated co-polyreaction: Kinetics, products, and phytotoxicity. Journal of Hazardous Materials, 2022, 436, 129269.	12.4	13
111	Glomalin-related soil protein enhances the sorption of polycyclic aromatic hydrocarbons on cation-modified montmorillonite. Environment International, 2019, 132, 105093.	10.0	12
112	Enhanced PAHs-contaminated site soils remediation by mixed persulfate and calcium peroxide. Journal of Environmental Management, 2022, 306, 114363.	7.8	12
113	Organochlorinated pesticides expedite the enzymatic degradation of DNA. Communications Biology, 2019, 2, 81.	4.4	11
114	Ecological and human health risks of manure-borne steroid estrogens: A 20-year global synthesis study. Journal of Environmental Management, 2022, 301, 113708.	7.8	10
115	Removal of phenanthrene and acenaphthene from aqueous solution by enzyme-catalyzed phenol coupling reaction. Chemical Engineering Journal, 2015, 265, 27-33.	12.7	9
116	Laccase-Catalyzed Oxidative Coupling Reaction of Triclosan in Aqueous Solution. Water, Air, and Soil Pollution, 2016, 227, 1.	2.4	8
117	Abatement of Polycyclic Aromatic Hydrocarbon Residues in Biochars by Thermal Oxidation. Environmental Science and Technology Letters, 2021, 8, 451-456.	8.7	8
118	Enhanced transformation capability towards benzo(a)pyrene by Fe(III)-modified manganese oxides. Journal of Hazardous Materials, 2022, 431, 128637.	12.4	6
119	Functional group substitutions influence the binding of benzophenone-type UV filters with DNA. Chemosphere, 2022, 299, 134490.	8.2	6
120	Subcellular Accumulation of Different Concentrations of Cadmium, Nickel, and Copper in Indian Mustard and Application of a Sigmoidal Model. Journal of Environmental Quality, 2013, 42, 1142-1150.	2.0	5
121	Characterization of Different Molecular Size Fractions of Glomalin-Related Soil Protein From Forest Soil and Their Interaction With Phenanthrene. Frontiers in Microbiology, 2021, 12, 822831.	3.5	5
122	Optimization of extractants, purifying packings, and eluents for analytical extraction of organochlorine pesticides in Hydragric Acrisols. Environmental Monitoring and Assessment, 2012, 184, 5159-5171.	2.7	4
123	Nitrogen Regulates the Distribution of Antibiotic Resistance Genes in the Soilâ€"Vegetable System. Frontiers in Microbiology, 2022, 13, 848750.	3.5	4
124	Bacterial diversity losses: A potential extracellular driving mechanism involving the molecular ecological function of hydrophobic polycyclic aromatic hydrocarbons. Biotechnology Reports (Amsterdam, Netherlands), 2015, 5, 27-30.	4.4	3
125	Inhibition mechanisms of Fe2+/Fe3+ and Mn2+ on fungal laccase-enabled bisphenol a polyreaction. Chemosphere, 2022, 307, 135685.	8.2	3
126	The use of experimental data and the application of a kinetic model to determine the subcellular distribution of Zn/Cd/Ni/Cu over time in Indian mustard. RSC Advances, 2013, 3, 12423.	3.6	2

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127	Advances in agro-environmental organic contamination: An introduction to the Special Issue. Chemosphere, 2022, 287, 132071.	8.2	2
128	The Impact of Different Root Exudate Components on Phenanthrene Availability in Soil. , 2013, , 653-657.		2
129	Nano-goethite-mediated transformation of anthracene derivatives under low moisture conditions. Environmental Science: Nano, 2022, 9, 289-301.	4.3	2
130	Endophytic Bacteria in in planta Organopollutant Detoxification in Crops. Reviews of Environmental Contamination and Toxicology, 2019, 252, 1-50.	1.3	1
131	Agro-environmental contamination, food safety and human health: An introduction to the special issue. Environment International, 2021, 157, 106812.	10.0	1