Yongguang Yin

List of Publications by Year
in descending order

120 papers	4,361 citations	94381 37 h-index	128225 60 g-index
122 all docs	122 docs citations	122 times ranked	4659 citing authors

#	Article	IF	Citations
1	Silver nanoparticles in the environment. Environmental Sciences: Processes and Impacts, 2013, 15, 78-92.	1.7	297
2	Sunlight-Induced Reduction of Ionic Ag and Au to Metallic Nanoparticles by Dissolved Organic Matter. ACS Nano, 2012, 6, 7910-7919.	7.3	237
3	Speciation Analysis of Silver Nanoparticles and Silver Ions in Antibacterial Products and Environmental Waters via Cloud Point Extraction-Based Separation. Analytical Chemistry, 2011, 83, 6875-6882.	3.2	198
4	Highly Dynamic PVP-Coated Silver Nanoparticles in Aquatic Environments: Chemical and Morphology Change Induced by Oxidation of Ag⁰ and Reduction of Ag⁺. Environmental Science & Technology, 2014, 48, 403-411.	4.6	148
5	Elemental mercury: Its unique properties affect its behavior and fate in the environment. Environmental Pollution, 2017, 229, 69-86.	3.7	120
6	Photo-induced chemical-vapor generation for sample introduction in atomic spectrometry. TrAC - Trends in Analytical Chemistry, 2011, 30, 1672-1684.	5.8	119
7	Particle Coating-Dependent Interaction of Molecular Weight Fractionated Natural Organic Matter: Impacts on the Aggregation of Silver Nanoparticles. Environmental Science & Technology, 2015, 49, 6581-6589.	4.6	118
8	Quantification of the Uptake of Silver Nanoparticles and Ions to HepG2 Cells. Environmental Science & Technology, 2013, 47, 3268-3274.	4.6	110
9	Effects of molecular weight-dependent physicochemical heterogeneity of natural organic matter on the aggregation of fullerene nanoparticles in mono- and di-valent electrolyte solutions. Water Research, 2015, 71, 11-20.	5.3	94
10	Stable silver isotope fractionation in the natural transformation process of silver nanoparticles. Nature Nanotechnology, 2016, 11, 682-686.	15.6	85
11	Photoreduction and Stabilization Capability of Molecular Weight Fractionated Natural Organic Matter in Transformation of Silver Ion to Metallic Nanoparticle. Environmental Science & Technology, 2014, 48, 9366-9373.	4.6	83
12	Humic-Like Substances (HULIS) in Aerosols of Central Tibetan Plateau (Nam Co, 4730 m asl): Abundance, Light Absorption Properties, and Sources. Environmental Science & Technology, 2018, 52, 7203-7211.	4.6	78
13	Dithizone-functionalized solid phase extractionâ€"displacement elution-high performance liquid chromatographyâ€"inductively coupled plasma mass spectrometry for mercury speciation in water samples. Talanta, 2010, 81, 1788-1792.	2.9	77
14	Simple interface of high-performance liquid chromatographyâ€"atomic fluorescence spectrometry hyphenated system for speciation of mercury based on photo-induced chemical vapour generation with formic acid in mobile phase as reaction reagent. Journal of Chromatography A, 2008, 1181, 77-82.	1.8	66
15	Isotope Tracers To Study the Environmental Fate and Bioaccumulation of Metal-Containing Engineered Nanoparticles: Techniques and Applications. Chemical Reviews, 2017, 117, 4462-4487.	23.0	66
16	The Crucial Role of Environmental Coronas in Determining the Biological Effects of Engineered Nanomaterials. Small, 2020, 16, e2003691.	5.2	66
17	Methods and recent advances in speciation analysis of mercury chemical species in environmental samples: a review. Chemical Speciation and Bioavailability, 2016, 28, 51-65.	2.0	65
18	l-cysteine-induced degradation of organic mercury as a novel interface in the HPLC-CV-AFS hyphenated system for speciation of mercury. Journal of Analytical Atomic Spectrometry, 2010, 25, 810.	1.6	59

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19	Water chemistry controlled aggregation and photo-transformation of silver nanoparticles in environmental waters. Journal of Environmental Sciences, 2015, 34, 116-125.	3.2	59
20	Significant contribution of metastable particulate organic matter to natural formation of silver nanoparticles in soils. Nature Communications, 2019, 10, 3775.	5.8	57
21	Photo-induced chemical vapour generation with formic acid: novel interface for high performance liquid chromatography-atomic fluorescence spectrometry hyphenated system and application in speciation of mercury. Journal of Analytical Atomic Spectrometry, 2007, 22, 822.	1.6	56
22	Superoxide-Mediated Extracellular Biosynthesis of Silver Nanoparticles by the Fungus <i>Fusarium oxysporum</i>. Environmental Science and Technology Letters, 2016, 3, 160-165.	3.9	55
23	An Integrated Model for Input and Migration of Mercury in Chinese Coastal Sediments. Environmental Science & Technology, 2019, 53, 2460-2471.	4.6	55
24	Toward Full Spectrum Speciation of Silver Nanoparticles and Ionic Silver by On-Line Coupling of Hollow Fiber Flow Field-Flow Fractionation and Minicolumn Concentration with Multiple Detectors. Analytical Chemistry, 2015, 87, 8441-8447.	3.2	54
25	Uptake and Transformation of Silver Nanoparticles and Ions by Rice Plants Revealed by Dual Stable Isotope Tracing. Environmental Science & Technology, 2019, 53, 625-633.	4.6	52
26	Probing and Comparing the Photobromination and Photoiodination of Dissolved Organic Matter by Using Ultra-High-Resolution Mass Spectrometry. Environmental Science & Technology, 2017, 51, 5464-5472.	4.6	51
27	Transformation kinetics of silver nanoparticles and silver ions in aquatic environments revealed by double stable isotope labeling. Environmental Science: Nano, 2016, 3, 883-893.	2.2	48
28	Fumigant methyl iodide can methylate inorganic mercury species in natural waters. Nature Communications, 2014, 5, 4633.	5.8	47
29	Thermal and Photoinduced Reduction of Ionic Au(III) to Elemental Au Nanoparticles by Dissolved Organic Matter in Water: Possible Source of Naturally Occurring Au Nanoparticles. Environmental Science & Technology, 2014, 48, 2671-2679.	4.6	46
30	Characterization of Brominated Disinfection Byproducts Formed During the Chlorination of Aquaculture Seawater. Environmental Science & Technology, 2018, 52, 5662-5670.	4.6	46
31	Mercury Redox Chemistry in Waters of the Eastern Asian Seas: From Polluted Coast to Clean Open Ocean. Environmental Science & Technology, 2016, 50, 2371-2380.	4.6	42
32	Tracking the Transformation of Nanoparticulate and Ionic Silver at Environmentally Relevant Concentration Levels by Hollow Fiber Flow Field-Flow Fractionation Coupled to ICPMS. Environmental Science & Technology, 2017, 51, 12369-12376.	4.6	42
33	Efficient decolorization of typical azo dyes using low-frequency ultrasound in presence of carbonate and hydrogen peroxide. Journal of Hazardous Materials, 2018, 346, 42-51.	6.5	42
34	Enhanced removal of Cr(VI) by biochar with Fe as electron shuttles. Journal of Environmental Sciences, 2019, 78, 109-117.	3.2	42
35	Mercury isotope variations within the marine food web of Chinese Bohai Sea: Implications for mercury sources and biogeochemical cycling. Journal of Hazardous Materials, 2020, 384, 121379.	6.5	40
36	PM2.5 induces vascular permeability increase through activating MAPK/ERK signaling pathway and ROS generation. Journal of Hazardous Materials, 2020, 386, 121659.	6.5	39

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37	Sunlight-driven reduction of silver ion to silver nanoparticle by organic matter mitigates the acute toxicity of silver to Daphnia magna. Journal of Environmental Sciences, 2015, 35, 62-68.	3.2	38
38	Single-drop gold nanoparticles for headspace microextraction and colorimetric assay of mercury (II) in environmental waters. Talanta, 2018, 176, 77-84.	2.9	38
39	Estimation of the Major Source and Sink of Methylmercury in the Florida Everglades. Environmental Science & Technology, 2012, 46, 5885-5893.	4.6	37
40	Role of Secondary Particle Formation in the Persistence of Silver Nanoparticles in Humic Acid Containing Water under Light Irradiation. Environmental Science & Technology, 2017, 51, 14164-14172.	4.6	37
41	Mechanism of Accumulation of Methylmercury in Rice (<i>Oryza sativa</i> L.) in a Mercury Mining Area. Environmental Science & Technology, 2018, 52, 9749-9757.	4.6	36
42	Critical role of natural organic matter in photodegradation of methylmercury in water: Molecular weight and interactive effects with other environmental factors. Science of the Total Environment, 2017, 578, 535-541.	3.9	35
43	Mercury speciation by a high performance liquid chromatographyâ€"atomic fluorescence spectrometry hyphenated system with photo-induced chemical vapour generation reagent in the mobile phase. Mikrochimica Acta, 2009, 167, 289-295.	2.5	34
44	Scattered Light Imaging Enables Real-Time Monitoring of Label-Free Nanoparticles and Fluorescent Biomolecules in Live Cells. Journal of the American Chemical Society, 2019, 141, 14043-14047.	6.6	33
45	Photo- and thermo-chemical transformation of AgCl and Ag2S in environmental matrices and its implication. Environmental Pollution, 2017, 220, 955-962.	3.7	32
46	Speciation of mercury in coal using HPLC-CV-AFS system: Comparison of different extraction methods. Journal of Analytical Atomic Spectrometry, 2008, 23, 1397.	1.6	31
47	Possible alkylation of inorganic Hg(II) by photochemical processes in the environment. Chemosphere, 2012, 88, 8-16.	4.2	30
48	Analytical methods, formation, and dissolution of cinnabar and its impact on environmental cycle of mercury. Critical Reviews in Environmental Science and Technology, 2017, 47, 2415-2447.	6.6	30
49	Tracking Mercury in Individual <i>Tetrahymena</i> Using a Capillary Single-Cell Inductively Coupled Plasma Mass Spectrometry Online System. Analytical Chemistry, 2020, 92, 622-627.	3.2	30
50	Loss and Increase of the Electron Exchange Capacity of Natural Organic Matter during Its Reduction and Reoxidation: The Role of Quinone and Nonquinone Moieties. Environmental Science & Technology, 2022, 56, 6744-6753.	4.6	30
51	Probing the DOM-mediated photodegradation of methylmercury by using organic ligands with different molecular structures as the DOM model. Water Research, 2018, 138, 264-271.	5.3	29
52	New evidence for atmospheric mercury transformations in the marine boundary layer from stable mercury isotopes. Atmospheric Chemistry and Physics, 2020, 20, 9713-9723.	1.9	29
53	Occurrence of monoethylmercury in the Florida Everglades: Identification and verification. Environmental Pollution, 2010, 158, 3378-3384.	3.7	28
54	Environmentally Relevant Freezeâ€"Thaw Cycles Enhance the Redox-Mediated Morphological Changes of Silver Nanoparticles. Environmental Science & Technology, 2018, 52, 6928-6935.	4.6	28

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55	Direct chemical vapour generation-flame atomization as interface of high performance liquid chromatography-atomic fluorescence spectrometry for speciation of mercury without using post-column digestion. Journal of Analytical Atomic Spectrometry, 2009, 24, 1575.	1.6	27
56	Hydroxyl radical formation upon dark oxidation of reduced iron minerals: Effects of iron species and environmental factors. Chinese Chemical Letters, 2019, 30, 2241-2244.	4.8	26
57	Simultaneous size characterization and mass quantification of the in vivo core-biocorona structure and dissolved species of silver nanoparticles. Journal of Environmental Sciences, 2018, 63, 227-235.	3.2	24
58	Speciation of organotin compounds in environmental samples with semi-permanent coated capillaries by capillary electrophoresis coupled with inductively coupled plasma mass spectrometry. Analytical Methods, 2010, 2, 2025.	1.3	23
59	Recent advances in speciation analysis of mercury, arsenic and selenium. Science Bulletin, 2013, 58, 150-161.	1.7	22
60	Tracing aquatic bioavailable Hg in three different regions of China using fish Hg isotopes. Ecotoxicology and Environmental Safety, 2018, 150, 327-334.	2.9	22
61	Natural organic matter inhibits aggregation of few-layered black phosphorus in mono- and divalent electrolyte solutions. Environmental Science: Nano, 2019, 6, 599-609.	2.2	22
62	Aging and phytoavailability of newly introduced and legacy cadmium in paddy soil and their bioaccessibility in rice grain distinguished by enriched isotope tracing. Journal of Hazardous Materials, 2021, 417, 125998.	6.5	22
63	Cadmium-binding proteins in human blood plasma. Ecotoxicology and Environmental Safety, 2020, 188, 109896.	2.9	21
64	Formation of organobromine and organoiodine compounds by engineered TiO2 nanoparticle-induced photohalogenation of dissolved organic matter in environmental waters. Science of the Total Environment, 2018, 631-632, 158-168.	3.9	20
65	Dithizone-functionalized C18 online solid-phase extraction-HPLC-ICP-MS for speciation of ultra-trace organic and inorganic mercury in cereals and environmental samples. Journal of Environmental Sciences, 2022, 115, 403-410.	3.2	20
66	Freezing Facilitates Formation of Silver Nanoparticles under Natural and Simulated Sunlight Conditions. Environmental Science & Technology, 2019, 53, 13802-13811.	4.6	19
67	Transformation and uptake of silver nanoparticles and silver ions in rice plant (<i>Oryza sativa</i> L.): the effect of iron plaque and dissolved iron. Environmental Science: Nano, 2020, 7, 599-609.	2.2	19
68	Understanding foliar accumulation of atmospheric Hg in terrestrial vegetation: Progress and challenges. Critical Reviews in Environmental Science and Technology, 2022, 52, 4331-4352.	6.6	19
69	Tracing the Transboundary Transport of Mercury to the Tibetan Plateau Using Atmospheric Mercury Isotopes. Environmental Science & Technology, 2022, 56, 1568-1577.	4.6	19
70	Methylation of inorganic mercury by methylcobalamin in aquatic systems. Applied Organometallic Chemistry, 2007, 21, 462-467.	1.7	18
71	Catalytic role of iron in the formation of silver nanoparticles in photo-irradiated Ag + -dissolved organic matter solution. Environmental Pollution, 2017, 225, 66-73.	3.7	18
72	Removal of Hg²⁺ and methylmercury in waters by functionalized multi-walled carbon nanotubes: adsorption behavior and the impacts of some environmentally relevant factors. Chemical Speciation and Bioavailability, 2017, 29, 161-169.	2.0	18

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73	Analyses of nitrobenzene, benzene and aniline in environmental water samples by headspace solid phase microextraction coupled with gas chromatography-mass spectrometry. Science Bulletin, 2006, 51, 1648-1651.	1.7	17
74	Abiotic formation of organoiodine compounds by manganese dioxide induced iodination of dissolved organic matter. Environmental Pollution, 2018, 236, 672-679.	3.7	17
75	Mitigation of methylmercury production in eutrophic waters by interfacial oxygen nanobubbles. Water Research, 2020, 173, 115563.	5.3	17
76	Significant Enrichment of Engineered Nanoparticles in Water Surface Microlayer. Environmental Science and Technology Letters, 2016, 3, 381-385.	3.9	15
77	Evaluating the role of re-adsorption of dissolved Hg2+ during cinnabar dissolution using isotope tracer technique. Journal of Hazardous Materials, 2016, 317, 466-475.	6.5	15
78	Occurrence of Mercurous [Hg(I)] Species in Environmental Solid Matrices as Probed by Mild 2-Mercaptoethanol Extraction and HPLC-ICP-MS Analysis. Environmental Science and Technology Letters, 2020, 7, 482-488.	3.9	15
79	Species-specific isotope dilution-GC-ICP-MS for accurate and precise measurement of methylmercury in water, sediments and biological tissues. Analytical Methods, 2014, 6, 164-169.	1.3	14
80	Evaluating the blank contamination and recovery of sample pretreatment procedures for analyzing organophosphorus flame retardants in waters. Journal of Environmental Sciences, 2015, 34, 57-62.	3.2	14
81	Decreased bioavailability of both inorganic mercury and methylmercury in anaerobic sediments by sorption on iron sulfide nanoparticles. Journal of Hazardous Materials, 2022, 424, 127399.	6.5	14
82	Weathered Microplastics Induce Silver Nanoparticle Formation. Environmental Science and Technology Letters, 2022, 9, 179-185.	3.9	14
83	Solar-induced generation of singlet oxygen and hydroxyl radical in sewage wastewaters. Environmental Chemistry Letters, 2017, 15, 515-523.	8.3	13
84	Facile Photoinduced Generation of Hydroxyl Radical on a Nitrocellulose Membrane Surface and its Application in the Degradation of Organic Pollutants. ChemSusChem, 2018, 11, 843-847.	3.6	13
85	Terrestrial mercury transformation in the Tibetan Plateau: New evidence from stable isotopes in upland buzzards. Journal of Hazardous Materials, 2020, 400, 123211.	6.5	13
86	Katabatic Wind and Seaâ€"Ice Dynamics Drive Isotopic Variations of Total Gaseous Mercury on the Antarctic Coast. Environmental Science & Technology, 2021, 55, 6449-6458.	4.6	13
87	Dark Reduction of Mercury by Microalgae-Associated Aerobic Bacteria in Marine Environments. Environmental Science & Technology, 2021, 55, 14258-14268.	4.6	13
88	Periphyton as an important source of methylmercury in Everglades water and food web. Journal of Hazardous Materials, 2021, 410, 124551.	6.5	12
89	Determination of methylmercury and inorganic mercury by volatile species generation-flameless/flame atomization-atomic fluorescence spectrometry without chromatographic separation. Analytical Methods, 2012, 4, 1122.	1.3	11
90	Enriched isotope tracing to reveal the fractionation and lability of legacy and newly introduced cadmium under different amendments. Journal of Hazardous Materials, 2021, 403, 123975.	6.5	11

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91	Flow field-flow fractionation hyphenated with inductively coupled plasma mass spectrometry: a robust technique for characterization of engineered elemental metal nanoparticles in the environment. Applied Spectroscopy Reviews, 2023, 58, 110-131.	3.4	11
92	Long-term investigation of heavy metal variations in mollusks along the Chinese Bohai Sea. Ecotoxicology and Environmental Safety, 2022, 236, 113443.	2.9	11
93	Length and diameter-dependent phagocytosis and cytotoxicity of long silver nanowires in macrophages. Chemosphere, 2019, 237, 124565.	4.2	10
94	Fate of mercury and methylmercury in full-scale sludge anaerobic digestion combined with thermal hydrolysis. Journal of Hazardous Materials, 2021, 406, 124310.	6.5	10
95	Different circulation history of mercury in aquatic biota from King George Island of the Antarctic. Environmental Pollution, 2019, 250, 892-897.	3.7	9
96	Monitoring AuNP Dynamics in the Blood of a Single Mouse Using Single Particle Inductively Coupled Plasma Mass Spectrometry with an Ultralow-Volume High-Efficiency Introduction System. Analytical Chemistry, 2020, 92, 14872-14877.	3.2	9
97	Revisiting the forms of trace elements in biogeochemical cycling: Analytical needs and challenges. TrAC - Trends in Analytical Chemistry, 2020, 129, 115953.	5.8	9
98	Identification of mercury methylation product by tert-butyl compounds in aqueous solution under light irradiation. Marine Pollution Bulletin, 2015, 98, 40-46.	2.3	8
99	Mutual detoxification of mercury and selenium in unicellular Tetrahymena. Journal of Environmental Sciences, 2018, 68, 143-150.	3.2	8
100	Gaseous Elemental Mercury [Hg(0)] Oxidation in Poplar Leaves through a Two-Step Single-Electron Transfer Process. Environmental Science and Technology Letters, 2021, 8, 1098-1103.	3.9	8
101	Particle-Bound Hg(II) is Available for Microbial Uptake as Revealed by a Whole-Cell Biosensor. Environmental Science & Technology, 2022, 56, 6754-6764.	4.6	8
102	Ultra-long silver nanowires induced mitotic abnormalities and cytokinetic failure in A549 cells. Nanotoxicology, 2019, 13, 543-557.	1.6	7
103	Tracking the dissolution behavior of zinc oxide nanoparticles in skimmed milk powder solutions. Food Chemistry, 2021, 365, 130520.	4.2	7
104	Administration of Silver Nasal Spray Leads to Nanoparticle Accumulation in Rat Brain Tissues. Environmental Science & Technology, 2022, 56, 403-413.	4.6	7
105	Optimization of Pretreatment Method for Alkylmercuries Speciation in Coal by Highâ€Performance Liquid Chromatography Coupled with UVâ€Digestion Cold Vapor Atomic Fluorescence Spectrometry. Spectroscopy Letters, 2006, 39, 785-796.	0.5	6
106	Identification of photochemical methylation products of tin(ii) in aqueous solutions using headspace SPME coupled with GC-FPD or GCâ€“MS. Analytical Methods, 2012, 4, 2109.	1.3	6
107	Acute and Sublethal Effects of Ethylmercury Chloride on Chinese Rare Minnow (Gobiocypris rarus): Accumulation, Elimination, and Histological Changes. Bulletin of Environmental Contamination and Toxicology, 2019, 102, 708-713.	1.3	6
108	Identification of mercury-containing nanoparticles in the liver and muscle of cetaceans. Journal of Hazardous Materials, 2022, 424, 127759.	6.5	6

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109	Challenges for utilization and management of crop straw from Cdâ€contaminated soil. Soil Use and Management, 2022, 38, 1337-1339.	2.6	6
110	Occurrence and leaching of silver in municipal sewage sludge in China. Ecotoxicology and Environmental Safety, 2020, 189, 109929.	2.9	5
111	In Situ Tracking Photodegradation of Trace Graphene Oxide by the Online Coupling of Photoinduced Chemical Vapor Generation with a Point Discharge Optical Emission Spectrometer. Analytical Chemistry, 2020, 92, 1549-1556.	3.2	4
112	Dissolved organic matter-mediated reduction of ionic Au(III) to elemental Au nanoparticles and their growth to visible granules. Chinese Chemical Letters, 2020, 31, 1970-1973.	4.8	4
113	On-line determination of soluble Zn content and size of the residual fraction in PM2.5 incubated in various aqueous media. Science of the Total Environment, 2020, 724, 138309.	3.9	4
114	Unified Probability Distribution and Dynamics of Lead Contents in Human Erythrocytes Revealed by Single-Cell Analysis. Environmental Science & Technology, 2021, 55, 3819-3826.	4.6	4
115	Mercury Inputs Into Eastern China Seas Revealed by Mercury Isotope Variations in Sediment Cores. Journal of Geophysical Research: Oceans, 2021, 126, e2020JC016891.	1.0	4
116	High-Throughput Single Cell Analysis Reveals the Heterogeneity of QDots-Induced Response in Macrophages. Environmental Science and Technology Letters, 2020, 7, 337-342.	3.9	2
117	Catalytic Oxidation of Arsenic in Water by Silver Nanoparticles. Acta Chimica Sinica, 2018, 76, 387.	0.5	2
118	Occurrence of silver-containing particles in rat brains upon intranasal exposure of silver nanoparticles. Metallomics, 2022, 14, .	1.0	2
119	Characterization of nanoparticles using coupled gel immobilization and label-free optical imaging. Chemical Communications, 2021, 57, 13016-13019.	2.2	1
120	Binding characteristics of Hg(II) with extracellular polymeric substances: implications for Hg(II) reactivity within periphyton. Environmental Science and Pollution Research, 2022, , 1.	2.7	1