Erik BjÃ¶rn

List of Publications by Year
in descending order

81 papers	3,349 citations	109311 35 h-index	161844 54 g-index
84 all docs	84 docs citations	84 times ranked	3374 citing authors

#	Article	IF	Citations
1	Oxygenâ€deficient water zones in the Baltic Sea promote uncharacterized Hg methylating microorganisms in underlying sediments. Limnology and Oceanography, 2022, 67, 135-146.	3.1	15
2	Methylmercury formation in boreal wetlands in relation to chemical speciation of mercury(II) and concentration of low molecular mass thiols. Science of the Total Environment, 2021, 755, 142666.	8.0	20
3	Quantification of total concentration of thiol functional groups in environmental samples by titration with monobromo(trimethylammonio)bimane and determination with tandem mass spectrometry. Talanta, 2020, 218, 121109.	5.5	9
4	Toward an Internally Consistent Model for Hg(II) Chemical Speciation Calculations in Bacteriumâ€"Natural Organic Matterâ€"Low Molecular Mass Thiol Systems. Environmental Science & Technology, 2020, 54, 8094-8103.	10.0	11
5	Anaerobic guilds responsible for mercury methylation in boreal wetlands of varied trophic status serving as either a methylmercury source or sink. Environmental Microbiology, 2020, 22, 3685-3699.	3.8	23
6	Determination of picomolar levels of methylmercury complexes with low molecular mass thiols by liquid chromatography tandem mass spectrometry and online preconcentration. Analytical and Bioanalytical Chemistry, 2020, 412, 1619-1628.	3.7	4
7	Opposing spatial trends in methylmercury and total mercury along a peatland chronosequence trophic gradient. Science of the Total Environment, 2020, 718, 137306.	8.0	9
8	Uptake Kinetics of Methylmercury in a Freshwater Alga Exposed to Methylmercury Complexes with Environmentally Relevant Thiols. Environmental Science & Technology, 2019, 53, 13757-13766.	10.0	23
9	Microbial Biosynthesis of Thiol Compounds: Implications for Speciation, Cellular Uptake, and Methylation of Hg(II). Environmental Science & Technology, 2019, 53, 8187-8196.	10.0	41
10	Determination of picomolar concentrations of thiol compounds in natural waters and biological samples by tandem mass spectrometry with online preconcentration and isotope-labeling derivatization. Analytica Chimica Acta, 2019, 1067, 71-78.	5.4	10
11	Corrections to Methyl Mercury Formation in Hillslope Soils of Boreal Forests: The Role of Forest Harvest and Anaerobic Microbes. Environmental Science & Technology, 2018, 52, 367-367.	10.0	0
12	Mechanisms of Methyl Mercury Net Degradation in Alder Swamps: The Role of Methanogens and Abiotic Processes. Environmental Science and Technology Letters, 2018, 5, 220-225.	8.7	34
13	High methylmercury formation in ponds fueled by fresh humic and algal derived organic matter. Limnology and Oceanography, 2018, 63, S44.	3.1	58
14	Deciphering the Role of Water Column Redoxclines on Methylmercury Cycling Using Speciation Modeling and Observations From the Baltic Sea. Global Biogeochemical Cycles, 2018, 32, 1498-1513.	4.9	36
15	Influence of dissolved organic matter (DOM) characteristics on dissolved mercury (Hg) species composition in sediment porewater of lakes from southwest China. Water Research, 2018, 146, 146-158.	11.3	113
16	Rapid Dissolution of Cinnabar in Crude Oils at Reservoir Temperatures Facilitated by Reduced Sulfur Ligands. ACS Earth and Space Chemistry, 2018, 2, 1022-1028.	2.7	3
17	Thermodynamics of Hg(II) Bonding to Thiol Groups in Suwannee River Natural Organic Matter Resolved by Competitive Ligand Exchange, Hg L_{III}-Edge EXAFS and ¹H NMR Spectroscopy. Environmental Science & Technology, 2018, 52, 8292-8301.	10.0	53
18	Terrestrial discharges mediate trophic shifts and enhance methylmercury accumulation in estuarine biota. Science Advances, 2017, 3, e1601239.	10.3	88

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19	Screening of biocides, metals and antibiotics in Swedish sewage sludge and wastewater. Water Research, 2017, 115, 318-328.	11.3	176
20	Thermodynamic Modeling of the Solubility and Chemical Speciation of Mercury and Methylmercury Driven by Organic Thiols and Micromolar Sulfide Concentrations in Boreal Wetland Soils. Environmental Science & Technology, 2017, 51, 3678-3686.	10.0	72
21	Thermodynamic stability of mercury(II) complexes formed with environmentally relevant low-molecular-mass thiols studied by competing ligand exchange and density functional theory. Environmental Chemistry, 2017, 14, 243.	1.5	46
22	Forest harvest contribution to Boreal freshwater methyl mercury load. Global Biogeochemical Cycles, 2016, 30, 825-843.	4.9	43
23	Rethinking chemistry in higher education towards technology-enhanced problem-based learning. Education Inquiry, 2016, 7, 27287.	2.9	5
24	Influence of chelation strength and bacterial uptake of gallium salicylidene acylhydrazide on biofilm formation and virulence of Pseudomonas aeruginosa. Journal of Inorganic Biochemistry, 2016, 160, 24-32.	3.5	9
25	Eutrophication Increases Phytoplankton Methylmercury Concentrations in a Coastal Seaâ€”A Baltic Sea Case Study. Environmental Science & Technology, 2016, 50, 11787-11796.	10.0	71
26	Methyl Mercury Formation in Hillslope Soils of Boreal Forests: The Role of Forest Harvest and Anaerobic Microbes. Environmental Science & Technology, 2016, 50, 9177-9186.	10.0	42
27	Fractionation and size-distribution of metal and metalloid contaminants in a polluted groundwater rich in dissolved organic matter. Journal of Hazardous Materials, 2016, 318, 194-202.	12.4	42
28	Effects of Nutrient Loading and Mercury Chemical Speciation on the Formation and Degradation of Methylmercury in Estuarine Sediment. Environmental Science & Technology, 2016, 50, 6983-6990.	10.0	42
29	Assessment of chemical and material contamination in waste wood fuels â€“ A case study ranging over nine years. Waste Management, 2016, 49, 311-319.	7.4	37
30	Persistent Hg contamination and occurrence of Hg-methylating transcript (hgcA) downstream of a chlor-alkali plant in the Olt River (Romania). Environmental Science and Pollution Research, 2016, 23, 10529-10541.	5.3	69
31	Mercury Isotope Signatures in Contaminated Sediments as a Tracer for Local Industrial Pollution Sources. Environmental Science & Technology, 2015, 49, 177-185.	10.0	75
32	Determination of Sub-Nanomolar Levels of Low Molecular Mass Thiols in Natural Waters by Liquid Chromatography Tandem Mass Spectrometry after Derivatization with <i>p</i>-(Hydroxymercuri) Benzoate and Online Preconcentration. Analytical Chemistry, 2015, 87, 1089-1096.	6.5	54
33	Trace element landscape of resting and activated human neutrophils on the sub-micrometer level. Metallomics, 2015, 7, 996-1010.	2.4	36
34	Kinetics of Hg(II) Exchange between Organic Ligands, Goethite, and Natural Organic Matter Studied with an Enriched Stable Isotope Approach. Environmental Science & Technology, 2014, 48, 13207-13217.	10.0	48
35	Analytical developments for the determination of monomethylmercury complexes with low molecular mass thiols by reverse phase liquid chromatography hyphenated to inductively coupled plasma mass spectrometry. Journal of Chromatography A, 2014, 1339, 50-58.	3.7	11
36	Soluble silica inhibits osteoclast formation and bone resorption in vitro. Acta Biomaterialia, 2014, 10, 406-418.	8.3	99

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37	<i>In vitro</i> study of the biological interface of <scp>B</scp>ioâ€‹<scp>O</scp>ss: implications of the experimental setup. Clinical Oral Implants Research, 2013, 24, 329-335.	4.5	27
38	Significant interaction effects from sulfate deposition and climate on sulfur concentrations constitute major controls on methylmercury production in peatlands. Geochimica Et Cosmochimica Acta, 2013, 102, 1-11.	3.9	42
39	Calcium binding by the PKD1 domain regulates interdomain flexibility in <i>Vibrio cholerae</i> metalloprotease PrtV. FEBS Open Bio, 2013, 3, 263-270.	2.3	10
40	Extreme zinc tolerance in acidophilic microorganisms from the bacterial and archaeal domains. Extremophiles, 2013, 17, 75-85.	2.3	68
41	Towards Universal Wavelength-Specific Photodegradation Rate Constants for Methyl Mercury in Humic Waters, Exemplified by a Boreal Lake-Wetland Gradient. Environmental Science & Technology, 2013, 47, 6279-6287.	10.0	56
42	Refining Thermodynamic Constants for Mercury(II)-Sulfides in Equilibrium with Metacinnabar at Sub-Micromolar Aqueous Sulfide Concentrations. Environmental Science & Technology, 2013, 47, 4197-4203.	10.0	59
43	Interaction between the Anticancer Drug Cisplatin and the Copper Chaperone Atox1 in Human Melanoma Cells. Protein and Peptide Letters, 2013, 21, 63-68.	0.9	19
44	Determinants for Simultaneous Binding of Copper and Platinum to Human Chaperone Atox1: Hitchhiking not Hijacking. PLoS ONE, 2013, 8, e70473.	2.5	40
45	Eight Boreal Wetlands as Sources and Sinks for Methyl Mercury in Relation to Soil Acidity, C/N Ratio, and Small-Scale Flooding. Environmental Science & Technology, 2012, 46, 8052-8060.	10.0	81
46	Mercury Methylation Rates for Geochemically Relevant Hg^{II} Species in Sediments. Environmental Science & Technology, 2012, 46, 11653-11659.	10.0	162
47	Net Degradation of Methyl Mercury in Alder Swamps. Environmental Science & Technology, 2012, 46, 13144-13151.	10.0	25
48	Potential Hg methylation and MeHg demethylation rates related to the nutrient status of different boreal wetlands. Biogeochemistry, 2012, 108, 335-350.	3.5	98
49	The Antibacterial Activity of Ga³⁺Is Influenced by Ligand Complexation as Well as the Bacterial Carbon Source. Antimicrobial Agents and Chemotherapy, 2011, 55, 5568-5580.	3.2	60
50	Cisplatin binds human copper chaperone Atox1 and promotes unfolding in vitro. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 6951-6956.	7.1	94
51	Evaluation of cell lysis methods for platinum metallomic studies of human malignant cells. Analytical Biochemistry, 2010, 396, 76-82.	2.4	33
52	Mobile phase selection for the combined use of liquid chromatographyâ€“inductively coupled plasma mass spectrometry and electrospray ionisation mass spectrometry. Journal of Chromatography A, 2010, 1217, 4980-4986.	3.7	7
53	Substantial Emission of Gaseous Monomethylmercury from Contaminated Waterâˆ’Sediment Microcosms. Environmental Science & Technology, 2010, 44, 278-283.	10.0	16
54	Elevated Concentrations of Methyl Mercury in Streams after Forest Clear-Cut: A Consequence of Mobilization from Soil or New Methylation?. Environmental Science & Technology, 2009, 43, 8535-8541.	10.0	61

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55	Potential demethylation rate determinations in relation to concentrations of MeHg, Hg and pore water speciation of MeHg in contaminated sediments. Marine Chemistry, 2008, 112, 93-101.	2.3	22
56	Hydrophilic interaction liquid chromatography (HILIC) coupled to inductively coupled plasma mass spectrometry (ICPMS) utilizing a mobile phase with a low-volatile organic modifier for the determination of cisplatin, and its monohydrolyzed metabolite. Journal of Analytical Atomic Spectrometry, 2008, 23, 948.	3.0	29
57	Complexation of cadmium to sulfur and oxygen functional groups in an organic soil. Geochimica Et Cosmochimica Acta, 2007, 71, 604-614.	3.9	58
58	Importance of Dissolved Neutral Mercury Sulfides for Methyl Mercury Production in Contaminated Sediments. Environmental Science & Technology, 2007, 41, 2270-2276.	10.0	190
59	Studies of transport and collection characteristics of gaseous mercury in natural gases using amalgamation and isotope dilution analysis. Analyst, The, 2007, 132, 579-586.	3.5	9
60	Comparison of aerosol properties and ICP-MS analytical performance of the Vulkan direct injection nebuliser and the Direct Injection High Efficiency Nebuliser. Journal of Analytical Atomic Spectrometry, 2007, 22, 250-257.	3.0	8
61	Recent Advances in Mercury Speciation Analysis with Focus on Spectrometric Methods and Enriched Stable Isotope Applications. Ambio, 2007, 36, 443-451.	5.5	33
62	Dose and Hg species determine the T-helper cell activation in murine autoimmunity. Toxicology, 2007, 229, 23-32.	4.2	34
63	Determination of platinum in human subcellular microsamples by inductively coupled plasma mass spectrometry. Analytical Biochemistry, 2007, 363, 135-142.	2.4	17
64	Effects of oxic and anoxic filtration on determined methyl mercury concentrations in sediment pore waters. Marine Chemistry, 2007, 103, 76-83.	2.3	11
65	Mercury species in lymphoid and non-lymphoid tissues after exposure to methyl mercury: Correlation with autoimmune parameters during and after treatment in susceptible mice. Toxicology and Applied Pharmacology, 2007, 221, 21-28.	2.8	30
66	Noise characteristics and analytical precision of inductively coupled plasma mass spectrometry using a Vulkan direct injection nebuliser for sample introduction. Journal of Analytical Atomic Spectrometry, 2006, 21, 168-176.	3.0	10
67	The immunosuppressive effect of methylmercury does not preclude development of autoimmunity in genetically susceptible mice. Toxicology, 2005, 208, 149-164.	4.2	46
68	Immunosuppressive and autoimmune effects of thimerosal in mice. Toxicology and Applied Pharmacology, 2005, 204, 109-121.	2.8	53
69	Radial ICP characteristics for ICP-AES using direct injection or microconcentric nebulisation. Journal of Analytical Atomic Spectrometry, 2005, 20, 645.	3.0	10
70	Methylmercury in tuna: demonstrating measurement capabilities and evaluating comparability of results worldwide from the CCQM P-39 comparison. Journal of Analytical Atomic Spectrometry, 2005, 20, 1058.	3.0	11
71	Species specific isotope dilution with on line derivatisation for determination of gaseous mercury species. Journal of Analytical Atomic Spectrometry, 2005, 20, 1232.	3.0	21
72	Validation of a simplified field-adapted procedure for routine determinations of methyl mercury at trace levels in natural water samples using species-specific isotope dilution mass spectrometry. Analytical and Bioanalytical Chemistry, 2004, 380, 871-875.	3.7	52

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73	Platform-to-platform sample transfer, distribution, dilution, and dosing via electrothermal vaporization and electrostatic deposition. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2004, 59, 737-748.	2.9	13
74	Introduction of high carbon content solvents into inductively coupled plasma mass spectrometry by a direct injection high efficiency nebuliser. Analytical and Bioanalytical Chemistry, 2003, 376, 274-278.	3.7	30
75	Noise characteristics and analytical precision of a direct injection high efficiency and micro concentric nebuliser for sample introduction in inductively coupled plasma mass spectrometry. Journal of Analytical Atomic Spectrometry, 2002, 17, 1257-1263.	3.0	18
76	Calibration errors due to variations in peak characteristics in the measurement of transient signals by inductively coupled plasma-scanning mass spectrometry. Journal of Analytical Atomic Spectrometry, 2002, 17, 1582-1588.	3.0	14
77	The origin of peristaltic pump interference noise harmonics in inductively coupled plasma mass spectrometry. Journal of Analytical Atomic Spectrometry, 2002, 17, 1390-1393.	3.0	17
78	Non-spectral interference effects in inductively coupled plasma mass spectrometry using direct injection high efficiency and microconcentric nebulisation. Journal of Analytical Atomic Spectrometry, 2001, 16, 4-11.	3.0	43
79	Investigation of errors introduced by the species distribution of mercury in organic solutions on total mercury determination by electrothermal vaporisationâ€“inductively coupled plasma mass spectrometry. Journal of Analytical Atomic Spectrometry, 2000, 15, 397-402.	3.0	23
80	Optimisation of operating parameters for simultaneous multi-element determination of antimony, arsenic, bismuth and selenium by hydride generation, graphite atomiser sequestration atomic absorption spectrometry. Journal of Analytical Atomic Spectrometry, 2000, 15, 697-703.	3.0	25
81	Investigation and quantification of spectroscopic interferences from polyatomic species in inductively coupled plasma mass spectrometry using electrothermal vaporization or pneumatic nebulization for sample introduction. Spectrochimica Acta, Part B: Atomic Spectroscopy, 1998, 53, 1765-1776.	2.9	20