Kei Toda

List of Publications by Year
in descending order

104	2,391	201674 27	233421 45
papers	citations	h-index	g-index

105	105	105	2733
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Recent progress in applications of graphene oxide for gas sensing: A review. Analytica Chimica Acta, 2015, 878, 43-53.	5.4	348
2	Determination of acetone in breath. Analytica Chimica Acta, 2005, 535, 189-199.	5.4	112
3	Micro gas analyzers for environmental and medical applications. Analytica Chimica Acta, 2008, 619, 143-156.	5.4	96
4	Portable system for near-real time measurement of gaseous formaldehyde by means of parallel scrubber stopped-flow absorptiometry. Analytica Chimica Acta, 2005, 531, 41-49.	5.4	75
5	Measurement of Ammonia in Human Breath with a Liquid-Film Conductivity Sensor. Analytical Chemistry, 2006, 78, 7284-7291.	6.5	73
6	Ion chromatographic measurement of sulfide, methanethiolate, sulfite and sulfate in aqueous and air samples. Journal of Chromatography A, 2006, 1121, 280-284.	3.7	66
7	A fiber optic sensor with a metal organic framework as a sensing material for trace levels of water in industrial gases. Analytica Chimica Acta, 2015, 886, 188-193.	5.4	62
8	A Capacitance Sensor for Water: Trace Moisture Measurement in Gases and Organic Solvents. Analytical Chemistry, 2012, 84, 8891-8897.	6.5	57
9	Field Instrument for Simultaneous Large Dynamic Range Measurement of Atmospheric Hydrogen Sulfide, Methanethiol, and Sulfur Dioxide. Environmental Science & Technology, 2004, 38, 1529-1536.	10.0	52
10	Sulfurized limonite as material for fast decomposition of organic compounds by heterogeneous Fenton reaction. Journal of Hazardous Materials, 2014, 278, 426-432.	12.4	51
11	Fluorometric Field Instrument for Continuous Measurement of Atmospheric Hydrogen Sulfide. Analytical Chemistry, 2001, 73, 5716-5724.	6.5	50
12	Hybrid Microfabricated Device for Field Measurement of Atmospheric Sulfur Dioxide. Analytical Chemistry, 2002, 74, 5890-5896.	6.5	47
13	Micro gas analysis system for measurement of atmospheric hydrogen sulfide and sulfur dioxide. Lab on A Chip, 2005, 5, 1374.	6.0	47
14	Arsine gas sensor based on gold-modified reduced graphene oxide. Sensors and Actuators B: Chemical, 2017, 240, 657-663.	7.8	47
15	A Gas-Phase Chemiluminescence-Based Analyzer for Waterborne Arsenic. Analytical Chemistry, 2006, 78, 7088-7097.	6.5	46
16	Speciation-Capable Field Instrument for the Measurement of Arsenite and Arsenate in Water. Analytical Chemistry, 2005, 77, 4765-4773.	6.5	40
17	Simultaneous Electrodialytic Preconcentration and Speciation of Chromium(III) and Chromium(VI). Analytical Chemistry, 2015, 87, 11575-11580.	6.5	40
18	Trace Gas Measurement with an Integrated Porous Tube Collector/Long-Path Absorbance Detector. Analytical Chemistry, 2003, 75, 4050-4056.	6.5	38

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19	Trends in Atmospheric Trace Gas Measurement Instruments with Membrane-based Gas Diffusion Scrubbers. Analytical Sciences, 2004, 20, 19-27.	1.6	38
20	Formaldehyde Content of Atmospheric Aerosol. Environmental Science & Technology, 2014, 48, 6636-6643.	10.0	37
21	Single Column Trapping/Separation and Chemiluminescence Detection for On-Site Measurement of Methyl Mercaptan and Dimethyl Sulfide. Analytical Chemistry, 2006, 78, 6252-6259.	6.5	36
22	Micro-gas analysis system Î¼GAS comprising a microchannel scrubber and a micro-fluorescence detector for measurement of hydrogen sulfide. Analytica Chimica Acta, 2004, 511, 3-10.	5.4	35
23	Identification of Naturally Occurring Polyamines as Root-Knot Nematode Attractants. Molecular Plant, 2020, 13, 658-665.	8.3	35
24	Atmospheric methanethiol emitted from a pulp and paper plant on the shore of Lake Baikal. Atmospheric Environment, 2010, 44, 2427-2433.	4.1	33
25	On-line electrodialytic matrix isolation for chromatographic determination of organic acids in wine. Journal of Chromatography A, 2014, 1372, 18-24.	3.7	32
26	Can Breath Isoprene Be Measured by Ozone Chemiluminescence?. Analytical Chemistry, 2007, 79, 2641-2649.	6.5	30
27	NEW APPLICATIONS OF CHEMILUMINESCENCE FOR SELECTIVE GAS ANALYSIS. Chemical Engineering Communications, 2007, 195, 82-97.	2.6	28
28	Electrodialytic Ion Isolation for Matrix Removal. Analytical Chemistry, 2012, 84, 5421-5426.	6.5	27
29	Matrix isolation with an ion transfer device for interference-free simultaneous spectrophotometric determinations of hexavalent and trivalent chromium in a flow-based system. Talanta, 2017, 164, 445-450.	5.5	27
30	Micro Gas Analyzer Measurement of Nitric Oxide in Breath by Direct Wet Scrubbing and Fluorescence Detection. Analytical Chemistry, 2009, 81, 7031-7037.	6.5	26
31	Simple Field Device for Measurement of Dimethyl Sulfide and Dimethylsulfoniopropionate in Natural Waters, Based on Vapor Generation and Chemiluminescence Detection. Analytical Chemistry, 2013, 85, 4461-4467.	6.5	26
32	Diurnal Variations in Partitioning of Atmospheric Glyoxal and Methylglyoxal between Gas and Particles at the Ground Level and in the Free Troposphere. ACS Earth and Space Chemistry, 2018, 2, 915-924.	2.7	25
33	On-Site Measurement of Trace-Level Sulfide in Natural Waters by Vapor Generation and Microchannel Collection. Environmental Science & Technology, 2011, 45, 5622-5628.	10.0	23
34	Mobile monitoring along a street canyon and stationary forest air monitoring of formaldehyde by means of a micro-gas analysis system. Journal of Environmental Monitoring, 2012, 14, 1462.	2.1	22
35	Electrochemical enzyme immunoassay using immobilized antibody on gold film with monitoring of surface plasmon resonance signal. Analytica Chimica Acta, 2002, 463, 219-227.	5.4	21
36	High Sensitivity Arsenic Analyzer Based on Liquid-reagent-free Hydride Generation and Chemiluminescence Detection for On-site Water Analysis. Analytical Sciences, 2011, 27, 733-738.	1.6	19

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37	Determination of nitenpyram and its metabolites in agricultural products by using hydrophilic interaction liquid chromatography-tandem mass spectrometry. Journal of Pesticide Sciences, 2013, 38, 27-32.	1.4	19
38	In situ oxygenous functionalization of a graphite electrode for enhanced affinity towards charged species and a reduced graphene oxide mediator. New Journal of Chemistry, 2014, 38, 2120-2127.	2.8	19
39	Levels, indoorâ€“outdoor relationships and exposure risks of airborne particle-associated perchlorate and chlorate in two urban areas in Eastern Asia. Chemosphere, 2015, 135, 31-37.	8.2	19
40	Miniature open channel scrubbers for gas collection. Talanta, 2010, 82, 1870-1875.	5.5	17
41	Miniature Liquid Flow Sensor and Feedback Control of Electroosmotic and Pneumatic Flows for a Micro Gas Analysis System. Analytical Sciences, 2006, 22, 61-65.	1.6	16
42	Membrane-based microchannel device for continuous quantitative extraction of dissolved free sulfide from water and from oil. Analytica Chimica Acta, 2012, 741, 38-46.	5.4	16
43	Micro-gas analysis system for measurement of nitric oxide and nitrogen dioxide: Respiratory treatment and environmental mobile monitoring. Analytica Chimica Acta, 2007, 603, 60-66.	5.4	15
44	Gas collection efficiency of annular denuders: A spreadsheet-based calculator. Analytica Chimica Acta, 2010, 664, 56-61.	5.4	15
45	Electrodialytic matrix isolation for metal cations. Talanta, 2015, 132, 228-233.	5.5	15
46	Automated determinations of selenium in thermal power plant wastewater by sequential hydride generation and chemiluminescence detection. Talanta, 2016, 148, 609-616.	5.5	15
47	Natural dimethyl sulfide gradients would lead marine predators to higher prey biomass. Communications Biology, 2021, 4, 149.	4.4	15
48	Miniaturized detector of sulfur dioxide based on the flow conductometry of an absorbing solution.. Bunseki Kagaku, 1998, 47, 727-734.	0.2	14
49	Highly Sensitive Flow Analysis of Trace Level Arsenic in Water Based on Vaporization-collection In-line Preconcentration. Chemistry Letters, 2005, 34, 176-177.	1.3	14
50	Amperometric Detection of Nitrogen Oxides by Means of Interdigitated Array Electrodes.. Analytical Sciences, 1997, 13, 981-986.	1.6	13
51	Simple water analysis of golf link pesticides by means of batch-wise adsorption and supercritical fluid extraction. Talanta, 2009, 80, 738-743.	5.5	13
52	Electrodialytic in-line preconcentration for ionic solute analysis. Talanta, 2018, 180, 176-181.	5.5	13
53	Dimethylsulfide (DMS) fluxes from permeable coral reef carbonate sediments. Marine Chemistry, 2019, 208, 1-10.	2.3	13
54	In situ gas generation for micro gas analysis system. Analytica Chimica Acta, 2007, 588, 147-152.	5.4	12

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55	Simultaneous analysis of silicon and boron dissolved in water by combination of electrodialytic salt removal and ion-exclusion chromatography with corona charged aerosol detection. Journal of Chromatography A, 2016, 1431, 131-137.	3.7	11
56	Evaluation of Single Column Trapping/Separation and Chemiluminescence Detection for Measurement of Methanethiol and Dimethyl Sulfide from Pig Production. Journal of Analytical Methods in Chemistry, 2012, 2012, 1-7.	1.6	10
57	Flow-based ammonia gas analyzer with an open channel scrubber for indoor environments. Talanta, 2013, 116, 527-534.	5.5	10
58	Micro Ion Extractor for Single Drop Whole Blood Analysis. Analytical Chemistry, 2015, 87, 6483-6486.	6.5	10
59	Interlayer Void Space as the Key Semipermeable Site for Sieving Molecules and Leaking Ions in Graphene Oxide Filter. ChemistrySelect, 2017, 2, 4248-4254.	1.5	10
60	Universal HPLC Detector for Hydrophilic Organic Compounds by Means of Total Organic Carbon Detection. Analytical Chemistry, 2018, 90, 6461-6467.	6.5	10
61	Semi-continuous Monitoring of Cr(VI) and Cr(III) during a Soil Extraction Process by Means of an Ion Transfer Device and Graphite Furnace Atomic Absorption Spectroscopy. Analytical Sciences, 2020, 36, 617-620.	1.6	10
62	Gas analyzer for continuous monitoring of trace level methanethiol by microchannel collection and fluorescence detection. Analytica Chimica Acta, 2014, 841, 1-9.	5.4	9
63	Monitoring variations of dimethyl sulfide and dimethylsulfoniopropionate in seawater and the atmosphere based on sequential vapor generation and ion molecule reaction mass spectrometry. Environmental Sciences: Processes and Impacts, 2016, 18, 464-472.	3.5	9
64	Sequential multiple analyses of atmospheric nitrous acid and nitrogen oxides. Talanta, 2007, 71, 1652-1660.	5.5	8
65	Environmental Applications: Atmospheric Trace Gas Analyses. Comprehensive Analytical Chemistry, 2008, , 639-683.	1.3	8
66	Measurements of arsenite and arsenate contained in mining river waters and leached from contaminated sediments by sequential hydride generation flow injection analysis. Talanta, 2011, 84, 1336-1341.	5.5	8
67	On-site Multi Monitoring of Isoprene and Related Compounds in Forest Air. Bunseki Kagaku, 2011, 60, 489-498.	0.2	8
68	Development of miniature key devices for flow analysis and their applications. Bunseki Kagaku, 2004, 53, 207-219.	0.2	7
69	Direct Determination of Polycyclic Aromatic Hydrocarbons in PM_{2.5} by Thermal Desorption-GC/MS and Analysis of Their Diurnal/Seasonal Variations and Field Burning in Kumamoto. Bunseki Kagaku, 2015, 64, 571-579.	0.2	7
70	Electrodialytic extraction of anionic pharmaceutical compounds from a single drop of whole blood using a supported liquid membrane. Talanta, 2018, 181, 197-203.	5.5	7
71	Detection of gaseous hydrides by metal-titanium oxide gas sensors.. Bunseki Kagaku, 1990, 39, 611-615.	0.2	6
72	Double Schottky Diode-Type Gas Sensor for Discriminative Detection of Phosphine and Hydrogen.. Analytical Sciences, 1995, 11, 317-318.	1.6	6

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73	Measurement of polychlorinated biphenyls in solid waste such as transformer insulation paper by supercritical fluid extraction and gas chromatography electron capture detection. Journal of Chromatography A, 2012, 1256, 267-270.	3.7	6
74	Determination of Isotianil in Brown Rice and Soil Using Supercritical Fluid Extraction and Gas Chromatography/Mass Spectrometry. Analytical Sciences, 2013, 29, 919-922.	1.6	6
75	Formaldehyde vapor produced from hexamethylenetetramine and pesticide: Simultaneous monitoring of formaldehyde and ozone in chamber experiments by flow-based hybrid micro-gas analyzer. Talanta, 2016, 148, 649-654.	5.5	6
76	High Sensitivity Monitoring Device for Onboard Measurement of Dimethyl Sulfide and Dimethylsulfoniopropionate in Seawater and an Oceanic Atmosphere. Analytical Chemistry, 2019, 91, 10484-10491.	6.5	6
77	Miniaturized crossflow ion transfer device for post-column enrichment in ion chromatography. Talanta, 2020, 216, 120989.	5.5	6
78	Long-Term and Mobile Monitoring of Atmospheric Sulfur Dioxide and Hydrogen Sulfide at Mt. Aso and Kumamoto City. Bunseki Kagaku, 2006, 55, 109-115.	0.2	6
79	Investigation of arsenic removal in batch wise water treatments by means of sequential hydride generation flow injection analysis. Chemosphere, 2008, 72, 1517-1523.	8.2	5
80	Surface modified annular wet denuder for the collection of water-soluble trace gases. Analytical Methods, 2013, 5, 6071.	2.7	5
81	Electrodialytic Handling of Radioactive Metal Ions for Preparation of Tracer Reagents. Analytical Chemistry, 2020, 92, 14953-14958.	6.5	5
82	Biogenic Diamines and Their Amide Derivatives Are Present in the Forest Atmosphere and May Play a Role in Particle Formation. ACS Earth and Space Chemistry, 2022, 6, 421-430.	2.7	5
83	Down-Sizing in Analytical Chemistry. Amperometric gas detection using a micro-ring electrode coupled with a gas-absorbing droplet.. Bunseki Kagaku, 2000, 49, 989-995.	0.2	4
84	Investigation of Daily Variation of Atmospheric Nitrophenols by Means of Inline Preconcentration-HPLC/MS Analysis with Large Volume Injection. Bunseki Kagaku, 2013, 62, 775-783.	0.2	4
85	Online Analysis of Water-soluble Acidic Gases and Anions in Particles at the Southeastern Foot of Mt. Fuji. Bunseki Kagaku, 2021, 70, 65-69.	0.2	4
86	Electrochemical Flow Enzyme Immunoassay by Means of a Needle-Shaped Sampler/Reactor.. Analytical Sciences, 2003, 19, 155-158.	1.6	3
87	Dynamic Evaluation on Hydrogen Sulfide Adsorption Properties of Solid Adsorbents Using Their 'Sink Efficiencies' - in Case of Desulfurization by Limonite -. Bunseki Kagaku, 2011, 60, 641-646.	0.2	3
88	Leaching behavior of arsenite and arsenate from the contaminated sediment by the effect of phosphate ion under anaerobic conditions. Environmental Earth Sciences, 2015, 74, 737-743.	2.7	3
89	Humic-like substances global levels and extraction methods in aerosols. Environmental Chemistry Letters, 2019, 17, 1023-1029.	16.2	3
90	Determination of oxoanions and water-soluble species of arsenic, selenium, antimony, vanadium, and chromium eluted in water from airborne fine particles (PM_{2.5}): effect of acid and transition metal content of particles on heavy metal elution. Environmental Sciences: Processes and Impacts, 2020, 22, 1514-1524.	3.5	3

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91	Electrodialytic Enrichment and Matrix Conversion for the Determination of Trace Metals in Ultra-Pure Water. ACS Omega, 2022, 7, 14082-14088.	3.5	3
92	Ultra-sensitive Trace-Water Optical Sensor with In situ- synthesized Metalâ€“Organic Framework in Glass Paper. Analytical Sciences, 2018, 34, 495-500.	1.6	2
93	Electrodialytic Universal Synthesis of Highly Pure and Mixed Ionic Liquids. ACS Omega, 0, , .	3.5	2
94	Measurement of association constants between metal ions and porphyrin or metalloporphyrins before their complexation or replacement reaction using a hydrophobic resin column.. Bunseki Kagaku, 1996, 45, 659-665.	0.2	1
95	Development of Micro Gas Analysis System and Its Applications to Environmental Analysis. Bunseki Kagaku, 2014, 63, 873-883.	0.2	1
96	Identification of Volatile Organic Compounds from Pollens for Pollen Scattering Markers Using Thermal Desorption-GC/MS. Bunseki Kagaku, 2018, 67, 323-331.	0.2	1
97	Universal Detection Methods in Ion Chromatography. Bunseki Kagaku, 2019, 68, 153-162.	0.2	1
98	On-line analysis of free-tropospheric water-soluble acidic gases and particulate anions on the summit of Mt. Fuji, Japan. Atmospheric Environment, 2022, 273, 118977.	4.1	1
99	Rapid Flow-Based System for Separation of Radioactive Metals by Selective Complex Formation. Analytical Chemistry, 2021, 93, 17069-17075.	6.5	1
100	The Interplay Between Dimethyl Sulfide (DMS) and Methane (CH4) in a Coral Reef Ecosystem. Frontiers in Marine Science, 0, 9, .	2.5	1
101	Electrodialytic Matrices Isolation for Determination of Heavy Metals in Soil Extracts by Anodic Stripping Voltammetry. Bunseki Kagaku, 2018, 67, 761-766.	0.2	0
102	Measurement Device for Ambient Carbonyl Sulfide by Means of Catalytic Reduction Followed by Wet Scrubbing/Fluorescence Detection. ACS Omega, 2020, 5, 25704-25711.	3.5	0
103	Indirect Potentiometric pH Detection of Weak Acids with Absolute Quantitation by a Theoretical Approach. Analytical Chemistry, 2021, 93, 12305-12311.	6.5	0
104	Highly Efficient Separation of Ultratrace Radioactive Copper Using a Flow Electrolysis Cell. ACS Omega, 2022, 7, 15779-15785.	3.5	0