Makoto Taniguchi

List of Publications by Year
in descending order

139 papers	8,807 citations	61857 43 h-index	43802 91 g-index
141 all docs	141 docs citations	141 times ranked	7395 citing authors

#	Article	IF	Citations
1	Ground water and climate change. Nature Climate Change, 2013, 3, 322-329.	8.1	1,513
2	Groundwater and pore water inputs to the coastal zone. Biogeochemistry, 2003, 66, 3-33.	1.7	824
3	Beneath the surface of global change: Impacts of climate change on groundwater. Journal of Hydrology, 2011, 405, 532-560.	2.3	796
4	Investigation of submarine groundwater discharge. Hydrological Processes, 2002, 16, 2115-2129.	1.1	569
5	Measurement and significance of the direct discharge of groundwater into the coastal zone. Journal of Sea Research, 2001, 46, 109-116.	0.6	250
6	Groundwater sustainability strategies. Nature Geoscience, 2010, 3, 378-379.	5.4	213
7	Towards Sustainable Groundwater Use: Setting Longâ€Term Goals, Backcasting, and Managing Adaptively. Ground Water, 2012, 50, 19-26.	0.7	208
8	Methods of the Water-Energy-Food Nexus. Water (Switzerland), 2015, 7, 5806-5830.	1.2	171
9	Submarine Groundwater Discharge: Updates on Its Measurement Techniques, Geophysical Drivers, Magnitudes, and Effects. Frontiers in Environmental Science, 2019, 7, .	1.5	158
10	Tidal effects on submarine groundwater discharge into the ocean. Geophysical Research Letters, 2002, 29, 2-1.	1.5	151
11	Evaluation of vertical groundwater fluxes and thermal properties of aquifers based on transient temperature-depth profiles. Water Resources Research, 1993, 29, 2021-2026.	1.7	146
12	Continuous Measurements of Ground-Water Seepage Using an Automatic Seepage Meter. Ground Water, 1993, 31, 675-679.	0.7	143
13	Spatial and temporal distributions of submarine groundwater discharge rates obtained from various types of seepage meters at a site in the Northeastern Gulf of Mexico. Biogeochemistry, 2003, 66, 35-53.	1.7	122
14	Radon and radium isotope assessment of submarine groundwater discharge in the Yellow River delta, China. Journal of Geophysical Research, 2008, 113, .	3.3	117
15	Combined Effects of Urbanization and Global Warming on Subsurface Temperature in Four Asian Cities. Vadose Zone Journal, 2007, 6, 591-596.	1.3	114
16	Assessing methodologies for measuring groundwater discharge to the ocean. Eos, 2002, 83, 117.	0.1	105
17	Urbanization and subsurface environmental issues: An attempt at DPSIR model application in Asian cities. Science of the Total Environment, 2009, 407, 3089-3104.	3.9	105
18	Significance of stemflow in groundwater recharge. 1: Evaluation of the stemflow contribution to recharge using a mass balance approach. Hydrological Processes, 1996, 10, 71-80.	1.1	101

#	Article	IF	Citations
19	Detecting urbanization effects on surface and subsurface thermal environment â€" A case study of Osaka. Science of the Total Environment, 2009, 407, 3142-3152.	3.9	97
20	Groundwater-derived nutrient inputs to the Upper Gulf of Thailand. Continental Shelf Research, 2007, 27, 176-190.	0.9	95
21	Effects of human activities and urbanization on groundwater environments: An example from the aquifer system of Tokyo and the surrounding area. Science of the Total Environment, 2009, 407, 3165-3172.	3.9	94
22	Nitrate pollution of groundwater in the Yellow River delta, China. Hydrogeology Journal, 2007, 15, 1605-1614.	0.9	89
23	Urban warming trends in several large Asian cities over the last 100Âyears. Science of the Total Environment, 2009, 407, 3112-3119.	3.9	88
24	Multiple isotope (H, O, N, S and Sr) approach elucidates complex pollution causes in the shallow groundwaters of the Taipei urban area. Journal of Hydrology, 2011, 397, 23-36.	2.3	81
25	Dynamics of submarine groundwater discharge and freshwater-seawater interface. Journal of Geophysical Research, 2006, 111, .	3.3	75
26	Disturbances of temperature-depth profiles due to surface climate change and subsurface water flow: 2. An effect of step increase in surface temperature caused by forest clearing in southwest western Australia. Water Resources Research, 1999, 35, 1519-1529.	1.7	69
27	Submarine groundwater discharge in Osaka Bay, Japan. Limnology, 2004, 5, 25-32.	0.8	63
28	Measurements of submarine groundwater discharge rates by a continuous heat-type automated seepage meter in Osaka Bay, Japan. Journal of Groundwater Hydrology, 2001, 43, 271-277.	0.1	62
29	Determination of transport rates in the Yellow Riverâ€"Bohai Sea mixing zone via natural geochemical tracers. Continental Shelf Research, 2008, 28, 2700-2707.	0.9	58
30	Erratum to â€œSources of nitrate and ammonium contamination in groundwater under developing Asian megacitiesâ€• Science of the Total Environment, 2009, 407, 3219-3231.	3.9	57
31	Effects of intensive urbanization on the intrusion of shallow groundwater into deep groundwater: Examples from Bangkok and Jakarta. Science of the Total Environment, 2008, 404, 401-410.	3.9	55
32	Significance of stemflow in groundwater recharge. 2: A cylindrical infiltration model for evaluating the stemflow contribution to groundwater recharge. Hydrological Processes, 1996, 10, 81-88.	1.1	54
33	Seasonal Changes in Submarine Groundwater Discharge and Associated Nutrient Transport into a Tideless Semi-enclosed Embayment (Obama Bay, Japan). Estuaries and Coasts, 2016, 39, 13-26.	1.0	54
34	Transient effects of surface temperature and groundwater flow on subsurface temperature in Kumamoto Plain, Japan. Physics and Chemistry of the Earth, 2003, 28, 477-486.	1.2	53
35	Potential Impacts of Climate Change and Human Activity on Subsurface Water Resources. Vadose Zone Journal, 2007, 6, 531-532.	1.3	51
36	Evaluations of groundwater discharge rates from subsurface temperature in Cockburn Sound, Western Australia. Biogeochemistry, 2003, 66, 111-124.	1.7	49

#	Article	IF	Citations
37	Submarine groundwater discharge measured by seepage meters in sicilian coastal waters. Continental Shelf Research, 2006, 26, 835-842.	0.9	49
38	Anthropogenic effects on the subsurface thermal and groundwater environments in Osaka, Japan and Bangkok, Thailand. Science of the Total Environment, 2009, 407, 3153-3164.	3.9	49
39	Evaluation of time-space distributions of submarine ground water discharge. Ground Water, 2005, 43, 336-342.	0.7	48
40	Effects of urbanization and groundwater flow on the subsurface temperature in Osaka, Japan. Physics of the Earth and Planetary Interiors, 2005, 152, 305-313.	0.7	47
41	Groundwater Discharge as an Important Land-Sea Pathway into Manila Bay, Philippines. Journal of Coastal Research, 2008, 1, 15-24.	0.1	47
42	Submarine groundwater discharge in LÃ¼tzow-Holm Bay, Antarctica. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	46
43	The contribution of human activities to subsurface environment degradation in Greater Jakarta Area, Indonesia. Science of the Total Environment, 2009, 407, 3129-3141.	3.9	44
44	Seepage rate variability in Florida Bay driven by Atlantic tidal height. Biogeochemistry, 2003, 66, 187-202.	1.7	43
45	Reconstruction of the thermal environment evolution in urban areas from underground temperature distribution. Science of the Total Environment, 2009, 407, 3120-3128.	3.9	43
46	Application of multi-isotope ratios to study the source and quality of urban groundwater in Metro Manila, Philippines. Applied Geochemistry, 2010, 25, 900-909.	1.4	42
47	Water-Energy-Food Nexus in the Asia-Pacific Region. Journal of Hydrology: Regional Studies, 2017, 11, 1-8.	1.0	40
48	Evaluating Ground Waterâ€“Sea Water Interactions via Resistivity and Seepage Meters. Ground Water, 2007, 45, 729-735.	0.7	39
49	Spatial Distribution of Submarine Groundwater Discharge and Associated Nutrients within a Local Coastal Area. Environmental Science & Technology, 2012, 46, 5319-5326.	4.6	39
50	Food-centric interlinkages in agricultural food-energy-water nexus under climate change and irrigation management. Resources, Conservation and Recycling, 2020, 163, 105099.	5.3	39
51	Direct measurements of submarine groundwater discharge (SGD) over a fractured rock aquifer in Flamengo Bay Brazil. Estuarine, Coastal and Shelf Science, 2008, 76, 466-472.	0.9	38
52	Submarine groundwater discharge from the Yellow River Delta to the Bohai Sea, China. Journal of Geophysical Research, 2008, 113, .	3.3	38
53	Stable isotope studies of precipitation and river water in the Lake Biwa basin, Japan. Hydrological Processes, 2000, 14, 539-556.	1.1	37
54	Evaluations of the saltwater-groundwater interface from borehole temperature in a coastal region. Geophysical Research Letters, 2000, 27, 713-716.	1.5	37

#	Article	IF	Citations
55	An Effect of Seiche on Groundwater Seepage Rate into Lake Biwa, Japan. Water Resources Research, 1996, 32, 333-338.	1.7	36
56	Human impacts on groundwater flow and contamination deduced by multiple isotopes in Seoul City, South Korea. Science of the Total Environment, 2009, 407, 3189-3197.	3.9	36
57	Estimated Recharge Rates From Groundwater Temperatures In The Nara Basin, Japan. Hydrogeology Journal, 1994, 2, 7-14.	0.9	35
58	Spatial variability of submarine groundwater discharge, Ubatuba, Brazil. Estuarine, Coastal and Shelf Science, 2008, 76, 493-500.	0.9	35
59	Effects of urbanization and groundwater flow on subsurface temperature in three megacities in Japan. Journal of Geophysics and Engineering, 2005, 2, 320-325.	0.7	34
60	Hydrogeological constraint on nitrate and arsenic contamination in Asian metropolitan groundwater. Hydrological Processes, 2011, 25, 2742-2754.	1.1	34
61	Integrated research on subsurface environments in Asian urban areas. Science of the Total Environment, 2008, 404, 377-392.	3.9	32
62	Groundwater Dynamics of Fongafale Islet, Funafuti Atoll, Tuvalu. Ground Water, 2012, 50, 639-644.	0.7	32
63	Water, energy, and food security in the Asia Pacific region. Journal of Hydrology: Regional Studies, 2017, 11, 9-19.	1.0	30
64	Unsustainable groundwater use for global food production and related international trade. Global Sustainability, 2019, 2, .	1.6	29
65	Use of Temperature Profiles and Stable Isotopes to Trace Flow Lines: Nagaoka Area, Japan. Ground Water, 2004, 42, 83-91.	0.7	26
66	Groundwater flow system under a rapidly urbanizing coastal city as determined by hydrogeochemistry. Journal of Asian Earth Sciences, 2011, 40, 226-239.	1.0	25
67	Groundwater age rejuvenation caused by excessive urban pumping in Jakarta area, Indonesia. Hydrological Processes, 2013, 27, 2591-2604.	1.1	25
68	Different isotopic evolutionary trends of Î´34S and Î´18O compositions of dissolved sulfate in an anaerobic deltaic aquifer system. Applied Geochemistry, 2014, 46, 30-42.	1.4	24
69	Identification of changes in subsurface temperature and groundwater flow after the 2016 Kumamoto earthquake using long-term well temperatureâ€“depth profiles. Journal of Hydrology, 2020, 582, 124530.	2.3	24
70	Submarine groundwater discharge and seawater circulation in a subterranean estuary beneath a tidal flat. Hydrological Processes, 2011, 25, 2755-2763.	1.1	23
71	Comparing anthropogenic heat input and heat accumulation in the subsurface of Osaka, Japan. Science of the Total Environment, 2018, 643, 1127-1136.	3.9	23
72	Increase in Fish Production Through Bottom-Up Trophic Linkage in Coastal Waters Induced by Nutrients Supplied via Submarine Groundwater. Frontiers in Environmental Science, 2019, 7, .	1.5	21

#	Article	IF	Citations
73	Estimations of the past groundwater recharge rate from deep borehole temperature data. Catena, 2002, 48, 39-51.	2.2	20
74	Higher species richness and abundance of fish and benthic invertebrates around submarine groundwater discharge in Obama Bay, Japan. Journal of Hydrology: Regional Studies, 2017, 11, 139-146.	1.0	20
75	High-resolution mapping and time-series measurements of 222Rn concentrations and biogeochemical properties related to submarine groundwater discharge along the coast of Obama Bay, a semi-enclosed sea in Japan. Progress in Earth and Planetary Science, 2017, 4, .	1.1	20
76	An Analysis of the Water-Energy-Food-Land Requirements and CO2 Emissions for Food Security of Rice in Japan. Sustainability, 2018, 10, 3354.	1.6	20
77	Shallow subsurface thermal regimes in major plains in Japan with reference to recent surface warming. Physics and Chemistry of the Earth, 2003, 28, 457-466.	1.2	19
78	Underground sources of nutrient contamination to surface waters in Bangkok, Thailand. Science of the Total Environment, 2009, 407, 3198-3207.	3.9	19
79	Scale dependence of controls on groundwater vulnerability in the waterâ€“energyâ€“food nexus, California Coastal Basin aquifer system. Journal of Hydrology: Regional Studies, 2017, 11, 126-138.	1.0	18
80	Recovery of Lost Nexus Synergy via Payment for Environmental Services in Kumamoto, Japan. Frontiers in Environmental Science, 2019, 7, .	1.5	18
81	MECHANISM OF GROUNDWATER TEMPERATURE FORMATION IN NAGAOKA PLAIN. Chirigaku Hyoron, 1987, 60, 725-738.	0.0	17
82	Supporting collaboration in interdisciplinary research of waterâ€“energyâ€“food nexus by means of ontology engineering. Journal of Hydrology: Regional Studies, 2017, 11, 31-43.	1.0	15
83	Monitoring groundwater variation by satellite and implications for in-situ gravity measurements. Science of the Total Environment, 2009, 407, 3173-3180.	3.9	14
84	Alteration of the groundwater thermal regime caused by advection. Hydrological Sciences Journal, 1985, 30, 343-360.	1.2	13
85	Evaluations of spatial distribution of submarine groundwater discharge. Geophysical Research Letters, 2006, 33, .	1.5	13
86	Optimizing the Water-Energy-Food Nexus in the Asia-Pacific Ring of Fire. Eos, 2013, 94, 435-435.	0.1	12
87	Erratum to â€œIntegrated research on subsurface environments in Asian urban areasâ€• Science of the Total Environment, 2009, 407, 3076-3088.	3.9	11
88	Evaluating the Tradeoffs between Groundwater Pumping for Snow-Melting and Nearshore Fishery Productivity in Obama City, Japan. Water (Switzerland), 2018, 10, 1556.	1.2	11
89	Estimations of surface temperature and subsurface heat flux following forest removal in the south-west of Western Australia. Hydrological Processes, 1998, 12, 2205-2216.	1.1	10
90	Mass variation in outcome to high production activity in Kamojang Geothermal Field, Indonesia: A reservoir monitoring with relative and absolute gravimetry. Earth, Planets and Space, 2011, 63, 1157-1167.	0.9	10

#	Article	IF	Citations
91	The first repeated absolute gravity measurement for geothermal monitoring in The Kamojang Geothermal Field, Indonesia. Geothermics, 2015, 53, 114-124.	1.5	10
92	Fresh and Recirculated Submarine Groundwater Discharge Evaluated by Geochemical Tracers and a Seepage Meter at Two Sites in the Seto Inland Sea, Japan. Hydrology, 2018, 5, 61.	1.3	10
93	Analysis of industrial waterâ€“energyâ€“labor nexus zones for economic and resource-based impact assessment. Resources, Conservation and Recycling, 2021, 169, 105483.	5.3	10
94	Analysing the long term reduction in groundwater temperature due to pun pumping. Hydrological Sciences Journal, 1995, 40, 407-421.	1.2	9
95	Tradeoffs in the water-energy- food nexus in the urbanizing Asia-Pacific region. Water International, 2018, 43, 892-903.	0.4	9
96	Isotope Studies of Precipitation, River Water and Groundwater in the HEIFE Area, Northwestern China. Journal of the Meteorological Society of Japan, 1995, 73, 1293-1299.	0.7	8
97	Interaction between Groundwater and Surface Water/Sea Water. Journal of Groundwater Hydrology, 2001, 43, 189-199.	0.1	7
98	Evaluations of subsurface flow for reconstructions of climate change using borehole temperature and isotope data in Kamchatka. Physics of the Earth and Planetary Interiors, 2005, 152, 335-342.	0.7	7
99	Assessment of urban groundwater heat contaminant in Jakarta, Indonesia. Environmental Earth Sciences, 2013, 70, 2033-2038.	1.3	7
100	The economic value of groundwater in Obama. Journal of Hydrology: Regional Studies, 2017, 11, 44-52.	1.0	7
101	Subsurface Water Responses to Land Cover/Use Changes: An Overview. , 1997, , 1-20.		6
102	Hot spring resort development in Laguna Province, Philippines: Challenges in water use regulation. Journal of Hydrology: Regional Studies, 2017, 11, 96-106.	1.0	6
103	Nutrient fluxes from rivers, groundwater, and the ocean into the coastal embayment along the Sanriku ria coast, Japan. Limnology and Oceanography, 2021, 66, 2728-2744.	1.6	6
104	EFFECTS OF SNOW COVER AND INFILTRATED MELTWATER ON SOIL AND GROUNDWATER TEMPERATURE IN AND AROUND NAGAOKA CITY. Chirigaku Hyoron, 1985, 58, 370-384.	0.0	6
105	Changes in Surface and Subsurface Temperatures after Clearing Forest in Western Australia. , 1997, , 139-151.		5
106	Evaluation of the groundwater capture zone for modelling of nutrient discharge. Hydrological Processes, 2001, 15, 1939-1949.	1.1	5
107	Periodical changes of submarine fluid discharge from a deep seafloor, Suiyo Sea Mountain, Japan. Geophysical Research Letters, 2003, 30, .	1.5	5
108	Detection of submarine fresh groundwater discharge and its relation to onshore groundwater flow system. Journal of Groundwater Hydrology, 2003, 45, 133-144.	0.1	5

#	Article	IF	Citations
109	The Basic Act on the Water Cycle with groundwater. Journal of Groundwater Hydrology, 2015, 57, 83-90.	0.1	5
110	A Critical Review of Global Studies on Groundwater. Scale-up of groundwater studies in time and space.. Suimon Mizu Shigen Gakkaishi, 2000, 13, 476-485.	0.1	5
111	Erratum to â€œSources of nitrate and ammonium contamination in groundwater under developing Asian megacitiesâ€•[Science of the Total Environment 404 (2008) 361â€“376]. Science of the Total Environment, 2009, 407, 3218.	3.9	4
112	Identifying social responses to inundation disasters: a humanityâ€“nature interaction perspective. Global Sustainability, 2020, 3, .	1.6	4
113	Significance of stemflow in groundwater recharge. 1: Evaluation of the stemflow contribution to recharge using a mass balance approach. , 1996, 10, 71.		4
114	Subsurface Hydrological Responses to Land Cover and Land Use Changes. , 1997, , .		4
115	A new technique to collect groundwater samples from submarine formations and its application to offshore Kurobe alluvial fan. Journal of Groundwater Hydrology, 2001, 43, 279-287.	0.1	3
116	Erratum to â€œEffects of intensive urbanization on the intrusion of shallow groundwater into deep groundwater: Examples from Bangkok and Jakartaâ€•[Science of the Total Environment 404 (2008) 401â€“410]. Science of the Total Environment, 2009, 407, 3208.	3.9	3
117	What are the Subsurface Environmental Problems?. , 2011, , 3-18.		3
118	Applications of a field absolute gravimeter for monitoring temporal gravity changes. , 2011, , .		2
119	Lacustrine groundwater discharge in southern Laguna de Bay, Philippines. Global Environmental Studies, 2018, , 87-100.	0.2	2
120	Asian Groundwater Perspectives on Global Change and Future Earth. , 0, , 179-186.		2
121	Estimation of submarine groundwater discharge and its impact on the nutrient environment at Kamaiso beach, Yamagata, Japan. Nippon Suisan Gakkaishi, 2019, 85, 30-39.	0.0	2
122	Detecting Groundwater Inputs into Bangkok Canals Via Radon and Thoron Measurements. , 2011, , 143-158.		2
123	Groundwater flow and subsurface thermal regime. , 2000, , 485-488.		2
124	Challenges for future hydrology: From the view points of interdisciplinary and transdisciplinary studies. Journal of Japanese Association of Hydrological Sciences, 2018, 48, 133-146.	0.2	2
125	Session focuses on subsurface thermal studies. Eos, 2000, 81, 546-552.	0.1	1
126	Climate change and groundwater. Journal of Groundwater Hydrology, 2005, 47, 5-17.	0.1	1

#	Article	IF	Citations
127	Application of A10 Absolute Gravimeter for Monitoring Land Subsidence in Jakarta, Indonesia. International Association of Geodesy Symposia, 2016, , 127-134.	0.2	1
128	Editorial: Submarine Groundwater Discharge: Impacts on Coastal Ecosystem by Hidden Water and Dissolved Materials. Frontiers in Environmental Science, 2021, 8, .	1.5	1
129	Significance of stemflow in groundwater recharge. 2: A cylindrical infiltration model for evaluating the stemflow contribution to groundwater recharge. Hydrological Processes, 1996, 10, 81-88.	1.1	1
130	Coupled water and heat studies in subsurface environment. Journal of Groundwater Hydrology, 2010, 52, 371-379.	0.1	1
131	Groundwater Flow and Mass/Heat Transports. Journal of Japanese Association of Hydrological Sciences, 1998, 28, 1-12.	0.2	1
132	Effects of Soil Properties on Evaporation and Soil Moisture Movement at a Playa under Arid Conditions. Chirigaku Hyoron, 1999, 72, 215-226.	0.0	1
133	A New Linkage Toward a Sustainable Society in COVID-19 Under the Global Environmental Change. Trends in the Sciences, 2021, 26, 11_72-11_77.	0.0	1
134	Interaction between Groundwater and Surface Water/Sea Water. Journal of Groundwater Hydrology, 2001, 43, 343-351.	0.1	0
135	â...-1. Research trends on the boundary between Hydrology and Fisheries. Nippon Suisan Gakkaishi, 2016, 82, 806-806.	0.0	0
136	Assessment of Collaboration Process in Interdisciplinary Research of Water-energy-food Nexus by Means of Ontology Engineering. Global Environmental Studies, 2018, , 301-320.	0.2	0
137	Directions and trends of international research on groundwater for sustainability. Journal of Groundwater Hydrology, 2020, 62, 5-13.	0.1	0
138	Water-Energy-Food Nexus KAN: Current Status and Issues of Nexus Knowledge Action Network. Trends in the Sciences, 2018, 23, 4_71-4_74.	0.0	0
139	Water and Related Nexus as Sustainable Basis in Anthropocene: Water Diversity and Integrated Research. Trends in the Sciences, 2022, 27, 1_17-1_21.	0.0	0