Hikaru Komatsu

List of Publications by Year
in descending order

101 papers	2,841 citations	147566 31 h-index	214527 47 g-index
101 all docs	101 docs citations	101 times ranked	2319 citing authors

#	Article	IF	Citations
1	Annual water balance and seasonality of evapotranspiration in a Bornean tropical rainforest. Agricultural and Forest Meteorology, 2005, 128, 81-92.	1.9	166
2	Do coniferous forests evaporate more water than broad-leaved forests in Japan?. Journal of Hydrology, 2007, 336, 361-375.	2.3	115
3	Ten-year evapotranspiration estimates in a Bornean tropical rainforest. Agricultural and Forest Meteorology, 2011, 151, 1183-1192.	1.9	105
4	A new global policy regime founded on invalid statistics? Hanushek, Woessmann, PISA, and economic growth. Comparative Education, 2017, 53, 166-191.	1.8	101
5	Effect of forest structure on the spatial variation in soil respiration in a Bornean tropical rainforest. Agricultural and Forest Meteorology, 2009, 149, 1666-1673.	1.9	87
6	Forest categorization according to dry-canopy evaporation rates in the growing season: comparison of the Priestley-Taylor coefficient values from various observation sites. Hydrological Processes, 2005, 19, 3873-3896.	1.1	82
7	Effects of sample size on sap flux-based stand-scale transpiration estimates. Tree Physiology, 2010, 30, 129-138.	1.4	72
8	Inter-annual variation in growing season length of a tropical seasonal forest in northern Thailand. Forest Ecology and Management, 2006, 229, 333-339.	1.4	67
9	Relationships between soil CO2 concentration and CO2 production, temperature, water content, and gas diffusivity: implications for field studies through sensitivity analyses. Journal of Forest Research, 2006, 11, 41-50.	0.7	66
10	The effect of converting a native broad-leaved forest to a coniferous plantation forest on annual water yield: A paired-catchment study in northern Japan. Forest Ecology and Management, 2008, 255, 880-886.	1.4	62
11	Azimuthal and radial variations in sap flux density and effects on stand-scale transpiration estimates in a Japanese cedar forest. Tree Physiology, 2013, 33, 550-558.	1.4	61
12	A model to estimate annual forest evapotranspiration in Japan from mean annual temperature. Journal of Hydrology, 2008, 348, 330-340.	2.3	59
13	Stand-scale transpiration estimates in a Moso bamboo forest: II. Comparison with coniferous forests. Forest Ecology and Management, 2010, 260, 1295-1302.	1.4	59
14	â€˜Better policies for better livesâ€™?: constructive critique of the OECDâ€™s (mis)measure of student well-being. Journal of Education Policy, 2020, 35, 258-282.	2.1	56
15	Modeling CO2exchange over a Bornean tropical rain forest using measured vertical and horizontal variations in leaf-level physiological parameters and leaf area densities. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	55
16	Canopy conductance for a Moso bamboo (Phyllostachys pubescens) forest in western Japan. Agricultural and Forest Meteorology, 2012, 156, 111-120.	1.9	52
17	Culture and the Independent Self: Obstacles to environmental sustainability?. Anthropocene, 2019, 26, 100198.	1.6	50
18	Relationship between annual rainfall and interception ratio for forests across Japan. Forest Ecology and Management, 2008, 256, 1189-1197.	1.4	49

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19	A PISA Paradox? An Alternative Theory of Learning as a Possible Solution for Variations in PISA Scores. Comparative Education Review, 2017, 61, 269-297.	0.6	49
20	Stand-scale transpiration estimates in a Moso bamboo forest: (I) Applicability of sap flux measurements. Forest Ecology and Management, 2010, 260, 1287-1294.	1.4	48
21	How to make Lesson Study work in America and worldwide: A Japanese perspective on the onto-cultural basis of (teacher) education. Research in Comparative and International Education, 2017, 12, 398-430.	0.8	47
22	Estimation of annual forest evapotranspiration from a coniferous plantation watershed in Japan (1): Water use components in Japanese cedar stands. Journal of Hydrology, 2014, 508, 66-76.	2.3	46
23	Student-Centered Learning and Sustainability: Solution or Problem?. Comparative Education Review, 2021, 65, 6-33.	0.6	46
24	Less than 20-min time lags between transpiration and stem sap flow in emergent trees in a Bornean tropical rainforest. Agricultural and Forest Meteorology, 2008, 148, 1181-1189.	1.9	44
25	Effect of strip thinning on rainfall interception in a Japanese cypress plantation. Journal of Hydrology, 2015, 525, 607-618.	2.3	40
26	Comparative modeling of the effects of intensive thinning on canopy interception loss in a Japanese cedar (Cryptomeria japonica D. Don) forest of western Japan. Agricultural and Forest Meteorology, 2015, 214-215, 148-156.	1.9	38
27	Transpiration from aCryptomeria japonica plantation, part 2: responses of canopy conductance to meteorological factors. Hydrological Processes, 2006, 20, 1321-1334.	1.1	37
28	Azimuthal variations of sap flux density within Japanese cypress xylem trunks and their effects on tree transpiration estimates. Journal of Forest Research, 2010, 15, 398-403.	0.7	36
29	Relationship between canopy height and the reference value of surface conductance for closed coniferous stands. Hydrological Processes, 2003, 17, 2503-2512.	1.1	33
30	Rainfall interception in a moso bamboo (Phyllostachys pubescens) forest. Journal of Forest Research, 2009, 14, 111-116.	0.7	33
31	Simple modeling of the global variation in annual forest evapotranspiration. Journal of Hydrology, 2012, 420-421, 380-390.	2.3	33
32	Living on borrowed time: rethinking temporality, self, nihilism, and schooling. Comparative Education, 2016, 52, 177-201.	1.8	32
33	Influences of canopy structure and physiological traits on flux partitioning between understory and overstory in an eastern Siberian boreal larch forest. Ecological Modelling, 2011, 222, 1479-1490.	1.2	30
34	Standâ€scale transpiration of two Moso bamboo stands with different culm densities. Ecohydrology, 2015, 8, 450-459.	1.1	30
35	Seasonal Trend in the Occurrence of Nocturnal Drainage Flow on a Forested Slope Under a Tropical Monsoon Climate. Boundary-Layer Meteorology, 2003, 106, 573-592.	1.2	27
36	Increasing annual runoffâ€"broadleaf or coniferous forests?. Hydrological Processes, 2011, 25, 302-318.	1.1	27

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37	Models to predict changes in annual runoff with thinning and clearcutting of Japanese cedar and cypress plantations in Japan. Hydrological Processes, 2015, 29, 5120-5134.	1.1	27
38	A general method of parameterizing the big-leaf model to predict the dry-canopy evaporation rate of individual coniferous forest stands. Hydrological Processes, 2004, 18, 3019-3036.	1.1	26
39	A model relating transpiration for Japanese cedar and cypress plantations with stand structure. Forest Ecology and Management, 2014, 334, 301-312.	1.4	25
40	Moso-bamboo Forests in Japan:. Journal of the Japanese Forest Society, 2014, 96, 351-361.	0.1	24
41	Differences in sap fluxâ€based stand transpiration between upper and lower slope positions in a Japanese cypress plantation watershed. Ecohydrology, 2016, 9, 1105-1116.	1.1	24
42	Reduction in soil water availability and tree transpiration in a forest with pedestrian trampling. Agricultural and Forest Meteorology, 2007, 146, 107-114.	1.9	23
43	Tropical tree water use under seasonal waterlogging and drought in central Cambodia. Journal of Hydrology, 2014, 515, 81-89.	2.3	23
44	Modeling of evapotranspiration changes with forest management practices: A genealogical review. Journal of Hydrology, 2020, 585, 124835.	2.3	23
45	Characteristics of canopy interception loss in Moso bamboo forests of Japan. Hydrological Processes, 2013, 27, 2041-2047.	1.1	22
46	Changes in canopy transpiration due to thinning of a Cryptomeria japonica plantation. Hydrological Research Letters, 2013, 7, 60-65.	0.3	22
47	Reimagining Modern Education: Contributions from Modern Japanese Philosophy and Practice?. ECNU Review of Education, 2020, 3, 20-45.	1.3	21
48	Towards (comparative) educational research for a finite future. Comparative Education, 2020, 56, 190-217.	1.8	21
49	Differences in Annual Precipitation Amounts Between Forested Area, Agricultural Area, and Urban Area in Japan. Suimon Mizu Shigen Gakkaishi, 2005, 18, 435-440.	0.1	21
50	Interannual variation in transpiration onset and its predictive indicator for a tropical deciduous forest in northern Thailand based on 8â€year sapâ€flow records. Ecohydrology, 2011, 4, 225-235.	1.1	20
51	Is exam hell the cause of high academic achievement in East Asia? The case of Japan and the case for transcending stereotypes. British Educational Research Journal, 2018, 44, 802-826.	1.4	20
52	Water resource management in Japan: Forest management or dam reservoirs?. Journal of Environmental Management, 2010, 91, 814-823.	3.8	19
53	A preliminary investigation of surface runoff and soil properties in a moso-bamboo (Phyllostachys) Tj ETQq1 1 0.784314 rgBT /Overlock	0.3	19
54	Scaling-up from tree to stand transpiration for a warm-temperate multi-specific broadleaved forest with a wide variation in stem diameter. Journal of Forest Research, 2016, 21, 161-169.	0.7	18

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55	Carbon allocation in a Bornean tropical rainforest without dry seasons. Journal of Plant Research, 2013, 126, 505-515.	1.2	17
56	Stereotypes as Anglo-American exam ritual? Comparisons of studentsâ€™ exam anxiety in East Asia, America, Australia, and the United Kingdom. Oxford Review of Education, 2018, 44, 730-754.	1.4	16
57	Changes in peak flow with decreased forestry practices: Analysis using watershed runoff data. Journal of Environmental Management, 2011, 92, 1528-1536.	3.8	15
58	Rearticulating PISA. Globalisation, Societies and Education, 2021, 19, 245-258.	1.9	15
59	Observation of Canopy Interception Loss in an Abandoned Coniferous Plantation.. Journal of the Japanese Forest Society, 2010, 92, 54-59.	0.1	15
60	Changes in low flow with the conversion of a coniferous plantation to a broadâ€leaved forest in a summer precipitation region, Japan. Ecohydrology, 2009, 2, 164-172.	1.1	14
61	Did the shift to computer-based testing in PISA 2015 affect reading scores? A View from East Asia. Compare, 2017, 47, 616-623.	1.5	14
62	Difference between the transpiration rates of Moso bamboo (<i>Phyllostachys pubescens</i>) and Japanese cedar (<i>Cryptomeria japonica</i>) forests in a subtropical climate in Taiwan. Ecological Research, 2017, 32, 835-843.	0.7	13
63	Is knowledge capital theory degenerate? PIAAC, PISA, and economic growth. Compare, 2021, 51, 240-258.	1.5	13
64	Classification of Vertical Wind Speed Profiles Observed Above a Sloping Forest at Nighttime Using the Bulk Richardson Number. Boundary-Layer Meteorology, 2005, 115, 205-221.	1.2	12
65	Interannual variation of evapotranspiration in an eastern Siberian larch forest. Hydrological Processes, 2012, 26, 2360-2368.	1.1	12
66	Does measuring azimuthal variations in sap flux lead to more reliable stand transpiration estimates?. Hydrological Processes, 2016, 30, 2129-2137.	1.1	12
67	Relationship between stem diameter and transpiration for <scp>Japanese</scp> cypress trees: Implications for estimating canopy transpiration. Ecohydrology, 2019, 12, e2097.	1.1	12
68	Spatial and temporal variations in summer precipitation in Japanese mountain areas. Hydrological Processes, 2010, 24, 1844-1855.	1.1	11
69	A simple model to estimate monthly forest evapotranspiration in Japan from monthly temperature. Hydrological Processes, 2010, 24, 1896-1911.	1.1	11
70	Are measurements from excised leaves suitable for modeling diurnal patterns of gas exchange of intact leaves?. Hydrological Processes, 2011, 25, 2924-2930.	1.1	11
71	Contribution of lianas to communityâ€level canopy transpiration in a warmâ€temperate forest. Functional Ecology, 2017, 31, 1690-1699.	1.7	11
72	Applicability of Sap Flux Measurements in Moso Bamboo (Phyllostachys pubescens): Relationship between Water Absorption and Whole-tree Water Use Utilizing Granier Sensor Sap Flux Measurements.. Journal of the Japanese Forest Society, 2009, 91, 366-370.	0.1	10

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73	Allometric Equations between Stem Diameter and Sapwood Area of Japanese Cedar and Japanese Cypress for Stand Transpiration Estimates Using Sap Flow Measurement. Suimon Mizu Shigen Gakkaishi, 2011, 24, 261-270.	0.1	10
74	Canopy transpiration in two Japanese cypress forests with contrasting structures. Journal of Forest Research, 2015, 20, 464-474.	0.7	10
75	Using airborne LiDAR to determine total sapwood area for estimating stand transpiration in plantations. Hydrological Processes, 2015, 29, 5071-5087.	1.1	10
76	Effects of Coniferous Plantation Thinning on Annual Interception Evaporation:. Journal of the Japanese Forest Society, 2008, 91, 94-103.	0.1	9
77	The effects of annual precipitation and mean air temperature on annual runoff in global forest regions. Climatic Change, 2011, 108, 401-410.	1.7	9
78	Spatial and temporal variations in rainfall characteristics in mountainous and lowland areas in Taiwan. Hydrological Processes, 2013, 27, 2651-2658.	1.1	9
79	Implications of leaf-scale physiology for whole tree transpiration under seasonal flooding and drought in central Cambodia. Agricultural and Forest Meteorology, 2014, 198-199, 221-231.	1.9	9
80	Refuting the OECD-World Bank development narrative: was East Asiaâ€™s â€˜Economic Miracleâ€™ primarily driven by education quality and cognitive skills?. Globalisation, Societies and Education, 2019, 17, 101-116.	1.9	9
81	Relationship Between Tree Height and Transpiration for Individual Japanese Cypress (Chamaecyparis) Tj ETQq1 1 0.784314 rgBT /Overlo	0.1	8
82	Modeling evapotranspiration changes with managing Japanese cedar and cypress plantations. Forest Ecology and Management, 2020, 475, 118395.	1.4	8
83	Social mindfulness for global environmental sustainability?. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	8
84	Seasonal changes of azimuthal, radial, and tree-to-tree variations in sap flux affect stand transpiration estimates in a <i>Cryptomeria japonica</i> forest, central Taiwan. Journal of Forest Research, 2016, 21, 151-160.	0.7	7
85	Incongruity between scientific knowledge and ordinary perceptions of nature: an ontological perspective for forest hydrology in Japan. Journal of Forest Research, 2017, 22, 75-82.	0.7	7
86	Measuring What <i>Really</i> Matters: Education and Large-Scale Assessments in the Time of Climate Crisis. ECNU Review of Education, 2019, 2, 342-346.	1.3	6
87	A Method for Estimating Global Solar Radiation from Daily Maximum and Minimum Temperatures: its Applicability to Japan. Suimon Mizu Shigen Gakkaishi, 2007, 20, 462-469.	0.1	6
88	Relationship between stem density and dry-canopy evaporation rates in coniferous forests. Journal of Hydrology, 2007, 332, 271-275.	2.3	5
89	Sapwood and intermediate wood thickness variation in Japanese cedar: impacts on sapwood area estimates. Hydrological Research Letters, 2015, 9, 35-40.	0.3	5
90	Transpiration in response to wind speed: can apparent leaf-type differences between conifer and broadleaf trees be a practical indicator?. Trees - Structure and Function, 2015, 29, 605-612.	0.9	5

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91	Optimal sap flux sensor allocation for stand transpiration estimates: a non-dimensional analysis. Annals of Forest Science, 2017, 74, 1.	0.8	5
92	What is the best way to represent surface conductance for a range of vegetated sites?. Hydrological Processes, 2007, 21, 1142-1147.	1.1	4
93	Changes in the sapwood area of Japanese cedar and cypress plantations after thinning. Journal of Forest Research, 2015, 20, 43-51.	0.7	4
94	Measuring the Transformation of University Studentsâ€™ Self-Construal for Greater Environmental Sustainability. SAGE Open, 2022, 12, 215824402210798.	0.8	4
95	Rainfall-runoff Processes in Moso-bamboo (Phyllostachys pubescens) Forests : an Observation Result of Overland-flow and Biomat-flow. Suimon Mizu Shigen Gakkaishi, 2011, 24, 360-368.	0.1	3
96	Effects of thinning on canopy transpiration of a dense Moso bamboo stand in Western Japan. Journal of Forest Research, 2019, 24, 285-291.	0.7	3
97	Influences of Forest Recovery on Catchment Runoff:Examinations on Two Catchments With Different Geology. Suimon Mizu Shigen Gakkaishi, 2010, 23, 32-42.	0.1	2
98	Relationship between Nighttime Wind Speeds and Thermal Conditions above a Sloping Forest. Journal of the Meteorological Society of Japan, 2008, 86, 805-815.	0.7	2
99	Is bullying and suicide a problem for East Asia's schools? Evidence from TIMSS and PISA. Discourse, 2020, 41, 310-331.	1.1	1
100	Sensitivity of annual runoff to interannual precipitation variations for forested catchments in Japan. Hydrological Research Letters, 2013, 7, 42-47.	0.3	1
101	Is shadow education the driver of East Asiaâ€™s high performance on comparative learning assessments?. Education Policy Analysis Archives, 0, 28, 67.	0.3	0