Wlodek Tych

List of Publications by Year
in descending order

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74 papers	3,157 citations	186209 28 h-index	161767 54 g-index
78 all docs	78 docs citations	78 times ranked	3137 citing authors

#	Article	IF	Citations
1	In situ high resolution measurements of fluxes of Ni, Cu, Fe, and Mn and concentrations of Zn and Cd in porewaters by DGT. Geochimica Et Cosmochimica Acta, 1995, 59, 4181-4192.	1.6	322
2	Kinetics of metal exchange between solids and solutions in sediments and soils interpreted from DGT measured fluxes. Geochimica Et Cosmochimica Acta, 1998, 62, 2757-2770.	1.6	302
3	Dynamic harmonic regression. Journal of Forecasting, 1999, 18, 369-394.	1.6	254
4	Environmental time series analysis and forecasting with the Captain toolbox. Environmental Modelling and Software, 2007, 22, 797-814.	1.9	226
5	DIFSâ€"a modelling and simulation tool for DGT induced trace metal remobilisation in sediments and soils. Environmental Modelling and Software, 2000, 15, 55-66.	1.9	182
6	Major agricultural changes required to mitigate phosphorus losses under climate change. Nature Communications, 2017, 8, 161.	5.8	121
7	Temporal, Spatial, and Resolution Constraints forin SituSampling Devices Using Diffusional Equilibration:Â Dialysis and DET. Environmental Science & Technology, 1997, 31, 3110-3119.	4.6	102
8	2D DGT induced fluxes in sediments and soils (2D DIFS). Environmental Modelling and Software, 2007, 22, 14-23.	1.9	89
9	Polycyclic Aromatic Hydrocarbons Not Declining in Arctic Air Despite Global Emission Reduction. Environmental Science & Technology, 2019, 53, 2375-2382.	4.6	88
10	Modelling and PIP control of a glasshouse micro-climate. Control Engineering Practice, 1994, 2, 591-604.	3.2	74
11	North Atlantic forcing of moisture delivery to Europe throughout the Holocene. Scientific Reports, 2016, 6, 24745.	1.6	74
12	Sources of suspended sediment within a tropical catchment recovering from selective logging. Hydrological Processes, 2004, 18, 685-701.	1.1	68
13	Title is missing!. Plant Ecology, 2001, 153, 215-229.	0.7	63
14	Changing sources and environmental factors reduce the rates of decline of organochlorine pesticides in the Arctic atmosphere. Atmospheric Chemistry and Physics, 2012, 12, 4033-4044.	1.9	62
15	Resolving the Long-Term Trends of Polycyclic Aromatic Hydrocarbons in the Canadian Arctic Atmosphere. Environmental Science & Technology, 2006, 40, 3217-3222.	4.6	61
16	Long-term trends in atmospheric concentrations of Î±- and Î³-HCH in the Arctic provide insight into the effects of legislation and climatic fluctuations on contaminant levels. Atmospheric Environment, 2008, 42, 8225-8233.	1.9	56
17	An unobserved component model for multi-rate forecasting of telephone call demand: the design of a forecasting support system. International Journal of Forecasting, 2002, 18, 673-695.	3.9	55
18	Estimation of Pore Water Concentrations from DGT Profiles: A Modelling Approach. Aquatic Geochemistry, 1999, 5, 337-355.	1.5	49

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19	Long-term responses of rainforest erosional systems at different spatial scales to selective logging and climatic change. Philosophical Transactions of the Royal Society B: Biological Sciences, 2011, 366, 3340-3353.	1.8	49
20	Sodiumâ€related partial stomatal closure and salt tolerance of Aster tripolium. New Phytologist, 2002, 153, 509-515.	3.5	48
21	Proportional-integral-plus (PIP) design for delta (delta) operator systems Part 2. MIMO systems. International Journal of Control, 1998, 70, 149-168.	1.2	47
22	Theoretical Comparison of How Soil Processes Affect Uptake of Metals by Diffusive Gradients in Thinfilms and Plants. Journal of Environmental Quality, 2006, 35, 1903-1913.	1.0	46
23	An Evaluation of DGT Performance Using a Dynamic Numerical Model. Environmental Science & Technology, 2006, 40, 6368-6376.	4.6	45
24	Temporal Trends of Persistent Organic Pollutants: A Comparison of Different Time Series Models. Environmental Science & Technology, 2012, 46, 3928-3934.	4.6	45
25	Quantitative assessment of soil parameter (KD and TC) estimation using DGT measurements and the 2D DIFS model. Chemosphere, 2008, 71, 795-801.	4.2	39
26	Analysis of Micro-Nutrient Behaviour in the Rhizosphere using a DGT Parameterised Dynamic Plant Uptake Model. Plant and Soil, 2006, 282, 227-238.	1.8	37
27	Characterizing solute transport in undisturbed soil cores using electrical and X-ray tomographic methods. , 1999, 13, 211-221.		34
28	BARUMODEL: Combined Data Based Mechanistic models of runoff response in a managed rainforest catchment. Forest Ecology and Management, 2006, 224, 58-80.	1.4	34
29	One-Dimensional Views of Three-Dimensional Sediments. Environmental Science & Technology, 1999, 33, 2611-2616.	4.6	33
30	First Dynamic Model of Dissolved Organic Carbon Derived Directly from High-Frequency Observations through Contiguous Storms. Environmental Science & Technology, 2014, 48, 13289-13297.	4.6	30
31	Sampling frequency for water quality variables in streams: Systems analysis to quantify minimum monitoring rates. Water Research, 2017, 123, 49-57.	5.3	26
32	Towards the provision of site specific flood warnings using wireless sensor networks. Meteorological Applications, 2009, 16, 57-64.	0.9	25
33	Proportional-integral-plus (PIP) design for delta (delta) operator systems Part 1. SISO systems. International Journal of Control, 1998, 70, 123-147.	1.2	22
34	Sorption of trace metals (Cu, Pb, Zn) by suspended lake particles in artificial (0.005 M NaNO3) and natural (Esthwaite Water) freshwaters. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1997, 120, 205-219.	2.3	21
35	A three-dimensional reactive transport model for sediments, incorporating microniches. Environmental Chemistry, 2008, 5, 218.	0.7	19
36	Understanding small-scale features in DGT measurements in sediments. Environmental Chemistry, 2009, 6, 477.	0.7	17

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37	Identifying step changes in single streamflow and evaporation records due to forest cover change. Hydrological Processes, 2012, 26, 100-116.	1.1	17
38	A Matlab software framework for dynamic model emulation. Environmental Modelling and Software, 2012, 34, 19-29.	1.9	16
39	Strong and recurring seasonality revealed within stream diatom assemblages. Scientific Reports, 2019, 9, 3313.	1.6	16
40	Role of rainstorm intensity underestimated by data-derived flood models: Emerging global evidence from subsurface-dominated watersheds. Environmental Modelling and Software, 2017, 88, 1-9.	1.9	14
41	Does the Establishment of Sustainable Use Reserves Affect Fire Management in the Humid Tropics?. PLoS ONE, 2016, 11, e0149292.	1.1	14
42	Multi-state dependent parameter model identification and estimation for nonlinear dynamic systems. Electronics Letters, 2010, 46, 1265.	0.5	13
43	Calibrated digital images of Campbellâ€“Stokes recorder card archives for direct solar irradiance studies. Atmospheric Measurement Techniques, 2013, 6, 1371-1379.	1.2	13
44	Exploratory studies into seasonal flow forecasting potential for large lakes. Hydrology and Earth System Sciences, 2018, 22, 127-141.	1.9	12
45	Hydrological functioning of cattle ranching impoundments in the Dry Chaco rangelands of Argentina. Hydrology Research, 2019, 50, 1596-1608.	1.1	12
46	Reversing hydrology: Estimation of sub-hourly rainfall time-series from streamflow. Environmental Modelling and Software, 2014, 60, 290-301.	1.9	11
47	Tropical Montane Forest Conversion Is a Critical Driver for Sediment Supply in East African Catchments. Water Resources Research, 2020, 56, e2020WR027495.	1.7	11
48	Modelling rainfall and canopy controls on net-precipitation beneath selectively-logged tropical forest. Forestry Sciences, 2001, , 215-229.	0.4	11
49	Prediction of storm transfers and annual loads with data-based mechanistic models using high-frequency data. Hydrology and Earth System Sciences, 2017, 21, 6425-6444.	1.9	9
50	Extended State Dependent Parameter modelling with a Data-Based Mechanistic approach to nonlinear model structure identification. Environmental Modelling and Software, 2018, 104, 81-93.	1.9	9
51	True digital control: A unified design procedure for linear sampled data control systems. , 1991, , 71-109.		8
52	Nierji reservoir flood forecasting based on a Data-Based Mechanistic methodology. Journal of Hydrology, 2018, 567, 227-237.	2.3	8
53	The effect of hedgerow wildâ€margins on topsoil hydraulic properties, and overlandâ€flow incidence, magnitude and waterâ€quality. Hydrological Processes, 2021, 35, e14098.	1.1	8
54	Quantification of the effect of forest harvestingversusclimate on streamflow cycles and trends in an evergreen broadleaf catchment. Hydrological Sciences Journal, 2016, 61, 1716-1727.	1.2	7

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55	New developments in the CAPTAIN Toolbox for Matlab with case study examples. IFAC-PapersOnLine, 2018, 51, 694-699.	0.5	7
56	A non-minimal state variable feedback approach to multivariable control of glasshouse climate. Transactions of the Institute of Measurement and Control, 1995, 17, 200-211.	1.1	6
57	The Captain Toolbox for Matlab. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 758-763.	0.4	6
58	Long-term variations in the net inflow record for Lake Malawi. Hydrology Research, 2017, 48, 851-866.	1.1	6
59	Development of the forSIM model to quantify positive and negative hydrological impacts of tropical reforestation. Forest Ecology and Management, 2007, 251, 52-64.	1.4	5
60	Simulating hourly rainfall occurrence within an equatorial rainforest, Borneo Island / Simulation de l'occurrence de pluie horaire au sein de la forÃªt Ã©quatoriale, Ile de BornÃ©o. Hydrological Sciences Journal, 2009, 54, 571-581.	1.2	5
61	A Simple Transfer-Function-Based Approach for Estimating Material Parameters From Terahertz Time-Domain Data. IEEE Photonics Journal, 2014, 6, 1-11.	1.0	5
62	Managing Heterogeneous Data Flows in Wireless Sensor Networks Using a "Split Personality' Mote Platform. , 2008, , .		4
63	Reversing hydrology: quantifying the temporal aggregation effect of catchment rainfall estimation using sub-hourly data. Hydrology Research, 2016, 47, 630-645.	1.1	4
64	What Really Happens at the End of the Rainbow? â€“ Paying the Price for Reducing Uncertainty (Using) Tj ETQq0 0 0 rgBT /Overlock 10	1.2	4
65	Dynamic harmonic regression and irregular sampling; avoiding pre-processing and minimising modelling assumptions. Environmental Modelling and Software, 2019, 121, 104503.	1.9	4
66	The provision of site specific flood warnings using wireless sensor networks. , 2008, , 1241-1247.		4
67	TDC: Computer Aided True Digital Control of Multivariable Delta Operator Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1996, 29, 5617-5622.	0.4	3
68	Stochastic unobserved component models for adaptive signal extraction and forecasting. , 0, , .		3
69	Spatially significant effects of selective tropical forestry on water, nutrient and sediment flows: a modelling-supported review. , 2005, , 513-532.		3
70	Linear and Nonlinear Non-minimal State Space Control System Design. , 2012, , 559-581.		3
71	Texture dependence of the persistent NMR signal in superfluid3He-B. European Physical Journal D, 1996, 46, 233-234.	0.4	1
72	Extending Manley's Lancashire Plain Temperature Record: 1753â€“2007. International Journal of Climatology, 2012, 32, 1899-1908.	1.5	1

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73	Reflections on almost a century of hydrological studies on Africa's largest lake. Proceedings of the International Association of Hydrological Sciences, 0, 384, 141-147.	1.0	1
74	Seasonal flow forecasting in Africa; exploratory studies for large lakes. Proceedings of the International Association of Hydrological Sciences, 0, 384, 289-293.	1.0	0