Florimond De Smedt

List of Publications by Year
in descending order

108 papers	4,601 citations
100601 38 h-index	129628 63 g-index
112 all docs	112 docs citations
112 times ranked	4708 citing authors

#	Article	IF	Citations
1	Analytical Solution for Fractional Well Flow in a Double-Porosity Aquifer with Fractional Transient Exchange between Matrix and Fractures. Water (Switzerland), 2022, 14, 456.	1.2	2
2	Groundwater Vulnerability and Nitrate Contamination Assessment and Mapping Using DRASTIC and Geostatistical Analysis. Water (Switzerland), 2020, 12, 2022.	1.2	13
3	Constantâ€Rate Pumping Test in a Leaky Aquifer with Water Release from Storage in the Aquitard. Ground Water, 2020, 58, 487-491.	0.7	2
4	Estimation and Mapping of the Transmissivity of the Nubian Sandstone Aquifer in the Kharga Oasis, Egypt. Water (Switzerland), 2020, 12, 604.	1.2	14
5	Evaluation of the Groundwater Quality Using the Water Quality Index and Geostatistical Analysis in the Dier al-Balah Governorate, Gaza Strip, Palestine. Water (Switzerland), 2020, 12, 262.	1.2	67
6	Analysis and Mapping of Rainfall-Induced Landslide Susceptibility in A Luoi District, Thua Thien Hue Province, Vietnam. Water (Switzerland), 2019, 11, 51.	1.2	18
7	Case Study Kleine Nete: Observation Error and Uncertainty. SpringerBriefs in Applied Sciences and Technology, 2018, , 75-86.	0.2	0
8	Experimental and statistical study of saturated hydraulic conductivity and relations with other soil properties of a desert soil. European Journal of Soil Science, 2018, 69, 256-264.	1.8	29
9	Zone-Integrated Double-Constraint Methodology for Calibration of Hydraulic Conductivities in Grid Cell Clusters of Groundwater Flow Models. Transport in Porous Media, 2018, 122, 633-645.	1.2	3
10	Double Constraint Method for Pumping Test Analysis. Journal of Hydrologic Engineering - ASCE, 2018, 23, 06018003.	0.8	5
11	The Zone-Integrated Double Constraint Method. SpringerBriefs in Applied Sciences and Technology, 2018, , 87-98.	0.2	0
12	Regional groundwater flow modeling of the Geba basin, northern Ethiopia. Hydrogeology Journal, 2017, 25, 639-655.	0.9	21
13	A Combined Hydrological and Hydraulic Model for Flood Prediction in Vietnam Applied to the Huong River Basin as a Test Case Study. Water (Switzerland), 2017, 9, 879.	1.2	28
14	Hydrodynamics of porous formations: Simple indices for calibration and identification of spatio-temporal scales. Marine and Petroleum Geology, 2016, 78, 690-700.	1.5	11
15	Landfill site selection using multi-criteria evaluation in the GIS interface: a case study from the Gaza Strip, Palestine. Arabian Journal of Geosciences, 2015, 8, 7499-7513.	0.6	52
16	Improving the Confidence in Hydrologic Model Calibration and Prediction by Transformation of Model Residuals. Journal of Hydrologic Engineering - ASCE, 2015, 20, 04015001.	0.8	3
17	Analytical solution for the catchment zone of a well located near a groundwater divide in a recharged semi-confined aquifer. Journal of Hydrology, 2014, 519, 1271-1277.	2.3	3
18	Improving WetSpa model to predict streamflows for gaged and ungaged catchments. Journal of Hydroinformatics, 2014, 16, 758-771.	1.1	3

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19	Intercomparison of five lumped and distributed models for catchment runoff and extreme flow simulation. Journal of Hydrology, 2014, 511, 335-349.	2.3	78
20	Impact of climate change and urban development on extreme flows in the Grote Nete watershed, Belgium. Natural Hazards, 2014, 71, 2127-2142.	1.6	22
21	Slope stability analysis using a physically based model: a case study from A Luoi district in Thua Thien-Hue Province, Vietnam. Landslides, 2014, 11, 897-907.	2.7	18
22	Intercomparison of hydrological model structures and calibration approaches in climate scenario impact projections. Journal of Hydrology, 2014, 519, 743-755.	2.3	61
23	Analytical solution for capture and catchment zones of a well located on a groundwater divide. Water Resources Research, 2014, 50, 736-740.	1.7	9
24	Evaluation and comparison of GIS based landslide susceptibility mapping procedures in Kulekhani watershed, Nepal. Journal of the Geological Society of India, 2013, 81, 219-231.	0.5	43
25	Validation of soil moisture simulation with a distributed hydrologic model (WetSpa). Environmental Earth Sciences, 2013, 69, 739-747.	1.3	22
26	Evaluation of the consistency of landslide susceptibility mapping: a case study from the Kankai watershed in east Nepal. Landslides, 2013, 10, 785-799.	2.7	40
27	Application of the analytical hierarchy process (AHP) for landslide susceptibility mapping: A case study from the Tinau watershed, west Nepal. Computers and Geosciences, 2013, 52, 398-408.	2.0	391
28	Application of a spatially distributed water balance model for assessing surface water and groundwater resources in the Geba basin, Tigray, Ethiopia. Journal of Hydrology, 2013, 499, 110-123.	2.3	87
29	GIS based landslide susceptibility mapping using a fuzzy logic approach: A case study from Ghurmi-Dhad Khola area, Eastern Nepal. Journal of the Geological Society of India, 2013, 82, 249-261.	0.5	39
30	Climate change impact on river flows and catchment hydrology: a comparison of two spatially distributed models. Hydrological Processes, 2013, 27, 3649-3662.	1.1	53
31	Landslide susceptibility mapping using the weight of evidence method in the Tinau watershed, Nepal. Natural Hazards, 2012, 63, 479-498.	1.6	123
32	Impact of Climate Change on Streamflow and Soil Moisture in the Vermilion Basin, Illinois. Journal of Hydrologic Engineering - ASCE, 2012, 17, 1059-1070.	0.8	22
33	Simulation of hydrological processes in the Simiyu River, tributary of Lake Victoria, Tanzania. Water S A, 2012, 38, .	0.2	2
34	Application of an analytical hierarchical process approach for landslide susceptibility mapping in A Luoi district, Thua Thien Hue Province, Vietnam. Environmental Earth Sciences, 2012, 66, 1739-1752.	1.3	83
35	WetSpa model application in the Distributed Model Intercomparison Project (DMIP2). Journal of Hydrology, 2012, 418-419, 78-89.	2.3	42
36	Results of the DMIP 2 Oklahoma experiments. Journal of Hydrology, 2012, 418-419, 17-48.	2.3	97

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37	Analytical Solution for Constant-Rate Pumping Test in Fissured Porous Media with Double-Porosity Behaviour. Transport in Porous Media, 2011, 88, 479-489.	1.2	19
38	Evaluation of groundwater resources in the Geba basin, Ethiopia. Bulletin of Engineering Geology and the Environment, 2011, 70, 461-466.	1.6	17
39	Containment of groundwater pollution (methyl tertiary butyl ether and benzene) to protect a drinking-water production site in Belgium. Hydrogeology Journal, 2010, 18, 1917-1925.	0.9	11
40	Prediction of snowmelt floods with a distributed hydrological model using a physical snow mass and energy balance approach. Natural Hazards, 2010, 54, 451-468.	1.6	31
41	Predictive Analysis and Simulation Uncertainty of a Distributed Hydrological Model. Water Resources Management, 2010, 24, 2869-2880.	1.9	37
42	Multi-objective calibration of a distributed hydrological model (WetSpa) using a genetic algorithm. Hydrology and Earth System Sciences, 2009, 13, 2137-2149.	1.9	75
43	Multi-Criteria Decision Making under Uncertainty in Rainfall-Runoff Calibration: A Fuzzy Compromise Programming Approach Based on Alpha Level Sets. , 2009, , .		2
44	Groundwater recharge and flow in a small mountain catchment in northern Ethiopia. Hydrological Sciences Journal, 2009, 54, 739-753.	1.2	43
45	Comparison of Two Mathematical Models for 3D Groundwater Flow: Block-Centered Heads and Edge-Based Stream Functions. Transport in Porous Media, 2009, 79, 469-485.	1.2	4
46	Hydrological Modeling of Snow Accumulation and Melting on River Basin Scale. Water Resources Management, 2009, 23, 2271-2287.	1.9	49
47	Slope stability analysis on a regional scale using GIS: a case study from Dhading, Nepal. Environmental Geology, 2009, 57, 1603-1611.	1.2	38
48	Distributed Hydrological Modeling and Sensitivity Analysis in Torysa Watershed, Slovakia. Water Resources Management, 2008, 22, 393-408.	1.9	87
49	GIS-based recharge estimation by coupling surface–subsurface water balances. Journal of Hydrology, 2007, 337, 337-355.	2.3	209
50	Analytical solution and analysis of solute transport in rivers affected by diffusive transfer in the hyporheic zone. Journal of Hydrology, 2007, 339, 29-38.	2.3	25
51	Reply to comment: â€œAnalytical solution for solute transport resulting from instantaneous injection in streams with transient storageâ€•by F. De Smedt, W. Brevis, and P. Debels, 2005. Journal of Hydrology 315, 25â€"39. Journal of Hydrology, 2007, 338, 149-151.	2.3	1
52	WetSpa Model Application for Assessing Reforestation Impacts on Floods in Margecanyâ€"Hornad Watershed, Slovakia. Water Resources Management, 2007, 21, 1373-1391.	1.9	76
53	Effects of climate change on the groundwater system in the Grote-Nete catchment, Belgium. Hydrogeology Journal, 2007, 15, 891-901.	0.9	146
54	A comparative study of hydraulic conductivity estimations using geostatistics. Hydrogeology Journal, 2007, 15, 459-470.	0.9	18

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55	Reply to comment: "Analytical solution for solute transport resulting from instantaneous injection in streams with transient storage" by F. De Smedt, W. Brevis, and P. Debels, 2005. Journal of Hydrology 315, 25–39. Journal of Hydrology, 2006, 330, 761-762.	2.3	2
56	Analytical solutions for transport of decaying solutes in rivers with transient storage. Journal of Hydrology, 2006, 330, 672-680.	2.3	37
57	Application of WetSpa model for assessing land use impacts on floods in the Margecany–Hornad watershed, Slovakia. Water Science and Technology, 2006, 53, 37-45.	1.2	46
58	Simulation of runoff and phosphorus transport in a Carpathian catchment, Slovakia. River Research and Applications, 2006, 22, 1009-1022.	0.7	10
59	Modelling groundwater flow of the Trifa aquifer, Morocco. Hydrogeology Journal, 2006, 14, 1265-1276.	0.9	27
60	Assessing landslide hazard in GIS: a case study from Rasuwa, Nepal. Bulletin of Engineering Geology and the Environment, 2006, 65, 99-107.	1.6	58
61	Large-scale GIS-based hydrogeological modeling of Flanders: a tool for groundwater management. Environmental Geology, 2006, 50, 1201-1209.	1.2	21
62	Predicting storm runoff from different land-use classes using a geographical information system-based distributed model. Hydrological Processes, 2006, 20, 533-548.	1.1	47
63	Two- and Three-Dimensional Flow of Groundwater. , 2006, , 4-1-4-36.		1
64	Test of a distributed modelling approach to predict flood flows in the karst Suoimuoi catchment in Vietnam. Environmental Geology, 2005, 48, 931-940.	1.2	28
65	Study of cavernous underground conduits in Nam La (Northwest Vietnam) by an integrative approach. Hydrogeology Journal, 2005, 13, 675-689.	0.9	5
66	Flood Modeling for Complex Terrain Using GIS and Remote Sensed Information. Water Resources Management, 2005, 19, 605-624.	1.9	79
67	Assessing land use impacts on flood processes in complex terrain by using GIS and modeling approach. Environmental Modeling and Assessment, 2005, 9, 227-235.	1.2	43
68	Assessing the hydrological effects of Landuse changes using distributed hydrological modelling and GIS. International Journal of River Basin Management, 2005, 3, 261-271.	1.5	6
69	Analytical solution for solute transport resulting from instantaneous injection in streams with transient storage. Journal of Hydrology, 2005, 315, 25-39.	2.3	80
70	Lineament extraction and analysis, comparison of LANDSAT ETM and ASTER imagery. Case study: Suoimuoi tropical karst catchment, Vietnam. , 2005, 5983, 182.		104
71	Simulation of flood reduction by natural river rehabilitation using a distributed hydrological model. Hydrology and Earth System Sciences, 2004, 8, 1129-1140.	1.9	20
72	Analysing the effect of climate changes on streamflow using statistically downscaled GCM scenarios. International Journal of River Basin Management, 2004, 2, 271-280.	1.5	40

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73	Application of a Bayesian Approach to Stochastic Delineation of Capture Zones. Ground Water, 2004, 42, 542-551.	0.7	13
74	SEEPAGE, a New MODFLOW DRAIN Package. Ground Water, 2004, 42, 576-588.	0.7	32
75	Study on the relationship between lineaments and borehole specific capacity in a fractured and karstified limestone area in Vietnam. Hydrogeology Journal, 2004, 12, 662-673.	0.9	54
76	A geostatistical methodology to estimate the base of the Trifa aquifer (Morocco) with limited drilling and geo-electrical sounding data. Bulletin of Engineering Geology and the Environment, 2004, 63, 345-351.	1.6	3
77	Doode Bemde CASI-SWIR 2002: Hyperspectral sensing of moisture gradients--set-up and first results of a combined field and airborne campaign. , 2004, , .		1
78	A Bayesian approach to stochastic capture zone delineation incorporating tracer arrival times, conductivity measurements, and hydraulic head observations. Water Resources Research, 2003, 39, .	1.7	41
79	Bayesian methodology for stochastic capture zone delineation incorporating transmissivity measurements and hydraulic head observations. Journal of Hydrology, 2003, 271, 156-170.	2.3	36
80	Regional groundwater discharge: phreatophyte mapping, groundwater modelling and impact analysis of land-use change. Journal of Hydrology, 2003, 275, 86-108.	2.3	145
81	Stochastic delineation of capture zones: classical versus Bayesian approach. Journal of Hydrology, 2003, 281, 313-324.	2.3	17
82	A diffusive transport approach for flow routing in GIS-based flood modeling. Journal of Hydrology, 2003, 283, 91-106.	2.3	153
83	Bayesian methodology to stochastic capture zone determination: Conditioning on transmissivity measurements. Water Resources Research, 2002, 38, 3-1-3-11.	1.7	27
84	Stochastic capture zone delineation within the generalized likelihood uncertainty estimation methodology: Conditioning on head observations. Water Resources Research, 2001, 37, 625-638.	1.7	83
85	Simulation of calcium leaching and desorption in an acid forest soil. European Journal of Soil Science, 2000, 51, 245-255.	1.8	1
86	Heavy metal distribution model under estuarine mixing. Hydrological Processes, 1999, 13, 789-804.	1.1	18
87	A time-dependent flow model for heavy metals in the Scheldt estuary. , 1998, , 143-155.		7
88	Numerical solution of 3-D groundwater flow involving free boundaries by a fixed finite element method. Journal of Hydrology, 1997, 201, 161-182.	2.3	24
89	A Time-dependent flow model for heavy metals in the scheldt estuary. Hydrobiologia, 1997, 366, 143-155.	1.0	21
90	Principal component transformation method to separate active discharge and recharge areas. Journal of the Indian Society of Remote Sensing, 1997, 25, 93-103.	1.2	0

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91	Dissolved humic substances for remediation of sites contaminated by organic pollutants. Binding-desorption model predictions. Water Research, 1996, 30, 2027-2038.	5.3	76
92	Transport of polychlorinated biphenyls (PCB) in the Scheldt Estuary simulated with the water quality model WASP. Journal of Hydrology, 1996, 174, 1-18.	2.3	40
93	The family of inositol and phosphatidylinositol polyphosphate 5-phosphatases. Biochemical Society Transactions, 1996, 24, 1001-1005.	1.6	25
94	A distributed model for water and energy transfer between soil, plants and atmosphere (WetSpa). Physics and Chemistry of the Earth, 1996, 21, 189-193.	0.3	153
95	Production of Recombinant Human Brain type I Inositol-1,4,5-trisphosphate 5-phosphatase in Escherichia coli. Lack of Phosphorylation by Protein Kinase C. FEBS Journal, 1995, 234, 598-602.	0.2	12
96	Solving three-dimensional hexahedral finite element groundwater models by preconditioned conjugate gradient methods. Water Resources Research, 1994, 30, 509-521.	1.7	19
97	Three-Dimensional Finite Element Model for Saltwater Intrusion into Aquifers. Water Science and Technology Library, 1994, , 1019-1026.	0.2	2
98	Modelling of Groundwater Transport of Microorganic Pollutants: State-of-the-Art. , 1988, , 387-400.		1
99	Study of tracer movement through unsaturated sand. Geoderma, 1986, 38, 223-236.	2.3	20
100	Study of tracer movement through unsaturated sand. Journal of Hydrology, 1986, 85, 169-181.	2.3	69
101	Solute Transfer Through Columns of Glass Beads. Water Resources Research, 1984, 20, 225-232.	1.7	187
102	Application to Rivers and Underground Waters. Water Science and Technology, 1982, 14, 1073-1094.	1.2	0
103	Solute Transfer Through Unsaturated Porous Media. Studies in Environmental Science, 1981, 17, 1011-1016.	0.0	1
104	Mass transfer in porous media with immobile water. Journal of Hydrology, 1979, 41, 59-67.	2.3	80
105	A generalized solution for solute flow in soils with mobile and immobile water. Water Resources Research, 1979, 15, 1137-1141.	1.7	91
106	Solute Transport Through Soil With Nonuniform Water Content. Soil Science Society of America Journal, 1978, 42, 7-10.	1.2	30
107	Approximate Analytical Solution for Solute Flow During Infiltration and Redistribution. Soil Science Society of America Journal, 1978, 42, 407-412.	1.2	50
108	Investigation of the hydrological balance in a peat swamp. Journal of Hydrology, 1977, 34, 151-160.	2.3	1