## Christophe Cudennec

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/3213095/publications.pdf

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84 papers

4,246 citations

279701 23 h-index 61 g-index

95 all docs 95 docs citations

95 times ranked 5076 citing authors

| #  | Article  | IF  | Citations |
|----|--|-----|-----------|
| 1  | A decade of Predictions in Ungauged Basins (PUB)—a review. Hydrological Sciences Journal, 2013, 58, 1198-1255.   | 1.2 | 821       |
| 2  | "Panta Rhei—Everything Flows― Change in hydrology and society—The IAHS Scientific Decade 2013–2022. Hydrological Sciences Journal, 2013, 58, 1256-1275.  | 1.2 | 569       |
| 3  | Twenty-three unsolved problems in hydrology (UPH) – a community perspective. Hydrological Sciences Journal, 2019, 64, 1141-1158.   | 1.2 | 474       |
| 4  | Plausible and desirable futures in the Anthropocene: A new research agenda. Global Environmental Change, 2016, 39, 351-362.  | 3.6 | 389       |
| 5  | Sociohydrology: Scientific Challenges in Addressing the Sustainable Development Goals. Water Resources Research, 2019, 55, 6327-6355.  | 1.7 | 226       |
| 6  | Re-conceptualizing the Anthropocene: A call for collaboration. Global Environmental Change, 2016, 39, 318-327.   | 3.6 | 210       |
| 7  | Dryland hydrology in Mediterranean regions—a review. Hydrological Sciences Journal, 2007, 52, 1077-1087.   | 1.2 | 168       |
| 8  | Challenges in operationalizing the water–energy–food nexus. Hydrological Sciences Journal, 2017, 62, 1714-1720.  | 1.2 | 159       |
| 9  | Measurements and Observations in the XXI century (MOXXI): innovation and multi-disciplinarity to sense the hydrological cycle. Hydrological Sciences Journal, 2018, 63, 169-196.   | 1.2 | 151       |
| 10 | Plant functional traits capture species richness variations along a flooding gradient. Oikos, 2011, 120, 389-398.  | 1.2 | 68        |
| 11 | Evaluation of potential evapotranspiration assessment methods for hydrological modelling with SWAT—Application in data-scarce rural Tunisia. Agricultural Water Management, 2016, 174, 39-51.  | 2.4 | 68        |
| 12 | Adaptation of water resources systems to changing society and environment: a statement by the International Association of Hydrological Sciences. Hydrological Sciences Journal, 2016, 61, 2803-2817.  | 1.2 | 57        |
| 13 | Panta Rhei 2013–2015: global perspectives on hydrology, society and change. Hydrological Sciences Journal, 0, , 1-18.  | 1.2 | 53        |
| 14 | A geomorphological explanation of the unit hydrograph concept. Hydrological Processes, 2004, 18, 603-621.  | 1.1 | 47        |
| 15 | Application of morphological approaches to determine unit hydrographs of urban catchments. Hydrological Processes, 2005, 19, 1021-1035.  | 1.1 | 44        |
| 16 | Incorporating elevation in rainfall interpolation in Tunisia using geostatistical methods.<br>Hydrological Sciences Journal, 2012, 57, 1294-1314.  | 1.2 | 42        |
| 17 | Structure du gradient pluviométrique de la transition Méditerranée–Sahara en Tunisie: déterminants géographiques et saisonnalité / <i>Structure of the rainfall gradient in the Mediterranean–Sahara transition in Tunisia: geographical determinants and seasonality</i> 2007. 52. 1088-1102. | 1.2 | 41        |
| 18 | Use of a geomorphological transfer function to model design floods in small hillside catchments in semiarid Tunisia. Journal of Hydrology, 2004, 287, 197-213.   | 2.3 | 35        |

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|----|---|-----|-----------|
| 19 | Modeling Water Quality to Improve Agricultural Practices and Land Management in a Tunisian Catchment Using the Soil and Water Assessment Tool. Journal of Environmental Quality, 2014, 43, 18-25.   | 1.0 | 34        |
| 20 | Citizens AND HYdrology (CANDHY): conceptualizing a transdisciplinary framework for citizen science addressing hydrological challenges. Hydrological Sciences Journal, 2022, 67, 2534-2551.  | 1.2 | 33        |
| 21 | Accounting for sparsely observed rainfall space—time variability in a rainfall—runoff model of a<br>semiarid Tunisian basin/Prise en compte d'observations peu denses de la variabilité spatiotemporelle de<br>la pluie dans une modélisation pluie—débit d'un bassin semi-aride Tunisien. Hydrological Sciences<br>lournal, 2005, 50           | 1.2 | 31        |
| 22 | Ditch network extraction and hydrogeomorphological characterization using LiDAR-derived DTM in wetlands. Hydrology Research, 2015, 46, 276-290.   | 1.1 | 28        |
| 23 | A Framework to Consider Soil Ecosystem Services in Territorial Planning. Frontiers in Environmental Science, 2020, 8, .   | 1.5 | 27        |
| 24 | Hydrological processes in macrocatchment water harvesting in the arid region of Tunisia: the traditional system of tabias/Processus hydrologiques au sein d'un amĀ©nagement de collecte des eaux dans la région aride tunisienne: le système traditionnel des tabias. Hydrological Sciences Journal, 2004, 49, .                                | 1.2 | 26        |
| 25 | Geostatistically based optimization of a rainfall monitoring network extension: case of the climatically heterogeneous Tunisia. Hydrology Research, 2017, 48, 514-541.  | 1.1 | 24        |
| 26 | Editorial – Towards FAIR and SQUARE hydrological data. Hydrological Sciences Journal, 2020, 65, 681-682.  | 1.2 | 22        |
| 27 | Intergovernmental cooperation for hydrometry – what, why and how?. Hydrological Sciences Journal, 2022, 67, 2552-2566.  | 1.2 | 21        |
| 28 | Hydrological sciences and water security: An overview. Proceedings of the International Association of Hydrological Sciences, 0, 366, 1-9.  | 1.0 | 21        |
| 29 | The multi-objective role of <i>HSJ</i> in processing and disseminating hydrological knowledge. Hydrological Sciences Journal, 2008, 53, 485-487.  | 1.2 | 19        |
| 30 | Streamflow prediction in ungauged basins through geomorphology-based hydrograph transposition. Hydrology Research, 2015, 46, 291-302.   | 1.1 | 19        |
| 31 | Valuing scarce observation of rainfall variability with flexible semi-distributed hydrological modelling – Mountainous Mediterranean context. Science of the Total Environment, 2018, 643, 346-356.   | 3.9 | 18        |
| 32 | Structural patterns in river network organization at both infra- and supra-basin levels: the case of a granitic relief. Earth Surface Processes and Landforms, 2006, 31, 369-381.   | 1.2 | 16        |
| 33 | Transferring measured discharge time series: Largeâ€scale comparison of Topâ€kriging to geomorphologyâ€based inverse modeling. Water Resources Research, 2016, 52, 5555-5576.   | 1.7 | 16        |
| 34 | A near infrared index to assess effects of soil texture and organic carbon content on soil water content. European Journal of Soil Science, 2019, 70, 151-161.  | 1.8 | 16        |
| 35 | On width function-based unit hydrographs deduced from separately random self-similar river networks and rainfall variability: Discussion of "Coding random self-similar river networks and calculating geometric distances: 1. General methodology―and "2. Application to runoff simulations― Hydrological Sciences Journal. 2007. 52. 230-237. | 1.2 | 15        |
| 36 | Water quality: the missing dimension of water in the water–energy–food nexus. Hydrological Sciences Journal, 2021, 66, 745-758.   | 1.2 | 15        |

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|----|---|-----|-----------|
| 37 | Epistemological dimensions of the water–energy–food nexus approach: reply to discussions of "Challenges in operationalizing the water–energy–food nexusâ€ <sup></sup> . Hydrological Sciences Journal, 2018, 63, 1868-1871. | 1.2 | 13        |
| 38 | Contrasting behaviour of two riparian wetlands in relation to their location in the hydrographic network. Journal of Hydrology, 2011, 406, 39-53.   | 2.3 | 12        |
| 39 | Statistical distribution of rainy events characteristics and instantaneous hyetographs generation (Merguellil watershed in central Tunisia). Arabian Journal of Geosciences, 2013, 6, 1581-1590.                            | 0.6 | 12        |
| 40 | Structures spatiales de l'évapotranspiration de référence et des variables climatiques corrélées en Tunisie. Hydrological Sciences Journal, 2012, 57, 818-829.  | 1.2 | 11        |
| 41 | Regional watershed characterization and classification with river network analyses. Earth Surface Processes and Landforms, 2017, 42, 2068-2081.   | 1.2 | 11        |
| 42 | Assessing the hydrological impacts of agricultural changes upstream of the Tunisian World Heritage sea-connected Ichkeul Lake. Proceedings of the International Association of Hydrological Sciences, 0, 365, 61-65.        | 1.0 | 11        |
| 43 | Gestion de l'eau en milieu arideÂ: considérations physiques et sociales pour l'identification des territoires pertinents dans le Sud-Est tunisien. Développement Durable Et Territoires, 2006, , .                          | 0.0 | 10        |
| 44 | Joint spatial, topological and scaling analysis framework of river-network geomorphometry. Geomorphologie Relief, Processus, Environnement, 2013, 19, 7-16.   | 0.7 | 10        |
| 45 | Modélisation robuste de l'impact agrégé de retenues collinaires sur l'hydrologie de surface. Revue<br>Des Sciences De L'Eau, 2004, 17, 181-194.   | 0.2 | 9         |
| 46 | Joint editorial: Fostering innovation and improving impact assessment for journal publications in hydrology. Water Resources Research, 2016, 52, 2399-2402.   | 1.7 | 9         |
| 47 | Statistical detection and no-detection of rainfall change trends and breaks in semiarid Tunisia—50+ years over the Merguellil agro-hydro-climatic reference basin. Arabian Journal of Geosciences, 2018, 11, 1.             | 0.6 | 9         |
| 48 | PUB in Québec: A robust geomorphology-based deconvolution-reconvolution framework for the spatial transposition of hydrographs. Journal of Hydrology, 2019, 570, 378-392.   | 2.3 | 9         |
| 49 | Joint editorial – Fostering innovation and improving impact assessment for journal publications in hydrology. Hydrological Sciences Journal, 0, , 1-4.  | 1.2 | 8         |
| 50 | An end-user-friendly hydrological Web Service for hydrograph prediction in ungauged basins. Hydrological Sciences Journal, 2020, , $1$ -9.  | 1.2 | 8         |
| 51 | Editorial: Hydrogeomorphology – a long-term scientific interface. Hydrology Research, 2015, 46, 175-179.  | 1.1 | 7         |
| 52 | Hydrometeorology and Hydroclimate. Advances in Meteorology, 2016, 2016, 1-4.  | 0.6 | 7         |
| 53 | Net rainfall estimation by the inversion of a geomorphology-based transfer function and discharge deconvolution. Hydrological Sciences Journal, 2018, 63, 285-301.  | 1.2 | 7         |
| 54 | Assessment of freshwater discharge into a coastal bay through multi-basin ensemble hydrological modelling. Science of the Total Environment, 2019, 669, 812-820.  | 3.9 | 7         |

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|----|---|-----|-----------|
| 55 | Invigorating Hydrological Research Through Journal Publications. Water Resources Research, 2020, 56, .  | 1.7 | 5         |
| 56 | Relevance of the H2U model to predict the discharge of a catchment. Water Science and Technology, 1997, 36, 169-175.  | 1.2 | 5         |
| 57 | Invigorating hydrological research through journal publications. Hydrological Sciences Journal, 2018, 63, 1113-1117.  | 1.2 | 4         |
| 58 | Relevance of a near infrared spectral index for assessing tillage and fertilization effects on soil water retention. Soil and Tillage Research, 2019, 194, 104345.  | 2.6 | 4         |
| 59 | Prediction of streamflow from the set of basins flowing into a coastal bay. Proceedings of the International Association of Hydrological Sciences, 0, 365, 55-60.   | 1.0 | 4         |
| 60 | Interpolation of reference evapotranspiration in Tunisia using ordinary kriging. Sécheresse, 2012, 23, 121-132.   | 0.1 | 3         |
| 61 | GéoSAS: A modular and interoperable Open Source Spatial Data Infrastructure for research. Proceedings of the International Association of Hydrological Sciences, 2015, 368, 9-14.                                     | 1.0 | 3         |
| 62 | Joint editorial: Invigorating hydrological research through journal publications. Hydrology and Earth System Sciences, 2018, 22, 5735-5739.   | 1.9 | 3         |
| 63 | Preface: Hydrological processes and water security in a changing world. Proceedings of the International Association of Hydrological Sciences, 0, 383, 3-4.   | 1.0 | 3         |
| 64 | Governing Open Science. Hydrological Sciences Journal, 2022, 67, 2359-2362.   | 1.2 | 3         |
| 65 | On the transposition and the improvement of an allometric model from river networks to trees: identification of analogous objects, variables and modellings. Journal of Theoretical Biology, 2005, 233, 151-157.      | 0.8 | 2         |
| 66 | Sensitivity analysis of SWAT model to the spatial rainfall distribution and watershed subdivision in streamflow simulations in the Mediterranean context: A case study in the Joumine watershed. Tunisia. , 2013, , . |     | 2         |
| 67 | Online watershed boundary delineation: sharing models through Spatial Data Infrastructures. Proceedings of the International Association of Hydrological Sciences, 2015, 368, 144-149.                                | 1.0 | 2         |
| 68 | Joint Editorial: Fostering innovation and improving impact assessment for journal publications in hydrology. Hydrology and Earth System Sciences, 2016, 20, 1081-1084.  | 1.9 | 2         |
| 69 | Joint Editorial—Fostering Innovation and Improving Impact Assessment for Journal Publications in Hydrology. Vadose Zone Journal, 2016, 15, 1-4.   | 1.3 | 1         |
| 70 | Should auld acquaintance be forgot? Comment on "Farewell, <i>HSJ</i> !—address from the retiring editor―by Z.W. Kundzewicz. Hydrological Sciences Journal, 0, , 1-2.  | 1.2 | 1         |
| 71 | Weak relationships between landforms and hydro-climatologic processes: a case study in Haiti.<br>Hydrology Research, 2019, 50, 744-760.   | 1.1 | 1         |
| 72 | Autopsie des événements hydrométéorologiques extrêmes de 1969 en Tunisie. Proceedings of the International Association of Hydrological Sciences, 0, 369, 169-173.   | 1.0 | 1         |

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|----|---|-----|-----------|
| 73 | Geomorphometry-based modelling of discharge series in ungauged basins – Robustness regarding DEM sources. Proceedings of the International Association of Hydrological Sciences, 0, 383, 129-134.   | 1.0 | 1         |
| 74 | Joint Editorial Invigorating Hydrological Research through Journal Publications. Journal of Hydrology and Hydromechanics, 2018, 66, 257-260.  | 0.7 | 1         |
| 75 | Preface: Hydrology of Large River Basins in Africa. Proceedings of the International Association of Hydrological Sciences, 0, 384, 1-4.   | 1.0 | 1         |
| 76 | Reply to comment on ?A geomorphological explanation of the unit hydrograph concept? by C. Fleurant and P. Boulestreau. Hydrological Processes, 2005, 19, 545-547.   | 1.1 | 0         |
| 77 | Joint Editorial: Invigorating hydrological research through journal publications. Hydrology<br>Research, 2018, 49, iii-ix.  | 1.1 | 0         |
| 78 | Invigorating Hydrological Research through Journal Publications. Journal of Hydrometeorology, 2018, 19, 1713-1719.  | 0.7 | 0         |
| 79 | Joint Editorial: Invigorating Hydrological Research through Journal Publications. Vadose Zone<br>Journal, 2018, 17, 180001ed.   | 1.3 | 0         |
| 80 | Invigorating hydrological research through journal publications. Ecohydrology, 2018, 11, e2016.   | 1.1 | 0         |
| 81 | Valuing knowledge on temporal dynamics from long-term monitored basins for neighbouring sites. Proceedings of the International Association of Hydrological Sciences, 0, 366, 179-180.  | 1.0 | 0         |
| 82 | Preface: Extreme Hydrological Events. Proceedings of the International Association of Hydrological Sciences, 0, 369, 1-2.   | 1.0 | 0         |
| 83 | Joint editorial: Invigorating hydrological research through journal publications. Proceedings of the International Association of Hydrological Sciences, 0, 380, 3-8.   | 1.0 | 0         |
| 84 | Ensuring consideration of water quality in nexus approaches in the science–practice continuum: reply to discussion of "Water quality: the missing dimension of water in the water–energy–food nexus?― Hydrological Sciences Journal, 2022, 67, 1291-1293. | 1.2 | 0         |