# Marcelo H Garcia

## List of Publications by Citations



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|---|---|---|---|
| 219 papers | 7,148 citations | 45 h-index | 78 g-index |
| 235 ext. papers | 7,883 ext. citations | 3.1 avg, IF | 6.13 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 219 | Entrainment of Bed Sediment into Suspension. *Journal of Hydraulic Engineering*, **1991**, 117, 414-435 | 1.8 | 356 |
| 218 | Experiments on turbidity currents over an erodible bed. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **1987**, 25, 123-147 | 1.9 | 293 |
| 217 | Mean Flow and Turbulence Structure of Open-Channel Flow through Non-Emergent Vegetation. *Journal of Hydraulic Engineering*, **2001**, 127, 392-402 | 1.8 | 282 |
| 216 | Experiments on particle□turbulence interactions in the near□wall region of an open channel flow: implications for sediment transport. *Journal of Fluid Mechanics*, **1996**, 326, 285-319 | 3.7 | 238 |
| 215 | A Herschel□Bulkley model for mud flow down a slope. *Journal of Fluid Mechanics*, **1998**, 374, 305-333 | 3.7 | 227 |
| 214 | Experiments on the entrainment of sediment into suspension by a dense bottom current. *Journal of Geophysical Research*, **1993**, 98, 4793-4807 | | 177 |
| 213 | open-channel flow through simulated vegetation: Suspended sediment transport modeling. *Water Resources Research*, **1998**, 34, 2341-2352 | 5.4 | 173 |
| 212 | On the front velocity of gravity currents. *Journal of Fluid Mechanics*, **2007**, 586, 1-39 | 3.7 | 171 |
| 211 | Depositional Turbidity Currents Laden with Poorly Sorted Sediment. *Journal of Hydraulic Engineering*, **1994**, 120, 1240-1263 | 1.8 | 171 |
| 210 | Hydraulic Jumps in Sediment-Driven Bottom Currents. *Journal of Hydraulic Engineering*, **1993**, 119, 1094-1117 | 1.8 | 164 |
| 209 | Gravel saltation: 1. Experiments. *Water Resources Research*, **1994**, 30, 1907-1914 | 5.4 | 152 |
| 208 | Sediment Transport and Morphodynamics **2008**, 21-163 | | 145 |
| 207 | Threshold for particle entrainment into suspension. *Sedimentology*, **2003**, 50, 247-263 | 3.3 | 140 |
| 206 | Turbulence Measurements with Acoustic Doppler Velocimeters. *Journal of Hydraulic Engineering*, **2005**, 131, 1062-1073 | 1.8 | 124 |
| 205 | Three-Dimensional Numerical Model with Free Water Surface and Mesh Deformation for Local Sediment Scour. *Journal of Waterway, Port, Coastal and Ocean Engineering*, **2008**, 134, 203-217 | 1.7 | 120 |
| 204 | Experiments on hydraulic jumps in turbidity currents near a canyon-fan transition. *Science*, **1989**, 245, 393-6 | 33.3 | 113 |
| 203 | Using Lagrangian particle saltation observations for bedload sediment transport modelling **1998**, 12, 1197-1218 | | 108 |

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| 202 | Gravel Saltation: 2. Modeling. *Water Resources Research*, **1994**, 30, 1915-1924 | 5.4 | 100 |
| 201 | A simplified 2D model for meander migration with physically-based bank evolution. *Geomorphology* , **2012**, 163-164, 10-25 | 4.3 | 98 |
| 200 | Experiments on Saltation of Sand in Water. *Journal of Hydraulic Engineering*, **1998**, 124, 1014-1025 | 1.8 | 89 |
| 199 | Spatial variability in bank resistance to erosion on a large meandering, mixed bedrock-alluvial river. *Geomorphology*, **2016**, 252, 80-97 | 4.3 | 84 |
| 198 | Characteristics of Velocity and Excess Density Profiles of Saline Underflows and Turbidity Currents Flowing over a Mobile Bed. *Journal of Hydraulic Engineering*, **2010**, 136, 412-433 | 1.8 | 80 |
| 197 | Laboratory measurements of 3-D flow patterns and turbulence in straight open channel with rough bed. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2008**, 46, 454-465 | 1.9 | 80 |
| 196 | Flow Structure at Different Stages in a Meander-Bend with Bendway Weirs. *Journal of Hydraulic Engineering*, **2008**, 134, 1052-1063 | 1.8 | 78 |
| 195 | Turbulent structures in planar gravity currents and their influence on the flow dynamics. *Journal of Geophysical Research*, **2008**, 113, | | 78 |
| 194 | Experiments on Wedge-Shaped Deep Sea Sedimentary Deposits in Minibasins and/or on Channel Levees Emplaced by Turbidity Currents. Part II. Morphodynamic Evolution of the Wedge and of the Associated Bedforms. *Journal of Sedimentary Research*, **2009**, 79, 608-628 | 2.1 | 77 |
| 193 | High-resolution simulations of cylindrical density currents. *Journal of Fluid Mechanics*, **2007**, 590, 437-469 | 3.7 | 69 |
| 192 | Experimental study on self-accelerating turbidity currents. *Journal of Geophysical Research*, **2009**, 114, | | 67 |
| 191 | A Perturbation Solution for Bingham-Plastic Mudflows. *Journal of Hydraulic Engineering*, **1997**, 123, 986-994 | 1.84 | 67 |
| 190 | High-resolution Numerical Simulation of Flow Through a Highly Sinuous River Reach. *Water Resources Management*, **2004**, 18, 177-199 | 3.7 | 67 |
| 189 | Numerical modeling of large-scale bubble plumes accounting for mass transfer effects. *International Journal of Multiphase Flow*, **2002**, 28, 1763-1785 | 3.6 | 62 |
| 188 | A robust two-equation model for transient-mixed flows. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2010**, 48, 44-56 | 1.9 | 55 |
| 187 | Modeling and scaling of aeration bubble plumes: A two-phase flow analysis. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2007**, 45, 617-630 | 1.9 | 55 |
| 186 | Direct Numerical Simulations of Planar and Cylindrical Density Currents. *Journal of Applied Mechanics, Transactions ASME*, **2006**, 73, 923-930 | 2.7 | 55 |
| 185 | Dynamics of sediment bars in straight and meandering channels: experiments on the resonance phenomenon. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **1993**, 31, 739-761 | 1.9 | 55 |

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| 184 | Confidence intervals in the determination of turbulence parameters. *Experiments in Fluids*, **2006**, 40, 514-522 | 2.5 | 53 |
| 183 | Wall Similarity in Turbulent Open-Channel Flow. *Journal of Engineering Mechanics - ASCE*, **1999**, 125, 789-796 | 2.4 | 53 |
| 182 | Hydrodynamic and sediment transport modeling with emphasis on shallow-water, vegetated areas (lakes, reservoirs, estuaries and lagoons). *Hydrobiologia*, **2001**, 444, 1-23 | 2.4 | 52 |
| 181 | An EulerianEulerian model for gravity currents driven by inertial particles. *International Journal of Multiphase Flow*, **2008**, 34, 484-501 | 3.6 | 51 |
| 180 | INTEGRATING SCIENCE AND TECHNOLOGY TO SUPPORT STREAM NATURALIZATION NEAR CHICAGO, ILLINOIS1. *Journal of the American Water Resources Association*, **2002**, 38, 931-944 | 2.1 | 51 |
| 179 | Development of a Fluvial Egg Drift Simulator to evaluate the transport and dispersion of Asian carp eggs in rivers. *Ecological Modelling*, **2013**, 263, 211-222 | 3 | 49 |
| 178 | Three-dimensional flow structure and bed morphology in large elongate meander loops with different outer bank roughness characteristics. *Water Resources Research*, **2016**, 52, 9621-9641 | 5.4 | 48 |
| 177 | RVR Meander: A toolbox for re-meandering of channelized streams. *Computers and Geosciences*, **2006**, 32, 92-101 | 4.5 | 46 |
| 176 | Measurements of turbulence characteristics in an open-channel flow over a transitionally-rough bed using particle image velocimetry. *Experiments in Fluids*, **2006**, 41, 857-867 | 2.5 | 46 |
| 175 | 2D stream hydrodynamic, sediment transport and bed morphology model for engineering applications. *Hydrological Processes*, **2008**, 22, 1443-1459 | 3.3 | 45 |
| 174 | Comparative 1D and 3D numerical investigation of open-channel junction flows and energy losses. *Advances in Water Resources*, **2018**, 117, 120-139 | 4.7 | 43 |
| 173 | Experiments in a high-amplitude Kinoshita meandering channel: 1. Implications of bend orientation on mean and turbulent flow structure. *Water Resources Research*, **2009**, 45, | 5.4 | 42 |
| 172 | Two-dimensional scour simulations based on coupled model of shallow water equations and sediment transport on unstructured meshes. *Coastal Engineering*, **2008**, 55, 800-810 | 4.8 | 42 |
| 171 | Application of Godunov-type schemes to transient mixed flows. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2009**, 47, 147-156 | 1.9 | 41 |
| 170 | Modeling of non-hydroplaning mudflows on continental slopes. *Marine Geology*, **1999**, 154, 131-142 | 3.3 | 41 |
| 169 | Inexpensive fluorescent particles for large-scale experiments using particle image velocimetry. *Experiments in Fluids*, **2008**, 45, 183-186 | 2.5 | 40 |
| 168 | A New Phase Diagram for Combined-Flow Bedforms. *Journal of Sedimentary Research*, **2014**, 84, 301-313 | 2.1 | 39 |
| 167 | Evaluation of the LISST-ST instrument for suspended particle size distribution and settling velocity measurements. *Continental Shelf Research*, **2006**, 26, 943-958 | 2.4 | 38 |

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| 166 | Bedload transport and bed resistance associated with density and turbidity currents. *Sedimentology* , **2010**, 57, 1463-1490 | 3.3 | 37 |
| 165 | Godunov-Type Solutions for Transient Flows in Sewers. *Journal of Hydraulic Engineering*, **2006**, 132, 800-813 | 1.8 | 36 |
| 164 | Errors in Acoustic Doppler Profiler Velocity Measurements Caused by Flow Disturbance. *Journal of Hydraulic Engineering*, **2007**, 133, 1411-1420 | 1.8 | 35 |
| 163 | Efficient Second-Order Accurate Shock-Capturing Scheme for Modeling One- and Two-Phase Water Hammer Flows. *Journal of Hydraulic Engineering*, **2008**, 134, 970-983 | 1.8 | 34 |
| 162 | Methods for Evaluating the Geomorphological Performance of Naturalized Rivers: Examples from the Chicago Metropolitan Area209-228 | | 34 |
| 161 | Assessment of floodplain vulnerability during extreme Mississippi River flood 2011. *Environmental Science & Technology*, **2014**, 48, 2619-25 | 10.3 | 33 |
| 160 | A unified model for bedform development and equilibrium under unidirectional, oscillatory and combined-flows. *Sedimentology*, **2014**, 61, 2063-2085 | 3.3 | 33 |
| 159 | Secondary Current of Saline Underflow In A Highly Meandering Channel: Experiments and Theory. *Journal of Sedimentary Research*, **2011**, 81, 787-813 | 2.1 | 33 |
| 158 | Risk of Sediment Erosion and Suspension in Turbulent Flows. *Journal of Hydraulic Engineering*, **2001**, 127, 231-235 | 1.8 | 33 |
| 157 | Mixing at the front of gravity currents. *Dynamics of Atmospheres and Oceans*, **1996**, 24, 197-205 | 1.9 | 33 |
| 156 | Length scales and statistical characteristics of outer bank roughness for large elongate meander bends: The influence of bank material properties, floodplain vegetation and flow inundation. *Earth Surface Processes and Landforms*, **2017**, 42, 2024-2037 | 3.7 | 32 |
| 155 | Discussions and Closure: Sand-Dune Geometry of Large Rivers during Floods. *Journal of Hydraulic Engineering*, **1997**, 123, 582-585 | 1.8 | 32 |
| 154 | Effect of particle inertia on the dynamics of depositional particulate density currents. *Computers and Geosciences*, **2008**, 34, 1307-1318 | 4.5 | 32 |
| 153 | Integrated urban hydrologic and hydraulic modelling in Chicago, Illinois. *Environmental Modelling and Software*, **2016**, 77, 63-70 | 5.2 | 31 |
| 152 | Experiments in a high-amplitude Kinoshita meandering channel: 2. Implications of bend orientation on bed morphodynamics. *Water Resources Research*, **2009**, 45, | 5.4 | 31 |
| 151 | Three-dimensional model to capture the fate and transport of combined sewer overflow discharges: A case study in the Chicago Area Waterway System. *Science of the Total Environment*, **2017**, 576, 362-373 | 10.2 | 30 |
| 150 | Characterization of flow turbulence in large-scale bubble-plume experiments. *Experiments in Fluids*, **2006**, 41, 91-101 | 2.5 | 30 |
| 149 | Characterization of near-bed coherent structures in turbulent open channel flow using synchronized high-speed video and hot-film measurements. *Experiments in Fluids*, **1995**, 19, 16-28 | 2.5 | 30 |

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| 148 | Application of the FluEgg model to predict transport of Asian carp eggs in the Saint Joseph River (Great Lakes tributary). *Journal of Great Lakes Research*, **2015**, 41, 374-386 | 3 | 28 |
| 147 | A tale of two riffles: Using multidimensional, multifractional, time-varying sediment transport to assess self-maintenance in pool-riffle sequences. *Water Resources Research*, **2017**, 53, 2095-2113 | 5.4 | 27 |
| 146 | The Mechanics of Marine Sediment Gravity Flows275-337 | | 27 |
| 145 | Geometry of scour hole around, and the influence of the angle of attack on the burial of finite cylinders under combined flows. *Ocean Engineering*, **2007**, 34, 856-869 | 3.9 | 27 |
| 144 | Modeling of one-dimensional turbidity currents with a dissipative-Galerkin finite element method. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **1995**, 33, 623-648 | 1.9 | 27 |
| 143 | The bubble bursts for cavitation in natural rivers: laboratory experiments reveal minor role in bedrock erosion. *Earth Surface Processes and Landforms*, **2017**, 42, 1308-1316 | 3.7 | 26 |
| 142 | Computational Fluid Dynamics Modeling for the Design of Large Primary Settling Tanks. *Journal of Hydraulic Engineering*, **2011**, 137, 343-355 | 1.8 | 25 |
| 141 | The Legend of A. F. Shields. *Journal of Hydraulic Engineering*, **2000**, 126, 718-723 | 1.8 | 25 |
| 140 | Hydrologic-Hydraulic Model for Simulating Dual Drainage and Flooding in Urban Areas: Application to a Catchment in the Metropolitan Area of Chicago. *Journal of Hydrologic Engineering - ASCE*, **2015**, 20, 04014071 | 1.8 | 24 |
| 139 | Modeling the transport of oil-particle aggregates resulting from an oil spill in a freshwater environment. *Environmental Fluid Mechanics*, **2018**, 18, 967-984 | 2.2 | 24 |
| 138 | Enhanced Sediment Scavenging Due to Double-Diffusive Convection. *Journal of Sedimentary Research*, **2000**, 70, 47-52 | 2.1 | 24 |
| 137 | Flow over bedforms in a large sand-bed river: A field investigation. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2008**, 46, 322-333 | 1.9 | 23 |
| 136 | Three-dimensional hydrodynamic modeling of the Chicago River, Illinois. *Environmental Fluid Mechanics*, **2012**, 12, 471-494 | 2.2 | 22 |
| 135 | Combined PIV/PLIF measurements of a steady density current front. *Experiments in Fluids*, **2009**, 46, 265-276 | 2.3 | 22 |
| 134 | Laboratory experiments on the formation of subaqueous depositional gullies by turbidity currents. *Marine Geology*, **2009**, 258, 48-59 | 3.3 | 22 |
| 133 | Computations of Curved Free Surface Water Flow on Spiral Concentrators. *Journal of Hydraulic Engineering*, **2001**, 127, 629-631 | 1.8 | 22 |
| 132 | Three-dimensional numerical modeling of the Bulle effect: the nonlinear distribution of near-bed sediment at fluvial diversions. *Earth Surface Processes and Landforms*, **2017**, 42, 2322-2337 | 3.7 | 21 |
| 131 | Density currents in the Chicago River: characterization, effects on water quality, and potential sources. *Science of the Total Environment*, **2008**, 401, 130-43 | 10.2 | 20 |

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| 130 | Geometry and migration characteristics of bedforms under waves and currents. *Coastal Engineering* , **2006**, 53, 781-792 | 4.8 | 20 |
| 129 | Flow, turbulence, and resistance in a flume with simulated vegetation. *Water Science and Application*, **2004**, 11-27 | | 20 |
| 128 | Characterization of bedform morphology generated under combined flows and currents using wavelet analysis. *Ocean Engineering*, **2009**, 36, 617-632 | 3.9 | 19 |
| 127 | In Situ Characterization of Resuspended-Sediment Oxygen Demand in Bubbly Creek, Chicago, Illinois. *Journal of Environmental Engineering, ASCE*, **2011**, 137, 717-730 | 2 | 19 |
| 126 | Geometry and migration characteristics of bedforms under waves and currents. Part 1: Sandwave morphodynamics. *Coastal Engineering*, **2006**, 53, 767-780 | 4.8 | 19 |
| 125 | Spreading of Gravity Plumes on an Incline. *Coastal Engineering Journal*, **2001**, 43, 221-237 | 2.8 | 19 |
| 124 | Innovative modeling framework for combined sewer overflows prediction. *Urban Water Journal*, **2017**, 14, 97-111 | 2.3 | 18 |
| 123 | ADCP Measurements of Gravity Currents in the Chicago River, Illinois. *Journal of Hydraulic Engineering*, **2007**, 133, 1356-1366 | 1.8 | 18 |
| 122 | Self-Burial of Short Cylinders Under Oscillatory Flows and Combined Waves Plus Currents. *IEEE Journal of Oceanic Engineering*, **2007**, 32, 191-203 | 3.3 | 18 |
| 121 | Junction and Drop-Shaft Boundary Conditions for Modeling Free-Surface, Pressurized, and Mixed Free-Surface Pressurized Transient Flows. *Journal of Hydraulic Engineering*, **2010**, 136, 705-715 | 1.8 | 17 |
| 120 | Modeling turbidity currents with nonuniform sediment and reverse buoyancy. *Water Resources Research*, **2009**, 45, | 5.4 | 17 |
| 119 | Noise-resolution trade-off in projection algorithms for laser diffraction particle sizing. *Applied Optics*, **2006**, 45, 3620-8 | 1.7 | 17 |
| 118 | Entrainment response of bed sediment to time-varying flows. *Water Resources Research*, **2000**, 36, 335-348 | 3.4 | 17 |
| 117 | Experiments on Wedge-Shaped Deep Sea Sedimentary Deposits in Minibasins and/or on Channel Levees Emplaced by Turbidity Currents. Part I. Documentation of the Flow. *Journal of Sedimentary Research*, **2009**, 79, 593-607 | 2.1 | 16 |
| 116 | Vortex trajectory hysteresis above self-formed vortex ripples. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2006**, 44, 437-450 | 1.9 | 16 |
| 115 | Laboratory measurement of suspended sediment concentration using an Acoustic Concentration Profiler (ACP). *Experiments in Fluids*, **2000**, 28, 116-127 | 2.5 | 16 |
| 114 | Effect of initial excess density and discharge on constant flux gravity currents propagating on a slope. *Environmental Fluid Mechanics*, **2014**, 14, 409-429 | 2.2 | 15 |
| 113 | Acoustic measurement of suspended sediment concentration profiles in an oscillatory boundary layer. *Continental Shelf Research*, **2012**, 46, 87-95 | 2.4 | 15 |

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| 112 | A Three-Dimensional Water Quality Model of Chicago Area Waterway System (CAWS). *Environmental Modeling and Assessment*, **2013**, 18, 567-592 | 2 | 15 |
| 111 | Bed morphology, flow structure, and sediment transport at the outlet of Lake Huron and in the upper St. Clair River. *Journal of Great Lakes Research*, **2011**, 37, 480-493 | 3 | 15 |
| 110 | Alluvial Roughness in Streams with Dunes: A Boundary-Layer Approach **2001**, 37-60 | | 15 |
| 109 | Three-dimensional flow in centered pool-riffle sequences. *Water Resources Research*, **2013**, 49, 202-215 | 5.4 | 14 |
| 108 | Modeling Framework for Organic Sediment Resuspension and Oxygen Demand: Case of Bubbly Creek in Chicago. *Journal of Environmental Engineering, ASCE*, **2010**, 136, 952-964 | 2 | 14 |
| 107 | Sediment management by jets and turbidity currents with application to a reservoir for flood and pollution control in Chicago, Illinois. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2009**, 47, 340-348 | 1.9 | 14 |
| 106 | Engelund's Analysis of Turbulent Energy and Suspended Load. *Journal of Engineering Mechanics - ASCE*, **1998**, 124, 480-483 | 2.4 | 14 |
| 105 | Oil-particle interactions and submergence from crude oil spills in marine and freshwater environments: review of the science and future research needs. *US Geological Survey Open-File Report*, | | 14 |
| 104 | Experimental Studies on Burial of Finite-Length Cylinders under Oscillatory Flow. *Journal of Waterway, Port, Coastal and Ocean Engineering*, **2007**, 133, 117-124 | 1.7 | 13 |
| 103 | Hydraulic Evaluation of the Design and Operation of Ancient Rome's Anio Novus Aqueduct. *Archaeometry*, **2017**, 59, 1150-1174 | 1.6 | 12 |
| 102 | Modeling of a Transient Event in the Tunnel and Reservoir Plan System in Chicago, Illinois. *Journal of Hydraulic Engineering*, **2014**, 140, 05014005 | 1.8 | 12 |
| 101 | Numerical modeling of simultaneous tracer release and piscicide treatment for invasive species control in the Chicago Sanitary and Ship Canal, Chicago, Illinois. *Environmental Fluid Mechanics*, **2017**, 17, 211-229 | 2.2 | 12 |
| 100 | Pollution of Gravel Spawning Grounds by Deposition of Suspended Sediment. *Journal of Environmental Engineering, ASCE*, **2000**, 126, 963-967 | 2 | 12 |
| 99 | Impact of combined sewer overflow on urban river hydrodynamic modelling: a case study of the Chicago waterway. *Urban Water Journal*, **2017**, 14, 984-989 | 2.3 | 11 |
| 98 | Numerical aspects of the simulation of discontinuous saline underflows: the lock-exchange problem. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2009**, 47, 777-789 | 1.9 | 11 |
| 97 | Burial of Short Cylinders Induced by Scour under Combined Waves and Currents. *Journal of Waterway, Port, Coastal and Ocean Engineering*, **2006**, 132, 439-449 | 1.7 | 11 |
| 96 | ASCE Manual of Practice 110 Sedimentation Engineering: Processes, Measurements, Modeling and Practice **2006**, 1 | | 11 |
| 95 | A Laboratory Investigation of the Suspension, Transport, and Settling of Silver Carp Eggs Using Synthetic Surrogates. *PLoS ONE*, **2015**, 10, e0145775 | 3.7 | 10 |

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| 94 | Friction coefficient for oscillatory flow: the rough–smooth turbulent transition. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2009**, 47, 438-444 | 1.9 | 10 |
| 93 | Discussion of "Efficient Algorithm for Computing Einstein Integrals" by Junke Guo and Pierre Y. Julien. *Journal of Hydraulic Engineering*, **2006**, 132, 332-334 | 1.8 | 10 |
| 92 | Development of a Rapid Response Riverine Oil-Particle Aggregate Formation, Transport, and Fate Model. *Journal of Environmental Engineering, ASCE*, **2018**, 144, 04018125 | 2 | 10 |
| 91 | Travertine-based estimates of the amount of water supplied by ancient Rome's Anio Novus aqueduct. *Journal of Archaeological Science: Reports*, **2015**, 3, 1-10 | 0.7 | 8 |
| 90 | Sediment mobility and bed armoring in the St Clair River: insights from hydrodynamic modeling. *Earth Surface Processes and Landforms*, **2012**, 37, 957-970 | 3.7 | 8 |
| 89 | Gravity currents down a slope in deceleration phase. *Dynamics of Atmospheres and Oceans*, **2010**, 49, 75-82 | 1.9 | 8 |
| 88 | Scour and burial mechanics of conical frustums on a sandy bed under combined flow conditions. *Ocean Engineering*, **2011**, 38, 1256-1268 | 3.9 | 8 |
| 87 | Implications of Climate Change on the Heat Budget of Lentic Systems Used for Power Station Cooling: Case Study Clinton Lake, Illinois. *Environmental Science & Technology*, **2016**, 50, 478-88 | 10.3 | 7 |
| 86 | Application of computational fluid dynamic modelling to improve flow and grit transport in Terrence J. O'Brien Water Reclamation Plant, Chicago, Illinois. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2014**, 52, 759-774 | 1.9 | 7 |
| 85 | Modulation of the flow structure by progressive bedforms in the Kinoshita meandering channel. *Earth Surface Processes and Landforms*, **2013**, 38, n/a-n/a | 3.7 | 7 |
| 84 | Co-evolving delta faces under the condition of a moving sediment source. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2011**, 49, 42-54 | 1.9 | 7 |
| 83 | Closure to "Turbulence Measurements with Acoustic Doppler Velocimeters" by Carlos M. García, Mariano I. Cantero, Yarko Niño, and Marcelo H. García. *Journal of Hydraulic Engineering*, **2007**, 133, 1289-1292 | 1.8 | 7 |
| 82 | Turbulent kinetic energy balance of an oscillatory boundary layer in the transition to the fully turbulent regime. *Journal of Turbulence*, **2011**, 12, N32 | 2.1 | 6 |
| 81 | Evolución temporal de las sequías hidrológicas en Argentina y su relación con indicadores macroclimáticos. *Tecnologia Y Ciencias Del Agua*, **2018**, 9, 01-32 | 0.9 | 6 |
| 80 | Nonlinear Distribution of Sediment at River Diversions: Brief History of the Bulle Effect and Its Implications. *Journal of Hydraulic Engineering*, **2018**, 144, 03118001 | 1.8 | 5 |
| 79 | PIV experiments in rough-wall, laminar-to-turbulent, oscillatory boundary-layer flows. *Experiments in Fluids*, **2014**, 55, 1 | 2.5 | 5 |
| 78 | Experimental and Numerical Study of the Flow Structure around Two Partially Buried Objects on a Deformed Bed. *Journal of Hydraulic Engineering*, **2013**, 139, 269-283 | 1.8 | 5 |
| 77 | Effect of self-stratification on sediment diffusivity in channel flows and boundary layers: a study using direct numerical simulations. *Earth Surface Dynamics*, **2014**, 2, 419-431 | 3.8 | 5 |

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| 76 | WaveAR: A software tool for calculating parameters for water waves with incident and reflected components. *Computers and Geosciences*, **2012**, 46, 38-43 | 4.5 | 5 |
| 75 | Conceptual and Mathematical Model for Evolution of Meandering Rivers in Naturalization Processes **2004**, 1 | | 5 |
| 74 | Studies of Mass-Movement Processes on Submarine Slopes. *Oceanography*, **1996**, 9, 168-172 | 2.3 | 5 |
| 73 | Coherent structures in oscillatory flows within the laminar-to-turbulent transition regime for smooth and rough walls. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2016**, 54, 502-515 | 1.9 | 4 |
| 72 | Discussion of Note on the Analysis of Plunging of Density Flows by Gary Parker and Horacio Toniolo. *Journal of Hydraulic Engineering*, **2009**, 135, 532-533 | 1.8 | 4 |
| 71 | Sedimentation Hazards **2008**, 885-936 | | 4 |
| 70 | Numerical Simulation of Local Scour with Free Surface and Automatic Mesh Deformation **2006**, 1 | | 4 |
| 69 | Naturalization of Urban Streams Using In-Channel Structures **2000**, 1 | | 4 |
| 68 | An Efficient Finite-Volume Scheme for Modeling Water Hammer Flows. *Journal of Water Management Modeling*, **2007**, | | 4 |
| 67 | On the near-wall effects induced by an axial-flow rotor. *Renewable Energy*, **2016**, 91, 524-530 | 8.1 | 4 |
| 66 | Hydraulic resistance in mixed bedrock-alluvial meandering channels. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2021**, 59, 298-313 | 1.9 | 4 |
| 65 | Reducing the Flood Risk of Art Cities: The Case of Florence. *Journal of Hydraulic Engineering*, **2020**, 146, 02520001 | 1.8 | 3 |
| 64 | HydroSedFoam: A new parallelized two-dimensional hydrodynamic, sediment transport, and bed morphology model. *Computers and Geosciences*, **2018**, 120, 32-39 | 4.5 | 3 |
| 63 | Upper Mississippi River Flow and Sediment Characteristics and Their Effect on a Harbor Siltation Case. *Journal of Hydraulic Engineering*, **2018**, 144, 04018066 | 1.8 | 3 |
| 62 | Erosion of glacial till from the St. Clair River (Great Lakes basin). *Journal of Great Lakes Research*, **2011**, 37, 399-399 | 3 | 3 |
| 61 | Two-Dimensional BOD and DO Water Quality Model for Engineering Applications: The Case of Bubbly Creek in Chicago, Illinois **2009**, | | 3 |
| 60 | Analysis of plunging phenomena. *Journal of Hydraulic Research/De Recherches Hydrauliques*, **2009**, 47, 638-642 | 1.9 | 3 |
| 59 | Prediction of Margin Stratigraphy459-529 | | 3 |

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| 58 | Erosion of Finite Thickness Sediment Beds by Single and Multiple Circular Jets. *Journal of Hydraulic Engineering*, **2007**, 133, 495-507 | 1.8 | 3 |
| 57 | Burial of Short Cylinders Induced by Scour and Bedforms under Waves plus Currents **2005**, 1 | | 3 |
| 56 | Large Eddy Simulation (LES) of flow and bedload transport at an idealized 90-degree diversion: Insight into Bulle-Effect **2016**, | | 3 |
| 55 | Illinois Transient Model: Simulating the Flow Dynamics in Combined Storm Sewer Systems. *Journal of Water Management Modeling*, **2011**, | | 3 |
| 54 | A well-balanced and positivity-preserving SPH method for shallow water flows in open channels. *Journal of Hydraulic Research/De Recherches Hydrauliques*,1-14 | 1.9 | 3 |
| 53 | Analytical Lagrangian Model of Sediment Oxygen Demand and Reaeration Flux Coevolution in Streams. *Journal of Environmental Engineering, ASCE*, **2016**, 142, 04016028 | 2 | 3 |
| 52 | Nonlinear Bedload Transport Trajectory Angle Expressed in a Traditional Form: Derivation and Application. *Journal of Hydraulic Engineering*, **2019**, 145, 04019028 | 1.8 | 2 |
| 51 | Innovative framework to simulate the fate and transport of nonconservative constituents in urban combined sewer catchments. *Water Resources Research*, **2016**, 52, 9164-9181 | 5.4 | 2 |
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