Marcelo H Garcia

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7488821/publications.pdf Version: 2024-02-01



| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Entrainment of Bed Sediment into Suspension. Journal of Hydraulic Engineering, 1991, 117, 414-435. | 0.7 | 415 |
| 2 | Experiments on turbidity currents over an erodible bed. Journal of Hydraulic Research/De Recherches Hydrauliques, 1987, 25, 123-147. | 0.7 | 347 |
| 3 | Mean Flow and Turbulence Structure of Open-Channel Flow through Non-Emergent Vegetation. Journal of Hydraulic Engineering, 2001, 127, 392-402. | 0.7 | 326 |
| 4 | 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. | 1.4 | 274 |
| 5 | A Herschel–Bulkley model for mud flow down a slope. Journal of Fluid Mechanics, 1998, 374, 305-333. | 1.4 | 272 |
| 6 | Experiments on the entrainment of sediment into suspension by a dense bottom current. Journal of Geophysical Research, 1993, 98, 4793-4807. | 3.3 | 223 |
| 7 | open-channel flow through simulated vegetation: Suspended sediment transport modeling. Water Resources Research, 1998, 34, 2341-2352. | 1.7 | 221 |
| 8 | Depositional Turbidity Currents Laden with Poorly Sorted Sediment. Journal of Hydraulic Engineering, 1994, 120, 1240-1263. | 0.7 | 196 |
| 9 | On the front velocity of gravity currents. Journal of Fluid Mechanics, 2007, 586, 1-39. | 1.4 | 196 |
| 10 | Hydraulic Jumps in Sedimentâ€Ðriven Bottom Currents. Journal of Hydraulic Engineering, 1993, 119, 1094-1117. | 0.7 | 190 |
| 11 | Sediment Transport and Morphodynamics. , 2008, , 21-163. | | 180 |
| 12 | Threshold for particle entrainment into suspension. Sedimentology, 2003, 50, 247-263. | 1.6 | 176 |
| 13 | Gravel saltation: 1. Experiments. Water Resources Research, 1994, 30, 1907-1914. | 1.7 | 167 |
| 14 | Turbulence Measurements with Acoustic Doppler Velocimeters. Journal of Hydraulic Engineering, 2005, 131, 1062-1073. | 0.7 | 156 |
| 15 | 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. | 0.5 | 149 |
| 16 | Experiments on Hydraulic Jumps in Turbidity Currents Near a Canyon-Fan Transition. Science, 1989, 245, 393-396. | 6.0 | 148 |
| 17 | Using Lagrangian particle saltation observations for bedload sediment transport modelling. , 1998, 12, 1197-1218. | | 119 |
| 18 | A simplified 2D model for meander migration with physically-based bank evolution. Geomorphology, 2012, 163-164, 10-25. | 1.1 | 117 |

| # | Article | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | 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. | 0.7 | 115 |
| 20 | Gravel Saltation: 2. Modeling. Water Resources Research, 1994, 30, 1915-1924. | 1.7 | 109 |
| 21 | 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. | 0.8 | 109 |
| 22 | Spatial variability in bank resistance to erosion on a large meandering, mixed bedrock-alluvial river. Geomorphology, 2016, 252, 80-97. | 1.1 | 108 |
| 23 | Experiments on Saltation of Sand in Water. Journal of Hydraulic Engineering, 1998, 124, 1014-1025. | 0.7 | 101 |
| 24 | 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. | 0.7 | 98 |
| 25 | Turbulent structures in planar gravity currents and their influence on the flow dynamics. Journal of Geophysical Research, 2008, 113, . | 3.3 | 94 |
| 26 | High-resolution Numerical Simulation of Flow Through a Highly Sinuous River Reach. Water Resources Management, 2004, 18, 177-199. | 1.9 | 84 |
| 27 | Flow Structure at Different Stages in a Meander-Bend with Bendway Weirs. Journal of Hydraulic Engineering, 2008, 134, 1052-1063. | 0.7 | 84 |
| 28 | Experimental study on selfâ€accelerating turbidity currents. Journal of Geophysical Research, 2009, 114, | 3.3 | 83 |
| 29 | High-resolution simulations of cylindrical density currents. Journal of Fluid Mechanics, 2007, 590, 437-469. | 1.4 | 80 |
| 30 | A Perturbation Solution for Bingham-Plastic Mudflows. Journal of Hydraulic Engineering, 1997, 123, 986-994. | 0.7 | 76 |
| 31 | Title is missing!. Hydrobiologia, 2001, 444, 1-23. | 1.0 | 71 |
| 32 | Numerical modeling of large-scale bubble plumes accounting for mass transfer effects. International Journal of Multiphase Flow, 2002, 28, 1763-1785. | 1.6 | 69 |
| 33 | A robust two-equation model for transient-mixed flows. Journal of Hydraulic Research/De Recherches Hydrauliques, 2010, 48, 44-56. | 0.7 | 69 |
| 34 | 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. | 1.2 | 68 |
| 35 | 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. | 0.7 | 65 |
| 36 | An Eulerian–Eulerian model for gravity currents driven by inertial particles. International Journal of Multiphase Flow, 2008, 34, 484-501. | 1.6 | 64 |

| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Confidence intervals in the determination of turbulence parameters. Experiments in Fluids, 2006, 40, 514-522. | 1.1 | 63 |
| 38 | Wall Similarity in Turbulent Open-Channel Flow. Journal of Engineering Mechanics - ASCE, 1999, 125, 789-796. | 1.6 | 62 |
| 39 | Direct Numerical Simulations of Planar and Cylindrical Density Currents. Journal of Applied Mechanics, Transactions ASME, 2006, 73, 923-930. | 1.1 | 62 |
| 40 | Modeling and scaling of aeration bubble plumes: A two-phase flow analysis. Journal of Hydraulic Research/De Recherches Hydrauliques, 2007, 45, 617-630. | 0.7 | 62 |
| 41 | INTEGRATING SCIENCE AND TECHNOLOGY TO SUPPORT STREAM NATURALIZATION NEAR CHICAGO, ILLINOIS. Journal of the American Water Resources Association, 2002, 38, 931-944. | 1.0 | 60 |
| 42 | Threeâ€dimensional flow structure and bed morphology in large elongate meander loops with different outer bank roughness characteristics. Water Resources Research, 2016, 52, 9621-9641. | 1.7 | 60 |
| 43 | 2D stream hydrodynamic, sediment transport and bed morphology model for engineering applications. Hydrological Processes, 2008, 22, 1443-1459. | 1.1 | 57 |
| 44 | Application of Godunov-type schemes to transient mixed flows. Journal of Hydraulic Research/De Recherches Hydrauliques, 2009, 47, 147-156. | 0.7 | 57 |
| 45 | A New Phase Diagram for Combined-Flow Bedforms. Journal of Sedimentary Research, 2014, 84, 301-313. | 0.8 | 57 |
| 46 | Experiments in a highâ€amplitude Kinoshita meandering channel: 1. Implications of bend orientation on mean and turbulent flow structure. Water Resources Research, 2009, 45, . | 1.7 | 56 |
| 47 | Comparative 1D and 3D numerical investigation of open-channel junction flows and energy losses. Advances in Water Resources, 2018, 117, 120-139. | 1.7 | 56 |
| 48 | Godunov-Type Solutions for Transient Flows in Sewers. Journal of Hydraulic Engineering, 2006, 132, 800-813. | 0.7 | 55 |
| 49 | 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. | 1.1 | 55 |
| 50 | RVR Meander: A toolbox for re-meandering of channelized streams. Computers and Geosciences, 2006, 32, 92-101. | 2.0 | 51 |
| 51 | 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. | 3.9 | 50 |
| 52 | Modeling of non-hydroplaning mudflows on continental slopes. Marine Geology, 1999, 154, 131-142. | 0.9 | 49 |
| 53 | Inexpensive fluorescent particles for large-scale experiments using particle image velocimetry. Experiments in Fluids, 2008, 45, 183-186. | 1.1 | 49 |
| 54 | Two-dimensional scour simulations based on coupled model of shallow water equations and sediment transport on unstructured meshes. Coastal Engineering, 2008, 55, 800-810. | 1.7 | 47 |

| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | Errors in Acoustic Doppler Profiler Velocity Measurements Caused by Flow Disturbance. Journal of Hydraulic Engineering, 2007, 133, 1411-1420. | 0.7 | 46 |
| 56 | Experiments in a highâ€amplitude Kinoshita meandering channel: 2. Implications of bend orientation on bed morphodynamics. Water Resources Research, 2009, 45, . | 1.7 | 46 |
| 57 | Bedload transport and bed resistance associated with density and turbidity currents. Sedimentology, 2010, 57, 1463-1490. | 1.6 | 46 |
| 58 | Evaluation of the LISST-ST instrument for suspended particle size distribution and settling velocity measurements. Continental Shelf Research, 2006, 26, 943-958. | 0.9 | 43 |
| 59 | Efficient Second-Order Accurate Shock-Capturing Scheme for Modeling One- and Two-Phase Water Hammer Flows. Journal of Hydraulic Engineering, 2008, 134, 970-983. | 0.7 | 42 |
| 60 | Risk of Sediment Erosion and Suspension in Turbulent Flows. Journal of Hydraulic Engineering, 2001, 127, 231-235. | 0.7 | 41 |
| 61 | A unified model for bedform development and equilibrium under unidirectional, oscillatory and combinedâ€flows. Sedimentology, 2014, 61, 2063-2085. | 1.6 | 41 |
| 62 | Discussions and Closure: Sand-Dune Geometry of Large Rivers during Floods. Journal of Hydraulic Engineering, 1997, 123, 582-585. | 0.7 | 40 |
| 63 | Integrated urban hydrologic and hydraulic modelling in Chicago, Illinois. Environmental Modelling and Software, 2016, 77, 63-70. | 1.9 | 40 |
| 64 | 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. | 1.2 | 40 |
| 65 | Assessment of Floodplain Vulnerability during Extreme Mississippi River Flood 2011. Environmental Science & Technology, 2014, 48, 2619-2625. | 4.6 | 39 |
| 66 | 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. | 0.8 | 39 |
| 67 | Secondary Current of Saline Underflow In A Highly Meandering Channel: Experiments and Theory. Journal of Sedimentary Research, 2011, 81, 787-813. | 0.8 | 38 |
| 68 | Flow over bedforms in a large sand-bed river: A field investigation. Journal of Hydraulic Research/De Recherches Hydrauliques, 2008, 46, 322-333. | 0.7 | 37 |
| 69 | Mixing at the front of gravity currents. Dynamics of Atmospheres and Oceans, 1996, 24, 197-205. | 0.7 | 36 |
| 70 | The Legend of A. F. Shields. Journal of Hydraulic Engineering, 2000, 126, 718-723. | 0.7 | 36 |
| 71 | Characterization of flow turbulence in large-scale bubble-plume experiments. Experiments in Fluids, 2006, 41, 91-101. | 1.1 | 36 |
| 72 | 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. | 1.1 | 34 |

| # | Article | IF | CITATIONS |
|----|--|-----|-----------|
| 73 | 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. | 1.2 | 34 |
| 74 | 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. | 1.9 | 33 |
| 75 | Effect of particle inertia on the dynamics of depositional particulate density currents. Computers and Geosciences, 2008, 34, 1307-1318. | 2.0 | 33 |
| 76 | Computational Fluid Dynamics Modeling for the Design of Large Primary Settling Tanks. Journal of Hydraulic Engineering, 2011, 137, 343-355. | 0.7 | 33 |
| 77 | 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, . | 0.8 | 33 |
| 78 | A tale of two riffles: Using multidimensional, multifractional, timeâ€varying sediment transport to assess selfâ€maintenance in poolâ€riffle sequences. Water Resources Research, 2017, 53, 2095-2113. | 1.7 | 33 |
| 79 | Modeling of one-dimensional turbidity currents with a dissipative-Galerkin finite element method. Journal of Hydraulic Research/De Recherches Hydrauliques, 1995, 33, 623-648. | 0.7 | 32 |
| 80 | Modeling the transport of oil–particle aggregates resulting from an oil spill in a freshwater environment. Environmental Fluid Mechanics, 2018, 18, 967-984. | 0.7 | 31 |
| 81 | Characterization of bedform morphology generated under combined flows and currents using wavelet analysis. Ocean Engineering, 2009, 36, 617-632. | 1.9 | 29 |
| 82 | Laboratory experiments on the formation of subaqueous depositional gullies by turbidity currents. Marine Geology, 2009, 258, 48-59. | 0.9 | 29 |
| 83 | Enhanced Sediment Scavenging Due to Double-Diffusive Convection. Journal of Sedimentary Research, 2000, 70, 47-52. | 0.8 | 27 |
| 84 | Computations of Curved Free Surface Water Flow on Spiral Concentrators. Journal of Hydraulic Engineering, 2001, 127, 629-631. | 0.7 | 27 |
| 85 | Geometry and migration characteristics of bedforms under waves and currents. Coastal Engineering, 2006, 53, 781-792. | 1.7 | 27 |
| 86 | Three-dimensional hydrodynamic modeling of the Chicago River, Illinois. Environmental Fluid Mechanics, 2012, 12, 471-494. | 0.7 | 27 |
| 87 | Threeâ€dimensional numerical modeling of the Bulle effect: the nonlinear distribution of nearâ€bed sediment at fluvial diversions. Earth Surface Processes and Landforms, 2017, 42, 2322-2337. | 1.2 | 26 |
| 88 | Entrainment response of bed sediment to time-varying flows. Water Resources Research, 2000, 36, 335-348. | 1.7 | 25 |
| 89 | ADCP Measurements of Gravity Currents in the Chicago River, Illinois. Journal of Hydraulic Engineering, 2007, 133, 1356-1366. | 0.7 | 25 |
| 90 | Combined PIV/PLIF measurements of a steady density current front. Experiments in Fluids, 2009, 46, 265-276. | 1.1 | 25 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 91 | Geometry and migration characteristics of bedforms under waves and currents. Part 1: Sandwave morphodynamics. Coastal Engineering, 2006, 53, 767-780. | 1.7 | 23 |
| 92 | Innovative modeling framework for combined sewer overflows prediction. Urban Water Journal, 2017, 14, 97-111. | 1.0 | 23 |
| 93 | Spreading of Gravity Plumes on an Incline. Coastal Engineering Journal, 2001, 43, 221-237. | 0.7 | 22 |
| 94 | Flow, turbulence, and resistance in a flume with simulated vegetation. Water Science and Application, 2004, , 11-27. | 0.3 | 22 |
| 95 | Noise-resolution trade-off in projection algorithms for laser diffraction particle sizing. Applied Optics, 2006, 45, 3620. | 2.1 | 22 |
| 96 | Density currents in the Chicago River: Characterization, effects on water quality, and potential sources. Science of the Total Environment, 2008, 401, 130-143. | 3.9 | 22 |
| 97 | Laboratory measurement of suspended sediment concentration using an Acoustic Concentration Profiler (ACP). Experiments in Fluids, 2000, 28, 116-127. | 1.1 | 21 |
| 98 | Self-Burial of Short Cylinders Under Oscillatory Flows and Combined Waves Plus Currents. IEEE Journal of Oceanic Engineering, 2007, 32, 191-203. | 2.1 | 21 |
| 99 | 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. | 0.8 | 21 |
| 100 | Burial of Short Cylinders Induced by Scour under Combined Waves and Currents. Journal of Waterway, Port, Coastal and Ocean Engineering, 2006, 132, 439-449. | 0.5 | 20 |
| 101 | In Situ Characterization of Resuspended-Sediment Oxygen Demand in Bubbly Creek, Chicago, Illinois. Journal of Environmental Engineering, ASCE, 2011, 137, 717-730. | 0.7 | 20 |
| 102 | Vortex trajectory hysteresis above self-formed vortex ripples. Journal of Hydraulic Research/De Recherches Hydrauliques, 2006, 44, 437-450. | 0.7 | 19 |
| 103 | Experimental Studies on Burial of Finite-Length Cylinders under Oscillatory Flow. Journal of Waterway, Port, Coastal and Ocean Engineering, 2007, 133, 117-124. | 0.5 | 19 |
| 104 | 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. | 0.7 | 19 |
| 105 | Hydraulic Evaluation of the Design and Operation of Ancient Rome's Anio Novus Aqueduct. Archaeometry, 2017, 59, 1150-1174. | 0.6 | 19 |
| 106 | Engelund's Analysis of Turbulent Energy and Suspended Load. Journal of Engineering Mechanics - ASCE, 1998, 124, 480-483. | 1.6 | 18 |
| 107 | Pollution of Gravel Spawning Grounds by Deposition of Suspended Sediment. Journal of Environmental Engineering, ASCE, 2000, 126, 963-967. | 0.7 | 18 |
| 108 | Modeling turbidity currents with nonuniform sediment and reverse buoyancy. Water Resources Research, 2009, 45, . | 1.7 | 18 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 109 | 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. | 0.8 | 18 |
| 110 | A Three-Dimensional Water Quality Model of Chicago Area Waterway System (CAWS). Environmental Modeling and Assessment, 2013, 18, 567-592. | 1.2 | 18 |
| 111 | Effect of initial excess density and discharge on constant flux gravity currents propagating on a slope. Environmental Fluid Mechanics, 2014, 14, 409-429. | 0.7 | 18 |
| 112 | Alluvial Roughness in Streams with Dunes: A Boundary-Layer Approach. , 2001, , 37-60. | | 18 |
| 113 | Acoustic measurement of suspended sediment concentration profiles in an oscillatory boundary layer. Continental Shelf Research, 2012, 46, 87-95. | 0.9 | 17 |
| 114 | Threeâ€dimensional flow in centered poolâ€riffle sequences. Water Resources Research, 2013, 49, 202-215. | 1.7 | 17 |
| 115 | Development of a Rapid Response Riverine Oil–Particle Aggregate Formation, Transport, and Fate Model. Journal of Environmental Engineering, ASCE, 2018, 144, . | 0.7 | 17 |
| 116 | Modeling Framework for Organic Sediment Resuspension and Oxygen Demand: Case of Bubbly Creek in Chicago. Journal of Environmental Engineering, ASCE, 2010, 136, 952-964. | 0.7 | 16 |
| 117 | Modeling of a Transient Event in the Tunnel and Reservoir Plan System in Chicago, Illinois. Journal of Hydraulic Engineering, 2014, 140, . | 0.7 | 16 |
| 118 | A Laboratory Investigation of the Suspension, Transport, and Settling of Silver Carp Eggs Using Synthetic Surrogates. PLoS ONE, 2015, 10, e0145775. | 1.1 | 15 |
| 119 | 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. | 0.7 | 14 |
| 120 | Impact of combined sewer overflow on urban river hydrodynamic modelling: a case study of the Chicago waterway. Urban Water Journal, 2017, 14, 984-989. | 1.0 | 14 |
| 121 | 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. | 0.7 | 14 |
| 122 | Numerical aspects of the simulation of discontinuous saline underflows: the lock-exchange problem. Journal of Hydraulic Research/De Recherches Hydrauliques, 2009, 47, 777-789. | 0.7 | 13 |
| 123 | Modulation of the flow structure by progressive bedforms in the Kinoshita meandering channel. Earth Surface Processes and Landforms, 2013, 38, 1612-1622. | 1.2 | 13 |
| 124 | ASCE Manual of Practice 110 — Sedimentation Engineering: Processes, Measurements, Modeling and Practice. , 2006, , 1. | | 12 |
| 125 | Scour and burial mechanics of conical frustums on a sandy bed under combined flow conditions. Ocean Engineering, 2011, 38, 1256-1268. | 1.9 | 12 |
| 126 | Discussion of "Efficient Algorithm for Computing Einstein Integrals―by Junke Guo and Pierre Y. Julien. Journal of Hydraulic Engineering, 2006, 132, 332-334. | 0.7 | 11 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 127 | Friction coefficient for oscillatory flow: the rough–smooth turbulent transition. Journal of Hydraulic Research/De Recherches Hydrauliques, 2009, 47, 438-444. | 0.7 | 11 |
| 128 | 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. | 0.2 | 11 |
| 129 | Closure to "Turbulence Measurements with Acoustic Doppler Velocimeters―by Carlos M. GarcÃa, Mariano I. Cantero, Yarko Niño, and Marcelo H. GarcÃa. Journal of Hydraulic Engineering, 2007, 133, 1289-1292. | 0.7 | 9 |
| 130 | Gravity currents down a slope in deceleration phase. Dynamics of Atmospheres and Oceans, 2010, 49, 75-82. | 0.7 | 9 |
| 131 | Sediment mobility and bed armoring in the St Clair River: insights from hydrodynamic modeling. Earth Surface Processes and Landforms, 2012, 37, 957-970. | 1.2 | 9 |
| 132 | Hydraulic resistance in mixed bedrock-alluvial meandering channels. Journal of Hydraulic Research/De Recherches Hydrauliques, 2021, 59, 298-313. | 0.7 | 9 |
| 133 | Co-evolving delta faces under the condition of a moving sediment source. Journal of Hydraulic Research/De Recherches Hydrauliques, 2011, 49, 42-54. | 0.7 | 8 |
| 134 | Erosion of glacial till from the St. Clair River (Great Lakes basin). Journal of Great Lakes Research, 2011, 37, 399-410. | 0.8 | 8 |
| 135 | Assessing the system performance of an evolving and integrated urban drainage system to control combined sewer overflows using a multiple-layer based coupled modeling approach. Journal of Hydrology, 2021, 603, 127130. | 2.3 | 8 |
| 136 | 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. | 1.0 | 7 |
| 137 | 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. | 0.7 | 7 |
| 138 | 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, 478-488. | 4.6 | 7 |
| 139 | Reducing the Flood Risk of Art Cities: The Case of Florence. Journal of Hydraulic Engineering, 2020, 146, . | 0.7 | 7 |
| 140 | An Efficient Finite-Volume Scheme for Modeling Water Hammer Flows. Journal of Water Management Modeling, 2007, , . | 0.0 | 7 |
| 141 | Turbulent kinetic energy balance of an oscillatory boundary layer in the transition to the fully turbulent regime. Journal of Turbulence, 2011, 12, N32. | 0.5 | 6 |
| 142 | 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. | 0.7 | 6 |
| 143 | PIV experiments in rough-wall, laminar-to-turbulent, oscillatory boundary-layer flows. Experiments in Fluids, 2014, 55, 1. | 1.1 | 6 |
| 144 | On the near-wall effects induced by an axial-flow rotor. Renewable Energy, 2016, 91, 524-530. | 4.3 | 6 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 145 | A well-balanced and positivity-preserving SPH method for shallow water flows in open channels. Journal of Hydraulic Research/De Recherches Hydrauliques, 2021, 59, 903-916. | 0.7 | 6 |
| 146 | Evolución temporal de las sequÃas hidrológicas en Argentina y su relación con indicadores macroclimáticos. Tecnologia Y Ciencias Del Agua, 2018, 9, 01-32. | 0.1 | 6 |
| 147 | Physical Habitat Analysis and Design of In-Channel Structures on a Chicago, IL Urban Drainage: A Stream Naturalization Design Process. , 2002, , 1. | | 5 |
| 148 | Conceptual and Mathematical Model for Evolution of Meandering Rivers in Naturalization Processes. , 2004, , 1. | | 5 |
| 149 | Numerical Simulation of Local Scour with Free Surface and Automatic Mesh Deformation. , 2006, , 1. | | 5 |
| 150 | Prediction of Margin Stratigraphy. , 0, , 459-529. | | 5 |
| 151 | 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. | 0.7 | 5 |
| 152 | Analysis of plunging phenomena. Journal of Hydraulic Research/De Recherches Hydrauliques, 2009, 47, 638-642. | 0.7 | 5 |
| 153 | WaveAR: A software tool for calculating parameters for water waves with incident and reflected components. Computers and Geosciences, 2012, 46, 38-43. | 2.0 | 5 |
| 154 | Nonlinear Distribution of Sediment at River Diversions: Brief History of the Bulle Effect and Its Implications. Journal of Hydraulic Engineering, 2018, 144, . | 0.7 | 5 |
| 155 | Relationship of point bar morphology to channel curvature and planform evolution. Geomorphology, 2021, 375, 107541. | 1.1 | 5 |
| 156 | pyRiverBed: A Python framework to generate synthetic riverbed topography for constant-width meandering rivers. Computers and Geosciences, 2021, 152, 104755. | 2.0 | 5 |
| 157 | Studies of Mass-Movement Processes on Submarine Slopes. Oceanography, 1996, 9, 168-172. | 0.5 | 5 |
| 158 | Mean flow structure and velocity–bed shear stress maxima phase difference in smooth wall, transitionally turbulent oscillatory boundary layers: direct numerical simulations. Journal of Fluid Mechanics, 2021, 928, . | 1.4 | 5 |
| 159 | Naturalization of Urban Streams Using In-Channel Structures. , 2000, , 1. | | 4 |
| 160 | Exploratory Study of Oscillatory Flow over a Movable Sediment Bed with Particle-Image-Velocimetry (PIV). , 2002, , 1. | | 4 |
| 161 | Erosion of Finite Thickness Sediment Beds by Single and Multiple Circular Jets. Journal of Hydraulic Engineering, 2007, 133, 495-507. | 0.7 | 4 |
| 162 | Sedimentation Hazards. , 2008, , 885-936. | | 4 |

10

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 163 | Two-Dimensional BOD and DO Water Quality Model for Engineering Applications: The Case of Bubbly Creek in Chicago, Illinois. , 2009, , . | | 4 |
| 164 | Analytical Lagrangian Model of Sediment Oxygen Demand and Reaeration Flux Coevolution in Streams. Journal of Environmental Engineering, ASCE, 2016, 142, 04016028. | 0.7 | 4 |
| 165 | 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. | 0.7 | 4 |
| 166 | Inputâ€variable sensitivity assessment for sediment transport relations. Water Resources Research, 2017, 53, 8105-8119. | 1.7 | 4 |
| 167 | HydroSedFoam: A new parallelized two-dimensional hydrodynamic, sediment transport, and bed morphology model. Computers and Geosciences, 2018, 120, 32-39. | 2.0 | 4 |
| 168 | Upper Mississippi River Flow and Sediment Characteristics and Their Effect on a Harbor Siltation Case. Journal of Hydraulic Engineering, 2018, 144, 04018066. | 0.7 | 4 |
| 169 | Nonlinear Bedload Transport Trajectory Angle Expressed in a Traditional Form: Derivation and Application. Journal of Hydraulic Engineering, 2019, 145, 04019028. | 0.7 | 4 |
| 170 | Mean flow structure and velocity–bed shear stress maxima phase difference in smooth wall, transitionally turbulent oscillatory boundary layers: experimental observations. Journal of Fluid Mechanics, 2021, 922, . | 1.4 | 4 |
| 171 | Large Eddy Simulation (LES) of flow and bedload transport at an idealized 90-degree diversion: Insight into Bulle-Effect. , 2016, , . | | 4 |
| 172 | Travertine crystal growth ripples record the hydraulic history of ancient Rome's Anio Novus aqueduct. Scientific Reports, 2022, 12, 1239. | 1.6 | 4 |
| 173 | Mean Flow and Turbulence Characteristics in Pool-Riffle Structures. , 2002, , 1. | | 3 |
| 174 | Burial of Short Cylinders Induced by Scour and Bedforms under Waves plus Currents. , 2005, , 1. | | 3 |
| 175 | Bathymetric Evolution of a Sandy Bed under Transient Progressive Waves. , 2007, , . | | 3 |
| 176 | Unstable flow structure around partially buried objects on a simulated river bed. Journal of Hydroinformatics, 2017, 19, 31-46. | 1.1 | 3 |
| 177 | Visualization of the Bulle-Effect at River Bifurcations. , 2018, , . | | 3 |
| 178 | Illinois Transient Model: Simulating the Flow Dynamics in Combined Storm Sewer Systems. Journal of Water Management Modeling, 2011, , . | 0.0 | 3 |
| 179 | FluOil: A Novel Tool for Modeling the Transport of Oil-Particle Aggregates in Inland Waterways. Frontiers in Water, 2022, 3, . | 1.0 | 3 |
| 180 | Velocity and Sediment Concentration Measurements over Bedforms in Sand-Bed Rivers. , 2002, , 1. | | 2 |

 $\label{eq:Velocity} Velocity \ and \ Sediment \ Concentration \ Measurements \ over \ Bedforms \ in \ Sand-Bed \ Rivers. \ , \ 2002, \ , \ 1.$ 180

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 181 | In-Situ Measurements of Sediment Oxygen Demand by Suspended Biosolids. , 2002, , 1. | | 2 |
| 182 | Closure to "Hydraulic Design of Large-Diameter Pipes―by Fabián A. Bombardelli and Marcelo H. GarcÃa. Journal of Hydraulic Engineering, 2005, 131, 224-225. | 0.7 | 2 |
| 183 | CFD Modeling Optimizes the Design of Primary Settling Tanks at MWRDGC's Calumet Water Reclamation Plant. Proceedings of the Water Environment Federation, 2008, 2008, 1698-1713. | 0.0 | 2 |
| 184 | Optimal Design of the Chicago Calumet Water Reclamation Plant (CCWRP) Primary Settling Tanks with 3D Numerical Models. , 2008, , . | | 2 |
| 185 | Computational Fluid Dynamics (CFD) Modeling of Flow into the Aerated Grit Chamber of the MWRD's North Side Water Reclamation Plant, Illinois. , 2010, , . | | 2 |
| 186 | Modelling deltaic progradation constrained by a moving sediment source. Journal of Hydraulic Research/De Recherches Hydrauliques, 2013, 51, 284-292. | 0.7 | 2 |
| 187 | Innovative framework to simulate the fate and transport of nonconservative constituents in urban combined sewer catchments. Water Resources Research, 2016, 52, 9164-9181. | 1.7 | 2 |
| 188 | Improved understanding of combined sewer systems using the Illinois Conveyance Analysis Program (ICAP). Urban Water Journal, 2017, 14, 811-819. | 1.0 | 2 |
| 189 | Entrainment, Transport, and Fate of Sediments during Storm Events in Urban Canals and Rivers: Case Study on Bubbly Creek, Chicago. Journal of Hydraulic Engineering, 2021, 147, . | 0.7 | 2 |
| 190 | Arbitrary Lagrangian-Eulerian Approach for Finite Element Modeling of Two-dimensional Turbidity Currents. Water International, 1996, 21, 175-182. | 0.4 | 1 |
| 191 | Prediction of the Behavior of Hydraulic Jumps in Canoe Chutes. , 2000, , 1. | | 1 |
| 192 | On the impact of journal papers: The Muskingum-Cunge flood-routing method. Journal of Hydraulic Research/De Recherches Hydrauliques, 2003, 41, 563-563. | 0.7 | 1 |
| 193 | Buoyancy-Driven Flow in a Two-Story Compartment. Journal of Engineering Mechanics - ASCE, 2009, 135, 738-742. | 1.6 | 1 |
| 194 | A Robust and Fast Model for Simulating Street Flooding. , 2009, , . | | 1 |
| 195 | Boundary Conditions for Simulating Complex Storm-Sewer Systems in Free Surface, Pressurized, and Mixed Flow Conditions. , 2009, , . | | 1 |
| 196 | Hydraulic Model Study of Canoe Chute and Fish Passage for the Chicago River North Branch Dam. , 2009, , . | | 1 |
| 197 | Stability of a Pair of Counterrotating and Corotating Vortices of Different Strengths. Journal of Engineering Mechanics - ASCE, 2009, 135, 591-595. | 1.6 | 1 |
| 198 | Energy Dissipative Plunging Flows. Journal of Hydraulic Engineering, 2010, 136, 519-523. | 0.7 | 1 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 199 | Experimental Investigation of a Vortex-Flow Restrictor: Rain-Blocker Performance Tests. Journal of Hydraulic Engineering, 2010, 136, 528-533. | 0.7 | 1 |
| 200 | Flow Dynamics in Combined Storm-Sewer Systems: Application of the Illinois Transient Model (ITM) to the Calumet TARP System in Chicago, Illinois. , 2010, , . | | 1 |
| 201 | Discussion of "Evaluation of Sediment Diversion Design Attributes and Their Impact on the Capture Efficiency―by Ahmed Gaweesh and Ehab Meselhe. Journal of Hydraulic Engineering, 2018, 144, 07018007. | 0.7 | 1 |
| 202 | Using Lagrangian particle saltation observations for bedload sediment transport modelling. , 1998, 12, 1197. | | 1 |
| 203 | Hydraulics. , 2007, , 959-1042. | | 1 |
| 204 | Experimental comparison of initiation of motion for submerged objects resting on fixed permeable and impermeable beds. Physical Review Fluids, 2019, 4, . | 1.0 | 1 |
| 205 | Numerical modeling of sediment traps after the 2010 Kalamazoo River oil spill, Michigan, USA. , 2016, , . | | 1 |
| 206 | Impact of Lake Michigan water level rise on complex bidirectional flow in the Chicago Area Waterway System (CAWS). Journal of Great Lakes Research, 2021, 47, 1626-1643. | 0.8 | 1 |
| 207 | The role of dunes in flow resistance in a large and a small river. The case of the ParanÃ _i and Tercero rivers, Argentina. Journal of Hydraulic Research/De Recherches Hydrauliques, 2022, 60, 389-407. | 0.7 | 1 |
| 208 | Steady‣tate Parallel Retreat Migration in River Bends With Noncohesive (Composite) Banks. Water Resources Research, 2022, 58, . | 1.7 | 1 |
| 209 | Sedimentation in Vegetated Rivers. , 1998, , 937. | | 0 |
| 210 | Building up on the Legacy of Vito Vanoni: Volume 2 of Manual 54 ``Sedimentation Engineering''. , 2000, , 1. | | 0 |
| 211 | Alluvial Resistance and Sediment Transport for Flows over Dunes. , 2000, , 1. | | Ο |
| 212 | Bank Erosion in Meandering Rivers. , 2000, , 1. | | 0 |
| 213 | Celebrating more than 40 years of service to the profession. Journal of Hydraulic Research/De Recherches Hydrauliques, 2004, 42, 339-340. | 0.7 | 0 |
| 214 | Characterizing a December 2005 Density Current Event in the Chicago River, Chicago, Illinois. , 2006, , 1. | | 0 |
| 215 | Effect of Particle Inertia in Particulate Density Currents. , 2006, , 393-402. | | 0 |
| 216 | A Finite Volume Model for Mixed Surface-Pressurized Flows in Drainage Systems. , 2008, , . | | 0 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 217 | Closure to "Burial of Short Cylinders Induced by Scour under Combined Waves and Currents―by Yovanni A. Cataño-Lopera and Marcelo H. GarcÃa. Journal of Waterway, Port, Coastal and Ocean Engineering, 2008, 134, 262-264. | 0.5 | 0 |
| 218 | Physical Modeling to Optimize Chicago's New Calumet Influent Pumping Station. Proceedings of the Water Environment Federation, 2008, 2008, 4634-4642. | 0.0 | 0 |
| 219 | Plunging conditions of two-dimensional negative buoyant surface jets released on a sloping bottom. Journal of Hydraulic Research/De Recherches Hydrauliques, 2009, 47, 681-682. | 0.7 | 0 |
| 220 | Meandering Instability of a Vertical Plume. Journal of Engineering Mechanics - ASCE, 2009, 135, 111-114. | 1.6 | 0 |
| 221 | Stephen Edward Coleman (1966–2012). Acta Geophysica, 2012, 60, 1500-1501. | 1.0 | 0 |
| 222 | Depositional and diagenetic history of travertine deposited within the Anio Novus aqueduct of ancient Rome. , 2022, , 541-570. | | 0 |