Patrick J Lynett

List of Publications by Year
in descending order

137 papers	4,219 citations	94269 37 h-index	114278 63 g-index
151 all docs	151 docs citations	151 times ranked	2621 citing authors

#	Article	IF	Citations
1	Validation and inter-comparison of models for landslide tsunami generation. Ocean Modelling, 2022, 170, 101943.	1.0	18
2	The Mw = 6.6 earthquake and tsunami of south Crete on 2020 May 2. Geophysical Journal International, 2022, 230, 480-506.	1.0	6
3	The 28 November 2020 Landslide, Tsunami, and Outburst Flood â€“ A Hazard Cascade Associated With Rapid Deglaciation at Elliot Creek, British Columbia, Canada. Geophysical Research Letters, 2022, 49, .	1.5	23
4	Probabilistic Estimates of Tsunami Risk for Small Craft Marinas. Journal of Waterway, Port, Coastal and Ocean Engineering, 2021, 147, 04020047.	0.5	0
5	Large eddy simulation study of a wave-induced shallow-water monopolar vortex. Ocean Modelling, 2021, 162, 101796.	1.0	1
6	Adaptive third order Adams-Bashforth time integration for extended Boussinesq equations. Computer Physics Communications, 2021, 265, 108006.	3.0	3
7	Modeling the motion of large vessels due to tsunami-induced currents. Ocean Engineering, 2021, 236, 109487.	1.9	7
8	Wave overtopping due to harbour resonance. Coastal Engineering, 2021, 169, 103973.	1.7	9
9	Celeris Base: An interactive and immersive Boussinesq-type nearshore wave simulation software. Computer Physics Communications, 2020, 248, 106966.	3.0	8
10	Modelling scour and deposition in harbours due to complex tsunamiâ€induced currents. Earth Surface Processes and Landforms, 2020, 45, 978-998.	1.2	2
11	Physical model investigation of mid-scale mangrove effects on flow hydrodynamics and pressures and loads in the built environment. Coastal Engineering, 2020, 162, 103791.	1.7	24
12	Detection and Assessment of a Large and Potentially Tsunamigenic Periglacial Landslide in Barry Arm, Alaska. Geophysical Research Letters, 2020, 47, e2020GL089800.	1.5	30
13	Field Survey and Numerical Modelling of the December 22, 2018 Anak Krakatau Tsunami. Pure and Applied Geophysics, 2020, 177, 2457-2475.	0.8	31
14	Hurricane Michael in the Area of Mexico Beach, Florida. Journal of Waterway, Port, Coastal and Ocean Engineering, 2020, 146, .	0.5	21
15	Wave-by-Wave Forecasting via Assimilation of Marine Radar Data. Journal of Atmospheric and Oceanic Technology, 2020, 37, 1269-1288.	0.5	7
16	INTERACTIVE AUGMENTED REALITY SIMULATION SYSTEM FOR COASTAL HAZARD EDUCATION. Coastal Engineering Proceedings, 2020, , 45.	0.1	0
17	A COMPREHENSIVE EVALUATION OF FLOOD HAZARDS FOR SABINE TO GALVESTON, TX, USA REGION. Coastal Engineering Proceedings, 2020, , 22.	0.1	0
18	DATA-MODEL COMPARISONS OF STORM PROCESSES DURING HURRICANE HARVEY. Coastal Engineering Proceedings, 2020, , 40.	0.1	0

#	Article	IF	Citations
19	INTER-COUPLED TSUNAMI MODELLING THROUGH AN ABSORBING-GENERATING BOUNDARY. Coastal Engineering Proceedings, 2020, , 38.	0.1	1
20	FOREWORD: Proceedings of the virtual International Conference. Coastal Engineering Proceedings, 2020, , 1.	0.1	0
21	PHYSICAL MODEL INVESTIGATION OF PARCEL SCALE MANGROVE EFFECTS ON FLOW HYDRODYNAMICS AND PRESSURES AND LOADS IN THE BUILT ENVIRONMENT. Coastal Engineering Proceedings, 2020, , 1.	0.1	0
22	LOADING AND STRUCTURAL RESPONSE OF DEVELOPED SHORELINES UNDER WAVES, SURGE, AND TSUNAMI OVERLAND FLOW HAZARDS. Coastal Engineering Proceedings, 2020, , 36.	0.1	0
23	A GPU-ACCELERATED MODELING OF SCALAR TRANSPORT BASED ON BOUSSINESQ-TYPE EQUATIONS. Coastal Engineering Proceedings, 2020, , 11.	0.1	0
24	TSUNAMI RUNUP AMPLIFICATION OF BREAKING AND NON-BREAKING ERROR-FUNCTION WAVES OVER A SLOPING BEACH IN SHADOW ZONE BY A SMALL ISLAND. Coastal Engineering Proceedings, 2020, , 13.	0.1	1
25	Three-Dimensional Hydrodynamics Associated with a Solitary Wave Traveling over an Alongshore Variable Shallow Shelf. Journal of Waterway, Port, Coastal and Ocean Engineering, 2019, 145, .	0.5	5
26	Experimental study of long wave dynamics in the presence of two offshore islands. Environmental Fluid Mechanics, 2019, 19, 941-968.	0.7	3
27	A study of long wave run-ups on a bi-linear beach slope induced by solitary and transient-focused wave group. Coastal Engineering Journal, 2019, 61, 135-151.	0.7	5
28	Bottom boundary layer forced by finite amplitude long and short surface waves motions. Ocean Modelling, 2018, 124, 48-60.	1.0	0
29	INTERACTIVE AND IMMERSIVE COASTAL HYDRODYNAMIC SIMULATION. Coastal Engineering Proceedings, 2018, , 63.	0.1	0
30	Tsunami versus Infragravity Surge: Comparison of the Physical Character of Extreme Runup. Geophysical Research Letters, 2018, 45, 12,982.	1.5	14
31	The 2015 landslide and tsunami in Taan Fiord, Alaska. Scientific Reports, 2018, 8, 12993.	1.6	89
32	OPTIMUM FREQUENCY DISCRETIZATION AND ITS IMPLICATIONS ON EXTREME INFRA-GRAVITY WAVE RUNUP. Coastal Engineering Proceedings, 2018, , 89.	0.1	0
33	OPTICAL MEASUREMENTS FOR LABORATORY OBSERVATIONS OF TSUNAMI RUN-UP ON CONICAL ISLANDS. Coastal Engineering Proceedings, 2018, , 65.	0.1	0
34	FOREWORD: Proceedings of the 36th International Conference. Coastal Engineering Proceedings, 2018, , 1.	0.1	0
35	A DESIGN LIFE BASED APPROACH TO MULTI-HAZARD RISK ANALYSIS. Coastal Engineering Proceedings, 2018, , 81.	0.1	0
36	LARGE-SCALE EXPERIMENTS ON WAVE-INDUCED SHALLOW TURBULENT COHERENT STRUCTURES. Coastal Engineering Proceedings, 2018, , 54.	0.1	0

#	Article	IF	Citations
37	DEBRIS AND VESSEL TRANSPORT DUE TO TSUNAMI CURRENTS IN PORTS AND HARBORS. Coastal Engineering Proceedings, 2018, , 68.	0.1	1
38	NUMERICAL MODELLING OF TSUNAMI INUNUNDATION CONSIDERING THE PRESENCE OF OFFSHORE ISLANDS AND BARRIER REEFS. Coastal Engineering Proceedings, 2018, , 72.	0.1	0
39	Monte Carloâ€“Based Approach to Estimating Fragility Curves of Floating Docks for Small Craft Marinas. Journal of Waterway, Port, Coastal and Ocean Engineering, 2017, 143, 04017004.	0.5	5
40	Inter-model analysis of tsunami-induced coastal currents. Ocean Modelling, 2017, 114, 14-32.	1.0	79
41	Energy Method for Approximating Overland Tsunami Flows. Journal of Waterway, Port, Coastal and Ocean Engineering, 2017, 143, .	0.5	19
42	Celeris: A GPU-accelerated open source software with a Boussinesq-type wave solver for real-time interactive simulation and visualization. Computer Physics Communications, 2017, 217, 117-127.	3.0	37
43	An approach for estimating the largest probable tsunami from far-field subduction zone earthquakes. Natural Hazards, 2017, 89, 233-253.	1.6	6
44	Spatial Statistics of Tsunami Overland Flow Properties. Journal of Waterway, Port, Coastal and Ocean Engineering, 2017, 143, 04016017.	0.5	8
45	EFFECTS OF TIDE AND WAVE DIRECTIONALITY ON LOCALIZED TSUNAMI-INDUCED CURRENTS IN PORT AND HARBORS. Coastal Engineering Proceedings, 2017, , 8.	0.1	1
46	QUANTIFYING NUMERICAL MODEL ACCURACY AND VARIABILITY. Coastal Engineering Proceedings, 2017, , 12.	0.1	1
47	OPPORTUNITIES FOR INTERACTIVE, PHYSICS-DRIVEN WAVE SIMULATION USING THE BOUSSINESQ-TYPE MODEL, CELERIS. Coastal Engineering Proceedings, 2017, , 11.	0.1	0
48	FOREWORD: Proceedings of the 35th International Conference. Coastal Engineering Proceedings, 2017, , 1.	0.1	0
49	FRAGILITY OF FLOATING DOCKS FOR SMALL CRAFT MARINAS. Coastal Engineering Proceedings, 2017, , 21.	0.1	0
50	SPOT APPLICATION TOOL FOR WAVE DRIVEN NEARSHORE HYDRODYNAMICS. Coastal Engineering Proceedings, 2017, , 19.	0.1	0
51	Case Study of Small Harbor Excitation under Storm Conditions. , 2016, , .		1
52	Effect of tides and source location on nearshore tsunami-induced currents. Journal of Geophysical Research: Oceans, 2016, 121, 8807-8820.	1.0	6
53	Target Structural Reliability Analysis for Tsunami Hydrodynamic Loads of the ASCE 7 Standard. Journal of Structural Engineering, 2016, 142, 04016092.	1.7	24
54	A Comprehensive Sensitivity Analysis of Tsunami Model System to the Parametric and Input Uncertainties. Journal of Coastal Research, 2016, 75, 1117-1121.	0.1	0

#	Article	IF	Citations
55	Modeling of Coastal Waves and Hydrodynamics. , 2016, , 597-610.		0
56	Fragility of Floating Docks for Small Craft Marinas. , 2016, , .		0
57	An entropy-based framework for efficient post-disaster assessment based on crowdsourced data. , 2016, , .		5
58	Lagrangian flow measurements and observations of the 2015 Chilean tsunami in Ventura, CA. Geophysical Research Letters, 2016, 43, 5217-5224.	1.5	12
59	Precise Prediction of Coastal and Overland Flow Dynamics: A Grand Challenge or a Foolâ€™s Errand. Journal of Disaster Research, 2016, 11, 615-623.	0.4	16
60	The 11 March 2011 Tohoku tsunami wavefront mapping across offshore Southern California. Journal of Geophysical Research: Solid Earth, 2015, 120, 3350-3362.	1.4	8
61	NUMERICAL AND PHYSICAL MODELING OF LOCALIZED TSUNAMI-INDUCED CURRENTS IN HARBORS. Coastal Engineering Proceedings, 2015, 1, 6.	0.1	1
62	FORWARD: Proceedings of the 34th International Conference. Coastal Engineering Proceedings, 2015, 1, 1.	0.1	0
63	Simulating tsunami propagation in fjords with long-wave models. Natural Hazards and Earth System Sciences, 2015, 15, 657-669.	1.5	19
64	Tsunami currents in ports. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140372.	1.6	43
65	The Eltanin impact and its tsunami along the coast of South America: Insights for potential deposits. Earth and Planetary Science Letters, 2015, 409, 175-181.	1.8	11
66	Source Processes for the Probabilistic Assessment of Tsunami Hazards. Oceanography, 2014, 27, 86-93.	0.5	66
67	A Numerical Code for Waves in a Two-Layer Shallow Fluid. , 2014, , .		0
68	Nonlinear and dispersive free surface waves propagating over fluids with weak vertical and horizontal density variation. Journal of Fluid Mechanics, 2014, 748, 221-240.	1.4	3
69	Observations and Modeling of the August 27, 2012 Earthquake and Tsunami affecting El Salvador and Nicaragua. Pure and Applied Geophysics, 2014, 171, 3421-3435.	0.8	23
70	Interaction of dispersive water waves with weakly sheared currents of arbitrary profile. Coastal Engineering, 2014, 90, 64-84.	1.7	21
71	Source and progression of a submarine landslide and tsunami: The 1964 Great Alaska earthquake at Valdez. Journal of Geophysical Research: Solid Earth, 2014, 119, 8502-8516.	1.4	42
72	Assessment of the tsunami-induced current hazard. Geophysical Research Letters, 2014, 41, 2048-2055.	1.5	62

#	Article	IF	Citations
73	Tsunami inundation modeling in constructed environments: A physical and numerical comparison of free-surface elevation, velocity, and momentum flux. Coastal Engineering, 2013, 79, 9-21.	1.7	129
74	Coastal Impacts of the March 11th Tohoku, Japan Tsunami in the Galapagos Islands. Pure and Applied Geophysics, 2013, 170, 1189-1206.	0.8	20
75	Observations and Impacts from the 2010 Chilean and 2011 Japanese Tsunamis in California (USA). Pure and Applied Geophysics, 2013, 170, 1127-1147.	0.8	63
76	Buried relic seawall mitigates Hurricane Sandy's impacts. Coastal Engineering, 2013, 80, 79-82.	1.7	40
77	An amalgamated meter-thick sedimentary package enabled by the 2011 Tohoku tsunami in El Garrapatero, Galapagos Islands. Quaternary Research, 2013, 80, 9-19.	1.0	6
78	A Ïƒ-coordinate transport model coupled with rotational boussinesq-type equations. Environmental Fluid Mechanics, 2013, 13, 51-72.	0.7	10
79	TheSAFRRTsunami Scenario. , 2013, , .		0
80	Detailed Simulation of Tsunami-Induced Currents in California Ports and Harbors. , 2013, , .		1
81	Simulating run-up on steep slopes with operational Boussinesq models; capabilities, spurious effects and instabilities. Nonlinear Processes in Geophysics, 2013, 20, 379-395.	0.6	30
82	Evaluation of the Structure of Levee Transitions on Wave Run-Up and Overtopping by Physical Modeling. Journal of Waterway, Port, Coastal and Ocean Engineering, 2012, 138, 53-62.	0.5	1
83	Observations and modeling of tsunami-induced currents in ports and harbors. Earth and Planetary Science Letters, 2012, 327-328, 68-74.	1.8	76
84	Foreword: Proceedings of the 33rd International Conference. Coastal Engineering Proceedings, 2012, , 1.	0.1	2
85	A PROBABILISTIC APPROACH FOR THE WAVES GENERATED BY A SUBMARINE LANDSLIDE. Coastal Engineering Proceedings, 2012, , 15.	0.1	1
86	Nested and multi-physics modeling of tsunami evolution from generation to inundation. Ocean Modelling, 2011, 38, 96-113.	1.0	42
87	Numerical Simulation of Complex Tsunami Behavior. Computing in Science and Engineering, 2011, 13, 50-57.	1.2	6
88	Insights on the 2009 South Pacific tsunami in Samoa and Tonga from field surveys and numerical simulations. Earth-Science Reviews, 2011, 107, 66-75.	4.0	64
89	Dispersive and Nonhydrostatic Pressure Effects at the Front of Surge. Journal of Hydraulic Engineering, 2011, 137, 754-765.	0.7	49
90	Turbulent mixing and passive scalar transport in shallow flows. Physics of Fluids, 2011, 23, .	1.6	34

#	Article	IF	Citations
91	Tsunami Inundation, Modeling of. , 2011, , 1008-1021.		1
92	EXPERIMENTAL STUDY OF SOLITARY WAVE EVOLUTION OVER A 3D SHALLOW SHELF. Coastal Engineering Proceedings, 2011, 1, 1.	0.1	10
93	Foreword: Proceedings of the 32nd International Conference. Coastal Engineering Proceedings, 2011, 1, 1.	0.1	2
94	BREACHING OF SEA DIKES. Coastal Engineering Proceedings, 2011, 1, 9.	0.1	0
95	Multiâ€scale simulation with a hybrid Boussinesqâ€RANS hydrodynamic model. International Journal for Numerical Methods in Fluids, 2010, 62, 1013-1046.	0.9	13
96	An application of Boussinesq modeling to Hurricane wave overtopping and inundation. Ocean Engineering, 2010, 37, 135-153.	1.9	70
97	Efficient Nonhydrostatic Modeling of Surface Waves from Deep to Shallow Water. Journal of Waterway, Port, Coastal and Ocean Engineering, 2010, 136, 104-118.	0.5	24
98	Field Survey of the Samoa Tsunami of 29 September 2009. Seismological Research Letters, 2010, 81, 577-591.	0.8	101
99	Hydrodynamic Modeling of Tsunamis Generated by Submarine Landslides: Generation, Propagation, and Shoreline Impact. , 2010, , 685-694.		3
100	TSUNAMI INUNDATION WITH MACRO-ROUGHNESS IN THE CONSTRUCTED ENVIRONMENT. , 2009, , .		9
101	Determination of fractional energy loss of waves in nearshore waters using an improved high-order Boussinesq-type model. Chinese Journal of Oceanology and Limnology, 2009, 27, 621-629.	0.7	1
102	Hydrodynamic modeling of tsunamis from the Currituck landslide. Marine Geology, 2009, 264, 41-52.	0.9	100
103	Laboratory and numerical studies of wave damping by emergent and near-emergent wetland vegetation. Coastal Engineering, 2009, 56, 332-340.	1.7	310
104	A depth-integrated model for weakly dispersive, turbulent, and rotational fluid flows. Ocean Modelling, 2009, 27, 198-214.	1.0	127
105	NUMERICAL STUDY ON THE THREE-DIMENSIONAL DAMBREAK BORE INTERACTING WITH A SQUARE CYLINDER. , 2009, , 281-303.		5
106	Tsunami Inundation, Modeling of. , 2009, , 9618-9631.		4
107	Tsunami Inundation, Modeling of. , 2009, , 117-133.		2
108	EXPERIMENTAL INVESTIGATION INTO THREE-DIMENSIONAL LONG WAVE BREAKING. , 2009, , .		1

#	Article	IF	Citations
109	Effect of a Shallow Water Obstruction on Long Wave Runup and Overland Flow Velocity. Journal of Waterway, Port, Coastal and Ocean Engineering, 2007, 133, 455-462.	0.5	48
110	DEVELOPMENT OF A BOUSSINESQ-RANS VOF HYBRID WAVE MODEL. , 2007, , .		2
111	Sandy signs of a tsunami's onshore depth and speed. Eos, 2007, 88, 577-578.	0.1	37
112	Run-up from impact tsunami. Geophysical Journal International, 2007, 170, 1076-1088.	1.0	30
113	Predicted Sedimentary Record of Reflected Bores. , 2007, , .		1
114	Sri Lanka Field Survey after the December 2004 Indian Ocean Tsunami. Earthquake Spectra, 2006, 22, 155-172.	1.6	71
115	Wave breaking velocity effects in depth-integrated models. Coastal Engineering, 2006, 53, 325-333.	1.7	14
116	Nearshore Wave Modeling with High-Order Boussinesq-Type Equations. Journal of Waterway, Port, Coastal and Ocean Engineering, 2006, 132, 348-357.	0.5	102
117	THREE-DIMENSIONAL RUNUP DUE TO SUBMERGED AND SUBAERIAL LANDSLIDES. , 2006, , .		1
118	Parallel computation of a highly nonlinear Boussinesq equation model through domain decomposition. International Journal for Numerical Methods in Fluids, 2005, 49, 57-74.	0.9	26
119	A MULTI-LAYER APPROACH TO BOUSSINESQ-TYPE MODELING. , 2005, , .		0
120	Observations by the International Tsunami Survey Team in Sri Lanka. Science, 2005, 308, 1595-1595.	6.0	236
121	Numerical Simulations of Nonlinear Short Waves Using a Multilayer Model. Journal of Engineering Mechanics - ASCE, 2005, 131, 231-243.	1.6	41
122	Offshore breaking of impact tsunami: The Van Dorn effect revisited. Geophysical Research Letters, 2005, 32, .	1.5	39
123	A numerical study of the run-up generated by three-dimensional landslides. Journal of Geophysical Research, 2005, 110, .	3.3	116
124	SIDE-BAND EVOLUTION OF INITIALLY UNIFORM DEEP WATER WAVE. , 2005, , .		1
125	Seasonal Dynamics of a Microtidal Pocket Beach with Posidonia oceanica Seabeds (Mallorca, Spain). Journal of Coastal Research, 2004, 204, 1155-1164.	0.1	40
126	Linear analysis of the multi-layer model. Coastal Engineering, 2004, 51, 439-454.	1.7	89

#	Article	IF	Citations
127	A two-layer approach to wave modelling. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2004, 460, 2637-2669.	1.0	169
128	Field Survey and Numerical Simulations: A Review of the 1998 Papua New Guinea Tsunami. Pure and Applied Geophysics, 2003, 160, 2119-2146.	0.8	83
129	Fully nonlinear wave-current interactions and kinematics by a BEM-based numerical wave tank. Computational Mechanics, 2003, 32, 336-346.	2.2	49
130	Modeling of storm-induced coastal flooding for emergency management. Ocean Engineering, 2003, 30, 1353-1386.	1.9	85
131	Analytical solutions for forced long waves on a sloping beach. Journal of Fluid Mechanics, 2003, 478, 101-109.	1.4	84
132	Field Survey and Numerical Simulations: A Review of the 1998 Papua New Guinea Tsunami. , 2003, , 2119-2146.		9
133	Multi-Layer Modeling of Wave Groups From Deep to Shallow Water. , 2003, , .		0
134	A numerical study of submarineâ€“landslideâ€“generated waves and runâ€“up. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2002, 458, 2885-2910.	1.0	185
135	A two-dimensional, depth-integrated model for internal wave propagation over variable bathymetry. Wave Motion, 2002, 36, 221-240.	1.0	67
136	Modeling wave runup with depth-integrated equations. Coastal Engineering, 2002, 46, 89-107.	1.7	334
137	Solitary Wave Interaction with Porous Breakwaters. Journal of Waterway, Port, Coastal and Ocean Engineering, 2000, 126, 314-322.	0.5	61