Patrick Paultre

List of Publications by Citations

88 papers	2,541 citations	28 h-index	49 g-index
95 ext. papers	2,920 ext. citations	2.9 avg, IF	5.29 L-index

#	Paper	IF	Citations
88	Stress-Strain Model for Confined High-Strength Concrete. *Journal of Structural Engineering*, **1995**, 121, 468-477	3	288
87	High-Strength Concrete Columns Confined by Rectangular Ties. *Journal of Structural Engineering*, **1994**, 120, 783-804	3	209
86	Uniaxial Confinement Model for Normal- and High-Strength Concrete Columns. *Journal of Structural Engineering*, **2003**, 129, 241-252	3	160
85	Bridge dynamics and dynamic amplification factors â review of analytical and experimental findings. *Canadian Journal of Civil Engineering*, **1992**, 19, 260-278	1.3	111
84	Behavior of Steel Fiber-Reinforced High-Strength Concrete Columns under Uniaxial Compression. *Journal of Structural Engineering*, **2010**, 136, 1225-1235	3	94
83	Normal- and High-Strength Concrete Circular Elements Wrapped with FRP Composites. *Journal of Composites for Construction*, **2009**, 13, 113-124	3.3	92
82	Dynamic characterization of machining robot and stability analysis. *International Journal of Advanced Manufacturing Technology*, **2016**, 82, 351-359	3.2	80
81	Damage Mechanics Modeling of Nonlinear Seismic Behavior of Concrete Structures. *Journal of Structural Engineering*, **2005**, 131, 946-955	3	75
80	Seismic force modification factors for the proposed 2005 edition of the National Building Code of Canada. *Canadian Journal of Civil Engineering*, **2003**, 30, 308-327	1.3	73
79	Compressive behavior of FRP-confined reinforced concrete columns. *Engineering Structures*, **2017**, 132, 518-530	4.7	72
78	Fragility curves of typical as-built highway bridges in eastern Canada. *Engineering Structures*, **2012**, 40, 107-118	4.7	64
77	Dynamic Testing Procedures for Highway Bridges Using Traffic Loads. *Journal of Structural Engineering*, **1995**, 121, 362-376	3	60
76	Multiple-support seismic analysis of large structures. *Computers and Structures*, **1990**, 36, 1153-1158	4.5	60
75	Consistent regularization of nonlinear model updating for damage identification. *Mechanical Systems and Signal Processing*, **2009**, 23, 1965-1985	7.8	58
74	Confinement Reinforcement Design for Reinforced Concrete Columns. *Journal of Structural Engineering*, **2008**, 134, 738-749	3	55
73	An experimental investigation of water level effects on the dynamic behaviour of a large arch dam. *Earthquake Engineering and Structural Dynamics*, **2001**, 30, 1147-1166	4	54
72	Analytical Model for FRP-Confined Circular Reinforced Concrete Columns. *Journal of Composites for Construction*, **2008**, 12, 541-552	3.3	50

71	Three-dimensional analysis of concrete dams including contraction joint non-linearity. *Engineering Structures*, **2002**, 24, 757-771	4.7	49
70	Modal identification based on continuous wavelet transform and ambient excitation tests. *Journal of Sound and Vibration*, **2012**, 331, 2023-2037	3.9	46
69	Evolution of seismic design provisions in the National building code of Canada. *Canadian Journal of Civil Engineering*, **2010**, 37, 1157-1170	1.3	45
68	Fragility curves for isolated bridges in eastern Canada using experimental results. *Engineering Structures*, **2014**, 74, 311-324	4.7	39
67	Modal identification based on the timeâfrequency domain decomposition of unknown-input dynamic tests. *International Journal of Mechanical Sciences*, **2013**, 71, 41-50	5.5	35
66	Structural damage detection using nonlinear parameter identification with Tikhonov regularization. *Structural Control and Health Monitoring*, **2007**, 14, 406-427	4.5	35
65	Damage Identification in a Truss Tower by Regularized Model Updating. *Journal of Structural Engineering*, **2010**, 136, 307-316	3	34
64	A closed-form formulation for earthquake-induced hydrodynamic pressure on gravity dams. *Journal of Sound and Vibration*, **2003**, 261, 573-582	3.9	34
63	Seismic Fragility of Concrete Gravity Dams with Spatial Variation of Angle of Friction: Case Study. *Journal of Structural Engineering*, **2016**, 142, 05015002	3	33
62	Plasticity-based model for circular concrete columns confined with fibre-composite sheets. *Engineering Structures*, **2007**, 29, 3301-3311	4.7	30
61	Ductility and overstrength in seismic design of reinforced concrete structures. *Canadian Journal of Civil Engineering*, **1994**, 21, 1049-1060	1.3	30
60	Seismic Fragility of a Highway Bridge in Quebec. *Journal of Bridge Engineering*, **2013**, 18, 1131-1139	2.7	28
59	Two-dimensional modelling of ice cover effects for the dynamic analysis of concrete gravity dams. *Earthquake Engineering and Structural Dynamics*, **2002**, 31, 2083-2102	4	25
58	Assessment of the frequency domain decomposition technique by forced-vibration tests of a full-scale structure. *Earthquake Engineering and Structural Dynamics*, **2008**, 37, 487-494	4	23
57	Metamodel-Based Seismic Fragility Analysis of Concrete Gravity Dams. *Journal of Structural Engineering*, **2020**, 146, 04020121	3	23
56	Damage model for FRP-confined concrete columns under cyclic loading. *Engineering Structures*, **2013**, 48, 519-531	4.7	21
55	Performance-based seismic retrofit of a bridge bent: Design and experimental validation. *Canadian Journal of Civil Engineering*, **2010**, 37, 367-379	1.3	21
54	Using the Conditional Spectrum Method for Improved Fragility Assessment of Concrete Gravity Dams in Eastern Canada. *Earthquake Spectra*, **2016**, 32, 1449-1468	3.4	19

53	Seismic performance of a 12-storey ductile concrete shear wall system designed according to the 2005National building code of Canadaand the 2004 Canadian Standard Association standard A23.3. *Canadian Journal of Civil Engineering*, **2010**, 37, 1-16	1.3	17
52	Strain Localization in Confined High-Strength Concrete Columns. *Journal of Structural Engineering*, **1996**, 122, 1055-1061	3	17
51	Experimental determination of the lateral stability and shear failure limit states of bridge rubber bearings. *Engineering Structures*, **2018**, 174, 39-48	4.7	15
50	An experimental evaluation of ice cover effects on the dynamic behaviour of a concrete gravity dam. *Earthquake Engineering and Structural Dynamics*, **2002**, 31, 2067-2082	4	15
49	Performance evaluation of natural rubber seismic isolators as a retrofit measure for typical multi-span concrete bridges in eastern Canada. *Engineering Structures*, **2014**, 74, 300-310	4.7	13
48	Role of Spandrel Beams on Response of Slab-Beam-Column Connections. *Journal of Structural Engineering*, **1995**, 121, 408-419	3	13
47	Seismic response of concentrically braced steel frames. *Canadian Journal of Civil Engineering*, **1991**, 18, 1062-1077	1.3	13
46	Seismic response of reinforced concrete frame subassemblages â Canadian code perspective. *Canadian Journal of Civil Engineering*, **1989**, 16, 627-649	1.3	13
45	Seismic force demand on ductile reinforced concrete shear walls subjected to western North American ground motions: Part 1 â parametric study. *Canadian Journal of Civil Engineering*, **2012**, 39, 723-737	1.3	12
44	Elastoplastic Confinement Model for Circular Concrete Columns. *Journal of Structural Engineering*, **2007**, 133, 1821-1831	3	12
43	Detection and prediction of seismic damage to a high-strength concrete moment resisting frame structure. *Engineering Structures*, **2016**, 114, 209-225	4.7	12
42	Seismic force demand on ductile reinforced concrete shear walls subjected to western North American ground motions: Part 2 â new capacity design methods. *Canadian Journal of Civil Engineering*, **2012**, 39, 738-750	1.3	11
41	A new boundary condition for energy radiation in covered reservoirs using BEM. *Engineering Analysis With Boundary Elements*, **2005**, 29, 903-911	2.6	10
40	Experimental Evaluation of Inelastic Higher-Mode Effects on the Seismic Behavior of RC Structural Walls. *Journal of Structural Engineering*, **2020**, 146, 04020016	3	9
39	Forced-Vibration Tests and Numerical Modeling of the Daniel-Johnson Multiple-Arch Dam. *Journal of Performance of Constructed Facilities*, **2018**, 32, 04017137	2	9
38	Seismic performance of a full-scale, reinforced high-performance concrete building. Part II: Analytical study. *Canadian Journal of Civil Engineering*, **2008**, 35, 849-862	1.3	8
37	Seismic performance of a full-scale, reinforced high-performance concrete building. Part I: Experimental study. *Canadian Journal of Civil Engineering*, **2008**, 35, 832-848	1.3	8
36	Dynamic response of a concrete dam impounding an ice-covered reservoir: Part II. Parametric and numerical study. *Canadian Journal of Civil Engineering*, **2004**, 31, 965-976	1.3	8

35	Influence of soil-structure interaction on seismic demands in shear wall building gravity load frames. *Engineering Structures*, **2019**, 198, 109259	4.7	7
34	Analysis of a damaged 12-storey frame-wall concrete building during the 2010 Haiti earthquake â Part II: Nonlinear numerical simulations. *Canadian Journal of Civil Engineering*, **2013**, 40, 803-814	1.3	7
33	Dynamic response of a concrete dam impounding an ice-covered reservoir: Part I. Mathematical modelling. *Canadian Journal of Civil Engineering*, **2004**, 31, 956-964	1.3	7
32	Computer-Aided Education in Structural Dynamics. *Journal of Computing in Civil Engineering*, **1991**, 5, 374-390	5	7
31	On the Seismic Fragility Assessment of Concrete Gravity Dams in Eastern Canada. *Earthquake Spectra*, **2019**, 35, 211-231	3.4	7
30	**2013**,		6
29	Toward a better understanding of the dynamic characteristics of single-storey braced steel frame buildings in Canada. *Canadian Journal of Civil Engineering*, **2009**, 36, 969-979	1.3	6
28	Influence of synthetic fibers on the seismic behavior of reinforced-concrete circular columns. *Engineering Structures*, **2021**, 228, 111493	4.7	6
27	Modelling and Characterizing a Concrete Gravity Dam for Fragility Analysis. *Infrastructures*, **2019**, 4, 62	2.6	5
26	Damage to engineered structures during the 12 January 2010, Haiti (Lôgîe) earthquake. *Canadian Journal of Civil Engineering*, **2013**, 40, 777-790	1.3	5
25	Dynamic Testing of Large-Scale Structures. *Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE)*, **1997**, 7, 29-34	1	4
24	Microcomputer analysis of reinforced concrete slab systems. *Canadian Journal of Civil Engineering*, **1993**, 20, 587-601	1.3	4
23	Elastic analysis of frames considering panel zones deformations. *Computers and Structures*, **1991**, 39, 689-697	4.5	4
22	Accounting for Uncertainties in the Safety Assessment of Concrete Gravity Dams: A Probabilistic Approach with Sample Optimization. *Water (Switzerland)*, **2021**, 13, 855	3	4
21	Analysis of a damaged 12-storey frame-wall concrete building during the 2010 Haiti earthquake Part I: Dynamic behaviour assessment. *Canadian Journal of Civil Engineering*, **2013**, 40, 791-802	1.3	3
20	Reply: Bridge dynamics and dynamic amplification factors â review of analytical and experimental findings. *Canadian Journal of Civil Engineering*, **1993**, 20, 878-878	1.3	2
19	Computer graphics for computer assisted learning of structural analysis. *Computers and Structures*, **1990**, 36, 1159-1166	4.5	2
18	LAS: A programming language and development environment for learning matrix structural analysis. *Computer Applications in Engineering Education*, **2016**, 24, 89-100	1.6	2

17	Damage mechanics applied to performance-based design of reinforced concrete columns. *Earthquake Engineering and Structural Dynamics*, **2017**, 46, 2439-2457	4	1
16	Background to seismic design provisions in CSA A23.3â04 for high-strength concrete. *Canadian Journal of Civil Engineering*, **2009**, 36, 565-579	1.3	1
15	Stressâstrain curve for concrete in circular columns based on elastoplastic analysis. *Materials and Structures/Materiaux Et Constructions*, **2010**, 43, 63-79	3.4	1
14	Discussion of "Making use of brace overstrength to improve the seismic response of multistorey split-X concentrically braced steel frames". *Canadian Journal of Civil Engineering*, **2007**, 34, 686-687	1.3	1
13	Numerical response analysis in dynamic engineering problems. *Revue Europ nne De G nie Civil*, **2003**, 7, 831-880		1
12	Closure to âStrain Localization in Confined High-Strength Concrete Columnsâ by Daniel Cusson, Fran ois de Larrard, Claude Boulay, and Patrick Paultre. *Journal of Structural Engineering*, **1998**, 124, 1092-1093	3	1
11	CAL/CGIâAn application of graphics for matrix structural analysis education. *Computers and Graphics*, **1991**, 15, 131-135	1.8	1
10	Inelastic seismic shear amplification due to higher mode effects in reinforced concrete coupled walls. *Earthquake Spectra*,875529302110533	3.4	1
9	Expected seismic performance of gravity dams using machine learning techniques. *Bulletin of the New Zealand Society for Earthquake Engineering*, **2021**, 54, 58-68	0.5	1
8	Seismic fragility of bridges: An approach coupling multiple-stripe analysis and Gaussian mixture for multicomponent structures. *Earthquake Spectra*,875529302110361	3.4	1
7	High-order finite element model of bridge rubber bearings for the prediction of buckling and shear failure. *Engineering Structures*, **2021**, 240, 112314	4.7	1
6	Experiments on Large Structures **2010**, 201-232		
5	On calculating equivalent static seismic forces in the 2005 National Building Code of Canada. *Canadian Journal of Civil Engineering*, **2011**, 38, 476-481	1.3	
4	Distribution of moments in reinforced concrete slabs with continuous drop panels. *Canadian Journal of Civil Engineering*, **2002**, 29, 119-124	1.3	
3	FRP Wrapping of RC Structures Submitted to Seismic Loads. *Geotechnical, Geological and Earthquake Engineering*, **2009**, 297-305	0.2	
2	Measuring Earthquake Damages to a High Strength Concrete Structure221-250		
1	Hybrid testing of capacity designed RC structural walls for the determination of nonlinear seismic shear amplification. *Earthquake Engineering and Structural Dynamics*, **2021**, 50, 3266-3287	4	