

# Timothy J Sullivan

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

97 papers	1,842 citations	24 h-index	39 g-index
100 ext. papers	2,118 ext. citations	2.3 avg, IF	5.58 L-index

#	Paper	IF	Citations
97	P-delta effects on short-period systems subjected to earthquake excitation. <i>Engineering Structures</i> , <b>2022</b> , 254, 113642	4.7	2
96	Randomised one-step time integration methods for deterministic operator differential equations. <i>Calcolo</i> , <b>2022</b> , 59, 1	1.5	
95	Seismic design of acceleration-sensitive non-structural elements in New Zealand: State-of-practice and recommended changes. <i>Bulletin of the New Zealand Society for Earthquake Engineering</i> , <b>2021</b> , 54, 243-262	0.5	1
94	Theoretical and experimental evaluation of timber-framed partitions under lateral drift. <i>Bulletin of the New Zealand Society for Earthquake Engineering</i> , <b>2021</b> , 54, 263-281	0.5	2
93	Simplified Pushover Analysis of Moment Resisting Frame Structures. <i>Journal of Earthquake Engineering</i> , <b>2021</b> , 25, 621-648	1.8	11
92	Precast concrete spreader-walls to improve the reparability of RC frame buildings. <i>Earthquake Engineering and Structural Dynamics</i> , <b>2021</b> , 50, 831-844	4	3
91	Lessons for loss assessment from the Canterbury earthquakes: a 22-storey building. <i>Bulletin of Earthquake Engineering</i> , <b>2021</b> , 19, 2081-2104	3.7	5
90	Displacement-Based Seismic Assessment of the Likelihood of Failure of Reinforced Concrete Wall Buildings. <i>Buildings</i> , <b>2021</b> , 11, 295	3.2	1
89	Bayesian numerical methods for nonlinear partial differential equations. <i>Statistics and Computing</i> , <b>2021</b> , 31, 1	1.8	1
88	Low-Damage Rocking Precast Concrete Cladding Panels: Design Approach and Experimental Validation. <i>Journal of Earthquake Engineering</i> , <b>2020</b> , 1-34	1.8	7
87	Displacement-based assessment of typical Italian RC bridges. <i>Bulletin of Earthquake Engineering</i> , <b>2020</b> , 18, 4299-4329	3.7	5
86	Displacement-Based Simplified Seismic Loss Assessment of Post-70s RC Buildings. <i>Journal of Earthquake Engineering</i> , <b>2020</b> , 24, 114-145	1.8	5
85	Displacement-Based Simplified Seismic Loss Assessment of Steel Buildings. <i>Journal of Earthquake Engineering</i> , <b>2020</b> , 24, 146-178	1.8	4
84	Displacement-Based Framework for Simplified Seismic Loss Assessment. <i>Journal of Earthquake Engineering</i> , <b>2020</b> , 24, 1-22	1.8	16
83	Experimental Seismic Performance of Partly-Sliding Partition Walls. <i>Journal of Earthquake Engineering</i> , <b>2020</b> , 1-26	1.8	9
82	Post-Earthquake Reparability of Buildings: The Role of Non-Structural Elements. <i>Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE)</i> , <b>2020</b> , 30, 217-223	1	1
81	Experimental investigation into the seismic fragility of a commercial glazing system. <i>Bulletin of the New Zealand Society for Earthquake Engineering</i> , <b>2020</b> , 53, 144-149	0.5	2

80	Experimental study of the seismic performance of plasterboard partition walls with seismic gaps. <i>Bulletin of the New Zealand Society for Earthquake Engineering</i> , <b>2020</b> , 53, 175-188	0.5	6
79	A practice-oriented method for estimating elastic floor response spectra. <i>Bulletin of the New Zealand Society for Earthquake Engineering</i> , <b>2020</b> , 53, 116-136	0.5	5
78	Wellington earthquake resilience: Lessons from the 2016 Kaikūra earthquake. <i>Earthquake Spectra</i> , <b>2020</b> , 36, 1448-1484	3.4	4
77	Formulation of Localized Damping Models for Large Displacement Analysis of Single-Degree-of-Freedom Inelastic Systems. <i>Journal of Earthquake Engineering</i> , <b>2020</b> , 1-24	1.8	3
76	Adaptive Reconstruction of Imperfectly Observed Monotone Functions, with Applications to Uncertainty Quantification. <i>Algorithms</i> , <b>2020</b> , 13, 196	1.8	
75	Developing a Direct Approach for Estimating Expected Annual Losses of Italian Buildings. <i>Journal of Earthquake Engineering</i> , <b>2019</b> , 1-32	1.8	11
74	Rapid assessment of peak storey drift demands on reinforced concrete frame buildings. <i>Bulletin of the New Zealand Society for Earthquake Engineering</i> , <b>2019</b> , 52, 109-118	0.5	
73	Modeling Techniques for the Seismic Assessment of the Existing Italian RC Frame Structures. <i>Journal of Earthquake Engineering</i> , <b>2019</b> , 23, 1262-1296	1.8	33
72	Structural Strengthening and Retrofit; Motivations, Concepts and Approaches. <i>Building Pathology and Rehabilitation</i> , <b>2018</b> , 1-24	0.2	
71	Evaluation of fragility functions with potential relevance for use in New Zealand. <i>Bulletin of the New Zealand Society for Earthquake Engineering</i> , <b>2018</b> , 51, 127-144	0.5	2
70	Quantification of modelling uncertainty in existing Italian RC frames. <i>Earthquake Engineering and Structural Dynamics</i> , <b>2018</b> , 47, 1054-1074	4	35
69	A multidirectional conditional spectrum. <i>Earthquake Engineering and Structural Dynamics</i> , <b>2018</b> , 47, 945-965	4	3
68	Probabilistic seismic assessment and retrofit considerations for Italian RC frame buildings. <i>Bulletin of Earthquake Engineering</i> , <b>2018</b> , 16, 1447-1485	3.7	48
67	Seismic performance of steel friction connections considering direct-repair costs. <i>Bulletin of Earthquake Engineering</i> , <b>2018</b> , 16, 5963-5993	3.7	20
66	Technical Note: Practical Challenges Facing the Selection of Conditional Spectrum-Compatible Accelerograms. <i>Journal of Earthquake Engineering</i> , <b>2017</b> , 21, 169-180	1.8	7
65	Accounting for directionality as a function of structural typology in performance-based earthquake engineering design. <i>Earthquake Engineering and Structural Dynamics</i> , <b>2017</b> , 46, 791-809	4	7
64	Simplified estimation of the expected annual loss of reinforced concrete buildings. <i>Earthquake Engineering and Structural Dynamics</i> , <b>2017</b> , 46, 2009	4	16
63	Assessment of the loss of functionality of individual rooms in critical facilities after earthquakes. <i>Bulletin of Earthquake Engineering</i> , <b>2017</b> , 15, 1135-1159	3.7	3

62	MODELLING UNCERTAINTY IN EXISTING ITALIAN RC FRAMES <b>2017</b> ,		5
61	Direct Displacement-Based Seismic Design of Eccentrically Braced Steel Frames. <i>Journal of Earthquake Engineering</i> , <b>2016</b> , 20, 243-278	1.8	39
60	Empirical Correlation between Inelastic and Elastic Spectral Displacement Demands. <i>Earthquake Spectra</i> , <b>2016</b> , 32, 1419-1448	3.4	11
59	Displacement-based design of steel moment resisting frames with partially-restrained beam-to-column joints. <i>Bulletin of Earthquake Engineering</i> , <b>2016</b> , 14, 1017-1046	3.7	20
58	Cost-Benefit Analysis of Buildings Retrofitted Using GIB Systems. <i>Earthquake Spectra</i> , <b>2016</b> , 32, 861-879	3.4	2
57	Fragility functions for eccentrically braced steel frame structures. <i>Earthquake and Structures</i> , <b>2016</b> , 10, 367-388		8
56	Characterising the in-plane seismic performance of infill masonry. <i>Bulletin of the New Zealand Society for Earthquake Engineering</i> , <b>2016</b> , 49, 98-115	0.5	41
55	Seismic hazard disaggregation in performance-based earthquake engineering: occurrence or exceedance?. <i>Earthquake Engineering and Structural Dynamics</i> , <b>2016</b> , 45, 835-842	4	6
54	Use of the conditional spectrum to incorporate record-to-record variability in simplified seismic assessment of RC wall buildings. <i>Earthquake Engineering and Structural Dynamics</i> , <b>2016</b> , 45, 463-482	4	4
53	Use of Limit State Loss versus Intensity Models for Simplified Estimation of Expected Annual Loss. <i>Journal of Earthquake Engineering</i> , <b>2016</b> , 20, 954-974	1.8	12
52	Applicability of the direct displacement-based design method to steel moment resisting frames with setbacks. <i>Bulletin of Earthquake Engineering</i> , <b>2015</b> , 13, 3841-3870	3.7	14
51	Factors influencing the repair costs of soft-story RC frame buildings and implications for their seismic retrofit. <i>Engineering Structures</i> , <b>2015</b> , 101, 233-245	4.7	19
50	Seismic response of a case study soft story frame retrofitted using a GIB system. <i>Earthquake Engineering and Structural Dynamics</i> , <b>2015</b> , 44, 997-1014	4	11
49	Inelastic Higher-Mode Response in Reinforced Concrete Wall Structures. <i>Earthquake Spectra</i> , <b>2015</b> , 31, 1493-1514	3.4	17
48	Evaluation of seismic assessment procedures for determining deformation demands in RC wall buildings. <i>Earthquake and Structures</i> , <b>2015</b> , 9, 911-936		8
47	INFLUENCE OF MODELLING PARAMETERS ON THE FRAGILITY ASSESSMENT OF PRE-1970 ITALIAN RC STRUCTURES <b>2015</b> ,		2
46	Distributional Uncertainty. <i>Texts in Applied Mathematics</i> , <b>2015</b> , 295-318	2.1	
45	Performance-based seismic design of nonstructural building components: The next frontier of earthquake engineering. <i>Earthquake Engineering and Engineering Vibration</i> , <b>2014</b> , 13, 17-46	2	120

44	Simplified seismic performance assessment and implications for seismic design. <i>Earthquake Engineering and Engineering Vibration</i> , <b>2014</b> , 13, 95-122	2	37
43	Optimal uncertainty quantification with model uncertainty and legacy data. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2014</b> , 72, 1-19	5	9
42	Gapped-Inclined Braces for Seismic Retrofit of Soft-Story Buildings. <i>Journal of Structural Engineering</i> , <b>2014</b> , 140, 04014080	3	10
41	Capacity Design of Coupled RC Walls. <i>Journal of Earthquake Engineering</i> , <b>2014</b> , 18, 735-758	1.8	10
40	Estimating floor spectra in multiple degree of freedom systems. <i>Earthquake and Structures</i> , <b>2014</b> , 7, 17-38		71
39	Developing Direct Displacement-Based Procedures for Simplified Loss Assessment in Performance-Based Earthquake Engineering. <i>Journal of Earthquake Engineering</i> , <b>2014</b> , 18, 290-322	1.8	63
38	Direct Displacement-Based Seismic Design of Reinforced Concrete Arch Bridges. <i>Journal of Bridge Engineering</i> , <b>2014</b> , 19, 44-58	2.7	8
37	Comparison of Force-Based and Displacement-Based Design approaches for RC coupled walls in New Zealand. <i>Bulletin of the New Zealand Society for Earthquake Engineering</i> , <b>2014</b> , 47, 190-205	0.5	5
36	Potential of Building Information Modelling for seismic risk mitigation in buildings. <i>Bulletin of the New Zealand Society for Earthquake Engineering</i> , <b>2014</b> , 47, 253-263	0.5	16
35	A Seismic Performance Classification Framework to Provide Increased Seismic Resilience. <i>Geotechnical, Geological and Earthquake Engineering</i> , <b>2014</b> , 361-400	0.2	20
34	Sectional response of T-shaped RC walls. <i>Bulletin of Earthquake Engineering</i> , <b>2013</b> , 11, 999-1019	3.7	10
33	Stratified graphene/noble metal systems for low-loss plasmonics applications. <i>Physical Review B</i> , <b>2013</b> , 87,	3.3	24
32	Direct displacement-based seismic design of steel eccentrically braced frame structures. <i>Bulletin of Earthquake Engineering</i> , <b>2013</b> , 11, 2197-2231	3.7	34
31	Optimal Uncertainty Quantification. <i>SIAM Review</i> , <b>2013</b> , 55, 271-345	7.4	61
30	Highlighting Differences between Force-Based and Displacement-Based Design Solutions for Reinforced Concrete Frame Structures. <i>Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE)</i> , <b>2013</b> , 23, 122-131	1	12
29	Optimal uncertainty quantification for legacy data observations of Lipschitz functions. <i>ESAIM: Mathematical Modelling and Numerical Analysis</i> , <b>2013</b> , 47, 1657-1689	1.8	8
28	Towards improved floor spectra estimates for seismic design. <i>Earthquake and Structures</i> , <b>2013</b> , 4, 109-132		87
27	Towards a simplified Direct DBD procedure for the seismic design of moment resisting frames with viscous dampers. <i>Engineering Structures</i> , <b>2012</b> , 35, 140-148	4.7	56

26	Rigorous model-based uncertainty quantification with application to terminal ballistics, part I: Systems with controllable inputs and small scatter. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2012</b> , 60, 983-1001	5	17
25	Rigorous model-based uncertainty quantification with application to terminal ballistics Part II. Systems with uncontrollable inputs and large scatter. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2012</b> , 60, 1002-1019	5	17
24	Damage Control for Clay Masonry Infills in the Design of RC Frame Structures. <i>Journal of Earthquake Engineering</i> , <b>2012</b> , 16, 1-35	1.8	87
23	Development of improved inelastic displacement prediction equations for the seismic design of hybrid systems. <i>Bulletin of the New Zealand Society for Earthquake Engineering</i> , <b>2012</b> , 45, 1-14	0.5	3
22	An Energy-Factor Method for the Displacement-Based Seismic Design of RC Wall Structures. <i>Journal of Earthquake Engineering</i> , <b>2011</b> , 15, 1083-1116	1.8	8
21	Equivalent viscous damping for steel concentrically braced frame structures. <i>Bulletin of Earthquake Engineering</i> , <b>2011</b> , 9, 1535-1558	3.7	68
20	Uncertainty quantification via codimension-one partitioning. <i>International Journal for Numerical Methods in Engineering</i> , <b>2011</b> , 85, 1499-1521	2.4	8
19	Displacement Reduction Factors for the Design of Medium and Long Period Structures. <i>Journal of Earthquake Engineering</i> , <b>2011</b> , 15, 1-29	1.8	74
18	Direct Displacement-Based Design of a RC wall-steel EBF dual system with added dampers. <i>Bulletin of the New Zealand Society for Earthquake Engineering</i> , <b>2011</b> , 44, 167-178	0.5	5
17	Development of a Displacement-Based Design Method for Steel Frame-RC Wall Buildings. <i>Journal of Earthquake Engineering</i> , <b>2010</b> , 14, 252-277	1.8	37
16	Introduction to a Model Code for Displacement-Based Seismic Design. <i>Geotechnical, Geological and Earthquake Engineering</i> , <b>2010</b> , 137-148	0.2	9
15	Conceptual Seismic Design of Cable-Stayed Bridges. <i>Journal of Earthquake Engineering</i> , <b>2010</b> , 14, 1139-1171	1.8	36
14	Development of a Displacement-Based Design Method for Steel Dual Systems With Buckling-Restrained Braces and Moment-Resisting Frames. <i>Journal of Earthquake Engineering</i> , <b>2010</b> , 14, 106-140	1.8	63
13	A Novel Seismic Design Strategy for Structures With Complex Geometry. <i>Journal of Earthquake Engineering</i> , <b>2010</b> , 14, 69-105	1.8	4
12	Capacity design considerations for RC frame-wall structures. <i>Earthquake and Structures</i> , <b>2010</b> , 1, 391-410		14
11	Displacement-Based Design of Precast Walls with Additional Dampers. <i>Journal of Earthquake Engineering</i> , <b>2009</b> , 13, 40-65	1.8	44
10	Direct Displacement-Based Design of a RC wall-steel EBF dual system with added dampers. <i>Bulletin of the New Zealand Society for Earthquake Engineering</i> , <b>2009</b> , 42, 167-178	0.5	6
9	Estimating the Higher-Mode Response of Ductile Structures. <i>Journal of Earthquake Engineering</i> , <b>2008</b> , 12, 456-472	1.8	50

8	DIRECT DISPLACEMENT-BASED DESIGN OF FRAME-WALL STRUCTURES. <i>Journal of Earthquake Engineering</i> , <b>2006</b> , 10, 91-124	1.8	37
7	DEVELOPMENT OF AN INNOVATIVE SEISMIC DESIGN PROCEDURE FOR FRAME-WALL STRUCTURES. <i>Journal of Earthquake Engineering</i> , <b>2005</b> , 9, 279-307	1.8	22
6	THE LIMITATIONS AND PERFORMANCES OF DIFFERENT DISPLACEMENT BASED DESIGN METHODS. <i>Journal of Earthquake Engineering</i> , <b>2003</b> , 7, 201-241	1.8	48
5	. <i>Journal of Earthquake Engineering</i> , <b>2003</b> , 7, 201	1.8	24
4	Quantifying the Likelihood of Exceeding a Limit State via the Displacement-based Assessment Approach. <i>Journal of Earthquake Engineering</i> , 1-19	1.8	2
3	Effect of Damper Sub-System Stiffness on the Response of a Single Degree of Freedom System Equipped with a Viscous Damper. <i>Journal of Earthquake Engineering</i> , 1-20	1.8	1
2	Seismic Performance of a Rocking Precast Concrete Cladding Panel System under Lateral Cyclic Displacement Demands. <i>Journal of Earthquake Engineering</i> , 1-30	1.8	
1	Cyclic Behaviour of Two-Story Low-Damage Rocking Precast Concrete Cladding Panel System. <i>Journal of Earthquake Engineering</i> , 1-26	1.8	