Timothy J Sullivan

List of Publications by Citations

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	Performance-based seismic design of nonstructural building components: The next frontier of earthquake engineering. *Earthquake Engineering and Engineering Vibration*, **2014**, 13, 17-46	2	120
96	Damage Control for Clay Masonry Infills in the Design of RC Frame Structures. *Journal of Earthquake Engineering*, **2012**, 16, 1-35	1.8	87
95	Towards improved floor spectra estimates for seismic design. *Earthquake and Structures*, **2013**, 4, 109-132		87
94	Displacement Reduction Factors for the Design of Medium and Long Period Structures. *Journal of Earthquake Engineering*, **2011**, 15, 1-29	1.8	74
93	Estimating floor spectra in multiple degree of freedom systems. *Earthquake and Structures*, **2014**, 7, 17-38		71
92	Equivalent viscous damping for steel concentrically braced frame structures. *Bulletin of Earthquake Engineering*, **2011**, 9, 1535-1558	3.7	68
91	Developing Direct Displacement-Based Procedures for Simplified Loss Assessment in Performance-Based Earthquake Engineering. *Journal of Earthquake Engineering*, **2014**, 18, 290-322	1.8	63
90	Development of a Displacement-Based Design Method for Steel Dual Systems With Buckling-Restrained Braces and Moment-Resisting Frames. *Journal of Earthquake Engineering*, **2010**, 14, 106-140	1.8	63
89	Optimal Uncertainty Quantification. *SIAM Review*, **2013**, 55, 271-345	7.4	61
88	Towards a simplified Direct DBD procedure for the seismic design of moment resisting frames with viscous dampers. *Engineering Structures*, **2012**, 35, 140-148	4.7	56
87	Estimating the Higher-Mode Response of Ductile Structures. *Journal of Earthquake Engineering*, **2008**, 12, 456-472	1.8	50
86	THE LIMITATIONS AND PERFORMANCES OF DIFFERENT DISPLACEMENT BASED DESIGN METHODS. *Journal of Earthquake Engineering*, **2003**, 7, 201-241	1.8	48
85	Probabilistic seismic assessment and retrofit considerations for Italian RC frame buildings. *Bulletin of Earthquake Engineering*, **2018**, 16, 1447-1485	3.7	48
84	Displacement-Based Design of Precast Walls with Additional Dampers. *Journal of Earthquake Engineering*, **2009**, 13, 40-65	1.8	44
83	Characterising the in-plane seismic performance of infill masonry. *Bulletin of the New Zealand Society for Earthquake Engineering*, **2016**, 49, 98-115	0.5	41
82	Direct Displacement-Based Seismic Design of Eccentrically Braced Steel Frames. *Journal of Earthquake Engineering*, **2016**, 20, 243-278	1.8	39
81	Simplified seismic performance assessment and implications for seismic design. *Earthquake Engineering and Engineering Vibration*, **2014**, 13, 95-122	2	37

80	Development of a Displacement-Based Design Method for Steel Frame-RC Wall Buildings. *Journal of Earthquake Engineering*, **2010**, 14, 252-277	1.8	37
79	DIRECT DISPLACEMENT-BASED DESIGN OF FRAME-WALL STRUCTURES. *Journal of Earthquake Engineering*, **2006**, 10, 91-124	1.8	37
78	Conceptual Seismic Design of Cable-Stayed Bridges. *Journal of Earthquake Engineering*, **2010**, 14, 1139-1181	1.8	36
77	Quantification of modelling uncertainty in existing Italian RC frames. *Earthquake Engineering and Structural Dynamics*, **2018**, 47, 1054-1074	4	35
76	Direct displacement-based seismic design of steel eccentrically braced frame structures. *Bulletin of Earthquake Engineering*, **2013**, 11, 2197-2231	3.7	34
75	Modeling Techniques for the Seismic Assessment of the Existing Italian RC Frame Structures. *Journal of Earthquake Engineering*, **2019**, 23, 1262-1296	1.8	33
74	Stratified graphene/noble metal systems for low-loss plasmonics applications. *Physical Review B*, **2013**, 87,	3.3	24
73	. *Journal of Earthquake Engineering*, **2003**, 7, 201	1.8	24
72	DEVELOPMENT OF AN INNOVATIVE SEISMIC DESIGN PROCEDURE FOR FRAME-WALL STRUCTURES. *Journal of Earthquake Engineering*, **2005**, 9, 279-307	1.8	22
71	Displacement-based design of steel moment resisting frames with partially-restrained beam-to-column joints. *Bulletin of Earthquake Engineering*, **2016**, 14, 1017-1046	3.7	20
70	A Seismic Performance Classification Framework to Provide Increased Seismic Resilience. *Geotechnical, Geological and Earthquake Engineering*, **2014**, 361-400	0.2	20
69	Seismic performance of steel friction connections considering direct-repair costs. *Bulletin of Earthquake Engineering*, **2018**, 16, 5963-5993	3.7	20
68	Factors influencing the repair costs of soft-story RC frame buildings and implications for their seismic retrofit. *Engineering Structures*, **2015**, 101, 233-245	4.7	19
67	Inelastic Higher-Mode Response in Reinforced Concrete Wall Structures. *Earthquake Spectra*, **2015**, 31, 1493-1514	3.4	17
66	Rigorous model-based uncertainty quantification with application to terminal ballistics, part I: Systems with controllable inputs and small scatter. *Journal of the Mechanics and Physics of Solids*, **2012**, 60, 983-1001	5	17
65	Rigorous model-based uncertainty quantification with application to terminal ballistics Part II. Systems with uncontrollable inputs and large scatter. *Journal of the Mechanics and Physics of Solids*, **2012**, 60, 1002-1019	5	17
64	Simplified estimation of the expected annual loss of reinforced concrete buildings. *Earthquake Engineering and Structural Dynamics*, **2017**, 46, 2009	4	16
63	Displacement-Based Framework for Simplified Seismic Loss Assessment. *Journal of Earthquake Engineering*, **2020**, 24, 1-22	1.8	16

62	Potential of Building Information Modelling for seismic risk mitigation in buildings. *Bulletin of the New Zealand Society for Earthquake Engineering*, **2014**, 47, 253-263	0.5	16
61	Applicability of the direct displacement-based design method to steel moment resisting frames with setbacks. *Bulletin of Earthquake Engineering*, **2015**, 13, 3841-3870	3.7	14
60	Capacity design considerations for RC frame-wall structures. *Earthquake and Structures*, **2010**, 1, 391-410		14
59	Highlighting Differences between Force-Based and Displacement-Based Design Solutions for Reinforced Concrete Frame Structures. *Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE)*, **2013**, 23, 122-131	1	12
58	Use of Limit State Loss versus Intensity Models for Simplified Estimation of Expected Annual Loss. *Journal of Earthquake Engineering*, **2016**, 20, 954-974	1.8	12
57	Developing a Direct Approach for Estimating Expected Annual Losses of Italian Buildings. *Journal of Earthquake Engineering*, **2019**, 1-32	1.8	11
56	Seismic response of a case study soft story frame retrofitted using a GIB system. *Earthquake Engineering and Structural Dynamics*, **2015**, 44, 997-1014	4	11
55	Empirical Correlation between Inelastic and Elastic Spectral Displacement Demands. *Earthquake Spectra*, **2016**, 32, 1419-1448	3.4	11
54	Simplified Pushover Analysis of Moment Resisting Frame Structures. *Journal of Earthquake Engineering*, **2021**, 25, 621-648	1.8	11
53	Gapped-Inclined Braces for Seismic Retrofit of Soft-Story Buildings. *Journal of Structural Engineering*, **2014**, 140, 04014080	3	10
52	Sectional response of T-shaped RC walls. *Bulletin of Earthquake Engineering*, **2013**, 11, 999-1019	3.7	10
51	Capacity Design of Coupled RC Walls. *Journal of Earthquake Engineering*, **2014**, 18, 735-758	1.8	10
50	Experimental Seismic Performance of Partly-Sliding Partition Walls. *Journal of Earthquake Engineering*, **2020**, 1-26	1.8	9
49	Optimal uncertainty quantification with model uncertainty and legacy data. *Journal of the Mechanics and Physics of Solids*, **2014**, 72, 1-19	5	9
48	Introduction to a Model Code for Displacement-Based Seismic Design. *Geotechnical, Geological and Earthquake Engineering*, **2010**, 137-148	0.2	9
47	Direct Displacement-Based Seismic Design of Reinforced Concrete Arch Bridges. *Journal of Bridge Engineering*, **2014**, 19, 44-58	2.7	8
46	Optimal uncertainty quantification for legacy data observations of Lipschitz functions. *ESAIM: Mathematical Modelling and Numerical Analysis*, **2013**, 47, 1657-1689	1.8	8
45	An Energy-Factor Method for the Displacement-Based Seismic Design of RC Wall Structures. *Journal of Earthquake Engineering*, **2011**, 15, 1083-1116	1.8	8

44	Uncertainty quantification via codimension-one partitioning. *International Journal for Numerical Methods in Engineering*, **2011**, 85, 1499-1521	2.4	8
43	Evaluation of seismic assessment procedures for determining deformation demands in RC wall buildings. *Earthquake and Structures*, **2015**, 9, 911-936		8
42	Fragility functions for eccentrically braced steel frame structures. *Earthquake and Structures*, **2016**, 10, 367-388		8
41	Technical Note: Practical Challenges Facing the Selection of Conditional Spectrum-Compatible Accelerograms. *Journal of Earthquake Engineering*, **2017**, 21, 169-180	1.8	7
40	Accounting for directionality as a function of structural typology in performance-based earthquake engineering design. *Earthquake Engineering and Structural Dynamics*, **2017**, 46, 791-809	4	7
39	Low-Damage Rocking Precast Concrete Cladding Panels: Design Approach and Experimental Validation. *Journal of Earthquake Engineering*, **2020**, 1-34	1.8	7
38	Direct Displacement-Based Design of a RC wall-steel EBF dual system with added dampers. *Bulletin of the New Zealand Society for Earthquake Engineering*, **2009**, 42, 167-178	0.5	6
37	Experimental study of the seismic performance of plasterboard partition walls with seismic gaps. *Bulletin of the New Zealand Society for Earthquake Engineering*, **2020**, 53, 175-188	0.5	6
36	Seismic hazard disaggregation in performance-based earthquake engineering: occurrence or exceedance?. *Earthquake Engineering and Structural Dynamics*, **2016**, 45, 835-842	4	6
35	Displacement-based assessment of typical Italian RC bridges. *Bulletin of Earthquake Engineering*, **2020**, 18, 4299-4329	3.7	5
34	Displacement-Based Simplified Seismic Loss Assessment of Post-70s RC Buildings. *Journal of Earthquake Engineering*, **2020**, 24, 114-145	1.8	5
33	Direct Displacement-Based Design of a RC wall-steel EBF dual system with added dampers. *Bulletin of the New Zealand Society for Earthquake Engineering*, **2011**, 44, 167-178	0.5	5
32	Comparison of Force-Based and Displacement-Based Design approaches for RC coupled walls in New Zealand. *Bulletin of the New Zealand Society for Earthquake Engineering*, **2014**, 47, 190-205	0.5	5
31	MODELLING UNCERTAINTY IN EXISTING ITALIAN RC FRAMES **2017**,		5
30	A practice-oriented method for estimating elastic floor response spectra. *Bulletin of the New Zealand Society for Earthquake Engineering*, **2020**, 53, 116-136	0.5	5
29	Lessons for loss assessment from the Canterbury earthquakes: a 22-storey building. *Bulletin of Earthquake Engineering*, **2021**, 19, 2081-2104	3.7	5
28	Displacement-Based Simplified Seismic Loss Assessment of Steel Buildings. *Journal of Earthquake Engineering*, **2020**, 24, 146-178	1.8	4
27	A Novel Seismic Design Strategy for Structures With Complex Geometry. *Journal of Earthquake Engineering*, **2010**, 14, 69-105	1.8	4

26	Wellington's earthquake resilience: Lessons from the 2016 Kaikōura earthquake. *Earthquake Spectra*, **2020**, 36, 1448-1484	3.4	4
25	Use of the conditional spectrum to incorporate record-to-record variability in simplified seismic assessment of RC wall buildings. *Earthquake Engineering and Structural Dynamics*, **2016**, 45, 463-482	4	4
24	Assessment of the loss of functionality of individual rooms in critical facilities after earthquakes. *Bulletin of Earthquake Engineering*, **2017**, 15, 1135-1159	3.7	3
23	Development of improved inelastic displacement prediction equations for the seismic design of hybrid systems. *Bulletin of the New Zealand Society for Earthquake Engineering*, **2012**, 45, 1-14	0.5	3
22	Formulation of Localized Damping Models for Large Displacement Analysis of Single-Degree-of-Freedom Inelastic Systems. *Journal of Earthquake Engineering*, **2020**, 1-24	1.8	3
21	Precast concrete spreader-walls to improve the reparability of RC frame buildings. *Earthquake Engineering and Structural Dynamics*, **2021**, 50, 831-844	4	3
20	A multidirectional conditional spectrum. *Earthquake Engineering and Structural Dynamics*, **2018**, 47, 945-965	4	3
19	Cost-Benefit Analysis of Buildings Retrofitted Using GIB Systems. *Earthquake Spectra*, **2016**, 32, 861-879	3.4	2
18	P-delta effects on short-period systems subjected to earthquake excitation. *Engineering Structures*, **2022**, 254, 113642	4.7	2
17	Experimental investigation into the seismic fragility of a commercial glazing system. *Bulletin of the New Zealand Society for Earthquake Engineering*, **2020**, 53, 144-149	0.5	2
16	Theoretical and experimental evaluation of timber-framed partitions under lateral drift. *Bulletin of the New Zealand Society for Earthquake Engineering*, **2021**, 54, 263-281	0.5	2
15	INFLUENCE OF MODELLING PARAMETERS ON THE FRAGILITY ASSESSMENT OF PRE-1970 ITALIAN RC STRUCTURES **2015**,		2
14	Evaluation of fragility functions with potential relevance for use in New Zealand. *Bulletin of the New Zealand Society for Earthquake Engineering*, **2018**, 51, 127-144	0.5	2
13	Quantifying the Likelihood of Exceeding a Limit State via the Displacement-based Assessment Approach. *Journal of Earthquake Engineering*,1-19	1.8	2
12	Post-Earthquake Reparability of Buildings: The Role of Non-Structural Elements. *Structural Engineering International: Journal of the International Association for Bridge and Structural Engineering (IABSE)*, **2020**, 30, 217-223	1	1
11	Seismic design of acceleration-sensitive non-structural elements in New Zealand: State-of-practice and recommended changes. *Bulletin of the New Zealand Society for Earthquake Engineering*, **2021**, 54, 243-262	0.5	1
10	Effect of Damper Sub-System Stiffness on the Response of a Single Degree of Freedom System Equipped with a Viscous Damper. *Journal of Earthquake Engineering*,1-20	1.8	1
9	Displacement-Based Seismic Assessment of the Likelihood of Failure of Reinforced Concrete Wall Buildings. *Buildings*, **2021**, 11, 295	3.2	1

8	Bayesian numerical methods for nonlinear partial differential equations. *Statistics and Computing*, **2021**, 31, 1	1.8	1
7	Structural Strengthening and Retrofit; Motivations, Concepts and Approaches. *Building Pathology and Rehabilitation*, **2018**, 1-24	0.2	
6	Rapid assessment of peak storey drift demands on reinforced concrete frame buildings. *Bulletin of the New Zealand Society for Earthquake Engineering*, **2019**, 52, 109-118	0.5	
5	Distributional Uncertainty. *Texts in Applied Mathematics*, **2015**, 295-318	2.1	
4	Adaptive Reconstruction of Imperfectly Observed Monotone Functions, with Applications to Uncertainty Quantification. *Algorithms*, **2020**, 13, 196	1.8	
3	Randomised one-step time integration methods for deterministic operator differential equations. *Calcolo*, **2022**, 59, 1	1.5	
2	Seismic Performance of a Rocking Precast Concrete Cladding Panel System under Lateral Cyclic Displacement Demands. *Journal of Earthquake Engineering*,1-30	1.8	
1	Cyclic Behaviour of Two-Story Low-Damage Rocking Precast Concrete Cladding Panel System. *Journal of Earthquake Engineering*,1-26	1.8	