

# Wen-Shao Chang

## List of Publications by Year in descending order

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65  
papers

1,133  
citations

361045

20  
h-index

454577

30  
g-index

69  
all docs

69  
docs citations

69  
times ranked

837  
citing authors

#	ARTICLE	IF	CITATIONS
1	The Use of Horizontal Shading Devices to Alleviate Overheating in Residential Buildings in the Severe Cold Region and Cold Region of China. Buildings, 2022, 12, 408.	1.4	6
2	Research on the Relationship between Thermal Insulation Thickness and Summer Overheating Risk: A Case Study in Severe Cold and Cold Regions of China. Buildings, 2022, 12, 1032.	1.4	5
3	Reducing human-induced vibration of cross-laminated timber floor—Application of multi-tuned mass damper system. Structural Control and Health Monitoring, 2021, 28, e2656.	1.9	14
4	Self-tapping screws as reinforcement on single-dowel connections with artificial cracks. Proceedings of the Institution of Civil Engineers: Structures and Buildings, 2021, , 1-11.	0.4	1
5	Predicting the human-induced vibration of cross laminated timber floor under multi-person loadings. Structures, 2021, 29, 65-78.	1.7	20
6	Optimal trajectory planning of complicated robotic timber joints based on particle swarm optimization and an adaptive genetic algorithm. Construction Robotics, 2021, 5, 131-146.	1.2	5
7	Glue-laminated bamboo for dowel-type moment-resisting connections. Composite Structures, 2021, 267, 113848.	3.1	11
8	Feasibility of Using Floor Vibration to Detect Human Falls. International Journal of Environmental Research and Public Health, 2021, 18, 200.	1.2	9
9	Strain Distribution of Dowel-Type Connections Reinforced with Self-Tapping Screws. Journal of Materials in Civil Engineering, 2020, 32, 04019319.	1.3	5
10	Human-induced vibration of cross-laminated timber (CLT) floor under different boundary conditions. Engineering Structures, 2020, 204, 110016.	2.6	32
11	Drive-in torque for self-tapping screws into timber. Proceedings of Institution of Civil Engineers: Construction Materials, 2020, , 1-13.	0.7	4
12	Adaptive tuned mass damper with shape memory alloy for seismic application. Engineering Structures, 2020, 223, 111171.	2.6	28
13	Comparison of Bending Fatigue of NiTi and CuAlMn Shape Memory Alloy Bars. Advances in Materials Science and Engineering, 2020, 2020, 1-9.	1.0	9
14	Re-tuning an off-tuned tuned mass damper by adjusting temperature of shape memory alloy: Exposed to wind action. Structures, 2020, 25, 180-189.	1.7	13
15	PRELIMINARY STRUCTURAL ANALYSIS STUDY OF THE CHINESE COMPLEX BRACKET SYSTEMS. WIT Transactions on the Built Environment, 2020, , .	0.0	0
16	Screw reinforcement on dowel-type moment-resisting connections with cracks. Construction and Building Materials, 2019, 215, 59-72.	3.2	28
17	Bending properties of finger-jointed Malaysian dark red meranti. International Wood Products Journal, 2019, 10, 49-54.	0.6	5
18	Study of SMA-dowelled timber connection reinforced by densified veneer wood under cyclic loading. MATEC Web of Conferences, 2019, 275, 01015.	0.1	3

#	ARTICLE	IF	CITATIONS
19	Static behaviour of a two-tiered Dou-Gong system reinforced by super-elastic alloy. Proceedings of the ICE - Engineering History and Heritage, 2019, 172, 164-173.	0.1	7
20	Using self-tapping screw to reinforce dowel-type connection in a timber portal frame. Engineering Structures, 2019, 178, 656-664.	2.6	24
21	Heat and moisture transfer behaviour in Phyllostachys edulis (Moso bamboo) based panels. Construction and Building Materials, 2018, 166, 35-49.	3.2	13
22	Bench-scale fire tests of Dark Red Meranti and Spruce finger joints in tension. Construction and Building Materials, 2018, 168, 257-265.	3.2	2
23	Enhancing the seismic performance of historic timber buildings in Asia by applying super-elastic alloy to a Chinese complex bracket system. International Journal of Architectural Heritage, 2018, 12, 734-748.	1.7	9
24	Structural behavior of traditional Dieh-Dou timber main frame. International Journal of Architectural Heritage, 2018, 12, 555-577.	1.7	26
25	Application of pre-stressed SMA-based tuned mass damper to a timber floor system. Engineering Structures, 2018, 167, 143-150.	2.6	26
26	Assessing the Climate Change Impacts of Biogenic Carbon in Buildings: A Critical Review of Two Main Dynamic Approaches. Sustainability, 2018, 10, 2020.	1.6	65
27	Construction and monitoring of experimental straw bale building in northeast China. Construction and Building Materials, 2018, 183, 46-57.	3.2	20
28	Thermal and hygroscopic expansion characteristics of bamboo. Proceedings of the Institution of Civil Engineers: Structures and Buildings, 2018, 171, 463-471.	0.4	4
29	Feasibility of shape memory alloy in a tuneable mass damper to reduce excessive in-service vibration. Structural Control and Health Monitoring, 2017, 24, e1858.	1.9	24
30	Seismic resilience timber connection-adoption of shape memory alloy tubes as dowels. Structural Control and Health Monitoring, 2017, 24, e1980.	1.9	25
31	Porosity estimation of Phyllostachys edulis (Moso bamboo) by computed tomography and backscattered electron imaging. Wood Science and Technology, 2017, 51, 11-27.	1.4	15
32	Thermal diffusivity measurement of Phyllostachys edulis (Moso bamboo) by the flash method. Holzforschung, 2017, 71, 349-354.	0.9	4
33	Water vapour diffusion resistance factor of Phyllostachys edulis (Moso bamboo). Construction and Building Materials, 2017, 141, 216-221.	3.2	21
34	Lateral-Load Resistance of Cross-Laminated Timber Shear Walls. Journal of Structural Engineering, 2017, 143, .	1.7	36
35	Encoding bamboo's nature for freeform structure design. International Journal of Architectural Computing, 2017, 15, 169-182.	0.9	3
36	Energy Saving and Carbon Reduction in the Operation Stage of Cross Laminated Timber Residential Buildings in China. Sustainability, 2017, 9, 292.	1.6	34

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37	Experimental Tests on a Dowel-Type Timber Connection and Validation of Numerical Models. <i>Buildings</i> , 2017, 7, 116.	1.4	20
38	Assessing Cross Laminated Timber (CLT) as an Alternative Material for Mid-Rise Residential Buildings in Cold Regions in China—A Life-Cycle Assessment Approach. <i>Sustainability</i> , 2016, 8, 1047.	1.6	74
39	Use of shape-memory alloys in construction: a critical review. <i>Proceedings of the Institution of Civil Engineers: Civil Engineering</i> , 2016, 169, 87-95.	0.3	49
40	Specific heat capacity measurement of <i>Phyllostachys edulis</i> (Moso bamboo) by differential scanning calorimetry. <i>Construction and Building Materials</i> , 2016, 125, 821-831.	3.2	19
41	The effect of simulated flooding on the structural performance of light frame timber shear walls – An experimental approach. <i>Engineering Structures</i> , 2016, 106, 288-298.	2.6	8
42	Shaking Table Test of the Taiwanese Traditional Dieh-Dou Timber Frame. <i>International Journal of Architectural Heritage</i> , 2016, 10, 539-557.	1.7	26
43	Ambient vibration tests of a cross-laminated timber building. <i>Proceedings of Institution of Civil Engineers: Construction Materials</i> , 2015, 168, 121-131.	0.7	20
44	The effect of drying on timber frame connections post flooding. <i>Proceedings of Institution of Civil Engineers: Construction Materials</i> , 2015, 168, 144-157.	0.7	4
45	Density distribution profile for internodes and nodes of <i>Phyllostachys edulis</i> (Moso bamboo) by computer tomography scanning. <i>Construction and Building Materials</i> , 2015, 93, 197-204.	3.2	52
46	Repair and reinforcement of timber columns and shear walls – A review. <i>Construction and Building Materials</i> , 2015, 97, 14-24.	3.2	27
47	Stiffness of dowel-type timber connections under pre-yield oscillating loads. <i>Engineering Structures</i> , 2014, 65, 21-29.	2.6	14
48	Nonlinear pre-yield modal properties of timber structures with large-diameter steel dowel connections. <i>Engineering Structures</i> , 2014, 76, 235-244.	2.6	4
49	Viscoelastic embedment behaviour of dowels and screws in timber under in-service vibration. <i>European Journal of Wood and Wood Products</i> , 2013, 71, 623-634.	1.3	11
50	An analytical model for embedment stiffness of a dowel in timber under cyclic load. <i>European Journal of Wood and Wood Products</i> , 2013, 71, 609-622.	1.3	6
51	Lightly modified bamboo for structural applications. <i>Proceedings of Institution of Civil Engineers: Construction Materials</i> , 2013, 166, 238-247.	0.7	20
52	Dynamic characteristics of Taiwanese traditional Dieh-Dou timber structures. , 2013, , .		1
53	Life Cycle Assessment of Timber Components in Taiwan Traditional Temples. <i>Procedia Engineering</i> , 2011, 14, 2683-2691.	1.2	1
54	Development of All-Wood Connections with Plywood Fitch Plate and Oak Pegs. <i>Advances in Structural Engineering</i> , 2011, 14, 123-131.	1.2	13

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55	A new proposal to reinforce planked timber shear walls. <i>Journal of Wood Science</i> , 2011, 57, 493-500.	0.9	5
56	Performance of Shear Wall Composed of LVL and Cement Fiber Board Sheathing. <i>Journal of Asian Architecture and Building Engineering</i> , 2010, 9, 463-469.	1.2	3
57	Improvement of glued-in-rod joint system using compressed wooden dowel. <i>Holzforschung</i> , 2010, 64, .	0.9	14
58	The structural behaviour of timber joints subjected to biaxial bending. <i>Earthquake Engineering and Structural Dynamics</i> , 2009, 38, 739-757.	2.5	10
59	Experimental study on mechanical performance of all-softwood pegged mortice and tenon connections. <i>Biosystems Engineering</i> , 2008, 100, 562-570.	1.9	22
60	On mechanical behavior of traditional timber shear wall in Taiwan I: background and theory derivation. <i>Journal of Wood Science</i> , 2007, 53, 17-23.	0.9	16
61	On mechanical behavior of traditional timber shear wall in Taiwan II: simplified calculation and experimental verification. <i>Journal of Wood Science</i> , 2007, 53, 24-30.	0.9	8
62	Rotational performance of traditional Nuki joints with gap II: the behavior of butted Nuki joint and its comparison with continuous Nuki joint. <i>Journal of Wood Science</i> , 2007, 53, 401-407.	0.9	50
63	Research efforts being devoted to traditional Chuan-Dou timber structures after Chi-Chi earthquake in Taiwan. <i>WIT Transactions on the Built Environment</i> , 2007, , .	0.0	1
64	Rotational performance of traditional Nuki joints with gap I: theory and verification. <i>Journal of Wood Science</i> , 2006, 52, 58-62.	0.9	65
65	“Rope effect” mechanism of self-tapping screws as reinforcement on dowel-type connections. <i>Proceedings of the Institution of Civil Engineers: Structures and Buildings</i> , 0, , 1-10.	0.4	3