Chee-Kiong Soh

List of Publications by Year
in descending order

75 papers	3,206 citations	147726 31 h-index	155592 55 g-index
79 all docs	79 docs citations	79 times ranked	1715 citing authors

#	Article	IF	Citations
1	Monitoring the curing process of in-situ concrete with piezoelectric-based techniques â€" A practical application. Structural Health Monitoring, 2023, 22, 518-539.	4.3	14
2	Monitoring of concrete curing using the electromechanical impedance technique: review and path forward. Structural Health Monitoring, 2021, 20, 604-636.	4.3	45
3	Enhancing underground development usersâ€™ health through facilities management: a study of the underground metro system in Hong Kong. IOP Conference Series: Earth and Environmental Science, 2021, 703, 012043.	0.2	1
4	The importance of air quality for underground spaces: An international survey of public attitudes. Indoor Air, 2021, 31, 2239-2251.	2.0	6
5	Strength development monitoring and dynamic modulus assessment of cementitious materials using EMI-Miniature Prism based technique. Structural Health Monitoring, 2020, 19, 373-389.	4.3	21
6	Prevalence of and factors associated with poor sleep quality and short sleep in a working population in Singapore. Sleep Health, 2020, 6, 277-287.	1.3	26
7	Prevalence of Vitamin D Deficiency and Its Associated Work-Related Factors among Indoor Workers in a Multi-Ethnic Southeast Asian Country. International Journal of Environmental Research and Public Health, 2020, 17, 164.	1.2	13
8	White- and Blue- collar workers responsesâ€™ towards underground workspaces. Tunnelling and Underground Space Technology, 2020, 105, 103526.	3.0	6
9	Associations of perceived indoor environmental quality with stress in the workplace. Indoor Air, 2020, 30, 1166-1177.	2.0	20
10	Employee experiences in underground workplaces: a qualitative investigation. Ergonomics, 2020, 63, 1337-1349.	1.1	3
11	Association between shift work and poor sleep quality in an Asian multi-ethnic working population: A cross-sectional study. PLoS ONE, 2020, 15, e0229693.	1.1	18
12	Prevalence of psychological distress and its association with perceived indoor environmental quality and workplace factors in under and aboveground workplaces. Building and Environment, 2020, 175, 106799.	3.0	18
13	Transitional areas affect perception of workspaces and employee well-being: A study of underground and above-ground workspaces. Building and Environment, 2020, 179, 106840.	3.0	10
14	Activity Trackerâ€"Based Metrics as Digital Markers of Cardiometabolic Health: Cross-Sectional Study. JMIR MHealth and UHealth, 2020, 8, e16409.	1.8	16
15	Prevalence of sick building syndrome and its association with perceived indoor environmental quality in an Asian multi-ethnic working population. Building and Environment, 2019, 166, 106420.	3.0	34
16	A Multifactorial Approach to Sleep and Its Association with Health-Related Quality of Life in a Multiethnic Asian Working Population: A Cross-Sectional Analysis. International Journal of Environmental Research and Public Health, 2019, 16, 4147.	1.2	6
17	Novel non-fiber optical metamaterial waveguide for monitoring canal and pipeline structures. Journal of Civil Structural Health Monitoring, 2019, 9, 369-383.	2.0	0
18	The underground workspaces questionnaire (UWSQ): Investigating public attitudes toward working in underground spaces. Building and Environment, 2019, 153, 28-34.	3.0	16

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19	A Perspective of Non-Fiber-Optical Metamaterial and Piezoelectric Material Sensing in Automated Structural Health Monitoring. Sensors, 2019, 19, 1490.	2.1	5
20	The cubicle deconstructed: Simple visual enclosure improves perseverance. Journal of Environmental Psychology, 2019, 63, 60-73.	2.3	6
21	Risk Factors for Non-Communicable Diseases at Baseline and Their Short-Term Changes in a Workplace Cohort in Singapore. International Journal of Environmental Research and Public Health, 2019, 16, 4551.	1.2	2
22	Examining the Factor Structure of the Pittsburgh Sleep Quality Index in a Multi-Ethnic Working Population in Singapore. International Journal of Environmental Research and Public Health, 2019, 16, 4590.	1.2	10
23	Review of the potential health effects of light and environmental exposures in underground workplaces. Tunnelling and Underground Space Technology, 2019, 84, 201-209.	3.0	36
24	Digging Deep: The Effect of Design on the Social Behavior and Attitudes of People Working in Underground Workplaces in Europe. Advances in Intelligent Systems and Computing, 2019, , 791-802.	0.5	1
25	Assessing the suitability of virtual reality for psychological testing.. Psychological Assessment, 2019, 31, 318-328.	1.2	25
26	Health Effects of Underground Workspaces cohort: study design and baseline characteristics. Epidemiology and Health, 2019, 41, e2019025.	0.8	16
27	Investigating the performance of â€œSmart Probeâ€•based indirect EMI technique for strength development monitoring of cementitious materials â€" Modelling and parametric study. Construction and Building Materials, 2018, 172, 134-152.	3.2	36
28	Melatonin and health: an umbrella review of health outcomes and biological mechanisms of action. BMC Medicine, 2018, 16, 18.	2.3	65
29	Application of Metamaterial Surface Plasmon and Waveguide for Robotic-Arm Based Structural Health Monitoring. Journal of Nondestructive Evaluation, 2018, 37, 1.	1.1	7
30	Working in underground spaces: Architectural parameters, perceptions and thermal comfort measurements. Tunnelling and Underground Space Technology, 2018, 71, 428-439.	3.0	49
31	A novel electromechanical impedanceâ€"based model for strength development monitoring of cementitious materials. Structural Health Monitoring, 2018, 17, 902-918.	4.3	54
32	Parametric study and modeling of PZT based wave propagation technique related to practical issues in monitoring of concrete curing. Construction and Building Materials, 2018, 176, 519-530.	3.2	29
33	Applications of structural health monitoring technology in Asia. Structural Health Monitoring, 2017, 16, 324-346.	4.3	90
34	Load monitoring using a calibrated piezo diaphragm based impedance strain sensor and wireless sensor network in real time. Smart Materials and Structures, 2017, 26, 045036.	1.8	25
35	Evaluation of peak-free electromechanical piezo-impedance and electromagnetic contact sensing using metamaterial surface plasmons for load monitoring. Smart Materials and Structures, 2017, 26, 015003.	1.8	14
36	Practical issues related to the application of piezoelectric based wave propagation technique in monitoring of concrete curing. Construction and Building Materials, 2017, 152, 506-519.	3.2	32

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37	A Psychosocial Approach to Understanding Underground Spaces. Frontiers in Psychology, 2017, 8, 452.	1.1	27
38	Human-centered Development of Underground work Spaces. Procedia Engineering, 2016, 165, 242-250.	1.2	23
39	Contactless load monitoring in near-field with surface localized spoof plasmonsâ€"A new breed of metamaterials for health of engineering structures. Sensors and Actuators A: Physical, 2016, 244, 156-165.	2.0	17
40	Non-destructive concrete strength evaluation using smart piezoelectric transducerâ€"a comparative study. Smart Materials and Structures, 2016, 25, 085021.	1.8	75
41	Social aspects of working in underground spaces. Tunnelling and Underground Space Technology, 2016, 55, 135-145.	3.0	35
42	Psycho-biological factors associated with underground spaces: What can the new era of cognitive neuroscience offer to their study?. Tunnelling and Underground Space Technology, 2016, 55, 118-134.	3.0	58
43	A Parametric Study on Admittance Signatures of a PZT Transducer Under Free Vibration. Mechanics of Advanced Materials and Structures, 2015, 22, 877-884.	1.5	12
44	Towards more accurate numerical modeling of impedance based high frequency harmonic vibration. Smart Materials and Structures, 2014, 23, 035017.	1.8	43
45	Electro-Mechanical Impedance (EMI)-Based Incipient Crack Monitoring and Critical Crack Identification of Beam Structures. Research in Nondestructive Evaluation, 2014, 25, 82-98.	0.5	51
46	Development of a broadband nonlinear two-degree-of-freedom piezoelectric energy harvester. Journal of Intelligent Material Systems and Structures, 2014, 25, 1875-1889.	1.4	138
47	Monitoring of Fatigue in Welded Beams Using Piezoelectric Wafer Based Impedance Technique. Journal of Nondestructive Evaluation, 2013, 33, 124.	1.1	7
48	Damage detction and characterization using EMI technique under varying axial load. Smart Structures and Systems, 2013, 11, 349-364.	1.9	24
49	Effect of varying axial load under fixed boundary condition on admittance signatures of electromechanical impedance technique. Journal of Intelligent Material Systems and Structures, 2012, 23, 815-826.	1.4	79
50	Fatigue life estimation of a 1D aluminum beam under mode-I loading using the electromechanical impedance technique. Smart Materials and Structures, 2011, 20, 125001.	1.8	56
51	Application of Electromechanical Impedance Technique for Engineering Structures: Review and Future Issues. Journal of Intelligent Material Systems and Structures, 2010, 21, 41-59.	1.4	170
52	A Reusable PZT Transducer for Monitoring Initial Hydration and Structural Health of Concrete. Sensors, 2010, 10, 5193-5208.	2.1	97
53	Monitoring damage propagation using PZT impedance transducers. Smart Materials and Structures, 2009, 18, 045003.	1.8	51
54	Practical issues related to the application of the electromechanical impedance technique in the structural health monitoring of civil structures: I. Experiment. Smart Materials and Structures, 2008, 17, 035008.	1.8	98

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55	Three-Dimensional Electromechanical Impedance Model for Multiple Piezoceramic Transducersâ€"Structure Interaction. Journal of Aerospace Engineering, 2008, 21, 35-44.	0.8	49
56	Three-Dimensional Damage Model for Concrete. I: Theory. Journal of Engineering Mechanics - ASCE, 2008, 134, 72-81.	1.6	7
57	Three-Dimensional Damage Model for Concrete. II: Verification. Journal of Engineering Mechanics - ASCE, 2008, 134, 82-89.	1.6	2
58	Three-Dimensional Electromechanical Impedance Model. I: Formulation of Directional Sum Impedance. Journal of Aerospace Engineering, 2007, 20, 53-62.	0.8	70
59	Hybrid Genetic Programming with Local Search Operators for Dynamic Force Identification. Journal of Computing in Civil Engineering, 2007, 21, 311-320.	2.5	3
60	Integrating Evolutionary Programming and Electro-Mechanical Impedance Method for Damage Identification. , 2007, , 756.		0
61	Influence of loading on the electromechanical admittance of piezoceramic transducers. Smart Materials and Structures, 2007, 16, 1888-1897.	1.8	81
62	Shear correction for Mindlin type plate and shell elements. International Journal for Numerical Methods in Engineering, 2007, 69, 2789-2806.	1.5	12
63	An evolutionary programming algorithm for continuous global optimization. European Journal of Operational Research, 2006, 168, 354-369.	3.5	18
64	Integrated Optimization of Control System for Smart Cylindrical Shells Using Modified GA. Journal of Aerospace Engineering, 2006, 19, 68-79.	0.8	13
65	Structural identification and damage diagnosis using self-sensing piezo-impedance transducers. Smart Materials and Structures, 2006, 15, 987-995.	1.8	115
66	Closure to â€œA Displacement Equivalence-Based Damage Model for Brittle Materials, Part I: Theory; Part II: Verificationâ€•(2005, ASME J. Appl. Mech., 72, pp. 306â€"307). Journal of Applied Mechanics, Transactions ASME, 2005, 72, 308-308.	1.1	0
67	Generic Impedance-Based Model for Structure-Piezoceramic Interacting System. Journal of Aerospace Engineering, 2005, 18, 93-101.	0.8	67
68	Calibration of piezo-impedance transducers for strength prediction and damage assessment of concrete. Smart Materials and Structures, 2005, 14, 671-684.	1.8	155
69	Identification Of Dynamic Rock Properties Using A Genetic Algorithm. International Journal of Rock Mechanics and Minings Sciences, 2004, 41, 490-495.	2.6	3
70	Structural Health Monitoring by Piezo-Impedance Transducers. I: Modeling. Journal of Aerospace Engineering, 2004, 17, 154-165.	0.8	273
71	Structural Health Monitoring by Piezoâ€"Impedance Transducers. II: Applications. Journal of Aerospace Engineering, 2004, 17, 166-175.	0.8	130
72	Structural impedance based damage diagnosis by piezo-transducers. Earthquake Engineering and Structural Dynamics, 2003, 32, 1897-1916.	2.5	175

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73	Damage Model Based Reinforced-Concrete Element. Journal of Materials in Civil Engineering, 2003, 15, 371-380.	1.3	17
74	Evolutionary Programming for Inverse Problems in Civil Engineering. Journal of Computing in Civil Engineering, 2001, 15, 144-150.	2.5	10
75	Fuzzy Controlled Genetic Algorithm Search for Shapeâ€‰Optimization. Journal of Computing in Civil Engineering, 1996, 10, 143-150.	2.5	118