## Qian Fang

## List of Publications by Year in descending order

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69	1,999	27 h-index	42
papers	citations		g-index
69	69	69	939
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Effects of twin tunnels construction beneath existing shield-driven twin tunnels. Tunnelling and Underground Space Technology, 2015, 45, 128-137.	3.0	140
2	Shallow tunnelling method (STM) for subway station construction in soft ground. Tunnelling and Underground Space Technology, 2012, 29, 10-30.	3.0	122
3	Ground surface settlements due to construction of closely-spaced twin tunnels with different geometric arrangements. Tunnelling and Underground Space Technology, 2016, 51, 144-151.	3.0	76
4	Grouting techniques for the unfavorable geological conditions of Xiang'an subsea tunnel in China. Journal of Rock Mechanics and Geotechnical Engineering, 2014, 6, 438-446.	3.7	74
5	A physical and numerical investigation of the failure mechanism of weak rocks surrounding tunnels. Computers and Geotechnics, 2014, 61, 292-307.	2.3	69
6	Complex variable analysis for stress distribution of an underwater tunnel in an elastic half plane. International Journal for Numerical and Analytical Methods in Geomechanics, 2015, 39, 1821-1835.	1.7	64
7	Behaviour of existing tunnel due to new tunnel construction below. Computers and Geotechnics, 2019, 110, 71-81.	2.3	61
8	Mechanical responses of existing tunnel due to new tunnelling below without clearance. Tunnelling and Underground Space Technology, 2018, 80, 44-52.	3.0	59
9	Analytical solutions of non-Darcy seepage of grouted subsea tunnels. Tunnelling and Underground Space Technology, 2020, 96, 103182.	3.0	58
10	Influence of long-term chloride diffusion in concrete and the resulting corrosion of reinforcement on the serviceability of RC beams. Cement and Concrete Composites, 2016, 71, 144-152.	4.6	57
11	Protection of Buildings against Damages as a Result of Adjacent Large-Span Tunneling in Shallowly Buried Soft Ground. Journal of Geotechnical and Geoenvironmental Engineering - ASCE, 2013, 139, 903-913.	1.5	56
12	Undrained analysis of ground reaction curves for deep tunnels in saturated ground considering the effect of ground reinforcement. Tunnelling and Underground Space Technology, 2018, 71, 579-590.	3.0	56
13	Environmental risk management for a cross interchange subway station construction in China. Tunnelling and Underground Space Technology, 2011, 26, 750-763.	3.0	55
14	Settlement characteristics of large-diameter shield excavation below existing subway in close vicinity. Journal of Central South University, 2021, 28, 882-897.	1.2	52
15	Movements of ground and existing structures induced by slurry pressure-balance tunnel boring machine (SPB TBM) tunnelling in clay. Tunnelling and Underground Space Technology, 2020, 97, 103278.	3.0	49
16	Subway station construction using combined shield and shallow tunnelling method: Case study of Gaojiayuan station in Beijing. Tunnelling and Underground Space Technology, 2018, 82, 627-635.	3.0	48
17	Scientific problems and research proposals for Sichuan–Tibet railway tunnel construction. Underground Space (China), 2022, 7, 419-439.	3.4	48
18	Analysis of the interaction between tunnel support and surrounding rock considering pre-reinforcement. Tunnelling and Underground Space Technology, 2021, 115, 104074.	3.0	47

#	Article	IF	CITATIONS
19	Analytical algorithm for longitudinal deformation profile of a deep tunnel. Journal of Rock Mechanics and Geotechnical Engineering, 2021, 13, 845-854.	3.7	46
20	Ground reaction curves for deep circular tunnels considering the effect of ground reinforcement. International Journal of Rock Mechanics and Minings Sciences, 2013, 60, 401-412.	2.6	42
21	Surface settlement of subway station construction using pile-beam-arch approach. Tunnelling and Underground Space Technology, 2019, 90, 340-356.	3.0	40
22	Energy-based prediction of volume loss ratio and plastic zone dimension of shallow tunnelling. Computers and Geotechnics, 2020, 118, 103343.	2.3	40
23	Face stability of shallow tunnelling in sandy soil considering unsupported length. Tunnelling and Underground Space Technology, 2020, 102, 103445.	3.0	34
24	Shallow tunnel construction with irregular surface topography using cross diaphragm method. Tunnelling and Underground Space Technology, 2017, 68, 11-21.	3.0	33
25	Behaviors of existing twin subway tunnels due to new subway station excavation below in close vicinity. Tunnelling and Underground Space Technology, 2018, 81, 121-128.	3.0	32
26	Excavation failure due to pipeline damage during shallow tunnelling in soft ground. Tunnelling and Underground Space Technology, 2015, 46, 76-84.	3.0	30
27	Displacement process analysis of deep tunnels with grouted rockbolts considering bolt installation time and bolt length. Computers and Geotechnics, 2021, 140, 104437.	2.3	29
28	Fatigue damage and residual life of secondary lining of high-speed railway tunnel under aerodynamic pressure wave. Tunnelling and Underground Space Technology, 2021, 111, 103851.	3.0	28
29	Mechanical analysis of circular tunnels supported by steel sets embedded in primary linings. Tunnelling and Underground Space Technology, 2013, 37, 80-88.	3.0	26
30	A generalized complex variable method for multiple tunnels at great depth considering the interaction between linings and surrounding rock. Computers and Geotechnics, 2021, 129, 103891.	2.3	26
31	Mechanical responses of closely spaced large span triple tunnels. Tunnelling and Underground Space Technology, 2020, 105, 103574.	3.0	24
32	Semi-analytical prediction for tunnelling-induced ground movements in multi-layered clayey soils. Tunnelling and Underground Space Technology, 2020, 102, 103446.	3.0	22
33	Structural Responses of Secondary Lining of High-Speed Railway Tunnel Excavated in Loess Ground. Advances in Structural Engineering, 2013, 16, 1371-1379.	1.2	21
34	Challenges and countermeasures for using pile-beam-arch approach to enlarge large-diameter shield tunnel to subway station. Tunnelling and Underground Space Technology, 2020, 98, 103326.	3.0	21
35	Displacement Characteristics of Shallow-Buried Large-Section Loess Tunnel with Different Types of Pre-Supports: A Case Study of New Badaling Tunnel. Applied Sciences (Switzerland), 2020, 10, 195.	1.3	21
36	Functional catastrophe analysis of collapse mechanisms for deep tunnels based on the Hoek-Brown failure criterion. Journal of Zhejiang University: Science A, 2014, 15, 723-731.	1.3	20

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37	A contact algorithm for cohesive cracks in the extended finite element method. International Journal for Numerical Methods in Engineering, 2020, 121, 2747-2766.	1.5	16
38	Mechanical responses of surrounding rock mass and tunnel linings in large-span triple-arch tunnel. Tunnelling and Underground Space Technology, 2021, 113, 103971.	3.0	16
39	Analytical solutions of stresses and displacements for deep circular tunnels with liners in saturated ground. Journal of Zhejiang University: Science A, 2014, 15, 395-404.	1.3	14
40	Numerical simulation of compression breakage of spherical particle. Chemical Engineering Science, 2017, 173, 443-454.	1.9	13
41	Analytical study on pretensioned bolt-cable combined support of large cross-section tunnel. Science China Technological Sciences, 2020, 63, 1808-1823.	2.0	13
42	Numerical simulation of slurry fracturing during shield tunnelling. Tunnelling and Underground Space Technology, 2018, 74, 153-166.	3.0	12
43	Reasonable overburden thickness for underwater shield tunnel. Tunnelling and Underground Space Technology, 2018, 81, 35-40.	3.0	12
44	Deformation analysis of existing tunnels with shearing and bending stiffness reduction at movement joints. Tunnelling and Underground Space Technology, 2022, 123, 104408.	3.0	12
45	Analytical modeling of complex contact behavior between rock mass and lining structure. Journal of Rock Mechanics and Geotechnical Engineering, 2022, 14, 813-824.	3.7	11
46	Influences of High-Speed Train Speed on Tunnel Aerodynamic Pressures. Applied Sciences (Switzerland), 2022, 12, 303.	1.3	11
47	Field Monitoring of the Deformation and Internal Forces of the Surrounding Rock and Support Structures in the Construction of a Super-Span High-Speed Railway Tunnel—A Case Study. Applied Sciences (Switzerland), 2020, 10, 5182.	1.3	10
48	A virtual interfaceâ€coupled extended finite element method for threeâ€dimensional contact problems. International Journal for Numerical Methods in Engineering, 2021, 122, 386-402.	1.5	10
49	An efficient patch-to-patch method for coupling independent finite element subdomains with intersecting interfaces. Computer Methods in Applied Mechanics and Engineering, 2022, 388, 114209.	3.4	10
50	Determination Method of Reasonable Reinforcement Parameters for Subsea Tunnels Considering Ground Reinforcement and Seepage Effect. Applied Sciences (Switzerland), 2019, 9, 3607.	1.3	9
51	A semi-analytical method for frictional contact analysis between rock mass and concrete linings. Applied Mathematical Modelling, 2022, 105, 17-28.	2.2	9
52	A numerical algorithm for multiple cracks propagation in concrete structure. Structural Concrete, 2020, 21, 2168-2177.	1.5	8
53	Modelling the wave-induced instantaneous liquefaction in a non-cohesive seabed as a nonlinear complementarity problem. Computers and Geotechnics, 2021, 137, 104275.	2.3	8
54	Analytical Solution on Ground Deformation Caused by Parallel Construction of Rectangular Pipe Jacking. Applied Sciences (Switzerland), 2022, 12, 3298.	1.3	8

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55	Safety Distance of Shotcrete Subjected to Blasting Vibration in Large-Span High-Speed Railway Tunnels. Shock and Vibration, 2019, 2019, 1-14.	0.3	7
56	Geotechnical monitoring and safety assessment of large-span triple tunnels using drilling and blasting method. Journal of Vibroengineering, 2019, 21, 1373-1387.	0.5	7
57	Work input for unsaturated soils considering interfacial effects. International Journal for Numerical and Analytical Methods in Geomechanics, 2018, 42, 1078-1094.	1.7	6
58	Analysis of four shield-driven tunnels with complex spatial relations in a clay stratum. Tunnelling and Underground Space Technology, 2022, 124, 104478.	3.0	6
59	Mechanical Analysis of Secondary Lining of High-Speed Railway Tunnel. KSCE Journal of Civil Engineering, 2018, 22, 2384-2389.	0.9	5
60	Bridge Responses Induced by Adjacent Subway Station Construction Using Shallow Tunneling Method. Advances in Civil Engineering, 2018, 2018, 1-16.	0.4	5
61	Predicting Ground Settlement Due to Symmetrical Tunneling through an Energy Conservation Method. Symmetry, 2018, 10, 186.	1.1	5
62	Combined Application of Pipe Roof Pre-SUPPORT and Curtain Grouting Pre-Reinforcement in Closely Spaced Large Span Triple Tunnels. Applied Sciences (Switzerland), 2020, 10, 3186.	1.3	5
63	Spatiotemporal Deformation of Existing Pipeline Due to New Shield Tunnelling Parallel Beneath Considering Construction Process. Applied Sciences (Switzerland), 2022, 12, 500.	1.3	5
64	Machine Learning in Conventional Tunnel Deformation in High In Situ Stress Regions. Symmetry, 2022, 14, 513.	1.1	5
65	A New Numerical Finite Strain Procedure for a Circular Tunnel Excavated in Strain-Softening Rock Masses and Its Engineering Application. Applied Sciences (Switzerland), 2022, 12, 2706.	1.3	5
66	Estimating Volume Loss for Shield-Driven Tunnels Based on the Principle of Minimum Total Potential Energy. Applied Sciences (Switzerland), 2022, 12, 1794.	1.3	4
67	Dissecting the Robustness of the Rock Mass Classification Methods Used in Jiaozhou Bay Subsea Tunnel. International Journal of Civil Engineering, 2021, 19, 1473-1482.	0.9	2
68	Aerodynamic Effects Produced by a High-Speed Train Traveling through a Tunnel Considering Different Car Numbers. Symmetry, 2022, 14, 479.	1.1	2
69	Analytical Prediction of Strip Foundation Building Response to Shallow Tunneling Considering the Tunneling Process. Applied Sciences (Switzerland), 2022, 12, 4656.	1.3	2