

# Qian Shao

## List of Publications by Year in descending order

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26  
papers

545  
citations

623699

14  
h-index

642715

23  
g-index

26  
all docs

26  
docs citations

26  
times ranked

459  
citing authors

#	ARTICLE	IF	CITATIONS
1	Bayesian sparse polynomial chaos expansion for global sensitivity analysis. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2017, 318, 474-496.	6.6	89
2	An XFEM crack-tip enrichment for a crack terminating at a bi-material interface. <i>Engineering Fracture Mechanics</i> , 2013, 102, 51-64.	4.3	62
3	Elastic anisotropy measure for two-dimensional crystals. <i>Extreme Mechanics Letters</i> , 2020, 34, 100615.	4.1	54
4	A Fourier-related double scale analysis on the instability phenomena of sandwich plates. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2017, 318, 270-295.	6.6	40
5	A high-accurate solution for Darcy-Brinkman double-diffusive convection in saturated porous media. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2016, 69, 26-47.	0.9	35
6	Core-Shell Magnetic Micropillars for Reprogrammable Actuation. <i>ACS Nano</i> , 2021, 15, 4747-4758.	14.6	30
7	A combination of Crouzeix-Raviart, Discontinuous Galerkin and MPFA methods for buoyancy-driven flows. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2014, 24, 735-759.	2.8	24
8	A 3D Semianalytical Solution for Density-Driven Flow in Porous Media. <i>Water Resources Research</i> , 2018, 54, 10,094.	4.2	24
9	A new benchmark reference solution for double-diffusive convection in a heterogeneous porous medium. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2016, 70, 373-392.	0.9	20
10	Influence of heat transfer and fluid flow on crack growth in multilayered porous/dense materials using XFEM: Application to Solid Oxide Fuel Cell like material design. <i>International Journal of Solids and Structures</i> , 2014, 51, 3557-3569.	2.7	16
11	Influence of fluid flow and heat transfer on crack propagation in SOFC multi-layered like material with anisotropic porous layers. <i>International Journal of Solids and Structures</i> , 2016, 78-79, 189-198.	2.7	16
12	Data-Driven Discovery and Understanding of Ultrahigh-Modulus Crystals. <i>Chemistry of Materials</i> , 2021, 33, 1276-1284.	6.7	16
13	An advanced numerical model for energy conversion and crack growth predictions in Solid Oxide Fuel Cell units. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 16509-16520.	7.1	15
14	Global sensitivity analysis of solid oxide fuel cells with Bayesian sparse polynomial chaos expansions. <i>Applied Energy</i> , 2020, 260, 114318.	10.1	15
15	A robust Riks-like path following method for strain-actuated snap-through phenomena in soft solids. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2017, 323, 416-438.	6.6	14
16	An XFEM model for cracked porous media: effects of fluid flow and heat transfer. <i>International Journal of Fracture</i> , 2014, 185, 155-169.	2.2	13
17	Three-dimensional natural convection, entropy generation and mixing in heterogeneous porous medium. <i>Advances in Water Resources</i> , 2021, 155, 103992.	3.8	13
18	A data-driven analysis on bridging techniques for heterogeneous materials and structures. <i>Mechanics of Advanced Materials and Structures</i> , 2021, 28, 1-15.	2.6	10

#	ARTICLE	IF	CITATIONS
19	Bounds on the in-plane Poisson's ratios and the in-plane linear and area compressibilities for sheet crystals. <i>Journal of the Mechanics and Physics of Solids</i> , 2021, 152, 104409.	4.8	10
20	Elasticity-based-exfoliability measure for high-throughput computational exfoliation of two-dimensional materials. <i>Npj Computational Materials</i> , 2021, 7, .	8.7	10
21	Uncertainty Analysis of Seepage-Induced Consolidation in a Fractured Porous Medium. <i>CMES - Computer Modeling in Engineering and Sciences</i> , 2021, 129, 279-297.	1.1	7
22	Spatially Confined CVD Growth of High-Density Semiconducting Single-Walled Carbon Nanotube Horizontal Arrays. <i>Advanced Functional Materials</i> , 2022, 32, 2106643.	14.9	5
23	Joule heating effect on thermal stress for a bi-material interface crack. <i>International Journal of Solids and Structures</i> , 2021, 226-227, 111069.	2.7	4
24	Random Sampling from Joint Probability Distributions Defined in a Bayesian Framework. <i>SIAM Journal of Scientific Computing</i> , 2019, 41, A316-A338.	2.8	1
25	Use of Global Sensitivity and Data-Worth Analysis for an Efficient Estimation of Soil Hydraulic Properties. <i>Water (Switzerland)</i> , 2020, 12, 736.	2.7	1
26	Theoretical optimization of functional graded micropillars for strong and durable bioinspired dry adhesion. <i>Mechanics of Advanced Materials and Structures</i> , 2022, 29, 7723-7731.	2.6	1