Anthony R Ingraffea

List of Publications by Citations

20 papers	2,775 citations	15 h-index	20 g-index
20 ext. papers	3,243 ext. citations	4.6 avg, IF	5.07 L-index

#	Paper	IF	Citations
20	Methane and the greenhouse-gas footprint of natural gas from shale formations. *Climatic Change*, **2011**, 106, 679-690	4.5	824
19	Two-dimensional stress intensity factor computations using the boundary element method. *International Journal for Numerical Methods in Engineering*, **1981**, 17, 387-404	2.4	443
18	Reengineering Aircraft Structural Life Prediction Using a Digital Twin. *International Journal of Aerospace Engineering*, **2011**, 2011, 1-14	0.9	378
17	Stress-intensity factor computation in three dimensions with quarter-point elements. *International Journal for Numerical Methods in Engineering*, **1980**, 15, 1427-1445	2.4	181
16	A numerical procedure for simulation of hydraulically-driven fracture propagation in poroelastic media. *International Journal for Numerical and Analytical Methods in Geomechanics*, **1990**, 14, 27-47	4	172
15	Assessment and risk analysis of casing and cement impairment in oil and gas wells in Pennsylvania, 2000-2012. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 10955-60	11.5	156
14	Finite element models for rock fracture mechanics. *International Journal for Numerical and Analytical Methods in Geomechanics*, **1980**, 4, 25-43	4	123
13	Transition elements to be used with quarter-point crack-tip elements. *International Journal for Numerical Methods in Engineering*, **1978**, 12, 1031-1036	2.4	107
12	Mechanical resilience and cementitious processes in Imperial Roman architectural mortar. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 18484-9	11.5	76
11	On the Effects of Modeling As-Manufactured Geometry: Toward Digital Twin. *International Journal of Aerospace Engineering*, **2014**, 2014, 1-10	0.9	69
10	Venting and leaking of methane from shale gas development: response to Cathles et al.. *Climatic Change*, **2012**, 113, 537-549	4.5	62
9	Arbitrary crack representation using solid modeling. *Engineering With Computers*, **1993**, 9, 63-82	4.5	62
8	Use of ‘simple solutions’ for boundary integral methods in elasticity and fracture analysis. *International Journal for Numerical Methods in Engineering*, **1992**, 35, 1737-1751	2.4	58
7	Sourcing methane and carbon dioxide emissions from a small city: Influence of natural gas leakage and combustion. *Environmental Pollution*, **2016**, 218, 102-110	9.3	25
6	The Effect of Osteoporosis Treatments on Fatigue Properties of Cortical Bone Tissue. *Bone Reports*, **2015**, 2, 8-13	2.6	20
5	Reported Methane Emissions from Active Oil and Gas Wells in Pennsylvania, 2014-2018. *Environmental Science & Technology*, **2020**, 54, 5783-5789	10.3	12
4	Delamination buckling of laminated plates. *International Journal for Numerical Methods in Engineering*, **1991**, 32, 1321-1337	2.4	5

3	Surface water and groundwater analysis using aryl hydrocarbon and endocrine receptor biological assays and liquid chromatography-high resolution mass spectrometry in Susquehanna County, PA. *Environmental Sciences: Processes and Impacts*, **2019**, 21, 988-998	4.3	2
2	OS12(5)-21(OS12W0406) Simplified Method to Calculate Stress Intensity Factors for a Surface Crack in a Weld of a Pipe Penetrating a Thick Plate with a Stub Tube. *The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on*	0	
1	OS12W0406 Simplified method to calculate stress intensity factors for a surface crack in a weld of a pipe penetrating a thick plate with a stub tube. *The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics*, **2003**, 2003.2, _OS12W0406-_OS12W0406	0	