Ange-Therese Akono

List of Publications by Year
in descending order

43 papers	1,228 citations	430442 18 h-index	377514 34 g-index
46 all docs	46 docs citations	46 times ranked	838 citing authors

#	Article	IF	Citations
1	Experimental determination of the fracture toughness via microscratch tests: Application to polymers, ceramics, and metals. Journal of Materials Research, 2012, 27, 485-493.	1.2	123
2	Nano-chemo-mechanical signature of conventional oil-well cement systems: Effects of elevated temperature and curing time. Cement and Concrete Research, 2015, 67, 103-121.	4.6	118
3	Scratching as a Fracture Process: From Butter to Steel. Physical Review Letters, 2011, 106, 204302.	2.9	102
4	Scratch test model for the determination of fracture toughness. Engineering Fracture Mechanics, 2011, 78, 334-342.	2.0	101
5	An improved technique for characterizing the fracture toughness via scratch test experiments. Wear, 2014, 313, 117-124.	1.5	99
6	Fracture scaling relations for scratch tests of axisymmetric shape. Journal of the Mechanics and Physics of Solids, 2012, 60, 379-390.	2.3	54
7	Influence of multi-walled carbon nanotubes on the hydration products of ordinary Portland cement paste. Cement and Concrete Research, 2020, 137, 106197.	4.6	53
8	Microscopic fracture characterization of gas shale via scratch testing. Mechanics Research Communications, 2016, 78, 86-92.	1.0	52
9	Discussion: Strength-to-fracture scaling in scratching. Engineering Fracture Mechanics, 2014, 119, 21-28.	2.0	41
10	Influence of pore structure on the strength behavior of particle- and fiber-reinforced metakaolin-based geopolymer composites. Cement and Concrete Composites, 2019, 104, 103361.	4.6	34
11	A review of geochemicalâ€“mechanical impacts in geological carbon storage reservoirs. , 2019, 9, 474-504.		32
12	Rate-independent fracture toughness of gray and black kerogen-rich shales. Acta Geotechnica, 2017, 12, 1207-1227.	2.9	31
13	Geochemical and geomechanical alteration of siliciclastic reservoir rock by supercritical CO2-saturated brine formed during geological carbon sequestration. International Journal of Greenhouse Gas Control, 2019, 88, 251-260.	2.3	29
14	Basic creep and fracture response of fine recycled aggregate concrete. Construction and Building Materials, 2021, 266, 121107.	3.2	28
15	Energetic Size Effect Law at the Microscopic Scale: Application to Progressive-Load Scratch Testing. Journal of Nanomechanics & Micromechanics, 2016, 6, .	1.4	27
16	Friction and fracture characteristics of engineered crumb-rubber concrete at microscopic lengthscale. Construction and Building Materials, 2018, 175, 735-745.	3.2	27
17	Nanostructure of calcium-silicate-hydrates in fine recycled aggregate concrete. Cement and Concrete Composites, 2021, 115, 103827.	4.6	26
18	Microscopic assessment of bone toughness using scratch tests. Bone Reports, 2017, 6, 17-25.	0.2	25

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19	Modeling $$hbox {CO}_2$$-Induced Alterations in Mt. Simon Sandstone via Nanomechanics. Rock Mechanics and Rock Engineering, 2019, 52, 1353-1375.	2.6	20
20	Effect of nano-TiO2 on Câ€“Sâ€“H phase distribution within Portland cement paste. Journal of Materials Science, 2020, 55, 11106-11119.	1.7	18
21	Rebuttal: Shallow and deep scratch tests as powerful alternatives to assess the fracture properties of quasi-brittle materials. Engineering Fracture Mechanics, 2016, 158, 23-38.	2.0	16
22	Performance of geopolymer composites made with feldspathic solid solutions: Micromechanics and microstructure. Cement and Concrete Composites, 2021, 124, 104241.	4.6	15
23	Lattice Discrete Particle Modeling of Size Effect in Slab Scratch Tests. Journal of Applied Mechanics, Transactions ASME, 2021, 88, .	1.1	14
24	Fracture properties of the alkali silicate gel using microscopic scratch testing. Cement and Concrete Composites, 2017, 79, 71-75.	4.6	13
25	Microstructureâ€“toughness relationships in calcium aluminate cementâ€“polymer composites using instrumented scratch testing. Journal of Materials Science, 2017, 52, 13120-13132.	1.7	12
26	Microscopic Toughness of Viscous Solids via Scratching: From Amorphous Polymers to Gas Shale. Journal of Nanomechanics & Micromechanics, 2017, 7, .	1.4	12
27	Influence of geochemistry on toughening behavior of organic-rich shale. Acta Geotechnica, 2019, 14, 1129-1142.	2.9	12
28	Fracture behavior of metakaolinâ€based geopolymer reinforced with carbon nanofibers. International Journal of Ceramic Engineering & Science, 2020, 2, 234-242.	0.5	12
29	Reply to â€œDiscussion on the Fracture mechanics interpretation of the scratch test by Akono et al.â€• Engineering Fracture Mechanics, 2017, 178, 14-21.	2.0	9
30	Intrinsic mechanical properties of calcium aluminate crystals via the linear comparison composite method coupled with nano-indentation. Mechanics of Materials, 2018, 118, 74-84.	1.7	9
31	Nano-Scale Characterization of Organic-Rich Shale via Indentation Methods. , 2016, , 209-233.		8
32	Nanostructure and Fracture Behavior of Carbon Nanofiber-Reinforced Cement Using Nanoscale Depth-Sensing Methods. Materials, 2020, 13, 3837.	1.3	8
33	Particles size and distribution on the improvement of the mechanical performance of high strength solid solution based inorganic polymer composites: A microstructural approach. Materials Chemistry and Physics, 2021, 267, 124602.	2.0	8
34	Influence of geochemical reactions on the creep behavior of Mt. Simon sandstone. International Journal of Greenhouse Gas Control, 2020, 103, 103183.	2.3	8
35	Fundamental Investigation of the Chemical and Mechanical Properties of High-Temperature-Cured Oilwell Cements. , 2012, , .		6
36	Fabrication of fiber-reinforced polymer ceramic composites by wet electrospinning. Manufacturing Letters, 2021, , .	1.1	6

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37	Micromechanics-based estimates on the macroscopic fracture toughness of micro-particulate composites. Engineering Fracture Mechanics, 2015, 148, 243-257.	2.0	5
38	Influence of multi-walled carbon nanotubes on the fracture response and phase distribution of metakaolin-based potassium geopolymers. Journal of Materials Science, 2021, 56, 19403.	1.7	5
39	Fracture toughness of one- and two-dimensional nanoreinforced cement via scratch testing. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200288.	1.6	3
40	Valorization of marble powder wastes using rice husk ash to yield enhanced-performance inorganic polymer cements: Phase evolution, microstructure, and micromechanics analyses. Cleaner Engineering and Technology, 2022, 8, 100461.	2.1	3
41	Geochemically induced shear slip in artificially fractured dolomite- and clay-cemented sandstone. International Journal of Greenhouse Gas Control, 2021, 111, 103448.	2.3	2
42	Advanced Geomechanical Model to Predict the Impact of CO2-Induced Microstructural Alterations on the Cohesive-Frictional Behavior of Mt. Simon Sandstone. Minerals (Basel, Switzerland), 2021, 11, 38.	0.8	1
43	Fragility Assessment of Bovine Cortical Bone Using Scratch Tests. Journal of Visualized Experiments, 2017, , .	0.2	0