Dag Kristian Dysthe

List of Publications by Year
in descending order

71	2,275	172457	233421
papers	citations	29 h-index	45 g-index

76	76	76	2157
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Role of Pressure Solution Creep in the Ductility of the Earthâ€™s Upper Crust. Advances in Geophysics, 2013, , 47-179.	2.8	197
2	Enhanced pressure solution creep rates induced by clay particles: Experimental evidence in salt aggregates. Geophysical Research Letters, 2001, 28, 1295-1298.	4.0	98
3	Experimental investigation of surface energy and subcritical crack growth in calcite. Journal of Geophysical Research, 2011, 116, .	3.3	87
4	4D imaging of fracturing in organic-rich shales during heating. Journal of Geophysical Research, 2011, 116, .	3.3	87
5	Self-Diffusion Coefficients of Methane or Ethane Mixtures with Hydrocarbons at High Pressure by NMR. Journal of Chemical & Engineering Data, 1996, 41, 598-603.	1.9	74
6	Fluid transport properties by equilibrium molecular dynamics. III. Evaluation of united atom interaction potential models for pure alkanes. Journal of Chemical Physics, 2000, 112, 7581-7590.	3.0	72
7	How travertine veins grow from top to bottom and lift the rocks above them: The effect of crystallization force. Geology, 2012, 40, 1015-1018.	4.4	67
8	Amoeboid Swimming: A Generic Self-Propulsion of Cells in Fluids by Means of Membrane Deformations. Physical Review Letters, 2013, 111, 228102.	7.8	63
9	A deformation rig for synchrotron microtomography studies of geomaterials under conditionsÂdown to 10â€…km depth in the Earth. Journal of Synchrotron Radiation, 2016, 23, 1030-1034.	2.4	63
10	Coupling between pressure solution creep and diffusive mass transport in porous rocks. Journal of Geophysical Research, 2002, 107, ECV 19-1-ECV 19-19.	3.3	61
11	Dynamic In Situ Three-Dimensional Imaging and Digital Volume Correlation Analysis to Quantify Strain Localization and Fracture Coalescence in Sandstone. Pure and Applied Geophysics, 2019, 176, 1083-1115.	1.9	57
12	Role of friction-induced torque in stick-slip motion. Europhysics Letters, 2010, 92, 54001.	2.0	52
13	Universal Scaling in Transient Creep. Physical Review Letters, 2002, 89, 246102.	7.8	51
14	Experimental calcite dissolution under stress: Evolution of grain contact microstructure during pressure solution creep. Journal of Geophysical Research, 2010, 115, .	3.3	51
15	Fluid transport properties by equilibrium molecular dynamics. I. Methodology at extreme fluid states. Journal of Chemical Physics, 1999, 110, 4047-4059.	3.0	50
16	Effect of fluid salinity on subcritical crack propagation in calcite. Tectonophysics, 2013, 583, 68-75.	2.2	49
17	Strength evolution of a reactive frictional interface is controlled by the dynamics of contacts and chemical effects. Earth and Planetary Science Letters, 2012, 341-344, 20-34.	4.4	48
18	A 4D Synchrotron X-Ray-Tomography Study of the Formation of Hydrocarbon- Migration Pathways in Heated Organic-Rich Shale. SPE Journal, 2013, 18, 366-377.	3.1	45

#	Article	IF	Citations
19	Experimental pressure solution compaction of synthetic halite/calcite aggregates. Tectonophysics, 2004, 385, 45-57.	2.2	44
20	In situ AFM study of the dissolution and recrystallization behaviour of polished and stressed calcite surfaces. Geochimica Et Cosmochimica Acta, 2006, 70, 1728-1738.	3.9	44
21	Fluid transport properties by equilibrium molecular dynamics. II. Multicomponent systems. Journal of Chemical Physics, 1999, 110, 4060-4067.	3.0	42
22	Dynamics of Microscale Precursors During Brittle Compressive Failure in Carrara Marble. Journal of Geophysical Research: Solid Earth, 2019, 124, 6121-6139.	3.4	39
23	Thermal diffusion in alkane binary mixtures. Fluid Phase Equilibria, 1998, 150-151, 151-159.	2.5	37
24	Fluid in mineral interfacesâ€"molecular simulations of structure and diffusion. Geophysical Research Letters, 2002, 29, 13-1.	4.0	35
25	High-resolution measurements of pressure solution creep. Physical Review E, 2003, 68, 011603.	2.1	35
26	A compaction front in North Sea chalk. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	35
27	The dynamics of travertine dams. Earth and Planetary Science Letters, 2007, 256, 258-263.	4.4	33
28	The mechanism of porosity formation during solvent-mediated phase transformations. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2011, 467, 1408-1426.	2.1	31
29	Oxygen Demand, Uptake, and Deficits in Elite Cross-Country Skiers during a 15-km Race. Medicine and Science in Sports and Exercise, 2020, 52, 983-992.	0.4	30
30	Fluid expulsion and microfracturing during the pyrolysis of an organic rich shale. Fuel, 2019, 235, 1-16.	6.4	29
31	Evolution of fluid chemistry during travertine formation in the Troll thermal springs, Svalbard, Norway. Geofluids, 2005, 5, 140-150.	0.7	28
32	Calcite precipitation instability under laminar, open-channel flow. Geochimica Et Cosmochimica Acta, 2008, 72, 5009-5021.	3.9	28
33	Inter- and intradiffusion in liquid mixtures of methane andn-decane. International Journal of Thermophysics, 1995, 16, 1213-1224.	2.1	25
34	Prediction of Fluid Mixture Transport Properties by Molecular Dynamics. International Journal of Thermophysics, 1998, 19, 437-448.	2.1	25
35	Microfluidic Control of Nucleation and Growth of CaCO₃. Crystal Growth and Design, 2018, 18, 4528-4535.	3.0	24
36	Subsurface combustion in Mali: Refutation of the active volcanism hypothesis in West Africa. Geology, 2003, 31, 581.	4.4	23

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37	Propulsive Power in Cross-Country Skiing: Application and Limitations of a Novel Wearable Sensor-Based Method During Roller Skiing. Frontiers in Physiology, 2018, 9, 1631.	2.8	23
38	Rim formation on crystal faces growing in confinement. Journal of Crystal Growth, 2012, 346, 89-100.	1.5	22
39	Xurography for microfluidics on a reactive solid. Lab on A Chip, 2017, 17, 293-303.	6.0	20
40	Drainage fracture networks in elastic solids with internal fluid generation. Europhysics Letters, 2013, 102, 66002.	2.0	18
41	Compaction of North-Sea Chalk by Pore-Failure and Pressure Solution in a Producing Reservoir. Frontiers in Physics, 2016, 4, .	2.1	18
42	Crack propagation driven by crystal growth. Europhysics Letters, 2011, 96, 24003.	2.0	18
43	Single-contact pressure solution creep on calcite monocrystals. Geological Society Special Publication, 2005, 243, 81-95.	1.3	17
44	Travertine terracing: patterns and mechanisms. Geological Society Special Publication, 2010, 336, 345-355.	1.3	17
45	A high resolution interferometric method to measure local swelling due to CO2 exposure in coal and shale. International Journal of Coal Geology, 2018, 187, 131-142.	5.0	17
46	Transient dissolution patterns on stressed crystal surfaces. Geochimica Et Cosmochimica Acta, 2004, 68, 3317-3325.	3.9	16
47	Evolution of a fracture network in an elastic medium with internal fluid generation and expulsion. Physical Review E, 2014, 90, 052801.	2.1	16
48	Nucleation in confinement generates long-range repulsion between rough calcite surfaces. Scientific Reports, 2019, 9, 8948.	3.3	16
49	The Li+-H2system in a rigid-rotor approximation: potential energy surface and transport coefficients. Journal of Physics B: Atomic, Molecular and Optical Physics, 2002, 35, 1707-1725.	1.5	14
50	Growth of Calcite in Confinement. Crystals, 2017, 7, 361.	2.2	13
51	In-situ imaging of fracture development during maturation of an organic-rich shale: Effects of heating rate and confinement. Marine and Petroleum Geology, 2018, 95, 314-327.	3.3	12
52	Setting behavior and bioactivity assessment of calcium carbonate cements. Journal of the American Ceramic Society, 2019, 102, 6980-6990.	3.8	12
53	Mechanisms of Phase Transformation and Creating Mechanical Strength in a Sustainable Calcium Carbonate Cement. Materials, 2020, 13, 3582.	2.9	12
54	Numerical modelling of pressure solution in sandstone, rate-limiting processes and the effect of clays. Geological Society Special Publication, 2002, 200, 41-60.	1.3	11

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55	Evolution of mineralâ€“fluid interfaces studied at pressure with synchrotron X-ray techniques. Chemical Geology, 2006, 230, 232-241.	3.3	11
56	Instabilities and Coarsening of Stressed Crystal Surfaces in Aqueous Solution. Physical Review Letters, 2006, 96, 146103.	7.8	11
57	Pattern formation during healing of fluidâ€filled cracks: an analog experiment. Geofluids, 2009, 9, 365-372.	0.7	11
58	Morphological transitions in partially gas-fluidized granular mixtures. Physical Review E, 2010, 81, 061305.	2.1	11
59	Cavity Formation in Confined Growing Crystals. Physical Review Letters, 2018, 121, 096101.	7.8	9
60	Structure of plastically compacting granular packings. Physical Review E, 2006, 73, 051301.	2.1	8
61	Microscopic modeling of confined crystal growth and dissolution. Physical Review E, 2016, 94, 023005.	2.1	8
62	Interferometric Technique for Measuring Interdiffusion at High Pressures. The Journal of Physical Chemistry, 1995, 99, 11230-11238.	2.9	6
63	Quartz dissolution associated with magnesium silicate hydrate cement precipitation. Solid Earth, 2021, 12, 389-404.	2.8	6
64	Synchrotron 4D X-Ray Imaging Reveals Strain Localization at the Onset of System-Size Failure in Porous Reservoir Rocks. Pure and Applied Geophysics, 0, , .	1.9	6
65	Cell crawling on a compliant substrate: A biphasic relation with linear friction. International Journal of Non-Linear Mechanics, 2022, 139, 103897.	2.6	6
66	Classification of fracture patterns by heterogeneity and topology. Europhysics Letters, 2014, 105, 56004.	2.0	5
67	First principles model of carbonate compaction creep. Journal of Geophysical Research: Solid Earth, 2016, 121, 3348-3365.	3.4	4
68	Dissolutionâ€“precipitation recrystallization of miscut crystal surfaces under stress. Journal of Crystal Growth, 2009, 311, 1576-1583.	1.5	3
69	Modeling V̇‡<scp>o</scp>₂ on-kinetics based on intensity-dependent delayed adjustment and loss of efficiency (DALE). Journal of Applied Physiology, 2022, 132, 1480-1488.	2.5	3
70	Oscillatory ductile compaction dynamics in a cylinder. Physical Review E, 2006, 74, 031301.	2.1	1
71	Shaping the Interface â€“ Interactions Between Confined Water and the Confining Solid. NATO Science for Peace and Security Series C: Environmental Security, 2014, , 199-212.	0.2	0