Guttorm Alendal

List of Publications by Year
in descending order

48	620	623574	642610
papers	citations	14 h-index	23 g-index

49	49	49	458
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Two-phase, near-field modeling of purposefully released CO2in the ocean. Journal of Geophysical Research, 2001, 106, 1085-1096.	3.3	77
2	Assessment of non-hydrostatic ocean models using laboratory scale problems. Continental Shelf Research, 2006, 26, 1433-1447.	0.9	46
3	Towards improved monitoring of offshore carbon storage: A real-world field experiment detecting a controlled sub-seafloor CO2 release. International Journal of Greenhouse Gas Control, 2021, 106, 103237.	2.3	39
4	Ocean release of fossil fuel CO2: A case study. Geophysical Research Letters, 2001, 28, 2637-2640.	1.5	37
5	Layout of CCS monitoring infrastructure with highest probability of detecting a footprint of a CO2 leak in a varying marine environment. International Journal of Greenhouse Gas Control, 2015, 37, 274-279.	2.3	31
6	Impact and detectability of hypothetical CCS offshore seep scenarios as an aid to storage assurance and risk assessment. International Journal of Greenhouse Gas Control, 2020, 95, 102949.	2.3	31
7	A comparison of Monte Carlo sampling methods for metabolic network models. PLoS ONE, 2020, 15, e0235393.	1.1	30
8	Dissolution of CO2 in the ocean. Energy Conversion and Management, 1995, 36, 461-466.	4.4	26
9	Influence from â€˜Ocean Weatherâ€™ on near seabed currents and events at Ormen Lange. Marine and Petroleum Geology, 2005, 22, 21-31.	1.5	26
10	Terminal velocities of pure and hydrate coated CO2 droplets and CH4 bubbles rising in a simulated oceanic environment. Deep-Sea Research Part I: Oceanographic Research Papers, 2010, 57, 1102-1110.	0.6	20
11	The effect of submarine CO₂ vents on seawater: Implications for detection of subsea carbon sequestration leakage. Limnology and Oceanography, 2015, 60, 402-410.	1.6	18
12	A bottom gravity current model for CO2-enriched seawater. Energy Conversion and Management, 1993, 34, 1065-1072.	4.4	16
13	Survey strategies to quantify and optimize detecting probability of a CO2 seep in a varying marine environment. Environmental Modelling and Software, 2016, 83, 303-309.	1.9	16
14	Optimal sensors placement for detecting CO2 discharges from unknown locations on the seafloor. International Journal of Greenhouse Gas Control, 2020, 95, 102951.	2.3	15
15	Semi-conditional variational auto-encoder for flow reconstruction and uncertainty quantification from limited observations. Physics of Fluids, 2021, 33, .	1.6	15
16	Turbulent diffusion and transport from a CO2lake in the deep ocean. Journal of Geophysical Research, 2005, 110, .	3.3	14
17	Parameterization of drag and dissolution of rising CO2drops in seawater. Geophysical Research Letters, 2005, 32, .	1.5	14
18	Detection and quantification of CO2 seepage in seawater using the stoichiometric Cseep method: Results from a recent subsea CO2 release experiment in the North Sea. International Journal of Greenhouse Gas Control, 2021, 108, 103310.	2.3	13

#	Article	IF	Citations
19	Simulating spatial and temporal varying CO₂ signals from sources at the seafloor to help designing riskâ€based monitoring programs. Journal of Geophysical Research: Oceans, 2016, 121, 745-757.	1.0	12
20	Cost efficient environmental survey paths for detecting continuous tracer discharges. Journal of Geophysical Research: Oceans, 2017, 122, 5458-5467.	1.0	12
21	Binary Time Series Classification with Bayesian Convolutional Neural Networks When Monitoring for Marine Gas Discharges. Algorithms, 2020, 13, 145.	1.2	11
22	Modelling of Deep-Sea Gravity Currents Using an Integrated Plume Model. Geophysical Monograph Series, 0, , 237-246.	0.1	10
23	Low shear turbulence structures beneath stress-driven interface with neutral and stable stratification. Physics of Fluids, 2006, 18, 055106.	1.6	8
24	Efficient marine environmental characterisation to support monitoring of geological CO2 storage. International Journal of Greenhouse Gas Control, 2021, 109, 103388.	2.3	8
25	Numerical modelling of CO2 migration in heterogeneous sediments and leakage scenario for STEMM-CCS field experiments. International Journal of Greenhouse Gas Control, 2021, 109, 103339.	2.3	8
26	Assuring the integrity of offshore carbon dioxide storage. Renewable and Sustainable Energy Reviews, 2022, 166, 112670.	8.2	8
27	Dissolution of a CO2 lake, modeled by using an advanced vertical turbulence mixing scheme. International Journal of Greenhouse Gas Control, 2008, 2, 511-519.	2.3	7
28	LES study of flow around a CO2-droplet plume in the ocean. Energy Conversion and Management, 1997, 38, S361-S366.	4.4	6
29	Effects of the bottom boundary condition in numerical investigations of dense water cascading on a slope. Ocean Dynamics, 2018, 68, 553-573.	0.9	6
30	Using Bayes Theorem to Quantify and Reduce Uncertainties when Monitoring Varying Marine Environments for Indications of a Leak. Energy Procedia, 2017, 114, 3607-3612.	1.8	5
31	Gas exploration beyond the shelf break: An oceanographic challenge. Environmental Modelling and Software, 2006, 21, 136-141.	1.9	4
32	Assessing model parameter uncertainties for rising velocity of CO2 droplets through experimental design. International Journal of Greenhouse Gas Control, 2012, 11, 283-289.	2.3	4
33	Letter: International Field Experiment on Ocean Carbon Sequestration. Environmental Science & Technology, 2002, 36, 399A-399A.	4.6	3
34	PVTx Properties of a Two-phase CO2 Jet from Ruptured Pipeline. Energy Procedia, 2013, 37, 3031-3038.	1.8	3
35	The role of eddies on pathways, transports, and entrainment in dense water flows along a slope. Ocean Dynamics, 2019, 69, 841-860.	0.9	3
36	A model of solar coronal heating by classical inverse bremsstrahlung and generation of the solar wind. Astrophysical Journal, 1993, 412, 827.	1.6	3

#	Article	IF	Citations
37	LES study of CO2 enriched gravity currents. Energy Conversion and Management, 1997, 38, S331-S336.	4.4	2
38	Simulating CO2 transport into the ocean from a CO2 lake at the seafloor using a z- and a Ïƒ-coordinate model. Ocean Dynamics, 2009, 59, 795-808.	0.9	2
39	Topographic effects on CO2, diffusion and dissolution from the seafloor. Energy Procedia, 2009, 1, 4945-4952.	1.8	2
40	Flow over a rounded backward-facing step, using a z-coordinate model and a Ïƒ-coordinate model. Ocean Dynamics, 2011, 61, 1681-1696.	0.9	2
41	Experimental design for parameter estimation in steady-state linear models of metabolic networks. Mathematical Biosciences, 2020, 319, 108291.	0.9	2
42	New Conceptual Toxicokinetic Model to Assess Synergistic Mixture Effects between the Aromatic Hydrocarbon Î²-Naphthoflavone and the Azole Nocodazole on the CYP1A Biomarker in a Fish Cell Line. Environmental Science & Technology, 2020, 54, 13748-13758.	4.6	2
43	Comment on â€œFate of Rising CO2Droplets in Seawaterâ€• Environmental Science & Technology, 2006, 40, 3653-3654.	4.6	1
44	Ocean abyssal carbon experiments at 0.7 and 4 KM depth. , 2005, , 801-808.		1
45	Influence from â€˜Ocean Weatherâ€™ on near seabed currents and events at Ormen Lange. , 2005, , 21-31.		1
46	A numerical study of transport and spreading of gases from natural analogues of gas-seepage through the seafloor. Energy Procedia, 2009, 1, 1941-1947.	1.8	0
47	Assessing Model Uncertainties Through Proper Experimental Design. Energy Procedia, 2013, 37, 3439-3446.	1.8	0
48	Parameterization of drag and dissolution of rising CO2 drops in seawater. , 2005, , 2353-2357.		0