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	Assuring the integrity of offshore carbon dioxide storage. Renewable and Sustainable Energy Reviews, 2022, 166, 112670.	8.2	8
2	Semi-conditional variational auto-encoder for flow reconstruction and uncertainty quantification from limited observations. Physics of Fluids, 2021, 33, .	1.6	15
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	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
5	Efficient marine environmental characterisation to support monitoring of geological CO2 storage. International Journal of Greenhouse Gas Control, 2021, 109, 103388.	2.3	8
6	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
7	Experimental design for parameter estimation in steady-state linear models of metabolic networks. Mathematical Biosciences, 2020, 319, 108291.	0.9	2
8	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
9	Binary Time Series Classification with Bayesian Convolutional Neural Networks When Monitoring for Marine Gas Discharges. Algorithms, 2020, 13, 145.	1.2	11
10	A comparison of Monte Carlo sampling methods for metabolic network models. PLoS ONE, 2020, 15, e0235393.	1.1	30
11	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
12	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
13	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
14	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
15	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
16	Cost efficient environmental survey paths for detecting continuous tracer discharges. Journal of Geophysical Research: Oceans, 2017, 122, 5458-5467.	1.0	12
17	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
18	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

#	Article	IF	Citations
19	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
20	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
21	PVTx Properties of a Two-phase CO2 Jet from Ruptured Pipeline. Energy Procedia, 2013, 37, 3031-3038.	1.8	3
22	Assessing Model Uncertainties Through Proper Experimental Design. Energy Procedia, 2013, 37, 3439-3446.	1.8	0
23	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
24	Flow over a rounded backward-facing step, using a *z*-coordinate model and a Ï*f*-coordinate model. Ocean Dynamics, 2011, 61, 1681-1696.	0.9	2
25	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
26	Simulating CO2 transport into the ocean from a CO2 lake at the seafloor using a *z*- and a Ï*f*-coordinate model. Ocean Dynamics, 2009, 59, 795-808.	0.9	2
27	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
28	Topographic effects on CO2, diffusion and dissolution from the seafloor. Energy Procedia, 2009, 1, 4945-4952.	1.8	2
29	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
30	Comment on â€œFate of Rising CO2Droplets in Seawaterâ€• Environmental Science & Technology, 2006, 40, 3653-3654.	4.6	1
31	Assessment of non-hydrostatic ocean models using laboratory scale problems. Continental Shelf Research, 2006, 26, 1433-1447.	0.9	46
32	Gas exploration beyond the shelf break: An oceanographic challenge. Environmental Modelling and Software, 2006, 21, 136-141.	1.9	4
33	Low shear turbulence structures beneath stress-driven interface with neutral and stable stratification. Physics of Fluids, 2006, 18, 055106.	1.6	8
34	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
35	Turbulent diffusion and transport from a CO2lake in the deep ocean. Journal of Geophysical Research, 2005, 110, .	3.3	14
36	Parameterization of drag and dissolution of rising CO2drops in seawater. Geophysical Research Letters, 2005, 32, .	1.5	14

#	Article	IF	Citations
37	Parameterization of drag and dissolution of rising CO2 drops in seawater. , 2005, , 2353-2357.		0
38	Ocean abyssal carbon experiments at 0.7 and 4 KM depth. , 2005, , 801-808.		1
39	Influence from â€˜Ocean Weatherâ€™ on near seabed currents and events at Ormen Lange. , 2005, , 21-31.		1
40	Letter: International Field Experiment on Ocean Carbon Sequestration. Environmental Science & Technology, 2002, 36, 399A-399A.	4.6	3
41	Two-phase, near-field modeling of purposefully released CO2in the ocean. Journal of Geophysical Research, 2001, 106, 1085-1096.	3.3	77
42	Ocean release of fossil fuel CO2: A case study. Geophysical Research Letters, 2001, 28, 2637-2640.	1.5	37
43	LES study of CO2 enriched gravity currents. Energy Conversion and Management, 1997, 38, S331-S336.	4.4	2
44	LES study of flow around a CO2-droplet plume in the ocean. Energy Conversion and Management, 1997, 38, S361-S366.	4.4	6
45	Dissolution of CO2 in the ocean. Energy Conversion and Management, 1995, 36, 461-466.	4.4	26
46	A bottom gravity current model for CO2-enriched seawater. Energy Conversion and Management, 1993, 34, 1065-1072.	4.4	16
47	A model of solar coronal heating by classical inverse bremsstrahlung and generation of the solar wind. Astrophysical Journal, 1993, 412, 827.	1.6	3
48	Modelling of Deep-Sea Gravity Currents Using an Integrated Plume Model. Geophysical Monograph Series, 0, , 237-246.	0.1	10