# Akihiro Hachikubo

List of Publications by Year
in descending order



| 83 | 1,926 | 304368 | 288905 |
|---|---|---|---|
| papers | citations | 22 h-index | 40 g-index |

| 85 | 85 | 85 | 1689 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Effects of snow physical parameters on spectral albedo and bidirectional reflectance of snow surface. Journal of Geophysical Research, 2000, 105, 10219-10236. | 3.3 | 239 |
| 2 | In-situ measured spectral directional emissivity of snow and ice in the 8â€“14 Î¼m atmospheric window. Remote Sensing of Environment, 2006, 100, 486-502. | 4.6 | 129 |
| 3 | Effects of snow physical parameters on shortwave broadband albedos. Journal of Geophysical Research, 2003, 108, . | 3.3 | 128 |
| 4 | Structure and thermal expansion of natural gas clathrate hydrates. Chemical Engineering Science, 2006, 61, 2670-2674. | 1.9 | 85 |
| 5 | Coexistence of structure I and II gas hydrates in Lake Baikal suggesting gas sources from microbial and thermogenic origin. Geophysical Research Letters, 2006, 33, . | 1.5 | 84 |
| 6 | Gas hydrate of Lake Baikal: Discovery and varieties. Journal of Asian Earth Sciences, 2013, 62, 162-166. | 1.0 | 76 |
| 7 | Reflective properties of natural snow: approximate asymptotic theory versus in situ measurements. IEEE Transactions on Geoscience and Remote Sensing, 2005, 43, 1529-1535. | 2.7 | 71 |
| 8 | ADEOS-II/GLI snow/ice products â€" Part II: Validation results using GLI and MODIS data. Remote Sensing of Environment, 2007, 111, 274-290. | 4.6 | 69 |
| 9 | Effect of wind on surface hoar growth on snow. Journal of Geophysical Research, 1997, 102, 4367-4373. | 3.3 | 40 |
| 10 | Preservation phenomena of methane hydrate in pore spaces. Physical Chemistry Chemical Physics, 2011, 13, 17449. | 1.3 | 40 |
| 11 | Hydrate-bearing structures in the Sea of Okhotsk. Eos, 2005, 86, 13. | 0.1 | 39 |
| 12 | Methane Clathrate Hydrates Formed within Hydrophilic and Hydrophobic Media: Kinetics of Dissociation and Distortion of Host Structure. Journal of Physical Chemistry C, 2013, 117, 7081-7085. | 1.5 | 39 |
| 13 | Lattice Expansion of Clathrate Hydrates of Methane Mixtures and Natural Gas. Angewandte Chemie - International Edition, 2005, 44, 6928-6931. | 7.2 | 36 |
| 14 | Distribution of Butane in the Host Water Cage of Structureâ€…II Clathrate Hydrates. Chemistry - A European Journal, 2014, 20, 17207-17213. | 1.7 | 34 |
| 15 | Natural gas hydrates with locally different cage occupancies and hydration numbers in Lake Baikal. Geochemistry, Geophysics, Geosystems, 2009, 10, . | 1.0 | 31 |
| 16 | Isotopic fractionation of methane and ethane hydrates between gas and hydrate phases. Geophysical Research Letters, 2007, 34, . | 1.5 | 30 |
| 17 | Modeling angular-dependent spectral emissivity of snow and ice in the thermal infrared atmospheric window. Applied Optics, 2013, 52, 7243. | 2.1 | 30 |
| 18 | Molecular and Isotopic Composition of Volatiles in Gas Hydrates and in Sediment from the Joetsu Basin, Eastern Margin of the Japan Sea. Energies, 2015, 8, 4647-4666. | 1.6 | 30 |

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|---|---|---|---|
| 19 | Molecular and isotopic characteristics of gas hydrate-bound hydrocarbons in southern and central Lake Baikal. Geo-Marine Letters, 2010, 30, 321-329. | 0.5 | 28 |
| 20 | Model of formation of double structure gas hydrates in Lake Baikal based on isotopic data. Geophysical Research Letters, 2009, 36, . | 1.5 | 27 |
| 21 | First discovery and formation process of authigenic siderite from gas hydrateâ€"bearing mud volcanoes in fresh water: Lake Baikal, eastern Siberia. Geophysical Research Letters, 2008, 35, . | 1.5 | 25 |
| 22 | Distinct microbial communities thriving in gas hydrate-associated sediments from the eastern Japan Sea. Journal of Asian Earth Sciences, 2014, 90, 243-249. | 1.0 | 25 |
| 23 | SNOWPACK model simulations for snow in Hokkaido, Japan. Annals of Glaciology, 2004, 38, 123-129. | 2.8 | 24 |
| 24 | Estimation of Gas Composition and Cage Occupancies in CH<sub>4</sub>-C<sub>2</sub>H<sub>6</sub> Hydrates by CP-MAS <sup>13</sup>C NMR Technique. Journal of the Japan Petroleum Institute, 2007, 50, 132-138. | 0.4 | 24 |
| 25 | Isotopic composition of gas hydrates in subsurface sediments from offshore Sakhalin Island, Sea of Okhotsk. Geo-Marine Letters, 2010, 30, 313-319. | 0.5 | 23 |
| 26 | In situ measurements of polarization properties of snow surface under the Brewster geometry in Hokkaido, Japan, and northwest Greenland ice sheet. Journal of Geophysical Research D: Atmospheres, 2014, 119, 13,946. | 1.2 | 23 |
| 27 | Monte Carlo simulations of spectral albedo for artificial snowpacks composed of spherical and nonspherical particles. Applied Optics, 2006, 45, 5310. | 2.1 | 21 |
| 28 | Structure and Density Comparison of Noble Gas Hydrates Encapsulating Xenon, Krypton and Argon. ChemPhysChem, 2019, 20, 2518-2524. | 1.0 | 21 |
| 29 | Thermal anomalies associated with shallow gas hydrates in the K-2 mud volcano, Lake Baikal. Geo-Marine Letters, 2012, 32, 407-417. | 0.5 | 20 |
| 30 | Biogeochemical Cycle of Methanol in Anoxic Deep-Sea Sediments. Microbes and Environments, 2016, 31, 190-193. | 0.7 | 20 |
| 31 | Physical and thermal properties of mud-dominant sediment from the Joetsu Basin in the eastern margin of the Japan Sea. Marine Geophysical Researches, 2017, 38, 393-407. | 0.5 | 20 |
| 32 | Numerical modelling of sublimation on snow and comparison with field measurements. Annals of Glaciology, 2001, 32, 27-32. | 2.8 | 19 |
| 33 | Isotopic composition of dissolved inorganic carbon in subsurface sediments of gas hydrate-bearing mud volcanoes, Lake Baikal: implications for methane and carbonate origin. Geo-Marine Letters, 2010, 30, 427-437. | 0.5 | 17 |
| 34 | Gas hydrates in Lake Baikal. Limnology and Freshwater Biology, 2018, , 66-70. | 0.1 | 17 |
| 35 | Effects of Snow Grain Shape and Mixing State of Snow Impurity on Retrieval of Snow Physical Parameters From Groundâ€Based Optical Instrument. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031858. | 1.2 | 16 |
| 36 | Crystallization of authigenic carbonates in mud volcanoes at Lake Baikal. Geochemistry International, 2008, 46, 985-995. | 0.2 | 15 |

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| 37 | Possible variation in methane flux caused by gas hydrate formation on the northeastern continental slope off Sakhalin Island, Russia. Geo-Marine Letters, 2012, 32, 525-534. | 0.5 | 15 |
| 38 | Molecular and isotopic composition of hydrate-bound and dissolved gases in the southern basin of Lake Baikal, based on an improved headspace gas method. Geo-Marine Letters, 2012, 32, 465-472. | 0.5 | 15 |
| 39 | Effects of temperature and grain type on time variation of snow specific surface area. Bulletin of Glaciological Research, 2014, 32, 47-53. | 0.5 | 15 |
| 40 | Geochemical characteristics of methane from sediments of the underwater high Posolskaya Bank (Lake Baikal). Lithology and Mineral Resources, 2017, 52, 102-110. | 0.3 | 13 |
| 41 | Structural Studies of Lake Baikal Natural Gas Hydrates. Journal of Structural Chemistry, 2019, 60, 1437-1455. | 0.3 | 13 |
| 42 | Shallow-rooted mud volcanism in Lake Baikal. Marine and Petroleum Geology, 2019, 102, 580-589. | 1.5 | 13 |
| 43 | Characteristics of hydrate-bound gas retrieved at the Kedr mud volcano (southern Lake Baikal). Scientific Reports, 2020, 10, 14747. | 1.6 | 13 |
| 44 | Upwarding gas source and postgenetic processes in the shallow sediments from the ARAON Mounds, Chukchi Sea. Journal of Natural Gas Science and Engineering, 2020, 76, 103223. | 2.1 | 13 |
| 45 | Daytime preservation of surface-hoar crystals. Annals of Glaciology, 1998, 26, 22-26. | 2.8 | 12 |
| 46 | Raman spectroscopic and calorimetric observations on natural gas hydrates with cubic structures I and II obtained from Lake Baikal. Geo-Marine Letters, 2012, 32, 419-426. | 0.5 | 11 |
| 47 | Isotopic Composition and Crystallographic Properties of Gas Hydrate in the Sea of Okhotsk. Journal of Geography (Chigaku Zasshi), 2009, 118, 207-221. | 0.1 | 10 |
| 48 | Methane Hydrates and Plumes in the Sea of Okhotsk. Journal of Geography (Chigaku Zasshi), 2009, 118, 175-193. | 0.1 | 10 |
| 49 | A physicochemical model for the formation of gas hydrates of different structural types in K-2 mud volcano (Kukui Canyon, Lake Baikal). Russian Geology and Geophysics, 2013, 54, 475-482. | 0.3 | 10 |
| 50 | Manifestation of carbonate-barite mineralization around methane seeps in the Sea of Okhotsk (the) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 | 0.3 | 10 |
| 51 | AGE OF MUD BRECCIA FROM MUD VOLCANOES IN ACADEMICIAN RIDGE, LAKE BAIKAL. Geodinamika I Tektonofizika, 2017, 8, 923-932. | 0.3 | 10 |
| 52 | Gas hydrate forming fluids on the NE Sakhalin slope, Sea of Okhotsk. Geological Society Special Publication, 2009, 319, 51-72. | 0.8 | 9 |
| 53 | Authigenic rhodochrosite from a gas hydrate-bearing structure in Lake Baikal. International Journal of Earth Sciences, 2018, 107, 2011-2022. | 0.9 | 8 |
| 54 | Phase Equilibrium of Isotopologue Methane Hydrates Enclathrated CH3D and CD4. Journal of Chemical & Engineering Data, 2018, 63, 2266-2270. | 1.0 | 8 |

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| 55 | Distortion of the Host Water Cages of Structure I Gas Hydrates: Structural Analysis of C<sub>2</sub>H<sub>4</sub> Hydrate by Powder X-ray Diffraction. Journal of Physical Chemistry C, 2021, 125, 28150-28156. | 1.5 | 8 |
| 56 | Geochemistry of Pore Waters from Gas Hydrate-bearing Sediment Cores Retrieved at the Sea of Okhotsk. Journal of Geography (Chigaku Zasshi), 2009, 118, 194-206. | 0.1 | 7 |
| 57 | Dissolved gas analysis of pore water in subsurface sediments retrieved at eastern margin of Japan Sea (MD179 gas hydrates cruise). Journal of the Japanese Association for Petroleum Technology, 2012, 77, 268-273. | 0.0 | 7 |
| 58 | Geochemistry of pore waters from gas hydrate research in the eastern margin of the Japan Sea (MD179). Journal of the Japanese Association for Petroleum Technology, 2012, 77, 262-267. | 0.0 | 7 |
| 59 | Hydrogen and oxygen isotopic anomalies in pore waters suggesting clay mineral dehydration at gas hydrate-bearing Kedr mud volcano, southern Lake Baikal, Russia. Geo-Marine Letters, 2018, 38, 403-415. | 0.5 | 7 |
| 60 | X-Ray attenuation and image contrast in the X-ray computed tomography of clathrate hydrates depending on guest species. Physical Chemistry Chemical Physics, 2020, 22, 27658-27665. | 1.3 | 7 |
| 61 | Sequentially sampled gas hydrate water, coupled with pore water and bottom water isotopic and ionic signatures at the Kukuy mud volcano, Lake Baikal: ambiguous deep-rooted source of hydrate-forming water. Geo-Marine Letters, 2014, 34, 241. | 0.5 | 6 |
| 62 | Daytime preservation of surface-hoar crystals. Annals of Glaciology, 1998, 26, 22-26. | 2.8 | 5 |
| 63 | Observations and simulations of the formation of the faceted snow crystals in the weak-layer of the 1998 Niseko Haru no Taki avalanche. Cold Regions Science and Technology, 2000, 31, 235-247. | 1.6 | 5 |
| 64 | Carbon Isotope Fractionation during the Formation of CO2 Hydrate and Equilibrium Pressures of 12CO2 and 13CO2 Hydrates. Molecules, 2021, 26, 4215. | 1.7 | 5 |
| 65 | Hydrocarbon Gases of the Gorevoi Utes Underwater Oil-Gas Seep (Lake Baikal, Russia). Russian Geology and Geophysics, 2019, 60, 1188-1194. | 0.3 | 5 |
| 66 | Measurement of specific surface area of fresh solid precipitation particles in heavy snowfall regions of Japan. Cryosphere, 2019, 13, 2713-2732. | 1.5 | 4 |
| 67 | Spectral degree of linear polarization and neutral points of polarization in snow and ice surfaces. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 273, 107845. | 1.1 | 4 |
| 68 | Methane with Abnormally High Î´13C and ÎD Values from the Coastal Hot Springs in Lake Baikal. Lithology and Mineral Resources, 2020, 55, 439-444. | 0.3 | 3 |
| 69 | Dissociation kinetics of propaneâ€“methane and butaneâ€“methane hydrates below the melting point of ice. Physical Chemistry Chemical Physics, 2021, 23, 15003-15009. | 1.3 | 3 |
| 70 | Phase Equilibrium of Methane Hydrate Encapsulated Isotopologue 13CH4 and Singly Deuterated Methane. Journal of Chemical & Engineering Data, 0, , . | 1.0 | 3 |
| 71 | The Position of Gas Hydrates in the Sedimentary Strata and in the Geological Structure of Lake Baikal. , 2022, , 465-471. | | 3 |
| 72 | Crystal Structure and Guest Distribution of N2O Hydrate Determined by Powder X-ray Diffraction Measurements. Crystal Growth and Design, 2022, 22, 1345-1351. | 1.4 | 3 |

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|---|---|---|---|
| 73 | Temperature effects on the Câ€“H symmetric stretching vibrational frequencies of guest hydrocarbon molecules in 5<sup>12</sup>, 5<sup>12</sup>6<sup>2</sup> and 5<sup>12</sup>6<sup>4</sup> cages of sI and sII clathrate hydrates. RSC Advances, 2020, 10, 37582-37587. | 1.7 | 2 |
| 74 | A Long-Lived Center of Gasâ€“Fluid Emanations on the Western Slope of the Kuril Basin (Sea of) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 7 | 0.3 | 2 |
| 75 | Effect of temperature and large guest molecules on the Câ€“H symmetric stretching vibrational frequencies of methane in structure H and I clathrate hydrates. RSC Advances, 2020, 10, 17473-17478. | 1.7 | 1 |
| 76 | Dissociation heat of mixed-gas hydrate composed of methane and ethane. Journal of the Japanese Society of Snow and Ice, 2009, 71, 341-351. | 0.0 | 1 |
| 77 | A New Oil and Gas Seep in Lake Baikal. Petroleum Chemistry, 2022, 62, 475-481. | 0.4 | 1 |
| 78 | Impact of High Methane Flux on the Properties of Pore Fluid and Methane-Derived Authigenic Carbonate in the ARAON Mounds, Chukchi Sea. Frontiers in Marine Science, 0, 9, . | 1.2 | 1 |
| 79 | GLI cryosphere products and validation. , 0, , . | | 0 |
| 80 | Possibility to discriminate snow types using brightness temperatures in the thermal infrared wavelength region. , 2013, , . | | 0 |
| 81 | Studies on Atmosphere, Snow/Ice, and Glacial Microbes on Greenland Ice Sheet by SIGMA and relevant projects. Journal of the Japanese Society of Snow and Ice, 2021, 83, 169-191. | 0.0 | 0 |
| 82 | Slab avalanches occurred at Mt. Kamihorokamettoku, Tokachi Mountain Range, in Hokkaido in November 2007. Journal of the Japanese Society of Snow and Ice, 2008, 70, 571-580. | 0.0 | 0 |
| 83 | The exchange between clathrate phase and gas phase methane on artificial methane hydrate. Journal of the Japanese Association for Petroleum Technology, 2019, 84, 162-165. | 0.0 | 0 |