Yongwon Seo

List of Publications by Year in descending order

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87723 123241 4,285 109 38 61 citations h-index g-index papers 110 110 110 1847 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Effects of pressure and temperature conditions on thermodynamic and kinetic guest exchange behaviors of CH4Ââ° CO2Â+ N2 replacement for energy recovery and greenhouse gas storage. Energy, 2022, 239, 122153.	4.5	23
2	Fused aromatic networks as a new class of gas hydrate inhibitors. Chemical Engineering Journal, 2022, 433, 133691.	6.6	7
3	Theoretically achievable efficiency of hydrate-based desalination and its significance for evaluating kinetic desalination performance of gaseous hydrate formers. Desalination, 2022, 524, 115487.	4.0	12
4	Efficient dual-function inhibitors for prevention of gas hydrate formation and CO2/H2S corrosion inside oil and gas pipelines. Chemical Engineering Journal, 2022, 431, 134098.	6.6	25
5	Experimental and computational investigation of hydrophilic monomeric substances as novel CO2 hydrate inhibitors and potential synergists. Energy, 2022, 244, 123136.	4.5	10
6	Thermodynamic and Structural Investigation of Xe and Kr Hydrates Containing Tetrahydrofuran for Applications in Gas Capture and Storage. Energy & Samp; Fuels, 2022, 36, 10652-10658.	2.5	4
7	Experimental investigation of the exact role of large-molecule guest substances (LMGSs) in determining phase equilibria and structures of natural gas hydrates. Energy, 2021, 215, 119219.	4.5	6
8	Mechanism and kinetics of guest exchange in sll hydrate – Flue gas replacement as revealed by experimental and computational approaches for hydrocarbon recovery and CO2 sequestration. Chemical Engineering Journal, 2021, 417, 128119.	6.6	5
9	Separation efficiency and equilibrium recovery ratio of SF6 in hydrate-based greenhouse gas separation. Chemical Engineering Journal, 2021, 405, 126956.	6.6	31
10	Thermodynamic and structural features of chlorodifluoromethane (a sl–sII dual hydrate former) + external guest (N ₂ or CH ₄) hydrates and their significance for greenhouse gas separation. Physical Chemistry Chemical Physics, 2021, 23, 15693-15701.	1.3	6
11	Complex Phase Behaviors and Structural Coexistence of Natural Gas Hydrates Containing Large-Molecule Guest Substances. Energy & Samp; Fuels, 2021, 35, 6081-6089.	2.5	3
12	Evaluation of kinetic salt-enrichment behavior and separation performance of HFC-152a hydrate-based desalination using an experimental measurement and a thermodynamic correlation. Water Research, 2021, 193, 116882.	5.3	23
13	Optimal driving force for the dissociation of CH4 hydrates in hydrate-bearing sediments using depressurization. Energy, 2021, 223, 120047.	4.5	14
14	The dual-functional roles of N2 gas for the exploitation of natural gas hydrates: An inhibitor for dissociation and an external guest for replacement. Energy, 2021, 232, 121054.	4.5	16
15	Synergistic inhibition effects of hydrophilic monomeric substances on CH4 hydrate as revealed by experimental and computational approaches. Chemical Engineering Journal, 2021, 426, 130794.	6.6	10
16	The impact of the abnormal salinity enrichment in pore water on the thermodynamic stability of marine natural gas hydrates in the Arctic region. Science of the Total Environment, 2021, 799, 149357.	3.9	5
17	Connectivity-informed drainage network generation using deep convolution generative adversarial networks. Scientific Reports, 2021, 11, 1519.	1.6	2
18	Kinetic Selectivity of SF ₆ during Formation and Dissociation of SF ₆ + N ₂ Hydrates and Its Significance in Hydrate-Based Greenhouse Gas Separation. ACS Sustainable Chemistry and Engineering, 2021, 9, 14152-14160.	3.2	5

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19	Phase equilibria of tetra-iso-amyl ammonium bromide (TiAAB) semiclathrates with CO2, N2, or CO2Â+ÂN2. Journal of Chemical Thermodynamics, 2020, 142, 106024.	1.0	3
20	Synergistic kinetic inhibition of amino acids and ionic liquids on CH4 hydrate for flow assurance. Fuel, 2020, 263, 116689.	3.4	21
21	Influence of feed gas composition on structural transformation and guest exchange behaviors in sH hydrate – Flue gas replacement for energy recovery and CO2 sequestration. Energy, 2020, 207, 118299.	4.5	8
22	Influence of CH4 hydrate exploitation using depressurization and replacement methods on mechanical strength of hydrate-bearing sediment. Applied Energy, 2020, 277, 115569.	5.1	38
23	Thermodynamic inhibition effects of an ionic liquid (choline chloride), a naturally derived substance (urea), and their mixture (deep eutectic solvent) on CH4 hydrates. Chemical Engineering Journal, 2020, 399, 125830.	6.6	27
24	Recoverable and recyclable gas hydrate inhibitors based on magnetic nanoparticle-decorated metal–organic frameworks. Chemical Engineering Journal, 2020, 401, 126081.	6.6	22
25	Formation and dissociation behaviors of SF6 hydrates in the presence of a surfactant and an antifoaming agent for hydrate-based greenhouse gas (SF6) separation. Chemical Engineering Journal, 2020, 400, 125973.	6.6	29
26	Time-dependent observation of a cage-specific guest exchange in sI hydrates for CH4 recovery and CO2 sequestration. Chemical Engineering Journal, 2020, 389, 124434.	6.6	34
27	Inhibition synergism of glycine (an amino acid) and [BMIM][BF4] (an ionic liquid) on the growth of CH4 hydrate. Chemical Engineering Journal, 2020, 393, 124466.	6.6	17
28	The effect of nozzle geometry on the turbulence evolution in an axisymmetric jet flow: A focus on fractals. Physica A: Statistical Mechanics and Its Applications, 2020, 550, 124145.	1.2	2
29	<i>In Situ</i> Raman Study of the Formation and Dissociation Kinetics of Methane and Methane/Propane Hydrates. Energy &	2.5	27
30	Influence of Competitive Inclusion of CO ₂ and N ₂ on sII Hydrate–Flue Gas Replacement for Energy Recovery and CO ₂ Sequestration. Environmental Science & Technology, 2020, 54, 7562-7569.	4.6	24
31	SF6 Hydrate Formation in Various Reaction Media: A Preliminary Study on Hydrate-Based Greenhouse Gas Separation. Environmental Science & Echnology, 2019, 53, 12945-12952.	4.6	13
32	Thermodynamic, structural, and kinetic studies of cyclopentane + CO2 hydrates: Applications for desalination and CO2 capture. Chemical Engineering Journal, 2019, 375, 121974.	6.6	55
33	Experimental and computational investigation of methane hydrate inhibition in the presence of amino acids and ionic liquids. Energy, 2019, 182, 632-640.	4.5	49
34	Kinetic CO2 selectivity in clathrate-based CO2 capture for upgrading CO2-rich natural gas and biogas. Chemical Engineering Journal, 2019, 369, 686-693.	6.6	51
35	A novel discovery of a gaseous sH clathrate hydrate former. Chemical Engineering Journal, 2019, 359, 775-778.	6.6	12
36	Spatial and temporal variations of volatile organic compounds using passive air samplers in the multi-industrial city of Ulsan, Korea. Environmental Science and Pollution Research, 2019, 26, 5831-5841.	2.7	32

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37	Guest–Guest Interactions and Co-Occupation by Distinct Guests in the Metastable State of Clathrate Hydrates. Journal of Physical Chemistry C, 2019, 123, 3811-3816.	1.5	7
38	Thermodynamic and kinetic influences of NaCl on HFC-125a hydrates and their significance in gas hydrate-based desalination. Chemical Engineering Journal, 2019, 358, 598-605.	6.6	55
39	Characterization of cyclopentane clathrates with gaseous guests for gas storage and separation. Chemical Engineering Journal, 2018, 338, 572-578.	6.6	44
40	MULTIFRACTAL CHARACTERISTICS OF AXISYMMETRIC JET TURBULENCE INTENSITY FROM RANS NUMERICAL SIMULATION. Fractals, 2018, 26, 1850008.	1.8	2
41	Clathrate-Based CO ₂ Capture from Co ₂ -Rich Natural Gas and Biogas. ACS Sustainable Chemistry and Engineering, 2018, 6, 5627-5635.	3.2	39
42	Phase equilibria and azeotropic behavior of C2F6+ N2 gas hydrates. Journal of Chemical Thermodynamics, 2018, 117, 43-47.	1.0	6
43	Thermodynamic phase equilibria and cage occupancy of NF 3 hydrate. Fluid Phase Equilibria, 2018, 471, 55-60.	1.4	9
44	Structural transition induced by cage-dependent guest exchange in CH4 + C3H8 hydrates with CO2 injection for energy recovery and CO2 sequestration. Applied Energy, 2018, 228, 229-239.	5.1	44
45	Greenhouse Gas (CHF ₃) Separation by Gas Hydrate Formation. ACS Sustainable Chemistry and Engineering, 2017, 5, 5485-5492.	3.2	52
46	Guest enclathration and structural transition in CO2+ N2+ methylcyclopentane hydrates and their significance for CO2 capture and sequestration. Chemical Engineering Journal, 2017, 320, 43-49.	6.6	35
47	CH4 enclathration in tetra-iso-amyl ammonium bromide (TiAAB) semiclathrate and its significance for natural gas storage. Chemical Engineering Journal, 2017, 330, 1160-1165.	6.6	21
48	CH 4 -CO 2 replacement occurring in sll natural gas hydrates for CH 4 recovery and CO 2 sequestration. Energy Conversion and Management, 2017, 150, 356-364.	4.4	60
49	CO 2 capture from flue gas using clathrate formation in the presence of thermodynamic promoters. Energy, 2017, 118, 950-956.	4.5	40
50	Thermodynamic stability and guest distribution of CH4/N2/CO2 mixed hydrates for methane hydrate production using N2/CO2 injection. Journal of Chemical Thermodynamics, 2017, 106, 16-21.	1.0	46
51	CH 4 \hat{a} \in "Flue gas replacement occurring in sH hydrates and its significance for CH 4 recovery and CO 2 sequestration. Chemical Engineering Journal, 2017, 308, 50-58.	6.6	73
52	Science Walden: Exploring the Convergence of Environmental Technologies with Design and Art. Sustainability, 2017, 9, 35.	1.6	1
53	Dual inhibition effects of diamines on the formation of methane gas hydrate and their significance for natural gas production and transportation. Energy Conversion and Management, 2016, 124, 578-586.	4.4	23
54	Enclathration of CHF 3 and C 2 F 6 molecules in gas hydrates for potential application in fluorinated gas (F-gas) separation. Chemical Engineering Journal, 2016, 306, 298-305.	6.6	24

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55	Multifractal characteristics of the jet turbulent intensity depending on the outfall nozzle geometry. Stochastic Environmental Research and Risk Assessment, 2016, 30, 653-664.	1.9	6
56	Accurate measurement of phase equilibria and dissociation enthalpies of HFC-134a hydrates in the presence of NaCl for potential application in desalination. Korean Journal of Chemical Engineering, 2016, 33, 1425-1430.	1.2	35
57	Isostructural and cage-specific replacement occurring in sII hydrate with external CO2/N2 gas and its implications for natural gas production and CO2 storage. Applied Energy, 2016, 178, 579-586.	5.1	49
58	Enclathration of tert-butyl alcohol in sII hydrates and its implications in gas storage and CO2 sequestration. Fuel, 2016, 164, 237-244.	3.4	30
59	Phase equilibria, dissociation enthalpies, and Raman spectroscopic analyses of N 2 Â+ tetra-n-butyl ammonium chloride (TBAC) semiclathrates. Fluid Phase Equilibria, 2016, 413, 86-91.	1.4	6
60	Enclathration of CO 2 as a co-guest of structure H hydrates and its implications for CO 2 capture and sequestration. Applied Energy, 2016, 163, 51-59.	5.1	54
61	Incorporation of ammonium fluoride into clathrate hydrate lattices and its significance in inhibiting hydrate formation. Chemical Communications, 2015, 51, 8761-8764.	2.2	14
62	Semiclathrate-based CO2 capture from flue gas mixtures: An experimental approach with thermodynamic and Raman spectroscopic analyses. Applied Energy, 2015, 154, 987-994.	5.1	70
63	Influences of large molecular alcohols on gas hydrates and their potential role in gas storage and CO2 sequestration. Chemical Engineering Journal, 2015, 267, 117-123.	6.6	42
64	Structural transition and phase behavior of N2 gas hydrates with pinacolyl alcohol and tert-amyl alcohol. Fluid Phase Equilibria, 2015, 393, 85-90.	1.4	9
65	Enhanced CH ₄ Recovery Induced via Structural Transformation in the CH ₄ /CO ₂ Replacement That Occurs in sH Hydrates. Environmental Science & En	4.6	45
66	Semiclathrate-based CO2 capture from flue gas in the presence of tetra-n-butyl ammonium chloride (TBAC). Chemical Engineering Journal, 2015, 276, 205-212.	6.6	42
67	CH4 recovery and CO2 sequestration using flue gas in natural gas hydrates as revealed by a micro-differential scanning calorimeter. Applied Energy, 2015, 150, 120-127.	5.1	116
68	Guest gas enclathration in tetra-n-butyl ammonium chloride (TBAC) semiclathrates: Potential application to natural gas storage and CO2 capture. Applied Energy, 2015, 140, 107-112.	5.1	61
69	1-Propanol as a co-guest of gas hydrates and its potential role in gas storage and CO2 sequestration. Chemical Engineering Journal, 2014, 258, 427-432.	6.6	30
70	Structure identification and dissociation enthalpy measurements of the CO2+ N2 hydrates for their application to CO2 capture and storage. Chemical Engineering Journal, 2014, 246, 20-26.	6.6	88
71	Multifractal properties of the peak flow distribution on stochastic drainage networks. Stochastic Environmental Research and Risk Assessment, 2014, 28, 1157-1165.	1.9	7
72	Application of Gibbs' model to urban drainage networks: a case study in southwestern Chicago, USA. Hydrological Processes, 2014, 28, 1148-1158.	1.1	15

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73	Stability conditions and guest distribution of the methane + ethane + propane hydrates or semiclathrates in the presence of tetrahydrofuran or quaternary ammonium salts. Journal of Chemical Thermodynamics, 2013, 65, 113-119.	1.0	17
74	Thermodynamic and 13C NMR spectroscopic verification of methane–carbon dioxide replacement in natural gas hydrates. Chemical Engineering Journal, 2013, 225, 636-640.	6.6	63
75	Experimental Verification of Methane–Carbon Dioxide Replacement in Natural Gas Hydrates Using a Differential Scanning Calorimeter. Environmental Science & Environmental Science & 2013, 47, 13184-13190.	4.6	139
76	Hydrate-based pre-combustion capture of carbon dioxide in the presence of a thermodynamic promoter and porous silica gels. International Journal of Greenhouse Gas Control, 2013, 14, 193-199.	2.3	115
77	CO ₂ Capture from Simulated Fuel Gas Mixtures Using Semiclathrate Hydrates Formed by Quaternary Ammonium Salts. Environmental Science & Envi	4.6	136
78	2-Propanol As a Co-Guest of Structure II Hydrates in the Presence of Help Gases. Journal of Physical Chemistry B, 2013, 117, 2449-2455.	1.2	23
79	Improved Experimental Determinations of Phase Equilibria and Structural Transitions of Mixed Gas Hydrates under Isothermal Conditions. Energy & Fuels, 2013, 27, 5144-5152.	2.5	6
80	Network configuration and hydrograph sensitivity to storm kinematics. Water Resources Research, 2013, 49, 1812-1827.	1.7	20
81	Structure Transition from Semi- to True Clathrate Hydrates Induced by CH ₄ Enclathration. Journal of Physical Chemistry C, 2012, 116, 16352-16357.	1.5	22
82	Thermodynamic and Spectroscopic Identification of Guest Gas Enclathration in the Double Tetra- <i>n</i> butylammonium Fluoride Semiclathrates. Journal of Physical Chemistry B, 2012, 116, 9075-9081.	1.2	62
83	Structural Transformation of Isopropylamine Semiclathrate Hydrates in the Presence of Methane as a Coguest. Journal of Physical Chemistry B, 2012, 116, 13476-13480.	1.2	14
84	The effect of rainstorm movement on urban drainage network runoff hydrographs. Hydrological Processes, 2012, 26, 3830-3841.	1.1	29
85	Guest Gas Enclathration in Semiclathrates of Tetra- <i>n</i> -butylammonium Bromide: Stability Condition and Spectroscopic Analysis. Langmuir, 2011, 27, 10597-10603.	1.6	83
86	Spectroscopy Identification and Thermodynamic Stability of <i>tert</i> Butyl Nitrite and Methane Clathrate Hydrate. Journal of Chemical & Engineering Data, 2010, 55, 5906-5909.	1.0	5
87	Phase Behavior and ¹³ C NMR Spectroscopic Analysis of the Mixed Methane + Ethane + Propane Hydrates in Mesoporous Silica Gels. Journal of Physical Chemistry B, 2010, 114, 15079-15084.	1.2	24
88	Experimental Measurement and Thermodynamic Modeling of Hydrate-Phase Equilibria for the Ternary C ₂ H ₆ + NaCl + Water and C ₃ H ₈ + NaCl + Water Mixtures in Silica Gel Pores. Energy & Description (2010), 24, 6074-6080.	2.5	10
89	Experimental Measurement and Thermodynamic Modeling of the Mixed CH ₄ + C ₃ H ₈ Clathrate Hydrate Equilibria in Silica Gel Pores: Effects of Pore Size and Salinity. Langmuir, 2010, 26, 9742-9748.	1.6	54
90	Separation of SF ₆ from Gas Mixtures Using Gas Hydrate Formation. Environmental Science & En	4.6	120

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91	Phase Equilibria of Semiclathrate Hydrate for Nitrogen in the Presence of Tetra- <i>n</i> -butylammonium Bromide and Fluoride. Journal of Chemical & Engineering Data, 2010, 55, 5883-5886.	1.0	77
92	Effect of Reaction Temperature on CO2 Capture Using Potassium-Based Solid Sorbent in Bubbling Fluidized-Bed Reactor. Journal of Environmental Engineering, ASCE, 2009, 135, 473-477.	0.7	28
93	Magnetic Transition and Long-Time Relaxation Behavior Induced by Selective Injection of Guest Molecules into Clathrate Hydrates. Journal of the American Chemical Society, 2009, 131, 5736-5737.	6.6	17
94	Phase Equilibria and Thermodynamic Modeling of Ethane and Propane Hydrates in Porous Silica Gels. Journal of Physical Chemistry B, 2009, 113, 5487-5492.	1.2	61
95	The Effect of Voidage on the CO2 Sorption Capacity of K-Based Sorbent in a Dual Circulating Fluidized Bed Process. Journal of Chemical Engineering of Japan, 2008, 41, 691-694.	0.3	24
96	One-Step DME Synthesis from Coal-Derived, CO-Rich Syngas in a Slurry Reactor. Journal of Chemical Engineering of Japan, 2008, 41, 585-589.	0.3	2
97	Effects of water vapor pretreatment time and reaction temperature on CO2 capture characteristics of a sodium-based solid sorbent in a bubbling fluidized-bed reactor. Chemosphere, 2007, 69, 712-718.	4.2	108
98	Continuous operation of the potassium-based dry sorbent CO2 capture process with two fluidized-bed reactors. International Journal of Greenhouse Gas Control, 2007, 1, 31-36.	2.3	168
99	Effect of water pretreatment on CO2 capture using a potassium-based solid sorbent in a bubbling fluidized bed reactor. Korean Journal of Chemical Engineering, 2007, 24, 457-460.	1.2	61
100	A New Method for Separating HFC-134a from Gas Mixtures Using Clathrate Hydrate Formation. Environmental Science & Environmenta	4.6	51
101	Recovering Methane from Solid Methane Hydrate with Carbon Dioxide. Angewandte Chemie - International Edition, 2003, 42, 5048-5051.	7.2	332
102	Hydrate Phase Equilibria of the Ternary CH4 + NaCl + Water, CO2 + NaCl + Water and CH4 + CO2 + Water Mixtures in Silica Gel Pores. Journal of Physical Chemistry B, 2003, 107, 889-894.	1.2	33
103	Methane and Carbon Dioxide Hydrate Phase Behavior in Small Porous Silica Gels:Â Three-Phase Equilibrium Determination and Thermodynamic Modeling. Langmuir, 2002, 18, 9164-9170.	1.6	140
104	Phase Behavior and Structure Identification of the Mixed Chlorinated Hydrocarbon Clathrate Hydrates. Journal of Physical Chemistry B, 2002, 106, 9668-9673.	1.2	27
105	Hydration number and two-phase equilibria of CH4hydrate in the deep ocean sediments. Geophysical Research Letters, 2002, 29, 85-1-85-4.	1.5	36
106	A New Hydrate-Based Recovery Process for Removing Chlorinated Hydrocarbons from Aqueous Solutions. Environmental Science & Env	4.6	56
107	Kinetics of Esterification of Lactic Acid with Methanol in the Presence of Cation Exchange Resin Using a Pseudo-Homogeneous Model Journal of Chemical Engineering of Japan, 2000, 33, 128-133.	0.3	37
108	Effects of operation variables on the recovery of lactic acid in a batch distillation process with chemical reactions. Korean Journal of Chemical Engineering, 1999, 16, 556-561.	1.2	35

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109	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