Wanjun Lu

List of Publications by Year
in descending order

35 papers	1,165 citations	430874 18 h-index	434195 31 g-index
35 all docs	35 docs citations	35 times ranked	941 citing authors

#	Article	IF	Citations
1	A unified equation for calculating methane vapor pressures in the CH_4â€“H_2O system with measured Raman shifts. Geochimica Et Cosmochimica Acta, 2007, 71, 3969-3978.	3.9	140
2	Determination of methane concentrations in water in equilibrium with sI methane hydrate in the absence of a vapor phase by in situ Raman spectroscopy. Geochimica Et Cosmochimica Acta, 2008, 72, 412-422.	3.9	118
3	Determination of diffusion coefficients of carbon dioxide in water between 268 and 473 K in a high-pressure capillary optical cell with in situ Raman spectroscopic measurements. Geochimica Et Cosmochimica Acta, 2013, 115, 183-204.	3.9	117
4	Quantitative Raman spectroscopic investigation of geo-fluids high-pressure phase equilibria: Part I. Accurate calibration and determination of CO_2 solubility in water from 273.15 to 573.15 K and from 10 to 120 MPa. Fluid Phase Equilibria, 2014, 382, 70-79.	2.5	84
5	Temperature-Dependent Hydrophobic Crossover Length Scale and Water Tetrahedral Order. Journal of Physical Chemistry Letters, 2018, 9, 1012-1017.	4.6	51
6	In situ Study of Mass Transfer in Aqueous Solutions under High Pressures via Raman Spectroscopy: A New Method for the Determination of Diffusion Coefficients of Methane in Water near Hydrate Formation Conditions. Applied Spectroscopy, 2006, 60, 122-129.	2.2	48
7	In situ Raman spectroscopic study of diffusion coefficients of methane in liquid water under high pressure and wide temperatures. Fluid Phase Equilibria, 2013, 360, 274-278.	2.5	47
8	An extensive study on Raman spectra of water from 253 to 753 K at 30 MPa: A new insight into structure of water. Journal of Molecular Spectroscopy, 2013, 292, 23-27.	1.2	45
9	Quantitative Raman spectroscopic investigation of geo-fluids high-pressure phase equilibria: Part II. Accurate determination of CH_4 solubility in water from 273 to 603 K and from 5 to 140 MPa and refining the parameters of the thermodynamic model. Fluid Phase Equilibria, 2015, 391, 18-30.	2.5	42
10	Determination of water solubility in supercritical CO_2 from 313.15 to 473.15â€¯K and from 10 to 50â€¯MPa by in-situ quantitative Raman spectroscopy. Fluid Phase Equilibria, 2018, 476, 170-178.	2.5	42
11	An equation for determining methane densities in fluid inclusions with Raman shifts. Journal of Geochemical Exploration, 2016, 171, 20-28.	3.2	41
12	CO₂ Densityâ€Raman Shift Relation Derived from Synthetic Inclusions in Fused Silica Capillaries and Its Application. Acta Geologica Sinica, 2009, 83, 932-938.	1.4	40
13	Temperature and salinity effects on the Raman scattering cross section of the water OH-stretching vibration band in NaCl aqueous solutions from 0 to 300â€‰Â°C. Journal of Raman Spectroscopy, 2017, 48, 314-322.	2.5	40
14	Determination of diffusion coefficients of hydrogen in fused silica between 296 and 523K by Raman spectroscopy and application of fused silica capillaries in studying redox reactions. Geochimica Et Cosmochimica Acta, 2009, 73, 5435-5443.	3.9	39
15	Raman spectroscopic investigation on aqueous NaCl solutions at temperatures from 273 to 573K: Effect of NaCl on water structure. Journal of Molecular Liquids, 2014, 199, 83-87.	4.9	32
16	A new optical capillary cell for spectroscopic studies of geologic fluids at pressures up to 100 MPa. , 2005, , 475-485.		28
17	A re-evaluation of the effects of temperature and NaCl concentration on quantitative Raman spectroscopic measurements of dissolved CH_4 in NaCl aqueous solutions: Application to fluid inclusion analysis. Chemical Geology, 2015, 417, 1-10.	3.3	27
18	Charge history of CO_2 in Lishui sag, East China Sea basin: Evidence from quantitative Raman analysis of CO_2-bearing fluid inclusions. Marine and Petroleum Geology, 2018, 98, 50-65.	3.3	25

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19	Hiding in the Crowd: Spectral Signatures of Overcoordinated Hydrogen-Bond Environments. Journal of Physical Chemistry Letters, 2019, 10, 6067-6073.	4.6	22
20	Sensitive Surface-Enhanced Raman Scattering (SERS) Detection of Nitroaromatic Pollutants in Water. Applied Spectroscopy, 2014, 68, 784-788.	2.2	18
21	In situ Raman spectroscopic investigation of flux-controlled crystal growth under high pressure: A case study of carbon dioxide hydrate growth in aqueous solution. International Journal of Heat and Mass Transfer, 2016, 101, 834-843.	4.8	17
22	Raman spectroscopic densimeter for pure CO2 and CO2-H2O-NaCl fluid systems over a wide P-T range up to 360â€¯Â°C and 50â€¯MPa. Chemical Geology, 2019, 528, 119281.	3.3	16
23	Measurement of methane solubility in pure water in equilibrium with hydrate by using highâ€“pressure optical capillary cell. Marine Chemistry, 2019, 212, 74-82.	2.3	15
24	Pressure and Temperature Dependence of the Raman Peak Intensity Ratio of Asymmetric Stretching Vibration (Î½₃) and Asymmetric Bending Overtone (2Î½₂) of Methane. Applied Spectroscopy, 2014, 68, 536-540.	2.2	12
25	The effects of hydrate formation and dissociation on the water-oil interface: Insight into the stability of an emulsion. Fuel, 2020, 266, 116980.	6.4	12
26	Determination of Pâ€“Vâ€“Tâ€“x properties of the CO2â€“H2O system up to 573.15 K and 120 MPaâ€"Experiments and model. Chemical Geology, 2016, 424, 60-72.	3.3	10
27	Effects of CH4 and CO2 on the sulfidization of goethite and magnetite: an in situ Raman spectroscopic study in high-pressure capillary optical cells at room temperature. European Journal of Mineralogy, 2015, 27, 193-201.	1.3	9
28	In situ Raman spectroscopic study of the pressure effect on the concentration of CO2 in water at hydrate-liquid water equilibrium up to 900Âbar. Fluid Phase Equilibria, 2017, 438, 37-43.	2.5	9
29	CH4 accumulation characteristics and relationship with deep CO2 fluid in Lishui sag, East China Sea Basin. Applied Geochemistry, 2020, 115, 104563.	3.0	9
30	Lipid Distribution in Marine Sediments from the Northern South China Sea and Association with Gas Hydrate. Acta Geologica Sinica, 2014, 88, 226-237.	1.4	3
31	In situ Raman spectroscopic observation of the temperature-dependent partition of CH₄ and CO₂ during the growth of double hydrate from aqueous solution. Canadian Journal of Chemistry, 2015, 93, 970-975.	1.1	3
32	An Accurate Model to Calculate CO2 Solubility in Pure Water and in Seawater at Hydrateâ€“Liquid Water Two-Phase Equilibrium. Minerals (Basel, Switzerland), 2021, 11, 393.	2.0	3
33	Experimental Simulation of Hydrate Accumulation and Dispersion in Pore Fluids. , 2013, , 217-237.		1
34	Predict C2H6Concentration in Aqueous Solution Equilibrium with Its Hydrate in the Absence of Vapor. Acta Geologica Sinica, 2013, 87, 991-1011.	1.4	0
35	Effects of Î²-Cyclodextrins and Their Aggregates on the Formation of Methane Hydrate. Energy & Fuels, 0, , .	5.1	0