

# Lee H Spangler

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11349339/publications.pdf>

Version: 2024-02-01

53  
papers

1,955  
citations

257357

24  
h-index

243529

44  
g-index

54  
all docs

54  
docs citations

54  
times ranked

1606  
citing authors

#	ARTICLE	IF	CITATIONS
1	Microbially Enhanced Carbon Capture and Storage by Mineral-Trapping and Solubility-Trapping. Environmental Science & Technology, 2010, 44, 5270-5276.	4.6	231
2	Potential CO <sub>2</sub> Leakage Reduction through Biofilm-Induced Calcium Carbonate Precipitation. Environmental Science & Technology, 2013, 47, 142-149.	4.6	173
3	A shallow subsurface controlled release facility in Bozeman, Montana, USA, for testing near surface CO <sub>2</sub> detection techniques and transport models. Environmental Earth Sciences, 2010, 60, 227-239.	1.3	146
4	Biofilm enhanced geologic sequestration of supercritical CO <sub>2</sub> . International Journal of Greenhouse Gas Control, 2009, 3, 90-99.	2.3	95
5	Polarization lidar measurements of honey bees in flight for locating land mines. Optics Express, 2005, 13, 5853.	1.7	94
6	Pre-site Characterization Risk Analysis for Commercial-Scale Carbon Sequestration. Environmental Science & Technology, 2014, 48, 3908-3915.	4.6	90
7	Intersystem crossing in isolated molecules. Magnetic field effects on the fluorescence decay behavior of 1B <sub>3u</sub> pyrazine with $\hat{\epsilon}^{\sim}$ single $\hat{\epsilon}^{\sim}$ rovibronic level excitation. Journal of Chemical Physics, 1984, 80, 5539-5544.	1.2	80
8	Assignment of the low-frequency modes in trans-stilbene: evidence for planarity in the isolated molecule. The Journal of Physical Chemistry, 1987, 91, 2782-2786.	2.9	79
9	Laser-induced phosphorescence spectroscopy in supersonic jets. The lowest triplet states of glyoxal, methylglyoxal, and biacetyl. Journal of Chemical Physics, 1986, 84, 4789-4796.	1.2	77
10	STRUCTURAL INFORMATION FROM METHYL INTERNAL ROTATION SPECTROSCOPY. Annual Review of Physical Chemistry, 1997, 48, 481-510.	4.8	60
11	Two-photon fluorescence excitation spectra of indole in vapor and jet: 1La states. The Journal of Physical Chemistry, 1990, 94, 7340-7342.	2.9	59
12	Optical detection of honeybees by use of wing-beat modulation of scattered laser light for locating explosives and land mines. Applied Optics, 2006, 45, 1839.	2.1	50
13	Studying the vegetation response to simulated leakage of sequestered CO <sub>2</sub> using spectral vegetation indices. Ecological Informatics, 2010, 5, 379-389.	2.3	46
14	Potential CO <sub>2</sub> and brine leakage through wellbore pathways for geologic CO <sub>2</sub> sequestration using the National Risk Assessment Partnership tools: Application to the Big Sky Regional Partnership. International Journal of Greenhouse Gas Control, 2019, 81, 44-65.	2.3	39
15	1La transitions of jet-cooled 3-methylindole. Chemical Physics Letters, 1992, 193, 532-538.	1.2	38
16	Ring mediated coupling of the internal motions of the amine and methyl groups in $\hat{\epsilon}$ -methylaniline. Journal of Chemical Physics, 1992, 96, 4106-4117.	1.2	37
17	A controlled field pilot for testing near surface CO <sub>2</sub> detection techniques and transport models. Energy Procedia, 2009, 1, 2143-2150.	1.8	35
18	Multi-spectral imaging of vegetation for detecting CO <sub>2</sub> leaking from underground. Environmental Earth Sciences, 2010, 60, 313-323.	1.3	34

#	ARTICLE	IF	CITATIONS
19	Direct laser excitation of triplet states in supersonic jets. Rotationally resolved 3Au → 1Ag excitation spectrum of glyoxal. <i>The Journal of Physical Chemistry</i> , 1983, 87, 4781-4783.	2.9	33
20	Observed response of soil O <sub>2</sub> concentration to leaked CO <sub>2</sub> from an engineered CO <sub>2</sub> leakage experiment. <i>International Journal of Greenhouse Gas Control</i> , 2013, 16, 116-128.	2.3	33
21	Additional evidence for planarity in isolated trans-stilbene: a study of .alpha.-deuterio-trans-stilbene. <i>The Journal of Physical Chemistry</i> , 1987, 91, 6077-6079.	2.9	32
22	Abandoned well CO <sub>2</sub> leakage mitigation using biologically induced mineralization: current progress and future directions. , 2013, 3, 40-49.		32
23	Process-based soil gas leakage assessment at the Kerr Farm: Comparison of results to leakage proxies at ZERT and Mt. Etna. <i>International Journal of Greenhouse Gas Control</i> , 2014, 30, 42-57.	2.3	32
24	Rotational analysis of some vibronic bands in the 3Au → 1Ag transition of glyoxal. Spin splittings in the lowest triplet state of the isolated molecule. <i>Journal of Chemical Physics</i> , 1986, 85, 3229-3236.	1.2	30
25	Looking for leakage or monitoring for public assurance?. <i>Energy Procedia</i> , 2014, 63, 3881-3890.	1.8	25
26	Testing carbon sequestration site monitor instruments using a controlled carbon dioxide release facility. <i>Applied Optics</i> , 2008, 47, 548.	2.1	22
27	Substituent Effects on Torsional Barriers: p-Methoxy- and p-Methoxy-p'-methyl-trans-stilbene. <i>The Journal of Physical Chemistry</i> , 1995, 99, 9316-9324.	2.9	21
28	Methyl rotor effects in 3- and 5-methylindole. <i>The Journal of Physical Chemistry</i> , 1992, 96, 5771-5778.	2.9	20
29	Remote Substituent Effects on Methyl Torsional Barriers: trans-p-Amino-p'-methylstilbene. <i>The Journal of Physical Chemistry</i> , 1995, 99, 3047-3052.	2.9	20
30	Experimental observation of signature changes in bulk soil electrical conductivity in response to engineered surface CO <sub>2</sub> leakage. <i>International Journal of Greenhouse Gas Control</i> , 2012, 7, 20-29.	2.3	19
31	Approximate solutions for diffusive fracture-matrix transfer: Application to storage of dissolved CO <sub>2</sub> in fractured rocks. <i>Water Resources Research</i> , 2017, 53, 1746-1762.	1.7	19
32	Hindered internal rotation in some singly methylated trans-stilbenes. <i>Journal of Chemical Physics</i> , 1988, 88, 6768-6777.	1.2	18
33	Use of Isosbestic Points for Determination of Quantum Efficiency in Transient Absorption Spectroscopy. <i>Journal of Physical Chemistry A</i> , 2002, 106, 1701-1707.	1.1	15
34	Laser-based carbon dioxide monitoring instrument testing during a 30-day controlled underground carbon release field experiment. <i>International Journal of Greenhouse Gas Control</i> , 2011, 5, 138-145.	2.3	14
35	Detection of Leaking CO <sub>2</sub> Gas With Vegetation Reflectances Measured By a Low-Cost Multispectral Imager. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2012, 5, 699-706.	2.3	14
36	Physiological responses of dandelion and orchard grass leaves to experimentally released upwelling soil CO <sub>2</sub> . <i>International Journal of Greenhouse Gas Control</i> , 2014, 24, 139-148.	2.3	13

#	ARTICLE	IF	CITATIONS
37	A rotationally resolved phosphorescence excitation spectrum of the lowest triplet state of pyrazine. <i>Chemical Physics Letters</i> , 1989, 161, 347-352.	1.2	12
38	Skin factor and potential formation damage from chemical and mechanical processes in a naturally fractured carbonate aquifer with implications to CO2 sequestration. <i>International Journal of Greenhouse Gas Control</i> , 2021, 108, 103326.	2.3	12
39	Resolution of different conformers of methoxy-trans-stilbenes via rotational coherence spectroscopy. <i>Chemical Physics Letters</i> , 1995, 238, 313-318.	1.2	10
40	Structural Information from Methyl Rotors: Methyl Torsional Barriers in p-Hydroxy-methyl-t-Stilbene and Its Water Complexes. <i>Journal of Physical Chemistry A</i> , 1997, 101, 5431-5436.	1.1	8
41	Comparison of Long-Wave Infrared Imaging and Visible/Near-Infrared Imaging of Vegetation for Detecting Leaking $\text{CO}_2$ Gas. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2014, 7, 1651-1657.	2.3	8
42	The First Brazilian Field Lab Fully Dedicated to CO2 MMV Experiments: From the Start-up to the Initial Results. <i>Energy Procedia</i> , 2014, 63, 6227-6238.	1.8	7
43	Geologic carbon sequestration injection wells in overpressured storage reservoirs: estimating area of review. , 2016, 6, 775-786.		7
44	The First Brazilian Field Lab Fully Dedicated to CO2 MMV Experiments: A Closer Look at atmospheric Leakage Detection. <i>Energy Procedia</i> , 2014, 63, 6215-6226.	1.8	6
45	Delineating Area of Review in a System with Pre-injection Relative Overpressure. <i>Energy Procedia</i> , 2014, 63, 3715-3722.	1.8	4
46	Bulk electric conductivity response to soil and rock CO2 concentration during controlled CO2 release experiments: Observations and analytic modeling. <i>Geophysics</i> , 2015, 80, E293-E308.	1.4	2
47	Photoinduced Electron Transfer between C60 and Bis-Diphenylamino (Diphenylpolyenes), Measurement of Intrinsic Quantum Efficiency. <i>Journal of Physical Chemistry A</i> , 2001, 105, 10978-10985.	1.1	1
48	Millisecond long-lived charge separated state at room temperature in a flexibly linked diphenylaminopolyene-C60 dyad. <i>Chemical Communications</i> , 2005, , 1067.	2.2	1
49	Foreword to the Special Issue on Zero Emission Research and Technology Center testing field site, Bozeman, Montana, USA. <i>Environmental Earth Sciences</i> , 2010, 60, 225-225.	1.3	1
50	High Resolution Time and Frequency Resolved Spectroscopy for the Study of Photophysical Processes in Luminescent Materials. <i>Materials Research Society Symposia Proceedings</i> , 1999, 560, 145.	0.1	0
51	Fourier Transform Techniques for Measuring Absorption of Transient Species in Optical Limiting Materials. <i>Materials Research Society Symposia Proceedings</i> , 1999, 597, 345.	0.1	0
52	Photo-Induced Effects in Mn <sup>4+</sup> :YAG. Observation of Unusually Efficient Excited State Absorption and a Long-Lived Metastable State. <i>Materials Research Society Symposia Proceedings</i> , 1999, 597, 419.	0.1	0
53	Optical Engineering. <i>Optics and Photonics News</i> , 2005, 16, 32.	0.4	0