

Eric Weitz

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5959534/publications.pdf>

Version: 2024-02-01

81
papers

2,361
citations

201674

27
h-index

223800

46
g-index

83
all docs

83
docs citations

83
times ranked

2375
citing authors

#	ARTICLE	IF	CITATIONS
1	FTIR Study of CO ₂ Adsorption on Amine-Grafted SBA-15: Elucidation of Adsorbed Species. Journal of Physical Chemistry C, 2011, 115, 11540-11549.	3.1	285
2	An <i>in Situ</i> NMR Study of the Mechanism for the Catalytic Conversion of Fructose to 5-Hydroxymethylfurfural and then to Levulinic Acid Using ¹³ C Labeled <i>scpd</i> -Fructose. ACS Catalysis, 2012, 2, 1211-1218.	11.2	138
3	NO _x Reduction from Diesel Emissions over a Nontransition Metal Zeolite Catalyst: A Mechanistic Study Using FTIR Spectroscopy. Journal of Physical Chemistry B, 2004, 108, 5386-5404.	2.6	131
4	Photocatalytic Transformation of 2,4,5-Trichlorophenol on TiO ₂ under Sub-Band-Gap Illumination. Langmuir, 2003, 19, 1402-1409.	3.5	118
5	The wavelength dependence of excimer laser photolysis of Fe(CO) ₅ in the gas phase. Transient infrared spectroscopy and kinetics of the Fe(CO) _x (x=4,3,2) photofragments. Journal of Chemical Physics, 1986, 85, 1977-1986.	3.0	106
6	Pulsed laser induced thermal desorption of CO from copper surfaces. Journal of Chemical Physics, 1983, 79, 5200-5202.	3.0	88
7	Photoinduced Reactions of Surface-Bound Species on Titania Nanotubes and Platinized Titania Nanotubes: An <i>in Situ</i> FTIR Study. Journal of Physical Chemistry C, 2013, 117, 20643-20655.	3.1	71
8	Modification of acid sites in ZSM-5 by ion-exchange: An <i>in-situ</i> FTIR study. Applied Surface Science, 2014, 316, 405-415.	6.1	71
9	Highly Efficient Activation, Regeneration, and Active Site Identification of Oxide-Based Olefin Metathesis Catalysts. ACS Catalysis, 2016, 6, 5740-5746.	11.2	71
10	257 nm photoinduced chemistry of methyl iodide adsorbed on MgO(100). Journal of Chemical Physics, 1992, 96, 9221-9232.	3.0	46
11	Ultraviolet photodissociation dynamics of methyl iodide at 333 nm. Journal of Chemical Physics, 1994, 101, 3787-3791.	3.0	44
12	O(3P) atom lifetimes and mobilities in xenon matrices. Journal of Chemical Physics, 1992, 96, 2846-2855.	3.0	42
13	A Theoretical Study of the Reaction H ₂ + Fe(CO) ₄ ⇌ H ₂ Fe(CO) ₄ . Journal of Physical Chemistry A, 1997, 101, 2358-2363.	2.5	42
14	The role of adsorbate structure in the photodissociation dynamics of adsorbed species: Methyl iodide/MgO(100). Journal of Chemical Physics, 1995, 102, 7267-7276.	3.0	41
15	Bonding Interactions in Olefin (C ₂ X ₄ , X = H, F, Cl, Br, I, CN) Iron Tetracarbonyl Complexes: A Role of the Deformation Energy in Bonding and Reactivity. Journal of Physical Chemistry A, 2001, 105, 8077-8085.	2.5	38
16	A study of the dynamics of UV laser photolysis of NOCl and NOBr. Journal of Chemical Physics, 1983, 78, 757-766.	3.0	36
17	The adsorption and photochemistry of CD ₃ I on TiO ₂ (110). Journal of Chemical Physics, 1994, 100, 4615-4625.	3.0	35
18	The kinetics of reaction of photolytically generated Fe(CO) _x (x=2,3,4) with CO. Journal of Chemical Physics, 1983, 79, 1089-1091.	3.0	34

#	ARTICLE	IF	CITATIONS
19	Photodissociation dynamics of CH ₃ I adsorbed on MgO(100): Theory and experiment. <i>Journal of Chemical Physics</i> , 1992, 97, 5168-5176.	3.0	34
20	An acid catalyzed step in the catalytic reduction of NO _x to N ₂ . <i>Catalysis Letters</i> , 2006, 112, 129-132.	2.6	34
21	Coking Can Enhance Product Yields in the Dry Reforming of Methane. <i>ACS Catalysis</i> , 2022, 12, 8352-8362.	11.2	34
22	Low Activation Energy Pathway for the Catalyzed Reduction of Nitrogen Oxides to N ₂ by Ammonia. <i>Catalysis Letters</i> , 2004, 98, 5-9.	2.6	32
23	Wavelength dependence of the photodissociation and photodesorption of CD ₃ I adsorbed on the TiO ₂ (110) surface. <i>Journal of Chemical Physics</i> , 1994, 100, 4626-4636.	3.0	31
24	A spectroscopic study of CH ₃ F isolated in rare gas matrices. <i>Journal of Chemical Physics</i> , 1982, 76, 5796-5811.	3.0	30
25	Rare gas dependence of vibration-vibration energy transfer processes: A diagnostic technique. Applications to CH ₂ D ₂ and CH ₃ F. <i>Journal of Chemical Physics</i> , 1979, 71, 4349-4368.	3.0	28
26	Infrared spectra and band strengths of the fundamental and first overtone of HCl and DCl in liquid xenon solutions. <i>Journal of Chemical Physics</i> , 1985, 83, 927-933.	3.0	28
27	Overtone spectroscopy of propyne and propyne-d ₁ . <i>Journal of Chemical Physics</i> , 1989, 90, 615-627.	3.0	28
28	Bond Energies and Bonding Interactions in Fe(CO) ₅ -n(N ₂) _n (n = 0-5) and Cr(CO) ₆ -n(N ₂) _n (n = 0-6) Complexes: A Density Functional Theory Calculations and Comparisons to Experimental Data. <i>Journal of Physical Chemistry A</i> , 2001, 105, 3773-3787.	2.5	28
29	Density Functional Theory Study of Fe(CO) ₃ (η -2-C ₃ H ₆), HFe(CO) ₃ (η -3-C ₃ H ₅), and the Iron-allyl Bond Energy. <i>Organometallics</i> , 2003, 22, 2652-2659.	2.3	28
30	Identifying Boron Active Sites for the Oxidative Dehydrogenation of Propane. <i>ACS Catalysis</i> , 2021, 11, 9370-9376.	11.2	27
31	Photochemistry and reaction dynamics of HBr in xenon matrices: Photodissociation of HBr and production of Br atoms. <i>Journal of Chemical Physics</i> , 1995, 102, 4112-4122.	3.0	26
32	Density Functional Study of Fe(CO) ₃ and Fe(CO) ₃ (L) with H ₂ and C ₂ H ₄ , where L = H ₂ or C ₂ H ₄ : Reactions Relevant to Olefin Hydrogenation. <i>Organometallics</i> , 2005, 24, 4714-4720.	2.3	25
33	Diode laser probes of vinyl radical kinetics: The reaction of C ₂ H ₃ with HCl and DCl. <i>Journal of Chemical Physics</i> , 1988, 88, 1608-1616.	3.0	24
34	A photofragment spectrometer for studying photodissociation of molecules adsorbed on surfaces: The 257-nm photolysis of CD ₃ I on MgO(100). <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1991, 9, 1820-1822.	2.1	24
35	UV-induced desorption of CH ₃ X (X=I and Br)/TiO ₂ (110). <i>Journal of Chemical Physics</i> , 1998, 108, 5080-5088.	3.0	23
36	Real Time Infrared Spectroscopic Probe of the Reactions of Fe(CO) ₃ and Fe(CO) ₄ with N ₂ in the Gas Phase. <i>Journal of Physical Chemistry A</i> , 2001, 105, 3765-3772.	2.5	22

#	ARTICLE	IF	CITATIONS
37	Gas Phase Study of the Kinetics of Formation and Dissociation of Fe(CO) ₄ L and Fe(CO) ₃ L ₂ (L = C ₂ H ₄ and Tj ETQq _{1,1} 0.7843 ₂₁ rgBT	2.5	21
38	Pulsed laser-induced electron and positive-ion emission from Cu(100) under ultrahigh vacuum conditions near the threshold for surface damage. Journal of Applied Physics, 1991, 69, 3472-3479.	2.5	20
39	Photochemistry in CH ₃ I Adlayers on TiO ₂ (110) Studied with Postirradiation Thermal Desorption. Langmuir, 1998, 14, 4156-4161.	3.5	20
40	Self-trapping of CO ₂ 0001 emission: A theoretical and experimental investigation. Journal of Chemical Physics, 1982, 76, 3839-3841.	3.0	19
41	Photoproduction and dynamics of oxygen atoms in xenon matrices. Journal of Chemical Physics, 1993, 99, 1004-1012.	3.0	19
42	Vibrational Energy Flow in the Ground Electronic States of Polyatomic Molecules. Advances in Chemical Physics, 2007, , 185-235.	0.3	19
43	Probing Water and CO ₂ Interactions at the Surface of Collapsed Titania Nanotubes Using IR Spectroscopy. Molecules, 2015, 20, 15469-15487.	3.8	19
44	Vibrational relaxation of HCl as a function of xenon density: The role of HCl-Xe complexes. Journal of Chemical Physics, 1993, 98, 6947-6957.	3.0	18
45	Method for Evaluating Vibrational Mode Assignments in Surface-Bound Cyclic Hydrocarbons Using Sum-Frequency Generation. Journal of Physical Chemistry C, 2011, 115, 18284-18294.	3.1	17
46	Methanol Oxidation to Formate on ALD-Prepared VO _x /Al ₂ O ₃ Catalysts: A Mechanistic Study. Journal of Physical Chemistry C, 2017, 121, 26794-26805.	3.1	17
47	In-situ IR spectroscopy as a probe of oxidation/reduction of Ce in nanostructured CeO ₂ . Applied Surface Science, 2018, 445, 548-554.	6.1	16
48	Photodepletion and dynamics of oxygen atoms in xenon matrices. Journal of Chemical Physics, 1993, 99, 8628-8636.	3.0	15
49	Mode specific vibrational energy transfer in CH ₃ F-N ₂ O mixtures. Journal of Chemical Physics, 1981, 74, 2879-2887.	3.0	14
50	Vibrational energy transfer and migration processes in matrix isolated CH ₃ F. Journal of Chemical Physics, 1986, 85, 5593-5610.	3.0	14
51	Photoreactions of methyl iodide multilayers on the TiO ₂ (110) surface. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1996, 14, 1557-1561.	2.1	14
52	Orientation of methyl iodide adsorbed on MgO(100): Results from 257 nm photodissociation studies. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1992, 10, 2243-2247.	2.1	12
53	The dynamics of laser-induced infrared multiphoton isomerization in substituted cyclobutenes-butadienes. Journal of Chemical Physics, 1982, 77, 3500-3507.	3.0	11
54	Reactions of Fe(CO) ₃ and Fe(CO) ₄ with C ₂ Cl ₄ in the Gas Phase Monitored by Transient Infrared Spectroscopy: A Formation of Fe(CO) ₄ (C ₂ Cl ₄), Fe(CO) ₃ (C ₂ Cl ₄) ₂ , and Novel Chloride Complexes Resulting from the Oxidative Addition of C ₂ Cl ₄ . Journal of Physical Chemistry A, 2000, 104, 8011-8026.	2.5	11

#	ARTICLE	IF	CITATIONS
55	A Density Functional Theory Study of σ -Acyl Bonding in Fe and Mn Carbonyl Complexes. Journal of Physical Chemistry A, 2002, 106, 11782-11790.	2.5	11
56	The Isolated Binary Collision Picture of Vibrational Energy Transfer Processes in Condensed Phases. Israel Journal of Chemistry, 1989, 29, 487-496.	2.3	9
57	Resonance enhanced multiphoton ionization/time-of-flight measurements of the velocity and internal energy content of thermal and photochemical methyl radical sources. Review of Scientific Instruments, 1997, 68, 2031-2036.	1.3	9
58	Mechanistic and Adsorption Studies of Relevance to Photocatalysts on Titanium Grafted Mesoporous Silicalites. Catalysis Letters, 2011, 141, 1057-1066.	2.6	9
59	Catalyst Deactivation by Carbon Deposition: The Remarkable Case of Nickel Confined by Atomic Layer Deposition. ChemCatChem, 2021, 13, 2988-3000.	3.7	8
60	An information theoretic derivation of population distributions for vibrational states in laser excited systems. Journal of Chemical Physics, 1977, 66, 1740-1743.	3.0	7
61	Kinetic Isoconversion Loop Catalysis: A Reactor Operation Mode To Investigate Slow Catalyst Deactivation Processes, with Ni/Al ₂ O ₃ for the Dry Reforming of Methane. Industrial & Engineering Chemistry Research, 2019, 58, 2481-2491.	3.7	7
62	Effect of Deposition Temperature on the Mobility of Matrix-Isolated Species: HBr in Xenon. The Journal of Physical Chemistry, 1996, 100, 18848-18851.	2.9	6
63	Molecular-Level Insight into the Hydroxylated Monomeric VO ₂ (H ₂ O) and Its Adsorption of Methanol. Journal of Physical Chemistry C, 2019, 123, 27704-27711.	3.1	6
64	A complete determination of vibrational energy transfer pathways in CH ₂ D ₂ for states below 3000 cm ⁻¹ : A laser induced fluorescence study. Journal of Chemical Physics, 1981, 74, 342-360.	3.0	5
65	Relaxation of HCl in liquid xenon solution by vibration-vibration energy transfer. Journal of Chemical Physics, 1985, 82, 4381-4382.	3.0	5
66	The vibrational relaxation of DCl(v=1) in liquid xenon and HCl(v=1) in liquid krypton. Journal of Chemical Physics, 1986, 85, 204-210.	3.0	5
67	Vibrational energy transfer in solutions: From diffusive to impulsive binary collisions. Journal of Chemical Physics, 1988, 89, 5589-5597.	3.0	5
68	A laser induced fluorescence study of the ν_2 mode of CH ₃ F. Journal of Chemical Physics, 1976, 65, 3795-3796.	3.0	4
69	V-V energy transfer in the HCl-CO system: A comparison between measurements in the gas phase and in liquid xenon solution. Journal of Chemical Physics, 1987, 86, 3311-3317.	3.0	4
70	A Gas-Phase Study of the Kinetics of Formation of Fe(CO) ₃ DMB, Fe(CO) ₃ (DMB) ₂ , and Fe(CO) ₄ DMB: The Bond Dissociation Enthalpy for Fe(CO) ₃ (DMB) ₂ (DMB = 3,3-dimethyl-1-butene). Journal of Physical Chemistry A, 2001, 105, 5410-5419.	2.5	3
71	An Experimental Determination of the Cr-DMB (DMB = 3,3-Dimethyl-1-butene) Bond Energy in Cr(CO) ₅ (DMB): Effects of Alkyl Substitution on Chromium Olefin Bond Energies in Cr(CO) ₅ (olefin) Complexes. Journal of Physical Chemistry A, 2002, 106, 4651-4660.	2.5	3
72	Mechanistic Studies of the Oxidation of Cyclohexene to 2-Cyclohexen-1-one over ALD Prepared Titania Supported Vanadia. Journal of Physical Chemistry C, 2020, 124, 11844-11862.	3.1	3

#	ARTICLE	IF	CITATIONS
73	NO ₂ Reduction with Nitromethane over Ag/Y: A Catalyst with High Activity over a Wide Temperature Range. <i>Catalysis Letters</i> , 2007, 118, 173-179.	2.6	2
74	Photo-Initiated Reduction of CO ₂ by H ₂ on Silica Surface. <i>ChemSusChem</i> , 2018, 11, 1163-1168.	6.8	2
75	The <i>JPC</i> Periodic Table. <i>Journal of Physical Chemistry A</i> , 2019, 123, 5837-5848.	2.5	2
76	The <i>JPC</i> Periodic Table. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 4051-4062.	4.6	2
77	Interfacial Unit-Dependent Catalytic Activity for CO Oxidation over Cerium Oxysulfate Cluster Assemblies. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 33515-33524.	8.0	2
78	Coordinatively Unsaturated Metal Carbonyls in the Gas Phase via Time-Resolved Infrared Spectroscopy. <i>ACS Symposium Series</i> , 1987, , 81-98.	0.5	1
79	The <i>JPC</i> Periodic Table. <i>Journal of Physical Chemistry B</i> , 2019, 123, 5973-5984.	2.6	1
80	The <i>JPC</i> Periodic Table. <i>Journal of Physical Chemistry C</i> , 2019, 123, 17063-17074.	3.1	1
81	Photo-Initiated Reduction of CO ₂ by H ₂ on Silica Surface. <i>ChemSusChem</i> , 2018, 11, 1135-1135.	6.8	0