Eric Weitz

List of Publications by Year
in descending order

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	Coking Can Enhance Product Yields in the Dry Reforming of Methane. ACS Catalysis, 2022, 12, 8352-8362.	11.2	34
2	Interfacial Unit-Dependent Catalytic Activity for CO Oxidation over Cerium Oxysulfate Cluster Assemblies. ACS Applied Materials & Interfaces, 2022, 14, 33515-33524.	8.0	2
3	Catalyst Deactivation by Carbon Deposition: The Remarkable Case of Nickel Confined by Atomic Layer Deposition. ChemCatChem, 2021, 13, 2988-3000.	3.7	8
4	Identifying Boron Active Sites for the Oxidative Dehydrogenation of Propane. ACS Catalysis, 2021, 11, 9370-9376.	11.2	27
5	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
6	The JPC Periodic Table. Journal of Physical Chemistry A, 2019, 123, 5837-5848.	2.5	2
7	The JPC Periodic Table. Journal of Physical Chemistry B, 2019, 123, 5973-5984.	2.6	1
8	The JPC Periodic Table. Journal of Physical Chemistry C, 2019, 123, 17063-17074.	3.1	1
9	The JPC Periodic Table. Journal of Physical Chemistry Letters, 2019, 10, 4051-4062.	4.6	2
10	Molecular-Level Insight into the Hydroxylated Monomeric VO_x/Î¸-Al₂O₃(010) and Its Adsorption of Methanol. Journal of Physical Chemistry C, 2019, 123, 27704-27711.	3.1	6
11	Kinetic Isoconversion Loop Catalysis: A Reactor Operation Mode To Investigate Slow Catalyst Deactivation Processes, with Ni/Al2O3for the Dry Reforming of Methane. Industrial & Engineering Chemistry Research, 2019, 58, 2481-2491.	3.7	7
12	Photo-Initiated Reduction of CO2 by H2 on Silica Surface. ChemSusChem, 2018, 11, 1135-1135.	6.8	0
13	Photoâ€Initiated Reduction of CO 2 by H 2 on Silica Surface. ChemSusChem, 2018, 11, 1163-1168.	6.8	2
14	In-situ IR spectroscopy as a probe of oxidation/reduction of Ce in nanostructured CeO2. Applied Surface Science, 2018, 445, 548-554.	6.1	16
15	Methanol Oxidation to Formate on ALD-Prepared VO_x/Î¸-Al₂O₃ Catalysts: A Mechanistic Study. Journal of Physical Chemistry C, 2017, 121, 26794-26805.	3.1	17
16	Highly Efficient Activation, Regeneration, and Active Site Identification of Oxide-Based Olefin Metathesis Catalysts. ACS Catalysis, 2016, 6, 5740-5746.	11.2	71
17	Probing Water and CO2 Interactions at the Surface of Collapsed Titania Nanotubes Using IR Spectroscopy. Molecules, 2015, 20, 15469-15487.	3.8	19
18	Modification of acid sites in ZSM-5 by ion-exchange: An in-situ FTIR study. Applied Surface Science, 2014, 316, 405-415.	6.1	71

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19	Photoinduced Reactions of Surface-Bound Species on Titania Nanotubes and Platinized Titania Nanotubes: An in Situ FTIR Study. Journal of Physical Chemistry C, 2013, 117, 20643-20655.	3.1	71
20	An in Situ NMR Study of the Mechanism for the Catalytic Conversion of Fructose to 5-Hydroxymethylfurfural and then to Levulinic Acid Using ¹³C Labeled <scp>d</scp>-Fructose. ACS Catalysis, 2012, 2, 1211-1218.	11.2	138
21	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
22	FTIR Study of CO₂ Adsorption on Amine-Grafted SBA-15: Elucidation of Adsorbed Species. Journal of Physical Chemistry C, 2011, 115, 11540-11549.	3.1	285
23	Mechanistic and Adsorption Studies of Relevance to Photocatalysts on Titanium Grafted Mesoporous Silicalites. Catalysis Letters, 2011, 141, 1057-1066.	2.6	9
24	Vibrational Energy Flow in the Ground Electronic States of Polyatomic Molecules. Advances in Chemical Physics, 2007, , 185-235.	0.3	19
25	NO2 Reduction with Nitromethane over Ag/Y: A Catalyst with High Activity over a Wide Temperature Range. Catalysis Letters, 2007, 118, 173-179.	2.6	2
26	An acid catalyzed step in the catalytic reduction of NO x to N2. Catalysis Letters, 2006, 112, 129-132.	2.6	34
27	Density Functional Study of Fe(CO)3 and Fe(CO)3(L) with H2 and C2H4, where L = H2 or C2H4:â€‰ Reactions Relevant to Olefin Hydrogenation. Organometallics, 2005, 24, 4714-4720.	2.3	25
28	Low Activation Energy Pathway for the Catalyzed Reduction of Nitrogen Oxides to N2 by Ammonia. Catalysis Letters, 2004, 98, 5-9.	2.6	32
29	NOxReduction from Diesel Emissions over a Nontransition Metal Zeolite Catalyst:Â A Mechanistic Study Using FTIR Spectroscopy. Journal of Physical Chemistry B, 2004, 108, 5386-5404.	2.6	131
30	Density Functional Theory Study of Fe(CO)3(Î·2-C3H6), HFe(CO)3(Î·3-C3H5), and the Ironâ^'Allyl Bond Energy. Organometallics, 2003, 22, 2652-2659.	2.3	28
31	Photocatalytic Transformation of 2,4,5-Trichlorophenol on TiO2under Sub-Band-Gap Illumination. Langmuir, 2003, 19, 1402-1409.	3.5	118
32	A Density Functional Theory Study of Î·2 Acyl Bonding in Fe and Mn Carbonyl Complexes. Journal of Physical Chemistry A, 2002, 106, 11782-11790.	2.5	11
33	An Experimental Determination of the Crâ^'DMB (DMB = 3,3-Dimethyl-1-butene) Bond Energy in Cr(CO)5(DMB):Â Effects of Alkyl Substitution on Chromiumâ^'Olefin Bond Energies in Cr(CO)5(olefin) Complexes. Journal of Physical Chemistry A, 2002, 106, 4651-4660.	2.5	3
34	A Gas-Phase Study of the Kinetics of Formation of Fe(CO)3DMB, Fe(CO)3(DMB)2, and Fe(CO)4DMB:Â 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
35	Bond Energies and Bonding Interactions in Fe(CO)5-n(N2)n(n= 0â^'5) and Cr(CO)6-n(N2)n(n= 0â^'6) Complexes:Â Density Functional Theory Calculations and Comparisons to Experimental Data. Journal of Physical Chemistry A, 2001, 105, 3773-3787.	2.5	28
36	Real Time Infrared Spectroscopic Probe of the Reactions of Fe(CO)3and Fe(CO)4with N2in the Gas Phase. Journal of Physical Chemistry A, 2001, 105, 3765-3772.	2.5	22

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37	Bonding Interactions in Olefin (C2X4, X = H, F, Cl, Br, I, CN) Iron Tetracarbonyl Complexes:Â Role of the Deformation Energy in Bonding and Reactivity. Journal of Physical Chemistry A, 2001, 105, 8077-8085.	2.5	38
38	Reactions of Fe(CO)3and Fe(CO)4with C2Cl4in the Gas Phase Monitored by Transient Infrared Spectroscopy:Â Formation of Fe(CO)4(C2Cl4), Fe(CO)3(C2Cl4)2, and Novel Chloride Complexes Resulting from the Oxidative Addition of C2Cl4. Journal of Physical Chemistry A, 2000, 104, 8011-8026.	2.5	11
39	Photochemistry in CH3I Adlayers on TiO2(110) Studied with Postirradiation Thermal Desorption. Langmuir, 1998, 14, 4156-4161.	3.5	20
40	UV-induced desorption of CH3X (X=I and Br)/TiO2(110). Journal of Chemical Physics, 1998, 108, 5080-5088.	3.0	23
41	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
42	Gas Phase Study of the Kinetics of Formation and Dissociation of Fe(CO)4L and Fe(CO)3L2(L = C2H4and) Tj ETQq0 0 0 rgBT /Overlock 1	2.5	21
43	A Theoretical Study of the Reaction H2+ Fe(CO)4â‡Œ H2Fe(CO)4. Journal of Physical Chemistry A, 1997, 101, 2358-2363.	2.5	42
44	Photoreactions of methyl iodide multilayers on the TiO2(110) surface. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1996, 14, 1557-1561.	2.1	14
45	Effect of Deposition Temperature on the Mobility of Matrix-Isolated Species:Â HBr in Xenon. The Journal of Physical Chemistry, 1996, 100, 18848-18851.	2.9	6
46	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
47	Photochemistry and reaction dynamics of HBr in xenon matrices: Photodissociation of HBr and production of Br atoms. Journal of Chemical Physics, 1995, 102, 4112-4122.	3.0	26
48	Ultraviolet photodissociation dynamics of methyl iodide at 333 nm. Journal of Chemical Physics, 1994, 101, 3787-3791.	3.0	44
49	The adsorption and photochemistry of CD3I on TiO2(110). Journal of Chemical Physics, 1994, 100, 4615-4625.	3.0	35
50	Wavelength dependence of the photodissociation and photodesorption of CD3I adsorbed on the TiO2(110) surface. Journal of Chemical Physics, 1994, 100, 4626-4636.	3.0	31
51	Vibrational relaxation of HCl as a function of xenon density: The role of HClâ€“Xe complexes. Journal of Chemical Physics, 1993, 98, 6947-6957.	3.0	18
52	Photodepletion and dynamics of oxygen atoms in xenon matrices. Journal of Chemical Physics, 1993, 99, 8628-8636.	3.0	15
53	Photoproduction and dynamics of oxygen atoms in xenon matrices. Journal of Chemical Physics, 1993, 99, 1004-1012.	3.0	19
54	Orientation of methyl iodide adsorbed on MgO(100): Results from 257â€nm photodissociation studies. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1992, 10, 2243-2247.	2.1	12

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55	Photodissociation dynamics of CH3I adsorbed on MgO(100): Theory and experiment. Journal of Chemical Physics, 1992, 97, 5168-5176.	3.0	34
56	257 nm photoinduced chemistry of methyl iodide adsorbed on MgO(100). Journal of Chemical Physics, 1992, 96, 9221-9232.	3.0	46
57	O(3P) atom lifetimes and mobilities in xenon matrices. Journal of Chemical Physics, 1992, 96, 2846-2855.	3.0	42
58	Pulsed laserâ€induced electron and positiveâ€ion emission from Cu(100) under ultrahighâ€vacuum conditions near the threshold for surface damage. Journal of Applied Physics, 1991, 69, 3472-3479.	2.5	20
59	A photofragment spectrometer for studying photodissociation of molecules adsorbed on surfaces: The 257â€nm photolysis of CD3I on MgO(100). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1991, 9, 1820-1822.	2.1	24
60	Overtone spectroscopy of propyne and propyneâ€d1. Journal of Chemical Physics, 1989, 90, 615-627.	3.0	28
61	The Isolated Binary Collision Picture of Vibrational Energy Transfer Processes in Condensed Phases. Israel Journal of Chemistry, 1989, 29, 487-496.	2.3	9
62	Vibrational energy transfer in solutions: From diffusive to impulsive binary collisions. Journal of Chemical Physics, 1988, 89, 5589-5597.	3.0	5
63	Diode laser probes of vinyl radical kinetics: The reaction of C2H3 with HCl and DCl. Journal of Chemical Physics, 1988, 88, 1608-1616.	3.0	24
64	Vâ€“V energy transfer in the HClâ€“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
65	Coordinatively Unsaturated Metal Carbonyls in the Gas Phase via Time-Resolved Infrared Spectroscopy. ACS Symposium Series, 1987, , 81-98.	0.5	1
66	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
67	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
68	Vibrational energy transfer and migration processes in matrix isolated CH3F. Journal of Chemical Physics, 1986, 85, 5593-5610.	3.0	14
69	Relaxation of HCl in liquid xenon solution by vibrationâ€“vibration energy transfer. Journal of Chemical Physics, 1985, 82, 4381-4382.	3.0	5
70	Infrared spectra and band strengths of the fundamental and first overtone of HCl and DCl in liquid xenon solutions. Journal of Chemical Physics, 1985, 83, 927-933.	3.0	28
71	A study of the dynamics of UV laser photolysis of NOCl and NOBr. Journal of Chemical Physics, 1983, 78, 757-766.	3.0	36
72	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

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73	Pulsed laser induced thermal desorption of CO from copper surfaces. Journal of Chemical Physics, 1983, 79, 5200-5202.	3.0	88
74	A spectroscopic study of CH3F isolated in rare gas matrices. Journal of Chemical Physics, 1982, 76, 5796-5811.	3.0	30
75	Selfâ€trapping of CO2 0001 emission: A theoretical and experimental investigation. Journal of Chemical Physics, 1982, 76, 3839-3841.	3.0	19
76	The dynamics of laserâ€induced infrared multiphoton isomerization in substituted cyclobutenesâ€“butadienes. Journal of Chemical Physics, 1982, 77, 3500-3507.	3.0	11
77	A complete determination of vibrational energy transfer pathways in CH2D2 for states below 3000 cmâ^'1: A laser induced fluorescence study. Journal of Chemical Physics, 1981, 74, 342-360.	3.0	5
78	Mode specific vibrational energy transfer in CH3Fâ€“N2O mixtures. Journal of Chemical Physics, 1981, 74, 2879-2887.	3.0	14
79	Rare gas dependence of vibrationâ€“vibration energy transfer processes: A diagnostic technique. Applications to CH2D2 and CH3F. Journal of Chemical Physics, 1979, 71, 4349-4368.	3.0	28
80	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
81	A laser induced fluorescence study of the Î½3 mode of CH3F. Journal of Chemical Physics, 1976, 65, 3795-3796.	3.0	4