Moti Herskowitz

List of Publications by Year in Descending Order

125 papers	3,377 citations	34 h-index	52 g-index
139 ext. papers	3,670 ext. citations	5.5 avg, IF	5.07 L-index

#	Paper	IF	Citations
125	Chemical looping reaction of methane with oxygen from La0.8Sr0.2FeO3-δ and La0.8Sr0.2FeO3-δ -Fe2O3 systems to syngas. *Discover Chemical Engineering*, **2022**, 2, 1		
124	Core-Shell FeO@LaSrFeO Material for Catalytic Oxidations: Coverage of Iron Oxide Core, Oxygen Storage Capacity and Reactivity of Surface Oxygens. *Materials*, **2021**, 14,	3.5	2
123	Effect of surface acidity-basicity balance in modified ZnxZryOz catalyst on its performance in the conversion of hydrous ethanol to hydrocarbons. *Journal of Industrial and Engineering Chemistry*, **2021**, 95, 156-169	6.3	2
122	Eco-Friendly and Sustainable Process for Converting Hydrous Bioethanol to Butanol. *Catalysts*, **2021**, 11, 498	4	2
121	Utilization of CO-rich waste gases from the steel industry for production of renewable liquid fuels. *Energy Conversion and Management*, **2021**, 240, 114233	10.6	3
120	Techno-economic analysis of a sustainable process for converting CO2 and H2O to feedstock for fuels and chemicals. *Sustainable Energy and Fuels*, **2021**, 5, 486-500	5.8	4
119	Reverse Water Gas Shift by Chemical Looping with Iron-Substituted Hexaaluminate Catalysts. *Catalysts*, **2020**, 10, 1082	4	6
118	Electrospun Fe-Al-O Nanobelts for Selective CO Hydrogenation to Light Olefins. *ACS Applied Materials & Interfaces*, **2020**, 12, 24855-24867	9.5	13
117	Electrospun nanofibers with surface oriented lamellar patterns and their potential applications. *Nanoscale*, **2020**, 12, 12993-13000	7.7	3
116	Conversion of hydrous bio-ethanol on ZnxZryOz catalyst to renewable liquid chemicals and additives to gasoline. *Fuel Processing Technology*, **2020**, 198, 106246	7.2	4
115	Effect of Surface Chemistry and Crystallographic Parameters of TiO2 Anatase Nanocrystals on Photocatalytic Degradation of Bisphenol A. *Catalysts*, **2019**, 9, 447	4	4
114	Effect of salt type on the particle size of LaMn1-xFexO3 (0.1≤x≤0.5) synthesized in molten chlorides. *Materials Chemistry and Physics*, **2019**, 231, 181-187	4.4	2
113	Performance of Reverse Water Gas Shift on Coprecipitated and C-Templated BaFe-Hexaaluminate: The Effect of Fe Loading, Texture, and Promotion with K. *ChemCatChem*, **2018**, 10, 3795-3805	5.2	7
112	Relationship of Crystals Shape, Aggregation Mode and Surface Purity in Catalytic Wet Peroxide Oxidation of Phenol in Dark with Titania Anatase Nanocrystals. *Catalysis Letters*, **2018**, 148, 3524-3533	2.8	2
111	Effect of potassium on the active phases of Fe catalysts for carbon dioxide conversion to liquid fuels through hydrogenation. *Journal of Catalysis*, **2017**, 348, 29-39	7.3	81
110	Simulation of novel process of CO 2 conversion to liquid fuels. *Journal of CO2 Utilization*, **2017**, 17, 284-289	7.9	23
109	CO2 hydrogenation to higher hydrocarbons on K/FeAlO spinel catalysts promoted with Si, Ti, Zr, Hf, Mn and Ce. *Catalysis Science and Technology*, **2017**, 7, 4048-4063	5.5	15

108	Conversion of CO2, CO, and H2 in CO2 Hydrogenation to Fungible Liquid Fuels on Fe-Based Catalysts. *Industrial & Engineering Chemistry Research*, **2017**, 56, 13334-13355	3.9	42
107	Molten salt synthesis of LaCoO3 perovskite. *Journal of Materials Science*, **2017**, 52, 11383-11390	4.3	8
106	Novel bifunctional catalysts based on crystalline multi-oxide matrices containing iron ions for CO2 hydrogenation to liquid fuels and chemicals. *Faraday Discussions*, **2016**, 188, 545-63	3.6	24
105	From macroalgae to liquid fuel via waste-water remediation, hydrothermal upgrading, carbon dioxide hydrogenation and hydrotreating. *Energy and Environmental Science*, **2016**, 9, 1828-1840	35.4	49
104	Conversion of vegetable oils on Pt/Al2O3/SAPO-11 to diesel and jet fuels containing aromatics. *Fuel*, **2015**, 161, 287-294	7.1	76
103	Improvement of hydrothermal stability of Pt/SAPO-11 catalyst in hydrodeoxygenation□somerization□romatization of vegetable oil. *Journal of Catalysis*, **2015**, 332, 164-176	7.3	51
102	Novel process and catalytic materials for converting CO2 and H2 containing mixtures to liquid fuels and chemicals. *Faraday Discussions*, **2015**, 183, 197-215	3.6	28
101	CO2 reduction reactions: general discussion. *Faraday Discussions*, **2015**, 183, 261-90	3.6	4
100	Fixed-bed catalytic wet peroxide oxidation of phenol with titania and Au/titania catalysts in dark. *Catalysis Today*, **2015**, 241, 63-72	5.3	26
99	Hydroprocessing of soybean oil on nickel-phosphide supported catalysts. *Fuel*, **2015**, 139, 684-691	7.1	81
98	Homogeneous Tubular-Flow Process for Monoolein Preparation. *JAOCS, Journal of the American Oil ChemistskSociety*, **2015**, 92, 1525-1529	1.8	3
97	Sustainable production of green feed from carbon dioxide and hydrogen. *ChemSusChem*, **2014**, 7, 785-94	8.3	54
96	Grain boundaries in nanocrystalline catalytic materials as a source of surface chemical functionality. *Reviews in Chemical Engineering*, **2014**, 30,	5	10
95	Hierarchical Zeolitic Imidazolate Framework-8 Catalyst for Monoglyceride Synthesis. *ChemCatChem* , **2013**, 5, 3562-3566	5.2	69
94	Fe/SiO2 heterogeneous Fenton catalyst for continuous catalytic wet peroxide oxidation prepared in situ by grafting of iron released from LaFeO3. *Applied Catalysis B: Environmental*, **2013**, 138-139, 276-284	21.8	31
93	Grain boundaries at the surface of consolidated MgO nanocrystals and acid-base functionality. *Physical Chemistry Chemical Physics*, **2013**, 15, 14783-96	3.6	11
92	Synthesis of Monoglycerides by Esterification of Oleic Acid with Glycerol in Heterogeneous Catalytic Process Using Tin□rganic Framework Catalyst. *Catalysis Letters*, **2013**, 143, 356-363	2.8	41
91	Synthesis of LaMnO3 in molten chlorides: effect of preparation conditions. *Physical Chemistry Chemical Physics*, **2013**, 15, 10914-20	3.6	17

90	A commercially-viable, one-step process for production of green diesel from soybean oil on Pt/SAPO-11. *Fuel*, **2013**, 111, 157-164	7.1	57
89	Effect of preparation method and particle size on LaMnO3 performance in butane oxidation. *Catalysis Communications*, **2011**, 12, 1437-1441	3.2	27
88	Control of surface acidity and catalytic activity of Al2O3 by adjusting the nanocrystalline contact interface. *Journal of Catalysis*, **2011**, 282, 215-227	7.3	36
87	Density Functional Theory Study of Sulfur Adsorption at the (001) Surface of Metal-Rich Nickel Phosphides: Effect of the Ni/P Ratio. *Journal of Physical Chemistry C*, **2010**, 114, 13313-13321	3.8	24
86	Aerobic oxidation of benzylic alcohols with solid alkaline metal hydroxides. *Kinetics and Catalysis*, **2010**, 51, 63-68	1.5	9
85	Effect of SBA-15 microporosity on the inserted TiO2 crystal size determined by Raman spectroscopy. *Materials Chemistry and Physics*, **2010**, 122, 53-59	4.4	11
84	Magnetotransport properties of ferromagnetic LaMnO3+ nano-sized crystals. *Journal of Magnetism and Magnetic Materials*, **2010**, 322, 1311-1314	2.8	17
83	Grain boundary control in nanocrystalline MgO as a novel means for significantly enhancing surface basicity and catalytic activity. *Journal of Catalysis*, **2009**, 263, 196-204	7.3	46
82	Modeling and simulation of a smart catalytic converter combining NOx storage, ammonia production and SCR. *Chemical Engineering Journal*, **2009**, 155, 419-426	14.7	24
81	Ultradeep Hydrodesulfurization and Adsorptive Desulfurization of Diesel Fuel on Metal-Rich Nickel Phosphides. *Industrial & Engineering Chemistry Research*, **2009**, 48, 5239-5249	3.9	55
80	Ultradeep Adsorption Desulfurization of Gasoline with Ni/Al SiO2 Material Catalytically Facilitated by Ethanol. *Industrial & Engineering Chemistry Research*, **2008**, 47, 6904-6916	3.9	27
79	Surface and exchange-bias effects in compacted CaMnO3 nanoparticles. *Physical Review B*, **2008**, 77,	3.3	56
78	Pressure-induced suppression of ferromagnetic phase in LaCoO3 nanoparticles. *Journal of Non-Crystalline Solids*, **2008**, 354, 5204-5206	3.9	5
77	Size- and pressure-controlled ferromagnetism in LaCoO3 nanoparticles. *Physical Review B*, **2008**, 77,	3.3	40
76	Catalytic wet air oxidation of aniline with nanocasted Mn-Ce-oxide catalyst. *Environmental Science & Technology*, **2008**, 42, 5165-70	10.3	33
75	Magnetotransport in granular LaMnO3+ manganite with nano-sized particles. *Journal Physics D: Applied Physics*, **2008**, 41, 185001	3	28
74	Metastable diamagnetic response of 20nm La1 MnO3 particles. *Physical Review B*, **2008**, 77,	3.3	9
73	Effect of particle size on magnetic properties of nanoparticles. *Superlattices and Microstructures*, **2008**, 44, 476-482	2.8	10

72	Effect of silica wall microporosity on the state and performance of TiO2 nanocrystals in SBA-15 matrix. *Microporous and Mesoporous Materials*, **2008**, 116, 237-245	5.3	15
71	Low-temperature combustion of 2,4,6-trichlorophenol in catalytic wet oxidation with nanocasted Mn□e-oxide catalyst. *Journal of Catalysis*, **2007**, 247, 201-213	7.3	49
70	Kinetic experiments and modeling of NO oxidation and SCR of NOx with decane over Cu- and Fe-MFI catalysts. *Applied Catalysis B: Environmental*, **2007**, 70, 53-57	21.8	24
69	Application of Cs salt of 12-tungstophosphoric acid supported on SBA-15 mesoporous silica in NO x storage. *Topics in Catalysis*, **2007**, 42-43, 203-207	2.3	3
68	Magnetic properties of nanocrystalline La1□MnO3+□anganites: size effects. *Journal of Physics Condensed Matter*, **2007**, 19, 346210	1.8	37
67	Alumina Foam Coated with Nanostructured Chromia Aerogel:□Efficient Catalytic Material for Complete Combustion of Chlorinated VOC. *Industrial & Engineering Chemistry Research*, **2006**, 45, 7462-7469	3.9	17
66	Unexpected Performance of Solid Alkaline Metal Hydroxides in Liquid Phase Oxidation of 1-Phenylethanol. *Letters in Organic Chemistry*, **2006**, 3, 664-667	0.6	9
65	Size effect on SBA-15 microporosity. *Microporous and Mesoporous Materials*, **2006**, 93, 313-317	5.3	36
64	Combustion of chlorinated VOC on nanostructured chromia aerogel as catalyst and catalyst support. *Environmental Science & Technology*, **2005**, 39, 6845-50	10.3	65
63	Kinetic Experiments and Modeling of a Complex DeNOx System: Decane Selective Catalytic Reduction of NOx in the Gas Phase and over an Fe-MFI Type Zeolite Catalyst. *Industrial & Engineering Chemistry Research*, **2005**, 44, 4523-4533	3.9	6
62	Cesium salt of a heteropolyacid in nanotubular channels and on the external surface of SBA-15 crystals: preparation and performance as acidic catalysts. *Microporous and Mesoporous Materials*, **2005**, 80, 43-55	5.3	32
61	Dispersions of transition-metal-based phases in mesostructured silica matrixes: preparation of high-performance catalytic materials. *Comptes Rendus Chimie*, **2005**, 8, 679-691	2.7	27
60	Cerium incorporated ordered manganese oxide OMS-2 materials: Improved catalysts for wet oxidation of phenol compounds. *Applied Catalysis B: Environmental*, **2005**, 59, 91-98	21.8	95
59	Geometric and electronic factors in paraffin dehydrogenation on bimetallic platinum catalysts. *Reaction Kinetics and Catalysis Letters*, **2005**, 85, 341-345		3
58	The Sonochemical Insertion of Nanomaterials into Mesostructures. *Transactions of the Indian Ceramic Society*, **2004**, 63, 137-144	1.8	5
57	High surface area chromia aerogel efficient catalyst and catalyst support for ethylacetate combustion. *Applied Catalysis B: Environmental*, **2004**, 47, 111-126	21.8	71
56	NO oxidation kinetics on iron zeolites: influence of framework type and iron speciation. *Topics in Catalysis*, **2004**, 30/31, 333-339	2.3	19
55	Catalytic Wet Oxidation of Phenol with Mn□e-Based Oxide Catalysts: Impact of Reactive Adsorption on TOC Removal. *Industrial & Engineering Chemistry Research*, **2004**, 43, 5089-5097	3.9	40

54	Efficient immobilization of 12-tungstophosphoric acid catalyst at the surface of silica support grafted with alumina. *Catalysis Communications*, **2004**, 5, 327-331	3.2	13
53	High loading of short W(Mo)S2 slabs inside the nanotubes of SBA-15. Promotion with Ni(Co) and performance in hydrodesulfurization and hydrogenation.. *Studies in Surface Science and Catalysis*, **2003**, 146, 721-724	1.8	10
52	High loading of short WS2 slabs inside SBA-15: promotion with nickel and performance in hydrodesulfurization and hydrogenation. *Journal of Catalysis*, **2003**, 213, 163-175	7.3	152
51	Micro-level instability of bubble flows in packings. *Chemical Engineering Science*, **2003**, 58, 1631-1640	4.4	1
50	Hydrodearomatization of petroleum fuel fractions on silica supported Ni□W sulphide with increased stacking number of the WS2 phase?. *Fuel*, **2003**, 82, 633-639	7.1	29
49	Heterogenization of Rh-MeDuPHOS by occlusion in polyvinyl alcohol films. *Tetrahedron: Asymmetry*, **2002**, 13, 465-468		12
48	Dehydrogenation of Neohexane to Neohexene on Platinum Polymetallic Catalysts. *Industrial & Engineering Chemistry Research*, **2002**, 41, 5949-5951	3.9	9
47	Aqueous enantioselective hydrogenation of methyl 2-acetamidoacrylate with Rh-MeDuPHOS occluded in PDMS. *Chemical Communications*, **2002**, 388-9	5.8	35
46	Novel nitrogen containing heterogeneous catalysts for oxidative dehydrogenation of light paraffins. *Catalysis Communications*, **2002**, 3, 327-333	3.2	7
45	The role and stability of Li 2 O 2 phase in supported LiCl catalyst in oxidative dehydrogenation of n -butane. *Journal of Molecular Catalysis A*, **2001**, 176, 127-139		12
44	Mesoporous alumina catalytic material prepared by grafting wide-pore MCM-41 with an alumina multilayer. *Microporous and Mesoporous Materials*, **2001**, 49, 65-81	5.3	68
43	Enantioselective hydrogenation of methyl acetoacetate catalyzed by nickel supported on activated carbon or graphite. *Applied Catalysis A: General*, **2001**, 208, 91-98	5.1	20
42	Ammoxidation of p-cresol to p-hydroxybenzonitrile High-performance boria-phosphoria supported catalysts. *Applied Catalysis A: General*, **2001**, 208, 21-34	5.1	9
41	Dehydrogenation of propane on modified Pt/□alumina Performance in hydrogen and steam environment. *Applied Catalysis A: General*, **2001**, 208, 185-191	5.1	52
40	Two-Phase Flow Filtrating in Packed Beds. *Chemie-Ingenieur-Technik*, **2001**, 73, 746-746	0.8	
39	Using sonochemical methods for the preparation of mesoporous materials and for the deposition of catalysts into the mesopores. *Chemistry - A European Journal*, **2001**, 7, 4547-52	4.8	66
38	Ultrasonically Controlled Deposition□Precipitation. *Journal of Catalysis*, **2001**, 201, 22-36	7.3	142
37	Selective propane dehydrogenation to propylene on novel bimetallic catalysts. *Catalysis Communications*, **2001**, 2, 179-185	3.2	28

36	A novel system consisting of Rh-DuPHOS and ionic liquid for asymmetric hydrogenations. *Chemical Communications*, **2001**, 2314-5	5.8	61
35	A comparative study of an MCM-41 anchored quaternary ammonium chloride/SnCl4 catalyst and its silica gel analogue. *Chemical Communications*, **2001**, 992-993	5.8	18
34	Regeneration of Poisoned Nickel Catalyst by Supercritical CO2 Extraction. *Industrial & Engineering Chemistry Research*, **2001**, 40, 1589-1590	3.9	25
33	Attenuation of ultrasound in porous media with dispersed microbubbles. *Ultrasonics*, **2000**, 38, 767-9	3.5	8
32	Supported chromia catalysts for oxidation of organic compounds. *Applied Catalysis B: Environmental* , **2000**, 27, 73-85	21.8	80
31	Wetting stability of Si-MCM-41 mesoporous material in neutral, acidic and basic aqueous solutions. *Microporous and Mesoporous Materials*, **1999**, 33, 149-163	5.3	157
30	Deep desulfurization of diesel fuels: kinetic modeling of model compounds in trickle-bed. *Catalysis Today*, **1999**, 48, 41-48	5.3	39
29	Colloidal Nanocrystals of Zeolite Stabilized in Alumina Matrix. *Chemistry of Materials*, **1999**, 11, 2030-2036	7.6	48
28	Effects of gaseous and liquid components on rate of deep desulfurization of heavy atmospheric gas oil. *Studies in Surface Science and Catalysis*, **1999**, 127, 393-396	1.8	
27	Medium severity hydrotreating and hydrocracking of Israeli shale oil II. Testing of novel catalyst systems in a trickle bed reactor. *Fuel*, **1998**, 77, 3-13	7.1	24
26	Medium severity hydrotreating and hydrocracking of Israeli shale oil. *Fuel*, **1998**, 77, 1589-1597	7.1	6
25	Metal particle structure: Contrasting the influences of carbons and refractory oxides. *Applied Catalysis A: General*, **1998**, 173, 273-287	5.1	14
24	Oxidative conversion of LPG to olefins with mixed oxide catalysts: Surface chemistry and reactions network. *Studies in Surface Science and Catalysis*, **1997**, 315-326	1.8	17
23	Dehydrogenation of methoxyisopropanol to methoxyacetone on supported bimetallic Cu-Zn catalysts. *Studies in Surface Science and Catalysis*, **1997**, 407-414	1.8	
22	Tail-selective hydrocracking of heavy gas oil in diesel production. *Studies in Surface Science and Catalysis*, **1997**, 371-378	1.8	1
21	Selectivity in heterogeneous catalytic processes. *Catalysis Today*, **1997**, 36, 497-510	5.3	27
20	Hydrodesulfurization of Methyl-Substituted Dibenzothiophenes:Fundamental Study of Routes to Deep Desulfurization. *Journal of Catalysis*, **1996**, 159, 236-245	7.3	105
19	Deep hydrodesulfurization of atmospheric gas oil; Effects of operating conditions and modelling by artificial neural network techniques. *Fuel*, **1996**, 75, 907-911	7.1	9

18	Deep desulfurization of heavy atmospheric gas oil with CoMoAl catalysts effect of sulfur adsorption. *Applied Catalysis A: General*, **1995**, 122, 99-110	5.1	20
17	Silica-supported crystals of ZSM-5 zeolite: effect of zeolite loading. *Studies in Surface Science and Catalysis*, **1995**, 357-362	1.8	3
16	Deactivation of a multimetal supported catalyst for anilineN-alkylation with alcohol. *Applied Catalysis A: General*, **1994**, 118, 139-152	5.1	6
15	Silica-supported small crystals of ZSM-5 zeolite. *Applied Catalysis A: General*, **1994**, 115, L7-L14	5.1	17
14	Shape Selectivity of Pt On Carbon Fibers Catalysts. *Studies in Surface Science and Catalysis*, **1993**, 78, 353-359	1.8	4
13	Hydrogenation of Benzaldehyde to Benzyl Alcohol in a Slurry and Fixed-Bed Reactor. *Studies in Surface Science and Catalysis*, **1991**, 105-112	1.8	5
12	O2(1) generation in a bubble column reactor for chemically pumped iodine lasers: Experiment and modeling. *Journal of Applied Physics*, **1991**, 70, 5211-5220	2.5	11
11	A GENERAL RUNAWAY CRITERION FOR FIXED-BED REACTORS. *Chemical Engineering Communications*, **1990**, 96, 291-302	2.2	
10	Accurate one-dimensional fixed-bed reactor model based on asymptotic analysis. *AICHE Journal*, **1988**, 34, 1367-1372	3.6	5
9	A Simple Approach to Highly Sensitive Tubular Reactors. *SIAM Journal on Applied Mathematics*, **1988**, 48, 1083-1101	1.8	22
8	Runaway in Highly Sensitive Tubular Reactors. *SIAM Journal on Applied Mathematics*, **1988**, 48, 1437-1450	1.8	13
7	Equilibrium Temperature Profiles in Highly Sensitive Tubular Reactors. *SIAM Journal on Applied Mathematics*, **1987**, 47, 1287-1305	1.8	9
6	Liquid-solid mass transfer in a trickle-bed reactor measured by means of a catalytic reaction. *Chemical Engineering Science*, **1985**, 40, 631-634	4.4	6
5	Modelling of a trickle-bed reactor the hydrogenation of xylose to xylitol. *Chemical Engineering Science*, **1985**, 40, 1309-1311	4.4	23
4	Vapor-liquid equilibrium of aqueous crown ether solutions. *Fluid Phase Equilibria*, **1984**, 17, 135-138	2.5	4
3	CO oxidation on Pt supported catalysts. Kinetics and multiple steady states. *Canadian Journal of Chemical Engineering*, **1983**, 61, 194-199	2.3	27
2	Effect of metal dispersion in CO oxidation on supported Pt catalysts. *Journal of Catalysis*, **1982**, 74, 408-410	7.3	31
1	Hydrogenation of CO2 on Fe-Based Catalysts: Preferred Route to Renewable Liquid Fuels. *Industrial & Engineering Chemistry Research*,	3.9	1