

Steven L Bernasek

List of Publications by Year in descending order

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58
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361296

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#	ARTICLE	IF	CITATIONS
1	Impact of Biodiesel-Based Phosphorus and Sulfur on Copper Speciation of Cu-SSZ-13 Catalysts: XAFS Scanning during H ₂ -TPR. <i>Journal of Physical Chemistry C</i> , 2022, 126, 3385-3396.	1.5	7
2	Computational Study of Noble Metal CHA Zeolites: NO Adsorption and Sulfur Resistance. <i>Journal of Physical Chemistry C</i> , 2022, 126, 7022-7035.	1.5	5
3	Differences in oxidation-reduction kinetics and mobility of Cu species in fresh and SO ₂ -poisoned Cu-SSZ-13 catalysts. <i>Applied Catalysis B: Environmental</i> , 2021, 284, 119756.	10.8	20
4	Insights into sulfur poisoning and regeneration of Cu-SSZ-13 catalysts: in situ Cu and S K-edge XAS studies. <i>Catalysis Science and Technology</i> , 2021, 11, 5619-5632.	2.1	2
5	First-Principles Calculations of Condition-Dependent Cu/Fe Speciation in Sulfur-Poisoned Cu- and Fe-SSZ-13 Catalysts. <i>Journal of Physical Chemistry C</i> , 2021, 125, 4632-4645.	1.5	16
6	Regeneration of sulfur-poisoned Cu-SSZ-13 catalysts: Copper speciation and catalytic performance evaluation. <i>Applied Catalysis B: Environmental</i> , 2021, 299, 120626.	10.8	21
7	Probing the Reaction Mechanism in CO ₂ Hydrogenation on Bimetallic Ni/Cu(100) with Near-Ambient Pressure X-Ray Photoelectron Spectroscopy. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 2548-2554.	4.0	9
8	In-situ studies of oxidation/reduction of copper in Cu-CHA SCR catalysts: Comparison of fresh and SO ₂ -poisoned catalysts. <i>Applied Catalysis B: Environmental</i> , 2020, 269, 118722.	10.8	42
9	Probing the Oxidation/Reduction Dynamics of Fresh and P-, Na-, and K-Contaminated Pt/Pd/Al ₂ O ₃ Diesel Oxidation Catalysts by STEM, TPR, and in Situ XANES. <i>Journal of Physical Chemistry C</i> , 2020, 124, 2945-2952.	1.5	10
10	Differential charging analysis of Nb-TiO ₂ thin films on SiO ₂ substrates. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2019, 37, 051101.	0.9	0
11	Synthesis of a surface mounted metal-organic framework on gold using a Au-carbene self-assembled monolayer linkage. <i>Materials Chemistry Frontiers</i> , 2019, 3, 636-639.	3.2	8
12	In-situ characterization by Near-Ambient Pressure XPS of the catalytically active phase of Pt/Al ₂ O ₃ during NO and CO oxidation. <i>Applied Catalysis B: Environmental</i> , 2018, 220, 506-511.	10.8	46
13	Interpretation on Nanoporous Network Structure in Rice Husk Silica Layer: A Graph Model. <i>ACS Omega</i> , 2018, 3, 11544-11549.	1.6	1
14	Two-Dimensional versus Three-Dimensional Self-Assembly of a Series of 5-Alkoxyisophthalic Acids. <i>Langmuir</i> , 2018, 34, 10739-10747.	1.6	3
15	Catalytic Intermediates of CO ₂ Hydrogenation on Cu(111) Probed by In Operando Near-Ambient Pressure Technique. <i>Chemistry - A European Journal</i> , 2018, 24, 16097-16103.	1.7	20
16	Mechanism and activity of CO oxidation on (001) and (110) surfaces of spinel Co ₃ O ₄ , NiCo ₂ O ₄ and NiFe ₂ O ₄ : A DFT study. <i>Surface Science</i> , 2018, 677, 278-283.	0.8	18
17	Oxygen Deficiency and Reactivity of Spinel NiCo ₂ O ₄ (001) Surfaces. <i>Journal of Physical Chemistry C</i> , 2017, 121, 3929-3937.	1.5	39
18	Useful X-ray Photoelectron Spectroscopy-Based Chemical Tool: Differential Charging Studies of Complex Composite Materials. <i>Chemistry of Materials</i> , 2017, 29, 4162-4166.	3.2	10

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19	Formation, Electronic Structure, and Defects of Ni Substituted Spinel Cobalt Oxide: a DFT+U Study. <i>Journal of Physical Chemistry C</i> , 2016, 120, 14892-14898.	1.5	86
20	Dynamic Oxygen on Surface: Catalytic Intermediate and Coking Barrier in the Modeled CO ₂ Reforming of CH ₄ on Ni (111). <i>ACS Catalysis</i> , 2016, 6, 4330-4339.	5.5	93
21	Surface Oxidation of Bi ₂ (Te,Se) ₃ Topological Insulators Depends on Cleavage Accuracy. <i>Chemistry of Materials</i> , 2016, 28, 35-39.	3.2	43
22	The Kinetics and Mechanism of the Selective Oxidation of 20Feâ€“40Niâ€“10Mnâ€“30Cr Alloy. <i>Oxidation of Metals</i> , 2015, 83, 71-88.	1.0	4
23	Structure of the NiFe ₂ O ₄ (001) surface in contact with gaseous O ₂ and water vapor. <i>Surface Science</i> , 2015, 640, 73-79.	0.8	30
24	Can We Understand the Molecule in Molecular Electronics?. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 9737-9738.	7.2	7
25	Formation of Organic Nanostructures on Semiconductor Surfaces. , 2012, , 277-300.		1
26	Thermally Driven Switch of Binding Configuration of 3-Pyrroline on Si(111)-7 Å ⁻⁷ . <i>Journal of Physical Chemistry C</i> , 2011, 115, 2020-2025.	1.5	4
27	Differential charging in X-ray photoelectron spectroscopy for characterizing organic thin films. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2010, 176, 18-23.	0.8	5
28	Hydrogen-Bonding versus van der Waals Interactions in Self-Assembled Monolayers of Substituted Isophthalic Acids. <i>Langmuir</i> , 2010, 26, 18155-18161.	1.6	40
29	Impedance-type measurements using XPS. <i>Applied Surface Science</i> , 2009, 256, 1296-1298.	3.1	14
30	Transfer of Electron Density and Formation of Dative Bonds in Chemisorption of Pyrrolidine on Si(111)-7 Å ⁻⁷ . <i>Journal of Physical Chemistry C</i> , 2008, 112, 15474-15482.	1.5	4
31	Complexity in the Self-Assembly of Bifunctional Molecules on HOPG: The Influence of Solvent Functionality on Self-Assembled Structures. <i>Langmuir</i> , 2007, 23, 3513-3522.	1.6	35
32	Understanding Odd-Even Effects in Organic Self-Assembled Monolayers. <i>Chemical Reviews</i> , 2007, 107, 1408-1453.	23.0	351
33	Characterization of Self-Assembled Organic Films Using Differential Charging in X-ray Photoelectron Spectroscopy. <i>Langmuir</i> , 2006, 22, 4649-4653.	1.6	56
34	Systematic Modification of Indium Tin Oxide to Enhance Diode Device Behavior. <i>Materials Research Society Symposia Proceedings</i> , 2005, 871, 1.	0.1	1
35	Low-Energy Collisions of Pyrazine and 6-Benzene Molecular Ions with Self-Assembled Monolayer Surfaces: The Odd-Even Chain Length Effect. <i>Langmuir</i> , 2001, 17, 8254-8259.	1.6	12
36	The Reaction between Tetrakis(diethylamino)tin and Indium Tin Oxide. <i>Langmuir</i> , 2001, 17, 5696-5702.	1.6	12

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37	Surface Modification of Indium Tin Oxide by Phenoxytin Complexes. Langmuir, 2001, 17, 948-952.	1.6	24
38	Surface Characterization and Modification of Indium Tin Oxide in Ultrahigh Vacuum. Journal of the American Chemical Society, 2000, 122, 1808-1809.	6.6	127
39	Interaction of Neopentyl Thiol with Clean and Oxygen-Modified Fe(100) Surfaces. Journal of Physical Chemistry B, 2000, 104, 3320-3326.	1.2	11
40	Enhanced Bonding of Alkanephosphonic Acids to Oxidized Titanium Using Surface-Bound Alkoxyzirconium Complex Interfaces. Langmuir, 1999, 15, 8929-8933.	1.6	96
41	Reaction of Tetra(tert-Butoxy)Tin or -Zirconium with Hydroxylated Titanium in Ultrahigh Vacuum: A Contrasting Reactivity with Hydroxylated Aluminum Substrate. Langmuir, 1999, 15, 7092-7096.	1.6	9
42	The Reaction between Tetra-tert-butoxytin and Al(110)OH in Ultrahigh Vacuum: A Contrasting Behavior vs Its Zirconium Analogue. Langmuir, 1998, 14, 1532-1534.	1.6	7
43	Monolayer Stabilization on Hydroxylated Aluminum Surfaces. Langmuir, 1998, 14, 1367-1370.	1.6	9
44	Ligand Metathesis in Surface-Bound Alkoxyzirconium Complexes. 2. Preparation of Alkanecarboxylate Complexes in Ultrahigh Vacuum. Langmuir, 1998, 14, 3720-3722.	1.6	12
45	Physisorption and Chemisorption of Alkanethiols and Alkyl Sulfides on Au(111). Journal of Physical Chemistry B, 1998, 102, 3456-3465.	1.2	418
46	The internal energy of CO ₂ produced from catalytic oxidation of CO by NO. Journal of Chemical Physics, 1998, 109, 746-752.	1.2	22
47	A Compact UHV Tandem Quadrupole Mass Spectrometer for Surface-Induced Dissociation Studies Using Well-Characterized Surfaces. Israel Journal of Chemistry, 1998, 38, 375-383.	1.0	1
48	The nature of residues following the ashing of arsenic implanted photoresist. Journal of Materials Research, 1997, 12, 2799-2808.	1.2	7
49	Stabilization of Self-Assembled Monolayers of Carboxylic Acids on Native Oxides of Metals. Journal of the American Chemical Society, 1997, 119, 259-262.	6.6	100
50	Coadsorption of Ethanethiol with Sulfur, Oxygen, and Water on the Fe(100) Surface. Langmuir, 1996, 12, 392-401.	1.6	20
51	Diode laser absorption study of internal energies of CO ₂ produced from catalytic CO oxidation. Journal of Chemical Physics, 1996, 104, 7719-7728.	1.2	29
52	Epitaxy and defects in laser-irradiated, single-crystal bismuth. Journal of Materials Research, 1988, 3, 1097-1103.	1.2	1
53	Laser-Assisted Etching of Lithium Niobate. Materials Research Society Symposia Proceedings, 1988, 126, 251.	0.1	1
54	Polygonal fitting for linearization. Review of Scientific Instruments, 1984, 55, 1510-1511.	0.6	2

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55	Epitaxy and Defects in Laser-Irradiated, Single-Crystal Bismuth. Materials Research Society Symposia Proceedings, 1984, 35, 439.	0.1	3
56	Sensitivity analysis of surface structure determination by low energy electron diffraction. Journal of Chemical Physics, 1983, 79, 3581-3589.	1.2	3
57	Studies of Structure and Dynamics in Heterogeneous Reactions. Israel Journal of Chemistry, 1982, 22, 395-400.	1.0	0
58	Simple two-axis sample positioning mechanism. Review of Scientific Instruments, 1977, 48, 399-401.	0.6	3