

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Redox Defect Thermochemistry of FeAl ₂ O ₄ Hercynite in Water Splitting from First-Principles Methods. Chemistry of Materials, 2022, 34, 519-528.	3.2	11
2	Predicting Oxygen Off-Stoichiometry and Hydrogen Incorporation in Complex Perovskite Oxides. Chemistry of Materials, 2022, 34, 510-518.	3.2	7
3	A Computational Framework to Accelerate the Discovery of Perovskites for Solar Thermochemical Hydrogen Production: Identification of Gd Perovskite Oxide Redox Mediators. Advanced Functional Materials, 2022, 32, .	7.8	7
4	Predictive energetic tuning of C-Nucleophiles for the electrochemical capture of carbon dioxide. IScience, 2022, 25, 103997.	1.9	4
5	Ab initio screening of refractory nitrides and carbides for high temperature hydrogen permeation barriers. Journal of Nuclear Materials, 2022, 563, 153611.	1.3	3
6	Bond-Valence Parameterization for the Accurate Description of DFT Energetics. Journal of Chemical Theory and Computation, 2022, 18, 3257-3267.	2.3	3
7	How the Bioinspired Fe ₂ Mo ₆ S ₈ Chevrel Breaks Electrocatalytic Nitrogen Reduction Scaling Relations. Journal of the American Chemical Society, 2022, 144, 12800-12806.	6.6	29
8	Determining Michael acceptor reactivity from kinetic, mechanistic, and computational analysis for the base-catalyzed thiol-Michael reaction. Polymer Chemistry, 2021, 12, 3619-3628.	1.9	9
9	Reduction of N ₂ to Ammonia by Phosphate Molten Salt and Li Electrode: Proof of Concept Using Quantum Mechanics. Journal of Physical Chemistry Letters, 2021, 12, 1696-1701.	2.1	6
10	Kinetics of Hydride Transfer from Catalytic Metal-Free Hydride Donors to CO ₂ . Journal of Physical Chemistry Letters, 2021, 12, 2306-2311.	2.1	19
11	Mechanistic Studies of Styrene Production from Benzene and Ethylene Using [(² -C ₂ H ₄) ₂ Rh(^{1/4} -OAc)] ₂ as Catalyst Precursor: Identification of a Bis-Rh ^I Mono-Cu ^{II} Complex As the Catalyst. ACS Catalysis, 2021, 11, 5688-5702.	5.5	9
12	Machine Learning Guided Synthesis of Multinary Chevrel Phase Chalcogenides. Journal of the American Chemical Society, 2021, 143, 9113-9122.	6.6	22
13	Visible-Light Photoinitiation of (Meth)acrylate Polymerization with Autonomous Post-conversion. Macromolecules, 2021, 54, 7702-7715.	2.2	2
14	Atomic layer deposited boron nitride nanoscale films act as high temperature hydrogen barriers. Applied Surface Science, 2021, 565, 150428.	3.1	9
15	Diazaphospholenes as reducing agents: a thermodynamic and electrochemical DFT study. Physical Chemistry Chemical Physics, 2021, 23, 17794-17802.	1.3	7
16	Electrocatalytic Reduction of CO ₂ to CO over Ag(110) and Cu(211) Modeled by Grand-Canonical Density Functional Theory. Journal of Physical Chemistry C, 2021, 125, 23773-23783.	1.5	26
17	Computationally Accelerated Discovery and Experimental Demonstration of Gd _{0.5} La _{0.5} Co _{0.5} Fe _{0.5} O ₃ for Solar Thermochemical Hydrogen Production. Frontiers in Energy Research, 2021, 9, .	1.2	12
18	Altering Linear Scaling Relationships on Metal Catalysts via Ligand-Adsorbate Hydrogen Bonding. Journal of Physical Chemistry C, 2021, 125, 23791-23802.	1.5	4

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19	Relocation and reinforcement of the adhesive/composite interface with spontaneous amine-peroxide interfacial polymerization. <i>Dental Materials</i> , 2021, 37, 1865-1872.	1.6	0
20	Immobilization of π -Capping Arene-Cobalt(II) Complexes on Ordered Mesoporous Carbon for Electrocatalytic Water Oxidation. <i>ACS Catalysis</i> , 2021, 11, 15068-15082.	5.5	8
21	Surface Hydrides on Fe_2P Electrocatalyst Reduce CO_2 at Low Overpotential: Steering Selectivity to Ethylene Glycol. <i>Journal of the American Chemical Society</i> , 2021, 143, 21275-21285.	6.6	34
22	Atomic layer deposition of tungsten nitride films as protective barriers to hydrogen. <i>Applied Surface Science</i> , 2020, 507, 145019.	3.1	5
23	Stabilizing Hydrogen Adsorption through Theory-Guided Chalcogen Substitution in Chevrel-Phase Mo_6X_8 ($\text{X}=\text{S}, \text{Se}, \text{Te}$) Electrocatalysts. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 35995-36003.	4.0	26
24	Computational and Experimental Evaluation of Peroxide Oxidants for Amine-Peroxide Redox Polymerization. <i>Macromolecules</i> , 2020, 53, 9736-9746.	2.2	5
25	A Synergistic Approach to Unraveling the Thermodynamic Stability of Binary and Ternary Chevrel Phase Sulfides. <i>Chemistry of Materials</i> , 2020, 32, 7044-7051.	3.2	10
26	Computationally Predicted High-Throughput Free-Energy Phase Diagrams for the Discovery of Solid-State Hydrogen Storage Reactions. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 48553-48564.	4.0	6
27	Modified Single Iteration Synchronous-Transit Approach to Bound Diffusion Barriers for Solid-State Reactions. <i>Journal of Chemical Theory and Computation</i> , 2020, 16, 5912-5922.	2.3	3
28	Predicting Spinel Disorder and Its Effect on Oxygen Transport Kinetics in Hercynite. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 23831-23843.	4.0	11
29	High-Throughput Analysis of Materials for Chemical Looping Processes. <i>Advanced Energy Materials</i> , 2020, 10, 2000685.	10.2	18
30	Oxidation kinetics of hercynite spinels for solar thermochemical fuel production. <i>Chemical Engineering Journal</i> , 2020, 401, 126015.	6.6	17
31	High-Efficiency Radical Photopolymerization Enhanced by Autonomous Dark Cure. <i>Macromolecules</i> , 2020, 53, 5034-5046.	2.2	13
32	Solid-state sintering of core-shell ceramic powders fabricated by particle atomic layer deposition. <i>Journal of the American Ceramic Society</i> , 2020, 103, 4101-4109.	1.9	1
33	Highly dispersed Co deposited on Al_2O_3 particles via $\text{CoCp}_2 + \text{H}_2$ ALD. <i>Nanotechnology</i> , 2020, 31, 175703.	1.3	4
34	Inorganic Halide Double Perovskites with Optoelectronic Properties Modulated by Sublattice Mixing. <i>Journal of the American Chemical Society</i> , 2020, 142, 5135-5145.	6.6	62
35	Metalloradical intermediates in electrocatalytic reduction of CO_2 to CO: Mn <i>versus</i> Re bis-N-heterocyclic carbene pinners. <i>Dalton Transactions</i> , 2020, 49, 2053-2057.	1.6	18
36	Mn-Based Molecular Catalysts for the Electrocatalytic Disproportionation of CO_2 into CO and CO_3 . <i>ACS Catalysis</i> , 2020, 10, 1961-1968.	5.5	25

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37	Nonuniform Growth of Sub-2 Nanometer Atomic Layer Deposited Alumina Films on Lithium Nickel Manganese Cobalt Oxide Cathode Battery Materials. <i>ACS Applied Nano Materials</i> , 2019, 2, 6989-6997.	2.4	23
38	Enhancing Au/TiO ₂ Catalyst Thermostability and Coking Resistance with Alkyl Phosphonic-Acid Self-Assembled Monolayers. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 41289-41296.	4.0	26
39	The role of decomposition reactions in assessing first-principles predictions of solid stability. <i>Npj Computational Materials</i> , 2019, 5, .	3.5	63
40	Independent Control of Singlet Oxygen and Radical Generation via Irradiation of a Two-Color Photosensitive Molecule. <i>Macromolecules</i> , 2019, 52, 4968-4978.	2.2	21
41	Continuous on-sun solar thermochemical hydrogen production via an isothermal redox cycle. <i>Applied Energy</i> , 2019, 249, 368-376.	5.1	49
42	Rational Design of Efficient Amine Reductant Initiators for Amine-Peroxide Redox Polymerization. <i>Journal of the American Chemical Society</i> , 2019, 141, 6279-6291.	6.6	19
43	High-Throughput Equilibrium Analysis of Active Materials for Solar Thermochemical Ammonia Synthesis. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 24850-24858.	4.0	21
44	The effect of ultrathin ALD films on the oxidation kinetics of SiC in high-temperature steam. <i>Chemical Engineering Science</i> , 2019, 201, 230-236.	1.9	5
45	Importance of proton-coupled electron transfer in cathodic regeneration of organic hydrides. <i>Chemical Communications</i> , 2019, 55, 5583-5586.	2.2	24
46	New tolerance factor to predict the stability of perovskite oxides and halides. <i>Science Advances</i> , 2019, 5, eaav0693.	4.7	778
47	Catalyst-free, aza-Michael polymerization of hydrazides: polymerizability, kinetics, and mechanistic origin of an I±-effect. <i>Polymer Chemistry</i> , 2019, 10, 5790-5804.	1.9	9
48	Particle atomic layer deposition of alumina for sintering yttria-stabilized cubic zirconia. <i>Journal of the American Ceramic Society</i> , 2019, 102, 2283-2293.	1.9	8
49	Benzimidazoles as Metal-Free and Recyclable Hydrides for CO ₂ Reduction to Formate. <i>Journal of the American Chemical Society</i> , 2019, 141, 272-280.	6.6	67
50	Amine Induced Retardation of the Radical-Mediated Thiol-Ene Reaction via the Formation of Metastable Disulfide Radical Anions. <i>Journal of Organic Chemistry</i> , 2018, 83, 2912-2919.	1.7	32
51	Nanostructured mullite steam oxidation resistant coatings for silicon carbide deposited via atomic layer deposition. <i>Journal of the American Ceramic Society</i> , 2018, 101, 2493-2505.	1.9	11
52	Predicting Hydride Donor Strength via Quantum Chemical Calculations of Hydride Transfer Activation Free Energy. <i>Journal of Physical Chemistry B</i> , 2018, 122, 1278-1288.	1.2	15
53	Thermodynamic and kinetic hydricities of metal-free hydrides. <i>Chemical Society Reviews</i> , 2018, 47, 2809-2836.	18.7	103
54	Renewable Hydride Donors for the Catalytic Reduction of CO ₂ : A Thermodynamic and Kinetic Study. <i>Journal of Physical Chemistry B</i> , 2018, 122, 10179-10189.	1.2	13

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55	Dynamic and Responsive DNA-like Polymers. <i>Journal of the American Chemical Society</i> , 2018, 140, 13594-13598.	6.6	45
56	Physical descriptor for the Gibbs energy of inorganic crystalline solids and temperature-dependent materials chemistry. <i>Nature Communications</i> , 2018, 9, 4168.	5.8	152
57	Bistable and photoswitchable states of matter. <i>Nature Communications</i> , 2018, 9, 2804.	5.8	111
58	A user's guide to the thiol-thioester exchange in organic media: scope, limitations, and applications in material science. <i>Polymer Chemistry</i> , 2018, 9, 4523-4534.	1.9	78
59	The Unified Electrochemical Band Diagram Framework: Understanding the Driving Forces of Materials Electrochemistry. <i>Advanced Functional Materials</i> , 2018, 28, 1803439.	7.8	8
60	Predicting kinetics of polymorphic transformations from structure mapping and coordination analysis. <i>Physical Review Materials</i> , 2018, 2, .	0.9	13
61	Implications of heterostructural alloying for enhanced piezoelectric performance of (Al,Sc)N. <i>Physical Review Materials</i> , 2018, 2, .	0.9	47
62	Adatom surface diffusion of catalytic metals on the anatase TiO ₂ (101) surface. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 4541-4552.	1.3	28
63	Dihydropteridine/Pteridine as a 2H ⁺ /2e ⁻ Redox Mediator for the Reduction of CO ₂ to Methanol: A Computational Study. <i>Journal of Physical Chemistry B</i> , 2017, 121, 4158-4167.	1.2	13
64	Solvent effects on the intramolecular charge transfer character of <i>N,N</i> -diaryl dihydrophenazine catalysts for organocatalyzed atom transfer radical polymerization. <i>Journal of Polymer Science Part A</i> , 2017, 55, 3017-3027.	2.5	56
65	Intramolecular Charge Transfer and Ion Pairing in <i>N,N</i> -Diaryl Dihydrophenazine Photoredox Catalysts for Efficient Organocatalyzed Atom Transfer Radical Polymerization. <i>Journal of the American Chemical Society</i> , 2017, 139, 348-355.	6.6	207
66	Controlling the Surface Reactivity of Titania via Electronic Tuning of Self-Assembled Monolayers. <i>ACS Catalysis</i> , 2017, 7, 8351-8357.	5.5	30
67	A review and perspective of efficient hydrogen generation via solar thermal water splitting. <i>Wiley Interdisciplinary Reviews: Energy and Environment</i> , 2016, 5, 261-287.	1.9	168
68	Organocatalyzed atom transfer radical polymerization driven by visible light. <i>Science</i> , 2016, 352, 1082-1086.	6.0	649
69	Rapid Growth of Crystalline Mn ₅ O ₈ by Self-Limited Multilayer Deposition using Mn(EtCp) ₂ and O ₃ . <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 18560-18569.	4.0	17
70	Organocatalyzed Atom Transfer Radical Polymerization Using <i>N</i> -Aryl Phenoxazines as Photoredox Catalysts. <i>Journal of the American Chemical Society</i> , 2016, 138, 11399-11407.	6.6	300
71	Degradation of Ethylene Carbonate Electrolytes of Lithium Ion Batteries via Ring Opening Activated by LiCo ₂ Cathode Surfaces and Electrolyte Species. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 26664-26674.	4.0	67
72	Band Diagram and Rate Analysis of Thin Film Spinel LiMn ₂ O ₄ Formed by Electrochemical Conversion of ALD-Grown MnO. <i>Advanced Functional Materials</i> , 2016, 26, 7895-7907.	7.8	37

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73	Aluminum Nitride Hydrolysis Enabled by Hydroxyl-Mediated Surface Proton Hopping. ACS Applied Materials & Interfaces, 2016, 8, 18550-18559.	4.0	21
74	First-Principles Analysis of Cation Diffusion in Mixed Metal Ferrite Spinel. Chemistry of Materials, 2016, 28, 214-226.	3.2	80
75	Growth and Characterization of Al ₂ O ₃ Atomic Layer Deposition Films on sp ² -Graphitic Carbon Substrates Using NO ₂ /Trimethylaluminum Pretreatment. ACS Applied Materials & Interfaces, 2015, 7, 12030-12037.	4.0	34
76	Sodium Charge Storage in Thin Films of MnO ₂ Derived by Electrochemical Oxidation of MnO Atomic Layer Deposition Films. Journal of the Electrochemical Society, 2015, 162, A2753-A2761.	1.3	42
77	Charge Storage in Cation Incorporated δ -MnO ₂ . Chemistry of Materials, 2015, 27, 1172-1180.	3.2	122
78	Solvent Control of Surface Plasmon-Mediated Chemical Deposition of Au Nanoparticles from Alkylgold Phosphine Complexes. ACS Applied Materials & Interfaces, 2015, 7, 13384-13394.	4.0	8
79	Intrinsic Material Properties Dictating Oxygen Vacancy Formation Energetics in Metal Oxides. Journal of Physical Chemistry Letters, 2015, 6, 1948-1953.	2.1	103
80	Predicting the solar thermochemical water splitting ability and reaction mechanism of metal oxides: a case study of the hercynite family of water splitting cycles. Energy and Environmental Science, 2015, 8, 3687-3699.	15.6	68
81	Mechanisms of LiCoO ₂ Cathode Degradation by Reaction with HF and Protection by Thin Oxide Coatings. ACS Applied Materials & Interfaces, 2015, 7, 24265-24278.	4.0	98
82	Mechanism of hydrofluoric acid formation in ethylene carbonate electrolytes with fluorine salt additives. Journal of Power Sources, 2015, 297, 427-435.	4.0	35
83	Catalytic Reduction of CO ₂ by Renewable Organohydrides. Journal of Physical Chemistry Letters, 2015, 6, 5078-5092.	2.1	59
84	Extracting Kinetic Information from Complex Gas-Solid Reaction Data. Industrial & Engineering Chemistry Research, 2015, 54, 4113-4122.	1.8	26
85	Electronic and dielectric properties of Ruddlesden-Popper type and Magnéli type SrTiO ₃ . Computational Materials Science, 2015, 96, 223-228.	1.4	15
86	Tunable Oxygen Vacancy Formation Energetics in the Complex Perovskite Oxide Sr _x La _{1-x} Mn _y Al _{1-y} O _{3-δ} . Chemistry of Materials, 2014, 26, 6595-6602.	4.0	90
87	Reduction of CO ₂ to Methanol Catalyzed by a Biomimetic Organo-Hydride Produced from Pyridine. Journal of the American Chemical Society, 2014, 136, 16081-16095.	6.6	131
88	Increasing the Photocatalytic Activity of Anatase TiO ₂ through B, C, and N Doping. Journal of Physical Chemistry C, 2014, 118, 27415-27427.	1.5	55
89	Visible-Light Organic Photocatalysis for Latent Radical-Initiated Polymerization via 2e ⁻ /1H ⁺ Transfers: Initiation with Parallels to Photosynthesis. Journal of the American Chemical Society, 2014, 136, 7418-7427.	6.6	78
90	Oxide enthalpy of formation and band gap energy as accurate descriptors of oxygen vacancy formation energetics. Energy and Environmental Science, 2014, 7, 1996.	15.6	109

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91	Bulk and Surface Tunneling Hydrogen Defects in Alumina. <i>Physical Review Letters</i> , 2013, 111, 065901.	2.9	51
92	Roles of the Lewis Acid and Base in the Chemical Reduction of CO ₂ Catalyzed by Frustrated Lewis Pairs. <i>Inorganic Chemistry</i> , 2013, 52, 10062-10066.	1.9	58
93	Efficient Generation of H ₂ by Splitting Water with an Isothermal Redox Cycle. <i>Science</i> , 2013, 341, 540-542.	6.0	296
94	Mechanistic Basis for High Stereoselectivity and Broad Substrate Scope in the (salen)Co(III)-Catalyzed Hydrolytic Kinetic Resolution. <i>Journal of the American Chemical Society</i> , 2013, 135, 15595-15608.	6.6	115
95	A Correlated Electron View of Singlet Fission. <i>Accounts of Chemical Research</i> , 2013, 46, 1339-1347.	7.6	150
96	The Effect of N and B Doping on Graphene and the Adsorption and Migration Behavior of Pt Atoms. <i>Journal of Physical Chemistry C</i> , 2013, 117, 10523-10535.	1.5	71
97	Mechanism of Homogeneous Reduction of CO ₂ by Pyridine: Proton Relay in Aqueous Solvent and Aromatic Stabilization. <i>Journal of the American Chemical Society</i> , 2013, 135, 142-154.	6.6	151
98	Growth of Pt Particles on the Anatase TiO ₂ (101) Surface. <i>Journal of Physical Chemistry C</i> , 2012, 116, 12114-12123.	1.5	63
99	Effect of Surface Deposited Pt on the Photoactivity of TiO ₂ . <i>Journal of Physical Chemistry C</i> , 2012, 116, 10138-10149.	1.5	92
100	Molecular Layer Deposition of Conductive Hybrid Organic-Inorganic Thin Films Using Diethylzinc and Hydroquinone. <i>ECS Transactions</i> , 2011, 33, 191-195.	0.3	33
101	Atomic Layer Deposition of Tantalum Nitride Using A Novel Precursor. <i>Journal of Physical Chemistry C</i> , 2011, 115, 11507-11513.	1.5	25
102	Reactions of Amino Acids on the Si(100)-2 \times 1 Surface. <i>Journal of Physical Chemistry C</i> , 2011, 115, 7477-7486.	1.5	13
103	Effects of Water and Formic Acid Adsorption on the Electronic Structure of Anatase TiO ₂ (101). <i>Journal of Physical Chemistry C</i> , 2011, 115, 2738-2749.	1.5	41
104	Dynamic Mechanisms for Ammonia Borane Thermolysis in Solvent: Deviation from Gas-Phase Minimum-Energy Pathways. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 276-281.	2.1	27
105	Effect of interface structure on the Ru on HfO ₂ work function. <i>Journal of Materials Science</i> , 2010, 45, 4924-4928.	1.7	2
106	Singlet fission in pentacene through multi-exciton quantum states. <i>Nature Chemistry</i> , 2010, 2, 648-652.	6.6	356
107	Reaction Mechanism, Bonding, and Thermal Stability of 1-Alkanethiols Self-Assembled on Halogenated Ge Surfaces. <i>Langmuir</i> , 2010, 26, 8419-8429.	1.6	22
108	Simultaneous Two-Hydrogen Transfer as a Mechanism for Efficient CO ₂ Reduction. <i>Inorganic Chemistry</i> , 2010, 49, 8724-8728.	1.9	70

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109	Excited states of methylene from quantum Monte Carlo. <i>Journal of Chemical Physics</i> , 2009, 131, 124103.	1.2	70
110	The Role of Free Nâ€Heterocyclic Carbene (NHC) in the Catalytic Dehydrogenation of Ammoniaâ€Borane in the Nickel NHC System. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 2201-2205.	7.2	115
111	Oligomerization and Autocatalysis of NH ₂ BH ₂ with AmmoniaâˆBorane. <i>Inorganic Chemistry</i> , 2009, 48, 1069-1081.	1.9	108
112	Catalytic Dehydrogenation of Ammonia Borane at Ni Monocarbene and Dicarbene Catalysts. <i>Inorganic Chemistry</i> , 2009, 48, 5418-5433.	1.9	72
113	Formation of Alkanethiolate Self-Assembled Monolayers at Halide-Terminated Ge Surfaces. <i>Langmuir</i> , 2009, 25, 2013-2025.	1.6	38
114	Adsorption of Organic Matter at Mineral/Water Interfaces: 7. ATR-FTIR and Quantum Chemical Study of Lactate Interactions with Hematite Nanoparticles. <i>Langmuir</i> , 2008, 24, 6683-6692.	1.6	55
115	Quantum dot properties in the multiband envelope-function approximation using boundary conditions based upon first-principles quantum calculations. <i>Physical Review B</i> , 2008, 77, .	1.1	5
116	Atomic Layer Deposition of Hafnium Oxide from Hafnium Chloride and Water. <i>Journal of the American Chemical Society</i> , 2008, 130, 11996-12006.	6.6	45
117	Comparison of DFT Methods for Molecular Orbital Eigenvalue Calculations. <i>Journal of Physical Chemistry A</i> , 2007, 111, 1554-1561.	1.1	693
118	A Detailed Theoretical Study of the Mechanism and Energetics of Methane to Methanol Conversion by Cisplatin and Catalytica. <i>Organometallics</i> , 2007, 26, 793-809.	1.1	49
119	The role of ammonia in atomic layer deposition of tungsten nitride. <i>Applied Physics Letters</i> , 2007, 90, 173120.	1.5	17
120	Attachment of Alanine and Arginine to the Ge(100)-2Ã—1 Surface. <i>Journal of Physical Chemistry C</i> , 2007, 111, 3692-3699.	1.5	18
121	CarbonâˆOxygen Coupling in the Reaction of Formaldehyde on Ge(100)-2Ã—1. <i>Journal of Physical Chemistry C</i> , 2007, 111, 1739-1746.	1.5	12
122	First-Principles Investigation of the Structure, Energetics, and Electronic Properties of Ru/HfO ₂ Interfaces. <i>Journal of Physical Chemistry C</i> , 2007, 111, 9203-9210.	1.5	11
123	Carbon Dioxide Reduction by Pincer Rhodium Î²-Dihydrogen Complexes:âˆ Hydrogen-Binding Modes and Mechanistic Studies by Density Functional Theory Calculations. <i>Organometallics</i> , 2007, 26, 508-513.	1.1	62
124	Catalyzed Dehydrogenation of Ammoniaâ€Borane by Iridium Dihydrogen Pincer Complex Differs from Ethane Dehydrogenation. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 8153-8156.	7.2	194
125	First-Principles Investigation of Hydroxylated Monoclinic HfO ₂ Surfaces. <i>Chemistry of Materials</i> , 2006, 18, 3397-3403.	3.2	30
126	First-principles calculations of structural and electronic properties of monoclinic hafnia surfaces. <i>Physical Review B</i> , 2006, 73, .	1.1	71

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127	Density Functional Theory Calculations of Ti ^{IV} -TEMPO Complexes: Influence of Ancillary Ligation on the Strength of the Ti ^{IV} -O Bond. <i>Organometallics</i> , 2006, 25, 3317-3323.	1.1	20
128	Non-growth ligand exchange reactions in atomic layer deposition of HfO ₂ . <i>Chemical Physics Letters</i> , 2006, 421, 215-220.	1.2	23
129	A chemical mechanism for nitrogen incorporation into HfO ₂ ALD films using ammonia and alkylamide as precursors. <i>Surface Science</i> , 2005, 591, L280-L285.	0.8	11
130	Atomic layer deposition of hafnium nitrides using ammonia and alkylamide precursors. <i>Chemical Physics Letters</i> , 2005, 407, 272-275.	1.2	11
131	First-principles calculation of free Si(100) surface impurity enrichment. <i>Applied Physics Letters</i> , 2005, 87, 232101.	1.5	7
132	Atomic layer deposition of high- κ dielectrics on nitrated silicon surfaces. <i>Applied Physics Letters</i> , 2005, 86, 192110.	1.5	15
133	First-principles calculation of intrinsic defect formation volumes in silicon. <i>Physical Review B</i> , 2005, 72, .	1.1	76
134	Homolysis of Weak Ti ^{IV} -O Bonds: Experimental and Theoretical Studies of Titanium Oxygen Bonds Derived from Stable Nitroxyl Radicals. <i>Journal of the American Chemical Society</i> , 2005, 127, 3807-3816.	6.6	49
135	Initial Nitridation of the Ge(100)-2 \times 1 Surface by Ammonia. <i>Langmuir</i> , 2005, 21, 5230-5232.	1.6	18
136	Density Functional Theory Study of the Geometry, Energetics, and Reconstruction Process of Si(111) Surfaces. <i>Langmuir</i> , 2005, 21, 12404-12414.	1.6	21
137	In-Situ Infrared Spectroscopy and Density Functional Theory Modeling of Hafnium Alkylamine Adsorption on Si ^{IV} -OH and Si ^{IV} -H Surfaces. <i>Chemistry of Materials</i> , 2005, 17, 5305-5314.	3.2	55
138	Predicting ionic conductivity of solid oxide fuel cell electrolyte from first principles. <i>Journal of Applied Physics</i> , 2005, 98, 103513.	1.1	162
139	Indirect adsorbate-adsorbate interactions mediated through the surface electronic structure of the Si(100) surface. <i>Journal of Chemical Physics</i> , 2004, 120, 1555-1559.	1.2	33
140	A quantum chemical study of ZrO ₂ atomic layer deposition growth reactions on the SiO ₂ surface. <i>Surface Science</i> , 2004, 550, 199-212.	0.8	45
141	Surface reaction mechanisms for atomic layer deposition of silicon nitride. <i>Surface Science</i> , 2004, 557, 159-170.	0.8	34
142	Atomic Layer Deposition of HfO ₂ Using Alkoxides as Precursors. <i>Journal of Physical Chemistry B</i> , 2004, 108, 15150-15164.	1.2	28
143	A Density Functional Theory Study on the Effect of Ge Alloying on Hydrogen Desorption from SiGe Alloy Surfaces. <i>Journal of Physical Chemistry B</i> , 2004, 108, 6336-6350.	1.2	9
144	Calculating Cumulene/Poly-yne Isomerization Energies. <i>Journal of Physical Chemistry A</i> , 2004, 108, 4030-4035.	1.1	12

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146	Quantum Chemistry Based Statistical Mechanical Model of Hydrogen Desorption from Si(100)-2 × 1, Ge(100)-2 × 1, and SiGe Alloy Surfaces. <i>Journal of Physical Chemistry B</i> , 2004, 108, 18243-18253.	1.2	9
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