

# Jyh-Chiang Jiang

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4418973/publications.pdf>

Version: 2024-02-01

154  
papers

4,063  
citations

136740

32  
h-index

161609

54  
g-index

156  
all docs

156  
docs citations

156  
times ranked

4408  
citing authors

#	ARTICLE	IF	CITATIONS
1	Infrared Spectra of H <sup>+</sup> (H <sub>2</sub> O) <sub>5-8</sub> Clusters: Evidence for Symmetric Proton Hydration. <i>Journal of the American Chemical Society</i> , 2000, 122, 1398-1410.	6.6	337
2	Protonated clathrate cages enclosing neutral water molecules: H <sup>+</sup> (H <sub>2</sub> O) <sub>21</sub> and H <sup>+</sup> (H <sub>2</sub> O) <sub>28</sub> . <i>Journal of Chemical Physics</i> , 2005, 122, 074315.	1.2	144
3	Molecular Design of Porphyrins for Dye-Sensitized Solar Cells: A DFT/TDDFT Study. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 524-530.	2.1	123
4	Efficient hydrogen storage in boron doped graphene decorated by transition metals – A first-principles study. <i>Carbon</i> , 2014, 73, 132-140.	5.4	123
5	Structures and Isomeric Transitions of NH <sub>4</sub> <sup>+</sup> (H <sub>2</sub> O) <sub>3-6</sub> : From Single to Double Rings. <i>Journal of the American Chemical Society</i> , 1998, 120, 8777-8788.	6.6	113
6	Hydrogen Bond Stabilization in 1,3-Dimethylimidazolium Methyl Sulfate and 1-Butyl-3-Methylimidazolium Hexafluorophosphate Probed by High Pressure: The Role of Charge-Enhanced C-H...O Interactions in the Room-Temperature Ionic Liquid. <i>Journal of Physical Chemistry B</i> , 2006, 110, 3302-3307.	1.2	99
7	C-H Bond Activation of Methane via $\sigma$ Interaction on the IrO <sub>2</sub> (110) Surface: Density Functional Theory Study. <i>Journal of Physical Chemistry C</i> , 2012, 116, 6367-6370.	1.5	95
8	Cooperative Effect of Unsheltered Amide Groups on CO <sub>2</sub> Adsorption Inside Open-Ended Channels of a Zinc(II)-Organic Framework. <i>Inorganic Chemistry</i> , 2013, 52, 3962-3968.	1.9	82
9	Structural Organization in Aqueous Solutions of 1-Butyl-3-methylimidazolium Halides: A High-Pressure Infrared Spectroscopic Study on Ionic Liquids. <i>Journal of Physical Chemistry B</i> , 2008, 112, 4351-4356.	1.2	80
10	Theoretical Study on the Correlation between Band Gap, Bandwidth, and Oscillator Strength in Fluorene-Based Donor-Acceptor Conjugated Copolymers. <i>Journal of Physical Chemistry B</i> , 2009, 113, 8268-8277.	1.2	70
11	C-H...O Hydrogen Bonds in $\beta$ -Sheetlike Networks: Combined X-ray Crystallography and High-Pressure Infrared Study. <i>Journal of the American Chemical Society</i> , 2003, 125, 12358-12364.	6.6	62
12	Evidence of Rotational Isomerism in 1-Butyl-3-methylimidazolium Halides: A Combined High-Pressure Infrared and Raman Spectroscopic Study. <i>Journal of Physical Chemistry A</i> , 2007, 111, 9201-9206.	1.1	62
13	Isomeric Transitions between Linear and Cyclic H <sup>+</sup> (CH <sub>3</sub> OH) <sub>4,5</sub> : Implications for Proton Migration in Liquid Methanol. <i>Journal of Physical Chemistry A</i> , 1999, 103, 2941-2944.	1.1	61
14	Theoretical Study of the Reductive Decomposition of Ethylene Sulfite: A Film-Forming Electrolyte Additive in Lithium Ion Batteries. <i>Journal of Physical Chemistry A</i> , 2012, 116, 11025-11033.	1.1	58
15	Lithium diffusion in graphene and graphite: Effect of edge morphology. <i>Carbon</i> , 2016, 103, 209-216.	5.4	53
16	Migration of an Excess Proton upon Asymmetric Hydration: H <sup>+</sup> [(CH <sub>3</sub> ) <sub>2</sub> O](H <sub>2</sub> O) <sub>n</sub> as a Model System. <i>Journal of the American Chemical Society</i> , 1999, 121, 4443-4450.	6.6	49
17	A First Principles study on Boron-doped Graphene decorated by Ni-Ti-Mg atoms for Enhanced Hydrogen Storage Performance. <i>Scientific Reports</i> , 2015, 5, 16797.	1.6	49
18	Theoretical study of the reductive decomposition of 1,3-propane sultone: SEI forming additive in lithium-ion batteries. <i>RSC Advances</i> , 2012, 2, 5439.	1.7	48

#	ARTICLE	IF	CITATIONS
19	Comparative Study on the Solid Electrolyte Interface Formation by the Reduction of Alkyl Carbonates in Lithium ion Battery. <i>Electrochimica Acta</i> , 2014, 136, 274-285.	2.6	48
20	Effects of water and methanol on the molecular organization of 1-butyl-3-methylimidazolium tetrafluoroborate as functions of pressure and concentration. <i>Journal of Chemical Physics</i> , 2008, 129, 044506.	1.2	46
21	Structural change of ionic association in ionic liquid/water mixtures: A high-pressure infrared spectroscopic study. <i>Journal of Chemical Physics</i> , 2009, 130, 124503.	1.2	43
22	Photoisomerization and Photodissociation of Toluene in Molecular Beam. <i>Journal of the American Chemical Society</i> , 2002, 124, 4068-4075.	6.6	41
23	Design strategies of metal free-organic sensitizers for dye sensitized solar cells: Role of donor and acceptor monomers. <i>Organic Electronics</i> , 2014, 15, 1205-1214.	1.4	41
24	High-pressure spectroscopic probe of hydrophobic hydration of the methyl groups in dimethyl sulfoxide. <i>Journal of Chemical Physics</i> , 2003, 118, 1802-1807.	1.2	40
25	Novel triarylamine-based alternating conjugated polymer with high hole mobility: Synthesis, electro-optical, and electronic properties. <i>Journal of Polymer Science Part A</i> , 2010, 48, 4654-4667.	2.5	40
26	Aqueous solution-processed off-stoichiometric Cu <sup>2+</sup> /In <sup>3+</sup> /S QDs and their application in quantum dot-sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2018, 6, 9629-9641.	5.2	40
27	First principles study of organic sensitizers for dye sensitized solar cells: effects of anchoring groups on optoelectronic properties and dye aggregation. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 1071-1081.	1.3	39
28	Conformations of 1-Butyl-3-methylimidazolium Chloride Probed by High Pressure Raman Spectroscopy. <i>International Journal of Molecular Sciences</i> , 2006, 7, 417-424.	1.8	36
29	Novel rapid switching and bleaching electrochromic polyimides containing triarylamine with 2-phenyl-2-isopropyl groups. <i>Polymer</i> , 2010, 51, 4493-4502.	1.8	35
30	Preparation and oxygen reduction activity of stable RuSex/C catalyst with pyrite structure. <i>Electrochimica Acta</i> , 2009, 54, 4297-4304.	2.6	34
31	Effect of External Electric Field on Methane Conversion on IrO <sub>2</sub> (110) Surface: A Density Functional Theory Study. <i>ACS Catalysis</i> , 2019, 9, 8230-8242.	5.5	34
32	Photodissociation of ethylbenzene and n-propylbenzene in a molecular beam. <i>Journal of Chemical Physics</i> , 2002, 117, 7034-7040.	1.2	33
33	New Insights into the N-S Bond Formation of a Sulfurized-Polyacrylonitrile Cathode Material for Lithium-Sulfur Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 14230-14238.	4.0	33
34	Boron and Nitrogen Co-doped Graphene Used As Counter Electrode for Iodine Reduction in Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2018, 122, 26385-26392.	1.5	31
35	Evidence of charge-enhanced C-H-O interactions in aqueous protonated imidazole probed by high pressure infrared spectroscopy. <i>Journal of Chemical Physics</i> , 2003, 119, 10753-10758.	1.2	30
36	Revealing the influence of Cyano in Anchoring Groups of Organic Dyes on Adsorption Stability and Photovoltaic Properties for Dye-Sensitized Solar Cells. <i>Scientific Reports</i> , 2017, 7, 4979.	1.6	30

#	ARTICLE	IF	CITATIONS
37	Hydrogen-Bond Rearrangement and Intermolecular Proton Transfer in Protonated Methanol Clusters. <i>Israel Journal of Chemistry</i> , 1999, 39, 231-243.	1.0	29
38	Evidence for hydrogen bond-like C-H...O interactions in aqueous 1,4-dioxane probed by high pressure. <i>Chemical Physics Letters</i> , 2004, 397, 205-210.	1.2	29
39	Solvation and microscopic properties of ionic liquid/acetonitrile mixtures probed by high-pressure infrared spectroscopy. <i>Journal of Chemical Physics</i> , 2009, 131, 234502.	1.2	29
40	Interactions of Silica Nanoparticles and Ionic Liquids Probed by High Pressure Vibrational Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2011, 115, 11962-11967.	1.5	29
41	Association structures of ionic liquid/DMSO mixtures studied by high-pressure infrared spectroscopy. <i>Journal of Chemical Physics</i> , 2011, 134, 044506.	1.2	29
42	Transmissive-to-black fast electrochromic switching from a long conjugated pendant group and a highly dispersed polymer/SWNT. <i>Polymer Chemistry</i> , 2018, 9, 619-626.	1.9	29
43	Enhanced moisture stability of cesium lead iodide perovskite solar cells – a first-principles molecular dynamics study. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 5693-5701.	1.3	29
44	Oxidative Decomposition of Propylene Carbonate in Lithium Ion Batteries: A DFT Study. <i>Journal of Physical Chemistry A</i> , 2013, 117, 7959-7969.	1.1	28
45	Dopamine sensing by boron and nitrogen co-doped single-walled carbon nanotubes: A first-principles study. <i>Applied Surface Science</i> , 2019, 473, 59-64.	3.1	28
46	Photoionization of methanol dimer using a tunable vacuum ultraviolet laser. <i>Journal of Chemical Physics</i> , 1999, 111, 3434-3440.	1.2	27
47	Charge-enhanced C-H...O interactions of a self-assembled triple helical spine probed by high-pressure. <i>Journal of Chemical Physics</i> , 2002, 117, 1723-1728.	1.2	27
48	Photodissociation Dynamics of Fluorobenzene. <i>Journal of the American Chemical Society</i> , 2003, 125, 9814-9820.	6.6	27
49	In situ spectroscopic and theoretical investigation of methane activation on IrO <sub>2</sub> nanoparticles: Role of Ir oxidation state on C-H activation. <i>Journal of Catalysis</i> , 2020, 385, 265-273.	3.1	27
50	Evidence for C-H...O interaction of acetone and deuterium oxide probed by high-pressure. <i>Journal of Chemical Physics</i> , 2001, 115, 3215-3218.	1.2	26
51	Ab initio study of the ammoniated ammonium ions NH <sub>4</sub> <sup>+</sup> (NH <sub>3</sub> ) <sub>6</sub> . <i>Chemical Physics</i> , 2002, 276, 93-106.	0.9	26
52	Density Functional Theory Study of the Oxidation of Ammonia on RuO <sub>2</sub> (110) Surface. <i>Journal of Physical Chemistry C</i> , 2009, 113, 17411-17417.	1.5	26
53	DFT Study of NH <sub>x</sub> (x = 1~3) Adsorption on RuO <sub>2</sub> (110) Surfaces. <i>Journal of Physical Chemistry C</i> , 2009, 113, 2816-2821.	1.5	26
54	The intramolecular blue-shifting C-H...C hydrogen bond: crystal structure of [4,4'-bis(HCF <sub>2</sub> CF <sub>2</sub> CF <sub>2</sub> CH <sub>2</sub> OCH <sub>2</sub> )-2,2'-bpy]MCl <sub>2</sub> where M = Pt, Pd. <i>CrystEngComm</i> , 2010, 12, 538-542.	1.3	26

#	ARTICLE	IF	CITATIONS
55	Photodissociation of ethylbenzene at 248 nm. <i>Journal of Chemical Physics</i> , 2002, 116, 7779-7782.	1.2	25
56	Carbon-carbon bond cleavage in the photoionization of ethanol and 1-propanol clusters. <i>Journal of Chemical Physics</i> , 2004, 120, 8979-8984.	1.2	25
57	Probing C-H...X hydrogen bonds in amide-functionalized imidazolium salts under high pressure. <i>Journal of Chemical Physics</i> , 2004, 120, 8645-8650.	1.2	25
58	Adsorption and Thermal Reactions of H <sub>2</sub> O and H <sub>2</sub> S on Ge(100). <i>Journal of Physical Chemistry C</i> , 2010, 114, 1019-1027.	1.5	25
59	Probing the Nature and Local Structure of Phosphonic Acid Groups Functionalized in Mesoporous Silica SBA-15. <i>Journal of Physical Chemistry C</i> , 2012, 116, 1658-1669.	1.5	25
60	Methanol decomposition reactions over a boron-doped graphene supported Ru-Pt catalyst. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 9355-9363.	1.3	25
61	Hydrogen bond-like equatorial C-H...O interactions in aqueous 1,3-dioxane: A combined high-pressure infrared and Raman spectroscopy study. <i>Chemical Physics Letters</i> , 2005, 410, 42-48.	1.2	24
62	A High-Pressure Study of the Effects of TiO <sub>2</sub> Nanoparticles on the Structural Organization of Ionic Liquids. <i>Journal of Physical Chemistry C</i> , 2011, 115, 23778-23783.	1.5	24
63	Novel poly(triphenylamine-fluorene) with asymmetric hexaphenylbenzene and pyrene moieties: synthesis, fluorescence, flexible near-infrared electrochromic devices and theoretical investigation. <i>Polymer Chemistry</i> , 2016, 7, 1505-1516.	1.9	24
64	A DFT study of ethanol adsorption and decomposition on $\gamma$ -Al <sub>2</sub> O <sub>3</sub> (0001) surface. <i>Applied Surface Science</i> , 2016, 363, 636-643.	3.1	24
65	Density Functional Theory Study of NH <sub>x</sub> (x = 0-3) and N <sub>2</sub> Adsorption on IrO <sub>2</sub> (110) Surfaces. <i>Journal of Physical Chemistry C</i> , 2010, 114, 18588-18593.	1.5	23
66	Deoxygenation of IrO <sub>2</sub> (110) surface: Core-level spectroscopy and density functional theory calculation. <i>Surface Science</i> , 2010, 604, 118-124.	0.8	21
67	A combined experimental and theoretical study of surface film formation: Effect of oxygen on the reduction mechanism of propylene carbonate. <i>Journal of Power Sources</i> , 2013, 244, 318-327.	4.0	21
68	Correlation of Mesh Size of Metal-Carboxylate Layer with Degree of Interpenetration in Pillared-Layer Frameworks. <i>Crystal Growth and Design</i> , 2014, 14, 5608-5616.	1.4	21
69	Microkinetic Simulation of Ammonia Oxidation on the RuO <sub>2</sub> (110) Surface. <i>ACS Catalysis</i> , 2014, 4, 639-648.	5.5	21
70	A DFT study of ethane activation on IrO <sub>2</sub> (110) surface by precursor-mediated mechanism. <i>Applied Catalysis A: General</i> , 2017, 541, 8-14.	2.2	21
71	Understanding the Role of Dopant Metal Atoms on the Structural and Electronic Properties of Lithium-Rich Li <sub>1.2</sub> Ni <sub>0.2</sub> Mn <sub>0.6</sub> O <sub>2</sub> Cathode Material for Lithium-Ion Batteries. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 4842-4850.	2.1	21
72	Experimental and theoretical investigation of a new rapid switching near-infrared electrochromic conjugated polymer. <i>Journal of Polymer Science Part A</i> , 2010, 48, 3913-3923.	2.5	20

#	ARTICLE	IF	CITATIONS
73	Barrierless Proton Transfer within Short Protonated Peptides in the Presence of Water Bridges. A Density Functional Theory Study. <i>Journal of Physical Chemistry B</i> , 2011, 115, 1485-1490.	1.2	20
74	Theoretical investigations of metal-free dyes for solar cells: Effects of electron donor and acceptor groups on sensitizers. <i>Journal of Power Sources</i> , 2013, 242, 464-471.	4.0	20
75	Density Functional Theory Study of the Oxidation of Ammonia on the IrO <sub>2</sub> (110) Surface. <i>Langmuir</i> , 2011, 27, 14253-14259.	1.6	19
76	Photoisomerization and Photodissociation of m-Xylene in a Molecular Beam. <i>Journal of Physical Chemistry A</i> , 2003, 107, 4019-4024.	1.1	18
77	On the search for C-H...O hydrogen bonding in aqueous acetic acid: Combined high-pressure infrared spectroscopy and ab initio calculations study. <i>Journal of Chemical Physics</i> , 2002, 117, 3799-3803.	1.2	17
78	Pressure-Enhanced C-H...O Interactions in Aqueous tert-Butyl Alcohol. <i>Journal of Physical Chemistry A</i> , 2004, 108, 11001-11005.	1.1	16
79	Local Structures of Water in 1-Butyl-3-methylimidazolium Tetrafluoroborate Probed by High-Pressure Infrared Spectroscopy. <i>Analytical Sciences</i> , 2008, 24, 1305-1309.	0.8	16
80	Conjugated polymers containing electron-deficient main chains and electron-rich pendant groups: Synthesis and application to electroluminescence. <i>Organic Electronics</i> , 2011, 12, 1048-1062.	1.4	16
81	High-Pressure Raman Studies on Aqueous Protonated Thiazole: Presence of Charge-Enhanced C-H...O Hydrogen Bonds. <i>Journal of Physical Chemistry B</i> , 2005, 109, 23103-23107.	1.2	15
82	A High-Pressure Infrared Spectroscopic Study on the Interaction of Ionic Liquids with PEO-PPO-PEO Block Copolymers and 1,4-Dioxane. <i>Journal of Physical Chemistry B</i> , 2011, 115, 883-888.	1.2	15
83	Amide-containing zinc(ii) metal-organic layered networks: a structure-CO <sub>2</sub> capture relationship. <i>Inorganic Chemistry Frontiers</i> , 2015, 2, 477-484.	3.0	15
84	Effects of the terminal donor unit in dyes with D-A-π-A architecture on the regeneration mechanism in DSSCs: a computational study. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 23564-23577.	1.3	15
85	On the Search for H <sub>5</sub> O <sub>2</sub> <sup>+</sup> centered Water Clusters in the Gas Phase. <i>Journal of the Chinese Chemical Society</i> , 1999, 46, 427-434.	0.8	14
86	Microkinetic Simulation of Temperature-Programmed Desorption. <i>Journal of Physical Chemistry C</i> , 2013, 117, 6136-6142.	1.5	14
87	Amide-CO <sub>2</sub> Interaction Induced Gate-Opening Behavior for CO <sub>2</sub> Adsorption in 2-Fold Interpenetrating Framework. <i>ChemistrySelect</i> , 2016, 1, 2923-2929.	0.7	14
88	Temperature-programmed desorption studies of NH <sub>3</sub> and H <sub>2</sub> O on the RuO <sub>2</sub> (110) surface: effects of adsorbate diffusion. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 24201-24209.	1.3	14
89	Proton-Assisted Hydration at Hydrophobic Sites in Protonated Ether and Keto Dimers. <i>Journal of Physical Chemistry A</i> , 1999, 103, 8753-8761.	1.1	13
90	Synthesis and computational oxidation mechanism study of novel organosoluble aramids with high modulus by low-temperature solution polycondensation. <i>Journal of Polymer Science Part A</i> , 2010, 48, 5659-5669.	2.5	13

#	ARTICLE	IF	CITATIONS
91	Density Functional Theory Study of Ethanol Decomposition on 3Ni/±-Al<sub>2</sub>O<sub>3</sub>(0001) Surface. Langmuir, 2010, 26, 15845-15851.	1.6	13
92	Neutrally colourless, transparent and thermally stable polynorbornenes via ring-opening metathesis polymerisation for near-infrared electroactive applications. Journal of Materials Chemistry, 2011, 21, 8597.	6.7	13
93	High-Purity Semiconducting Single-Walled Carbon Nanotubes via Selective Dispersion in Solution Using Fully Conjugated Polytriarylamines. Macromolecules, 2016, 49, 8520-8529.	2.2	13
94	New Insights into Organic Dye Regeneration Mechanism in Dye-Sensitized Solar Cells: A Theoretical Study. ACS Sustainable Chemistry and Engineering, 2017, 5, 8619-8629.	3.2	13
95	Comparative Studies of H+(C6H6)(H2O)1,2 and H+(C5H5N)(H2O)1,2 by DFT Calculations and IR Spectroscopy. Australian Journal of Chemistry, 2004, 57, 1153.	0.5	12
96	Characterization of extraframework aluminum in H-mordenite dealuminated with ammonium hexafluorosilicate. Catalysis Today, 2004, 97, 13-23.	2.2	12
97	The role of charge-enhanced Hâ€O interactions in gel-like mixtures prepared from ionic liquids and tungsten(VI) oxide nanoparticles. Chemical Physics Letters, 2006, 427, 310-316.	1.2	12
98	Theoretical study on molecular design and optical properties of organic sensitizers. Physical Chemistry Chemical Physics, 2014, 16, 15389.	1.3	12
99	Theoretical insight into hydroxyl production <i>via</i> H<sub>2</sub>O<sub>2</sub> decomposition over the Fe<sub>3</sub>O<sub>4</sub>(311) surface. RSC Advances, 2021, 11, 36257-36264.	1.7	12
100	Enhancement of chlorobenzene sensing by doping aluminum on nanotubes: A DFT study. Applied Surface Science, 2020, 514, 145897.	3.1	11
101	Prediction of SEI Formation in Allâ€Solidâ€State Batteries: Computational Insights from PCLâ€based Polymer Electrolyte Decomposition on Lithiumâ€Metal. Batteries and Supercaps, 2022, 5, .	2.4	11
102	Initial growth of chemical-vapor-deposited Ru from bis(hexafluoroacetylacetonate)dicarbonyl ruthenium. Thin Solid Films, 2005, 483, 31-37.	0.8	10
103	Surface Raman Spectroscopy of <i>trans</i>-Stilbene on Ag/Ge(111): Surface-Induced Effects. Journal of Physical Chemistry C, 2009, 113, 208-212.	1.5	10
104	Preparation of neutrally colorless, transparent polynorbornenes with multiple redoxâ€active chromophores via ringâ€opening metathesis polymerization toward electrochromic applications. Journal of Polymer Science Part A, 2011, 49, 3248-3259.	2.5	10
105	Density Functional Theory Study of Water-Gas-Shift Reaction on 3Cu/±-Al2O3(0001) Surface. Journal of Physical Chemistry C, 2013, 117, 12045-12053.	1.5	10
106	Pressure-enhanced surface interactions between nano-TiO<sub>2</sub> and ionic liquid mixtures probed by high pressure IR spectroscopy. Physical Chemistry Chemical Physics, 2015, 17, 21143-21148.	1.3	10
107	Reduction mechanism of iron titanium based oxygen carriers with H<sub>2</sub> for chemical looping applications â€ a combined experimental and theoretical study. RSC Advances, 2016, 6, 106340-106346.	1.7	10
108	Adsorption and Decomposition of Ethylene Carbonate on LiMn2O4 Cathode Surface. Electrochimica Acta, 2016, 210, 61-70.	2.6	10



#	ARTICLE	IF	CITATIONS
109	A first principles study of CO oxidation over gold clusters: The catalytic role of boron nitride support and water. <i>Molecular Catalysis</i> , 2019, 471, 44-53.	1.0	10
110	Theoretical study on halide and mixed halide Perovskite solar cells: Effects of halide atoms on the stability and electronic properties. <i>Journal of the Chinese Chemical Society</i> , 2019, 66, 575-582.	0.8	10
111	A computational study of CO oxidation on IrO <sub>2</sub> (1 1 0) surface. <i>Applied Surface Science</i> , 2021, 539, 148244.	3.1	10
112	Direct visualization of lattice oxygen evolution and related electronic properties of Li <sub>1.2</sub> Ni <sub>0.2</sub> Mn <sub>0.6</sub> O <sub>2</sub> cathode materials. <i>Applied Surface Science</i> , 2021, 563, 150334.	3.1	10
113	Pressure-dependent studies on hydration of the C-H group in formic acid. <i>Journal of Chemical Physics</i> , 2001, 115, 8032-8037.	1.2	9
114	DFT study on dissociative adsorption of SiH <sub>4</sub> and GeH <sub>4</sub> on SiGe(100)-2 $\times$ 1 surface. <i>Surface Science</i> , 2006, 600, 3194-3201.	0.8	9
115	Mechanism of Growth of the Ge Wetting Layer Upon Exposure of Si(100)-2 $\times$ 1 to GeH <sub>4</sub> . <i>Journal of the American Chemical Society</i> , 2008, 130, 5440-5442.	6.6	9
116	Effect of solvent proton affinity on the kinetics of michael addition polymerization of <i>N</i> -bismaleimide-4,4'-diphenylmethane with barbituric acid. <i>Polymer Engineering and Science</i> , 2014, 54, 559-568.	1.5	9
117	B, N-doped graphene-supported Ir and Pt clusters for methane activation and C-C coupling: A density functional theory study. <i>Journal of Computational Chemistry</i> , 2020, 41, 194-202.	1.5	9
118	A first-principles study on double-sided decorated boron-nitrogen co-doped graphene by vanadium for enhanced low-temperature reversible hydrogen storage. <i>Sustainable Energy and Fuels</i> , 2021, 5, 2159-2168.	2.5	9
119	Comparable catalytic activity of a low-cost catalyst IrO <sub>2</sub> /TiO <sub>2</sub> for methane conversion - A density functional theory study. <i>Applied Surface Science</i> , 2022, 577, 151938.	3.1	9
120	Boron and Nitrogen Codoped Multilayer Graphene as a Counter Electrode: A Combined Theoretical and Experimental Study on Dye-Sensitized Solar Cells under Ambient Light Conditions. <i>Journal of Physical Chemistry C</i> , 2021, 125, 24894-24901.	1.5	9
121	The effect of pressure on charge-enhanced C-H...O interactions in aqueous triethylamine hydrochloride probed by high pressure Raman spectroscopy. <i>Chemical Physics Letters</i> , 2006, 432, 100-105.	1.2	8
122	Energetics and Rate Constants of Si <sub>2</sub> H <sub>6</sub> and Ge <sub>2</sub> H <sub>6</sub> Dissociative Adsorption on Dimers of SiGe(100)-2 $\times$ 1. <i>Journal of Physical Chemistry C</i> , 2007, 111, 13466-13472.	1.5	8
123	Application of Density Functional Theory and Photoelectron Spectra to the Adsorption and Reaction of H <sub>2</sub> S on Si (100). <i>Journal of Physical Chemistry C</i> , 2011, 115, 19203-19209.	1.5	8
124	Quantum Chemical Studies of Methane Oxidation to Methanol on a Biomimetic Tricopper Complex: Mechanistic Insights. <i>ChemistrySelect</i> , 2018, 3, 5113-5122.	0.7	8
125	Theoretical Study of Electrochemical and Electrochromic Properties of Novel Viologen Derivatives: Effects of Donors and $\pi$ -Conjugation. <i>Journal of Physical Chemistry B</i> , 2019, 123, 4735-4744.	1.2	8
126	Elucidating the Improved Electrolyte Stability with Novel Benzimidazole Salt on the Li Anode Surface: Insights into Interfacial Reactions. <i>Journal of Physical Chemistry C</i> , 2020, 124, 23523-23531.	1.5	8



#	ARTICLE	IF	CITATIONS
127	Combined Density Functional Theory and Microkinetics Study to Predict Optimum Operating Conditions of Si(100) Surface Carbonization by Acetylene for High Power Devices. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 4558-4568.	2.1	8
128	A first principles study of H <sub>2</sub> S adsorption and decomposition on a Ge(100) surface. <i>RSC Advances</i> , 2015, 5, 3825-3832.	1.7	7
129	Theoretical study on the interaction of iodide electrolyte/organic dye with the TiO <sub>2</sub> surface in dye-sensitized solar cells. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 26410-26418.	1.3	7
130	Tuning Interfacial Thermal and Electrical Conductance across a Metal/MoS <sub>2</sub> Monolayer through N-Methyl-2-pyrrolidone Wet Cleaning. <i>Advanced Materials Interfaces</i> , 2020, 7, 2000364.	1.9	7
131	Specific interactions between the quaternary ammonium oligoether-based ionic liquid and water as a function of pressure. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 12734.	1.3	6
132	A theoretical design of some silole-based dibenzothiophene-S,S-dioxide semiconducting compounds for red phosphorescence. <i>Organic Electronics</i> , 2018, 54, 270-276.	1.4	6
133	Theoretical study on wetting behavior of B-SWNT: Effects of doping concentration. <i>Applied Surface Science</i> , 2019, 497, 143798.	3.1	6
134	Effects of Electric Field on the Performance of Graphene-Based Counter Electrodes for Dye-Sensitized Solar Cells: A Theoretical Study. <i>Journal of Physical Chemistry C</i> , 2019, 123, 30373-30381.	1.5	6
135	Silole and selenophene-based D-π-A dyes in dye-sensitized solar cells: Insights from optoelectronic and regeneration properties. <i>Dyes and Pigments</i> , 2020, 176, 108243.	2.0	6
136	The fluorescence turn-off mechanism of a norbornene-derived homopolymer as an Al <sup>3+</sup> colorimetric and fluorescent chemosensor. <i>Materials Advances</i> , 0, , .	2.6	6
137	Intermolecular Interactions in Aqueous Dimethyl Sulphoxide and Acetic Acid Probed by High-Pressure FTIR. <i>Journal of the Chinese Chemical Society</i> , 2002, 49, 663-667.	0.8	5
138	Theoretical studies on effective metal-to-ligand charge transfer characteristics of novel ruthenium dyes for dye sensitized solar cells. <i>Journal of Computer-Aided Molecular Design</i> , 2014, 28, 565-575.	1.3	5
139	Theoretical Study of the Reductive Decomposition of Vinylethylene Sulfite as an Additive in Lithium Ion Battery. <i>Journal of the Chinese Chemical Society</i> , 2016, 63, 480-487.	0.8	5
140	The investigation of methane storage at the Ni-MOF-74 material: a periodic DFT calculation. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 12270-12279.	1.3	5
141	Theoretical investigation of CO <sub>2</sub> conversion on corrugated g-C <sub>3</sub> N <sub>4</sub> Surface decorated by single-atom of Fe, Co, and Pd. <i>Molecular Catalysis</i> , 2022, 526, 112402.	1.0	5
142	Study of Pathway of Hydrogen Migration and Desorption on SiGe(100) Surface Using Ab Initio Calculations. <i>Japanese Journal of Applied Physics</i> , 2005, 44, 7625-7633.	0.8	4
143	Unraveling Molecular Adsorption with Surface Raman Spectroscopy: trans-Stilbene, trans,trans-Distyrylbenzene, and trans-Azobenzene on Ag/Ge(111). <i>Journal of Physical Chemistry C</i> , 2011, 115, 516-520.	1.5	4
144	Spin-polarized transport properties in some transition metal dithiolene complexes. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 32536-32543.	1.3	4

#	ARTICLE	IF	CITATIONS
145	Effects of hydrogen on GaN metalorganic vapor-phase epitaxy using tertiarybutylhydrazine as nitrogen source. <i>Journal of Crystal Growth</i> , 2004, 266, 347-353.	0.7	3
146	Photodissociation and photoisomerization of $\hat{1}$ -fluorotoluene and 4-fluorotoluene in a molecular beam. <i>Journal of Chemical Physics</i> , 2006, 125, 133305.	1.2	3
147	Hydrophobic hydration in aqueous acetic acid and formic acid solutions probed by high pressure. <i>Journal of Luminescence</i> , 2002, 98, 177-182.	1.5	2
148	A First Study of the Kinetics of Metal Ion Adsorption at Solid/Liquid Interface using Evanescent Wave-based Optical Microfiber. <i>IEEE Sensors Journal</i> , 2020, , 1-1.	2.4	2
149	Molecular Bending: An Important Factor Affecting the Packing of Self-Assembled Monolayers of Triptycene-Based Molecular Rods on a (111) Gold Surface. <i>Journal of Physical Chemistry C</i> , 2022, 126, 7193-7207.	1.5	2
150	Intermolecular Hydrogen Bonding and Structures in 1,3-Dioxane/D <sub>2</sub> O Mixtures Studied by High-Pressure Raman Spectroscopy. <i>Journal of the Chinese Chemical Society</i> , 2005, 52, 625-630.	0.8	1
151	Quantum chemical study on the gas-phase reaction of tertiarybutylhydrazine: A potential nitrogen-bearing compound for GaN film growth. <i>Thin Solid Films</i> , 2006, 498, 100-107.	0.8	1
152	An Experimental Study on the Reduction Kinetics of Iron Titanium Based Oxygen Carriers with CO Validated by First Principle Calculations. <i>ChemistrySelect</i> , 2017, 2, 274-278.	0.7	1
153	Guest Editorial: <i>Journal of the Chinese Chemical Society</i> 6/2016. <i>Journal of the Chinese Chemical Society</i> , 2016, 63, 451-452.	0.8	0
154	The role of $\hat{1}$ -donors/acceptors in molecular rotors towards development of ambient blue light sensors - A density functional theory study. <i>Materials Chemistry and Physics</i> , 2022, 277, 125563.	2.0	0