

# Chuying Ouyang

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

187  
papers

6,859  
citations

44  
h-index

77  
g-index

191  
ext. papers

7,962  
ext. citations

4.9  
avg, IF

6.15  
L-index

#	Paper	IF	Citations
187	Insights into Bulk Properties and Transport Mechanisms in New Ternary Halide Solid Electrolytes: First-Principles Calculations. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 23510-23520	3.8	3
186	Two-dimensional MnN utilized as high-capacity anode for Li-ion batteries*. <i>Chinese Physics B</i> , <b>2021</b> , 30, 046302	1.2	1
185	Effects of Strain and Electric Field on Molecular Doping in MoSSe. <i>ACS Omega</i> , <b>2021</b> , 6, 14639-14647	3.9	3
184	First-principles calculation identification of ultrahigh hydrogen storage capacity in g-Mg <sub>3</sub> N <sub>2</sub> . <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 867, 158744	5.7	1
183	A first-principles investigation of Janus MoSSe as a catalyst for photocatalytic water-splitting. <i>Applied Surface Science</i> , <b>2021</b> , 537, 147919	6.7	17
182	Adsorption of propylene carbonate on the LiMn <sub>2</sub> O <sub>4</sub> (100) surface investigated by DFT + U calculations*. <i>Chinese Physics B</i> , <b>2021</b> , 30, 038202	1.2	1
181	The thermodynamics and electronic structure analysis of P-doped spinel CoO. <i>Physical Chemistry Chemical Physics</i> , <b>2021</b> , 23, 3588-3594	3.6	1
180	Dissociation of (LiO) on graphene and boron-doped graphene: insights from first-principles calculations. <i>Physical Chemistry Chemical Physics</i> , <b>2020</b> , 22, 14216-14224	3.6	3
179	The effect of strain on the Li-storage performance of V <sub>2</sub> C and Nb <sub>2</sub> C: From first-principles study. <i>Solid State Communications</i> , <b>2020</b> , 311, 113857	1.6	2
178	2D honeycomb borophene oxide: a promising anode material offering super high capacity for Li/Na-ion batteries. <i>Journal of Physics Condensed Matter</i> , <b>2020</b> , 32, 065001	1.8	11
177	An Sc-based coordination polymer with concaved superstructures: preparation, formation mechanism, conversion, and their electrochemistry properties. <i>CrystEngComm</i> , <b>2020</b> , 22, 2926-2932	3.3	
176	First-principles study of Eborophene for charge-modulated switchable CO capture. <i>Physical Chemistry Chemical Physics</i> , <b>2020</b> , 22, 8864-8869	3.6	3
175	Formation and thermodynamic stability of oxygen vacancies in typical cathode materials for Li-ion batteries: Density functional theory study. <i>Solid State Ionics</i> , <b>2020</b> , 347, 115257	3.3	20
174	First-principles study on the structural, electronic, and Li-ion mobility properties of anti-perovskite superionic conductor Li <sub>3</sub> OCl (100) surface. <i>Applied Surface Science</i> , <b>2020</b> , 510, 145394	6.7	4
173	Theoretical prediction of T-graphene as a promising alkali-ion battery anode offering ultrahigh capacity. <i>Physical Chemistry Chemical Physics</i> , <b>2020</b> , 22, 3281-3289	3.6	20
172	The effect of thickness on the Li-ion adsorption behaviors of 2D Ti <sub>1</sub> C multi-layers from first-principles calculations. <i>Thin Solid Films</i> , <b>2020</b> , 704, 138019	2.2	0
171	Multi-scale stabilization of high-voltage LiCoO <sub>2</sub> enabled by nanoscale solid electrolyte coating. <i>Energy Storage Materials</i> , <b>2020</b> , 29, 71-77	19.4	19

170	Structural and Electronic Properties of Small Stoichiometric (Li <sub>2</sub> O) <sub>n</sub> Clusters and Relevance to Li <sub>2</sub> O Batteries. <i>Journal of Cluster Science</i> , <b>2020</b> , 31, 643-649	3	1
169	Strong Jahn-Teller effect at NiO <sub>4</sub> tetrahedron in NiCo <sub>2</sub> O <sub>4</sub> spinel. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2020</b> , 384, 126114	2.3	0
168	Surface Modification of the LiNiCoMnO Cathode Material by Coating with FePO with a Yolk-Shell Structure for Improved Electrochemical Performance. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 36046-36053	9.5	25
167	First-principles insights of hydrogen diffusion dynamics at the $\alpha$ -Al <sub>2</sub> O <sub>3</sub> (0001) surface. <i>Applied Surface Science</i> , <b>2020</b> , 531, 147263	6.7	1
166	Efficient potential-tuning strategy through p-type doping for designing cathodes with ultrahigh energy density. <i>National Science Review</i> , <b>2020</b> , 7, 1768-1775	10.8	23
165	Hydrogen solution in tungsten (W) under different temperatures and strains: a first principles calculation study. <i>Physical Chemistry Chemical Physics</i> , <b>2020</b> , 22, 19623-19630	3.6	4
164	LiGaOS is a fast Li-Ion conductor: A first-principles prediction. <i>Materials and Design</i> , <b>2020</b> , 185, 108264	8.1	5
163	First principles study of g-MgN as an anode material for Na-, K-, Mg-, Ca- and Al-ion storage.. <i>RSC Advances</i> , <b>2019</b> , 9, 27378-27385	3.7	11
162	Electric-field-tunable molecular adsorption on germanane. <i>Physical Chemistry Chemical Physics</i> , <b>2019</b> , 21, 20287-20295	3.6	4
161	Tunable electronic structures in BP/MoSSe van der Waals heterostructures by external electric field and strain. <i>Applied Surface Science</i> , <b>2019</b> , 497, 143809	6.7	45
160	Phosphorus-Mediated MoS <sub>2</sub> : Phosphorus-Mediated MoS <sub>2</sub> Nanowires as a High-Performance Electrode Material for Quasi-Solid-State Sodium-Ion Intercalation Supercapacitors (Small 4/2019). <i>Small</i> , <b>2019</b> , 15, 1970026	11	2
159	Germagraphene as a promising anode material for lithium-ion batteries predicted from first-principles calculations. <i>Nanoscale Horizons</i> , <b>2019</b> , 4, 457-463	10.8	36
158	Trace doping of multiple elements enables stable battery cycling of LiCoO <sub>2</sub> at 4.6 V. <i>Nature Energy</i> , <b>2019</b> , 4, 594-603	62.3	299
157	The effect of protons on the Mg migration in an $\alpha$ -VO cathode for magnesium batteries: a first-principles investigation. <i>Physical Chemistry Chemical Physics</i> , <b>2019</b> , 21, 7406-7411	3.6	12
156	Structural and electronic properties of small lithium peroxide clusters in view of the charge process in Li-O batteries. <i>Physical Chemistry Chemical Physics</i> , <b>2019</b> , 21, 19935-19943	3.6	2
155	New insights into Li diffusion in Li-Si alloys for Si anode materials: role of Si microstructures. <i>Nanoscale</i> , <b>2019</b> , 11, 14042-14049	7.7	10
154	First Principles Study of Penta-siligraphene as High-Performance Anode Material for Li-Ion Batteries. <i>Nanoscale Research Letters</i> , <b>2019</b> , 14, 260	5	13
153	First principles study of alkali and alkaline earth metal ions adsorption and diffusion on penta-graphene. <i>Solid State Ionics</i> , <b>2019</b> , 342, 115062	3.3	11

152	First-principles study of rare-earth-doped cathode materials Li <sub>2</sub> MnO <sub>3</sub> in Li-ion batteries. <i>Wuli Xuebao/Acta Physica Sinica</i> , <b>2019</b> , 68, 138201	0.6	1
151	First-principles study of reduction mechanism of oxygen molecule using nitrogen doped graphene as cathode material for lithium air batteries. <i>Wuli Xuebao/Acta Physica Sinica</i> , <b>2019</b> , 68, 128801	0.6	2
150	Density functional theory prediction of MgN as a high-performance anode material for Li-ion batteries. <i>Physical Chemistry Chemical Physics</i> , <b>2019</b> , 21, 7053-7060	3.6	9
149	Jahn-Teller type small polaron assisted Na diffusion in NaMnO <sub>2</sub> as a cathode material for Na-ion batteries. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 6053-6061	13	14
148	New insight into the effect of fluorine doping and oxygen vacancies on electrochemical performance of Co <sub>2</sub> MnO <sub>4</sub> for flexible quasi-solid-state asymmetric supercapacitors. <i>Energy Storage Materials</i> , <b>2019</b> , 22, 384-396	19.4	105
147	Interpenetrating graphene network bct-C: a promising anode material for Li ion batteries. <i>Physical Chemistry Chemical Physics</i> , <b>2019</b> , 21, 23485-23491	3.6	6
146	Three-dimensional honeycomb carbon: Junction line distortion and novel emergent fermions. <i>Carbon</i> , <b>2019</b> , 141, 417-426	10.4	29
145	Phosphorus-Mediated MoS Nanowires as a High-Performance Electrode Material for Quasi-Solid-State Sodium-Ion Intercalation Supercapacitors. <i>Small</i> , <b>2019</b> , 15, e1803984	11	54
144	Tailoring Lithium Deposition via an SEI-Functionalized Membrane Derived from LiF Decorated Layered Carbon Structure. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1802912	21.8	74
143	Scandium Molybdate Microstructures with Tunable Phase and Morphology: Microwave Synthesis, Theoretical Calculations, and Photoluminescence Properties. <i>Inorganic Chemistry</i> , <b>2019</b> , 58, 2491-2500	5.1	6
142	Effect of Interstitial Hydrogen on the Mechanical and Thermal Properties of Tungsten: A First-Principles Study. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 1913-1921	3.8	8
141	Phosphorous-containing oxygen-deficient cobalt molybdate as an advanced electrode material for supercapacitors. <i>Energy Storage Materials</i> , <b>2019</b> , 19, 186-196	19.4	90
140	Molecular adsorption and strain-induced ferromagnetic semiconductor-metal transition in half-hydrogenated germanene. <i>Journal of Applied Physics</i> , <b>2019</b> , 125, 082504	2.5	1
139	Effect of cation substitution on the pseudocapacitive performance of spinel cobaltite MCo <sub>2</sub> O <sub>4</sub> (M = Mn, Ni, Cu, and Co). <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 10674-10685	13	164
138	Siligraphene as a promising anode material for lithium-ion batteries predicted from first-principles calculations. <i>Nano Energy</i> , <b>2018</b> , 49, 67-76	17.1	65
137	The adsorption and dissociation of oxygen on Ag (111) supported B borophene. <i>Physica B: Condensed Matter</i> , <b>2018</b> , 537, 1-6	2.8	14
136	The structural and electronic properties of Pt-Cu alloy clusters: Embedding atom method combined with density functional theory study. <i>Journal of Alloys and Compounds</i> , <b>2018</b> , 741, 604-609	5.7	7
135	Tuning the electronic properties of germanene by molecular adsorption and under an external electric field. <i>Journal of Materials Chemistry C</i> , <b>2018</b> , 6, 5937-5948	7.1	22

134	Na <sub>2</sub> MnO <sub>3</sub> as cathode materials for Na ion batteries: From first-principles investigations. <i>Solid State Ionics</i> , <b>2018</b> , 320, 210-214	3.3	18
133	Bandgap tuning in MoS <sub>2</sub> bilayers: synergistic effects of dipole moment and interlayer distance. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 20, 20919-20926	3.6	32
132	Electron-donor doping enhanced Li storage in electride CaN monolayer: a first-principles study. <i>Journal of Physics Condensed Matter</i> , <b>2018</b> , 30, 345501	1.8	5
131	Curvature induced improvement of Li storage in Ca <sub>2</sub> N nanotubes. <i>Applied Surface Science</i> , <b>2018</b> , 459, 406-410	6.7	2
130	Confined Li ion migration in the silicon-graphene complex system: An ab initio investigation. <i>Applied Surface Science</i> , <b>2018</b> , 436, 505-510	6.7	10
129	Comparative study on dynamical stability against strain of pristine and chemically functionalized monolayer honeycomb materials. <i>Journal of Materials Science</i> , <b>2018</b> , 53, 4306-4315	4.3	3
128	Bulk properties and transport mechanisms of a solid state antiperovskite Li-ion conductor Li <sub>3</sub> OCl: insights from first principles calculations. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 1150-1160	13	33
127	Ab initio molecular dynamics simulation of irradiation particles behavior in tungsten. <i>European Physical Journal B</i> , <b>2018</b> , 91, 1	1.2	
126	Theoretical Prediction of Janus MoS <sub>2</sub> as a Potential Anode Material for Lithium-Ion Batteries. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 23899-23909	3.8	34
125	First-principles identification of spinel CaCo <sub>2</sub> O <sub>4</sub> as a promising cathode material for Ca-ion batteries. <i>Solid State Ionics</i> , <b>2018</b> , 326, 145-149	3.3	9
124	Strain-tunable molecular doping in germanane: a first-principles study. <i>Nanotechnology</i> , <b>2018</b> , 29, 465203	4	3
123	Further discussions on the geometry and fast diffusion of AlCl <sub>4</sub> cluster intercalated in graphite. <i>Electrochimica Acta</i> , <b>2017</b> , 223, 137-139	6.7	7
122	Design and Properties Prediction of AMCOF by First-Principles Calculations. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 13255-13261	9.5	2
121	Ab initio investigation of Jahn-Teller-distortion-tuned Li-ion migration in $\delta$ -MnO <sub>2</sub> . <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 9618-9626	13	18
120	Preparation and temperature-dependent photoluminescence properties of ScF <sub>3</sub> :Eu <sup>3+</sup> submicroparticles. <i>New Journal of Chemistry</i> , <b>2017</b> , 41, 7915-7923	3.6	10
119	Designing Air-Stable O <sub>3</sub> -Type Cathode Materials by Combined Structure Modulation for Na-Ion Batteries. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 8440-8443	16.4	219
118	Bonding interactions in Li/Na oxides, peroxides and superoxides and their implication to the performance of the Li/Na-air batteries. <i>Solid State Ionics</i> , <b>2017</b> , 303, 24-28	3.3	3
117	Li ion diffusion dynamics on Li oxides and peroxides surfaces. <i>Materials Letters</i> , <b>2017</b> , 188, 208-211	3.3	2

116	Structural and Electronic Features of Nb-Doped SrCoO <sub>3</sub> : Insight from First-Principles Calculations. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 24987-24993	3.8	3
115	Compressive strain induced dynamical stability of monolayer 1T-MX <sub>2</sub> (M = Mo, W; X = S, Se). <i>Materials Research Express</i> , <b>2017</b> , 4, 115018	1.7	8
114	Jahn-Teller distortion affected Li ion migration in spinel TiO <sub>2</sub> . <i>Solid State Ionics</i> , <b>2017</b> , 312, 17-20	3.3	2
113	Insights into the physics of interaction between borophene and O <sub>2</sub> -first-principles investigation. <i>Computational Materials Science</i> , <b>2017</b> , 140, 261-266	3.2	13
112	Facile microwave synthesis of ScPO <sub>4</sub> ·2H <sub>2</sub> O flowerlike superstructures: morphology control, electronic structure and multicolor tunable luminescent properties. <i>CrystEngComm</i> , <b>2017</b> , 19, 5787-5796	3.3	7
111	The effect of titanium(Ti) doping on hydrogen incorporation in tungsten(W):First-principles calculations. <i>Fusion Engineering and Design</i> , <b>2017</b> , 121, 227-234	1.7	12
110	Calcium Doping of Lithium Titanium Oxide Nanospheres: A Combined First-Principles and Experimental Study. <i>Energy Technology</i> , <b>2017</b> , 5, 539-543	3.5	10
109	Lithium ion adsorption and diffusion on black phosphorene nanotube: A first-principles study. <i>Applied Surface Science</i> , <b>2017</b> , 392, 88-94	6.7	23
108	Highly optimized embedding atom method potential for Pt-Cu alloys. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 696, 470-480	5.7	4
107	Mechanical properties of W-Ti alloys from first-principles calculations. <i>Fusion Engineering and Design</i> , <b>2016</b> , 106, 34-39	1.7	29
106	Comparisons between adsorption and diffusion of alkali, alkaline earth metal atoms on silicene and those on silicane: Insight from first-principles calculations. <i>Chinese Physics B</i> , <b>2016</b> , 25, 067103	1.2	15
105	Coordination of lithium ion with ethylene carbonate electrolyte solvent: A computational study. <i>International Journal of Quantum Chemistry</i> , <b>2016</b> , 116, 97-102	2.1	29
104	Improving the electrical conductivity and structural stability of the Li <sub>2</sub> MnO <sub>3</sub> cathode via P doping. <i>Journal of Alloys and Compounds</i> , <b>2016</b> , 658, 818-823	5.7	23
103	Multi-scale computation methods: Their applications in lithium-ion battery research and development. <i>Chinese Physics B</i> , <b>2016</b> , 25, 018212	1.2	346
102	First principle study of Li <sub>2</sub> X <sub>2</sub> S <sub>2</sub> (X = Ga, In) as cathode materials for Li ion batteries. <i>Chinese Physics B</i> , <b>2016</b> , 25, 028202	1.2	2
101	Physics of electron and lithium-ion transport in electrode materials for Li-ion batteries. <i>Chinese Physics B</i> , <b>2016</b> , 25, 018206	1.2	27
100	Manipulation of spin-flip in Co <sub>3</sub> O <sub>4</sub> : a first principles study. <i>Journal of Materials Science</i> , <b>2016</b> , 51, 4691-4696	4.9	8
99	Insight into the Vibrational and Thermodynamic Properties of Layered Lithium Transition-Metal Oxides LiMO <sub>2</sub> (M = Co, Ni, Mn): A First-Principles Study. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 5876-5882	3.8	20

98	Investigations on Nb <sub>2</sub> C monolayer as promising anode material for Li or non-Li ion batteries from first-principles calculations. <i>RSC Advances</i> , <b>2016</b> , 6, 27467-27474	3.7	96
97	Geometry and fast diffusion of AlCl <sub>4</sub> cluster intercalated in graphite. <i>Electrochimica Acta</i> , <b>2016</b> , 195, 158-165	6.7	69
96	Ce <sup>3+</sup> -doped Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> with CeO <sub>2</sub> surface modification by a sol-gel method for high-performance lithium-ion batteries. <i>Electrochimica Acta</i> , <b>2016</b> , 189, 147-157	6.7	55
95	Structural, electronic, sodium diffusion and elastic properties of Na <sub>3</sub> P alloy anode for Na-ion batteries: Insight from first-principles calculations. <i>Modern Physics Letters B</i> , <b>2016</b> , 30, 1650385	1.6	3
94	A novel organosilicon-based ionic plastic crystal as solid-state electrolyte for lithium-ion batteries. <i>Journal of Zhejiang University: Science A</i> , <b>2016</b> , 17, 155-162	2.1	3
93	The strain effect on lithium ion migration in Li-Si alloys: A first-principles study. <i>Solid State Communications</i> , <b>2016</b> , 247, 47-52	1.6	4
92	The effect of titanium doping on carbon behavior in tungsten: A first-principles study. <i>Fusion Engineering and Design</i> , <b>2016</b> , 112, 123-129	1.7	4
91	Structural, Electronic, and Li Migration Properties of RE-Doped (RE = Ce, La) LiCoO <sub>2</sub> for Li-ion Batteries: A First-Principles Investigation. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 18428-18434	3.8	28
90	Structural Features of Medium-Sized Ge <sub>n</sub> (n = 35, 40, 45, 50, 55 and 60) clusters. <i>Journal of Cluster Science</i> , <b>2015</b> , 26, 1001-1010	3	1
89	Organosilicon functionalized glycerol carbonates as electrolytes for lithium-ion batteries. <i>RSC Advances</i> , <b>2015</b> , 5, 17660-17666	3.7	16
88	The structural and electronic properties of spinel MnCo <sub>2</sub> O <sub>4</sub> bulk and low-index surfaces: From first principles studies. <i>Applied Surface Science</i> , <b>2015</b> , 349, 510-515	6.7	22
87	2D Electrides as Promising Anode Materials for Na-Ion Batteries from First-Principles Study. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 24016-22	9.5	126
86	Multiple Dirac Points and Hydrogenation-Induced Magnetism of Germanene Layer on Al (111) Surface. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 4936-42	6.4	27
85	First-principles study of the stability of free-standing germanene in oxygen atmosphere. <i>Journal of Applied Physics</i> , <b>2015</b> , 118, 124303	2.5	14
84	First-Principles Study of Lithium and Sodium Atoms Intercalation in Fluorinated Graphite. <i>Engineering</i> , <b>2015</b> , 1, 243-246	9.7	11
83	The stability of free-standing germanene in oxygen: First-principles investigation. <i>Europhysics Letters</i> , <b>2015</b> , 110, 17007	1.6	5
82	W <sub>6</sub> <sup>+</sup> & Br <sub>3</sub> <sup>-</sup> -doped Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> anode with super rate performance for Li-ion batteries. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 13706-13716	13	59
81	Nitrogen- and Phosphorus-Doped Biocarbon with Enhanced Electrocatalytic Activity for Oxygen Reduction. <i>ACS Catalysis</i> , <b>2015</b> , 5, 920-927	13.1	124

80	Hydrogen storage on calcium-decorated BC7 sheet: A first-principles study. <i>International Journal of Hydrogen Energy</i> , <b>2014</b> , 39, 2142-2148	6.7	19
79	Investigations on V2C and V2CX2 (X = F, OH) Monolayer as a Promising Anode Material for Li Ion Batteries from First-Principles Calculations. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 24274-24281	3.8	215
78	Polaron states and migration in F-doped Li2MnO3. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2014</b> , 378, 2449-2452	2.3	16
77	Comparison of the stability of free-standing silicene and hydrogenated silicene in oxygen: a first principles investigation. <i>Journal of Physics Condensed Matter</i> , <b>2014</b> , 26, 355007	1.8	18
76	Li-decorated graphyne as high-capacity hydrogen storage media: First-principles plane wave calculations. <i>International Journal of Hydrogen Energy</i> , <b>2014</b> , 39, 17104-17111	6.7	56
75	Curvature induced magnetic nanonodes in (6, 0) SiC/C nanotube heterojunction superlattice. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2014</b> , 58, 153-156	3	1
74	Insights into structural stability and Li superionic conductivity of Li10GeP2S12 from first-principles calculations. <i>Chemical Physics Letters</i> , <b>2014</b> , 591, 16-20	2.5	28
73	Strain tuned Li diffusion in LiCoO2 material for Li ion batteries: A first principles study. <i>Solid State Ionics</i> , <b>2014</b> , 263, 46-48	3.3	71
72	Is silicene stable in O2? First-principles study of O2 dissociation and O2-dissociation-induced oxygen atoms adsorption on free-standing silicene. <i>Europhysics Letters</i> , <b>2014</b> , 106, 47001	1.6	26
71	Effect of strain on Li adsorption on silicene. <i>Wuli Xuebao/Acta Physica Sinica</i> , <b>2014</b> , 63, 217101	0.6	1
70	First-Principles Calculation of Lithium Adsorption and Diffusion on Silicene. <i>Chinese Physics Letters</i> , <b>2013</b> , 30, 017103	1.8	22
69	The role of Cu in degrading adsorption of CO on the PtnCu clusters. <i>Journal of Physical Chemistry A</i> , <b>2013</b> , 117, 8293-7	2.8	21
68	The structural, mechanical and electronic properties of (4,4) SiC/C nanotube heterojunction: A first-principles study. <i>Computational Materials Science</i> , <b>2013</b> , 68, 367-370	3.2	8
67	Effects of hydrogen on Mn-doped GaN: A first principles calculation. <i>Physica B: Condensed Matter</i> , <b>2013</b> , 425, 38-41	2.8	3
66	STRAIN-TUNABLE BAND GAP OF BC3 SHEET: A FIRST-PRINCIPLES INVESTIGATION. <i>Modern Physics Letters B</i> , <b>2013</b> , 27, 1350110	1.6	2
65	Charge transfer and formation of Ce3+ upon adsorption of metal atom M (M = Cu, Ag, Au) on CeO2 (100) surface. <i>Journal of Power Sources</i> , <b>2013</b> , 234, 69-81	8.9	27
64	The Origin of BC 7 Sheet Metallicity and the Tuning of its Electronic Properties by Hydrogenation. <i>Chinese Physics Letters</i> , <b>2013</b> , 30, 066102	1.8	2
63	Physics towards next generation Li secondary batteries materials: A short review from computational materials design perspective. <i>Science China: Physics, Mechanics and Astronomy</i> , <b>2013</b> , 56, 2278-2292	3.6	20



62	STRUCTURAL AND ELECTRONIC EVOLUTION FROM SiC SHEET TO SILICENE. <i>International Journal of Modern Physics B</i> , <b>2013</b> , 27, 1350188	1.1	2
61	FIRST-PRINCIPLES STUDY ON SiC/BNNT CORE/SHELL NANOCABLE. <i>Modern Physics Letters B</i> , <b>2013</b> , 27, 1350169	1.6	
60	First-principles study on the electronic structures of Cr- and W-doped single-layer MoS <sub>2</sub> . <i>Wuli Xuebao/Acta Physica Sinica</i> , <b>2013</b> , 62, 037103	0.6	13
59	First-principles study on the electronic structures of SiC/carbon nanotube core-shell structures. <i>Wuli Xuebao/Acta Physica Sinica</i> , <b>2013</b> , 62, 107101	0.6	5
58	First-principles study of high-capacity hydrogen storage on graphene with Li atoms. <i>Journal of Physics and Chemistry of Solids</i> , <b>2012</b> , 73, 245-251	3.9	74
57	Electronic states of metal (Cu, Ag, Au) atom on CeO <sub>2</sub> (111) surface: The role of local structural distortion. <i>Journal of Power Sources</i> , <b>2012</b> , 197, 28-37	8.9	41
56	Synthesis and Lithium Storage Mechanism of Ultrafine MoO <sub>2</sub> Nanorods. <i>Chemistry of Materials</i> , <b>2012</b> , 24, 457-463	9.6	201
55	Role of alloying elements in vanadium-based binary alloy membranes for hydrogen separation. <i>Journal of Membrane Science</i> , <b>2012</b> , 423-424, 332-341	9.6	22
54	First-principles study of the oxygen adsorption and dissociation on graphene and nitrogen doped graphene for Li-air batteries. <i>Journal of Applied Physics</i> , <b>2012</b> , 112, 104316	2.5	112
53	First-principles investigation of transition metal atom M (M = Cu, Ag, Au) adsorption on CeO <sub>2</sub> (110). <i>Physical Chemistry Chemical Physics</i> , <b>2012</b> , 14, 1923-33	3.6	47
52	Strain-induced semimetal-metal transition in silicene. <i>Europhysics Letters</i> , <b>2012</b> , 99, 17010	1.6	70
51	First-principles study of lithium intercalated bilayer graphene. <i>Science China: Physics, Mechanics and Astronomy</i> , <b>2012</b> , 55, 1376-1382	3.6	19
50	STRAIN INDUCED ENHANCED MIGRATION OF POLARON AND LITHIUM ION IN MnO <sub>2</sub> . <i>Functional Materials Letters</i> , <b>2012</b> , 05, 1250037	1.2	20
49	Understanding the effect of the layer-to-layer distance on Li-intercalated graphite. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 124325	2.5	19
48	The effect of strain on band structure of single-layer MoS <sub>2</sub> : an ab initio study. <i>Wuli Xuebao/Acta Physica Sinica</i> , <b>2012</b> , 61, 227102	0.6	15
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46	Electrical and Lithium Ion Dynamics in Three Main Components of Solid Electrolyte Interphase from Density Functional Theory Study. <i>Journal of Physical Chemistry C</i> , <b>2011</b> , 115, 7044-7049	3.8	117
45	Hydrogen solution in tetrahedral or octahedral interstitial sites in Al. <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, 9214-9217	5.7	11

44	Hydrogen-induced interactions in vanadium from first-principles calculations. <i>Physical Review B</i> , <b>2011</b> , 83,	3.3	44
43	Antisite defects and Mg doping in LiFePO <sub>4</sub> : a first-principles investigation. <i>Applied Physics A: Materials Science and Processing</i> , <b>2011</b> , 104, 529-537	2.6	43
42	Lithium ion diffusion in Li <sub>4+x</sub> Ti <sub>5</sub> O <sub>12</sub> : From ab initio studies. <i>Electrochimica Acta</i> , <b>2011</b> , 56, 6084-6088	6.7	44
41	Cobalt suppressed Jahn-Teller effect in LiCo <sub>0.5</sub> Ni <sub>0.5</sub> O <sub>2</sub> for lithium ion batteries. <i>Solid State Communications</i> , <b>2011</b> , 151, 234-237	1.6	18
40	Vacancy and H Interactions in Nb. <i>Chinese Physics Letters</i> , <b>2011</b> , 28, 127101	1.8	3
39	Improving the Electrochemical Activity of LiMnPO <sub>4</sub> Via Mn-Site Substitution. <i>Journal of the Electrochemical Society</i> , <b>2010</b> , 157, A225	3.9	98
38	Transition from Mn(4+) to Mn(3+) induced by surface reconstruction at $\bar{1}10$ MnO <sub>2</sub> (001). <i>Journal of Chemical Physics</i> , <b>2010</b> , 133, 204701	3.9	18
37	First-principles investigation on redox properties of M-doped CeO <sub>2</sub> (M=Mn,Pr,Sn,Zr). <i>Physical Review B</i> , <b>2010</b> , 82,	3.3	100
36	Oxidation States of Mn Atoms at Clean and Al <sub>2</sub> O <sub>3</sub> -Covered LiMn <sub>2</sub> O <sub>4</sub> (001) Surfaces. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 4756-4759	3.8	63
35	Ab initio studies on atomic and electronic structures of black phosphorus. <i>Journal of Applied Physics</i> , <b>2010</b> , 107, 093718	2.5	200
34	O-vacancy and surface on CeO <sub>2</sub> : A first-principles study. <i>Journal of Physics and Chemistry of Solids</i> , <b>2010</b> , 71, 788-796	3.9	24
33	First principles studies on the structural and electronic properties of Sr <sub>n+1</sub> Ti <sub>n</sub> O <sub>3n+1</sub> (n=1, 2, 3, ∞). <i>Physica B: Condensed Matter</i> , <b>2010</b> , 405, 4780-4784	2.8	1
32	First principles study of Jahn-Teller effects in Li <sub>x</sub> MnPO <sub>4</sub> . <i>Solid State Communications</i> , <b>2010</b> , 150, 40-44	1.6	76
31	Density functional theory study of Ir atom deposited on $\bar{1}10$ Al <sub>2</sub> O <sub>3</sub> (001) surface. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2009</b> , 373, 277-281	2.3	15
30	Small polaron migration in Li <sub>x</sub> Mn <sub>2</sub> O <sub>4</sub> : From first principles calculations. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2009</b> , 373, 2796-2799	2.3	37
29	First-principles study of lattice dynamics of LiFePO <sub>4</sub> . <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2009</b> , 373, 4096-4100	2.3	45
28	First-principles investigation of the bonding, optical and lattice dynamical properties of CeO <sub>2</sub> . <i>Journal of Power Sources</i> , <b>2009</b> , 194, 830-834	8.9	43
27	First-principles study of $\bar{1}10$ Al <sub>2</sub> O <sub>3</sub> (100) surface. <i>Physical Review B</i> , <b>2009</b> , 79,	3.3	34

26	Jahn-Teller distortion and electronic structure of LiMn <sub>2</sub> O <sub>4</sub> . <i>Journal of Alloys and Compounds</i> , <b>2009</b> , 474, 370-374	5.7	133
25	Electronic structure and magnetism of EuX (X = O, S, Se and Te): A first-principles investigation. <i>Europhysics Letters</i> , <b>2008</b> , 83, 69001	1.6	15
24	Li <sub>1+x</sub> FePO <sub>4</sub> (0 ≤ x ≤ 1) as anode material for lithium ion batteries: From ab initio studies. <i>Journal of Power Sources</i> , <b>2008</b> , 175, 891-896	8.9	16
23	Ab initio studies on Li <sub>4+x</sub> Ti <sub>5</sub> O <sub>12</sub> compounds as anode materials for lithium-ion batteries. <i>ChemPhysChem</i> , <b>2008</b> , 9, 2104-8	3.2	95
22	First-principles study on electronic structure of LiFePO <sub>4</sub> . <i>Solid State Communications</i> , <b>2007</b> , 143, 144-148	1.6	15
21	Ab initio studies of structural and electronic properties of Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> spinel. <i>Electrochemistry Communications</i> , <b>2007</b> , 9, 1107-1112	5.1	239
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19	Effect of Mg-doping on the structural and electronic properties of LiCoO <sub>2</sub> : A first-principles investigation. <i>Journal of Power Sources</i> , <b>2007</b> , 171, 908-912	8.9	66
18	Iodine ion transport in solid electrolyte LiI(C <sub>3</sub> H <sub>5</sub> NO) <sub>2</sub> : a first-principles identification. <i>Ionics</i> , <b>2007</b> , 12, 343-347	2.7	10
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14	Pulsed laser deposition prepared LiMn <sub>2</sub> O <sub>4</sub> thin film. <i>Thin Solid Films</i> , <b>2006</b> , 503, 268-271	2.2	19
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12	First principles study of wurtzite and zinc blende GaN: a comparison of the electronic and optical properties. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2005</b> , 336, 145-151	2.3	26
11	Ab initio investigation of the surface properties of Cu(111) and Li diffusion in Cu thin film. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2005</b> , 337, 247-255	2.3	32
10	Ab initio studies on the stability and electronic structure of LiCoO <sub>2</sub> (001) surfaces. <i>Physical Review B</i> , <b>2005</b> , 71,	3.3	25
9	The effect of Cr doping on Li ion diffusion in LiFePO <sub>4</sub> from first principles investigations and Monte Carlo simulations. <i>Journal of Physics Condensed Matter</i> , <b>2004</b> , 16, 2265-2272	1.8	68

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6	First-principles study of Li ion diffusion in $\text{LiFePO}_4$ . <i>Physical Review B</i> , <b>2004</b> , 69,	3.3	209
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4	The effect of cation doping on spinel $\text{LiMn}_2\text{O}_4$ : a first-principles investigation. <i>Solid State Communications</i> , <b>2003</b> , 126, 531-534	1.6	47
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