

# Yongquan Zhou

## List of Publications by Year in descending order

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42  
papers

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citations

840776

11  
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752698

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42  
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docs citations

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times ranked

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#	ARTICLE	IF	CITATIONS
1	Polyborates in aqueous borate solution: A Raman and DFT theory investigation. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2011, 83, 82-87.	3.9	71
2	Experimental and theoretical investigations of Cs <sup>+</sup> adsorption on crown ethers modified magnetic adsorbent. <i>Journal of Hazardous Materials</i> , 2019, 371, 712-720.	12.4	66
3	Density, Electrical Conductivity, pH, and Polyborate Distribution of LiB(OH) <sub>4</sub> , Li <sub>2</sub> B <sub>4</sub> O <sub>5</sub> (OH) <sub>4</sub> , and LiB <sub>5</sub> O <sub>6</sub> (OH) <sub>4</sub> Solutions. <i>Journal of Chemical &amp; Engineering Data</i> , 2014, 59, 4039-4048.	1.9	38
4	B(OH) <sub>4</sub> <sup>-</sup> hydration and association in sodium metaborate solutions by X-ray diffraction and empirical potential structure refinement. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 27878-27887.	2.8	34
5	Hydrogen generation mechanism of $\text{BH}_4^-$ spontaneous hydrolysis: A sight from ab initio calculation. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 22668-22676.	2.9	29
6	Volumetric and Transport Properties of Aqueous NaB(OH) <sub>4</sub> Solutions. <i>Chinese Journal of Chemical Engineering</i> , 2013, 21, 1048-1056.	3.5	23
7	Solution Structure of Energy Stored System I: Aqua-B(OH) <sub>4</sub> <sup>-</sup> : A DFT, Carâ€Parrinello Molecular Dynamics, and Raman Study. <i>Journal of Physical Chemistry B</i> , 2013, 117, 11709-11718.	2.6	18
8	Local structure of a highly concentrated NaClO <sub>4</sub> aqueous solution-type electrolyte for sodium ion batteries. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 26452-26458.	2.8	18
9	Selectivity of 18-crown-6 ether to alkali ions by density functional theory and molecular dynamics simulation. <i>Journal of Molecular Liquids</i> , 2020, 311, 113305.	4.9	18
10	Microhydration of BH <sub>4</sub> <sup>-</sup> : Dihydrogen Bonds, Structure, Stability, and Raman Spectra. <i>Journal of Physical Chemistry A</i> , 2017, 121, 9146-9155.	2.5	13
11	Raman spectroscopy and ab initio quantum chemical calculations of ion association behavior in calcium nitrate solution. <i>Journal of Raman Spectroscopy</i> , 2018, 49, 852-861.	2.5	11
12	Dihydrogen Bonds in Aqueous NaBD <sub>4</sub> Solution by Neutron and X-ray Diffraction. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 1622-1628.	4.6	11
13	Structure of alkaline aqueous NaBH <sub>4</sub> solutions by X-ray scattering and empirical potential structure refinement. <i>Journal of Molecular Liquids</i> , 2019, 274, 173-182.	4.9	10
14	The investigation of structure and IR spectra for hydrated potassium ion clusters K <sup>+</sup> (H <sub>2</sub> O) <sub>n=1-16</sub> by density functional theory*. <i>European Physical Journal D</i> , 2016, 70, 1.	1.3	9
15	Molecular interactions in aqueous solutions of polyborates at different acidity based on the Raman spectroscopy data at 25Â°C. <i>Russian Journal of Physical Chemistry A</i> , 2017, 91, 1925-1931.	0.6	9
16	Structure of Aqueous Lithium Tetraborate Solution. <i>Journal of Cluster Science</i> , 2016, 27, 1131-1145.	3.3	8
17	Modified Calcium Chloride Hexahydrate Lotus Root Starch/Expanded Graphite Shape-Stabilized Composite Phase Change Materials: Enhanced Heat Storage, Improved Heat Transfer, and Suppressed Supercooling Behavior. <i>Energy &amp; Fuels</i> , 2021, 35, 15126-15132.	5.1	8
18	Microâ€Raman and density functional theory analyses of ion pairs in concentrated sodium tetrahydroxyborate droplets. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2020, 224, 117308.	3.9	7

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19	The structural elucidation of aqueous $H_3BO_3$ solutions by DFT and neutron scattering studies. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 17160-17170.	2.8	7
20	Micro-hydration and acid dissociation mechanism of $B(OH)_3$ . <i>Chemical Physics Letters</i> , 2015, 636, 97-102.	2.6	6
21	Ion association in lithium metaborate solution: a Raman and ab initio insight. <i>Physics and Chemistry of Liquids</i> , 2017, 55, 186-195.	1.2	6
22	<i>Ab Initio</i> Investigation of the Microspecies and Energy in Hydrated Strontium Ion Clusters. <i>Molecular Physics</i> , 2018, 116, 273-282.	1.7	6
23	The process and mechanism for cesium and rubidium extraction with saponified 4-tert-butyl-2-( $\pm$ -methylbenzyl) phenol. <i>Chinese Journal of Chemical Engineering</i> , 2022, 46, 31-39.	3.5	6
24	Ion hydration and association in aqueous potassium tetrahydroxyborate solutions. <i>Analyst</i> , 2020, 145, 2245-2255.	3.5	6
25	<i>Ab-initio</i> investigation on ion-associated species and association process in $Li[B(OH)_4]$ solution. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2019, 213, 423-429.	3.9	5
26	Raman and ab initio analyses of ion pairs in concentrated $K[B(OH)_4]$ droplets. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2020, 230, 118039.	3.9	5
27	Structure of Aqueous Potassium Tetraborate Solutions. <i>Acta Chimica Sinica</i> , 2012, 70, 445.	1.4	5
28	Structure analysis of aqueous $Mg(NO_3)_2$ solutions. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2022, 267, 120478.	3.9	5
29	Construction of $Na_2CO_3 \cdot 10H_2O$ - $Na_2HPO_4 \cdot 12H_2O$ eutectic hydrated salt/ $NiCo_2O_4$ -expanded graphite multidimensional phase change material. <i>Journal of Energy Storage</i> , 2022, 52, 104781.	8.1	5
30	Hydrogen bonds in aqueous choline chloride solutions by DFT calculations and X-ray scattering. <i>Journal of Molecular Liquids</i> , 2022, 362, 119742.	4.9	5
31	<i>Ab Initio</i> Investigation of the Micro-species in $[CaCl_2(H_2O)_n]^{2+}$ and Their Raman Spectra. <i>Journal of Cluster Science</i> , 2018, 29, 605-616.	3.3	4
32	Structure of aqueous sodium acetate solutions by X-Ray scattering and density functional theory. <i>Pure and Applied Chemistry</i> , 2020, 92, 1627-1641.	1.9	4
33	Structure of phase change energy storage material $Ca(NO_3)_2 \cdot 4H_2O$ solution. <i>Journal of Molecular Liquids</i> , 2022, 356, 119010.	4.9	4
34	Structure of Aqueous $CaCl_2$ Solutions by X-ray Scattering and Density Functional Theory. <i>Russian Journal of Physical Chemistry A</i> , 2022, 96, S68-S76.	0.6	4
35	Mechanism for hydrolysis of double six-membered ring tetraborate anion. <i>International Journal of Quantum Chemistry</i> , 2020, 120, e26118.	2.0	3
36	<i>Ab Initio</i> Investigation of the Micro-species and Raman Spectra in $Ca(NO_3)_2$ Solution. <i>Journal of Cluster Science</i> , 2017, 28, 2293-2307.	3.3	2

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37	Phase Equilibrium in Aqueous Systems Containing Magnesium Borate. Russian Journal of Physical Chemistry A, 2019, 93, 1478-1483.	0.6	2
38	Structure of Ternary Nitrate Molten Salt (Hitec) by X-ray Scattering and Density Functional Theory. Russian Journal of Physical Chemistry A, 2021, 95, 1185-1193.	0.6	1
39	5ĩŷ4Žé«~é»åœšæ°´ç³»é»æ±ã@ççºç««ã,ç»æCEřã←ãŸæjřãŽšæ°´ç³»é»èšŁæŕ². Denki Kagaku, 2019, 87, 220-226.o.o		1
40	Study on energy storage performance of thermally enhanced composite phase change material of calcium nitrate tetrahydrate. Journal of Energy Storage, 2022, 52, 104879.	8.1	1
41	Structures of 18-crown-6/Cs+ complexes in aqueous solutions by wide angle X-ray scattering and density functional theory. Journal of Molecular Liquids, 2022, 360, 119477.	4.9	1
42	A Study of the Structure of Aqueous Rubidium Tetraborate Solutions. Journal of Solution Chemistry, 2021, 50, 19-30.	1.2	0