

# Fayan Zhu

## List of Publications by Year in descending order

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24  
papers

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docs citations

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citing authors

#	ARTICLE	IF	CITATIONS
1	Polyborates in aqueous borate solution: A Raman and DFT theory investigation. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2011, 83, 82-87.	3.9	71
2	Preparation and thermal energy storage studies of CH <sub>3</sub> COONa·3H <sub>2</sub> O/KCl composites salt system with enhanced phase change performance. Applied Thermal Engineering, 2016, 102, 708-715.	6.0	69
3	B(OH) <sub>4</sub> <sup>-</sup> hydration and association in sodium metaborate solutions by X-ray diffraction and empirical potential structure refinement. Physical Chemistry Chemical Physics, 2017, 19, 27878-27887.	2.8	34
4	Phase change performance assessment of salt mixtures for thermal energy storage material. International Journal of Energy Research, 2017, 41, 1855-1866.	4.5	15
5	Microhydration of BH <sub>4</sub> <sup>-</sup> : Dihydrogen Bonds, Structure, Stability, and Raman Spectra. Journal of Physical Chemistry A, 2017, 121, 9146-9155.	2.5	13
6	Raman spectroscopy and ab initio quantum chemical calculations of ion association behavior in calcium nitrate solution. Journal of Raman Spectroscopy, 2018, 49, 852-861.	2.5	11
7	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*. European Physical Journal D, 2016, 70, 1.	1.3	9
8	Structure of Aqueous Lithium Tetraborate Solution. Journal of Cluster Science, 2016, 27, 1131-1145.	3.3	8
9	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. Energy & Fuels, 2021, 35, 15126-15132.	5.1	8
10	Structure of aqueous sodium sulfate solutions derived from X-ray diffraction. Science Bulletin, 2009, 54, 2022-2027.	9.0	7
11	Micro-Raman and density functional theory analyses of ion pairs in concentrated sodium tetrahydroxyborate droplets. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 224, 117308.	3.9	7
12	The structural elucidation of aqueous H <sub>3</sub> BO <sub>3</sub> solutions by DFT and neutron scattering studies. Physical Chemistry Chemical Physics, 2020, 22, 17160-17170.	2.8	7
13	Ion association in lithium metaborate solution: a Raman and ab initio insight. Physics and Chemistry of Liquids, 2017, 55, 186-195.	1.2	6
14	<i>Ab Initio</i> Investigation of the Microspecies and Energy in Hydrated Strontium Ion Clusters. Molecular Physics, 2018, 116, 273-282.	1.7	6
15	Ion hydration and association in aqueous potassium tetrahydroxyborate solutions. Analyst, The, 2020, 145, 2245-2255.	3.5	6
16	Ab-initio investigation on ion-associated species and association process in Li[B(OH) <sub>4</sub> ] solution. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2019, 213, 423-429.	3.9	5
17	Raman and ab initio analyses of ion pairs in concentrated K[B(OH) <sub>4</sub> ] droplets. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 230, 118039.	3.9	5
18	Structure analysis of aqueous Mg(NO <sub>3</sub> ) <sub>2</sub> solutions. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2022, 267, 120478.	3.9	5

#	ARTICLE	IF	CITATIONS
19	Ab Initio Investigation of the Micro-species in $[\text{CaCl}_2(\text{H}_2\text{O})_n]^{2-}$ and Their Raman Spectra. <i>Journal of Cluster Science</i> , 2018, 29, 605-616.	3.3	4
20	Structure of phase change energy storage material $\text{Ca}(\text{NO}_3)_2 \cdot 4\text{H}_2\text{O}$ solution. <i>Journal of Molecular Liquids</i> , 2022, 356, 119010.	4.9	4
21	Structure of Aqueous $\text{CaCl}_2$ Solutions by X-ray Scattering and Density Functional Theory. <i>Russian Journal of Physical Chemistry A</i> , 2022, 96, S68-S76.	0.6	4
22	Mechanism for hydrolysis of double six-membered ring tetraborate anion. <i>International Journal of Quantum Chemistry</i> , 2020, 120, e26118.	2.0	3
23	Ab Initio Investigation of the Micro-species and Raman Spectra in $\text{Ca}(\text{NO}_3)_2$ Solution. <i>Journal of Cluster Science</i> , 2017, 28, 2293-2307.	3.3	2
24	A Study of the Structure of Aqueous Rubidium Tetraborate Solutions. <i>Journal of Solution Chemistry</i> , 2021, 50, 19-30.	1.2	0