

# Taoxiang Sun

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9426727/publications.pdf>

Version: 2024-02-01

37  
papers

805  
citations

623188

14  
h-index

525886

27  
g-index

37  
all docs

37  
docs citations

37  
times ranked

871  
citing authors

#	ARTICLE	IF	CITATIONS
1	Performance and Mechanism of Uranium Adsorption from Seawater to Poly(dopamine)-Inspired Sorbents. <i>Environmental Science &amp; Technology</i> , 2017, 51, 4606-4614.	4.6	168
2	Visualization of Adsorption: Luminescent Mesoporous Silica-Carbon Dots Composite for Rapid and Selective Removal of U(VI) and in Situ Monitoring the Adsorption Behavior. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 7392-7398.	4.0	96
3	Selective Separation and Complexation of Trivalent Actinide and Lanthanide by a Tetradentate Soft-Hard Donor Ligand: Solvent Extraction, Spectroscopy, and DFT Calculations. <i>Inorganic Chemistry</i> , 2019, 58, 4420-4430.	1.9	84
4	Microplasma electrochemistry controlled rapid preparation of fluorescent polydopamine nanoparticles and their application in uranium detection. <i>Chemical Engineering Journal</i> , 2018, 344, 480-486.	6.6	49
5	Microplasma-assisted rapid, chemical oxidant-free and controllable polymerization of dopamine for surface modification. <i>Polymer Chemistry</i> , 2017, 8, 4388-4392.	1.9	38
6	Performance and Mechanism for the Selective Separation of Trivalent Americium from Lanthanides by a Tetradentate Phenanthroline Ligand in Ionic Liquid. <i>Inorganic Chemistry</i> , 2020, 59, 3905-3911.	1.9	31
7	Comparative study on the extraction of trivalent americium and europium by CMPO in imidazolium-based ionic liquids and dodecane. <i>Solvent Extraction and Ion Exchange</i> , 2017, 35, 408-422.	0.8	27
8	Extraction of Th(IV) from aqueous solution by room-temperature ionic liquids and coupled with supercritical carbon dioxide stripping. <i>Separation and Purification Technology</i> , 2013, 119, 66-71.	3.9	23
9	Interactions of Bis(2,4,4-trimethylpentyl)dithiophosphinate with Trivalent Lanthanides in a Homogeneous Medium: Thermodynamics and Coordination Modes. <i>Inorganic Chemistry</i> , 2017, 56, 2556-2565.	1.9	17
10	Quantum Chemistry Study on the Extraction of Trivalent Lanthanide Series by Cyanex301: Insights from Formation of Inner- and Outer-Sphere Complexes. <i>ACS Omega</i> , 2018, 3, 4070-4080.	1.6	17
11	Substituent Effect on the Selective Separation and Complexation of Trivalent Americium and Lanthanides by N,O-Hybrid 2,9-Diamide-1,10-phenanthroline Ligands in Ionic Liquid. <i>Inorganic Chemistry</i> , 2021, 60, 5131-5139.	1.9	17
12	Novel polyazamacrocyclic receptor decorated core-shell superparamagnetic microspheres for selective binding and magnetic enrichment of palladium: synthesis, adsorptive behavior and coordination mechanism. <i>Dalton Transactions</i> , 2016, 45, 9553-9564.	1.6	16
13	Crystallization of cesium complex containing bis(2-propyloxy)calix[4]crown-6 and bis[(trifluoromethyl)sulfonyl]imide. <i>Inorganica Chimica Acta</i> , 2012, 390, 8-11.	1.2	14
14	Formation of W/O microemulsions in the extraction of Nd(III) by bis(2,4,4-trimethylpentyl)dithiophosphinic acid and its effects on Nd(III) coordination. <i>Dalton Transactions</i> , 2016, 45, 1078-1084.	1.6	14
15	Thermodynamic Insight into the Solvation and Complexation Behavior of U(VI) in Ionic Liquid: Binding of CMPO with U(VI) Studied by Optical Spectroscopy and Calorimetry. <i>Inorganic Chemistry</i> , 2017, 56, 3014-3021.	1.9	14
16	Thermodynamic and spectroscopic study on the solvation and complexation behavior of Ln(III) in ionic liquids: binding of Ln(III) with CMPO in C <sub>4</sub> mimNTf <sub>2</sub> . <i>New Journal of Chemistry</i> , 2018, 42, 9098-9109.	1.4	14
17	Extraction of U(VI) by the ionic liquid hexyltributylphosphonium bis(trifluoromethylsulfonyl)imides: An experimental and theoretical study. <i>Separation and Purification Technology</i> , 2017, 188, 386-393.	3.9	13
18	Complexation of Pu(VI) with N,N,N',N'-tetramethyl-3-oxa-glutar-amide (TMOGA) and related ligands: optical properties and coordination modes. <i>Dalton Transactions</i> , 2018, 47, 15246-15253.	1.6	13

#	ARTICLE	IF	CITATIONS
19	Hydraulic and Mass-Transfer Performance of a 20-Mm-Diameter Annular Centrifugal Contactor for the Solvent Extraction of Cesium by Bis(2-Propyloxy)Calix[4]-Crown-6 in <i>n</i> -Octanol. <i>Solvent Extraction and Ion Exchange</i> , 2015, 33, 75-90.	0.8	12
20	Formation of W/O Microemulsions in the Extraction of the Lanthanide Series by Purified Cyanex 301. <i>Solvent Extraction and Ion Exchange</i> , 2017, 35, 199-209.	0.8	12
21	Denitration of simulated high-level liquid waste by formic acid for the connection of PUREX process with TRPO process. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2017, 314, 221-229.	0.7	12
22	Tremendous impact of substituent group on the extraction and selectivity to Am(III) over Eu(III) by diaryldithiophosphinic acids: experimental and DFT analysis. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2019, 320, 219-226.	0.7	12
23	A further understanding of the cation exchange mechanism for the extraction of Sr <sup>2+</sup> and Cs <sup>+</sup> by ionic liquid. <i>Science China Chemistry</i> , 2013, 56, 782-788.	4.2	10
24	Characterization of reversed micelles formed in solvent extraction of thorium(IV) by bis(2-ethylhexyl) phosphoric acid. Transforming from rodlike to wormlike morphology. <i>Radiochimica Acta</i> , 2016, 104, 457-469.	0.5	10
25	Efficient co-extraction of strontium and cesium from nitric acid medium by mixtures of di- <i>tert</i> -butylcyclohexano-18-crown-6 and 1,3-di(2-propoxy)calix[4]arene-crown-6 in <i>n</i> -octanol. <i>Separation Science and Technology</i> , 2018, 53, 503-512.	1.3	10
26	â€œSweepingâ€•Ortho Substituents Drive Desolvation and Overwhelm Electronic Effects in Nd <sup>3+</sup> Chelation: A Case of Three Aryldithiophosphinates. <i>Inorganic Chemistry</i> , 2020, 59, 161-171.	1.9	10
27	Involvement of 5f Orbitals in the Covalent Bonding between the Uranyl Ion and Trialkyl Phosphine Oxide: Unraveled by Oxygen K-Edge X-ray Absorption Spectroscopy and Density Functional Theory. <i>Inorganic Chemistry</i> , 2022, 61, 92-104.	1.9	9
28	Improvement of the extraction ability of bis(2-propyloxy)calix[4]arene-crown-6 toward cesium cation by introducing an intramolecular triple cooperative effect. <i>Separation and Purification Technology</i> , 2018, 199, 97-104.	3.9	8
29	Coordination of Nd( <sup>iii</sup> ) and Eu( <sup>iii</sup> ) with monodentate organophosphorus ligands in ionic liquids: spectroscopy and thermodynamics. <i>New Journal of Chemistry</i> , 2019, 43, 3866-3873.	1.4	8
30	Identification of Fâˆ’ and SO <sub>4</sub> <sup>2-</sup> as the radiolytic products of the ionic liquid C <sub>4</sub> mimNTf <sub>2</sub> and their effect on the extraction of UO <sub>2</sub> <sup>2+</sup> . <i>Radiation Physics and Chemistry</i> , 2013, 83, 74-78.	1.4	7
31	Improving the Robustness of Trivalent Actinides/Lanthanides Separation by Bis(2,4,4-trimethylpentyl)dithiophosphinic Acid: Batch Extraction and Process Demonstration. <i>Solvent Extraction and Ion Exchange</i> , 2021, 39, 290-304.	0.8	5
32	DFT calculation and experimental validation on the interactions of bis(trifluoromethylsulfonyl)imide and hexafluorophosphate with cesium. <i>Journal of Molecular Structure</i> , 2017, 1148, 206-212.	1.8	4
33	Probing the Difference in the Complexation of Trivalent Actinides and Lanthanides with a Tridentate N,O-Hybrid Ligand: Spectroscopy, Thermodynamics, and Coordination Modes. <i>Inorganic Chemistry</i> , 2022, 61, 6063-6072.	1.9	4
34	Extraction of U(VI) by a novel polyazamacrocycle extractant. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2015, 303, 771-776.	0.7	2
35	Covalency between the uranyl ion and dithiophosphinate by sulfur <i>K</i> -edge X-ray absorption spectroscopy and density functional theory. <i>Journal of Synchrotron Radiation</i> , 2022, 29, 11-20.	1.0	2
36	Liquid Hold-up Volume and Phase Ratio (A/O) of HNO <sub>3</sub> â€•DtBuCH18C6/ <i>n</i> -Octanol System in an Annular Centrifugal Extractor. <i>Solvent Extraction and Ion Exchange</i> , 2022, 40, 777-799.	0.8	2

#	ARTICLE	IF	CITATIONS
37	Complexation of U(VI) with diphenyldithiophosphinic acid: spectroscopy, structure and DFT calculations. Journal of Radioanalytical and Nuclear Chemistry, 2018, 317, 121-129.	0.7	1