

Sk Musharaf Ali

List of Publications by Year in descending order

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122
papers

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279798

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#	ARTICLE	IF	CITATIONS
1	Application of hybrid MOF composite in extraction of f-block elements: Experimental and computational investigation. <i>Chemosphere</i> , 2022, 287, 132232.	8.2	12
2	Sequestration of Am ³⁺ and Eu ³⁺ into ionic liquid containing Aza-macrocyclic based multiple-diglycolamide ligands: Extraction, complexation, luminescence and DFT studies. <i>Journal of Molecular Liquids</i> , 2022, 347, 118291.	4.9	7
3	Mechanism unravelling for highly efficient and selective ⁹⁹ TcO ₄ ⁻ sequestration utilising crown ether based solvent system from nuclear liquid waste: experimental and computational investigations. <i>RSC Advances</i> , 2022, 12, 3216-3226.	3.6	9
4	Exploring the reaction pathway involved in the dibenzo-18-crown-6 synthesis from catechol and bis(2-chloroethyl) ether in presence of base. <i>Journal of Physical Organic Chemistry</i> , 2022, 35, .	1.9	1
5	Density functional theoretical analysis of micro-adsorption of isotopes of hydrogen molecule and atom by uranium. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 18441-18467.	7.1	2
6	Efficient separation of strontium ions from aqueous solution by dibenzo-18-crown-6 functionalized resin: Static and dynamic adsorption studies with computational DFT insights. <i>Chemical Engineering Journal Advances</i> , 2022, 11, 100308.	5.2	7
7	Tuning Network Connectivity of Silicate and Sodium Borosilicate Glasses by TiO ₂ for Enhanced Chemical Durability: Molecular Dynamics Simulation Investigations. <i>Langmuir</i> , 2022, 38, 7639-7663.	3.5	3
8	Chemisorption, diffusion and permeation of hydrogen isotopes in bcc bulk Cr and Cr(100) surface: First-principles DFT simulations. <i>Journal of Nuclear Materials</i> , 2021, 543, 152538.	2.7	11
9	Density functional theoretical tailoring of electronic effect through various substituents on calix[4]arene-crown-6 for efficient Cs ⁺ ion encapsulation and extraction. <i>International Journal of Quantum Chemistry</i> , 2021, 121, e26436.	2.0	1
10	Highly efficient diglycolamide-functionalized dendrimers for the sequestration of tetravalent actinides: solvent extraction and theoretical studies. <i>New Journal of Chemistry</i> , 2021, 45, 9462-9471.	2.8	6
11	Does uranyl-TBP complex formation happen at the aqueous-organic interface? Revelation by molecular dynamics simulations. <i>Journal of Molecular Liquids</i> , 2021, 330, 115621.	4.9	3
12	New Greener and Sustainable Methodology for Direct Sequestering and Analysis of Uranium Using a Maline Supramolecular Scaffold and Mechanistic Understanding through Speciation and Interaction Studies. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 7846-7862.	6.7	9
13	Characterization of Thorium-Pyrazinoic acid complexation and its decorporation efficacy in human cells and blood. <i>Chemosphere</i> , 2021, 271, 129547.	8.2	5
14	<i>In Situ</i> Preconcentration during the Di-(2-ethylhexyl) Phosphoric Acid-Assisted Dissolution of Uranium Trioxide in an Ionic Liquid: Spectroscopic, Electrochemical, and Theoretical Studies. <i>Inorganic Chemistry</i> , 2021, 60, 10147-10157.	4.0	9
15	Deciphering the curved profile of uranyl ions at the aqueous-organic interface by atomistic simulations. <i>Journal of Molecular Liquids</i> , 2021, 343, 117599.	4.9	2
16	Molecular dynamics simulations of simplified sodium borosilicate glasses: the effect of composition on structure and dynamics. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 14898-14912.	2.8	8
17	The aqueous interaction of neodymium with two omnixistent biomolecules – a mechanistic understanding by experimental and theoretical studies. <i>Dalton Transactions</i> , 2021, 50, 16191-16204.	3.3	3
18	New deep eutectic solvents based on imidazolium cation: Probing redox speciation of uranium oxides by electrochemical and theoretical simulations. <i>Journal of Electroanalytical Chemistry</i> , 2021, 901, 115752.	3.8	6

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19	Insight into Speciation and Electrochemistry of Uranyl Ions in Deep Eutectic Solvents. <i>Journal of Physical Chemistry B</i> , 2020, 124, 181-189.	2.6	26
20	Diffusion, permeation and solubility of hydrogen, deuterium and tritium in crystalline tungsten: First principles DFT simulations. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 29095-29109.	7.1	27
21	Experimental and theoretical insight into the extraction mechanism, kinetics, thermodynamics, complexation and radiolytic stability of novel calix crown ether in ionic liquid with Sr ²⁺ . <i>Journal of Molecular Liquids</i> , 2020, 316, 113864.	4.9	12
22	DFT and MD simulation supplemented experiments for isotopic fractionation of zinc compounds using a macrocyclic crown ether appended polymeric resin. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 14682-14693.	2.8	11
23	Ligand architectural effect on coordination, bonding, interaction, and selectivity of Am(^{III}) and Ln(^{III}) ions with bitopic ligands: synthesis, solvent extraction, and DFT studies. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 15448-15462.	2.8	13
24	Exploring functionalized titania for task specific application of efficient separation of trivalent f-block elements. <i>New Journal of Chemistry</i> , 2020, 44, 6151-6162.	2.8	12
25	The effect of alkyl chain length attached to the diglycolamide and n-paraffin on the aggregation behaviour of diglycolamide and MD simulation of aggregates. <i>Journal of Molecular Structure</i> , 2020, 1221, 128795.	3.6	6
26	Aquatic interaction of uranium with two naturally ubiquitous pyrazine compounds: Speciation studies by experiment and theory. <i>Chemosphere</i> , 2020, 249, 126116.	8.2	9
27	Unusual behavior of Stokes-Einstein relation in liquid mixtures. <i>AIP Advances</i> , 2020, 10, .	1.3	4
28	Reduction in Coordination Number of Eu(III) on Complexation with Pyrazine Mono- and Di-Carboxylates in Aqueous Medium. <i>Inorganic Chemistry</i> , 2019, 58, 11180-11194.	4.0	20
29	Molecular Dynamics Simulation of Amorphous SiO ₂ , B ₂ O ₃ , Na ₂ O-SiO ₂ , Na ₂ O-B ₂ O ₃ , and Na ₂ O-SiO ₂ -B ₂ O ₃ Glasses with Variable Compositions and with Cs ₂ O and SrO Dopants. <i>Journal of Physical Chemistry B</i> , 2019, 123, 6290-6302.	2.6	14
30	Sorption of different metal ions on magnetic nanoparticles and their effect on nanoparticles settlement. <i>Environmental Nanotechnology, Monitoring and Management</i> , 2019, 11, 100202.	2.9	8
31	Adsorption, Absorption, Diffusion, and Permeation of Hydrogen and Its Isotopes in bcc Bulk Fe and Fe(100) Surface: Plane Wave-Based Density Functional Theoretical Investigations. <i>Journal of Physical Chemistry C</i> , 2019, 123, 23951-23966.	3.1	11
32	Breakdown of continuum model for water transport and desalination through ultrathin graphene nanopores: insights from molecular dynamics simulations. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 21389-21406.	2.8	15
33	Highly Efficient N-Pivot Tripodal Diglycolamide Ligands for Trivalent f-Cations: Synthesis, Extraction, Spectroscopy, and Density Functional Theory Studies. <i>Inorganic Chemistry</i> , 2019, 58, 8633-8644.	4.0	20
34	Molecular Dynamics Simulation Studies on Structure, Dynamics, and Thermodynamics of Uranyl Nitrate Solution at Various Acid Concentrations. <i>Journal of Physical Chemistry B</i> , 2019, 123, 4571-4586.	2.6	12
35	Scalar Relativistic Density Functional Theoretical Investigation of Higher Complexation Ability of Substituted 1,10-Phenanthroline over Bipyridine Towards Am ³⁺ /Eu ³⁺ Ions. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2019, 645, 817-829.	1.2	8
36	Adsorption of Gadolinium (Gd ³⁺) Ions on the Dibenzo Crown Ether (DBCE) and Dicyclo Hexano Crown Ether (DCHCE) Grafted on the Polystyrene Surface: Insights from All Atom Molecular Dynamics Simulations and Experiments. <i>Journal of Physical Chemistry C</i> , 2019, 123, 12276-12285.	3.1	14

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37	Nanoscope insights of saline water in carbon nanotube appended filters using molecular dynamics simulations. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 8529-8542.	2.8	15
38	Macrocylic host appended carbon nanotubes for selective adsorption of metal ions: combined experimental, DFT and MD studies. <i>Molecular Systems Design and Engineering</i> , 2019, 4, 616-625.	3.4	2
39	Understanding of interfacial tension and interface thickness of liquid/liquid interface at a finite concentration of alkyl phosphate by molecular dynamics simulation. <i>Journal of Molecular Liquids</i> , 2019, 277, 217-232.	4.9	15
40	Thorium decorporation efficacy of rationally-selected biocompatible compounds with relevance to human application. <i>Journal of Hazardous Materials</i> , 2019, 365, 952-961.	12.4	15
41	Molecular dynamics simulation for the test of calibrated OPLS-AA force field for binary liquid mixture of tri-iso-amyl phosphate and <i>n</i> -dodecane. <i>Journal of Chemical Physics</i> , 2018, 148, 074502.	3.0	15
42	Complexation of thorium with pyridine monocarboxylate-N-oxides: Thermodynamic and computational studies. <i>Journal of Chemical Thermodynamics</i> , 2018, 122, 13-22.	2.0	13
43	Dispersion corrected interaction of polar and nonpolar fluids confined within carbon nanotubes: Density functional theoretical analysis using Grimme's D3 scheme. <i>International Journal of Quantum Chemistry</i> , 2018, 118, e25578.	2.0	4
44	Interfacial Behavior of Cs ⁺ , K ⁺ , Na ⁺ , and Rb ⁺ Extraction in the Presence of Dibenzo-18-Crown-6 from the Nitrobenzene-Water Biphasic System: Experimental, Quantum Chemical, and Molecular Dynamic Studies. <i>ACS Omega</i> , 2018, 3, 1663-1674.	3.5	8
45	Partitioning of Cs ⁺ and Na ⁺ ions by dibenzo-18-crown-6 ionophore in biphasic aqueous systems of octanol and ionic liquid. <i>Radiochimica Acta</i> , 2018, 106, 477-495.	1.2	9
46	Alkali Metal Ion Partitioning with Calix[4]arene-benzo-crown-6 Ionophore in Acidic Medium: Insights from Experiments, Statistical Mechanical Framework, and Molecular Dynamics Simulations. <i>Journal of Physical Chemistry B</i> , 2018, 122, 2102-2112.	2.6	8
47	Extraction of Gd ³⁺ and UO ₂ ²⁺ Ions Using Polystyrene Grafted Dibenzo Crown Ether (DB18C6) with Octanol and Nitrobenzene: A Molecular Dynamics Study. <i>Journal of Physical Chemistry B</i> , 2018, 122, 1334-1344.	2.6	12
48	Molecular Facts on the Structure and Dynamics of Electrolyte Species in Cu-Cl Cycle for Hydrogen Generation: An Insight from Molecular Dynamic Simulations. <i>Journal of Physical Chemistry B</i> , 2018, 122, 4115-4130.	2.6	0
49	Structural, luminescence, thermodynamic and theoretical studies on mononuclear complexes of Eu(III) with pyridine monocarboxylate-N-oxides in aqueous solution. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018, 190, 150-163.	3.9	12
50	Carbon nano tubes functionalized with novel functional group- amido-amine for sorption of actinides. <i>Journal of Hazardous Materials</i> , 2018, 345, 63-75.	12.4	31
51	Complexation thermodynamics of tetraalkyl diglycolamides with trivalent f-elements in ionic liquids: spectroscopic, microcalorimetric and computational studies. <i>New Journal of Chemistry</i> , 2018, 42, 708-716.	2.8	13
52	Evaluation of 1st and 2nd generation of poly(amidoamine) dendrimer functionalized carbon nanotubes for the efficient removal of neptunium. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2018, 315, 331-340.	1.5	19
53	Role of Ligand Straining in Complexation of Eu ³⁺ and Am ³⁺ Ions by TPEN and PPDEN, Scalar Relativistic DFT Exploration in Conjunction with COSMO-RS. <i>ACS Omega</i> , 2018, 3, 13104-13116.	3.5	6
54	Tailoring of carbon nanotubes for the adsorption of heavy metal ions: molecular dynamics and experimental investigations. <i>Molecular Systems Design and Engineering</i> , 2018, 3, 917-929.	3.4	20

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55	Structure, Dynamics, and Adsorption of Charged Guest within the Nanocavity of Polymer-Functionalized Neutral Macrocyclic Host. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 20968-20982.	8.0	8
56	Surface Engineering of PAMAM-SDB Chelating Resin with Diglycolamic Acid (DGA) Functional Group for Efficient Sorption of U(VI) and Th(IV) from Aqueous Medium. <i>Journal of Hazardous Materials</i> , 2017, 328, 1-11.	12.4	58
57	A molecular dynamics study for the extraction of Cs ⁺ and Na ⁺ ions using dicyclohexano-18-crown-6 with octanol. <i>Separation Science and Technology</i> , 2017, 52, 2291-2299.	2.5	3
58	Poly(amidoamine) Dendrimer Functionalized Carbon Nanotube for Efficient Sorption of Trivalent f-Elements: A Comparison Between 1 st And 2 nd Generation. <i>ChemistrySelect</i> , 2017, 2, 975-985.	1.5	14
59	High Complexation Selectivity of U(VI) over Rare Earths by <i>N,N</i> -Diethylhexyl-2-ethylhexanamide (DH2EHA): Experimental and Theoretical Evidence. <i>ChemistrySelect</i> , 2017, 2, 2348-2354.	1.5	6
60	Insight into the Complexation of Actinides and Lanthanides with Diglycolamide Derivatives: Experimental and Density Functional Theoretical Studies. <i>Journal of Physical Chemistry B</i> , 2017, 121, 2640-2649.	2.6	23
61	Understanding the sorption behavior of Pu ⁴⁺ on poly(amidoamine) dendrimer functionalized carbon nanotube: sorption equilibrium, mechanism, kinetics, radiolytic stability, and back-extraction studies. <i>Radiochimica Acta</i> , 2017, 105, 677-688.	1.2	16
62	Diglycolamic acid-functionalized multiwalled carbon nanotubes as a highly efficient sorbent for f-block elements: experimental and theoretical investigations. <i>New Journal of Chemistry</i> , 2017, 41, 4531-4545.	2.8	22
63	Curious Characteristics of Polar and Nonpolar Molecules Confined within Carbon Nanotubes (CNT) of Varied Diameter: Insights from Molecular Dynamics Simulation. <i>Journal of Chemical & Engineering Data</i> , 2017, 62, 2307-2315.	1.9	9
64	Test of Universal Scaling Law for Molecular Diffusion of Liquids in Bulk and Nanotube Confinement. <i>Journal of Physical Chemistry C</i> , 2017, 121, 11968-11974.	3.1	5
65	Extractive insights in the cesium ion partitioning with bis(2-propyloxy)-calix [4]crown-6 and dicyclohexano-18-crown-6 in ionic liquid-water biphasic systems. <i>Journal of Molecular Liquids</i> , 2017, 241, 279-291.	4.9	9
66	TBP Assisted Uranyl Extraction in Water-Dodecane Biphasic System: Insights from Molecular Dynamics Simulation. <i>Chemical Product and Process Modeling</i> , 2017, 12, .	0.9	5
67	Extraction of uranium(VI) by tri iso-amyl phosphate (TiAP) in ionic liquids. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2017, 312, 255-262.	1.5	6
68	Molecular Dynamics Simulation for the Calibration of the OPLS Force Field Using DFT Derived Partial Charges for the Screening of Alkyl Phosphate Ligands by Studying Structure, Dynamics, and Thermodynamics. <i>Journal of Chemical & Engineering Data</i> , 2017, 62, 2280-2295.	1.9	19
69	Enhanced free energy of extraction of Eu ³⁺ and Am ³⁺ ions towards diglycolamide appended calix[4]arene: insights from DFT-D3 and COSMO-RS solvation models. <i>Dalton Transactions</i> , 2017, 46, 10886-10898.	3.3	14
70	Unusual extraction of trivalent f-cations using diglycolamide dendrimers in a room temperature ionic liquid: extraction, spectroscopic and DFT studies. <i>Dalton Transactions</i> , 2017, 46, 16541-16550.	3.3	22
71	Novel amidoamine functionalized multi-walled carbon nanotubes for removal of mercury(II) ions from wastewater: Combined experimental and density functional theoretical approach. <i>Chemical Engineering Journal</i> , 2017, 313, 899-911.	12.7	79
72	Interfacial insights on the dibenzo-based crown ether assisted cesium extraction in [BMIM][Tf2N] water binary system. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2017, 311, 427-438.	1.5	25

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73	Molecular modeling guided isotope separation of gadolinium with strong cation exchange resin using displacement chromatography. <i>Separation Science and Technology</i> , 2017, 52, 2300-2307.	2.5	7
74	Molecular engineering of functionalized crown ether resins for the isotopic enrichment of gadolinium: from computer to column chromatography. <i>Molecular Systems Design and Engineering</i> , 2017, 2, 640-652.	3.4	9
75	Amidoamine functionalized task specific carbon nanotube for efficient sorption of penta and hexavalent neptunium: Experimental and theoretical investigations. <i>Journal of Environmental Chemical Engineering</i> , 2017, 5, 3058-3064.	6.7	14
76	Self diffusion and wetting transition of fluids in carbon nanotubes. <i>AIP Conference Proceedings</i> , 2016, , .	0.4	3
77	Understanding the complexation of the Eu ³⁺ ion with TODGA, CMPO, TOPO and DMBTDM: Extraction, luminescence and theoretical investigation. <i>Polyhedron</i> , 2016, 117, 612-622.	2.2	28
78	Insights into the Interaction Energy for Cs ⁺ –Crown Ether Complex by Molecular Dynamics Simulations. <i>Energy Procedia</i> , 2016, 90, 395-400.	1.8	9
79	Complexation thermodynamics of diglycolamide with f-elements: solvent extraction and density functional theory analysis. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 9816-9828.	2.8	57
80	An amide functionalized task specific carbon nanotube for the sorption of tetra and hexa valent actinides: experimental and theoretical insight. <i>RSC Advances</i> , 2016, 6, 39553-39562.	3.6	54
81	Passage of TBP–uranyl complexes from aqueous–organic interface to the organic phase: insights from molecular dynamics simulation. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 23769-23784.	2.8	34
82	Oxidation state selective sorption behavior of plutonium using N,N-dialkylamide functionalized carbon nanotubes: experimental study and DFT calculation. <i>RSC Advances</i> , 2016, 6, 78692-78701.	3.6	37
83	Sorption behaviour of Pu ⁴⁺ and PuO ₂ ²⁺ on amido amine-functionalized carbon nanotubes: experimental and computational study. <i>RSC Advances</i> , 2016, 6, 107011-107020.	3.6	23
84	A new bisglycolamide substituted calix[4]arene-benzo-crown-6 for the selective removal of cesium ion: combined experimental and density functional theoretical investigation. <i>RSC Advances</i> , 2016, 6, 47120-47129.	3.6	10
85	Change in the Affinity of Ethylene Glycol Methacrylate Phosphate Monomer and Its Polymer Anchored on a Graphene Oxide Platform toward Uranium(VI) and Plutonium(IV) Ions. <i>Journal of Physical Chemistry B</i> , 2016, 120, 2942-2950.	2.6	12
86	The entropic forces and dynamic integrity of single file water in hydrophobic nanotube confinements. <i>Journal of Chemical Physics</i> , 2015, 143, 184503.	3.0	15
87	Diglycolamic Acid Functionalized CNTs for Preferential Selection of Eu(III) over Am(III) Ion: Density Functional Theoretical Modelling Validated by Experiments. <i>Separation Science and Technology</i> , 2015, 50, 395-403.	2.5	6
88	Thermodynamics of fluid conduction through hydrophobic channel of carbon nanotubes: The exciting force for filling of nanotubes with polar and nonpolar fluids. <i>Journal of Chemical Physics</i> , 2015, 142, 074501.	3.0	18
89	Density functional theoretical analysis of structure, bonding, interaction and thermodynamic selectivity of hexavalent uranium (UO ₂ ²⁺) and tetravalent plutonium (Pu ⁴⁺) ion complexes of tetramethyl diglycolamide (TMDGA). <i>Theoretical Chemistry Accounts</i> , 2015, 134, 1.	1.4	49
90	Experimental and DFT studies for selective separation of Sb(III) and Sb(V) from mixtures with Zr(IV)/Co(II) using thiourea grafted polystyrene adsorbent. <i>RSC Advances</i> , 2015, 5, 71393-71401.	3.6	8

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91	Unanticipated favoured adsorption affinity of Th(^{IV}) ions towards bidentate carboxylate functionalized carbon nanotubes (CNT-COOH) over tridentate diglycolamic acid functionalized CNT: density functional theoretical investigation. RSC Advances, 2015, 5, 80076-80088.	3.6	24
92	Theoretical prediction of distribution coefficients of Sr ²⁺ in nuclear waste/ionic liquid phases using COSMO-RS model. Separation and Purification Technology, 2014, 133, 138-148.	7.9	6
93	Conformational effect of dicyclo-hexano-18-crown-6 on isotopic fractionation of zinc: DFT approach. , 2014, , .		2
94	Thermodynamical Criteria of the Higher Selectivity of Zirconium Oxycations over Hafnium Oxycations towards Organophosphorus Ligands: Density Functional Theoretical Investigation. European Journal of Inorganic Chemistry, 2014, 2014, 1533-1545.	2.0	18
95	Dual mode of extraction for Cs ⁺ and Na ⁺ ions with dicyclohexano-18-crown-6 and bis(2-propyloxy)calix[4]crown-6 in ionic liquids: density functional theoretical investigation. RSC Advances, 2014, 4, 22911-22925.	3.6	31
96	Nano Cavity Induced Isotope Separation of Zinc: Density Functional Theoretical Modeling. Journal of Chemical & Engineering Data, 2014, 59, 2472-2484.	1.9	8
97	Structural and dynamical properties of Li ⁺ -dibenzo-18-crown-6(DB18C6) complex in pure solvents and at the aqueous-organic interface. Journal of Molecular Modeling, 2014, 20, 2413.	1.8	21
98	Design and screening of suitable ligand/diluents systems for removal of Sr ²⁺ ion from nuclear waste: Density functional theoretical modelling. Computational and Theoretical Chemistry, 2014, 1034, 38-52.	2.5	20
99	Density Functional Theoretical Modeling of Selective Ligand for the Separation of Zr and Hf Metal Oxycations (ZrO ²⁺ and HfO ²⁺). Separation Science and Technology, 2013, 48, 2397-2409.	2.5	15
100	From microhydration to bulk hydration of Rb ⁺ metal ion: DFT, MP2 and AIMD simulation study. Journal of Molecular Liquids, 2013, 179, 34-45.	4.9	9
101	Density functional theoretical study on the preferential selectivity of macrocyclic dicyclohexano-18-crown-6 for Sr ²⁺ ion over Th ⁴⁺ ion during extraction from an aqueous phase to organic phases with different dielectric constants. Journal of Molecular Modeling, 2013, 19, 5277-5291.	1.8	13
102	Ab initio and density functional theoretical design and screening of model crown ether based ligand (host) for extraction of lithium metal ion (guest): effect of donor and electronic induction. Journal of Molecular Modeling, 2012, 18, 3507-3522.	1.8	49
103	From microhydration to bulk hydration of Sr ²⁺ metal ion: DFT, MP2 and molecular dynamics study. Journal of Molecular Liquids, 2012, 172, 110-118.	4.9	20
104	Designing of ligands for solvent extraction of Cs ⁺ using molecular modeling approach. Desalination and Water Treatment, 2012, 38, 1-7.	1.0	8
105	DFT modeling on the suitable crown ether architecture for complexation with Cs ⁺ and Sr ²⁺ metal ions. Journal of Molecular Modeling, 2011, 17, 1091-1108.	1.8	52
106	Preferential interaction of charged alkali metal ions (guest) within a narrow cavity of cyclic crown ethers (neutral host): A quantum chemical investigation. Computational and Theoretical Chemistry, 2010, 941, 90-101.	1.5	53
107	Partition coefficients of macrocyclic crown ethers in water-organic biphasic system: DFT/COSMO-RS approach. Fluid Phase Equilibria, 2010, 288, 111-120.	2.5	15
108	Conformational effect on the preferential binding of alkali metal cation with crown ether: A molecular level investigation. Desalination and Water Treatment, 2009, 12, 93-99.	1.0	9

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109	Micro-solvation of the Zn ²⁺ ion—a case study. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 8285.	2.8	27
110	Ligands for selective metal ion extraction: A molecular modeling approach. <i>Desalination</i> , 2008, 232, 181-190.	8.2	30
111	Microhydration of Cs ⁺ ion: A density functional theory study on Cs ⁺ (H ₂ O) _n clusters (n=1–10). <i>Journal of Chemical Physics</i> , 2007, 127, 044303.	3.0	28
112	Simple theoretical model of shear viscosity in isotopic fluid mixtures. <i>Molecular Physics</i> , 2007, 105, 387-393.	1.7	5
113	Mass dependence of shear viscosity in a binary fluid mixture: Mode-coupling theory. <i>Physical Review E</i> , 2006, 74, 051201.	2.1	8
114	A stretched exponential model of collective dynamic structure factor in simple dense fluids. <i>Chemical Physics Letters</i> , 2006, 429, 299-303.	2.6	1
115	Scaling law of shear viscosity in atomic liquid and liquid mixtures. <i>Journal of Chemical Physics</i> , 2006, 124, 144504.	3.0	8
116	Time-dependent friction and solvation time correlation function. <i>New Journal of Physics</i> , 2005, 7, 27-27.	2.9	2
117	Universal scaling laws of diffusion: Application to liquid metals. <i>Journal of Chemical Physics</i> , 2005, 123, 084505.	3.0	19
118	New Universal Scaling Laws of Diffusion and Kolmogorov-Sinai Entropy in Simple Liquids. <i>Physical Review Letters</i> , 2004, 92, 145901.	7.8	55
119	Theory of cross-diffusivity in a binary fluid mixture. <i>Chemical Physics</i> , 2002, 276, 301-308.	1.9	8
120	A microscopic theory of tracer diffusivity: crossover to the hydrodynamic limit. <i>Chemical Physics Letters</i> , 2002, 357, 217-222.	2.6	6
121	Universal Scaling Laws of Diffusion in a Binary Fluid Mixture. <i>Physical Review Letters</i> , 2001, 87, 245901.	7.8	93
122	Mode coupling theory of self and cross diffusivity in a binary fluid mixture: Application to Lennard-Jones systems. <i>Journal of Chemical Physics</i> , 2001, 114, 10419-10429.	3.0	48