

Sk Musharaf Ali

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Universal Scaling Laws of Diffusion in a Binary Fluid Mixture. <i>Physical Review Letters</i> , 2001, 87, 245901.	7.8	93
2	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
3	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
4	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
5	New Universal Scaling Laws of Diffusion and Kolmogorov-Sinai Entropy in Simple Liquids. <i>Physical Review Letters</i> , 2004, 92, 145901.	7.8	55
6	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
7	Preferential interaction of charged alkali metal ions (guest) within a narrow cavity of cyclic crown ethers (neutral host): A quantum chemical investigation. <i>Computational and Theoretical Chemistry</i> , 2010, 941, 90-101.	1.5	53
8	DFT modeling on the suitable crown ether architecture for complexation with Cs ⁺ and Sr ²⁺ metal ions. <i>Journal of Molecular Modeling</i> , 2011, 17, 1091-1108.	1.8	52
9	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. <i>Journal of Molecular Modeling</i> , 2012, 18, 3507-3522.	1.8	49
10	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
11	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
12	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
13	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
14	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. <i>RSC Advances</i> , 2014, 4, 22911-22925.	3.6	31
15	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
16	Ligands for selective metal ion extraction: A molecular modeling approach. <i>Desalination</i> , 2008, 232, 181-190.	8.2	30
17	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
18	Understanding the complexation of the Eu ³⁺ ion with TODGA, CMPO, TOPO and DMDBDMA: Extraction, luminescence and theoretical investigation. <i>Polyhedron</i> , 2016, 117, 612-622.	2.2	28

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19	Micro-solvation of the Zn ²⁺ ion—a case study. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 8285.	2.8	27
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	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
22	Interfacial insights on the dibenzo-based crown ether assisted cesium extraction in [BMIM][Tf ₂ N]—water binary system. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2017, 311, 427-438.	1.5	25
23	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. <i>RSC Advances</i> , 2015, 5, 80076-80088.	3.6	24
24	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
25	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
26	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
27	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
28	Structural and dynamical properties of Li ⁺ -dibenzo-18-crown-6(DB18C6) complex in pure solvents and at the aqueous-organic interface. <i>Journal of Molecular Modeling</i> , 2014, 20, 2413.	1.8	21
29	From microhydration to bulk hydration of Sr ²⁺ metal ion: DFT, MP2 and molecular dynamics study. <i>Journal of Molecular Liquids</i> , 2012, 172, 110-118.	4.9	20
30	Design and screening of suitable ligand/diluents systems for removal of Sr ²⁺ ion from nuclear waste: Density functional theoretical modelling. <i>Computational and Theoretical Chemistry</i> , 2014, 1034, 38-52.	2.5	20
31	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
32	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
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	Universal scaling laws of diffusion: Application to liquid metals. <i>Journal of Chemical Physics</i> , 2005, 123, 084505.	3.0	19
35	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
36	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

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37	Thermodynamical Criteria of the Higher Selectivity of Zirconium Oxycations over Hafnium Oxycations towards Organophosphorus Ligands: Density Functional Theoretical Investigation. <i>European Journal of Inorganic Chemistry</i> , 2014, 2014, 1533-1545.	2.0	18
38	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
39	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
40	Partition coefficients of macrocyclic crown ethers in water-organic biphasic system: DFT/COSMO-RS approach. <i>Fluid Phase Equilibria</i> , 2010, 288, 111-120.	2.5	15
41	Density Functional Theoretical Modeling of Selective Ligand for the Separation of Zr and Hf Metal Oxycations (ZrO ²⁺ and HfO ²⁺). <i>Separation Science and Technology</i> , 2013, 48, 2397-2409.	2.5	15
42	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
43	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
44	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
45	Nanosopic 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
46	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
47	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
48	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
49	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
50	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-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
51	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
52	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
53	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. <i>Journal of Molecular Modeling</i> , 2013, 19, 5277-5291.	1.8	13
54	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

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55	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
56	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
57	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
58	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
59	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
60	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
61	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
62	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
63	Application of hybrid MOF composite in extraction of f-block elements: Experimental and computational investigation. <i>Chemosphere</i> , 2022, 287, 132232.	8.2	12
64	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
65	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
66	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
67	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
68	Conformational effect on the preferential binding of alkali metal cation with crown ether: A molecular level investigation. <i>Desalination and Water Treatment</i> , 2009, 12, 93-99.	1.0	9
69	From microhydration to bulk hydration of Rb ⁺ metal ion: DFT, MP2 and AIMD simulation study. <i>Journal of Molecular Liquids</i> , 2013, 179, 34-45.	4.9	9
70	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
71	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
72	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

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73	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
74	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
75	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
76	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
77	<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
78	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
79	Theory of cross-diffusivity in a binary fluid mixture. <i>Chemical Physics</i> , 2002, 276, 301-308.	1.9	8
80	Mass dependence of shear viscosity in a binary fluid mixture: Mode-coupling theory. <i>Physical Review E</i> , 2006, 74, 051201.	2.1	8
81	Scaling law of shear viscosity in atomic liquid and liquid mixtures. <i>Journal of Chemical Physics</i> , 2006, 124, 144504.	3.0	8
82	Designing of ligands for solvent extraction of Cs ⁺ using molecular modeling approach. <i>Desalination and Water Treatment</i> , 2012, 38, 1-7.	1.0	8
83	Nano Cavity Induced Isotope Separation of Zinc: Density Functional Theoretical Modeling. <i>Journal of Chemical & Engineering Data</i> , 2014, 59, 2472-2484.	1.9	8
84	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
85	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
86	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
87	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
88	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
89	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
90	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

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91	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
92	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
93	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
94	A microscopic theory of tracer diffusivity: crossover to the hydrodynamic limit. <i>Chemical Physics Letters</i> , 2002, 357, 217-222.	2.6	6
95	Theoretical prediction of distribution coefficients of Sr ²⁺ in nuclear waste/ionic liquid phases using COSMO-RS model. <i>Separation and Purification Technology</i> , 2014, 133, 138-148.	7.9	6
96	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
97	High Complexation Selectivity of U(VI) over Rare Earths by N,N'-Dihexyl-2-ethylhexanamide (DH2EHA): Experimental and Theoretical Evidence. <i>ChemistrySelect</i> , 2017, 2, 2348-2354.	1.5	6
98	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
99	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
100	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
101	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
102	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
103	Simple theoretical model of shear viscosity in isotopic fluid mixtures. <i>Molecular Physics</i> , 2007, 105, 387-393.	1.7	5
104	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
105	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
106	Characterization of Thorium-Pyrazinoic acid complexation and its decorporation efficacy in human cells and blood. <i>Chemosphere</i> , 2021, 271, 129547.	8.2	5
107	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
108	Unusual behavior of Stokes-Einstein relation in liquid mixtures. <i>AIP Advances</i> , 2020, 10, .	1.3	4

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109	Self diffusion and wetting transition of fluids in carbon nanotubes. AIP Conference Proceedings, 2016, , .	0.4	3
110	A molecular dynamics study for the extraction of Cs ⁺ and Na ⁺ ions using dicyclohexano-18-crown-6 with octanol. Separation Science and Technology, 2017, 52, 2291-2299.	2.5	3
111	Does uranyl-TBP complex formation happen at the aqueous-organic interface? Revelation by molecular dynamics simulations. Journal of Molecular Liquids, 2021, 330, 115621.	4.9	3
112	The aqueous interaction of neodymium with two omni existent biomoieties " a mechanistic understanding by experimental and theoretical studies. Dalton Transactions, 2021, 50, 16191-16204.	3.3	3
113	Tuning Network Connectivity of Silicate and Sodium Borosilicate Glasses by TiO ₂ for Enhanced Chemical Durability: Molecular Dynamics Simulation Investigations. Langmuir, 2022, 38, 7639-7663.	3.5	3
114	Time-dependent friction and solvation time correlation function. New Journal of Physics, 2005, 7, 27-27.	2.9	2
115	Conformational effect of dicyclo-hexano-18-crown-6 on isotopic fractionation of zinc: DFT approach. , 2014, , .		2
116	Macrocyclic host appended carbon nanotubes for selective adsorption of metal ions: combined experimental, DFT and MD studies. Molecular Systems Design and Engineering, 2019, 4, 616-625.	3.4	2
117	Deciphering the curved profile of uranyl ions at the aqueous-organic interface by atomistic simulations. Journal of Molecular Liquids, 2021, 343, 117599.	4.9	2
118	Density functional theoretical analysis of micro-adsorption of isotopes of hydrogen molecule and atom by uranium. International Journal of Hydrogen Energy, 2022, 47, 18441-18467.	7.1	2
119	A stretched exponential model of collective dynamic structure factor in simple dense fluids. Chemical Physics Letters, 2006, 429, 299-303.	2.6	1
120	Density functional theoretical tailoring of electronic effect through various substituents on calix[4]arene-crown-6 for efficient Cs ⁺ ion encapsulation and extraction. International Journal of Quantum Chemistry, 2021, 121, e26436.	2.0	1
121	Exploring the reaction pathway involved in the dibenzo-18-crown-6 synthesis from catechol and bis(2-chloroethyl) ether in presence of base. Journal of Physical Organic Chemistry, 2022, 35, .	1.9	1
122	Molecular Facts on the Structure and Dynamics of Electrolyte Species in Cu-Cl Cycle for Hydrogen Generation: An Insight from Molecular Dynamic Simulations. Journal of Physical Chemistry B, 2018, 122, 4115-4130.	2.6	0