

Michael Badawi

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/4073426/michael-badawi-publications-by-year.pdf>

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

143
papers

1,882
citations

25
h-index

35
g-index

155
ext. papers

2,570
ext. citations

5.2
avg. IF

5.56
L-index

#	Paper	IF	Citations
143	Molecular picture of the adsorption of phenol, toluene, carbon dioxide and water on kaolinite basal surfaces. <i>Applied Surface Science</i> , 2022 , 585, 152699	6.7	1
142	Stacking effect on electronic properties of InSe/blue phosphorene and GaSe/blue phosphorene heterostructures from first-principles. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2022 , 139, 115115	3	
141	Functionalized hydrochar-based catalysts for biodiesel production via oil transesterification: Optimum preparation conditions and performance assessment. <i>Fuel</i> , 2022 , 312, 122731	7.1	1
140	Polysaccharides in fabrication of membranes: A review.. <i>Carbohydrate Polymers</i> , 2022 , 281, 119041	10.3	12
139	Effect of Al ³⁺ and Mg ²⁺ on the flotation of fluorapatite using fatty- and hydroxamic-acid collectors: A multiscale investigation. <i>Applied Surface Science</i> , 2022 , 572, 151499	6.7	5
138	Impact of Sn doping on the hydrogen detection characteristics of ZnO thin films: Insights from experimental and DFT combination. <i>Applied Surface Science</i> , 2022 , 574, 151585	6.7	0
137	Performance and interactions of diclofenac adsorption using Alginate/Carbon-based Films: Experimental investigation and statistical physics modelling. <i>Chemical Engineering Journal</i> , 2022 , 428, 131929	14.7	9
136	High-Pressure Properties of Wolframite-Type ScNbO ₄ . <i>Journal of Physical Chemistry C</i> , 2022 , 126, 4664-4686	4.6	2
135	Sustainable Downstream Separation of Itaconic Acid Using Carbon-Based Adsorbents. <i>Adsorption Science and Technology</i> , 2022 , 2022, 1-14	3.6	
134	Understanding the Cu adsorption mechanism on activated carbon using advanced statistical physics modelling.. <i>Environmental Science and Pollution Research</i> , 2022 , 1	5.1	
133	First-Principles Modeling of Dye Anchoring on (001) Monoclinic WO ₃ Surfaces: The Role of Oxygen Vacancies. <i>Journal of Physical Chemistry C</i> , 2022 , 126, 5424-5434	3.8	1
132	Thermodynamics and Mechanism of the Adsorption of Heavy Metal Ions on Keratin Biomasses for Wastewater Detoxification. <i>Adsorption Science and Technology</i> , 2022 , 2022, 1-13	3.6	1
131	Layer-by-layer polymer deposited fabrics with superior flame retardancy and electrical conductivity. <i>Reactive and Functional Polymers</i> , 2022 , 173, 105221	4.6	0
130	Growth and annealing effect on the Cu thin film deposited on Si (0 0 1) surface. <i>Journal of Crystal Growth</i> , 2022 , 586, 126631	1.6	0
129	Ordered sodium zeolite-templated carbon with high first discharge capacity for sodium battery application. <i>Microporous and Mesoporous Materials</i> , 2022 , 336, 111853	5.3	2
128	Outstanding Performance of a New Exfoliated Clay Impregnated with Rutile TiO ₂ Nanoparticles Composite for Dyes Adsorption: Experimental and Theoretical Studies. <i>Coatings</i> , 2022 , 12, 22	2.9	1
127	Adaptation of advanced physical models to interpret the adsorption isotherms of lead and cadmium ions onto activated carbon in single-compound and binary systems.. <i>Environmental Science and Pollution Research</i> , 2022 , 1	5.1	

126	Synergistic effects between fatty acids and non-ionic reagents for the selective flotation of scheelite from a complex tungsten skarn ore. <i>Minerals Engineering</i> , 2022 , 182, 107566	4.9	1
125	Access to sodalite cages in ion-exchanged nanosized FAU zeolites probed by hyperpolarized ¹²⁹ Xe NMR and DFT calculations. <i>Microporous and Mesoporous Materials</i> , 2022 , 338, 111965	5.3	0
124	Enhanced adsorption of ketoprofen and 2,4-dichlorophenoxyacetic acid on <i>Physalis peruviana</i> fruit residue functionalized with H ₂ SO ₄ : Adsorption properties and statistical physics modeling. <i>Chemical Engineering Journal</i> , 2022 , 445, 136773	14.7	0
123	Dynamics of Topology-dependent Water Purification by Siliceous Zeolite Membranes. <i>Journal of Molecular Liquids</i> , 2022 , 359, 119250	6	0
122	Insights Into the Mn(VII) and Cr(VI) Adsorption Mechanisms on Purified Diatomite/MCM-41 Composite: Experimental Study and Statistical Physics Analysis.. <i>Frontiers in Chemistry</i> , 2021 , 9, 814431	5	0
121	Engineered biochar: A way forward to environmental remediation. <i>Fuel</i> , 2021 , 122510	7.1	1
120	Graphene/g-carbon nitride (GO/g-CN) nanohybrids as a sensor material for the detection of methyl parathion and carbendazim.. <i>Chemosphere</i> , 2021 , 292, 133450	8.4	5
119	Low-dimensional HfS as SO adsorbent and gas sensor: effect of water and sulfur vacancies. <i>Physical Chemistry Chemical Physics</i> , 2021 , 23, 23655-23666	3.6	0
118	Co-precipitation polymerization of dual functional monomers and polystyrene--divinylbenzene for ciprofloxacin imprinted polymer preparation.. <i>RSC Advances</i> , 2021 , 11, 34281-34290	3.7	0
117	Hydration of magnesite and dolomite minerals: new insights from ab initio molecular dynamics. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021 , 631, 127697	5.1	2
116	Beneficial effect of Au and Pt doping of the Ag-(100) surface for thiophene and pyridine adsorption from density functional theory calculations. <i>Chemical Physics</i> , 2021 , 553, 111391	2.3	0
115	Understanding the Pressure Effect on the Elastic, Electronic, Vibrational, and Bonding Properties of the CeScO ₃ Perovskite. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 107-119	3.8	7
114	Theoretical study and analysis of o-nitrophenol adsorption using layered double hydroxides containing Ca-Al, Ni-Al and Zn-Al. <i>Environmental Science and Pollution Research</i> , 2021 , 28, 44547-44556	5.1	4
113	Interaction between fine particles of fluorapatite and phosphoric acid unraveled by surface spectroscopies. <i>Powder Technology</i> , 2021 , 382, 368-377	5.2	1
112	Hydration mechanisms of scheelite from adsorption isotherms and ab initio molecular dynamics simulations. <i>Applied Surface Science</i> , 2021 , 150137	6.7	8
111	Hybrid localized graph kernel for machine learning energy-related properties of molecules and solids. <i>Journal of Computational Chemistry</i> , 2021 , 42, 1390-1401	3.5	1
110	Make it clean, make it safe: A review on virus elimination via adsorption. <i>Chemical Engineering Journal</i> , 2021 , 412, 128682	14.7	9
109	Investigation of tautomerism of 1,3,5-triazine derivative, stability, and acidity of its tautomers from density functional theory. <i>Journal of Molecular Modeling</i> , 2021 , 27, 147	2	2

108	Single and simultaneous adsorption of Cr(VI) and Cu (II) on a novel Fe ₃ O ₄ /pine cones gel beads nanocomposite: Experiments, characterization and isotherms modeling. <i>Chemical Engineering Journal</i> , 2021 , 416, 129101	14.7	25
107	Understanding the Fundamentals of Microporosity Upgrading in Zeolites: Increasing Diffusion and Catalytic Performances. <i>Advanced Science</i> , 2021 , 8, e2100001	13.6	7
106	Elimination of Thiophenic Compounds by Cycloaddition with Ethylene for an Efficient Purification of Fuels: A DFT Study. <i>Topics in Catalysis</i> , 2021 , 64, 288-296	2.3	0
105	Simultaneous adsorption of acetaminophen, diclofenac and tetracycline by organo-sepiolite: Experiments and statistical physics modelling. <i>Chemical Engineering Journal</i> , 2021 , 404, 126601	14.7	28
104	An ab initio study of the electronic properties of the ferroelectric heterostructure In ₂ Se ₃ /Bi ₂ Se ₃ . <i>Applied Surface Science</i> , 2021 , 538, 148066	6.7	8
103	Molecular insights on the adsorption of some pharmaceutical residues from wastewater on kaolinite surfaces. <i>Chemical Engineering Journal</i> , 2021 , 407, 127176	14.7	21
102	Trapping of Ag ⁺ , Cu ²⁺ , and Co ²⁺ by faujasite zeolite Y: New interpretations of the adsorption mechanism via DFT and statistical modeling investigation. <i>Chemical Engineering Journal</i> , 2021 , 420, 127712	14.7	13
101	Correlation Between Structure and Mechanical Properties of Amorphous Cu ₃ Ag Alloys. <i>Physica Status Solidi (B): Basic Research</i> , 2021 , 258, 2000262	1.3	
100	Ab initio screening of zeolite Y formulations for efficient adsorption of thiophene in presence of benzene. <i>Applied Surface Science</i> , 2021 , 541, 148515	6.7	8
99	Sintering and deposition of homo- and heteronanoparticles of aluminum and nickel on aluminum (100) substrate. <i>Chemical Physics</i> , 2021 , 541, 111037	2.3	3
98	Effect of halogenation on the optical and electronic properties of tetrathienoanthracene and tetrathionoacridine derivatives: A DFT study. <i>Computational Condensed Matter</i> , 2021 , 26, e00528	1.7	
97	Adsorption mechanisms of fatty acids on fluorite unraveled by infrared spectroscopy and first-principles calculations. <i>Journal of Colloid and Interface Science</i> , 2021 , 583, 692-703	9.3	29
96	Adsorption of water in Na-LTA zeolites: an ab initio molecular dynamics investigation. <i>Physical Chemistry Chemical Physics</i> , 2021 , 23, 19032-19042	3.6	2
95	Adsorption of 3-aminophenol and resorcinol on avocado seed activated carbon: Mathematical modelling, thermodynamic study and description of adsorbent performance. <i>Journal of Molecular Liquids</i> , 2021 , 342, 116952	6	4
94	Adsorption of ketoprofen and 2- nitrophenol on activated carbon prepared from winery wastes: A combined experimental and theoretical study. <i>Journal of Molecular Liquids</i> , 2021 , 333, 115906	6	12
93	investigations of some compounds as potential anti-inflammatory inhibitors of 5-LO and LTA4H enzymes. <i>Journal of Biomolecular Structure and Dynamics</i> , 2021 , 1-16	3.6	1
92	Understanding the optical and bonding properties of hybrid metal-halide (C ₅ H ₁₆ NP) PbX ₄ (X = Cl, Br, I) perovskite: A density-functional theory study. <i>Inorganic Chemistry Communication</i> , 2021 , 130, 108721	2.1	1
91	Adsorption of Toluene and Water over Cationic-Exchanged Y Zeolites: A DFT Exploration. <i>Molecules</i> , 2021 , 26,	4.8	2

90	Nucleic Acids under Stress: Understanding and Simulating Nucleobase Fragmentation Pathways. <i>ChemPlusChem</i> , 2021 , 86, 1426-1435	2.8	
89	Ab initio investigation of the adsorption of phenolic compounds, CO, and H ₂ O over metallic cluster/silica catalysts for hydrodeoxygenation process. <i>Applied Surface Science</i> , 2021 , 567, 150790	6.7	4
88	Selective adsorption of glucose towards itaconic acid on amorphous silica surfaces: Insights from density functional theory calculations. <i>Journal of Molecular Liquids</i> , 2021 , 343, 117586	6	1
87	One-step fabrication of a new outstanding rutile TiO ₂ nanoparticles/anthracite adsorbent: Modeling and physicochemical interpretations for malachite green removal. <i>Chemical Engineering Journal</i> , 2021 , 426, 131890	14.7	7
86	Ternary adsorption of cobalt, nickel and methylene blue on a modified chitin: Phenomenological modeling and physical interpretation of the adsorption mechanism. <i>International Journal of Biological Macromolecules</i> , 2020 , 158, 595-604	7.9	23
85	Synergistic adsorption of Pb ²⁺ and CrO ₄ ²⁻ on an engineered biochar highlighted by statistical physical modeling. <i>Journal of Molecular Liquids</i> , 2020 , 312, 113483	6	15
84	DNA Nucleobase under Ionizing Radiation: Unexpected Proton Transfer by Thymine Cation in Water Nanodroplets. <i>Chemistry - A European Journal</i> , 2020 , 26, 11340-11344	4.8	2
83	Grafting of iron on amorphous silica surfaces from ab initio calculations. <i>Journal of Chemical Physics</i> , 2020 , 152, 214706	3.9	10
82	Fabrication and characterization of a thin coated adsorbent for antibiotic and analgesic adsorption: Experimental investigation and statistical physical modelling. <i>Chemical Engineering Journal</i> , 2020 , 401, 126007	14.7	21
81	Origin of the outstanding performance of ZnAl and MgFe layered double hydroxides in the adsorption of 2-nitrophenol: A statistical physics assessment. <i>Journal of Molecular Liquids</i> , 2020 , 314, 113572	6	6
80	Copper-enriched diamond-like carbon coatings promote regeneration at the bone-implant interface. <i>Heliyon</i> , 2020 , 6, e03798	3.6	15
79	The Challenge of Tungsten Skarn Processing by Froth Flotation: A Review. <i>Frontiers in Chemistry</i> , 2020 , 8, 230	5	13
78	Effects of Wall Slip on Convective Heat Transfers of Giesekus Fluid in Microannulus. <i>Journal of Heat Transfer</i> , 2020 , 142,	1.8	1
77	Synergistic adsorption of lanthanum ions and fatty acids for efficient rare-earth phosphate recovery: Surface analysis and ab initio molecular dynamics studies. <i>Applied Surface Science</i> , 2020 , 526, 146725	6.7	13
76	Kinetic, thermodynamic and mechanism study of the adsorption of phenol on Moroccan clay. <i>Journal of Molecular Liquids</i> , 2020 , 312, 113383	6	24
75	Improved tribological properties, thermal and colloidal stability of poly-β-lefins based lubricants with hydrophobic MoS ₂ submicron additives. <i>Journal of Colloid and Interface Science</i> , 2020 , 562, 91-101	9.3	13
74	Physicochemical interpretation of the adsorption of 4-Bromophenol and 4-Chloroaniline on an activated carbon. <i>Journal of Environmental Chemical Engineering</i> , 2020 , 8, 104542	6.8	8
73	Statistical physics interpretation of the adsorption mechanism of Pb ²⁺ , Cd ²⁺ and Ni ²⁺ on chicken feathers. <i>Journal of Molecular Liquids</i> , 2020 , 319, 114168	6	20

72	Adsorption of methylene blue on silica nanoparticles: Modelling analysis of the adsorption mechanism via a double layer model. <i>Journal of Molecular Liquids</i> , 2020 , 319, 114348	6	13
71	Structure, stability, and surface diffusion of clusters: Pt ₄ /Cu (110) AND Au ₄ /Ag (110) surface by molecular dynamics. <i>EPJ Applied Physics</i> , 2020 , 91, 31302	1.1	2
70	Biofuel purification: Coupling experimental and theoretical investigations for efficient separation of phenol from aromatics by zeolites. <i>Chemical Engineering Journal</i> , 2020 , 402, 126264	14.7	23
69	Understanding the adsorption mechanism of Ag ⁺ and Hg ²⁺ on functionalized layered double hydroxide via statistical physics modeling. <i>Applied Clay Science</i> , 2020 , 198, 105828	5.2	15
68	Interaction between transition metals (Co, Ni, and Cu) systems and amorphous silica surfaces: A DFT investigation. <i>Applied Surface Science</i> , 2020 , 533, 147422	6.7	11
67	Water-silanol interactions on the amorphous silica surface: A dispersion-corrected DFT investigation. <i>Journal of Molecular Liquids</i> , 2020 , 320, 114496	6	1
66	Disclosing the behavior under hydrostatic pressure of rhombohedral MgInSe by means of first-principles calculations. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 21909-21918	3.6	3
65	Structure-Elasticity Relationship of Potassium Silicate Glasses from Brillouin Light Scattering Spectroscopy and Molecular Dynamics Simulations. <i>Journal of Physical Chemistry B</i> , 2020 , 124, 9216-9223 ^{3,4}	3.4	2
64	drug discovery of IKK- β inhibitors from 2-amino-3-cyano-4-alkyl-6-(2-hydroxyphenyl) pyridine derivatives based on QSAR, docking, molecular dynamics and drug-likeness evaluation studies. <i>Journal of Biomolecular Structure and Dynamics</i> , 2020 , 1-17	3.6	8
63	Assessing the Potential of Amorphous Silica Surfaces for the Removal of Phenol from Biofuel: A Density Functional Theory Investigation. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 20262-20269	3.8	8
62	Imprinting isolated single iron atoms onto mesoporous silica by templating with metallosurfactants. <i>Journal of Colloid and Interface Science</i> , 2020 , 573, 193-203	9.3	15
61	Incorporation of trivalent cations in NaX zeolite nanocrystals for the adsorption of O in the presence of CO. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 9934-9942	3.6	6
60	Quantum Effects on the Diffusivity of Hydrogen Isotopes in Zeolites. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 23455-23463	3.8	8
59	A review of atomistic simulation methods for surface physical-chemistry phenomena applied to froth flotation. <i>Minerals Engineering</i> , 2019 , 143, 106020	4.9	37
58	Relationship between electronic structures and antiplasmodial activities of xanthone derivatives: a 2D-QSAR approach. <i>Structural Chemistry</i> , 2019 , 30, 2301-2310	1.8	
57	A first principle evaluation of the adsorption mechanism and stability of volatile organic compounds into NaY zeolite. <i>Zeitschrift Fur Kristallographie - Crystalline Materials</i> , 2019 , 234, 469-482	1	17
56	An ab initio study of the ferroelectric In ₂ Se ₃ /graphene heterostructure. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2019 , 114, 113582	3	12
55	Computational insights into the structure of barium titanosilicate glasses. <i>Journal of the American Ceramic Society</i> , 2019 , 102, 6626-6639	3.8	8

54	Dibenzyl Disulfide Adsorption on Cationic Exchanged Faujasites: A DFT Study. <i>Nanomaterials</i> , 2019 , 9,	5.4	12
53	Pressure effects on local atomic structure of Ni ₁₅ Co ₁₅ Al ₇₀ metallic glasses. <i>Computational Materials Science</i> , 2019 , 166, 20-29	3.2	7
52	Ab initio screening of cation-exchanged zeolites for biofuel purification. <i>Molecular Systems Design and Engineering</i> , 2019 , 4, 882-892	4.6	25
51	Benchmarking the performance of approximate van der Waals methods for the structural and energetic properties of SiO and AlPO frameworks. <i>Journal of Chemical Physics</i> , 2019 , 150, 094102	3.9	14
50	Adsorption of volatile organic and iodine compounds over silver-exchanged mordenites: A comparative periodic DFT study for several silver loadings. <i>Applied Surface Science</i> , 2019 , 485, 56-63	6.7	30
49	Ionization and fragmentation of uracil upon microhydration. <i>Physical Chemistry Chemical Physics</i> , 2019 , 21, 4810-4821	3.6	10
48	Ab Initio Study of the Stepwise versus Concerted Fragmentation Pathways in Microhydrated Thymine Radical Cations. <i>Chemistry - A European Journal</i> , 2019 , 25, 15525-15534	4.8	3
47	Adsorption and diffusion of Pt, Cu, Ag and Au on missing row reconstructed Pt(110) surfaces: An ab initio investigation. <i>Surface Science</i> , 2019 , 690, 121463	1.8	3
46	Surface chemistry of halloysite nanotubes controls the curability of low filled epoxy nanocomposites. <i>Progress in Organic Coatings</i> , 2019 , 135, 555-564	4.8	46
45	Electronic structure and optical properties of isolated and TiO ₂ -grafted free base porphyrins for water oxidation: A challenging test case for DFT and TD-DFT. <i>Journal of Computational Chemistry</i> , 2019 , 40, 2530-2538	3.5	2
44	Quantum mechanistic study of furan and 2-methylfuran hydrodeoxygenation on molybdenum and tungsten sulfide clusters. <i>Journal of Molecular Modeling</i> , 2019 , 25, 237	2	4
43	Atomistic description of phenol, CO and H ₂ O adsorption over crystalline and amorphous silica surfaces for hydrodeoxygenation applications. <i>Applied Surface Science</i> , 2019 , 494, 721-730	6.7	17
42	Untangling electronic, optical and bonding properties of hexagonal bismuth borate SrBi ₂ B ₂ O ₇ crystal for ultraviolet opto-electronic applications: An ab initio study. <i>Journal of Alloys and Compounds</i> , 2019 , 803, 1127-1135	5.7	6
41	Computing RPA Adsorption Enthalpies by Machine Learning Thermodynamic Perturbation Theory. <i>Journal of Chemical Theory and Computation</i> , 2019 , 15, 6333-6342	6.4	21
40	Bridging molecular dynamics and correlated wave-function methods for accurate finite-temperature properties. <i>Physical Review Materials</i> , 2019 , 3,	3.2	10
39	Comment on: Effects of crystal chemistry on sodium oleate adsorption on fluorite surface investigated by molecular dynamics simulation: Renji Zheng, Zijie Ren, Huimin Gao, Zhijie Chen, Yupeng Qian, Yubiao Li, <i>Minerals Engineering</i> , vol. 124, pp. 7785, 2018. <i>Minerals Engineering</i> , 2019 , 135, 156-159	4.9	2
38	Synergistic adsorptions of NaCO and NaSiO on calcium minerals revealed by spectroscopic and molecular dynamics studies. <i>Chemical Science</i> , 2019 , 10, 9928-9940	9.4	22
37	Evaluation of the Inhibiting Effect of Organic Compounds on the Adsorption of Iodine Compounds in Cation-Exchanged Zeolites: A DFT Study. <i>Advances in Science, Technology and Innovation</i> , 2018 , 107-109	6.3	4

36	Surface Properties of Fluorite in Presence of Water: An Atomistic Investigation. <i>Journal of Physical Chemistry B</i> , 2018 , 122, 6829-6836	3.4	27
35	Elastic and structural properties of low silica calcium aluminosilicate glasses from molecular dynamics simulations. <i>Journal of Non-Crystalline Solids</i> , 2018 , 499, 142-152	3.9	8
34	New reagent formulations for selective flotation of scheelite from a skarn ore with complex calcium minerals gangue. <i>Minerals Engineering</i> , 2018 , 123, 85-94	4.9	44
33	Comparative study of structural and electronic properties of GaSe and InSe polytypes. <i>Journal of Chemical Physics</i> , 2018 , 149, 054106	3.9	23
32	Proton Mobility, Intrinsic Acid Strength, and Acid Site Location in Zeolites Revealed by Varying Temperature Infrared Spectroscopy and Density Functional Theory Studies. <i>Journal of the American Chemical Society</i> , 2018 , 140, 17790-17799	16.4	31
31	Molecular Insight into Fatty Acid Adsorption on Bare and Hydrated (111) Fluorite Surface. <i>Journal of Physical Chemistry B</i> , 2018 , 122, 12403-12410	3.4	35
30	Adsorption of NO, NO ₂ , CO, H ₂ O and CO ₂ over isolated monovalent cations in faujasite zeolite: a periodic DFT investigation. <i>Theoretical Chemistry Accounts</i> , 2018 , 137, 1	1.9	27
29	Selective Capture of Phenol from Biofuel Using Protonated Faujasite Zeolites with Different Si/Al Ratios. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 26419-26429	3.8	32
28	A DFT study of RuO interactions with porous materials: metal-organic frameworks (MOFs) and zeolites. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 16770-16776	3.6	19
27	Forced convection heat transfer of Giesekus fluid with wall slip above the critical shear stress in pipes. <i>International Journal of Heat and Fluid Flow</i> , 2018 , 71, 442-450	2.4	3
26	Curing behavior of epoxy/Fe ₃ O ₄ nanocomposites: A comparison between the effects of bare Fe ₃ O ₄ , Fe ₃ O ₄ /SiO ₂ /chitosan and Fe ₃ O ₄ /SiO ₂ /chitosan/imide/phenylalanine-modified nanofillers. <i>Progress in Organic Coatings</i> , 2018 , 123, 10-19	4.8	78
25	Competing structures in (In,Ga)Se and (In,Ga) ₂ Se ₃ semiconductors. <i>Physica Status Solidi (B): Basic Research</i> , 2017 , 254, 1700120	1.3	5
24	Performance of Cu ⁺ , Pb ⁺ , and Hg ⁺ -Exchanged Mordenite in the Adsorption of I ₂ , ICH ₃ , H ₂ O, CO, ClCH ₃ , and Cl ₂ : A Density Functional Study. <i>ChemPhysChem</i> , 2017 , 18, 1642-1652	3.2	19
23	Dissociative iodomethane adsorption on Ag-MOR and the formation of AgI clusters: an ab initio molecular dynamics study. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 27530-27543	3.6	29
22	Influence of water, dihydrogen and dioxygen on the stability of the Cr ₂ O ₃ surface: A first-principles investigation. <i>Surface Science</i> , 2017 , 666, 44-52	1.8	11
21	Thermodynamic and structural properties of binary calcium silicate glasses: insights from molecular dynamics. <i>Physical Chemistry Chemical Physics</i> , 2017 , 19, 19083-19093	3.6	17
20	Syntheses, crystal structures, and optical properties of CsBa ₅ Ti ₂ Se ₉ Cl and CsBa ₂ Cl ₅ . <i>Journal of Solid State Chemistry</i> , 2017 , 253, 258-262	3.3	2
19	Evaluation of volatile iodine trapping in presence of contaminants: A periodic DFT study on cation exchanged-faujasite. <i>Microporous and Mesoporous Materials</i> , 2017 , 239, 111-122	5.3	36

18	Impact of the Si/Al ratio on the selective capture of iodine compounds in silver-mordenite: a periodic DFT study. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 25574-25581	3.6	28
17	Crystal structure and energy bands of (Ga/In)Se and Cu(In,Ga)Se ₂ semiconductors in comparison. <i>Physica Status Solidi (B): Basic Research</i> , 2016 , 253, 1472-1475	1.3	13
16	Effect of Sodium Oxide Modifier on Structural and Elastic Properties of Silicate Glass. <i>Journal of Physical Chemistry B</i> , 2016 , 120, 13193-13205	3.4	45
15	A DFT investigation of the adsorption of iodine compounds and water in H-, Na-, Ag-, and Cu-mordenite. <i>Journal of Chemical Physics</i> , 2016 , 144, 244705	3.9	45
14	A DFT study of the hematite surface state in the presence of H ₂ , H ₂ O and O ₂ . <i>Surface Science</i> , 2013 , 610, 7-15	1.8	36
13	Hydrodeoxygenation of Phenolic Compounds by Sulfided (Co)Mo/Al ₂ O ₃ Catalysts, a Combined Experimental and Theoretical Study. <i>Oil and Gas Science and Technology</i> , 2013 , 68, 829-840	1.9	32
12	Molecular structures and thermodynamic properties of 12 gaseous cesium-containing species of nuclear safety interest: Cs ₂ , CsH, CsO, Cs ₂ O, CsX, and Cs ₂ X ₂ (X = OH, Cl, Br, and I). <i>Journal of Nuclear Materials</i> , 2012 , 420, 452-462	3.3	25
11	Ab initio calculations and iodine kinetic modeling in the reactor coolant system of a pressurized water reactor in case of severe nuclear accident. <i>Computational and Theoretical Chemistry</i> , 2012 , 990, 194-208	2	21
10	n-Heptane cracking over mixtures of HY and HZSM-5 zeolites: Influence of the presence of phenol. <i>Fuel</i> , 2012 , 94, 571-577	7.1	19
9	Guaiacol derivatives and inhibiting species adsorption over MoS ₂ and CoMoS catalysts under HDO conditions: A DFT study. <i>Catalysis Communications</i> , 2011 , 12, 901-905	3.2	65
8	Effect of water on the stability of Mo and CoMo hydrodeoxygenation catalysts: A combined experimental and DFT study. <i>Journal of Catalysis</i> , 2011 , 282, 155-164	7.3	135
7	Kinetic study of olefin hydrogenation on hydrotreating catalysts. <i>Journal of Molecular Catalysis A</i> , 2010 , 320, 34-39		24
6	DFT study of furan adsorption over stable molybdenum sulfide catalyst under HDO conditions. <i>Comptes Rendus Chimie</i> , 2009 , 12, 754-761	2.7	43
5	Promoting effect of cobalt and nickel on the activity of hydrotreating catalysts in hydrogenation and isomerization of olefins. <i>Journal of Molecular Catalysis A</i> , 2008 , 293, 53-58		35
4	Contribution of DFT to the optimization of Ni-based catalysts for dry reforming of methane: a review. <i>Catalysis Reviews - Science and Engineering</i> , 1-53	12.6	1
3	Latex/AgNPs: Synthesis, and Their Antibacterial Activity. <i>Journal of Cluster Science</i> , 1	3	0
2	Competitive adsorption of phenol and toluene onto silica-supported transition metal clusters for biofuel purification. <i>Molecular Systems Design and Engineering</i> ,	4.6	3
1	Elucidation of the IR of Cu and Mn substituted intraframework SiBEA zeolites. <i>Topics in Catalysis</i> , 1	2.3	

