

# Hind A Al-Abadleh

## List of Publications by Citations

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

52 papers	1,807 citations	24 h-index	42 g-index
60 ext. papers	2,044 ext. citations	6.3 avg, IF	4.96 L-index

#	Paper	IF	Citations
52	FT-IR Study of Water Adsorption on Aluminum Oxide Surfaces. <i>Langmuir</i> , <b>2003</b> , 19, 341-347	4	289
51	Oxide surfaces as environmental interfaces. <i>Surface Science Reports</i> , <b>2003</b> , 52, 63-161	12.9	209
50	Interfacial acidities, charge densities, potentials, and energies of carboxylic acid-functionalized silica/water interfaces determined by second harmonic generation. <i>Journal of the American Chemical Society</i> , <b>2004</b> , 126, 11754-5	16.4	95
49	A Knudsen Cell Study of the Heterogeneous Reactivity of Nitric Acid on Oxide and Mineral Dust Particles. <i>Journal of Physical Chemistry A</i> , <b>2001</b> , 105, 6609-6620	2.8	88
48	Adsorption thermodynamics of p-arsanilic acid on iron (oxyhydr)oxides: in-situ ATR-FTIR studies. <i>Environmental Science &amp; Technology</i> , <b>2008</b> , 42, 1922-7	10.3	79
47	Carboxylic Acid- and Ester-Functionalized Siloxane Scaffolds on Glass Studied by Broadband Sum Frequency Generation. <i>Journal of Physical Chemistry B</i> , <b>2004</b> , 108, 18675-18682	3.4	75
46	Heterogeneous Reaction of NO <sub>2</sub> on Hexane Soot: A Knudsen Cell and FT-IR Study. <i>Journal of Physical Chemistry A</i> , <b>2000</b> , 104, 11926-11933	2.8	57
45	Oxide and carbonate surfaces as environmental interfaces: the importance of water in surface composition and surface reactivity. <i>Journal of Molecular Catalysis A</i> , <b>2005</b> , 228, 47-54		53
44	Review of the bulk and surface chemistry of iron in atmospherically relevant systems containing humic-like substances. <i>RSC Advances</i> , <b>2015</b> , 5, 45785-45811	3.7	52
43	ATR-FTIR studies on the nature of surface complexes and desorption efficiency of p-arsanilic acid on iron (oxyhydr)oxides. <i>Environmental Science &amp; Technology</i> , <b>2009</b> , 43, 3142-7	10.3	46
42	In situ ATR-FTIR and surface complexation modeling studies on the adsorption of dimethylarsinic acid and p-arsanilic acid on iron-(oxyhydr)oxides. <i>Journal of Colloid and Interface Science</i> , <b>2011</b> , 358, 534-40	10.3	42
41	Formation of Light Absorbing Soluble Secondary Organics and Insoluble Polymeric Particles from the Dark Reaction of Catechol and Guaiacol with Fe(III). <i>Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 7793-801	10.3	38
40	Structural and mechanical properties of amorphous silicon carbonitride films prepared by vapor-transport chemical vapor deposition. <i>Surface and Coatings Technology</i> , <b>2009</b> , 204, 539-545	4.4	38
39	Chromium(VI) binding to functionalized silica/water interfaces studied by nonlinear optical spectroscopy. <i>Journal of the American Chemical Society</i> , <b>2004</b> , 126, 11126-7	16.4	36
38	Phase transitions in calcium nitrate thin films. <i>Chemical Communications</i> , <b>2003</b> , 2796-7	5.8	36
37	Kinetic studies of chromium (VI) binding to carboxylic acid- and methyl ester-functionalized silica/water interfaces important in geochemistry. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 16852-9	3.4	35
36	Insights into the surface complexation of dimethylarsinic acid on iron (oxyhydr)oxides from ATR-FTIR studies and quantum chemical calculations. <i>Environmental Science &amp; Technology</i> , <b>2010</b> , 44, 7802-7	10.3	34

35	Control of carboxylic acid and ester groups on chromium (VI) binding to functionalized silica/water interfaces studied by second harmonic generation. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 9691-702	3.4	33
34	Phase Transitions in Magnesium Nitrate Thin Films: A Transmission FT-IR Study of the Deliquescence and Efflorescence of Nitric Acid Reacted Magnesium Oxide Interfaces. <i>Journal of Physical Chemistry B</i> , <b>2003</b> , 107, 10829-10839	3.4	33
33	Kinetic ATR-FTIR studies on phosphate adsorption on iron (oxyhydr)oxides in the absence and presence of surface arsenic: molecular-level insights into the ligand exchange mechanism. <i>Journal of Physical Chemistry A</i> , <b>2012</b> , 116, 10143-9	2.8	31
32	ATR-FTIR studies on the adsorption/desorption kinetics of dimethylarsinic acid on iron-(oxyhydr)oxides. <i>Journal of Physical Chemistry A</i> , <b>2012</b> , 116, 1596-604	2.8	28
31	DRIFTS studies on the photodegradation of tannic acid as a model for HULIS in atmospheric aerosols. <i>Physical Chemistry Chemical Physics</i> , <b>2009</b> , 11, 7838-47	3.6	27
30	Nonlinear optical studies of the agricultural antibiotic morantel interacting with silica/water interfaces. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 15771-7	16.4	27
29	Temperature-dependent infrared and calorimetric studies on arsenicals adsorption from solution to hematite nanoparticles. <i>Langmuir</i> , <b>2015</b> , 31, 2749-60	4	24
28	Thermodynamics of dimethylarsinic acid and arsenate interactions with hydrated iron-(oxyhydr)oxide clusters: DFT calculations. <i>Environmental Science &amp; Technology</i> , <b>2011</b> , 45, 10438-44	10.3	24
27	Vibrational spectroscopic characterization of some environmentally important organoarsenicals □ A guide for understanding the nature of their surface complexes. <i>Canadian Journal of Chemistry</i> , <b>2008</b> , 86, 942-950	0.9	24
26	Density functional theory calculations on the complexation of p-arsanilic acid with hydrated iron oxide clusters: structures, reaction energies, and transition states. <i>Journal of Physical Chemistry A</i> , <b>2014</b> , 118, 5667-79	2.8	23
25	Surface interactions of aromatic organoarsenical compounds with hematite nanoparticles using ATR-FTIR: kinetic studies. <i>Journal of Physical Chemistry A</i> , <b>2013</b> , 117, 2195-204	2.8	23
24	DRIFTS studies on the role of surface water in stabilizing catechol-iron(III) complexes at the gas/solid interface. <i>Journal of Physical Chemistry A</i> , <b>2013</b> , 117, 10368-80	2.8	22
23	Measuring Heterogeneous Uptake Coefficients of Gases on Solid Particle Surfaces with a Knudsen Cell Reactor: Complications Due to Surface Saturation and Gas Diffusion into Underlying Layers. <i>Journal of Physical Chemistry A</i> , <b>2002</b> , 106, 1210-1219	2.8	22
22	Perspective on identifying and characterizing the processes controlling iron speciation and residence time at the atmosphere-ocean interface. <i>Marine Chemistry</i> , <b>2019</b> , 217, 103704	3.7	21
21	Spectral characterization and surface complexation modeling of low molecular weight organics on hematite nanoparticles: role of electrolytes in the binding mechanism. <i>Environmental Science: Nano</i> , <b>2016</b> , 3, 910-926	7.1	19
20	Efficient Formation of Light-Absorbing Polymeric Nanoparticles from the Reaction of Soluble Fe(III) with C4 and C6 Dicarboxylic Acids. <i>Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 9700-9708	10.3	17
19	DRIFTS studies on the photosensitized transformation of gallic acid by iron(III) chloride as a model for HULIS in atmospheric aerosols. <i>Physical Chemistry Chemical Physics</i> , <b>2011</b> , 13, 6507-16	3.6	16
18	Effect of Oxalate and Sulfate on Iron-Catalyzed Secondary Brown Carbon Formation. <i>Environmental Science &amp; Technology</i> , <b>2019</b> , 53, 6708-6717	10.3	15

17	ATR-FTIR and Flow Microcalorimetry Studies on the Initial Binding Kinetics of Arsenicals at the Organic-Hematite Interface. <i>Journal of Physical Chemistry A</i> , <b>2017</b> , 121, 5569-5579	2.8	10
16	Surface interactions of monomethylarsonic acid with hematite nanoparticles studied using ATR-FTIR: adsorption and desorption kinetics. <i>Canadian Journal of Chemistry</i> , <b>2015</b> , 93, 1297-1304	0.9	8
15	Surface water enhances the uptake and photoreactivity of gaseous catechol on solid iron(III) chloride. <i>Environmental Science &amp; Technology</i> , <b>2014</b> , 48, 394-402	10.3	8
14	Trends in the frequencies of $\nu(\text{AsOxHx})$ [ $x = 2, 3$ ] in selected As(V)-containing compounds investigated using quantum chemical calculations. <i>Canadian Journal of Chemistry</i> , <b>2010</b> , 88, 65-77	0.9	8
13	Dust-Catalyzed Oxidative Polymerization of Catechol and Its Impacts on Ice Nucleation Efficiency and Optical Properties. <i>ACS Earth and Space Chemistry</i> , <b>2020</b> , 4, 1127-1139	3.2	8
12	and Real-Time ATR-FTIR Temperature-Dependent Adsorption Kinetics Coupled with DFT Calculations of Dimethylarsinate and Arsenate on Hematite Nanoparticles. <i>Langmuir</i> , <b>2020</b> , 36, 4299-4307	4	6
11	Rigorous quantification of statistical significance of the COVID-19 lockdown effect on air quality: The case from ground-based measurements in Ontario, Canada. <i>Journal of Hazardous Materials</i> , <b>2021</b> , 413, 125445	12.8	6
10	Surface Water Structure and Hygroscopic Properties of Light Absorbing Secondary Organic Polymers of Atmospheric Relevance. <i>ACS Omega</i> , <b>2018</b> , 3, 15519-15529	3.9	6
9	Density functional theory calculations on the adsorption of monomethylarsonic acid onto hydrated iron (oxyhydr)oxide clusters. <i>Computational and Theoretical Chemistry</i> , <b>2017</b> , 1109, 58-63	2	5
8	Dispersion Effects on the Thermodynamics and Transition States of Dimethylarsinic Acid Adsorption on Hydrated Iron (Oxyhydr)oxide Clusters from Density Functional Theory Calculations. <i>Journal of Physical Chemistry A</i> , <b>2016</b> , 120, 9270-9280	2.8	5
7	Dark Iron-Catalyzed Reactions in Acidic and Viscous Aerosol Systems Efficiently Form Secondary Brown Carbon. <i>Environmental Science &amp; Technology</i> , <b>2021</b> , 55, 209-219	10.3	2
6	Aging of atmospheric aerosols and the role of iron in catalyzing brown carbon formation. <i>Environmental Science Atmospheres</i> , <b>2021</b> , 1, 297-345		2
5	Quantum chemical calculations on solvation effects for selected photoreactive aromatic organic molecules of atmospheric relevance. <i>Computational and Theoretical Chemistry</i> , <b>2011</b> , 965, 346-352	2	1
4	Effect of aromatic ring substituents on the ability of catechol to produce brown carbon in iron(III)-catalyzed reactions. <i>Environmental Science Atmospheres</i> , <b>2021</b> , 1, 64-78		1
3	Air Quality Measurements in Kitchener, Ontario, Canada Using Multisensor Mini Monitoring Stations. <i>Atmosphere</i> , <b>2022</b> , 13, 83	2.7	0
2	Adsorption of small organic acids and polyphenols on hematite surfaces: Density Functional Theory and Thermodynamics analysis. <i>Journal of Colloid and Interface Science</i> , <b>2021</b> , 609, 469-469	9.3	0
1	Air quality education in public schools.. <i>Science</i> , <b>2022</b> , 376, 589	33.3	0