Florian Maier

List of Publications by Year in Descending Order

87 papers	4,711 citations	30 h-index	68 g-index
94 ext. papers	5,132 ext. citations	6.2 avg, IF	5.18 L-index

#	Paper	IF	Citations
87	The Effect of Ambient Conditions on the Potential Screening at Ionic Liquid Electrode Interfaces. *Journal of Ionic Liquids*, **2022**, 2, 100019		
86	Enrichment effects of ionic liquid mixtures at polarized electrode interfaces monitored by potential screening. *Physical Chemistry Chemical Physics*, **2021**, 23, 10756-10762	3.6	3
85	B/N-doped carbon sheets from a new ionic liquid with excellent sorption properties for methylene blue. *Journal of Ionic Liquids*, **2021**, 1, 100004		0
84	Time- and Temperature-Dependent Growth Behavior of Ionic Liquids on Au(111) Studied by Atomic Force Microscopy in Ultrahigh Vacuum. *Journal of Physical Chemistry C*, **2021**, 125, 20439-20449	3.8	1
83	Adsorption, Wetting, Growth, and Thermal Stability of the Protic Ionic Liquid Diethylmethylammonium Trifluoromethanesulfonate on Ag(111) and Au(111). *Langmuir*, **2021**, 37, 11552-11560	4	0
82	n-Butane, iso-Butane and 1-Butene Adsorption on Imidazolium-Based Ionic Liquids Studied with Molecular Beam Techniques. *Chemistry - A European Journal*, **2021**, 27, 17059-17065	4.8	
81	Die dynamische Wechselwirkung von n-Butan mit Imidazolium-basierten ionischen Flüssigkeiten. *Angewandte Chemie*, **2020**, 132, 14536-14541	3.6	1
80	On the Dynamic Interaction of n-Butane with Imidazolium-Based Ionic Liquids. *Angewandte Chemie - International Edition*, **2020**, 59, 14429-14433	16.4	5
79	Pronounced surface enrichment of fluorinated ionic liquids in binary mixtures with methoxy-functionalized ionic liquids. *Journal of Molecular Liquids*, **2020**, 305, 112783	6	4
78	Atomic Force and Scanning Tunneling Microscopy of Ordered Ionic Liquid Wetting Layers from 110 K up to Room Temperature. *ACS Nano*, **2020**, 14, 9000-9010	16.7	10
77	On the adsorption of n-butane on alkyl imidazolium ionic liquids with different anions using a new molecular beam setup. *Journal of Chemical Physics*, **2020**, 153, 214706	3.9	1
76	Growth of Multilayers of Ionic Liquids on Au(111) Investigated by Atomic Force Microscopy in Ultrahigh Vacuum. *Langmuir*, **2020**, 36, 13670-13681	4	5
75	Ultrathin ionic liquid films on metal surfaces: adsorption, growth, stability and exchange phenomena. *Advances in Physics: X*, **2020**, 5, 1761266	5.1	14
74	Surface Tension and Viscosity of Binary Mixtures of the Fluorinated and Non-fluorinated Ionic Liquids [PFBMIm][PF6] and [C4C1Im][PF6] by the Pendant Drop Method and Surface Light Scattering. *International Journal of Thermophysics*, **2020**, 41, 1	2.1	6
73	Temperature-Dependent Surface Enrichment Effects in Binary Mixtures of Fluorinated and Non-Fluorinated Ionic Liquids. *Chemistry - A European Journal*, **2020**, 26, 1117-1126	4.8	7
72	Few layer 2D pnictogens catalyze the alkylation of soft nucleophiles with esters. *Nature Communications*, **2019**, 10, 509	17.4	45
71	Potential Screening at Electrode/Ionic Liquid Interfaces from In Situ X-ray Photoelectron Spectroscopy. *ChemistryOpen*, **2019**, 8, 1365-1368	2.3	5

70	Stability and Exchange Processes in Ionic Liquid/Porphyrin Composite Films on Metal Surfaces. *Journal of Physical Chemistry C*, **2019**, 123, 29708-29721	3.8	4
69	Cation Exchange at the Interfaces of Ultrathin Films of Fluorous Ionic Liquids on Ag(111). *Langmuir*, **2019**, 35, 398-405	4	15
68	Surface behavior of low-temperature molten salt mixtures during the transition from liquid to solid. *Journal of Molecular Liquids*, **2019**, 275, 290-296	6	2
67	Reactions of a Polyhalide Ionic Liquid with Copper, Silver, and Gold. *ChemistryOpen*, **2019**, 8, 15-22	2.3	8
66	Probing the Surface Tension of Ionic Liquids Using the Langmuir Principle. *Langmuir*, **2018**, 34, 4408-4416	4	23
65	Surface Enrichment in Equimolar Mixtures of Non-Functionalized and Functionalized Imidazolium-Based Ionic Liquids. *ChemPhysChem*, **2018**, 19, 1733-1745	3.2	13
64	Time-dependent changes in the growth of ultrathin ionic liquid films on Ag(111). *Physical Chemistry Chemical Physics*, **2018**, 20, 12929-12938	3.6	18
63	Ionic liquids at interfaces: general discussion. *Faraday Discussions*, **2018**, 206, 549-586	3.6	
62	Anion Exchange at the Liquid/Solid Interface of Ultrathin Ionic Liquid Films on Ag(111). *ChemPhysChem*, **2018**, 19, 2978-2984	3.2	16
61	Surface-Induced Changes in the Thermochromic Transformation of an Ionic Liquid Cobalt Thiocyanate Complex. *Journal of Physical Chemistry Letters*, **2017**, 8, 1137-1141	6.4	12
60	Perspective: Chemical reactions in ionic liquids monitored through the gas (vacuum)/liquid interface. *Journal of Chemical Physics*, **2017**, 146, 170901	3.9	14
59	Gallium-rich Pd-Ga phases as supported liquid metal catalysts. *Nature Chemistry*, **2017**, 9, 862-867	17.6	140
58	Switching adsorption and growth behavior of ultrathin [CCIm][OTf] films on Au(111) by Pd deposition. *Physical Chemistry Chemical Physics*, **2016**, 18, 25143-25150	3.6	15
57	Surface enrichment of Pt in Ga2O3 films grown on liquid Pt/Ga alloys. *Surface Science*, **2016**, 651, 16-21	1.8	12
56	Thermally stable bis(trifluoromethylsulfonyl)imide salts and their mixtures. *New Journal of Chemistry*, **2016**, 40, 7157-7161	3.6	23
55	Dual analyzer system for surface analysis dedicated for angle-resolved photoelectron spectroscopy at liquid surfaces and interfaces. *Review of Scientific Instruments*, **2016**, 87, 045105	1.7	19
54	Strong and Tunable Spin-Orbit Coupling in a Two-Dimensional Hole Gas in Ionic-Liquid Gated Diamond Devices. *Nano Letters*, **2016**, 16, 3768-73	11.5	36
53	Photoinduced degradation of methylammonium lead triiodide perovskite semiconductors. *Journal of Materials Chemistry A*, **2016**, 4, 15896-15903	13	92

52	Vacuum Surface Science Meets Heterogeneous Catalysis: Dehydrogenation of a Liquid Organic Hydrogen Carrier in the Liquid State. *ChemPhysChem*, **2015**, 16, 1873-9	3.2	13
51	Interface of Ionic Liquids and Carbon: Ultrathin [C1C1Im][Tf2N] Films on Graphite and Graphene. *Journal of Physical Chemistry C*, **2015**, 119, 28068-28076	3.8	23
50	Carbon dioxide capture by an amine functionalized ionic liquid: fundamental differences of surface and bulk behavior. *Journal of the American Chemical Society*, **2014**, 136, 436-41	16.4	95
49	Electrospray ionization deposition of ultrathin ionic liquid films: [C8C1Im]Cl and [C8C1Im][Tf2N] on Au(111). *Langmuir*, **2014**, 30, 1063-71	4	20
48	Redox chemistry, solubility, and surface distribution of Pt(II) and Pt(IV) complexes dissolved in ionic liquids. *Journal of Molecular Liquids*, **2014**, 192, 103-113	6	16
47	Influence of substituents and functional groups on the surface composition of ionic liquids. *Chemistry - A European Journal*, **2014**, 20, 3954-65	4.8	30
46	At the ionic liquid|metal interface: structure formation and temperature dependent behavior of an ionic liquid adlayer on Au(111). *Physical Chemistry Chemical Physics*, **2013**, 15, 17295-302	3.6	72
45	Interfacial Behavior of Thin Ionic Liquid Films on Mica. *Journal of Physical Chemistry C*, **2013**, 117, 5101-5181	3.8	52
44	Chemical and (Photo)-Catalytical Transformations in Photonic Crystal Fibers. *ChemCatChem*, **2013**, 5, 641-650	5.2	19
43	Interface Properties and Physicochemical Characterization of the Low-Temperature Molten Salt Li/K/Cs Acetate. *Journal of Physical Chemistry C*, **2013**, 117, 22939-22946	3.8	7
42	Probing a gas/liquid acid-base reaction by X-ray photoelectron spectroscopy. *Angewandte Chemie - International Edition*, **2013**, 52, 8904-7	16.4	14
41	Temperature-dependent surface-enrichment effects of imidazolium-based ionic liquids. *ChemPhysChem*, **2013**, 14, 3726-30	3.2	13
40	Probing a Gas/Liquid Acid‐Base Reaction by X-ray Photoelectron Spectroscopy. *Angewandte Chemie*, **2013**, 125, 9072-9075	3.6	1
39	Interfaces of ionic liquids and transition metal surfaces-adsorption, growth, and thermal reactions of ultrathin [C1C1Im][Tf2N] films on metallic and oxidised Ni(111) surfaces. *Physical Chemistry Chemical Physics*, **2012**, 14, 5153-63	3.6	76
38	Low melting Li/K/Cs acetate salt mixtures as new ionic media for catalytic applications--first physico-chemical characterization. *Dalton Transactions*, **2012**, 41, 14433-8	4.3	9
37	Monitoring of Liquid-Phase Organic Reactions by Photoelectron Spectroscopy. *Angewandte Chemie* , **2012**, 124, 2664-2667	3.6	8
36	Monitoring of liquid-phase organic reactions by photoelectron spectroscopy. *Angewandte Chemie - International Edition*, **2012**, 51, 2610-3	16.4	26
35	Cyclic thiouronium ionic liquids: physicochemical properties and their electronic structure probed by X-ray induced photoelectron spectroscopy. *Chemistry - A European Journal*, **2012**, 18, 8288-91	4.8	14

34	Organic reactions in ionic liquids studied by in situ XPS. *ChemPhysChem*, **2012**, 13, 1725-35	3.2	41
33	Liquid/solid interface of ultrathin ionic liquid films: [C1C1Im][Tf2N] and [C8C1Im][Tf2N] on Au(111). *Langmuir*, **2011**, 27, 3662-71	4	159
32	Methylated [(arene)(1,3-cyclohexadiene)Ru(0)] complexes as low-melting MOCVD precursor complexes with a controlled follow-up chemistry of the ligands. *Journal of Materials Chemistry*, **2011**, 21, 3014		10
31	Surface science and model catalysis with ionic liquid-modified materials. *Advanced Materials*, **2011**, 23, 2571-87	24	154
30	Methylated [(benzene)(1,3-butadiene)Ru0] Derivatives as Novel MOCVD Precursors with Favorable Properties. *Chemical Vapor Deposition*, **2011**, 17, 15-21		8
29	Der Kohlendioxid-Abscheidung an der Gas-flüssig-Grenzfläche auf der Spur. *Angewandte Chemie*, **2011**, 123, 10315-10316	3.6	1
28	Capture of carbon dioxide at the gas-liquid interface elucidated by surface science approaches. *Angewandte Chemie - International Edition*, **2011**, 50, 10133-4	16.4	13
27	Photoelectron spectroscopy of ionic liquid-based interfaces. *Chemical Reviews*, **2010**, 110, 5158-90	68.1	234
26	Density and surface tension of ionic liquids. *Journal of Physical Chemistry B*, **2010**, 114, 17025-36	3.4	187
25	Ionic liquid based model catalysis: interaction of [BMIM][Tf2N] with Pd nanoparticles supported on an ordered alumina film. *Physical Chemistry Chemical Physics*, **2010**, 12, 10610-21	3.6	70
24	Insights into the surface composition and enrichment effects of ionic liquids and ionic liquid mixtures. *Physical Chemistry Chemical Physics*, **2010**, 12, 1905-15	3.6	127
23	Ligand effects on the surface composition of Rh-containing ionic liquid solutions used in hydroformylation catalysis. *Chemistry - A European Journal*, **2010**, 16, 12083-7	4.8	27
22	Towards a molecular understanding of cation-anion interactions--probing the electronic structure of imidazolium ionic liquids by NMR spectroscopy, X-ray photoelectron spectroscopy and theoretical calculations. *Chemistry - A European Journal*, **2010**, 16, 9018-33	4.8	241
21	Influence of different anions on the surface composition of ionic liquids studied using ARXPS. *Journal of Physical Chemistry B*, **2009**, 113, 8682-8	3.4	158
20	Influence of different substituents on the surface composition of ionic liquids studied using ARXPS. *Journal of Physical Chemistry B*, **2009**, 113, 2854-64	3.4	166
19	Chloroalkylsulfonate ionic liquids by ring opening of sultones with organic chloride salts. *Chemical Communications*, **2008**, 3867-9	5.8	38
18	Surface characterization of functionalized imidazolium-based ionic liquids. *Langmuir*, **2008**, 24, 9500-7	4	112
17	Physical vapor deposition of [EMIM][Tf2N]: a new approach to the modification of surface properties with ultrathin ionic liquid films. *ChemPhysChem*, **2008**, 9, 2185-90	3.2	120

16	Interaction of Cobalt(II) Tetraarylporphyrins with a Ag(111) Surface Studied with Photoelectron Spectroscopy. *Journal of Physical Chemistry C*, **2007**, 111, 3090-3098	3.8	171
15	Surface enrichment and depletion effects of ions dissolved in an ionic liquid: an X-ray photoelectron spectroscopy study. *Angewandte Chemie - International Edition*, **2006**, 45, 7778-80	16.4	105
14	Surface Enrichment and Depletion Effects of Ions Dissolved in an Ionic Liquid: An X-ray Photoelectron Spectroscopy Study. *Angewandte Chemie*, **2006**, 118, 7942-7944	3.6	14
13	Surface Studies on the Ionic Liquid 1-Ethyl-3-Methylimidazolium Ethylsulfate Using X-Ray Photoelectron Spectroscopy (XPS). *Zeitschrift Fur Physikalische Chemie*, **2006**, 220, 1439-1453	3.1	95
12	Geometry of the (2×1) reconstruction of diamond (111). *Journal of Physics Condensed Matter*, **2002**, 14, 3085-3092	1.8	18
11	Maier et al. Reply:. *Physical Review Letters*, **2001**, 87,	7.4	5
10	Surface doping: a special feature of diamond. *Journal of Physics Condensed Matter*, **2001**, 13, 8979-8987	1.8	17
9	Spectroscopic investigations of diamond/hydrogen/metal and diamond/metal interfaces. *Diamond and Related Materials*, **2001**, 10, 506-510	3.5	8
8	Electron affinity of plasma-hydrogenated and chemically oxidized diamond (100) surfaces. *Physical Review B*, **2001**, 64,	3.3	343
7	Diamond surface conductivity experiments and photoelectron spectroscopy. *Diamond and Related Materials*, **2001**, 10, 416-422	3.5	77
6	Origin of surface conductivity in diamond. *Physical Review Letters*, **2000**, 85, 3472-5	7.4	723
5	Electronic states of an ordered oxide on C-terminated 6H-SiC. *Surface Science*, **1999**, 442, 531-542	1.8	40
4	The hydrogenated and bare diamond (110) surface: a combined LEED-, XPS-, and ARPES study. *Surface Science*, **1999**, 443, 177-185	1.8	35
3	High-resolution surface-sensitive C 1s core-level spectra of clean and hydrogen-terminated diamond (100) and (111) surfaces. *Physical Review B*, **1998**, 57, 12397-12409	3.3	105
2	A simple design for a helium scattering apparatus. *Surface Science*, **1997**, 377-379, 1101-1105	1.8	1
1	Resonant magnetic scattering study of the 50% Ho-Tb alloy. *Journal of Magnetism and Magnetic Materials*, **1995**, 140-144, 753-754	2.8	9