Ralf Ludwig

List of Publications by Year in Descending Order

322 papers	14,607 citations	63 h-index	108 g-index
369 ext. papers	15,934 ext. citations	5.6 avg, IF	7 L-index

#	Paper	IF	Citations
322	Computational investigation of a covalent triazine framework (CTF-0) as an efficient electrochemical sensor.. *RSC Advances*, **2022**, 12, 3909-3923	3.7	3
321	Structure, hydrogen bond dynamics and phase transition in a model ionic liquid electrolyte.. *Physical Chemistry Chemical Physics*, **2022**,	3.6	2
320	Why Do Liquids Mix? The Mixing of Protic Ionic Liquids Sharing the Same Cation Is Apparently Driven by Enthalpy, Not Entropy.. *Journal of Physical Chemistry Letters*, **2022**, 3556-3561	6.4	0
319	Non-covalent interactions in molecular systems: thermodynamic evaluation of the hydrogen bond strength in aminoalcohols. *Physical Chemistry Chemical Physics*, **2021**, 23, 25226-25238	3.6	0
318	Kinetics of Hydrogen Bonding between Ions with Opposite and Like Charges in Hydroxyl-Functionalized Ionic Liquids. *Journal of Physical Chemistry B*, **2021**, 125, 281-286	3.4	5
317	The co-crystal of copper(II) phenanthroline chloride complex hydrate with p-aminobenzoic acid: structure, cytotoxicity, thermal analysis, and DFT calculation. *Monatshefte F□ Chemie*, **2021**, 152, 323-336	1.4	3
316	Balance Between Contact and Solvent-Separated Ion Pairs in Mixtures of the Protic Ionic Liquid [EtNH][MeSO] with Water Controlled by Water Content and Temperature. *Journal of Physical Chemistry B*, **2021**, 125, 4476-4488	3.4	3
315	Nonlinear optical response of first-row transition metal doped Al12P12 nanoclusters; a first-principles study. *Journal of Physics and Chemistry of Solids*, **2021**, 151, 109914	3.9	8
314	Structural similarity of an ionic liquid and the mixture of the neutral molecules. *Journal of Molecular Liquids*, **2021**, 329, 115589	6	4
313	Hydrogen Bonds between Ions of Opposite and Like Charge in Hydroxyl-Functionalized Ionic Liquids: an Exhaustive Examination of the Interplay between Global and Local Motions and Intermolecular Hydrogen Bond Lifetimes and Kinetics. *Journal of Physical Chemistry B*, **2021**, 125, 5132-5144	3.4	3
312	Inorganic electrides of alkali metal doped ZnO nanocage with excellent nonlinear optical response. *Journal of Molecular Graphics and Modelling*, **2021**, 106, 107935	2.8	5
311	Anticancer evaluation of a manganese complex on HeLa and MCF-7 cancer cells: design, deterministic solvothermal synthesis approach, Hirshfeld analysis, DNA binding, intracellular reactive oxygen species production, electrochemical characterization and density functional theory. *Journal of Biomolecular Structure and Dynamics*, **2021**, 39, 1068-1081	3.6	3
310	Rotational correlation times, diffusion coefficients and quadrupolar peaks of the protic ionic liquid ethylammonium nitrate by means of 1H fast field cycling NMR relaxometry. *Journal of Molecular Liquids*, **2021**, 322, 114983	6	9
309	First row transition metals decorated boron phosphide nanoclusters as nonlinear optical materials with high thermodynamic stability and enhanced electronic properties; A detailed quantum chemical study. *Optics and Laser Technology*, **2021**, 134, 106570	4.2	11
308	Towards operando IR- and UV-vis-Spectro-Electrochemistry: A Comprehensive Matrix Factorisation Study on Sensitive and Transient Molybdenum and Tungsten Mono-Dithiolene Complexes**. *Chemistry Methods*, **2021**, 1, 22-35		3
307	Determination of the dispersion forces in the gas phase structures of ionic liquids using exclusively thermodynamic methods. *Physical Chemistry Chemical Physics*, **2021**, 23, 7398-7406	3.6	1
306	Insights into the translational and rotational dynamics of cations and anions in protic ionic liquids by means of NMR fast-field-cycling relaxometry. *Physical Chemistry Chemical Physics*, **2021**, 23, 2663-2673	3.6	6

305	Quasi-Universal Solubility Behavior of Light Gases in Imidazolium-Based Ionic Liquids with Varying Anions: A Molecular Dynamics Simulation Study. *Journal of Physical Chemistry B*, **2021**, 125, 1647-1659	3.4	4
304	Three in One: The Versatility of Hydrogen Bonding Interaction in Halide Salts with Hydroxy-Functionalized Pyridinium Cations. *ChemPhysChem*, **2021**, 22, 1850-1856	3.2	2
303	Towards thermodynamically stable anionic dimers with anti-electrostatic hydrogen bonds overcoming like-charge repulsion. *Journal of Molecular Liquids*, **2021**, 340, 116882	6	0
302	Quantification and understanding of non-covalent interactions in molecular and ionic systems: Dispersion interactions and hydrogen bonding analysed by thermodynamic methods. *Journal of Molecular Liquids*, **2021**, 343, 117547	6	1
301	Clusters of Hydroxyl-Functionalized Cations Stabilized by Cooperative Hydrogen Bonds: The Role of Polarizability and Alkyl Chain Length. *Molecules*, **2020**, 25,	4.8	5
300	Counting cations involved in cationic clusters of hydroxy-functionalized ionic liquids by means of infrared and solid-state NMR spectroscopy. *Physical Chemistry Chemical Physics*, **2020**, 22, 6861-6867	3.6	9
299	Facile Synthesis of a Stable Side-on Phosphinyne Complex by Redox Driven Intramolecular Cyclisation. *Chemistry - A European Journal*, **2020**, 26, 11492-11502	4.8	3
298	Designing alkoxy-induced based high performance near infrared sensitive small molecule acceptors for organic solar cells. *Journal of Molecular Liquids*, **2020**, 305, 112829	6	25
297	Understanding the Nature of Nuclear Magnetic Resonance Relaxation by Means of Fast-Field-Cycling Relaxometry and Molecular Dynamics Simulations-The Validity of Relaxation Models. *Journal of Physical Chemistry Letters*, **2020**, 11, 2165-2170	6.4	12
296	Controlling "like-likes-like" charge attraction in hydroxy-functionalized ionic liquids by polarizability of the cations, interaction strength of the anions and varying alkyl chain length. *Physical Chemistry Chemical Physics*, **2020**, 22, 2763-2774	3.6	22
295	Chain Length Dependence of Hydrogen Bond Linkages between Cationic Constituents in Hydroxy-Functionalized Ionic Liquids: Tracking Bulk Behavior to the Molecular Level with Cold Cluster Ion Spectroscopy. *Journal of Physical Chemistry Letters*, **2020**, 11, 683-688	6.4	10
294	Effect of Hydrogen Bonding between Ions of Like Charge on the Boundary Layer Friction of Hydroxy-Functionalized Ionic Liquids. *Journal of Physical Chemistry Letters*, **2020**, 11, 3905-3910	6.4	9
293	Dissecting intermolecular interactions in the condensed phase of ibuprofen and related compounds: the specific role and quantification of hydrogen bonding and dispersion forces. *Physical Chemistry Chemical Physics*, **2020**, 22, 4896-4904	3.6	5
292	Comparing the void space and long-range structure of an ionic liquid with a neutral mixture of similar sized molecules. *Journal of Molecular Liquids*, **2020**, 299, 112121	6	6
291	Freezing the Motion in Hydroxy-Functionalized Ionic Liquids-Temperature Dependent NMR Deuteron Quadrupole Coupling Constants for Two Types of Hydrogen Bonds Far below the Glass Transition. *Journal of Physical Chemistry Letters*, **2020**, 11, 6000-6006	6.4	6
290	Metal/Metal Redox Isomerism Governed by Configuration. *Chemistry - A European Journal*, **2020**, 26, 16811-16817	4.8	4
289	Cyclic Octamer of Hydroxyl-functionalized Cations with Net Charge Q=+8e Kinetically Stabilized by a 'Molecular Island' of Cooperative Hydrogen Bonds. *ChemPhysChem*, **2020**, 21, 2411-2416	3.2	1
288	Probing relaxation models by means of Fast Field-Cycling relaxometry, NMR spectroscopy and molecular dynamics simulations: Detailed insight into the translational and rotational dynamics of a protic ionic liquid. *Journal of Molecular Liquids*, **2020**, 319, 114207	6	8

287	Isolating the role of hydrogen bonding in hydroxyl-functionalized ionic liquids by means of vaporization enthalpies, infrared spectroscopy and molecular dynamics simulations. *Physical Chemistry Chemical Physics*, **2019**, 21, 20308-20314	3.6	7
286	When hydrogen bonding overcomes Coulomb repulsion: from kinetic to thermodynamic stability of cationic dimers. *Physical Chemistry Chemical Physics*, **2019**, 21, 8215-8220	3.6	25
285	The Double-Faced Nature of Hydrogen Bonding in Hydroxy-Functionalized Ionic Liquids Shown by Neutron Diffraction and Molecular Dynamics Simulations. *Angewandte Chemie - International Edition*, **2019**, 58, 12887-12892	16.4	30
284	The Effect of Additives on the Viscosity and Dissolution of Cellulose in Tetrabutylphosphonium Hydroxide. *ChemSusChem*, **2019**, 12, 3458-3462	8.3	7
283	Die zweigesichtige Natur der Wasserstoffbrückenbindung in hydroxylfunktionalisierten ionischen Flüssigkeiten, offenbart durch Neutronendiffraktometrie und Molekulardynamik-Simulation. *Angewandte Chemie*, **2019**, 131, 13019-13024	3.6	3
282	Dissecting the Vaporization Enthalpies of Ionic Liquids by Exclusively Experimental Methods: Coulomb Interaction, Hydrogen Bonding, and Dispersion Forces. *Angewandte Chemie - International Edition*, **2019**, 58, 8589-8592	16.4	11
281	Zerlegung der Verdampfungsenthalpien ionischer Flüssigkeiten durch rein experimentelle Methoden: Coulomb-Wechselwirkung, Wasserstoffbrücken und Dispersionskräfte. *Angewandte Chemie*, **2019**, 131, 8679	3.6	
280	Isolation, characterization and DFT studies of epoxy ring containing new withanolides from Withania coagulans Dunal. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2019**, 217, 113-121	4.4	3
279	Photo-tunable linear and nonlinear optical response of cyclophanediene-dihydropyrene photoswitches. *Journal of Molecular Graphics and Modelling*, **2019**, 88, 261-272	2.8	5
278	Synthesis, X-ray crystal structure and spin polarized DFT study of high spin Mn based metal-organic framework. *Journal of Molecular Structure*, **2019**, 1175, 439-444	3.4	5
277	Cooperatively enhanced hydrogen bonds in ionic liquids: closing the loop with molecular mimics of hydroxy-functionalized cations. *Physical Chemistry Chemical Physics*, **2019**, 21, 18092-18098	3.6	21
276	Hydrogen Bonding Between Ions of Like Charge in Ionic Liquids Characterized by NMR Deuteron Quadrupole Coupling Constants—Comparison with Salt Bridges and Molecular Systems. *Angewandte Chemie*, **2019**, 131, 18027-18035	3.6	3
275	Hydrogen Bonding Between Ions of Like Charge in Ionic Liquids Characterized by NMR Deuteron Quadrupole Coupling Constants-Comparison with Salt Bridges and Molecular Systems. *Angewandte Chemie - International Edition*, **2019**, 58, 17863-17871	16.4	28
274	Influence of Hydrogen Bonding between Ions of Like Charge on the Ionic Liquid Interfacial Structure at a Mica Surface. *Journal of Physical Chemistry Letters*, **2019**, 10, 7368-7373	6.4	15
273	Simultaneous determination of deuteron quadrupole coupling constants and rotational correlation times: the model case of hydrogen bonded ionic liquids. *Physical Chemistry Chemical Physics*, **2019**, 21, 25597-25605	3.6	4
272	Mechanistic Insights into the Electrochemical Reduction of CO2 Catalyzed by Iron Cyclopentadienone Complexes. *Organometallics*, **2019**, 38, 1236-1247	3.8	10
271	Selective Earth-Abundant System for CO2 Reduction: Comparing Photo- and Electrocatalytic Processes. *ACS Catalysis*, **2019**, 9, 2091-2100	13.1	50
270	Revisiting imidazolium based ionic liquids: Effect of the conformation bias of the [NTf] anion studied by molecular dynamics simulations. *Journal of Chemical Physics*, **2018**, 148, 193828	3.9	34

269	Rotational and translational dynamics and their relation to hydrogen bond lifetimes in an ionic liquid by means of NMR relaxation time experiments and molecular dynamics simulation. *Journal of Chemical Physics*, **2018**, 148, 193843	3.9	18
268	Like-likes-Like: Cooperative Hydrogen Bonding Overcomes Coulomb Repulsion in Cationic Clusters with Net Charges up to Q=+6e. *ChemPhysChem*, **2018**, 19, 1691-1695	3.2	24
267	Dynamical heterogeneities in ionic liquids as revealed from deuteron NMR. *Chemical Communications*, **2018**, 54, 3098-3101	5.8	15
266	The influence of like-charge attraction on the structure and dynamics of ionic liquids: NMR chemical shifts, quadrupole coupling constants, rotational correlation times and failure of Stokes-Einstein-Debye. *Physical Chemistry Chemical Physics*, **2018**, 20, 5617-5625	3.6	19
265	Hydrogen bonding in protic ionic liquids: structural correlations, vibrational spectroscopy, and rotational dynamics of liquid ethylammonium nitrate. *Journal of Physics B: Atomic, Molecular and Optical Physics*, **2018**, 51, 034002	1.3	19
264	Acridinedione as selective flouride ion chemosensor: a detailed spectroscopic and quantum mechanical investigation.. *RSC Advances*, **2018**, 8, 1993-2003	3.7	15
263	A chemometric study in the area of feasible solution of an acid-base titration of -methyl-6-oxyquinolone.. *RSC Advances*, **2018**, 8, 9922-9932	3.7	
262	Novel acridine-based thiosemicarbazones as 'turn-on' chemosensors for selective recognition of fluoride anion: a spectroscopic and theoretical study. *Royal Society Open Science*, **2018**, 5, 180646	3.3	22
261	Receptor-Spacer-Fluorophore Based Coumarin-Thiosemicarbazones as Anion Chemosensors with Turn on Response: Spectroscopic and Computational (DFT) Studies. *ChemistrySelect*, **2018**, 3, 7633-7642	1.8	11
260	Diferrate [Fe (CO) (CO){P(aryl) }] as Self-Assembling Iron/Phosphor-Based Catalyst for the Hydrogen Evolution Reaction in Photocatalytic Proton Reduction-Spectroscopic Insights. *Chemistry - A European Journal*, **2018**, 24, 16052-16065	4.8	8
259	Remarkable nonlinear optical response of alkali metal doped aluminum phosphide and boron phosphide nanoclusters. *Journal of Molecular Liquids*, **2018**, 271, 51-64	6	57
258	Mechanistic Study on the Addition of CO2 to Epoxides Catalyzed by Ammonium and Phosphonium Salts: A Combined Spectroscopic and Kinetic Approach. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 10778-10788	8.3	39
257	NMR Studies of Protic Ionic Liquids. *Annual Reports on NMR Spectroscopy*, **2018**, 147-190	1.7	5
256	Spektroskopischer Nachweis einer attraktiven Kation-Kation- Wechselwirkung in OH-funktionalisierten ionischen Flssigkeiten: ein H-Brken-gebundenes kettenfmiges Trimer. *Angewandte Chemie*, **2018**, 130, 15590-15594	3.6	8
255	Spectroscopic Evidence for an Attractive Cation-Cation Interaction in Hydroxy-Functionalized Ionic Liquids: A Hydrogen-Bonded Chain-like Trimer. *Angewandte Chemie - International Edition*, **2018**, 57, 15364-15368	16.4	38
254	Cationic clustering influences the phase behaviour of ionic liquids. *Scientific Reports*, **2018**, 8, 14753	4.9	41
253	Structural Motifs in Cold Ternary Ion Complexes of Hydroxyl-Functionalized Ionic Liquids: Isolating the Role of Cation-Cation Interactions. *Journal of Physical Chemistry Letters*, **2018**, 9, 2979-2984	6.4	40
252	Studying Interaction, Ion-Pair Formation, and Mixing Behavior of Protic Ionic Liquids by Means of Far-Infrared Spectroscopy **2018**, 527-567		1

251	A Stable Manganese Pincer Catalyst for the Selective Dehydrogenation of Methanol. *Angewandte Chemie*, **2017**, 129, 574-577	3.6	31
250	Electrical Energy Storage by a Magnesium-Copper-Sulfide Rechargeable Battery. *Journal of the Electrochemical Society*, **2017**, 164, A770-A774	3.9	7
249	The Relation between Vaporization Enthalpies and Viscosities: Eyring's Theory Applied to Selected Ionic Liquids. *ChemPhysChem*, **2017**, 18, 1242-1246	3.2	9
248	Phosphides or nitrides for better NLO properties? A detailed comparative study of alkali metal doped nano-cages. *Materials Research Bulletin*, **2017**, 92, 113-122	5.1	64
247	A Stable Manganese Pincer Catalyst for the Selective Dehydrogenation of Methanol. *Angewandte Chemie - International Edition*, **2017**, 56, 559-562	16.4	129
246	Transport properties of graphene quantum dots in glycerol and distilled water. *Journal of Molecular Liquids*, **2017**, 241, 831-838	6	29
245	Large Stokes Shift Ionic-Liquid Dye. *Angewandte Chemie - International Edition*, **2017**, 56, 8564-8567	16.4	7
244	Ionische Flüssigkeit mit eingebautem Farbstoff zeigt große Stokes-Verschiebung. *Angewandte Chemie*, **2017**, 129, 8686-8690	3.6	
243	A simple guiding principle for the temperature dependence of the solubility of light gases in imidazolium-based ionic liquids derived from molecular simulations. *Physical Chemistry Chemical Physics*, **2017**, 19, 1770-1780	3.6	16
242	Anziehung gleich geladener Ionen in ionischen Flüssigkeiten: Kontrolle der Bildung kationischer Cluster über die Wechselwirkungsstärke der Gegenionen. *Angewandte Chemie*, **2017**, 129, 510-514	3.6	19
241	When Like Charged Ions Attract in Ionic Liquids: Controlling the Formation of Cationic Clusters by the Interaction Strength of the Counterions. *Angewandte Chemie - International Edition*, **2017**, 56, 496-500	16.4	66
240	Improving antibacterial activity of phosphomolybdic acid using graphene. *Materials Chemistry and Physics*, **2017**, 188, 58-67	4.4	24
239	Charakterisierung von Wasserstoffbrücken zwischen Ionen in protischen ionischen Flüssigkeiten mittels NMR-Deuteron-Quadrupol-Kopplungskonstanten – Unterschiede zu H-Brücken in Amiden, Peptiden und Proteinen. *Angewandte Chemie*, **2017**, 129, 14500-14505	3.6	5
238	Light to Hydrogen: Photocatalytic Hydrogen Generation from Water with Molecularly-Defined Iron Complexes. *Inorganics*, **2017**, 5, 14	2.9	30
237	Characterization of Doubly Ionic Hydrogen Bonds in Protic Ionic Liquids by NMR Deuteron Quadrupole Coupling Constants: Differences to H-bonds in Amides, Peptides, and Proteins. *Angewandte Chemie - International Edition*, **2017**, 56, 14310-14314	16.4	28
236	Predicting the Ionic Product of Water. *Scientific Reports*, **2017**, 7, 10244	4.9	23
235	Utilization of the dye N-methyl-6-oxyquinolone as an optical acidometer in molecular solvents and protic ionic liquids. *Chemical Communications*, **2017**, 53, 10761-10764	5.8	7
234	Kinetics and mechanism of antibacterial activity and cytotoxicity of Ag-RGO nanocomposite. *Colloids and Surfaces B: Biointerfaces*, **2017**, 159, 366-374	6	56

233	Controlling the kinetic and thermodynamic stability of cationic clusters by the addition of molecules or counterions. *Physical Chemistry Chemical Physics*, **2017**, 19, 18854-18862	3.6	26
232	Dispersion und Wasserstoffbrücken bestimmend für Warum die Verdampfungsenthalpien von aprotischen größer als die von protischen ionischen Flüssigkeiten sind. *Angewandte Chemie*, **2016**, 128, 11856-11860	3.6	10
231	Highly active and selective photochemical reduction of CO2 to CO using molecular-defined cyclopentadienone iron complexes. *Chemical Communications*, **2016**, 52, 8393-6	5.8	46
230	Novel quinoxaline based chemosensors with selective dual mode of action: nucleophilic addition and host–guest type complex formation. *RSC Advances*, **2016**, 6, 64009-64018	3.7	11
229	Mechanistic Study of Photocatalytic Hydrogen Generation with Simple Iron Carbonyls as Water Reduction Catalysts. *ChemCatChem*, **2016**, 8, 404-411	5.2	14
228	Theoretical mechanistic investigation of zinc(II) catalyzed oxidative amidation of benzyl alcohols with amines. *Polyhedron*, **2016**, 112, 34-42	2.7	3
227	Gas hydrates model for the mechanistic investigation of the Wittig reaction in water. *RSC Advances*, **2016**, 6, 23448-23458	3.7	11
226	Iron-catalyzed photoreduction of carbon dioxide to synthesis gas. *Catalysis Science and Technology*, **2016**, 6, 3623-3630	5.5	49
225	Copper-Based Photosensitisers in Water Reduction: A More Efficient In Situ Formed System and Improved Mechanistic Understanding. *Chemistry - A European Journal*, **2016**, 22, 1233-8	4.8	60
224	In Situ FTIR and NMR Spectroscopic Investigations on Ruthenium-Based Catalysts for Alkene Hydroformylation. *Chemistry - A European Journal*, **2016**, 22, 2746-57	4.8	13
223	Spectroscopic Evidence for Clusters of Like-Charged Ions in Ionic Liquids Stabilized by Cooperative Hydrogen Bonding. *ChemPhysChem*, **2016**, 17, 458-62	3.2	100
222	Theoretical mechanistic investigation of zinc(II) catalyzed oxidation of alcohols to aldehydes and esters. *RSC Advances*, **2016**, 6, 31876-31883	3.7	7
221	Selective Catalytic Hydrogenations of Nitriles, Ketones, and Aldehydes by Well-Defined Manganese Pincer Complexes. *Journal of the American Chemical Society*, **2016**, 138, 8809-14	16.4	375
220	Deuteron quadrupole coupling constants and reorientational correlation times in protic ionic liquids. *Physical Chemistry Chemical Physics*, **2016**, 18, 17788-94	3.6	18
219	Dispersion and Hydrogen Bonding Rule: Why the Vaporization Enthalpies of Aprotic Ionic Liquids Are Significantly Larger than those of Protic Ionic liquids. *Angewandte Chemie - International Edition* , **2016**, 55, 11682-6	16.4	43
218	Controlling the subtle energy balance in protic ionic liquids: dispersion forces compete with hydrogen bonds. *Angewandte Chemie - International Edition*, **2015**, 54, 2792-5	16.4	71
217	The effect of dispersion forces on the interaction energies and far infrared spectra of protic ionic liquids. *Physical Chemistry Chemical Physics*, **2015**, 17, 13790-3	3.6	40
216	Isolation, spectroscopic and density functional theory studies of 7-(4-methoxyphenyl)-9H-furo[2,3-f]chromen-9-one: a new flavonoid from the bark of Millettia ovalifolia. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2015**, 146, 24-32	4.4	17

215	Spectroscopic and density functional theory studies of 7-hydroxy-3'-methoxyisoflavone: A new isoflavone from the seeds of Indigofera heterantha (Wall). *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2015**, 148, 375-81	4.4	20
214	Spectroscopic evidence of 'jumping and pecking' of cholinium and H-bond enhanced cation-cation interaction in ionic liquids. *Physical Chemistry Chemical Physics*, **2015**, 17, 30978-82	3.6	54
213	Immune mechanism-targeted treatment of experimental epidermolysis bullosa acquisita. *Expert Review of Clinical Immunology*, **2015**, 11, 1365-78	5.1	3
212	Non-ideal mixing behaviour of hydrogen bonding in mixtures of protic ionic liquids. *ChemPhysChem*, **2015**, 16, 299-304	3.2	41
211	Cation-cation clusters in ionic liquids: Cooperative hydrogen bonding overcomes like-charge repulsion. *Scientific Reports*, **2015**, 5, 17505	4.9	86
210	Vibrational dephasing in ionic liquids as a signature of hydrogen bonding. *ChemPhysChem*, **2015**, 16, 2519-23	3.2	13
209	Steuerung der subtilen Energiebalance in protischen ionischen Flüssigkeiten: Dispersionskräfte im Wettstreit mit Wasserstoffbrücken. *Angewandte Chemie*, **2015**, 127, 2834-2837	3.6	12
208	Towards thermally stable cyclophanediene-dihydropyrene photoswitches. *Journal of Molecular Modeling*, **2015**, 21, 148	2	6
207	Imidazolium salt ion pairs in solution. *Chemistry - A European Journal*, **2015**, 21, 8324-35	4.8	137
206	Mechanistic insight of TiCl4 catalyzed formal [3 + 3] cyclization of 1,3-bis(silyl enol ethers) with 1,3-dielectrophiles. *RSC Advances*, **2015**, 5, 94304-94314	3.7	6
205	Hydrogen bonding in a mixture of protic ionic liquids: a molecular dynamics simulation study. *Physical Chemistry Chemical Physics*, **2015**, 17, 8431-40	3.6	63
204	Base-free non-noble-metal-catalyzed hydrogen generation from formic acid: scope and mechanistic insights. *Chemistry - A European Journal*, **2014**, 20, 13589-602	4.8	42
203	Probing molecular interaction in ionic liquids by low frequency spectroscopy: Coulomb energy, hydrogen bonding and dispersion forces. *Physical Chemistry Chemical Physics*, **2014**, 16, 21903-29	3.6	172
202	Advancing into water's "no man's land": two liquid states?. *Angewandte Chemie - International Edition*, **2014**, 53, 11699-701	16.4	8
201	Synthesis and Characterisation of Bridged Titanocene Oxido Complexes and Their Reactions with Water. *European Journal of Inorganic Chemistry*, **2014**, 2014, 4068-4072	2.3	6
200	Ion pairing in protic ionic liquids probed by far-infrared spectroscopy: effects of solvent polarity and temperature. *ChemPhysChem*, **2014**, 15, 2604-9	3.2	35
199	Volatile times for the very first ionic liquid: understanding the vapor pressures and enthalpies of vaporization of ethylammonium nitrate. *Chemistry - A European Journal*, **2014**, 20, 11640-5	4.8	68
198	Site Selective Synthesis of Pentaarylpyridines via Multiple Suzuki–Miyaura Cross-Coupling Reactions. *Advanced Synthesis and Catalysis*, **2014**, 356, 1987-2008	5.6	28

197	Formation of "quasi" contact or solvent-separated ion pairs in the local environment of probe molecules dissolved in ionic liquids. *ChemPhysChem*, **2014**, 15, 265-70	3.2	14
196	Death and Rebirth: Photocatalytic Hydrogen Production by a Self-Organizing Copper–Iron System. *ACS Catalysis*, **2014**, 4, 1845-1849	13.1	71
195	An operando FTIR spectroscopic and kinetic study of carbon monoxide pressure influence on rhodium-catalyzed olefin hydroformylation. *Chemistry - A European Journal*, **2014**, 20, 11921-31	4.8	24
194	Investigation into the Equilibrium of Iridium Catalysts for the Hydroformylation of Olefins by Combining In Situ High-Pressure FTIR and NMR Spectroscopy. *ACS Catalysis*, **2014**, 4, 2097-2108	13.1	28
193	Base-free hydrogen generation from methanol using a bi-catalytic system. *Chemical Communications*, **2014**, 50, 707-9	5.8	101
192	Angriff auf das "Niemandsland" des Wassers: Zwei Flüssigkeiten?. *Angewandte Chemie*, **2014**, 126, 11888-11890	3.0	2
191	Dynamics of methanol in ionic liquids: validity of the Stokes-Einstein and Stokes-Einstein-Debye relations. *ChemPhysChem*, **2014**, 15, 3040-8	3.2	16
190	Analyzing the interaction energies between cation and anion in ionic liquids: The subtle balance between Coulomb forces and hydrogen bonding. *Journal of Molecular Liquids*, **2014**, 192, 94-102	6	123
189	The dissolution of polyols in salt solutions and ionic liquids at molecular level: ions, counter ions, and hofmeister effects. *ChemPhysChem*, **2013**, 14, 3667-71	3.2	26
188	The Influence of Water on the Solubility of Carbon Dioxide in Imidazolium Based Ionic Liquids. *Zeitschrift Fur Physikalische Chemie*, **2013**, 227, 167-176	3.1	16
187	Comparison of force fields on the basis of various model approaches--how to design the best model for the [CnMIM][NTf2] family of ionic liquids. *ChemPhysChem*, **2013**, 14, 3368-74	3.2	30
186	Equilibrium of contact and solvent-separated ion pairs in mixtures of protic ionic liquids and molecular solvents controlled by polarity. *Angewandte Chemie - International Edition*, **2013**, 52, 12439-42	16.4	51
185	A molecularly defined iron-catalyst for the selective hydrogenation of α,β-unsaturated aldehydes. *Chemistry - A European Journal*, **2013**, 19, 7701-7	4.8	72
184	Dissecting anion-cation interaction energies in protic ionic liquids. *Angewandte Chemie - International Edition*, **2013**, 52, 2368-72	16.4	90
183	Site-Selective Sonogashira Reactions of 1,4-Dibromo-2-(trifluoromethyl)benzene: Synthesis and Properties of Fluorinated Alkynylbenzenes. *European Journal of Organic Chemistry*, **2013**, 2013, 8115-8134	3.2	8
182	3-Pyrenylacrylates: Synthetic, Photophysical, Theoretical and Electrochemical Investigations. *Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences*, **2013**, 68, 367-377	1	2
181	Ion speciation of protic ionic liquids in water: transition from contact to solvent-separated ion pairs. *Angewandte Chemie - International Edition*, **2013**, 52, 2990-4	16.4	79
180	Energetik der Anion-Kation-Wechselwirkung in protischen ionischen Flüssigkeiten. *Angewandte Chemie*, **2013**, 125, 2425-2429	3.6	17

179	Ionenspezies in Mischungen aus protischen ionischen Flüssigkeiten und Wasser: Übergang von Kontakt- zu solvensseparierten Ionenpaaren. *Angewandte Chemie*, **2013**, 125, 3064-3068	3.6	20
178	Gleichgewicht zwischen Kontakt- und solvensseparierten Ionenpaaren in Mischungen von protischen ionischen Flüssigkeiten und molekularen Lösungsmitteln durch Polarität kontrolliert. *Angewandte Chemie*, **2013**, 125, 12667-12670	3.6	11
177	Preface. Prof. Dr. Andreas Heintz. *Zeitschrift Fur Physikalische Chemie*, **2013**, 227, 153-156	3.1	
176	Site-Selective Sonogashira Reactions of 1,4-Dibromo-2-fluorobenzene – Synthesis and Properties of Fluorinated Alkynylbenzenes. *European Journal of Organic Chemistry*, **2012**, 2012, 604-615	3.2	9
175	Efficient Synthesis of Arylated Flavones by Site-Selective Suzuki–Miyaura Cross-Coupling Reactions of the Bis(triflate) of 5,7- and 7,8-Dihydroxyflavone. *European Journal of Organic Chemistry*, **2012**, 2012, 1639-1652	3.2	8
174	Hydrogen bonding in ionic liquids probed by linear and nonlinear vibrational spectroscopy. *New Journal of Physics*, **2012**, 14, 105026	2.9	87
173	Anti-inflammatory activity of IgG1 mediated by Fc galactosylation and association of FcγRIIB and dectin-1. *Nature Medicine*, **2012**, 18, 1401-6	50.5	311
172	Site-selective Sonogashira reactions of 1,2-dibromo-3,5-difluorobenzene. *Catalysis Communications*, **2012**, 25, 142-147	3.2	4
171	The anion dependence of the interaction strength between ions in imidazolium-based ionic liquids probed by far-infrared spectroscopy. *Journal of Physical Chemistry B*, **2012**, 116, 9507-11	3.4	48
170	Cyclization of 1,4-Phenylenediacrylic Acid with Thionyl Chloride and Subsequent Suzuki–Miyaura Reactions Revisited. The Products are Benzo[1,2-b;5,6-b?]dithiophenes and not Benzo[1,2-b;4,5-b?]dithiophenes. *Advanced Synthesis and Catalysis*, **2012**, 354, 731-739	5.6	6
169	Niederfrequente Schwingungsmoden protischer geschmolzener Salze und ionischer Flüssigkeiten: Nachweis und Quantifizierung von Wasserstoffbrücken. *Angewandte Chemie*, **2012**, 124, 6340-6344	3.6	26
168	Low-frequency vibrational modes of protic molten salts and ionic liquids: detecting and quantifying hydrogen bonds. *Angewandte Chemie - International Edition*, **2012**, 51, 6236-40	16.4	92
167	Model-free multivariate curve resolution combined with model-based kinetics: algorithm and applications. *Journal of Chemometrics*, **2012**, 26, 538-548	1.6	32
166	Exploring between the extremes: conversion-dependent kinetics of phosphite-modified hydroformylation catalysis. *Chemistry - A European Journal*, **2012**, 18, 8780-94	4.8	47
165	The effect of neutral ion aggregate formation on the electrical conductivity of an ionic liquid and its mixtures with chloroform. *ChemPhysChem*, **2012**, 13, 1748-52	3.2	29
164	Structure-property relationships in ionic liquids: a study of the anion dependence in vaporization enthalpies of imidazolium-based ionic liquids. *ChemPhysChem*, **2012**, 13, 1868-76	3.2	51
163	Microheterogeneities in ionic-liquid-methanol solutions studied by FTIR spectroscopy, DFT calculations and molecular dynamics simulations. *ChemPhysChem*, **2012**, 13, 1708-17	3.2	40
162	Ionic liquids can be more hydrophobic than chloroform or benzene. *ChemPhysChem*, **2012**, 13, 3102-5	3.2	12

161	Efficient dehydrogenation of formic acid using an iron catalyst. *Science*, **2011**, 333, 1733-6	33.3	641
160	PI3K plays a critical role in neutrophil activation by immune complexes. *Science Signaling*, **2011**, 4, ra23	8.8	115
159	The influence of hydrogen bonding on the physical properties of ionic liquids. *Physical Chemistry Chemical Physics*, **2011**, 13, 14064-75	3.6	243
158	1-(Arylalkenyl)pyrenes Synthetic, Structural, Photophysical, Theoretical, and Electrochemical Investigations. *European Journal of Organic Chemistry*, **2011**, 2011, 5261-5271	3.2	18
157	Cavity model challenged: the hydrated electron is localized in regions of enhanced water density. *ChemPhysChem*, **2011**, 12, 75-7	3.2	5
156	Understanding the dissolution of polyols by ionic liquids using the example of a well-defined model compound. *ChemPhysChem*, **2011**, 12, 2400-4	3.2	20
155	Ionenabhngige Struktur und Dynamik von Wassermolekln jenseits der ersten Hydrathlle. *Angewandte Chemie*, **2011**, 123, 368-370	3.6	11
154	Der Einfluss von Wasserstoffbrckendefekten auf die Eigenschaften ionischer Flssigkeiten. *Angewandte Chemie*, **2011**, 123, 6791-6795	3.6	27
153	Einblicke in den Mechanismus der photokatalytischen Wasserreduktion durch DFT-gesttzte In-situ-EPR/Raman-Spektroskopie. *Angewandte Chemie*, **2011**, 123, 10429-10433	3.6	19
152	Specific ion effects on water structure and dynamics beyond the first hydration shell. *Angewandte Chemie - International Edition*, **2011**, 50, 352-3	16.4	71
151	The influence of hydrogen-bond defects on the properties of ionic liquids. *Angewandte Chemie - International Edition*, **2011**, 50, 6661-5	16.4	104
150	Insights into the mechanism of photocatalytic water reduction by DFT-supported in situ EPR/Raman spectroscopy. *Angewandte Chemie - International Edition*, **2011**, 50, 10246-50	16.4	53
149	Synthesis and characterization of tetramethylammonium trifluorosulfate. *Chemistry - A European Journal*, **2011**, 17, 925-9	4.8	7
148	Photocatalytic hydrogen generation from water with iron carbonyl phosphine complexes: improved water reduction catalysts and mechanistic insights. *Chemistry - A European Journal*, **2011**, 17, 6425-36	4.8	98
147	Limiting diffusion coefficients of ionic liquids in water and methanol: a combined experimental and molecular dynamics study. *Physical Chemistry Chemical Physics*, **2011**, 13, 3268-73	3.6	29
146	Comment on "Isotope effects in liquid water by infrared spectroscopy. IV. No free OH groups in liquid water" [J. Chem. Phys. 133, 164509 (2010)]. *Journal of Chemical Physics*, **2011**, 135, 117101; author reply 117102	3.9	6
145	Small magnesium clusters: between van der waals and valence bonds. *Inorganic Chemistry*, **2010**, 49, 3851-6	5.1	25
144	Preparation and properties of dimethyltetrafluorophosphate. *Inorganic Chemistry*, **2010**, 49, 6421-7	5.1	0

143	Comment on "New interpretation of the CH stretching vibrations in imidazolium-based ionic liquids". *Journal of Physical Chemistry A*, **2010**, 114, 685-6; author reply 687-8	2.8	69
142	Iron-catalyzed hydrogen production from formic acid. *Journal of the American Chemical Society*, **2010**, 132, 8924-34	16.4	297
141	A Comparative In Situ HP-FTIR Spectroscopic Study of Bi- and Monodentate Phosphite-Modified Hydroformylation. *ChemCatChem*, **2010**, 2, 287-295	5.2	41
140	Secondary Phosphane Oxides as Preligands in Rhodium-Catalyzed Hydroformylation. *ChemCatChem*, **2010**, 2, 1278-1285	5.2	24
139	Combined THz, FIR and Raman spectroscopy studies of imidazolium-based ionic liquids covering the frequency range 2-300 cm(-1). *ChemPhysChem*, **2010**, 11, 349-53	3.2	62
138	Estimating enthalpies of vaporization of imidazolium-based ionic liquids from far-infrared measurements. *ChemPhysChem*, **2010**, 11, 1623-6	3.2	53
137	Inside Cover: Estimating Enthalpies of Vaporization of Imidazolium-Based Ionic Liquids from Far-Infrared Measurements (ChemPhysChem 8/2010). *ChemPhysChem*, **2010**, 11, 1586-1586	3.2	9
136	On the Tautomerism of Secondary Phosphane Oxides. *European Journal of Organic Chemistry*, **2010**, 2010, 2733-2741	3.2	79
135	Spektroskopischer Nachweis einer verstärkten Anion-Kation- Wechselwirkung durch H-Brücken in reinen ionischen Flüssigkeiten auf Imidazoliumbasis. *Angewandte Chemie*, **2010**, 122, 459-463	3.6	46
134	Orthometallierung in Eisen(0)-Tribenzylphosphan-Komplexen: aktivere Homogenkatalysatoren für die Wasserstofferzeugung aus Ameisensäure. *Angewandte Chemie*, **2010**, 122, 9177-9181	3.6	26
133	Die Bedeutung von Wasserstoffbrücken für die Struktur ionischer Flüssigkeiten – Einkristall-Röntgenstrukturanalyse sowie Transmissions- und ATR-Spektroskopie im Terahertz-Bereich. *Angewandte Chemie*, **2010**, 122, 10419-10423	3.6	29
132	Spectroscopic evidence for an enhanced anion-cation interaction from hydrogen bonding in pure imidazolium ionic liquids. *Angewandte Chemie - International Edition*, **2010**, 49, 449-53	16.4	223
131	ortho-Metalation of iron(0) tribenzylphosphine complexes: homogeneous catalysts for the generation of hydrogen from formic acid. *Angewandte Chemie - International Edition*, **2010**, 49, 8993-6	16.4	97
130	The importance of hydrogen bonds for the structure of ionic liquids: single-crystal X-ray diffraction and transmission and attenuated total reflection spectroscopy in the terahertz region. *Angewandte Chemie - International Edition*, **2010**, 49, 10221-4	16.4	98
129	The Effects of Temperature and H/D Isotopic Dilution on the Transmission and Attenuated Total Reflection FTIR Spectra of Water. *Zeitschrift Fur Physikalische Chemie*, **2009**, 223, 1011-1022	3.1	6
128	Therapeutic use of heparin beyond anticoagulation. *Current Drug Discovery Technologies*, **2009**, 6, 281-9	1.5	79
127	Wasserstoffbrücken in protischen ionischen Flüssigkeiten – Ähnlichkeiten mit Wasser. *Angewandte Chemie*, **2009**, 121, 3230-3233	3.6	46
126	Applying the inductive effect for synthesizing low-melting and low-viscosity imidazolium-based ionic liquids. *ChemPhysChem*, **2009**, 10, 516-9	3.2	21

125	What far-infrared spectra can contribute to the development of force fields for ionic liquids used in molecular dynamics simulations. *ChemPhysChem*, **2009**, 10, 1181-6	3.2	49
124	Hydrogen bonding in protic ionic liquids: reminiscent of water. *Angewandte Chemie - International Edition*, **2009**, 48, 3184-6	16.4	273
123	A simple geometrical explanation for the occurrence of specific large aggregated ions in some protic ionic liquids. *Journal of Physical Chemistry B*, **2009**, 113, 15419-22	3.4	41
122	An elemental mercury diffusion coefficient for natural waters determined by molecular dynamics simulation. *Environmental Science & Technology*, **2009**, 43, 3183-6	10.3	50
121	Temperature dependence of the solubility of carbon dioxide in imidazolium-based ionic liquids. *Journal of Physical Chemistry B*, **2009**, 113, 12727-35	3.4	92
120	The potential role of hydrogen bonding in aprotic and protic ionic liquids. *Physical Chemistry Chemical Physics*, **2009**, 11, 8790-4	3.6	194
119	Correlation of Static and Dynamic Heterogeneities in Supercooled Water by Means of Molecular Dynamics Simulations. *Zeitschrift Fur Physikalische Chemie*, **2009**, 223, 1001-1010	3.1	5
118	Thermodynamic properties of ionic liquids-a cluster approach. *Physical Chemistry Chemical Physics*, **2008**, 10, 4333-9	3.6	65
117	Solvophobic solvation and interaction of small apolar particles in imidazolium-based ionic liquids. *Physical Review Letters*, **2008**, 100, 115901	7.4	18
116	Ionic liquids: dissecting the enthalpies of vaporization. *ChemPhysChem*, **2008**, 9, 549-55	3.2	117
115	On the validity of Stokes-Einstein and Stokes-Einstein-Debye relations in ionic liquids and ionic-liquid mixtures. *ChemPhysChem*, **2008**, 9, 1851-8	3.2	127
114	Temperature and concentration effects on the solvophobic solvation of methane in aqueous salt solutions. *ChemPhysChem*, **2008**, 9, 2722-30	3.2	12
113	Salt effects on the structure of water probed by attenuated total reflection infrared spectroscopy and molecular dynamics simulations. *ChemPhysChem*, **2008**, 9, 2731-6	3.2	23
112	The cation-anion interaction in ionic liquids probed by far-infrared spectroscopy. *Angewandte Chemie - International Edition*, **2008**, 47, 3830-4	16.4	223
111	Strong, localized, and directional hydrogen bonds fluidize ionic liquids. *Angewandte Chemie - International Edition*, **2008**, 47, 8731-4	16.4	340
110	Fern-IR-spektroskopische Charakterisierung der Wechselwirkung zwischen Kationen und Anionen in ionischen Flüssigkeiten. *Angewandte Chemie*, **2008**, 120, 3890-3894	3.6	46
109	Starke, lokalisierte und gerichtete H-Brücken machen ionische Flüssigkeiten beweglicher. *Angewandte Chemie*, **2008**, 120, 8859-8862	3.6	59
108	Twisted oxygen-containing oligosilanes--unprecedented examples of sigma-n mixed conjugated systems. *Chemical Communications*, **2007**, 1810-2	5.8	13

107	Do we understand the volatility of ionic liquids?. *Angewandte Chemie - International Edition*, **2007**, 46, 6582-4	16.4	107
106	Pressure and salt effects in simulated water: two sides of the same coin?. *Angewandte Chemie - International Edition*, **2007**, 46, 8907-11	16.4	76
105	Verstehen wir die Flüchtigkeit ionischer Flüssigkeiten?. *Angewandte Chemie*, **2007**, 119, 6702-6704	3.6	25
104	Druck- und Salzeffekte in simuliertem Wasser: zwei Seiten einer Medaille?. *Angewandte Chemie*, **2007**, 119, 9065-9069	3.6	10
103	The mechanism of the molecular reorientation in water. *ChemPhysChem*, **2007**, 8, 44-6	3.2	18
102	The importance of tetrahedrally coordinated molecules for the explanation of liquid water properties. *ChemPhysChem*, **2007**, 8, 938-43	3.2	32
101	IR and NMR properties of ionic liquids: do they tell us the same thing?. *ChemPhysChem*, **2007**, 8, 2265-9	3.2	95
100	Molecular dynamic simulations of ionic liquids: a reliable description of structure, thermodynamics and dynamics. *ChemPhysChem*, **2007**, 8, 2464-70	3.2	316
99	Molecular reorientation in ionic liquids: A comparative dielectric and magnetic relaxation study. *Chemical Physics Letters*, **2007**, 439, 323-326	2.5	63
98	Ultraviolet Optical Absorption Spectra of Water Clusters: From Molecular Dimer to Nanoscaled Cage-Like Hexakaidecahedron. *Journal of Computational and Theoretical Nanoscience*, **2007**, 4, 453-466	0.3	9
97	The association of water in ionic liquids: a reliable measure of polarity. *Angewandte Chemie - International Edition*, **2006**, 45, 3697-702	16.4	247
96	The puzzling properties of supercooled and glassy water. *Angewandte Chemie - International Edition* , **2006**, 45, 3402-5	16.4	20
95	Hydroxy-substituted oligosilane dendrimers: controlling the electronic properties through hydrogen bonding. *Angewandte Chemie - International Edition*, **2006**, 45, 6755-9	16.4	26
94	Structure and dynamics of water confined in dimethyl sulfoxide. *ChemPhysChem*, **2006**, 7, 266-72	3.2	36
93	Ion-pair formation in the ionic liquid 1-ethyl-3-methylimidazolium bis(triflyl)imide as a function of temperature and concentration. *ChemPhysChem*, **2006**, 7, 1944-9	3.2	270
92	Ionic liquids--revolutionary potential for chemistry?. *ChemPhysChem*, **2006**, 7, 1415-6	3.2	7
91	Die Assoziation von Wasser in ionischen Flüssigkeiten: eine verlässliche Sonde zur Bestimmung der Polarität. *Angewandte Chemie*, **2006**, 118, 3780-3785	3.6	39
90	Die ungewöhnlichen Eigenschaften des unterkühlten und glasartigen Wassers. *Angewandte Chemie* , **2006**, 118, 3480-3483	3.6	3

89	Water Vibrational Bands as a Polarity Indicator in Ionic Liquids. *Zeitschrift Fur Physikalische Chemie*, **2006**, 220, 1361-1376	3.1	25
88	Management of cutaneous type IV hypersensitivity reactions induced by heparin. *Thrombosis and Haemostasis*, **2006**, 96, 611-617	7	29
87	The ability of different forms of heparins to suppress P-selectin function in vitro correlates to their inhibitory capacity on bloodborne metastasis in vivo. *Thrombosis and Haemostasis*, **2006**, 95, 535-40	7	79
86	The structure of liquid methanol. *ChemPhysChem*, **2005**, 6, 1369-75	3.2	100
85	Isotopic quantum effects in liquid methanol. *ChemPhysChem*, **2005**, 6, 1376-80	3.2	30
84	Calculation of clathrate-like water clusters including H2O-buckminsterfullerene. *Angewandte Chemie - International Edition*, **2005**, 44, 811-5	16.4	83
83	Berechnung clathratähnlicher Wassercluster einschließlich eines Wasser-Buckminsterfullerens. *Angewandte Chemie*, **2005**, 117, 821-826	3.6	11
82	Wasser: Anomalien und Rätsel. *Chemie in Unserer Zeit*, **2005**, 39, 164-175	0.2	16
81	Protonated water clusters: the third dimension. *ChemPhysChem*, **2004**, 5, 1495-7	3.2	14
80	N-Methylacetamide/water clusters in a hydrophobic solvent. *Physical Chemistry Chemical Physics*, **2004**, 6, 1867-1873	3.6	27
79	Complex formation of isocytosine tautomers with PdII and PtII. *Inorganic Chemistry*, **2004**, 43, 3386-93	5.1	26
78	Hydronium Ion Complex of 18-Crown-6: Theory Confirms Three "Normal" Linear Hydrogen Bonds. *Journal of Physical Chemistry A*, **2004**, 108, 11463-11468	2.8	33
77	Collective contributions to the dielectric relaxation of hydrogen-bonded liquids. *Journal of Chemical Physics*, **2004**, 120, 11692-7	3.9	37
76	Die Bildung von Wasserclustern in einem hydrophoben Lösungsmittel. *Angewandte Chemie*, **2003**, 115, 5052-5056	3.6	12
75	tert-Butylphosphonic acid: from the bulk to the gas phase. *Chemistry - A European Journal*, **2003**, 9, 837-48	4.8	43
74	How does water bind to metal surfaces: hydrogen atoms up or hydrogen atoms down?. *Angewandte Chemie - International Edition*, **2003**, 42, 3458-60	16.4	35
73	Formation of water clusters in a hydrophobic solvent. *Angewandte Chemie - International Edition*, **2003**, 42, 4904-8	16.4	60
72	New insight into the transport mechanism of hydrated hydroxide ions in water. *Angewandte Chemie - International Edition*, **2003**, 42, 258-60	16.4	65

71	Vibrational spectra of the tetramethylpnikogenonium ions. *Journal of Molecular Spectroscopy*, **2003**, 219, 170-174	1.3	1
70	Struktur und Eigenschaften des Hydridomethyltetrafluorphosphatanions, [CH3PF4H]. *Zeitschrift Fur Anorganische Und Allgemeine Chemie*, **2003**, 629, 609-614	1.3	2
69	Struktur und Eigenschaften des Methylpentafluorphosphatanions, [CH3PF5]. *Zeitschrift Fur Anorganische Und Allgemeine Chemie*, **2003**, 629, 615-620	1.3	1
68	Raman spectroscopic investigation of small matrix-isolated lithium clusters. *Journal of Chemical Physics*, **2003**, 118, 6957-6963	3.9	33
67	Darstellung von Tetramethylammoniumazidsulfit und Tetramethylammoniumcyanat-Schwefeldioxid-Addukt, [(CH3)4N]+[SO2N3]., [(CH3)4N]+[SO2OCN]. und Kristallstruktur von [(CH3)4N]+[SO2N3]. *Zeitschrift Fur Anorganische Und Allgemeine Chemie*, **2002**, 628, 183-190	1.3	5
66	Struktur und Eigenschaften von Methyltrifluorphosphoran CH3PF3H. *Zeitschrift Fur Anorganische Und Allgemeine Chemie*, **2002**, 628, 1835	1.3	4
65	Die molekulare Zusammensetzung des flüssigen Schwefels. *Angewandte Chemie*, **2002**, 114, 3331-3335	3.6	2
64	Molecular composition of liquid sulfur. *Angewandte Chemie - International Edition*, **2002**, 41, 3199-202	16.4	21
63	Hydrogen bonding in a sterically hindered alcohol. *Journal of Molecular Liquids*, **2002**, 98-99, 163-171	6	38
62	Quantum Cluster Equilibrium Theory of Liquids: Isotopically substituted QCE/3-21G Model Water. *Zeitschrift Fur Physikalische Chemie*, **2002**, 216,	3.1	19
61	Formation of the magic cluster Na8 in noble gas matrixes. *Inorganic Chemistry*, **2002**, 41, 6206-10	5.1	16
60	The effect of hydrogen bonding on the thermodynamic and spectroscopic properties of molecular clusters and liquids. *Physical Chemistry Chemical Physics*, **2002**, 4, 5481-5487	3.6	76
59	From Intramolecularly [4 + 1]- and [4 + 2]-Coordinated Tri- and Tetraorganosilanes to Hypercoordinated Benzoxasilaphospholes. *Organometallics*, **2001**, 20, 4654-4663	3.8	30
58	Correlations between structural, NMR and IR spectroscopic properties of N-methylacetamide. *Magnetic Resonance in Chemistry*, **2001**, 39, S127-S134	2.1	28
57	Wasser: von Clustern in die Flüssigkeit. *Angewandte Chemie*, **2001**, 113, 1856-1876	3.6	101
56	Water: From Clusters to the Bulk. *Angewandte Chemie - International Edition*, **2001**, 40, 1808-1827	16.4	1042
55	Preparation and crystal structure of tetraphenylphosphonium triiodotetrabromide [PPh4][I3Br4]. *Inorganic Chemistry*, **2001**, 40, 25-8	5.1	26
54	Crystal structure of IO(2)F. *Inorganic Chemistry*, **2001**, 40, 6493-5	5.1	8

53	Water: From Clusters to the Bulk. *Angewandte Chemie - International Edition*, **2001**, 40, 1808-1827	16.4	47
52	In Spite of the Chemist's Belief: Carbonic Acid Is Surprisingly Stable. *Angewandte Chemie - International Edition*, **2000**, 39, 1421-1423	16.4	36
51	Synthesis and Characterization of Novel Iodine(III) Compounds; Crystal Structures of Methoxy(trifluoromethyl)iodine(III) Chloride [CF3I(Cl)OCH3] and Dimethoxy(trifluoromethyl)iodine(III) [CF3I(OCH3)2]. *European Journal of Inorganic Chemistry*, **2000**, 2000, 2387-2392	2.3	11
50	Hexamers: from covalently bound organic structures to hydrogen bonded water clusters. *ChemPhysChem*, **2000**, 1, 53-6	3.2	38
49	Cooperative hydrogen bonding in amides and peptides. *Journal of Molecular Liquids*, **2000**, 84, 65-75	6	53
48	Temperature dependence of hydrogen bonding in alcohols. *Journal of Molecular Liquids*, **2000**, 85, 105-125	6	44
47	Calixarenes in analytical and separation chemistry. *Freseniusl Journal of Analytical Chemistry*, **2000**, 367, 103-28		224
46	Crystal structure of (difluoro)methoxyoxo iodine(V) IF2(O)OCH3. *Inorganic Chemistry*, **2000**, 39, 4766-8	5.1	2
45	Quantum cluster equilibrium theory of liquids: light and heavy QCE/3-21G model water. *Physical Chemistry Chemical Physics*, **2000**, 2, 1613-1619	3.6	24
44	Syntheses and Structures of Novel Molecular Organotin Chalcogenides. *Phosphorus, Sulfur and Silicon and the Related Elements*, **1999**, 150, 325-332	1	4
43	Quantum cluster equilibrium theory of liquids: temperature dependent chemical shifts, quadrupole coupling constants and vibrational frequencies in liquid ethanol. *Molecular Physics*, **1999**, 97, 479-486	1.7	38
42	Investigation of an H-bonded dimer: Calculations of bonding structures and temperature dependence of the librational substructure of the OH-stretching band. *Journal of Chemical Physics*, **1999**, 111, 5897-5904	3.9	20
41	Quantum cluster equilibrium theory of liquids: Freezing of QCE/3-21G water to tetrakaidecahedral Bucky-ice *Journal of Chemical Physics*, **1999**, 110, 508-515	3.9	67
40	On the reaction of perfluoro-aza-propene with oxygen difluoride and fluorination of bis(trifluoromethyl)-hydroxylamine. *Journal of Fluorine Chemistry*, **1999**, 99, 145-149	2.1	4
39	Quantum cluster equilibrium theory of liquids: molecular clusters and thermodynamics of liquid ethanol. *Molecular Physics*, **1999**, 97, 465-477	1.7	66
38	Trifluorosulfite Anion, SOF3-. *Inorganic Chemistry*, **1999**, 38, 3066-3069	5.1	13
37	Synthesis and Characterization of Tetramethylammonium Cyanosulfite, (CH3)4N+SO2CN-. *Journal of the American Chemical Society*, **1999**, 121, 4019-4022	16.4	13
36	Raman Spectroscopic Investigation of Matrix Isolated Rubidium and Cesium Molecules: Rb(2), Rb(3), Cs(2), and Cs(3)(,)(1). *Inorganic Chemistry*, **1999**, 38, 4696-4699	5.1	15

35	Syntheses, Dynamic Stereochemistry, and Unusual Reactivity of Intramolecularly Coordinated Organotin Fluorides. *Phosphorus, Sulfur and Silicon and the Related Elements*, **1999**, 150, 305-310	1	8
34	Quantum cluster equilibrium theory of liquids part I: Molecular clusters and thermodynamics of liquid ammonia. *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1998**, 102, 197-204		26
33	Quantum cluster equilibrium theory of liquids part II: Temperature dependent chemical shifts, quadrupole coupling constants and vibrational frequencies in liquid ammonia. *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1998**, 102, 205-212		24
32	Lithiumtriamidostannat(II), Li[Sn(NH2)3] □Synthese und Kristallstruktur. *Zeitschrift Fur Anorganische Und Allgemeine Chemie*, **1998**, 624, 1395-1399	1.3	1
31	Kleine Kaliumcluster. *Angewandte Chemie*, **1998**, 110, 1620-1622	3.6	6
30	Small Potassium Clusters. *Angewandte Chemie - International Edition*, **1998**, 37, 1575-1577	16.4	20
29	Quantum Cluster Equilibrium Theory of Liquids: Temperature Dependence of Hydrogen Bonding in Liquid N-Methylacetamide Studied by IR Spectra. *Journal of Physical Chemistry B*, **1998**, 102, 9312-9318	3.4	99
28	Theoretical study of hydrogen bonding in liquid and gaseous N-methylformamide. *Journal of Chemical Physics*, **1997**, 107, 499-507	3.9	89
27	Application of enolates of activated carboxylic acid derivatives in organic synthesisnovel syntheses of ▯lactones. *Pure and Applied Chemistry*, **1997**, 69, 605-608	2.1	6
26	Vibrational Spectra and Structural Aspects of Fluorosulfites. *Inorganic Chemistry*, **1997**, 36, 5570-5573	5.1	15
25	Trifluoromethyl Hypobromite, CF(3)OBr. *Inorganic Chemistry*, **1997**, 36, 2147-2150	5.1	8
24	Structure of Liquid N-Methylacetamide: Temperature Dependence of NMR Chemical Shifts and Quadrupole Coupling Constants. *Journal of Physical Chemistry A*, **1997**, 101, 8861-8870	2.8	58
23	Tetramethylammonium Difluorobromate(I), (CH3)4N+BrF2-. *Inorganic Chemistry*, **1997**, 36, 4280-4283	5.1	11
22	Effective O-17 quadrupole moments for the calibrated computation of quadrupole coupling parameters at different levels of theory. *Journal of Chemical Physics*, **1996**, 105, 8223-8230	3.9	29
21	Quadrupole Relaxation of the 7Li+ Ion in Dilute Aqueous Solution Determined by Experimental and Theoretical Methods. *Journal of Molecular Modeling*, **1996**, 2, 379-382	2	4
20	NMR relaxation studies in water-alcohol mixtures: the water-rich region. *Chemical Physics*, **1995**, 195, 329-337	2.3	86
19	Synthesis of substituted ▯lactones by a Reformatsky reaction of carbonyl compounds, phenyl ▯-bromoalkanoates, and indium. *Tetrahedron*, **1995**, 51, 2939-2946	2.4	19
18	Experimental and theoretical determination of the temperature dependence of deuteron and oxygen quadrupole coupling constants of liquid water. *Journal of Chemical Physics*, **1995**, 103, 6941-6950	3.9	114

17	Temperature dependence of hydrogen bonding in neat, liquid formamide. *Journal of Chemical Physics*, **1995**, 103, 3636-3642	3.9	47
16	Experimental and theoretical studies of hydrogen bonding in neat, liquid formamide. *Journal of Chemical Physics*, **1995**, 102, 5118-5125	3.9	80
15	The Anisotropy of the Molecular Reorientational Motions in Liquid Methanol. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1995**, 50, 211-216	1.4	16
14	Correlation Times and Quadrupole Coupling Constants in Neat, Liquid Formamide. *The Journal of Physical Chemistry*, **1995**, 99, 9681-9686		13
13	Molecular Dynamics in Lower Alcohols. *Zeitschrift Fur Physikalische Chemie*, **1995**, 189, 19-27	3.1	45
12	Temperature Dependence of the Deuteron and Oxygen Quadrupole Coupling Constants of Water in the System Water/Dimethyl Sulfoxide. *The Journal of Physical Chemistry*, **1994**, 98, 6684-6687		38
11	NMR relaxation in ethanol and propanol and in their binary mixtures with carbon tetrachloride. *Molecular Physics*, **1994**, 82, 313-323	1.7	47
10	Synthesis of .alpha.,.alpha.,.beta.,.beta.-Tetrasubstituted .beta.-Lactones from Ketones, Ethyl .alpha.-Bromoisobutyrate, and Indium or Zinc. Factors Influencing the .beta.-Lactone Formation in the Electrochemical and the Classical Procedure of the Reformatsky Reaction. *Journal of Organic Chemistry*, **1994**, 59, 3161-3164	4.2	20
9	Molecular Dynamics in the System Methanol-Dimethylsulphoxide. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1994**, 49, 1131-1135	1.4	4
8	Nuclear magnetic resonance relaxation, permittivity, viscosity and ultrasonic velocity measurements in binary mixtures of methanol and tetrahydrofuran. *Journal of the Chemical Society, Faraday Transactions*, **1993**, 89, 3955		16
7	Novel Synthesis of Tetrasubstituted β-Lactones: The Use of Indium in the Electrochemically Supported Reformatsky Reaction. *Angewandte Chemie International Edition in English*, **1993**, 32, 1191-1193		13
6	Neuartige Synthese tetrasubstituierter β-Lactone: die Verwendung von Indium in der elektrochemisch unterstützten Reformatsky-Reaktion. *Angewandte Chemie*, **1993**, 105, 1218-1220	3.6	5
5	Electrochemically supported Reformatskii reaction: a convenient preparation of 2-substituted 1-ethyl 3-oxoalkanedioates. *Journal of Organic Chemistry*, **1992**, 57, 4013-4015	4.2	15
4	NMR relaxation in binary aqueous mixtures of acetone and tetrahydrofurane. *Journal of Molecular Liquids*, **1992**, 54, i	6	13
3	Synthesis of methyl (±)-2,3-O-isopropylideneglycerate by electrochemical oxidation of (±)-1,2-O-isopropylideneglycerol. *Liebigs Annalen Der Chemie*, **1991**, 1991, 503-504		0
2	Molecular Reorientation in Liquid Methanol. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1991**, 46, 89-94	1.4	44
1	Nuclear spin relaxation in liquids and gases. *Nuclear Magnetic Resonance*,243-270	3	1