

# Bartosz A Grzybowski

## List of Publications by Citations

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308  
papers

24,622  
citations

72  
h-index

151  
g-index

329  
ext. papers

27,237  
ext. citations

13.3  
avg, IF

7.35  
L-index

#	Paper	IF	Citations
308	Self-assembly at all scales. <i>Science</i> , <b>2002</b> , 295, 2418-21	33.3	5583
307	Nanoscale forces and their uses in self-assembly. <i>Small</i> , <b>2009</b> , 5, 1600-30	11	1204
306	Electrostatic self-assembly of binary nanoparticle crystals with a diamond-like lattice. <i>Science</i> , <b>2006</b> , 312, 420-4	33.3	753
305	Great expectations: can artificial molecular machines deliver on their promise?. <i>Chemical Society Reviews</i> , <b>2012</b> , 41, 19-30	58.5	723
304	The mosaic of surface charge in contact electrification. <i>Science</i> , <b>2011</b> , 333, 308-12	33.3	531
303	Nanoparticles functionalised with reversible molecular and supramolecular switches. <i>Chemical Society Reviews</i> , <b>2010</b> , 39, 2203-37	58.5	447
302	Dynamic self-assembly of magnetized, millimetre-sized objects rotating at a liquid-air interface. <i>Nature</i> , <b>2000</b> , 405, 1033-6	50.4	427
301	Swimming bacteria power microscopic gears. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2010</b> , 107, 969-74	11.5	367
300	Light-controlled self-assembly of reversible and irreversible nanoparticle suprastructures. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2007</b> , 104, 10305-9	11.5	338
299	Self-assembly: from crystals to cells. <i>Soft Matter</i> , <b>2009</b> , 5, 1110	3.6	328
298	Writing self-erasing images using metastable nanoparticle "inks". <i>Angewandte Chemie - International Edition</i> , <b>2009</b> , 48, 7035-9	16.4	300
297	Computer-Assisted Synthetic Planning: The End of the Beginning. <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55, 5904-37	16.4	269
296	The nanotechnology of life-inspired systems. <i>Nature Nanotechnology</i> , <b>2016</b> , 11, 585-92	28.7	268
295	Plastic and moldable metals by self-assembly of sticky nanoparticle aggregates. <i>Science</i> , <b>2007</b> , 316, 261-3	33.3	252
294	Directing cell motions on micropatterned ratchets. <i>Nature Physics</i> , <b>2009</b> , 5, 606-612	16.2	238
293	Principles and implementations of dissipative (dynamic) self-assembly. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 2482-96	3.4	234
292	Adsorption of Proteins to Hydrophobic Sites on Mixed Self-Assembled Monolayers. <i>Langmuir</i> , <b>2003</b> , 19, 1861-1872	4	227

291	Photoconductance and inverse photoconductance in films of functionalized metal nanoparticles. <i>Nature</i> , <b>2009</b> , 460, 371-5	50.4	209
290	Maze solving by chemotactic droplets. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 1198-9	16.4	205
289	Electrostatic self-assembly of macroscopic crystals using contact electrification. <i>Nature Materials</i> , <b>2003</b> , 2, 241-5	27	195
288	Janus Particle Synthesis, Assembly, and Application. <i>Langmuir</i> , <b>2017</b> , 33, 6964-6977	4	192
287	Nanoseparations: Strategies for size and/or shape-selective purification of nanoparticles. <i>Current Opinion in Colloid and Interface Science</i> , <b>2011</b> , 16, 135-148	7.6	189
286	Mesoscale Self-Assembly of Hexagonal Plates Using Lateral Capillary Forces: Synthesis Using the Capillary Bond. <i>Journal of the American Chemical Society</i> , <b>1999</b> , 121, 5373-5391	16.4	189
285	Ultrasensitive detection of toxic cations through changes in the tunnelling current across films of striped nanoparticles. <i>Nature Materials</i> , <b>2012</b> , 11, 978-85	27	187
284	How and why nanoparticle's curvature regulates the apparent pKa of the coating ligands. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 2192-7	16.4	183
283	Electrostatics at the nanoscale. <i>Nanoscale</i> , <b>2011</b> , 3, 1316-44	7.7	182
282	Chromatography in a single metal-organic framework (MOF) crystal. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 16358-61	16.4	177
281	Photoswitchable catalysis mediated by dynamic aggregation of nanoparticles. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 11018-20	16.4	177
280	From dynamic self-assembly to networked chemical systems. <i>Chemical Society Reviews</i> , <b>2017</b> , 46, 5647-5688	5.8	176
279	Micro- and nanotechnology via reaction-diffusion. <i>Soft Matter</i> , <b>2005</b> , 1, 114	3.6	174
278	Applications, Properties and Synthesis of $\alpha$ -Functionalized n-Alkanethiols and Disulfides - the Building Blocks of Self-Assembled Monolayers. <i>Current Organic Chemistry</i> , <b>2004</b> , 8, 1763-1797	1.7	166
277	Synthesis, shape control, and optical properties of hybrid Au/Fe <sub>3</sub> O <sub>4</sub> "nanoflowers". <i>Small</i> , <b>2008</b> , 4, 1635-9	1.9	153
276	Efficient Syntheses of Diverse, Medicinally Relevant Targets Planned by Computer and Executed in the Laboratory. <i>Chem</i> , <b>2018</b> , 4, 522-532	16.2	152
275	Colloidal assembly directed by virtual magnetic moulds. <i>Nature</i> , <b>2013</b> , 503, 99-103	50.4	144
274	Organic switches for surfaces and devices. <i>Advanced Materials</i> , <b>2013</b> , 25, 331-48	24	134

273	Contact electrification between identical materials. <i>Angewandte Chemie - International Edition</i> , <b>2010</b> , 49, 946-9	16.4	131
272	Reaction-diffusion systems in intracellular molecular transport and control. <i>Angewandte Chemie - International Edition</i> , <b>2010</b> , 49, 4170-98	16.4	127
271	Nanoparticle core/shell architectures within MOF crystals synthesized by reaction diffusion. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 7435-9	16.4	122
270	Biospecific Binding of Carbonic Anhydrase to Mixed SAMs Presenting Benzenesulfonamide Ligands: A Model System for Studying Lateral Steric Effects. <i>Langmuir</i> , <b>1999</b> , 15, 7186-7198	4	121
269	Material transfer and polarity reversal in contact charging. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 4843-7	16.4	118
268	Fabrication using $\beta$ programmed reactions. <i>Materials Today</i> , <b>2007</b> , 10, 38-46	21.8	114
267	Geometric curvature controls the chemical patchiness and self-assembly of nanoparticles. <i>Nature Nanotechnology</i> , <b>2013</b> , 8, 676-81	28.7	113
266	Synthesis of Stable, Low-Dispersity Copper Nanoparticles and Nanorods and Their Antifungal and Catalytic Properties. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 15612-15616	3.8	113
265	Active colloids with collective mobility status and research opportunities. <i>Chemical Society Reviews</i> , <b>2017</b> , 46, 5551-5569	58.5	111
264	Metal nanoparticles functionalized with molecular and supramolecular switches. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 4233-5	16.4	111
263	Systems of mechanized and reactive droplets powered by multi-responsive surfactants. <i>Nature</i> , <b>2018</b> , 553, 313-318	50.4	109
262	Storage of electrical information in metal-organic-framework memristors. <i>Angewandte Chemie - International Edition</i> , <b>2014</b> , 53, 4437-41	16.4	108
261	Control of surface charges by radicals as a principle of antistatic polymers protecting electronic circuitry. <i>Science</i> , <b>2013</b> , 341, 1368-71	33.3	104
260	Dynamic hook-and-eye nanoparticle sponges. <i>Nature Chemistry</i> , <b>2009</b> , 1, 733-8	17.6	104
259	The 'wired' universe of organic chemistry. <i>Nature Chemistry</i> , <b>2009</b> , 1, 31-6	17.6	103
258	A tool for studying contact electrification in systems comprising metals and insulating polymers. <i>Analytical Chemistry</i> , <b>2003</b> , 75, 4859-67	7.8	103
257	<b>2009</b> ,		103
256	Nanoparticle oscillations and fronts. <i>Angewandte Chemie - International Edition</i> , <b>2010</b> , 49, 8616-9	16.4	101

255	Ionic-like behavior of oppositely charged nanoparticles. <i>Journal of the American Chemical Society</i> , <b>2006</b> , 128, 15046-7	16.4	94
254	Generation of Micrometer-Sized Patterns for Microanalytical Applications Using a Laser Direct-Write Method and Microcontact Printing. <i>Analytical Chemistry</i> , <b>1998</b> , 70, 4645-4652	7.8	91
253	Dynamic self-assembly in ensembles of camphor boats. <i>Journal of Physical Chemistry B</i> , <b>2008</b> , 112, 10848-53	3.5	91
252	Architecture and evolution of organic chemistry. <i>Angewandte Chemie - International Edition</i> , <b>2005</b> , 44, 7263-9	16.4	90
251	What really drives chemical reactions on contact charged surfaces?. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 7223-6	16.4	88
250	Electrostatic aggregation and formation of core-shell suprastructures in binary mixtures of charged metal nanoparticles. <i>Nano Letters</i> , <b>2006</b> , 6, 1896-903	11.5	87
249	Targeted crystallization of mixed-charge nanoparticles in lysosomes induces selective death of cancer cells. <i>Nature Nanotechnology</i> , <b>2020</b> , 15, 331-341	28.7	86
248	Is water necessary for contact electrification?. <i>Angewandte Chemie - International Edition</i> , <b>2011</b> , 50, 6766-70	1.4	86
247	Dynamic, self-assembled aggregates of magnetized, millimeter-sized objects rotating at the liquid-air interface: macroscopic, two-dimensional classical artificial atoms and molecules. <i>Physical Review E</i> , <b>2001</b> , 64, 011603	2.4	86
246	Combinatorial computational method gives new picomolar ligands for a known enzyme. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 1270-3	11.5	85
245	Controlled pH stability and adjustable cellular uptake of mixed-charge nanoparticles. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 6392-5	16.4	84
244	Chemoelectronic circuits based on metal nanoparticles. <i>Nature Nanotechnology</i> , <b>2016</b> , 11, 603-8	28.7	83
243	Parallel optimization of synthetic pathways within the network of organic chemistry. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 7928-32	16.4	83
242	Multicolour micropatterning of thin films of dry gels. <i>Nature Materials</i> , <b>2004</b> , 3, 729-35	27	83
241	Effects of Surface Modification and Moisture on the Rates of Charge Transfer between Metals and Organic Materials. <i>Journal of Physical Chemistry B</i> , <b>2004</b> , 108, 20296-20302	3.4	83
240	Self-assembly of nanotriangle superlattices facilitated by repulsive electrostatic interactions. <i>Angewandte Chemie - International Edition</i> , <b>2010</b> , 49, 6760-3	16.4	79
239	Dynamic aggregation of chiral spinners. <i>Science</i> , <b>2002</b> , 296, 718-21	33.3	78
238	Modeling of Menisci and Capillary Forces from the Millimeter to the Micrometer Size Range. <i>Journal of Physical Chemistry B</i> , <b>2001</b> , 105, 404-412	3.4	75

237	Assembly of polygonal nanoparticle clusters directed by reversible noncovalent bonding interactions. <i>Nano Letters</i> , <b>2009</b> , 9, 3185-90	11.5	73
236	Molecular dynamics imaging in micropatterned living cells. <i>Nature Methods</i> , <b>2005</b> , 2, 739-41	21.6	71
235	Mechanoradicals created in "polymeric sponges" drive reactions in aqueous media. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 3596-600	16.4	67
234	The core and most useful molecules in organic chemistry. <i>Angewandte Chemie - International Edition</i> , <b>2006</b> , 45, 5348-54	16.4	66
233	Self-assembly of polymeric microspheres of complex internal structures. <i>Nature Materials</i> , <b>2004</b> , 4, 93-97	27	66
232	Tunneling Electrical Connection to the Interior of Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 8169-75	16.4	65
231	Wet stamping of microscale periodic precipitation patterns. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 2774-8	3.4	65
230	Engineering Gram Selectivity of Mixed-Charge Gold Nanoparticles by Tuning the Balance of Surface Charges. <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55, 8610-4	16.4	64
229	Imprinting chemical and responsive micropatterns into metal-organic frameworks. <i>Angewandte Chemie - International Edition</i> , <b>2011</b> , 50, 276-9	16.4	63
228	Predicting the outcomes of organic reactions via machine learning: are current descriptors sufficient?. <i>Scientific Reports</i> , <b>2017</b> , 7, 3582	4.9	62
227	Liesegang rings engineered from charged nanoparticles. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 58-60	16.4	62
226	Controlling the growth of "ionic" nanoparticle supracrystals. <i>Nano Letters</i> , <b>2007</b> , 7, 1018-21	11.5	62
225	Rewiring chemistry: algorithmic discovery and experimental validation of one-pot reactions in the network of organic chemistry. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 7922-7	16.4	61
224	Prediction of Major Regio-, Site-, and Diastereoisomers in Diels-Alder Reactions by Using Machine-Learning: The Importance of Physically Meaningful Descriptors. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 4515-4519	16.4	60
223	Retrieving and converting energy from polymers: deployable technologies and emerging concepts. <i>Energy and Environmental Science</i> , <b>2013</b> , 6, 3467	35.4	59
222	Studying the thermodynamics of surface reactions on nanoparticles by electrostatic titrations. <i>Journal of the American Chemical Society</i> , <b>2007</b> , 129, 6664-5	16.4	59
221	A metal-organic framework stabilizes an occluded photocatalyst. <i>Chemistry - A European Journal</i> , <b>2013</b> , 19, 11194-8	4.8	57
220	Bridging interactions and selective nanoparticle aggregation mediated by monovalent cations. <i>ACS Nano</i> , <b>2011</b> , 5, 530-6	16.7	57

219	Molecular-mechanical switching at the nanoparticle-solvent interface: practice and theory. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 4310-20	16.4	57
218	The chemopreventive bioflavonoid apigenin inhibits prostate cancer cell motility through the focal adhesion kinase/Src signaling mechanism. <i>Cancer Prevention Research</i> , <b>2009</b> , 2, 830-41	3.2	57
217	Making use of bond strength and steric hindrance in nanoscale "synthesis". <i>Angewandte Chemie - International Edition</i> , <b>2009</b> , 48, 9477-80	16.4	56
216	Charged nanoparticles as supramolecular surfactants for controlling the growth and stability of microcrystals. <i>Nature Materials</i> , <b>2012</b> , 11, 227-32	27	55
215	"Nanoions": fundamental properties and analytical applications of charged nanoparticles. <i>ChemPhysChem</i> , <b>2007</b> , 8, 2171-6	3.2	55
214	Vesicle-to-micelle oscillations and spatial patterns. <i>Langmuir</i> , <b>2010</b> , 26, 13770-2	4	53
213	Tactic, reactive, and functional droplets outside of equilibrium. <i>Chemical Society Reviews</i> , <b>2016</b> , 45, 4766-965	16.4	52
212	Responsive and Nonequilibrium Nanomaterials. <i>Journal of Physical Chemistry Letters</i> , <b>2012</b> , 3, 2103-2111	16.4	52
211	Dynamics of self assembly of magnetized disks rotating at the liquid-air interface. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 4147-51	11.5	52
210	Swarming in Shallow Waters. <i>Journal of Physical Chemistry Letters</i> , <b>2011</b> , 2, 770-774	6.4	51
209	Electrostatically "patchy" coatings via cooperative adsorption of charged nanoparticles. <i>Journal of the American Chemical Society</i> , <b>2007</b> , 129, 15623-30	16.4	48
208	From knowledge-based potentials to combinatorial lead design in silico. <i>Accounts of Chemical Research</i> , <b>2002</b> , 35, 261-9	24.3	48
207	Plasmoelectronics: coupling plasmonic excitation with electron flow. <i>Langmuir</i> , <b>2012</b> , 28, 9093-102	4	47
206	Computational planning of the synthesis of complex natural products. <i>Nature</i> , <b>2020</b> , 588, 83-88	50.4	47
205	Organic chemistry as a language and the implications of chemical linguistics for structural and retrosynthetic analyses. <i>Angewandte Chemie - International Edition</i> , <b>2014</b> , 53, 8108-12	16.4	46
204	Enhanced photocatalytic activity of hybrid Fe <sub>2</sub> O <sub>3</sub> /Pd nanoparticulate catalysts. <i>Chemical Science</i> , <b>2012</b> , 3, 1090	9.4	46
203	Reactive surface micropatterning by wet stamping. <i>Langmuir</i> , <b>2005</b> , 21, 2637-40	4	46
202	Dynamic self-assembly of photo-switchable nanoparticles. <i>Soft Matter</i> , <b>2012</b> , 8, 227-234	3.6	45

201	Supercapacitors Based on Metal Electrodes Prepared from Nanoparticle Mixtures at Room Temperature. <i>Journal of Physical Chemistry Letters</i> , <b>2010</b> , 1, 1428-1431	6.4	45
200	Controlling the properties of self-assembled monolayers by substrate curvature. <i>Langmuir</i> , <b>2011</b> , 27, 1246-50	4	45
199	Bulk Synthesis and Surface Patterning of Nanoporous Metals and Alloys from Supraspherical Nanoparticle Aggregates. <i>Advanced Functional Materials</i> , <b>2008</b> , 18, 2763-2769	15.6	45
198	Slit Tubes for Semisoft Pneumatic Actuators. <i>Advanced Materials</i> , <b>2018</b> , 30, 1704446	24	44
197	Antibacterial nanoparticle monolayers prepared on chemically inert surfaces by cooperative electrostatic adsorption (CELA). <i>ACS Applied Materials &amp; Interfaces</i> , <b>2010</b> , 2, 1206-10	9.5	44
196	Synthesis of heterodimeric sphere-prism nanostructures via metastable gold supraspheres. <i>Angewandte Chemie - International Edition</i> , <b>2007</b> , 46, 8363-7	16.4	44
195	Precision assembly of oppositely and like-charged nanoobjects mediated by charge-induced dipole interactions. <i>Nano Letters</i> , <b>2010</b> , 10, 2275-80	11.5	43
194	Kinetics of contact electrification between metals and polymers. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 20511-5	3.4	43
193	Dynamic internal gradients control and direct electric currents within nanostructured materials. <i>Nature Nanotechnology</i> , <b>2011</b> , 6, 740-6	28.7	42
192	Dynamic self-assembly of rings of charged metallic spheres. <i>Physical Review Letters</i> , <b>2003</b> , 90, 083903	7.4	42
191	Self-division of macroscopic droplets: partitioning of nanosized cargo into nanoscale micelles. <i>Angewandte Chemie - International Edition</i> , <b>2010</b> , 49, 6756-9	16.4	41
190	One-step multilevel microfabrication by reaction–diffusion. <i>Langmuir</i> , <b>2005</b> , 21, 418-23	4	41
189	Wy-like movement patterns of metastatic cancer cells revealed in microfabricated systems and implicated in vivo. <i>Nature Communications</i> , <b>2018</b> , 9, 4539	17.4	41
188	Large-Area, Freestanding MOF Films of Planar, Curvilinear, or Micropatterned Topographies. <i>Angewandte Chemie - International Edition</i> , <b>2017</b> , 56, 127-132	16.4	39
187	Enhancing crystal growth using polyelectrolyte solutions and shear flow. <i>Nature</i> , <b>2020</b> , 579, 73-79	50.4	39
186	Nano- and microscopic surface wrinkles of linearly increasing heights prepared by periodic precipitation. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 17803-7	16.4	39
185	Self-assembling fluidic machines. <i>Applied Physics Letters</i> , <b>2004</b> , 84, 1798-1800	3.4	38
184	Development of a Knowledge-Based Potential for Crystals of Small Organic Molecules: Calculation of Energy Surfaces for C=O···H··· Hydrogen Bonds. <i>Journal of Physical Chemistry B</i> , <b>2000</b> , 104, 7293-7298	3.4	37



183	Nanoparticle supracrystals and layered supracrystals as chemical amplifiers. <i>Angewandte Chemie - International Edition</i> , <b>2010</b> , 49, 5737-41	16.4	36
182	Complexity and dynamic self-assembly. <i>Chemical Engineering Science</i> , <b>2004</b> , 59, 1667-1676	4.4	36
181	Absorption of water by thin, ionic films of gelatin. <i>Langmuir</i> , <b>2004</b> , 20, 3513-6	4	36
180	Modeling of Electrodynamic Interactions between Metal Nanoparticles Aggregated by Electrostatic Interactions into Closely-Packed Clusters. <i>Journal of Physical Chemistry C</i> , <b>2007</b> , 111, 11816-11822	3.8	35
179	Thermally actuated interferometric sensors based on the thermal expansion of transparent elastomeric media. <i>Review of Scientific Instruments</i> , <b>1999</b> , 70, 2031-2037	1.7	35
178	Cutting into Solids with Micropatterned Gels. <i>Advanced Materials</i> , <b>2005</b> , 17, 1361-1365	24	34
177	Elastomeric optical elements with deformable surface topographies: applications to force measurements, tunable light transmission and light focusing. <i>Sensors and Actuators A: Physical</i> , <b>2000</b> , 86, 81-85	3.9	34
176	Transport into metal-organic frameworks from solution is not purely diffusive. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 2662-6	16.4	33
175	Cell motility on micropatterned treadmills and tracks. <i>Soft Matter</i> , <b>2007</b> , 3, 672-679	3.6	33
174	Self-assembly of gears at a fluid/air interface. <i>Journal of the American Chemical Society</i> , <b>2003</b> , 125, 7948-58.4	58.4	33
173	Rapid and Accurate Prediction of p Values of C-H Acids Using Graph Convolutional Neural Networks. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 17142-17149	16.4	32
172	Material Transfer and Polarity Reversal in Contact Charging. <i>Angewandte Chemie</i> , <b>2012</b> , 124, 4927-4931	3.6	32
171	Chematica: A Story of Computer Code That Started to Think like a Chemist. <i>CheM</i> , <b>2018</b> , 4, 390-398	16.2	31
170	Mechanochemical activation and patterning of an adhesive surface toward nanoparticle deposition. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 1726-9	16.4	31
169	Mechanism of the cooperative adsorption of oppositely charged nanoparticles. <i>Journal of Physical Chemistry A</i> , <b>2009</b> , 113, 3799-803	2.8	31
168	Synergy Between Expert and Machine-Learning Approaches Allows for Improved Retrosynthetic Planning. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 725-730	16.4	31
167	Self-Assembling Films of Covalent Organic Frameworks Enable Long-Term, Efficient Cycling of Zinc-Ion Batteries. <i>Advanced Materials</i> , <b>2021</b> , 33, e2101726	24	31
166	Bistability and Hysteresis During Aggregation of Charged Nanoparticles. <i>Journal of Physical Chemistry Letters</i> , <b>2010</b> , 1, 1459-1462	6.4	30

- 165 Synthetic connectivity, emergence, and self-regeneration in the network of prebiotic chemistry. *Science*, **2020**, 369, 33-3 30
- 164 Computergestützte Syntheseplanung: Das Ende vom Anfang. *Angewandte Chemie*, **2016**, 128, 6004-6040 3.6 29
- 163 Rewiring Chemistry: Algorithmic Discovery and Experimental Validation of One-Pot Reactions in the Network of Organic Chemistry. *Angewandte Chemie*, **2012**, 124, 8046-8051 3.6 29
- 162 Color Micro- and Nanopatterning with Counter-Propagating Reaction-Diffusion Fronts. *Advanced Materials*, **2004**, 16, 1912-1917 24 29
- 161 Vortex flows impart chirality-specific lift forces. *Nature Communications*, **2015**, 6, 5640 17.4 28
- 160 Storage of Electrical Information in Metal-Organic-Framework Memristors. *Angewandte Chemie*, **2014**, 126, 4526-4530 3.6 28
- 159 Three-Dimensional Dynamic Self-Assembly of Spinning Magnetic Disks: Vortex Crystals. *Journal of Physical Chemistry B*, **2002**, 106, 1188-1194 3.4 28
- 158 Navigating around Patented Routes by Preserving Specific Motifs along Computer-Planned Retrosynthetic Pathways. *Chem*, **2019**, 5, 460-473 16.2 28
- 157 Automatic mapping of atoms across both simple and complex chemical reactions. *Nature Communications*, **2019**, 10, 1434 17.4 26
- 156 Micro- and nanoprinting into solids using reaction-diffusion etching and hydrogel stamps. *Small*, **2009**, 5, 22-7 11 26
- 155 Selection of cost-effective yet chemically diverse pathways from the networks of computer-generated retrosynthetic plans. *Chemical Science*, **2019**, 10, 4640-4651 9.4 25
- 154 Magnetofluidic Tweezing of Nonmagnetic Colloids. *Advanced Materials*, **2016**, 28, 3453-9 24 25
- 153 Precipitation of oppositely charged nanoparticles by dilution and/or temperature increase. *Journal of Physical Chemistry B*, **2009**, 113, 1413-7 3.4 25
- 152 Gene therapy vectors with enhanced transfection based on hydrogels modified with affinity peptides. *Biomaterials*, **2011**, 32, 5092-9 15.6 25
- 151 Relationship between dynamical entropy and energy dissipation far from thermodynamic equilibrium. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 16339-43 11.5 24
- 150 Architecture and Evolution of Organic Chemistry. *Angewandte Chemie*, **2005**, 117, 7429-7435 3.6 24
- 149 Tweezing of Magnetic and Non-Magnetic Objects with Magnetic Fields. *Advanced Materials*, **2017**, 29, 1603516 24 23
- 148 Electrostatic Titrations Reveal Surface Compositions of Mixed, On-Nanoparticle Monolayers Comprising Positively and Negatively Charged Ligands. *Journal of Physical Chemistry C*, **2016**, 120, 4139-4144 28 23

147	Self-assembly of like-charged nanoparticles into microscopic crystals. <i>Nanoscale</i> , <b>2016</b> , 8, 157-61	7.7	23
146	Independence of Primary and Secondary Structures in Periodic Precipitation Patterns. <i>Journal of Physical Chemistry Letters</i> , <b>2011</b> , 2, 345-349	6.4	23
145	Lift-off and micropatterning of mono- and multilayer nanoparticle films. <i>Small</i> , <b>2009</b> , 5, 1970-3	11	22
144	Nanoparticles that "remember" temperature. <i>Small</i> , <b>2010</b> , 6, 1385-7	11	22
143	Sequential reactions directed by core/shell catalytic reactors. <i>Small</i> , <b>2010</b> , 6, 857-63	11	22
142	Maskless Microetching of Transparent Conductive Oxides (ITO and ZnO) and Semiconductors (GaAs) Based on Reaction-Diffusion. <i>Chemistry of Materials</i> , <b>2006</b> , 18, 4722-4723	9.6	22
141	Directed dynamic self-assembly of objects rotating on two parallel fluid interfaces. <i>Journal of Chemical Physics</i> , <b>2002</b> , 116, 8571	3.9	22
140	Algorithmic Discovery of Tactical Combinations for Advanced Organic Syntheses. <i>Chem</i> , <b>2020</b> , 6, 280-293	16.2	22
139	Tunable Photoluminescence across the Visible Spectrum and Photocatalytic Activity of Mixed-Valence Rhenium Oxide Nanoparticles. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 15088-15093	16.4	21
138	Estimating chemical reactivity and cross-influence from collective chemical knowledge. <i>Chemical Science</i> , <b>2012</b> , 3, 1497	9.4	21
137	Chemical network algorithms for the risk assessment and management of chemical threats. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 7933-7	16.4	21
136	The dependence between forces and dissipation rates mediating dynamic self-assembly. <i>Soft Matter</i> , <b>2009</b> , 5, 1279	3.6	21
135	Metal-Organic Framework "Swimmers" with Energy-Efficient Autonomous Motility. <i>ACS Nano</i> , <b>2017</b> , 11, 10914-10923	16.7	20
134	The logic of translating chemical knowledge into machine-processable forms: a modern playground for physical-organic chemistry. <i>Reaction Chemistry and Engineering</i> , <b>2019</b> , 4, 1506-1521	4.9	20
133	Nanoparticle Oscillations and Fronts. <i>Angewandte Chemie</i> , <b>2010</b> , 122, 8798-8801	3.6	20
132	Micropatterning chemical oscillations: waves, autofocusing, and symmetry breaking. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 15943-8	16.4	20
131	The rate of energy dissipation determines probabilities of non-equilibrium assemblies. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 10304-8	16.4	19
130	Theoretical basis for the stabilization of charges by radicals on electrified polymers. <i>Chemical Science</i> , <b>2017</b> , 8, 2025-2032	9.4	19

129	The unstable and expanding interface between reacting liquids: theoretical interpretation of negative surface tension. <i>Soft Matter</i> , <b>2012</b> , 8, 1601-1608	3.6	19
128	Carboxybetaine methacrylate polymers offer robust, long-term protection against cell adhesion. <i>Langmuir</i> , <b>2011</b> , 27, 10800-4	4	19
127	Laser-induced fluorescence studies of jet-cooled S2O: Axis-switching and predissociation effects. <i>Journal of Chemical Physics</i> , <b>1995</b> , 103, 67-79	3.9	19
126	Modular synthesis of bipyridinium oligomers and corresponding donor-acceptor oligorotaxanes with crown ethers. <i>Organic Letters</i> , <b>2012</b> , 14, 5066-9	6.2	18
125	Mechanoradicals Created in Polymeric Sponges Drive Reactions in Aqueous Media. <i>Angewandte Chemie</i> , <b>2012</b> , 124, 3656-3660	3.6	18
124	Imprinting Chemical and Responsive Micropatterns into Metal-Organic Frameworks. <i>Angewandte Chemie</i> , <b>2011</b> , 123, 290-293	3.6	18
123	Measurement of protein-ligand binding constants from reaction-diffusion concentration profiles. <i>Analytical Chemistry</i> , <b>2010</b> , 82, 8780-4	7.8	18
122	Size selection during crystallization of oppositely charged nanoparticles. <i>Chemistry - A European Journal</i> , <b>2009</b> , 15, 2032-5	4.8	18
121	Versatile and efficient synthesis of omega-functionalized asymmetric disulfides via sulfenyl bromide adducts. <i>Langmuir</i> , <b>2007</b> , 23, 2318-21	4	18
120	The Core and Most Useful Molecules in Organic Chemistry. <i>Angewandte Chemie</i> , <b>2006</b> , 118, 5474-5480	3.6	18
119	Freestanding Three-Dimensional Copper Foils Prepared by Electroless Deposition on Micropatterned Gels. <i>Advanced Materials</i> , <b>2005</b> , 17, 751-755	24	18
118	Macroscopic Synthesis of Self-Assembled Dissipative Structures. <i>Journal of Physical Chemistry B</i> , <b>2001</b> , 105, 8770-8775	3.4	18
117	Why Cells are Microscopic: A Transport-Time Perspective. <i>Journal of Physical Chemistry Letters</i> , <b>2013</b> , 4, 861-5	6.4	17
116	Microtubule guidance tested through controlled cell geometry. <i>Journal of Cell Science</i> , <b>2012</b> , 125, 5790-9	3.3	17
115	When and Why Like-Sized, Oppositely Charged Particles Assemble into Diamond-like Crystals. <i>Journal of Physical Chemistry Letters</i> , <b>2013</b> , 4, 1507-11	6.4	17
114	Melting in 2D Lennard-Jones Systems: What Type of Phase Transition? <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 20749-20755	3.8	17
113	"Nanoarmoured" droplets of different shapes formed by interfacial self-assembly and crosslinking of metal nanoparticles. <i>Nanoscale</i> , <b>2010</b> , 2, 2366-9	7.7	17
112	Arrays of microlenses of complex shapes prepared by reaction-diffusion in thin films of ionically doped gels. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 1871-1873	3.4	17

111	Oscillating droplet trains in microfluidic networks and their suppression in blood flow. <i>Nature Physics</i> , <b>2019</b> , 15, 706-713	16.2	16
110	A long-lasting concentration cell based on a magnetic electrolyte. <i>Nature Nanotechnology</i> , <b>2014</b> , 9, 901-907	6.8	7
109	Short-term molecular polarization of cells on symmetric and asymmetric micropatterns. <i>Soft Matter</i> , <b>2010</b> , 6, 3257-3268	3.6	16
108	Synthesis of toroidal gold nanoparticles assisted by soft templates. <i>Langmuir</i> , <b>2014</b> , 30, 9886-90	4	15
107	Non-Equilibrium Self-Assembly of Monocomponent and Multicomponent Tubular Structures in Rotating Fluids. <i>Advanced Materials</i> , <b>2017</b> , 29, 1704274	24	15
106	Heterogeneous Structure, Heterogeneous Dynamics, and Complex Behavior in Two-Dimensional Liquids. <i>Journal of Physical Chemistry Letters</i> , <b>2012</b> , 3, 2431-5	6.4	15
105	Formation of Dense Nanoparticle Monolayers Mediated by Alternating Current Electric Fields and Electrohydrodynamic Flows. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 8800-8805	3.8	15
104	Fabrication of Topologically Complex Three-Dimensional Microstructures: Metallic Microknots. <i>Journal of the American Chemical Society</i> , <b>2000</b> , 122, 12691-12699	16.4	15
103	Parallel Optimization of Synthetic Pathways within the Network of Organic Chemistry. <i>Angewandte Chemie</i> , <b>2012</b> , 124, 8052-8056	3.6	14
102	Nanoparticle Core/Shell Architectures within MOF Crystals Synthesized by Reaction Diffusion. <i>Angewandte Chemie</i> , <b>2012</b> , 124, 7553-7557	3.6	14
101	Linguistic measures of chemical diversity and the "keywords" of molecular collections. <i>Scientific Reports</i> , <b>2018</b> , 8, 7598	4.9	14
100	Control and Switching of Charge-Selective Catalysis on Nanoparticles by Counterions. <i>ACS Catalysis</i> , <b>2018</b> , 8, 7469-7474	13.1	14
99	Controlling reversible dielectric breakdown in metal/polymer nanocomposites. <i>Advanced Materials</i> , <b>2012</b> , 24, 1850-5	24	13
98	Blocking of disulfide adsorption by coadsorbing omega-functionalized alkane thiols revealed by wet stamping and fluorescence microscopy. <i>Langmuir</i> , <b>2008</b> , 24, 11600-4	4	13
97	Localized chemical wave emission and mode switching in a patterned excitable medium. <i>Physical Review Letters</i> , <b>2006</b> , 97, 128702	7.4	13
96	Engineering Gram Selectivity of Mixed-Charge Gold Nanoparticles by Tuning the Balance of Surface Charges. <i>Angewandte Chemie</i> , <b>2016</b> , 128, 8752-8756	3.6	13
95	Nanostructured Rhenium-Carbon Composites as Hydrogen-Evolving Catalysts Effective over the Entire pH Range. <i>ACS Applied Nano Materials</i> , <b>2019</b> , 2, 2725-2733	5.6	12
94	Shaping Microcrystals of Metal-Organic Frameworks by Reaction-Diffusion. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 10301-10305	16.4	12

93	Computational design of syntheses leading to compound libraries or isotopically labelled targets. <i>Chemical Science</i> , <b>2019</b> , 10, 9219-9232	9.4	12
92	Organic Chemistry as a Language and the Implications of Chemical Linguistics for Structural and Retrosynthetic Analyses. <i>Angewandte Chemie</i> , <b>2014</b> , 126, 8246-8250	3.6	12
91	A Priori Estimation of Organic Reaction Yields. <i>Angewandte Chemie - International Edition</i> , <b>2015</b> , 54, 10797-10801	7.8	12
90	Universal area distributions in the monolayers of confluent mammalian cells. <i>Physical Review Letters</i> , <b>2014</b> , 112, 138104	7.4	12
89	Molecular tethering or aggregation: is the existence of charge-transfer bands indicative of the formation of blue-box/tetrathiafulvalene inclusion complexes?. <i>Chemistry - A European Journal</i> , <b>2012</b> , 18, 5606-11	4.8	12
88	Is Water Necessary for Contact Electrification?. <i>Angewandte Chemie</i> , <b>2011</b> , 123, 6898-6902	3.6	12
87	Remote Fabrication via Three-Dimensional Reaction-Diffusion: Making Complex Core-and-Shell Particles and Assembling Them into Open-Lattice Crystals. <i>Advanced Materials</i> , <b>2009</b> , 21, 1911-1915	24	12
86	Synthetic popularity reflects chemical reactivity. <i>Journal of Physical Organic Chemistry</i> , <b>2009</b> , 22, 897-902	2.1	12
85	Wet-stamped precipitant gradients control the growth of protein microcrystals in an array of nanoliter wells. <i>Journal of the American Chemical Society</i> , <b>2008</b> , 130, 2146-7	16.4	12
84	Discovery and Enumeration of Organic-Chemical and Biomimetic Reaction Cycles within the Network of Chemistry. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 2367-2371	16.4	11
83	Label-free in situ optical monitoring of the adsorption of oppositely charged metal nanoparticles. <i>Langmuir</i> , <b>2014</b> , 30, 13478-82	4	11
82	Additivity of the excess energy dissipation rate in a dynamically self-assembled system. <i>Journal of Physical Chemistry B</i> , <b>2009</b> , 113, 7574-8	3.4	11
81	Concentric liquid reactors for chemical synthesis and separation. <i>Nature</i> , <b>2020</b> , 586, 57-63	50.4	11
80	Interference-like patterns of static magnetic fields imprinted into polymer/nanoparticle composites. <i>Nature Communications</i> , <b>2017</b> , 8, 1564	17.4	10
79	Mechanism of reactive wetting and direct visual determination of the kinetics of self-assembled monolayer formation. <i>Langmuir</i> , <b>2009</b> , 25, 9-12	4	10
78	Minimal-uncertainty prediction of general drug-likeness based on Bayesian neural networks. <i>Nature Machine Intelligence</i> , <b>2020</b> , 2, 457-465	22.5	10
77	Motility efficiency and spatiotemporal synchronization in non-metastatic vs. metastatic breast cancer cells. <i>Integrative Biology (United Kingdom)</i> , <b>2013</b> , 5, 1464-73	3.7	9
76	Tomography and static-mechanical properties of adherent cells. <i>Advanced Materials</i> , <b>2012</b> , 24, 5719-26	24	9

75	Chemical Network Algorithms for the Risk Assessment and Management of Chemical Threats. <i>Angewandte Chemie</i> , <b>2012</b> , 124, 8057-8061	3.6	9
74	Nanoparticle-loaded aerogels and layered aerogels cast from sol-gel mixtures. <i>Small</i> , <b>2011</b> , 7, 2568-72	11	9
73	Nanoparticle-based solution deposition of gold films supporting bioresistant SAMs. <i>Langmuir</i> , <b>2009</b> , 25, 1905-7	4	9
72	Rewritable and pH-sensitive micropatterns based on nanoparticle "inks". <i>Small</i> , <b>2010</b> , 6, 2114-6	11	9
71	Amplification of changes of a thin film's macromolecular structure into macroscopic reaction-diffusion patterns. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 6936-7	16.4	9
70	Prediction of Major Regio-, Site-, and Diastereoisomers in Diels-Alder Reactions by Using Machine-Learning: The Importance of Physically Meaningful Descriptors. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 4563-4567	3.6	9
69	Dynamic Self-Assembly of Magnetic/Polymer Composites in Rotating Frames of Reference. <i>Advanced Materials</i> , <b>2017</b> , 29, 1700614	24	8
68	Accelerated Self-Replication under Non-Equilibrium, Periodic Energy Delivery. <i>Angewandte Chemie</i> , <b>2014</b> , 126, 177-181	3.6	8
67	Trapping, manipulation, and crystallization of live cells using magnetofluidic tweezers. <i>Nanoscale Horizons</i> , <b>2017</b> , 2, 50-54	10.8	8
66	Design, Implementation, Simulation, and Visualization of a Highly Efficient RIM Microfluidic Mixer for Rapid Freeze-Quench of Biological Samples. <i>Applied Magnetic Resonance</i> , <b>2011</b> , 40, 415-425	0.8	8
65	Suggestions for second-pass anti-COVID-19 drugs based on the Artificial Intelligence measures of molecular similarity, shape and pharmacophore distribution.		8
64	Immature dendritic cells navigate microscopic mazes to find tumor cells. <i>Lab on A Chip</i> , <b>2019</b> , 19, 1665-1675	16.75	7
63	Artificial Heliotropism and Nyctinasty Based on Optomechanical Feedback and No Electronics. <i>Soft Robotics</i> , <b>2018</b> , 5, 93-98	9.2	7
62	Chemical reaction facilitates nanoscale mixing. <i>Soft Matter</i> , <b>2010</b> , 6, 4441	3.6	7
61	Color Micropatterning with Reconfigurable Stamps. <i>Journal of Physical Chemistry B</i> , <b>2004</b> , 108, 19904-19907	3.4	7
60	Chemist Ex Machina: Advanced Synthesis Planning by Computers. <i>Accounts of Chemical Research</i> , <b>2021</b> , 54, 1094-1106	24.3	7
59	Transistors and logic circuits based on metal nanoparticles and ionic gradients. <i>Nature Electronics</i> , <b>2021</b> , 4, 109-115	28.4	7
58	Mixed-Charge, pH-Responsive Nanoparticles for Selective Interactions with Cells, Organelles, and Bacteria. <i>Accounts of Materials Research</i> , <b>2020</b> , 1, 188-200	7.5	6

57	Computer-generated "synthetic contingency" plans at times of logistics and supply problems: scenarios for hydroxychloroquine and remdesivir. <i>Chemical Science</i> , <b>2020</b> , 11, 6736-6744	9.4	6
56	Microfabricated Systems and Assays for Studying the Cytoskeletal Organization, Micromechanics, and Motility Patterns of Cancerous Cells. <i>Advanced Materials Interfaces</i> , <b>2014</b> , 1, 1400158	4.6	6
55	Nanostructural anisotropy underlies anisotropic electrical bistability. <i>Advanced Materials</i> , <b>2013</b> , 25, 16232-16238	2.4	6
54	Microphase separation as the cause of structural complexity in 2D liquids. <i>Soft Matter</i> , <b>2013</b> , 9, 10042	3.6	6
53	pH Oscillator Stretched in Space but Frozen in Time. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 760-766	6.4	6
52	Mechanically Driven Activation of Polyaniline into Its Conductive Form. <i>Angewandte Chemie</i> , <b>2014</b> , 126, 7066-7070	3.6	6
51	Inorganic salts direct the assembly of charged nanoparticles into composite nanoscopic spheres, plates, or needles. <i>Faraday Discussions</i> , <b>2012</b> , 159, 201	3.6	6
50	The Rate of Energy Dissipation Determines Probabilities of Non-equilibrium Assemblies. <i>Angewandte Chemie</i> , <b>2013</b> , 125, 10494-10498	3.6	6
49	Reaction-driven mixing and dispersion. <i>Angewandte Chemie - International Edition</i> , <b>2011</b> , 50, 40-2	16.4	6
48	Synergy Between Expert and Machine-Learning Approaches Allows for Improved Retrosynthetic Planning. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 735-740	3.6	6
47	The Influence of Distant Substrates on the Outcome of Contact Electrification. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 15379-15383	16.4	6
46	Large-Area, Freestanding MOF Films of Planar, Curvilinear, or Micropatterned Topographies. <i>Angewandte Chemie</i> , <b>2017</b> , 129, 133-138	3.6	5
45	Charged nanoparticles crystallizing and controlling crystallization: from coatings to nanoparticle surfactants to chemical amplifiers. <i>CrystEngComm</i> , <b>2014</b> , 16, 9368-9380	3.3	5
44	Mechanical control of surface adsorption by nanoscale cracking. <i>Advanced Materials</i> , <b>2014</b> , 26, 3667-72	2.4	5
43	A Cost-Effective, Column-Free Route to Ethylene Glycol Oligomers EG6, EG10, and EG12. <i>Synthesis</i> , <b>2012</b> , 44, 717-722	2.9	5
42	Suggestions for second-pass anti-COVID-19 drugs based on the Artificial Intelligence measures of molecular similarity, shape and pharmacophore distribution.		5
41	Scaffold-Directed Face Selectivity Machine-Learned from Vectors of Non-covalent Interactions. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 15230-15235	16.4	5
40	Uniform and directional growth of centimeter-sized single crystals of cyclodextrin-based metal organic frameworks. <i>CrystEngComm</i> , <b>2019</b> , 21, 1867-1871	3.3	5



39	On-Nanoparticle Gating Units Render an Ordinary Catalyst Substrate- and Site-Selective. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 1807-1815	16.4	5
38	Switchable counterion gradients around charged metallic nanoparticles enable reception of radio waves. <i>Science Advances</i> , <b>2018</b> , 4, eaau3546	14.3	5
37	Charged Metal Nanoparticles for Chemoelectronic Circuits. <i>Advanced Materials</i> , <b>2019</b> , 31, e1804864	24	4
36	A Priori Estimation of Organic Reaction Yields. <i>Angewandte Chemie</i> , <b>2015</b> , 127, 10947-10951	3.6	4
35	Rapid deposition of hydrophobic nanoparticle monolayers onto hydrophilic surfaces from liquid-liquid interfaces. <i>Langmuir</i> , <b>2009</b> , 25, 12855-9	4	4
34	Modeling the kinetics of acylation of insulin using a recursive method for solving the systems of coupled differential equations. <i>Biophysical Journal</i> , <b>2000</b> , 78, 652-61	2.9	4
33	Mixed-Charge Nanocarriers Allow for Selective Targeting of Mitochondria by Otherwise Nonselective Dyes. <i>ACS Nano</i> , <b>2021</b> ,	16.7	4
32	The Influence of Distant Substrates on the Outcome of Contact Electrification. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 15605-15609	3.6	4
31	Discovery and Enumeration of Organic-Chemical and Biomimetic Reaction Cycles within the Network of Chemistry. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 2391-2395	3.6	3
30	Efficient and Long-Lasting Current Rectification by Laminated Yet Separated, Oppositely Charged Monolayers. <i>ACS Applied Electronic Materials</i> , <b>2019</b> , 1, 2295-2300	4	3
29	Heterogeneous Catalysis "On Demand": Mechanically Controlled Catalytic Activity of a Metal Surface. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 44264-44269	9.5	3
28	Mechanofabrication of pancake and rodlike nanostructures from deformable nanoparticle aggregates. <i>Small</i> , <b>2009</b> , 5, 2656-8	11	3
27	Multilevel surface nano- and microstructuring via sequential photoswelling of dichromated gelatin. <i>Langmuir</i> , <b>2007</b> , 23, 5419-22	4	3
26	An Electrocatalytic Reaction As a Basis for Chemical Computing in Water Droplets. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 16908-16912	16.4	3
25	Scaffold-Directed Face Selectivity Machine-Learned from Vectors of Non-covalent Interactions. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 15358-15363	3.6	3
24	Propagation of Oscillating Chemical Signals through Reaction Networks. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 4520-4525	16.4	3
23	Computer-designed repurposing of chemical wastes into drugs.. <i>Nature</i> , <b>2022</b> , 604, 668-676	50.4	3
22	Shaping Microcrystals of MetalOrganic Frameworks by ReactionDiffusion. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 10387-10391	3.6	2

21	Stretchable and Reactive Membranes of Metal-Organic Framework Nanosurfactants on Liquid Droplets Enable Dynamic Control of Self-Propulsion, Cargo Pick-Up, and Drop-Off. <i>Advanced Intelligent Systems</i> , <b>2019</b> , 1, 1900065	6	2
20	Temperature driven assembly of like-charged nanoparticles at non-planar liquid-liquid or gel-air interfaces. <i>Nanoscale</i> , <b>2014</b> , 6, 4475-9	7.7	2
19	Electrostatically Templated Self-Assembly of Polymeric Particles: The Role of Friction and Shape Complementarity. <i>Advanced Functional Materials</i> , <b>2011</b> , 21, 4763-4768	15.6	2
18	Mechanical and electrical properties of nanostructured plastic metals. <i>Journal of Non-Crystalline Solids</i> , <b>2009</b> , 355, 1313-1317	3.9	2
17	Materials, assemblies and reaction systems under rotation. <i>Nature Reviews Materials</i> ,	73.3	2
16	Propagation of Oscillating Chemical Signals through Reaction Networks. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 4568-4573	3.6	2
15	Dynamic Assembly of Small Parts in Vortex-Vortex Traps Established within a Rotating Fluid. <i>Advanced Materials</i> , <b>2019</b> , 31, e1902298	24	1
14	Microfabrication Tools: Microfabricated Systems and Assays for Studying the Cytoskeletal Organization, Micromechanics, and Motility Patterns of Cancerous Cells (Adv. Mater. Interfaces 7/2014). <i>Advanced Materials Interfaces</i> , <b>2014</b> , 1, n/a-n/a	4.6	1
13	Mischen und Dispergieren mithilfe von chemischen Reaktionen. <i>Angewandte Chemie</i> , <b>2011</b> , 123, 40-42	3.6	1
12	Large-Scale, Wavelet-Based Analysis of Lysosomal Trajectories and Co-Movements of Lysosomes with Nanoparticle Cargos.. <i>Cells</i> , <b>2022</b> , 11,	7.9	1
11	A computer algorithm to discover iterative sequences of organic reactions <b>2022</b> , 1, 49-58		1
10	Additive Contact Polarization of Nonferroelectric Polymers for Patterning of Multilevel Memory Elements. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 1504-1510	9.5	1
9	Stimuli-responsive granular crystals assembled by dipolar and multipolar interactions. <i>Soft Matter</i> , <b>2021</b> , 17, 8595-8604	3.6	1
8	Stretchable and Reactive Membranes of Metal-Organic Framework Nanosurfactants on Liquid Droplets Enable Dynamic Control of Self-Propulsion, Cargo Pick-Up, and Drop-Off. <i>Advanced Intelligent Systems</i> , <b>2019</b> , 1, 1970071	6	0
7	Is Organic Chemistry Really Growing Exponentially?. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 26226-26232	16.4	0
6	R&Ktitelbild: Accelerated Self-Replication under Non-Equilibrium, Periodic Energy Delivery (Angew. Chem. 1/2014). <i>Angewandte Chemie</i> , <b>2014</b> , 126, 338-338	3.6	
5	Micropatterning: Tomography and Static-Mechanical Properties of Adherent Cells (Adv. Mater. 42/2012). <i>Advanced Materials</i> , <b>2012</b> , 24, 5774-5774	24	
4	Nanocomposites: Controlling Reversible Dielectric Breakdown in Metal/Polymer Nanocomposites (Adv. Mater. 14/2012). <i>Advanced Materials</i> , <b>2012</b> , 24, 1912-1912	24	

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| 3 | Back Cover: Material Transfer and Polarity Reversal in Contact Charging (Angew. Chem. Int. Ed. 20/2012). <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 5014-5014 | 16.4 |
| 2 | Nanoparticle-Aerogel Composites: Nanoparticle-Loaded Aerogels and Layered Aerogels Cast from Sol-Gel Mixtures (Small 18/2011). <i>Small</i> , <b>2011</b> , 7, 2542-2542                | 11   |
| 1 | Cover Picture: Architecture and Evolution of Organic Chemistry (Angew. Chem. Int. Ed. 44/2005). <i>Angewandte Chemie - International Edition</i> , <b>2005</b> , 44, 7145-7145          | 16.4 |