Valentin Ananikov

List of Publications by Year in Descending Order

301 papers	12,357 citations	58 h-index	103 g-index
383 ext. papers	14,513 ext. citations	7.1 avg, IF	7.48 L-index

#	Paper	IF	Citations
301	Nickel and Palladium Catalysis: Stronger Demand than Ever. *ACS Catalysis*, **2022**, 12, 1180-1200	13.1	6
300	Generation, regeneration, and recovery of Cu catalytic system by changing the polarity of electrodes. *Green Chemistry*, **2022**, 24, 1132-1140	10	1
299	Merging structural frameworks of imidazolium, pyridinium, and cholinium ionic liquids with cinnamic acid to tune solution state behavior and properties. *Journal of Molecular Liquids*, **2022**, 118673	6	0
298	Metal-catalyzed chemical activation of calcium carbide: New way to hierarchical metal/alloy-on-carbon catalysts. *Journal of Catalysis*, **2022**, 407, 281-281	7.3	0
297	Exploring metallic and plastic 3D printed photochemical reactors for customizing chemical synthesis.. *Scientific Reports*, **2022**, 12, 3780	4.9	1
296	Preparation of Hybrid Sol-Gel Materials Based on Living Cells of Microorganisms and Their Application in Nanotechnology.. *Nanomaterials*, **2022**, 12,	5.4	1
295	Comparative assessment of heterogeneous and homogeneous Suzuki-Miyaura catalytic reactions using bio-Profiles and bio-Factors. *Journal of Organometallic Chemistry*, **2022**, 965-966, 122319	2.3	0
294	How to Make a Cocktail of Palladium Catalysts with Cola and Alcohol: Heteroatom Doping vs. Nanoscale Morphology of Carbon Supports. *Nanomaterials*, **2021**, 11,	5.4	2
293	Electrochemical Etching of Germanium in Ionic Liquids without the Use of Toxic and Corrosive Reagents. *ChemNanoMat*, **2021**, 7, 1355	3.5	0
292	Intermolecular Diels-Alder Cycloadditions of Furfural-Based Chemicals from Renewable Resources: A Focus on the Regio- and Diastereoselectivity in the Reaction with Alkenes. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	5
291	Introduction to Dynamic Catalysis and the Interface Between Molecular and Heterogeneous Catalysts **2021**, 13-42		1
290	Neural Network Analysis of Electron Microscopy Video Data Reveals the Temperature-Driven Microphase Dynamics in the Ions/Water System. *Small*, **2021**, 17, e2007726	11	0
289	Detection and Structural Investigation of Elusive Palladium Hydride Intermediates Formed from Simple Metal Salts. *Inorganic Chemistry*, **2021**, 60, 7128-7142	5.1	1
288	ESI-MS Analysis of Thiol-yne Click Reaction in Petroleum Medium. *Molecules*, **2021**, 26,	4.8	1
287	Formation and stabilization of nanosized Pd particles in catalytic systems: Ionic nitrogen compounds as catalytic promoters and stabilizers of nanoparticles. *Coordination Chemistry Reviews*, **2021**, 437, 213860	23.2	13
286	Systematic Study of Aromatic-Ring-Targeted Cycloadditions of 5-Hydroxymethylfurfural Platform Chemicals. *ChemSusChem*, **2021**, 14, 3110-3123	8.3	3
285	Comparing Separation vs. Fresh Start to Assess Reusability of Pd/C Catalyst in Liquid-Phase Hydrogenation. *ChemCatChem*, **2021**, 13, 3656-3661	5.2	2

284	Quaternary Ammonium Compounds (QACs) and Ionic Liquids (ILs) as Biocides: From Simple Antiseptics to Tunable Antimicrobials. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	31
283	One-Pot and Two-Chamber Methodologies for Using Acetylene Surrogates in the Synthesis of Pyridazines and Their D-Labeled Derivatives. *Chemistry - an Asian Journal*, **2021**, 16, 2286-2297	4.5	3
282	Nanoscale Advancement Continues-From Catalysts and Reagents to Restructuring of Reaction Media. *Angewandte Chemie - International Edition*, **2021**, 60, 18926-18928	16.4	0
281	Unusual Effect of Impurities on the Spectral Characterization of 1,2,3-Triazoles Synthesized by the Cu-Catalyzed Azide-Alkyne Click Reaction. *Journal of Organic Chemistry*, **2021**, 86, 11456-11463	4.2	3
280	Nanoscale Advancement Continues‐From Catalysts and Reagents to Restructuring of Reaction Media. *Angewandte Chemie*, **2021**, 133, 19074-19076	3.6	0
279	Visualization of catalyst dynamics and development of a practical procedure to study complex "cocktail"-type catalytic systems. *Faraday Discussions*, **2021**, 229, 458-474	3.6	9
278	Synergistic/antagonistic cytotoxic effects in mixtures of ionic liquids with doxorubicin or mitoxantrone. *Journal of Molecular Liquids*, **2021**, 323, 114870	6	4
277	Catalytic C-H Functionalization of Unreactive Furan Cores in Bio-Derived Platform Chemicals. *ChemSusChem*, **2021**, 14, 558-568	8.3	5
276	Comparative study of aryl halides in Pd-mediated reactions: key factors beyond the oxidative addition step. *Inorganic Chemistry Frontiers*, **2021**, 8, 620-635	6.8	10
275	Visualization of the Mechanical Wave Effect on Liquid Microphases and Its Application for the Tuning of Dissipative Soft Microreactors. *Jacs Au*, **2021**, 1, 87-97		4
274	NMR Parameters of Imidazolium Ionic Liquids as Indicators of Their State and Properties in Aqueous Solutions. *Journal of Solution Chemistry*, **2021**, 50, 90-104	1.8	2
273	New Bio-Based Furanic Materials Effectively Absorb Metals from Water and Exert Antimicrobial Activity. *Chemistry - A European Journal*, **2021**, 27, 3382-3396	4.8	2
272	Sustainable Hydrogenation of Vinyl Derivatives Using Pd/C Catalysts. *Catalysts*, **2021**, 11, 179	4	1
271	Biomass- and calcium carbide-based recyclable polymers. *Green Chemistry*, **2021**, 23, 2487-2495	10	3
270	Deep neural network analysis of nanoparticle ordering to identify defects in layered carbon materials. *Chemical Science*, **2021**, 12, 7428-7441	9.4	2
269	Biomass-Derived Ionic Liquids Based on a 5-HMF Platform Chemical: Synthesis, Characterization, Biological Activity, and Tunable Interactions at the Molecular Level. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 3552-3570	8.3	9
268	Biobased C6-Furans in Organic Synthesis and Industry: Cycloaddition Chemistry as a Key Approach to Aromatic Building Blocks. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 3011-3042	8.3	18
267	Tri-tert-butyl(n-alkyl)phosphonium Ionic Liquids: Structure, Properties and Application as Hybrid Catalyst Nanomaterials. *Sustainability*, **2021**, 13, 9862	3.6	3

266	3D Printing to Increase the Flexibility of the Chemical Synthesis of Biologically Active Molecules: Design of On-Demand Gas Generation Reactors. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	1
265	Development of 3D+G Printing for the Design of Customizable Flow Reactors. *Chemical Engineering Journal*, **2021**, 132670	14.7	3
264	Transition metal □ocktail□type catalysis. *Current Opinion in Green and Sustainable Chemistry*, **2021**, 31, 100502	7.9	7
263	Metal nanoparticles in ionic liquids: Synthesis and catalytic applications. *Coordination Chemistry Reviews*, **2021**, 445, 213982	23.2	16
262	Ionic liquids: prospects for nucleic acid handling and delivery. *Nucleic Acids Research*, **2021**, 49, 1201-1234	20.1	7
261	A large-scale study of ionic liquids employed in chemistry and energy research to reveal cytotoxicity mechanisms and to develop a safe design guide. *Green Chemistry*, **2021**, 23, 6414-6430	10	6
260	Different effects of metal-NHC bond cleavage on the Pd/NHC and Ni/NHC catalyzed □arylation of ketones with aryl halides. *Inorganic Chemistry Frontiers*, **2021**, 8, 1511-1527	6.8	5
259	Organocatalytic Deuteration Induced by the Dynamic Covalent Interaction of Imidazolium Cations with Ketones. *Advanced Synthesis and Catalysis*, **2021**, 363, 1368-1378	5.6	3
258	Building bio-Profiles for common catalytic reactions. *Green Chemistry*, **2021**, 23, 6373-6391	10	1
257	Calcium Carbide: Versatile Synthetic Applications, Green Methodology and Sustainability. *European Journal of Organic Chemistry*, **2021**, 2021, 43-52	3.2	13
256	Sterically Hindered Quaternary Phosphonium Salts (QPSs): Antimicrobial Activity and Hemolytic and Cytotoxic Properties.. *International Journal of Molecular Sciences*, **2021**, 23,	6.3	3
255	The Increasing Value of Biomass: Moving From C6 Carbohydrates to Multifunctionalized Building Blocks via 5-(hydroxymethyl)furfural. *ChemistryOpen*, **2020**, 9, 1135-1148	2.3	8
254	Porous Silicon Preparation by Electrochemical Etching in Ionic Liquids. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 10259-10264	8.3	5
253	Primary Vinyl Ethers as Acetylene Surrogate: A Flexible Tool for Deuterium-Labeled Pyrazole Synthesis. *European Journal of Organic Chemistry*, **2020**, 2020, 4571-4580	3.2	5
252	The key role of R-NHC coupling (R = C, H, heteroatom) and M-NHC bond cleavage in the evolution of M/NHC complexes and formation of catalytically active species. *Chemical Science*, **2020**, 11, 6957-6977	9.4	43
251	Ambident Reactivity of Imidazolium Cations as Evidence of the Dynamic Nature of N-Heterocyclic Carbene-Mediated Organocatalysis. *Chemistry - A European Journal*, **2020**, 26, 8567-8571	4.8	3
250	Solution processed CZTS solar cells using amine□thiol systems: understanding the dissolution process and device fabrication. *Journal of Materials Chemistry C*, **2020**, 8, 10309-10318	7.1	2
249	Recent advances in applications of vinyl ether monomers for precise synthesis of custom-tailored polymers. *European Polymer Journal*, **2020**, 136, 109872	5.2	15

248	Carbocatalytic Acetylene Cyclotrimerization: A Key Role of Unpaired Electron Delocalization. *Journal of the American Chemical Society*, **2020**, 142, 3784-3796	16.4	11
247	Calcium Carbide Looping System for Acetaldehyde Manufacturing from Virtually any Carbon Source. *ChemSusChem*, **2020**, 13, 3679-3685	8.3	9
246	Electron microscopy dataset for the recognition of nanoscale ordering effects and location of nanoparticles. *Scientific Data*, **2020**, 7, 101	8.2	4
245	Examining the vinyl moiety as a protecting group for hydroxyl (OH) functionality under basic conditions. *Organic Chemistry Frontiers*, **2020**, 7, 1334-1342	5.2	8
244	2-Carboxyethylgermanium Sesquioxide as A Promising Anode Material for Li-Ion Batteries. *ChemSusChem*, **2020**, 13, 3137-3146	8.3	9
243	Widely accessible 3D printing technologies in chemistry, biochemistry and pharmaceutics: applications, materials and prospects. *Russian Chemical Reviews*, **2020**, 89, 1507-1561	6.8	19
242	Assessing possible influence of structuring effects in solution on cytotoxicity of ionic liquid systems. *Journal of Molecular Liquids*, **2020**, 297, 111751	6	11
241	Preventing PdNHC bond cleavage and switching from nano-scale to molecular catalytic systems: amines and temperature as catalyst activators. *Catalysis Science and Technology*, **2020**, 10, 1228-1247	5.5	13
240	An environment-friendly approach to produce nanostructured germanium anodes for lithium-ion batteries. *Green Chemistry*, **2020**, 22, 359-367	10	17
239	Efficient labeling of organic molecules using 13C elemental carbon: universal access to 13C2-labeled synthetic building blocks, polymers and pharmaceuticals. *Organic Chemistry Frontiers*, **2020**, 7, 638-647	5.2	17
238	Introducing tox-Profiles of Chemical Reactions. *Angewandte Chemie - International Edition*, **2020**, 59, 22296-22305	16.4	8
237	Understanding the solubilization of Ca acetylide with a new computational model for ionic pairs. *Chemical Science*, **2020**, 11, 13102-13112	9.4	3
236	Introducing tox-Profiles of Chemical Reactions. *Angewandte Chemie*, **2020**, 132, 22480-22489	3.6	
235	Stabilization of phosphorus in (1,2,3,4,5-pentaphenylphosphole)palladium. *Russian Chemical Bulletin*, **2020**, 69, 1185-1188	1.7	3
234	Solid-State C-S Coupling in Nickel Organochalcogenide Frameworks as a Route to Hierarchical Structure Transfer to Binary Nanomaterials. *Inorganic Chemistry*, **2020**, 59, 10835-10844	5.1	2
233	Selectivity control in thiol-yne click reactions visible light induced associative electron upconversion. *Chemical Science*, **2020**, 11, 10061-10070	9.4	21
232	Application of Ni-based metal-organic framework as heterogeneous catalyst for disulfide addition to acetylene. *Catalysis Communications*, **2020**, 146, 106119	3.2	0
231	Carbocatalysis: From Acetylene Trimerization to Modern Organic Synthesis. A Review. *Doklady Physical Chemistry*, **2020**, 493, 95-122	0.8	1

230	Comprehensive Mass Spectrometric Mapping of Chemical Compounds for the Development of Algorithms for Machine Learning and Artificial Intelligence. *Doklady Physical Chemistry*, **2020**, 492, 51-56	0.8	1
229	Mechanistic Study of Pd/NHC-Catalyzed Sonogashira Reaction: Discovery of NHC-Ethynyl Coupling Process. *Chemistry - A European Journal*, **2020**, 26, 15672-15681	4.8	3
228	Proton-deuterium exchange of acetone catalyzed in imidazolium-based ionic liquid-DO mixtures.. *RSC Advances*, **2020**, 10, 32485-32489	3.7	5
227	Directing-Group-Free, Carbonyl Group-Promoted Catalytic C□H Arylation of Bio-Based Furans. *ACS Catalysis*, **2020**, 10, 11466-11480	13.1	4
226	Controlled Natural Biomass Deoxygenation Allows the Design of Reusable Hot-Melt Adhesives Acting in a Multiple Oxygen Binding Mode. *ACS Applied Materials & Interfaces*, **2020**, 12, 45394-45403	9.5	6
225	Pd-Catalyzed Synthesis of Densely Functionalized Cyclopropyl Vinyl Sulfides Reveals the Origin of High Selectivity in a Fundamental Alkyne Insertion Step. *ACS Catalysis*, **2020**, 10, 9872-9888	13.1	6
224	Sterically Hindered Phosphonium Salts: Structure, Properties and Palladium Nanoparticle Stabilization. *Nanomaterials*, **2020**, 10,	5.4	5
223	Addressing Reversibility of R-NHC Coupling on Palladium: Is Nano-to-Molecular Transition Possible for the Pd/NHC System?. *Inorganic Chemistry*, **2019**, 58, 12218-12227	5.1	10
222	In situ transformations of Pd/NHC complexes with N-heterocyclic carbene ligands of different nature into colloidal Pd nanoparticles. *Inorganic Chemistry Frontiers*, **2019**, 6, 482-492	6.8	18
221	Synthesis of 2-Azidomethyl-5-ethynylfuran: A New Bio-Derived Self-Clickable Building Block. *Synthesis*, **2019**, 51, 1235-1242	2.9	9
220	A tunable precious metal-free system for selective oxidative esterification of biobased 5-(hydroxymethyl)furfural. *Green Chemistry*, **2019**, 21, 3464-3468	10	19
219	When Will 5-Hydroxymethylfurfural, the "Sleeping Giant" of Sustainable Chemistry, Awaken?. *ChemSusChem*, **2019**, 12, 2976-2982	8.3	78
218	Pseudo-Solid-State Suzuki□Miyaura Reaction and the Role of Water Formed by Dehydration of Arylboronic Acids. *European Journal of Organic Chemistry*, **2019**, 2019, 4239-4247	3.2	17
217	Direct Synthesis of Deuterium-Labeled O-, S-, N-Vinyl Derivatives from Calcium Carbide. *Synthesis*, **2019**, 51, 3001-3013	2.9	19
216	Applying Green Metrics to Eco-Friendly Synthesis of Sulfur-Substituted Conjugated Dienes Based on Atom-Economic Hydrothiolation. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 9680-9689	8.3	14
215	Modeling Key Pathways Proposed for the Formation and Evolution of □Cocktail□Type Systems in Pd-Catalyzed Reactions Involving ArX Reagents. *ACS Catalysis*, **2019**, 9, 3991-4005	13.1	40
214	Pd and Pt Catalyst Poisoning in the Study of Reaction Mechanisms: What Does the Mercury Test Mean for Catalysis?. *ACS Catalysis*, **2019**, 9, 2984-2995	13.1	43
213	Phantom Reactivity in Organic and Catalytic Reactions as a Consequence of Microscale Destruction and Contamination-Trapping Effects of Magnetic Stir Bars. *ACS Catalysis*, **2019**, 9, 3070-3081	13.1	61

212	Calcium-Based Sustainable Chemical Technologies for Total Carbon Recycling. *ChemSusChem*, **2019**, 12, 1483-1516	8.3	51
211	Fast and Convenient Method For FE-SEM Characterization of Microstructured Organic Solutions in Ionic Liquids. *Microscopy and Microanalysis*, **2019**, 25, 67-68	0.5	
210	Catalytic Transfer Hydrodebenzylation with Low Palladium Loading. *Advanced Synthesis and Catalysis*, **2019**, 361, 4781-4789	5.6	8
209	Ionic Pd/NHC Catalytic System Enables Recoverable Homogeneous Catalysis: Mechanistic Study and Application in the Mizoroki-Heck Reaction. *Chemistry - A European Journal*, **2019**, 25, 16439	4.8	
208	Ionic Pd/NHC Catalytic System Enables Recoverable Homogeneous Catalysis: Mechanistic Study and Application in the Mizoroki-Heck Reaction. *Chemistry - A European Journal*, **2019**, 25, 16564	4.8	24
207	OX-1 Metal□Organic Framework Nanosheets as Robust Hosts for Highly Active Catalytic Palladium Species. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 5875-5885	8.3	11
206	Evaluation of phytotoxicity and cytotoxicity of industrial catalyst components (Fe, Cu, Ni, Rh and Pd): A case of lethal toxicity of a rhodium salt in terrestrial plants. *Chemosphere*, **2019**, 223, 738-747	8.4	4
205	Monitoring chemical reactions in liquid media using electron microscopy. *Nature Reviews Chemistry*, **2019**, 3, 624-637	34.6	33
204	Revealing interactions of layered polymeric materials at solid-liquid interface for building solvent compatibility charts for 3D printing applications. *Scientific Reports*, **2019**, 9, 20177	4.9	35
203	Relative stabilities of M/NHC complexes (M = Ni, Pd, Pt) against R-NHC, X-NHC and X-X couplings in M(0)/M(ii) and M(ii)/M(iv) catalytic cycles: a theoretical study. *Dalton Transactions*, **2019**, 48, 17052-17062	4.3	7
202	Switchable Ni-catalyzed bis-thiolation of acetylene with aryl disulfides as an access to functionalized alkenes and 1,3-dienes. *Applied Catalysis A: General*, **2019**, 571, 170-179	5.1	11
201	Towards Improved Biorefinery Technologies: 5-Methylfurfural as a Versatile C Platform for Biofuels Development. *ChemSusChem*, **2019**, 12, 185-189	8.3	27
200	Switching the nature of catalytic centers in Pd/NHC systems by solvent effect driven non-classical R-NHC Coupling. *Journal of Computational Chemistry*, **2019**, 40, 191-199	3.5	8
199	Fast and Slow Release of Catalytically Active Species in Metal/NHC Systems Induced by Aliphatic Amines. *Organometallics*, **2018**, 37, 1483-1492	3.8	35
198	"Solvent-in-salt" systems for design of new materials in chemistry, biology and energy research. *Chemical Society Reviews*, **2018**, 47, 1250-1284	58.5	101
197	Ionic liquids in whole-cell biocatalysis: a compromise between toxicity and efficiency. *Biophysical Reviews*, **2018**, 10, 881-900	3.7	31
196	[3 + 2]-Cycloaddition of in Situ Generated Nitrile Imines and Acetylene for Assembling of 1,3-Disubstituted Pyrazoles with Quantitative Deuterium Labeling. *Journal of Organic Chemistry*, **2018**, 83, 3819-3828	4.2	50
195	Rapid □Mix-and-Stir□Preparation of Well-Defined Palladium on Carbon Catalysts for Efficient Practical Use. *ChemCatChem*, **2018**, 10, 1869-1873	5.2	27

194	Micro-scale processes occurring in ionic liquid–water phases during extraction. *Separation and Purification Technology*, **2018**, 196, 318-326	8.3	14
193	Calcium-mediated one-pot preparation of isoxazoles with deuterium incorporation. *Organic Chemistry Frontiers*, **2018**, 5, 226-231	5.2	33
192	A Green and Sustainable Route to Carbohydrate Vinyl Ethers for Accessing Bioinspired Materials with a Unique Microspherical Morphology. *ChemSusChem*, **2018**, 11, 292-298	8.3	23
191	Exploring the performance of nanostructured reagents with organic-group-defined morphology in cross-coupling reaction. *Nature Communications*, **2018**, 9, 2936	17.4	26
190	Vinylation of a Secondary Amine Core with Calcium Carbide for Efficient Post-Modification and Access to Polymeric Materials. *Molecules*, **2018**, 23,	4.8	13
189	Revealing the unusual role of bases in activation/deactivation of catalytic systems: O-NHC coupling in M/NHC catalysis. *Chemical Science*, **2018**, 9, 5564-5577	9.4	44
188	Chemical Transformations of Biomass-Derived C6-Furanic Platform Chemicals for Sustainable Energy Research, Materials Science, and Synthetic Building Blocks. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 8064-8092	8.3	149
187	Improvement of quality of 3D printed objects by elimination of microscopic structural defects in fused deposition modeling. *PLoS ONE*, **2018**, 13, e0198370	3.7	87
186	Systematic Study of the Behavior of Different Metal and Metal-Containing Particles under the Microwave Irradiation and Transformation of Nanoscale and Microscale Morphology. *Nanomaterials* , **2018**, 9,	5.4	5
185	Influence of R–NHC Coupling on the Outcome of R–X Oxidative Addition to Pd/NHC Complexes (R = Me, Ph, Vinyl, Ethynyl). *Organometallics*, **2018**, 37, 787-796	3.8	28
184	Ionic Liquids As Tunable Toxicity Storage Media for Sustainable Chemical Waste Management. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 719-726	8.3	24
183	High-Performance Synthesis of Phosphorus-Doped Graphene Materials and Stabilization of Phosphoric Micro- and Nanodroplets. *Langmuir*, **2018**, 34, 15739-15748	4	8
182	Acetylene in Organic Synthesis: Recent Progress and New Uses. *Molecules*, **2018**, 23,	4.8	63
181	Fundamental importance of ionic interactions in the liquid phase: A review of recent studies of ionic liquids in biomedical and pharmaceutical applications. *Journal of Molecular Liquids*, **2018**, 272, 271-300	6	105
180	SYNTHESIS OF SELECTED TRANSITION METAL AND MAIN GROUP COMPOUNDS WITH SYNTHETIC APPLICATIONS. *Inorganic Syntheses*, **2018**, 155-204		1
179	Sustainable Utilization of Biomass Refinery Wastes for Accessing Activated Carbons and Supercapacitor Electrode Materials. *ChemSusChem*, **2018**, 11, 3599-3608	8.3	55
178	Ten-fold boost of catalytic performance in thiol–yne click reaction enabled by a palladium diketonate complex with a hexafluoroacetylacetonate ligand. *Catalysis Science and Technology*, **2018**, 8, 3073-3080	5.5	5
177	Organoelement chemistry: promising growth areas and challenges. *Russian Chemical Reviews*, **2018**, 87, 393-507	6.8	111

176	Understanding active species in catalytic transformations: From molecular catalysis to nanoparticles, leaching, "cocktails" of catalysts and dynamic systems. *Coordination Chemistry Reviews*, **2017**, 346, 2-19	23.2	223
175	Biological Activity of Ionic Liquids and Their Application in Pharmaceutics and Medicine. *Chemical Reviews*, **2017**, 117, 7132-7189	68.1	847
174	Substrate-Selective C-H Functionalization for the Preparation of Organosulfur Compounds from Crude Oil-Derived Components. *ACS Omega*, **2017**, 2, 1419-1423	3.9	2
173	A solid acetylene reagent with enhanced reactivity: fluoride-mediated functionalization of alcohols and phenols. *Green Chemistry*, **2017**, 19, 3032-3041	10	50
172	A New Mode of Operation of Pd-NHC Systems Studied in a Catalytic Mizoroki–Heck Reaction. *Organometallics*, **2017**, 36, 1981-1992	3.8	97
171	Organic and hybrid systems: from science to practice. *Mendeleev Communications*, **2017**, 27, 425-438	1.9	79
170	Dynamic Behavior of Metal Nanoparticles in Pd/C and Pt/C Catalytic Systems under Microwave and Conventional Heating. *ACS Applied Materials & Interfaces*, **2017**, 9, 36723-36732	9.5	11
169	Three-Dimensional Printing with Biomass-Derived PEF for Carbon-Neutral Manufacturing. *Angewandte Chemie - International Edition*, **2017**, 56, 15931-15935	16.4	76
168	Three-Dimensional Printing with Biomass-Derived PEF for Carbon-Neutral Manufacturing. *Angewandte Chemie*, **2017**, 129, 16147-16151	3.6	18
167	Efficient route for the construction of polycyclic systems from bioderived HMF. *Green Chemistry*, **2017**, 19, 4858-4864	10	41
166	Alkynylation of Bio-Based 5-Hydroxymethylfurfural to Connect Biomass Processing with Conjugated Polymers and Furanic Pharmaceuticals. *Chemistry - an Asian Journal*, **2017**, 12, 2652-2655	4.5	17
165	Investigation of Cytotoxic Activity of Mitoxantrone at the Individual Cell Level by Using Ionic-Liquid-Tag-Enhanced Mass Spectrometry. *Analytical Chemistry*, **2017**, 89, 13374-13381	7.8	16
164	Toxicity of Metal Compounds: Knowledge and Myths. *Organometallics*, **2017**, 36, 4071-4090	3.8	283
163	Rücktitelbild: Three-Dimensional Printing with Biomass-Derived PEF for Carbon-Neutral Manufacturing (Angew. Chem. 50/2017). *Angewandte Chemie*, **2017**, 129, 16308-16308	3.6	
162	Facile Chemical Access to Biologically Active Norcantharidin Derivatives from Biomass. *Molecules*, **2017**, 22,	4.8	16
161	Conversion of plant biomass to furan derivatives and sustainable access to the new generation of polymers, functional materials and fuels. *Russian Chemical Reviews*, **2017**, 86, 357-387	6.8	59
160	An efficient metal-free pathway to vinyl thioesters with calcium carbide as the acetylene source. *Green Chemistry*, **2016**, 18, 482-486	10	54
159	Welche Katalysatormetalle sind harmlos, welche giftig? Vergleich der Toxizitäten von Ni-, Cu-, Fe-, Pd-, Pt-, Rh- und Au-Salzen. *Angewandte Chemie*, **2016**, 128, 12334-12347	3.6	52

158	Which Metals are Green for Catalysis? Comparison of the Toxicities of Ni, Cu, Fe, Pd, Pt, Rh, and Au Salts. *Angewandte Chemie - International Edition*, **2016**, 55, 12150-62	16.4	260
157	Alkynes as a versatile platform for construction of chemical molecular complexity and realization of molecular 3D printing. *Russian Chemical Reviews*, **2016**, 85, 226-247	6.8	30
156	Technological aspects of fructose conversion to high-purity 5-hydroxymethylfurfural, a versatile platform chemical. *Russian Journal of Organic Chemistry*, **2016**, 52, 767-771	0.7	23
155	Selective Synthesis of 2,5-Diformylfuran by Sustainable 4-acetamido-TEMPO/Halogen-Mediated Electrooxidation of 5-Hydroxymethylfurfural. *Chemistry - an Asian Journal*, **2016**, 11, 2578-85	4.5	19
154	Shielding the chemical reactivity using graphene layers for controlling the surface properties of carbon materials. *Physical Chemistry Chemical Physics*, **2016**, 18, 4608-16	3.6	11
153	Do nanoparticles have a survival instinct?. *Mendeleev Communications*, **2016**, 26, 1-2	1.9	3
152	Visible light mediated metal-free thiol-yne click reaction. *Chemical Science*, **2016**, 7, 6740-6745	9.4	86
151	Critical Influence of 5-Hydroxymethylfurfural Aging and Decomposition on the Utility of Biomass Conversion in Organic Synthesis. *Angewandte Chemie*, **2016**, 128, 8478-8482	3.6	33
150	Calcium Carbide: A Unique Reagent for Organic Synthesis and Nanotechnology. *Chemistry - an Asian Journal*, **2016**, 11, 965-76	4.5	87
149	Direct Observation of Self-Organized Water-Containing Structures in the Liquid Phase and Their Influence on 5-(Hydroxymethyl)furfural Formation in Ionic Liquids. *Angewandte Chemie*, **2016**, 128, 2201-2206	3.6	7
148	Critical Influence of 5-Hydroxymethylfurfural Aging and Decomposition on the Utility of Biomass Conversion in Organic Synthesis. *Angewandte Chemie - International Edition*, **2016**, 55, 8338-42	16.4	116
147	Direct Observation of Self-Organized Water-Containing Structures in the Liquid Phase and Their Influence on 5-(Hydroxymethyl)furfural Formation in Ionic Liquids. *Angewandte Chemie - International Edition*, **2016**, 55, 2161-6	16.4	72
146	Modern electron microscopy in the study of chemical systems at the boundary of organic synthesis and catalysis. *Russian Chemical Reviews*, **2016**, 85, 1198-1214	6.8	19
145	Analysis of 3D printing possibilities for the development of practical applications in synthetic organic chemistry. *Russian Chemical Bulletin*, **2016**, 65, 1637-1643	1.7	29
144	Plausible role of nanoparticle contamination in the synthesis and properties of organic electronic materials. *Organic Photonics and Photovoltaics*, **2016**, 4,	5	2
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