Valentin Ananikov

List of Publications by Citations

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	Transition-metal-catalyzed C-S, C-Se, and C-Te bond formation via cross-coupling and atom-economic addition reactions. *Chemical Reviews*, **2011**, 111, 1596-636	68.1	1226
300	Biological Activity of Ionic Liquids and Their Application in Pharmaceutics and Medicine. *Chemical Reviews*, **2017**, 117, 7132-7189	68.1	847
299	Nickel: The Spirited Horse of Transition Metal Catalysis. *ACS Catalysis*, **2015**, 5, 1964-1971	13.1	452
298	Toxicity of ionic liquids: eco(cyto)activity as complicated, but unavoidable parameter for task-specific optimization. *ChemSusChem*, **2014**, 7, 336-60	8.3	312
297	Toxicity of Metal Compounds: Knowledge and Myths. *Organometallics*, **2017**, 36, 4071-4090	3.8	283
296	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
295	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
294	Toward the Ideal Catalyst: From Atomic Centers to a Cocktail of Catalysts. *Organometallics*, **2012**, 31, 1595-1604	3.8	209
293	Pd2(dba)3 as a Precursor of Soluble Metal Complexes and Nanoparticles: Determination of Palladium Active Species for Catalysis and Synthesis. *Organometallics*, **2012**, 31, 2302-2309	3.8	202
292	Unusual Influence of the Structures of Transition Metal Complexes on Catalytic CS and CSe Bond Formation Under Homogeneous and Heterogeneous Conditions. *European Journal of Organic Chemistry*, **2007**, 2007, 3431-3444	3.2	177
291	Target-oriented analysis of gaseous, liquid and solid chemical systems by mass spectrometry, nuclear magnetic resonance spectroscopy and electron microscopy. *Russian Chemical Reviews*, **2013**, 82, 648-685	6.8	169
290	Organic and hybrid molecular systems. *Mendeleev Communications*, **2015**, 25, 75-82	1.9	163
289	Miniaturization of NMR systems: desktop spectrometers, microcoil spectroscopy, and "NMR on a chip" for chemistry, biochemistry, and industry. *Chemical Reviews*, **2014**, 114, 5641-94	68.1	159
288	Mechanistic insight into organic and catalytic reactions by joint studies using mass spectrometry and NMR spectroscopy. *Mendeleev Communications*, **2010**, 20, 125-131	1.9	156
287	Development of new methods in modern selective organic synthesis: preparation of functionalized molecules with atomic precision. *Russian Chemical Reviews*, **2014**, 83, 885-985	6.8	153
286	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
285	Homogeneous Nickel Catalysts for the Selective Transfer of a Single Arylthio Group in the Catalytic Hydrothiolation of Alkynes. *Organometallics*, **2006**, 25, 4462-4470	3.8	149

284	Theoretical Insight into the C□ Coupling Reactions of the Vinyl, Phenyl, Ethynyl, and Methyl Complexes of Palladium and Platinum. *Organometallics*, **2005**, 24, 715-723	3.8	146
283	New approach for size- and shape-controlled preparation of Pd nanoparticles with organic ligands. Synthesis and application in catalysis. *Journal of the American Chemical Society*, **2007**, 129, 7252-3	16.4	123
282	A SEM study of nanosized metal films and metal nanoparticles obtained by magnetron sputtering. *Russian Chemical Bulletin*, **2011**, 60, 2602-2607	1.7	116
281	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
280	Catalytic C-C and C-heteroatom bond formation reactions: in situ generated or preformed catalysts? Complicated mechanistic picture behind well-known experimental procedures. *Journal of Organic Chemistry*, **2013**, 78, 11117-25	4.2	114
279	Organoelement chemistry: promising growth areas and challenges. *Russian Chemical Reviews*, **2018**, 87, 393-507	6.8	111
278	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
277	"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
276	Efficient and Convenient Synthesis of ß-Vinyl Sulfides in Nickel-Catalyzed Regioselective Addition of Thiols to Terminal Alkynes under Solvent-Free Conditions. *Organometallics*, **2006**, 25, 1970-1977	3.8	101
275	A New Mode of Operation of Pd-NHC Systems Studied in a Catalytic Mizoroki–Heck Reaction. *Organometallics*, **2017**, 36, 1981-1992	3.8	97
274	Vinyl-vinyl coupling on late transition metals through C-C reductive elimination mechanism. A computational study. *Journal of the American Chemical Society*, **2002**, 124, 2839-52	16.4	95
273	Recent advances in computational predictions of NMR parameters for the structure elucidation of carbohydrates: methods and limitations. *Chemical Society Reviews*, **2013**, 42, 8376-415	58.5	93
272	Mechanistic Investigation and New Catalyst Design in Palladium- and Platinum-Catalyzed Se–Se Bond Addition to Alkynes. *Organometallics*, **2003**, 22, 1414-1421	3.8	91
271	Critical Effect of Phosphane Ligands on the Mechanism of Carbon–Carbon Bond Formation Involving Palladium(II) Complexes: A Theoretical Investigation of Reductive Elimination from Square-Planar and T-Shaped Species. *European Journal of Inorganic Chemistry*, **2007**, 2007, 5390-5399	2.3	90
270	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
269	Nickel(II) Chloride-Catalyzed Regioselective Hydrothiolation of Alkynes. *Advanced Synthesis and Catalysis*, **2005**, 347, 1993-2001	5.6	87
268	Calcium Carbide: A Unique Reagent for Organic Synthesis and Nanotechnology. *Chemistry - an Asian Journal*, **2016**, 11, 965-76	4.5	87
267	PEG as an alternative reaction medium in metal-mediated transformations. *Coordination Chemistry Reviews*, **2012**, 256, 2893-2920	23.2	86

266	Visible light mediated metal-free thiol-yne click reaction. *Chemical Science*, **2016**, 7, 6740-6745	9.4	86
265	Challenges in the development of organic and hybrid molecular systems. *Mendeleev Communications*, **2016**, 26, 365-374	1.9	86
264	How sensitive and accurate are routine NMR and MS measurements?. *Mendeleev Communications*, **2015**, 25, 454-456	1.9	84
263	Catalytic adaptive recognition of thiol (SH) and selenol (SeH) groups toward synthesis of functionalized vinyl monomers. *Journal of the American Chemical Society*, **2012**, 134, 6637-49	16.4	84
262	Organic and hybrid systems: from science to practice. *Mendeleev Communications*, **2017**, 27, 425-438	1.9	79
261	New Catalytic System for S–H and Se–e Bond Addition to Alkynes Based on Phosphite Ligands. *Organometallics*, **2005**, 24, 1275-1283	3.8	79
260	When Will 5-Hydroxymethylfurfural, the "Sleeping Giant" of Sustainable Chemistry, Awaken?. *ChemSusChem*, **2019**, 12, 2976-2982	8.3	78
259	Three-Dimensional Printing with Biomass-Derived PEF for Carbon-Neutral Manufacturing. *Angewandte Chemie - International Edition*, **2017**, 56, 15931-15935	16.4	76
258	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
257	Addition reactions of E-E and E-H bonds to triple bond of alkynes catalyzed by Pd, Pt, and Ni complexes (E=S, Se). *Pure and Applied Chemistry*, **2007**, 79, 1041-1056	2.1	69
256	Characterization of molecular systems and monitoring of chemical reactions in ionic liquids by nuclear magnetic resonance spectroscopy. *Chemical Reviews*, **2011**, 111, 418-54	68.1	67
255	Remarkable ligand effect in Ni- and Pd-catalyzed bisthiolation and bisselenation of terminal alkynes: solving the problem of stereoselective dialkyldichalcogenide addition to the C triple chemical bond C Bond. *Chemistry - A European Journal*, **2008**, 14, 2420-34	4.8	66
254	Mechanistic study of palladium catalyzed S–H and Se–e bonds addition to alkynes. *Journal of Organometallic Chemistry*, **2003**, 687, 451-461	2.3	66
253	Highly Efficient Nickel-Based Heterogeneous Catalytic System with Nanosized Structural Organization for Selective Se–H Bond Addition to Terminal and Internal Alkynes. *Organometallics*, **2007**, 26, 740-750	3.8	63
252	Acetylene in Organic Synthesis: Recent Progress and New Uses. *Molecules*, **2018**, 23,	4.8	63
251	Acid-Free Nickel Catalyst for Stereo- and Regioselective Hydrophosphorylation of Alkynes: Synthetic Procedure and Combined Experimental and Theoretical Mechanistic Study. *Advanced Synthesis and Catalysis*, **2010**, 352, 2979-2992	5.6	62
250	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
249	An unexpected increase of toxicity of amino acid-containing ionic liquids. *Toxicology Research*, **2015**, 4, 152-159	2.6	60

248	Self-assembled selenium monolayers: from nanotechnology to materials science and adaptive catalysis. *Chemistry - A European Journal*, **2013**, 19, 17640-60	4.8	60
247	General and selective head-to-head dimerization of terminal alkynes proceeding via hydropalladation pathway. *Organic Letters*, **2012**, 14, 2846-9	6.2	60
246	The first molecular level monitoring of carbohydrate conversion to 5-hydroxymethylfurfural in ionic liquids. B2O3--an efficient dual-function metal-free promoter for environmentally benign applications. *ChemSusChem*, **2012**, 5, 783-9	8.3	59
245	Two distinct mechanisms of alkyne insertion into the metal-sulfur bond: combined experimental and theoretical study and application in catalysis. *Chemistry - A European Journal*, **2010**, 16, 2063-71	4.8	59
244	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
243	Fast and accurate computational modeling of adsorption on graphene: a dispersion interaction challenge. *Physical Chemistry Chemical Physics*, **2013**, 15, 18815-21	3.6	56
242	Celebrating 20 Years of SYNLETT - Special Essay: General Procedure for the Palladium-Catalyzed Selective Hydrophosphorylation of Alkynes. *Synlett*, **2009**, 2009, 2375-2381	2.2	56
241	Palladium and platinum catalyzed hydroselenation of alkynes: Se?H vs Se?Se addition to C?C bond. *Journal of Organometallic Chemistry*, **2003**, 679, 162-172	2.3	56
240	Sustainable Utilization of Biomass Refinery Wastes for Accessing Activated Carbons and Supercapacitor Electrode Materials. *ChemSusChem*, **2018**, 11, 3599-3608	8.3	55
239	An efficient metal-free pathway to vinyl thioesters with calcium carbide as the acetylene source. *Green Chemistry*, **2016**, 18, 482-486	10	54
238	Palladium-catalyzed addition of disulfides and diselenides to alkynes under solvent free conditions. *Organic and Biomolecular Chemistry*, **2004**, 2, 284-7	3.9	54
237	Cytotoxic Activity of Salicylic Acid-Containing Drug Models with Ionic and Covalent Binding. *ACS Medicinal Chemistry Letters*, **2015**, 6, 1099-104	4.3	53
236	Expanded-ring N-heterocyclic carbenes efficiently stabilize gold(I) cations, leading to high activity in □acid-catalyzed cyclizations. *Chemistry - A European Journal*, **2014**, 20, 6162-70	4.8	53
235	Welche Katalysatormetalle sind harmlos, welche giftig? Vergleich der Toxizit□en von Ni-, Cu-, Fe-, Pd-, Pt-, Rh- und Au-Salzen. *Angewandte Chemie*, **2016**, 128, 12334-12347	3.6	52
234	Stereodefined Synthesis of a New Type of 1,3-Dienes by Ligand-Controlled Carbon□Carbon and Carbon□Heteroatom Bond Formation in Nickel-Catalyzed Reaction of Diaryldichalcogenides with Alkynes. *Organometallics*, **2008**, 27, 4056-4061	3.8	52
233	Calcium-Based Sustainable Chemical Technologies for Total Carbon Recycling. *ChemSusChem*, **2019**, 12, 1483-1516	8.3	51
232	A solid acetylene reagent with enhanced reactivity: fluoride-mediated functionalization of alcohols and phenols. *Green Chemistry*, **2017**, 19, 3032-3041	10	50
231	[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

230	Ni(acac)2/Phosphine as an Excellent Precursor of Nickel(0) for Catalytic Systems. *Organometallics*, **2010**, 29, 5098-5102	3.8	45
229	The First Example of Polymer-Supported Palladium Catalyst for Stereoselective S-S Bond Addition to Terminal Alkynes. *Synlett*, **2005**, 2005, 1015-1017	2.2	45
228	Pd-NHC Catalytic System for the Efficient Atom-Economic Synthesis of Vinyl Sulfides from Tertiary, Secondary, or Primary Thiols. *ACS Catalysis*, **2015**, 5, 7208-7213	13.1	44
227	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
226	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
225	Spatial imaging of carbon reactivity centers in Pd/C catalytic systems. *Chemical Science*, **2015**, 6, 3302-3313	9.4	43
224	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
223	Noninnocent Nature of Carbon Support in Metal/Carbon Catalysts: Etching/Pitting vs Nanotube Growth under Microwave Irradiation. *ACS Catalysis*, **2014**, 4, 3806-3814	13.1	43
222	Efficient route for the construction of polycyclic systems from bioderived HMF. *Green Chemistry*, **2017**, 19, 4858-4864	10	41
221	Real size of ligands, reactants and catalysts: Studies of structure, reactivity and selectivity by ONIOM and other hybrid computational approaches?. *Journal of Molecular Catalysis A*, **2010**, 324, 104-119		41
220	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
219	Alkyne insertion into the M-P and M-H bonds (M=Pd, Ni, Pt, and Rh): a theoretical mechanistic study of the C-P and C-H bond-formation steps. *Chemistry - an Asian Journal*, **2011**, 6, 1423-30	4.5	39
218	Unprecedented Control of Selectivity in Nickel-Catalyzed Hydrophosphorylation of Alkynes: Efficient Route to Mono- and Bisphosphonates. *Advanced Synthesis and Catalysis*, **2014**, 356, 771-780	5.6	38
217	Facile Hydrolysis of Nickel(II) Complexes with N-Heterocyclic Carbene Ligands. *Organometallics*, **2015**, 34, 5759-5766	3.8	38
216	Fast and Slow Release of Catalytically Active Species in Metal/NHC Systems Induced by Aliphatic Amines. *Organometallics*, **2018**, 37, 1483-1492	3.8	35
215	Preparation of metal "nanosalts" and their application in catalysis: heterogeneous and homogeneous pathways. *Dalton Transactions*, **2011**, 40, 4011-23	4.3	35
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213	Nature of the Copper-Oxide-Mediated C–S Cross-Coupling Reaction: Leaching of Catalytically Active Species from the Metal Oxide Surface. *ACS Catalysis*, **2016**, 6, 3637-3643	13.1	35

212	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
211	Calcium-mediated one-pot preparation of isoxazoles with deuterium incorporation. *Organic Chemistry Frontiers*, **2018**, 5, 226-231	5.2	33
210	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
209	Monitoring chemical reactions in liquid media using electron microscopy. *Nature Reviews Chemistry*, **2019**, 3, 624-637	34.6	33
208	First principles design of derivatizing agent for direct determination of enantiomeric purity of chiral alcohols and amines by NMR spectroscopy. *Chemical Communications*, **2010**, 46, 3212-4	5.8	32
207	Ionic liquids in whole-cell biocatalysis: a compromise between toxicity and efficiency. *Biophysical Reviews*, **2018**, 10, 881-900	3.7	31
206	Carboxylate switch between hydro- and carbopalladation pathways in regiodivergent dimerization of alkynes. *Chemistry - A European Journal*, **2014**, 20, 9578-88	4.8	31
205	Catalyst Leaching as an Efficient Tool for Constructing New Catalytic Reactions: Application to the Synthesis of Cyclic Vinyl Sulfides and Vinyl Selenides. *European Journal of Inorganic Chemistry*, **2009**, 2009, 1149-1161	2.3	31
204	Palladium-catalyzed activation of E-E and C-E bonds in diaryl dichalcogenides (E = S, Se) under microwave irradiation conditions. *Russian Chemical Bulletin*, **2005**, 54, 576-587	1.7	31
203	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
202	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
201	Can Steric Effects Induce the Mechanism Switch in the Rhodium-Catalyzed Imine Boration Reaction? A Density Functional and ONIOM Study. *Organometallics*, **2005**, 24, 1938-1946	3.8	30
200	Efficient general procedure to access a diversity of gold(0) particles and gold(I) phosphine complexes from a simple HAuCl4 source. Localization of homogeneous/heterogeneous system's interface and field-emission scanning electron microscopy study. *Journal of the American Chemical Society*, **2013**, 135, 3550-9	16.4	29
199	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
198	Catalytic hydrofunctionalization of alkynes through P-H bond addition: the unique role of orientation and properties of the phosphorus group in the insertion step. *Chemistry - A European Journal*, **2011**, 17, 12623-30	4.8	28
197	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
196	Molecular Extraction of Peptides in Ionic Liquid Systems. *ACS Sustainable Chemistry and Engineering*, **2015**, 3, 357-364	8.3	27
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	Towards Improved Biorefinery Technologies: 5-Methylfurfural as a Versatile C Platform for Biofuels Development. *ChemSusChem*, **2019**, 12, 185-189	8.3	27
193	Exploring the performance of nanostructured reagents with organic-group-defined morphology in cross-coupling reaction. *Nature Communications*, **2018**, 9, 2936	17.4	26
192	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
191	Nickel-catalyzed addition of benzenethiol to alkynes: Formation of carbon-sulfur and carbon-carbon bonds. *Russian Chemical Bulletin*, **2006**, 55, 2109-2113	1.7	24
190	Ionic Liquids As Tunable Toxicity Storage Media for Sustainable Chemical Waste Management. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 719-726	8.3	24
189	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
188	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
187	Nanoscale organization of ionic liquids and their interaction with peptides probed by 13C NMR spectroscopy. *Tetrahedron*, **2014**, 70, 6075-6081	2.4	23
186	1,4-Diiodo-1,3-dienes: versatile reagents in organic synthesis. *Chemistry - an Asian Journal*, **2011**, 6, 306-22	4.5	23
185	The comparison of addition of molecules possessing P(V)-H bond to alkynes catalyzed with Pd and Ni complexes. *Russian Journal of Organic Chemistry*, **2010**, 46, 1269-1276	0.7	23
184	Catalytic Triple Bond Activation and Vinyl–Vinyl Reductive Coupling by Pt(IV) Complexes. A Density Functional Study. *Organometallics*, **2001**, 20, 1652-1667	3.8	23
183	Unusual Control of Reaction Selectivity through a Subtle Change in the Ligand: Proof of Concept and Application in Pd-Catalyzed C–P Bond Formation. *European Journal of Organic Chemistry*, **2012**, 2012, 3830-3840	3.2	22
182	NMR approach for the identification of dinuclear and mononuclear complexes: The first detection of [Pd(SPh)2(PPh3)2] and [Pd2(SPh)4(PPh3)2] – The intermediate complexes in the catalytic carbon–sulfur bond formation reaction. *Journal of Organometallic Chemistry*, **2011**, 696, 400-405	2.3	22
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180	Selectivity control in thiol-yne click reactions visible light induced associative electron upconversion. *Chemical Science*, **2020**, 11, 10061-10070	9.4	21
179	Ab initio study of the mechanisms of intermolecular and intramolecular [4 + 2] cycloaddition reactions of conjugated enynes. *Journal of Physical Organic Chemistry*, **2001**, 14, 109-121	2.1	20
178	Synthesis of HIV-1 capsid protein assembly inhibitor (CAP-1) and its analogues based on a biomass approach. *Organic and Biomolecular Chemistry*, **2016**, 14, 10593-10598	3.9	20
177	A tunable precious metal-free system for selective oxidative esterification of biobased 5-(hydroxymethyl)furfural. *Green Chemistry*, **2019**, 21, 3464-3468	10	19

176	Direct Synthesis of Deuterium-Labeled O-, S-, N-Vinyl Derivatives from Calcium Carbide. *Synthesis*, **2019**, 51, 3001-3013	2.9	19
175	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
174	Calcium carbide as a convenient acetylene source in the synthesis of unsaturated sulfides, promising functionalized monomers. *Mendeleev Communications*, **2015**, 25, 415-416	1.9	19
173	Widely accessible 3D printing technologies in chemistry, biochemistry and pharmaceutics: applications, materials and prospects. *Russian Chemical Reviews*, **2020**, 89, 1507-1561	6.8	19
172	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
171	Three-Dimensional Printing with Biomass-Derived PEF for Carbon-Neutral Manufacturing. *Angewandte Chemie*, **2017**, 129, 16147-16151	3.6	18
170	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
169	Exclusive selectivity in the one-pot formation of C-C and C-Se bonds involving Ni-catalyzed alkyne hydroselenation: optimization of the synthetic procedure and a mechanistic study. *Journal of Organic Chemistry*, **2014**, 79, 12111-21	4.2	18
168	Computational study of a model system of enzyme-mediated [4+2] cycloaddition reaction. *PLoS ONE*, **2015**, 10, e0119984	3.7	18
167	NMR analysis of chiral alcohols and amines: development of an environmentally benign “in tube” procedure with high efficiency and improved detection limit. *Green Chemistry*, **2011**, 13, 1735	10	18
166	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
165	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
164	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
163	Solvent-free palladium-catalyzed addition of diaryl dichalcogenides to alkynes. *Russian Chemical Bulletin*, **2004**, 53, 561-565	1.7	17
162	An environment-friendly approach to produce nanostructured germanium anodes for lithium-ion batteries. *Green Chemistry*, **2020**, 22, 359-367	10	17
161	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
160	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
159	Facile Chemical Access to Biologically Active Norcantharidin Derivatives from Biomass. *Molecules*, **2017**, 22,	4.8	16

158	Stable Pt(IV) vinylic complexes with unusual regioselectivity formed in the reaction of methylpropiolate triple bond activation. *Journal of Organometallic Chemistry*, **2001**, 636, 175-181	2.3	16
157	Metal nanoparticles in ionic liquids: Synthesis and catalytic applications. *Coordination Chemistry Reviews*, **2021**, 445, 213982	23.2	16
156	Recent advances in applications of vinyl ether monomers for precise synthesis of custom-tailored polymers. *European Polymer Journal*, **2020**, 136, 109872	5.2	15
155	Modeling of NMR spectra and signal assignment using real-time DFT/GIAO calculations. *Russian Chemical Bulletin*, **2011**, 60, 783-789	1.7	15
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153	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
152	Carboxylic Group-Assisted Proton Transfer in Gold-Mediated Thiolation of Alkynes. *Organometallics* , **2015**, 34, 5214-5224	3.8	14
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150	Synthesis of Phosphorus Compounds via Metal-Catalyzed Addition of P–H Bond to Unsaturated Organic Molecules. *Catalysis By Metal Complexes*, **2011**, 213-264		14
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