Mikhail S Nechaev

List of Publications by Year
in descending order

104	2,440	201674	233421
papers	citations	27 h-index	45 g-index

110	110	110	2277
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Development of new methods in modern selective organic synthesis: preparation of functionalized molecules with atomic precision. Russian Chemical Reviews, 2014, 83, 885-985.	6.5	182
2	Energy Partitioning Analysis of the Bonding in Ethylene and Acetylene Complexes of Group 6, 8, and 11 Metals:Â (CO)5TMâˆ’C2Hxand Cl4TMâˆ’C2Hx(TM = Cr, Mo, W), (CO)4TMâˆ’C2Hx(TM = Fe, Ru, Os), and TM+âˆ’C2Hx(TM = Cu, Ag, Au)â€‚Â§â€‚Š¥. Journal of Physical Chemistry A, 2004, 108, 3134-3142.	2.5	146
3	N-heterocyclic carbenes bearing two, one and no nitrogen atoms at the ylidene carbon: insight from theoretical calculations. Dalton Transactions, 2009, , 7015.	3.3	96
4	Six- and seven-membered ring carbenes: Rational synthesis of amidinium salts, generation of carbenes, synthesis of Ag(I) and Cu(I) complexes. Journal of Organometallic Chemistry, 2009, 694, 2454-2462.	1.8	89
5	Combustion behavior and physico-chemical properties of dihydroxylammonium 5,5â€²-bistetrazole-1,1â€²-diolate (TKX-50). Thermochimica Acta, 2015, 614, 85-92.	2.7	88
6	Pursuing reliable thermal analysis techniques for energetic materials: decomposition kinetics and thermal stability of dihydroxylammonium 5,5â€²-bistetrazole-1,1â€²-diolate (TKX-50). Physical Chemistry Chemical Physics, 2017, 19, 436-449.	2.8	88
7	New Stable Germylenes, Stannylenes, and Related Compounds. 1. Stable Germanium(II) and Tin(II) Compounds M(OCH2CH2NMe2)2(M = Ge, Sn) with Intramolecular Coordination Metalâˆ’Nitrogen Bonds. Synthesis and Structure. Organometallics, 2003, 22, 1675-1681.	2.3	82
8	Expanded ring diaminocarbene palladium complexes: synthesis, structure, and Suzukiâ€“Miyaura cross-coupling of heteroaryl chlorides in water. Dalton Transactions, 2013, 42, 6859.	3.3	82
9	Janus tricyclononene polymers bearing tri(n-alkoxy)silyl side groups for membrane gas separation. Journal of Materials Chemistry A, 2018, 6, 19393-19408.	10.3	68
10	Solventâ€Free Buchwaldâ€“Hartwig (Hetero)arylation of Anilines, Diarylamines, and Dialkylamines Mediated by Expandedâ€Ring Nâ€Heterocyclic Carbene Palladium Complexes. European Journal of Organic Chemistry, 2016, 2016, 1908-1914.	2.4	62
11	Expandedâ€Ring Nâ€Heterocyclic Carbenes Efficiently Stabilize Gold(I) Cations, Leading to High Activity in Ï€â€Acidâ€Catalyzed Cyclizations. Chemistry - A European Journal, 2014, 20, 6162-6170.	3.3	59
12	Solventâ€Free Buchwaldâ€“Hartwig Reaction of Aryl and Heteroaryl Halides with Secondary Amines. European Journal of Organic Chemistry, 2014, 2014, 3319-3322.	2.4	49
13	Miyaura Borylation and Oneâ€Pot Twoâ€Step Homocoupling of Aryl Chlorides and Bromides under Solventâ€Free Conditions. Advanced Synthesis and Catalysis, 2016, 358, 977-983.	4.3	49
14	New Stable Germylenes, Stannylenes, and Related Compounds. 3. Stable Monomers XGeOCH2CH2NMe2(X = Cl, OCOMe) with Only One Intramolecular Coordination Metalâˆ’Nitrogen Bond:Â Synthesis and Structure. Organometallics, 2003, 22, 5441-5446.	2.3	44
15	Eight-membered-ring diaminocarbenes bearing naphthalene moiety in the backbone: DFT studies, synthesis of amidinium salts, generation of free carbene, metal complexes, and solvent-free copper catalyzed azideâ€“alkyne cycloaddition (CuAAC) reaction. Dalton Transactions, 2017, 46, 4331-4345.	3.3	43
16	Reactivity of a C,N-Chelated Stannoxane. Organometallics, 2009, 28, 2629-2632.	2.3	41
17	Polymerization of 5-Alkylidene-2-norbornenes with Highly Active Pdâ€“N-Heterocyclic Carbene Complex Catalysts: Catalyst Structureâ€“Activity Relationships. ACS Catalysis, 2020, 10, 1663-1678.	11.2	36
18	Dual reactivity of N-heterocyclic carbenes towards copper(ii) salts. Dalton Transactions, 2011, 40, 3074.	3.3	35

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19	Divalent silicon, germanium, and tin compounds with elementâ€"heteroatom bonds. Russian Chemical Bulletin, 2004, 53, 980-1006.	1.5	34
20	Mild and Regioselective Synthesis of 3â€CF₃â€Pyrazoles by the AgOTfâ€Catalysed Reaction of CF₃â€Ynones with Hydrazines. European Journal of Organic Chemistry, 2018, 2018, 3750-3755.	2.4	33
21	Mechanisms in the Reaction of Palladium(II)â€"Ïâ€Allyl Complexes with Aryl Halides: Evidence for NHC Exchange Between Two Palladium Complexes. Chemistry - A European Journal, 2009, 15, 7063-7073.	3.3	32
22	Effect of AuPd Bimetal Sensitization on Gas Sensing Performance of Nanocrystalline SnO2 Obtained by Single Step Flame Spray Pyrolysis. Nanomaterials, 2019, 9, 728.	4.1	31
23	Mixed er-NHC/phosphine Pd(<scp>ii</scp>) complexes and their catalytic activity in the Buchwaldâ€"Hartwig reaction under solvent-free conditions. Dalton Transactions, 2019, 48, 3447-3452.	3.3	31
24	New stable germylenes, stannylenes, and related compounds. Journal of Organometallic Chemistry, 2005, 690, 1172-1177.	1.8	30
25	Modifications of addition poly(5-vinyl-2-norbornene) and gas-transport properties of the obtained polymers. Reactive and Functional Polymers, 2020, 149, 104513.	4.1	30
26	Solvent-Controlled Ring Size in Double C,N-Chelated Stannoxanes. Organometallics, 2008, 27, 5303-5308.	2.3	29
27	Can Sn(OCH2CH2NMe2)2 behave as a stannylene? Equatorialâ€"axial isomerism in the tin(ii)â€"iron(0) complex (Me2NCH2CH2O)2Snâ€"Fe(CO)4. Dalton Transactions, 2007, , 3489.	3.3	28
28	Suzukiâ€"Miyaura Crossâ€Coupling under Solventâ€Free Conditions. Advanced Synthesis and Catalysis, 2013, 355, 3553-3557.	4.3	28
29	Regioâ€and Stereoselective Dimerization of Arylacetylenes and Optical and Electrochemical Studies of (E)â€1,3â€Enynes. Advanced Synthesis and Catalysis, 2014, 356, 2671-2678.	4.3	28
30	Hydrohydrazination of Arylalkynes Catalyzed by an Expanded Ring Nâ€Heterocyclic Carbene (erâ€NHC) Gold Complex Under Solventâ€Free Conditions. Advanced Synthesis and Catalysis, 2016, 358, 1463-1468.	4.3	27
31	C,N-chelated hexaorganodistannanes, and triorganotin(IV) hydrides and cyclopentadienides. Journal of Organometallic Chemistry, 2009, 694, 3000-3007.	1.8	26
32	Donor-Stabilized Germyl Cations. Stable Pentacoordinate Germanium Chloride [PhGe(OCH2CH2NMe2)2][Cl]. Organometallics, 2006, 25, 2501-2504.	2.3	25
33	Germylene and stannylene (Me2NCH2CH2O)2E as strong Ïƒ-donor ligands for transition metal complexes [ML(CO)n] (E=Ge, Sn; M=Cr, Mo, W, n=4 or 5; M=Fe, n=4). Synthesis, spectroscopic and theoretical study. Journal of Organometallic Chemistry, 2009, 694, 3149-3153.	1.8	24
34	Reactivity of C,Nâ€Chelated Stannylene with Azobenzene. European Journal of Inorganic Chemistry, 2009, 2009, 2058-2061.	2.0	22
35	An unprecedentedly simple method of synthesis of aryl azides and 3-hydroxytriazenes. Green Chemistry, 2016, 18, 5984-5988.	9.0	22
36	Solvent-free Buchwaldâ€"Hartwig amination with low palladium loadings. Mendeleev Communications, 2017, 27, 618-620.	1.6	21

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37	Stannylation of Aryl Halides, Stille Crossâ€Coupling, and Oneâ€Pot, Twoâ€Step Stannylation/Stille Crossâ€Coupling Reactions under Solventâ€Free Conditions. European Journal of Organic Chemistry, 2018, 2018, 120-125.	2.4	21
38	Solvent-free Suzuki and Stille cross-coupling reactions of 4- and 5-halo-1,2,3-triazoles. Mendeleev Communications, 2019, 29, 147-149.	1.6	20
39	Solvent- and transition metal-free amide synthesis from phenyl esters and aryl amines. RSC Advances, 2019, 9, 1536-1540.	3.6	20
40	Azideâ€“Alkyne Cycloaddition (CuAAC) in Alkane Solvents Catalyzed by Fluorinated NHC Copper(I) Complex. European Journal of Organic Chemistry, 2019, 2019, 1016-1020.	2.4	20
41	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.	6.0	19
42	Aminostannanes and aminostannylenes containing a C,N-chelated ligand. Journal of Organometallic Chemistry, 2010, 695, 2651-2657.	1.8	18
43	Reactivity of a C,N-chelated stannylene with chalcogens. Journal of Organometallic Chemistry, 2009, 694, 2871-2874.	1.8	17
44	Microporous Materials Based on Norbornadiene-Based Cross-Linked Polymers. Polymers, 2018, 10, 1382.	4.5	17
45	Optimization Studies on Synthesis of <scp>TKX</scp>â€50. Chinese Journal of Chemistry, 2017, 35, 98-102.	4.9	16
46	An Unusual Reaction of (Î²-Dimethylaminoethoxy)triethyltin with Phenyltin Trichloride. The First X-ray Structural Evidence of the Existence of Complexes R2SnXYÂ·R2SnXY (R = Alkyl, Aryl; X, Y = Hal, OR, X â‰ Y) Both as Unsymmetrical Adducts [R2SnX2Â·R2SnY2] and Symmetrical Dimers [R2SnXY]2. European Journal of Inorganic Chemistry, 2006, 2006, 4271-4277.	2.0	15
47	Reduction of C,N-chelated Diorganotin(IV) Dichlorides. Journal of Organometallic Chemistry, 2010, 695, 1843-1847.	1.8	15
48	General Method for the Synthesis of 1,4â€Disubstituted 5â€Haloâ€1,2,3â€triazoles. European Journal of Organic Chemistry, 2017, 2017, 5225-5230.	2.4	15
49	Ring size and nothing else matters: unusual regioselectivity of alkyne hydration by NHC gold(<scp>i</scp>) complexes. Chemical Communications, 2021, 57, 5686-5689.	4.1	15
50	Reaction of donor-acceptor cyclopropanes with 1,3-diphenylisobenzofuran. Lewis acid effect on the reaction pathway. Russian Chemical Bulletin, 2013, 62, 2407-2423.	1.5	14
51	A general method of Suzukiâ€“Miyaura cross-coupling of 4- and 5-halo-1,2,3-triazoles in water. Organic and Biomolecular Chemistry, 2017, 15, 9575-9578.	2.8	14
52	Cyclometallated 1,2,3-triazol-5-ylidene iridium(III) complexes: synthesis, structure, and photoluminescence properties. Mendeleev Communications, 2019, 29, 128-131.	1.6	14
53	Reverse Kocheshkov reaction â€“ Redistribution reactions between RSn(OCH2CH2NMe2)2Cl (R=Alk, Ar) and PhSnCl3: Experimental and DFT study. Journal of Organometallic Chemistry, 2008, 693, 3847-3850.	1.8	13
54	Heteroleptic tin (II) dialkoxides stabilized by intramolecular coordination Sn(OCH2CH2NMe2)(OR) (R=Me, Et, iPr, tBu, Ph). Synthesis, structure and catalytic activity in polyurethane synthesis. Journal of Organometallic Chemistry, 2009, 694, 3184-3189.	1.8	13

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55	Addition homo- and copolymerization of 3-triethoxysilyltricyclo[4.2.1.02,5]non-7-ene. Russian Chemical Bulletin, 2018, 67, 121-126.	1.5	13
56	Bis(Î¼²-2-(dimethylamino)ethoxo-N,O,O)-di(phenolato-O)ditin(II): a high-resolution single-crystal X-ray diffraction and quantum chemical study. Acta Crystallographica Section B: Structural Science, 2011, 67, 315-323.	1.8	12
57	Catalytic activity of palladium complexes with stable diaminocarbenes containing five-, six- and seven-membered rings in the Suzuki-Miyaura reaction. Russian Chemical Bulletin, 2014, 63, 890-894.	1.5	12
58	Nitromethane as a reagent for the synthesis of 3-nitroindoles from 2-haloarylamine derivatives. Russian Chemical Bulletin, 2020, 69, 2370-2377.	1.5	12
59	Rare-Earth Complexes with the 5,5â€²-Bitetrazolate Ligand - Synthesis, Structure, Luminescence Properties, and Combustion Catalysis. European Journal of Inorganic Chemistry, 2018, 2018, 805-815.	2.0	11
60	Addition Homoâ€•and Copolymerizations of Dicyclopentadiene and 5â€nâ€Hexylnorbornene in the Presence of Pdâ€Nâ€Heterocyclic Carbene Complexes. Macromolecular Chemistry and Physics, 2018, 219, 1800323.	2.2	11
61	Transitionâ€Metalâ€Free Synthesis of 1,2â€Disubstituted Indoles. European Journal of Organic Chemistry, 2019, 2019, 4844-4854.	2.4	11
62	Tetrylenes: Electronic Structure, Stability, Reactivity, and Ligand Propertiesâ€”A Comparative DFT Study. Organometallics, 2021, 40, 3408-3423.	2.3	11
63	New organogermanium cations [RGe(OCH2CH2NME2)2]+ with intramolecular Nâ†’Ge coordination bonds. Russian Chemical Bulletin, 2007, 56, 926-934.	1.5	10
64	Making endo-cyclizations favorable again: a conceptually new synthetic approach to benzotriazoles via azide group directed lithiation/cyclization of 2-azidoaryl bromides. Organic and Biomolecular Chemistry, 2019, 17, 4523-4534.	2.8	10
65	NHC Pdii complexes for the solvent-free telomerisation of isoprene with methanol. Mendeleev Communications, 2021, 31, 478-480.	1.6	10
66	The heteronuclear bonding between heavier Group 14 elements and transition metals: a novel trioxystannateâ€“iron complex with an unusual stannate fragment. Dalton Transactions, 2008, , 1140.	3.3	9
67	Title is missing!. Russian Chemical Bulletin, 2002, 51, 721-753.	1.5	8
68	Reexamination of an Energetic Nitrate Ester SHN. Propellants, Explosives, Pyrotechnics, 2017, 42, 1014-1019.	1.6	8
69	One-pot two-step stannylation/Stille homocoupling of aryl bromides and iodides under solvent-free conditions. Mendeleev Communications, 2018, 28, 323-325.	1.6	8
70	Synthesis, Molecular, and Gas-Transport Properties of Homopolymers Based on 5-Ethylidene-2-norbornene and 5-Vinyl-2-norbornene. Polymer Science - Series C, 2019, 61, 86-101.	1.7	8
71	Deep blue luminescent cyclometallated 1,2,3-triazol-5-ylidene iridium(iii) complexes. Mendeleev Communications, 2020, 30, 717-718.	1.6	8
72	New expanded-ring NHC platinum(0) complexes: Synthesis, structure and highly efficient diboration of terminal alkenes. Journal of Organometallic Chemistry, 2020, 912, 121140.	1.8	8

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73	Evidence for Indirect Action of Ionizing Radiation in 18-Crown-6 Complexes with Halogenous Salts of Strontium: Simulation of Radiation-Induced Transformations in Ionic Liquid/Crown Ether Compositions. Journal of Physical Chemistry B, 2018, 122, 1992-2000.	2.6	7
74	Impact of the RAFT/MADIX agent on protonated diallylammonium monomer cyclopolymerization with efficient chain transfer to monomer. European Polymer Journal, 2020, 122, 109363.	5.4	7
75	Title is missing!. Russian Chemical Bulletin, 2001, 50, 1679-1682.	1.5	6
76	Germanium carboxylates: the first X-ray diffraction study of germanium(II) dicarboxylate and germanium(IV) tetracarboxylate. Applied Organometallic Chemistry, 2005, 19, 774-777.	3.5	6
77	New type of reactions of stannylenes with organic azides: Theoretical study. Computational and Theoretical Chemistry, 2008, 862, 49-52.	1.5	6
78	In search for a pentacoordinated monoorgano stannyl cation. Journal of Organometallic Chemistry, 2010, 695, 365-369.	1.8	6
79	Solvent-free palladium-catalyzed Câ€“O cross-coupling of aryl bromides with phenols. Mendeleev Communications, 2021, 31, 409-411.	1.6	6
80	Molecular geometry and electronic structures of stable organic derivatives of divalent germanium and tin $$[(operatorname{Me} _3 operatorname{Si})_2 operatorname{N} {kern 1pt} ---{kern 1pt} Me_2]_n$$ (M = Ge, n = 1; M = Sn, n = 2): a theoretical study. Russian Chemical Bulletin, 2005, 54, 108-116.	1.5	5
81	Novel Intramolecular CArylâ€“S Bond Activation by an Electron Rich, Ring-Expanded-NHC-Rh centre: A Combined Experimental and DFT Study. Australian Journal of Chemistry, 2011, 64, 1141.	0.9	5
82	A quantum-chemistry study of novel copper- and cobalt-complex based redox mediators for dye-sensitized solar cells. Moscow University Physics Bulletin (English Translation of Vestnik) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 377 T	0.4	5
83	Addition Polymerization of 5-Ethylidene-2-Norbornene in the Presence of Pd N-Heterocyclic Carbene Complexes. Doklady Chemistry, 2018, 479, 49-52.	0.9	5
84	Alkynylâ€•or Azidoâ€Functionalized 1,2,3â€Triazoles: Selective MonoCuAAC Promoted by Physical Factors. ChemistrySelect, 2019, 4, 7470-7475.	1.5	5
85	Synthesis and Study of the Thermal and Ballistic Properties of SMX. Central European Journal of Energetic Materials, 2018, 15, 30-46.	0.4	5
86	Nature of intramolecular Oâ†'Si bond in N-(trifluorosilylmethy)succinimide and N-(trifluorosilylmethy)phthalimide. Russian Journal of General Chemistry, 2009, 79, 1086-1089.	0.8	4
87	Vibrational spectra and structural features of carbene analogs ElII(OCH2CH2NMe2)2 and ClElIIOCH2CH2NMe2 (ElII = Ge, Sn, Pb). Russian Chemical Bulletin, 2011, 60, 69-80.	1.5	4
88	New zirconocenes with 4,5,6,7-tetrahydroindene ligands. Synthesis and catalytic activity in the polymerization of ethylene and copolymerization of ethylene with hex-1-ene. Russian Chemical Bulletin, 2016, 65, 1580-1585.	1.5	4
89	Thermally induced inter-ring haptotropic rearrangements in Ï€-complexes of molybdenum with nitrogen containing polyaromatic heterocycles: A DFT study. Journal of Organometallic Chemistry, 2017, 830, 212-218.	1.8	4
90	Undirected ortho-selectivity in Câ€“H borylation of arenes catalyzed by NHC platinum(0) complexes. Mendeleev Communications, 2020, 30, 569-571.	1.6	4

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91	Comparative activity of yttrium(iii) pincer complexes in isoprene polymerization. Russian Chemical Bulletin, 2020, 69, 2307-2311.	1.5	4
92	Heteroorganic betaines. Russian Chemical Bulletin, 2000, 49, 1823-1830.	1.5	3
93	Title is missing!. Russian Chemical Bulletin, 2002, 51, 678-683.	1.5	3
94	Polymerization of 5-Ethylidene-2-norbornene in the Presence of Pdâ€“N-Heterocyclic Carbene Complexes with Phosphine and Pyridine Ligands. Polymer Science - Series B, 2020, 62, 319-327.	0.8	3
95	Solvent-free palladium-catalyzed Câ€“O cross-coupling of aryl bromides with phenols. Mendeleev Communications, 2021, 31, 409-411.	1.6	3
96	Efficient synthesis of 3-arylbutadiene sulfones using the Heckâ€“Matsuda reaction. Mendeleev Communications, 2021, 31, 548-549.	1.6	3
97	DFT study of dihydrogen addition to molybdenum Ï€-heteroaromatic complexes: a prerequisite step for the catalytic hydrodenitrogenation process. New Journal of Chemistry, 2015, 39, 8915-8921.	2.8	2
98	Addition polymerization of 5-vinyl-2-norbornene and 5-ethylidene-2-norbornene. AIP Conference Proceedings, 2018, , .	0.4	2
99	DFT study of inter-ring haptotropic rearrangement in CpRu+ complexes of polycyclic aromatic ligands. Journal of Organometallic Chemistry, 2019, 889, 9-14.	1.8	2
100	Organometallic chemistry of new carbon materials. Structure and dynamic behavior of group 6 metal tricabonyl complexes of graphene and perforated graphene: a DFT study. New Journal of Chemistry, 2019, 43, 17991-18002.	2.8	2
101	DFT Investigation of the Î·6 â‡Œ Î·6-Inter-ring Haptotropic Rearrangement of the Group 8 Metals Complexes [(graphene)MCp]+ (M = Fe, Ru, Os). Journal of Physical Chemistry A, 2021, 125, 366-375.	2.5	1
102	Solvent-free palladium-catalyzed C O cross-coupling of (hetero)aryl halides with primary alcohols. Mendeleev Communications, 2022, 32, 258-259.	1.6	1
103	Initiation of ethylene polymerization on organoelement cations L2MMe+ (M = Ge, Sn) with intramolecular coordination bonds: a theoretical study. Russian Chemical Bulletin, 2008, 57, 1364-1373.	1.5	0
104	Synthesis and properties of polynorbornenes containing trialkoxysilyl groups. AIP Conference Proceedings, 2018, , .	0.4	0