Toshikazu Hirao

List of Publications by Year
in descending order

126 papers	5,409 citations	126708 33 h-index	85405 71 g-index
135 all docs	135 docs citations	135 times ranked	3534 citing authors

#	Article	IF	Citations
1	Synthesis of .alpha.,.beta.-unsaturated carbonyl compounds by palladium(II)-catalyzed dehydrosilylation of silyl enol ethers. Journal of Organic Chemistry, 1978, 43, 1011-1013.	1.7	855
2	A Synthesis of Sumanene, a Fullerene Fragment. Science, 2003, 301, 1878-1878.	6.0	486
3	Vanadium in Modern Organic Synthesis. Chemical Reviews, 1997, 97, 2707-2724.	23.0	323
4	A Novel Synthesis of Dialkyl Arenephosphonates. Synthesis, 1981, 1981, 56-57.	1.2	272
5	Structural Elucidation of Sumanene and Generation of Its Benzylic Anions. Journal of the American Chemical Society, 2005, 127, 11580-11581.	6.6	269
6	Stereoselective synthesis of vinylphosphonate. Tetrahedron Letters, 1980, 21, 3595-3598.	0.7	234
7	A molecular bowl sumanene. Chemical Communications, 2011, 47, 10524.	2.2	205
8	Anisotropic Electron Transport Properties in Sumanene Crystal. Journal of the American Chemical Society, 2009, 131, 408-409.	6.6	200
9	Cyclization reactions via oxo-.pi.-allylpalladium(II) intermediates. Journal of the American Chemical Society, 1979, 101, 494-496.	6.6	161
10	Chemistry of Sumanene. Chemical Record, 2015, 15, 310-321.	2.9	115
11	Surface-active properties of novel cationic surfactants with two alkyl chains and two ammonio groups. JAOCS, Journal of the American Oil Chemists' Society, 1996, 73, 907-911.	0.8	108
12	A Concaveâ€Bound CpFe Complex of Sumanene as a Metal in a Ï€â€…Bowl. Angewandte Chemie - International Edition, 2007, 46, 8376-8379.	7.2	98
13	Cp2VCl2-Catalyzed Meso-Selective Pinacol Coupling Reaction of Aldimines in the Presence of Chlorosilane and Zinc Metal. Journal of Organic Chemistry, 1998, 63, 9421-9424.	1.7	83
14	Oxovanadium-induced oxidative desilylation for the selective synthesis of 1,4-diketones. Tetrahedron Letters, 1992, 33, 5823-5826.	0.7	80
15	A Novel Photoinduced Thioselenation of Allenes by Use of a Disulfideâ^'Diselenide Binary System. Journal of Organic Chemistry, 1998, 63, 4277-4281.	1.7	75
16	A Dynamically Inverting Ï€â€Bowl Complex. Angewandte Chemie - International Edition, 2010, 49, 403-406.	7.2	75
17	A Catalytic System Consisting of Vanadium, Chlorosilane, and Aluminum Metal in the Stereoselective Pinacol Coupling Reaction of Benzaldehyde Derivatives. Journal of Organic Chemistry, 1999, 64, 7665-7667.	1.7	70
18	A Chiral Concaveâ€Bound Cyclopentadienyl Iron Complex of Sumanene. Angewandte Chemie - International Edition, 2009, 48, 1640-1643.	7.2	59

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19	Selective Intermolecular Oxidative Cross-Coupling of Enolates. Journal of the American Chemical Society, 2015, 137, 10072-10075.	6.6	58
20	Oxovanadium(v)-catalyzed oxidative biaryl synthesis from organoborate under O2. Chemical Communications, 2006, , 5042.	2.2	53
21	Highly Selective Three-Component Coupling of Ethyl Propiolate, Alkenes, and Diphenyl Diselenide under Visible-Light Irradiation. Angewandte Chemie - International Edition, 1999, 38, 2027-2029.	7.2	49
22	Synthesis of vinylsilanes by palladium-catalyzed reaction of trimethylsilylallyl acetates with nucleophiles. Tetrahedron Letters, 1981, 22, 3079-3080.	0.7	48
23	Preparation ofbis -quaternary ammonium salts from epichlorohydrin. JAOCS, Journal of the American Oil Chemists' Society, 1996, 73, 67-71.	0.8	47
24	Double Concave Cesium Encapsulation by Two Charged Sumanenyl Bowls. Angewandte Chemie - International Edition, 2017, 56, 2582-2587.	7.2	47
25	A Novel Redox-Active Conjugated Palladium Homobimetallic Complex. European Journal of Inorganic Chemistry, 2001, 2001, 651-657.	1.0	44
26	A theoretical study of the bowl-to-bowl inversion of sumanene derivatives. Pure and Applied Chemistry, 2010, 82, 969-978.	0.9	43
27	Oxovanadium(V)-Induced Oxidative Coupling of Organolithium and -magnesium Compounds. Organometallics, 1998, 17, 5713-5716.	1.1	41
28	Convex and Concave Encapsulation of Multiple Potassium Ions by Sumanenyl Anions. Journal of the American Chemical Society, 2015, 137, 9768-9771.	6.6	41
29	An Organic Catalytic System for Dehydrogenative Oxidation. Journal of Organic Chemistry, 1998, 63, 7534-7535.	1.7	40
30	Redoxâ€Active Catalyst Based on Poly(Anilinesulfonic Acid)â€•Supported Gold Nanoparticles for Aerobic Alcohol Oxidation in Water. Advanced Synthesis and Catalysis, 2010, 352, 2177-2182.	2.1	40
31	Sumanenyl Metallocenes: Synthesis and Structure of Mono- and Trinuclear Zirconocene Complexes. Journal of the American Chemical Society, 2014, 136, 12794-12798.	6.6	37
32	Bowl Inversion of Surface-Adsorbed Sumanene. Journal of the American Chemical Society, 2014, 136, 13666-13671.	6.6	36
33	The electrochemical inspection of the redox activity of sumanene and its concave CpFe complex. Dalton Transactions, 2009, , 9192.	1.6	34
34	Versatile desilylative cross-coupling of silyl enol ethers and allylic silanes via oxovanadium-induced chemoselective one-electron oxidation. Tetrahedron, 1994, 50, 10207-10214.	1.0	33
35	Oxovanadium(V)-Induced Cross-Coupling Reaction between Two Ligands of Organozinc Compounds. Journal of Organic Chemistry, 2000, 65, 1511-1515.	1.7	33
36	Oxovanadium(V)-Induced Vicinal Dialkylation of Cyclic Enones with Organozinc Compounds. Organic Letters, 2000, 2, 3659-3661.	2.4	32

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37	Bowl-to-bowl inversion of sumanene derivatives. Pure and Applied Chemistry, 2012, 84, 1089-1100.	0.9	31
38	Selective synthetic methods using vanadium-mediated redox reactions. Pure and Applied Chemistry, 2005, 77, 1539-1557.	0.9	30
39	Synthetic Strategy: Palladium-Catalyzed Dehydrogenation of Carbonyl Compounds. Journal of Organic Chemistry, 2019, 84, 1687-1692.	1.7	27
40	PALLADIUM-PROMOTED TRANSFORMATION OF Î±,Î²-EPOXYSILANES TO Î±,Î²-UNSATURATED CARBONYL COMPOUNDS. Chemistry Letters, 1982, 11, 1997-2000.	0.7	22
41	Tetracarbonyl nickel induced reaction of gem-dibromocyclopropanes with alcohols or amines.. Tetrahedron Letters, 1983, 24, 1255-1258.	0.7	22
42	Ruthenium complexes bearing Ï€-conjugated pendant moieties for a redox-switching system. Chemical Communications, 2001, , 431-432.	2.2	22
43	Versatile Synthesis of Polyaniline/Pd Nanoparticles and Catalytic Application. Macromolecular Symposia, 2008, 270, 88-94.	0.4	22
44	Polyaniline-Induced Cï£¿H Arylation of Arenes with Arenediazonium Salts. Chemistry - A European Journal, 2015, 21, 16427-16433.	1.7	22
45	Vanadium(V)â€Induced Oxidative Crossâ€Coupling of Various Boron and Silyl Enolates. Chemistry - an Asian Journal, 2017, 12, 1301-1304.	1.7	22
46	Nickel enolates in the Ni(CO)4 -induced carbonylation of gem-dibromocyclopropanes with silylamine or silylsulfide. Tetrahedron Letters, 1985, 26, 5061-5064.	0.7	21
47	One-Step Synthesis of Oxodimethylenemethaneâ^'Transition Metal Complexes and Palladium-Catalyzed Cycloaddition Reaction. Journal of Organic Chemistry, 1996, 61, 4971-4974.	1.7	21
48	Oxovanadium(v)-induced diastereoselective oxidative homocoupling of boron enolates. Chemical Communications, 2014, 50, 2279.	2.2	21
49	Synthesis of (arylimido)vanadium complexes and their application for oxidative coupling reactions of silyl enol ether derivatives. Dalton Transactions, 2010, 39, 9936.	1.6	20
50	Palladium(II)â€Catalyzed Dehydroboration via Generation of Boron Enolates. Chemistry - A European Journal, 2016, 22, 18686-18689.	1.7	20
51	Synthesis of self-doped conducting polyaniline bearing phosphonic acid monoester. Synthetic Metals, 2014, 195, 137-140.	2.1	19
52	Arylimidovanadium(V) Complexes for a Tridendritic Centrosymmetric Structural Motif or Axial Chirality. Angewandte Chemie - International Edition, 2010, 49, 83-86.	7.2	18
53	Double Concave Cesium Encapsulation by Two Charged Sumanenyl Bowls. Angewandte Chemie, 2017, 129, 2626-2631.	1.6	18
54	PALLADIUM-PROMOTED REACTION OF ALLYL TRIMETHYLSILYL ETHERS WITH ARYL IODIDES. Chemistry Letters, 1981, 10, 403-406.	0.7	17

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55	A novel redox system consisting of Ï€â€conjugated polymers and transition metals. Macromolecular Symposia, 1998, 131, 59-68.	0.4	17
56	Structural Control of (Arylimido)vanadium(V) Compounds through Ï€ Conjugation. European Journal of Inorganic Chemistry, 2008, 2008, 1969-1973.	1.0	17
57	Synthesis of Polyaniline/Pd Nanoparticles via Ligand Exchange. Journal of Inorganic and Organometallic Polymers and Materials, 2009, 19, 79-84.	1.9	16
58	Polyanilineâ€Induced Arylation with Arenediazonium Salts Derived from Anilines. Chemistry - A European Journal, 2017, 23, 7703-7709.	1.7	16
59	Quinone Oxygen-Coordinated Palladium(II) Complexes with Anthraquinone Ligands BearingN-Heterocyclic Coordination Sites. European Journal of Inorganic Chemistry, 2001, 2001, 277-287.	1.0	15
60	Metal atom dynamics of CpFe ligated to a concave Ï€-bowl sumanene. Journal of Organometallic Chemistry, 2011, 696, 3895-3899.	0.8	15
61	Quinonediimines as redox-active organocatalysts for oxidative coupling of aryl- and alkenylmagnesium compounds under molecular oxygen. Chemical Communications, 2016, 52, 7790-7793.	2.2	15
62	A Zinc(II) Complex Composed of a Tridentate Ligand Bearing Podand Pyrenyl Moieties. European Journal of Inorganic Chemistry, 2002, 2002, 447-451.	1.0	14
63	Dipeptide-induced chirality organization. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2012, 74, 23-40.	1.6	14
64	Trimethylsilylmethyl Isothiocyanate, An Isothiocyanatomethanide Equivalent. Angewandte Chemie International Edition in English, 1981, 20, 126-127.	4.4	13
65	Poly(<scp>l</scp>-glutamic acid)-modulated Emission Properties of Iridium(III) Complexes in an Aqueous Media. Chemistry Letters, 2012, 41, 310-312.	0.7	13
66	Vanadium-catalyzed chlorination under molecular oxygen. Journal of Inorganic Biochemistry, 2015, 147, 177-180.	1.5	13
67	One-Step Synthesis and Association of Alkylimidovanadium(V) Compounds. Bulletin of the Chemical Society of Japan, 2012, 85, 606-612.	2.0	12
68	Oxovanadium(v)-catalyzed oxidative cross-coupling of enolates using O2 as a terminal oxidant. Chemical Communications, 2020, 56, 11697-11700.	2.2	12
69	Oxovanadium-Induced or-Catalyzed Oxidative Allylation of 1,3-Dicarbonyl Compounds with Allylsilanes. Synthetic Communications, 1995, 25, 2579-2585.	1.1	11
70	Aerobic dehydrogenative imination in complete aqueous media catalyzed by poly(aniline sulfonic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.7	11
71	La(OTf)3-mediated self-organization of guanosine with an alkynyl-Au(i)PPh3 moiety to induce Au(i)â€“Au(i) interactions. RSC Advances, 2012, 2, 4359.	1.7	10
72	Practical Synthesis of Poly(2-methoxyaniline-5-phosphonic acid), a Self-Doped Conducting Polyaniline Bearing Phosphonic Acid. Bulletin of the Chemical Society of Japan, 2014, 87, 1026-1028.	2.0	10

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73	Crown Ether Assisted Convex Cesium Binding to a Sumanenyl Bowl. Organometallics, 2017, 36, 4961-4967.	1.1	10
74	Synthesis and Characterization of Bisumanenylidene. European Journal of Organic Chemistry, 2014, 2014, 3531-3535.	1.2	9
75	Synthesis of oxindoles via reductive CO₂ fixation. Organic Chemistry Frontiers, 2016, 3, 929-933.	2.3	9
76	Self-doped polyaniline derived from poly(2-methoxyaniline-5-phosphonic acid) and didodecyldimethylammonium salt. RSC Advances, 2016, 6, 22447-22452.	1.7	9
77	Control of Helical Chirality of Ferroceneâ€“Dipeptide Conjugates by the Secondary Structure of Dipeptide Chains. Chemistry - A European Journal, 2017, 23, 12704-12708.	1.7	9
78	Oxovanadium(V)â€Catalyzed Direct Amination of Allyl Alcohols. ChemCatChem, 2019, 11, 1175-1178.	1.8	9
79	SYNTHESIS OF Î², Î³-UNSATURATE CARBOXYLIC ACID DERIVATIVES BY THE NOVEL Ni (CO)4-INDUCED RING-OPENING CARBONYLATION REACTION OF 1,1-DIBROMO-2-CHLOROCYCLOPROPANES. Chemistry Letters, 1985, 14, 1625-1628.	0.7	8
80	Structural tuning and self-association of (arylimido)vanadium(V) compounds. Pure and Applied Chemistry, 2009, 81, 1187-1195.	0.9	8
81	Selfâ€Assembly Properties of NCN Pincer Palladium(II) Complexes Bearing a Uracil Moiety. European Journal of Inorganic Chemistry, 2014, 2014, 4626-4631.	1.0	8
82	Deprotonation-Induced Efficient Delocalization of Polaron in Self-Doped Poly(anilinephosphonic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3	2.2	8
83	Synthesis of Polyaniline and Transition Metal Nanoparticles Hybrids. Journal of Inorganic and Organometallic Polymers and Materials, 2015, 25, 145-152.	1.9	8
84	Dinuclear organogold(<scp>i</scp>) complexes bearing uracil moieties: chirality of Au(<scp>i</scp>)â€“Au(<scp>i</scp>) axis and self-assembly. CrystEngComm, 2015, 17, 3460-3467.	1.3	8
85	Bilayer Formation and Its Spectral Behavior of Double-Chain Amphiphiles Having Cinnamate Units. Langmuir, 1996, 12, 2785-2790.	1.6	7
86	Selective synthesis of organic sulfides and disulfides by the reduction of elemental sulfur with samarium diiodide. Heteroatom Chemistry, 1998, 9, 581-584.	0.4	7
87	Trimethylsilylâ€methylisothiocyanat, ein Isothiocyanatomethanidâ€Ã„quivalent. Angewandte Chemie, 1981, 93, 95-96.	1.6	7
88	Ferrocenylâ€Capped pâ€Phenylenediamine as a Redoxâ€Switching System. European Journal of Inorganic Chemistry, 2008, 2008, 3877-3882.	1.0	7
89	Theoretical investigation for the stability of the concaveâ€bound cyclopentadienyl iron complex of sumanene. International Journal of Quantum Chemistry, 2013, 113, 437-442.	1.0	7
90	Dimensionally oriented redox-activeÏ€-conjugated systems. Macromolecular Symposia, 2003, 204, 103-112.	0.4	6

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91	Controlled coordination in vanadium(V) dimethylhydrazido compounds. Journal of Inorganic Biochemistry, 2016, 164, 77-81.	1.5	6
92	Oxidative Bromination Reactions in Aqueous Media by Using Bu₄NBr/TFA/H₂O₂ System. Chemistry Letters, 2017, 46, 1708-1710.	0.7	6
93	Emission properties of platinum(II) terpyridyl complexes with hydrophobic poly-<scp>L</scp>-glutamic acid. Supramolecular Chemistry, 2011, 23, 113-116.	1.5	5
94	Hydrogen Peroxide Generation Using Polyaniline/Transition Metal Nanohybrid Electrodes. Journal of Inorganic and Organometallic Polymers and Materials, 2015, 25, 855-859.	1.9	5
95	Investigation of thresholds in laser-induced carbonization of sumanene derivatives through in situ observation utilizing a Raman spectroscope. RSC Advances, 2015, 5, 18523-18530.	1.7	5
96	Structural Characterization of Chiral Vanadium(V) Compounds with V=N Bond. Chemistry Letters, 2017, 46, 844-847.	0.7	5
97	Oxovanadium(<scp>V</scp>)-catalyzed amination of carbon dioxide under ambient pressure for the synthesis of ureas. RSC Advances, 2021, 11, 27121-27125.	1.7	5
98	Conjugated complex system composed of quinonediimine unit. Macromolecular Symposia, 2002, 186, 75-80.	0.4	4
99	Preparation of Polyanilineâ€“Pt Nanoparticles via Ligand Exchange from Starchâ€“Pt Nanoparticles. Bulletin of the Chemical Society of Japan, 2014, 87, 1130-1132.	2.0	4
100	Controlled self-assembling structures of ferrocene-dipeptide conjugates composed of Ala-Pro-NHCH2CH2SH chain. Journal of Inorganic Biochemistry, 2017, 177, 259-265.	1.5	4
101	Structural Consequences of Two-Fold Deprotonation of Sumanene: Embedding Two Cp-rings into a Nonplanar Carbon Framework. Organometallics, 2021, 40, 2023-2026.	1.1	4
102	Selective transformations of functional groups by use of dialkyl phosphonates.. Yuki Gosei Kagaku Kyokaishi/Journal of Synthetic Organic Chemistry, 1987, 45, 784-791.	0.0	4
103	Synthetic Transformations via Vanadium-Induced Redox Reactions. ACS Symposium Series, 2007, , 2-27.	0.5	3
104	Polypeptidesâ€Induced Selfâ€Aggregation and Tuning of Emission Properties of Luminescent Complexes. Macromolecular Symposia, 2012, 317-318, 206-214.	0.4	3
105	Molecular Structures of Dipeptideâ€“Palladium(II) Conjugated Complexes. European Journal of Inorganic Chemistry, 2012, 2012, 4669-4674.	1.0	3
106	Chiral Homobimetallic Palladium(II) Complexes Composed of Chirality-Organized Quinonediimines Bearing Amino Acid Moieties. Journal of Inorganic and Organometallic Polymers and Materials, 2013, 23, 251-255.	1.9	3
107	Highly Selective Three-Component Coupling of Ethyl Propiolate, Alkenes, and Diphenyl Diselenide under Visible-Light Irradiation. , 1999, 38, 2027.		3
108	Polypeptide-induced Fluorescence of Pyrene Derivatives Based on Coordination Programming. Chemistry Letters, 2014, 43, 1101-1103.	0.7	2

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109	Laser-Induced Carbonization of Sumanene Derivatives: Exposure-Time Dependence of Time-Resolved Microwave Conductivity. Bulletin of the Chemical Society of Japan, 2015, 88, 330-332.	2.0	2
110	Structural Characterization of (Arylimido)vanadium(V) Compounds with 2,6â€Difluorophenoxide Ligand. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2017, 643, 1173-1177.	0.6	2
111	Development of Self-Doped Conducting Polyaniline Bearing Phosphonic Acid Moiety. Kobunshi Ronbunshu, 2017, 74, 473-481.	0.2	2
112	Synthesis of a sumanenyl hafnocene complex. Organic Chemistry Frontiers, 2019, 6, 1032-1037.	2.3	2
113	Efficient System for Oxidation Induced by Transition Metal Complex Catalyst.. Yuki Gosei Kagaku Kyokaishi/Journal of Synthetic Organic Chemistry, 1992, 50, 997-1004.	0.0	2
114	Alkoxide ligand controlled self-assembling of (imido)vanadium(V) compounds having a tetrahedral VO3N geometry. Journal of Inorganic Biochemistry, 2020, 203, 110880.	1.5	1
115	Selective synthesis of organic sulfides and disulfides by the reduction of elemental sulfur with samarium diiodide. , 1998, 9, 581.		1
116	Metal Conjugates with Redox-Active Ï€-Conjugated Polymers or Molecules. , 2005, , 209-226.		0
117	Self-Assemblies of Bioorganometallic Conjugates. Kobunshi Ronbunshu, 2016, 73, 1-11.	0.2	0
118	Frontispiece: Double Concave Cesium Encapsulation by Two Charged Sumanenyl Bowls. Angewandte Chemie - International Edition, 2017, 56, .	7.2	0
119	Frontispiz: Double Concave Cesium Encapsulation by Two Charged Sumanenyl Bowls. Angewandte Chemie, 2017, 129, .	1.6	0
120	Front Cover: Structural Characterization of (Arylimido)vanadium(V) Compounds with 2,6-Difluorophenoxide Ligand (Z. Anorg. Allg. Chem. 18/2017). Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2017, 643, 1145-1145.	0.6	0
121	Frontispiece: Control of Helical Chirality of Ferroceneâ€“Dipeptide Conjugates by the Secondary Structure of Dipeptide Chains. Chemistry - A European Journal, 2017, 23, .	1.7	0
122	Cocrystal Structure of the Redox-active Phenylenediamine and Quinonediimine Derivatives. X-ray Structure Analysis Online, 2019, 35, 63-65.	0.1	0
123	10-Undecenoic Acid in Total Syntheses of Naturally Occurring Compounds. Journal of Japan Oil Chemists Society, 1992, 41, 804-809.	0.1	0
124	Chemistry of Î±, Î²-Epoxysilanes. Journal of Japan Oil Chemists Society, 1983, 32, 355-360.	0.1	0
125	Facile Synthesis of Alkenylphosphonates. Journal of Japan Oil Chemists Society, 1983, 32, 274-276.	0.1	0
126	Transformations of Main-Group Organometallics Induced by Transition Metals. Synlett, 0, , .	1.0	0