

# Hidetaka Nakai

## List of Publications by Year in descending order

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76  
papers

2,282  
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236612

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docs citations

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times ranked

2419  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Linear, O-Coordinated $\text{U}^{\text{IV}}$ -CO <sub>2</sub> Bound to Uranium. <i>Science</i> , 2004, 305, 1757-1759.	6.0	345
2	A Functional [NiFe]Hydrogenase Mimic That Catalyzes Electron and Hydride Transfer from H <sub>2</sub> . <i>Science</i> , 2013, 339, 682-684.	6.0	229
3	Evidence for Alkane Coordination to an Electron-Rich Uranium Center. <i>Journal of the American Chemical Society</i> , 2003, 125, 15734-15735.	6.6	137
4	Synthesis and Characterization of N-Heterocyclic Carbene Complexes of Uranium(III). <i>Inorganic Chemistry</i> , 2004, 43, 855-857.	1.9	124
5	Multiple-Bond Metathesis Mediated by Sterically Pressured Uranium Complexes. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 2389-2392.	7.2	100
6	pH-Dependent C <sup>+</sup> C Coupling Reactions Catalyzed by Water-Soluble Palladacyclic Aqua Catalysts in Water. <i>Organometallics</i> , 2006, 25, 331-338.	1.1	84
7	A new entry to N-heterocyclic carbene chemistry: synthesis and characterisation of a triscarbene complex of thallium(I). <i>Chemical Communications</i> , 2003, , 24-25.	2.2	68
8	Observation of the Inverse Trans Influence (ITI) in a Uranium(V) Imide Coordination Complex: An Experimental Study and Theoretical Evaluation. <i>Inorganic Chemistry</i> , 2012, 51, 6190-6199.	1.9	67
9	Fullerenethiolate-Functionalized Gold Nanoparticles: A New Class of Surface-Confined Metal-C <sub>60</sub> Nanocomposites. <i>Langmuir</i> , 2001, 17, 6393-6395.	1.6	57
10	pH-Dependent Cross-Coupling Reactions of Water-Soluble Organic Halides with Organoboron Compounds Catalyzed by the Organometallic Aqua Complex [(SCS)PdII(H <sub>2</sub> O)] <sup>+</sup> (SCS = Tj ETQqO O O rgBT /Overlook 110 Tf 50 377 Td (C	1.1	47
11	pH-Dependent H <sub>2</sub> -Activation Cycle Coupled to Reduction of Nitrate Ion by Cp*Ir Complexes. <i>Journal of the American Chemical Society</i> , 2002, 124, 597-601.	6.6	46
12	Catalytic C <sup>+</sup> F Bond Hydrogenolysis of Fluoroaromatics by [( <sup>+</sup> 5-C <sub>5</sub> Me <sub>5</sub> )Rh( <sup>+</sup> 1-(2,2'-bipyridine))]. <i>Organometallics</i> , 2014, 33, 4349-4352.	1.1	45
13	Photochromism of an Organorhodium Dithionite Complex in the Crystalline-State: Molecular Motion of Pentamethylcyclopentadienyl Ligands Coupled to Atom Rearrangement in a Dithionite Ligand. <i>Journal of the American Chemical Society</i> , 2008, 130, 17836-17845.	6.6	42
14	A High-Valent Iron(IV) Peroxo Core Derived from O <sub>2</sub> . <i>Angewandte Chemie - International Edition</i> , 2016, 55, 724-727.	7.2	40
15	Direct Observation of Photochromic Dynamics in the Crystalline State of an Organorhodium Dithionite Complex. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 6473-6476.	7.2	38
16	Reversible Switching of the Luminescence of a Photoresponsive Gadolinium(III) Complex. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 8722-8725.	7.2	38
17	[NiFe]Hydrogenase from <i>Citrobacter</i> sp. Surpasses Platinum as an Electrode for H <sub>2</sub> Oxidation Reaction. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 8895-8898.	7.2	38
18	Alkane-tetrathiol induced formation of remarkably stable self-assembled monolayer and polymer films containing electroactive tetrathiafulvalene moieties on metal electrodes. <i>Chemical Communications</i> , 1999, , 737-738.	2.2	37

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19	Organometallic Catalysts for Use in a Fuel Cell. <i>ChemCatChem</i> , 2013, 5, 1368-1373.	1.8	35
20	Photochromism of organometallic compounds with structural rearrangement. <i>Coordination Chemistry Reviews</i> , 2010, 254, 2652-2662.	9.5	34
21	Experimental Study of Reductive Elimination of H <sub>2</sub> from Rhodium Hydride Species. <i>Organometallics</i> , 2012, 31, 2996-3001.	1.1	29
22	Simple Ligand Effects Switch a Hydrogenase Mimic between H <sub>2</sub> and O <sub>2</sub> Activation. <i>Chemistry - an Asian Journal</i> , 2012, 7, 1394-1400.	1.7	29
23	Selective Redox Activation of H <sub>2</sub> or O <sub>2</sub> in a [NiRu] Complex by Aromatic Ligand Effects. <i>Organometallics</i> , 2013, 32, 79-87.	1.1	28
24	A [NiFe]hydrogenase model that catalyses the release of hydrogen from formic acid. <i>Chemical Communications</i> , 2014, 50, 13385-13387.	2.2	27
25	New Electroactive Tetrathiafulvalene-Derivatized Gold Nanoparticles and Their Remarkably Stable Nanoparticle Films on Electrodes. <i>Langmuir</i> , 1999, 15, 8574-8576.	1.6	23
26	Model Study of CO Inhibition of [NiFe]hydrogenase. <i>Inorganic Chemistry</i> , 2011, 50, 8902-8906.	1.9	22
27	Control of Lanthanide Coordination Environment: Synthesis, Structure, and Oxygen-Sensitive Luminescence Properties of an Eight-Coordinate Tb(III) Complex. <i>Inorganic Chemistry</i> , 2016, 55, 6609-6615.	1.9	22
28	1,2-Dihalodigermenes bearing bulky Eind groups: synthesis, characterization, and conversion to halogermolenoids. <i>Dalton Transactions</i> , 2018, 47, 814-822.	1.6	22
29	Synthesis and Crystal Structure of an Open Capsule-Type Octanuclear Heterometallic Sulfide Cluster with a Linked Incomplete Double Cubane Framework without an Intramolecular Inversion Center. <i>Journal of the American Chemical Society</i> , 2005, 127, 14366-14374.	6.6	21
30	A highly luminescent and highly oxygen-sensitive Tb(III) complex with a tris-aryloxy functionalised 1,4,7-triazacyclononane ligand. <i>Chemical Communications</i> , 2014, 50, 15737-15739.	2.2	21
31	Surface-assisted transfer hydrogenation catalysis on a $\gamma$ -Al <sub>2</sub> O <sub>3</sub> -supported Ir dimer. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 16023.	1.3	19
32	Photoinduced bending of rod-like millimetre-size crystals of a rhodium dithionite complex with n-pentyl moieties. <i>Chemical Communications</i> , 2016, 52, 4349-4352.	2.2	19
33	The absolute asymmetric photoisomerization of a photochromic dithionite complex in chiral crystals. <i>Chemical Communications</i> , 2009, , 2685.	2.2	18
34	Luminescent Tb(III) and Sm(III) complexes with a 1,4,7-triazacyclononane-based tris-aryloxy ligand for high-performance oxygen sensors. <i>Dalton Transactions</i> , 2017, 46, 9126-9130.	1.6	18
35	A macrocyclic tetraamine bearing four phenol groups: a new class of heptadentate ligands to provide an oxygen-sensitive luminescent Tb(III) complex with an extendable phenol pendant arm. <i>Dalton Transactions</i> , 2015, 44, 10923-10927.	1.6	17
36	An IrSi oxide film as a highly active water-oxidation catalyst in acidic media. <i>Chemical Communications</i> , 2015, 51, 12589-12592.	2.2	17

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37	Photoreactivity of crystals of a rhodium dithionite complex with ethyltetramethylcyclopentadienyl ligands: Crystal surface morphology changes and degradation. Dalton Transactions, 2011, 40, 2177.	1.6	16
38	An oxygen-sensitive luminescent Dy(III) complex. Dalton Transactions, 2016, 45, 9492-9496.	1.6	16
39	Why do nitrogenases waste electrons by evolving dihydrogen?. Applied Organometallic Chemistry, 2004, 18, 589-594.	1.7	15
40	Synthesis and structural characterization of a photoresponsive organodirhodium complex with active S-S bonds: [(CpPhRh) <sub>2</sub> (μ-CH <sub>2</sub> ) <sub>2</sub> (μ-O <sub>2</sub> SSO <sub>2</sub> )] (CpPh=1-5-C <sub>5</sub> Me <sub>4</sub> Ph). Journal of Organometallic Chemistry, 2007, 692, 122-128.	0.8	15
41	Establishing the mechanism of Rh-catalysed activation of O <sub>2</sub> by H <sub>2</sub> . Dalton Transactions, 2012, 41, 4328-4334.	1.6	13
42	Photofunctionalization of a Pentamethylcyclopentadienyl Ligand with the N-Phenylcarbazolyl Group To Prepare a Highly Luminescent Tb <sup>3+</sup> Complex Having a Fast Radiation Rate. Organometallics, 2010, 29, 2390-2393.	1.1	12
43	A (Ni-Sr)I model for [NiFe]hydrogenase. Journal of Organometallic Chemistry, 2015, 796, 73-76.	0.8	12
44	Titanium complexes supported by a sterically encumbering N-anchored tris-arylphenoxide ligand. Inorganic Chemistry Communication, 2005, 8, 903-907.	1.8	11
45	Substitution Effects of Cp Ring Benzyl Groups on Photoisomerization of a Rhodium Dithionite Complex in the Crystalline State. Chemistry Letters, 2008, 37, 826-827.	0.7	10
46	A naphthyl-substituted pentamethylcyclopentadienyl ligand and its Sm(II) bent-metallocene complexes with solvent-induced structure change. Dalton Transactions, 2012, 41, 354-356.	1.6	9
47	Isolation and Crystal Structure of the Proposed Low-Valent Active Species in the H <sub>2</sub> Activation Catalytic Cycle. European Journal of Inorganic Chemistry, 2013, 2013, 3978-3986.	1.0	8
48	A model for the water-oxidation and recovery systems of the oxygen-evolving complex. Dalton Transactions, 2014, 43, 3063-3071.	1.6	8
49	A gadolinium(III) complex that shows room-temperature phosphorescence in the crystalline state. Dalton Transactions, 2016, 45, 11620-11623.	1.6	8
50	Isolation of a Mn(IV) acylperoxo complex and its monooxidation ability. Chemical Communications, 2013, 49, 8356.	2.2	7
51	Synthesis and crystal structure of a dinuclear, monomeric Mn(II)-p-semiquinonato complex. Chemical Communications, 2014, 50, 13059-13061.	2.2	7
52	A non-linear phenomenon observed in the photochromic crystals of a rhodium dithionite complex with n-propyl moieties. Dalton Transactions, 2020, 49, 1721-1725.	1.6	7
53	Extraction of Hydrogen from Alcohols by a Methylene-Bridged Iridium(II) Dinuclear Complex Having a Short Ir-Ir Double Bond. Organometallics, 2010, 29, 4210-4212.	1.1	6
54	Synthesis and Structural Characterization of a Photochromic Dirhodium Dithionite Complex: [(CpPhRh) <sub>2</sub> (μ-CH <sub>2</sub> ) <sub>2</sub> (μ-O <sub>2</sub> SSO <sub>2</sub> )] (CpPh=1-5-C <sub>5</sub> Me <sub>4</sub> Ph). Molecular Crystals and Liquid Crystals, 2006, 456, 63-70.	0.4	5

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55	Synthesis and Reactivity of a Water-soluble NiRu Monohydride Complex with a Tethered Pyridine Moiety. Chemistry Letters, 2016, 45, 197-199.	0.7	5
56	Synthesis and Structure of a Water-soluble $\mu$ - $\eta^1$ - $\eta^1$ -N <sub>2</sub> Dinuclear Ru <sup>II</sup> Complex with a Polyamine Ligand. Chemistry Letters, 2016, 45, 149-151.	0.7	4
57	Inorganic clusters with a [Fe <sub>2</sub> MoOS <sub>3</sub> ] core—a functional model for acetylene reduction by nitrogenases. Dalton Transactions, 2016, 45, 14620-14627.	1.6	4
58	Molecular motion in organometallic crystals: photoinduced 2π/5 rotation of n-hexyltetramethylcyclopentadienyl ligand. CrystEngComm, 2021, 23, 3790-3793.	1.3	4
59	C-H Arylation of Benzene with Aryl Halides using H <sub>2</sub> and a Water-Soluble Rh-Based Electron Storage Catalyst. Chemistry - A European Journal, 2021, 27, 17326-17330.	1.7	4
60	Cumulative Effect of Ether Units on Electrochemical Behaviors of Self-assembled Monolayers and Multilayers of Tetrathiafulvalenyl-tetrathiol with Oligo-ethyleneoxy Linkages. Electrochemistry, 2000, 68, 8-10.	0.6	3
61	Reductive C(sp <sup>3</sup> )–C(sp <sup>3</sup> ) homo-coupling of benzyl or allyl halides with H <sub>2</sub> using a water-soluble electron storage catalyst. RSC Advances, 2021, 11, 39450-39454.	1.7	3
62	A Neutral Five-coordinated Organoruthenium(0) Complex: X-ray Structure and Unique Solvatochromism. Chemistry Letters, 2012, 41, 650-651.	0.7	2
63	Synthesis of Aqueous-stable and Water-soluble Mononuclear Nonheme MnV=Oxo Complexes Using H <sub>2</sub> O <sub>2</sub> as an Oxidant. Chemistry Letters, 2014, 43, 1380-1382.	0.7	2
64	A Water-soluble Ni Dihydrido Complex That Reduces O <sub>2</sub> to H <sub>2</sub> O in Water. Chemistry Letters, 2016, 45, 72-74.	0.7	2
65	A Non-precious Metal, Ni Molecular Catalyst for a Fuel Cell Cathode. Chemistry Letters, 2016, 45, 137-139.	0.7	2
66	Synthesis and Characterization of a Series of Diarylgermylenes and Dihalodigermenes Having Fused-Ring Bulky Rind-Groups. Bulletin of the Chemical Society of Japan, 2021, 94, 1931-1939.	2.0	2
67	Unusual motion of the n-methoxypropyl moiety observed in the photochromic crystals of an organorhodium dithionite complex with n-methoxypropyltetramethylcyclopentadienyl ligands. Dalton Transactions, 2021, 51, 48-52.	1.6	2
68	Insights from hydrogenase model studies on C–C bond forming reactions. Coordination Chemistry Reviews, 2022, 470, 214697.	9.5	2
69	Electropolymerization of Tetrathiol- and Tetrapyrrole Substituted Tetrathiafulvalene Derivatives and Electrochemical Properties of Their Electropolymerized Films. Journal of the Japan Society of Colour Material, 2000, 73, 176-181.	0.0	1
70	A mer-Triaqua Rh Complex with a Terpyridine Ligand. Chemistry Letters, 2012, 41, 116-118.	0.7	1
71	Crystalline-State Photochromism of a Newly Synthesized Rhodium Dithionite Complex with Inflexible Cyclo-Pentyl Groups. Bulletin of the Chemical Society of Japan, 2022, 95, 169-174.	2.0	1
72	Electrochemical Properties of Tetrathiafulvalenyl-thiol, disulfide, thioacetate, and sulfide, and Their Self-Assembled Monolayers on Gold Surfaces. Journal of the Japan Society of Colour Material, 2000, 73, 325-329.	0.0	0

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73	An N <sub>2</sub> -compatible NiO Metal-Organic Chemical Vapor Deposition (MOCVD) Precursor. Chemistry Letters, 2015, 44, 794-796.	0.7	0
74	An Fe-based Model for Metabolism Linking between O <sub>2</sub> -reduction and H <sub>2</sub> O-oxidation. Chemistry Letters, 2015, 44, 1263-1265.	0.7	0
75	Crystal polymorphism and crystalline-state photochromism of a rhodium dithionite complex with <i>n</i> -methoxypropyl moieties. CrystEngComm, 2022, 24, 1437-1441.	1.3	0
76	Photoinduced Bending Crystals of a Rhodium Dithionite Complex with <i>n</i> -Methoxybutyl Moieties. Chemistry Letters, 2022, 51, 372-374.	0.7	0