Bruno Chaudret

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Superlattices of Iron Nanocubes Synthesized from Fe[N(SiMe3)2]2. Science, 2004, 303, 821-823.	6.0	520
2	Surface effects on the magnetic properties of ultrafine cobalt particles. Physical Review B, 1998, 57, 2925-2935.	1.1	516
3	Ruthenium Nanoparticles inside Porous [Zn ₄ O(bdc) ₃] by Hydrogenolysis of Adsorbed [Ru(cod)(cot)]: A Solid-State Reference System for Surfactant-Stabilized Ruthenium Colloids. Journal of the American Chemical Society, 2008, 130, 6119-6130.	6.6	348
4	Ligand-Stabilized Ruthenium Nanoparticles:Â Synthesis, Organization, and Dynamics. Journal of the American Chemical Society, 2001, 123, 7584-7593.	6.6	336
5	Shape Control of Thermodynamically Stable Cobalt Nanorods through Organometallic Chemistry. Angewandte Chemie - International Edition, 2002, 41, 4286-4289.	7.2	335
6	Optimal Size of Nanoparticles for Magnetic Hyperthermia: A Combined Theoretical and Experimental Study. Advanced Functional Materials, 2011, 21, 4573-4581.	7.8	309
7	Improved water electrolysis using magnetic heating of FeC–Ni core–shell nanoparticles. Nature Energy, 2018, 3, 476-483.	19.8	299
8	A Case for Enantioselective Allylic Alkylation Catalyzed by Palladium Nanoparticles. Journal of the American Chemical Society, 2004, 126, 1592-1593.	6.6	288
9	Unprecedented Crystalline Super-Lattices of Monodisperse Cobalt Nanorods. Angewandte Chemie - International Edition, 2003, 42, 5213-5216.	7.2	265
10	Multimillimetre-large superlattices of air-stable iron–cobalt nanoparticles. Nature Materials, 2005, 4, 750-753.	13.3	262
11	Surface Chemistry of InP Quantum Dots: A Comprehensive Study. Journal of the American Chemical Society, 2010, 132, 18147-18157.	6.6	208
12	InP/ZnS Nanocrystals: Coupling NMR and XPS for Fine Surface and Interface Description. Journal of the American Chemical Society, 2012, 134, 19701-19708.	6.6	202
13	Ruthenium Nanoparticles Stabilized by Nâ€Heterocyclic Carbenes: Ligand Location and Influence on Reactivity. Angewandte Chemie - International Edition, 2011, 50, 12080-12084.	7.2	199
14	A Simple Chemical Route toward Monodisperse Iron Carbide Nanoparticles Displaying Tunable Magnetic and Unprecedented Hyperthermia Properties. Nano Letters, 2012, 12, 4722-4728.	4.5	185
15	Increase of magnetic hyperthermia efficiency due to dipolar interactions in low-anisotropy magnetic nanoparticles: Theoretical and experimental results. Physical Review B, 2013, 87, .	1.1	184
16	Influence of organic ligands on the stabilization of palladium nanoparticles. Journal of Organometallic Chemistry, 2004, 689, 4601-4610.	0.8	174
17	Magnetic Enhancement in Nanoscale CoRh Particles. Physical Review Letters, 2002, 89, 037203.	2.9	163
18	Preparation and characterization of organosols of monodispersed nanoscale palladium. Particle size effects in the binding geometry of adsorbed carbon monoxide. Chemistry of Materials, 1992, 4, 1234-1239.	3.2	154

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19	Organometallic Synthesis of Size-Controlled Polycrystalline Ruthenium Nanoparticles in the Presence of Alcohols. Advanced Functional Materials, 2003, 13, 118-126.	7.8	151
20	Preparation of organic solutions or solid films of small particles of ruthenium, palladium, and platinum from organometallic precursors in the presence of cellulose derivatives. Chemistry of Materials, 1993, 5, 341-347.	3.2	149
21	Synthesis of monodispersed bimetallic palladium-copper nanoscale colloids. Chemistry of Materials, 1993, 5, 254-256.	3.2	148
22	Organometallic approach to the synthesis and surface reactivity of noble metal nanoparticles. Comptes Rendus Chimie, 2003, 6, 1019-1034.	0.2	146
23	Chemistry of bis(dihydrogen) ruthenium complexes and of their derivatives. Coordination Chemistry Reviews, 1998, 178-180, 381-407.	9.5	140
24	Platinum nanoparticles stabilized by CO and octanethiol ligands or polymers: FT-IR, NMR, HREM and WAXS studies. New Journal of Chemistry, 1998, 22, 703-712.	1.4	140
25	Shape Control of Platinum Nanoparticles. Advanced Functional Materials, 2007, 17, 2219-2228.	7.8	138
26	Nanoscale Bimetallic CoxPt1-x Particles Dispersed in Poly(vinylpyrrolidone): Synthesis from Organometallic Precursors and Characterization. Journal of Physical Chemistry B, 2000, 104, 695-702.	1.2	133
27	Organized 3D-alkyl imidazolium ionic liquids could be used to control the size of in situ generated ruthenium nanoparticles?. Journal of Materials Chemistry, 2009, 19, 3624.	6.7	131
28	Magnetic hyperthermia in single-domain monodisperse FeCo nanoparticles: Evidences for Stoner–Wohlfarth behavior and large losses. Journal of Applied Physics, 2009, 105, .	1.1	131
29	Magnetically Induced Continuous CO ₂ Hydrogenation Using Composite Iron Carbide Nanoparticles of Exceptionally High Heating Power. Angewandte Chemie - International Edition, 2016, 55, 15894-15898.	7.2	128
30	Organometallic approach for the synthesis of nanostructures. New Journal of Chemistry, 2013, 37, 3374.	1.4	127
31	NHC-stabilized ruthenium nanoparticles as new catalysts for the hydrogenation of aromatics. Catalysis Science and Technology, 2013, 3, 99-105.	2.1	126
32	A New Synthetic Method toward Bimetallic Ruthenium Platinum Nanoparticles; Composition Induced Structural Changes. Journal of Physical Chemistry B, 1999, 103, 10098-10101.	1.2	125
33	Direct NMR Evidence for the Presence of Mobile Surface Hydrides on Ruthenium Nanoparticles. ChemPhysChem, 2005, 6, 605-607.	1.0	122
34	Regioselective and Stereospecific Deuteration of Bioactive Aza Compounds by the Use of Ruthenium Nanoparticles. Angewandte Chemie - International Edition, 2014, 53, 230-234.	7.2	122
35	Reactions of Olefins with Ruthenium Hydride Nanoparticles: NMR Characterization, Hydride Titration, and Roomâ€Temperature CC Bond Activation. Angewandte Chemie - International Edition, 2008, 47, 2074-2078.	7.2	121
36	Iron Nanoparticle Growth in Organic Superstructures. Journal of the American Chemical Society, 2009, 131, 549-557.	6.6	121

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37	Enantiospecific CH Activation Using Ruthenium Nanocatalysts. Angewandte Chemie - International Edition, 2015, 54, 10474-10477.	7.2	118
38	Complex Nano-objects Displaying Both Magnetic and Catalytic Properties: A Proof of Concept for Magnetically Induced Heterogeneous Catalysis. Nano Letters, 2015, 15, 3241-3248.	4.5	116
39	Synthesis, Neutron Structure, and Reactivity of the Bis(dihydrogen) Complex RuH2(η2-H2)2(PCyp3)2 Stabilized by Two Tricyclopentylphosphines. Journal of the American Chemical Society, 2005, 127, 17592-17593.	6.6	113
40	Highly Stable Waterâ€Soluble Platinum Nanoparticles Stabilized by Hydrophilic Nâ€Heterocyclic Carbenes. Angewandte Chemie - International Edition, 2014, 53, 13220-13224.	7.2	112
41	Synthesis, characterization and catalytic reactivity of ruthenium nanoparticles stabilized by chiral N-donor ligands. New Journal of Chemistry, 2006, 30, 115-122.	1.4	111
42	Organometallic Ruthenium Nanoparticles: A Comparative Study of the Influence of the Stabilizer on their Characteristics and Reactivity. ChemCatChem, 2013, 5, 28-45.	1.8	108
43	Large specific absorption rates in the magnetic hyperthermia properties of metallic iron nanocubes. Journal of Magnetism and Magnetic Materials, 2010, 322, L49-L52.	1.0	101
44	Gold nanoparticles from self-assembled gold(i) amine precursors. Chemical Communications, 2000, , 1945-1946.	2.2	98
45	Chemisorption on nickel nanoparticles of various shapes: Influence on magnetism. Journal of Applied Physics, 2003, 94, 6358-6365.	1.1	96
46	Phosphine-Stabilized Ruthenium Nanoparticles: The Effect of the Nature of the Ligand in Catalysis. ACS Catalysis, 2012, 2, 317-321.	5.5	90
47	The use of ultrasmall iron(0) nanoparticles as catalysts for the selective hydrogenation of unsaturated C–C bonds. Chemical Communications, 2013, 49, 3416.	2.2	89
48	Platinum Nâ€Heterocyclic Carbene Nanoparticles as New and Effective Catalysts for the Selective Hydrogenation of Nitroaromatics. ChemCatChem, 2014, 6, 87-90.	1.8	89
49	Surface chemistry on colloidal metals: spectroscopic study of adsorption of small molecules. Faraday Discussions, 1991, 92, 255.	1.6	84
50	Spontaneous Formation of Ordered 3D Superlattices of Nanocrystals from Polydisperse Colloidal Solutions. Angewandte Chemie - International Edition, 2003, 42, 1945-1949.	7.2	81
51	Organometallic Ruthenium Nanoparticles: Synthesis, Surface Chemistry, and Insights into Ligand Coordination. Accounts of Chemical Research, 2018, 51, 376-384.	7.6	79
52	Tuning Complex Shapes in Platinum Nanoparticles: From Cubic Dendrites to Fivefold Stars. Angewandte Chemie - International Edition, 2012, 51, 4690-4694.	7.2	78
53	Shape Control of Thermodynamically Stable Cobalt Nanorods through Organometallic Chemistry. Angewandte Chemie, 2002, 114, 4462-4465.	1.6	77
54	A new and specific mode of stabilization of metallic nanoparticles. Chemical Communications, 2008, , 3296.	2.2	77

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55	Location and Dynamics of CO Co-ordination on Ru Nanoparticles: A Solid State NMR Study. Catalysis Letters, 2010, 140, 1-7.	1.4	77
56	Full Characterization of Colloidal Solutions of Longâ€Alkylâ€Chainâ€Amine‧tabilized ZnO Nanoparticles by NMR Spectroscopy: Surface State, Equilibria, and Affinity. Chemistry - A European Journal, 2012, 18, 5384-5393.	1.7	76
57	Surface Chemistry on Colloidal Metals. Reversible Adsorbate-Induced Surface Composition Changes in Colloidal Palladium-Copper Alloys. Langmuir, 1995, 11, 693-695.	1.6	73
58	Ligand effects on the air stability of coppernanoparticles obtained from organometallic synthesis. Journal of Materials Chemistry, 2012, 22, 2279-2285.	6.7	73
59	Use of long chain amine as a reducing agent for the synthesis of high quality monodisperse iron(0) nanoparticles. Journal of Materials Chemistry, 2011, 21, 13464.	6.7	71
60	A novel stabilisation model for ruthenium nanoparticles in imidazolium ionic liquids: in situ spectroscopic and labelling evidence. Physical Chemistry Chemical Physics, 2010, 12, 4217.	1.3	68
61	Ïf-H–H, Ïf-C–H, and Ïf-Si–H Bond Activation Catalyzed by Metal Nanoparticles. Chemical Reviews, 2020, 12 1042-1084.	.0, 23.0	68
62	Chemical Control of Structural and Magnetic Properties of Cobalt Nanoparticles. Chemistry of Materials, 2005, 17, 107-111.	3.2	66
63	Hydrodeoxygenation Using Magnetic Induction: Highâ€Temperature Heterogeneous Catalysis in Solution. Angewandte Chemie - International Edition, 2019, 58, 11306-11310.	7.2	64
64	Size-Specific Spin Configurations in Single Iron Nanomagnet: From Flower to Exotic Vortices. Nano Letters, 2015, 15, 6952-6957.	4.5	63
65	Long-chain NHC-stabilized RuNPs as versatile catalysts for one-pot oxidation/hydrogenation reactions. Chemical Communications, 2016, 52, 4768-4771.	2.2	63
66	Synthesis and magnetic properties of Co nanorod superlattices. Materials Science and Engineering C, 2007, 27, 1162-1166.	3.8	62
67	The Big Impact of a Small Detail: Cobalt Nanocrystal Polymorphism as a Result of Precursor Addition Rate during Stock Solution Preparation. Journal of the American Chemical Society, 2012, 134, 17922-17931.	6.6	62
68	Enhancing the Catalytic Properties of Ruthenium Nanoparticle-SILP Catalysts by Dilution with Iron. ACS Catalysis, 2016, 6, 3719-3726.	5.5	62
69	Bimetallic Nanoparticles in Supported Ionic Liquid Phases as Multifunctional Catalysts for the Selective Hydrodeoxygenation of Aromatic Substrates. Angewandte Chemie - International Edition, 2018, 57, 12721-12726.	7.2	61
70	Secondary phosphineoxides as pre-ligands for nanoparticle stabilization. Catalysis Science and Technology, 2013, 3, 595-599.	2.1	60
71	Solution Epitaxial Growth of Cobalt Nanowires on Crystalline Substrates for Data Storage Densities beyond 1 Tbit/in ² . Nano Letters, 2014, 14, 3481-3486.	4.5	59
72	RuH2(H2)2(PCy3)2: a room temperature catalyst for the Murai reaction. Journal of Molecular Catalysis A, 2004, 212, 77-82.	4.8	58

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73	NMR and INS Line Shapes of Transition Metal Hydrides in the Presence of Coherent and Incoherent Dihydrogen Exchange. Journal of the American Chemical Society, 1998, 120, 7929-7943.	6.6	56
74	NiFe Nanoparticles: A Soft Magnetic Material?. Small, 2007, 3, 451-458.	5.2	56
75	Magnetism of single-crystalline Co nanorods. Applied Physics Letters, 2009, 95, .	1.5	56
76	Uniform Ru nanoparticles on N-doped graphene for selective hydrogenation of fatty acids to alcohols. Journal of Catalysis, 2019, 377, 429-437.	3.1	55
77	Carbohydrateâ€Derived 1,3â€Diphosphite Ligands as Chiral Nanoparticle Stabilizers: Promising Catalytic Systems for Asymmetric Hydrogenation. ChemSusChem, 2009, 2, 769-779.	3.6	54
78	New Route to Stabilize Ruthenium Nanoparticles with Nonâ€Isolable Chiral Nâ€Heterocyclic Carbenes. Chemistry - A European Journal, 2015, 21, 17495-17502.	1.7	54
79	Engineering Iron–Nickel Nanoparticles for Magnetically Induced CO ₂ Methanation in Continuous Flow. Angewandte Chemie - International Edition, 2020, 59, 6187-6191.	7.2	52
80	PTAâ€ s tabilized Ruthenium and Platinum Nanoparticles: Characterization and Investigation in Aqueous Biphasic Hydrogenation Catalysis. European Journal of Inorganic Chemistry, 2012, 2012, 1229-1236.	1.0	51
81	Organometallic precursors of nano-objects, a critical view. Dalton Transactions, 2013, 42, 12546.	1.6	51
82	A betaine adduct of N-heterocyclic carbene and carbodiimide, an efficient ligand to produce ultra-small ruthenium nanoparticles. Chemical Communications, 2015, 51, 4647-4650.	2.2	51
83	Surface Chemistry on Small Ruthenium Nanoparticles: Evidence for Site Selective Reactions and Influence of Ligands. Chemistry - A European Journal, 2014, 20, 1287-1297.	1.7	50
84	NHC‣tabilized Iridium Nanoparticles as Catalysts in Hydrogen Isotope Exchange Reactions of Anilines. Angewandte Chemie - International Edition, 2020, 59, 3517-3522.	7.2	50
85	Platinum colloids stabilized by bifunctional ligands: self-organization and connection to gold. Chemical Communications, 2001, , 1474-1475.	2.2	49
86	New Ru Nanoparticles Stabilized by Organosilane Fragments. Chemistry of Materials, 2004, 16, 4937-4941.	3.2	48
87	Zwitterionic amidinates as effective ligands for platinum nanoparticle hydrogenation catalysts. Chemical Science, 2017, 8, 2931-2941.	3.7	48
88	NHC-stabilised Rh nanoparticles: Surface study and application in the catalytic hydrogenation of aromatic substrates. Journal of Catalysis, 2017, 354, 113-127.	3.1	48
89	Ruthenium-catalyzed hydrogen isotope exchange of C(sp ³)–H bonds directed by a sulfur atom. Chemical Communications, 2018, 54, 2986-2989.	2.2	48
90	One-Pot Synthesis of Coreâ^'Shell FeRh Nanoparticles. Chemistry of Materials, 2007, 19, 4624-4626.	3.2	46

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91	Efficient Access to Deuterated and Tritiated Nucleobase Pharmaceuticals and Oligonucleotides using Hydrogenâ€Isotope Exchange. Angewandte Chemie - International Edition, 2019, 58, 4891-4895.	7.2	46
92	Bridging the Gap between Homogeneous and Heterogeneous Catalysis:Â Ortho/Para H2Conversion, Hydrogen Isotope Scrambling, and Hydrogenation of Olefins by Ir(CO)Cl(PPh3)2. Journal of the American Chemical Society, 2004, 126, 8366-8367.	6.6	45
93	Hydrido-Ruthenium Cluster Complexes as Models for Reactive Surface Hydrogen Species of Ruthenium Nanoparticles. Solid-State ² H NMR and Quantum Chemical Calculations. Journal of the American Chemical Society, 2010, 132, 11759-11767.	6.6	44
94	Theoretical characterization of the surface composition of ruthenium nanoparticles in equilibrium with syngas. Nanoscale, 2016, 8, 10974-10992.	2.8	43
95	Iron Under Pressure: "Kohn Tweezers―and Remnant Magnetism. Physical Review Letters, 2011, 106, 247201.	2.9	42
96	Tuning the Selectivity in the Hydrogenation of Aromatic Ketones Catalyzed by Similar Ruthenium and Rhodium Nanoparticles. ChemCatChem, 2014, 6, 3160-3168.	1.8	42
97	Organometallic Ruthenium Nanoparticles as Model Catalysts for CO Hydrogenation: A Nuclear Magnetic Resonance and Ambient-Pressure X-ray Photoelectron Spectroscopy Study. ACS Catalysis, 2014, 4, 3160-3168.	5.5	42
98	Chemical Ordering in Bimetallic FeCo Nanoparticles: From a Direct Chemical Synthesis to Application As Efficient High-Frequency Magnetic Material. Nano Letters, 2019, 19, 1379-1386.	4.5	42
99	An organometallic approach for the synthesis of water-soluble ruthenium and platinum nanoparticles. Dalton Transactions, 2009, , 10172.	1.6	41
100	Monitoring the Coordination of Amine Ligands on Silver Nanoparticles Using NMR and SERS. Langmuir, 2015, 31, 1362-1367.	1.6	41
101	Enantioselective hydrogenation of ketones by iridium nanoparticles ligated with chiral secondary phosphine oxides. Catalysis Science and Technology, 2016, 6, 3758-3766.	2.1	41
102	Water-Dispersible and Biocompatible Iron Carbide Nanoparticles with High Specific Absorption Rate. ACS Nano, 2019, 13, 2870-2878.	7.3	41
103	Synthesis of well-dispersed ruthenium nanoparticles inside mesostructured porous silica under mild conditions. Microporous and Mesoporous Materials, 2005, 79, 185-194.	2.2	40
104	Tuning the Composition of FeCo Nanoparticle Heating Agents for Magnetically Induced Catalysis. ACS Applied Nano Materials, 2020, 3, 3767-3778.	2.4	40
105	Organometallic Nanoparticles of Metals or Metal Oxides. Oil and Gas Science and Technology, 2007, 62, 799-817.	1.4	38
106	Copper nanoparticles and organometallic chemical liquid deposition (OMCLD) for substrate metallization. Journal of Materials Chemistry, 2008, 18, 3084.	6.7	38
107	Size-Dependent Activity and Selectivity of Fe/MCF-17 in the Catalytic Hydrogenation of Carbon Monoxide Using Fe(0) Nanoparticles as Precursors. ACS Catalysis, 2016, 6, 2496-2500.	5.5	38
108	Knight Shift in ¹³ Câ€NMR Resonances Confirms the Coordination of Nâ€Heterocyclic Carbene Ligands to Waterâ€6oluble Palladium Nanoparticles. Angewandte Chemie - International Edition, 2017, 56, 865-869.	7.2	38

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109	To heat or not to heat: a study of the performances of iron carbide nanoparticles in magnetic heating. Nanoscale, 2019, 11, 5402-5411.	2.8	38
110	Hydrodeoxygenation and hydrogenolysis of biomass-based materials using FeNi catalysts and magnetic induction. Green Chemistry, 2021, 23, 2025-2036.	4.6	38
111	From Molecular Complexes to Complex Metallic Nanostructures— ² H Solidâ€State NMR Studies of Rutheniumâ€Containing Hydrogenation Catalysts. ChemPhysChem, 2013, 14, 3026-3033.	1.0	37
112	Nanocatalyzed Hydrogen Isotope Exchange. Accounts of Chemical Research, 2021, 54, 1465-1480.	7.6	37
113	Room-Temperature Tunnel Magnetoresistance in Self-Assembled Chemically Synthesized Metallic Iron Nanoparticles. Nano Letters, 2011, 11, 5128-5134.	4.5	36
114	Monitoring of nanoparticle reactivity in solution: interaction of <scp>l</scp> -lysine and Ru nanoparticles probed by chemical shift perturbation parallels regioselective H/D exchange. Chemical Communications, 2017, 53, 5850-5853.	2.2	36
115	Soluble Platinum Nanoparticles Ligated by Longâ€Chain Nâ€Heterocyclic Carbenes as Catalysts. Chemistry - A European Journal, 2017, 23, 12779-12786.	1.7	36
116	Silica coated iron nanoparticles: synthesis, interface control, magnetic and hyperthermia properties. RSC Advances, 2018, 8, 32146-32156.	1.7	36
117	Ruthenium nanoparticles ligated by cholesterol-derived NHCs and their application in the hydrogenation of arenes. Chemical Communications, 2018, 54, 7070-7073.	2.2	36
118	Size and composition effects in polymer-protected ultrafine bimetallicPtxRu1â^'x(0 <x<1)particles. Physical Review B, 2001, 63, .</x<1)particles. 	1.1	35
119	hcp o Nanowires Grown on Metallic Foams as Catalysts for Fischer–Tropsch Synthesis. Angewandte Chemie - International Edition, 2018, 57, 10579-10583.	7.2	35
120	Segregation at a small scale: synthesis of core–shell bimetallic RuPt nanoparticles, characterization and solid state NMR studies. Journal of Materials Chemistry, 2012, 22, 3578.	6.7	34
121	NHC-stabilized Ru nanoparticles: Synthesis and surface studies. Nano Structures Nano Objects, 2016, 6, 39-45.	1.9	34
122	Iron carbide or iron carbide/cobalt nanoparticles for magnetically-induced CO ₂ hydrogenation over Ni/SiRAlOx catalysts. Catalysis Science and Technology, 2019, 9, 2601-2607.	2.1	34
123	² H Solid-State NMR of Ruthenium Complexes. Journal of the American Chemical Society, 2008, 130, 17502-17508.	6.6	33
124	Magnetic anisotropy determination and magnetic hyperthermia properties of small Fe nanoparticles in the superparamagnetic regime. Journal of Applied Physics, 2010, 107, 09A324.	1.1	33
125	TEM and HRTEM Evidence for the Role of Ligands in the Formation of Shapeâ€Controlled Platinum Nanoparticles. Small, 2011, 7, 235-241.	5.2	33
126	Synthesis of Waterâ€Soluble Palladium Nanoparticles Stabilized by Sulfonated Nâ€Heterocyclic Carbenes. Chemistry - A European Journal, 2017, 23, 13435-13444.	1.7	33

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127	Ultrastable Magnetic Nanoparticles Encapsulated in Carbon for Magnetically Induced Catalysis. ACS Applied Nano Materials, 2020, 3, 7076-7087.	2.4	33
128	Synthesis of Monodisperse Heptanol Stabilized Ruthenium Nanoparticles. Evidence for the Presence of Surface Hydrogens. Zeitschrift Fur Physikalische Chemie, 2003, 217, 1539-1548.	1.4	32
129	Concerted Growth and Ordering of Cobalt Nanorod Arrays as Revealed by Tandem in Situ SAXS-XAS Studies. Journal of the American Chemical Society, 2016, 138, 8422-8431.	6.6	32
130	Synthesis of Oxide-Free InP Quantum Dots: Surface Control and H ₂ -Assisted Growth. Chemistry of Materials, 2017, 29, 9623-9627.	3.2	32
131	The use of (cyclo-octadiene)(cyclo-octatriene)ruthenium(0) as the starting material for the synthesis of mono- and poly-nuclear ruthenium polyhydride phosphine complexes. Journal of the Chemical Society Chemical Communications, 1982, , 1388.	2.0	31
132	Selective catalytic hydrogenation of polycyclic aromatic hydrocarbons promoted by ruthenium nanoparticles. Catalysis Science and Technology, 2015, 5, 2741-2751.	2.1	31
133	Bimetallic Nanoparticles Associating Noble Metals and First-Row Transition Metals in Catalysis. ACS Nano, 2021, 15, 3550-3556.	7.3	31
134	Solid State and Gas Phase NMR Studies of Immobilized Catalysts and Catalytic Active Nanoparticles. Topics in Catalysis, 2008, 48, 75-83.	1.3	30
135	Where does Hydrogen Adsorb on Ru Nanoparticles? A Powerful Joint ² H MASâ€NMR/DFT Approach. ChemPhysChem, 2009, 10, 2939-2942.	1.0	30
136	Stabilizing Vortices in Interacting Nano-Objects: A Chemical Approach. Nano Letters, 2012, 12, 3245-3250.	4.5	30
137	New generation of magnetic and luminescent nanoparticles for <i>in vivo</i> real-time imaging. Interface Focus, 2013, 3, 20120103.	1.5	30
138	Investigation of the surface chemistry of phosphine-stabilized ruthenium nanoparticles – an advanced solid-state NMR study. Physical Chemistry Chemical Physics, 2013, 15, 17383.	1.3	29
139	Magnetically Induced Continuous CO ₂ Hydrogenation Using Composite Iron Carbide Nanoparticles of Exceptionally High Heating Power. Angewandte Chemie, 2016, 128, 16126-16130.	1.6	29
140	Probing the surface of platinum nanoparticles with13CO by solid-state NMR and IR spectroscopies. Nanoscale, 2014, 6, 539-546.	2.8	27
141	Facile synthesis of ultra-small rhenium nanoparticles. Chemical Communications, 2014, 50, 10809.	2.2	26
142	Hydrogenation Processes at the Surface of Ruthenium Nanoparticles: A NMR Study. Topics in Catalysis, 2013, 56, 1253-1261.	1.3	25
143	Hydrodeoxygenation Using Magnetic Induction: Highâ€Temperature Heterogeneous Catalysis in Solution. Angewandte Chemie, 2019, 131, 11428-11432.	1.6	25
144	DFT 2H quadrupolar coupling constants of ruthenium complexes: a good probe of the coordination of hydrides in conjuction with experiments. Physical Chemistry Chemical Physics, 2009, 11, 5657.	1.3	24

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145	Tin-decorated ruthenium nanoparticles: a way to tune selectivity in hydrogenation reaction. Nanoscale, 2014, 6, 9806-9816.	2.8	24
146	Selective catalytic deuteration of phosphorus ligands using ruthenium nanoparticles: a new approach to gain information on ligand coordination. Chemical Communications, 2015, 51, 16342-16345.	2.2	24
147	A New Approach to the Mechanism of Fischer–Tropsch Syntheses Arising from Gas Phase NMR and Mass Spectrometry. ChemCatChem, 2016, 8, 1727-1731.	1.8	24
148	On the influence of diphosphine ligands on the chemical order in small RuPt nanoparticles: combined structural and surface reactivity studies. Dalton Transactions, 2013, 42, 372-382.	1.6	23
149	Synergism of Au and Ru Nanoparticles in Lowâ€Temperature Photoassisted CO ₂ Methanation. Chemistry - A European Journal, 2018, 24, 18436-18443.	1.7	23
150	Hydrogen Isotope Exchange Catalyzed by Ru Nanocatalysts: Labelling of Complex Molecules Containing <i>N</i> â€Heterocycles and Reaction Mechanism Insights. Chemistry - A European Journal, 2020, 26, 4988-4996.	1.7	23
151	Multiple Site Hydrogen Isotope Labelling of Pharmaceuticals. Angewandte Chemie - International Edition, 2020, 59, 21114-21120.	7.2	22
152	Organometallic control at the nanoscale: a new, one-pot method to decorate a magnetic nanoparticle surface with noble metal atoms. Chemical Communications, 2010, 46, 2453.	2.2	21
153	Ligand effect on the NMR, vibrational and structural properties of tetra- and hexanuclear ruthenium hydrido clusters: a theoretical investigation. Dalton Transactions, 2009, , 2142.	1.6	20
154	Tuning the Reactivity of a Heterogeneous Catalyst using Nâ€Heterocyclic Carbene Ligands for Câ^'H Activation Reactions. Angewandte Chemie - International Edition, 2020, 59, 20879-20884.	7.2	20
155	Silica Nanoparticles Grown and Stabilized in Organic Nonalcoholic Media. Langmuir, 2009, 25, 7540-7546.	1.6	19
156	Enhancement of Carbon Oxides Hydrogenation on Ironâ€Based Nanoparticles by Inâ€5itu Water Removal. ChemCatChem, 2018, 10, 4047-4051.	1.8	19
157	Catalytic reactors for highly exothermic reactions: Steady-state stability enhancement by magnetic induction. Chemical Engineering Journal, 2020, 390, 124531.	6.6	19
158	Commercial Cu ₂ Cr ₂ O ₅ Decorated with Iron Carbide Nanoparticles as a Multifunctional Catalyst for Magnetically Induced Continuousâ€Flow Hydrogenation of Aromatic Ketones. Angewandte Chemie - International Edition, 2021, 60, 26639-26646.	7.2	19
159	Oriented Metallic Nano-Objects on Crystalline Surfaces by Solution Epitaxial Growth. ACS Nano, 2015, 9, 9665-9677.	7.3	17
160	Novel nickel nanoparticles stabilized by imidazolium-amidinate ligands for selective hydrogenation of alkynes. Catalysis Science and Technology, 2020, 10, 342-350.	2.1	17
161	Magnetically Induced CO ₂ Methanation Using Exchange oupled Spinel Ferrites in Cuboctahedron‧haped Nanocrystals. Angewandte Chemie - International Edition, 2020, 59, 15537-15542. 	7.2	17
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