Embedded Phases: A Way to Active and Stable Catalysts

ChemSusChem

3, 24-42

DOI: 10.1002/cssc.200900151

Citation Report

#	Article	IF	Citations
1	Pt Nanoparticles Supported on Highly Dispersed Alumina Coated inside SBAâ€15 for Enantioselective Hydrogenation. ChemCatChem, 2010, 2, 1303-1311.	1.8	23
2	Embedded Ru@ZrO₂ Catalysts for H₂ Production by Ammonia Decomposition. ChemCatChem, 2010, 2, 1096-1106.	1.8	59
3	Thermally Stable Pt/CeO₂ Hetero-Nanocomposites with High Catalytic Activity. Journal of the American Chemical Society, 2010, 132, 4998-4999.	6.6	187
4	Evidence for and mitigation of the encapsulation of gold nanoparticles within silica supports upon high-temperature treatment of Au/SiO2 catalysts: Implication to catalyst deactivation. Applied Catalysis A: General, 2010, 386, 147-156.	2.2	32
5	Kinetic Studies on Pd/CexZr1â^'xO2Catalyst for Methane Combustion. Industrial & Engineering Chemistry Research, 2010, 49, 11101-11111.	1.8	56
6	Novel embedded Pd@CeO₂catalysts: a way to active and stable catalysts. Dalton Transactions, 2010, 39, 2122-2127.	1.6	80
7	Embedded High Density Metal Nanoparticles with Extraordinary Thermal Stability Derived from Guestâ^'Host Mediated Layered Double Hydroxides. Journal of the American Chemical Society, 2010, 132, 14739-14741.	6.6	177
8	Metal/oxide interfaces in inorganic nanosystems: what's going on and what's next?. Journal of Materials Chemistry, 2011, 21, 1648-1654.	6.7	28
9	In Situ Calorimetric Study: Structural Effects on Adsorption and Catalytic Performances for CO Oxidation over Ir-in-CeO₂and Ir-on-CeO₂Catalysts. Journal of Physical Chemistry C, 2011, 115, 16509-16517.	1.5	73
10	Multicomponent Click Synthesis of 1,2,3-Triazoles from Epoxides in Water Catalyzed by Copper Nanoparticles on Activated Carbon. Journal of Organic Chemistry, 2011, 76, 8394-8405.	1.7	159
11	Catalytic nano-rattle of Au@hollow silica: towards a poison-resistant nanocatalyst. Journal of Materials Chemistry, 2011, 21, 789-794.	6.7	175
12	Study of the Water-Gas-Shift Reaction on Pd@CeO₂/Al₂O₃ Coreâ^'Shell Catalysts. Journal of Physical Chemistry C, 2011, 115, 915-919.	1.5	66
13	A facile route to ordered mesoporous-alumina-supported catalysts, and their catalytic activities for CO oxidation. Physical Chemistry Chemical Physics, 2011, 13, 2488-2491.	1.3	53
14	Kinetics and diffusional limitations in nanostructured heterogeneous catalyst with controlled pore texture. Catalysis Communications, 2011, 12, 441-445.	1.6	11
15	SnO2 nanoparticle embedded TiO2 nanofibers â€" Highly efficient photocatalyst for the degradation of rhodamine B. Catalysis Communications, 2011, 12, 1037-1041.	1.6	79
16	Fixed beds of Rh/Al2O3-based catalysts for syngas production in methane SCT-CPO reactors. International Journal of Hydrogen Energy, 2011, 36, 7776-7784.	3.8	3
17	Stabilization of Cu(0)-nanoparticles into the nanopores of modified montmorillonite: An implication on the catalytic approach for â€œClickâ€•reaction between azides and terminal alkynes. Green Chemistry, 2011, 13, 3453.	4.6	100
18	Design of Novel Structured Gold Nanocatalysts. ACS Catalysis, 2011, 1, 805-818.	5.5	131

#	Article	IF	Citations
20	Selective and regular localization of accessible Pt nanoparticles inside the walls of an ordered silica: Application as a highly active and well-defined heterogeneous catalyst for propene and styrene hydrogenation reactions. Journal of Catalysis, 2011, 284, 184-193.	3.1	22
21	Hydrocarbons valorisation to cleaner fuels: H2-rich gas production via fuel processors. Catalysis Today, 2011, 176, 191-196.	2.2	7
22	Click chemistry from organic halides, diazonium salts and anilines in water catalysed by copper nanoparticles on activated carbon. Organic and Biomolecular Chemistry, 2011, 9, 6385.	1.5	156
23	Nickelâ€Loaded Zirconia Catalysts with Large Specific Surface Area for Highâ€Temperature Catalytic Applications. ChemCatChem, 2011, 3, 598-606.	1.8	25
24	Gramâ€Scale Synthesis of Magnetically Separable and Recyclable Co@SiO₂ Yolkâ€Shell Nanocatalysts for Phenoxycarbonylation Reactions. ChemCatChem, 2011, 3, 755-760.	1.8	34
25	Progresses in the Preparation of Coke Resistant Niâ€based Catalyst for Steam and CO₂ Reforming of Methane. ChemCatChem, 2011, 3, 529-541.	1.8	535
26	Development of novel supported gold catalysts: A materials perspective. Nano Research, 2011, 4, 3-32.	5.8	179
27	Highly Efficient Ru-Ba/AC Catalyst Promoted by Magnesium for Ammonia Synthesis. Chinese Journal of Catalysis, 2011, 32, 436-439.	6.9	7
28	Polymers for Green Câ€“C Couplings. European Journal of Inorganic Chemistry, 2011, 2011, 2347-2360.	1.0	56
29	Combustion Derived Nanocrystallineâ€ZrO₂ and Its Catalytic Activity for Biginelli Condensation under Microwave Irradiation. Chinese Journal of Chemistry, 2011, 29, 1863-1868.	2.6	13
30	Catalytic partial oxidation of CH4 with nickelâ€“lanthanum-based catalysts. Catalysis Today, 2011, 171, 84-96.	2.2	52
31	A Versatile Route to Coreâ€“Shell Catalysts: Synthesis of Dispersible M@Oxide (M=Pd, Pt;) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T 140-148.	3.6	74
32	Effect of particle size on selective hydrogenation of cinnamaldehyde by Pt encapsulated in mesoporous silica. Catalysis Communications, 2012, 28, 42-46.	1.6	47
33	Bimetallic heterogeneous catalysts for hydrogen production. Catalysis Today, 2012, 197, 190-205.	2.2	173
34	Exceptional Activity for Methane Combustion over Modular Pd@CeO ₂ Subunits on Functionalized Al ₂ O ₃. Science, 2012, 337, 713-717.	6.0	842
35	Heterogeneous Catalytic Homocoupling of Terminal Alkynes. ACS Catalysis, 2012, 2, 1441-1451.	5.5	94
36	Silica-encapsulated bimetallic Coâ€“Ni nanoparticles as novel catalysts for partial oxidation of methane to syngas. Catalysis Communications, 2012, 26, 72-77.	1.6	52
37	Platinum based coreâ€“shell catalysts for sour waterâ€“gas shift reaction. Catalysis Communications, 2012, 26, 159-163.	1.6	22

#	Article	IF	Citations
38	Click Chemistry of Alkyneâ€“Azide Cycloaddition using Nanostructured Copper Catalysts. ChemCatChem, 2012, 4, 1217-1229.	1.8	105
39	Composite Metalâ€“Oxide Nanocatalysts. ChemCatChem, 2012, 4, 1462-1484.	1.8	65
40	Nanostructured Metalâ€Free Electrochemical Catalysts for Highly Efficient Oxygen Reduction. Small, 2012, 8, 3550-3566.	5.2	559
41	Silica-encapsulated platinum catalysts for the low-temperature water-gas shift reaction. Applied Catalysis B: Environmental, 2012, 127, 342-350.	10.8	38
42	Multi-component oxide nanosystems by Chemical Vapor Deposition and related routes: challenges and perspectives. CrystEngComm, 2012, 14, 6347.	1.3	41
43	Ordered Mesoporous Platinum@Graphitic Carbon Embedded Nanophase as a Highly Active, Stable, and Methanol-Tolerant Oxygen Reduction Electrocatalyst. Journal of the American Chemical Society, 2012, 134, 2236-2245.	6.6	208
44	New Challenges in Heterogeneous Catalysis for the 21st Century. Catalysis Letters, 2012, 142, 501-516.	1.4	114
45	Multiwalled Carbon Nanotubes Drive the Activity of Metal@oxide Coreâ€“Shell Catalysts in Modular Nanocomposites. Journal of the American Chemical Society, 2012, 134, 11760-11766.	6.6	107
46	Threeâ€Component Coupling of Aldehydes, Amines, and Alkynes Catalyzed by Oxidized Copper Nanoparticles on Titania. European Journal of Organic Chemistry, 2012, 2012, 3093-3104.	1.2	132
48	Diffusion through the Shells of Yolkâ€“Shell and Coreâ€“Shell Nanostructures in the Liquid Phase. Angewandte Chemie - International Edition, 2012, 51, 8034-8036.	7.2	69
49	Controlled synthesis of highly dispersed semi-embedded ruthenium nanoparticles in porous carbon framework with more exposed active sites. Catalysis Communications, 2012, 20, 29-35.	1.6	38
50	Correlation between catalytic activity and surface ligands of monolayer protected gold nanoparticles. Journal of Colloid and Interface Science, 2012, 368, 77-85.	5.0	31
51	Preparation and characterization of nickel aluminosilicate nanocomposites for transfer hydrogenation of carbonyl compounds. Journal of Molecular Catalysis A, 2012, 356, 90-99.	4.8	18
52	Synthesis and Catalytic Properties of Carbon-Nanotube-Supported RuO2 Catalyst Encapsulated in Silica Coating. Catalysis Letters, 2012, 142, 100-107.	1.4	3
53	Preparation of functionalized platinum nanoparticles: a comparison of different methods and reagents. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	5
54	Shapeâ€Controlled Nanostructures in Heterogeneous Catalysis. ChemSusChem, 2013, 6, 1797-1820.	3.6	142
55	Mass Transport across the Porous Oxide Shells of Coreâ€“Shell and Yolkâ€“Shell Nanostructures in Liquid Phase. Journal of Physical Chemistry C, 2013, 117, 20043-20053.	1.5	42
56	Oxidative Methane Reforming with an Intelligent Catalyst: Sinteringâ€Tolerant Supported Nickel Nanoparticles. ChemSusChem, 2013, 6, 2061-2065.	3.6	62

#	Article	IF	Citations
57	Playing with Structures at the Nanoscale: Designing Catalysts by Manipulation of Clusters and Nanocrystals as Building Blocks. ChemPhysChem, 2013, 14, 3869-3877.	1.0	25
58	Fischerâ€“Tropsch synthesis over different structured catalysts: The effect of silica coating onto nanoparticles. Journal of Molecular Catalysis A, 2013, 379, 263-268.	4.8	17
60	Highly Active and Stable Lanthanumâ€doped Coreâ€“Shellâ€structured Ni@SiO₂ Catalysts for the Partial Oxidation of Methane to Syngas. ChemCatChem, 2013, 5, 3781-3787.	1.8	23
61	Palladium nanoparticles encapsulated in porous silica shells: an efficient and highly stable catalyst for CO oxidation. RSC Advances, 2013, 3, 851-858.	1.7	38
62	Chemistry of precious metal oxides relevant to heterogeneous catalysis. Dalton Transactions, 2013, 42, 14653.	1.6	47
63	Nanostructured materials for applications in heterogeneous catalysis. Chemical Society Reviews, 2013, 42, 2746-2762.	18.7	567
64	Deposition and thermal transformation of metal oxides in mesoporous SBA-15 silica with hydrophobic mesopores. Microporous and Mesoporous Materials, 2013, 179, 40-47.	2.2	16
65	One-Pot Synthesis of Pd Nanoparticle Catalysts Supported on N-Doped Carbon and Application in the Domino Carbonylation. ACS Catalysis, 2013, 3, 839-845.	5.5	118
66	Advanced Coreâ€“Shell Nanoparticle Catalysts for Efficient Organic Transformations. ChemCatChem, 2013, 5, 1681-1691.	1.8	50
67	Magnetically recyclable Î³-Fe2O3â€“HAP nanoparticles for the cycloaddition reaction of alkynes, halides and azides in aqueous media. RSC Advances, 2013, 3, 8184.	1.7	39
68	Aminoclay: a functional layered material with multifaceted applications. Journal of Materials Chemistry A, 2013, 1, 6707.	5.2	118
69	Exceptional Thermal Stability of Pd@CeO₂ Coreâ€“Shell Catalyst Nanostructures Grafted onto an Oxide Surface. Nano Letters, 2013, 13, 2252-2257.	4.5	106
70	Coating with mesoporous silica remarkably enhances the stability of the highly active yet fragile flower-like MgO catalyst for dimethyl carbonate synthesis. Chemical Communications, 2013, 49, 6093.	2.2	40
71	In situ stabilization of Pd0-nanoparticles into the nanopores of modified Montmorillonite: Efficient heterogeneous catalysts for Heck and Sonogashira coupling reactions. Journal of Molecular Catalysis A, 2013, 366, 202-209.	4.8	49
73	Simultaneous Tuning Porosity and Basicity of Nickel@Nickelâ€“Magnesium Phyllosilicate Coreâ€“Shell Catalysts for CO₂ Reforming of CH₄. Langmuir, 2014, 30, 14694-14705.	1.6	139
74	Direct Synthesis of Rutheniumâ€Containing Ordered Mesoporous Carbon with Tunable Embedding Degrees by Using a Boric Acidâ€Assisted Approach. ChemCatChem, 2014, 6, 353-360.	1.8	31
75	Noble metal nanoparticle@metal oxide core/yolkâ€“shell nanostructures as catalysts: recent progress and perspective. Nanoscale, 2014, 6, 3995-4011.	2.8	347
76	A versatile designed synthesis of magnetically separable nano-catalysts with well-defined coreâ€“shell nanostructures. Journal of Materials Chemistry A, 2014, 2, 6071-6074.	5.2	63

#	Article	IF	Citations
77	Grapheneâ€Supported Ultrafine Metal Nanoparticles Encapsulated by Mesoporous Silica: Robust Catalysts for Oxidation and Reduction Reactions. Angewandte Chemie - International Edition, 2014, 53, 250-254.	7.2	384
78	RECENT PROGRESS IN METAL ASSISTED MULTICOMPONENT SYNTHESES OF HETEROCYCLES. Heterocycles, 2014, 89, 869.	0.4	18
79	Current Trends of Surface Science and Catalysis. , 2014, , .		19
80	Low pressure induced porous nanorods of ceria with high reducibility and large oxygen storage capacity: synthesis and catalytic applications. Journal of Materials Chemistry A, 2014, 2, 16459-16466.	5.2	106
81	One-step synthesis of highly ordered Pt/MCM-41 from natural diatomite and the superior capacity in hydrogen storage. Applied Clay Science, 2014, 99, 246-253.	2.6	27
82	Monodisperse embedded nanoparticles derived from an atomic metal-dispersed precursor of layered double hydroxide for architectured carbon nanotube formation. Journal of Materials Chemistry A, 2014, 2, 1686.	5.2	36
83	Efficient three-component coupling reactions catalyzed by Cu⁰-nanoparticles stabilized on modified montmorillonite. Catalysis Science and Technology, 2014, 4, 1047-1054.	2.1	69
84	Coreâ€“Shell Catalysts of Metal Nanoparticle Core and Metalâ€“Organic Framework Shell. ACS Catalysis, 2014, 4, 4409-4419.	5.5	318
85	Surfactant-Directed Atomic to Mesoscale Alignment: Metal Nanocrystals Encased Individually in Single-Crystalline Porous Nanostructures. Journal of the American Chemical Society, 2014, 136, 10561-10564.	6.6	157
86	Effects of sintering-resistance and large metalâ€“support interface of alumina nanorod-stabilized Pt nanoparticle catalysts on the improved high temperature water gas shift reaction activity. Catalysis Communications, 2014, 56, 11-16.	1.6	11
87	A General Mechanism for Stabilizing the Small Sizes of Precious Metal Nanoparticles on Oxide Supports. Chemistry of Materials, 2014, 26, 5475-5481.	3.2	53
88	Recent progress on graphene-based hybrid electrocatalysts. Materials Horizons, 2014, 1, 379-399.	6.4	303
89	SBA-15-supported highly dispersed copper catalysts: Vacuumâ€“thermal preparation and catalytic studies in propylene partial oxidation to acrolein. Journal of Catalysis, 2014, 316, 231-239.	3.1	34
90	Probing the stability of Pt nanoparticles encapsulated in solâ€“gel Al2O3 using in situ and ex situ characterization techniques. Applied Catalysis A: General, 2014, 485, 108-117.	2.2	10
91	Efficient Suzukiâ€“Miyaura coupling reaction in water: Stabilized Pdo-Montmorillonite clay composites catalyzed reaction. Applied Catalysis A: General, 2014, 469, 350-356.	2.2	46
93	Progress in Synthesis of Highly Active and Stable Nickelâ€Based Catalysts for Carbon Dioxide Reforming of Methane. ChemSusChem, 2015, 8, 3556-3575.	3.6	355
94	Highly Active and Stable Bimetallic Nickelâ€“Copper Coreâ€“Ceria Shell Catalyst for Highâ€Temperature Waterâ€“Gas Shift Reaction. ChemCatChem, 2015, 7, 3358-3367.	1.8	31
95	Synthesis of a Sulfonated Twoâ€Dimensional Covalent Organic Framework as an Efficient Solid Acid Catalyst for Biobased Chemical Conversion. ChemSusChem, 2015, 8, 3208-3212.	3.6	163

#	Article	IF	Citations
96	Toward high throughput optical metamaterial assemblies. Applied Optics, 2015, 54, F61.	2.1	8
97	Re-dispersion of Pd on Ce0.5Zr0.5O2 upon cooling in the presence of oxygen. Catalysis Today, 2015, 253, 51-56.	2.2	14
98	Highly durable carbon-supported Pt catalysts prepared by hydrosilane-assisted nanoparticle deposition and surface functionalization. Chemical Communications, 2015, 51, 5883-5886.	2.2	13
99	Recent Advances in Metal Nanoparticles Stabilization into Nanopores of Montmorillonite and Their Catalytic Applications for Fine Chemicals Synthesis. Catalysis Reviews - Science and Engineering, 2015, 57, 257-305.	5.7	46
100	Nickel nanocomposites: magnetic and catalytic properties. RSC Advances, 2015, 5, 63073-63079.	1.7	9
101	Recent Advances on the Design of Group VIII Base-Metal Catalysts with Encapsulated Structures. ACS Catalysis, 2015, 5, 4959-4977.	5.5	150
102	Recent advances in noble metal based composite nanocatalysts: colloidal synthesis, properties, and catalytic applications. Nanoscale, 2015, 7, 10559-10583.	2.8	150
103	Nano-socketed nickel particles with enhanced coking resistance grown in situ by redox exsolution. Nature Communications, 2015, 6, 8120.	5.8	603
104	Efficient Synthesis of Monodisperse Metal (Rh, Ru, Pd) Nanoparticles Supported on Fibrous Nanosilica (KCC-1) for Catalysis. ACS Sustainable Chemistry and Engineering, 2015, 3, 3224-3230.	3.2	100
105	Facile â€˜embeddingâ€™ of Au nanocrystals into silica spheres with controllable quantity for improved catalytic reduction of p-nitrophenol. Inorganic Chemistry Frontiers, 2015, 2, 938-944.	3.0	5
106	Methane Catalytic Combustion over Hierarchical Pd@CeO₂/Siâ€Al₂O₃: Effect of the Presence of Water. ChemCatChem, 2015, 7, 2038-2046.	1.8	98
107	Improving the catalytic performances of metal nanoparticles by combining shape control and encapsulation. Applied Catalysis A: General, 2015, 504, 504-508.	2.2	12
108	Mechanistic aspects of formation of sintering-resistant palladium nanoparticles over SiO2 prepared using Pd(acac)2 as precursor. Applied Catalysis A: General, 2015, 504, 179-186.	2.2	13
109	Distinctive size effects of Pt nanoparticles immobilized on Fe₃O₄@PPy used as an efficient recyclable catalyst for benzylic alcohol aerobic oxidation and hydrogenation reduction of nitroaromatics. New Journal of Chemistry, 2015, 39, 1179-1185.	1.4	16
110	CO2 hydrogenation with shape-controlled Pd nanoparticles embedded in mesoporous silica: Elucidating stability and selectivity issues. Catalysis Communications, 2015, 58, 11-15.	1.6	54
111	Electrocatalytic Applications of Grapheneâ€“Metal Oxide Nanohybrid Materials. , 0, , .		17
112	Design of Enhanced Catalysts by Coupling of Noble Metals (Au,Ag) with Semiconductor SnO₂ for Catalytic Reduction of 4â€Nitrophenol. Particle and Particle Systems Characterization, 2016, 33, 212-220.	1.2	23
113	Polystyrene supported N-phenylpiperazineâ€“Cu(<scp>ii</scp>) complex: an efficient and reusable catalyst for KA²-coupling reactions under solvent-free conditions. New Journal of Chemistry, 2016, 40, 5113-5120.	1.4	27

#	Article	IF	Citations
114	Selective hydrogenation of dienic and acetylenic compounds on metal-containing catalysts. Russian Journal of Physical Chemistry A, 2016, 90, 932-942.	0.1	13
115	Sandwich-like PdO/CeO₂nanosheet@HZSM-5 membrane hybrid composite for methane combustion: self-redispersion, sintering-resistance and oxygen, water-tolerance. Nanoscale, 2016, 8, 9621-9628.	2.8	62
116	Attapulgite clay supported Ni nanoparticles encapsulated by porous silica: Thermally stable catalysts for ammonia decomposition to COx free hydrogen. International Journal of Hydrogen Energy, 2016, 41, 21157-21165.	3.8	38
117	Hollow Nano- and Microstructures as Catalysts. Chemical Reviews, 2016, 116, 14056-14119.	23.0	634
118	Water-dispersible and magnetically recoverable Fe3O4/Pd@nitrogen-doped carbon composite catalysts for the catalytic reduction of 4-nitrophenol. RSC Advances, 2016, 6, 76128-76131.	1.7	15
119	Enhanced Nickel-Catalyzed Methanation Confined under Hexagonal Boron Nitride Shells. ACS Catalysis, 2016, 6, 6814-6822.	5.5	95
120	Design of a coreâ€“shell Ptâ€“SiO2 catalyst in a reverse microemulsion system: Distinctive kinetics on CO oxidation at low temperature. Journal of Catalysis, 2016, 340, 368-375.	3.1	61
121	Design, synthesis and applications of coreâ€“shell, hollow core, and nanorattle multifunctional nanostructures. Nanoscale, 2016, 8, 2510-2531.	2.8	283
122	Modified Montmorillonite Clay Stabilized Silver Nanoparticles: An Active Heterogeneous Catalytic System for the Synthesis of Propargylamines. Catalysis Letters, 2016, 146, 656-665.	1.4	20
123	Graphene stabilized ultra-small CuNi nanocomposite with high activity and recyclability toward catalysing the reduction of aromatic nitro-compounds. Nanoscale, 2016, 8, 536-542.	2.8	65
124	Preparation of Pd/Fe3O4 nanoparticles by use of Euphorbia stracheyi Boiss root extract: A magnetically recoverable catalyst for one-pot reductive amination of aldehydes at room temperature. Journal of Colloid and Interface Science, 2016, 464, 147-152.	5.0	87
125	Bifunctional Catalyst of Coreâ€“Shell Nanoparticles Socketed on Oxygen-Deficient Layered Perovskite for Soot Combustion: In Situ Observation of Synergistic Dual Active Sites. ACS Catalysis, 2016, 6, 2710-2714.	5.5	70
126	Nanoparticles-in-concavities as efficient nanocatalysts for carbon dioxide reforming of methane to hydrogen and syngas. Catalysis Science and Technology, 2016, 6, 4565-4576.	2.1	10
127	Structured catalysts for dry reforming of methane. New Journal of Chemistry, 2016, 40, 4049-4060.	1.4	101
128	Copper immobilized ferromagnetic nanoparticle triazine dendrimer (FMNP@TDâ€“Cu(<scp>ii</scp>))-catalyzed regioselective synthesis of 1,4-disubstituted 1,2,3-triazoles. New Journal of Chemistry, 2016, 40, 3447-3455.	1.4	40
129	Design of highly stable and selective core/yolkâ€“shell nanocatalystsâ€”A review. Applied Catalysis B: Environmental, 2016, 188, 324-341.	10.8	249
130	Metal oxide-containing SBA-15-supported gold catalysts for base-free aerobic homocoupling of phenylboronic acid in water. Journal of Catalysis, 2016, 336, 49-57.	3.1	22
131	Evaluation of the influence of sulfur-based functional groups on the embedding of silver nanoparticles into the pores of MCM-41. Journal of Solid State Chemistry, 2016, 235, 125-131.	1.4	14

#	Article	IF	Citations
132	Confining for Stability: Heterogeneous Catalysis with Transition Metal (Oxide) Nanoparticles Confined in the Secondary Pore Network of Mesoporous Scaffolds. ChemNanoMat, 2017, 3, 233-237.	1.5	14
133	Determination of catechol based on gold/Ni(OH)₂ nanocomposites supported on reduced graphene oxide via a one-step wet-chemical method. Analytical Methods, 2017, 9, 338-344.	1.3	15
134	Stability of Ag@SiO 2 coreâ€“shell particles in conditions of photocatalytic overall water-splitting. Journal of Energy Chemistry, 2017, 26, 309-314.	7.1	14
135	Catalytic performance and characterization of Neodymium-containing mesoporous silica supported nickel catalysts for methane reforming to syngas. International Journal of Hydrogen Energy, 2017, 42, 12197-12209.	3.8	23
136	Unconventional Pd@Sulfonated Silica Monoliths Catalysts for Selective Partial Hydrogenation Reactions under Continuous Flow. ChemCatChem, 2017, 9, 3245-3258.	1.8	22
138	Au@Void@Ag Yolkâ€“Shell Nanoclusters Visited by Molecular Dynamics Simulation: The Effects of Structural Factors on Thermodynamic Stability. Journal of Physical Chemistry Letters, 2017, 8, 2990-2998.	2.1	27
139	Directly anchoring Fe3C nanoclusters and FeNx sites in ordered mesoporous nitrogen-doped graphitic carbons to boost electrocatalytic oxygen reduction. Carbon, 2017, 121, 143-153.	5.4	71
140	Embedded iron nanoparticles by graphitized carbon as highly active yet stable catalyst for ammonia decomposition. Molecular Catalysis, 2017, 442, 147-153.	1.0	15
141	One-pot organometallic synthesis of alumina-embedded Pd nanoparticles. Dalton Transactions, 2017, 46, 14318-14324.	1.6	2
142	Platinum Nanoparticle-embedded Porous Diamond Spherical Particles as an Active and Stable Heterogeneous Catalyst. Scientific Reports, 2017, 7, 8651.	1.6	11
143	Mechanistic Understanding and the Rational Design of Sinter-Resistant Heterogeneous Catalysts. ACS Catalysis, 2017, 7, 7156-7173.	5.5	214
144	Charge transfer and recombination kinetics at WO3 for photoelectrochemical water oxidation. Electrochimica Acta, 2017, 258, 900-908.	2.6	33
145	Embedded MoN@C nanocomposites as an advanced catalyst for ammonia decomposition toÂCOx-free hydrogen. International Journal of Hydrogen Energy, 2017, 42, 30630-30638.	3.8	19
146	Opportunities and Challenges in the Synthesis, Characterization, and Catalytic Properties of Controlled Nanostructures. Studies in Surface Science and Catalysis, 2017, 177, 1-56.	1.5	1
147	Impacts of SiO2 Shell Structure of Ni@SiO2 Nanocatalysts on Their Performance for Catalytic Decomposition of Ammonia. Catalysis Letters, 2017, 147, 141-149.	1.4	12
148	Noble metalâ€“metal oxide nanohybrids with tailored nanostructures for efficient solar energy conversion, photocatalysis and environmental remediation. Energy and Environmental Science, 2017, 10, 402-434.	15.6	820
149	Group VIII Base Metal Nanocatalysts with Encapsulated Structures as an Area of Green Chemistry. Petroleum Chemistry, 2017, 57, 1259-1276.	0.4	6
150	Self-Assembled Materials for Catalysis. , 2017, , 329-349.		0

#	Article	IF	Citations
151	Facile solid-state synthesis of highly dispersed Cu nanospheres anchored on coal-based activated carbons as an efficient heterogeneous catalyst for the reduction of 4-nitrophenol. Journal of Solid State Chemistry, 2018, 260, 117-123.	1.4	30
152	Facile synthesis of starch-based nanoparticle stabilized Pickering emulsion: its pH-responsive behavior and application for recyclable catalysis. Green Chemistry, 2018, 20, 1538-1550.	4.6	83
153	Catalytic Oxidation of Methane: Pd and Beyond. European Journal of Inorganic Chemistry, 2018, 2018, 2884-2893.	1.0	105
154	Embedding platinum-based nanoparticles within ordered mesoporous carbon using supercritical carbon dioxide technique as a highly efficient oxygen reduction electrocatalyst. Journal of Alloys and Compounds, 2018, 741, 580-589.	2.8	9
155	Synthesis, characterization and performance of Pd-based core-shell methane oxidation nano-catalysts. Journal of Natural Gas Science and Engineering, 2018, 55, 625-633.	2.1	9
156	A Nickelâ€Based Perovskite Catalyst with a Bimodal Size Distribution of Nickel Particles for Dry Reforming of Methane. ChemCatChem, 2018, 10, 2078-2086.	1.8	74
157	Formation mechanism of highly dispersed semi-embedded ruthenium nanoparticles in porous carbon matrix determined by in situ temperature-programmed infrared spectroscopy. Chinese Journal of Catalysis, 2018, 39, 146-156.	6.9	6
158	Pt@h-BN coreâ€“shell fuel cell electrocatalysts with electrocatalysis confined under outer shells. Nano Research, 2018, 11, 3490-3498.	5.8	32
159	Pretreatment Effect on Ceriaâ€Supported Gold Nanocatalysts for CO Oxidation: Importance of the Goldâ€“Ceria Interaction. Energy Technology, 2018, 6, 379-390.	1.8	14
160	Ni-containing catalysts based on ordered mesoporous MgOâ€“Al2O3for methane dry reforming. Catalysis for Sustainable Energy, 2018, 5, 59-66.	0.7	7
161	Selective Oxidation of HMF via Catalytic and Photocatalytic Processes Using Metal-Supported Catalysts. Molecules, 2018, 23, 2792.	1.7	42
162	Efficient Baeyerâ€“Villiger Oxidation Catalysed by Silver Nanoparticles Stabilized on Modified Montmorillonite. Catalysis Letters, 2018, 148, 3669-3677.	1.4	5
163	Active and Stable Methane Oxidation Nano-Catalyst with Highly-Ionized Palladium Species Prepared by Solution Combustion Synthesis. Catalysts, 2018, 8, 66.	1.6	15
164	Understanding the preferential oxidation of carbon monoxide (PrOx) using sizeâ€controlled Au nanocrystal catalyst. AICHE Journal, 2018, 64, 3159-3167.	1.8	20
165	Catalytic Performance of Novel Hierarchical Porous Flower-Like NiCo2O4 Supported Pd in Lean Methane Oxidation. Catalysis Letters, 2018, 148, 2799-2811.	1.4	13
166	Efficient selective oxidation of propylene by dioxygen on mesoporous-silica-nanoparticle-supported nanosized copper. Journal of Catalysis, 2018, 365, 411-419.	3.1	20
167	Janus colloid surfactant catalysts for in situ organic reactions in Pickering emulsion microreactors. Green Chemistry, 2018, 20, 2840-2844.	4.6	53
168	Bimetallic nanoparticle decorated perovskite oxide for state-of-the-art trifunctional electrocatalysis. Journal of Materials Chemistry A, 2019, 7, 19453-19464.	5.2	68

#	Article	IF	Citations
170	Combined steam and CO2 reforming of methane over one-pot prepared Ni/La-Si catalysts. International Journal of Hydrogen Energy, 2019, 44, 4780-4793.	3.8	27
171	Stability of mesocellular foam supported copper catalysts for methanol synthesis. Catalysis Today, 2019, 334, 79-89.	2.2	5
172	Embedded Ni catalysts in Ni-O-Ce solid solution for stable hydrogen production from ethanol steam reforming reaction. Fuel Processing Technology, 2019, 193, 94-101.	3.7	54
174	Taming the stability of Pd active phases through a compartmentalizing strategy toward nanostructured catalyst supports. Nature Communications, 2019, 10, 1611.	5.8	168
175	A new approach to maintaining the structural integrity of fragile nanostructured heterogeneous catalysts with nanoscale magnetic stir bars. Science Bulletin, 2019, 64, 229-231.	4.3	1
176	Catalytic Performance of Nanoporous Metal Skeleton Catalysts for Molecular Transformations. ChemSusChem, 2019, 12, 2936-2954.	3.6	28
177	Ultrafine cobalt oxide nanoparticles embedded in porous SiO2 matrix as efficient and stable catalysts for methane combustion. Molecular Catalysis, 2019, 469, 155-160.	1.0	8
178	Colloidal nanocrystals for heterogeneous catalysis. Nano Today, 2019, 24, 15-47.	6.2	98
179	Colloidal Nanocrystals as Building Blocks for Well-Defined Heterogeneous Catalysts. Chemistry of Materials, 2019, 31, 576-596.	3.2	80
180	Tuning combined steam and dry reforming of methane for â€œmetgasâ€•production: A thermodynamic approach and state-of-the-art catalysts. Journal of Energy Chemistry, 2020, 48, 54-91.	7.1	53
181	Endogenous Nanoparticles Strain Perovskite Host Lattice Providing Oxygen Capacity and Driving Oxygen Exchange and CH 4 Conversion to Syngas. Angewandte Chemie, 2020, 132, 2531-2540.	1.6	9
182	Exsolution of Metallic Ru Nanoparticles from Defective, Fluorite-Type Solid Solutions Sm₂Ru_xCe_{2â€“x}O₇ To Impart Stability on Dry Reforming Catalysts. ACS Catalysis, 2020, 10, 1923-1937.	5.5	70
183	Endogenous Nanoparticles Strain Perovskite Host Lattice Providing Oxygen Capacity and Driving Oxygen Exchange and CH₄ Conversion to Syngas. Angewandte Chemie - International Edition, 2020, 59, 2510-2519.	7.2	70
184	Solid oxide fuel and electrolysis cells. , 2020, , 387-547.		7
185	Comparative Catalytic Properties of Supported and Encapsulated Gold Nanoparticles in Homocoupling Reactions. Frontiers in Chemistry, 2020, 8, 834.	1.8	10
186	Opportunities and challenges in the development of advanced materials for emission control catalysts. Nature Materials, 2021, 20, 1049-1059.	13.3	105
187	Controlling the formation of encapsulated gold nanoparticles for highly reactive catalysts in the homocoupling of phenylboronic acid. Catalysis Today, 2020, , .	2.2	6
188	Hierarchy Concepts in Design and Synthesis of Nanocatalysts. ChemCatChem, 2020, 12, 5303-5311.	1.8	13

#	Article	IF	Citations
189	The synthesis of Ni-ion exchanged-ZSM5 catalyst and its application in catalytic cracking of polypropylene. AIP Conference Proceedings, 2020, , .	0.3	0
190	Recent advances in three-way catalysts of natural gas vehicles. Catalysis Science and Technology, 2020, 10, 6407-6419.	2.1	55
191	SiO@Pd@CeO catalyst with improved thermal stability: Effect of interaction between Pd and CeO on activity for CO oxidation. Molecular Catalysis, 2020, 492, 111014.	1.0	7
192	Encapsulation Methods for Control of Catalyst Deactivation: A Review. ACS Catalysis, 2020, 10, 7630-7656.	5.5	105
193	Three-Dimensional Mesoporous Ni-CeO2 Catalysts with Ni Embedded in the Pore Walls for CO2 Methanation. Catalysts, 2020, 10, 523.	1.6	19
194	In Situ Exsolved Metal Nanoparticles: A Smart Approach for Optimization of Catalysts. Chemistry of Materials, 2020, 32, 5424-5441.	3.2	89
195	An overview on the role of lanthanide series (rare earth metals) in H2 and syngas production from CH4 reforming processes. Chemical Engineering Science, 2020, 227, 115863.	1.9	14
196	Pd/Fe3O4 Nanofibers for the Catalytic Conversion of Lignin-Derived Benzyl Phenyl Ether under Transfer Hydrogenolysis Conditions. Catalysts, 2020, 10, 20.	1.6	19
197	Into the carbon: A matter of core and shell in advanced electrocatalysis. APL Materials, 2020, 8, .	2.2	12
198	CoGa Particles Stabilized by the Combination of Alloyed Ga⁰ and Lattice Ga^{III} Species. Industrial & Engineering Chemistry Research, 2020, 59, 8649-8660.	1.8	6
199	Highly Active and Stable Palladium Catalysts Supported on Surfaceâ€modified Ceria Nanowires for Lean Methane Combustion. ChemCatChem, 2021, 13, 664-673.	1.8	13
200	Size-controlled nanocrystals reveal spatial dependence and severity of nanoparticle coalescence and Ostwald ripening in sintering phenomena. Nanoscale, 2021, 13, 930-938.	2.8	24
201	Performance Benchmark of Planar Solid Oxide Cells Based on Material Development and Designs. Energy Technology, 2021, 9, 2001062.	1.8	29
202	Progress of Exsolved Metal Nanoparticles on Oxides as High Performance (Electro)Catalysts for the Conversion of Small Molecules. Small, 2021, 17, e2005383.	5.2	53
203	Systematic Incorporation of Gold Nanoparticles onto Mesoporous Titanium Oxide Particles for Green Catalysts. Catalysts, 2021, 11, 451.	1.6	3
205	Adsorption of CO, H2, H2O, and CO2 on Fe-, Co-, Ni-, Cu-, Pd-, and Pt-Doped Mo2C(101) Surfaces. Journal of Physical Chemistry C, 2021, 125, 11419-11431.	1.5	3
206	Substrate-Assisted Encapsulation of Pd-Fe Bimetal Nanoparticles on Functionalized Silica Nanotubes for Catalytic Hydrogenation of Nitroarenes and Azo Dyes. ACS Applied Nano Materials, 2021, 4, 5854-5863.	2.4	39
207	Nanoparticle encapsulation into 2D layered metal-organic frameworks with capping agent free interface. Microporous and Mesoporous Materials, 2021, 323, 111137.	2.2	5

#	Article	IF	Citations
208	Interpenetrating polysaccharide-based hydrogel: A dynamically responsive versatile medium for precisely controlled synthesis of nanometals. Materials Science and Engineering C, 2021, 127, 112211.	3.8	5
209	On the Origin of Sinterâ€Resistance and Catalyst Accessibility in Raspberryâ€Colloidâ€Templated Catalyst Design. Advanced Functional Materials, 2021, 31, 2106876.	7.8	10
210	Efficient catalyst by a sequential melt infiltration method to achieve a high loading of supported nickel nanoparticles for compact reformer. Journal of Industrial and Engineering Chemistry, 2021, 102, 218-225.	2.9	2
211	Elucidating the roles of the Fe-Nx active sites and pore characteristics on Fe-Pani-biomass-derived RGO as oxygen reduction catalysts in PEMFCs. Materials Research Bulletin, 2022, 145, 111526.	2.7	7
212	Coreâ€“Shell Nanoarchitectures as Stable Nanocatalysts. , 2014, , 93-119.		1
213	Spatial Ensembles of Copper-Silica with Carbon Nanotubes as Ultrastable Nanostructured Catalysts for Selective Hydrogenation. ACS Applied Materials & Interfaces, 2020, 12, 27268-27276.	4.0	10
214	Flagella-Templated Process to Noble Metal Nanoparticles/TiO2 Composite Films and Their Photocatalytic Activity. Material Sciences, 2013, 03, 121-124.	0.0	0
216	Two Tungstates Containing Platinum Nanoparticles Prepared by Air-Calcining Keggin-Type Polyoxotungstate-Coordinated Diplatinum(II) Complexes: Effect on Sintering-Resistance and Photocatalysis. Catalysis Letters, 0, , 1.	1.4	0
217	Facile precipitation microfluidic synthesis of Monodisperse and inorganic hollow microspheres for Photocatalysis. Journal of Chemical Technology and Biotechnology, 0, , .	1.6	3
218	Effects of crosslinking density on the in situ formation of gold-polymer composite particles and their catalytic properties. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 640, 128409.	2.3	8
219	Strong Metalâ€“Support Interaction Boosts Activity, Selectivity, and Stability in Electrosynthesis of H₂O₂. Journal of the American Chemical Society, 2022, 144, 2255-2263.	6.6	90
220	Nickel Nanoparticles Embedded in Porous Carbon-Coated Honeycomb Ceramics: A Potential Monolithic Catalyst for Continuous Hydrogenation Reaction. SSRN Electronic Journal, 0, , .	0.4	0
221	Cuâ€“Ga<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>O<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>nanoparticles supported on ordered mesoporous silica for the catalytic hydrogenation of cinnamaldehyde. Comptes Rendus Chimie, 2022, 25, 81-94.	0.2	0
222	One-Step Solvothermal Synthesis of Ni Nanoparticle Catalysts Embedded in ZrO2 Porous Spheres to Suppress Carbon Deposition in Low-Temperature Dry Reforming of Methane. Nanoscale Research Letters, 2022, 17, 47.	3.1	9
224	Highly dispersed Ni-based catalysts derived from the LaNiO₃ perovskite for dry methane reforming: promotional effect of the Ni⁰â€“Ni²⁺ dipole inlaid on the support. New Journal of Chemistry, 0, , .	1.4	3
225	Effect of Precursor Status on the Transition from Complex to Carbon Shell in a Platinum Coreâ€“Carbon Shell Catalyst. ACS Omega, 2022, 7, 15615-15624.	1.6	2
226	Pt nanoparticles confined in the ordered mesoporous CeO2 as a highly efficient catalyst for the elimination of VOCs. Journal of Catalysis, 2022, 412, 42-58.	3.1	26
227	Embedded Structure of Ni@PSi Catalysts for Steam Reforming of Methane. European Journal of Inorganic Chemistry, 2022, 2022, .	1.0	2

#	Article	IF	Citations
228	Nickel nanoparticles embedded in porous carbon-coated honeycomb ceramics: A potential monolithic catalyst for continuous hydrogenation reaction. Carbon, 2022, 197, 171-182.	5.4	7
229	Photocatalysis vs adsorption by metal oxide nanoparticles. Journal of Materials Science and Technology, 2022, 131, 122-166.	5.6	68
230	Phenolic lipid derived coordination polymer nanocomposites: Synthesis, characterization and surface protective coating applications. Applied Surface Science Advances, 2022, 11, 100290.	2.9	5
231	The effects of iron oxide overlayers on Pt for CO oxidation. Catalysis Communications, 2022, 172, 106549.	1.6	2
232	Current Progress on Methods and Technologies for Catalytic Methane Activation at Low Temperatures. Advanced Science, 2023, 10, .	5.6	10
234	Superhydrophobic Mn(II)-coordinated technical cashew nut shell liquid-based bactericidal and corrosion-resistant advanced polyurethane coatings. Materials Today Communications, 2023, 35, 105947.	0.9	3
235	Review and Perspectives of Enhancement in the Catalytic Stability for the Complete Combustion of CO, CH₄, and Volatile Organic Compounds. Energy & Fuels, 2023, 37, 3590-3604.	2.5	12