

# CITATION REPORT

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**Designer platinum nanoparticles: Control of shape, composition in alloy, nanostructure and electrocatalytic property**

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#	Paper	IF	Citations
969	Twin-Induced Growth of PalladiumPlatinum Alloy Nanocrystals. <b>2009</b> , 121, 6422-6426		13
968	Twin-induced growth of palladium-platinum alloy nanocrystals. <b>2009</b> , 48, 6304-8		113
967	Self-templated synthesis of hollow nanostructures. <i>Nano Today</i> , <b>2009</b> , 4, 494-507	17.9	411
966	Rhodium Nanoparticle Shape Dependence in the Reduction of NO by CO. <b>2009</b> , 132, 317-322		37
965	PtAu bimetallic heteronanostructures made by post-synthesis modification of Pt-on-Au nanoparticles. <i>Nano Research</i> , <b>2009</b> , 2, 406-415	10	120
964	Ultrathin platinum film covered high-surface-area nanoporous gold for methanol electro-oxidation. <b>2009</b> , 11, 1717-1720		32
963	Noble metal nanoparticles for water purification: A critical review. <b>2009</b> , 517, 6441-6478		583
962	A general strategy for preparation of Pt 3d-transition metal (Co, Fe, Ni) nanocubes. <b>2009</b> , 131, 18543-7		300
961	Synthesis and Application of Pt Nanocrystals with Controlled Crystallographic Planes. <b>2009</b> , 113, 18115-18120		44
960	Synthesis and oxygen reduction electrocatalytic property of Pt-on-Pd bimetallic heteronanostructures. <b>2009</b> , 131, 7542-3		565
959	Construction of evolutionary tree for morphological engineering of nanoparticles. <b>2009</b> , 3, 2191-8		94
958	Surface-specific overgrowth of platinum on shaped gold nanocrystals. <b>2009</b> , 11, 9759-65		31
957	Supportless oxygen reduction electrocatalysts of CoCuPt hollow nanoparticles. <b>2010</b> , 368, 4261-74		10
956	In situ controllable synthesis of magnetite nanocrystals/CoSe <sub>2</sub> hybrid nanobelts and their enhanced catalytic performance. <b>2010</b> , 20, 9355		63
955	Modelling of nanoparticles: approaches to morphology and evolution. <b>2010</b> , 73, 086502		147
954	Platinum-based nanostructured materials: synthesis, properties, and applications. <b>2010</b> , 110, 3767-804		1133
953	New insights into the growth mechanism and surface structure of palladium nanocrystals. <i>Nano Research</i> , <b>2010</b> , 3, 180-188	10	88

952	Synthesis and electrocatalytic property of cubic and spherical nanoparticles of cobalt platinum alloys. <b>2010</b> , 4, 45-51	10
951	Directed and random self-assembly of PtAu nanoparticles. <b>2010</b> , 124, 1193-1197	11
950	Study of carbon monoxide oxidation on mesoporous platinum. <b>2010</b> , 11, 2896-905	10
949	Monodisperse Pt <sub>3</sub> Fe Nanocubes: Synthesis, Characterization, Self-Assembly, and Electrocatalytic Activity. <b>2010</b> , 20, 3727-3733	83
948	An Electrochemical Approach to PtAg Alloy Nanostructures Rich in Pt at the Surface. <b>2010</b> , 20, 3734-3741	99
947	Synthesis of AuPt Heteronanostructures with Enhanced Electrocatalytic Activity toward Oxygen Reduction. <b>2010</b> , 122, 10395-10399	31
946	Synthesis of AuPt heteronanostructures with enhanced electrocatalytic activity toward oxygen reduction. <b>2010</b> , 49, 10197-201	121
945	Decomposition of hydrogen iodide over PtIr/C bimetallic catalyst. <b>2010</b> , 35, 8862-8867	27
944	Carbon supported Pt-shell modified PdCo-core with electrocatalyst for methanol oxidation. <b>2010</b> , 35, 10081-10086	50
943	Effect of aging on the electrocatalytic activity of gold nanoparticles. <b>2010</b> , 12, 1245-1248	19
942	Surfactant-free and controllable synthesis of hierarchical platinum nanostructures and their comparative studies in electrocatalysis, surface-enhanced Raman scattering and surface wettability. <b>2010</b> , 55, 8649-8654	17
941	Silver triangular nanoplates as electrocatalyst for oxygen reduction reaction. <b>2010</b> , 12, 1609-1613	57
940	Facile synthesis of bimetallic Ag/Ni core/sheath nanowires and their magnetic and electrical properties. <b>2010</b> , 6, 1927-34	25
939	Nanochemistry [From Supramolecular Chemistry to Chemistry on the Nanoscale, Catalysis, Renewable Energy, Batteries, and Environmental Protection. <b>2010</b> , 477-526	
938	Platinum attachments on iron oxide nanoparticle surfaces. <b>2010</b> , 107, 09B311	19
937	Oxygen Reduction Kinetics on Pt <sub>x</sub> Ni <sub>100-x</sub> Thin Films Prepared by Pulsed Laser Deposition. <b>2010</b> , 157, B1051	14
936	Acceleration of Electrocatalytic Activity on PtSn Nanoparticles. <b>2010</b> , 157, B1245	10
935	Controlling the shapes of silver nanocrystals with different capping agents. <b>2010</b> , 132, 8552-3	364

934	Truncated octahedral Pt(3)Ni oxygen reduction reaction electrocatalysts. <b>2010</b> , 132, 4984-5		459
933	Synthesis of Bimetallic Au@Pt Nanoparticles with Au Core and Nanostructured Pt Shell toward Highly Active Electrocatalysts. <i>Chemistry of Materials</i> , <b>2010</b> , 22, 6310-6318	9.6	348
932	Electroreduction of dioxygen for fuel-cell applications: materials and challenges. <b>2010</b> , 49, 3557-66		588
931	Rapid and Efficient Synthesis of Platinum Nanodendrites with High Surface Area by Chemical Reduction with Formic Acid. <i>Chemistry of Materials</i> , <b>2010</b> , 22, 2835-2841	9.6	130
930	Probing Site Activity of Monodisperse Pt Nanoparticle Catalysts Using Steam Reforming of Methane. <b>2010</b> , 1, 254-259		17
929	Nanoscale Alloying, Phase-Segregation, and Core-Shell Evolution of Gold-Platinum Nanoparticles and Their Electrocatalytic Effect on Oxygen Reduction Reaction. <i>Chemistry of Materials</i> , <b>2010</b> , 22, 4282-4294	9.6	184
928	A Novel Side-Selective Galvanic Reaction and Synthesis of Hollow Nanoparticles with an Alloy Core. <b>2010</b> , 114, 18073-18080		30
927	Nanostructured Pt-alloy electrocatalysts for PEM fuel cell oxygen reduction reaction. <b>2010</b> , 39, 2184-202		926
926	Synthesis and Oxygen Reduction Electrocatalytic Property of Platinum Hollow and Platinum-on-Silver Nanoparticles. <i>Chemistry of Materials</i> , <b>2010</b> , 22, 1098-1106	9.6	138
925	Co-Assembly of Nanoparticles in Evaporating Aerosol Droplets: Preparation of Nanoporous Pt/TiO <sub>2</sub> Composite Particles. <b>2010</b> , 44, 1140-1145		14
924	Rational synthesis of heterostructured nanoparticles with morphology control. <b>2010</b> , 132, 6524-9		134
923	On the Role of Ascorbic Acid in the Synthesis of Single-Crystal Hyperbranched Platinum Nanostructures. <b>2010</b> , 10, 3454-3460		82
922	Composition-dependent formation of platinum silver nanowires. <b>2010</b> , 4, 1501-10		126
921	Electrochemical synthesis and catalytic property of sub-10 nm platinum cubic nanoboxes. <b>2010</b> , 10, 1492-6		123
920	Top-down shaping of metal nanoparticles in solution: partially etched Au@Pt nanoparticles with unique morphology. <b>2011</b> , 47, 8079-81		16
919	CO-assisted synthesis of finely size-controlled platinum nanoparticles. <b>2011</b> , 47, 3864-6		12
918	Mn <sub>3</sub> O <sub>4</sub> catalyzed growth of polycrystalline Pt nanoparticles and single crystalline Pt nanorods with high index facets. <b>2011</b> , 47, 1009-11		23
917	Synthesis of multiple platinum-attached iron oxide nanoparticles. <b>2011</b> , 21, 3966		19

916	Monomorphic platinum octapod and tripod nanocrystals synthesized by an iron nitrate modified polyol process. <b>2011</b> , 47, 11966-8	12
915	Morphology mapping of platinum catalysts over the entire nanoscale. <b>2011</b> , 1, 1440	24
914	In situ studies of different growth modes of silver crystals induced by the concentration field in an aqueous solution. <b>2011</b> , 13, 4491	25
913	The effect of Bi adsorption on CO oxidation inside 1.8 nm Pt pores. <b>2011</b> , 13, 17964-8	1
912	General preparation for Pt-based alloy nanoporous nanoparticles as potential nanocatalysts. <b>2011</b> , 1, 37	106
911	Promotional Effects of Bismuth on the Formation of Platinum-Bismuth Nanowires Network and the Electrocatalytic Activity toward Ethanol Oxidation. <b>2011</b> , 11, 594-599	31
910	Nanoparticle-aggregated paddy-like copper dendritic nanostructures. <b>2011</b> , 13, 1916-1921	19
909	Direct synthesis of spatially-controlled Pt-on-Pd bimetallic nanodendrites with superior electrocatalytic activity. <b>2011</b> , 133, 9674-7	478
908	Ab initio insights on the shapes of platinum nanocatalysts. <b>2011</b> , 5, 247-54	28
907	Catalytic Activity of Carbon-Supported Pt Nanoelectrocatalysts. Why Reducing the Size of Pt Nanoparticles is Not Always Beneficial. <b>2011</b> , 115, 5429-5434	66
906	Synthesis of Core-Shell PtRu Dendrimer-Encapsulated Nanoparticles. Relevance as Electrocatalysts for CO Oxidation □ <b>2011</b> , 115, 1287-1294	30
905	Gold-platinum nanoparticles: alloying and phase segregation. <b>2011</b> , 21, 4012-4020	113
904	Alkanethiol Adsorption on Platinum: Chain Length Effects on the Quality of Self-Assembled Monolayers. <b>2011</b> , 115, 17788-17798	29
903	Thermodynamic Cartography and Structure/Property Mapping of Commercial Platinum Catalysts. <i>ACS Catalysis</i> , <b>2011</b> , 1, 76-81	13.1 25
902	Surface structures and electrochemical activities of Pt overlayers on Ir nanoparticles. <b>2011</b> , 27, 3128-37	19
901	Facile synthesis of noble metal nanotubes by using ZnO nanowires as sacrificial scaffolds and their electrocatalytic properties. <b>2011</b> , 47, 6299-301	29
900	Morphology-dependent nanocatalysis: metal particles. <b>2011</b> , 40, 5811-26	166
899	Effects of the Synthesis Parameters on the Size and Composition of Pt <sub>n</sub> Nanoparticles Prepared by the Polyalcohol Reduction Method. <b>2011</b> , 115, 19084-19090	26

898	Nanomaterials of high surface energy with exceptional properties in catalysis and energy storage. <b>2011</b> , 40, 4167-85	668
897	Facile sonochemical synthesis of carbon nanotube-supported bimetallic PtRh nanoparticles for room temperature hydrogenation of arenes. <b>2011</b> , 35, 1649	52
896	Shape and composition-controlled platinum alloy nanocrystals using carbon monoxide as reducing agent. <b>2011</b> , 11, 798-802	407
895	A density functional theory approach to mushroom-like platinum clusters on palladium-shell over Au core nanoparticles for high electrocatalytic activity. <b>2011</b> , 13, 5441-9	26
894	Attachment of Platinum Nanoparticles to Substrates by Coating and Polyol Reduction of A Platinum Precursor. <b>2011</b> , 115, 8519-8526	44
893	Nanostructured catalysts in fuel cells. <b>2011</b> , 21, 4027-4036	184
892	Etching-limited branching growth of cuprous oxide during ethanol-assisted solution synthesis. <b>2011</b> , 13, 2837	36
891	Templated synthesis of metal nanorods in silica nanotubes. <b>2011</b> , 133, 19706-9	168
890	Surfactant-induced postsynthetic modulation of Pd nanoparticle crystallinity. <b>2011</b> , 11, 1614-7	87
889	Strategic Synthesis of Trimetallic [email protected]@Pt CoreShell Nanoparticles from Poly(vinylpyrrolidone)-Based Aqueous Solution toward Highly Active Electrocatalysts. <i>Chemistry of Materials</i> , <b>2011</b> , 23, 2457-2465	9.6 235
888	Three-Dimensional Structure of CeO <sub>2</sub> Nanocrystals. <b>2011</b> , 115, 3544-3551	63
887	Microemulsions as reaction media for the synthesis of Pt nanoparticles. <b>2011</b> , 13, 3048-58	20
886	Novel standing NiPt alloy nanocubes. <b>2011</b> , 13, 3364	21
885	Enhanced electrocatalytic oxygen reduction through electrostatic assembly of Pt nanoparticles onto porous carbon supports from SnCl <sub>2</sub> -stabilized suspensions. <b>2011</b> , 27, 5781-91	17
884	Highly symmetric polyhedral Cu <sub>2</sub> O crystals with controllable-index planes. <b>2011</b> , 13, 2217	67
883	Size Effect on Nanoparticle-Mediated Silver Crystal Growth. <b>2011</b> , 11, 5449-5456	15
882	Cu(2+)-assisted synthesis of hexoctahedral Au-Pd alloy nanocrystals with high-index facets. <b>2011</b> , 133, 17114-7	214
881	Enhanced oxygen reduction at Pd catalytic nanoparticles dispersed onto heteropolytungstate-assembled poly(diallyldimethylammonium)-functionalized carbon nanotubes. <b>2011</b> , 13, 4400-10	44

880	Pt-based composite nanoparticles for magnetic, catalytic, and biomedical applications. <b>2011</b> , 21, 12579	44
879	Simultaneous reduction-etching route to Pt/ZnSnO <sub>3</sub> hollow polyhedral architectures for methanol electrooxidation in alkaline media with superior performance. <b>2011</b> , 47, 2447-9	17
878	Facile synthesis of Pd-Pt alloy nanocages and their enhanced performance for preferential oxidation of CO in excess hydrogen. <b>2011</b> , 5, 8212-22	223
877	Direct synthesis of hydrogen peroxide from hydrogen and oxygen over a Pd core-silica shell catalyst. <b>2011</b> , 12, 968-971	30
876	Synthesis and characterization of PtPd nanoparticles with core-shell morphology: Nucleation and overgrowth of the Pd shells on the as-prepared and defined Pt seeds. <i>Journal of Alloys and Compounds</i> , <b>2011</b> , 509, 7702-7709	5-7 23
875	Shape-regulated high yield synthesis of electrocatalytically active branched Pt nanostructures for oxygen reduction and methanol oxidation reactions. <b>2011</b> , 21, 11973	37
874	Shape dependent electrocatalysis. <b>2011</b> , 107, 263	131
873	Nanocrystals composed of alternating shells of Pd and Pt can be obtained by sequentially adding different precursors. <b>2011</b> , 133, 10422-5	102
872	A versatile approach to processing of high active area pillar coral- and sponge-like Pt-nanostructures. Application to electrocatalysis. <b>2011</b> , 21, 4182	20
871	Structural Evolution of Plasma-Sputtered CoreShell Nanoparticles for Catalytic Combustion of Methane. <b>2011</b> , 115, 24164-24171	17
870	Shape-controlled synthesis of PtPd coreShell nanoparticles exhibiting polyhedral morphologies by modified polyol method. <b>2011</b> , 59, 2901-2907	51
869	Colloidal Hybrid Nanocrystals: Synthesis, Properties, and Perspectives. <b>2011</b> ,	
868	Development of Low-platinum Catalyst for Fuel Cells by Mechano-chemical Method. <b>2011</b> , 48, 364-369	3
867	A comparative study of Pt and PtPd coreShell nanocatalysts. <b>2011</b> , 56, 9133-9143	57
866	Growth of platinum nanoparticles on stainless steel 316L current collectors to improve carbon-based supercapacitor performance. <b>2011</b> , 56, 10217-10222	44
865	High-yield, size-controlled synthesis of silver nanoplates and their applications as methanol-tolerant electrocatalysts in oxygen reduction reaction. <b>2011</b> , 36, 10502-10512	24
864	Effect of deposition potential on the structure and electrocatalytic behavior of Pt micro/nanoparticles. <b>2011</b> , 36, 15052-15059	35
863	Lattice contracted AgPt nanoparticles. <b>2011</b> , 47, 12595-7	25

862	Polyelectrolyte-aided synthesis of gold and platinum nanoparticles: Implications in electrocatalysis and sensing. <b>2011</b> , 124, n/a-n/a		2
861	Morphology-controlled synthesis and electrocatalytic characteristics of platinum structures on micro-patterned carbon nanotube platforms. <b>2011</b> , 41, 1425-1431		12
860	The renaissance of unsupported nanostructured catalysts for low-temperature fuel cells: from the size to the shape of metal nanostructures. <b>2011</b> , 46, 4435-4457		105
859	Ultrafine Pt Nanoclusters for the Direct Methanol Fuel Cell Reactions. <b>2011</b> , 22, 173-181		5
858	Synthesis and characterization of polyhedral and quasi-sphere non-polyhedral Pt nanoparticles: effects of their various surface morphologies and sizes on electrocatalytic activity for fuel cell applications. <b>2011</b> , 13, 5177-5191		15
857	Effects of heat treatment and poly(vinylpyrrolidone) (PVP) polymer on electrocatalytic activity of polyhedral Pt nanoparticles towards their methanol oxidation. <b>2011</b> , 289, 1373-1386		52
856	A facile room temperature chemical route to Pt nanocube/carbon nanotube heterostructures with enhanced electrocatalysis. <b>2011</b> , 196, 191-195		27
855	Crystallographic control of noble metal nanocrystals. <i>Nano Today</i> , <b>2011</b> , 6, 265-285	17.9	161
854	Nanostars shine bright for you: Colloidal synthesis, properties and applications of branched metallic nanoparticles. <b>2011</b> , 16, 118-127		319
853	Synthesis and electrocatalytic oxygen reduction properties of truncated octahedral Pt <sub>3</sub> Ni nanoparticles. <i>Nano Research</i> , <b>2011</b> , 4, 72-82	10	72
852	Correlation Between Surface Chemistry and Electrocatalytic Properties of Monodisperse Pt <sub>x</sub> Ni <sub>1-x</sub> Nanoparticles. <b>2011</b> , 21, 147-152		204
851	Bimetallic nanocrystals: liquid-phase synthesis and catalytic applications. <b>2011</b> , 23, 1044-60		901
850	Strategies for the fabrication of porous platinum electrodes. <b>2011</b> , 23, 4976-5008		151
849	A Highly Durable Platinum Nanocatalyst for Proton Exchange Membrane Fuel Cells: Multiarmed Starlike Nanowire Single Crystal. <b>2011</b> , 123, 442-446		110
848	Surfactant-Free Platinum-on-Gold Nanodendrites with Enhanced Catalytic Performance for Oxygen Reduction. <b>2011</b> , 123, 771-774		12
847	Platin-Elektrokatalysatoren mit Kern-Schale-Nanostruktur. <b>2011</b> , 123, 2726-2728		20
846	Polyhedral Bimetallic Alloy Nanocrystals Exclusively Bound by {110} Facets: AuPd Rhombic Dodecahedra. <b>2011</b> , 123, 3528-3532		40
845	Mixing an Aqueous Suspension of Pd or Au Nanocrystals with a Less Polar Solvent Can Cause Changes to Size, Morphology, or Both. <b>2011</b> , 123, 6176-6179		



844	Triple-Layer (Au@Perylene)@Polyaniline Nanocomposite: Unconventional Growth of Faceted Organic Nanocrystals on Polycrystalline Au. <b>2011</b> , 123, 10072-10076	7
843	A highly durable platinum nanocatalyst for proton exchange membrane fuel cells: multiarmed starlike nanowire single crystal. <b>2011</b> , 50, 422-6	326
842	Surfactant-free platinum-on-gold nanodendrites with enhanced catalytic performance for oxygen reduction. <b>2011</b> , 50, 745-8	92
841	Platinum-based electrocatalysts with core-shell nanostructures. <b>2011</b> , 50, 2674-6	255
840	Polyhedral bimetallic alloy nanocrystals exclusively bound by {110} facets: Au-Pd rhombic dodecahedra. <b>2011</b> , 50, 3466-70	96
839	Mixing an aqueous suspension of Pd or Au nanocrystals with a less polar solvent can cause changes to size, morphology, or both. <b>2011</b> , 50, 6052-5	19
838	Triple-layer (au@perylene)@polyaniline nanocomposite: unconventional growth of faceted organic nanocrystals on polycrystalline Au. <b>2011</b> , 50, 9898-902	55
837	Synthesis of mesoporous Pt nanoparticles with uniform particle size from aqueous surfactant solutions toward highly active electrocatalysts. <b>2011</b> , 17, 8810-5	65
836	Methanol oxidation catalysis and substructure of PtRu/C bimetallic nanoparticles synthesized by a radiolytic process. <b>2011</b> , 396, 68-75	30
835	Au/Pt nanoparticle systems in methanol and carbon monoxide electrooxidation. <b>2011</b> , 56, 3673-3678	15
834	Microwave-assisted synthesis of graphene-supported Pd <sub>1</sub> Pt <sub>3</sub> nanostructures and their electrocatalytic activity for methanol oxidation. <b>2011</b> , 56, 7064-7070	80
833	Synthesis and characterization of PtPd alloy and core-shell bimetallic nanoparticles for direct methanol fuel cells (DMFCs): Enhanced electrocatalytic properties of well-shaped core-shell morphologies and nanostructures. <b>2011</b> , 36, 8478-8491	131
832	Noble metal nanomaterials: Controllable synthesis and application in fuel cells and analytical sensors. <i>Nano Today</i> , <b>2011</b> , 6, 240-264	17.9 661
831	Highly monodisperse cubic and octahedral rhodium nanocrystals: Their evolutions from sharp polyhedrons into branched nanostructures and surface-enhanced Raman scattering. <b>2011</b> , 320, 78-89	18
830	Synthesis, Functionalization, Characterization, and Application of Controlled Shape Nanoparticles in Energy Production. <b>2011</b> , 127-163	13
829	Polymer end-group mediated synthesis of well-defined catalytically active platinum nanoparticles. <b>2011</b> , 21, 15788	13
828	Control of nanoparticle aggregation in PEMFCs using surfactants. <b>2012</b> , 7, 38-43	9
827	Influence of dose on particle size and optical properties of colloidal platinum nanoparticles. <i>International Journal of Molecular Sciences</i> , <b>2012</b> , 13, 14723-41	6.3 93

826	Structural Characterization of Nanoparticles Obtained by a Polyol Synthesis in the Bimetallic System Pt-Pd. <b>2012</b> , 1372, 57	
825	The Status of Catalysts in PEMFC Technology. <b>2012</b> , 329-368	2
824	Sharp cubic and octahedral morphologies of poly(vinylpyrrolidone)-stabilised platinum nanoparticles by polyol method in ethylene glycol: their nucleation, growth and formation mechanisms. <b>2012</b> , 7, 133-149	12
823	On the selective decoration of facets in metallic nanoparticles. <b>2012</b> , 27, 1777-1786	15
822	Tailoring nanostructured catalysts for electrochemical energy conversion systems. <b>2012</b> , 1, 427-453	10
821	In-Situ Monitoring of Particle Growth at PEMFC Cathode under Accelerated Cycling Conditions. <b>2012</b> , 15, B72	25
820	Effect of mass transfer on the oxygen reduction reaction catalyzed by platinum dendrimer encapsulated nanoparticles. <b>2012</b> , 109, 11493-7	36
819	Nanoscale materials for organohalide degradation via reduction pathways. <b>2012</b> , 1, 147-171	4
818	Room-temperature Fast Synthesis of Composition-adjustable PtPd Alloy Sub-10-nm Nanoparticle Networks with Improved Electrocatalytic Activities. <b>2012</b> , 41, 546-548	3
817	An Introduction of Controlled Sizes and Shapes of Nanostructured Materials and Their Applications. <b>2012</b> , 1-16	1
816	New Experimental Evidences of PtPd Bimetallic Nanoparticles with CoreShell Configuration and Highly Fine-Ordered Nanostructures by High-Resolution Electron Transmission Microscopy. <b>2012</b> , 116, 12265-12274	35
815	The structure modification and activity improvement of PdCo/C electrocatalysts by the addition of Au for the oxygen reduction reaction. <b>2012</b> , 2, 1654	11
814	Synthesis of octopus-tentacle-like Cu nanowire-Ag nanocrystals heterostructures and their enhanced electrocatalytic performance for oxygen reduction reaction. <b>2012</b> , 4, 6654-60	41
813	Electrochemiluminescence imaging-based high-throughput screening platform for electrocatalysts used in fuel cells. <b>2012</b> , 84, 7700-7	69
812	Carbon monoxide-assisted synthesis of single-crystalline Pd tetrapod nanocrystals through hydride formation. <b>2012</b> , 134, 7073-80	108
811	Surfactant-free preparation of supported cubic platinum nanoparticles. <b>2012</b> , 48, 1854-6	43
810	An unconventional role of ligand in continuously tuning of metal-metal interfacial strain. <b>2012</b> , 134, 2004-7	158
809	Controlled synthesis of Pd-Pt alloy hollow nanostructures with enhanced catalytic activities for oxygen reduction. <b>2012</b> , 6, 2410-9	316

808	Icosahedral platinum alloy nanocrystals with enhanced electrocatalytic activities. <b>2012</b> , 134, 11880-3	445
807	Platinum-coated porous gold nanorods in methanol electrooxidation: dependence of catalytic activity on ligament size. <b>2012</b> , 7, 2937-41	4
806	Editorial: Catalyst Synthesis by Design for the Understanding of Catalysis. <b>2012</b> , 4, 1445-1447	14
805	Synergistic Effect of a Carbon Black Supported PtAg Non-Alloy Bimetal Nanocatalyst for CO Preferential Oxidation in Excess Hydrogen. <b>2012</b> , 4, 1960-1967	6
804	High stability platinum electrocatalysts with zirconia-carbon hybrid supports. <b>2012</b> , 22, 1135-1141	37
803	Synthesis of surfactant-free Pt concave nanoparticles in a freshly-made or recycled molten salt. <b>2012</b> , 14, 3197	9
802	Stabilisation of water-soluble platinum nanoparticles by phosphonic acid derivatives. <b>2012</b> , 41, 3407-13	8
801	Highly branched PtNi nanocrystals enclosed by stepped surface for methanol oxidation. <b>2012</b> , 3, 1925	136
800	In situ chemical vapor reaction in molten salts for preparation of platinum nanosheets via bubble breakage. <b>2012</b> , 22, 12046	14
799	Partial Hydrogenation of C <sub>2</sub> H <sub>2</sub> on Ag-Doped Pt Nanoparticles. <b>2012</b> , 116, 12982-12988	12
798	Interface synthesis of gold mesocrystals with highly roughened surfaces for surface-enhanced Raman spectroscopy. <b>2012</b> , 22, 1998-2006	75
797	Kinetically controlled overgrowth of Ag or Au on Pd nanocrystal seeds: from hybrid dimers to nonconcentric and concentric bimetallic nanocrystals. <b>2012</b> , 134, 15822-31	152
796	Growth of Pt Particles on the Anatase TiO <sub>2</sub> (101) Surface. <b>2012</b> , 116, 12114-12123	56
795	Quantitative analysis of the role played by poly(vinylpyrrolidone) in seed-mediated growth of Ag nanocrystals. <b>2012</b> , 134, 1793-801	238
794	Applications of extended X-ray absorption fine-structure spectroscopy to studies of bimetallic nanoparticle catalysts. <b>2012</b> , 41, 8163-78	210
793	Stabilization of high-performance oxygen reduction reaction Pt electrocatalyst supported on reduced graphene oxide/carbon black composite. <b>2012</b> , 134, 12326-9	400
792	New life of a forgotten method: Electrochemical route toward highly efficient Pt/C catalysts for low-temperature fuel cells. <b>2012</b> , 431-432, 120-125	44
791	Synthesis of crystalline silver nanoplates and their application for detection of nitrite in foods. <b>2012</b> , 664, 135-138	71

790	A dual-functional Pt/CNT TCO-free counter electrode for dye-sensitized solar cell. <b>2012</b> , 22, 25311		27
789	Palladium Nanoparticles Supported on $\text{Al}_2\text{O}_3$ for Hydrogenation of 2-Tertiary Butyl Anthraquinone to Produce $\text{H}_2\text{O}_2$ . <b>2012</b> , 33, 660-667		1
788	Facile one-step room-temperature synthesis of Pt <sub>3</sub> Ni nanoparticle networks with improved electro-catalytic properties. <b>2012</b> , 48, 2665-7		70
787	Colloidal Synthesis of Noble Metal Nanoparticles of Complex Morphologies. <b>2012</b> , 7-90		1
786	Facile Synthesis of Carbon-Supported PdCo Core/Shell Nanoparticles as Oxygen Reduction Electrocatalysts and Their Enhanced Activity and Stability with Monolayer Pt Decoration. <i>Chemistry of Materials</i> , <b>2012</b> , 24, 2274-2281	9.6	154
785	Modeling Nanomorphology in Noble Metal Particles: Thermodynamic Cartography. <b>2012</b> , 269-303		1
784	Cage-shell structured AuPt nanomaterials with enhanced electrocatalytic activity toward oxygen reduction. <b>2012</b> , 37, 13191-13199		17
783	Novel synthesis of N-doped porous carbons from collagen for electrocatalytic production of $\text{H}_2\text{O}_2$ . <b>2012</b> , 126, 208-214		80
782	Facile synthesis of Pt nanocrystals/graphene composite with excellent methanol electro-oxidation performance. <b>2012</b> , 47, 4311-4315		13
781	Synthesis and catalytic properties of bimetallic nanomaterials with various architectures. <i>Nano Today</i> , <b>2012</b> , 7, 448-466	17.9	405
780	Hollow ruthenium nanoparticles with small dimensions derived from Ni@Ru core@shell structure: synthesis and enhanced catalytic dehydrogenation of ammonia borane. <b>2012</b> , 48, 8009-11		59
779	Supported Core/Shell Bimetallic Nanoparticles Synthesis by Atomic Layer Deposition. <i>Chemistry of Materials</i> , <b>2012</b> , 24, 2973-2977	9.6	132
778	Molecular Dynamic Simulations of the Effect on the Hydration of Nafion in the Presence of a Platinum Nanoparticle. <b>2012</b> , 116, 12890-12899		23
777	A comprehensive search for stable Pt-Pd nanoalloy configurations and their use as tunable catalysts. <b>2012</b> , 12, 4875-80		89
776	Electrostatic interaction based hollow Pt and Ru assemblies toward methanol oxidation. <b>2012</b> , 2, 7479		21
775	Surface lattice-engineered bimetallic nanoparticles and their catalytic properties. <b>2012</b> , 41, 8066-74		215
774	Composition-controlled PtCo alloy nanocubes with tuned electrocatalytic activity for oxygen reduction. <b>2012</b> , 4, 6228-34		89
773	Synthesis of spatially uniform metal alloys nanocrystals via a diffusion controlled growth strategy: The case of Au-Pd alloy trisoctahedral nanocrystals with tunable composition. <i>Nano Research</i> , <b>2012</b> , 5, 618-629	10	31

772	Weakly-coordinated stable platinum nanocrystals. <b>2012</b> , 14, 7607		29
771	Heterogeneous Au-Pt nanostructures with enhanced catalytic activity toward oxygen reduction. <b>2012</b> , 41, 2898-903		51
770	The compressibility of nanocrystalline Pt. <b>2012</b> , 101, 173111		13
769	Electron tomography and 3D molecular simulations of platinum nanocrystals. <i>Nanoscale</i> , <b>2012</b> , 4, 5125-31.7		11
768	Stability of Porous Platinum Nanoparticles: Combined In Situ TEM and Theoretical Study. <b>2012</b> , 3, 1106-10		12
767	Surfactant-Directed Synthesis of Ternary Nanostructures: Nanocubes, Polyhedrons, Octahedrons, and Nanowires of PtNiFe. Their Shape-Dependent Oxygen Reduction Activity. <i>Chemistry of Materials</i> , <b>2012</b> , 24, 2527-2533	9.6	48
766	Highly active Pt3Pb and core-shell Pt3Pb-Pt electrocatalysts for formic acid oxidation. <b>2012</b> , 6, 2818-25		155
765	Enhancing the activity and tuning the mechanism of formic acid oxidation at tetrahedral Pt nanocrystals by Au decoration. <b>2012</b> , 14, 16415-23		32
764	Tailored design of architecturally controlled Pt nanoparticles with huge surface areas toward superior unsupported Pt electrocatalysts. <b>2012</b> , 4, 2865-9		56
763	Synthesis of Mesoporous Pt Films with Tunable Pore Sizes from Aqueous Surfactant Solutions. <i>Chemistry of Materials</i> , <b>2012</b> , 24, 1591-1598	9.6	148
762	Highly Active Bimetallic PdPt and CoPt Nanocrystals for Methanol Electro-oxidation. <b>2012</b> , 116, 7464-7470		69
761	Enhancing the catalytic and electrocatalytic properties of Pt-based catalysts by forming bimetallic nanocrystals with Pd. <b>2012</b> , 41, 8035-49		438
760	Octahedral PtNi nanoparticle catalysts: exceptional oxygen reduction activity by tuning the alloy particle surface composition. <b>2012</b> , 12, 5885-9		470
759	Catalysis for Alternative Energy Generation. <b>2012</b> ,		18
758	Development of nanoparticle composite technique for low Pt-loading PEFCs. <b>2012</b> , 684-688		
757	Solution-based synthesis and design of late transition metal chalcogenide materials for oxygen reduction reaction (ORR). <b>2012</b> , 8, 13-27		230
756	Metal corrosion for nanofabrication. <b>2012</b> , 8, 2621-35		25
755	Advanced Platinum Alloy Electrocatalysts for the Oxygen Reduction Reaction. <i>ACS Catalysis</i> , <b>2012</b> , 2, 891-898	13.1	352

754	Preparation of Highly Active 40 wt.% Pt on Multiwalled Carbon Nanotube by Improved Impregnation Method for Fuel Cell Applications. <b>2012</b> , 12, 827-834		18
753	Solvothermal synthesis of Pt-Pd alloys with selective shapes and their enhanced electrocatalytic activities. <i>Nanoscale</i> , <b>2012</b> , 4, 2633-9	7-7	87
752	Cyclic electrodeposition of PtCu alloy: facile fabrication of highly porous platinum electrodes. <b>2012</b> , 24, 2916-21		61
751	Controlling the Nucleation and Growth of Silver on Palladium Nanocubes by Manipulating the Reaction Kinetics. <b>2012</b> , 124, 2404-2408		21
750	Tuning Complex Shapes in Platinum Nanoparticles: From Cubic Dendrites to Fivefold Stars. <b>2012</b> , 124, 4768-4772		10
749	Tuning complex shapes in platinum nanoparticles: from cubic dendrites to fivefold stars. <b>2012</b> , 51, 4690-4		73
748	A Mechanistic Study on the Nucleation and Growth of Au on Pd Seeds with a Cubic or Octahedral Shape. <b>2012</b> , 4, 1668-1674		25
747	Study of the Durability of Faceted Pt <sub>3</sub> Ni Oxygen Reduction Electrocatalysts. <b>2012</b> , 4, 1572-1577		8
746	Mechanism of Pt(IV) sonochemical reduction in formic acid media and pure water. <b>2012</b> , 18, 3879-85		25
745	Nanocube-aggregated cauliflower-like copper hierarchical architectures: synthesis, growth mechanism and electrocatalytic activity. <b>2012</b> , 14, 5737		15
744	Electrochemical biosensing based on noble metal nanoparticles. <b>2012</b> , 177, 245-270		156
743	Synthesis of PtPd bimetal nanocrystals with controllable shape, composition, and their tunable catalytic properties. <b>2012</b> , 12, 4265-70		207
742	Shape and Size Controlled Pt Nanocrystals as Novel Model Catalysts. <b>2012</b> , 16, 1-13		20
741	Evolution of Pt and Pt-Alloy Catalytic Surfaces Under Oxygen Reduction Reaction in Acid Medium. <b>2012</b> , 55, 322-335		35
740	Facile syntheses and enhanced electrocatalytic activities of Pt nanocrystals with {hkk} high-index surfaces. <i>Nano Research</i> , <b>2012</b> , 5, 181-189	10	87
739	Colloidal Syntheses of Shape- and Size-Controlled Pt Nanoparticles for Electrocatalysis. <b>2012</b> , 3, 75-87		57
738	Improvement of activity for oxygen reduction reaction by decoration of Ir on PdCu/C catalyst. <b>2012</b> , 185, 138-142		39
737	Hierarchical structure SnO <sub>2</sub> supported Pt nanoparticles as enhanced electrocatalyst for methanol oxidation. <b>2012</b> , 76, 475-479		25

736	Dendritic PtCu bimetallic nanocrystals with a high electrocatalytic activity toward methanol oxidation. <b>2012</b> , 132, 244-247	36
735	Highly sensitive AlGaIn/GaN diode-based hydrogen sensors using platinum nanonetworks. <b>2012</b> , 164, 64-68	29
734	Supercritical fluids in fuel cell research and development. <b>2012</b> , 62, 1-31	41
733	Removing polyvinylpyrrolidone from catalytic Pt nanoparticles without modification of superficial order. <b>2012</b> , 13, 709-15	62
732	Small adsorbate-assisted shape control of Pd and Pt nanocrystals. <b>2012</b> , 24, 862-79	369
731	Convex Polyhedral Au@Pd Core-shell Nanocrystals with High-Index Facets. <b>2012</b> , 124, 163-167	22
730	Convex polyhedral Au@Pd core-shell nanocrystals with high-index facets. <b>2012</b> , 51, 159-63	123
729	Controlling the nucleation and growth of silver on palladium nanocubes by manipulating the reaction kinetics. <b>2012</b> , 51, 2354-8	193
728	Synthesis of nanostructured materials using supercritical CO <sub>2</sub> : Part II. Chemical transformations. <b>2012</b> , 47, 3469-3492	70
727	Structural characterization of Pt-Pd core-shell nanoparticles by Cs-corrected STEM. <b>2012</b> , 15, 1	27
726	Getrennt und geschützt mit flüssigen Salzen. <b>2013</b> , 61, 754-757	12
725	A nanoscale-modified LaMer model for particle synthesis from inorganic tin-platinum complexes. <b>2013</b> , 1, 8903	16
724	The development of mixture, alloy, and core-shell nanocatalysts with nanomaterial supports for energy conversion in low-temperature fuel cells. <b>2013</b> , 2, 636-676	227
723	Multi-Metallic Nanoparticles as More Efficient Catalysts for Fuel Cell Reactions. <b>2013</b> , 333-346	
722	Nanoalloy Catalysts in Electrochemical Energy Conversion and Storage. <b>2013</b> , 307-344	2
721	Controlled synthesis of FePt-Au hybrid nanoparticles triggered by reaction atmosphere and FePt seeds. <i>Nanoscale</i> , <b>2013</b> , 5, 9141-9	7-7 30
720	Electrochemical synthesis of flower-like Pd nanoparticles with high tolerance toward formic acid electrooxidation. <b>2013</b> , 3, 15727	17
719	Electrocatalysis in Fuel Cells. <b>2013</b> ,	63

718	Octahedral noble-metal nanoparticles and their electrocatalytic properties. <b>2013</b> , 6, 1848-57	6
717	Controlling the size of platinum nanoparticles prepared by cathodic corrosion. <b>2013</b> , 110, 796-800	17
716	Pt-Ni alloyed nanocrystals with controlled architectures for enhanced methanol oxidation. <b>2013</b> , 49, 8704-6	61
715	Electrostatic self-assembly of platinum nanochains on carbon nanotubes: A highly active electrocatalyst for the oxygen reduction reaction. <b>2013</b> , 140-141, 552-558	18
714	Electrocatalytic performance of Nicore@Ptshell/C core-shell nanoparticle with the Pt in nanoshell. <b>2013</b> , 38, 14261-14268	22
713	AlGa <sub>N</sub> /Ga <sub>N</sub> HEMT based hydrogen sensor with platinum nanonetwork gate electrode. <b>2013</b> , 13, 1746-1750	21
712	Nanoscale-phase-separated Pd-Rh boxes synthesized via metal migration: an archetype for studying lattice strain and composition effects in electrocatalysis. <b>2013</b> , 135, 14691-700	95
711	Monodisperse pattern nanoalloying for synergistic intermetallic catalysis. <b>2013</b> , 13, 5720-6	50
710	Confining the nucleation and overgrowth of Rh to the {111} facets of Pd nanocrystal seeds: the roles of capping agent and surface diffusion. <b>2013</b> , 135, 16658-67	60
709	Pt-Based Core-shell Catalyst Architectures for Oxygen Fuel Cell Electrodes. <b>2013</b> , 4, 3273-3291	306
708	Potentiostatic deposition of differently shaped Pt and PtBi nanoparticles. <b>2013</b> , 32, 375-379	3
707	A facile approach for in situ synthesis of graphene-branched-Pt hybrid nanostructures with excellent electrochemical performance. <i>Nanoscale</i> , <b>2013</b> , 5, 11265-74	7-7 46
706	Improved oxygen reduction reaction activities with amino acid R group functionalized PEG at platinum surfaces. <b>2013</b> , 1, 10267	4
705	Synthesis and characterization of mixed monolayer protected gold nanorods and their Raman activities. <b>2013</b> , 48, 4181-4185	8
704	Identification of hot spots of the science of catalysis: bibliometric and thematic analysis of nowadays reviews and monographs. <b>2013</b> , 62, 2266-2278	5
703	Shape-enhanced ammonia electro-oxidation property of a cubic platinum nanocrystal catalyst prepared by surfactant-free synthesis. <b>2013</b> , 1, 14402	31
702	Synthesis of bimetallic Pt/Pd nanotubes and their enhanced catalytic activity in methanol electro-oxidation. <b>2013</b> , 1, 15252	29
701	Biomimetic synthesis of an ultrathin platinum nanowire network with a high twin density for enhanced electrocatalytic activity and durability. <b>2013</b> , 52, 12577-81	164



700	Disproportionation route to monodispersed copper nanoparticles for the catalytic synthesis of propargylamines. <b>2013</b> , 3, 19812		27
699	Monodisperse Cu@PtCu nanocrystals and their conversion into hollow-PtCu nanostructures for methanol oxidation. <b>2013</b> , 1, 14449		57
698	Aqueous synthesis of porous platinum nanotubes at room temperature and their intrinsic peroxidase-like activity. <b>2013</b> , 49, 6024-6		106
697	Enhanced methanol oxidation and oxygen reduction reactions on palladium-decorated FeCo@Fe/C core-shell nanocatalysts in alkaline medium. <b>2013</b> , 15, 20982-91		30
696	Ternary electrocatalysts for oxidizing ethanol to carbon dioxide: making it capable of splitting C-C bond. <b>2013</b> , 135, 132-41		149
695	Recent advances in electrocatalysts for electro-oxidation of ammonia. <b>2013</b> , 1, 3216-3238		107
694	Synthesis of colloidal metal and metal alloy nanoparticles for electrochemical energy applications. <b>2013</b> , 42, 2880-904		445
693	Polyallylamine-directed green synthesis of platinum nanocubes. Shape and electronic effect codependent enhanced electrocatalytic activity. <b>2013</b> , 15, 3793-802		66
692	An atomistic thermodynamics study of the structural evolution of the Pt <sub>3</sub> Ni(111) surface in an oxygen environment. <i>Chinese Journal of Catalysis</i> , <b>2013</b> , 34, 1434-1442	11.3	9
691	In situ analysis of optimum surface atom coordination for Pt nanoparticle oxygen reduction electrocatalysts. <b>2013</b> , 112, 258-268		15
690	Metal Nanoparticle Synthesis in Ionic Liquids. <b>2013</b> , 17-53		22
689	Tuning the shape of ceria nanomaterials for catalytic applications. <i>Chinese Journal of Catalysis</i> , <b>2013</b> , 34, 838-850	11.3	70
688	Increase of catalyst utilization in polymer electrolyte membrane fuel cells by shape-selected Pt nanoparticles. <b>2013</b> , 38, 13393-13398		12
687	Palladium-based nanostructures with highly porous features and perpendicular pore channels as enhanced organic catalysts. <b>2013</b> , 52, 2520-4		135
686	Functionalizing nanoparticles with biological molecules: developing chemistries that facilitate nanotechnology. <b>2013</b> , 113, 1904-2074		1008
685	Ionic liquid assisted synthesis of Au-Pd bimetallic particles with enhanced electrocatalytic activity. <b>2013</b> , 19, 6005-13		53
684	Seed-mediated growth of noble metal nanocrystals: crystal growth and shape control. <i>Nanoscale</i> , <b>2013</b> , 5, 3172-81	7.7	147
683	Dimethylformamide-mediated synthesis of water-soluble platinum nanodendrites for ethanol oxidation electrocatalysis. <i>Nanoscale</i> , <b>2013</b> , 5, 4776-84	7.7	46

682	Electrochemical Desorption of Thiolates and Sulfur from Nanoparticle and Planar Platinum Surfaces. <b>2013</b> , 117, 7589-7597		6
681	Morphology dependent oxygen reduction activity of titanium carbide: bulk vs. nanowires. <b>2013</b> , 15, 8744-51		45
680	Atomic layer deposition of platinum clusters on titania nanoparticles at atmospheric pressure. <b>2013</b> , 1, 4647		60
679	CoreShell Catalysts in PEMFC Cathode Environments. <b>2013</b> , 561-587		2
678	Switching-off toluene formation in the solvent-free oxidation of benzyl alcohol using supported trimetallic Au-Pd-Pt nanoparticles. <b>2013</b> , 162, 365-78		55
677	Morphology, dimension, and composition dependence of thermodynamically preferred atomic arrangements in Ag-Pt nanoalloys. <b>2013</b> , 162, 293-306		21
676	Impact of Organic Ligands on the Structure and Hydrogenation Performance of Colloidally Prepared Bimetallic PtSn Nanoparticles. <b>2013</b> , 5, 1803-1810		12
675	Electrocatalytic activity of Pd nanoparticles supported on poly(3,4-ethylenedioxythiophene)-graphene hybrid for ethanol electrooxidation. <b>2013</b> , 17, 1039-1047		28
674	Embedded branch-like organic/metal nanowire heterostructures: liquid-phase synthesis, efficient photon-plasmon coupling, and optical signal manipulation. <b>2013</b> , 25, 2784-8		36
673	Surface and interface control of noble metal nanocrystals for catalytic and electrocatalytic applications. <i>Nano Today</i> , <b>2013</b> , 8, 168-197	17.9	376
672	Plasmonic and catalytic AuPd nanowheels for the efficient conversion of light into chemical energy. <b>2013</b> , 52, 6063-7		135
671	Investigating the multiple roles of polyvinylpyrrolidone for a general methodology of oxide encapsulation. <b>2013</b> , 135, 9099-110		159
670	Aqueous-Phase Synthesis of Sub 10 nm Pdcore@Ptshell Nanocatalysts for Oxygen Reduction Reaction Using Amphiphilic Triblock Copolymers as the Reductant and Capping Agent. <b>2013</b> , 117, 13413-13423 <sup>37</sup>		
669	Detection of sub-femtomolar DNA based on double potential electrodeposition of electrocatalytic platinum nanoparticles. <b>2013</b> , 138, 4340-4		14
668	Nanoparticle adhesion in proton exchange membrane fuel cell electrodes. <b>2013</b> , 241, 634-646		19
667	Platinum-based oxygen reduction electrocatalysts. <b>2013</b> , 46, 1848-57		774
666	One-Pot Controllable Synthesis of [email protected] Heterogeneous Nanorods with Highly Tunable Plasmonic Absorption. <i>Chemistry of Materials</i> , <b>2013</b> , 25, 2580-2590	9.6	83
665	A facile strategy to Pt <sub>3</sub> Ni nanocrystals with highly porous features as an enhanced oxygen reduction reaction catalyst. <b>2013</b> , 25, 2974-9		211

664	Pseudocapacitive hausmannite nanoparticles with (101) facets: synthesis, characterization, and charge-transfer mechanism. <b>2013</b> , 6, 1983-92	20
663	Molecular architecture of cobalt porphyrin multilayers on reduced graphene oxide sheets for high-performance oxygen reduction reaction. <b>2013</b> , 52, 5585-9	226
662	The Effect of N and B Doping on Graphene and the Adsorption and Migration Behavior of Pt Atoms. <b>2013</b> , 117, 10523-10535	59
661	Highly uniform platinum icosahedra made by hot injection-assisted GRAILS method. <b>2013</b> , 13, 2870-4	150
660	Deposition of Monodisperse Platinum Nanoparticles of Controlled Size on Different Supports. <b>2013</b> , 02, 32-38	11
659	Fabrication of highly porous platinum electrodes for micro-scale applications by pulsed electrodeposition and dealloying. <b>2013</b> , 242, 255-263	23
658	Enhancement of oxygen reduction reaction on PtAu nanoparticles via CO induced surface Pt enrichment. <b>2013</b> , 129, 375-381	40
657	Novel biocompatible nanoreactor for silica/gold hybrid nanoparticles preparation. <b>2013</b> , 102, 778-82	6
656	Molecular Architecture of Cobalt Porphyrin Multilayers on Reduced Graphene Oxide Sheets for High-Performance Oxygen Reduction Reaction. <b>2013</b> , 125, 5695-5699	95
655	Heterogeneous catalysts need not be so "heterogeneous": monodisperse Pt nanocrystals by combining shape-controlled synthesis and purification by colloidal recrystallization. <b>2013</b> , 135, 2741-7	93
654	Thermodynamic Control of Metal Loading and Composition of Carbon Aerogel Supported PtCu Alloy Nanoparticles by Supercritical Deposition. <b>2013</b> , 117, 6777-6787	36
653	One-pot synthesis and enhanced catalytic performance of Pd and Pt nanocages via galvanic replacement reactions. <b>2013</b> , 3, 12577	14
652	Kinetically controlled growth of polyhedral bimetallic alloy nanocrystals exclusively bound by high-index facets: Au-Pd hexoctahedra. <b>2013</b> , 9, 660-5	50
651	Ionic Liquids for the Synthesis and Stabilization of Metal Nanoparticles. <b>2013</b> , 68, 1059-1089	100
650	A Review on the Binary Oxide Nanomaterials for the Electrochemical Performance. <b>2013</b> , 788, 11-14	
649	The Effect of PtRu Nanoparticle Crystallinity in Electrocatalytic Methanol Oxidation. <b>2013</b> , 6, 1621-1631	21
648	Morphology control of bimetallic nanostructures for electrochemical catalysts. <b>2013</b> , 2, 487-514	21
647	Platinum nanoparticles on the surface of silica modified with silicon hydride groups. <b>2013</b> , 44, 239-243	3

646	Enhanced stability of (111)-surface-dominant core-shell nanoparticle catalysts towards the oxygen reduction reaction. <b>2013</b> , 6, 1888-92	18
645	Plasmonic and Catalytic AuPd Nanowheels for the Efficient Conversion of Light into Chemical Energy. <b>2013</b> , 125, 6179-6183	43
644	A unique platinum-graphene hybrid structure for high activity and durability in oxygen reduction reaction. <b>2013</b> , 3, 2580	52
643	Hard-templating Synthesis of Mesoporous Pt-Based Alloy Particles with Low Ni and Co Contents. <b>2013</b> , 42, 447-449	12
642	Stabilized Metal Nanoparticles from Organometallic Precursors for Low Temperature Fuel Cells. <b>2013</b> , 7, 13-25	9
641	Palladium-Based Nanostructures with Highly Porous Features and Perpendicular Pore Channels as Enhanced Organic Catalysts. <b>2013</b> , 125, 2580-2584	52
640	Biomimetic Synthesis of an Ultrathin Platinum Nanowire Network with a High Twin Density for Enhanced Electrocatalytic Activity and Durability. <b>2013</b> , 125, 12809-12813	18
639	Synthesis, characterization, and growth simulations of Cu-Pt bimetallic nanoclusters. <b>2014</b> , 5, 1371-9	19
638	Component, Microstructure and Simulation Calculation Study of Bimetallic Pt-Cu Alloys Towards Catalyzing Methanol Oxidation Reaction. <b>2014</b> , 13, 1460012	
637	Shape-controlled synthesis of Pt-Ir nanocubes with preferential (100) orientation and their unusual enhanced electrocatalytic activities. <b>2014</b> , 57, 13-25	38
636	Facile Synthesis of 3 D Platinum Dendrites with a Clean Surface as Highly Stable Electrocatalysts. <b>2014</b> , 6, 1538-1542	8
635	Speciation of [Pt(IV) Cl <sub>6-n</sub> Br <sub>n</sub> ] <sup>2-</sup> (n = 0-6) and some of their mono-aquated [Pt(IV) Cl <sub>5-n</sub> Br <sub>n</sub> (H <sub>2</sub> O)] <sup>-</sup> (n = 0-5) anions in solution at low concentrations by means of ion-pairing reversed-phase ultra-high-performance liquid chromatography coupled to electrospray ionization quadrupole time-of-flight mass spectrometry. <b>2014</b> , 20, 505-10	1
634	Tuning the Composition of AuPt Bimetallic Nanoparticles for Antibacterial Application. <b>2014</b> , 126, 8265-8269	15
633	Facet-Controlled Metal Alloy Electrocatalysts for Oxygen Reduction Reaction: Unconventional Post Treatment of Pt <sub>3</sub> Ni Octahedral Catalysts for Enhanced Activity. <b>2014</b> , 61, 25-34	3
632	A direct one-step synthetic route to PdPt nanostructures with controllable shape, size, and composition for electrocatalytic applications. <b>2014</b> , 2, 19239-19246	19
631	One-step and rapid synthesis of reduced graphene oxide supported Pt nanodendrites by a microwave-assisted simultaneous reduction. <b>2014</b> , 49, 119-125	17
630	Reduction by water for eco-friendly, capping agent-free synthesis of ultrasmall platinum nanocrystals. <b>2014</b> , 595-596, 77-82	9
629	Investigating the activity enhancement on Pt <sub>x</sub> Co <sub>1-x</sub> alloys induced by a combined strain and ligand effect. <b>2014</b> , 245, 908-914	26

628	Mesoporous nano/micro noble metal particles: synthesis and applications. <i>Nanoscale</i> , <b>2014</b> , 6, 4438-57	7.7	96
627	A novel approach for the in situ synthesis of Pt-Pd nanoalloys supported on Fe <sub>3</sub> O <sub>4</sub> @C core-shell nanoparticles with enhanced catalytic activity for reduction reactions. <b>2014</b> , 6, 2671-8		106
626	Efficient chemoselective reduction of nitro compounds and olefins using PdPt bimetallic nanoparticles on functionalized multi-wall-carbon nanotubes. <b>2014</b> , 45, 25-29		33
625	Electrochemistry of nanoparticles. <b>2014</b> , 53, 3558-86		287
624	Shape-directed platinum nanoparticle synthesis: nanoscale design of novel catalysts. <b>2014</b> , 28, 1-17		71
623	Effects of composition and metal particle size on ethane dehydrogenation over Pt <sub>x</sub> Sn <sub>100-x</sub> /Mg(Al)O (70?x?100). <b>2014</b> , 311, 161-168		83
622	Controlling the size and composition of nanosized Pt-Ni octahedra to optimize their catalytic activities toward the oxygen reduction reaction. <b>2014</b> , 7, 1476-83		67
621	High loading Pt nanoparticles on functionalization of carbon nanotubes for fabricating nonenzyme hydrogen peroxide sensor. <b>2014</b> , 59, 221-6		79
620	Recent Advances in the Stabilization of Platinum Electrocatalysts for Fuel-Cell Reactions. <b>2014</b> , 6, 26-45		155
619	Nanoparticle ensemble electrodes: fabrication by short-pulse sputtering and characterization by scanning probe microscopy and voltammetry. <b>2014</b> , 18, 2233-2243		3
618	Atomic layer-by-layer deposition of Pt on Pd nanocubes for catalysts with enhanced activity and durability toward oxygen reduction. <b>2014</b> , 14, 3570-6		380
617	Generation of Monodisperse, Shape-Controlled Single and Hybrid CoreShell Nanoparticles via a Simple One-Step Process. <b>2014</b> , 24, 841-847		11
616	Dealloyed Pt <sub>2</sub> O <sub>3</sub> nanoparticles for enhanced oxygen reduction reaction in acidic electrolytes. <b>2014</b> , 150-151, 636-646		12
615	One-pot synthesis and electrocatalytic properties of Pd@Pt core-shell nanocrystals with tailored morphologies. <b>2014</b> , 20, 7901-5		35
614	One-pot synthesis of platinum nanocubes on reduced graphene oxide with enhanced electrocatalytic activity. <b>2014</b> , 10, 2336-9		41
613	Uniform size and composition tuning of PtNi octahedra for systematic studies of oxygen reduction reactions. <b>2014</b> , 309, 343-350		34
612	Amorphous carbon enriched with pyridinic nitrogen as an efficient metal-free electrocatalyst for oxygen reduction reaction. <b>2014</b> , 50, 557-9		93
611	Facile synthesis of Pt/Pd nanodendrites for the direct oxidation of methanol. <b>2014</b> , 25, 195702		26

610	Synthesis of Fe-doped octahedral Pt <sub>3</sub> Ni nanocrystals with high electro-catalytic activity and stability towards oxygen reduction reaction. <b>2014</b> , 4, 1895-1899		22
609	Icosahedral gold-platinum alloy nanocrystals in hollow silica: a highly active and stable catalyst for Ullmann reactions. <b>2014</b> , 50, 539-41		31
608	Methanol oxidation reaction activity of microwave-irradiated and heat-treated Pt/Co and Pt/Ni nano-electrocatalysts. <b>2014</b> , 39, 18871-18881		26
607	Bimetallic nanodendrites via selective overgrowth of noble metals on multiply twinned Au seeds. <b>2014</b> , 2, 6130-6137		32
606	Evolution of nanoscale amorphous, crystalline and phase-segregated PtNiP nanoparticles and their electrocatalytic effect on methanol oxidation reaction. <b>2014</b> , 16, 3593-602		51
605	Anisotropic growth-induced synthesis of dual-compartment Janus mesoporous silica nanoparticles for bimodal triggered drugs delivery. <b>2014</b> , 136, 15086-92		298
604	[email[protected]] Catalyst Membranes Fabricated by Electrospinning and Atomic Layer Deposition. <i>ACS Catalysis</i> , <b>2014</b> , 4, 144-151	13.1	74
603	CO Oxidation Over TiO <sub>2</sub> -Supported PtFe Catalysts Prepared by Coimpregnation Methods. <b>2014</b> , 144, 1653-1660		20
602	Facile synthesis of high-quality Pt nanostructures with a controlled aspect ratio for methanol electro-oxidation. <b>2014</b> , 16, 8340-8343		11
601	Probing the surface of platinum nanoparticles with <sup>13</sup> CO by solid-state NMR and IR spectroscopies. <i>Nanoscale</i> , <b>2014</b> , 6, 539-46	7.7	26
600	Fabrication of SPR Nanosensor Using Gold Nanoparticles and Self-Assembled Monolayer Technique for Detection of Cu <sup>2+</sup> in an Aqueous Solution. <b>2014</b> , 35, 717-724		3
599	Synthesis of Au@ZIF-8 single- or multi-core-shell structures for photocatalysis. <b>2014</b> , 50, 8651-4		135
598	Wet chemical synthesis of intermetallic Pt <sub>3</sub> Zn nanocrystals via weak reduction reaction together with UPD process and their excellent electrocatalytic performances. <i>Nanoscale</i> , <b>2014</b> , 6, 7019-24	7.7	57
597	Learning from nature: introducing an epiphyte-host relationship in the synthesis of alloy nanoparticles by co-reduction methods. <b>2014</b> , 50, 9765-8		6
596	From Pt-rich dendrites to Ni-rich cuboctahedrons: structural evolution and electrocatalytic property studies. <b>2014</b> , 16, 5331-5337		8
595	Highly monodisperse multiple twinned AuCu-Pt trimetallic nanoparticles with high index surfaces. <b>2014</b> , 16, 16278-83		29
594	Size dependence of the lattice parameters of carbon supported platinum nanoparticles: X-ray diffraction analysis and theoretical considerations. <b>2014</b> , 4, 35959-35965		61
593	Propane dehydrogenation over Al <sub>2</sub> O <sub>3</sub> supported Pt nanoparticles: Effect of cerium addition. <b>2014</b> , 128, 283-288		17

592	Platinum Nanoparticles as Photoactive Substrates for Mass Spectrometry and Spectroscopy Sensors. <b>2014</b> , 118, 11432-11439		24
591	One-step synthesis of hybrid nanocrystals with rational tuning of the morphology. <b>2014</b> , 14, 6666-71		30
590	Pt-based nanoparticles on non-covalent functionalized carbon nanotubes as effective electrocatalysts for proton exchange membrane fuel cells. <b>2014</b> , 4, 46265-46284		51
589	Porous inorganic nanostructures with colloidal dimensions: synthesis and applications in electrochemical energy devices. <b>2014</b> , 50, 2077-88		22
588	Oxygen reduction reaction and peroxide generation on shape-controlled and polycrystalline platinum nanoparticles in acidic and alkaline electrolytes. <b>2014</b> , 30, 8995-9006		71
587	Small palladium islands embedded in palladium-tungsten bimetallic nanoparticles form catalytic hotspots for oxygen reduction. <b>2014</b> , 5, 5253		65
586	Semiconductor and metallic core-shell nanostructures: synthesis and applications in solar cells and catalysis. <b>2014</b> , 20, 11256-75		34
585	Effect of the type of Pt precursor on PtNi nanostructures for electro-oxidation of ammonia. <b>2014</b> , 147, 722-727		4
584	Aqueous solution synthesis of Pt-M (M = Fe, Co, Ni) bimetallic nanoparticles and their catalysis for the hydrolytic dehydrogenation of ammonia borane. <b>2014</b> , 6, 12429-35		90
583	Tuning the composition of AuPt bimetallic nanoparticles for antibacterial application. <b>2014</b> , 53, 8127-31		159
582	Nanoparticle catalysts for proton exchange membrane fuel cells: can surfactant effects be beneficial for electrocatalysis?. <b>2014</b> , 16, 11435-46		30
581	Synthesis of three-dimensional Pd nanospheres decorated with a Pt monolayer for the oxygen reduction reaction. <b>2014</b> , 39, 14018-14026		11
580	Electrospinning: a facile technique for fabricating polymeric nanofibers doped with carbon nanotubes and metallic nanoparticles for sensor applications. <b>2014</b> , 4, 52598-52610		126
579	Hydrogen induced p-phosphonic acid calix[8]arene controlled growth of Ru, Pt and Pd nanoparticles. <b>2014</b> , 50, 15167-70		13
578	Synthesis and electrocatalytic activity of Au@Pd core-shell nanothorns for the oxygen reduction reaction. <i>Nano Research</i> , <b>2014</b> , 7, 1205-1214	10	107
577	Effect of Stabilizing Polymers on Catalysis of Hydrotalcite-Supported Platinum Nanoparticles for Aerobic Oxidation of 1,2-Propanediol in Aqueous Solution at Room Temperature. <b>2014</b> , 118, 11723-11730		20
576	Pt-Containing Ag <sub>2</sub> S-Noble Metal Nanocomposites as Highly Active Electrocatalysts for the Oxidation of Formic Acid. <b>2014</b> , 6, 252-257		21
575	Carbon monoxide tolerant platinum electrocatalysts on niobium doped titania and carbon nanotube composite supports. <b>2014</b> , 272, 845-859		30



- 574 High activity of cubic PtRh alloys supported on graphene towards ethanol electrooxidation. **2014**, 16, 13662-71 73
- 573 Facile synthesis of PdPt alloy concave nanocubes with high-index facets as electrocatalysts for methanol oxidation. **2014**, 16, 2411-2416 58
- 572 Reasons for the Differences in the Kinetics of Thermal Oxidation of the Support in Pt/C Electrocatalysts. **2014**, 118, 23835-23844 14
- 571 Amylamine stabilized platinum(0) nanoparticles: active and reusable nanocatalyst in the room temperature dehydrogenation of dimethylamine-borane. **2014**, 4, 1526-1531 92
- 570 Preparation and cyclic voltammetric dissolution of core-shell AgPtAg nanocubes and their comparison in oxygen reduction reaction in alkaline media. **2014**, 39, 5528-5536 12
- 569 Iridium-decorated palladium-platinum core-shell catalysts for oxygen reduction reaction in proton exchange membrane fuel cell. *Journal of Colloid and Interface Science*, **2014**, 427, 91-7 9:3 19
- 568 Green synthesis of Pt-on-Pd bimetallic nanodendrites on graphene via in situ reduction, and their enhanced electrocatalytic activity for methanol oxidation. **2014**, 127, 377-383 45
- 567 Synthesis and Peroxidase-Like Activity of Salt-Resistant Platinum Nanoparticles by Using Bovine Serum Albumin as the Scaffold. **2014**, 6, 1543-1548 47
- 566 The role of twin boundary and surface energies in periodically twinned <111> nanowires. **2014**, 75, 180-187 6
- 565 Shape-Controllable Pulse Electrodeposition of Ultrafine Platinum Nanodendrites for Methanol Catalytic Combustion and the Investigation of their Local Electric Field Intensification by Electrostatic Force Microscope and Finite Element Method. **2014**, 136, 66-74 26
- 564 Synthesis of PtCu nanowires in nonaqueous solvent with enhanced activity and stability for oxygen reduction reaction. **2014**, 267, 380-387 51
- 563 Elektrochemie von Nanopartikeln. **2014**, 126, 3630-3660 44
- 562 Synthesis and Immobilization of Pt Nanoparticles on Amino-Functionalized Halloysite Nanotubes toward Highly Active Catalysts. **2015**, 5, 4 27
- 561 A New Approach towards Improving the Specific Energy and Specific Power of a Carbon-Based Supercapacitor using Platinum-Nanoparticles on Etched Stainless Steel Current Collector. **2015**, 83, 1053-1060<sup>6</sup> 6
- 560 The Application of Bactericidal Silver Nanoparticles in Wound Treatment. **2015**, 5, 23 43
- 559 Enhancing the methanol tolerance of platinum nanoparticles for the cathode reaction of direct methanol fuel cells through a geometric design. **2015**, 5, 16219 24
- 558 Structure of Nanocrystalline Nickel Prepared by Powder Metallurgy. **2015**, 647, 102-107 7
- 557 Facile Synthesis of Quasi-One-Dimensional Au/PtAu Heterojunction Nanotubes and Their Application as Catalysts in an Oxygen-Reduction Reaction. **2015**, 21, 7556-61 11



556	Recent Advances in the Synthesis and Electrocatalytic Applications of Platinum-Based Bimetallic Alloy Nanostructures. <b>2015</b> , 7, 3206-3228		58
555	Dual Lewis Acidic/Basic Pd <sub>0.5</sub> Ru <sub>0.5</sub> Poly(N-vinyl-2-pyrrolidone) Alloyed Nanoparticle: Outstanding Catalytic Activity and Selectivity in Suzuki-Miyaura Cross-Coupling Reaction. <b>2015</b> , 7, 3887-3894		20
554	Mechanochemical Synthesis of Free-Standing Platinum Nanosheets and Their Electrocatalytic Properties. <b>2015</b> , 27, 4430-4437		41
553	Chitosan Waste-Derived Co and N Co-doped Carbon Electrocatalyst for Efficient Oxygen Reduction Reaction. <i>ChemElectroChem</i> , <b>2015</b> , 2, 1806-1812	4-3	43
552	Coating Platinum Nanoparticles with Methyl Radicals: Effects on Properties and Catalytic Implications. <b>2015</b> , 21, 19000-9		13
551	Fabrication of Supported AuPt Alloy Nanocrystals with Enhanced Electrocatalytic Activity for Formic Acid Oxidation through Conversion Chemistry of Layer-Deposited Pt(2+) on Au Nanocrystals. <b>2015</b> , 11, 4884-93		16
550	Platinum nanoparticles/graphene-oxide hybrid with excellent peroxidase-like activity and its application for cysteine detection. <b>2015</b> , 140, 5251-6		81
549	Recent development in the preparation of nanoparticles as fuel cell catalysts. <b>2015</b> , 8, 89-97		21
548	Evolution from small sized Au nanoparticles to hollow Pt/Au nanostructures with Pt nanorods and a mechanistic study. <b>2015</b> , 5, 103797-103802		5
547	Shape-controlled syntheses of rhodium nanocrystals for the enhancement of their catalytic properties. <i>Nano Research</i> , <b>2015</b> , 8, 82-96	10	77
546	AuPd Alloy Octapods with High Electrocatalytic Activity for the Oxidation of Formic Acid. <b>2015</b> , 32, 295-300		21
545	An Overview of One-Dimensional Metal Nanostructures for Electrocatalysis. <b>2015</b> , 19, 88-121		20
544	Sub-nanometer dimensions control of core/shell nanoparticles prepared by atomic layer deposition. <b>2015</b> , 26, 094002		55
543	High-yield synthesis of sub-10 nm Pt nanotetrahedra with bare <111> facets for efficient electrocatalytic applications. <b>2015</b> , 7, 4998-5005		22
542	A Platinum Highly Concave Cube with one Leg on each Vertex as an Advanced Nanocatalyst for Electrocatalytic Applications. <b>2015</b> , 7, 1064-1069		22
541	Facile Synthesis of Carbon Supported Pd <sub>3</sub> [email protected] Pt Core/Shell Electrocatalyst with a Remarkable Activity for Oxygen Reduction. <b>2015</b> , 119, 4052-4061		18
540	Atomic Structure of Bimetallic Nanoparticles in PtAg/C Catalysts: Determination of Components Distribution in the Range from Disordered Alloys to Core-Shell Structures. <b>2015</b> , 119, 3217-3227		29
539	Noble metal-based composite nanomaterials fabricated via solution-based approaches. <b>2015</b> , 3, 3182-3223		82

538	Size-Controlled Synthesis of Platinum-Copper Hierarchical Trigonal Bipyramid Nanoframes. <b>2015</b> , 127, 110-115	29
537	The Effect of Reducing Agents on the Electronic, Magnetic and Electrocatalytic Properties of Thiol-Capped Pt/Co and Pt/Ni Nanoparticles. <b>2015</b> , 6, 274-285	8
536	Growth of Au on Pt icosahedral nanoparticles revealed by low-dose in situ TEM. <b>2015</b> , 15, 2711-5	90
535	Achieving Site-Specificity in Multistep Colloidal Synthesis. <b>2015</b> , 137, 7624-7	66
534	Co@Pt core-shell nanoparticles supported on carbon nanotubes as promising catalyst for methanol electro-oxidation. <b>2015</b> , 28, 344-350	28
533	Platinum Dendritic-Flowers Prepared by Tellurium Nanowires Exhibit High Electrocatalytic Activity for Glycerol Oxidation. <b>2015</b> , 7, 17725-30	42
532	Facile synthesis of Pt <sub>3</sub> Ni alloy nanorods by temperature modulation and their enhanced electrocatalytic properties. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 645, 309-316	5-7 12
531	Enhanced methanol electrooxidation at Pt skin@PdPt nanocrystals. <b>2015</b> , 3, 17771-17779	24
530	Phase properties of carbon-supported platinum-gold nanoparticles for formic acid electro-oxidation. <b>2015</b> , 294, 201-207	7
529	Effect of ionic liquid on the synthesis and electrocatalytic property of platinum-based bimetallic nanoparticles. <b>2015</b> , 482, 386-393	4
528	Ionic Liquids (ILs) in Organometallic Catalysis. <b>2015</b> ,	16
527	Engineering Ordered and Nonordered Porous Noble Metal Nanostructures: Synthesis, Assembly, and Their Applications in Electrochemistry. <b>2015</b> , 115, 8896-943	470
526	Increasing the Collision Rate of Particle Impact Electroanalysis with Magnetically Guided Pt-Decorated Iron Oxide Nanoparticles. <b>2015</b> , 9, 7583-95	43
525	Cu <sup>2+</sup> underpotential-deposition assisted synthesis of Au and AuPd alloy nanocrystals with systematic shape evolution. <b>2015</b> , 17, 5556-5561	12
524	Impacts of Copper Position on the Electronic Structure of [Au <sub>25-x</sub> Cu <sub>x</sub> (SH) <sub>18</sub> ] Nanoclusters. <b>2015</b> , 119, 8290-8298	24
523	Au-Ag core-shell nanoparticle array by block copolymer lithography for synergistic broadband plasmonic properties. <b>2015</b> , 9, 5536-43	112
522	Challenges of modelling real nanoparticles: Ni@Pt electrocatalysts for the oxygen reduction reaction. <b>2015</b> , 17, 28286-97	22
521	Carbon-supported Pt-based alloy electrocatalysts for the oxygen reduction reaction in polymer electrolyte membrane fuel cells: particle size, shape, and composition manipulation and their impact to activity. <b>2015</b> , 115, 3433-67	907

520	Real-time monitoring of H <sub>2</sub> O <sub>2</sub> release from single cells using nanoporous gold microelectrodes decorated with platinum nanoparticles. <b>2015</b> , 140, 3753-8		35
519	N- and S-doped high surface area carbon derived from soya chunks as scalable and efficient electrocatalysts for oxygen reduction. <i>Science and Technology of Advanced Materials</i> , <b>2015</b> , 16, 014803	7.1	24
518	Porous-structured platinum nanocrystals supported on a carbon nanotube film with super catalytic activity and durability. <b>2015</b> , 3, 7862-7869		8
517	First-principles calculations of the dissolution and coalescence properties of Pt nanoparticle ORR catalysts: The effect of nanoparticle shape. <i>Nano Research</i> , <b>2015</b> , 8, 1689-1697	10	32
516	Air- and water-resistant noble metal coated ferromagnetic cobalt nanorods. <b>2015</b> , 9, 2792-804		25
515	Synthesis of Pt dendritic nanocubes with enhanced catalytic properties. <b>2015</b> , 5, 16497-16500		8
514	Facile synthesis of PtCu nanowires with enhanced electrocatalytic activity. <i>Nano Research</i> , <b>2015</b> , 8, 2308-2316	10	83
513	Metal-free catalysts for oxygen reduction reaction. <b>2015</b> , 115, 4823-92		1763
512	Solvothermal synthesis of metal nanocrystals and their applications. <i>Nano Today</i> , <b>2015</b> , 10, 240-267	17.9	149
511	Noble metal alloy complex nanostructures: controllable synthesis and their electrochemical property. <b>2015</b> , 44, 3056-78		359
510	Polyhedral Pt vs. spherical Pt nanoparticles on commercial titanias: Is shape tailoring a guarantee of achieving high activity?. <b>2015</b> , 325, 156-167		22
509	Platinum Nanoparticle During Electrochemical Hydrogen Evolution: Adsorbate Distribution, Active Reaction Species, and Size Effect. <i>ACS Catalysis</i> , <b>2015</b> , 5, 2376-2383	13.1	81
508	Noble Metal Nanomaterials: Synthetic Routes, Fundamental Properties, and Promising Applications. <b>2015</b> , 66, 131-211		12
507	A seed-mediated approach to the morphology-controlled synthesis of bimetallic copper/platinum alloy nanoparticles with enhanced electrocatalytic performance for the methanol oxidation reaction. <b>2015</b> , 286, 488-494		39
506	Atomistic investigation on the diffusion mechanism of Pt nanoclusters on well-aligned multi-walled carbon nanotubes. <b>2015</b> , 103, 157-164		1
505	Enhancement of the catalytic performance of a CNT supported Pt nanorod cluster catalyst by controlling their microstructure. <b>2015</b> , 5, 80176-80183		3
504	Preparation and electrocatalytic performance of the Pt supported on the alkali-treated nanoporous TiO <sub>2</sub> material. <b>2015</b> , 21, 2863-2869		2
503	Recent advances in surface and interface engineering for electrocatalysis. <i>Chinese Journal of Catalysis</i> , <b>2015</b> , 36, 1476-1493	11.3	35

502	Efficient and facile tuning of Vulcan XC72 with ultra-small Pt nanoparticles for electrocatalytic applications. <b>2015</b> , 5, 90691-90697		16
501	Engineering Structural Diversity in Gold Nanocrystals by Ligand-Mediated Interface Control. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 8032-8040	9.6	13
500	Epitaxial Growth of ZnO Films on Patterned c-Plane GaN Layer Using Hydrothermal Method. <b>2015</b> , 4, N111-N116		3
499	Wet-chemical synthesis and applications of non-layer structured two-dimensional nanomaterials. <b>2015</b> , 6, 7873		425
498	Growth of Cu particles on a Cu <sub>2</sub> O truncated octahedron: tuning of the Cu content for efficient glucose sensing. <b>2015</b> , 17, 24361-9		18
497	Core-shell nanoparticles: synthesis and applications in catalysis and electrocatalysis. <b>2015</b> , 44, 7540-90		696
496	Reduced graphene oxide nanosheets decorated with Au, Pd and AuPd bimetallic nanoparticles as highly efficient catalysts for electrochemical hydrogen generation. <b>2015</b> , 3, 20254-20266		121
495	Etching approach to hybrid structures of PtPd nanocages and graphene for efficient oxygen reduction reaction catalysts. <i>Nano Research</i> , <b>2015</b> , 8, 2789-2799	10	34
494	Large-scale template-free synthesis of ordered mesoporous platinum nanocubes and their electrocatalytic properties. <i>Nanoscale</i> , <b>2015</b> , 7, 19461-7	7.7	19
493	Key parameters governing metallic nanoparticle electrocatalysis. <i>Nanoscale</i> , <b>2015</b> , 7, 16151-64	7.7	39
492	Toward Ending the Guessing Game: Study of the Formation of Nanostructures Using In Situ Liquid Transmission Electron Microscopy. <b>2015</b> , 6, 5051-61		27
491	In Situ Study of Fe <sub>3</sub> Pt-Fe <sub>2</sub> O <sub>3</sub> Core-Shell Nanoparticle Formation. <b>2015</b> , 137, 14850-3		42
490	Stable and methanol tolerant Pt/TiO <sub>x</sub> -C electrocatalysts for the oxygen reduction reaction. <b>2015</b> , 40, 14529-14539		27
489	Selective electrocatalysts toward a prototype of the membraneless direct methanol fuel cell. <b>2014</b> , 4, 3813		25
488	Synthesis of shaped Pt nanoparticles using common anions or small molecules as shape-directing agents: observation of a strong halide or pseudo-halide effect. <b>2015</b> , 3, 2012-2018		19
487	Evidence for Independent Glycerol Electrooxidation Behavior on Different Ordered Domains of Polycrystalline Platinum. <i>ChemElectroChem</i> , <b>2015</b> , 2, 263-268	4.3	33
486	Metal-Based Composite Nanomaterials. <b>2015</b> ,		5
485	Size-controlled synthesis of platinum-copper hierarchical trigonal bipyramid nanoframes. <b>2015</b> , 54, 108-13		141

484	Spiny-porous platinum nanotubes with enhanced electrocatalytic activity for methanol oxidation. <b>2015</b> , 3, 1388-1391		25
483	Stellated Ag-Pt bimetallic nanoparticles: an effective platform for catalytic activity tuning. <b>2014</b> , 4, 3969		63
482	Metallic Nanostructures for Electrocatalysis. <b>2015</b> , 205-241		
481	Metallic Nanostructures. <b>2015</b> ,		11
480	Porous Core-Shell Platinum-Silver Nanocatalyst for the Electrooxidation of Methanol. <b>2015</b> , 27, 135-143		9
479	Capillary force lithography: the versatility of this facile approach in developing nanoscale applications. <i>Nanoscale</i> , <b>2015</b> , 7, 401-14	7.7	33
478	Graphitized carbon nanofiber-Pt nanoparticle hybrids as sensitive tool for preparation of screen printing biosensors. Detection of lactate in wines and ciders. <b>2015</b> , 101, 58-65		47
477	Bibliography. <b>2016</b> , 10, 289-327		
476	Synthesis and experimental characterization of nanoalloy structures. <b>2016</b> , 10, 47-74		3
475	Electrochemical Behavior of Gold-Silver Alloy Nanoparticles. <i>ChemElectroChem</i> , <b>2016</b> , 3, 1039-1043	4.3	11
474	In situ fabricated platinum-poly(vinyl alcohol) nanocomposite thin film: a highly reusable dip catalyst for hydrogenation. <b>2016</b> , 3, 045018		4
473	Effects of Pt shell thickness on self-assembly monolayer Pd@Pt core-shell nanocrystals based hydrogen sensing. <b>2016</b> , 41, 15399-15410		25
472	One-pot synthesis of Pd@Pt core-shell nanocrystals for electrocatalysis: control of crystal morphology with polyoxometalate. <b>2016</b> , 18, 6029-6034		8
471	Bimetallic Nanocrystals: Syntheses, Properties, and Applications. <b>2016</b> , 116, 10414-72		1046
470	Recent Development of Platinum-Based Nanocatalysts for Oxygen Reduction Electrocatalysis. <b>2016</b> , 253-280		2
469	Nanomaterials for Fuel Cell Catalysis. <b>2016</b> ,		10
468	Recent Advances in the Use of Shape-Controlled Metal Nanoparticles in Electrocatalysis. <b>2016</b> , 31-92		7
467	Morphological and Interfacial Control of Platinum Nanostructures for Electrocatalytic Oxygen Reduction. <i>ACS Catalysis</i> , <b>2016</b> , 6, 5260-5267	13.1	100

466	In situ ETEM study of composition redistribution in Pt-Ni octahedral catalysts for electrochemical reduction of oxygen. <b>2016</b> , 62, 399-407	19
465	Regioselective Atomic Rearrangement of Ag-Pt Octahedral Catalysts by Chemical Vapor-Assisted Treatment. <b>2016</b> , 16, 7988-7992	19
464	Explicit Detection of the Mechanism of Platinum Nanoparticle Shape Control by Polyvinylpyrrolidone. <b>2016</b> , 120, 7532-7542	29
463	Controlling the Growth of Au on Icosahedral Seeds of Pd by Manipulating the Reduction Kinetics. <b>2016</b> , 120, 20768-20774	22
462	Fibrous AuPt bimetallic nanocatalyst with enhanced catalytic performance. <b>2016</b> , 6, 27696-27705	14
461	Monodisperse PdCu@PtCu Core@Shell nanocrystal and their high activity and durability for oxygen reduction reaction. <b>2016</b> , 192, 227-233	8
460	Kinetics of precipitation of non-ideal solid-solutions in a liquid environment. <b>2016</b> , 431, 20-35	5
459	Fibrous platinum nanocubes modified indium tin oxide electrodes for effective electrooxidation of alcohols and sensitive detection of hydrazine. <b>2016</b> , 779, 156-160	5
458	Shape evolution of carbon supported Pt nanoparticles: From synthesis to application. <b>2016</b> , 196, 174-184	13
457	Atomic structure of PtCu nanoparticles in PtCu/C catalysts from EXAFS spectroscopy data. <b>2016</b> , 58, 752-762	12
456	Controlled synthesis of highly multi-branched Pt-based alloy nanocrystals with high catalytic performance. <b>2016</b> , 18, 2356-2362	14
455	Room temperature photo-induced deposition of platinum mirrors and nano-layers from simple Pt(II) precursor complexes in water/ethanol solutions. <b>2016</b> , 6, 34014-34018	8
454	Controllably self-assembled graphene-supported Au@Pt bimetallic nanodendrites as superior electrocatalysts for methanol oxidation in direct methanol fuel cells. <b>2016</b> , 4, 7352-7364	51
453	Recent advances in the design of tailored nanomaterials for efficient oxygen reduction reaction. <b>2016</b> , 29, 149-165	162
452	Surface-functionalizable amphiphilic nanoparticles for pickering emulsions with designer fluid-fluid interfaces. <b>2016</b> , 6, 39926-39932	22
451	Shape-controlled synthesis of Au-Pd bimetallic nanocrystals for catalytic applications. <b>2016</b> , 45, 3916-34	193
450	Guide to by-products formed in organic solvents under solvothermal conditions. <b>2016</b> , 113, 166-197	24
449	Particle-mediated nucleation and growth of solution-synthesized metal nanocrystals: A new story beyond the LaMer curve. <i>Nano Today</i> , <b>2016</b> , 11, 145-167	17.9 90

448	Molecular dynamics simulations of ternary Pt <sub>x</sub> Pd <sub>y</sub> Au <sub>z</sub> fuel cell nanocatalyst growth. <b>2016</b> , 41, 22589-22597	7	
447	Pt-Containing Heterogeneous Nanomaterials for Methanol Oxidation and Oxygen Reduction Reactions. <b>2016</b> , 93-168		
446	Facile fabrication of highly durable Pt NPs/3D graphene hierarchical nanostructure for proton exchange membrane fuel cells. <b>2016</b> , 109, 805-812		10
445	Large faceted Pd nanocrystals supported small Pt nanoparticles as highly durable electrocatalysts for oxygen reduction. <b>2016</b> , 326, 23-34		13
444	NANOMATERIALS PROPERTIES. <b>2016</b> , 2657-2706		
443	Shaping electrocatalysis through tailored nanomaterials. <i>Nano Today</i> , <b>2016</b> , 11, 587-600	17.9	114
442	Engineering high-energy surfaces of noble metal nanocrystals with enhanced catalytic performances. <i>Nano Today</i> , <b>2016</b> , 11, 661-677	17.9	66
441	Melanoma Prevention: Challenges and Progresses in Nanotechnology for Melanoma Prevention and Treatment. <b>2016</b> , 480-497		
440	Pt/C nanocatalysts for methanol electrooxidation prepared by water-in-oil microemulsion method. <b>2016</b> , 20, 3405-3414		1
439	Electron transfer number control of the oxygen reduction reaction on nitrogen-doped reduced graphene oxides for the air electrodes of zinc-air batteries and organic degradation. <b>2016</b> , 183, 551-560		7
438	Continuous Production of Carbon-Supported Cubic and Octahedral Platinum-Based Catalysts Using Conveyor Transport System. <b>2016</b> , 12, 4808-4814		4
437	Rudimentary simple, single step fabrication of nano-flakes like AgCd alloy electro-catalyst for oxygen reduction reaction in alkaline fuel cell. <b>2016</b> , 212, 122-129		8
436	Formation of Asymmetric Bowl-Like Mesoporous Particles via Emulsion-Induced Interface Anisotropic Assembly. <b>2016</b> , 138, 11306-11		205
435	Self-Heating Approach to the Fast Production of Uniform Metal Nanostructures. <b>2016</b> , 2, 37-41		5
434	Structural evolution of concave trimetallic nanocubes with tunable ultra-thin shells for oxygen reduction reaction. <i>Nanoscale</i> , <b>2016</b> , 8, 16640-16649	7.7	31
433	Two stage formation of silver nanoparticles in PZT thin films controlled by re-nucleation through transition phase of Ag-Pb alloy. <b>2016</b> , 616, 252-259		2
432	Electrochemical Characterisation of Platinum Nanoparticles Prepared in a Water-in-Oil Microemulsion in the Presence of Different Modifiers and Metal Precursors. <i>ChemElectroChem</i> , <b>2016</b> , 3, 1601-1608	4.3	4
431	Asymmetric Au-core Pd-shell nanoparticles supported on reduced graphene oxide for enhanced electrocatalytic activity. <b>2016</b> , 6, 84334-84341		9



430	One-Step Synthesis of Platinum Nanochain Networks toward Methanol Electrooxidation. <i>ChemElectroChem</i> , <b>2016</b> , 3, 2093-2099	4-3	9
429	Inclusion of Ethyl Acetoacetate Bearing 7-Hydroxycoumarin Dye by $\beta$ -Cyclodextrin and its Cooperative Assembly with Mercury(II) Ions: Spectroscopic and Molecular Modeling Studies. <b>2016</b> , 17, 3300-3308		4
428	Porous Pt Aggregates Deposited on a Carbon Nanotube Film with High Catalytic Activity and Durability. <i>ChemElectroChem</i> , <b>2016</b> , 3, 1908-1914	4-3	3
427	In situ synthesis of PtPd bimetallic nanocatalysts supported on graphene nanosheets for methanol oxidation using triblock copolymer as reducer and stabilizer. <b>2016</b> , 783, 132-139		26
426	In Situ Environmental TEM in Imaging Gas and Liquid Phase Chemical Reactions for Materials Research. <b>2016</b> , 28, 9686-9712		88
425	Solvent-controlled platinum nanocrystals with a high growth rate along <100> to <111> and enhanced electro-activity in the methanol oxidation reaction. <b>2016</b> , 6, 89098-89102		5
424	Asymmetric silica encapsulation toward colloidal Janus nanoparticles: a concave nanoreactor for template-synthesis of an electrocatalytic hollow Pt nanodendrite. <i>Nanoscale</i> , <b>2016</b> , 8, 14593-9	7-7	13
423	Heterostructured palladium-platinum core-shell nanocubes for use in a nonenzymatic amperometric glucose sensor. <b>2016</b> , 183, 3311-3320		23
422	Gold Nanofiber-Based Electrodes for Plasmon-Enhanced Electrocatalysis. <b>2016</b> , 163, H1132-H1135		14
421	Ultrafine jagged platinum nanowires enable ultrahigh mass activity for the oxygen reduction reaction. <b>2016</b> , 354, 1414-1419		986
420	Free-standing ternary PtPdRu nanocatalysts with enhanced activity and durability for methanol electrooxidation. <b>2016</b> , 222, 1094-1102		21
419	Anisotropic etching of platinum electrodes at the onset of cathodic corrosion. <b>2016</b> , 7, 12653		49
418	Small gold nanocomposites obtained in reverse micelles as nanoreactors. Effect of surfactant, optical properties and activity against <i>Pseudomonas aeruginosa</i> . <b>2016</b> , 40, 10432-10439		7
417	Synthesis and Application of Metal Nanoparticle Catalysts in Ionic Liquid Media using Metal Carbonyl Complexes as Precursors. <b>2016</b> , 147-169		1
416	Shape-Controlled Synthesis of Pt Nanopeanuts. <b>2016</b> , 6, 31404		7
415	Defect-Rich Metal Nanocrystals in Catalysis. <b>2016</b> , 8, 480-485		29
414	Fabrication of electrodes with ultralow platinum loading by RF plasma processing of self-assembled arrays of Au@Pt nanoparticles. <b>2016</b> , 27, 305401		3
413	Layer by layer electroless deposition: An efficient route for preparing adhesion-enhanced metallic coatings on plastic surfaces. <b>2016</b> , 303, 100-108		46



4 <sup>12</sup>	Hierarchical Pt/PtxPb Core/Shell Nanowires as Efficient Catalysts for Electrooxidation of Liquid Fuels. <i>Chemistry of Materials</i> , <b>2016</b> , 28, 4447-4452	9.6	84
4 <sup>11</sup>	Facile synthesis of platinum octahedra and cubes through the manipulation of reduction kinetics. <b>2016</b> , 27, 1862-1867		4
4 <sup>10</sup>	Recent advances in Pt-based octahedral nanocrystals as high performance fuel cell catalysts. <b>2016</b> , 4, 11559-11581		49
4 <sup>09</sup>	Highly-branched mesoporous Au-Pd-Pt trimetallic nanoflowers blooming on reduced graphene oxide as an oxygen reduction electrocatalyst. <b>2016</b> , 52, 8659-62		47
4 <sup>08</sup>	A green synthesis of BakedPt and PtPd catalysts for highly efficient methanol electrooxidation. <b>2016</b> , 6, 56083-56090		11
4 <sup>07</sup>	Comparative Synthesis of Cu and Cu <sub>2</sub> O Nanoparticles from Different Copper Precursors in an Ionic Liquid or Propylene Carbonate. <b>2016</b> , 2016, 2106-2113		15
4 <sup>06</sup>	Construction of three-dimensional models of bimetallic nanoparticles based on X-ray absorption spectroscopy data. <b>2016</b> , 120, 926-932		7
4 <sup>05</sup>	CoreShell Nanostructured Au@NiPt <sub>2</sub> Electrocatalysts with Enhanced Activity and Durability for Oxygen Reduction Reaction. <i>ACS Catalysis</i> , <b>2016</b> , 6, 1680-1690	13.1	67
4 <sup>04</sup>	High second-order nonlinear response of platinum nanoflowers: the role of surface corrugation. <i>Nanoscale</i> , <b>2016</b> , 8, 3489-95	7.7	6
4 <sup>03</sup>	Control of the composition of Pt-Ni electrocatalysts in surfactant-free synthesis using neat N-formylpiperidine. <i>Nanoscale</i> , <b>2016</b> , 8, 2548-53	7.7	11
4 <sup>02</sup>	Platinum-based heterogeneous nanomaterials via wet-chemistry approaches toward electrocatalytic applications. <b>2016</b> , 230, 29-53		44
4 <sup>01</sup>	Chloride (Cl <sup>-</sup> ) ion-mediated shape control of palladium nanoparticles. <b>2016</b> , 27, 065603		23
4 <sup>00</sup>	Green and rapid synthesis of a water-dispersible Pt/reduced graphene oxide hybrid material for hydrogen peroxide detection. <b>2016</b> , 8, 816-823		7
399	Unravelling Thiol's Role in Directing Asymmetric Growth of Au Nanorod-Au Nanoparticle Dimers. <b>2016</b> , 16, 617-23		46
398	Supersaturation-controlled surface structure evolution of Pd@Pt core-shell nanocrystals: enhancement of the ORR activity at a sub-10 nm scale. <i>Nanoscale</i> , <b>2016</b> , 8, 1698-703	7.7	22
397	Gold-catalyzed formation of core-shell gold/palladium nanoparticles with palladium shells up to three atomic layers. <b>2016</b> , 4, 3813-3821		51
396	A sensitive enzyme-free hydrogen peroxide sensor based on a chitosan/graphene quantum dot/silver nanocube nanocomposite modified electrode. <b>2016</b> , 8, 2448-2455		21
395	Reactivity of boron- and nitrogen-doped carbon nanotubes functionalized by (Pt, Eu) atoms toward O <sub>2</sub> and CO: A density functional study. <b>2016</b> , 27, 1650075		2

394	Output Coupling of Perovskite Lasers from Embedded Nanoscale Plasmonic Waveguides. <b>2016</b> , 138, 2122-5		115
393	Hybrid Vesicles with Alterable Fully Covered Armors of Nanoparticles: Fabrication, Catalysis, and Surface-Enhanced Raman Scattering. <b>2016</b> , 32, 991-6		18
392	Shape-controlled continuous synthesis of metal nanostructures. <i>Nanoscale</i> , <b>2016</b> , 8, 7534-43	7-7	57
391	Pt-M/C (M = Cu, Ag) electrocatalysts with an inhomogeneous distribution of metals in the nanoparticles. <b>2016</b> , 41, 1609-1626		35
390	Photo-catalyzed and phyto-mediated rapid green synthesis of silver nanoparticles using herbal extract of <i>Salvinia molesta</i> and its antimicrobial efficacy. <b>2016</b> , 155, 51-9		52
389	Bio-directed one-pot synthesis of Pt-Pd alloyed nanoflowers supported on reduced graphene oxide with enhanced catalytic activity for ethylene glycol oxidation. <b>2016</b> , 188, 696-703		43
388	Increased activity in hydrogen evolution electrocatalysis for partial anionic substitution in cobalt oxysulfide nanoparticles. <b>2016</b> , 4, 2842-2848		24
387	Pt <sub>3</sub> Re alloy nanoparticles as electrocatalysts for the oxygen reduction reaction. <b>2016</b> , 20, 202-211		31
386	Underpotential Deposition and Related Phenomena at the Nanoscale: Theory and Applications. <b>2016</b> , 277-334		3
385	A simple synthesis of urchin-like Pt-Ni bimetallic nanostructures as enhanced electrocatalysts for the oxygen reduction reaction. <b>2016</b> , 52, 597-600		44
384	Synthesis of Au@UiO-66(NH <sub>2</sub> ) structures by small molecule-assisted nucleation for plasmon-enhanced photocatalytic activity. <b>2016</b> , 52, 116-9		87
383	Effect of the OH/Pt Ratio During Polyol Synthesis on Metal Loading and Particle Size in DMFC Catalysts. <b>2016</b> , 7, 13-21		6
382	Influence of the metal loading on the electrocatalytic activity of carbon-supported (100) Pt nanoparticles. <b>2016</b> , 20, 1107-1118		6
381	Surface Coordination Chemistry of Metal Nanomaterials. <b>2017</b> , 139, 2122-2131		381
380	A stretchable and screen-printed electrochemical sensor for glucose determination in human perspiration. <b>2017</b> , 91, 885-891		201
379	Electrocatalysts for low temperature fuel cells. <b>2017</b> , 285, 3-12		41
378	The comparison of direct borohydride-hydrogen peroxide fuel cell performance with membrane electrode assembly prepared by catalyst coated membrane method and catalyst coated gas diffusion layer method using Ni@Pt/C as anodic catalyst. <b>2017</b> , 42, 10363-10375		19
377	Bifunctional Ag@SiO <sub>2</sub> /Au Nanoparticles for Probing Sequential Catalytic Reactions by Surface-Enhanced Raman Spectroscopy. <b>2017</b> , 3, 245-251		9

376	Platinum Supported on Functionalized Carbon Nanotubes for Oxygen Reduction Reaction in PEM/AEM Hybrid Fuel Cells. <b>2017</b> , 164, F217-F223	5
375	Core-Shell Au-Pt Nanoparticles and Nanodendrites for Methanol Oxidation Reaction. <b>2017</b> , 1142, 234-237	
374	Electrochemically Shape-Controlled Nanoparticles. <b>2017</b> , 59-95	1
373	One-Dimensional Pt Nanostructures for Polymer Electrolyte Membrane Fuel Cells. <b>2017</b> , 145-198	
372	A unique approach to designing resilient bi-functional nano-electrocatalysts based on ultrafine bimetallic nanoparticles dispersed in carbon nanospheres. <b>2017</b> , 5, 10544-10553	28
371	Recent Advances in Nanostructured Electrocatalysts for Low-temperature Direct Alcohol Fuel Cells. <b>2017</b> , 347-371	4
370	Chitosan-Covered Pd@Pt Core-Shell Nanocubes for Direct Electron Transfer in Electrochemical Enzymatic Glucose Biosensor. <b>2017</b> , 2, 1896-1904	48
369	Electrochemical Cleaning of Polyvinylpyrrolidone-capped Pt Nanocubes for the Oxygen Reduction Reaction. <b>2017</b> , 241, 544-552	30
368	Facile solvothermal synthesis of Pt <sub>76</sub> Co <sub>24</sub> nanomyriapods for efficient electrocatalysis. <b>2017</b> , 5, 10554-10560	47
367	Synthesis of NiPt alloy nanoparticles by galvanic replacement method for direct ethanol fuel cell. <b>2017</b> , 42, 13192-13197	12
366	Electrocatalytic performance of Ni@Pt core-shell nanoparticles supported on carbon nanotubes for methanol oxidation reaction. <b>2017</b> , 795, 17-25	52
365	Stable structure optimization of Pt-X-Cu (X = Au, Ag, Pd and Rh) trimetallic nanoparticles. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 716, 240-250	5.7 14
364	Phase behavior of PtCu nanoparticles with different architecture upon their thermal treatment. <b>2017</b> , 12, 147-155	13
363	Diffraction peak profiles of surface relaxed spherical nanocrystals. <b>2017</b> , 97, 2317-2346	5
362	Nanocrystal Catalysts of High-Energy Surface and Activity. <b>2017</b> , 177, 439-475	2
361	Shell-Thickness-Controlled Synthesis of Core-Shell Pd@Pt Nanocubes and Tuning of Their Oxygen Reduction Activities. <b>2017</b> , 164, H112-H118	8
360	Solvent-Mediated Shape Tuning of Well-Defined Rhodium Nanocrystals for Efficient Electrochemical Water Splitting. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 5009-5015	9.6 68
359	Degradation-Restructuring Induced Anisotropic Epitaxial Growth for Fabrication of Asymmetric Diblock and Triblock Mesoporous Nanocomposites. <b>2017</b> , 29, 1701652	39

358	Self-Assembled Dendritic Pt Nanostructure with High-Index Facets as Highly Active and Durable Electrocatalyst for Oxygen Reduction. <b>2017</b> , 10, 3063-3068		17
357	Local structure and composition of PtRh nanoparticles produced through cathodic corrosion. <b>2017</b> , 19, 10301-10308		11
356	Preparation method of Ni@Pt/C nanocatalyst affects the performance of direct borohydride-hydrogen peroxide fuel cell: Improved power density and increased catalytic oxidation of borohydride. <i>Journal of Colloid and Interface Science</i> , <b>2017</b> , 500, 264-275	9.3	27
355	Synthesis of Janus Au@periodic mesoporous organosilica (PMO) nanostructures with precisely controllable morphology: a seed-shape defined growth mechanism. <i>Nanoscale</i> , <b>2017</b> , 9, 4826-4834	7.7	36
354	Supercritical Flow Synthesis of Pt <sub>1</sub> Ru <sub>x</sub> Nanoparticles: Comparative Phase Diagram Study of Nanostructure versus Bulk. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 3265-3273	9.6	6
353	Facile Synthesis of Pd@Pt <sub>3</sub> L Core-Shell Octahedra with a Clean Surface and Thus Enhanced Activity toward Oxygen Reduction. <b>2017</b> , 9, 414-419		14
352	Kinetic study and growth behavior of template-based electrodeposited platinum nanotubes controlled by overpotential. <b>2017</b> , 187, 141-148		
351	Keimvermitteltes Wachstum kolloidaler Metallnanokristalle. <b>2017</b> , 129, 60-98		55
350	Superior Bifunctional Liquid Fuel Oxidation and Oxygen Reduction Electrocatalysis Enabled by PtNiPd Core-Shell Nanowires. <b>2017</b> , 29, 1603774		90
349	Seed-Mediated Growth of Colloidal Metal Nanocrystals. <b>2017</b> , 56, 60-95		428
348	Recent advances in noble metal-based nanocomposites for electrochemical reactions. <b>2017</b> , 6, 115-127		34
347	Porous Carbon/rGO Composite: An Ideal Support Material of Highly Efficient Palladium Electrocatalysts for the Formic Acid Oxidation Reaction. <i>ChemElectroChem</i> , <b>2017</b> , 4, 3126-3133	4.3	15
346	Pt-Decorated Magnetic Nanozymes for Facile and Sensitive Point-of-Care Bioassay. <b>2017</b> , 9, 35133-35140		82
345	Nanostructured Catalysts in Vehicle Exhaust Control Systems. <b>2017</b> , 1-22		
344	Ammonia Mediated One-Step Synthesis of Three-Dimensional Porous Pt <sub>x</sub> Cu <sub>100-x</sub> Nanochain Networks with Enhanced Electrocatalytic Activity toward Polyhydric Alcohol Oxidation. <b>2017</b> , 5, 11086-11095		24
343	Controlled synthesis of sponge-like porous Au <sub>2</sub> Ag alloy nanocubes for surface-enhanced Raman scattering properties. <b>2017</b> , 5, 11039-11045		34
342	Facile Synthesis of Ru-Based Octahedral Nanocages with Ultrathin Walls in a Face-Centered Cubic Structure. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 9227-9237	9.6	45
341	Facet-Dependent Deposition of Highly Strained Alloyed Shells on Intermetallic Nanoparticles for Enhanced Electrocatalysis. <b>2017</b> , 17, 5526-5532		68

340	Decoration of Carbon Nitride Surface with Bimetallic Nanoparticles (Ag/Pt, Ag/Pd, and Ag/Au) via Galvanic Exchange for Hydrogen Evolution Reaction. <b>2017</b> , 121, 19548-19558	47
339	Electrochemical Synthesis of Nanoporous Platinum Nanoparticles Using Laser Pulse Heating: Application to Methanol Oxidation. <i>ACS Catalysis</i> , <b>2017</b> , 7, 7388-7398	13.1 25
338	Uniformly dispersed platinum-cobalt alloy nanoparticles with stable compositions on carbon substrates for methanol oxidation reaction. <b>2017</b> , 7, 11421	20
337	Nitrogen-Doped Carbon Activated in Situ by Embedded Nickel through the Mott-Schottky Effect for the Oxygen Reduction Reaction. <b>2017</b> , 18, 3454-3461	33
336	Quantitative Analysis of Different Formation Modes of Platinum Nanocrystals Controlled by Ligand Chemistry. <b>2017</b> , 17, 6146-6150	43
335	Rhodium-on-Palladium Nanocatalysts for Selective Methanation of Carbon Dioxide. <b>2017</b> , 3, 639-645	9
334	Capillary electrophoresis and nanomaterials - Part I: Capillary electrophoresis of nanomaterials. <b>2017</b> , 38, 2389-2404	15
333	Decoration of Pd and Pt nanoparticles on a carbon nitride (C <sub>3</sub> N <sub>4</sub> ) surface for nitro-compounds reduction and hydrogen evolution reaction. <b>2017</b> , 41, 9658-9667	24
332	Structural and Morphological Description of Sn/SnO Core-Shell Nanoparticles Synthesized and Isolated from Ionic Liquid. <b>2017</b> , 56, 10099-10106	5
331	Polymer-based hybrid catalyst of low Pt content for electrochemical hydrogen evolution. <b>2017</b> , 42, 22821-22829	27
330	Dendritic Ternary Alloy Nanocrystals for Enhanced Electrocatalytic Oxidation Reactions. <b>2017</b> , 9, 44018-44026	27
329	Tailoring the light absorption of Ag-PZT thin films by controlling the growth of hexagonal- and cubic-phase Ag nanoparticles. <b>2017</b> , 123, 1	1
328	Ternary PtPdAg alloy nanoflowers for oxygen reduction reaction electrocatalysis. <b>2017</b> , 19, 6964-6971	18
327	Design of Ultrathin Pt-Based Multimetallic Nanostructures for Efficient Oxygen Reduction Electrocatalysis. <b>2017</b> , 13, 1702156	57
326	Platinum nanoparticles in nanobiomedicine. <b>2017</b> , 46, 4951-4975	216
325	First-Principles Calculation of Pt Surface Energies in an Electrochemical Environment: Thermodynamic Driving Forces for Surface Faceting and Nanoparticle Reconstruction. <b>2017</b> , 33, 7043-7052	22
324	PtPb/PtNi Intermetallic Core/Atomic Layer Shell Octahedra for Efficient Oxygen Reduction Electrocatalysis. <b>2017</b> , 139, 9576-9582	158
323	3D porous nanostructured platinum prepared using atomic layer deposition. <b>2017</b> , 5, 19007-19016	8

322	PtSe nanostructures with oxidase-like activity and their application in a selective colorimetric assay for mercury(II). <b>2017</b> , 52, 10738-10750		30
321	Nanomaterials and their Classification. <b>2017</b> , 3-45		21
320	EMR/ESR/EPR Spectroscopy for Characterization of Nanomaterials. <b>2017</b> ,		11
319	Depletion sphere: Explaining the number of Ag islands on Au nanoparticles. <b>2017</b> , 8, 430-436		33
318	A Simple and Highly Stable Porous Gold-based Electrochemical Sensor for Bisphenol A Detection. <b>2017</b> , 29, 472-480		14
317	Layer-controlled Pt-Ni porous nanobowls with enhanced electrocatalytic performance. <i>Nano Research</i> , <b>2017</b> , 10, 187-198	10	39
316	An acetic acid refluxing-electrochemistry combined strategy to activate supported-platinum electrocatalysts. <b>2017</b> , 30, 111-117		4
315	Effect of Co-catalyst on the Selective Electrooxidation of Glycerol over Ruthenium-based Nanomaterials. <i>ChemElectroChem</i> , <b>2017</b> , 4, 39-45	4-3	25
314	Epitaxial growth of unusual 4H hexagonal Ir, Rh, Os, Ru and Cu nanostructures on 4H Au nanoribbons. <b>2017</b> , 8, 795-799		64
313	Metal Nanoparticles and Their Toxicity. <b>2017</b> , 237-293		1
312	Metal Nanoparticles and Their Toxicity. <b>2017</b> , 203-259		
311	. <b>2017</b> ,		20
310	Hydrothermal growth of n-ZnO films on a patterned p-GaN epilayer and its application in heterojunction light-emitting diodes. <b>2017</b> , 56, 04CH03		5
309	Fuel Cells: Hydrogen and Ethanol Technologies. <b>2017</b> ,		2
308	Advanced Nanocomposites With Noble Metal Antimicrobial Nanoparticles: How to Design a Balance Among Antimicrobial Activity, Bioactivity, and Safe Delivery to the Place of Infection. <b>2017</b> , 623-651		2
307	Effect of Platinum loading on Graphene Nano Sheets at Cathode. <b>2017</b> , 33, 134-140		3
306	Biomass chitosan derived cobalt/nitrogen doped carbon nanotubes for the electrocatalytic oxygen reduction reaction. <b>2018</b> , 6, 5740-5745		79
305	Rational Design of Nanosized Light Elements for Hydrogen Storage: Classes, Synthesis, Characterization, and Properties. <b>2018</b> , 3, 1700298		28

304	Noble Metal Electrocatalysts for Anode and Cathode in Polymer Electrolyte Fuel Cells. <b>2018</b> , 171-197		1
303	Enhanced Stability of Pt/M/WC(0001) Multilayer Alloys under Electrochemical Conditions: A First Principle Study. <b>2018</b> , 10, 15704-15711		3
302	Synthetic Routes to Shaped AuPt CoreShell Particles with Smooth Surfaces Based on Design Rules for Au Nanoparticle Growth. <b>2018</b> , 35, 1700401		9
301	Hierarchical concave layered triangular PtCu alloy nanostructures: rational integration of dendritic nanostructures for efficient formic acid electrooxidation. <i>Nanoscale</i> , <b>2018</b> , 10, 9369-9375	7.7	22
300	Simultaneous formation of trimetallic Pt-Ni-Cu excavated rhombic dodecahedrons with enhanced catalytic performance for the methanol oxidation reaction. <i>Nano Research</i> , <b>2018</b> , 11, 4786-4795	10	39
299	Pt/C electrocatalysts based on the nanoparticles with the gradient structure. <b>2018</b> , 43, 3676-3687		28
298	Nanostructured Electrochemical Biosensors for Label-Free Detection of Water- and Food-Borne Pathogens. <b>2018</b> , 10, 6055-6072		76
297	Rapid microwave synthesis and optical activity of highly crystalline platinum nanocubes. <b>2018</b> , 8, 71-78		8
296	Electrocatalytic N-Doped Graphitic Nanofiber - Metal/Metal Oxide Nanoparticle Composites. <b>2018</b> , 14, e1703459		42
295	Electrochemical processes on solid shaped nanoparticles with defined facets. <b>2018</b> , 47, 715-735		100
294	High Antifungal Activity against Species of Monometallic and Bimetallic Nanoparticles Synthesized in Nanoreactors. <b>2018</b> , 4, 647-653		29
293	Size-Dependent Synthesis of Gold Nanoparticles and Their Peroxidase-Like Activity for the Colorimetric Detection of Glutathione from Human Blood Serum. <b>2018</b> , 6, 7662-7675		40
292	N-doped graphitic carbon materials hybridized with transition metals (compounds) for hydrogen evolution reaction: Understanding the synergistic effect from atomistic level. <b>2018</b> , 133, 260-266		75
291	Catalyst design by scanning probe block copolymer lithography. <b>2018</b> , 115, 3764-3769		28
290	Biomimetic synthesis of platinum nanoparticles utilizing a terrestrial weed <i>Antigonon leptopus</i> . <b>2018</b> , 36, 681-688		21
289	Aqueous-phase synthesis of metal hydroxide nanoplates and platinum/nickel hydroxide hybrid nanostructures and their enhanced electrocatalytic properties. <b>2018</b> , 225, 238-242		13
288	Microwave-Irradiation Polyol Synthesis of PVP-Protected PtNi Electrocatalysts for Methanol Oxidation Reaction. <b>2018</b> , 9, 388-399		9
287	CoreShell Nanostructured CobaltPlatinum Electrocatalysts with Enhanced Durability. <i>ACS Catalysis</i> , <b>2018</b> , 8, 35-42	13.1	52



286	Atomic Vacancies Control of Pd-Based Catalysts for Enhanced Electrochemical Performance. <b>2018</b> , 30, 1704171	74
285	Oxygen Reduction Catalysts on Nanoparticle Electrodes. <b>2018</b> , 796-811	2
284	Synthesis of PtCu/Fe Electro-catalysts with Different Structures and Study of Their Functional Characteristics. <b>2018</b> , 54, 1209-1221	2
283	Roles played by polysaccharides with different structures in biomimetic synthesis of cuprous oxide. <b>2018</b> , 20, 6243-6251	
282	Iodide-mediated templating synthesis of highly porous rhodium nanospheres for enhanced dehydrogenation of ammonia borane. <b>2018</b> , 6, 24166-24174	18
281	Quantitative analysis of the reduction kinetics of a Pt(II) precursor in the context of Pt nanocrystal synthesis <b>2018</b> , 31, 370-374	8
280	3. Size and Shape Controlled Synthesis of Pd Nanocrystals. <b>2018</b> , 155-198	
279	4. Size and shape-controlled synthesis of Ru nanocrystals. <b>2018</b> , 199-278	
278	Biogenic synthesis of biopolymer-based Ag-Au bimetallic nanoparticle constructs and their anti-proliferative assessment. <b>2018</b> , 12, 1047-1055	7
277	Dendritic Pt shells coated on concave Pd nanocrystals: synthesis and use as electrocatalysts for acidic oxygen reduction reaction. <b>2018</b> , 43, 22195-22204	2
276	Calcination Atmosphere Regulated Morphology and Catalytic Performance of Pt/SiO <sub>2</sub> in Gas-phase Oxidative Dehydrogenation of KA-oil. <b>2018</b> , 10, 5689-5697	3
275	Chalcogenide Electrocatalysts for Energy Conversion Fuel Cell. <b>2018</b> , 419-445	3
274	The Enhanced Electro-catalytic Performance of Au@Pd Nanoparticles Self-assembled on Fluorine-Modified Multi-walled Carbon Nanotubes for Methanol Oxidation. <b>2018</b> , 148, 3281-3291	4
273	Facile synthesis of PtAg octahedral and tetrahedral nanocrystals with enhanced activity and durability toward methanol oxidation. <b>2018</b> , 33, 3891-3897	1
272	Alkali Metal Cation Effects in Structuring Pt, Rh, and Au Surfaces through Cathodic Corrosion. <b>2018</b> , 10, 39363-39379	24
271	Au Nanowires@Pd-Polyethylenimine Nanohybrids as Highly Active and Methanol-Tolerant Electrocatalysts toward Oxygen Reduction Reaction in Alkaline Media. <i>ACS Catalysis</i> , <b>2018</b> , 8, 11287-11295 <sup>13,1</sup>	85
270	Size and shape-controlled synthesis of Ru nanocrystals. <b>2018</b> , 3,	
269	One-Pot Seedless Aqueous Design of Metal Nanostructures for Energy Electrocatalytic Applications. <b>2018</b> , 1, 531-547	7



268	Synthesis of Pt nanocrystals with different shapes using the same protocol to optimize their catalytic activity toward oxygen reduction. <b>2018</b> , 21, 834-844		44
267	Ligand-mediated bifunctional catalysis for enhanced oxygen reduction and methanol oxidation tolerance in fuel cells. <b>2018</b> , 6, 18884-18890		16
266	Preparation optimization and single cell application of PtNi/C octahedral catalyst with enhanced ORR performance. <b>2018</b> , 288, 126-133		16
265	Janus nanoarchitectures: From structural design to catalytic applications. <i>Nano Today</i> , <b>2018</b> , 22, 62-82	17.9	93
264	3. Shape-controlled metal nanoparticles for electrocatalytic applications. <b>2018</b> , 103-156		1
263	Post-treatment of Pt-M (M = Cu, Co, Ni)/C Electrocatalysts with Different Distribution of Metals in Nanoparticles: Evolution of Structure and Activity. <b>2018</b> , 65-77		1
262	<sup>119</sup> Sn Mössbauer spectroscopy of the time-resolved evolution of SnCl <sub>3</sub> ligand structure on the surface of growing platinum nanoparticles. <i>Applied Surface Science</i> , <b>2018</b> , 448, 362-368	6.7	3
261	Synthesis of Ru Icosahedral Nanocages with a Face-Centered-Cubic Structure and Evaluation of Their Catalytic Properties. <i>ACS Catalysis</i> , <b>2018</b> , 8, 6948-6960	13.1	45
260	On the nexus between atom probe microscopy and density functional theory simulations. <b>2018</b> , 146, 347-358		15
259	Preparation of an octahedral PtNi/CNT catalyst and its application in high durability PEMFC cathodes. <b>2018</b> , 8, 18381-18387		24
258	Synthesis of zero-valent iron nanoparticles via laser ablation in a formate ionic liquid under atmospheric conditions. <b>2018</b> , 54, 7834-7837		13
257	Application of Nanomaterials Prepared by Thermolysis of Metal Chelates. <b>2018</b> , 459-541		
256	Solution-Grown Dendritic Pt-Based Ternary Nanostructures for Enhanced Oxygen Reduction Reaction Functionality. <b>2018</b> , 8,		9
255	Size and Shape Controlled Synthesis of Pd Nanocrystals. <b>2018</b> , 3,		1
254	Platinum nanoworms for imaging-guided combined cancer therapy in the second near-infrared window. <b>2018</b> , 6, 5069-5079		23
253	Influence of PtSn System Nanostructure on the Electronic Conditions at a Pt Adsorption Surface Site. <b>2018</b> , 122, 11371-11377		4
252	Electrocatalysis. <b>2018</b> , 315-359		
251	Seedless, one-step synthesis of porous Pt-Pd nanoflowers for electroreduction of oxygen in acidic medium. <i>Applied Surface Science</i> , <b>2018</b> , 458, 910-916	6.7	11

250	Development of Nanoparticle Composite Technique for Low Pt-Loading PEFCs. <b>2018</b> , 543-546		
249	Stability of nanostructured silver-platinum alloys. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 770, 934-941	5-7	8
248	Shape-controlled metal nanoparticles for electrocatalytic applications. <b>2019</b> , 4,		13
247	Salt-Templated Platinum-Copper Porous Macrobeams for Ethanol Oxidation. <i>Catalysts</i> , <b>2019</b> , 9, 662	4	2
246	Simple chemistry drives controlled synthesis of platinum nanocrystal to micron size. <b>2019</b> , 9, 197-202		3
245	Facilitating the C-C bond cleavage on sub-10 nm concavity-tunable Rh@Pt core-shell nanocubes for efficient ethanol electrooxidation. <b>2019</b> , 7, 17987-17994		19
244	Fine Control over the Compositional Structure of Trimetallic Core-Shell Nanocrystals for Enhanced Electrocatalysis. <b>2019</b> , 11, 25901-25908		10
243	The effects of size and shape on the structural and thermal stability of platinum nanoparticles. <b>2019</b> , 169, 109090		6
242	Self-Selective Catalyst Synthesis for CO <sub>2</sub> Reduction. <b>2019</b> , 3, 1927-1936		35
241	In Situ Formed PtTi Nanoparticles on a Two-Dimensional Transition Metal Carbide (MXene) Used as Efficient Catalysts for Hydrogen Evolution Reactions. <b>2019</b> , 19, 5102-5108		69
240	Composition, Structure and Stability of PtCu/C Electrocatalysts with Non-uniform Distribution of Metals in Nanoparticles. <b>2019</b> , 31-46		
239	In Situ Transmission Electron Microscopy Study of Nanocrystal Formation for Electrocatalysis. <b>2019</b> , 5, 1439-1455		7
238	Composites of Platinum-Iridium Alloy Nanoparticles and Graphene Oxide for the Dimethyl Amine Borane (DMAB) dehydrogenation at ambient conditions: An Experimental and Density Functional Theory Study. <b>2019</b> , 9, 15543		6
237	. <b>2019</b> ,		0
236	Improvement of Catalytic Activity of Platinum Nanoparticles Decorated Carbon Graphene Composite on Oxygen Electroreduction for Fuel Cells. <b>2019</b> , 7, 586		11
235	General Solvothermal Synthesis Method for Complete Solubility Range Bimetallic and High-Entropy Alloy Nanocatalysts. <b>2019</b> , 29, 1905933		57
234	Recent Advances in the Synthesis, Properties, and Biological Applications of Platinum Nanoclusters. <b>2019</b> , 2019, 1-31		9
233	Altering polythiophene derivative substrates to control the electrodeposition morphology of Au particles toward ultrafine nanoparticles. <b>2019</b> , 55, 12088-12091		2

232	Electrocatalysis of Oxygen Reduction Reaction on Shape-Controlled Pt and Pd Nanoparticles-Importance of Surface Cleanliness and Reconstruction. <b>2019</b> , 7, 648	17
231	NiS <sub>2</sub> /MoS <sub>2</sub> on carbon cloth as a bifunctional electrocatalyst for overall water splitting. <b>2019</b> , 326, 134983	26
230	NH-MIL-125(Ti)-derived porous cages of titanium oxides to support Pt-Co alloys for chemoselective hydrogenation reactions. <b>2019</b> , 10, 2111-2117	24
229	Rational design and construction of nanoporous iron- and nitrogen-doped carbon electrocatalysts for oxygen reduction reaction. <b>2019</b> , 7, 1380-1393	111
228	Improved control on the morphology and LSPR properties of plasmonic Pt NPs through enhanced solid state dewetting by using a sacrificial indium layer.. <b>2019</b> , 9, 2231-2243	3
227	Pt-Based electrocatalysts with high atom utilization efficiency: from nanostructures to single atoms. <b>2019</b> , 12, 492-517	275
226	Ternary Heterostructural Pt/CN/Ni as a Supercatalyst for Oxygen Reduction. <b>2019</b> , 11, 388-397	22
225	Metal-doped carbon nanoparticles with intrinsic peroxidase-like activity for colorimetric detection of HO and glucose. <b>2019</b> , 7, 296-304	42
224	Highly efficient hydrogen evolution of platinum via tuning the interfacial dissolved-gas concentration. <b>2019</b> , 55, 1378-1381	18
223	Nanomaterials Properties of Environmental Interest and How to Assess Them. <b>2019</b> , 45-105	2
222	The role of polyvinylpyrrolidone (PVP) as a capping and structure-directing agent in the formation of Pt nanocubes. <b>2019</b> , 1, 3095-3106	83
221	Exploring the synthesis conditions to control the morphology of gold-iron oxide heterostructures. <i>Nano Research</i> , <b>2019</b> , 12, 1781-1788	10 11
220	Fabrication of monodisperse ITO submicro-spheres using l-Histidine-assisted one-step solvothermal method. <b>2019</b> , 45, 17562-17566	5
219	ZnO and ZnO/CaO nanoparticles in alginate films. Synthesis, mechanical characterization, barrier properties and release kinetics. <b>2019</b> , 112, 108217	23
218	Preparation of Pt-skin PtRhNi Nanoframes Decorated with Small SnO Nanoparticles as an Efficient Catalyst for Ethanol Oxidation Reaction. <b>2019</b> , 11, 22352-22363	11
217	Tweaking the Interplay among Galvanic Exchange, Oxidative Etching, and Seed-Mediated Deposition toward Architectural Control of Multimetallic Nanoelectrocatalysts. <b>2019</b> , 11, 23482-23494	5
216	Composition- and shape-controlled synthesis of the PtNi alloy nanotubes with enhanced activity and durability toward oxygen reduction reaction. <b>2019</b> , 429, 1-8	11
215	A Non-Pt Electronically Coupled Semiconductor Heterojunction for Enhanced Oxygen Reduction Electrocatalytic Property. <b>2019</b> , 4, 5264-5268	2

214	Pd@Pt CoreShell Nanodots Arrays for Efficient Electrocatalytic Oxygen Reduction. <b>2019</b> , 2, 3695-3700		6
213	Effect of the Pt Precursor and Loading on the Structural Parameters and Catalytic Properties of Pt/Al <sub>2</sub> O <sub>3</sub> . <b>2019</b> , 11, 3064-3074		10
212	The experimental and theoretical insights towards the CO induced Pd-Graphene and their multifunctional energy conversion applications. <b>2019</b> , 149, 307-317		6
211	Orientation control for a-axis or c-axis oriented crystal films of hydroxyapatite, and a possible growth mechanism derived from X-ray diffraction. <i>Applied Surface Science</i> , <b>2019</b> , 484, 433-440	6.7	5
210	Metal Particle Size Effects on the Photocatalytic Hydrogen Ion Reduction. <i>ACS Catalysis</i> , <b>2019</b> , 9, 3946-3958		25
209	Ethanol-Mediated Phase Transfer of Metal Ions and Nanoparticles. <b>2019</b> , 35-67		
208	An Introduction to Noble Metal-Based Composite Nanomaterials. <b>2019</b> , 1-33		1
207	Nanocomposites Consisting of Chalcogenide Semiconductors and Other Noble Metals. <b>2019</b> , 149-192		1
206	Gas-Phase Synthesis of Trimetallic Nanoparticles. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 2151-2163	9.6	44
205	Fabrication of bilayer Pd-Pt nanocages with sub-nanometer thin shells for enhanced hydrogen evolution reaction. <i>Nano Research</i> , <b>2019</b> , 12, 2268-2274	10	23
204	One-Dimensional Metal Nanostructures: From Colloidal Syntheses to Applications. <b>2019</b> , 119, 8972-9073		148
203	Facile Synthesis of Sea-Urchin-Like Pt and Pt/Au Nanodendrites and Their Enhanced Electrocatalytic Properties. <b>2019</b> , 58, 5375-5379		6
202	Asymmetric Multimetallic Mesoporous Nanospheres. <b>2019</b> , 19, 3379-3385		43
201	A novel route for the generation of Co/CoZn/CoNi layered double hydroxides at ambient temperature. <b>2019</b> , 6, 1415-1421		11
200	Nanocomposites Consisting of Silver Sulfide and Noble Metals. <b>2019</b> , 193-216		
199	Pt-Containing Ag <sub>2</sub> S Noble Metal Nanocomposites for Direct Methanol Fuel Cells Operated at High Fuel Concentrations. <b>2019</b> , 277-299		
198	Facile Synthesis of Pt Icosahedral Nanocrystals with Controllable Sizes for the Evaluation of Size-Dependent Activity toward Oxygen Reduction. <b>2019</b> , 11, 2458-2463		9
197	Nanomaterials With Different Dimensions for Electrocatalysis. <b>2019</b> , 435-464		5

196	Synthesis of CuBiO <sub>2</sub> CoreShell Using Ultrasonic Waves and Its Antibacterial Activity. <b>2019</b> , 45, 518-524		3
195	PtFe Alloy Nanoparticles Confined on Carbon Nanotube Networks as Air Cathodes for Flexible and Wearable Energy Devices. <b>2019</b> , 2, 7870-7879		14
194	Pt <sub>3</sub> MeAu (Me = Ni, Cu) Fuel Cell Nanocatalyst Growth, Shapes, and Efficiency: A Molecular Dynamics Simulation Approach. <b>2019</b> , 123, 29656-29664		3
193	Galvanic replacement mediated 3D porous PtCu nano-frames for enhanced ethylene glycol oxidation. <b>2019</b> , 55, 14526-14529		10
192	Multicomponent Plasmonic Nanoparticles: From Heterostructured Nanoparticles to Colloidal Composite Nanostructures. <b>2019</b> , 119, 12208-12278		153
191	Optical and Thermal Properties of Laser-Ablated Platinum Nanoparticles Graphene Oxide Composite. <i>International Journal of Molecular Sciences</i> , <b>2019</b> , 20,	6.3	8
190	Nanoscale Structure Design for High-Performance Pt-Based ORR Catalysts. <b>2019</b> , 31, e1802234		286
189	Formation of the core-shell structures from bimetallic Janus-like nanoclusters under low-energy Ar and Ar <sup>13</sup> impacts: A molecular dynamics study. <b>2019</b> , 159, 110-119		2
188	Surface Atomic Regulation of Core-Shell Noble Metal Catalysts. <b>2019</b> , 25, 5113-5127		14
187	Salt-templated platinum-palladium porous macrobeam synthesis. <b>2019</b> , 9, 280-287		3
186	Tuning saw-toothed morphology on Pd/Pt nanocubes as oxygen reduction catalysts by co-surfactant synthesis method. <i>Applied Surface Science</i> , <b>2019</b> , 467-468, 844-850	6.7	9
185	Pt nanoparticles supported on non-carbon titanium chromium nitride nanotubes with high activity and durability for methanol oxidation reaction. <b>2019</b> , 23, 315-324		8
184	Plasmonic-Enhanced Oxygen Reduction Reaction of Silver/Graphene Electrocatalysts. <b>2019</b> , 19, 1371-1378		49
183	Introduction. <b>2019</b> , 1-36		1
182	Cu-Pd alloy nanoparticles as highly selective catalysts for efficient electrochemical reduction of CO <sub>2</sub> to CO. <b>2019</b> , 246, 82-88		102
181	A Simple and Fast Method to Synthesize Cubic Iridium Nanoparticles with Clean Surface Free from Surfactants. <b>2019</b> , 9,		10
180	Self-assembled Pt screen printed electrodes with a novel peroxidase <i>Panicum maximum</i> and zinc oxide nanoparticles for H <sub>2</sub> O <sub>2</sub> detection. <b>2019</b> , 561, 18-24		12
179	Graphene-Based Metal Particles. <b>2019</b> , 153-202		2

178	Platinum as an electrocatalyst: effect of morphological aspects of Pt/Pt-based materials. <b>2019</b> , 35, 1-11		17
177	Facile Fabrication of Graphene-Supported Pt Electrochemical Sensor for Determination of Caffeine. <b>2020</b> , 190, 529-539		8
176	Support interaction of Pt/CeO <sub>2</sub> and Pt/SiC catalysts prepared by nano platinum colloid deposition for CO oxidation. <b>2020</b> , 38, 376-383		18
175	Au Plasmonic Shofar Structures. <b>2020</b> , 15, 201-208		
174	Lowering Interfacial Dissolved Gas Concentration for Highly Efficient Hydrazine Oxidation at Platinum by Fluorosurfactant Modulation. <i>ChemElectroChem</i> , <b>2020</b> , 7, 55-58	4-3	3
173	Well-Defined Nanoparticle Electrocatalysts for the Refinement of Theory. <b>2020</b> , 120, 814-850		47
172	Single-atom catalysts for electrochemical clean energy conversion: recent progress and perspectives. <b>2020</b> , 4, 996-1011		22
171	Synthesis of anisotropic Au@Cu alloy nanostructures and its application in SERS for detection of methylene blue. <b>2020</b> , 7, 015052		6
170	Design of bimetallic catalysts and electrocatalysts through the control of reactive environments. <i>Nano Today</i> , <b>2020</b> , 31, 100832	17.9	19
169	Plasmonic hybrid platinum-titania nanocomposites as highly active photocatalysts: self-cleaning of cotton fiber under solar light. <b>2020</b> , 9, 1447-1456		16
168	Hollow AuAg Alloy Nanourchins: Twin Plane and Surface Treatment for Enhanced Methanol Electrooxidation Performance. <i>ACS Applied Energy Materials</i> , <b>2020</b> , 3, 723-732	6.1	10
167	Porous Strained Pt Nanostructured Thin-Film Electrocatalysts via Dealloying for PEM Fuel Cells. <b>2020</b> , 7, 1901326		14
166	Facile synthesis of Nafion-supported Pt nanoparticles with ultra-low loading as a high-performance electrocatalyst for hydrogen evolution reaction. <i>Journal of Colloid and Interface Science</i> , <b>2020</b> , 566, 505-512	9.3	7
165	Improved Hydrogen Sensing Performance of AlGa <sub>N</sub> /Ga <sub>N</sub> Based Gas Sensors with Controlled Surface Nanostructures of Platinum Nanoparticulate Films. <b>2020</b> , 20, 2503-2507		1
164	Preserving the shape of silver nanocubes under corrosive environment by covering their edges and corners with iridium. <i>Nanoscale</i> , <b>2020</b> , 12, 20859-20867	7.7	1
163	Low temperature electrochemical production of hydrogen: Challenge in anode and cathode materials. <b>2020</b> , 135-169		
162	Nickel platinum (Ni <sub>x</sub> Pt <sub>1-x</sub> ) nanoalloy monodisperse particles without the core-shell structure by colloidal synthesis. <b>2020</b> , 2, 3882-3889		2
161	Direct photocatalytic synthesis of N <sub>2</sub> /H <sub>2</sub> O to ammonia by plasmonic metal Pt supported on coal based graphene oxide/silica dioxide. <b>2020</b> , 130, 1155-1170		2

160	Polyaniline/Platinum Composite Cathode Catalysts Towards Durable Polymer Electrolyte Membrane Fuel Cells. <b>2020</b> , 9, 1109-1112		1
159	Colloidal stability and aggregation kinetics of nanocrystal CdSe/ZnS quantum dots in aqueous systems: effects of pH and organic ligands. <b>2020</b> , 22, 1		2
158	An ice-melting kinetic control strategy for highly photocatalytic organic nanocrystals. <b>2020</b> , 8, 25275-25282		2
157	Plasmonic Metallic Heteromeric Nanostructures. <b>2020</b> , 16, e2002588		18
156	From platinum atoms in molecules to colloidal nanoparticles: A review on reduction, nucleation and growth mechanisms. <b>2020</b> , 286, 102300		29
155	Size-dependent electronic, mechanical and optical properties of noble metal nanoribbons. <b>2020</b> , 262, 114786		1
154	Continuous Tuning of AuCu <sub>2</sub> O Janus Nanostructures for Efficient Charge Separation. <b>2020</b> , 132, 22430-22435		4
153	Metal Nanoparticles-Enhanced Biosensors: Synthesis, Design and Applications in Fluorescence Enhancement and Surface-enhanced Raman Scattering. <b>2020</b> , 15, 3180-3208		37
152	Applications of Metal Nanocrystals with Twin Defects in Electrocatalysis. <b>2020</b> , 15, 3254-3265		9
151	Continuous Tuning of Au-Cu O Janus Nanostructures for Efficient Charge Separation. <b>2020</b> , 59, 22246-22251		30
150	The impact of synthetic method on the catalytic application of intermetallic nanoparticles. <i>Nanoscale</i> , <b>2020</b> , 12, 18545-18562	7-7	7
149	Oxygen Transport Routes in Ionomer Film on Polyhedral Platinum Nanoparticles. <b>2020</b> ,		6
148	Precursor-templated synthesis of thermodynamically unfavored platinum nanoplates for the oxygen reduction reaction. <b>2020</b> , 49, 15837-15842		1
147	High-Index CoreShell NiPt Nanoparticles as Oxygen Reduction Electrocatalysts. <b>2020</b> , 3, 5718-5731		11
146	Boosting Oxygen and Peroxide Reduction Reactions on PdCu Intermetallic Cubes. <i>ChemElectroChem</i> , <b>2020</b> , 7, 2614-2620	4-3	4
145	Stable and Efficient PtRu Electrocatalysts Supported on Zn-BTC MOF Derived Microporous Carbon for Formic Acid Fuel Cells Application. <b>2020</b> , 8, 367		7
144	In Situ Exsolved Metal Nanoparticles: A Smart Approach for Optimization of Catalysts. <i>Chemistry of Materials</i> , <b>2020</b> , 32, 5424-5441	9.6	40
143	Efficient and Facile Synthesis of High-Quality Au Nanotwins. <b>2020</b> , 94, 231-232		2

142	Synergistic enhancement effect of MoO@Ag hybrid nanostructures for boosting selective detection sensitivity. <b>2020</b> , 241, 118611	5
141	Formation of microns long thin wire networks with a controlled spatial distribution of elements. <b>2020</b> , 10, 2020-2028	3
140	A CTAB-mediated antisolvent vapor route to shale-like CsPbBr microplates showing an eminent photoluminescence.. <b>2020</b> , 10, 10023-10029	2
139	Rapid Laser Pulse Synthesis of Supported Metal Nanoclusters with Kinetically Tunable Size and Surface Density for Electrocatalytic Hydrogen Evolution. <b>2020</b> , 3, 2959-2968	5
138	Energy-dispersive X-ray spectroscopy for an atomic-scale quantitative analysis of Pd-Pt core-shell nanoparticles. <b>2020</b> , 69, 26-30	1
137	Preparation of Nonprecious Metal Electrocatalysts for the Reduction of Oxygen Using a Low-Temperature Sacrificial Metal. <b>2020</b> , 142, 5477-5481	62
136	Engine-Trailer-Structured Nanotrucks for Efficient Nano-Bio Interactions and Bioimaging-Guided Drug Delivery. <b>2020</b> , 6, 1097-1112	33
135	Dewetted Pt nanostructures on Silicon Carbide surface. <b>2020</b> , 140, 109403	2
134	Review of supported metal nanoparticles: synthesis methodologies, advantages and application as catalysts. <b>2020</b> , 55, 6195-6241	99
133	Preparation of a Graphitized-Carbon-Supported PtNi Octahedral Catalyst and Application in a Proton-Exchange Membrane Fuel Cell. <b>2020</b> , 12, 7047-7056	10
132	Molecular Patching Engineering to Drive Energy Conversion as Efficient and Environment-Friendly Cell toward Wireless Power Transmission. <b>2020</b> , 30, 1908299	125
131	Synergistic Effect of Plasma and Laser Processes in Liquid for Alloyed-Nanoparticle Synthesis. <b>2020</b> , 13,	6
130	Highly efficient, cell reversal resistant PEMFC based on PtNi/C octahedral and OER composite catalyst. <b>2020</b> , 45, 8930-8940	14
129	Nonplatinum-based anode catalyst systems for direct methanol fuel cells. <b>2020</b> , 201-256	0
128	Morphological control of carbon-supported Pt-based nanoparticles via one-step synthesis. <b>2020</b> , 22, 100443	2
127	Synthesis of high-entropy alloy nanoparticles on supports by the fast moving bed pyrolysis. <b>2020</b> , 11, 2016	61
126	Fundamental Electrochemical Insights of Vertically Aligned Carbon Nanofiber Architecture as a Catalyst Support for ORR. <b>2020</b> , 167, 066523	8
125	Atomistic Explanation of the Dramatically Improved Oxygen Reduction Reaction of Jagged Platinum Nanowires, 50 Times Better than Pt. <b>2020</b> , 142, 8625-8632	32



124	Toward expanding the realm of high entropy materials to platinum group metals: A review. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 851, 156838	5.7	24
123	Comparison of the performance and durability of PEM fuel cells with different Pt-activated microporous layers. <b>2021</b> , 46, 18093-18106		1
122	Tuning the surface using palladium based metallosurfactant for hydrogen evolution reaction. <i>Journal of Colloid and Interface Science</i> , <b>2021</b> , 582, 894-905	9.3	3
121	A mild approach to bimetallic ZIF-derived porous carbons as highly efficient oxygen reduction electrocatalysts. <b>2021</b> , 46, 6188-6196		2
120	Synthesis of PDA-Mediated Magnetic Bimetallic Nanozyme and Its Application in Immunochematographic Assay. <b>2021</b> , 13, 1413-1423		16
119	Ultra-small hollow ternary alloy nanoparticles for efficient hydrogen evolution reaction. <b>2021</b> , 8, nwa204		5
118	Noble-Metal Based Random Alloy and Intermetallic Nanocrystals: Syntheses and Applications. <b>2021</b> , 121, 736-795		92
117	Self-reconstruction mediates isolated Pt tailored nanoframes for highly efficient catalysis.		1
116	PdAgPt Corner-Satellite Nanocrystals in Well-Controlled Morphologies and the Structure-Related Electrocatalytic Properties. <b>2021</b> , 11,		1
115	Electrochemical reduction of CO <sub>2</sub> using shape-controlled nanoparticles. <b>2021</b> , 155-181		
114	Geometric and electronic properties of AuPt ( + 10) clusters: a first-principles study. <b>2021</b> , 23, 3050-3062		
113	Interstitial and substitutional light elements in transition metals for heterogeneous catalysis. <b>2020</b> , 12, 517-532		13
112	Highly Toxic Nanomaterials for Cancer Treatment. <b>2021</b> , 161-185		
111	Ultrafast Synthesis of Wavy Gold-Silver Alloy Nanowires with Tunable Diameters in the Range of 2-10 nm via a Seed-Mediated Co-Reduction. <b>2021</b> , 2021, 1152-1159		2
110	Electrocatalysts in Polymer Electrolyte Membrane Fuel Cells. <b>2021</b> , 571-592		1
109	Peptide Gelators to Template Inorganic Nanoparticle Formation. <b>2021</b> , 7,		6
108	Advanced Noncarbon Materials as Catalyst Supports and Non-noble Electrocatalysts for Fuel Cells and Metal-Air Batteries. <b>2021</b> , 4, 336-381		30
107	Phase Control of Noble Monometallic and Alloy Nanomaterials by Chemical Reduction Methods. <i>ChemPlusChem</i> , <b>2021</b> , 86, 504-519	2.8	2

106	Phase-Controlled Synthesis of Pd-Se Nanocrystals for Phase-Dependent Oxygen Reduction Catalysis. <b>2021</b> , 21, 3805-3812		11
105	Initial nucleation process in the synthesis of Platinum Nanoparticle from chloroplatinic acid. <i>Nano Today</i> , <b>2021</b> , 37, 101093	17.9	3
104	Synthesis, Assembly, Optical Properties, and Sensing Applications of Plasmonic Gap Nanostructures. <b>2021</b> , 33, e2006966		15
103	Core-shell AgPt nanoparticles: A versatile platform for the synthesis of heterogeneous nanostructures towards catalyzing electrochemical reactions. <b>2021</b> , 32, 3288-3288		3
102	Anisotropic polymer-mesoporous silica hybrid particles with tailorable morphology. <b>2021</b> , 617, 126379		1
101	Improving the Purity and Uniformity of Pd and Pt Nanocrystals by Decoupling Growth from Nucleation in a Flow Reactor. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 3791-3801	9.6	3
100	Characterization and Electrocatalytic Features of PtPd and PdPt Bimetallic Nanoparticles for Methanol Electro-oxidation. <b>2021</b> , 7, 958-965		2
99	A review of energy and environment electrocatalysis based on high-index faceted nanocrystals. <b>2021</b> , 40, 3406-3441		15
98	Surface Engineering and Controlled Ripening for Seed-Mediated Growth of Au Islands on Au Nanocrystals. <b>2021</b> , 60, 16958-16964		12
97	Flow field-flow fractionation hyphenated with inductively coupled plasma mass spectrometry: a robust technique for characterization of engineered elemental metal nanoparticles in the environment. 1-22		3
96	Engineering the Spatial Arrangement of AuPt60 Heterostructures. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 5268-5275	5.8	1
95	Microwave Synthetic Routes for Shape-Controlled Catalyst Nanoparticles and Nanocomposites. <b>2021</b> , 26,		5
94	Surface Engineering and Controlled Ripening for Seed-Mediated Growth of Au Islands on Au Nanocrystals. <b>2021</b> , 133, 17095-17101		0
93	In Situ Growth of Pt-Co Nanocrystals on Different Types of Carbon Supports and Their Electrochemical Performance toward Oxygen Reduction. <b>2021</b> ,		1
92	Bimetallic Nanocrystals: Structure, Controllable Synthesis and Applications in Catalysis, Energy and Sensing. <b>2021</b> , 11,		10
91	Seed-Mediated Synthesis and Catalytic ORR Reactivity of Facet-Stable, Monodisperse Platinum Nano-Octahedra. <i>ACS Applied Energy Materials</i> , <b>2021</b> , 4, 9542-9552	6.1	6
90	Fabrication and characterization of La-added MgFe2O4 as catalyst support for CO oxidation. <b>2021</b> , 47, 32786-32786		
89	Formic acid electrooxidation on small, {1 0 0} structured, and Pd decorated carbon-supported Pt nanoparticles. <b>2021</b> , 400, 140-147		2

88	Proton selective anode nanochannel for efficient methanol utilization. <i>Nano Today</i> , <b>2021</b> , 39, 101213	17.9	12
87	Recent developments in PtCo catalysts for proton-exchange membrane fuel cells. <b>2021</b> , 28, 100715		4
86	Gold Nanorods: The Most Versatile Plasmonic Nanoparticles. <b>2021</b> , 121, 13342-13453		42
85	High Activity of Platinum-Cobalt Supported by Natto-like N-Doped Carbon Sphere as Durable Catalyst for Oxygen Reduction Reaction. <b>2021</b> , 35, 15074-15083		1
84	Boosting the activity of non-platinum group metal electrocatalyst for the reduction of oxygen via dual-ligated atomically dispersed precursors immobilized on carbon supports. <b>2021</b> , 106547		2
83	Facile synthesis of Pt5La nanoalloys as the enhanced electrocatalysts for oxygen reduction reaction and methanol oxidation reaction. <i>Journal of Alloys and Compounds</i> , <b>2021</b> , 161892	5.7	2
82	Electrodeposited PtNi nanoparticles towards oxygen reduction reaction: A study on nucleation and growth mechanism. <i>Chinese Journal of Catalysis</i> , <b>2021</b> , 42, 2068-2077	11.3	2
81	Critical Raw Materials in Polymer Electrolyte Fuel Cells. <b>2021</b> , 35-56		0
80	Proton selective adsorption on PtNi nano-thorn array electrodes for superior hydrogen evolution activity. <b>2021</b> , 14, 1594-1601		17
79	CHAPTER 9:Hydrides. <b>2021</b> , 219-248		0
78	Enriching the branching of Au@PdAu core-shell nanocrystals using a syringe pump: kinetics control meets lattice mismatch. <b>2021</b> , 23, 2582-2589		1
77	Fabrication of electro-catalytic nano-particles and applications to proton exchange membrane fuel cells. <b>2015</b> , 95-129		2
76	Development of Facile Preparation Methods for Precisely Structure-controlled Pt Nanocrystals and Their Application as Olefin Hydrogenation Model Catalysts. <b>2013</b> , 56, 214-220		1
75	Fabrication of Mn-N-C Catalyst for Oxygen Reduction Reactions Using Mn-Embedded Carbon Nanofiber. <b>2020</b> , 13, 2561		3
74	Pt Nano-Layer Formation by Redox Replacement of Cu Adlayer on Au(111) Surface. <b>2009</b> , 30, 2875-2876		11
73	Pt-Containing Ag2S-Noble Metal Nanocomposites as Highly Active Electrocatalysts for the Oxidation of Formic Acid. <b>2014</b> , 6, 252		1
72	Interfacial Assembly and Applications of Functional Mesoporous Materials. <b>2021</b> , 121, 14349-14429		24
71	Wire arc additive manufacturing: A brief review on advancements in addressing industrial challenges incurred with processing metallic alloys. <b>2021</b> ,		1

70	Recent Development of Pt-Based Core-Shell Structured Electrocatalysts in Fuel Cells. <i>Chinese Journal of Catalysis</i> , <b>2013</b> , 33, 222-229	11.3	
69	Preparation of Metallic Nanoparticles. <i>Manufacturing Technology</i> , <b>2013</b> , 13, 358-361	0.7	0
68	Nanocomposite-Related Scientific Issues. <b>2015</b> , 199-255		
67	Chemical Synthesis of Nanoscale Heterogeneous Catalysts. 9-29		
66	HYBRID NANOSTRUCTURES WITH QUANTUM DOTS A2B6 AND METAL NANOPARTICLES (REVIEW). <i>Optoelektronika I Poluprovodnikova Tehnika</i> , <b>2016</b> , 51, 7-30		
65	Nanostructured Catalysts in Vehicle Exhaust Control Systems. <b>2019</b> , 1679-1700		1
64	Catalyst Enhanced by Controlling Structure and Shape of Nanocrystals, Support Materials, and Hybrid System in DMFCs. <i>Ceramist</i> , <b>2019</b> , 22, 189-197	0.3	
63	One-step synthesis of Pt/a-CoO core/shell nanocomposites. <i>Applied Microscopy</i> , <b>2019</b> , 49, 12	1.1	
62	Construction of Concave PdAg Nanoshells with Limited Thickness for Efficient Electrooxidation of Ethanol. <i>Frontiers in Materials</i> , <b>2021</b> , 8,	4	
61	Denatured proteins as a novel template for the synthesis of well-defined, ultra-stable and water-soluble metal nanostructures for catalytic applications. <i>Journal of Leather Science and Engineering</i> , <b>2020</b> , 2,	3.6	1
60	The Electrocatalysis of Oxygen Reduction on Platinum and Its Alloys. <i>Energy and Environment Research in China</i> , <b>2021</b> , 25-61	0.3	
59	Solid-State Preparation of Metal and Metal Oxides Nanostructures and Their Application in Environmental Remediation.. <i>International Journal of Molecular Sciences</i> , <b>2022</b> , 23,	6.3	1
58	Engineering surface strain for site-selective island growth of Au on anisotropic Au nanostructures. <i>Nano Research</i> , 1	10	
57	Ultra Weak Chemiluminescence Enhanced by Noble Metal Nanoparticle. <b>2022</b> , 143-171		
56	Nis/Mos2 Complex Grown on Carbon Paper as Bifunctional Electrocatalyst for Full Water Splitting. <i>SSRN Electronic Journal</i> ,	1	
55	The Nexus between ASAT and Density Functional Theory. <b>2022</b> , 201-221		
54	Remarkable Activity of 002 Facet of Ruthenium Nanoparticles Grown on Graphene Films on the Photocatalytic CO 2 Methanation. <i>Advanced Sustainable Systems</i> , 2100487	5.9	3
53	Controllable Surfactant-free Synthesis of Colloidal Platinum Nanocuboids Enabled by Bromide Ions and Carbon Monoxide. <i>ChemElectroChem</i> ,	4.3	

52	Influence of polyvinylpyrrolidone as stabilizing agent on Pt nanoparticles in Pt/H-BEA catalyzed hydroconversion of n-hexadecane. <i>Fuel</i> , <b>2022</b> , 317, 123506	7.1	
51	Layered Pt-Co alloys: Bulk, surface and nanoparticle analysis, based on DFT. <i>Surface Science</i> , <b>2022</b> , 721, 122082	1.8	1
50	Continuous tuning the wetting growth of Au on Se nanoparticles.. <i>Journal of Colloid and Interface Science</i> , <b>2022</b> , 618, 451-461	9.3	0
49	Recent development on core-shell photo(electro)catalysts for elimination of organic compounds from pharmaceutical wastewater.. <i>Chemosphere</i> , <b>2022</b> , 134311	8.4	1
48	Electrodeposition of Pt <sub>8</sub> Trioctahedral Nanocrystals for the Oxidation Reactions of Methanol and Ethanol. <i>ACS Applied Energy Materials</i> , <b>2022</b> , 5, 807-814	6.1	0
47	Rational design and synthesis of one-dimensional platinum-based nanostructures for oxygen-reduction electrocatalysis. <i>Chinese Journal of Catalysis</i> , <b>2022</b> , 43, 1459-1472	11.3	19
46	Chapter 2. Nanoalloy Electrocatalysts for Alcohol Oxidation Reactions. <i>RSC Energy and Environment Series</i> , 71-96	0.6	
45	Data_Sheet_1.docx. <b>2020</b> ,		
44	Highly Durable Pt-Based CoreShell Catalysts with Metallic and Oxidized Co Species for Boosting the Oxygen Reduction Reaction. <i>ACS Catalysis</i> , 6394-6408	13.1	0
43	Research Progress in ZIF-8 Derived Single Atomic Catalysts for Oxygen Reduction Reaction. <i>Catalysts</i> , <b>2022</b> , 12, 525	4	0
42	Recent research progress on high-entropy alloys as electrocatalytic materials. <i>Journal of Alloys and Compounds</i> , <b>2022</b> , 165585	5.7	1
41	Numerical modeling of nanofluids flow and heat transfer. <b>2022</b> , 151-202		
40	Diverse nanomaterials synthesized by laser ablation of pure metals in liquids. <i>Science China: Physics, Mechanics and Astronomy</i> , <b>2022</b> , 65,	3.6	0
39	From a Chemotherapeutic Drug to a High-Performance Nanocatalyst: A Fast Colorimetric Test for Cisplatin Detection at ppb Level. <i>Biosensors</i> , <b>2022</b> , 12, 375	5.9	2
38	Solution-phase polyol synthesis and coadsorption MD calculations from faceted platinum nanoparticles: NOVEL NPs-polymer morphology controlling. <i>Chemical Papers</i> ,	1.9	0
37	Enhanced Pt dispersion and catalytic properties of NaCl-promoted Pt/MFI zeolite catalysts for propane dehydrogenation. <i>Microporous and Mesoporous Materials</i> , <b>2022</b> , 339, 112010	5.3	1
36	Revelation of transport properties of ultra-thin ionomer films in catalyst layer of polymer electrolyte membrane fuel cells using molecular dynamics. <i>Applied Surface Science</i> , <b>2022</b> , 598, 153815	6.7	1
35	Colloidal Synthesis of Nanoparticles: from Bimetallic to High Entropy Alloys. <i>Nanoscale</i> ,	7.7	0

34	Versatile nanoarchitectonics of Pt with morphology control of oxygen reduction reaction catalysts. <i>Science and Technology of Advanced Materials</i> , <b>2022</b> , 23, 413-423	7.1	2
33	Experimental Sabatier plot for predictive design of active and stable Pt-alloy oxygen reduction reaction catalysts. <i>Nature Catalysis</i> , <b>2022</b> , 5, 513-523	36.5	5
32	Tuning AuCu Janus Structures through Strong Ligand-Mediated Interfacial Energy Control. <i>Chemistry of Materials</i> ,	9.6	1
31	Non-Precious Metal-Doped Carbon Materials Derived From Porphyrin-Based Porous Organic Polymers for Oxygen Reduction Electrocatalysis. <i>ChemPlusChem</i> , <b>2022</b> , 87,	2.8	
30	Fabrication of Gold-Based Sphere-on-Plate Hybrid Nanostructures with Dual Plasmonic Absorptions Covering Visible and Near-Infrared II Windows via the VolmerWeber Growth Mode. <b>2022</b> , 38, 9669-9677		0
29	Carbon nanotubes do not provide strong seeding effect for the nucleation of C3S hydration. <b>2022</b> , 55,		
28	Formation of Ag/Pt bimetallic nanoparticles obtained by ion implantation in $\gamma$ -Al <sub>2</sub> O <sub>3</sub> . <b>2022</b> , 51, 101051		
27	Electrochemical synthesis of monodispersed and highly alloyed PtCo nanoparticles with a remarkable durability towards oxygen reduction reaction. <b>2022</b> , 318, 121831		1
26	First principles study of adsorption and simulation of desorption properties of Pd <sub>1-x</sub> Ag <sub>x</sub> . <b>2022</b> , 33, e00741		0
25	Promising approach for preparing metallic single-atom catalysts: electrochemical deposition.		0
24	CAT: A Compound Attachment Tool for the Construction of Composite Chemical Compounds.		0
23	Continuous and Scalable Production of Platinum Nanocubes with Uniform and Controllable Sizes in Air-Free Droplet Reactors. <b>2022</b> , 126, 8588-8595		1
22	High-Entropy Nanomaterials for Electrochemical Energy Conversion and Storage. 1,		0
21	Recent advances of electrodeposition of Bi <sub>2</sub> Te <sub>3</sub> and its thermoelectric applications in miniaturized power generation and cooling. 1-35		0
20	Kirkendall effect-driven formation of hollow PtNi alloy nanostructures with enhanced oxygen reduction reaction performance. <b>2023</b> , 556, 232483		0
19	Structure and dynamics of 38-atom Ag-Pt nanoalloys using ANN based-interatomic potential. <b>2023</b> , 1220, 113985		0
18	Studies on the Effect of Solvent for the Synthesis of Low Cost and Efficient Pt-Co / C AB Cathode Electrocatalyst to Enhance the Performance of a hydrogen based PEMFC.		0
17	Synthesis of Pt Double-Walled Nanoframes with Well-Defined and Controllable Facets.		0

- 16 One-Step Synthesis of Light Metal Nanoparticle from Metastable Complex. 2206518 ○
- 15 Emulsion-assisted interfacial polymerization strategy: Controllable architectural engineering of anisotropic and isotropic nanoparticles for high-performance supercapacitors. 20220058 ○
- 14 Dual/Triple Template-Induced Evolved Emulsion for Controllable Construction of Anisotropic Carbon Nanoparticles from Concave to Convex. 2210963 ○
- 13 Diffusion-controlled bridging of the Au Island and Au core in Au@Rh(OH)<sub>3</sub> core-shell structure. 11, ○
- 12 Scalable production of an intermetallic PtCo electrocatalyst for high-power proton-exchange-membrane fuel cells. ○
- 11 Recent advances in mixing-induced nanoprecipitation: from creating complex nanostructures to emerging applications beyond biomedicine. ○
- 10 Anisotropic Heavy-Metal-Free Semiconductor Nanocrystals: Synthesis, Properties, and Applications. **2023**, 123, 3625-3692 ○
- 9 Pt-Based Intermetallic Compound Catalysts for the Oxygen Reduction Reaction: Structural Control at the Atomic Scale to Achieve a Win-Win Situation Between Catalytic Activity and Stability. **2023**, 6, ○
- 8 Molecular dynamics simulation of ion dynamics within PEM Fuel Cells. **2023**, 816, 140380 ○
- 7 Two-Dimensional Metal Nanostructures: From Theoretical Understanding to Experiment. **2023**, 123, 3443-3492 ○
- 6 Structural Size Effect in Capped Metallic Nanoparticles. **2023**, 17, 5663-5672 ○
- 5 Green nanoparticles for stereospecific and stereoselective organic synthesis. **2023**, 195-240 ○
- 4 Design principles for the synthesis of platinum-cobalt intermetallic nanoparticles for electrocatalytic applications. **2023**, 59, 4852-4871 ○
- 3 Engineering the Au-Cu<sub>2</sub>O Crystalline Interfaces for Structural and Catalytic Integration. ○
- 2 Bubble-propelled micro-/nanomotors of variable sizes by regulating the surface microstructure of partially coated Pt shells. ○
- 1 Nanoparticle drug delivery systems in hepatocellular carcinoma: A focus on targeting strategies and therapeutic applications. **2023**, 12, 100159 ○