

# CITATION REPORT

List of articles citing

## Catalysis based on nanocrystals with well-defined facets

DOI: 10.1002/anie.201102619

Angewandte Chemie - International Edition, 2012, 51, 602-13.

**Source:** <https://exaly.com/paper-pdf/54705631/citation-report.pdf>

**Version:** 2024-04-27

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
696	Synthesis and applications of noble metal nanocrystals with high-energy facets. <b>2012</b> , 7, 586-605		198
695	Shape-controlled synthesis and catalytic application of ceria nanomaterials. <b>2012</b> , 41, 14455-75		314
694	One-pot synthesis of cubic PtCu <sub>3</sub> nanocages with enhanced electrocatalytic activity for the methanol oxidation reaction. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 13934-7	16.4	531
693	Biomimetic Oxygen Activation by MoS <sub>2</sub> /Ta <sub>3</sub> N <sub>5</sub> Nanocomposites for Selective Aerobic Oxidation. <b>2012</b> , 124, 11910-11914		16
692	Biomimetic oxygen activation by MoS <sub>2</sub> /Ta <sub>3</sub> N <sub>5</sub> nanocomposites for selective aerobic oxidation. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 11740-4	16.4	56
691	Trisoctahedral Au-Pd alloy nanocrystals with high-index facets and their excellent catalytic performance. <b>2012</b> , 18, 16626-30		37
690	Facile synthesis of multifunctional graphene oxide/AgNPs-Fe <sub>3</sub> O <sub>4</sub> nanocomposite: A highly integrated catalysts. <b>2012</b> , 211-212, 412-420		48
689	Laser-induced reshaping of particles aiming at energy-saving applications. <b>2012</b> , 22, 15947		37
688	Facile synthesis of uniform h-BN nanocrystals and their application as a catalyst support towards the selective oxidation of benzyl alcohol. <b>2012</b> , 2, 10689		18
687	Centrifugal Shape Sorting of Faceted Gold Nanoparticles Using an Atomic Plane-Selective Surfactant. <b>2012</b> , 3, 1484-7		7
686	Defining rules for the shape evolution of gold nanoparticles. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 14542-54	16.4	522
685	Surface plasmon resonance-mediated photocatalysis by noble metal-based composites under visible light. <b>2012</b> , 22, 21337		412
684	Advances in the Rational Design of Rhodium Nanoparticle Catalysts: Control via Manipulation of the Nanoparticle Core and Stabilizer. <i>ACS Catalysis</i> , <b>2012</b> , 2, 1057-1069	13.1	148
683	Platinum nanoparticles stabilized by cucurbit[6]uril with enhanced catalytic activity and excellent poisoning tolerance for methanol electrooxidation. <b>2012</b> , 18, 12978-85		41
682	Shape-controlled synthesis of Cu <sub>2</sub> O microparticles and their catalytic performances in the Rochow reaction. <b>2012</b> , 2, 1207		48
681	Exploring the different photocatalytic performance for dye degradations over hexagonal ZnIn <sub>2</sub> S <sub>4</sub> microspheres and cubic ZnIn <sub>2</sub> S <sub>4</sub> nanoparticles. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2012</b> , 4, 2273-9	9.5	158
680	A DFT-D study of structural and energetic properties of TiO <sub>2</sub> modifications. <b>2012</b> , 24, 424206		44

679	Synthesis and catalytic properties of bimetallic nanomaterials with various architectures. <b>2012</b> , 7, 448-466		405
678	Morphology-dependent nanocatalysis on metal oxides. <b>2012</b> , 55, 2485-2496		39
677	Seed-mediated growth method for high-quality noble metal nanocrystals. <b>2012</b> , 55, 2311-2317		20
676	Shape-controlled synthesis of polyhedral 50-facet Cu <sub>2</sub> O microcrystals with high-index facets. <i>CrystEngComm</i> , <b>2012</b> , 14, 4431	3.3	62
675	Hexoctahedral Au nanocrystals with high-index facets and their optical and surface-enhanced Raman scattering properties. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 4565-8	16.4	134
674	Microfluidic Synthesis of Palladium Nanocrystals Assisted by Supercritical CO <sub>2</sub> : Tailored Surface Properties for Applications in Boron Chemistry. <b>2012</b> , 124, 8653-8656		10
673	Microfluidic synthesis of palladium nanocrystals assisted by supercritical CO <sub>2</sub> : tailored surface properties for applications in boron chemistry. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 8525-8	16.4	35
672	ChemInform Abstract: Catalysis Based on Nanocrystals with Well-Defined Facets. <b>2012</b> , 43, no-no		
671	Manufacturing of inorganic nanomaterials: concepts and perspectives. <b>2012</b> , 4, 2813-25		37
670	A Unique Silk Mat-Like Structured Pd/CeO <sub>2</sub> as an Efficient Visible Light Photocatalyst for Green Organic Transformation in Water. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2013</b> , 1, 1258-1266	8.3	63
669	Surface structure dependent electrocatalytic activity of Co <sub>3</sub> O <sub>4</sub> anchored on graphene sheets toward oxygen reduction reaction. <b>2013</b> , 3, 2300		235
668	Effect of nickel nanoparticle size in Ni/Al <sub>2</sub> O <sub>3</sub> on CO methanation reaction for the production of synthetic natural gas. <b>2013</b> , 3, 2009		88
667	One-dimensional metal oxide nanostructures for heterogeneous catalysis. <b>2013</b> , 5, 7175-83		32
666	Sub-2 nm size and density tunable platinum nanoparticles using room temperature tilted-target sputtering. <b>2013</b> , 24, 205602		29
665	Co <sub>3</sub> O <sub>4</sub> nanocrystals with predominantly exposed facets: synthesis, environmental and energy applications. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 14427	13	128
664	Controlled synthesis of nanostructured manganese oxide: crystalline evolution and catalytic activities. <i>CrystEngComm</i> , <b>2013</b> , 15, 7010	3.3	130
663	Octahedral noble-metal nanoparticles and their electrocatalytic properties. <b>2013</b> , 6, 1848-57		6
662	Selective deposition of Ag <sub>2</sub> O on monoclinic BiVO <sub>4</sub> (040) for highly efficient photocatalysis. <b>2013</b> , 9, 3951-6, 3950		200

661	Porous Pt-M (M = Cu, Zn, Ni) nanoparticles as robust nanocatalysts. <i>Chemical Communications</i> , <b>2013</b> , 49, 7168-70	5.8	24
660	Crystal Plane-Dependent Surface Reactivity and Catalytic Property of Oxide Catalysts Studied with Oxide Nanocrystal Model Catalysts. <b>2013</b> , 56, 1363-1376		47
659	Nanoparticle Shape Selectivity in Catalysis: Butene Isomerization and Hydrogenation on Platinum. <b>2013</b> , 56, 1284-1298		23
658	Mixed-Metal Oxides. <b>2013</b> , 153-184		1
657	Influence of calcination and pretreatment conditions on the activity of Co <sub>3</sub> O <sub>4</sub> for CO oxidation. <b>2013</b> , 34, 283-293		16
656	Structural and Surface Effect of MnO <sub>2</sub> for Low Temperature Selective Catalytic Reduction of NO with NH <sub>3</sub> . <b>2013</b> , 18, 384-390		33
655	Metal-organic framework-immobilized polyhedral metal nanocrystals: reduction at solid-gas interface, metal segregation, core-shell structure, and high catalytic activity. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 16356-9	16.4	110
654	Improving Photocatalytic H <sub>2</sub> Evolution of TiO <sub>2</sub> via Formation of {001}/{010} Quasi-Heterojunctions. <b>2013</b> , 117, 22894-22902		33
653	Crystal-Plane Effects on the Catalytic Properties of Au/TiO <sub>2</sub> . <i>ACS Catalysis</i> , <b>2013</b> , 3, 2768-2775	13.1	93
652	Highly concave platinum nanoframes with high-index facets and enhanced electrocatalytic properties. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 12337-40	16.4	182
651	Mesostructural Bi-Mo-O catalyst: correct structure leading to high performance. <b>2013</b> , 3, 2881		10
650	Alcohol induced ultra-fine dispersion of Pt on tuned morphologies of CeO <sub>2</sub> for CO oxidation. <b>2013</b> , 130-131, 121-131		35
649	Multifunctionality in metal@microgel colloidal nanocomposites. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 20-26	13	61
648	Progress in organic reactions catalyzed by bimetallic nanomaterials. <b>2013</b> , 34, 1964-1974		34
647	Facet-dependent electrochemical properties of Co <sub>3</sub> O <sub>4</sub> nanocrystals toward heavy metal ions. <b>2013</b> , 3, 2886		87
646	Plasmonische Synthese von metallischen Nanostrukturen. <b>2013</b> , 125, 14158-14189		15
645	Plasmon-mediated syntheses of metallic nanostructures. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 13910-40	16.4	156
644	Green Chemistry, Applications. <b>2013</b> , 1		

643	Tuning the Morphology of Metal Oxides for Catalytic Applications. <b>2013</b> , 333-403		1
642	Rapid continuous flow synthesis of high-quality silver nanocubes and nanospheres. <b>2013</b> , 3, 22397		22
641	Exposed surfaces on shape-controlled ceria nanoparticles revealed through AC-TEM and water-gas shift reactivity. <b>2013</b> , 6, 1898-906		111
640	Shape-controlled ceria-based nanostructures for catalysis applications. <b>2013</b> , 6, 1821-33		146
639	Morphology Effect of CeO <sub>2</sub> Support in the Preparation, Metal-Support Interaction, and Catalytic Performance of Pt/CeO <sub>2</sub> Catalysts. <b>2013</b> , 5, 3610-3620		141
638	Defect-dominated shape recovery of nanocrystals: a new strategy for trimetallic catalysts. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 12220-3	16.4	88
637	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
636	Novel Bi <sub>2</sub> O <sub>3</sub> nanoporous film fabricated by anodic oxidation and its photoelectrochemical performance. <b>2013</b> , 17, 1215-1219		21
635	A new strategy for the surface-free-energy-distribution induced selective growth and controlled formation of Cu <sub>2</sub> O/Au hierarchical heterostructures with a series of morphological evolutions. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 919-929	13	75
634	Biomimetic synthesis of an ultrathin platinum nanowire network with a high twin density for enhanced electrocatalytic activity and durability. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 12577-81	16.4	164
633	Evolution of space-efficient and facet-specific ZnO 3-D nanostructures and their application in photocatalysis. <i>CrystEngComm</i> , <b>2013</b> , 15, 2601-2607	3.3	19
632	In situ identification of crystal facet-mediated chemical reactions on tetrahedral gold nanocrystals using surface-enhanced Raman spectroscopy. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 19337-42	3.6	12
631	Surface-dependent oxidation of H <sub>2</sub> on CeO <sub>2</sub> surfaces. <i>Journal of Catalysis</i> , <b>2013</b> , 297, 193-201	7.3	93
630	One-pot synthesis of branched palladium nanodendrites with superior electrocatalytic performance. <b>2013</b> , 5, 3202-7		53
629	High-Performance and Long-Lived Pd Nanocatalyst Directed by Shape Effect for CO Oxidative Coupling to Dimethyl Oxalate. <i>ACS Catalysis</i> , <b>2013</b> , 3, 118-122	13.1	109
628	Self-doped Ce <sup>3+</sup> enhanced CeO <sub>2</sub> host matrix for energy transfer from Ce <sup>3+</sup> to Tb <sup>3+</sup> . <b>2013</b> , 3, 3623		19
627	On the synergistic effect of hydrohalic acids in the shape-controlled synthesis of anatase TiO <sub>2</sub> single crystals. <i>CrystEngComm</i> , <b>2013</b> , 15, 3252-3255	3.3	41
626	Structure-dependent electrocatalysis of Ni(OH) <sub>2</sub> hourglass-like nanostructures towards L-histidine. <b>2013</b> , 19, 501-8		19

625	A highly efficient, clean-surface, porous platinum electrocatalyst and the inhibition effect of surfactants on catalytic activity. <b>2013</b> , 19, 240-8		64
624	Selective oxidation of toluene using surface-modified vanadium oxide nanobelts. <b>2013</b> , 34, 1297-1302		3
623	Dimensionality-dependent performance of nanostructured bismuth sulfide in photodegradation of organic dyes. <b>2013</b> , 138, 755-761		18
622	Controlled synthesis of nanostructured Co film catalysts with high performance for hydrogen generation from sodium borohydride solution. <b>2013</b> , 239, 277-283		53
621	Quantitative analysis of the coverage density of Br <sup>-</sup> ions on Pd{100} facets and its role in controlling the shape of Pd nanocrystals. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 3780-3	16.4	132
620	Hierarchical nanostructures with unique Y-shaped interconnection networks in manganese substituted cobalt oxides: the enhancement effect on electrochemical sensing performance. <i>Chemical Communications</i> , <b>2013</b> , 49, 3025-7	5.8	21
619	Synthesis of gold hexagonal bipyramids directed by planar-twinned silver triangular nanoprisms. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 3800-3	16.4	60
618	High catalytic activity for CO oxidation of Co <sub>3</sub> O <sub>4</sub> nanoparticles in SiO <sub>2</sub> nanocapsules. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 637-643	13	56
617	Seed-mediated growth of noble metal nanocrystals: crystal growth and shape control. <b>2013</b> , 5, 3172-81		147
616	Large-scale preparation and morphology-dependent photodegradation performances of monodispersed AgBr crystals. <b>2013</b> , 455, 199-205		11
615	Synthesis and Catalytic Properties of Sb <sub>2</sub> S <sub>3</sub> Nanowire Bundles as Counter Electrodes for Dye-Sensitized Solar Cells. <b>2013</b> , 117, 10285-10290		40
614	Growth of concave polyhedral Pd nanocrystals with 32 facets through in situ facet-selective etching. <b>2013</b> , 6, 1893-7		15
613	Design of Heterogeneous Catalysts for Fuels and Chemicals Processing: An Overview. <b>2013</b> , 3-68		30
612	Nanometallic chemistry: deciphering nanoparticle catalysis from the perspective of organometallic chemistry and homogeneous catalysis. <b>2013</b> , 42, 13294-304		74
611	Nanoparticles. <b>2013</b> , 109, 453		4
610	Environment-mediated structure, surface redox activity and reactivity of ceria nanoparticles. <b>2013</b> , 5, 6063-73		56
609	Surface and interface control of noble metal nanocrystals for catalytic and electrocatalytic applications. <b>2013</b> , 8, 168-197		376
608	Facile hydrogen-bond-assisted polymerization and immobilization method to synthesize hierarchical Fe <sub>3</sub> O <sub>4</sub> @poly(4-vinylpyridine-co-divinylbenzene)@Au nanostructures and their catalytic applications. <b>2013</b> , 8, 1160-7		42

607	Catalysis on faceted noble-metal nanocrystals: both shape and size matter. <b>2013</b> , 2, 142-150		96
606	Achieving polyhedral nanocrystal growth with systematic shape control. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 8081	13	52
605	Layered double hydroxide-based catalysts: nanostructure design and catalytic performance. <i>Chemical Communications</i> , <b>2013</b> , 49, 5912-20	5.8	255
604	Manipulation of the Reducibility of Ceria-Supported Au Catalysts by Interface Engineering. <b>2013</b> , 5, 1308-1312	11	
603	Facet-dependent catalytic activity of platinum nanocrystals for triiodide reduction in dye-sensitized solar cells. <b>2013</b> , 3, 1836		133
602	Preparation of MnO <sub>2</sub> nanowires and its application in low temperature CO oxidation. <b>2013</b> , 30, 2012-2016		19
601	Theoretical study of H <sub>2</sub> O adsorption on Zn <sub>2</sub> GeO <sub>4</sub> surfaces: effects of surface state and structure-activity relationships. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2013</b> , 5, 6893-901	9.5	11
600	Synthesis and antimicrobial activity of ZnTi-layered double hydroxide nanosheets. <b>2013</b> , 1, 5988-5994		34
599	Dopant-induced modification of active site structure and surface bonding mode for high-performance nanocatalysts: CO oxidation on capping-free (110)-oriented CeO <sub>2</sub> :Ln (Ln = La-Lu) nanowires. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 15191-200	16.4	112
598	Crystal-plane-controlled surface chemistry and catalytic performance of surfactant-free Cu <sub>2</sub> O nanocrystals. <b>2013</b> , 6, 1966-72		75
597	PdPt Nanocubes: A High-Performance Catalyst for Hydrolytic Dehydrogenation of Ammonia Borane. <b>2013</b> , 30, 888-892		49
596	Crystal-facet engineering of ferric giniite by using ionic-liquid precursors and their enhanced photocatalytic performances under visible-light irradiation. <b>2013</b> , 19, 7231-42		28
595	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
594	Highly Concave Platinum Nanoframes with High-Index Facets and Enhanced Electrocatalytic Properties. <b>2013</b> , 125, 12563-12566		35
593	Facile synthesis, shape evolution and magnetic properties of polyhedral 50-facet Fe <sub>3</sub> O <sub>4</sub> nanocrystals partially enclosed by {311} high-index planes. <i>CrystEngComm</i> , <b>2014</b> , 16, 10451-10459	3.3	14
592	Shape-controlled synthesis of Pt-Ir nanocubes with preferential (100) orientation and their unusual enhanced electrocatalytic activities. <b>2014</b> , 57, 13-25		38
591	Grain boundaries in nanocrystalline catalytic materials as a source of surface chemical functionality. <b>2014</b> , 30,		10
590	Copper oxide nanoplatelets and nanoflowers: facile synthesis and catalytic activity in oxidative degradation of methylene blue. <b>2014</b> , 9, 432-436		3

589	Development of new methods in modern selective organic synthesis: preparation of functionalized molecules with atomic precision. <b>2014</b> , 83, 885-985		153
588	Tin oxide microspheres with exposed {101} facets for dye-sensitized solar cells: enhanced photocurrent and photovoltage. <b>2014</b> , 7, 172-8		12
587	Low-temperature remediation of NO catalyzed by interleaved CuO nanoplates. <b>2014</b> , 26, 4481-5		66
586	Crystal-plane-controlled selectivity of Cu(2)O catalysts in propylene oxidation with molecular oxygen. <i>Angewandte Chemie - International Edition</i> , <b>2014</b> , 53, 4856-61	16.4	152
585	Opposite Face Sensitivity of CeO <sub>2</sub> in Hydrogenation and Oxidation Catalysis. <b>2014</b> , 126, 12265-12268		38
584	Self-assembled platinum nanoflowers on polydopamine-coated reduced graphene oxide for methanol oxidation and oxygen reduction reactions. <b>2014</b> , 9, 3221-7		15
583	Quantitative determination of a nano-object's atom density without atomic resolution. <b>2014</b> , 90,		5
582	COLLOIDAL PREPARATION OF MONODISPERSE NANOCRYSTALS. <b>2014</b> , 02, 1430001		5
581	Shape-controlled metal nanocrystals for catalytic applications. <b>2014</b> , 39, 727-737		30
580	InOCl nanosheets with exposed {0 0 1} facets: Synthesis, electronic structure and surprisingly high photocatalytic activity. <b>2014</b> , 152-153, 390-396		9
579	Direct growth of ZnO nanodisk networks with an exposed (0001) facet on Au comb-shaped interdigitating electrodes and the enhanced gas-sensing property of polar {0001} surfaces. <b>2014</b> , 195, 71-79		51
578	Crystal-Plane-Controlled Selectivity of Cu <sub>2</sub> O Catalysts in Propylene Oxidation with Molecular Oxygen. <b>2014</b> , 126, 4956-4961		28
577	Successive, Seed-Mediated Growth for the Synthesis of Single-Crystal Gold Nanospheres with Uniform Diameters Controlled in the Range of 5-150 nm. <b>2014</b> , 31, 266-273		185
576	New advances in the use of infrared absorption spectroscopy for the characterization of heterogeneous catalytic reactions. <b>2014</b> , 43, 7624-63		185
575	Electrochemistry of nanoparticles. <i>Angewandte Chemie - International Edition</i> , <b>2014</b> , 53, 3558-86	16.4	287
574	Facile Synthesis of Multipodal MnO Nanocrystals and Their Catalytic Performance. <b>2014</b> , 2014, 1279-1283		10
573	Shape Control of Mn <sub>3</sub> O <sub>4</sub> Nanoparticles on Nitrogen-Doped Graphene for Enhanced Oxygen Reduction Activity. <b>2014</b> , 24, 2072-2078		261
572	Heterogeneous Catalysis by Metals. <b>2014</b> , 1-16		8



571	Defect Chemistry of Ceria Nanorods. <b>2014</b> , 118, 4131-4142		81
570	Co <sub>3</sub> O <sub>4</sub> nanosheets: synthesis and catalytic application for CO oxidation at room temperature. <b>2014</b> , 57, 873-880		12
569	Nanocasting synthesis of In <sub>2</sub> O <sub>3</sub> with appropriate mesostructured ordering and enhanced gas-sensing property. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 401-9	9.5	98
568	One-pot synthesis of platinum nanocubes on reduced graphene oxide with enhanced electrocatalytic activity. <b>2014</b> , 10, 2336-9		41
567	CuO nanostructures: Synthesis, characterization, growth mechanisms, fundamental properties, and applications. <b>2014</b> , 60, 208-337		852
566	Selectivity in the catalytic hydrogenation of cinnamaldehyde promoted by Pt/SiO <sub>2</sub> as a function of metal nanoparticle size. <b>2014</b> , 4, 955-962		62
565	One pot synthesis of nanoscale phase-segregated PdPt nanoarchitectures via unusual Pt-doping induced structural reorganization of a Pd nanosheet into a PdPt nanotent. <b>2014</b> , 6, 10551-5		18
564	Why does bromine square palladium off? An ab initio study of brominated palladium and its nanomorphology. <i>Physical Chemistry Chemical Physics</i> , <b>2014</b> , 16, 18570-7	3.6	22
563	Catalytic activity of shaped platinum nanoparticles for hydrogenation: a kinetic study. <b>2014</b> , 4, 3290		33
562	The facet-dependent enhanced catalytic activity of Pd nanocrystals. <i>Chemical Communications</i> , <b>2014</b> , 50, 9454-7	5.8	36
561	CHAPTER 1:Stabilizing Gold Nanoparticles by Solid Supports. <i>RSC Catalysis Series</i> , 1-26	0.3	3
560	Distinct optical and magnetic properties of ionic liquid tuned hematite nanocrystals having different exposed (001) facets. <b>2014</b> , 4, 593-597		9
559	The crystal plane effect of CoFe nanocrystals on Fischer-Tropsch synthesis. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 13116-13122	13	17
558	Crystal facet control of LaFeO <sub>3</sub> , LaCrO <sub>3</sub> , and La <sub>0.75</sub> Sr <sub>0.25</sub> MnO <sub>3</sub> . <i>CrystEngComm</i> , <b>2014</b> , 16, 2874	3.3	23
557	Thermodynamic controlled synthesis of intermetallic Au <sub>3</sub> Cu alloy nanocrystals from Cu microparticles. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 902-906	13	64
556	Facet-dependent properties of polyhedral nanocrystals. <i>Chemical Communications</i> , <b>2014</b> , 50, 1634-44	5.8	116
555	NaY(MoO <sub>4</sub> ) <sub>2</sub> microcrystals with controlled faceting and their tunable photoluminescence properties after doping with Eu <sup>3+</sup> . <b>2014</b> , 4, 13502		16
554	Silver iodide microstructures of a uniform towerlike shape: morphology purification via a chemical dissolution, simultaneously boosted catalytic durability, and enhanced catalytic performances. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 4160-9	9.5	15

553	Opposite face sensitivity of CeO <sub>2</sub> hydrogenation and oxidation catalysis. <i>Angewandte Chemie - International Edition</i> , <b>2014</b> , 53, 12069-72	16.4	161
552	Unique excavated rhombic dodecahedral PtCu <sub>3</sub> alloy nanocrystals constructed with ultrathin nanosheets of high-energy {110} facets. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 3748-51	16.4	207
551	Hexadecylphosphate-Functionalized Iron Oxide Nanoparticles: Mild Oxidation of Benzyl C-H Bonds Exclusive to Carbonyls by Molecular Oxygen. <i>ACS Catalysis</i> , <b>2014</b> , 4, 2746-2752	13.1	16
550	Synthesis of novel two-phase Co@SiO <sub>2</sub> nanorattles with high catalytic activity. <b>2014</b> , 53, 9073-9		38
549	Utilization of shape-controlled nanoparticles as catalysts with enhanced activity and selectivity. <b>2014</b> , 4, 41017-41027		47
548	Role of the Morphology and Surface Planes on the Catalytic Activity of Spinel LiMn <sub>1.5</sub> Ni <sub>0.5</sub> O <sub>4</sub> for Oxygen Evolution Reaction. <i>ACS Catalysis</i> , <b>2014</b> , 4, 421-425	13.1	50
547	Facile synthesis of single crystal Fe <sub>3</sub> O <sub>4</sub> sub-microcubes free of any capping agent and their catalytic performance in p-nitrophenol reduction. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 17530-17535 <sup>13</sup>		20
546	Influence and Removal of Capping Ligands on Catalytic Colloidal Nanoparticles. <b>2014</b> , 144, 1355-1369		70
545	Bi <sub>2</sub> MoO <sub>6</sub> nanobelts for crystal facet-enhanced photocatalysis. <b>2014</b> , 10, 2791-5, 2741		123
544	A rational biomimetic approach to structure defect generation in colloidal nanocrystals. <i>ACS Nano</i> , <b>2014</b> , 8, 6934-44	16.7	41
543	Recent progress on graphene-based hybrid electrocatalysts. <b>2014</b> , 1, 379-399		277
542	Self-assembly of colloidal one-dimensional nanocrystals. <b>2014</b> , 43, 2301-23		156
541	Citrate-hydrazine hydrogen-bonding driven single-step synthesis of tunable near-IR plasmonic, anisotropic silver nanocrystals: implications for SERS spectroscopy of inorganic oxoanions. <b>2014</b> , 43, 11826-33		16
540	The synthesis of CeO <sub>2</sub> nanospheres with different hollowness and size induced by copper doping. <b>2014</b> , 6, 10693-700		70
539	Layered double hydroxide-based nanomaterials as highly efficient catalysts and adsorbents. <b>2014</b> , 10, 4469-86		278
538	The role of ceria-based nanostructured materials in energy applications. <b>2014</b> , 17, 349-357		187
537	Preparation and cyclic voltammetric dissolution of core-shell Ag <sub>2</sub> S@Ag nanocubes and their comparison in oxygen reduction reaction in alkaline media. <b>2014</b> , 39, 5528-5536		12
536	Morphology-dependent nanocatalysts: rod-shaped oxides. <b>2014</b> , 43, 1543-74		374

535	A model of interface-related enhancement based on the contrast between Co <sub>3</sub> O <sub>4</sub> sphere and cube for electrochemical detection of hydrogen peroxide. <b>2014</b> , 40, 67-70		24
534	Rational Design of High-Performance DeNO <sub>x</sub> Catalysts Based on Mn <sub>x</sub> Co <sub>3-x</sub> O <sub>4</sub> Nanocages Derived from Metal-Organic Frameworks. <i>ACS Catalysis</i> , <b>2014</b> , 4, 1753-1763	13.1	354
533	Morphology controllable synthesis of NaLa(WO <sub>4</sub> ) <sub>2</sub> : the morphology dependent photoluminescent properties and single-phased white light emission of NaLa(WO <sub>4</sub> ) <sub>2</sub> : Eu <sup>3+</sup> /Tb <sup>3+</sup> /Tm <sup>3+</sup> . <i>CrystEngComm</i> , <b>2014</b> , 16, 1268	3.3	58
532	Strategy for nano-catalysis in a fixed-bed system. <b>2014</b> , 26, 4151-5		79
531	Shape-Dependent Activity of Ceria in Soot Combustion. <i>ACS Catalysis</i> , <b>2014</b> , 4, 172-181	13.1	322
530	High-energy-surface engineered metal oxide micro- and nanocrystallites and their applications. <b>2014</b> , 47, 308-18		174
529	Synthesis of hexagonal and triangular Fe <sub>3</sub> O <sub>4</sub> nanosheets via seed-mediated solvothermal growth. <i>Nano Research</i> , <b>2014</b> , 7, 536-543	10	45
528	Metal oxide mesocrystals with tailored structures and properties for energy conversion and storage applications. <b>2014</b> , 6, e100-e100		77
527	Elektrochemie von Nanopartikeln. <b>2014</b> , 126, 3630-3660		44
526	Facet-Controlled Synthetic Strategy of CuO-Based Crystals for Catalysis and Sensing. <i>Advanced Science</i> , <b>2015</b> , 2, 1500140	13.6	110
525	A Facile Approach to Prepare Bismuth Oxide Nanorods for Application in Optoelectronic Devices. <b>2015</b> , 44, 97-99		3
524	Denitration performance of modified AC loaded with nano V <sub>2</sub> O <sub>5</sub> with different morphologies. <b>2015</b> , 30, 1204-1209		2
523	Structure Evolution and Associated Catalytic Properties of Pt-Sn Bimetallic Nanoparticles. <b>2015</b> , 21, 12034-41		43
522	Towards Shape Control of Metal Oxide Nanocrystals in Confined Molten Media. <i>ChemNanoMat</i> , <b>2015</b> , 1, 18-26	3.5	15
521	Titania Morphology-Dependent Gold-Titania Interaction, Structure, and Catalytic Performance of Gold/Titania Catalysts. <b>2015</b> , 7, 3290-3298		46
520	Monitoring Ligand-Mediated Growth and Aggregation of Metal Nanoparticles and Nanodendrites by In Situ Synchrotron Scattering Techniques. <i>ChemNanoMat</i> , <b>2015</b> , 1, 109-114	3.5	10
519	Synthesis of Concave Pt Nanocubes and Concave Mn-Doped Pt Nano-octahedra by Identifying a Synergistic Effect among Surface Binding Moieties. <b>2015</b> , 32, 986-990		3
518	Effects of Nano-CeO <sub>2</sub> with Different Nanocrystal Morphologies on Cytotoxicity in HepG2 Cells. <b>2015</b> , 12, 10806-19		24

517	{331}-Faceted trisoctahedral gold nanocrystals: synthesis, superior electrocatalytic performance and highly efficient SERS activity. <b>2015</b> , 7, 8405-15		39
516	Charge separation between polar {111} surfaces of CoO octahedrons and their enhanced visible-light photocatalytic activity. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 6109-17	9.5	43
515	Morphological Effects of Gold Clusters on the Reactivity of Ceria Surface Oxygen. <i>ACS Catalysis</i> , <b>2015</b> , 5, 2873-2881	13.1	49
514	One-pot synthesis of porous PtAu nanodendrites supported on reduced graphene oxide nanosheets toward catalytic reduction of 4-nitrophenol. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 290-296	12	193
513	Bridging the gap between insightful simplicity and successful complexity: From fundamental studies on model systems to technical catalysts. <i>Journal of Catalysis</i> , <b>2015</b> , 328, 59-71	7.3	15
512	A novel label free long non-coding RNA electrochemical biosensor based on green L-cysteine electrodeposition and AuRh hollow nanospheres as tags. <b>2015</b> , 5, 51990-51999		18
511	A one-step, clean, capping-agent-free electrochemical approach to prepare Pt nanoparticles with preferential (100) orientation and their high electrocatalytic activities. <b>2015</b> , 58, 6-10		29
510	Ceria Nanoshapes Structural and Catalytic Properties. <b>2015</b> , 31-70		6
509	Morphology-dependent interplay of reduction behaviors, oxygen vacancies and hydroxyl reactivity of CeO2 nanocrystals. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 31862-71	3.6	74
508	Atomically thin MoSe2/graphene and WSe2/graphene nanosheets for the highly efficient oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 24397-24404	13	87
507	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
506	Spherical and sheetlike Ag/AgCl nanostructures: interesting photocatalysts with unusual facet-dependent yet substrate-sensitive reactivity. <b>2015</b> , 31, 602-10		32
505	Facet-Dependent Electrocatalytic Performance of Co3O4 for Rechargeable LiO2 Battery. <b>2015</b> , 119, 4516-4523		81
504	Tailoring the shape of amorphous nanomaterials: recent developments and applications. <b>2015</b> , 58, 44-59		42
503	Superior photocatalytic activities of NiO octahedrons with loaded AgCl particles and charge separation between polar NiO {1 1 1} surfaces. <b>2015</b> , 172-173, 165-173		27
502	Shaping Single-Crystalline Trimetallic PtPdRh Nanocrystals toward High-Efficiency CO Splitting of Ethanol in Conversion to CO2. <i>ACS Catalysis</i> , <b>2015</b> , 5, 1995-2008	13.1	63
501	Synthesis of Hierarchical FeWO4 Architectures with {100}-Faceted Nanosheet Assemblies as a Robust Biomimetic Catalyst. <b>2015</b> , 54, 1171-1178		28
500	Two-dimensional MoS2 nanosheet-coated Bi2O3 discoids: synthesis, formation mechanism, and photocatalytic application. <b>2015</b> , 31, 4314-22		147

499	Morphology Effect of Ir/La <sub>2</sub> O <sub>2</sub> CO <sub>3</sub> Nanorods with Selectively Exposed {110} Facets in Catalytic Steam Reforming of Glycerol. <i>ACS Catalysis</i> , <b>2015</b> , 5, 1155-1163	13.1	44
498	Engineering a high energy surface of anatase TiO <sub>2</sub> crystals towards enhanced performance for energy conversion and environmental applications. <b>2015</b> , 5, 20396-20409		67
497	Controlled Synthesis of a Hexagonal-Shaped NiO Nanocatalyst with Highly Reactive Facets {1 1 0} and Its Catalytic Activity. <b>2015</b> , 7, 791-798		23
496	Fabrication of hierarchical Fe <sub>3</sub> O <sub>4</sub> @SiO <sub>2</sub> @P(4VP-DVB)@Au nanostructures and their enhanced catalytic properties. <b>2015</b> , 10, 701-8		22
495	Soft landing of bare nanoparticles with controlled size, composition, and morphology. <b>2015</b> , 7, 3491-503		55
494	(100) surface-exposed CeO <sub>2</sub> nanocubes as an efficient heterogeneous catalyst in the tandem oxidation of benzyl alcohol, para-chlorobenzyl alcohol and toluene to the corresponding aldehydes selectively. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 6909-6920	13	49
493	Catalytic hydrogenation by noble-metal nanocrystals with well-defined facets: a review. <b>2015</b> , 5, 2532-2553		77
492	Toward continuous and scalable production of colloidal nanocrystals by switching from batch to droplet reactors. <b>2015</b> , 44, 5806-20		117
491	Dependence of alloying and island composition on terrace width: Growth of Cu on Ag(100). <b>2015</b> , 92,		4
490	Facile synthesis of CeO <sub>2</sub> hollow structures with controllable morphology by template-engaged etching of Cu <sub>2</sub> O and their visible light photocatalytic performance. <b>2015</b> , 179, 458-467		59
489	Mesoporous Pd@M (M=Pt, Au) microrods as excellent electrocatalysts for methanol oxidation. <b>2015</b> , 17, 111-119		21
488	Palladium-nanoparticles on end-functionalized poly(lactic acid)-based stereocomplexes for the chemoselective cinnamaldehyde hydrogenation: Effect of the end-group. <i>Journal of Catalysis</i> , <b>2015</b> , 330, 187-196	7.3	20
487	Mechanistic Insight into the Facet-Dependent Adsorption of Methanol on a Pt <sub>3</sub> Ni Nanocatalyst. <b>2015</b> , 119, 18352-18363		18
486	Novel AgBr/Ag <sub>3</sub> PO <sub>4</sub> Decorated Ceria Nanoflake Composites for Enhanced Photocatalytic Activity toward Dyes and Bacteria under Visible Light. <b>2015</b> , 54, 8031-8042		57
485	Support Morphology-Dependent Catalytic Activity of Pd/CeO <sub>2</sub> For Formaldehyde Oxidation. <i>Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 8675-82	10.3	222
484	Methods and Structures for Self-assembly of Anisotropic 1D Nanocrystals. <b>2015</b> , 27-68		1
483	Ultrasensitive strategy based on PtPd nanodendrite/nano-flower-like@GO signal amplification for the detection of long non-coding RNA. <b>2015</b> , 74, 214-21		43
482	Efficient visible driven photocatalyst, silver phosphate: performance, understanding and perspective. <b>2015</b> , 44, 7808-28		344

481	Origin of the facet dependence in the hydrogenation catalysis of olefins: experiment and theory. <i>Chemical Communications</i> , <b>2015</b> , 51, 12016-9	5.8	30
480	Room-Temperature Reactivity Of Silicon Nanocrystals With Solvents: The Case Of Ketone And Hydrogen Production From Secondary Alcohols: Catalysis?. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 13794-800	9.5	13
479	High oxygen storage capacity and enhanced catalytic performance of NiO/NixCe1-xO2 nanorods: synergy between Ni-doping and 1D morphology. <b>2015</b> , 5, 54571-54579		22
478	Converting 2D inorganic-organic ZnSe-DETA hybrid nanosheets into 3D hierarchical nanosheet-based ZnSe microspheres with enhanced visible-light-driven photocatalytic performances. <b>2015</b> , 7, 9752-9		24
477	Anisotropic Shaped Iron Oxide Nanostructures: Controlled Synthesis and Proton Relaxation Shortening Effects. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 3505-3515	9.6	126
476	Template-free construction of hollow Fe2O3 hexagonal nanocolumn particles with an exposed special surface for advanced gas sensing properties. <b>2015</b> , 7, 9416-20		65
475	Thermal conductivity enhancement in thermal grease containing different CuO structures. <b>2015</b> , 10, 113		31
474	Heterogeneous catalysis for green chemistry based on nanocrystals. <b>2015</b> , 2, 150-166		50
473	Recent advances in noble metal based composite nanocatalysts: colloidal synthesis, properties, and catalytic applications. <b>2015</b> , 7, 10559-83		124
472	Copper nanocrystal plane effect on stereoselectivity of catalytic deoxygenation of aromatic epoxides. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 3791-4	16.4	44
471	Surface-Dependence of Defect Chemistry of Nanostructured Ceria. <b>2015</b> , 119, 12423-12433		56
470	Surface Chemistry and Catalytic Properties of Well-Defined Cu2O Nanocrystals. <b>2015</b> , 1-29		
469	Electrochemical Fabrication of Well-Defined Spherical Iridium Nanoparticles and Electrocatalytic Activity towards Carbon Monoxide Adlayer Oxidation. <b>2015</b> , 6, 365-372		4
468	Fabrication of Pd Nanoparticles Embedded C@Fe3O4 Core-Shell Hybrid Nanospheres: An Efficient Catalyst for Cyanation in Aryl Halides. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 22907-17	9.5	37
467	3D Flowerlike Fe2O3@TiO2 Core-Shell Nanostructures: General Synthesis and Enhanced Photocatalytic Performance. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2015</b> , 3, 2975-2984	8.3	154
466	Charge Density Modulated Shape-Dependent Electrocatalytic Activity of Gold Nanoparticles for the Oxidation of Ascorbic Acid. <b>2015</b> , 119, 23103-23112		22
465	Advances in nanoscale alloys and intermetallics: low temperature solution chemistry synthesis and application in catalysis. <b>2015</b> , 44, 18692-717		12
464	Crystal facet tailoring arts in perovskite oxides. <b>2015</b> , 2, 965-981		61

463	Controlled synthesis of concave cuboctahedral nitrogen-rich metalorganic framework nanoparticles showing enhanced catalytic activation of epoxides with carbon dioxide. <i>CrystEngComm</i> , <b>2015</b> , 17, 8596-8601	3.3	20
462	Visible-light-driven Ag/AgCl plasmonic photocatalysts via a surfactant-assisted protocol: enhanced catalytic performance by morphology evolution from near-spherical to 1D structures. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 25182-90	3.6	11
461	Revealing the elemental-specific growth dynamics of PtAu multipods by scanning transmission electron microscopy and chemical mapping. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 21284-21289	13	6
460	Exploring the energy landscape of PtAu <sub>115</sub> nanoalloys. <b>2015</b> , 1074, 150-156		2
459	PtAg bimetallic nanowires: Facile synthesis and their use as excellent electrocatalysts toward low-cost fuel cells. <b>2015</b> , 12, 105-114		100
458	Superior photocatalytic activity of porous wurtzite ZnO nanosheets with exposed {001} facets and a charge separation model between polar (001) and (. <b>2015</b> , 264, 557-564		40
457	Tailoring the assembly, interfaces, and porosity of nanostructures toward enhanced catalytic activity. <i>Chemical Communications</i> , <b>2015</b> , 51, 624-35	5.8	35
456	Branched Au nanostructures enriched with a uniform facet: facile synthesis and catalytic performances. <b>2014</b> , 4, 5259		33
455	Hierarchically CdS Decorated 1D ZnO Nanorods-2D Graphene Hybrids: Low Temperature Synthesis and Enhanced Photocatalytic Performance. <b>2015</b> , 25, 221-229		344
454	Kinetically-controlled growth of cubic and octahedral Rh-Pd alloy oxygen reduction electrocatalysts with high activity and durability. <b>2015</b> , 7, 301-7		27
453	Synthesis of Fe <sub>3</sub> O <sub>4</sub> -nanocatalysts with different morphologies and its promotion on shifting C <sub>5</sub> + hydrocarbons for Fischer-Tropsch synthesis. <b>2015</b> , 59, 211-215		29
452	Charge separation between wurtzite ZnO polar {0 0 1} surfaces and their enhanced photocatalytic activity. <b>2015</b> , 163, 189-197		86
451	Shape/size controlling syntheses, properties and applications of two-dimensional noble metal nanocrystals. <b>2016</b> , 10, 360-382		12
450	Shape Engineering of Oxide Nanoparticles for Heterogeneous Catalysis. <b>2016</b> , 11, 1470-88		35
449	Wide bandgap mesoporous hematite nanowire bundles as a sensitive and rapid response ethanol sensor. <b>2016</b> , 27, 185702		19
448	Theoretical study of crystal phase effect in heterogeneous catalysis. <b>2016</b> , 6, 571-583		27
447	Rapid, controllable growth of silver nanostructured surface-enhanced Raman scattering substrates for red blood cell detection. <b>2016</b> , 6, 24503		9
446	Concave PtAu nanocuboctahedrons with high-index facets and improved electrocatalytic performance. <i>CrystEngComm</i> , <b>2016</b> , 18, 3216-3222	3.3	21

445	Shape-Controlled Metal Nanocrystals for Heterogeneous Catalysis. <b>2016</b> , 7, 327-48		82
444	Asymmetric transfer hydrogenation of carbonyl compounds catalyzed by rhodium nanoparticles. <b>2016</b> , 420, 149-158		8
443	Defect-Dominated Shape Recovery of Nanocrystals: A New Strategy for Trimetallic Catalysts. <b>2016</b> , 71-91		
442	Crystallographic Facet-Induced Toxicological Responses by Faceted Titanium Dioxide Nanocrystals. <i>ACS Nano</i> , <b>2016</b> , 10, 6062-73	16.7	45
441	Oxide Nanocrystal Model Catalysts. <b>2016</b> , 49, 520-7		150
440	Towards rational design of core-shell catalytic nanoreactor with high performance catalytic hydrogenation of levulinic acid. <b>2016</b> , 6, 5102-5115		39
439	Hydrophilic Pt nanoflowers: synthesis, crystallographic analysis and catalytic performance. <i>CrystEngComm</i> , <b>2016</b> , 18, 3422-3427	3.3	23
438	High catalytic activity of oxygen-induced (200) surface of Ta <sub>2</sub> O <sub>5</sub> nanolayer towards durable oxygen evolution reaction. <b>2016</b> , 25, 60-67		24
437	Single Phase PtAg Bimetallic Alloy Nanoparticles Highly Dispersed on Reduced Graphene Oxide for Electrocatalytic Application of Methanol Oxidation Reaction. <b>2016</b> , 197, 117-125		57
436	UV-induced epitaxial attachment of TiO <sub>2</sub> nanocrystals in molecularly mediated 1D and 2D alignments. <i>Chemical Communications</i> , <b>2016</b> , 52, 7545-8	5.8	13
435	Polymer-templated mesoporous hybrid oxides of Al and Cu: highly porous sorbents for ammonia. <b>2016</b> , 6, 38662-38670		1
434	Preparation of a FeO-Au-GO nanocomposite for simultaneous treatment of oil/water separation and dye decomposition. <b>2016</b> , 8, 17451-17457		14
433	Ceria-Based Materials in Catalysis: Historical Perspective and Future Trends. <b>2016</b> , 50, 209-242		27
432	Water bridge coordination on the metal-rich facets of GdO nanoplates confers high T relaxivity. <b>2016</b> , 8, 17887-17894		26
431	Crystal Shape Tailoring in Perovskite Structure Rare-Earth Ferrites REFeO <sub>3</sub> (RE = La, Pr, Sm, Dy, Er, and Y) and Shape-Dependent Magnetic Properties of YFeO <sub>3</sub> . <b>2016</b> , 16, 6522-6530		40
430	Impurity effects on solid-solid transitions in atomic clusters. <b>2016</b> , 8, 18326-18340		13
429	Highly Active Carbon Supported Pd-Ag Nanofacets Catalysts for Hydrogen Production from HCOOH. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 20839-48	9.5	41
428	Enantioselective hydrogen transfer hydrogenation on rhodium colloid systems with optically active stabilizers. <b>2016</b> , 86, 1240-1249		4



427	Development of Hierarchical Polymer@Pd Nanowire-Network: Synthesis and Application as Highly Active Recyclable Catalyst and Printable Conductive Ink. <b>2016</b> , 5, 213-8		28
426	Recent developments in copper-based, non-noble metal electrocatalysts for the oxygen reduction reaction. <b>2016</b> , 37, 1049-1061		41
425	Influence of the Copper(II) Oxide Dispersion on its Catalytic Properties in Carbon Monoxide Oxidation: A Comparative Study by Using Two Types of Catalytic Reactors. <b>2016</b> , 8, 3546-3555		8
424	Probing Surface Structures of CeO <sub>2</sub> , TiO <sub>2</sub> , and Cu <sub>2</sub> O Nanocrystals with CO and CO <sub>2</sub> Chemisorption. <b>2016</b> , 120, 21472-21485		97
423	Low-temperature CO oxidation by Co <sub>3</sub> O <sub>4</sub> nanocubes on the surface of Co(OH) <sub>2</sub> nanosheets. <b>2016</b> , 86, 100-103		13
422	Morphology effect of one-dimensional iron oxide nanocatalysts on Fischer-Tropsch synthesis. <b>2016</b> , 6, 7505-7511		15
421	Morphology-dependent defect structures and photocatalytic performance of hydrogenated anatase TiO <sub>2</sub> nanocrystals. <i>Journal of Catalysis</i> , <b>2016</b> , 341, 126-135	7-3	71
420	Mussel-inspired Functionalization of Cotton for Nano-catalyst Support and Its Application in a Fixed-bed System with High Performance. <b>2016</b> , 6, 21904		71
419	Controllable incoherent growth of a surface toward gold nanocrystals with regular multi-bumps. <i>CrystEngComm</i> , <b>2016</b> , 18, 4713-4719		3-3
418	Low-Temperature Methane Combustion over Pd/H-ZSM-5: Active Pd Sites with Specific Electronic Properties Modulated by Acidic Sites of H-ZSM-5. <i>ACS Catalysis</i> , <b>2016</b> , 6, 8127-8139	13.1	154
417	CeO nanorods anchored on mesoporous carbon as an efficient catalyst for imine synthesis. <i>Chemical Communications</i> , <b>2016</b> , 52, 13495-13498	5.8	36
416	Voltage Controlled Rupturing of TiO <sub>2</sub> Nanotubes for Gas Sensor Device Applications: Correlation With Surface and Edge Energy. <b>2016</b> , 63, 4933-4938		7
415	Shape-Controlled Synthesis of Trimetallic Nanoclusters: Structure Elucidation and Properties Investigation. <b>2016</b> , 22, 17145-17150		55
414	Engineering surface atomic structure of single-crystal cobalt (II) oxide nanorods for superior electrocatalysis. <i>Nature Communications</i> , <b>2016</b> , 7, 12876	17.4	471
413	Amorphous nickel boride membrane on a platinum-nickel alloy surface for enhanced oxygen reduction reaction. <i>Nature Communications</i> , <b>2016</b> , 7, 12362	17.4	147
412	Rational design and synthesis of noble-metal nanoframes for catalytic and photonic applications. <b>2016</b> , 3, 520-533		45
411	CO Dissociation on Face-Centered Cubic and Hexagonal Close-Packed Nickel Catalysts: A First-Principles Study. <b>2016</b> , 120, 24895-24903		35
410	Defect-Rich Metal Nanocrystals in Catalysis. <b>2016</b> , 8, 480-485		29

409	Synthesis of Nitrogen-Doped Porous Carbon Nanocubes as a Catalyst Support for Methanol Oxidation. <b>2016</b> , 8, 1901-1904		13
408	Unveiling the active sites of graphene-catalyzed peroxymonosulfate activation. <b>2016</b> , 107, 371-378		219
407	Platelike Ag <sub>2</sub> Nb <sub>4</sub> O <sub>11</sub> mesocrystals: Soft chemical synthesis, formation mechanism and enhanced photocatalytic performance. <i>Journal of Alloys and Compounds</i> , <b>2016</b> , 686, 48-54	5.7	12
406	Effect of sodium nitrate on microwave-assisted synthesis of ceria nanocubes. <b>2016</b> , 178, 71-74		15
405	Effects of Morphology of Cerium Oxide Catalysts for Reverse Water Gas Shift Reaction. <b>2016</b> , 146, 770-777		49
404	Controlling the alloy composition of PtNi nanocrystals using solid-state dewetting of bilayer films. <i>Journal of Alloys and Compounds</i> , <b>2016</b> , 667, 141-145	5.7	15
403	Covalent triazine framework-supported palladium as a ligand-free catalyst for the selective double carbonylation of aryl iodides under ambient pressure of CO. <i>Chemical Communications</i> , <b>2016</b> , 52, 2960-3	5.8	50
402	Facet-defined AgCl nanocrystals with surface-electronic-structure-dominated photoreactivities. <b>2016</b> , 19, 8-16		35
401	One-step synthesis of hollow porous gold nanoparticles with tunable particle size for the reduction of 4-nitrophenol. <b>2016</b> , 310, 89-97		127
400	Synthesis of octahedral, truncated octahedral, and cubic Rh <sub>2</sub> Ni nanocrystals and their structure-activity relationship for the decomposition of hydrazine in aqueous solution to hydrogen. <b>2016</b> , 8, 7043-55		18
399	A facile surfactant-free synthesis of Rh flower-like nanostructures constructed from ultrathin nanosheets and their enhanced catalytic properties. <i>Nano Research</i> , <b>2016</b> , 9, 849-856	10	50
398	Indented Cu <sub>2</sub> MoS <sub>4</sub> nanosheets with enhanced electrocatalytic and photocatalytic activities realized through edge engineering. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 6713-21	3.6	38
397	Biopanning and characterization of peptides with Fe <sub>3</sub> O <sub>4</sub> nanoparticles-binding capability via phage display random peptide library technique. <b>2016</b> , 141, 537-545		17
396	Oxidative dehydrogenation of isobutane over vanadia catalysts supported by titania nanoshapes. <i>Catalysis Today</i> , <b>2016</b> , 263, 84-90	5.3	15
395	Formation of silver single crystal polyhedra with high catalytic activity toward oxidation of ascorbic acid in highly ordered SiO <sub>2</sub> cavities. <b>2016</b> , 768, 41-46		5
394	Nucleation-mediated synthesis and enhanced catalytic properties of Au-Pd bimetallic tripods and bipyramids with twinned structures and high-energy facets. <b>2016</b> , 8, 2819-25		11
393	Crystal growth of Bi <sub>2</sub> Te <sub>3</sub> and noble cleaved (0001) surface properties. <b>2016</b> , 236, 203-208		17
392	Synthesis of perovskite-based nanocomposites for deNO <sub>x</sub> catalytic activity. <i>Canadian Journal of Chemistry</i> , <b>2016</b> , 94, 215-220	0.9	2

391	Preparation of hollow multiple-Ag-nanoclusters-C-shell nanostructures and their catalytic properties. <b>2016</b> , 180, 13-19		25
390	Chemical Insights into the Design and Development of Face-Centered Cubic Ruthenium Catalysts for Fischer-Tropsch Synthesis. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 2267-2276	16.4	104
389	Enhancing the Sensing Properties of TiO Nanosheets with Exposed {001} Facets by a Hydrogenation and Sensing Mechanism. <b>2017</b> , 56, 1504-1510		41
388	Spatial charge separation between wurtzite CdS polar (0001) and (0001 $\bar{1}$ ) facets and their enhanced visible-light photocatalytic activity. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 700, 138-148	5.7	8
387	Surface Coordination Chemistry of Metal Nanomaterials. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 2122-2131	16.4	381
386	Synthesized MoSe <sub>2</sub> /TiO <sub>2</sub> heterogeneous structure as the promising photocatalytic material: Studies from theory to experiment. <b>2017</b> , 121, 044303		17
385	Heterojunction Photocatalysts. <b>2017</b> , 29, 1601694		2003
384	IR spectroscopic investigations of chemical and photochemical reactions on metal oxides: bridging the materials gap. <b>2017</b> , 46, 1875-1932		120
383	Shape transformation of {hk0}-faceted Pt nanocrystals from a tetrahexahedron into a truncated ditetragonal prism. <i>Chemical Communications</i> , <b>2017</b> , 53, 3236-3238	5.8	14
382	Visible-light photocatalysis in CdTe nanoflakes with exposed {111} facets and charge separation between polar CdTe {111}surfaces. <b>2017</b> , 208, 94-103		12
381	A situ hydrothermal synthesis of a two-dimensional MoS <sub>2</sub> /TiO <sub>2</sub> heterostructure composite with exposed (001) facets and its visible-light photocatalytic activity. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2017</b> , 28, 9003-9010	2.1	23
380	Green synthesis of bimetallic Pt@Cu nanostructures for catalytic oxidative desulfurization of model oil. <b>2017</b> , 7, 159-170		16
379	Shape Effect of MnO <sub>x</sub> -Decorated CeO <sub>2</sub> Catalyst in Diesel Soot Oxidation. <b>2017</b> , 90, 556-564		17
378	An In situ TEM study of the surface oxidation of palladium nanocrystals assisted by electron irradiation. <b>2017</b> , 9, 6327-6333		45
377	Deposition of carbon species on the surface of metal: As a poison or a promoter for the long-term stability of Ni/SiO <sub>2</sub> methanation catalyst?. <b>2017</b> , 322, 339-345		13
376	Composites derived from exfoliated Laponite and Mn-Al hydrotalcite prepared in inverse microemulsion: A new strategy for design of robust VOCs combustion catalysts. <b>2017</b> , 211, 46-56		31
375	Shape-Controlled Metal-Free Catalysts: Facet-Sensitive Catalytic Activity Induced by the Arrangement Pattern of Noncovalent Supramolecular Chains. <i>ACS Nano</i> , <b>2017</b> , 11, 4866-4876	16.7	26
374	Sphere-Shaped MnO Catalyst with Remarkable Low-Temperature Activity for Methyl-Ethyl-Ketone Combustion. <i>Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 6288-6297	10.3	105

373	Circular-to-elliptical-to-circular shape transitions of strained islands. <b>2017</b> , 631, 189-192		
372	Ozonation of dimethyl phthalate catalyzed by highly active CuO-FeO nanoparticles prepared with zero-valent iron as the innovative precursor. <b>2017</b> , 227, 73-82		28
371	Mixed Conducting Perovskite Materials as Superior Catalysts for Fast Aqueous-Phase Advanced Oxidation: A Mechanistic Study. <i>ACS Catalysis</i> , <b>2017</b> , 7, 388-397	13.1	186
370	Facet Effect of Single-Crystalline Pd Nanocrystals for Aerobic Oxidation of 5-Hydroxymethyl-2-furfural. <i>ACS Catalysis</i> , <b>2017</b> , 7, 421-432	13.1	58
369	4-Nitrophenol Reduction by a Single Platinum Palladium Nanocube Caged within a Nitrogen-Doped Hollow Carbon Nanosphere. <b>2017</b> , 9, 980-986		45
368	Improved Oxidase Mimetic Activity by Praseodymium Incorporation into Ceria Nanocubes. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 18595-18608	9.5	48
367	Nanostructured Fe <sub>2</sub> O <sub>3</sub> dispersed on SiO <sub>2</sub> as catalyst for high temperature sulfuric acid decompositionStructural and morphological modifications on catalytic use and relevance of Fe <sub>2</sub> O <sub>3</sub> -SiO <sub>2</sub> interactions. <b>2017</b> , 217, 154-168		44
366	Electrocatalysis of Facet-controlled Noble Metal Nanomaterials for Low-temperature Fuel Cells. <b>2017</b> , 373-399		3
365	Synthesis of Cubic-Shaped Pt Particles with (100) Preferential Orientation by a Quick, One-Step and Clean Electrochemical Method. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 18856-18864	9.5	27
364	Ceria Catalysts at Nanoscale: How Do Crystal Shapes Shape Catalysis?. <i>ACS Catalysis</i> , <b>2017</b> , 7, 4716-4735	13.1	372
363	Activated Surface Charge-Reversal Manganese Oxide Nanocubes with High Surface-to-Volume Ratio for Accurate Magnetic Resonance Tumor Imaging. <b>2017</b> , 27, 1700978		39
362	Surface chemistry of group IB metals and related oxides. <b>2017</b> , 46, 1977-2000		36
361	ZnO powders as multi-facet single crystals. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 10622-10628	3.6	10
360	Shaping Gold Nanocrystals in Dimethyl Sulfoxide: Toward Trapezohedral and Bipyramidal Nanocrystals Enclosed by {311} Facets. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 5817-5826	16.4	36
359	Controlled Growth of Monodisperse Ferrite Octahedral Nanocrystals for Biomass-Derived Catalytic Applications. <i>ACS Catalysis</i> , <b>2017</b> , 7, 2948-2955	13.1	32
358	Surface Faceting and Reconstruction of Ceria Nanoparticles. <i>Angewandte Chemie - International Edition</i> , <b>2017</b> , 56, 375-379	16.4	136
357	Atomically and Electronically Coupled Pt and CoO Hybrid Nanocatalysts for Enhanced Electrocatalytic Performance. <b>2017</b> , 29, 1604607		194
356	Scale-Activity Relationship of MnO-FeO Nanocage Catalysts Derived from Prussian Blue Analogues for Low-Temperature NO Reduction: Experimental and DFT Studies. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 2581-2593	9.5	109

355	Carbon induced selective regulation of cobalt-based Fischer-Tropsch catalysts by ethylene treatment. <i>Faraday Discussions</i> , <b>2017</b> , 197, 207-224	3.6	12
354	Sheet-like and truncated-dodecahedron-like AgI structures via a surfactant-assisted protocol and their morphology-dependent photocatalytic performance. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 19, 837-845	3.6	12
353	The role of CO <sub>2</sub> in dehydrogenation of ethylbenzene over pure $\gamma$ -Fe <sub>2</sub> O <sub>3</sub> catalysts with different facets. <i>Journal of Catalysis</i> , <b>2017</b> , 345, 104-112	7.3	19
352	Achievement of safer palladium nanocrystals by enlargement of {100} crystallographic facets. <b>2017</b> , 11, 907-922		9
351	Reaction Sensitivity of Ceria Morphology Effect on Ni/CeO Catalysis in Propane Oxidation Reactions. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 35897-35907	9.5	67
350	Oxygen vacancy clusters essential for the catalytic activity of CeO nanocubes for o-xylene oxidation. <b>2017</b> , 7, 12845		53
349	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
348	Particle Size and Crystal Phase Effects in Fischer-Tropsch Catalysts. <b>2017</b> , 3, 467-476		58
347	Distinguishing faceted oxide nanocrystals with O solid-state NMR spectroscopy. <i>Nature Communications</i> , <b>2017</b> , 8, 581	17.4	38
346	The most active Cu facet for low-temperature water gas shift reaction. <i>Nature Communications</i> , <b>2017</b> , 8, 488	17.4	98
345	Nanobubbles: An Effective Way to Study Gas-Generating Catalysis on a Single Nanoparticle. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 14277-14284	16.4	56
344	Enhanced and durable electrocatalytic performance of thin layer PtRu bimetallic alloys on Pd-nanocubes for methanol oxidation reactions. <b>2017</b> , 7, 3283-3290		18
343	Hydrochar-Supported, in Situ-Generated Nickel Nanoparticles for Sorption-Enhanced Catalytic Gasification of Sewage Sludge. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2017</b> , 5, 7613-7622	8.3	24
342	Icosahedral nanocrystals of noble metals: Synthesis and applications. <b>2017</b> , 15, 121-144		65
341	Phase-controlled growth of cubic phase CuO nanoparticles by chemical vapor deposition. <b>2017</b> , 214, 1700041		11
340	A study of degradation phenomenon of NiPt/CeO <sub>2</sub> catalyst towards hydrogen generation from hydrous hydrazine. <b>2017</b> , 42, 16355-16361		17
339	Cobalt-Tungsten-Boron as an Active Electrocatalyst for Water Electrolysis. <b>2017</b> , 2, 6187-6193		17
338	Synthesis of Ti <sup>3+</sup> and P <sup>5+</sup> co-doped TiO <sub>2</sub> nanocrystal with enhanced visible light photocatalytic activity. <b>2017</b> , 102, 1-4		9

337	Oberflächenfaccettierung und Rekonstruktion von Ceroxid- Nanopartikeln. <b>2017</b> , 129, 382-387		13
336	One-Pot Synthesis of Size- and Composition-Controlled Ni-Rich NiPt Alloy Nanoparticles in a Reverse Microemulsion System and Their Application. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 30643-30653	9.5	10
335	Isolable C@Fe <sub>3</sub> O <sub>4</sub> nanospheres supported cubical Pd nanoparticles as reusable catalysts for Stille and Mizoroki-Heck coupling reactions. <b>2017</b> , 58, 3276-3282		18
334	Carbon dots decorated the exposing high-reactive (111) facets CoO octahedrons with enhanced photocatalytic activity and stability for tetracycline degradation under visible light irradiation. <b>2017</b> , 219, 36-44		73
333	The Surface Chemistry of Metal-Based Hydrogenation Catalysis. <i>ACS Catalysis</i> , <b>2017</b> , 7, 4947-4967	13.1	116
332	Structure Tuning of Bi <sub>2</sub> MoO <sub>6</sub> and Their Enhanced Visible Light Photocatalytic Performances. <b>2017</b> , 42, 347-372		33
331	In situ TEM observation of dissolution and regrowth dynamics of MoO <sub>2</sub> nanowires under oxygen. <i>Nano Research</i> , <b>2017</b> , 10, 397-404	10	13
330	Facet-Engineered Surface and Interface Design of Photocatalytic Materials. <i>Advanced Science</i> , <b>2017</b> , 4, 1600216	13.6	223
329	Studies on the Electrochemical Stability of Preferentially (100)-Oriented Pt Prepared through Three Different Methods. <b>2017</b> , 4, 66-74		7
328	The recent progress and future of oxygen reduction reaction catalysis: A review. <b>2017</b> , 69, 401-414		220
327	Supported Cobalt Nanorod Catalysts for Carbon Dioxide Hydrogenation. <b>2017</b> , 5, 884-891		12
326	New insights into the support morphology-dependent ammonia synthesis activity of Ru/CeO <sub>2</sub> catalysts. <b>2017</b> , 7, 191-199		76
325	Crystal facet-dependent reactivity of $\beta$ -Mn <sub>2</sub> O <sub>3</sub> microcrystalline catalyst for soot combustion. <b>2017</b> , 204, 374-384		98
324	Methanobactin-mediated synthesis of bimetallic Au-Pd/AlO toward an efficient catalyst for glucose oxidation. <b>2017</b> , 11, 512-516		3
323	Engineering Surface Ligands of Noble Metal Nanocatalysts in Tuning the Product Selectivity. <b>2017</b> , 7, 44		34
322	Discovering and Utilizing Structure Sensitivity: From Chemical Catalysis in the Gas Phase to Electrocatalysis in the Liquid Phase. <b>2017</b> , 177, 613-641		1
321	Poly-L-lysine mediated synthesis of palladium nanochain networks and nanodendrites as highly efficient electrocatalysts for formic acid oxidation and hydrogen evolution. <b>2018</b> , 516, 325-331		24
320	Silver-Assisted Synthesis of Gold Nanorods: the Relation between Silver Additive and Iodide Impurities. <b>2018</b> , 14, e1703879		23

319	Noble Metal Electrocatalysts for Anode and Cathode in Polymer Electrolyte Fuel Cells. <b>2018</b> , 171-197		1
318	AuPd NPs immobilised on nanostructured ceria and titania: impact of support morphology on the catalytic activity for selective oxidation. <b>2018</b> , 8, 2529-2539		23
317	NanoMOFs: little crystallites for substantial applications. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 7338-7350	13	54
316	Modeling the characteristic etch morphologies along specific crystallographic orientations by anisotropic chemical etching. <b>2018</b> , 8, 025214		0
315	Chemistry of Hume-Rothery inspired organometallics: Selective functionalization of [M(ZnCp*) <sub>4</sub> (ZnCH <sub>3</sub> ) <sub>4</sub> ] (M = Ni, Pd, Pt) with terminal alkynes to yield [M(ZnCp*) <sub>4</sub> (ZnCCSi i Pr) <sub>4</sub> ]. <b>2018</b> , 860, 78-84		8
314	Insights into the high performance of Mn-Co oxides derived from metal-organic frameworks for total toluene oxidation. <b>2018</b> , 349, 119-127		108
313	Crystal-plane effects of MFI zeolite in catalytic conversion of methanol to hydrocarbons. <i>Journal of Catalysis</i> , <b>2018</b> , 360, 89-96	7.3	35
312	Directed self-assembly of dual metal ions with ligands: towards the synthesis of noble metal/metal oxide composites with controlled facets. <i>Chemical Communications</i> , <b>2018</b> , 54, 2044-2047	5.8	2
311	Surface/Interfacial Catalysis of (Metal)/Oxide System: Structure and Performance Control. <b>2018</b> , 10, 2125-2163		18
310	Nanostructured equimolar ceria-praseodymia for NO <sub>x</sub> -assisted soot oxidation: Insight into Pr dominance over Pt nanoparticles and metal-support interaction. <b>2018</b> , 226, 147-161		41
309	Surface step decoration of isolated atom as electron pumping: Atomic-level insights into visible-light hydrogen evolution. <b>2018</b> , 45, 109-117		80
308	Influence of copper oxide grown on various conducting substrates towards improved performance for photoelectrocatalytic bacterial inactivation. <b>2018</b> , 451, 161-169		12
307	Unlocking the door to highly active ORR catalysts for PEMFC applications: polyhedron-engineered Pt-based nanocrystals. <b>2018</b> , 11, 258-275		255
306	Unsupported shaped cobalt nanoparticles as efficient and recyclable catalysts for the solvent-free acceptorless dehydrogenation of alcohols. <b>2018</b> , 8, 562-572		15
305	Facet-dependent photocatalysis of nanosize semiconductive metal oxides and progress of their characterization. <b>2018</b> , 18, 15-34		66
304	Template-free hydrothermal synthesis and luminescence properties of NaGd(WO <sub>4</sub> ) <sub>2</sub> :Eu <sup>3+</sup> red phosphors with controlled morphology. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2018</b> , 29, 5034-5041	2.1	5
303	Facet and Phase-dependent Electroanalysis Performance of Nanocrystals in PTS Monitoring: Demonstrated by Density Functional Theory X-ray Absorption Fine Structure Spectroscopy. <b>2018</b> , 195-261		
302	Simple synthesis and surface facet-tuning of ultrathin alloy-shells of Au@AuPd nanoparticles via silver-assisted co-reduction onto facet-controlled Au nanoparticles. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 7675-7685	13	20

301	Optimum Particle Size for Gold-Catalyzed CO Oxidation. <b>2018</b> , 122, 8327-8340		28
300	Shape dependence and sulfate promotion of CeO <sub>2</sub> for selective catalytic reduction of NO with NH <sub>3</sub> . <b>2018</b> , 232, 246-259		103
299	Crystal Engineering for Catalysis. <b>2018</b> , 9, 283-309		25
298	Carbon Capture by Metal Oxides: Unleashing the Potential of the (111) Facet. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 4736-4742	16.4	56
297	A Universal Method to Engineer Metal Oxide-Metal-Carbon Interface for Highly Efficient Oxygen Reduction. <i>ACS Nano</i> , <b>2018</b> , 12, 3042-3051	16.7	88
296	One-step green synthesis of silver nanobelts assisted by sodium carboxymethylcellulose for catalytic reduction of 4-nitrophenol. <i>CrystEngComm</i> , <b>2018</b> , 20, 2135-2143	3.3	8
295	Computational insights into crystal plane dependence of thermal and photoresponse of pure and palladium-substituted titania. <b>2018</b> , 143, 528-541		4
294	Sonochemical fabrication of reduced graphene oxide supported Au nano dendrites for ethanol electrooxidation in alkaline medium. <i>Catalysis Today</i> , <b>2018</b> , 307, 308-317	5.3	17
293	Insight into the Role of Pd State on Pd-Based Catalysts in o-Xylene Oxidation at Low Temperature. <b>2018</b> , 10, 998-1004		17
292	Influence of Carbon Support on Catalytic Layer Performance of Proton Exchange Membrane Fuel Cells. <b>2018</b> , 9, 22-30		8
291	Insights into perovskite-catalyzed peroxymonosulfate activation: Maneuverable cobalt sites for promoted evolution of sulfate radicals. <b>2018</b> , 220, 626-634		274
290	Crystal-plane engineering of NiCo <sub>2</sub> O <sub>4</sub> electrocatalysts towards efficient overall water splitting. <i>Journal of Catalysis</i> , <b>2018</b> , 357, 238-246	7.3	97
289	Insight of DFT and ab initio atomistic thermodynamics on the surface stability and morphology of In <sub>2</sub> O <sub>3</sub> . <b>2018</b> , 434, 1344-1352		30
288	Facile synthesis of ultrafine cobalt oxides embedded into N-doped carbon with superior activity in hydrogenation of 4-nitrophenol. <b>2018</b> , 512, 844-852		34
287	Morphology-dependent catalytic properties of nanocupric oxides in the Rochow reaction. <i>Nano Research</i> , <b>2018</b> , 11, 804-819	10	17
286	Dynamical and Structural Characterization of the Adsorption of Fluorinated Alkane Chains onto CeO <sub>2</sub> . <b>2018</b> , 122, 23405-23413		2
285	From nanoparticles to mesoporous materials. <b>2018</b> , 129-144		
284	Titania-morphology-dependent dual-perimeter-sites catalysis by Au/TiO <sub>2</sub> catalysts in low-temperature CO oxidation. <i>Journal of Catalysis</i> , <b>2018</b> , 368, 163-171	7.3	37



283	Elucidation of Tip-Broadening Effect in Tip-Enhanced Raman Spectroscopy (TERS): A Cause of Artifacts or Potential for 3D TERS. <b>2018</b> , 122, 24334-24340		19
282	The surface science of nanoparticles for catalysis: electronic and steric effects of organic ligands. <b>2018</b> , 20, 1		13
281	Facet-controlled morphology of cobalt disulfide towards enhanced oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 22545-22554	13	31
280	Fe <sub>2</sub> O <sub>3</sub> hollow microspheres as highly selective catalysts for the production of Bolefins. <b>2018</b> , 42, 17923-17930	2	
279	Controllable dynamics of oxygen vacancies through extrinsic doping for superior catalytic activities. <b>2018</b> , 10, 18576-18585		26
278	Facet effect of Co <sub>3</sub> O <sub>4</sub> nanocrystals on visible-light driven water oxidation. <b>2018</b> , 237, 74-84		68
277	Au(SR): the captain of the great nanocluster ship. <b>2018</b> , 10, 10758-10834		159
276	In-situ incorporation of carbon dots into mesoporous nickel boride for regulating photocatalytic activities. <b>2018</b> , 137, 484-492		32
275	A mechanistic study of CO oxidation over spinel MnFe <sub>2</sub> O <sub>4</sub> surface during chemical-looping combustion. <b>2018</b> , 230, 410-417		24
274	MOF-Confined Sub-2 nm Atomically Ordered Intermetallic PdZn Nanoparticles as High-Performance Catalysts for Selective Hydrogenation of Acetylene. <b>2018</b> , 30, e1801878		77
273	Direct Molten Polymerization Synthesis of Highly Active Samarium Manganese Perovskites with Different Morphologies for VOC Removal. <b>2018</b> , 57, 8451-8457		34
272	Ru Nanospheres in Water Drops for Enhanced Catalytic Performances in Selective Hydrogenation. <i>ACS Applied Energy Materials</i> , <b>2018</b> , 1, 4277-4284	6.1	10
271	Interfacial Chemistry of Low-Dimensional Systems for Applications in Nanocatalysis. <b>2018</b> , 2018, 4311-4321		5
270	Machine learning hydrogen adsorption on nanoclusters through structural descriptors. <b>2018</b> , 4,		93
269	The sensing reaction on the Ni-NiO (111) surface at atomic and molecule level and migration of electron. <b>2018</b> , 273, 794-803		12
268	When Crystals Go Nano – The Role of Advanced X-ray Total Scattering Methods in Nanotechnology. <b>2018</b> , 2018, 3789-3803		20
267	A Droplet-Reactor System Capable of Automation for the Continuous and Scalable Production of Noble-Metal Nanocrystals. <b>2018</b> , 18, 3879-3884		38
266	Unraveling Kinetically-Driven Mechanisms of Gold Nanocrystal Shape Transformations Using Graphene Liquid Cell Electron Microscopy. <b>2018</b> , 18, 5731-5737		47

265	Hollow Metal Nanocrystals with Ultrathin, Porous Walls and Well-Controlled Surface Structures. <b>2018</b> , 30, e1801956		53
264	Visualizing Facet-Dependent Hydrogenation Dynamics in Individual Palladium Nanoparticles. <b>2018</b> , 18, 5357-5363		22
263	Getting Insights into the Influence of Crystal Plane Effect of Shaped Ceria on Its Catalytic Performances. <b>2018</b> , 122, 20402-20409		20
262	Understanding the facet-dependent catalytic performance of hematite microcrystals in a CO oxidation reaction. <b>2018</b> , 5, 2332-2339		16
261	A simple, scalable approach for combining carbon dots with hexagonal nanoplates of nickel-based compounds for efficient photocatalytic reduction. <b>2018</b> , 47, 12694-12701		2
260	Highly Active Surface Structure in Nanosized Spinel Cobalt-Based Oxides for Electrocatalytic Water Splitting. <b>2018</b> , 122, 14447-14458		12
259	Improving Catalytic Hydrogenation Performance of Pd Nanoparticles by Electronic Modulation Using Phosphine Ligands. <i>ACS Catalysis</i> , <b>2018</b> , 8, 6476-6485	13.1	98
258	Rational Design of Catalytic Centers in Crystalline Frameworks. <b>2018</b> , 30, e1707582		70
257	Electrical properties of nanocube CeO <sub>2</sub> in advanced solid oxide fuel cells. <b>2018</b> , 43, 12909-12916		57
256	Shape dependence of support for NO storage and reduction catalysts. <b>2019</b> , 75, 396-407		2
255	Functionalization of Hollow Nanomaterials for Catalytic Applications: Nanoreactor Construction. <b>2019</b> , 31, e1800426		147
254	Role of well-defined cobalt crystal facets in Fischer-Tropsch synthesis: a combination of experimental and theoretical studies. <i>Chemical Communications</i> , <b>2019</b> , 55, 10559-10562	5.8	11
253	An Environmental Transmission Electron Microscopy Study of the Stability of the TiO <sub>2</sub> (1 1 1) Reconstructed (001) Surface. <b>2019</b> , 123, 21522-21527		9
252	Adsorption of Acetate on Au(111): An in-situ Scanning Tunnelling Microscopy Study and Implications on Formic Acid Electrooxidation. <b>2019</b> , 20, 2989-2996		7
251	Surfactant-free synthesis of porous Au by a urea complex.. <b>2019</b> , 9, 23081-23085		5
250	Enhancing C-H Bond Scission for Efficient Ethanol Oxidation using PtIr Nanocube Electrocatalysts. <i>ACS Catalysis</i> , <b>2019</b> , 9, 7618-7625	13.1	44
249	Improved Photocatalytic Hydrogen Evolution of CdS Using Earth-Abundant Cocatalyst Mo <sub>2</sub> N with Rod Shape and Large Capacitance. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 13569-13575	8.3	23
248	Surface chemistry and catalysis of oxide model catalysts from single crystals to nanocrystals. <b>2019</b> , 74, 100471		65

247	Highly faceted layered orientation in SnSSe nanosheets enables facile Li <sup>+</sup> -Diffusion channels. <b>2019</b> , 318, 937-948		7
246	Interfacial Super-Assembled Porous CeO <sub>2</sub> /C Frameworks Featuring Efficient and Sensitive Decomposing Li <sub>2</sub> O <sub>2</sub> for Smart LiO <sub>2</sub> Batteries. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1901751	21.8	53
245	Strain Relaxation-Induced Twin Interface Migration and Morphology Evolution of Silver Nanoparticles. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 842-850	9.6	13
244	Thermal Reshaping of Gold Microplates: Three Possible Routes and Their Transformation Mechanisms. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 41813-41820	9.5	7
243	Improved methane oxidation activity of P-doped Al <sub>2</sub> O <sub>3</sub> supported palladium catalysts by tailoring the oxygen mobility and electronic properties. <b>2019</b> , 44, 27772-27783		11
242	Anisotropic nanomaterials for shape-dependent physicochemical and biomedical applications. <b>2019</b> , 48, 5140-5176		97
241	Controllable synthesis of Au nanocrystals with systematic shape evolution from an octahedron to a truncated ditetragonal prism and rhombic dodecahedron. <i>CrystEngComm</i> , <b>2019</b> , 21, 5602-5609	3.3	8
240	Self-assembly and wetting properties of gold nanorod-CTAB molecules on HOPG. <b>2019</b> , 10, 696-705		9
239	Electrocatalysis of Oxygen Reduction Reaction on Shape-Controlled Pt and Pd Nanoparticles-Importance of Surface Cleanliness and Reconstruction. <i>Frontiers in Chemistry</i> , <b>2019</b> , 7, 648	5	17
238	Isovalent bismuth ion-induced growth of highly-disperse Sb <sub>2</sub> S <sub>3</sub> nanorods and their composite with p-CuSCN for self-powered photodetectors. <i>CrystEngComm</i> , <b>2019</b> , 21, 554-562	3.3	9
237	Size and shape controlled synthesis of rhodium nanoparticles. <b>2019</b> , 5, e01165		15
236	How to control selectivity in alkane oxidation?. <b>2019</b> , 10, 2429-2443		18
235	Facile controlled synthesis of AgPO with various morphologies for enhanced photocatalytic oxygen evolution from water splitting.. <b>2019</b> , 9, 18222-18231		7
234	Interfacial-engineered cobalt@carbon hybrids for synergistically boosted evolution of sulfate radicals toward green oxidation. <b>2019</b> , 256, 117795		62
233	Advanced on-site glucose sensing platform based on a new architecture of free-standing hollow Cu(OH) nanotubes decorated with CoNi-LDH nanosheets on graphite screen-printed electrode. <b>2019</b> , 11, 12655-12671		34
232	ZnO supported on Cu <sub>2</sub> O{1 0 0} enhances charge transfer in dimethyldichlorosilane synthesis. <i>Journal of Catalysis</i> , <b>2019</b> , 374, 284-296	7.3	12
231	Morphologie-optimierte hochaktive und -stabile Ru/TiO <sub>2</sub> -Katalysatoren für die selektive CO-Methanisierung. <b>2019</b> , 131, 10842-10847		5
230	Morphology-Engineered Highly Active and Stable Ru/TiO Catalysts for Selective CO Methanation. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 10732-10736	16.4	41

229	Surface Reconstructions of Metal Oxides and the Consequences on Catalytic Chemistry. <i>ACS Catalysis</i> , <b>2019</b> , 9, 5692-5707	13.1	65
228	Plasmon-Enhanced Hydrogen Evolution on Specific Facet of Silver Nanocrystals. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 3722-3728	9.6	16
227	Synthesis of platelet-like BiVO <sub>4</sub> using hyperbranched polyethyleneimine for the formation of heterojunctions with Bi <sub>2</sub> O <sub>3</sub> . <b>2019</b> , 9, 1501-1514		6
226	Morphology evolution of fcc Ru nanoparticles under hydrogen atmosphere. <b>2019</b> , 11, 8037-8046		13
225	Tailoring the photoluminescence of atomically precise nanoclusters. <b>2019</b> , 48, 2422-2457		404
224	Understanding CeO <sub>2</sub> -Based Nanostructures through Advanced Electron Microscopy in 2D and 3D. <b>2019</b> , 36, 1800287		13
223	Propanol-Triggered Luminescence for Rapid Screening of Crystal Facets in Noble Metal. <b>2019</b> , 91, 4513-4519		11
222	Bimetallic (Zn/Co) MOFs-Derived Highly Dispersed Metallic Co/HPC for Completely Hydrolytic Dehydrogenation of AmmoniaBorane. <b>2019</b> , 58, 7209-7216		27
221	Efficient Catalysts of La <sub>2</sub> O <sub>3</sub> Nanorod-Supported Pt Nanoparticles for Soot Oxidation: The Role of La <sub>2</sub> O <sub>3</sub> -{110} Facets. <b>2019</b> , 58, 7074-7084		11
220	Photocorrosion Inhibition of Semiconductor-Based Photocatalysts: Basic Principle, Current Development, and Future Perspective. <i>ACS Catalysis</i> , <b>2019</b> , 9, 4642-4687	13.1	253
219	Selective oxidation of glycerol on morphology controlled ceria nanomaterials. <b>2019</b> , 9, 2328-2334		17
218	Heterogeneous Catalytic Conversion of Greenhouse Gas CO <sub>2</sub> to Fuels. <b>2019</b> , 57-80		3
217	Improving sensing performance of the ZnO foam structure with exposed {001} facets by hydrogenation and sensing mechanism at molecule level. <b>2019</b> , 479, 646-654		12
216	Controlled Synthesis of Spinel-Type Mesoporous MnCo Rods for SCR of NO <sub>x</sub> with NH <sub>3</sub> at Low Temperature. <b>2019</b> , 58, 3606-3617		37
215	Hydrothermal synthesis of novel rhombic dodecahedral SnS nanocrystals for highly efficient photothermal therapy. <i>Chemical Communications</i> , <b>2019</b> , 55, 2789-2792	5.8	9
214	Anisotropic photogenerated charge separations between different facets of a dodecahedral Fe <sub>2</sub> O <sub>3</sub> photocatalyst. <i>CrystEngComm</i> , <b>2019</b> , 21, 6390-6395	3.3	1
213	Surface Chemistry of CH <sub>2</sub> I <sub>2</sub> on Clean, Hydrogen- and Carbon Monoxide-Covered Co(0001) Surfaces. <b>2019</b> , 123, 7740-7748		3
212	Persulfate non-radical activation by nano-CuO for efficient removal of chlorinated organic compounds: Reduced graphene oxide-assisted and CuO (0 0 1) facet-dependent. <b>2019</b> , 356, 178-189		73

211	Structurally modified CuFe <sub>2</sub> O <sub>4</sub> /persulfate process for acetaminophen scavenging: high efficiency with low catalyst addition. <b>2019</b> , 94, 785-794		11
210	Insights into the crystal size and morphology of photocatalysts. <b>2019</b> , 538, 638-647		14
209	Surface and interface design for heterogeneous catalysis. <i>Physical Chemistry Chemical Physics</i> , <b>2019</b> , 21, 523-536	3.6	29
208	Cube-like LaFeO <sub>3</sub> microstructures synthesised by a hydrothermal method and their optical properties. <b>2019</b> , 14, 259-262		1
207	Colloidal nanocrystals for heterogeneous catalysis. <b>2019</b> , 24, 15-47		68
206	Synergistic effects in gas sensing semiconducting oxide nano-heterostructures: A review. <b>2019</b> , 286, 624-640		247
205	Role of aliphatic ligands and solvent composition in the solvothermal synthesis of iron oxide nanocrystals. <b>2019</b> , 157, 54-62		8
204	Designed inorganic nanomaterials for intrinsic peroxidase mimics: A review. <b>2019</b> , 283, 18-34		51
203	Selective hydrogenation of cinnamaldehyde by unsupported and few layer graphene supported platinum concave nanocubes exposing {110} facets stabilized by a long-chain amine. <i>Catalysis Today</i> , <b>2020</b> , 357, 166-175	5.3	4
202	Selective Hydrogenation over Supported Metal Catalysts: From Nanoparticles to Single Atoms. <i>Chemical Reviews</i> , <b>2020</b> , 120, 683-733	68.1	419
201	Palladium Nanocatalysts Encapsulated on Porous Silica @ Magnetic Carbon-Coated Cobalt Nanoparticles for Sustainable Hydrogenation of Nitroarenes, Alkenes and Alkynes.. <b>2020</b> , 12, 569-575		8
200	Construction of hierarchical functional nanomaterials for energy conversion and storage. <b>2020</b> , 48, 34-47		4
199	Rational Design of Ag-Based Catalysts for the Electrochemical CO Reduction to CO: A Review. <b>2020</b> , 13, 39-58		55
198	Synthesis of PdH <sub>0.43</sub> nanocrystals with different surface structures and their catalytic activities towards formic acid electro-oxidation. <b>2020</b> , 63, 375-382		14
197	Continuous Flow Routes toward Designer Metal Nanocatalysts. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 1902051	21.8	9
196	Equilibrium morphology evolution of FCC cobalt nanoparticle under CO and hydrogen environments. <b>2020</b> , 504, 144469		4
195	Effects of alumina morphology on dry reforming of methane over Ni/Al <sub>2</sub> O <sub>3</sub> catalysts. <b>2020</b> , 10, 510-516		21
194	Block copolymer-templated electrodeposition of mesoporous Au-Ni alloy films with tunable composition. <b>2020</b> , 18, 100526		15

193	Well-Defined Materials for Heterogeneous Catalysis: From Nanoparticles to Isolated Single-Atom Sites. <i>Chemical Reviews</i> , <b>2020</b> , 120, 623-682	68.1	407
192	Supramolecular confinement of single Cu atoms in hydrogel frameworks for oxygen reduction electrocatalysis with high atom utilization. <b>2020</b> , 35, 78-86		45
191	Selective oxidation using Au-Pd catalysts: Role of the support in the stabilization of colloidal Au-Pd NPs. <i>Catalysis Today</i> , <b>2020</b> , 348, 203-211	5.3	1
190	CoO-decorated CeO heterostructures: effects of morphology on their catalytic properties in diesel soot combustion. <b>2020</b> , 12, 1779-1789		23
189	Enhancing gas sensitivity of CdO octahedrons having {111} facets by hydrogenation and sensing mechanism of 3-coordinated Cd atoms as the reactive centers. <b>2020</b> , 506, 144868		7
188	Effect of Cu Preferential Orientation on the Microstructure and Properties of Anodized Cu <sub>x</sub> O Films. <b>2020</b> , 2020, 261-268		8
187	Catalysis with Colloidal Ruthenium Nanoparticles. <i>Chemical Reviews</i> , <b>2020</b> , 120, 1085-1145	68.1	65
186	Thermodynamic Evolution of Cerium Oxide Nanoparticle Morphology Using Carbon Dioxide. <b>2020</b> , 124, 23210-23220		6
185	Controlling palladium morphology in electrodeposition from nanoparticles to dendrites the use of mixed solvents. <b>2020</b> , 12, 21757-21769		3
184	Recent Progress in Engineering the Atomic and Electronic Structure of Electrocatalysts via Cation Exchange Reactions. <b>2020</b> , 32, e2001866		45
183	Preserving the shape of silver nanocubes under corrosive environment by covering their edges and corners with iridium. <b>2020</b> , 12, 20859-20867		1
182	Steering Hollow Multishelled Structures in Photocatalysis: Optimizing Surface and Mass Transport. <b>2020</b> , 32, e2002556		63
181	Hydrothermal Synthesis of Euhedral Co <sub>3</sub> O <sub>4</sub> Nanocrystals via Nutrient-Assisted Topotactic Transformation of the Layered Co(OH) <sub>2</sub> Precursor under Anoxic Conditions: Insights into Intricate Routes Leading to Spinel Phase Development and Shape Perfection. <b>2020</b> , 20, 7771-7787		2
180	Toward Informed Design of Nanomaterials: A Mechanistic Analysis of Structure-Property-Function Relationships for Faceted Nanoscale Metal Oxides. <i>ACS Nano</i> , <b>2020</b> ,	16.7	12
179	Recent Advances in Synthesis of Metal-Carbon Nanocomposites and Their Application in Catalytic Hydrogenation Reactions. <b>2020</b> , 403-458		0
178	Atomically precise alloy nanoclusters: syntheses, structures, and properties. <b>2020</b> , 49, 6443-6514		186
177	Preparation of Anisotropic MnO <sub>2</sub> Nanocatalysts for Selective Oxidation of Benzyl Alcohol and 5-Hydroxymethylfurfural. <b>2020</b> , 26, 382-390		5
176	Regulation of intrinsic physicochemical properties of metal oxide nanomaterials for energy conversion and environmental detection applications. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 17326-17359	13	11

175	Large-scale and facile synthesis of a porous high-entropy alloy CrMnFeCoNi as an efficient catalyst. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 18318-18326	13	12
174	Adsorption of NO <sub>2</sub> and NO <sub>3</sub> on Cobalt Spinel Nanocubes and Interfacial Dynamics of the Resultant NO <sub>x</sub> Adspecies (x = 1, 2, and 3): DFT, Atomistic Thermodynamic, IR, and Isotopic Exchange Study. <b>2020</b> , 124, 19681-19697		6
173	Surface Coordination Chemistry of Atomically Dispersed Metal Catalysts. <i>Chemical Reviews</i> , <b>2020</b> , 120, 11810-11899	68.1	134
172	Atomically Precise Nanocrystals. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 15627-15637	16.4	23
171	Recent Advances in Supported Metal Catalysts and Oxide Catalysts for the Reverse Water-Gas Shift Reaction. <i>Frontiers in Chemistry</i> , <b>2020</b> , 8, 709	5	22
170	A Density Functional Theory Study on the Mechanism of Complete Ethanol Oxidation on Ir(100): Surface Diffusion-Controlled C-H Bond Cleavage. <b>2020</b> , 124, 26953-26964		10
169	High-Index-Facet- and High-Surface-Energy Nanocrystals of Metals and Metal Oxides as Highly Efficient Catalysts. <b>2020</b> , 4, 2562-2598		43
168	A Review on Particle Size Effect in Metal-Catalyzed Heterogeneous Reactions. <i>Chinese Journal of Chemistry</i> , <b>2020</b> , 38, 1422-1444	4.9	32
167	Synthesis in Silica Nanoreactor: Copper Pyrophosphate Quantum Dots and Silver Oxide Nanocrystallites Inside Silica Mezochannels. <b>2020</b> , 13,		1
166	A photocatalytic transformation realized by Pd/TiO <sub>2</sub> particle size modulation: from oxidative dehydrogenation of ethane to direct dehydrogenation of ethane. <b>2020</b> , 395, 125120		7
165	Rational Catalyst Design for N <sub>2</sub> Reduction under Ambient Conditions: Strategies toward Enhanced Conversion Efficiency. <i>ACS Catalysis</i> , <b>2020</b> , 10, 6870-6899	13.1	126
164	Facettierte verzweigte Nickel-Nanopartikel mit variierbarer Verzweigungslänge für die hochaktive elektrokatalytische Oxidation von Biomasse. <b>2020</b> , 132, 15615-15620		13
163	Synergistic effects of octahedral TiO-MIL-101(Cr) with two heterojunctions for enhancing visible-light photocatalytic degradation of liquid tetracycline and gaseous toluene. <b>2020</b> , 579, 37-49		90
162	Size-Dependent Structures and Catalytic Performances of Au/TiO <sub>2</sub> -{001} Catalysts for Propene Epoxidation. <b>2020</b> , 124, 15264-15274		3
161	Understanding the role of ionic flux on the polarity of the exposed surfaces of ZnO. <i>Physical Chemistry Chemical Physics</i> , <b>2020</b> , 22, 15427-15436	3.6	2
160	Morphology-dependent formaldehyde detection of porous copper oxide hierarchical microspheres at near-room temperature. <b>2020</b> , 302, 110232		9
159	In-Situ Probing of Crystal-Phase-Dependent Photocatalytic Activities of Au Nanostructures by Surface-Enhanced Raman Spectroscopy. <b>2020</b> , 2, 409-414		14
158	Formation mechanism and size control of ceria nanocubes. <i>CrystEngComm</i> , <b>2020</b> , 22, 3033-3041	3.3	9

157	Beyond surface redox and oxygen mobility at pd-polar ceria (100) interface: Underlying principle for strong metal-support interactions in green catalysis. <b>2020</b> , 270, 118843		9
156	Hollow Mn <sub>3</sub> O <sub>4</sub> nanospheres on graphene matrix for oxygen reduction reaction and supercapacitance applications: Experimental and theoretical insight. <b>2020</b> , 471, 228465		23
155	Hydrogenated Cu <sub>2</sub> O octahedrons with exposed {111} facets: Enhancing sensing performance and sensing mechanism of 1-coordinated Cu atom as a reactive center. <b>2020</b> , 310, 127827		11
154	Recent Advances on the Rational Design of Non-Precious Metal Oxide Catalysts Exemplified by CuO <sub>x</sub> /CeO <sub>2</sub> Binary System: Implications of Size, Shape and Electronic Effects on Intrinsic Reactivity and Metal-Support Interactions. <b>2020</b> , 10, 160		36
153	Enhancing gas-sensing property and sensing mechanism at molecule level of the hollow microspheres assembled with ZnO nanoflakes exposing {001} facets. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2020</b> , 31, 6118-6129	2.1	5
152	Interaction of nitric oxide with the (100) surface of cobalt spinel nanocubes: A comprehensive DFT, atomistic thermodynamic, IR and TPD account. <b>2020</b> , 513, 145835		7
151	High-performance natural-sunlight-driven Ag/AgCl photocatalysts with a cube-like morphology and blunt edges via a bola-type surfactant-assisted synthesis. <i>Physical Chemistry Chemical Physics</i> , <b>2020</b> , 22, 3940-3952	3.6	10
150	Erbium-doped oxygen deficient cerium oxide: bi-functional material in the field of spintronics and photocatalysis. <b>2020</b> , 10, 1721-1733		12
149	Aqueous Synthesis of Pd <sub>M</sub> (M = Pd, Pt, and Au) Decahedra with Concave Facets for Catalytic Applications. <b>2020</b> , 63, 664-672		4
148	A P-doped PtTe mesoporous nanotube electrocatalyst. <b>2020</b> , 4, 2950-2955		6
147	Facet-Dependent Oxygen Reduction Reaction Activity on the Surfaces of Co <sub>3</sub> O <sub>4</sub> . <b>2020</b> , 4, 407		5
146	Facets and Defects in Perovskite Nanocrystals for Photocatalytic CO Reduction. <b>2020</b> , 11, 3608-3614		35
145	New perspectives on the nature and imaging of active site in small metallic particles: II. Electronic effects. <b>2021</b> , 208, 411-431		1
144	Catalytic Performance for the Conversion of Potent Fluorinated Greenhouse Gases by Aluminium Fluorides with Different Morphology. <b>2021</b> , 151, 2065-2074		0
143	Unusual positive effect of SO <sub>2</sub> on Mn-Ce mixed-oxide catalyst for the SCR reaction of NO <sub>x</sub> with NH <sub>3</sub> . <b>2021</b> , 407, 127071		26
142	Ultrathin nanoflake-assembled hierarchical BiOBr microflower with highly exposed {001} facets for efficient photocatalytic degradation of gaseous ortho-dichlorobenzene. <b>2021</b> , 281, 119478		45
141	Sulfite activation and tetracycline removal by rectangular copper oxide nanosheets with dominantly exposed (0 0 1) reactive facets: Performance, degradation pathway and mechanism. <b>2021</b> , 406, 126693		26
140	Nanoscale engineering of catalytic materials for sustainable technologies. <b>2021</b> , 16, 129-139		62



- 139 Ultra-small hollow ternary alloy nanoparticles for efficient hydrogen evolution reaction. **2021**, 8, nwaa204 5
- 138 Noble-Metal Based Random Alloy and Intermetallic Nanocrystals: Syntheses and Applications. *Chemical Reviews*, **2021**, 121, 736-795 68.1 92
- 137 Synthesis, Structure and Catalytic Properties of Faceted Oxide Crystals. **2021**, 13, 6-27 3
- 136 New perspectives on the nature and imaging of active site in small metallic particles: I. Geometric effects. **2021**, 208, 89-109
- 135 Stable lead-halide perovskite quantum dots as efficient visible light photocatalysts for organic transformations. **2021**, 3, 1464-1472 8
- 134 Atomically precise vanadium-oxide clusters. **2021**, 3, 1293-1318 10
- 133 Self-Assembly and Polymorphic Transformation of Butterfly-Shaped Organic Nanocrystals from a Windmill-like Bulky Small Molecule. **2021**, 21, 1113-1121 1
- 132 Hairy silica nanosphere supported metal nanoparticles for reductive degradation of dye pollutants. **2021**, 3, 2879-2886 3
- 131 CHAPTER 5:Gases. **2021**, 97-129 1
- 130 Recent advancements in coinage metal nanostructures and bio-applications. **2021**, 2, 1507-1529 13
- 129 Probing surface-sensitive redox properties of VO/TiO catalyst nanoparticles. **2021**, 13, 7266-7272 3
- 128 Rhodium nanoparticles inside well-defined unimolecular amphiphilic polymeric nanoreactors: synthesis and biphasic hydrogenation catalysis. **2021**, 3, 2554-2566 4
- 127 Recent Progress in 5-Hydroxymethylfurfural Catalytic Oxidation to 2,5-Furandicarboxylic Acid. **2021**, 25, 404-416 2
- 126 Complete catalytic oxidation of formaldehyde at room temperature on  $Mn_xCo_{3-x}O_4$  catalysts derived from metal-organic frameworks. **2021**, 611, 117975 6
- 125 Nature and Role of Surface Junctions in BiOI<sub>3</sub> Photocatalysts. **2021**, 31, 2009472 9
- 124 Study on the adsorption selection of CH<sub>4</sub> on CuO (110) versus (111) surfaces: a density functional theory study. **2021**, 3, 1
- 123 Photogenerated Charge Separation between Polar Crystal Facets Under a Spontaneous Electric Field. **2021**, 9, 2001898 2
- 122 Facet-Dependent Reactivity of Ceria Nanoparticles Exemplified by CeO<sub>2</sub>-Based Transition Metal Catalysts: A Critical Review. **2021**, 11, 452 12

121	New Trends in the Design of Metal Nanoparticles and Derived Nanomaterials for Catalysis. <b>2021</b> , 1-11		
120	How the Morphology of NiO-Decorated CeO Nanostructures Affects Catalytic Properties in CO Methanation. <b>2021</b> , 37, 5376-5384		8
119	Understanding the Solution-Phase Growth of Cu and Ag Nanowires and Nanocubes from First Principles. <b>2021</b> , 37, 4419-4431		5
118	Enhancing the CO-to-CO Conversion from 2D Silver Nanoprisms Superstructure Assembly. <i>ACS Nano</i> , <b>2021</b> , 15, 7682-7693	16.7	11
117	A Strategy to Develop Efficient Ag <sub>3</sub> PO <sub>4</sub> -based Photocatalytic Materials Toward Water Splitting: Perspectives and Challenges. <b>2021</b> , 13, 2965-2987		8
116	Synthesis of (111) facet-engineered MgO nanosheet from coal fly ash and its superior catalytic performance for high-temperature water gas shift reaction. <b>2021</b> , 618, 118132		4
115	Thermodynamic stability and electronic structure properties of the Bi <sub>2</sub> WO <sub>6</sub> (0 0 1) surface: First principle calculation. <b>2021</b> , 548, 149053		6
114	Recent advances in wireless photofixation of dinitrogen to ammonia under the ambient condition: A review. <b>2021</b> , 47, 100402		6
113	A cobalt coordination polymer from bulk to nanoscale crystals as heterogeneous catalysts for tandem reactions. <b>2021</b> , 299, 122174		
112	Shape effect of cerium oxide nanoparticles on mild traumatic brain injury. <b>2021</b> , 11, 15571		4
111	The active sites of Cu-ZnO catalysts for water gas shift and CO hydrogenation reactions. <i>Nature Communications</i> , <b>2021</b> , 12, 4331	17.4	20
110	Importance of Surface Topography in Both Biological Activity and Catalysis of Nanomaterials: Can Catalysis by Design Guide Safe by Design?. <b>2021</b> , 22,		1
109	Facet effect of In <sub>2</sub> O <sub>3</sub> for methanol synthesis by CO <sub>2</sub> hydrogenation: A mechanistic and kinetic study. <b>2021</b> , 25, 101244		2
108	Heterojunction photocatalysts for degradation of the tetracycline antibiotic: a review. <b>2021</b> , 1-39		16
107	Prussian blue-based nanostructured materials: Catalytic applications for environmental remediation and energy conversion. <b>2021</b> , 514, 111835		8
106	Facile Regeneration Strategy for Facet-Controlled Nanocatalysts via the Dissolution/Reprecipitation Process Promoted by an Organic Modifier. <i>Chemistry of Materials</i> ,	9.6	1
105	Nanosized ZnInS supported on facet-engineered CeO nanorods for efficient gaseous elemental mercury immobilization. <b>2021</b> , 419, 126436		21
104	High entropy nanoparticles of CoCrXFeNi (X=Al, Cu, Mn) loaded on activated carbon for efficient degradation of methylene blue. <b>2021</b> , 15, 256-267		0

103	Mechanism study on the high-performance BaFe <sub>2</sub> O <sub>4</sub> during chemical looping gasification. <b>2022</b> , 307, 121847		2
102	Improving the sensitivity of contrast-enhanced MRI and sensitive diagnosing tumors with ultralow doses of MnO octahedrons. <b>2021</b> , 11, 6966-6982		3
101	Morphology effects of CeO <sub>2</sub> -ZrO <sub>2</sub> on the catalytic performance of CuO/CeO <sub>2</sub> -ZrO <sub>2</sub> for toluene oxidation. <b>2021</b> , 4, 55-60		4
100	Morphology-dependent nanocatalysis: tricobalt tetraoxide. <b>2021</b> , 47, 195-209		1
99	Recent advances in zinc chalcogenide-based nanocatalysts for photocatalytic reduction of CO <sub>2</sub> . <i>Journal of Materials Chemistry A</i> ,	13	4
98	Heterogeneous catalysts for CO <sub>2</sub> hydrogenation to formic acid/formate: from nanoscale to single atom. <b>2021</b> , 14, 1247-1285		48
97	Confined Transformation of Organometal-Encapsulated MOFs into Spinel CoFe <sub>2</sub> O <sub>4</sub> /C Nanocubes for Low-Temperature Catalytic Oxidation. <b>2020</b> , 30, 1910257		29
96	Faceted Branched Nickel Nanoparticles with Tunable Branch Length for High-Activity Electrocatalytic Oxidation of Biomass. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 15487-15491 <sup>16.4</sup>		41
95	Structural and optical transmittance analysis of CuO thin films deposited by the spray pyrolysis method. <i>Solid State Sciences</i> , <b>2020</b> , 104, 106254	3.4	11
94	CHAPTER 15: Model Catalysts for Au Catalysis: From Single Crystals to Supported Nanoparticles. <i>RSC Catalysis Series</i> , 533-574	0.3	2
93	Nanosheet-assembled microflower-like coordination polymers by surfactant-assisted assembly with enhanced catalytic activity. <i>CrystEngComm</i> , <b>2020</b> , 22, 7858-7863	3.3	2
92	Abatement of formaldehyde with photocatalytic and catalytic oxidation: a review. <i>International Journal of Chemical Reactor Engineering</i> , <b>2021</b> , 19, 1-29	1.2	3
91	Study on the atomic and electronic structures of BiOCl{001} surface using first principles. <i>Wuli Xuebao/Acta Physica Sinica</i> , <b>2013</b> , 62, 127301	0.6	6
90	Uniform octahedral ZrO <sub>2</sub> @C from carbonized UiO-66 for electrocatalytic nitrogen reduction. <i>Materials Today Energy</i> , <b>2021</b> , 100884	7	0
89	Ultra-fast Cu-based A <sub>3</sub> -coupling catalysts: faceted Cu <sub>2</sub> O microcrystals as efficient catalyst-delivery systems in batch and flow conditions. <i>Canadian Journal of Chemistry</i> ,	0.9	1
88	Recent strategies for enhancing the catalytic activity of CO <sub>2</sub> hydrogenation to formate/formic acid over Pd-based catalyst. <i>Journal of CO<sub>2</sub> Utilization</i> , <b>2021</b> , 54, 101765	7.6	6
87	Nanocatalysts: Green Fuel and Chemical Production. <b>2014</b> , 1-15		1
86	Supported Nanoparticle Synthesis by Electrochemical Deposition. <b>2015</b> , 1-23		

85	Supported Nanoparticle Synthesis by Electrochemical Deposition. <b>2016</b> , 603-631		
84	General Introduction. <i>Springer Series on Polymer and Composite Materials</i> , <b>2018</b> , 1-23	0.9	
83	The Roles of Citrate and Defects in the Anisotropic Growth of Ag Nanostructures. <i>Chemistry of Materials</i> ,	9.6	3
82	Reversible structural transformation and redox properties of Cr-loaded iron oxide dendrites studied by XANES spectroscopy. <i>Physical Chemistry Chemical Physics</i> , <b>2020</b> , 22, 28093-28099	3.6	0
81	Structural and Optical Properties of CuO Thin Films Synthesized Using Spray Pyrolysis Method. <i>Coatings</i> , <b>2021</b> , 11, 1392	2.9	3
80	Photoluminescence of metal nanoclusters. <b>2021</b> ,		
79	Enhanced sensitivity of hydrogenated Fe <sub>2</sub> O <sub>3</sub> nanoplates having {001} facets and the gas sensing mechanism. <i>Journal of Materials Science: Materials in Electronics</i> , <b>2022</b> , 33, 3617	2.1	
78	Effectiveness of morphology and size. <b>2022</b> , 91-111		0
77	Structure sensitivity of CuO in CO oxidation over CeO <sub>2</sub> -CuO/Cu <sub>2</sub> O catalysts. <i>Journal of Catalysis</i> , <b>2022</b> , 405, 333-345	7.3	3
76	Regulating electron transfer over asymmetric low-spin Co(II) for highly selective electrocatalysis. <i>Chem Catalysis</i> , <b>2022</b> ,		8
75	Chemical conversion based on the crystal facet effect of transition metal oxides and construction methods for sharp-faced nanocrystals.. <i>Chemical Communications</i> , <b>2022</b> ,	5.8	1
74	Cu <sub>2</sub> O Nanocrystal Model Catalysts. <i>Chinese Journal of Chemistry</i> ,	4.9	0
73	Self-assembled inorganic chiral superstructures. <i>Nature Reviews Chemistry</i> , <b>2022</b> , 6, 125-145	34.6	17
72	Spiers Memorial Lecture. Next generation nanoelectrochemistry: the fundamental advances needed for applications. <i>Faraday Discussions</i> , <b>2021</b> ,	3.6	2
71	The Therapeutic Role of Nanoparticle Shape in Traumatic Brain Injury : An in vitro Comparative Study.. <i>Journal of Korean Neurosurgical Society</i> , <b>2022</b> ,	2.3	
70	Dielectric Loss Mechanism in Electromagnetic Wave Absorbing Materials.. <i>Advanced Science</i> , <b>2022</b> , e2105553	5.3	37
69	Experimental and Theoretical Insight into the Facet-Dependent Mechanisms of NO Oxidation Catalyzed by Structurally Diverse Mn <sub>2</sub> O <sub>3</sub> Nanocrystals. <i>ACS Catalysis</i> , <b>2022</b> , 12, 397-410	13.1	2
68	Electrocatalytic Performance of Ws <sub>2</sub> /Ac and Ws <sub>2</sub> /Rgo for Oxygen Reduction Reaction. <i>SSRN Electronic Journal</i> ,	1	

67	Five-fold twinned Ir-alloyed Pt nanorods with high C1 pathway selectivity for ethanol electrooxidation. <i>Nano Research</i> , 1	10	0
66	Remarkable Activity of 002 Facet of Ruthenium Nanoparticles Grown on Graphene Films on the Photocatalytic CO <sub>2</sub> Methanation. <i>Advanced Sustainable Systems</i> , 2100487	5.9	3
65	Nanometer-thick defective graphene films decorated with oriented ruthenium nanoparticles. Higher activity of 101 vs 002 plane for silane-alcohol coupling and hydrogen transfer reduction. <i>Journal of Catalysis</i> , <b>2022</b> , 407, 342-352	7.3	1
64	Designing Sites in Heterogeneous Catalysis: Are We Reaching Selectivities Competitive With Those of Homogeneous Catalysts?. <i>Chemical Reviews</i> , <b>2022</b> ,	68.1	13
63	Three Millennia of Nanocrystals.. <i>ACS Nano</i> , <b>2022</b> ,	16.7	8
62	Interface Dynamics in Ag-CuP Nanoparticle Heterostructures.. <i>Journal of the American Chemical Society</i> , <b>2021</b> ,	16.4	1
61	Defect-Dependent Selective C-H/C-C Bond Cleavage of Propane in the Presence of CO <sub>2</sub> over FeNi/Ceria Catalysts. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2021</b> , 9, 17301-17309	8.3	0
60	Electrodeposition of PtRh 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
59	Review on Low-Cost Counter Electrode Materials for Dye-Sensitized Solar Cells: Effective Strategy to Improve Photovoltaic Performance. <i>Advanced Materials Interfaces</i> , <b>2022</b> , 9, 2101229	4.6	3
58	Designing Self-Supported Electrocatalysts for Electrochemical Water Splitting: Surface/Interface Engineering toward Enhanced Electrocatalytic Performance. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> ,	9.5	8
57	Methane Oxidation Enhancement in the Presence of Water: Stabilizing Role of Praseodymium in Ceria-Supported Palladium Nanocatalysts. <i>SSRN Electronic Journal</i> ,	1	
56	Highly active WS <sub>2</sub> catalysts attached to two carbon substrates for oxygen reduction reaction. <i>Journal of Alloys and Compounds</i> , <b>2022</b> , 911, 164991	5.7	1
55	Rational design of porous CexNb <sub>1-x</sub> oxide hollow nanosphere as novel NH <sub>3</sub> -SCR catalyst. <i>Journal of Materials Chemistry A</i> ,	13	0
54	Potential link between structure of iron catalyst and Fenton-like performance: from fundamental understanding to engineering design. <i>Journal of Materials Chemistry A</i> ,	13	0
53	Structural, optical and electrical properties of CuO nanostructures prepared by reactive DC magnetron sputtering. <i>Materials Today: Proceedings</i> , <b>2022</b> ,	1.4	
52	Morphology-Dependent Catalysis of CeO <sub>2</sub> -Based Nanocrystal Model Catalysts. <i>Chinese Journal of Chemistry</i> ,	4.9	4
51	Selective Degradation of Electron-Rich Organic Pollutants Induced by CuO@Biochar: The Key Role of Outer-Sphere Interaction and Singlet Oxygen.. <i>Environmental Science &amp; Technology</i> , <b>2022</b> ,	10.3	0
50	Synthesis of perovskite polyhedron nanocrystals with equivalent facets and the controlled growth of Pt nanoparticles with differing surface concentration of oxidized Pt <sup>4+</sup> /Pt <sup>2+</sup> species. <i>Catalysis Today</i> , <b>2022</b> ,	5.3	0

49	Electronic Metal-Support Interactions Between Cu <sub>x</sub> O and ZnO for Cu <sub>x</sub> O/ZnO Catalysts With Enhanced CO Oxidation Activity. <i>Frontiers in Chemistry</i> , <b>2022</b> , 10,	5	0
48	Enhanced Water Oxidation reaction activity of Mn <sub>3</sub> O <sub>4</sub> nanocrystals in alkaline medium by doping Transition-metal Ions. <i>Nano Futures</i> ,	3.6	
47	Imaging the facet surface strain state of supported multi-faceted Pt nanoparticles during reaction. <i>Nature Communications</i> , <b>2022</b> , 13,	17.4	1
46	Ultrafine PdZn bimetallic nanoparticles anchored on sulfur-doped mesoporous carbon for the partial hydrogenation of alkynols. <i>Catalysis Today</i> , <b>2022</b> ,	5.3	1
45	Heterogeneous Catalysis for Carbon Dioxide Mediated Hydrogen Storage Technology Based on Formic Acid. <i>Advanced Energy Materials</i> , 2200817	21.8	4
44	Synthesis and Characterization of Pt-Ag Icosahedral Nanocages with Enhanced Catalytic Activity toward Oxygen Reduction. <i>ChemNanoMat</i> ,	3.5	1
43	Origin of luminescence of metal nanoclusters. <b>2022</b> , 119-160		
42	Environmental Health and Safety of Engineered Nanomaterials. <b>2022</b> , 1-47		
41	Facet engineering of NiCo <sub>2</sub> S <sub>4</sub> electrocatalysts for enhanced hydrogen evolution reaction. <b>2022</b> , 643, 118803		1
40	Green Nano-catalysts and importance of green reactions in Industry: A Review. <b>2022</b> , 188-192		
39	(111) Faceted Metal Oxides: A Review of Synthetic Methods.		0
38	Surface Plane Effect of ZnO on the Catalytic Performance of Au/ZnO for the CO Oxidation Reaction. <b>2022</b> , 126, 14155-14162		0
37	Determination of Crystallographic Orientation and Exposed Facets of Titanium Oxide Nanocrystals. 2203320		0
36	Advances in Microfluidic Synthesis of Solid Catalysts. <b>2022</b> , 1, 155-183		0
35	Synergistic Pt-CeO <sub>2</sub> interface boosting low temperature dry reforming of methane. <b>2022</b> , 318, 121809		2
34	Water-induced stacking of Fe <sub>2</sub> O <sub>3</sub> hexagonal nanoplates along the [001] direction and their facet-dependent catalytic performances. <b>2022</b> , 24, 6512-6518		0
33	Recent advances in Co <sub>2</sub> C-based nanocatalysts for direct production of olefins from syngas conversion. <b>2022</b> , 58, 9712-9727		0
32	Mofs-Derived Cu <sub>o</sub> -Fe <sub>3</sub> O <sub>4</sub> @C with Abundant Oxygen Vacancies and Strong Cu-Fe Interaction for Deep Mineralization of Bisphenol a.		0

31	Double Confinement Hydrogel Network Enables Continuously Regenerative Solar-to-Hydrogen Conversion.	0
30	Effect of the Preparation Conditions on the Catalytic Properties of CoPt for Highly Efficient 4-Nitrophenol Reduction. <b>2022</b> , 15, 6250	0
29	Double Confinement Hydrogel Network Enables Continuously Regenerative Solar-to-Hydrogen Conversion.	0
28	The Role of Nanocrystal Facets in Sustainable Organic Synthesis.	0
27	Electrodeposition of Shaped PtIr Alloy Nanocrystals with High Index Facets for the Electrocatalytic Oxidation of Alcohols. <b>2022</b> , 155225	0
26	Theoretical SERS study of the strength and suitability of Cu <sub>12</sub> nanostar for SERS: Complete theoretical studies, coinage metal SM <sub>12</sub> comparisons, benzothiazole (BTH) adsorbent. <b>2022</b> , 1217, 113889	0
25	Ultrafine PdCo bimetallic nanoclusters confined in N-doped porous carbon for the efficient semi-hydrogenation of alkynes. <b>2022</b> , 51, 16361-16370	0
24	Continuous and Scalable Production of Platinum Nanocubes with Uniform and Controllable Sizes in Air-Free Droplet Reactors. <b>2022</b> , 126, 8588-8595	1
23	Photostimulated Synthesis of Noble Metals Nanoparticles. <b>2019</b> , 57-83	0
22	New insights into the morphological effects of MnO <sub>2</sub> -CeO <sub>2</sub> binary mixed oxides on Hg <sup>0</sup> capture. <b>2023</b> , 613, 156035	0
21	rGO/CNTs heterogeneous interface modified by polyelectrolyte towards modulating negative permittivity of meta-composites. <b>2023</b> , 613, 156074	0
20	Colloidal Synthesis of Metal Nanocrystals: From Asymmetrical Growth to Symmetry Breaking.	3
19	Importance of K Substitution in LaMnO <sub>3</sub> Nanostructures for the Selective Reduction of $\mu$ Unsaturated Carbonyl Compounds and Nitroarenes. <b>2022</b> , 5, 17482-17486	0
18	Unveiling the Balance between Catalytic Activity and Water Resistance over Co <sub>3</sub> O <sub>4</sub> Catalysts for Propane Oxidation: The Role of Crystal Facet and Oxygen Vacancy. 237-247	0
17	Self-Assembly of Nanocrystalline Structures from Freestanding Oxide Membranes. 2210989	0
16	Hydrogenation of CO <sub>2</sub> into Formates by Ligand-Capped Palladium Heterogeneous Catalysts.	0
15	Electric, magnetic, and shear field-directed assembly of inorganic nanoparticles.	0
14	Environmental Health and Safety of Engineered Nanomaterials. <b>2023</b> , 801-846	0

13	Heterogeneous selective oxidation over supported metal catalysts: From nanoparticles to single atoms. <b>2023</b> , 325, 122384	1
12	Identification of the Active Sites of Platinum-Ceria Catalysts in Propane Oxidation and Preferential Oxidation of Carbon Monoxide in Hydrogen.	2
11	Surface and Interface Coordination Chemistry Learned from Model Heterogeneous Metal Nanocatalysts: From Atomically Dispersed Catalysts to Atomically Precise Clusters.	1
10	Supercritical fluid-assisted fabrication of Pt-modified cerium oxide nanozyme based on polymer nanoreactors for peroxidase-like and glucose detection characteristics. <b>2023</b> , 198, 105915	0
9	Electrochemical reduction of carbon dioxide into valuable chemicals: a review.	0
8	Practical Considerations for Simulating the Plasmonic Properties of Metal Nanoparticles.	0
7	Combining the Curvature and Ligand Effects for Regioselective Growth on Au Nano-bipyramids.	0
6	Chloride enables the growth of Ag nanocubes and nanowires by making PVP binding facet-selective. <b>2023</b> , 15, 5219-5229	0
5	Uniform Catalytic Nanocrystals: From Model Catalysts to Efficient Catalysts.	0
4	Understanding Heterogeneous Catalytic Hydrogenation by Parahydrogen-Induced Polarization NMR Spectroscopy. <b>2023</b> , 13, 3501-3519	0
3	Theory of Anisotropic Metal Nanostructures. <b>2023</b> , 123, 4146-4183	0
2	One-dimensional metal-organic frameworks: Synthesis, structure and application in electrocatalysis. <b>2023</b> , 1, 100010	0
1	Surface-Functionalized Nanoparticles as Catalysts for Artificial Photosynthesis.	0