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In situ growth of nanoparticles through control of non-stoichiometry

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666	Chromate cathode decorated with in-situ growth of copper nanocatalyst for high temperature carbon dioxide electrolysis. 2014 , 39, 20888-20897		44
665	Redox Stable Anodes for Solid Oxide Fuel Cells. 2014 , 2,		22
664	Structure and magnetic properties of 4H-SrMnO ₃ (x=0.0 and 0.18) nanoparticles synthesized by thermal decomposition of appropriate precursor. 2014 , 1708, 25		
663	Synthesis and electrocatalytic performance of La _{0.3} Ce _{0.1} Sr _{0.5} Ba _{0.1} TiO ₃ anode catalyst for solid oxide fuel cells. 2014 , 43, 79-82		5
662	Synthesis of 4H-SrMnO _{3.0} Nanoparticles from a Molecular Precursor and Their Topotactic Reduction Pathway Identified at Atomic Scale. 2014 , 26, 2256-2265		9
661	Titania single crystals with a curved surface. 2014 , 5, 5355		73
660	Formation Mechanism of Freestanding CH ₃ NH ₃ PbI ₃ Functional Crystals: In Situ Transformation vs Dissolution-Crystallization. 2014 , 26, 6705-6710		130
659	Composite titanate cathode decorated with heterogeneous electrocatalytic sites towards efficient carbon dioxide electrolysis. 2014 , 4, 22697-22709		19
658	Determination of Fe oxidation states in the B-site ordered perovskite-type Ba ₂ Ca _{0.67} Fe _{0.33} NbO ₆ at the surface (nano-scale) and bulk by variable temperature XPS and TGA and their impact on electrochemical catalysis. 2014 , 2, 8736		13
657	Demonstration of efficient electrochemical biogas reforming in a solid oxide electrolyser with titanate cathode. 2014 , 4, 38474-38483		8
656	Engineering the surface of perovskite La(0.5)Sr(0.5)MnO ₃ for catalytic activity of CO oxidation. 2014 , 50, 9200-3		67
655	Crystal facet control of LaFeO ₃ , LaCrO ₃ , and La _{0.75} Sr _{0.25} MnO ₃ . 2014 , 16, 2874		23
654	Composite titanate cathode enhanced with in situ grown nickel nanocatalyst for direct steam electrolysis. 2014 , 38, 3434		17
653	Redox-reversible niobium-doped strontium titanate decorated with in situ grown nickel nanocatalyst for high-temperature direct steam electrolysis. 2014 , 43, 14147-57		28
652	Releasing metal catalysts via phase transition: (NiO) _{0.05} -(SrTi _{0.8} Nb _{0.2} O ₃) _{0.95} as a redox stable anode material for solid oxide fuel cells. 2014 , 6, 19990-6		34
651	Single-phase nickel-doped ceria cathode with in situ grown nickel nanocatalyst for direct high-temperature carbon dioxide electrolysis. 2014 , 4, 40494-40504		20
650	Robust nanostructures with exceptionally high electrochemical reaction activity for high temperature fuel cell electrodes. 2014 , 7, 1685-1692		47

649	Perovskite titanate cathode decorated by in-situ grown iron nanocatalyst with enhanced electrocatalytic activity for high-temperature steam electrolysis. 2014 , 127, 215-227	28
648	Infiltrated lanthanum strontium chromite anodes for solid oxide fuel cells: Structural and catalytic aspects. 2014 , 262, 207-212	15
647	Effect of Sintering Temperature on Microstructure, Chemical Stability, and Electrical Properties of Transition Metal or Yb-Doped BaZr _{0.1} Ce _{0.7} Y _{0.1} M _{0.1} O ₃ (M=Fe, Ni, Co, and Yb). 2014 , 2, 1-12	13
646	Composite Cathode Based on Redox-Reversible NbTi _{0.5} Ni _{0.5} O ₄ Decorated with In Situ Grown Ni Particles for Direct Carbon Dioxide Electrolysis. 2014 , 14, 1036-1045	13
645	Ru-doped lanthanum strontium titanates for the anode of solid oxide fuel cells. 2015 , 40, 10985-10993	22
644	Enhancing Electrochemical Water-Splitting Kinetics by Polarization-Driven Formation of Near-Surface Iron(0): An In Situ XPS Study on Perovskite-Type Electrodes. 2015 , 127, 2666-2670	12
643	Aerosol Spray Synthesis of Powder Perovskite-Type Oxides. 2015 , 69-90	
642	Selective Dissolution of A-Site Cations in ABO ₃ Perovskites: A New Path to High-Performance Catalysts. 2015 , 54, 7954-7	125
641	Advances in Cathode Materials for Solid Oxide Fuel Cells: Complex Oxides without Alkaline Earth Metal Elements. 2015 , 5, 1500537	169
640	Well-Dispersed and Size-Controlled Supported Metal Oxide Nanoparticles Derived from MOF Composites and Further Application in Catalysis. 2015 , 11, 3130-4	58
639	Selective Dissolution of A-Site Cations in ABO ₃ Perovskites: A New Path to High-Performance Catalysts. 2015 , 127, 8065-8068	32
638	A-site-deficiency facilitated in situ growth of bimetallic Ni-Fe nano-alloys: a novel coking-tolerant fuel cell anode catalyst. 2015 , 7, 11173-81	84
637	A-site deficient perovskite: the parent for in situ exsolution of highly active, regenerable nano-particles as SOFC anodes. 2015 , 3, 11048-11056	136
636	A-site deficient chromite perovskite with in situ exsolution of nano-Fe: a promising bi-functional catalyst bridging the growth of CNTs and SOFCs. 2015 , 3, 14625-14630	38
635	Fine-tuning B-site of a Chromite based Perovskite Catalyst for Steam Reforming of Glycerol. 2015 , 1735, 39	
634	Evidence and Model for Strain-Driven Release of Metal Nanocatalysts from Perovskites during Exsolution. 2015 , 6, 5106-10	103
633	Fabrication and characterization of a highly sensitive hydroquinone chemical sensor based on iron-doped ZnO nanorods. 2015 , 44, 21081-7	30
632	Ammonia synthesis at atmospheric pressure in a BaCe _{0.2} Zr _{0.7} Y _{0.1} O _{2.9} solid electrolyte cell. 2015 , 275, 110-116	44

631	Sulfur-Tolerant Hierarchically Porous Ceramic Anode-Supported Solid-Oxide Fuel Cells with Self-Precipitated Nanocatalyst. 2015 , 2, 672-678	18
630	A redox-stable chromate cathode decorated with in situ grown nickel nanocatalyst for efficient carbon dioxide electrolysis. 2015 , 5, 1929-1940	27
629	Enhancing electrochemical water-splitting kinetics by polarization-driven formation of near-surface iron(0): an in situ XPS study on perovskite-type electrodes. 2015 , 54, 2628-32	83
628	Effect of anode firing on the performance of lanthanum and nickel co-doped SrTiO ₃ (La _{0.2} Sr _{0.8} Ti _{0.9} Ni _{0.1} O _{3-δ}) anode of solid oxide fuel cell. 2015 , 293, 684-691	25
627	Experimental and DFT studies on Sr-doped LaMnO ₃ catalysts for NO _x storage and reduction. 2015 , 5, 2478-2485	43
626	An extended Tolerance Factor approach for organic-inorganic perovskites. 2015 , 6, 3430-3433	439
625	Spatially confined catalysis-enhanced high-temperature carbon dioxide electrolysis. 2015 , 17, 11705-14	6
624	Water-Gas Shift and Methane Reactivity on Reducible Perovskite-Type Oxides. 2015 , 119, 11739-11753	16
623	Nano-socketed nickel particles with enhanced coking resistance grown in situ by redox exsolution. 2015 , 6, 8120	438
622	Electrochemical performance and stability of La _{0.2} Sr _{0.8} Ti _{0.9} Ni _{0.1} O _{3-δ} and La _{0.2} Sr _{0.8} Ti _{0.9} Ni _{0.1} O _{3-δ} - Gd _{0.2} Ce _{0.8} O _{2-δ} anode with anode interlayer in H ₂ and CH ₄ . 2015 , 182, 39-46	16
621	Interlayer Communication in Aurivillius Vanadate to Enable Defect Structures and Charge Ordering. 2015 , 54, 10925-33	6
620	Atomic-scale control of TiO ₆ octahedra through solution chemistry towards giant dielectric response. 2014 , 4, 6582	42
619	In Situ Tailored Nickel Nano-Catalyst Layer for Internal Reforming Hydrocarbon Fueled SOFCs. 2015 , 68, 1121-1128	2
618	Application of Exsolved Structures as a Route to More Robust Anodes for Improved Biogas Utilisation in SOFCs. 2015 , 68, 2029-2036	6
617	Nonstoichiometric Oxides as Low-Cost and Highly-Efficient Oxygen Reduction/Evolution Catalysts for Low-Temperature Electrochemical Devices. 2015 , 115, 9869-921	631
616	Exsolution of Fe and SrO Nanorods and Nanoparticles from Lanthanum Strontium Ferrite LaSrFeO ₃ Materials by Hydrogen Reduction. 2015 , 119, 22050-22056	37
615	In situ growth of Ni(x)Cu(1-x) alloy nanocatalysts on redox-reversible rutile (Nb,Ti)O ₂ towards high-temperature carbon dioxide electrolysis. 2014 , 4, 5156	35
614	In situ fabrication of CoFe alloy nanoparticles structured (Pr _{0.4} Sr _{0.6}) ₃ (Fe _{0.85} Nb _{0.15}) ₂ O ₇ ceramic anode for direct hydrocarbon solid oxide fuel cells. 2015 , 11, 704-710	142

613	Efficient Carbon Dioxide Electrolysis Based on Perovskite Cathode Enhanced with Nickel Nanocatalyst. 2015 , 153, 325-333	31
612	Synthesis and characterization of B-site doped La _{0.20} Sr _{0.25} Ca _{0.45} TiO ₃ as SOFC anode materials. 2015 , 40, 760-766	22
611	Exsolution-Mimic Heterogeneous Surfaces: Towards Unlimited Catalyst Design. 2015 , 7, 48-50	18
610	Rhodium-Catalyzed Methanation and Methane Steam Reforming Reactions on Rhodium-Perovskite Systems: Metal-Support Interaction. 2016 , 8, 2057-2067	22
609	Photoinduced In Situ Growth of Ag Nanoparticles on AgNbO ₃ . 2016 , 120, 28712-28716	9
608	Elucidating dz ² orbital selective catalytic activity in brownmillerite Ca ₂ Mn ₂ O ₅ . 2016 , 6, 095210	5
607	An emerging platform for electrocatalysis: perovskite exsolution. 2016 , 61, 1783-1784	14
606	Nucleation and growth kinetics of La _{0.7} Sr _{0.3} Cr _{0.4} Mn _{0.6} O _{3-δ} SOFC perovskite: Symmetry alteration evolution induced by Cu ²⁺ and Ni ²⁺ impregnation. 2016 , 26, 665-670	1
605	Surface Tuning of La _{0.5} Sr _{0.5} CoO ₃ Perovskite Catalysts by Acetic Acid for NO _x Storage and Reduction. 2016 , 50, 6442-8	80
604	In Situ Growth of Nanoparticles in Layered Perovskite La _{0.8} Sr _{1.2} Fe _{0.9} Co _{0.1} O _{4-δ} as an Active and Stable Electrode for Symmetrical Solid Oxide Fuel Cells. 2016 , 28, 2981-2993	109
603	Size Control of Pt Clusters on CeO ₂ Nanoparticles via an Incorporation-Segregation Mechanism and Study of Segregation Kinetics. 2016 , 6, 3688-3699	29
602	Crystal Shape Tailoring in Perovskite Structure Rare-Earth Ferrites REFeO ₃ (RE = La, Pr, Sm, Dy, Er, and Y) and Shape-Dependent Magnetic Properties of YFeO ₃ . 2016 , 16, 6522-6530	40
601	Structural dependence of the photocatalytic properties of double perovskite compounds A ₂ InTaO ₆ (A = Sr or Ba) doped with nickel. 2016 , 18, 21491-9	27
600	Highly Stable and Efficient Catalyst with In Situ Exsolved Fe-Ni Alloy Nanospheres Socketed on an Oxygen Deficient Perovskite for Direct CO ₂ Electrolysis. 2016 , 6, 6219-6228	148
599	Redox-Reversible Iron Orthovanadate Cathode for Solid Oxide Steam Electrolyzer. 2016 , 3, 1500186	22
598	New Opportunity for in Situ Exsolution of Metallic Nanoparticles on Perovskite Parent. 2016 , 16, 5303-9	161
597	Exsolved Fe-Ni nano-particles from Sr ₂ Fe _{1.3} Ni _{0.2} Mo _{0.5} O ₆ perovskite oxide as a cathode for solid oxide steam electrolysis cells. 2016 , 4, 14163-14169	64
596	Switching on electrocatalytic activity in solid oxide cells. 2016 , 537, 528-531	276

595	Impregnation versus exsolution: Using metal catalysts to improve electrocatalytic properties of LSCM-based anodes operating at 600°C. 2016 , 41, 14207-14216	32
594	Site Redistribution, Partial Frozen-in Defect Chemistry, and Electrical Properties of Ba _{1-x} (Zr,Pr)O _{3-δ} . 2016 , 55, 8552-63	9
593	Ni doped La _{0.6} Sr _{0.4} FeO _{3-δ} symmetrical electrode for solid oxide fuel cells. 2016 , 37, 1347-1353	16
592	High-Performance Anode Material Sr ₂ FeMo _{0.65} Ni _{0.35} O _{6-δ} with In Situ Exsolved Nanoparticle Catalyst. 2016 , 10, 8660-9	206
591	Development and performance of anode material based on A-site deficient Sr _{2-x} Fe _{1.4} Ni _{0.1} Mo _{0.5} O _{6-δ} perovskites for solid oxide fuel cells. 2016 , 215, 592-599	30
590	From material design to mechanism study: Nanoscale Ni exsolution on a highly active A-site deficient anode material for solid oxide fuel cells. 2016 , 27, 499-508	137
589	Electrochemically Scavenging the Silica Impurities at the Ni-YSZ Triple Phase Boundary of Solid Oxide Cells. 2016 , 8, 17023-7	8
588	Strategies for Carbon and Sulfur Tolerant Solid Oxide Fuel Cell Materials, Incorporating Lessons from Heterogeneous Catalysis. 2016 , 116, 13633-13684	180
587	Trends in electrode development for next generation solid oxide fuel cells. 2016 , 4, 17913-17932	97
586	Micro solid oxide fuel cell fabricated on porous stainless steel: a new strategy for enhanced thermal cycling ability. 2016 , 6, 22443	24
585	Evolution of the electrochemical interface in high-temperature fuel cells and electrolyzers. 2016 , 1,	418
584	A perovskite oxide with high conductivities in both air and reducing atmosphere for use as electrode for solid oxide fuel cells. 2016 , 6, 31839	34
583	Review Materials Degradation of Solid Oxide Electrolysis Cells. 2016 , 163, F3070-F3083	115
582	Smart material concept: reversible microstructural self-regeneration for catalytic applications. 2016 , 4, 11939-11948	52
581	Improved chemical and electrochemical stability of perovskite oxides with less reducible cations at the surface. 2016 , 15, 1010-6	238
580	Conductivity and redox stability of new double perovskite oxide Sr _{1.6} K _{0.4} Fe _{1+x} Mo _{1-x} O _{6-δ} (x = 0.2, 0.4, 0.6). 2016 , 51, 4115-4124	9
579	Growth and in situ transformation of TiO ₂ and HTiOF ₃ crystals on chitosan-polyvinyl alcohol co-polymer substrates under vapor phase hydrothermal conditions. 2016 , 9, 745-754	16
578	Formulation of the coupled electrochemical-mechanical boundary-value problem, with applications to transport of multiple charged species. 2016 , 104, 33-51	32

577	Oxygen content, cobalt oxide exsolution and defect structure of the double perovskite PrBaCo ₂ O ₆ . 2016 , 4, 1962-1969	22
576	High-Figure-of-Merit Thermoelectric La-Doped A-Site-Deficient SrTiO ₃ Ceramics. 2016 , 28, 925-935	124
575	Nickel nanocatalyst exsolution from (La,Sr) (Cr,M,Ni)O ₃ (MMn,Fe) perovskites for the fuel oxidation layer of Oxygen Transport Membranes. 2016 , 288, 120-123	38
574	Bifunctional Catalyst of Core-Shell Nanoparticles Socketed on Oxygen-Deficient Layered Perovskite for Soot Combustion: In Situ Observation of Synergistic Dual Active Sites. 2016 , 6, 2710-2714	54
573	Ambient Pressure XPS Study of Mixed Conducting Perovskite-Type SOFC Cathode and Anode Materials under Well-Defined Electrochemical Polarization. 2016 , 120, 1461-1471	83
572	Novel quasi-symmetric solid oxide fuel cells with enhanced electrochemical performance. 2016 , 310, 109-117	32
571	Ni-Perovskite interaction and its structural and catalytic consequences in methane steam reforming and methanation reactions. 2016 , 337, 26-35	51
570	Anodes. 2016 , 133-160	5
569	Reduction Kinetics of La ₂ Mo ₂ O ₉ and Phase Evolution during Reduction and Reoxidation. 2016 , 55, 2522-33	4
568	Double-Layered Perovskite Anode with in Situ Exsolution of a Co-Fe Alloy To Cogenerate Ethylene and Electricity in a Proton-Conducting Ethane Fuel Cell. 2016 , 6, 760-768	75
567	Titanate cathodes with enhanced electrical properties achieved via growing surface Ni particles toward efficient carbon dioxide electrolysis. 2016 , 18, 3137-43	29
566	Heterovalent Dopant Incorporation for Bandgap and Type Engineering of Perovskite Crystals. 2016 , 7, 295-301	268
565	The surface evolution of La _{0.4} Sr _{0.6} TiO ₃ + δ anode in solid oxide fuel cells: Understanding the sulfur-promotion effect. 2017 , 343, 127-134	12
564	A template-free method for preparation of MnO ₂ catalysts with high surface areas. 2017 , 297, 188-192	23
563	Insight into the enhanced photoelectrocatalytic activity in reduced LaFeO films. 2017 , 53, 2499-2502	12
562	The Electrochemical Properties of Sr(Ti,Fe)O ₃ - δ for Anodes in Solid Oxide Fuel Cells. 2017 , 164, F364-F371	27
561	A review of high temperature co-electrolysis of H ₂ O and CO to produce sustainable fuels using solid oxide electrolysis cells (SOECs): advanced materials and technology. 2017 , 46, 1427-1463	332
560	In-Situ Exsolved Alloy Nanoparticles on Perovskite for Direct CO ₂ Reduction. 2017 , 75, 1-6	2

559	In situ growth of Pt ₃ Ni nanoparticles on an A-site deficient perovskite with enhanced activity for the oxygen reduction reaction. 2017 , 5, 6399-6404	56
558	Perovskite Hollow Fibers with Precisely Controlled Cation Stoichiometry via One-Step Thermal Processing. 2017 , 29, 1606377	20
557	Development of Robust Metal-Supported SOFCs and Stack Components in EU METSAPP Consortium. 2017 , 17, 508-516	9
556	Thermal cycling and electrochemical characteristics of solid oxide fuel cell supported on stainless steel with a new 3-phase composite anode. 2017 , 354, 74-84	13
555	Trends in the processing and manufacture of solid oxide fuel cells. 2017 , 6, e248	8
554	High-Resolution Studies on Nanoscaled Ni/YSZ Anodes. 2017 , 29, 5113-5123	5
553	Composite Cu-LaFeO ₃ Conversion Coatings on a 18Cr Ferritic Stainless Steel for IT-SOFC Interconnects: An Investigation on Structure and Formation Mechanism. 2017 , 164, F850-F857	7
552	Exsolution of Re-alloy catalysts with enhanced stability for methane dry reforming. 2017 , 209, 711-719	67
551	Exploring Electro-Chemo-Mechanical Phenomena on the Nanoscale Using Scanning Probe Microscopy. 2017 , 137-160	
550	A novel high performance composite anode with in situ growth of Fe-Ni alloy nanoparticles for intermediate solid oxide fuel cells. 2017 , 235, 317-322	39
549	A robust and active hybrid catalyst for facile oxygen reduction in solid oxide fuel cells. 2017 , 10, 964-971	145
548	Enhancing CO electrolysis through synergistic control of non-stoichiometry and doping to tune cathode surface structures. 2017 , 8, 14785	147
547	Catalysts and Processes in Solid Oxide Fuel Cells. 2017 , 155-221	2
546	(La _{1-x} Sr _x) _{0.98} MnO ₃ perovskite with A-site deficiencies toward oxygen reduction reaction in aluminum-air batteries. 2017 , 342, 192-201	64
545	Controlled Growth of Ceria Nanoarrays on Anatase Titania Powder: A Bottom-up Physical Picture. 2017 , 17, 348-354	21
544	Role of 2D and 3D defects on the reduction of LaNiO nanoparticles for catalysis. 2017 , 7, 10080	21
543	Redox cycling induced Ni exsolution in Gd _{0.1} Ce _{0.8} Ni _{0.1} O ₂ - (Sr _{0.9} La _{0.1}) _{0.9} Ti _{0.9} Ni _{0.1} O ₃ composite solid oxide fuel cell anodes. 2017 , 370, 122-130	15
542	Self-Decorated MnO Nanoparticles on Double Perovskite Solid Oxide Fuel Cell Anode by in Situ Exsolution. 2017 , 5, 9207-9213	33

- 541 NdBaMn₂O₅+□ layered perovskite as an active cathode material for solid oxide fuel cells. **2017**, 43, 15932-15938
- 540 Controlling cation segregation in perovskite-based electrodes for high electro-catalytic activity and durability. **2017**, 46, 6345-6378 179
- 539 A novel fuel electrode enabling direct CO₂ electrolysis with excellent and stable cell performance. **2017**, 5, 20833-20842 80
- 538 Influence of Cation Substitutions Based on ABO₃ Perovskite Materials, Sr_{1-x}Y_xTi_{1-y}RuyO₃□, on Ammonia Dehydrogenation. **2017**, 5, 9370-9379 24
- 537 Surface Chemistry of Perovskite-Type Electrodes During High Temperature CO Electrolysis Investigated by Operando Photoelectron Spectroscopy. **2017**, 9, 35847-35860 67
- 536 Modeling the impedance spectra of mixed conducting thin films with exposed and embedded current collectors. **2017**, 19, 26310-26321 13
- 535 New Atomic-Scale Insight into Self-Regeneration of Pt-CaTiO₃ Catalysts: Incipient Redox-Induced Structures Revealed by a Small-Angle Tilting STEM Technique. **2017**, 121, 17348-17353 23
- 534 Mechanistic Origin of Enhanced CO Catalytic Oxidation over Co₃O₄/LaCoO₃ at Lower Temperature. **2017**, 9, 3102-3106 20
- 533 Promoting photocatalytic H₂ evolution by tuning cation deficiency in La and Cr co-doped SrTiO₃. **2017**, 53, 10038-10041 22
- 532 Smart tuning of 3D ordered electrocatalysts for enhanced oxygen reduction reaction. **2017**, 219, 640-644 23
- 531 La_{1-x}Sr_xFe_{0.7}Ni_{0.3}O₃□ as both cathode and anode materials for Solid Oxide Fuel Cells. **2017**, 42, 23160-23165
- 530 Electrochemical Energy Production Using Fuel Cell Technologies. **2017**, 1729-1779 1
- 529 Demonstration of chemistry at a point through restructuring and catalytic activation at anchored nanoparticles. **2017**, 8, 1855 87
- 528 Enhanced electrochemical property of La_{0.6}Sr_{0.4}Co_{0.8}Fe_{0.2}O₃ as cathode for solid oxide fuel cell by efficient in situ polarization-exsolution treatment. **2017**, 258, 1096-1105 17
- 527 Infiltrated La_{0.4}Sr_{0.4}Fe_{0.03}Ni_{0.03}Ti_{0.94}O₃ based anodes for all ceramic and metal supported solid oxide fuel cells. **2017**, 372, 99-106 12
- 526 Nanocatalysis in Solid Oxide Cells. **2017**, 939-960
- 525 Enhancing Perovskite Electrocatalysis of Solid Oxide Cells Through Controlled Exsolution of Nanoparticles. **2017**, 10, 3333-3341 70
- 524 Highly Efficient CO Electrolysis on Cathodes with Exsolved Alkaline Earth Oxide Nanostructures. **2017**, 9, 25350-25357 31

523	Ce _{0.70} La _{0.20} Ni _{0.10} O _{2-δ} catalyst for methane dry reforming: Influence of reduction temperature on the catalytic activity and stability. 2017 , 218, 779-792	43
522	Nanocomposites for "ano green energy" applications. 2017 , 421-449	
521	Co-electrolysis of CO ₂ and H ₂ O in high-temperature solid oxide electrolysis cells: Recent advance in cathodes. 2017 , 26, 839-853	80
520	Exsolution trends and co-segregation aspects of self-grown catalyst nanoparticles in perovskites. 2017 , 8, 15967	207
519	Advances in Medium and High Temperature Solid Oxide Fuel Cell Technology. 2017 ,	11
518	In situ formation of Ru nanoparticles on La _{1-x} Sr _x TiO ₃ -based mixed conducting electrodes and their application in electrochemical synthesis of ammonia using a proton-conducting solid electrolyte. 2017 , 52, 2825-2835	32
517	Microstructural Degradation. 2017 , 79-99	4
516	New Materials for Improved Durability and Robustness in Solid Oxide Fuel Cell. 2017 , 193-216	
515	The enhanced electrochemical response of Sr(Ti _{0.3} Fe _{0.7} Ru _{0.07})O _{3-δ} anodes due to exsolved RuBe nanoparticles. 2018 , 6, 5193-5201	24
514	Structural Reversibility of LaCoCuO Followed by In Situ X-ray Diffraction and Absorption Spectroscopy. 2018 , 19, 1876	8
513	Fuel Processing for Solid Oxide Fuel Cells. 2018 , 97-141	1
512	Infiltrated Pr ₂ NiO ₄ as promising bi-electrode for symmetrical solid oxide fuel cells. 2018 , 43, 8953-8961	28
511	Modeling, Design, Construction, and Operation of Power Generators with Solid Oxide Fuel Cells. 2018 ,	1
510	Selective Chemical Epitaxial Growth of TiO ₂ Islands on Ferroelectric PbTiO ₃ Crystals to Boost Photocatalytic Activity. 2018 , 2, 1095-1107	66
509	Promotion of Oxygen Reduction with Both Amorphous and Crystalline MnO _x through the Surface Engineering of La _{0.8} Sr _{0.2} MnO _{3-δ} Perovskite. 2018 , 5, 1105-1112	36
508	Hydrothermal shape controllable synthesis of La _{0.5} Sr _{0.5} MnO ₃ crystals and facet effect on electron transfer of oxygen reduction. 2018 , 5, 732-738	10
507	Growth of Nanoparticles with Desired Catalytic Functions by Controlled Doping-Segregation of Metal in Oxide. 2018 , 30, 1585-1592	10
506	Structural investigations of LaSrFeO under reducing conditions: kinetic and thermodynamic limitations for phase transformations and iron exsolution phenomena.. 2018 , 8, 3120-3131	23

505	Nanomaterials and technologies for low temperature solid oxide fuel cells: Recent advances, challenges and opportunities. 2018 , 45, 148-176	242
504	Addition of Pd on La _{0.7} Sr _{0.3} CoO ₃ Perovskite To Enhance Catalytic Removal of NO _x . 2018 , 57, 521-531	27
503	Toward a rational photocatalyst design: a new formation strategy of co-catalyst/semiconductor heterostructures via in situ exsolution. 2018 , 54, 1505-1508	25
502	Mineralizer effect on facet-controllable hydrothermal crystallization of perovskite structure YbFeO ₃ crystals. 2018 , 20, 470-476	10
501	Nb and Pd co-doped La _{0.57} Sr _{0.38} Co _{0.19} Fe _{0.665} Nb _{0.095} Pd _{0.05} O _{3-δ} as a stable, high performance electrode for barrier-layer-free Y ₂ O ₃ -ZrO ₂ electrolyte of solid oxide fuel cells. 2018 , 378, 433-442	35
500	Substitutional Carbon-Modified Anatase TiO Decahedral Plates Directly Derived from Titanium Oxalate Crystals via Topotactic Transition. 2018 , 30, e1705999	38
499	Synthesis and applications of nanoporous perovskite metal oxides. 2018 , 9, 3623-3637	82
498	Self-Regenerating Co@Fe Nanoparticles on Perovskite Oxides as a Hydrocarbon Fuel Oxidation Catalyst in Solid Oxide Fuel Cells. 2018 , 30, 2515-2525	54
497	Evolution of Exsolved Nanoparticles on a Perovskite Oxide Surface during a Redox Process. 2018 , 30, 2838-2847	48
496	Ni-Substituted Sr(Ti,Fe)O ₃ SOFC Anodes: Achieving High Performance via Metal Alloy Nanoparticle Exsolution. 2018 , 2, 478-496	139
495	Cogeneration of ethylene and energy in protonic fuel cell with an efficient and stable anode anchored with in-situ exsolved functional metal nanoparticles. 2018 , 220, 283-289	44
494	Metal-oxide interactions for infiltrated Ni nanoparticles on A-site deficient La _x Sr _{1-δ} x/2TiO ₃ . 2018 , 315, 126-130	7
493	Solid oxide fuel cells fed with dry ethanol: The effect of a perovskite protective anodic layer containing dispersed Ni-alloy @ FeO _x core-shell nanoparticles. 2018 , 220, 98-110	41
492	A self-assembled dual-phase composite as a precursor of high-performance anodes for intermediate temperature solid oxide fuel cells. 2018 , 54, 12341-12344	7
491	In situ synthesis of supported metal nanocatalysts through heterogeneous doping. 2018 , 9, 4829	51
490	Micro-mechanics in Electrochemical Systems. 2018 , 1-54	
489	Postsynthesis Growth of CoOOH Nanostructure on SrCo _{0.6} Ti _{0.4} O _{3-δ} Perovskite Surface for Enhanced Degradation of Aqueous Organic Contaminants. 2018 , 6, 15737-15748	43
488	Sr Segregation in Perovskite Oxides: Why It Happens and How It Exists. 2018 , 2, 1476-1499	136

487	A Geologic Architecture System-Inspired Micro-/Nano-Heterostructure Design for High-Performance Energy Storage. 2018 , 8, 1802388	47
486	In-situ growth of metallic nanoparticles on perovskite parent as a hydrogen electrode for solid oxide cells. 2018 , 405, 114-123	32
485	Influence of surface atomic structure demonstrated on oxygen incorporation mechanism at a model perovskite oxide. 2018 , 9, 3710	40
484	Ultra-stable 2D layered methylammonium cadmium trihalide perovskite photoelectrodes. 2018 , 6, 11552-11560	3
483	Thermally driven in situ exsolution of Ni nanoparticles from (Ni, Gd)CeO ₂ for high-performance solid oxide fuel cells. 2018 , 6, 18133-18142	16
482	Recent Advances in Novel Nanostructuring Methods of Perovskite Electrocatalysts for Energy-Related Applications. 2018 , 2, 1800071	169
481	Role of spontaneous strains on the biphasic nature of partial B-site disorder double perovskite La ₂ NiMnO ₆ . 2018 , 6, 066102	18
480	Energetics of Nanoparticle Exsolution from Perovskite Oxides. 2018 , 9, 3772-3778	37
479	Highly active subnanometer Rh clusters derived from Rh-doped SrTiO ₃ for CO ₂ reduction. 2018 , 237, 1003-1011	39
478	Oxide-Carbon Nanofibrous Composite Support for a Highly Active and Stable Polymer Electrolyte Membrane Fuel-Cell Catalyst. 2018 , 12, 6819-6829	35
477	Growth of 2 cm metallic porous TiN single crystals. 2018 , 5, 953-960	7
476	LaMnO ₃ -based perovskite with in-situ exsolved Ni nanoparticles: a highly active, performance stable and coking resistant catalyst for CO ₂ dry reforming of CH ₄ . 2018 , 564, 199-207	50
475	Fabrication of a regenerable Ni supported NiO-MgO catalyst for methane steam reforming by exsolution. 2018 , 397, 318-324	18
474	Self-assembled alloy nanoparticles in a layered double perovskite as a fuel oxidation catalyst for solid oxide fuel cells. 2018 , 6, 15947-15953	61
473	Roles of Fe Ni nanoparticles and SrLaFeO ₄ substrate in the performance and reliability of a composite anode prepared through in-situ exsolution for intermediate temperature solid oxide fuel cells (I). 2018 , 43, 10440-10447	25
472	Exploration of Co-Fe alloy precipitation and electrochemical behavior hysteresis using Lanthanum and Cobalt co-substituted SrFeO _{3-δ} SOFC anode. 2018 , 277, 226-234	39
471	Transition metal oxide-based oxygen reduction reaction electrocatalysts for energy conversion systems with aqueous electrolytes. 2018 , 6, 10595-10626	109
470	Surface tuning of noble metal doped perovskite oxide by synergistic effect of thermal treatment and acid etching: A new path to high-performance catalysts for methane combustion. 2018 , 239, 373-382	42

469	Nanoscale Architecture of RuO ₂ /La _{0.9} Fe _{0.92} Ru _{0.08} Fe _{0.03} O _{3-δ} Composite via Manipulating the Exsolution of Low Ru-Substituted A-Site Deficient Perovskite. 2018 , 6, 11999-12005	23
468	Electrochemical performance and stability of La _{0.75} Sr _{0.25} Fe _{0.9} Nb _{0.1} O _{3-δ} symmetric electrode for solid oxide fuel cells. 2018 , 399, 398-405	48
467	Expanding possibilities for solid-phase crystallization by exsolving tunable Pd@NiO core-shell nanostructures. 2018 , 20, 6372-6376	9
466	Tunable, Hybrid 1D ZnO Nanostructures Obtained by Using Bio-renewable Ferulic Acid as Support and its Applications. 2018 , 3, 6232-6241	1
465	A review on morphology engineering for highly efficient and stable hybrid perovskite solar cells. 2018 , 6, 12842-12875	115
464	Performance comparison of Ni Ex-soluted and impregnated La- and Y- doped Sr titanates as anode for solid oxide fuel cell. 2019 , 25, 171-180	8
463	Co-substituted Sr ₂ Fe _{1.5} Mo _{0.5} O _{6-δ} as anode materials for solid oxide fuel cells: Achieving high performance via nanoparticle exsolution. 2019 , 438, 226989	32
462	A review on sintering technology of proton conducting BaCeO ₃ -BaZrO ₃ perovskite oxide materials for Protonic Ceramic Fuel Cells. 2019 , 438, 226991	48
461	Pulsed electric current boosts electrochemical performance and electro-conductivity of La Sr Cr Ni O perovskite via exsolution of nanoparticles. 2019 , 30, 425301	3
460	Structural, optoelectronic, and morphological study of indium-doped methylammonium lead chloride perovskites. 2019 , 125, 1	6
459	Impact of the Sintering Additive Al ₂ O ₃ on the Electrical Conductivity of Proton-Conducting Electrolyte CaZr _{0.95} Sc _{0.05} O _{3-δ} . 2019 , 61, 1456-1463	1
458	Approaching Durable Single-Layer Fuel Cells: Promotion of Electroactivity and Charge Separation via Nanoalloy Redox Exsolution. 2019 , 11, 27924-27933	45
457	Nickel Exsolution-Driven Phase Transformation from an n=2 to an n=1 Ruddlesden-Popper Manganite for Methane Steam Reforming Reaction in SOFC Conditions. 2019 , 11, 4631-4641	23
456	High-Temperature CO Electrolysis in Solid Oxide Electrolysis Cells: Developments, Challenges, and Prospects. 2019 , 31, e1902033	94
455	Co-electrolysis of H ₂ O and CO ₂ on exsolved Ni nanoparticles for efficient syngas generation at controllable H ₂ /CO ratios. 2019 , 258, 117950	29
454	In situ exsolution of PdO nanoparticles from non-stoichiometric LaFePd _{0.05} O _{3+δ} electrode for impedancemetric NO ₂ sensor. 2019 , 298, 126827	14
453	Perovskite-structured Active Solid Catalyst for Biofuel Synthesis. 2019 , 6, 1-5	
452	Bimetallic nanoparticle decorated perovskite oxide for state-of-the-art trifunctional electrocatalysis. 2019 , 7, 19453-19464	39

451	In situ catalyst exsolution on perovskite oxides for the production of CO and synthesis gas in ceramic membrane reactors. 2019 , 3, 2347-2355	22
450	Exsolution of SrO during the Topochemical Conversion of LaSrCoRuO to the Oxyhydride LaSrCoRuOH. 2019 , 58, 14863-14870	6
449	In Situ Growth of Nanostructured BiVO-BiO Mixed-Phase via Nonequilibrium Deposition Involving Metal Exsolution for Enhanced Photoelectrochemical Water Splitting. 2019 , 11, 44069-44076	12
448	Advanced perovskite anodes for solid oxide fuel cells: A review. 2019 , 44, 31275-31304	66
447	Exsolution of Nano Metal Particle on Anode for Increased Performance at Low Temperature Operation. 2019 , 91, 1915-1922	
446	Structural and electrochemical property evolutions of perovskite SOFC anodes: Role of fuel atmosphere in $(\text{La}_{0.4}\text{Sr}_{0.6})_{1-x}\text{Co}_{0.2}\text{Fe}_{0.7}\text{Nb}_{0.1}\text{O}_{3-\delta}$. 2019 , 44, 31386-31393	9
445	Control of metal-support interactions in heterogeneous catalysts to enhance activity and selectivity. 2019 , 2, 955-970	527
444	Influence of A- and B-Site Modifications of $(\text{La}_{1-x}\text{Sr}_x)_y\text{Cr}_{0.5}\text{Mn}_{0.5}\text{Ni}_z\text{W}_w\text{O}_{3-\delta}$ on Electrochemical Impedance Characteristics of Reversible Solid Oxide Cell. 2019 , 166, F1148-F1156	0
443	Observation of Nanoparticle Exsolution from Perovskite Oxides: From Atomic Scale Mechanistic Insight to Nanostructure Tailoring. 2019 , 13, 12996-13005	78
442	Enhanced CO ₂ Electrolysis at Redox Engineered Interfaces. 2019 , 91, 2565-2570	1
441	Towards efficient use of noble metals via exsolution exemplified for CO oxidation. 2019 , 11, 16935-16944	24
440	Lanthanum manganite-based perovskite as a catalyst for co-production of ethylene and hydrogen by ethane dehydrogenation. 2019 , 377, 629-637	12
439	Chemical Environment-Induced Mixed Conductivity of Titanate as a Highly Stable Oxygen Transport Membrane. 2019 , 19, 955-964	14
438	Migration and Growth of Silver Nanoparticles in Zeolite Socony Mobil 5 (ZSM-5) Observed by Environmental Electron Microscopy: Implications for Heterogeneous Catalysis. 2019 , 2, 6452-6461	7
437	Hierarchical dual-porosity nanoscale nickel cermet electrode with high performance and stability. 2019 , 11, 17746-17758	6
436	Exsolved Nickel Nanoparticles Acting as Oxygen Storage Reservoirs and Active Sites for Redox CH ₄ Conversion. 2019 , 2, 7288-7298	33
435	Insights into Reaction Intermediates to Predict Synthetic Pathways for Shape-Controlled Metal Nanocrystals. 2019 , 141, 16312-16322	29
434	Exsolution and electrochemistry in perovskite solid oxide fuel cell anodes: Role of stoichiometry in Sr(Ti,Fe,Ni)O ₃ . 2019 , 439, 227077	31

433	Crystallographic and electronic evolution of lanthanum strontium ferrite (LaSrFeO) thin film and bulk model systems during iron exsolution. 2019 , 21, 3781-3794	10
432	Enhancing the performance of high-temperature H ₂ O/CO ₂ co-electrolysis process on the solid oxide Sr ₂ Fe _{1.6} Mo _{0.5} O _{6-δ} -SDC/LSGM/Sr ₂ Fe _{1.5} Mo _{0.5} O _{6-δ} -SDC cell. 2019 , 301, 63-68	26
431	A-Site Ordered Double Perovskite with in Situ Exsolved Core-Shell Nanoparticles as Anode for Solid Oxide Fuel Cells. 2019 , 11, 6995-7005	43
430	Surface Reconstruction under the Exposure of Electric Fields Enhances the Reactivity of Donor-Doped SrTiO ₃ . 2019 , 123, 16883-16892	20
429	Exsolution of Fe@Ni alloy nanoparticles from (La,Sr)(Cr,Fe,Ni)O ₃ perovskites as potential oxygen transport membrane catalysts for methane reforming. 2019 , 7, 15812-15822	33
428	Insight into the Electrochemical Processes of the Titanate Electrode with in Situ Ni Exsolution for Solid Oxide Cells. 2019 , 2, 4033-4044	9
427	Oxygen Deficient LaMnCoO Nanofibers as an Efficient Electrocatalyst for Oxygen Evolution Reaction and Zinc-Air Batteries. 2019 , 58, 8208-8214	52
426	Nanostructured Materials and Interfaces for Advanced Ionic Electronic Conducting Oxides. 2019 , 6, 1900462	23
425	Enhancing coking resistance of Ni/YSZ electrodes: In situ characterization, mechanism research, and surface engineering. 2019 , 62, 64-78	43
424	Surface Reconstructions of Metal Oxides and the Consequences on Catalytic Chemistry. 2019 , 9, 5692-5707	65
423	Structural and electrochemical properties of B-site Ru-doped (La _{0.8} Sr _{0.2}) _{0.9} Sc _{0.2} Mn _{0.8} O _{3-δ} as symmetrical electrodes for reversible solid oxide cells. 2019 , 792, 1132-1140	19
422	Facet-Dependent in Situ Growth of Nanoparticles in Epitaxial Thin Films: The Role of Interfacial Energy. 2019 , 141, 7509-7517	52
421	High-throughput, super-resolution 3D reconstruction of nano-structured solid oxide fuel cell electrodes and quantification of microstructure-property relationships. 2019 , 427, 112-119	11
420	Trivalent ion mediated abnormal growth of all-inorganic perovskite nanocrystals and their divergent emission properties. 2019 , 11, 7903-7912	16
419	Doping-Enhanced Visible-Light Absorption of CH ₃ NH ₃ PbBr ₃ by the Bi ³⁺ -Induced Impurity Band without Sacrificing a Band gap. 2019 , 123, 8578-8587	10
418	Self-templating construction of mesopores on three-dimensionally ordered macroporous La _{0.5} Sr _{0.5} MnO ₃ perovskite with enhanced performance for soot combustion. 2019 , 9, 1835-1846	18
417	Morphology evolution and exsolution mechanism of a partially decomposed anode for intermediate temperature-solid oxide fuel cells. 2019 , 304, 30-41	12
416	Surface nickel particles generated by exsolution from a perovskite structure. 2019 , 273, 75-80	6

415	Electrical reduction of perovskite electrodes for accelerating exsolution of nanoparticles. 2019 , 306, 159-166	16
414	Importance of Exsolution in Transition-Metal (Co, Rh, and Ir)-Doped LaCrO ₃ Perovskite Catalysts for Boosting Dry Reforming of CH ₄ Using CO ₂ for Hydrogen Production. 2019 , 58, 6385-6393	26
413	Structure and phase evolution of CaMnO ₃ perovskite during isothermal redox cycles. 2019 , 97, 2131-2136	2
412	Microstructure evolution and kinetics of B-site nanoparticle exsolution from an A-site-deficient perovskite surface: a phase-field modeling and simulation study. 2019 , 21, 10902-10907	9
411	Electrochemical conversion of methane to ethylene in a solid oxide electrolyzer. 2019 , 10, 1173	54
410	Characterization methods of nickel nano-particles obtained by the ex-solution process on the surface of Pr, Ni-doped SrTiO ₃ perovskite ceramics. 2019 , 1, 1	3
409	Nanoengineering of solid oxide electrochemical cell technologies: An outlook. 2019 , 12, 2081-2092	13
408	Influence of sintering profile on the microstructure and electronic transport properties of Sr(Ti,Nb)O ₃ tapes for solid oxide cell applications. 2019 , 335, 164-169	1
407	Enhanced activity and stability of Sr ₂ FeMo _{0.65} Ni _{0.35} O _{6-δ} anode for solid oxide fuel cells with Na doping. 2019 , 425, 103-109	14
406	In situ exsolved FeNi ₃ nanoparticles on nickel doped Sr ₂ Fe _{1.5} Mo _{0.5} O _{6-δ} perovskite for efficient electrochemical CO ₂ reduction reaction. 2019 , 7, 11967-11975	74
405	Nickel enriched Ruddlesden-Popper type lanthanum strontium manganite as electrode for symmetrical solid oxide fuel cell. 2019 , 425, 153-161	23
404	Lattice strain-enhanced exsolution of nanoparticles in thin films. 2019 , 10, 1471	66
403	Growth Kinetics of Individual Co Particles Ex-solved on SrTiCoO Polycrystalline Perovskite Thin Films. 2019 , 141, 6690-6697	48
402	Enhanced carbon dioxide electrolysis at redox manipulated interfaces. 2019 , 10, 1550	36
401	Cation-swapped homogeneous nanoparticles in perovskite oxides for high power density. 2019 , 10, 697	71
400	Wrinkled Perovskite La _{0.9} Mn _{0.6} Ni _{0.4} O _{3-δ} Nanofibers as Highly Efficient Electrocatalyst for Rechargeable Li- O_2 Batteries. 2019 , 6, 5864-5869	5
399	In situ grown cobalt phosphide (CoP) on perovskite nanofibers as an optimized trifunctional electrocatalyst for Zn-air batteries and overall water splitting. 2019 , 7, 26607-26617	50
398	Cu ₂ Be ₂ Ni nano alloy particles obtained by exsolution from Cu(Ni)Fe ₂ O ₄ as active anode for SOFCs. 2019 , 7, 26105-26115	7

397	Reversible magnetoelectric switching in multiferroic three-dimensional nanocup heterostructure films. 2019 , 11,	4
396	Co-free $\text{La}_{0.6}\text{Sr}_{0.4}\text{Fe}_{0.9}\text{Nb}_{0.1}\text{O}_{3-\delta}$ symmetric electrode for hydrogen and carbon monoxide solid oxide fuel cell. 2019 , 44, 32210-32218	17
395	A B-site doped perovskite ferrate as an efficient anode of a solid oxide fuel cell with in situ metal exsolution. 2019 , 7, 26944-26953	24
394	The external and internal influences on the tuning of the properties of perovskites: An overview. 2019 , 45, 4152-4166	26
393	Cobalt-free dual-phase oxygen transporting membrane reactor for the oxidative dehydrogenation of ethane. 2019 , 211, 966-971	8
392	Review of solid oxide electrolysis cells: a clean energy strategy for hydrogen generation. 2019 , 8, 2-22	31
391	Electrochemical XPS investigation of metal exsolution on SOFC electrodes: Controlling the electrode oxygen partial pressure in ultra-high-vacuum. 2019 , 680, 43-51	21
390	Compromising Between Phase Stability and Electrical Performance: SrVO_3 - SrTiO_3 Solid Solutions as Solid Oxide Fuel Cell Anode Components. 2019 , 12, 240-251	7
389	Sulfur-Tolerant, Exsolved Fe-Ni Alloy Nanoparticles for CO Oxidation. 2019 , 62, 1149-1156	21
388	Highly active and stable $\text{Sr}_{0.92}\text{Y}_{0.08}\text{Ti}_{1-x}\text{Ru}_x\text{O}_{3-\delta}$ in dry reforming for hydrogen production. 2019 , 44, 202-212	10
387	Heterointerface engineering for enhancing the electrochemical performance of solid oxide cells. 2020 , 13, 53-85	101
386	One step infiltration induced multi-cation oxide nanocatalyst for load proof SOFC application. 2020 , 267, 118374	18
385	Increased nickel exsolution from $\text{LaFe}_{0.8}\text{Ni}_{0.2}\text{O}_3$ perovskite-derived CO_2 methanation catalysts through strontium doping. 2020 , 590, 117328	6
384	Enhancing CO_2 catalytic activation and direct electroreduction on in-situ exsolved Fe/MnO_x nanoparticles from $(\text{Pr,Ba})_2\text{Mn}_{2-y}\text{Fe}_y\text{O}_{5+\delta}$ layered perovskites for SOEC cathodes. 2020 , 268, 118389	30
383	An FeNbO_4 -based oxide anode for a solid oxide fuel cell (SOFC). 2020 , 335, 135692	5
382	A-site deficient perovskite with nano-socketed Ni-Fe alloy particles as highly active and durable catalyst for high-temperature CO_2 electrolysis. 2020 , 335, 135683	18
381	A sulfur-tolerant cathode catalyst fabricated with in situ exsolved CoNi alloy nanoparticles anchored on a Ruddlesden-Popper support for CO_2 electrolysis. 2020 , 8, 138-148	30
380	In situ exsolution of Ni particles on the $\text{PrBaMn}_2\text{O}_5$ SOFC electrode material monitored by high temperature neutron powder diffraction under hydrogen. 2020 , 8, 3590-3597	12

- 379 Insight into tuning the surface and bulk microstructure of perovskite catalyst through control of cation non-stoichiometry. **2020**, 381, 408-414 6
- 378 Robust redox-reversible perovskite type steam electrolyser electrode decorated with in situ exsolved metallic nanoparticles. **2020**, 8, 582-591 29
- 377 Exsolution of Metallic Ru Nanoparticles from Defective, Fluorite-Type Solid Solutions $\text{Sm}_2\text{Ru}_x\text{Ce}_{2-x}\text{O}_7$ To Impart Stability on Dry Reforming Catalysts. **2020**, 10, 1923-1937 33
- 376 Enhanced Anode Performance and Coking Resistance by In Situ Exsolved Multiple-Twinned Co-Fe Nanoparticles for Solid Oxide Fuel Cells. **2020**, 12, 461-473 18
- 375 Symmetrical Exsolution of Rh Nanoparticles in Solid Oxide Cells for Efficient Syngas Production from Greenhouse Gases. **2020**, 10, 1278-1288 26
- 374 Solid oxide fuel and electrolysis cells. **2020**, 387-547 4
- 373 Embracing the Complexity of Catalytic Structures: A Viewpoint on the Synthesis of Nonstoichiometric Mixed Metal Oxides for Catalysis. **2020**, 10, 516-527 9
- 372 Sulfated ZrO_2 supported CoMo sulfide catalyst by surface exsolution for enhanced hydrodeoxygenation of lignin-derived ethers to aromatics. **2020**, 263, 116705 16
- 371 Electrochemical properties of A-site deficient $\text{Sr}_{0.9}\text{Y}_{0.08}\text{Ti}_{0.95}\text{Ni}_{0.05}\text{O}_{3-\delta}$ as an active fuel electrode for solid oxide cells. **2020**, 279, 128503 1
- 370 Dopant-Driven Positive Reinforcement in Ex-Solution Process: New Strategy to Develop Highly Capable and Durable Catalytic Materials. **2020**, 32, e2003983 13
- 369 The effects of stoichiometry on the properties of exsolved Ni-Fe alloy nanoparticles for dry methane reforming. **2020**, 66, e17078 10
- 368 Highly improved thermoelectric performance of Nb-doped SrTiO_3 due to significant suppression of phonon thermal conduction by synergetic effects of pores and metallic nanoparticles. **2020**, 46, 25964-25969 4
- 367 A high-performance intermediate-to-low temperature protonic ceramic fuel cell with in-situ exsolved nickel nanoparticles in the anode. **2020**, 46, 19952-19959 13
- 366 Construction of Multifunctional Nanoarchitectures in One Step on a Composite Fuel Catalyst through In Situ Exsolution of LaSrFeNiNbO . **2020**, 12, 34890-34900 8
- 365 A Perspective on Thin-Film Perovskites as Supports for Metal Catalysts. **2020**, 10, 8840-8849 9
- 364 Ruddlesden-Popper perovskites in electrocatalysis. **2020**, 7, 2519-2565 71
- 363 A Ce/Ru Codoped $\text{SrFeO}_{3-\delta}$ Perovskite for a Coke-Resistant Anode of a Symmetrical Solid Oxide Fuel Cell. **2020**, 10, 14398-14409 21
- 362 Solid-Solid Interfaces in Protonic Ceramic Devices: A Critical Review. **2020**, 12, 55537-55553 9

361	Modeling Exsolution of Pt from ATiO ₃ Perovskites (A = Ca/Sr/Ba) Using First-Principles Methods. 2020 , 32, 9642-9649	4
360	Deciphering the Nature of Ru Sites in Reductively Exsolved Oxides with Electronic and Geometric Metal-Support Interactions. 2020 , 124, 25299-25307	9
359	Ge-Modified GaN _{1-x} ZnO wurtzite solid solutions with high Zn content for efficient photocatalytic H ₂ evolution from water under visible light illumination. 2020 , 7, 3443-3447	2
358	Computational approaches to the exsolution phenomenon in perovskite oxides with a view to design highly durable and active anodes for solid oxide fuel cells. 2020 , 37, 1295-1305	4
357	In situ exsolution of Rh nanoparticles on a perovskite oxide surface: Efficient Rh catalysts for Dry reforming. 2020 , 37, 1401-1410	1
356	Surface decorated La _{0.43} Ca _{0.37} Ni _{0.06} Ti _{0.94} O _{3-δ} as an anode functional layer for solid oxide fuel cell applications. 2020 , 37, 1440-1444	1
355	Exsolution of Catalytically Active Iridium Nanoparticles from Strontium Titanate. 2020 , 12, 37444-37453	9
354	The origin of triple conductivity and water uptake in layered double perovskites: A case study on lanthanum-substituted GdBaCo ₂ O _{6-δ} . 2020 , 845, 156309	4
353	Toward Reducing the Operation Temperature of Solid Oxide Fuel Cells: Our Past 15 Years of Efforts in Cathode Development. 2020 , 34, 15169-15194	63
352	Pr and Mo Co-Doped SrFeO _{3-δ} as an Efficient Cathode for Pure CO ₂ Reduction Reaction in a Solid Oxide Electrolysis Cell. 2020 , 8, 2000539	1
351	Methane steam reforming in water-deficient conditions on a new Ni-exsolved Ruddlesden-Popper manganite: Coke formation and H ₂ S poisoning. 2020 , 45, 27145-27159	5
350	Organic Photochemistry-Assisted Nanoparticle Segregation on Perovskites. 2020 , 1, 100243	6
349	Probing One-Dimensional Oxygen Vacancy Channels Driven by Cation-Anion Double Ordering in Perovskites. 2020 , 20, 8353-8359	6
348	Enhancing the Bifunctional Catalytic Performance of Porous La _{0.9} Mn _{0.6} Ni _{0.4} O _{3-δ} Nanofibers for Li ⁺ /O ₂ Batteries through Exsolution of Ni Nanoparticles. 2020 , 3, 10015-10022	3
347	Iron stabilized 1/3 A-site deficient La _{1-x} Ti _x O ₃ perovskite cathodes for efficient CO ₂ electroreduction. 2020 , 8, 21053-21061	5
346	Understanding electrochemical switchability of perovskite-type exsolution catalysts. 2020 , 11, 4801	13
345	In-operando gas switching to suppress the degradation of symmetrical solid oxide fuel cells. 2020 , 476, 228630	2
344	Highly active dry methane reforming catalysts with boosted in situ grown Ni-Fe nanoparticles on perovskite via atomic layer deposition. 2020 , 6, eabb1573	29

343	Tailoring the Surface of Perovskite through In Situ Growth of Ru/RuO ₂ Nanoparticles as Robust Symmetrical Electrodes for Reversible Solid Oxide Cells. 2020 , 7, 2000828	2
342	Toward Controlling Filament Size and Location for Resistive Switches via Nanoparticle Exsolution at Oxide Interfaces. 2020 , 16, e2003224	10
341	Structure and electrochemical properties of titanate perovskite with in situ exsolution as a ceramic electrode material. 2020 , 45, 29-38	1
340	Metal Exsolution to Enhance the Catalytic Activity of Electrodes in Solid Oxide Fuel Cells. 2020 , 10,	8
339	Exceptional Tunability over Size and Density of Spontaneously Formed Nanoparticles via Nucleation Dynamics. 2020 , 12, 24039-24047	12
338	Exsolution of nickel alloys anchored nanoparticles on perovskite oxides for CO oxidation. 2020 , 778, 012059	3
337	Polymer Lamellae as Reaction Intermediates in the Formation of Copper Nanospheres as Evidenced by In Situ X-ray Studies. 2020 , 132, 11724-11730	1
336	A mesoporous catalytic fiber architecture decorated by exsolved nanoparticles for reversible solid oxide cells. 2020 , 468, 228349	7
335	Control of transition metal-oxygen bond strength boosts the redox ex-solution in a perovskite oxide surface. 2020 , 13, 3404-3411	14
334	Ex-Solved Ag Nanocatalysts on a Sr-Free Parent Scaffold Authorize a Highly Efficient Route of Oxygen Reduction. 2020 , 30, 2001326	24
333	A novel catalytic membrane reactor with homologous exsolution-based perovskite catalyst. 2020 , 608, 118213	12
332	High Temperature Water Gas Shift Reactivity of Novel Perovskite Catalysts. 2020 , 10, 582	9
331	The role of manganese substitution on the redox behavior of La _{0.6} Sr _{0.4} Fe _{0.8} Mn _{0.2} O _{3-δ} . 2020 , 40, 4076-4083	8
330	Efficient water splitting through solid oxide electrolysis cells with a new hydrogen electrode derived from A-site cation-deficient La _{0.4} Sr _{0.55} Co _{0.2} Fe _{0.6} Nb _{0.2} O _{3-δ} perovskite. 2020 , 17, 100458	16
329	The formation of oriented barium carbonate from the decomposition of yttria-doped barium zirconate films. 2020 , 186, 401-405	2
328	Bottom-Up and Top-Down Approaches for MgO. 2020 ,	2
327	In Situ Exsolved Metal Nanoparticles: A Smart Approach for Optimization of Catalysts. 2020 , 32, 5424-5441	40
326	Effect of crystal symmetries and phase boundaries on the magnetoelectricity of La ₂ NiMnO ₆ prepared under ambient conditions. 2020 , 127, 214101	3

325	Low temperature methane conversion with perovskite-supported exo/endo-particles. 2020 , 8, 12406-12417	12
324	Metal Supported SOFCs for Mobile Applications using Hydrocarbon Fuels. 2020 , 167, 104510	4
323	Ni catalysts for dry methane reforming prepared by A-site exsolution on mesoporous defect spinel magnesium aluminate. 2020 , 602, 117694	16
322	Emerging Perovskite Electromagnetic Wave Absorbers from Bi-Metal-Organic Frameworks. 2020 , 20, 4818-4826	6
321	In situ growth of nanoparticles in A-site deficient ferrite perovskite as an advanced electrode for symmetrical solid oxide fuel cells. 2020 , 456, 228000	17
320	In-situ growth of nanoparticles-decorated double perovskite electrode materials for symmetrical solid oxide cells. 2020 , 270, 118842	31
319	Impact of Sn doping on methylammonium lead chloride perovskite: An experimental study. 2020 , 127, 125110	6
318	Progress and Opportunities for Exsolution in Electrochemistry. 2020 , 1, 32-43	15
317	Modifying the Surface Structure of Perovskite-Based Catalysts by Nanoparticle Exsolution. 2020 , 10, 268	18
316	Facile surface improvement of LaCoO ₃ perovskite with high activity and water resistance towards toluene oxidation: Ca substitution and citric acid etching. 2020 , 10, 5829-5839	13
315	Studies on structural, redox and electrical properties of Ni-doped strontium titanate materials. 2020 , 46, 24635-24641	3
314	Recent Advances of First d-Block Metal-Based Perovskite Oxide Electrocatalysts for Alkaline Water Splitting. 2020 , 10, 770	20
313	Enhancing perovskite electrocatalysis through synergistic functionalization of B-site cation for efficient water splitting. 2020 , 401, 126082	16
312	Proton-conducting oxides for energy conversion and storage. 2020 , 7, 011314	92
311	Study on Ca Segregation toward an Epitaxial Interface between Bismuth Ferrite and Strontium Titanate. 2020 , 12, 12264-12274	3
310	Enhancing Activity and Durability of A-Site-Deficient (La _{0.6} Sr _{0.4}) _{0.95} Co _{0.2} Fe _{0.8} O _{3-δ} Cathode by Surface Modification with PrO ₂ Nanoparticles. 2020 , 8, 3367-3380	21
309	Perovskite-Based Catalysts as Efficient, Durable, and Economical NO _x Storage and Reduction Systems. 2020 , 10, 208	8
308	In situ grown metallic nickel from XNi (X=La, Mg, Sr) oxides for converting plastics into carbon nanotubes: Influence of metal-support interaction. 2020 , 258, 120633	30

307	Surface modification and electrochemical properties of cobalt-based layered perovskite cathodes for intermediate-temperature solid oxide fuel cells. 2020 , 347, 115268	4
306	Metal oxide nanocomposites as anode and cathode for low temperature solid oxide fuel cell. 2020 , 102, 106162	20
305	In Situ Exsolved Nanoparticles on La _{0.5} Sr _{1.5} Fe _{1.5} Mo _{0.5} O _{6-δ} Anode Enhance the Hydrogen Oxidation Reaction in SOFCs. 2020 , 167, 024510	12
304	Exsolution of Nickel Nanoparticles from Mixed-Valence Metal Oxides: A Quantitative Evaluation by Magnetic Measurements. 2020 , 37, 1900472	5
303	Exsolution of Cu nanoparticles in (LaSr) _{0.9} Fe _{0.9} Cu _{0.1} O ₄ Ruddlesden-Popper oxide as symmetrical electrode for solid oxide cells. 2020 , 511, 145525	19
302	Materials and nano-structural processes for use in solid oxide fuel cells: a review. 2020 , 57, 135-151	13
301	Tuning interfacial chemistry and electrochemical properties of solid oxide cells via cation interdiffusion. 2020 , 46, 12044-12049	1
300	Hierarchical porous γ -MnO ₂ from perovskite precursor: Application to the formaldehyde total oxidation. 2020 , 388, 124146	17
299	Effect of oxygen vacancies on electrical conductivity of La _{0.5} Sr _{0.5} FeO _{3-δ} from first-principles calculations. 2020 , 8, 4784-4789	18
298	In-situ exsolution of nanoparticles from Ni substituted Sr ₂ Fe _{1.5} Mo _{0.5} O ₆ perovskite oxides with different Ni doping contents. 2020 , 348, 136351	29
297	Combining Exsolution and Infiltration for Redox, Low Temperature CH ₄ Conversion to Syngas. 2020 , 10, 468	6
296	Spray-Flame-Prepared LaCo _{1-x} Fe _{x} O ₃ Perovskite Nanoparticles as Active OER Catalysts: Influence of Fe Content and Low-Temperature Heating. 2020 , 7, 2564-2574	9
295	In situ embedding of CoFe nanocatalysts into Sr ₃ FeMoO ₇ matrix as high-performance anode materials for solid oxide fuel cells. 2020 , 459, 228071	20
294	Metal Nanoparticle Exsolution on a Perovskite Stannate Support with High Electrical Conductivity. 2020 , 20, 3538-3544	9
293	La _{0.6} Sr _{0.4} Cr _{0.8} Co _{0.2} O ₃ Perovskite Decorated with Exsolved Co Nanoparticles for Stable CO ₂ Splitting and Syngas Production. 2020 , 3, 4569-4579	19
292	Review on exsolution and its driving forces in perovskites. 2020 , 2, 032001	21
291	Polymer Lamellae as Reaction Intermediates in the Formation of Copper Nanospheres as Evidenced by In Situ X-ray Studies. 2020 , 59, 11627-11633	5
290	Reaction tuned formation of hierarchical BaCo _{0.4} Fe _{0.4} Zr _{0.1} Y _{0.1} O _{3-δ} cathode. 2020 , 455, 227971	6

289	3D-Nanosponge enabled segregation: a versatile approach for highly dispersed and high content functionalization of metal oxide species. 2020 , 4, 1739-1746	2
288	Nanosized copper(ii) oxide/silica for catalytic generation of nitric oxide from S-nitrosothiols. 2020 , 8, 4267-4277	7
287	Restructuring effects of the chemical environment in metal nanocatalysis and single-atom catalysis. 2021 , 373, 80-97	17
286	Towards anti-perovskite nitrides as potential nitrogen storage materials for chemical looping ammonia production: Reduction of Co ₃ ZnN, Ni ₃ ZnN, Co ₃ InN and Ni ₃ InN under hydrogen. 2021 , 364, 196-201	3
285	Recent Advances in Perovskite-Type Oxides for Energy Conversion and Storage Applications. 2021 , 11, 2000459	105
284	Exploring the effect of Ga ³⁺ doping on structural, electronic and optical properties of CH ₃ NH ₃ PbCl ₃ perovskites: an experimental study. 2021 , 32, 12841-12855	1
283	Exsolution manipulated local surface cobalt/iron alloying and dealloying conversion in La _{0.95} Fe _{0.05} Co _{0.95} O ₃ perovskite for oxygen evolution reaction. 2021 , 854, 157154	7
282	Understanding the A-site non-stoichiometry in perovskites: promotion of exsolution of metallic nanoparticles and the hydrogen oxidation reaction in solid oxide fuel cells. 2021 , 5, 401-411	7
281	New Insight into the Doped Strontium Titanate Cathode with In Situ Exsolved Nickel Nanoparticles for Electrolysis of Carbon Dioxide. 2021 , 8, 2001598	7
280	Perovskite oxides as supercapacitive electrode: Properties, design and recent advances. 2021 , 431, 213680	9
279	Mechanistic insights into the phase transition and metal ex-solution phenomena of Pr _{0.5} Ba _{0.5} Mn _{0.85} Co _{0.15} O ₃ from simple to layered perovskite under reducing conditions and enhanced catalytic activity. 2021 , 14, 873-882	11
278	Coke Formation during high-temperature CO ₂ electrolysis over AFeO ₃ (A = La/Sr) cathode: Effect of A-site metal segregation. 2021 , 283, 119642	15
277	Weakening the strong Fe-La interaction in A-site-deficient perovskite via Ni substitution to promote the thermocatalytic synthesis of carbon nanotubes from plastics. 2021 , 403, 123642	11
276	A highly active and carbon-tolerant anode decorated with in situ grown cobalt nano-catalyst for intermediate-temperature solid oxide fuel cells. 2021 , 282, 119553	24
275	An all-oxide electrolysis cells for syngas production with tunable H ₂ /CO yield via co-electrolysis of H ₂ O and CO ₂ . 2021 , 482, 228887	14
274	Denary oxide nanoparticles as highly stable catalysts for methane combustion. 2021 , 4, 62-70	45
273	Defective Sr _{0.9} Mo _{0.9} O ₃ perovskites with exsolved Ni nanoparticles as high-performance composite anodes for solid-oxide fuel cells. 2021 , 45, 12041-12049	1
272	Defect engineering of oxide perovskites for catalysis and energy storage: synthesis of chemistry and materials science. 2021 , 50, 10116-10211	31

271	Ce-enhanced LaMnO ₃ perovskite catalyst with exsolved Ni particles for H ₂ production from CH ₄ dry reforming.	1
270	Understanding synergistic metal-oxide interactions of in situ exsolved metal nanoparticles on a pyrochlore oxide support for enhanced water splitting. 2021 , 14, 3053-3063	17
269	Boosted dehydrogenation of ethane over porous vanadium-based single crystals.	1
268	A review on infiltration techniques for energy conversion and storage devices: from fundamentals to applications.	4
267	Tailoring of a catalyst La _{0.8} Ce _{0.1} Ni _{0.4} Ti _{0.6} O _{3-δ} interlayer via in situ exsolution for a catalytic membrane reactor. 2021 , 6, 1395-1403	0
266	Highly efficient CO ₂ electrolysis to CO on Ruddlesden-Popper perovskite oxide with in situ exsolved Fe nanoparticles. 2021 , 9, 8740-8748	7
265	Performance Benchmark of Planar Solid Oxide Cells Based on Material Development and Designs. 2021 , 9, 2001062	11
264	Progress of Exsolved Metal Nanoparticles on Oxides as High Performance (Electro)Catalysts for the Conversion of Small Molecules. 2021 , 17, e2005383	22
263	Non-Stoichiometry Induced Exsolution of Metal Oxide Nanoparticles via Formation of Wavy Surfaces and their Enhanced Electrocatalytic Activity: Case of Misfit Calcium Cobalt Oxide. 2021 , 13, 9897-9907	4
262	Exsolution Catalysts—Increasing Metal Efficiency. 2021 , 1, 249-260	1
261	Precipitation of dopants on acceptor-doped LaMnO ₃ revealed by defect chemistry from first principles. 2021 , 154, 064702	2
260	Trends and Prospects of Bimetallic Exsolution. 2021 , 27, 6666-6675	4
259	Exsolution of Embedded Nanoparticles in Defect Engineered Perovskite Layers. 2021 , 15, 4546-4560	5
258	Influence of nickel exsolution on the electrochemical performance and rate-determining stages of hydrogen oxidation on Sr _{1.95} Fe _{1.4} Ni _{0.1} Mo _{0.5} O _{6-δ} promising electrode for solid state electrochemical devices. 2021 , 369, 137673	9
257	Upscaling of Co-Impregnated La _{0.20} Sr _{0.25} Ca _{0.45} TiO ₃ Anodes for Solid Oxide Fuel Cells: A Progress Report on a Decade of Academic-Industrial Collaboration. 2021 , 11, 2003951	3
256	Hierarchical and Anisotropic Nanostructured Catalysts. 2021 , 161-181	0
255	Emergence and Future of Exsolved Materials. 2021 , 17, e2006479	24
254	Solid Oxide Electrolysis of H ₂ O and CO ₂ to Produce Hydrogen and Low-Carbon Fuels. 2021 , 4, 508-517	8

253	Progress in proton-conducting oxides as electrolytes for low-temperature solid oxide fuel cells: From materials to devices. 2021 , 9, 984	13
252	Perovskite Cathode Materials for Low-Temperature Solid Oxide Fuel Cells: Fundamentals to Optimization. 1	1
251	Nanoparticle exsolution in perovskite oxide and its sustainable electrochemical energy systems. 2021 , 492, 229626	1
250	Achieving Highly Efficient Carbon Dioxide Electrolysis by Construction of the Heterostructure. 2021 , 13, 20060-20069	8
249	Exsolution of Noble-Metal Nanoparticles on Perovskites as Enhanced Peroxidase Mimics for Bioanalysis. 2021 , 93, 5954-5962	8
248	Performance and Limitations of Nickel-Doped Chromite Anodes in Electrolyte-Supported Solid Oxide Fuel Cells. 2021 , 14, 2401-2413	3
247	Perovskite Oxides for Cathodic Electrocatalysis of Energy-Related Gases: From O ₂ to CO ₂ and N ₂ . 2021 , 31, 2101872	7
246	Unlocking the Optimal Aqueous Bi-Bi ₂ O ₃ Anode via Unifying Octahedrally Liberated Bi-Atoms and Spilled Nano-Bi Exsolution. 2021 , 36, 376-386	12
245	Activation Strategies of Perovskite-Type Structure for Applications in Oxygen-Related Electrocatalysts.. 2021 , 5, e2100012	4
244	Ex-solution kinetics of nickel-ceria-doped strontium titanate perovskites. 2021 , 27, 2527-2536	0
243	Stability and activity controls of Cu nanoparticles for high-performance solid oxide fuel cells. 2021 , 285, 119828	8
242	Platinum incorporation into titanate perovskites to deliver emergent active and stable platinum nanoparticles. <i>Nature Chemistry</i> , 2021 , 13, 677-682	17.6 16
241	The first observation of Ni nanoparticle exsolution from YSZ and its application for dry reforming of methane. 2021 , 1, 100021	4
240	Perovskite materials for highly efficient catalytic CH ₄ fuel reforming in solid oxide fuel cell. 2021 , 46, 24441-24441	6
239	Convergent ambient sunlight-powered multifunctional catalysis for toluene abatement over in situ exsolution of Mn ₃ O ₄ on perovskite parent. 2021 , 412, 128560	8
238	Enhancing Stability and Catalytic Activity by In Situ Exsolution for High-Performance Direct Hydrocarbon Solid Oxide Fuel Cell Anodes. 2021 , 60, 7826-7834	4
237	Analysis of Performance Losses and Degradation Mechanism in Porous La NiTiO:YSZ Electrodes. 2021 , 14,	1
236	Enhancing Thermocatalytic Activities by Upshifting the d-Band Center of Exsolved Co-Ni-Fe Ternary Alloy Nanoparticles for the Dry Reforming of Methane. 2021 , 133, 16048-16055	2

235	Improved Catalytic Activity of the High-Temperature Water Gas Shift Reaction on Metal-Exsolved La _{0.9} Ni _{0.05} Fe _{0.95} O ₃ by Controlling Reduction Time. 2021 , 5, 28	0
234	Oxygen Vacancies and Lewis Acid Sites Synergistically Promoted Catalytic Methane Combustion over Perovskite Oxides. 2021 , 55, 9243-9254	12
233	A Review on Perovskite-Type LaFeO ₃ Based Electrodes for CO ₂ Reduction in Solid Oxide Electrolysis Cells: Current Understanding of Structure–Functional Property Relationships. 2021 , 33, 4249-4268 ⁶	6
232	Investigation of hetero-phases grown via in-situ exsolution on a Ni-doped (La,Sr)FeO ₃ cathode and the resultant activity enhancement in CO ₂ reduction. 2021 , 286, 119917	19
231	Tuning Point Defects by Elastic Strain Modulates Nanoparticle Exsolution on Perovskite Oxides. 2021 , 33, 5021-5034	7
230	Tailoring Electrochemical Performance of Perovskite Anodes through Exsolution of Nanocatalysts. 2021 , 13, 29755-29763	1
229	Enhancing Thermocatalytic Activities by Upshifting the d-Band Center of Exsolved Co-Ni-Fe Ternary Alloy Nanoparticles for the Dry Reforming of Methane. 2021 , 60, 15912-15919	10
228	Harnessing Selective Exsolution of Sn Metal to Enhance Electrical Conductivity in Oxygen-Deficient Perovskite Stannates. 2021 , 31, 2105086	3
227	Recent development of perovskite oxide-based electrocatalysts and their applications in low to intermediate temperature electrochemical devices. 2021 ,	16
226	Cation-Deficient Perovskites for Clean Energy Conversion. 2021 , 2, 477-488	20
225	Roadmap on inorganic perovskites for energy applications. 2021 , 3, 031502	13
224	In Situ Coexsolution of Metal Nanoparticle-Decorated Double Perovskites As Anode Materials for Solid Oxide Fuel Cells. 2021 , 4, 7992-8002	4
223	Solid Oxide Fuel Cells: Fabrication and Microstructure. 2022 , 561-620	
222	Probing into the In-Situ Exsolution Mechanism of Metal Nanoparticles from Doped Ceria Host. 2021 , 11,	1
221	In situ exsolution of metallic Cu in mixed oxides as battery-type electrode for energy storage devices. 2021 , 418, 129495	5
220	Ru exsolution in substituted La _{0.75} Sr _{0.25} Cr _{0.5} Mn _{0.5} O _{3-δ} compound as anode material for an IT-SOFCs. 2021 , 268, 124724	4
219	Use of Interplay between A-Site Non-Stoichiometry and Hydroxide Doping to Deliver Novel Proton-Conducting Perovskite Oxides. 2021 , 11, 2101337	1
218	Exsolved metal-boosted active perovskite oxide catalyst for stable water gas shift reaction. 2021 , 400, 148-159	5

217	Exsolution of Embedded Ni ²⁺ Nanoparticles: Implications for Dry Reforming of Methane. 2021 , 4, 8626-8636	3
216	Enhancing Ni Exsolution by Nonmetal B-Site Substituents (Si and P) in SrTiO ₃ -Based Solid Oxide Fuel Cell Anodes. 2021 , 35, 15084-15093	3
215	Controlling exsolution with a charge-balanced doping approach. 2021 , 87, 106193	3
214	Surface-Electronic-Structure Reconstruction of Perovskite via Double-Cation Gradient Etching for Superior Water Oxidation. 2021 , 21, 8166-8174	5
213	Recent progress in nanostructured electrodes for solid oxide fuel cells deposited by spray pyrolysis. 2021 , 507, 230277	8
212	The Influence of the Chemical Potential on Defects and Function of Perovskites in Catalysis. 2021 , 9, 746229	
211	Novel perovskite catalysts for CO ₂ utilization - Exsolution enhanced reverse water-gas shift activity. 2021 , 292, 120183	8
210	Promoting exsolution of RuFe alloy nanoparticles on SrFeRuMoO via repeated redox manipulations for CO electrolysis. 2021 , 12, 5665	13
209	Surface Defect Engineering on Perovskite Oxides as Efficient Bifunctional Electrocatalysts for Water Splitting. 2021 , 13, 42852-42860	8
208	Catalyst-Exsolving Anode-Supported Low-Temperature Solid Oxide Fuel Cell. 2021 , 168, 094503	
207	In-situ exsolved FeNi nanoparticles on perovskite matrix anode for co-production of ethylene and power from ethane in proton conducting fuel cells. 2021 , 393, 139096	7
206	Theoretical insights on the exsolved behavior of ruthenium atom in titanate perovskite. 2021 , 566, 150641	1
205	In-situ exsolution of Ni nanoparticles to achieve an active and stable solid oxide fuel cell anode catalyst on A-site deficient La _{0.4} Sr _{0.4} Ti _{0.94} Ni _{0.06} O _{3-δ} . 2021 , 103, 264-274	4
204	In-situ construction of ceria-metal/titanate heterostructure with controllable architectures for efficient fuel electrochemical conversion. 2021 , 298, 120588	5
203	Recent advancements, doping strategies and the future perspective of perovskite-based solid oxide fuel cells for energy conversion. 2022 , 428, 132603	15
202	Manipulating Surface Termination of Perovskite Manganate for Oxygen Activation. 2021 , 31, 2006439	7
201	Boosting methane partial oxidation on ceria through exsolution of robust Ru nanoparticles. 2021 , 2, 2924-2934	3
200	Unveiling the Interface Structure of the Exsolved Co-Fe Alloy Nanoparticles from Double Perovskite and Its Application in Solid Oxide Fuel Cells. 2021 , 13, 3287-3294	4

199	Promotion of oxygen reduction reaction on a double perovskite electrode by a water-induced surface modification. 2021 , 14, 1506-1516	22
198	In Situ exsolved Au nanoparticles from perovskite oxide for efficient epoxidation of styrene. 2021 , 9, 10374-10384	5
197	Replacement of Ca by Ni in a Perovskite Titanate to Yield a Novel Perovskite Exsolution Architecture for Oxygen-Evolution Reactions. 2020 , 10, 1903693	29
196	Perovskite Materials in Electrocatalysis. 2020 , 209-250	2
195	Facilitating oxygen reduction by silver nanoparticles on lanthanum strontium ferrite cathode. 2020 , 24, 609-621	4
194	Efficient reversible CO/CO ₂ conversion in solid oxide cells with a phase-transformed fuel electrode. 2021 , 64, 1114-1126	8
193	High performance Ni exsolved and Cu added La _{0.8} Ce _{0.2} Mn _{0.6} Ni _{0.4} O ₃ -based perovskites for ethanol steam reforming. 2020 , 45, 16458-16468	6
192	Monodisperse Pd Nanotetrahedrons on Ultrathin MoO ₃ Nanosheets as Excellent Heterogeneous Catalyst for Chemoselective Hydrogenation Reactions. 2017 , 121, 27528-27534	19
191	Ternary Ni-Co-Fe Exsolved Nanoparticles/Perovskite System for Energy Applications: Nanostructure Characterization and Electrochemical Activity. 2020 , 3, 9528-9533	2
190	Nanoparticle Ex-solution for Supported Catalysts: Materials Design, Mechanism and Future Perspectives. 2021 , 15, 81-110	36
189	In situ and operando characterisation techniques for solid oxide electrochemical cells: recent advances. 2021 , 3, 012001	4
188	Ca-doped rare earth perovskite materials for tailored exsolution of metal nanoparticles. 2020 , 76, 1055-1070	7
187	A review of smart exsolution catalysts for the application of gas phase reactions. 2020 , 23, 211-230	2
186	Nanomaterials for Advanced Electrode of Low Temperature Solid Oxide Fuel Cells (SOFCs). 2016 , 53, 469-477	18
185	Unraveling the evolution of exsolved Fe-Ni alloy nanoparticles in Ni-doped La _{0.3} Ca _{0.7} Fe _{0.7} Cr _{0.3} O ₃ and their role in enhancing CO ₂ electrocatalysis.	2
184	In-Situ Growth of Ru/RuO ₂ Nanoparticles Decorated (La _{0.6} Sr _{1.4}) _{0.95} Mn _{0.9} Ru _{0.1} O ₄ as a Potential Electrode for Symmetrical Solid Oxide Fuel Cells.	
183	Exceptionally high performance of protonic ceramic fuel cells with stoichiometric electrolytes. 2021 , 14, 6476-6483	11
182	Activating Lattice Oxygen in Perovskite Oxide by B-Site Cation Doping for Modulated Stability and Activity at Elevated Temperatures. 2021 , 8, e2102713	8

181	Integration of dry-reforming and sorption-enhanced water gas shift reactions for the efficient production of high-purity hydrogen from anthropogenic greenhouse gases. 2021 , 105, 563-563	2
180	Direct Observation of Rhodium Ex-Solution from a Ceria Nanodomain and Its Use for Hydrogen Production via Propane Steam Reforming. 2021 , 13, 48508-48515	0
179	Examining Operando Generated Ni-Based Alloy Nanomaterials as Fuel Electrodes in Solid Oxide Cells. 2021 , 168, 104514	2
178	Self-regeneration of supported transition metals by a high entropy-driven principle. 2021 , 12, 5917	3
177	Elucidating the Strain-Vacancy-Activity Relationship on Structurally Deformed Co@CoO Nanosheets for Aqueous Phase Reforming of Formaldehyde. 2021 , 17, e2102970	3
176	Roadmap on Sustainable Mixed Ionic-Electronic Conducting Membranes. 2105702	7
175	Semiconductor Electrochemistry for Clean Energy Conversion and Storage. 1	10
174	Plasma Driven Exsolution for Nanoscale Functionalization of Perovskite Oxides.. 2021 , 5, e2100868	4
173	Emerging anode materials architected with NiCoFe ternary alloy nanoparticles for ethane-fueled protonic ceramic fuel cells. 2021 , 515, 230634	1
172	Biomimetic construction of bifunctional perovskite oxygen catalyst for zinc-air batteries. 2021 , 399, 139407	2
171	Solid Oxide Fuel Cell Materials. 2018 , 175-215	
170	Micro-mechanics in Electrochemical Systems. 2019 , 901-953	
169	Development and application of ex-solution nanocatalyst. 2020 , 23, 200-210	
168	Synthesis and characterization of perovskite-supported CoNi catalyst for CO oxidation via exsolution. 2021 , 1195, 012029	
167	La 3+-substituted Sr ₂ Fe _{1.5} Ni _{0.1} Mo _{0.4} O _{6-δ} as Anodes for Solid Oxide Fuel Cells. 2020 , 35, 617	1
166	High-performance and durable alcohol-fueled symmetrical solid oxide fuel cell based on ferrite perovskite electrode. 2022 , 306, 118117	0
165	Enhanced photoelectrocatalytic hydrogen evolution using off-stoichiometry La _{0.43} FeO _y films. 2022 , 893, 162238	
164	Temperature-dependent producing multi-walled carbon nanotubes and hydrogen from plastic wastes over A-site-deficient perovskite LaNiCoO. 2021 , 132831	1

163	Exsolution Synthesis of Nanocomposite Perovskites with Tunable Electrical and Magnetic Properties. 2108005	6
162	Unveiling the key factor for the phase reconstruction and exsolved metallic particle distribution in perovskites. 2021 , 12, 6814	2
161	Doped Strontium Titanate Anode for Solid Oxide Fuel Cells: Electrical and Sintering behavior. 2021 , 48, 8709-8709	0
160	Developing sustainable, high-performance perovskites in photocatalysis: design strategies and applications. 2021 ,	10
159	Synergistic Interaction between In Situ Exsolved and Phosphorized Nanoparticles and Perovskite Oxides for Enhanced Electrochemical Water Splitting.	
158	Recent advances in the heteroatom doping of perovskite oxides for efficient electrocatalytic reactions. 2021 ,	5
157	Iron-based electrode materials for solid oxide fuel cells and electrolyzers. 2021 , 14, 6287-6319	1
156	Porous single-crystalline vanadium nitride octahedra with a unique electrocatalytic performance.	1
155	Tuning the oxygen vacancy concentration in a heterostructured electrode for high chemical and electrochemical stabilities. 2022 , 431, 134345	2
154	Development of intertwined nanostructured multi-phase air electrodes for efficient and durable reversible solid oxide cells. 2022 , 305, 121056	4
153	Direct propane fuel cells. 2022 , 315, 123152	0
152	Enhanced CO ₂ electrolysis at metal-oxide interfaces. 2022 , 26, 773-782	1
151	Electrical stability during redox cycles promoted by Pd exsolution in LSFPd thin films. 2022 ,	0
150	A Robust Approach to In Situ Exsolve Highly Dispersed and Stable Electrocatalysts.. 2022 , e2105741	1
149	Robust in situ exsolved nanocatalysts on perovskite oxide as an efficient anode for hydrocarbon fueled solid oxide fuel cells.	2
148	Self-assembled nano-composite perovskites as highly efficient and robust hybrid cathodes for solid oxide fuel cells. 2022 , 10, 2496-2508	6
147	Layered-perovskite oxides with in situ exsolved Co-Fe alloy nanoparticles as highly efficient electrodes for high-temperature carbon dioxide electrolysis. 2022 , 10, 2327-2335	2
146	Bulk and surface exsolution produces a variety of Fe-rich and Fe-depleted ellipsoidal nanostructures in LaSrFeO thin films. 2021 ,	2

145	Nanoscale interface engineering for solid oxide fuel cells using atomic layer deposition.	1
144	Manipulating Electrocatalytic Activity of Perovskite Oxide Through Electrochemical Treatment.. 2022 , e2107131	2
143	Exsolution of nanoparticles on A-site-deficient lanthanum ferrite perovskites: its effect on co-electrolysis of CO ₂ and H ₂ O. 2022 , 10, 2483-2495	3
142	Exsolution in La and Ni co-doped strontium titanate: a suitable anode for running SOFCs on ammonia as alternative fuel. 2022 , 334, 04008	
141	Water as a hole-predatory instrument to create metal nanoparticles on triple-conducting oxides.	4
140	Controllable porous perovskite with three-dimensional ordered structure as an efficient oxygen reduction reaction electrocatalyst for flexible aluminum-air battery. 2022 , 523, 231028	0
139	A microstructure engineered perovskite super anode with Li-storage life of exceeding 10,000 cycles. 2022 , 94, 106972	4
138	Activating Surface Lattice Oxygen of a Cu/ZnCuO Catalyst through Interface Interactions for CO Oxidation.. 2022 ,	0
137	Mutual Conversion of CO-CO on a Perovskite Fuel Electrode with Endogenous Alloy Nanoparticles for Reversible Solid Oxide Cells.. 2022 ,	6
136	Evidence for redispersion of Ni on LaMnO ₃ films following high-temperature oxidation. 2022 ,	2
135	A Microstructure Engineered Perovskite Super Anode with Li-Storage Life of Exceeding 10000 Cycles.	
134	Low-Temperature Exsolution of Ni-Ru Bimetallic Nanoparticles from A-Site Deficient Double Perovskites.. 2022 , e2107020	1
133	A Flexible Method to Fabricate Exsolution-Based Nanoparticle-Decorated Materials in Seconds.. 2022 , e2200250	3
132	Enhancing Oxygen Reduction Activity and Structural Stability of La _{0.6} Sr _{0.4} FeO _{3-δ} by 1 mol % Pt and Ru B-Site Doping for Application in All-Perovskite IT-SOFCs. 2022 , 5, 2918-2928	2
131	New Undisputed Evidence and Strategy for Enhanced Lattice-Oxygen Participation of Perovskite Electrocatalyst through Cation Deficiency Manipulation.. 2022 , e2200530	15
130	Hollow Capsule NiCo ₂ NS Prepared by Self-Sacrificing Template Method for High-Efficiency Bifunctional Catalyst and its Application in Zn-Air Battery.. 2022 ,	0
129	Synthesizing Functional Ceramic Powders for Solid Oxide Cells in Minutes through Thermal Shock. 2022 , 7, 1223-1229	2
128	Effects of exsolution on the stability and morphology of Ni nanoparticles on BZY thin films. 2022 , 228, 117752	0

127	In-situ growth of Ru/RuO ₂ nanoparticles decorated (La _{0.6} Sr _{1.4}) _{0.95} Mn _{0.9} Ru _{0.1} O ₄ as a potential electrode for symmetrical solid oxide fuel cells. 2022 , 189, 1419-1427	1
126	Exsolution Catalyst: An Innovative Approach to Develop Highly Selective and Sensitive Gas Sensors.. 2022 ,	1
125	Exsolution in Ni-doped lanthanum strontium titanate: a perovskite-based material for anode application in ammonia-fed Solid Oxide Fuel Cell. 2022 , 47, 13921-13932	0
124	Comparison of nanostructured composite cathodes synthesized by liquid self-assembly and nanosolid mechanical-mixing for solid oxide fuel cell. 2022 ,	0
123	A-site deficient La _{0.52} Sr _{0.28} Ti _{0.94} Ni _{0.06} O ₃ by low-pulsed electric current treatment: achieved exsolution of B-site Ni nanoparticles and significant improvement of electrocatalytic properties.. 2022 ,	0
122	A review on solid oxide fuel cell durability: Latest progress, mechanisms, and study tools. 2022 , 161, 112339	9
121	The metal/oxide heterointerface delivered by solid-based exsolution strategy: A review. 2022 , 440, 135868	2
120	Shape-shifting nanoparticles on a perovskite oxide for highly stable and active heterogeneous catalysis. 2022 , 441, 136025	2
119	Enhancing the Catalytic Activity and Coking Tolerance of the Perovskite Anode for Solid Oxide Fuel Cells through In Situ Exsolution of Co-Fe Nanoparticles. 2022 , 12, 828-836	1
118	In Situ Growth of Exsolved Nanoparticles under Varying rWGS Reaction ConditionsâA Catalysis and Near Ambient Pressure-XPS Study. 2021 , 11, 1484	1
117	Atomic-Scale Insights into Nickel Exsolution on LaNiO Catalysts via Electron Microscopy.. 2022 , 126, 786-796	1
116	Sol-Gel Combustion-Assisted Electrostatic Spray Deposition for Durable Solid Oxide Fuel Cell Cathodes.. 2022 , 10, 873758	1
115	Anodic Shock-Triggered Exsolution of Metal Nanoparticles from Perovskite Oxide.. 2022 ,	1
114	Evolution of surface and sub-surface morphology and chemical state of exsolved Ni nanoparticles.. 2022 ,	1
113	Robust Ruddlesden-Popper phase Sr ₃ Fe _{1.3} Mo _{0.5} Ni _{0.2} O _{7-δ} decorated with in-situ exsolved Ni nanoparticles as an efficient anode for hydrocarbon fueled solid oxide fuel cells.	0
112	Exsolution of CoFe(Ru) nanoparticles in Ru-doped (La _{0.8} Sr _{0.2}) _{0.9} Co _{0.1} Fe _{0.8} Ru _{0.1} O _{3δ} for efficient oxygen evolution reaction.	1
111	Manipulation of Rare Earth on Voltage-Driven in-Situ Exsolution Process of Perovskite Cathodes for Low-Temperature Solid Oxide Fuel Cells. 2022 , 136934	0
110	Engineering Surface Segregation of Perovskite Oxide through Wet Exsolution for CO Catalytic Oxidation. 2022 , 129110	1

- 109 Promoting ex-solution from metal-organic framework-mediated oxide scaffold for highly active and robust catalyts.. **2022**, e2201109 3
- 108 A one-pot carbon-coating-ex-solution route to efficient Ru-MnO@C nanowire electrocatalysts with enhanced interfacial interactions. **2022**, 446, 136816
- 107 Robust Ni nanocatalysts formed by exsolution from nanofibrous fluorite ceramic supports for methane partial oxidation. **2022**, 323, 124442
- 106 Concurrent promotion of phase transition and bimetallic nanocatalyst exsolution in perovskite oxides driven by Pd doping to achieve highly active bifunctional fuel electrodes for reversible solid oxide electrochemical cells. **2022**, 121517 0
- 105 Metal nanoparticles at grain boundaries of titanate toward efficient carbon dioxide electrolysis.
- 104 Synergistic interaction between in situ exsolved and phosphorized nanoparticles and perovskite oxides for enhanced electrochemical water splitting. **2022**, 0
- 103 Precise Modulation of Triple-Phase Boundaries towards Highly Functional Exsolved Catalyst for Dry Reforming of Methane under A Dilution-Free System.
- 102 Precise Modulation of Triple-Phase Boundaries towards Highly Functional Exsolved Catalyst for Dry Reforming of Methane under A Dilution-Free System. 0
- 101 Exsolution:A promising strategy for constructing advanced composite solids. **2022**, 100172 0
- 100 Exceptionally durable CoFe-exsolved Sr_{0.95}Nb_{0.1}Co_{0.7}Fe_{0.2}O₃ catalyst for rechargeable Zn||air batteries. **2022**, 315, 121553 1
- 99 Ionic Liquid-Assisted Exsolution of High-Density Cu Nanoparticles on La_{1.568}Sr_{0.392}Ce_{0.04}NiCuO_{4- δ} as Cathode for Zn-Air Batteries.
- 98 Oxygen reduction reaction in solid oxide fuel cells. **2022**, 379-426
- 97 Recent Advances in Perovskite Catalysts for Efficient Overall Water Splitting. **2022**, 12, 601 2
- 96 Electrocatalysis on Oxide Surfaces: Fundamental Challenges and Opportunities. **2022**, 101095 1
- 95 Dynamic Surface Evolution of Metal Oxides for Autonomous Adaptation to Catalytic Reaction Environments. 2203370
- 94 Bimetallic Exsolved Heterostructures of Controlled Composition with Tunable Catalytic Properties. 5
- 93 Solid oxide cells with cermet of silver and gadolinium-doped-ceria symmetrical electrodes for high-performance power generation and water electrolysis. **2022**, 1
- 92 Galvanic Restructuring of Exsolved Nanoparticles for Plasmonic and Electrocatalytic Energy Conversion. 2201106

91	Tracking the nanoparticle exsolution/reoxidation processes of Ni-doped SrTi _{0.3} Fe _{0.7} O _{3-δ} electrodes for intermediate temperature symmetric solid oxide fuel cells.	0
90	Exsolution-Driven Surface Transformation in the Host Oxide. 2022 , 22, 5401-5408	3
89	Morphology and facet tailoring of CaSnO ₃ assembled in molten salt with defect-mediated photocatalytic activity. 2022 , 10, 108169	
88	Effects of preparation method on exsolution and alloy formation in a PtRu bimetallic catalyst for hydrogen production via diesel reforming: Impregnation versus combustion synthesis. 2022 ,	0
87	Boosting the stability of perovskites with exsolved nanoparticles by B-site supplement mechanism. 2022 , 13,	0
86	Manipulating and Optimizing the Hierarchically Porous Electrode Structures for Rapid Mass Transport in Solid Oxide Cells. 2203722	1
85	Perovskites as precursors of bimetallic RhNi catalysts for ethanol steam reforming: effect of Rh inclusion on catalyst structure and behavior. 2022 , 26, 101077	0
84	Fabrication of heterostructural Ru-SrTiO ₃ fibers through in-situ exsolution for visible-light-induced photocatalysis. 2022 , 925, 166747	0
83	Surface modified perovskite SrCo _{0.8} Fe _{0.1} Nb _{0.1} O _{3-δ} oxide for enhanced electrocatalytic activity of oxygen evolution reaction. 2022 , 923, 116824	0
82	Recent advances and perspectives of perovskite-derived Ni-based catalysts for CO ₂ reforming of biogas. 2022 , 65, 102206	0
81	Ionic liquid-assisted exsolution of high-density Cu nanoparticles on La _{1.568} Sr _{0.392} Ce _{0.04} Ni _{Cu} O _{4-δ} as cathode for Zn-air batteries. 2023 , 451, 139037	0
80	In Situ Tem Observation of Electron-Beam-Induced Microstructural Evolution in Van Der Waals Layered Magnetic Crsbr Semiconductor.	0
79	A critical review of the nano-structured electrodes of solid oxide cells. 2022 , 58, 10619-10626	1
78	In-situ exsolved NiS nanoparticle-socketed CdS with strongly coupled interfaces as a superior visible-light-driven photocatalyst for hydrogen evolution. 2023 , 321, 122028	1
77	Building Efficient and Durable Hetero-Interfaces on a Perovskite-Based Electrode for Electrochemical CO ₂ Reduction. 2202175	1
76	In Situ Exsolved NiFe/(NiFe) _x O _y Core-shell-Structured Nanocatalysts on Perovskite Anode with Enhanced Coking Resistance. 2022 , 10, 12510-12519	0
75	Tunable Magnetism and Morphology of Ferromagnetic Nanocups in Perovskite Ferroelectric Films via Co Exsolution of Transition Metals. 2022 , 4, 4499-4506	0
74	Reversible Atomization and Nano-Clustering of Pt as a Strategy for Designing Ultra-Low-Metal-Loading Catalysts. 2022 , 126, 16194-16203	1

73	In Situ Control of the Eluted Ni Nanoparticles from Highly Doped Perovskite for Effective Methane Dry Reforming. 2022 , 12, 3325	0
72	US regulators clash over 5G rollout and aircraft safety. 2022 ,	0
71	A Model for Modulating Oxide Ion Transport with Endo-Particles for Application in Energy Conversion. 2200054	0
70	Perovskite-Socketed Sub-3 nm Copper for Enhanced CO ₂ Electroreduction to C ₂₊ . 2206002	0
69	In-situ Exsolution of Bimetallic CoFe nanoparticles on (La,Sr)FeO ₃ perovskite: Its effect on Electrocatalytic Oxidative Coupling of Methane. 2022 , 122026	2
68	Rapid Plasma Exsolution from an A-site Deficient Perovskite Oxide at Room Temperature. 2201131	0
67	A Hybrid Plasma-Catalysis System for CO ₂ Hydrogenation over Perovskite-Type Catalysts: Promoting Effect of A-Site Substitution. 2200817	0
66	Enhanced metal exsolution at the non-polar (001) surfaces of multi-faceted epitaxial thin films.	0
65	Novel CO ₂ -tolerant Co-based double perovskite cathode for intermediate temperature solid oxide fuel cells. 2022 ,	0
64	Ni/(R ₂ O ₃ ,CaO) Nanocomposites Produced by the Exsolution of R _{1.5} Ca _{0.5} NiO ₄ Nickelates (R = Nd, Sm, Eu): Rare Earth Effect on the Catalytic Performance in the Dry Reforming and Partial Oxidation of Methane. 2022 , 15, 7265	0
63	Surface Decomposition of Doped PrBaMn ₂ O _{5+δ} Induced by In Situ Nanoparticle Exsolution: Quantitative Characterization and Catalytic Effect in Methane Dry Reforming Reaction.	0
62	Cr deposition and poisoning on SrCo _{0.9} Ta _{0.1} O _{3-δ} cathode of solid oxide fuel cells. 2022 ,	0
61	Catalytic and electrocatalytic performance of Sr(Ti _{0.3} Fe _{0.7} Ru _{0.07})O _{3-δ} for applications in solid oxide fuel cells supplied with ethanol steam reforming mixtures. 2022 , 551, 232215	0
60	Sr _x Ti _{0.6} Fe _{0.4} O _{3+δ} (x = 1.0, 0.9) catalysts for ammonia synthesis via proton-conducting solid oxide electrolysis cells (PCECs).	0
59	A-site non-stoichiometric defects engineering in xPt _{1-x} Fe _{0.75} Sn _{0.25} O _{3+δ} hollow nanofiber for high-performance formaldehyde sensor.	0
58	Electrochemical Activation Applied to Perovskite Titanate Fibers to Yield Supported Alloy Nanoparticles for Electrocatalytic Application. 2204682	1
57	Anti-phase boundary accelerated exsolution of nanoparticles in non-stoichiometric perovskite thin films. 2022 , 13,	0
56	Metal exsolution engineering on perovskites for electrocatalysis: a perspective. 2023 , 31, 101216	1

- 55 Improved CO₂ electrolysis by a Fe nanoparticle-decorated (Ce, La, Sr)(CrFe)O_{3- δ} perovskite using a combined strategy of lattice defect-building. **2023**, 439, 141699 ○
- 54 Enhanced CO oxidation with cobalt-impregnated porous single-crystal manganese oxides. ○
- 53 Porous single crystal niobium nitride and tantalum nitride nanocubes boost catalytic performance. ○
- 52 Design of hybrid La₁-Ce CoO₃- catalysts for lean methane combustion via creating active Co and Ce species. **2023**, 456, 141054 ○
- 51 Ru-doped lanthanum ferrite as a stable and versatile electrode for reversible symmetric solid oxide cells (r-SSOCs). **2023**, 555, 232399 1
- 50 Metal-organic frameworks-derived hollow nanotube La₂O₃-In₂O₃ heterojunctions for enhanced TEA sensing at low temperature. **2023**, 378, 133125 ○
- 49 In situ/operando regulation of the reaction activities on hetero-structured electrodes for solid oxide cells. **2023**, 133, 101050 ○
- 48 In Situ TEM Observation of Electron-Beam-Induced Microstructural Evolution in van der Waals Layered Magnetic CrSBr Semiconductor. 2200994 ○
- 47 Synthesis of Highly Tunable Alloy Nanocatalyst through Heterogeneous Doping Method. 2204693 ○
- 46 Advances in component and operation optimization of solid oxide electrolysis cell. **2022**, 108035 ○
- 45 Ni/NiO Exsolved Perovskite La_{0.2}Sr_{0.7}Ti_{0.9}Ni_{0.1}O_{3- δ} for Semiconductor-Ionic Fuel Cells: Roles of Electrocatalytic Activity and Physical Junctions. 1
- 44 Exsolution of Ru Nanoparticles on BaCe_{0.9}Y_{0.1}O_{3- δ} Modifying Geometry and Electronic Structure of Ru for Ammonia Synthesis Reaction Under Mild Conditions. 2205424 1
- 43 Fe-Based Layered Double Perovskite Anode with in Situ Exsolved Nanoparticles for Direct Carbon Solid Oxide Fuel Cells. ○
- 42 A novel exsolution technique—twice lasers: rapidly aroused explosive exsolution of nanoparticles to boost electrochemical performance. **2023**, 34, 105709 ○
- 41 Impact of Pd Incorporation Method in Stoichiometric and La-Deficient La_xMnO₃ on Catalytic Performances in Methane Combustion: A Step Forward the Development of Novel NGV Three-Way Catalysts. ○
- 40 Observation of a robust and active catalyst for hydrogen evolution under high current densities. **2022**, 13, 1 ○
- 39 A critical review of key materials and issues in solid oxide cells. ○
- 38 Constructing LaNiO₃/NiO heterostructure via selective dissolution of A-site cations from La_{1-x}Sr_xNiO₃ for promoting oxygen evolution reaction. **2023**, 168908 ○

- 37 Visiting the roles of Sr- or Ca- doping on the oxygen reduction reaction activity and stability of a perovskite cathode for proton conducting solid oxide fuel cells. ○
- 36 Fast Surface Oxygen Release Kinetics Accelerate Nanoparticle Exsolution in Perovskite Oxides. ○
- 35 Exsolution Modeling and Control to Improve the Catalytic Activity of Nanostructured Electrodes. 2208984 ○
- 34 In situ self-exsolved ultrasmall Fe₂P quantum dots from attapulgite nanofibers as superior cocatalysts for solar hydrogen evolution. ○
- 33 The role of dopant on the defect chemistry of metal oxides. **2023**, 313-353 ○
- 32 Nanoparticle Exsolution from Nanoporous Perovskites for Highly Active and Stable Catalysts. 2205890 ○
- 31 Exsolution on perovskite oxides: morphology and anchorage of nanoparticles. **2023**, 59, 3948-3956 ○
- 30 Recent advances in carbon-resistant anodes for solid oxide fuel cells. ○
- 29 Coordination chemistry in modulating electronic structures of perovskite-type oxide nanocrystals for oxygen evolution catalysis. **2023**, 485, 215109 ○
- 28 A-site deficient titanate perovskite surface with exsolved nickel nanoparticles for ethanol steam reforming. **2023**, 274, 118690 ○
- 27 Surface reconstruction of defective SrTi_{0.7}Cu_{0.2}Mo_{0.1}O_{3- δ} perovskite oxide induced by in-situ copper nanoparticle exsolution for high-performance direct CO₂ electrolysis. **2023**, 43, 3414-3420 ○
- 26 Enhanced electrolysis performance through hierarchical nanoparticle formation in the BaCo_{0.4}Fe_{0.4}Zr_{0.1}Y_{0.1}O_{3- δ} cathode materials system. **2023**, 560, 232724 ○
- 25 Voltage-driven reduction method to optimize in-situ exsolution of Fe nanoparticles at Sr₂Fe_{1.5+x}Mo_{0.5}O_{6- δ} interface. **2023**, 561, 232740 ○
- 24 Ni Ingress and Egress in SrTiO₃ Single Crystals of Different Facets. **2023**, 127, 2875-2884 ○
- 23 Low Temperature Performance and Durability of Solid Oxide Fuel Cells with Titanate Based Fuel Electrodes Using Reformate Fuel. **2023**, 170, 024515 ○
- 22 Atypical stability of exsolved Ni-Fe alloy nanoparticles on double layered perovskite for CO₂ dry reforming of methane. **2023**, 328, 122479 ○
- 21 Oxygen electrodes for protonic ceramic cells. **2023**, 446, 142101 ○
- 20 Electrocatalytic Oxidative Coupling of Methane on NiFe Exsolved Perovskite Anode: Effect of Water. **2023**, 15, ○

- 19 Biogas dry reforming over Ni/LnOx-type catalysts (Ln = La, Ce, Sm or Pr). **2023**, ○
- 18 Self-assembled Ni-Rh bimetallic catalyst for the exceptional performance and stability of direct methane protonic ceramic fuel cells. ○
- 17 Dynamic Tracking of NiFe Smart Catalysts using In Situ X-Ray Absorption Spectroscopy for the Dry Methane Reforming Reaction. **2023**, 13, 3990-4002 ○
- 16 Engineering exsolved catalysts for CO2 conversion. 11, ○
- 15 Ex-Solution Hybrids Functionalized on Oxide Nanofibers for Highly Active and Durable Catalytic Materials. **2023**, 17, 5842-5851 ○
- 14 Exsolved catalyst particles as a plaything of atmosphere and electrochemistry. ○
- 13 In situ electrochemical reconstruction of Sr₂Fe_{1.45}Ir_{0.05}Mo_{0.5}O_{6- δ} perovskite cathode for CO₂ electrolysis in solid oxide electrolysis cells. ○
- 12 Histidine-Mediated Synthesis of Chiral Cobalt Oxide Nanoparticles for Enantiomeric Discrimination and Quantification. ○
- 11 Ex Situ Reconstruction-Shaped Ir/CoO/Perovskite Heterojunction for Boosted Water Oxidation Reaction. **2023**, 13, 5007-5019 ○
- 10 Use of A-Site Metal Exsolution from a Hydrated Perovskite Titanate for Combined Steam and CO₂ Reforming of Methane. **2023**, 62, 5831-5835 ○
- 9 Real-time insight into the multistage mechanism of nanoparticle exsolution from a perovskite host surface. **2023**, 14, ○
- 8 Emerging Exsolution Materials for Diverse Energy Applications: Design, Mechanism, and Future Prospects. ○
- 7 Metal Oxide-Supported Metal Catalysts for Electrocatalytic Oxygen Reduction Reaction: Characterization Methods, Modulation Strategies, and Recent Progress. ○
- 6 Exsolution of Co β e Alloy Nanoparticles on the PrBaFeCoO_{5+ δ} Layered Perovskite Monitored by Neutron Powder Diffraction and Catalytic Effect on Dry Reforming of Methane. ○
- 5 Nanoparticle exsolution via electrochemical switching in perovskite fibers for solid oxide fuel cell electrodes. ○
- 4 Rocking chair-like movement of ex-solved nanoparticles on the Ni-Co doped La_{0.6}Ca_{0.4}FeO_{3- δ} oxygen carrier during chemical looping reforming coupled with CO₂ splitting. **2023**, 332, 122745 ○
- 3 Recent Advances in Perovskite Oxides Electrocatalysts: Ordered perovskites, Cations Segregation and Exsolution. ○
- 2 Investigation of Ba doping in A-site deficient perovskite Ni-exsolved catalysts for biogas dry reforming. **2023**, ○

- 1 Influence of A-Site Modifications on the Properties of $\text{La}_{0.21}\text{Sr}_{0.74-x}\text{CaxTi}_{0.95}\text{Fe}_{0.05}\text{O}_3$ Based Fuel Electrode for Solid Oxide Cell. **2023**, 170, 054502

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