Shaomin Liu

List of Publications by Citations

578 papers	25,065 citations	79 h-index	132 g-index
590 ext. papers	29,730 ext. citations	8 avg, IF	7.49 L-index

#	Paper	IF	Citations
578	Single Cobalt Atoms with Precise N-Coordination as Superior Oxygen Reduction Reaction Catalysts. *Angewandte Chemie - International Edition*, **2016**, 55, 10800-5	16.4	1397
577	Mixed ionic□electronic conducting (MIEC) ceramic-based membranes for oxygen separation. *Journal of Membrane Science*, **2008**, 320, 13-41	9.6	896
576	Current status and development of membranes for CO2/CH4 separation: A review. *International Journal of Greenhouse Gas Control*, **2013**, 12, 84-107	4.2	428
575	Identification of single-atom active sites in carbon-based cobalt catalysts during electrocatalytic hydrogen evolution. *Nature Catalysis*, **2019**, 2, 134-141	36.5	409
574	Synthesis, characterization and evaluation of cation-ordered LnBaCo2O5+□as materials of oxygen permeation membranes and cathodes of SOFCs. *Acta Materialia*, **2008**, 56, 4876-4889	8.4	391
573	Chemical approaches toward graphene-based nanomaterials and their applications in energy-related areas. *Small*, **2012**, 8, 630-46	11	335
572	Bottom-up precise synthesis of stable platinum dimers on graphene. *Nature Communications*, **2017**, 8, 1070	17.4	306
571	Single-Site Active Cobalt-Based Photocatalyst with a Long Carrier Lifetime for Spontaneous Overall Water Splitting. *Angewandte Chemie - International Edition*, **2017**, 56, 9312-9317	16.4	277
570	Mechanistic investigation of the enhanced NH3-SCR on cobalt-decorated Ce-Ti mixed oxide: In situ FTIR analysis for structure-activity correlation. *Applied Catalysis B: Environmental*, **2017**, 200, 297-308	21.8	276
569	An insight into metal organic framework derived N-doped graphene for the oxidative degradation of persistent contaminants: formation mechanism and generation of singlet oxygen from peroxymonosulfate. *Environmental Science: Nano*, **2017**, 4, 315-324	7.1	272
568	Recent advances in non-metal modification of graphitic carbon nitride for photocatalysis: a historic review. *Catalysis Science and Technology*, **2016**, 6, 7002-7023	5.5	271
567	Dye Adsorption on Layered Graphite Oxide. *Journal of Chemical & Engineering Data*, **2011**, 56, 138-141	2.8	268
566	Recent advances in nanostructured metal nitrides for water splitting. *Journal of Materials Chemistry A*, **2018**, 6, 19912-19933	13	243
565	Facile assembly of Bi2O3/Bi2S3/MoS2 n-p heterojunction with layered n-Bi2O3 and p-MoS2 for enhanced photocatalytic water oxidation and pollutant degradation. *Applied Catalysis B: Environmental*, **2017**, 200, 47-55	21.8	234
564	Synthesis of Single-Crystalline TiO2 Nanotubes. *Chemistry of Materials*, **2002**, 14, 1391-1397	9.6	233
563	Preparation, characterization and activity evaluation of p□ junction photocatalyst p-ZnO/n-TiO2. *Applied Surface Science*, **2008**, 255, 2478-2484	6.7	218
562	Preparation and characterization of inorganic hollow fiber membranes. *Journal of Membrane Science*, **2001**, 188, 87-95	9.6	214

561	Catalytic combustion of 1,2-dichlorobenzene at low temperature over Mn-modified Co3O4 catalysts. *Applied Catalysis B: Environmental*, **2015**, 166-167, 393-405	21.8	207
560	Re-evaluation of Ba0.5Sr0.5Co0.8Fe0.2O3 perovskite as oxygen semi-permeable membrane. *Journal of Membrane Science*, **2007**, 291, 148-156	9.6	202
559	Gaseous Heterogeneous Catalytic Reactions over Mn-Based Oxides for Environmental Applications: A Critical Review. *Environmental Science & Technology*, **2017**, 51, 8879-8892	10.3	201
558	Optimization of high-speed DNA sequencing on microfabricated capillary electrophoresis channels. *Analytical Chemistry*, **1999**, 71, 566-73	7.8	194
557	Oxidative dehydrogenation on nanocarbon: identification and quantification of active sites by chemical titration. *Angewandte Chemie - International Edition*, **2013**, 52, 14224-8	16.4	190
556	Fabrication and characterization of polyamide thin film nanocomposite (TFN) nanofiltration membrane impregnated with TiO2 nanoparticles. *Desalination*, **2013**, 313, 176-188	10.3	190
555	A comparative study of reduced graphene oxide modified TiO2, ZnO and Ta2O5 in visible light photocatalytic/photochemical oxidation of methylene blue. *Applied Catalysis B: Environmental*, **2014**, 146, 162-168	21.8	160
554	Graphene facilitated visible light photodegradation of methylene blue over titanium dioxide photocatalysts. *Chemical Engineering Journal*, **2013**, 214, 298-303	14.7	160
553	Assessment of Ba0.5Sr0.5Co1−yFeyO3 (y=0.0–1.0) for prospective application as cathode for IT-SOFCs or oxygen permeating membrane. *Electrochimica Acta*, **2007**, 52, 7343-7351	6.7	160
552	Oxygen selective ceramic hollow fiber membranes. *Journal of Membrane Science*, **2005**, 246, 103-108	9.6	160
551	Preparation of porous aluminium oxide (Al2O3) hollow fibre membranes by a combined phase-inversion and sintering method. *Ceramics International*, **2003**, 29, 875-881	5.1	158
550	N-Doped Graphene from Metal–Organic Frameworks for Catalytic Oxidation of p-Hydroxylbenzoic Acid: N-Functionality and Mechanism. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 2693-2701	8.3	152
549	Fundamental Understanding of Photocurrent Hysteresis in Perovskite Solar Cells. *Advanced Energy Materials*, **2019**, 9, 1803017	21.8	148
548	Development of mixed conducting membranes for clean coal energy delivery. *International Journal of Greenhouse Gas Control*, **2009**, 3, 357-367	4.2	147
547	Fabrication of complex-shaped zirconia ceramic parts via a DLP- stereolithography-based 3D printing method. *Ceramics International*, **2018**, 44, 3412-3416	5.1	139
546	Conversion of methane to syngas by a membrane-based oxidation-reforming process. *Angewandte Chemie - International Edition*, **2003**, 42, 5196-8	16.4	138
545	Upconversion carbon quantum dots as visible light responsive component for efficient enhancement of photocatalytic performance. *Journal of Colloid and Interface Science*, **2017**, 496, 425-433	9.3	135
544	Surface-Nitrided Nickel with Bifunctional Structure As Low-Cost Counter Electrode for Dye-Sensitized Solar Cells. *Journal of Physical Chemistry C*, **2010**, 114, 13397-13401	3.8	135

543	Active Centers of Catalysts for Higher Alcohol Synthesis from Syngas: A Review. *ACS Catalysis*, **2018**, 8, 7025-7050	13.1	129
542	Cathode processes and materials for solid oxide fuel cells with proton conductors as electrolytes. *Journal of Materials Chemistry*, **2010**, 20, 6218		129
541	Research progress and materials selection guidelines on mixed conducting perovskite-type ceramic membranes for oxygen production. *RSC Advances*, **2011**, 1, 1661	3.7	123
540	High performance perovskite hollow fibres for oxygen separation. *Journal of Membrane Science*, **2011**, 368, 64-68	9.6	123
539	Nanosized perovskite-type oxides La1−xSrxMO3−δ (M=Co, Mn; x=0, 0.4) for the catalytic removal of ethylacetate. *Catalysis Today*, **2007**, 126, 420-429	5.3	123
538	Combustion synthesis of high-performance Li4Ti5O12 for secondary Li-ion battery. *Ceramics International*, **2009**, 35, 1757-1768	5.1	121
537	Designing CO-resistant oxygen-selective mixed ionic-electronic conducting membranes: guidelines, recent advances, and forward directions. *Chemical Society Reviews*, **2017**, 46, 2941-3005	58.5	119
536	Preparation and characterisation of SrCe0.95Yb0.05O2.975 hollow fibre membranes. *Journal of Membrane Science*, **2001**, 193, 249-260	9.6	117
535	Amphiphobic PVDF composite membranes for anti-fouling direct contact membrane distillation. *Journal of Membrane Science*, **2016**, 505, 61-69	9.6	115
534	Efficient stabilization of cubic perovskite SrCoO3−δ by B-site low concentration scandium doping combined with sol–gel synthesis. *Journal of Alloys and Compounds*, **2008**, 455, 465-470	5.7	114
533	Oxygen permeation behavior of La0.6Sr0.4Co0.8Fe0.2O3 hollow fibre membranes with highly concentrated CO2 exposure. *Journal of Membrane Science*, **2012**, 389, 216-222	9.6	112
532	Fabrication of dense zirconia-toughened alumina ceramics through a stereolithography-based additive manufacturing. *Ceramics International*, **2017**, 43, 968-972	5.1	111
531	Surface charging of layered double hydroxides during dynamic interactions of anions at the interfaces. *Journal of Colloid and Interface Science*, **2008**, 326, 522-9	9.3	109
530	Hydrothermal stability of cobalt silica membranes in a water gas shift membrane reactor. *Separation and Purification Technology*, **2009**, 66, 299-305	8.3	108
529	Preparation and functionality of clay-containing films. *Journal of Materials Chemistry*, **2011**, 21, 15132		106
528	Significant effects of sintering temperature on the performance of La0.6Sr0.4Co0.2Fe0.8O3−δ oxygen selective membranes. *Journal of Membrane Science*, **2007**, 302, 171-179	9.6	106
527	Boosting Fenton-Like Reactions via Single Atom Fe Catalysis. *Environmental Science & Technology*, **2019**, 53, 11391-11400	10.3	105
526	The potent antimicrobial properties of cell penetrating peptide-conjugated silver nanoparticles with excellent selectivity for gram-positive bacteria over erythrocytes. *Nanoscale*, **2013**, 5, 3834-40	7.7	105

525	Improved activity of W-modified MnO TiO2 catalysts for the selective catalytic reduction of NO with NH3. *Chemical Engineering Journal*, **2016**, 288, 216-222	14.7	104
524	Enhancement of oxygen permeation through La0.6Sr0.4Co0.2Fe0.8O3 hollow fibre membranes by surface modifications. *Journal of Membrane Science*, **2008**, 324, 128-135	9.6	104
523	Improved separation and antifouling performance of PVA thin film nanocomposite membranes incorporated with carboxylated TiO2 nanoparticles. *Journal of Membrane Science*, **2015**, 485, 48-59	9.6	102
522	Oxygen Vacancies in Shape Controlled CuO/Reduced Graphene Oxide/InO Hybrid for Promoted Photocatalytic Water Oxidation and Degradation of Environmental Pollutants. *ACS Applied Materials & Interfaces*, **2017**, 9, 11678-11688	9.5	101
521	Effect of the particle size and the debinding process on the density of alumina ceramics fabricated by 3D printing based on stereolithography. *Ceramics International*, **2016**, 42, 17290-17294	5.1	99
520	Steam reforming of acetic acid over Ni/ZrO2 catalysts: Effects of nickel loading and particle size on product distribution and coke formation. *Applied Catalysis A: General*, **2012**, 417-418, 281-289	5.1	97
519	Oxygen Permeability and Stability of Sr0.95Co0.8Fe0.2O3- In a CO2- and H2O-Containing Atmosphere. *Chemistry of Materials*, **2005**, 17, 5856-5861	9.6	97
518	Mixed-Matrix Membranes with Metal-Organic Framework-Decorated CNT Fillers for Efficient CO2 Separation. *ACS Applied Materials & Interfaces*, **2015**, 7, 14750-7	9.5	96
517	Factors That Determine the Performance of Carbon Fuels in the Direct Carbon Fuel Cell. *Industrial & Engineering Chemistry Research*, **2008**, 47, 9670-9677	3.9	96
516	Properties and performance of A-site deficient (Ba0.5Sr0.5)1 Co0.8Fe0.2O3 for oxygen permeating membrane. *Journal of Membrane Science*, **2007**, 306, 318-328	9.6	96
515	Fabrication and characterization of an anode-supported hollow fiber SOFC. *Journal of Power Sources*, **2009**, 187, 90-92	8.9	95
514	BaNb0.05Fe0.95O3 as a new oxygen reduction electrocatalyst for intermediate temperature solid oxide fuel cells. *Journal of Materials Chemistry A*, **2013**, 1, 9781	13	93
513	Metal doped silica membrane reactor: Operational effects of reaction and permeation for the water gas shift reaction. *Journal of Membrane Science*, **2008**, 316, 46-52	9.6	93
512	A numerical study on thermo-hydraulic characteristics of turbulent ow in a circular tube fitted with conical strip inserts. *Applied Thermal Engineering*, **2011**, 31, 2819-2828	5.8	91
511	Cobalt-doped silica membranes for gas separation. *Journal of Membrane Science*, **2009**, 326, 316-321	9.6	89
510	Magnetic Ni-Co alloy encapsulated N-doped carbon nanotubes for catalytic membrane degradation of emerging contaminants. *Chemical Engineering Journal*, **2019**, 362, 251-261	14.7	89
509	Ba0.5Sr0.5Co0.8Fe0.2O3- ceramic hollow-fiber membranes for oxygen permeation. *AICHE Journal*, **2006**, 52, 3452-3461	3.6	88
508	Synthesis and optical property of one-dimensional spinel ZnMn2O4 nanorods. *Nanoscale Research Letters*, **2011**, 6, 323	5	87

507	Preparation of a defect-free alumina cutting tool via additive manufacturing based on stereolithography Optimization of the drying and debinding processes. *Ceramics International*, **2016**, 42, 11598-11602	5.1	86
506	Enhancement photocatalytic activity of the graphite-like CN coated hollow pencil-like ZnO. *Journal of Colloid and Interface Science*, **2015**, 450, 381-387	9.3	83
505	A novel cobalt-free cathode with triple-conduction for proton-conducting solid oxide fuel cells with unprecedented performance. *Journal of Materials Chemistry A*, **2019**, 7, 16136-16148	13	82
504	Novel cobalt-free cathode materials BaCexFe1xO3 for proton-conducting solid oxide fuel cells. *Journal of Power Sources*, **2009**, 194, 801-804	8.9	82
503	Catalytic perovskite hollow fibre membrane reactors for methane oxidative coupling. *Journal of Membrane Science*, **2007**, 302, 109-114	9.6	80
502	A high performance cathode for proton conducting solid oxide fuel cells. *Journal of Materials Chemistry A*, **2015**, 3, 8405-8412	13	79
501	Preparation of AgInS2/TiO2 composites for enhanced photocatalytic degradation of gaseous o-dichlorobenzene under visible light. *Applied Catalysis B: Environmental*, **2016**, 185, 1-10	21.8	79
500	Hierarchically ordered meso/macroporous alumina for enhanced hydrodesulfurization performance. *Microporous and Mesoporous Materials*, **2012**, 158, 1-6	5.3	79
499	Adsorption of Anionic Dyes on Boron Industry Waste in Single and Binary Solutions Using Batch and Fixed-Bed Systems. *Journal of Chemical & Engineering Data*, **2011**, 56, 508-516	2.8	79
498	The enhancement of oxygen flux on Ba0.5Sr0.5Co0.8Fe0.2O3 (BSCF) hollow fibers using silver surface modification. *Journal of Membrane Science*, **2009**, 340, 148-153	9.6	79
497	In Situ Investigation of Reversible Exsolution/Dissolution of CoFe Alloy Nanoparticles in a Co-Doped Sr Fe Mo O Cathode for CO Electrolysis. *Advanced Materials*, **2020**, 32, e1906193	24	79
496	Facile synthesis of N-doped 3D graphene aerogel and its excellent performance in catalytic degradation of antibiotic contaminants in water. *Carbon*, **2019**, 144, 781-790	10.4	79
495	Morphology control of the perovskite hollow fibre membranes for oxygen separation using different bore fluids. *Journal of Membrane Science*, **2011**, 378, 308-318	9.6	77
494	Oxygen permeation through a Ce0.8Sm0.2O2a0.8Sr0.2CrO3 dual-phase composite membrane. *Journal of Membrane Science*, **2006**, 280, 849-855	9.6	77
493	Preparation TiO2/Al2O3 composite hollow fibre membranes. *Journal of Membrane Science*, **2003**, 218, 269-277	9.6	77
492	Roles of structure defect, oxygen groups and heteroatom doping on carbon in nonradical oxidation of water contaminants. *Water Research*, **2020**, 185, 116244	12.5	77
491	Understanding of the Oxidation Behavior of Benzyl Alcohol by Peroxymonosulfate via Carbon Nanotubes Activation. *ACS Catalysis*, **2020**, 10, 3516-3525	13.1	76
490	Construction of p-n heterojunction Bi2O3/BiVO4 nanocomposite with improved photoinduced charge transfer property and enhanced activity in degradation of ortho-dichlorobenzene. *Applied Catalysis B: Environmental*, **2017**, 219, 259-268	21.8	76

489	High performance BaBiScCo hollow fibre membranes for oxygen transport. *Energy and Environmental Science*, **2011**, 4, 2516	35.4	75
488	Novel CO2-tolerant ion-transporting ceramic membranes with an external short circuit for oxygen separation at intermediate temperatures. *Energy and Environmental Science*, **2012**, 5, 5257-5264	35.4	73
487	Synthesis and hydrogen permeation of NiBa(Zr0.1Ce0.7Y0.2)O3metalceramic asymmetric membranes. *International Journal of Hydrogen Energy*, **2011**, 36, 6337-6342	6.7	73
486	Investigation of Gas Permeability in Carbon Nanotube (CNT)Polymer Matrix Membranes via Modifying CNTs with Functional Groups/Metals and Controlling Modification Location. *Journal of Physical Chemistry C*, **2011**, 115, 6661-6670	3.8	72
485	Impact of oxygen vacancy occupancy on piezo-catalytic activity of BaTiO3 nanobelt. *Applied Catalysis B: Environmental*, **2020**, 279, 119340	21.8	72
484	Indium as an ideal functional dopant for a proton-conducting solid oxide fuel cell. *International Journal of Hydrogen Energy*, **2009**, 34, 2421-2425	6.7	71
483	Synthesis of cobaltluminate spinels via glycine chelated precursors. *Materials Chemistry and Physics*, **2006**, 96, 361-370	4.4	71
482	Improved ZIF-8 membrane: Effect of activation procedure and determination of diffusivities of light hydrocarbons. *Journal of Membrane Science*, **2015**, 493, 88-96	9.6	70
481	Improvement of the oxygen permeation through perovskite hollow fibre membranes by surface acid-modification. *Journal of Membrane Science*, **2009**, 345, 65-73	9.6	70
480	Performance of cobalt silica membranes in gas mixture separation. *Journal of Membrane Science*, **2009**, 329, 91-98	9.6	69
479	Properties of polyvinyl chloride (PVC) ultrafiltration membrane improved by lignin: Hydrophilicity and antifouling. *Journal of Membrane Science*, **2019**, 575, 50-59	9.6	69
478	FePO based single chamber air-cathode microbial fuel cell for online monitoring levofloxacin. *Biosensors and Bioelectronics*, **2017**, 91, 367-373	11.8	68
477	Catalytic steam reforming of bio-oil aqueous fraction for hydrogen production over NiMo supported on modified sepiolite catalysts. *International Journal of Hydrogen Energy*, **2013**, 38, 3948-3955	6.7	68
476	A stable BaCeO3-based proton conductor for intermediate-temperature solid oxide fuel cells. *Journal of Power Sources*, **2010**, 195, 3481-3484	8.9	68
475	Effects of amino functionality on uptake of CO2, CH4 and selectivity of CO2/CH4 on titanium based MOFs. *Fuel*, **2015**, 160, 318-327	7.1	67
474	Quantum-sized BiVO4 modified TiO2 microflower composite heterostructures: efficient production of hydroxyl radicals towards visible light-driven degradation of gaseous toluene. *Journal of Materials Chemistry A*, **2015**, 3, 21655-21663	13	66
473	A new cobalt-free proton-blocking composite cathode La2NiO4+aNi0.6Fe0.4O3for BaZr0.1Ce0.7Y0.2O3based solid oxide fuel cells. *Journal of Power Sources*, **2014**, 264, 67-75	8.9	64
472	Novel mixed conducting SrSc0.05Co0.95O3-ceramic membrane for oxygen separation. *AICHE Journal*, **2007**, 53, 3116-3124	3.6	64

471	Studies on adsorption of phenol and 4-nitrophenol on MgAl-mixed oxide derived from MgAl-layered double hydroxide. *Separation and Purification Technology*, **2009**, 67, 194-200	8.3	63
470	Bimetallic Ni-M (M = Co, Cu and Zn) supported on attapulgite as catalysts for hydrogen production from glycerol steam reforming. *Applied Catalysis A: General*, **2018**, 550, 214-227	5.1	63
469	Rapid microwave synthesis of I-doped Bi4O5Br2 with significantly enhanced visible-light photocatalysis for degradation of multiple parabens. *Applied Catalysis B: Environmental*, **2017**, 218, 398-408	21.8	62
468	The role of copper species on Cu/□Al2O3 catalysts for NH3□CO reaction. *Applied Surface Science*, **2012**, 258, 3738-3743	6.7	62
467	Facile hydrogen/nitrogen separation through graphene oxide membranes supported on YSZ ceramic hollow fibers. *Journal of Membrane Science*, **2017**, 535, 143-150	9.6	60
466	METHANE COUPLING USING CATALYTIC MEMBRANE REACTORS. *Catalysis Reviews - Science and Engineering*, **2001**, 43, 147-198	12.6	60
465	The Development of Yolk□Shell-Structured Pd&ZnO@Carbon Submicroreactors with High Selectivity and Stability. *Advanced Functional Materials*, **2018**, 28, 1801737	15.6	60
464	Fabrication of □-Fe2O3/In2O3 composite hollow microspheres: A novel hybrid photocatalyst for toluene degradation under visible light. *Journal of Colloid and Interface Science*, **2015**, 457, 18-26	9.3	58
463	Photocatalysis of C, N-doped ZnO derived from ZIF-8 for dye degradation and water oxidation. *RSC Advances*, **2016**, 6, 95903-95909	3.7	58
462	Insight into the mechanism of photocatalytic degradation of gaseous o-dichlorobenzene over flower-type V2O5 hollow spheres. *Journal of Materials Chemistry A*, **2015**, 3, 15163-15170	13	57
461	A novel CuTi-containing catalyst derived from hydrotalcite-like compounds for selective catalytic reduction of NO with C3H6 under lean-burn conditions. *Journal of Catalysis*, **2014**, 309, 268-279	7.3	57
460	Oxygen Permeation through La0.4Sr0.6Co0.2Fe0.8O3-□Membrane. *Chemistry of Materials*, **2001**, 13, 2797-2800	9.6	56
459	MXene as a non-metal charge mediator in 2D layered CdS@Ti3C2@TiO2 composites with superior Z-scheme visible light-driven photocatalytic activity. *Environmental Science: Nano*, **2019**, 6, 3158-3169	7.1	55
458	Preparation of Oxygen Ion Conducting Ceramic Hollow-Fiber Membranes. *Industrial & Engineering Chemistry Research*, **2005**, 44, 7633-7637	3.9	55
457	An experimental and numerical study on the laminar heat transfer and flow characteristics of a circular tube fitted with multiple conical strips inserts. *International Journal of Heat and Mass Transfer*, **2018**, 117, 691-709	4.9	54
456	Perovskite-based proton conducting membranes for hydrogen separation: A review. *International Journal of Hydrogen Energy*, **2018**, 43, 15281-15305	6.7	54
455	Palladium surface modified La0.6Sr0.4Co0.2Fe0.8O3□hollow fibres for oxygen separation. *Journal of Membrane Science*, **2011**, 380, 223-231	9.6	54
454	Influence of M cations on structural, thermal and electrical properties of new oxygen selective membranes based on SrCo0.95M0.05O3□perovskite. *Separation and Purification Technology*, **2009**, 67, 304-311	8.3	54

453	SrCo0.9Sc0.1O3−δ perovskite hollow fibre membranes for air separation at intermediate temperatures. *Journal of the European Ceramic Society*, **2009**, 29, 2815-2822	6	54
452	Self-assembly of 3D MnO2/N-doped graphene hybrid aerogel for catalytic degradation of water pollutants: Structure-dependent activity. *Chemical Engineering Journal*, **2019**, 369, 1049-1058	14.7	53
451	Facile synthesis of tube-shaped Mn-Ni-Ti solid solution and preferable Langmuir-Hinshelwood mechanism for selective catalytic reduction of NOx by NH3. *Applied Catalysis A: General*, **2018**, 549, 289-301	5.1	53
450	Selective functionalization of hollow nanospheres with Acid and base groups for cascade reactions. *Chemistry - A European Journal*, **2015**, 21, 7403-7	4.8	52
449	Samarium and yttrium codoped BaCeO3−δ proton conductor with improved sinterability and higher electrical conductivity. *ACS Applied Materials & Interfaces*, **2014**, 6, 5175-82	9.5	52
448	Nickel-based anode with water storage capability to mitigate carbon deposition for direct ethanol solid oxide fuel cells. *ChemSusChem*, **2014**, 7, 1719-28	8.3	51
447	Research into the mechanical properties, sintering mechanism and microstructure evolution of Al2O3-ZrO2 composites fabricated by a stereolithography-based 3D printing method. *Materials Chemistry and Physics*, **2018**, 207, 1-10	4.4	50
446	Fabrication and characterization of easily sintered and stable anode-supported proton-conducting membranes. *Journal of Membrane Science*, **2009**, 336, 1-6	9.6	50
445	Chemical stability and hydrogen permeation performance of Ni–BaZr0.1Ce0.7Y0.2O3−δ in an H2S-containing atmosphere. *Journal of Power Sources*, **2008**, 183, 126-132	8.9	50
444	Metal-organic-framework-derived formation of Co–N-doped carbon materials for efficient oxygen reduction reaction. *Journal of Energy Chemistry*, **2020**, 40, 137-143	12	50
443	Membranes for helium recovery: An overview on the context, materials and future directions. *Separation and Purification Technology*, **2017**, 176, 335-383	8.3	49
442	Oxygen Vacancy-rich Porous CoO Nanosheets toward Boosted NO Reduction by CO and CO Oxidation: Insights into the Structure-Activity Relationship and Performance Enhancement Mechanism. *ACS Applied Materials & Interfaces*, **2019**, 11, 41988-41999	9.5	49
441	A facile synthesis of monodispersed hierarchical layered double hydroxide on silica spheres for efficient removal of pharmaceuticals from water. *Journal of Materials Chemistry A*, **2013**, 1, 3877	13	49
440	Effect of surface Lewis acidity on selective catalytic reduction of NO by C3H6 over calcined hydrotalcite. *Applied Catalysis A: General*, **2013**, 451, 176-183	5.1	49
439	CO2-Resistant Hydrogen Permeation Membranes Based on Doped Ceria and Nickel. *Journal of Physical Chemistry C*, **2010**, 114, 10986-10991	3.8	49
438	The production of cobalt sulfide/graphene composite for use as a low-cost counter-electrode material in dye-sensitized solar cells. *Journal of Power Sources*, **2014**, 269, 473-478	8.9	48
437	Efficient removal of organic and bacterial pollutants by Ag-LaCaFeO perovskite via catalytic peroxymonosulfate activation. *Journal of Hazardous Materials*, **2018**, 356, 53-60	12.8	48
436	Role of electronic properties in partition of radical and nonradical processes of carbocatalysis toward peroxymonosulfate activation. *Carbon*, **2019**, 153, 73-80	10.4	47

435	A novel cobalt-free, CO2-stable, and reduction-tolerant dual-phase oxygen-permeable membrane. *ACS Applied Materials & Interfaces*, **2013**, 5, 11038-43	9.5	47
434	Synthesis, characterization and adsorptive performance of MgFe2O4 nanospheres for SO2 removal. *Journal of Hazardous Materials*, **2010**, 184, 704-709	12.8	47
433	Synthesis of strontium cerates-based perovskite ceramics via water-soluble complex precursor routes. *Ceramics International*, **2002**, 28, 327-335	5.1	47
432	Thermal-hydraulic performance and entropy generation analysis of a parabolic trough receiver with conical strip inserts. *Energy Conversion and Management*, **2019**, 179, 30-45	10.6	47
431	An unprecedented high-temperature-tolerance 2D laminar MXene membrane for ultrafast hydrogen sieving. *Journal of Membrane Science*, **2019**, 569, 117-123	9.6	47
430	Visible-light-driven sonophotocatalysis and peroxymonosulfate activation over 3D urchin-like MoS2/C nanoparticles for accelerating levofloxacin elimination: Optimization and kinetic study. *Chemical Engineering Journal*, **2019**, 378, 122039	14.7	46
429	Deactivation and Regeneration of Oxygen Reduction Reactivity on Double Perovskite Ba2Bi0.1Sc0.2Co1.7O6 Cathode for Intermediate-Temperature Solid Oxide Fuel Cells. *Chemistry of Materials*, **2011**, 23, 1618-1624	9.6	46
428	Catalysis of a Single Transition Metal Site for Water Oxidation: From Mononuclear Molecules to Single Atoms. *Advanced Materials*, **2020**, 32, e1904037	24	46
427	A novel CO2-resistant ceramic dual-phase hollow fiber membrane for oxygen separation. *Journal of Membrane Science*, **2017**, 522, 91-99	9.6	45
426	Novel Approach for Developing Dual-Phase Ceramic Membranes for Oxygen Separation through Beneficial Phase Reaction. *ACS Applied Materials & Interfaces*, **2015**, 7, 22918-26	9.5	44
425	Investigation of SmBaCuCoO5+ double-perovskite as cathode for proton-conducting solid oxide fuel cells. *Materials Research Bulletin*, **2010**, 45, 1771-1774	5.1	44
424	Effect of Sm-doping on the hydrogen permeation of Ni a2Ce2O7 mixed protonic electronic conductor. *International Journal of Hydrogen Energy*, **2010**, 35, 4508-4511	6.7	44
423	Oxygen selective membranes based on B-site cation-deficient (Ba0.5Sr0.5)(Co0.8Fe0.2)yO3 perovskite with improved operational stability. *Journal of Membrane Science*, **2008**, 318, 182-190	9.6	44
422	Advances in Multicompartment Mesoporous Silica Micro/Nanoparticles for Theranostic Applications. *Annual Review of Chemical and Biomolecular Engineering*, **2018**, 9, 389-411	8.9	43
421	Polydopamine-assisted decoration of TiO2 nanotube arrays with enzyme to construct a novel photoelectrochemical sensing platform. *Sensors and Actuators B: Chemical*, **2018**, 255, 133-139	8.5	43
420	Tin-doped perovskite mixed conducting membrane for efficient air separation. *Journal of Materials Chemistry A*, **2014**, 2, 9666-9674	13	43
419	Thin porous metal sheet-supported NaA zeolite membrane for water/ethanol separation. *Journal of Membrane Science*, **2011**, 371, 197-210	9.6	43
418	Effects of -NO2 and -NH2 functional groups in mixed-linker Zr-based MOFs on gas adsorption of CO2 and CH4. *Progress in Natural Science: Materials International*, **2018**, 28, 160-167	3.6	42

417	Ceramic supported attapulgite-graphene oxide composite membrane for efficient removal of heavy metal contamination. *Journal of Membrane Science*, **2019**, 591, 117323	9.6	42
416	Hydrogen production via catalytic pyrolysis of biomass in a two-stage fixed bed reactor system. *International Journal of Hydrogen Energy*, **2014**, 39, 13128-13135	6.7	42
415	Thermo-hydraulic characteristics of laminar flow in an enhanced tube with conical strip inserts. *International Journal of Thermal Sciences*, **2012**, 61, 28-37	4.1	42
414	Quasi-noble-metal graphene quantum dots deposited stannic oxide with oxygen vacancies: Synthesis and enhanced photocatalytic properties. *Journal of Colloid and Interface Science*, **2016**, 481, 13-9	9.3	40
413	Functionalized UiO-66 by Single and Binary (OH)2 and NO2 Groups for Uptake of CO2 and CH4. *Industrial & Engineering Chemistry Research*, **2016**, 55, 7924-7932	3.9	40
412	Temperature dependent photocatalysis of g-CN, TiO and ZnO: Differences in photoactive mechanism. *Journal of Colloid and Interface Science*, **2018**, 532, 321-330	9.3	40
411	Further performance improvement of Ba0.5Sr0.5Co0.8Fe0.2O3□perovskite membranes for air separation. *Ceramics International*, **2009**, 35, 2455-2461	5.1	40
410	Effect of Ba nonstoichiometry on the phase structure, sintering, electrical conductivity and phase stability of Ba1□xCe0.4Zr0.4Y0.2O3□(0≤x≤0.20) proton conductors. *International Journal of Hydrogen Energy*, **2011**, 36, 8450-8460	6.7	40
409	Photo-driven bioelectrochemical photocathode with polydopamine-coated TiO2 nanotubes for self-sustaining MoS2 synthesis to facilitate hydrogen evolution. *Journal of Power Sources*, **2019**, 413, 310-317	8.9	40
408	Sorption behavior of tylosin and sulfamethazine on humic acid: kinetic and thermodynamic studies. *RSC Advances*, **2015**, 5, 58865-58872	3.7	38
407	Construction of Mn0.5Zn0.5Fe2O4 modified TiO2 nanotube array nanocomposite electrodes and their photoelectrocatalytic performance in the degradation of 2,4-DCP. *Journal of Materials Chemistry C*, **2015**, 3, 6025-6034	7.1	38
406	La0.7Sr0.3FeO3□ perovskite hollow fiber membranes for oxygen permeation and methane conversion. *Separation and Purification Technology*, **2012**, 96, 89-97	8.3	38
405	Controllable preparation of graphitic carbon nitride nanosheets via confined interlayer nanospace of layered clays. *Materials Letters*, **2010**, 64, 2718-2721	3.3	38
404	Yttria Stabilized Zirconia Hollow Fiber Membranes. *Journal of the American Ceramic Society*, **2006**, 89, 1156-1159	3.8	38
403	Coupling hydrothermal and photothermal single-atom catalysis toward excellent water splitting to hydrogen. *Applied Catalysis B: Environmental*, **2021**, 283, 119660	21.8	38
402	Disordered layers on WO3 nanoparticles enable photochemical generation of hydrogen from water. *Journal of Materials Chemistry A*, **2019**, 7, 221-227	13	37
401	Ionic conducting ceramic□arbonate dual phase hollow fibre membranes for high temperature carbon dioxide separation. *Journal of Membrane Science*, **2014**, 458, 58-65	9.6	37
400	Photocatalytic CO2 conversion over single-atom MoN2 sites of covalent organic framework. *Applied Catalysis B: Environmental*, **2021**, 291, 120146	21.8	37

399	Effect of enhanced oxygen reduction activity on oxygen permeation of La0.6Sr0.4Co0.2Fe0.8O3 membrane decorated by K2NiF4-type oxide. *Journal of Alloys and Compounds*, **2016**, 654, 280-289	5.7	36
398	The insight into the role of CeO2 in improving low-temperature catalytic performance and SO2 tolerance of MnCoCeOx microflowers for the NH3-SCR of NOx. *Applied Surface Science*, **2020**, 510, 145517	6.7	36
397	Formation of continuous and highly permeable ZIF-8 membranes on porous alumina and zinc oxide hollow fibers. *Chemical Communications*, **2016**, 52, 13448-13451	5.8	36
396	Improvement of oxygen permeation in perovskite hollow fibre membranes by the enhanced surface exchange kinetics. *Journal of Membrane Science*, **2013**, 428, 198-204	9.6	36
395	Surface-etched halloysite nanotubes in mixed matrix membranes for efficient gas separation. *Separation and Purification Technology*, **2017**, 173, 63-71	8.3	36
394	Photocatalytic activation of peroxymonosulfate by surface-tailored carbon quantum dots. *Journal of Hazardous Materials*, **2020**, 395, 122695	12.8	36
393	Copper oxide - perovskite mixed matrix membranes delivering very high oxygen fluxes. *Journal of Membrane Science*, **2017**, 526, 323-333	9.6	35
392	Water and gas barrier properties of polyvinyl alcohol (PVA)/starch (ST)/ glycerol (GL)/halloysite nanotube (HNT) bionanocomposite films: Experimental characterisation and modelling approach. *Composites Part B: Engineering*, **2019**, 174, 107033	10	35
391	Seaweed-Derived Nitrogen-Rich Porous Biomass Carbon as Bifunctional Materials for Effective Electrocatalytic Oxygen Reduction and High-Performance Gaseous Toluene Absorbent. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 5057-5064	8.3	35
390	Removal of Methylene Blue from Aqueous Solution using Porous Biochar Obtained by KOH Activation of Peanut Shell Biochar. *BioResources*, **2015**, 10,	1.3	35
389	Oxygen permeation performance of BaBiO3 ceramic membranes. *Journal of Membrane Science*, **2009**, 344, 281-287	9.6	35
388	Oxygen permeation through perovskite membranes and the improvement of oxygen flux by surface modification. *Science and Technology of Advanced Materials*, **2006**, 7, 819-825	7.1	35
387	Cobalt-free niobium-doped barium ferrite as potential materials of dense ceramic membranes for oxygen separation. *Journal of Membrane Science*, **2014**, 455, 75-82	9.6	34
386	Bi-doping effects on the structure and oxygen permeation properties of BaSc0.1Co0.9O3 perovskite membranes. *Journal of Membrane Science*, **2010**, 361, 120-125	9.6	34
385	Facile autocombustion synthesis of La0.6Sr0.4Co0.2Fe0.8O3 (LSCF) perovskite via a modified complexing sol gel process with NH4NO3 as combustion aid. *Journal of Alloys and Compounds*, **2008**, 450, 338-347	5.7	34
384	Preparation of SrCe0.95Yb0.05O3 perovskite for use as a membrane material in hollow fibre fabrication. *Materials Research Bulletin*, **2004**, 39, 119-133	5.1	34
383	Conversion of Methane to Syngas by a Membrane-Based Oxidation Reforming Process. *Angewandte Chemie*, **2003**, 115, 5354-5356	3.6	34
382	Preparation of PDMSvi Al2O3 composite hollow fibre membranes for VOC recovery from waste gas streams. *Separation and Purification Technology*, **2005**, 46, 110-117	8.3	34

381	Rational Design of Ruthenium and Cobalt-Based Composites with Rich Metal-Insulator Interfaces for Efficient and Stable Overall Water Splitting in Acidic Electrolyte. *ACS Applied Materials & Interfaces*, **2019**, 11, 47894-47903	9.5	34
380	Facilitated water-selective permeation via PEGylation of graphene oxide membrane. *Journal of Membrane Science*, **2018**, 567, 311-320	9.6	34
379	A novel fabrication of yttria-stabilized-zirconia dense electrolyte for solid oxide fuel cells by 3D printing technique. *International Journal of Hydrogen Energy*, **2019**, 44, 6182-6191	6.7	33
378	Crystal transformation of 2D tungstic acid HWO to WO for enhanced photocatalytic water oxidation. *Journal of Colloid and Interface Science*, **2018**, 514, 576-583	9.3	33
377	Triconstituent co-assembly synthesis of N,S-doped carbon□silica nanospheres with smooth and rough surfaces. *Journal of Materials Chemistry A*, **2016**, 4, 3721-3727	13	33
376	Honeycomb-structured perovskite hollow fibre membranes with ultra-thin densified layer for oxygen separation. *Separation and Purification Technology*, **2011**, 80, 396-401	8.3	33
375	Porous and dense Ni hollow fibre membranes. *Journal of Alloys and Compounds*, **2009**, 470, 461-464	5.7	33
374	Gold nanostars: Benzyldimethylammonium chloride-assisted synthesis, plasmon tuning, SERS and catalytic activity. *Journal of Colloid and Interface Science*, **2016**, 462, 341-50	9.3	32
373	Raspberry-like hollow carbon nanospheres with enhanced matrix-free peptide detection profiles. *Chemical Communications*, **2016**, 52, 1709-12	5.8	32
372	Facile solution synthesis and characterization of porous cubic-shaped superstructure of ZnAl2O4. *Materials Letters*, **2011**, 65, 194-197	3.3	32
371	Modelling of oxygen transport through mixed ionic-electronic conducting (MIEC) ceramic-based membranes: An overview. *Journal of Membrane Science*, **2018**, 567, 228-260	9.6	32
370	Renewable acetic acid in combination with solid oxide fuel cells for sustainable clean electric power generation. *Journal of Materials Chemistry A*, **2013**, 1, 5620	13	31
369	Partial oxidation of methane in a Zr0.84Y0.16O1.92□a0.8Sr0.2Cr0.5Fe0.5O3□hollow fiber membrane reactor targeting solid oxide fuel cell applications. *Journal of Power Sources*, **2012**, 217, 287-290	8.9	31
368	Theoretical analysis of ion permeation through mixed conducting membranes and its application to dehydrogenation reactions. *Solid State Ionics*, **2000**, 138, 149-159	3.3	31
367	Enhanced visible-light induced degradation of benzene on Mg-ferrite/hematite/PANI nanospheres: in situ FTIR investigation. *Journal of Hazardous Materials*, **2012**, 241-242, 472-7	12.8	30
366	Production of pure oxygen from BSCF hollow fiber membranes using steam sweep. *Separation and Purification Technology*, **2011**, 78, 220-227	8.3	30
365	A dense oxygen separation membrane with a layered morphologic structure. *Journal of Membrane Science*, **2007**, 300, 182-190	9.6	30
364	Enhancing interfacial charge transfer on novel 3D/1D multidimensional MoS2/TiO2 heterojunction toward efficient photoelectrocatalytic removal of levofloxacin. *Electrochimica Acta*, **2019**, 295, 810-821	6.7	30

363	Preparation of Ag@AgCl-doped TiO/sepiolite and its photocatalytic mechanism under visible light. *Journal of Environmental Sciences*, **2017**, 60, 43-52	6.4	29
362	Functionalized nitrogen-doped carbon dot-modified yolk-shell ZnFeO nanospheres with highly efficient light harvesting and superior catalytic activity. *Nanoscale*, **2019**, 11, 3877-3887	7.7	29
361	Dolomite: a low cost thermochemical energy storage material. *Journal of Materials Chemistry A*, **2019**, 7, 1206-1215	13	29
360	Graphene nanostructures toward clean energy technology applications. *Wiley Interdisciplinary Reviews: Energy and Environment*, **2012**, 1, 317-336	4.7	29
359	Oxygen permeation and stability of Zr0.8Y0.2O0.9-La0.8Sr0.2CrO3-□dual-phase composite. *Journal of Solid State Electrochemistry*, **2006**, 10, 625-628	2.6	29
358	Perovskite Oxide Catalysts for Advanced Oxidation Reactions. *Advanced Functional Materials*, **2021**, 31, 2102089	15.6	29
357	Metal-free hybrids of graphitic carbon nitride and nanodiamonds for photoelectrochemical and photocatalytic applications. *Journal of Colloid and Interface Science*, **2017**, 493, 275-280	9.3	28
356	Less is more, greener microbial synthesis of silver nanoparticles. *Enzyme and Microbial Technology*, **2014**, 67, 53-8	3.8	28
355	A mixed electronic and protonic conducting hydrogen separation membrane with asymmetric structure. *International Journal of Hydrogen Energy*, **2012**, 37, 12708-12713	6.7	28
354	The NiAl mixed oxides: The relation between basicity and SO2 removal capacity. *Separation and Purification Technology*, **2011**, 80, 345-350	8.3	28
353	Hydrogen Generation from Catalytic Steam Reforming of Acetic Acid by Ni/Attapulgite Catalysts. *Catalysts*, **2016**, 6, 172	4	28
352	Revisiting the St□er method: Design of nitrogen-doped porous carbon spheres from molecular precursors of different chemical structures. *Journal of Colloid and Interface Science*, **2016**, 476, 55-61	9.3	28
351	Two-phase forced convection of nanofluids flow in circular tubes using convergent and divergent conical rings inserts. *International Communications in Heat and Mass Transfer*, **2019**, 101, 10-20	5.8	28
350	Perovskite-based mixed protonic□electronic conducting membranes for hydrogen separation: Recent status and advances. *Journal of Industrial and Engineering Chemistry*, **2018**, 60, 297-306	6.3	28
349	Nitrogen-doped Carbon Nanospheres-Modified Graphitic Carbon Nitride with Outstanding Photocatalytic Activity. *Nano-Micro Letters*, **2020**, 12, 24	19.5	27
348	High performance BaCe0.8Y0.2O3□ (BCY) hollow fibre membranes for hydrogen permeation. *Ceramics International*, **2014**, 40, 3131-3138	5.1	27
347	TS-1 zeolite as an effective diffusion barrier for highly stable Pd membrane supported on macroporous □-Al2O3 tube. *RSC Advances*, **2013**, 3, 4821	3.7	27
346	Robust ion-transporting ceramic membrane with an internal short circuit for oxygen production. *Journal of Materials Chemistry A*, **2013**, 1, 9150	13	27

345	One-step synthesis of ZIF-8/ZnO composites based on coordination defect strategy and its derivatives for photocatalysis. *Journal of Alloys and Compounds*, **2020**, 838, 155219	5.7	27
344	Novel cathode-supported hollow fibers for light weight micro-tubular solid oxide fuel cells with an active cathode functional layer. *Journal of Materials Chemistry A*, **2015**, 3, 1017-1022	13	26
343	Influence of fabrication process of NiBaCe0.7Zr0.1Y0.2O3 cermet on the hydrogen permeation performance. *Journal of Alloys and Compounds*, **2010**, 508, L5-L8	5.7	26
342	FT-IR study of the photocatalytic degradation of gaseous toluene over UV-irradiated TiO2 microballs: enhanced performance by hydrothermal treatment in alkaline solution. *Applied Surface Science*, **2011**, 257, 4709-4714	6.7	26
341	Highly Stable Dual-Phase Membrane Based on Ce0.9Gd0.1O2 La2NiO4+ for Oxygen Permeation under Pure CO2 Atmosphere. *Energy Technology*, **2019**, 7, 1800701	3.5	26
340	Engineering nanoreactors for metal chalcogen batteries. *Energy and Environmental Science*, **2021**, 14, 540-575	35.4	26
339	Three-dimensional porous vanadium nitride nanoribbon aerogels as Pt-free counter electrode for high-performance dye-sensitized solar cells. *Chemical Engineering Journal*, **2017**, 322, 611-617	14.7	25
338	Green Synthesis of Carbon- and Silver-Modified Hierarchical ZnO with Excellent Solar Light Driven Photocatalytic Performance. *ACS Sustainable Chemistry and Engineering*, **2015**, 3, 1010-1016	8.3	25
337	Revamping existing glycol technologies in natural gas dehydration to improve the purity and absorption efficiency: Available methods and recent developments. *Journal of Natural Gas Science and Engineering*, **2018**, 56, 486-503	4.6	25
336	Life-cycle phosphorus use efficiency of the farming system in Anhui Province, Central China. *Resources, Conservation and Recycling*, **2014**, 83, 1-14	11.9	25
335	Novel dual structured mixed conducting ceramic hollow fibre membranes. *Separation and Purification Technology*, **2008**, 63, 243-247	8.3	25
334	Fabrication of fine-grained alumina ceramics by a novel process integrating stereolithography and liquid precursor infiltration processing. *Ceramics International*, **2016**, 42, 17736-17741	5.1	25
333	Evaluation of mixed-conducting lanthanum-strontium-cobaltite ceramic membrane for oxygen separation. *AICHE Journal*, **2009**, 55, 2603-2613	3.6	24
332	Spinel-type oxygen-incorporated Ni self-doped NiS ultrathin nanosheets for highly efficient and stable oxygen evolution electrocatalysis. *Journal of Colloid and Interface Science*, **2020**, 564, 418-427	9.3	24
331	Re-evaluation of La0.6Sr0.4Co0.2Fe0.8O3- hollow fiber membranes for oxygen separation after long-term storage of five and ten years. *Journal of Membrane Science*, **2019**, 587, 117180	9.6	23
330	Oxygen selective perovskite hollow fiber membrane bundles. *Journal of Membrane Science*, **2019**, 581, 393-400	9.6	23
329	Evaluation of hydrogen permeation properties of NiBa(Zr0.7Pr0.1Y0.2)O3 cermet membranes. *International Journal of Hydrogen Energy*, **2014**, 39, 11683-11689	6.7	23
328	Photocatalytic performances and activities in Ag-doped ZnAl2O4 nanorods studied by FTIR spectroscopy. *Catalysis Science and Technology*, **2013**, 3, 788-796	5.5	23

327	Layered perovskite Y1−xCaxBaCo4O7+δ as ceramic membranes for oxygen separation. *Journal of Alloys and Compounds*, **2010**, 492, 552-558	5.7	23
326	Preparation and oxygen permeation properties of SrCo0.9Nb0.1O3−δ hollow fibre membranes. *Separation and Purification Technology*, **2011**, 78, 175-180	8.3	23
325	In Situ Fabrication of a Supported Ba3Ca1.18Nb1.82O9−δ Membrane Electrolyte for a Proton-Conducting SOFC. *Journal of the American Ceramic Society*, **2008**, 91, 3806-3809	3.8	23
324	Metallic nickel hollow fiber membranes for hydrogen separation at high temperatures. *Journal of Membrane Science*, **2016**, 509, 156-163	9.6	23
323	Enhancing oxygen reduction reaction activity of perovskite oxides cathode for solid oxide fuel cells using a novel anion doping strategy. *International Journal of Hydrogen Energy*, **2018**, 43, 12328-12336	6.7	23
322	Microwave-assisted catalytic methane reforming: A review. *Applied Catalysis A: General*, **2020**, 599, 117620	5.1	22
321	High-performance Ba(Zr0.1Ce0.7Y0.2)O3−δ asymmetrical ceramic membrane with external short circuit for hydrogen separation. *Journal of Alloys and Compounds*, **2016**, 660, 231-234	5.7	22
320	Enhancement of oxygen permeation fluxes of La0.6Sr0.4CoO3−δ hollow fiber membrane via macrostructure modification and (La0.5Sr0.5)2CoO4+ decoration. *Chemical Engineering Research and Design*, **2018**, 134, 487-496	5.5	22
319	The kinetics model and pyrolysis behavior of the aqueous fraction of bio-oil. *Bioresource Technology* , **2013**, 129, 381-6	11	22
318	Proton-Conducting La-Doped Ceria-Based Internal Reforming Layer for Direct Methane Solid Oxide Fuel Cells. *ACS Applied Materials & Interfaces*, **2017**, 9, 33758-33765	9.5	22
317	Solar Photocatalytic Water Oxidation and Purification on ZIF-8-Derived CN/ZnO Composites. *Energy & Fuels*, **2017**, 31, 2138-2143	4.1	22
316	Dense composite electrolyte hollow fibre membranes for high temperature CO2 separation. *Separation and Purification Technology*, **2014**, 132, 712-718	8.3	22
315	Synthesis of LaVO4/TiO2 heterojunction nanotubes by sol-gel coupled with hydrothermal method for photocatalytic air purification. *Journal of Colloid and Interface Science*, **2012**, 383, 13-8	9.3	22
314	A cobalt-free composite cathode prepared by a superior method for intermediate temperature solid oxide fuel cells. *Journal of Power Sources*, **2012**, 217, 431-436	8.9	22
313	The role of titania pillar in copper-ion exchanged titania pillared clays for the selective catalytic reduction of NO by propylene. *Applied Catalysis A: General*, **2011**, 398, 82-87	5.1	22
312	YBa2Cu3O6+δ as an Oxygen Separation Membrane. *Angewandte Chemie - International Edition*, **2001**, 40, 784-786	16.4	22
311	Facile directions for synthesis, modification and activation of MOFs. *Materials Today Chemistry*, **2020**, 17, 100343	6.2	22
310	Influence of nitric oxide on the oxygen permeation behavior of La0.6Sr0.4Co0.2Fe0.8O3−δ perovskite membranes. *Separation and Purification Technology*, **2019**, 210, 900-906	8.3	22

309	Rate determining step in SDC-SSAF dual-phase oxygen permeation membrane. *Journal of Membrane Science*, **2019**, 573, 628-638	9.6	22
308	Catalytic partial oxidation of methane to syngas: review of perovskite catalysts and membrane reactors. *Catalysis Reviews - Science and Engineering*, **2021**, 63, 1-67	12.6	22
307	Fabrication of flower-like Ag@AgCl/Bi 2 WO 6 photocatalyst and its mechanism of photocatalytic degradation. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2016**, 489, 275-281	5.1	21
306	Enhancing O2-permeability and CO2-tolerance of La2NiO4+□membrane via internal ionic-path. *Materials Letters*, **2018**, 230, 161-165	3.3	21
305	New morphological Ba0.5Sr0.5Co0.8Fe0.2O3□ hollow fibre membranes with high oxygen permeation fluxes. *Ceramics International*, **2013**, 39, 431-437	5.1	21
304	Heterogeneous activation of peroxymonosulfate via a Ag-La0.8Ca0.2Fe0.94O3□perovskite hollow fibre membrane reactor for dye degradation. *Separation and Purification Technology*, **2019**, 211, 298-302	8.3	21
303	Silver-doped strontium niobium cobaltite as a new perovskite-type ceramic membrane for oxygen separation. *Journal of Membrane Science*, **2018**, 563, 617-624	9.6	21
302	A-Site Excess (La0.8Ca0.2)1.01FeO3□(LCF) Perovskite Hollow Fiber Membrane for Oxygen Permeation in CO2-Containing Atmosphere. *Energy & Fuels*, **2017**, 31, 4531-4538	4.1	20
301	Highly stable La0.6Sr0.4Co0.2Fe0.8O3□hollow fibre membrane for air separation swept by steam or steam mixture. *Journal of Membrane Science*, **2015**, 479, 232-239	9.6	20
300	Porous titanium nitride microspheres on Ti substrate as a novel counter electrode for dye-sensitized solar cells. *Materials Letters*, **2015**, 161, 294-296	3.3	20
299	Photocatalytic degradation of gaseous toluene with multiphase Ti(x)Zr(1-x)O2 synthesized via co-precipitation route. *Journal of Colloid and Interface Science*, **2015**, 438, 1-6	9.3	20
298	Sorption and photodegradation of tylosin and sulfamethazine by humic acid-coated goethite. *RSC Advances*, **2015**, 5, 100464-100471	3.7	20
297	Naked□TiO2 capsulated in nanovoid microcapsule of poly(vinylidene fluoride) supporter with enhanced photocatalytic activity. *Chemical Engineering Journal*, **2012**, 204-206, 217-224	14.7	20
296	Preparation and catalysis in epoxidation of allyl chloride of zeolitic titanosilicate-1/smectitic clay minerals. *Applied Clay Science*, **2011**, 53, 279-287	5.2	20
295	Zirconium stabilized Ba0.5Sr0.5(Co0.8□Zrx)Fe0.2O3□ perovskite hollow fibre membranes for oxygen separation. *Ceramics International*, **2011**, 37, 2701-2709	5.1	20
294	PrBaCo2-xTaxO5+□based composite materials as cathodes for proton-conducting solid oxide fuel cells with high CO2 resistance. *International Journal of Hydrogen Energy*, **2020**, 45, 31017-31026	6.7	20
293	Novel Co3O4 @ CoFe2O4 double-shelled nanoboxes derived from Metal□Organic Framework for CO2 reduction. *Journal of Alloys and Compounds*, **2021**, 854, 156942	5.7	20
292	Surface-modified proton conducting perovskite hollow fibre membranes by Pd-coating for enhanced hydrogen permeation. *International Journal of Hydrogen Energy*, **2015**, 40, 6118-6127	6.7	19

291	Highly stable microtubular solid oxide fuel cells based on integrated electrolyte/anode hollow fibers. *Journal of Power Sources*, **2015**, 275, 362-369	8.9	19
290	Influence of calcination temperature of Ni/Attapulgite on hydrogen production by steam reforming ethanol. *Renewable Energy*, **2020**, 160, 597-611	8.1	19
289	Boosting CO adsorption and selectivity in metal-organic frameworks of MIL-96(Al) second metal Ca coordination.. *RSC Advances*, **2020**, 10, 8130-8139	3.7	19
288	Enhanced photoeletrocatalytic reduction dechlorinations of PCP by Ru-Pd BQDs anchored Titania NAEs composites with double Schottky junctions: First-principles evidence and experimental verifications. *Applied Catalysis B: Environmental*, **2018**, 227, 499-511	21.8	19
287	CO2-enhanced hydrogen permeability of dual-layered A-site deficient Ba0.95Ce0.85Tb0.05Zr0.1O3-δ based hollow fiber membrane. *Journal of Membrane Science*, **2018**, 546, 82-89	9.6	19
286	Proton conducting perovskite hollow fibre membranes with surface catalytic modification for enhanced hydrogen separation. *Journal of the European Ceramic Society*, **2016**, 36, 1669-1677	6	19
285	Novel solid oxide cells with SrCo0.8Fe0.1Ga0.1O3-δ oxygen electrode for flexible power generation and hydrogen production. *Journal of Power Sources*, **2016**, 306, 226-232	8.9	19
284	Yolk-Shell-Structured Aluminum Phenylphosphonate Microspheres with Anionic Core and Cationic Shell. *Advanced Science*, **2016**, 3, 1500363	13.6	19
283	La0.6Sr0.4Co0.2Fe0.8O3-δ hollow fibre membrane performance improvement by coating of Ba0.5Sr0.5Co0.9Nb0.1O3-δ porous layer. *RSC Advances*, **2014**, 4, 19999-20004	3.7	19
282	The catalytic effects of La0.3Sr0.7Fe0.7Cu0.2Mo0.1O3 perovskite and its hollow fibre membrane for air separation and methane conversion reactions. *Separation and Purification Technology*, **2015**, 147, 406-413	8.3	19
281	A high stability Ni-La 0.5 Ce 0.5 O 2-δ asymmetrical metal-ceramic membrane for hydrogen separation and generation. *Journal of Power Sources*, **2015**, 281, 417-424	8.9	19
280	Optimizing Oxygen Transport Through La0.6Sr0.4Co0.2Fe0.8O3-δ Hollow Fiber by Microstructure Modification and Ag/Pt Catalyst Deposition. *Energy & Fuels*, **2012**, 26, 4728-4734	4.1	19
279	Fabrication, characterization, and photocatalytic property of α-Fe2O3/graphene oxide composite. *Journal of Nanoparticle Research*, **2013**, 15, 1	2.3	19
278	Synthesis of cobalt-aluminum spinels via EDTA chelating precursors. *Journal of Materials Science*, **2004**, 39, 6191-6201	4.3	19
277	Magnetic ZnO@Fe3O4 composite for self-generated H2O2 toward photo-Fenton-like oxidation of nitrophenol. *Composites Part B: Engineering*, **2020**, 200, 108345	10	19
276	Enhanced CO2 Resistance for Robust Oxygen Separation Through Tantalum-doped Perovskite Membranes. *ChemSusChem*, **2016**, 9, 505-12	8.3	19
275	Bundling strategy to simultaneously improve the mechanical strength and oxygen permeation flux of the individual perovskite hollow fiber membranes. *Journal of Membrane Science*, **2017**, 527, 137-142	9.6	18
274	Voltage-enhanced ion sieving and rejection of Pb2+ through a thermally cross-linked two-dimensional MXene membrane. *Chemical Engineering Journal*, **2020**, 401, 126073	14.7	18

273	Atomic-level design of CoOH-hydroxyapatite@C catalysts for superfast degradation of organics via peroxymonosulfate activation. *Chemical Communications*, **2018**, 54, 4919-4922	5.8	18
272	Rational design via tailoring Mo content in La2Ni1-xMoxO4+□ to improve oxygen permeation properties in CO2 atmosphere. *Journal of Alloys and Compounds*, **2019**, 806, 153-162	5.7	18
271	Photocatalytic degradation of gaseous toluene over hollow □spindle-like□-Fe2O3 loaded with Ag. *Materials Research Bulletin*, **2012**, 47, 1459-1466	5.1	18
270	Preparation of spiral porous stainless steel hollow fiber membranes by a modified phase inversion□sintering technique. *Journal of Membrane Science*, **2015**, 489, 292-298	9.6	18
269	Effects of preparation methods on the oxygen nonstoichiometry, B-site cation valences and catalytic efficiency of perovskite La0.6Sr0.4Co0.2Fe0.8O3□ *Ceramics International*, **2009**, 35, 3201-3206	5.1	18
268	Bio-ceramic hollow fiber membranes for immunoisolation and gene delivery: I: Membrane development. *Journal of Membrane Science*, **2006**, 280, 375-382	9.6	18
267	Inhibiting in situ phase transition in Ruddlesden-Popper perovskite via tailoring bond hybridization and its application in oxygen permeation. *Matter*, **2021**, 4, 1720-1734	12.7	18
266	Bi-functional performances of BaCe0.95Tb0.05O3□based hollow fiber membranes for power generation and hydrogen permeation. *Journal of the European Ceramic Society*, **2016**, 36, 4123-4129	6	18
265	SrCe0.95Y0.05O3□ZnO dual-phase membranes for hydrogen permeation. *RSC Advances*, **2016**, 6, 36786-36793	3.7	17
264	One-step hydroxylation of benzene to phenol via a Pd capillary membrane microreactor. *Catalysis Science and Technology*, **2013**, 3, 2380	5.5	17
263	Performance and stability of nano-structured Pd and Pd0.95M0.05 (M = Mn, Co, Ce, and Gd) infiltrated Y2O3□ZrO2 oxygen electrodes of solid oxide electrolysis cells. *International Journal of Hydrogen Energy*, **2013**, 38, 16569-16578	6.7	17
262	Novel synthesis of porous aluminium and its application in hydrogen storage. *Journal of Alloys and Compounds*, **2017**, 702, 309-317	5.7	16
261	Enhanced oxygen permeability and electronic conductivity of Ce0.8Gd0.2O2□membrane via the addition of sintering aids. *Solid State Ionics*, **2017**, 310, 121-128	3.3	16
260	Ce0.9Gd0.1O2□membranes coated with porous Ba0.5Sr0.5Co0.8Fe0.2O3□for oxygen separation. *RSC Advances*, **2015**, 5, 5379-5386	3.7	16
259	Insights into the Adsorption of VOCs on a Cobalt-Adeninate Metal-Organic Framework (Bio-MOF-11). *ACS Omega*, **2020**, 5, 15402-15408	3.9	16
258	W□Mn1 □Ox Catalysts Synthesized by a One-Step Urea Co-precipitation Method for Selective Catalytic Reduction of NOx with NH3 at Low Temperatures. *Energy & Fuels*, **2016**, 30, 1810-1814	4.1	16
257	Enhanced oxygen permeation through perovskite hollow fibre membranes by methane activation. *Ceramics International*, **2009**, 35, 1435-1439	5.1	16
256	H2S poisoning and regeneration of Ni□BaZr0.1Ce0.7Y0.2O3□at intermediate temperature. *Journal of Alloys and Compounds*, **2009**, 475, 935-939	5.7	16

255	Optimization of BaxSr1−xCo0.9Nb0.1O3−δ perovskite as oxygen semi-permeable membranes by compositional tailoring. *Separation and Purification Technology*, **2010**, 71, 152-159	8.3	16
254	FTIR study of the photocatalytic degradation of gaseous benzene over UV-irradiated TiO2 nanoballs synthesized by hydrothermal treatment in alkaline solution. *Materials Research Bulletin*, **2010**, 45, 1889-1893	5.1	16
253	Digital light processing-stereolithography three-dimensional printing of yttria-stabilized zirconia. *Ceramics International*, **2020**, 46, 8745-8753	5.1	16
252	CO2 erosion of BaCo0.85Bi0.05Zr0.1O3-δ perovskite membranes under oxygen permeating conditions. *Separation and Purification Technology*, **2018**, 207, 133-141	8.3	16
251	TiO/g-CN photocatalyst for the purification of potassium butyl xanthate in mineral processing wastewater. *Journal of Environmental Management*, **2021**, 297, 113311	7.9	16
250	H2/CH4/CO2-tolerant properties of SrCo0.8Fe0.1Ga0.1O3−δ hollow fiber membrane reactors for methane partial oxidation to syngas. *Fuel Processing Technology*, **2017**, 161, 265-272	7.2	15
249	Enhanced hydrogen permeability and reverse water–gas shift reaction activity via magneli Ti 4 O 7 doping into SrCe 0.9 Y 0.1 O 3−δ hollow fiber membrane. *International Journal of Hydrogen Energy*, **2017**, 42, 12301-12309	6.7	15
248	Perovskite-derived trimetallic Co-Ni-Cu catalyst for higher alcohol synthesis from syngas. *Fuel Processing Technology*, **2019**, 193, 141-148	7.2	15
247	Oxygen permeation behavior through Ce0.9Gd0.1O2−δ membranes electronically short-circuited by dual-phase Ce0.9Gd0.1O2–Ag decoration. *Journal of Materials Chemistry A*, **2015**, 3, 19033-19041	13	15
246	Improvement of catalytic activity over Mn-modified CeZrO catalysts for the selective catalytic reduction of NO with NH. *Journal of Colloid and Interface Science*, **2018**, 531, 91-97	9.3	15
245	External short circuit-assisted proton conducting ceramic membrane for H2 permeation. *Ceramics International*, **2014**, 40, 791-797	5.1	15
244	Modeling of hydrogen permeation for Ni–ceramic proton conductor composite membrane with symmetric structure. *Journal of Membrane Science*, **2012**, 415-416, 328-335	9.6	15
243	Sintering and oxygen permeation studies of La0.6Sr0.4Co0.2Fe0.8O3−δ ceramic membranes with improved purity. *Journal of the European Ceramic Society*, **2011**, 31, 2931-2938	6	15
242	Bi1.5Y0.3Sm0.2O3−δ–La0.8Sr0.2MnO3−δ dual-phase composite hollow fiber membrane for oxygen separation. *Materials Letters*, **2011**, 65, 3365-3367	3.3	15
241	Microorganism adhesion inhibited by silver doped Yttria-stabilized zirconia ceramics. *Ceramics International*, **2011**, 37, 2109-2115	5.1	15
240	Synthesis of pyramidal, cubical and truncated octahedral magnetite nanocrystals by controlling reaction heating rate. *Advanced Powder Technology*, **2011**, 22, 532-536	4.6	15
239	Design and fabrication of micro/nano-motors for environmental and sensing applications. *Applied Materials Today*, **2021**, 23, 101007	6.6	15
238	Perovskite oxide and carbonate composite membrane for carbon dioxide transport. *Materials Letters*, **2019**, 236, 329-333	3.3	15

237	Cobalt Single Atoms Embedded in Nitrogen-Doped Graphene for Selective Oxidation of Benzyl Alcohol by Activated Peroxymonosulfate. *Small*, **2021**, 17, e2004579	11	15
236	Oxygen permeation properties of novel BaCo0.85Bi0.05Zr0.1O3 hollow fibre membrane. *Chemical Engineering Science*, **2018**, 177, 18-26	4.4	15
235	One-step thermal processing to prepare BaCo0.95-xBi0.05ZrxO3- membranes for oxygen separation. *Ceramics International*, **2019**, 45, 12579-12585	5.1	14
234	Sustainable synthesis of highly efficient sunlight-driven Ag embedded AgCl photocatalysts. *RSC Advances*, **2015**, 5, 80488-80495	3.7	14
233	Determination of Heavy Metals in Water and Tissues of Crucian Carp (Carassius auratus Gibelio) Collected from Subsidence Pools in Huainan Coal Fields (China). *Analytical Letters*, **2015**, 48, 861-877	2.2	14
232	Synergy of NiO quantum dots and temperature on enhanced photocatalytic and thermophoto hydrogen evolution. *Chemical Engineering Journal*, **2020**, 390, 124634	14.7	14
231	Dual-layer BaCe0.8Y0.2O3- Ce0.8Y0.2O2- /BaCe0.8Y0.2O3- Ni hollow fiber membranes for H2 separation. *Journal of Membrane Science*, **2020**, 601, 117801	9.6	14
230	Are microorganisms indispensable in green microbial nanomaterial synthesis?. *RSC Advances*, **2014**, 4, 14564-14568	3.7	14
229	The effects of Li2CO3 particle size on the properties of lithium titanate as anode material for lithium-ion batteries. *Ionics*, **2014**, 20, 1553-1560	2.7	14
228	Highly Stable External Short-Circuit-Assisted Oxygen Ionic Transport Membrane Reactor for Carbon Dioxide Reduction Coupled with Methane Partial Oxidation. *Energy & Fuels*, **2014**, 28, 349-355	4.1	14
227	Organic-inorganic hybrid hierarchical aluminum phenylphosphonate microspheres. *Journal of Colloid and Interface Science*, **2014**, 427, 35-41	9.3	14
226	Facile synthesis and characterization of ZnFe2O4/ -Fe2O3 composite hollow nanospheres. *Materials Research Bulletin*, **2011**, 46, 2235-2239	5.1	14
225	Structure effect on the oxygen permeation properties of barium bismuth iron oxide membranes. *Journal of Membrane Science*, **2010**, 351, 44-49	9.6	14
224	Design and synthesis of polyol ester-based zinc metal alkoxides as a bi-functional thermal stabilizer for poly(vinyl chloride). *Polymer Degradation and Stability*, **2019**, 159, 125-132	4.7	14
223	Improved biosynthesis of silver nanoparticles using keratinase from Stenotrophomonas maltophilia R13: reaction optimization, structural characterization, and biomedical activity. *Bioprocess and Biosystems Engineering*, **2018**, 41, 381-393	3.7	14
222	Dry reforming of methane over Co Mo/Al2O3 catalyst under low microwave power irradiation. *Catalysis Science and Technology*, **2018**, 8, 5315-5324	5.5	14
221	Nickel hollow fiber membranes for hydrogen separation from reformate gases and water gas shift reactions operated at high temperatures. *Journal of Membrane Science*, **2019**, 575, 89-97	9.6	13
220	Enhancing Oxygen Permeation via the Incorporation of Silver Inside Perovskite Oxide Membranes. *Processes*, **2019**, 7, 199	2.9	13

219	Ba0.5Sr0.5Co0.8-xFe0.2NbxO3-□(x□0.1) as cathode materials for intermediate temperature solid oxide fuel cells with an electron-blocking interlayer. *Ceramics International*, **2020**, 46, 10215-10223	5.1	13
218	Hydrogen Production from Steam Reforming of Acetic Acid over Ni-Fe/Palygorskite Modified with Cerium. *BioResources*, **2017**, 12,	1.3	13
217	Synthesis and characterization of cube-like Ag@AgCl-doped TiO2/fly ash cenospheres with enhanced visible-light photocatalytic activity. *Optical Materials*, **2016**, 53, 73-79	3.3	13
216	Insight into MoS2 Synthesis with Biophotoelectrochemical Engineering and Applications in Levofloxacin Elimination. *ACS Applied Energy Materials*, **2018**, 1, 3752-3762	6.1	13
215	A stable BaCe0.7Ta0.1In0.2O3□electrolyte membrane for proton-conducting solid oxide fuel cells. *Ceramics International*, **2013**, 39, 4287-4292	5.1	13
214	Effect of foreign oxides on the phase structure, sintering and transport properties of Ba0.5Sr0.5Co0.8Fe0.2O3□as ceramic membranes for oxygen separation. *Separation and Purification Technology*, **2011**, 81, 384-391	8.3	13
213	Facile auto-combustion synthesis for oxygen separation membrane application. *Journal of Membrane Science*, **2009**, 329, 219-227	9.6	13
212	Fabrication, microstructure, mechanical strength and oxygen permeation of Ba(Sr)Zr(CoFe)O3-particles-dispersed Ba0.5Sr0.5Co0.8Fe0.2O3□mixed-conducting composites. *Materials Letters*, **2004**, 58, 1561-1564	3.3	13
211	Novel oxygen permeable hollow fiber perovskite membrane with surface wrinkles. *Separation and Purification Technology*, **2021**, 261, 118295	8.3	13
210	The bioelectrochemical synthesis of high-quality carbon dots with strengthened electricity output and excellent catalytic performance. *Nanoscale*, **2019**, 11, 4428-4437	7.7	13
209	Oxygen permeation through single-phase perovskite membrane: Modeling study and comparison with the dual-phase membrane. *Separation and Purification Technology*, **2020**, 235, 116224	8.3	13
208	Catalytic palladium membrane reactors for one-step benzene hydroxylation to phenol. *Journal of Membrane Science*, **2018**, 563, 864-872	9.6	13
207	High Temperature Water Permeable Membrane Reactors for CO2 Utilization. *Chemical Engineering Journal*, **2021**, 420, 129834	14.7	13
206	Why Do Colloidal Wurtzite Semiconductor Nanoplatelets Have an Atomically Uniform Thickness of Eight Monolayers?. *Journal of Physical Chemistry Letters*, **2019**, 10, 3465-3471	6.4	12
205	Surfactant-modified graphene oxide membranes with tunable structure for gas separation. *Carbon*, **2019**, 152, 144-150	10.4	12
204	Efficient removal of organic pollutants by ceramic hollow fibre supported composite catalyst. *Sustainable Materials and Technologies*, **2019**, 20, e00108	5.3	12
203	Microwave-Assisted Dry and Bi-reforming of Methane over M□Mo/TiO2 (M = Co, Cu) Bimetallic Catalysts. *Energy & Fuels*, **2020**, 34, 7284-7294	4.1	12
202	Experimental and theoretical exploration of gas permeation mechanism through 2D graphene (not graphene oxides) membranes. *Journal of Membrane Science*, **2020**, 601, 117883	9.6	12

201	Bi-layer photoanode films of hierarchical carbon-doped brookite-rutile TiO 2 composite and anatase TiO 2 beads for efficient dye-sensitized solar cells. *Electrochimica Acta*, **2016**, 216, 429-437	6.7	12
200	A novel LaGa0.65Mg0.15Ni0.20O3□perovskite catalyst with high performance for the partial oxidation of methane to syngas. *Catalysis Today*, **2016**, 259, 388-392	5.3	12
199	Enhanced Oxygen Permeation Behavior of Ba0.5Sr0.5Co0.8Fe0.2O3□Membranes in a CO2-Containing Atmosphere with a Sm0.2Ce0.8O1.9 Functional Shell. *Energy & Fuels*, **2016**, 30, 1829-1834	4.1	12
198	Facile fabrication and enhanced photocatalytic performance of Ag@AgCl-activated sepiolite heterostructure photocatalyst. *Journal of Materials Science*, **2016**, 51, 2565-2572	4.3	12
197	Facile fabrication of 3D ferrous ion crosslinked graphene oxide hydrogel membranes for excellent water purification. *Environmental Science: Nano*, **2019**, 6, 3060-3071	7.1	12
196	Influence of sealing materials on the oxygen permeation fluxes of some typical oxygen ion conducting ceramic membranes. *Journal of Membrane Science*, **2014**, 470, 102-111	9.6	12
195	CO2-Tolerant Ceramic Membrane Driven by Electrical Current for Oxygen Production at Intermediate Temperatures. *Journal of the American Ceramic Society*, **2014**, 97, 120-126	3.8	12
194	Optimized preparation conditions of yttria doped zirconia coatings on potassium ferrate (VI) electrode for alkaline super-iron battery. *Applied Energy*, **2012**, 99, 265-271	10.7	12
193	Development of Al2O3 Film on Diatomite for Treating Wastewater Containing Anionic Polyacrylamide. *Chemical Engineering and Technology*, **2011**, 34, 2016-2021	2	12
192	Low-temperature synthesis of La0.6Sr0.4Co0.2Fe0.8O3□perovskite powder via asymmetric sol□gel process and catalytic auto-combustion. *Ceramics International*, **2009**, 35, 2809-2815	5.1	12
191	The Mechanism of Piezocatalysis: Energy Band Theory or Screening Charge Effect?. *Angewandte Chemie - International Edition*, **2021**, 61, e202110429	16.4	12
190	Rationally Tailored Redox Properties of a Mesoporous Mn□e Spinel Nanostructure for Boosting Low-Temperature Selective Catalytic Reduction of NOx with NH3. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 17727-17739	8.3	12
189	Hydrogen production by methane steam reforming using metallic nickel hollow fiber membranes. *Journal of Membrane Science*, **2021**, 620, 118909	9.6	12
188	Barium- and Strontium-Containing Anode Materials toward Ceria-Based Solid Oxide Fuel Cells with High Open Circuit Voltages. *ACS Applied Energy Materials*, **2018**, 1, 3521-3528	6.1	12
187	Highly Dispersed NiCo2O4 Nanodots Decorated Three-Dimensional g-C3N4 for Enhanced Photocatalytic H2 Generation. *ACS Sustainable Chemistry and Engineering*, **2019**,	8.3	11
186	Coking-resistant Ce0.8Ni0.2O2-□internal reforming layer for direct methane solid oxide fuel cells. *Electrochimica Acta*, **2018**, 282, 402-408	6.7	11
185	Rational design and synthesis of highly oriented copper-zinc ferrite QDs/titania NAE nano-heterojunction composites with novel photoelectrochemical and photoelectrocatalytic behaviors. *Dalton Transactions*, **2018**, 47, 12769-12782	4.3	11
184	Effects of broth composition and light condition on antimicrobial susceptibility testing of ionic silver. *Journal of Microbiological Methods*, **2014**, 105, 42-6	2.8	11

183	Mixed fuel strategy for carbon deposition mitigation in solid oxide fuel cells at intermediate temperatures. *Environmental Science & Technology*, **2014**, 48, 7122-7	10.3	11
182	Electrochemical characterization of YBaCo3ZnO7+δ as a stable proton-conducting SOFCs cathode. *Ceramics International*, **2012**, 38, 1737-1740	5.1	11
181	CO2 and water vapor-tolerant yttria stabilized bismuth oxide (YSB) membranes with external short circuit for oxygen separation with CO2 capture at intermediate temperatures. *Journal of Membrane Science*, **2013**, 427, 168-175	9.6	11
180	Effect of Ru and Ni nanocatalysts on water splitting and hydrogen oxidation reactions in oxygen-permeable membrane reactors. *Journal of Membrane Science*, **2020**, 599, 117702	9.6	11
179	A simple seed-embedded method to prepare ZIF-8 membranes supported on flexible PESf hollow fibers. *Journal of Industrial and Engineering Chemistry*, **2019**, 72, 222-231	6.3	11
178	Atomically dispersed cobalt on graphitic carbon nitride as a robust catalyst for selective oxidation of ethylbenzene by peroxymonosulfate. *Journal of Materials Chemistry A*, **2021**, 9, 3029-3035	13	11
177	Novel applications of perovskite oxide via catalytic peroxymonosulfate advanced oxidation in aqueous systems for trace L-cysteine detection. *Journal of Colloid and Interface Science*, **2019**, 545, 311-316	9.3	10
176	Surface chemistry-dependent activity and comparative investigation on the enhanced photocatalytic performance of graphitic carbon nitride modified with various nanocarbons. *Journal of Colloid and Interface Science*, **2020**, 569, 12-21	9.3	10
175	Carbon-coated three-dimensional WS2 film consisting of WO3@WS2 core-shell blocks and layered WS2 nanostructures as counter electrodes for efficient dye-sensitized solar cells. *Electrochimica Acta*, **2018**, 266, 130-138	6.7	10
174	Reinforced perovskite hollow fiber membranes with stainless steel as the reactive sintering aid for oxygen separation. *Journal of Membrane Science*, **2016**, 502, 151-157	9.6	10
173	Singlet oxygen formation in bio-inspired synthesis of a hollow Ag@AgBr photocatalyst for microbial and chemical decontamination. *Catalysis Science and Technology*, **2017**, 7, 4355-4360	5.5	10
172	Zinc-doped BSCF perovskite membranes for oxygen separation. *Separation and Purification Technology*, **2017**, 189, 399-404	8.3	10
171	Critical Role of Phosphorus in Hollow Structures Cobalt-Based Phosphides as Bifunctional Catalysts for Water Splitting. *Small*, **2021**, e2103561	11	10
170	Novel synthesis of porous Mg scaffold as a reactive containment vessel for LiBH4. *RSC Advances*, **2017**, 7, 36340-36350	3.7	10
169	Simultaneous production of hydrogen and carbon nanotubes from cracking of a waste cooking oil model compound over Ni-Co/SBA-15 catalysts. *International Journal of Energy Research*, **2020**, 44, 11564-11582	4.5	10
168	Single-step synthesized dual-layer hollow fiber membrane reactor for on-site hydrogen production through ammonia decomposition. *International Journal of Hydrogen Energy*, **2020**, 45, 7423-7432	6.7	10
167	Effects of alkali promoters on tri-metallic Co-Ni-Cu-based perovskite catalyst for higher alcohol synthesis from syngas. *Catalysis Today*, **2020**, 355, 26-34	5.3	10
166	Heat transfer augmentation of parabolic trough solar collector receiver's tube using hybrid nanofluids and conical turbulators. *Journal of the Taiwan Institute of Chemical Engineers*, **2021**, 125, 215-242	5.3	10

165	Hydrogen separation at elevated temperatures using metallic nickel hollow fiber membranes. *AICHE Journal*, **2017**, 63, 3026-3034	3.6	9
164	Morphological control of N-doped carbon nanotubes and their electrochemical properties. *Materials Letters*, **2015**, 154, 64-67	3.3	9
163	Deboronation-assisted construction of defective Ti(OSi)3OH species in MWW-type titanosilicate and their enhanced catalytic performance. *Catalysis Science and Technology*, **2020**, 10, 2905-2915	5.5	9
162	YxSi1-xO2-SO3H self-assembled membrane formed on phosphorylated YxSi1-xO2/Al2O3 for oily seawater partial desalination and deep cleaning. *Journal of Membrane Science*, **2018**, 556, 384-392	9.6	9
161	Bubble-wrap carbon: an integration of graphene and fullerenes. *Nanoscale*, **2018**, 10, 11328-11334	7.7	9
160	Perovskite hollow fiber membranes supported in a porous and catalytically active perovskite matrix for air separation. *Separation and Purification Technology*, **2018**, 192, 435-440	8.3	9
159	Porous ceramic membranes for membrane reactors **2013**, 298-336		9
158	Zirconia microbial hollow fibre bioreactor for Escherichia coli culture. *Ceramics International*, **2010**, 36, 2087-2093	5.1	9
157	Pentaerythritol p-hydroxybenzoate ester-based zinc metal alkoxides as multifunctional antimicrobial thermal stabilizer for PVC. *Polymer Degradation and Stability*, **2020**, 181, 109340	4.7	9
156	Piezotronic effect and oxygen vacancies boosted photocatalysis C-N coupling of benzylamine. *Nano Energy*, **2021**, 83, 105831	17.1	9
155	Theoretical and Experimental Insights into the Mechanism for Gas Separation through Nanochannels in 2D Laminar MXene Membranes. *Processes*, **2019**, 7, 751	2.9	9
154	Hydrogen permeation performance of dual-phase protonic-electronic conducting ceramic membrane with regular and independent transport channels. *Separation and Purification Technology*, **2019**, 213, 515-523	8.3	9
153	Perovskite LaFexCo1-xO3-□deposited SiO2 catalytic membrane for deeply cleaning wastewater. *Chemical Engineering Journal*, **2021**, 403, 126386	14.7	9
152	Directing charge transfer in chemical-bonded BaTiO @ReS Schottky heterojunction for piezoelectric enhanced photocatalysis.. *Advanced Materials*, **2022**, e2202508	24	9
151	Robust CO2 and H2 resistant triple-layered (Ag-YSZ)/YSZ/(La0.8Sr0.2MnO3-□YSZ) hollow fiber membranes with short-circuit for oxygen permeation. *Journal of Membrane Science*, **2017**, 524, 596-603	9.6	8
150	Improving hydrogen permeation and interface property of ceramic-supported graphene oxide membrane via embedding of silicalite-1 zeolite into Al2O3 hollow fiber. *Separation and Purification Technology*, **2019**, 227, 115712	8.3	8
149	Novel tungsten stabilizing SrCo1□W O3□membranes for oxygen production. *Ceramics International* , **2015**, 41, 14935-14940	5.1	8
148	Design of metallic nickel hollow fiber membrane modules for pure hydrogen separation. *AICHE Journal*, **2018**, 64, 3662-3670	3.6	8

147	Highly compact and robust hollow fiber solid oxide cells for flexible power generation and gas production. *Applied Energy*, **2017**, 205, 741-748	10.7	8
146	Carbon-Dot/Natural-Dye Sensitizer for TiO2 Solar Cells Prepared by a One-Step Treatment of Celery Leaf Extract. *ChemPhotoChem*, **2017**, 1, 470-478	3.3	8
145	Effects of scandium doping concentration on the properties of strontium cobalt oxide membranes. *Brazilian Journal of Chemical Engineering*, **2009**, 26, 563-574	1.7	8
144	Superstructures with Atomic-Level Arranged Perovskite and Oxide Layers for Advanced Oxidation with an Enhanced Non-Free Radical Pathway. *ACS Sustainable Chemistry and Engineering*, **2022**, 10, 1899-1909	8.2	8
143	Ultrafine copper nanoclusters and single sites for Fenton-like reactions with high atom utilities. *Environmental Science: Nano*, **2020**, 7, 2595-2606	7.1	8
142	Development of a techno-economic framework for natural gas dehydration via absorption using Tri-Ethylene Glycol: a comparative study on conventional and stripping gas dehydration processes. *Journal of Chemical Technology and Biotechnology*, **2019**, 94, 955-963	3.5	8
141	Elevated-temperature H2 separation using a dense electron and proton mixed conducting polybenzimidazole-based membrane with 2D sulfonated graphene. *Green Chemistry*, **2021**, 23, 3374-3385	10	8
140	SDC-SCFZ dual-phase ceramics: Structure, electrical conductivity, thermal expansion, and O2 permeability. *Journal of the American Ceramic Society*, **2021**, 104, 2268-2284	3.8	8
139	Piezotronic effect and hierarchical Z-scheme heterostructure stimulated photocatalytic H2 evolution integrated with C-N coupling of benzylamine. *Nano Energy*, **2021**, 89, 106349	17.1	8
138	Synthesis of Fe2O3□iO2/fly-ash-cenosphere composite and its mechanism of photocatalytic oxidation under visible light. *Research on Chemical Intermediates*, **2016**, 42, 3637-3654	2.8	7
137	CFD based investigations on the effects of blockage shapes on transient mixed convective nanofluid flow over a backward facing step. *Powder Technology*, **2019**, 346, 441-451	5.2	7
136	Pentaerythritol stearate ester-based tin (II) metal alkoxides: A tri-functional organotin as poly (vinyl chloride) thermal stabilizers. *Polymer Degradation and Stability*, **2020**, 175, 109129	4.7	7
135	Modeling of hydrogen separation through porous YSZ hollow fiber-supported graphene oxide membrane. *AICHE Journal*, **2018**, 64, 2711-2720	3.6	7
134	Influence of silicalite-1 nanoparticle seeds on the synthesis of Ti-containing mesoporous zeolites. *Chemical Engineering Journal*, **2016**, 289, 494-501	14.7	7
133	A Comparative Study of the Performance of SrCo0.76Fe0.19Al0.1Ox and (SrCo0.8Fe0.2O3)0.95(SrAl2O4)0.05 Mixed-Conducting Membranes. *Journal of the American Ceramic Society*, **2013**, 96, 1285-1291	3.8	7
132	From Chelating Precursor to Perovskite Oxides and Hollow Fiber Membranes. *Journal of the American Ceramic Society*, **2007**, 90, 84-91	3.8	7
131	Roadmap on Sustainable Mixed Ionic-Electronic Conducting Membranes. *Advanced Functional Materials*,2105702	15.6	7
130	Thermohydraulic and thermodynamics performance of hybrid nanofluids based parabolic trough solar collector equipped with wavy promoters. *Renewable Energy*, **2022**, 182, 401-426	8.1	7

129	Preparation of ZIF-8 Membranes on Porous ZnO Hollow Fibers by a Facile ZnO-Induced Method. *Industrial & Engineering Chemistry Research*, **2020**, 59, 15576-15585	3.9	7
128	New Insight into the Effects of NH3 on SO2 Poisoning for In Situ Removal of Metal Sulfates in Low-Temperature NH3-SCR over an Fe V Catalyst. *Journal of Physical Chemistry C*, **2020**, 124, 21396-21406	3.8	7
127	Unveiling the Promotion Effects of CoO on Low-Temperature NO Reduction with CO over an In-Situ-Established Co3O4 CoO Heterostructure. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 6107-6117	8.3	7
126	One stone two birds: Simultaneous realization of partial oxidation of methane to syngas and N2 purification via robust ceramic oxygen-permeable membrane reactors. *Chemical Engineering Journal*, **2021**, 419, 129462	14.7	7
125	CoP imbedded g-CN heterojunctions for highly efficient photo, electro and photoelectrochemical water splitting. *Journal of Colloid and Interface Science*, **2021**, 599, 23-33	9.3	7
124	Removal of heavy metal cations and co-existing anions in simulated wastewater by two separated hydroxylated MXene membranes under an external voltage. *Journal of Membrane Science*, **2021**, 638, 119697	9.6	7
123	A simple embedded-seeding method to prepare silicalite-1 membrane on porous -Al 2 O 3 hollow fibers. *Materials Letters*, **2017**, 194, 122-125	3.3	6
122	The effect of A-site element on CO 2 resistance of O 2 -selective La-based perovskite hollow fibers. *Journal of Industrial and Engineering Chemistry*, **2017**, 53, 276-284	6.3	6
121	Asymmetric nickel hollow fibres as the catalytic membrane reactor for CO hydrogenation into syngas. *Chemical Communications*, **2019**, 55, 4226-4229	5.8	6
120	Enhanced CO selectivity for reverse water-gas shift reaction using Ti4O7-doped SrCe0.9Y0.1O3- hollow fibre membrane reactor. *Canadian Journal of Chemical Engineering*, **2019**, 97, 1619-1626	2.3	6
119	Comprehensive Kinetic Study on the Pyrolysis and Combustion Behaviours of Five Oil Palm Biomass by Thermogravimetric-Mass Spectrometry (TG-MS) Analyses. *Bioenergy Research*, **2019**, 12, 370-387	3.1	6
118	Performance improvement of hybrid polymer membranes for wastewater treatment by introduction of micro reaction locations. *Progress in Natural Science: Materials International*, **2018**, 28, 148-159	3.6	6
117	Anti-corrosion porous RuO/NbC anodes for the electrochemical oxidation of phenol.. *RSC Advances*, **2019**, 9, 17373-17381	3.7	6
116	Effect of characteristics of (Sm,Ce)O2 powder on the fabrication and performance of anode-supported solid oxide fuel cells. *Materials Research Bulletin*, **2012**, 47, 121-129	5.1	6
115	One-pot synthesis of Bi-Ni nanowire and nanocable arrays by coelectrodeposition approach. *Nanoscale Research Letters*, **2012**, 7, 130	5	6
114	Preparation of SnO2 -TiO2 /Fly Ash Cenospheres and its Application in Phenol Degradation. *Photochemistry and Photobiology*, **2015**, 91, 1302-8	3.6	6
113	Modeling and analysis of the pyrolysis of bio-oil aqueous fraction in a fixed-bed reactor. *Fuel*, **2014**, 133, 1-6	7.1	6
112	Oxygen relaxation and phase transition in GdBaCo2O5 + oxide. *Solid State Ionics*, **2011**, 192, 245-247	3.3	6

111	Hydrogen Permeation Performance of Ni-BaZr0.1Ce0.7Y0.2O3 Metal-Ceramic Hollow Fiber Membrane. *Chinese Journal of Chemical Physics*, **2012**, 25, 125-128	0.9	6
110	Effects of niobium doping site and concentration on the phase structure and oxygen permeability of Nb-substituted SrCoOx oxides. *Ceramics International*, **2010**, 36, 635-641	5.1	6
109	Mechanical stability and transport properties of the Sn-promoted SrCo0.8Fe0.2O3 ceramic membrane. *Journal of Membrane Science*, **2007**, 290, 73-77	9.6	6
108	Constructing highly porous carbon materials from porous organic polymers for superior CO adsorption and separation. *Journal of Colloid and Interface Science*, **2021**,	9.3	6
107	Porous SiO coated AlFeZrO solid superacid nanoparticles with negative charge for polyvinylidene fluoride (PVDF) membrane: Cleaning and partial desalinating seawater. *Journal of Hazardous Materials*, **2020**, 384, 121471	12.8	6
106	Self-detoxifying hollow zinc silica nanospheres with tunable Ag ion release-recapture capability: A nanoantibiotic for efficient MRSA inhibition. *Composites Part B: Engineering*, **2020**, 202, 108415	10	6
105	A novel UiO-66 encapsulated 12-silicotungstic acid catalyst for dimethyl ether synthesis from syngas. *Catalysis Today*, **2020**, 355, 3-9	5.3	6
104	Novel SrCo0.9W0.1O3- Hollow Fiber Ceramic Membrane with Enhanced Oxygen Delivery Performance and CO2 Resistance Ability. *ChemistrySelect*, **2018**, 3, 13700-13704	1.8	6
103	Effects of inter/intralayer adsorption and direct/indirect reaction on photo-removal of pollutants by layered g-C3N4 and BiOBr. *Journal of Cleaner Production*, **2021**, 322, 129025	10.3	6
102	Modeling study of oxygen permeation through an electronically short-circuited YSZ-based asymmetric hollow fiber membrane. *AICHE Journal*, **2017**, 63, 3491-3500	3.6	5
101	One-step reducing and dispersing graphene oxide via hydroxypropyl hydrazine and its applications in Cu removal. *Physical Chemistry Chemical Physics*, **2019**, 21, 10947-10954	3.6	5
100	Self-assembled membrane manufactured by metal-organic framework (UiO-66) coated AlO for cleaning oily seawater.. *RSC Advances*, **2019**, 9, 10702-10714	3.7	5
99	Ammonium chloride metal hydride based reaction cycle for vehicular applications. *Journal of Materials Chemistry A*, **2019**, 7, 5031-5042	13	5
98	Comparative study on the performance of microwave-assisted plasma DRM in nitrogen and argon atmospheres at a low microwave power. *Journal of Industrial and Engineering Chemistry*, **2020**, 85, 118-129	6.3	5
97	TiO2/void/porous Al2O3 shell embedded in polyvinylidene fluoride film for cleaning wastewater. *Advanced Powder Technology*, **2018**, 29, 1582-1590	4.6	5
96	Synthesis and characterisation of a porous Al scaffold sintered from NaAlH4. *Journal of Materials Science*, **2018**, 53, 1076-1087	4.3	5
95	A novel heterogeneous La0.8Sr0.2CoO3 (La0.5Sr0.5)2CoO4+ dual-phase membrane for oxygen separation. *Asia-Pacific Journal of Chemical Engineering*, **2018**, 13, e2239	1.3	5
94	Fe3O4 encapsulated mesoporous silica nanospheres with tunable size and large void pore. *Frontiers of Chemical Science and Engineering*, **2014**, 8, 114-122	4.5	5

93	Perovskite membrane reactors: fundamentals and applications for oxygen production, syngas production and hydrogen processing **2014**, 182-217		5
92	Modeling and optimization of refinery hydrogen network □a new strategy to linearize power equation of new compressor. *Asia-Pacific Journal of Chemical Engineering*, **2017**, 12, 948-959	1.3	5
91	Effect of CuO additive on the sintering and performance of niobium-doped strontium cobaltite as oxygen separation membranes. *Separation and Purification Technology*, **2010**, 74, 28-37	8.3	5
90	Nature of Intrinsic Defects in Carbon Materials for Electrochemical Dechlorination of 1,2-Dichloroethane to Ethylene. *ACS Catalysis*, **2021**, 11, 14284-14292	13.1	5
89	Functionalized Activated Carbon for Competing Adsorption of Volatile Organic Compounds and Water. *ACS Applied Materials & Interfaces*, **2021**, 13, 56510-56518	9.5	5
88	Peanut-Shaped Cu□Mn Nano-Hollow Spinel with Oxygen Vacancies as Catalysts for Low-Temperature NO Reduction by CO. *ACS Applied Nano Materials*, **2021**, 4, 11969-11979	5.6	5
87	Manganese-Based Spinel Core□Shell Nanostructures for Efficient Electrocatalysis of 1,2-Dichloroethane. *ACS Applied Nano Materials*, **2020**, 3, 10778-10786	5.6	5
86	Rational Design of Cobaltate MCo2O4□Hierarchical Nanomicrostructures with Bunch of Oxygen Vacancies toward Highly Efficient Photocatalytic Fixing of Carbon Dioxide. *Journal of Physical Chemistry C*, **2021**, 125, 9782-9794	3.8	5
85	Simultaneous hydrogen and oxygen permeation through BaCe0.70Fe0.10Sc0.20O3-□perovskite hollow fiber membranes. *Journal of Membrane Science*, **2021**, 635, 119513	9.6	5
84	Highly active iron-nitrogen-boron-carbon bifunctional electrocatalytic platform for hydrogen peroxide sensing and oxygen reduction. *Environmental Research*, **2021**, 201, 111563	7.9	5
83	A dual-layer ZnO□Al2O3 hollow fiber for directly inducing the formation of ZIF membrane. *Journal of Membrane Science*, **2021**, 640, 119851	9.6	5
82	Novel La0.7Sr0.3FeO3 □/(La0.5Sr0.5)2CoO4 + □composite hollow fiber membrane for O2 separation with high CO2 resistance. *International Journal of Energy Research*, **2019**, 43, 8890-8897	4.5	4
81	Modeling of hydrogen permeation for Ni□BZCY asymmetric membrane. *Journal of Membrane Science*, **2013**, 437, 196-204	9.6	4
80	Synthesis of stable Ti-containing mesoporous tubular membrane using silicalite-1 nanoparticles as seeds. *Chemical Engineering Journal*, **2014**, 255, 344-355	14.7	4
79	Synthesis of SmBaCo2O6□powder by the combustion process using Co3O4 as precursor. *Journal of Alloys and Compounds*, **2009**, 481, L40-L42	5.7	4
78	Combustion of coal-derived CO with membrane-supplied oxygen enabling CO2 capture. *AICHE Journal*, **2007**, 53, 2481-2484	3.6	4
77	Thin porous glass tubes. *Materials Chemistry and Physics*, **2007**, 103, 147-152	4.4	4
76	New biosensors made of specially designed transparent chips with nano-optical tags. *Smart Materials and Structures*, **2007**, 16, 2214-2221	3.4	4

75	Chemical fabrication of Al2O3 nano-trilobes. *Applied Catalysis A: General*, **2005**, 287, 108-115	5.1	4
74	Single Pd atoms synergistically manipulating charge polarization and active sites for simultaneously photocatalytic hydrogen production and oxidation of benzylamine. *Nano Energy*, **2022**, 95, 107045	17.1	4
73	Nickel(II) ion-intercalated MXene membranes for enhanced H2/CO2 separation. *Frontiers of Chemical Science and Engineering*, **2021**, 15, 882-891	4.5	4
72	Investigations on electrochemical performance of La2NiO4+□cathode material doped at A site for solid oxide fuel cells. *Materials Research Express*, **2020**, 7, 065507	1.7	4
71	Novel Two-Dimensional AgInS/SnS/RGO Dual Heterojunctions: High Spatial Charge and Toxicity Evaluation. *Langmuir*, **2020**, 36, 9709-9718	4	4
70	Co/Co6Mo6C@C nanoreactors derived from ZIF-67 composite for higher alcohols synthesis. *Composites Part B: Engineering*, **2021**, 209, 108608	10	4
69	Tailoring collaborative N□O functionalities of graphene oxide for enhanced selective oxidation of benzyl alcohol. *Carbon*, **2021**, 182, 715-715	10.4	4
68	Parametric modeling study of oxidative dehydrogenation of propane in La0.6Sr0.4Co0.2Fe0.8O3-□ hollow fiber membrane reactor. *Catalysis Today*, **2019**, 330, 135-141	5.3	4
67	Size-tailored microwave absorption and reaction activity of Co3O4 nanocatalysts. *Journal of Industrial and Engineering Chemistry*, **2021**, 94, 173-179	6.3	4
66	A Parametric Study of Different Recycling Configurations for the Natural Gas Dehydration Process Via Absorption Using Triethylene Glycol. *Process Integration and Optimization for Sustainability*, **2018**, 2, 447-460	2	4
65	One-Pot Synthesis of Raspberry-Like Mesoporous Silica Nanospheres. *Journal of Nanoscience and Nanotechnology*, **2018**, 18, 401-406	1.3	4
64	Carbon-supported Fe catalysts with well-defined active sites for highly selective alcohol production from Fischer-Tropsch synthesis. *Applied Catalysis B: Environmental*, **2022**, 312, 121393	21.8	4
63	CO2-resistant SDC-SSAF oxygen selective dual-phase hollow fiber membranes. *Asia-Pacific Journal of Chemical Engineering*, **2020**, 15, e2528	1.3	3
62	Effect of formation of micro reaction locations (MRLs) on properties of polyvinylidene fluoride (PVDF) membranes. *Journal of Membrane Science*, **2018**, 553, 117-130	9.6	3
61	Bioceramic macrocapsules for cell immunoisolation. *Angewandte Chemie - International Edition*, **2007**, 46, 3062-5	16.4	3
60	Energetics for gas separation in microporous membranes. *International Journal of Nanotechnology*, **2007**, 4, 468	1.5	3
59	Glass□Carbon Composite Hollow Fibers. *Industrial & Engineering Chemistry Research*, **2004**, 43, 3137-3140	3.9	3
58	Removal of methylene blue (MB) by bimetallic- metal organic framework. *Journal of Applied Materials and Technology*, **2020**, 2, 36-49	0.3	3

57	Enhancing Acidic Dye Adsorption by Updated Version of UiO-66. *Journal of Applied Materials and Technology*, **2020**, 1, 54-62	0.3	3
56	Graphitic carbon nitride nanosheets via acid pretreatments for promoted photocatalysis toward degradation of organic pollutants. *Journal of Colloid and Interface Science*, **2021**, 608, 1334-1347	9.3	3
55	Development of a techno-economic framework for natural gas dehydration via absorption using tri-ethylene glycol: A comparative study between DRIZO and other dehydration processes. *South African Journal of Chemical Engineering*, **2020**, 31, 17-24	3.2	3
54	CO2 and Steam-Assisted H2 Separation through BaCe0.8Y0.2O3□e0.8Y0.2O2□Hollow Fiber Membranes. *Energy & Fuels*, **2020**, 34, 683-689	4.1	3
53	Electro-confinement membrane desalination by nanoporous carbon membrane. *Desalination*, **2020**, 476, 114232	10.3	3
52	Three-dimensionally ordered macro-mesoporous CoMo bulk catalysts with superior performance in hydrodesulfurization of thiophene.. *RSC Advances*, **2020**, 10, 37280-37286	3.7	3
51	Improving antibacterial, biocompatible, and reusable properties of polyvinyl chloride via the addition of aluminum alkoxides. *Journal of Vinyl and Additive Technology*, **2021**, 27, 519-532	2	3
50	Tuned single atom coordination structures mediated by polarization force and sulfur anions for photovoltaics. *Nano Research*, **2021**, 14, 4025	10	3
49	FeVO4-supported Mn□e oxides for the low-temperature selective catalytic reduction of NOx by NH3. *Catalysis Science and Technology*,	5.5	3
48	Selective oxidation of alcohols by graphene-like carbon with electrophilic oxygen and integrated pyridinic nitrogen active sites. *Nanoscale*, **2021**, 13, 12979-12990	7.7	3
47	Biomass-derived N,S co-doped 3D multichannel carbon supported Au@Pd@Pt catalysts for oxygen reduction. *Environmental Research*, **2021**, 202, 111684	7.9	3
46	Studies into the kinetic compensation effects of Loy Yang Brown coal during gasification in a steam environment □A mechanistic view. *Chemical Engineering Journal Advances*, **2021**, 8, 100159	3.6	3
45	Sea-Urchin-Like Carbon Nanospheres for Electrocatalytic Dechlorination of 1,2-Dichloroethane. *ACS Applied Nano Materials*, **2021**, 4, 13090-13098	5.6	3
44	A Pd-TSH composite membrane reactor for one-step oxidation of benzene to phenol. *Chemical Communications*, **2019**, 55, 7745-7748	5.8	2
43	Quadruple hydrogen bonded hyperbranched supramolecular polymers with aggregation-induced emission for artificial light-harvesting. *Dyes and Pigments*, **2019**, 171, 107774	4.6	2
42	Photocatalytic degradation of gaseous toluene over TiO2□SiO2 composite nanotubes synthesized by sol□gel with template technique. *Materials Research Bulletin*, **2012**, 47, 279-284	5.1	2
41	Nanoformulated Antimicrobial Agents for Central Nervous System Infections. *Journal of Nanoscience and Nanotechnology*, **2017**, 17, 8683-8698	1.3	2
40	Enhanced Oxygen Permeation of Pt-Modified La0.6Sr0.4Co0.2Fe0.8O3-□ Hollow Fibre Membranes. *Advanced Materials Research*, **2012**, 550-553, 630-633	0.5	2

39	A Comparative Structure and Performance Study of La[sub 1−x]Sr[sub x]CoO[sub 3−δ] and La[sub 1−x]Sr[sub x]Co[sub 0.9]Nb[sub 0.1]O[sub 3−δ] (x=0.5, 0.7, 0.9, and 1.0) Oxygen Permeable Mixed Conductors. *Journal of the Electrochemical Society*, **2011**, 158, H299	3.9	2
38	Preparation, characterization and catalytic performance of SrTi0.9Li0.1O3 ultrafine powders. *Ceramics International*, **2008**, 34, 1805-1810	5.1	2
37	Carbon Nitride Based Z-scheme Photocatalyst for Non-Sacrificial Overall Water Splitting. *Materials Today Energy*, **2021**, 23, 100915	7	2
36	Vacuum-assisted continuous flow electroless plating approach for high performance Pd membrane deposition on ceramic hollow fiber lumen. *Journal of Membrane Science*, **2022**, 645, 120207	9.6	2
35	A metal-free covalent organic framework as a photocatalyst for CO2 reduction at low CO2 concentration in a gas–solid system. *Journal of Materials Chemistry A*, **2021**, 9, 24895-24902	13	2
34	High-Performance Aqueous Sodium-Ion Battery Based on Graphene-Doped Na2MnFe(CN)6–Zinc with a Highly Stable Discharge Platform and Wide Electrochemical Stability. *Energy & Fuels*, **2021**, 35, 10860-10868	4.1	2
33	Modeling of steam permeation through the high temperature proton-Conducting ceramic membranes. *AICHE Journal*, **2019**, 65, 777-782	3.6	2
32	Striking CO2 capture and CO2/N2 separation by Mn/Al bimetallic MIL-53. *Polyhedron*, **2021**, 193, 114898	2.7	2
31	ZIF-67 membranes supported on porous ZnO hollow fibers for hydrogen separation from gas mixtures. *Journal of Membrane Science*, **2022**, 120550	9.6	2
30	Study on hydrogen permeation of Ni-BaZr0.1Ce0.7Y0.2O3−δ asymmetric cermet membrane. *International Journal of Energy Research*, **2019**, 43, 4959-4966	4.5	1
29	Frontispiece: Single-Site Active Cobalt-Based Photocatalyst with a Long Carrier Lifetime for Spontaneous Overall Water Splitting. *Angewandte Chemie - International Edition*, **2017**, 56,	16.4	1
28	Preparation and characterization of Ag@AgCl-doped fly ash cenospheres for photocatalytic applications. *Research on Chemical Intermediates*, **2017**, 43, 703-716	2.8	1
27	Electrochemical reduction of nitrate in a catalytic carbon membrane nano-reactor. *Water Research*, **2022**, 208, 117862	12.5	1
26	Mechanistic Insights into the Kinetic Compensation Effects during the Gasification of Loy Yang Brown Coal Char in O2. *Industrial & Engineering Chemistry Research*,	3.9	1
25	Oxygen permeation simulation of La0.8Ca0.2Fe0.95O3−δ–Ag hollow fiber membrane at different modes and flow configurations. *AICHE Journal*,e17508	3.6	1
24	Radio-frequency induction heating powered low-temperature catalytic CO2 conversion via bi-reforming of methane. *Chemical Engineering Journal*, **2021**, 430, 132934	14.7	1
23	High Temperature Oxygen Separation Using Dense Ceramic Membranes **2015**, 1-27		1
22	Effect of sulfate species on the performance of Ce-Fe-O catalysts in the selective catalytic reduction of NO by NH3. *Journal of Fuel Chemistry and Technology*, **2021**, 49, 844-852	1.8	1

21	Optical investigation on polyoxymethylene dimethyl ethers spray flame at different oxygen levels in a constant volume vessel. *Science China Technological Sciences*, **2021**, 64, 1611-1623	3.5	1
20	Ternary BaCaZrTi Perovskite Oxide Piezocatalysts Dancing for Efficient Hydrogen Peroxide Generation. *Nano Energy*, **2022**, 107251	17.1	1
19	Construction of S-scheme heterojunction by doping Bi2WO6 into Bi2O3 for efficiently enhanced visible-light photocatalytic performance. *Journal of Materials Science*, **2022**, 57, 4265-4282	4.3	0
18	Highly efficient recovery of hydrogen from dilute H2-streams using BaCe0.7Zr0.1Y0.2O3-/Ni-BaCe0.7Zr0.1Y0.2O3- dual-layer hollow fiber membrane. *Separation and Purification Technology*, **2022**, 287, 120602	8.3	0
17	Scandium-doped barium ceria ferrites-based composite mixed conducting hollow fiber membranes for H2 and O2 permeation. *Journal of Industrial and Engineering Chemistry*, **2021**, 107, 100-100	6.3	0
16	Integrated electrocatalytic packed-bed membrane reactor for nitrate removal. *Separation and Purification Technology*, **2022**, 121010	8.3	0
15	B-Ni/MgAl2O4 catalyzed dry reforming of methane: The role of boron to resist the formation of graphitic carbon. *Fuel*, **2022**, 320, 123950	7.1	0
14	Externally self-supported metallic nickel hollow fiber membranes for hydrogen separation. *Journal of Membrane Science*, **2022**, 653, 120513	9.6	0
13	Design and prediction of metal organic framework-based mixed matrix membranes for CO2 capture via machine learning. *Cell Reports Physical Science*, **2022**, 100864	6.1	0
12	Steam gasification of low-rank coal chars: Insights into the kinetic compensation effects and physical significance of kinetic parameters. *Chemical Engineering Journal Advances*, **2022**, 11, 100306	3.6	0
11	Peroxymonosulfate oxidation via paralleled nonradical pathways over iron and nitrogen doped porous carbons.. *Science of the Total Environment*, **2022**, 836, 155670	10.2	0
10	Low-temperature quartz wafer bonding using hyperbranched polyurethane oligomers. *Microsystem Technologies*, **2015**, 21, 1473-1478	1.7	
9	Inorganic Membranes **2013**, 1		
8	Hybrid nanocomposite colloidal crystals via in-situ synthesis of nanoparticles within polyelectrolyte shell. *Journal of Nanoscience and Nanotechnology*, **2009**, 9, 1330-2	1.3	
7	Bioceramic Macrocapsules for Cell Immunoisolation. *Angewandte Chemie*, **2007**, 119, 3122-3125	3.6	
6	Insight into the effect of mass transfer channels and intrinsic reactivity in titanium silicalite catalyst for one-step epoxidation of propylene. *Surfaces and Interfaces*, **2022**, 29, 101741	4.1	
5	High Temperature Oxygen Separation Using Dense Ceramic Membranes **2017**, 2681-2706		
4	Simulation of Oxygen Permeability of Dual-phase Hollow Fiber Membrane. *Wuji Cailiao Xuebao/Journal of Inorganic Materials*, **2012**, 27, 951-955	1	

3 High-Temperature Oxygen Separation Using Dense Ceramic Membranes **2021**, 1-33

2 Mechanism Research of Catalytic Degradation of 1, 2-Dichlorobenzene over Highly Efficient Hollow Calcium Ferrite by In situ FTIR Spectra. *Materials Today Energy*, **2022**, 100996 7

1 High-Temperature Oxygen Separation Using Dense Ceramic Membranes **2022**, 1725-1757