

# Joao Carlos Diniz da Costa

## List of Publications by Year in descending order

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Version: 2024-02-01

199  
papers

10,780  
citations

26630

56  
h-index

36028

97  
g-index

203  
all docs

203  
docs citations

203  
times ranked

8292  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Salt storage and induced crystallisation in porous asymmetric inorganic membranes. <i>Journal of Membrane Science</i> , 2022, 641, 119872.   | 8.2  | 2         |
| 2  | Novel two-step phase inversion and dry surface coated carbon membranes on alumina freeze-cast substrates for desalination. <i>Desalination</i> , 2021, 500, 114862.                                      | 8.2  | 5         |
| 3  | Asymmetric and hierarchical porous carbon membranes prepared by a single-step soft-templated method. <i>Chemical Engineering Communications</i> , 2021, 208, 166-170.                                    | 2.6  | 1         |
| 4  | Structural investigation of cobalt oxide seeded silica xerogels under harsh hydrothermal condition. <i>Journal of Sol-Gel Science and Technology</i> , 2021, 98, 470-477.                                | 2.4  | 3         |
| 5  | Improved dark ambient degradation of organic pollutants by cerium strontium cobalt perovskite. <i>Journal of Environmental Sciences</i> , 2020, 90, 110-118.   | 6.1  | 11        |
| 6  | Manufacture of Highly Porous Tubular Alumina Substrates with Anisotropic Pore Structure by Freeze-Casting. <i>Advanced Engineering Materials</i> , 2020, 22, 1901432.                                    | 3.5  | 9         |
| 7  | Catalysis of silica sol-gel reactions using a PdCl <sub>2</sub> precursor. <i>Journal of Sol-Gel Science and Technology</i> , 2020, 95, 456-464.   | 2.4  | 4         |
| 8  | Silicon carbide filters and porous membranes: A review of processing, properties, performance and application. <i>Journal of Membrane Science</i> , 2020, 610, 118193.                                   | 8.2  | 87        |
| 9  | 2D/3D Assemblies of Amine-Functionalized Graphene Silica (Templated) Aerogel for Enhanced CO <sub>2</sub> Sorption. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 30391-30400.               | 8.0  | 19        |
| 10 | Special Issue on "Membrane Materials, Performance and Processes". <i>Processes</i> , 2019, 7, 261.   | 2.8  | 0         |
| 11 | 2D/3D amine functionalised sorbents containing graphene silica aerogel and mesoporous silica with improved CO <sub>2</sub> sorption. <i>Separation and Purification Technology</i> , 2019, 222, 381-389. | 7.9  | 26        |
| 12 | Novel membrane percrystallisation process for nickel sulphate production. <i>Hydrometallurgy</i> , 2019, 185, 210-217.   | 4.3  | 15        |
| 13 | Inter-layer free cobalt-doped silica membranes for pervaporation of ammonia solutions. <i>Journal of Membrane Science</i> , 2018, 553, 111-116.  | 8.2  | 12        |
| 14 | Ceramic metal oxides with Ni <sup>2+</sup> active phase for the fast degradation of Orange II dye under dark ambience. <i>Ceramics International</i> , 2018, 44, 6634-6640.                              | 4.8  | 22        |
| 15 | Improved CO <sub>2</sub> Sorption in Freeze-Dried Amine Functionalized Mesoporous Silica Sorbent. <i>Industrial &amp; Engineering Chemistry Research</i> , 2018, 57, 5653-5660.                          | 3.7  | 17        |
| 16 | Novel inorganic membrane for the percrystallization of mineral, food and pharmaceutical compounds. <i>Journal of Membrane Science</i> , 2018, 550, 407-415.  | 8.2  | 24        |
| 17 | Hybrid vinyl silane and P123 template sol-gel derived carbon silica membrane for desalination. <i>Journal of Sol-Gel Science and Technology</i> , 2018, 85, 280-289.                                     | 2.4  | 15        |
| 18 | Degradation of azo dye Orange II under dark ambient conditions by calcium strontium copper perovskite. <i>Applied Catalysis B: Environmental</i> , 2018, 221, 691-700.                                   | 20.2 | 73        |

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|----|--|------|-----------|
| 19 | Environmental mineralization of caffeine micro-pollutant by Fe-MFI zeolites. <i>Environmental Science and Pollution Research</i> , 2018, 25, 3628-3635.  | 5.3  | 10        |
| 20 | Estimation of Pore Size Distribution of Amorphous Silica-Based Membrane by the Activation Energies of Gas Permeation. <i>Processes</i> , 2018, 6, 239.   | 2.8  | 7         |
| 21 | Fine control of NaCl crystal size and particle size in percrystallisation by tuning the morphology of carbonised sucrose membranes. <i>Journal of Membrane Science</i> , 2018, 567, 157-165.                                   | 8.2  | 17        |
| 22 | Effective degradation of azo dyes in the dark by Cu <sup>2+</sup> active sites in CaSrNiCu oxides. <i>Journal of Environmental Chemical Engineering</i> , 2018, 6, 5870-5878.  | 6.7  | 7         |
| 23 | Degradation of orange II dye under dark ambient conditions by MeSrCuO (Me = Mg and Ce) metal oxides. <i>Separation and Purification Technology</i> , 2018, 205, 293-301.   | 7.9  | 25        |
| 24 | Surface and catalytic properties of stable Me(Ba, Ca and Mg)SrCoO for the degradation of orange II dye under dark conditions. <i>Applied Surface Science</i> , 2018, 450, 292-300.   | 6.1  | 19        |
| 25 | Enhanced hydrogen production from thermochemical processes. <i>Energy and Environmental Science</i> , 2018, 11, 2647-2672.   | 30.8 | 111       |
| 26 | Substrate Effect on Carbon/Ceramic Mixed Matrix Membrane Prepared by a Vacuum-Assisted Method for Desalination. <i>Processes</i> , 2018, 6, 47.  | 2.8  | 6         |
| 27 | The Neck to Particle Ratio Effect on the Mechanical and Morphological Sintering Features of Porous Stainless Steel (SS) Hollow Fibers. <i>Advanced Engineering Materials</i> , 2018, 20, 1800045.                              | 3.5  | 4         |
| 28 | Enhanced CO <sub>2</sub> sorption efficiency in amine-functionalised 2D/3D graphene/silica hybrid sorbents. <i>Chemical Communications</i> , 2018, 54, 10586-10589.  | 4.1  | 14        |
| 29 | Creating Hydrothermally Stable Inorganic Membrane Interlayers by Limiting the Anatase-to-Rutile (ATR) Transition Temperature in Doped-Titania. <i>Industrial &amp; Engineering Chemistry Research</i> , 2018, 57, 11381-11389. | 3.7  | 3         |
| 30 | Investigation and simulation of the transport of gas containing mercury in microporous silica membranes. <i>Chemical Engineering Science</i> , 2018, 190, 286-296.   | 3.8  | 7         |
| 31 | Fine ultra-micropore control using the intrinsic viscosity of precursors for high performance carbon molecular sieve membranes. <i>Separation and Purification Technology</i> , 2017, 177, 129-134.                            | 7.9  | 17        |
| 32 | Long term and performance testing of NaMg double salts for H <sub>2</sub> /CO <sub>2</sub> separation. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 7997-8005.  | 7.1  | 3         |
| 33 | Influence of porous structures on O <sub>2</sub> flux of BSCF asymmetric membranes. <i>Separation and Purification Technology</i> , 2017, 175, 164-169.  | 7.9  | 23        |
| 34 | A novel route for manufacturing asymmetric BSCF-based perovskite structures by a combined tape and freeze casting method. <i>Journal of the European Ceramic Society</i> , 2017, 37, 5249-5257.                                | 5.7  | 20        |
| 35 | Copper oxide - perovskite mixed matrix membranes delivering very high oxygen fluxes. <i>Journal of Membrane Science</i> , 2017, 526, 323-333.  | 8.2  | 40        |
| 36 | Highly compact and robust hollow fiber solid oxide cells for flexible power generation and gas production. <i>Applied Energy</i> , 2017, 205, 741-748.   | 10.1 | 13        |

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|----|---|-----|-----------|
| 37 | Feasibility study of LSCF5582 membrane integration into a nitrogen based chemical looping air separation process. <i>Chemical Engineering Research and Design</i> , 2017, 125, 96-107.                                      | 5.6 | 5         |
| 38 | Zinc-doped BSCF perovskite membranes for oxygen separation. <i>Separation and Purification Technology</i> , 2017, 189, 399-404.   | 7.9 | 17        |
| 39 | Carbonation passivation layer of scandium loaded BSCF perovskite. <i>Ceramics International</i> , 2017, 43, 15179-15184.  | 4.8 | 3         |
| 40 | Vacuum film etching effect of carbon alumina mixed matrix membranes. <i>Journal of Membrane Science</i> , 2017, 541, 53-61.   | 8.2 | 13        |
| 41 | Vacuum-assisted tailoring of pore structures of phenolic resin derived carbon membranes. <i>Journal of Membrane Science</i> , 2017, 525, 240-248.   | 8.2 | 37        |
| 42 | Mixed matrix carbon stainless steel (MMCSS) hollow fibres for gas separation. <i>Separation and Purification Technology</i> , 2017, 174, 150-158.   | 7.9 | 13        |
| 43 | Improved stability of ethyl silicate interlayer-free membranes by the rapid thermal processing (RTP) for desalination. <i>Desalination</i> , 2017, 402, 25-32.  | 8.2 | 23        |
| 44 | Ultra-microporous membrane separation using toluene to simulate tar-containing gases. <i>Fuel Processing Technology</i> , 2017, 161, 259-264.   | 7.2 | 4         |
| 45 | Interlayer-free hybrid carbon-silica membranes for processing brackish to brine salt solutions by pervaporation. <i>Journal of Membrane Science</i> , 2017, 523, 197-204.   | 8.2 | 59        |
| 46 | Rapid Thermal Processing of Microporous Silica Membranes. , 2017, , 317-348.  |     | 1         |
| 47 | Molecular Weight Cut-Off and Structural Analysis of Vacuum-Assisted Titania Membranes for Water Processing. <i>Materials</i> , 2016, 9, 938.  | 2.9 | 6         |
| 48 | Physico-chemical properties of zinc partially substituted magnetite nanoparticles. <i>AIP Conference Proceedings</i> , 2016, , .  | 0.4 | 1         |
| 49 | Graphene oxide with zinc partially substituted magnetite ( $\text{GO} \text{--} \text{Fe}_{1-x}\text{Zn}_x\text{O}_y$ ) for the UV-assisted heterogeneous Fenton-like reaction. <i>RSC Advances</i> , 2016, 6, 44749-44757. | 3.6 | 9         |
| 50 | Gas permeation redox effect of binary iron oxide/cobalt oxide silica membranes. <i>Separation and Purification Technology</i> , 2016, 171, 248-255.   | 7.9 | 18        |
| 51 | Rapid thermal treatment of interlayer-free ethyl silicate 40 derived membranes for desalination. <i>Journal of Membrane Science</i> , 2016, 516, 94-103.  | 8.2 | 24        |
| 52 | Mixed Matrix Carbon Molecular Sieve and Alumina (CMS-Al <sub>2</sub> O <sub>3</sub> ) Membranes. <i>Scientific Reports</i> , 2016, 6, 30703.  | 3.3 | 30        |
| 53 | Structural evolution of nickel oxide silica sol-gel for the preparation of interlayer-free membranes. <i>Journal of Non-Crystalline Solids</i> , 2016, 447, 9-15.   | 3.1 | 40        |
| 54 | Pervaporation of ammonia solution with $\gamma$ -alumina supported organosilica membranes. <i>Separation and Purification Technology</i> , 2016, 168, 141-151.  | 7.9 | 20        |

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|----|---|------|-----------|
| 55 | Novel solid oxide cells with SrCo <sub>0.8</sub> Fe <sub>0.1</sub> Ga <sub>0.1</sub> O <sub>3</sub> oxygen electrode for flexible power generation and hydrogen production. <i>Journal of Power Sources</i> , 2016, 306, 226-232. | 7.8  | 27        |
| 56 | Review of perovskite ceramic synthesis and membrane preparation methods. <i>Ceramics International</i> , 2016, 42, 6555-6571.   | 4.8  | 153       |
| 57 | Improved pore connectivity by the reduction of cobalt oxide silica membranes. <i>Separation and Purification Technology</i> , 2015, 154, 338-344.   | 7.9  | 10        |
| 58 | Ternary Phase-Separation Investigation of Sol-Gel Derived Silica from Ethyl Silicate 40. <i>Scientific Reports</i> , 2015, 5, 14560.  | 3.3  | 27        |
| 59 | Nanoscale assembly of lanthanum silica with dense and porous interfacial structures. <i>Scientific Reports</i> , 2015, 5, 8210.   | 3.3  | 13        |
| 60 | Stainless steel hollow fibres – Sintering, morphology and mechanical properties. <i>Separation and Purification Technology</i> , 2015, 147, 379-387.  | 7.9  | 18        |
| 61 | Interlayer-free microporous cobalt oxide silica membranes via silica seeding sol-gel technique. <i>Journal of Membrane Science</i> , 2015, 492, 1-8.  | 8.2  | 20        |
| 62 | Temperature dependent transition point of purity versus flux for gas separation in Fe/Co-silica membranes. <i>Separation and Purification Technology</i> , 2015, 151, 284-291.  | 7.9  | 8         |
| 63 | Binary gas mixture and hydrothermal stability investigation of cobalt silica membranes. <i>Journal of Membrane Science</i> , 2015, 493, 470-477.  | 8.2  | 27        |
| 64 | Copper aided exchange in high performance oxygen production by CuCo binary oxides for clean energy delivery. <i>Journal of Materials Chemistry A</i> , 2015, 3, 17344-17350.  | 10.3 | 10        |
| 65 | Gas permeation redox effect on binary lanthanum cobalt silica membranes with enhanced silicate formation. <i>Journal of Membrane Science</i> , 2015, 489, 220-226.  | 8.2  | 27        |
| 66 | Mesoporous TiO <sub>2</sub> based membranes for water desalination and brine processing. <i>Separation and Purification Technology</i> , 2015, 147, 166-171.  | 7.9  | 38        |
| 67 | The sacrificial role of graphene oxide in stabilising a Fenton-like catalyst GO-Fe <sub>3</sub> O <sub>4</sub> . <i>Chemical Communications</i> , 2015, 51, 9291-9293.  | 4.1  | 179       |
| 68 | Effect of titania addition on the properties of freeze-cast alumina samples. <i>Ceramics International</i> , 2015, 41, 10467-10475.   | 4.8  | 23        |
| 69 | High performance interlayer-free mesoporous cobalt oxide silica membranes for desalination applications. <i>Desalination</i> , 2015, 365, 308-315.  | 8.2  | 72        |
| 70 | Modulation of microporous/mesoporous structures in self-templated cobalt-silica. <i>Scientific Reports</i> , 2015, 5, 7970.   | 3.3  | 6         |
| 71 | Hydrothermal stability investigation of micro- and mesoporous silica containing long-range ordered cobalt oxide clusters by XAS. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 19500-19506.                              | 2.8  | 12        |
| 72 | The influence of Fe <sub>2</sub> O <sub>3</sub> doping on the pore structure and mechanical strength of TiO <sub>2</sub> -containing alumina obtained by freeze-casting. <i>Ceramics International</i> , 2015, 41, 14049-14056.   | 4.8  | 16        |

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|----|---|------|-----------|
| 73 | Redox structural control of Pd and PdO silica matrices. RSC Advances, 2015, 5, 74144-74149.   | 3.6  | 1         |
| 74 | Improved hydrothermal stability of silica materials prepared from ethyl silicate 40. RSC Advances, 2015, 5, 6092-6099.  | 3.6  | 13        |
| 75 | Interlayer-free P123 carbonised template silica membranes for desalination with reduced salt concentration polarisation. Journal of Membrane Science, 2015, 475, 376-383.           | 8.2  | 90        |
| 76 | Influence of sol-gel conditioning on the cobalt phase and the hydrothermal stability of cobalt oxide silica membranes. Journal of Membrane Science, 2015, 475, 425-432.             | 8.2  | 27        |
| 77 | Binary iron cobalt oxide silica membrane for gas separation. Journal of Membrane Science, 2015, 474, 32-38.   | 8.2  | 50        |
| 78 | Current developments of mixed conducting membranes on porous substrates. Materials Research, 2014, 17, 242-249.   | 1.3  | 14        |
| 79 | A Pervaporation Study of Ammonia Solutions Using Molecular Sieve Silica Membranes. Membranes, 2014, 4, 40-54.   | 3.0  | 42        |
| 80 | Adsorption and transport of gases in a supported microporous silica membrane. Journal of Membrane Science, 2014, 460, 46-61.  | 8.2  | 21        |
| 81 | Fabrication of nanostructured TiO <sub>2</sub> hollow fiber photocatalytic membrane and application for wastewater treatment. Chemical Engineering Journal, 2014, 236, 314-322.     | 12.7 | 111       |
| 82 | Recent progresses on fabrication of photocatalytic membranes for water treatment. Catalysis Today, 2014, 230, 47-54.  | 4.4  | 82        |
| 83 | Claisen-type degradation mechanism of cellulose triacetate membranes in ethanol-water mixtures. Journal of Membrane Science, 2014, 454, 119-125.                                    | 8.2  | 19        |
| 84 | Palladium cobalt binary doping of molecular sieving silica membranes. Journal of Membrane Science, 2014, 451, 185-191.  | 8.2  | 53        |
| 85 | Influence of surfactant alkyl length in functionalizing sol-gel derived microporous cobalt oxide silica. RSC Advances, 2014, 4, 40181-40187.  | 3.6  | 7         |
| 86 | Processing municipal wastewaters by forward osmosis using CTA membrane. Journal of Membrane Science, 2014, 468, 269-275.  | 8.2  | 103       |
| 87 | Physicochemical characterisation and hydrothermal stability investigation of cobalt-incorporated silica xerogels. RSC Advances, 2014, 4, 18862-18870.                               | 3.6  | 22        |
| 88 | Optimisation of graphene oxide-iron oxide nanocomposite in heterogeneous Fenton-like oxidation of Acid Orange 7. Journal of Environmental Chemical Engineering, 2014, 2, 1881-1888. | 6.7  | 62        |
| 89 | The fluid dynamic effect on the driving force for a cobalt oxide silica membrane module at high temperatures. Chemical Engineering Science, 2014, 111, 142-152.                     | 3.8  | 22        |
| 90 | Novel microwave assisted approach to large scale nickel nanoparticle fabrication. Chemical Engineering Journal, 2014, 240, 155-160.   | 12.7 | 8         |

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|-----|--|------|-----------|
| 91  | Development of rapid thermal processing of tubular cobalt oxide silica membranes for gas separations. <i>Journal of Membrane Science</i> , 2014, 456, 192-201.   | 8.2  | 36        |
| 92  | Understanding the diffusional tortuosity of porous materials: An effective medium theory perspective. <i>Chemical Engineering Science</i> , 2014, 110, 55-71.  | 3.8  | 36        |
| 93  | The effect of non-ionic porous domains on supported Ba <sub>0.5</sub> Sr <sub>0.5</sub> Co <sub>0.8</sub> Fe <sub>0.2</sub> O <sub>3-<math>\delta</math></sub> membranes for O <sub>2</sub> separation. <i>Journal of Membrane Science</i> , 2014, 454, 382-389. | 8.2  | 13        |
| 94  | Mixed Fuel Strategy for Carbon Deposition Mitigation in Solid Oxide Fuel Cells at Intermediate Temperatures. <i>Environmental Science &amp; Technology</i> , 2014, 48, 7122-7127.  | 10.0 | 12        |
| 95  | Structural and functional investigation of graphene oxide-Fe <sub>3</sub> O <sub>4</sub> nanocomposites for the heterogeneous Fenton-like reaction. <i>Scientific Reports</i> , 2014, 4, 4594.   | 3.3  | 407       |
| 96  | Fenton-Like Degradation of Acid Orange 7 Using Graphene Oxide-Iron Oxide Nanocomposite. <i>Science of Advanced Materials</i> , 2014, 6, 1382-1388.   | 0.7  | 18        |
| 97  | Reversible Redox Effect on Gas Permeation of Cobalt Doped Ethoxy Polysiloxane (ES40) Membranes. <i>Scientific Reports</i> , 2013, 3, 1648.   | 3.3  | 33        |
| 98  | Performance and Long Term Stability of Mesoporous Silica Membranes for Desalination. <i>Membranes</i> , 2013, 3, 136-150.  | 3.0  | 83        |
| 99  | The transport of gases in a supported mesoporous silica membrane. <i>Journal of Membrane Science</i> , 2013, 438, 90-104.  | 8.2  | 23        |
| 100 | Structural investigation of cobalt-doped silica derived from sol-gel synthesis. <i>Journal of Non-Crystalline Solids</i> , 2013, 378, 1-6.   | 3.1  | 6         |
| 101 | Rapid thermal processing of tubular cobalt oxide silica membranes. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 7394-7399.  | 7.1  | 19        |
| 102 | A novel ethanol dehydration process by forward osmosis. <i>Chemical Engineering Journal</i> , 2013, 232, 397-404.  | 12.7 | 35        |
| 103 | Simulation of binary gas separation through multi-tube molecular sieving membranes at high temperatures. <i>Chemical Engineering Journal</i> , 2013, 218, 394-404.   | 12.7 | 31        |
| 104 | Tailoring the oxidation state of cobalt through halide functionality in sol-gel silica. <i>Scientific Reports</i> , 2013, 3, 2449.   | 3.3  | 15        |
| 105 | Robust ion-transporting ceramic membrane with an internal short circuit for oxygen production. <i>Journal of Materials Chemistry A</i> , 2013, 1, 9150.  | 10.3 | 28        |
| 106 | Scale-Up Design Analysis and Modelling of Cobalt Oxide Silica Membrane Module for Hydrogen Processing. <i>Processes</i> , 2013, 1, 49-66.  | 2.8  | 6         |
| 107 | Microporous Silica Based Membranes for Desalination. <i>Water (Switzerland)</i> , 2012, 4, 629-649.  | 2.7  | 91        |
| 108 | Combined investigation of bulk diffusion and surface exchange parameters of silver catalyst coated yttrium-doped BSCF membranes. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 9104.  | 2.8  | 36        |

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|-----|---|------|-----------|
| 109 | Long term pervaporation desalination of tubular MFI zeolite membranes. Journal of Membrane Science, 2012, 415-416, 816-823.   | 8.2  | 119       |
| 110 | High temperature H <sub>2</sub> /CO <sub>2</sub> separation using cobalt oxide silica membranes. International Journal of Hydrogen Energy, 2012, 37, 12700-12707.                                       | 7.1  | 51        |
| 111 | Computational fluid dynamics applied to high temperature hydrogen separation membranes. Frontiers of Chemical Science and Engineering, 2012, 6, 3-12.   | 4.4  | 24        |
| 112 | Long term performance cobalt oxide silica membrane module for high temperature H <sub>2</sub> separation. Energy and Environmental Science, 2012, 5, 5820.  | 30.8 | 91        |
| 113 | Cobalt oxide silica membranes for desalination. Journal of Colloid and Interface Science, 2012, 368, 70-76.   | 9.4  | 80        |
| 114 | The transport of gases in macroporous $\gamma$ -alumina supports. Journal of Membrane Science, 2012, 409-410, 24-33.  | 8.2  | 15        |
| 115 | Structural Characterization and Corrosion Behavior of Stainless Steel Coated With Sol-Gel Titania. Journal of Materials Engineering and Performance, 2012, 21, 411-417.                                 | 2.5  | 8         |
| 116 | High performance BaBiScCo hollow fibre membranes for oxygen transport. Energy and Environmental Science, 2011, 4, 2516.   | 30.8 | 77        |
| 117 | Preparation, Characterization and Performance of Templated Silica Membranes in Non-Osmotic Desalination. Materials, 2011, 4, 845-856.   | 2.9  | 1         |
| 118 | Yttrium doped BSCF membranes for oxygen separation. Separation and Purification Technology, 2011, 81, 88-93.  | 7.9  | 52        |
| 119 | Numerical study of a metal hydride heat transformer for low-grade heat recovery. Applied Thermal Engineering, 2011, 31, 2749-2756.  | 6.0  | 25        |
| 120 | High performance perovskite hollow fibres for oxygen separation. Journal of Membrane Science, 2011, 368, 64-68.   | 8.2  | 129       |
| 121 | Palladium surface modified La <sub>0.6</sub> Sr <sub>0.4</sub> Co <sub>0.2</sub> Fe <sub>0.8</sub> O <sub>3</sub> hollow fibres for oxygen separation. Journal of Membrane Science, 2011, 380, 223-231. | 8.2  | 59        |
| 122 | Production of pure oxygen from BSCF hollow fiber membranes using steam sweep. Separation and Purification Technology, 2011, 78, 220-227.  | 7.9  | 33        |
| 123 | H <sub>2</sub> S stability and separation performance of cobalt oxide silica membranes. Journal of Membrane Science, 2011, 380, 48-54.  | 8.2  | 40        |
| 124 | Preparation and oxygen permeation properties of SrCo <sub>0.9</sub> Nb <sub>0.1</sub> O <sub>3</sub> hollow fibre membranes. Separation and Purification Technology, 2011, 78, 175-180.                 | 7.9  | 24        |
| 125 | Iron Oxide Silica Derived from Sol-Gel Synthesis. Materials, 2011, 4, 448-456.  | 2.9  | 33        |
| 126 | Preparation, Characterization and Performance of Templated Silica Membranes in Non-Osmotic Desalination. Materials, 2011, 4, 845-856.   | 2.9  | 40        |



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|-----|--|------|-----------|
| 127 | Atmospheric and hydrological transport modelling of SO <sub>x</sub> emissions in a unique verification context. AICHE Journal, 2010, 56, 815-824.  | 3.6  | 0         |
| 128 | Membrane reactor modelling, validation and simulation for the WGS reaction using metal doped silica membranes. Asia-Pacific Journal of Chemical Engineering, 2010, 5, 83-92.   | 1.5  | 19        |
| 129 | Structure effect on the oxygen permeation properties of barium bismuth iron oxide membranes. Journal of Membrane Science, 2010, 351, 44-49.  | 8.2  | 14        |
| 130 | Long-term flue gas exposure effects of silica membranes on porous steel substrate. Journal of Membrane Science, 2010, 359, 110-114.  | 8.2  | 28        |
| 131 | Bi-doping effects on the structure and oxygen permeation properties of BaSc <sub>0.1</sub> Co <sub>0.9</sub> O <sub>3-<math>\delta</math></sub> perovskite membranes. Journal of Membrane Science, 2010, 361, 120-125. | 8.2  | 38        |
| 132 | Assessment of postcombustion carbon capture technologies for power generation. Frontiers of Chemical Engineering in China, 2010, 4, 184-195.   | 0.6  | 48        |
| 133 | High temperature steam investigation of cobalt oxide silica membranes for gas separation. Separation and Purification Technology, 2010, 76, 171-178.   | 7.9  | 45        |
| 134 | Study on composite membranes with high selective permeance properties. Journal of Membrane Science, 2010, 346, 318-326.  | 8.2  | 14        |
| 135 | Synthesis of Sintering-Resistant Sorbents for CO <sub>2</sub> Capture. Environmental Science & Technology, 2010, 44, 3093-3097.  | 10.0 | 213       |
| 136 | Ceramic membranes for gas processing in coal gasification. Energy and Environmental Science, 2010, 3, 268.   | 30.8 | 171       |
| 137 | Calcium Precursors for the Production of CaO Sorbents for Multicycle CO <sub>2</sub> Capture. Environmental Science & Technology, 2010, 44, 841-847.   | 10.0 | 234       |
| 138 | Recent Advance of Zero Emission Technologies for Coal-Based Power Generations Systems. , 2009, , .   |      | 2         |
| 139 | Characterization and Pervaporation Study on Ethanol Separation Membranes. Drying Technology, 2009, 27, 538-541.  | 3.1  | 7         |
| 140 | Effect of Nano-Al <sub>2</sub> O <sub>3</sub> Addition on the Densification of YSZ Electrolytes. Journal of Nano Research, 2009, 6, 115-122.   | 0.8  | 9         |
| 141 | Evaluation of mixed-conducting lanthanum-strontium-cobaltite ceramic membrane for oxygen separation. AICHE Journal, 2009, 55, 2603-2613.   | 3.6  | 26        |
| 142 | Modelling gas purification systems employing molecular sieve silica membranes. Separation and Purification Technology, 2009, 66, 559-564.  | 7.9  | 9         |
| 143 | Cobalt-doped silica membranes for gas separation. Journal of Membrane Science, 2009, 326, 316-321.   | 8.2  | 98        |
| 144 | Performance of cobalt silica membranes in gas mixture separation. Journal of Membrane Science, 2009, 329, 91-98.   | 8.2  | 72        |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
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