

# Julio Garcia-Fayos

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3844501/publications.pdf>

Version: 2024-02-01

26  
papers

674  
citations

623734

14  
h-index

610901

24  
g-index

27  
all docs

27  
docs citations

27  
times ranked

524  
citing authors

#	ARTICLE	IF	CITATIONS
1	Oxygen permeation through tape-cast asymmetric all-La <sub>0.6</sub> Sr <sub>0.4</sub> Co <sub>0.2</sub> Fe <sub>0.8</sub> O <sub>3-<math>\delta</math></sub> membranes. Journal of Membrane Science, 2013, 447, 297-305.	8.2	120
2	Fast Oxygen Separation Through SO <sub>2</sub> - and CO <sub>2</sub> -Stable Dual-Phase Membrane Based on NiFe <sub>2</sub> O <sub>4</sub> - $\delta$ -Ce <sub>0.8</sub> Tb <sub>0.2</sub> O <sub>2-<math>\delta</math></sub> . Chemistry of Materials, 2013, 25, 4986-4993.	6.7	79
3	Enhancing oxygen permeation through hierarchically-structured perovskite membranes elaborated by freeze-casting. Journal of Materials Chemistry A, 2014, 2, 3828.	10.3	76
4	Enhanced Oxygen Separation through Robust Freeze-Cast Bilayered Dual-Phase Membranes. ChemSusChem, 2014, 7, 2554-2561.	6.8	52
5	Dual-Phase Oxygen Transport Membranes for Stable Operation in Environments Containing Carbon Dioxide and Sulfur Dioxide. ChemSusChem, 2015, 8, 4242-4249.	6.8	40
6	Ethylene Production by ODHE in Catalytically Modified 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> Membrane Reactors. ChemSusChem, 2012, 5, 1587-1596.	6.8	33
7	Enhancing oxygen permeation through Fe <sub>2</sub> NiO <sub>4</sub> - $\delta$ -Ce <sub>0.8</sub> Tb <sub>0.2</sub> O <sub>2-<math>\delta</math></sub> composite membranes using porous layers activated with Pr <sub>6</sub> O <sub>11</sub> nanoparticles. Journal of Materials Chemistry A, 2018, 6, 1201-1209.	10.3	32
8	A review on dual-phase oxygen transport membranes: from fundamentals to commercial deployment. Journal of Materials Chemistry A, 2022, 10, 2152-2195.	10.3	31
9	Dual-phase membrane based on LaCo <sub>0.2</sub> Ni <sub>0.4</sub> Fe <sub>0.4</sub> O <sub>3-<math>\delta</math></sub> -Ce <sub>0.8</sub> Gd <sub>0.2</sub> O <sub>2-<math>\delta</math></sub> composition for oxygen permeation under CO <sub>2</sub> /SO <sub>2</sub> -rich gas environments. Journal of Membrane Science, 2018, 548, 117-124.	8.2	26
10	Rare Earth-doped Ceria Catalysts for ODHE Reaction in a Catalytic Modified MIEC Membrane Reactor. ChemCatChem, 2012, 4, 2102-2111.	3.7	24
11	Catalyst Screening for Oxidative Coupling of Methane Integrated in Membrane Reactors. Frontiers in Materials, 2018, 5, .	2.4	24
12	Oxygen transport membranes in a biomass/coal combined strategy for reducing CO <sub>2</sub> emissions: Permeation study of selected membranes under different CO <sub>2</sub> -rich atmospheres. Catalysis Today, 2015, 257, 221-228.	4.4	20
13	Thermochemical stability of La <sub>x</sub> Sr <sub>1-x</sub> Co <sub>y</sub> Fe <sub>1-y</sub> O <sub>3-<math>\delta</math></sub> and NiFe <sub>2</sub> O <sub>4</sub> -Ce <sub>0.8</sub> Tb <sub>0.2</sub> O <sub>2-<math>\delta</math></sub> under real conditions for its application in oxygen transport membranes for oxyfuel combustion. Journal of Membrane Science, 2018, 562, 26-37.	8.2	20
14	Shaping of 3YSZ porous substrates for oxygen separation membranes. Journal of the European Ceramic Society, 2017, 37, 5223-5231.	5.7	14
15	Oxygen Permeation Improvement under CO <sub>2</sub> -Rich Environments through Catalytic Activation of Hierarchically Structured Perovskite Membranes. ChemPlusChem, 2014, 79, 1720-1725.	2.8	11
16	Controlling the stress state of La <sub>1-x</sub> Sr <sub>x</sub> Co <sub>1-y</sub> Fe <sub>y</sub> O <sub>3-<math>\delta</math></sub> oxygen transport membranes on porous metallic supports deposited by plasma spray-physical vapor process. Journal of Membrane Science, 2016, 503, 1-7.	8.2	11
17	Mixed Ionic-Electronic Conduction in NiFe <sub>2</sub> O <sub>4</sub> - $\delta$ -Ce <sub>0.8</sub> Gd <sub>0.2</sub> O <sub>2-<math>\delta</math></sub> Nanocomposite Thin Films for Oxygen Separation. ChemSusChem, 2018, 11, 2818-2827.	6.8	11
18	Improving the performance of oxygen transport membranes in simulated oxy-fuel power plant conditions by catalytic surface enhancement. Journal of Membrane Science, 2019, 580, 307-315.	8.2	9

#	ARTICLE	IF	CITATIONS
19	Oxygen permeation studies in surface Pd-activated asymmetric Ce <sub>0.9</sub> Gd <sub>0.1</sub> O <sub>1.95</sub> membranes for application in CO <sub>2</sub> and CH <sub>4</sub> environments. Separation and Purification Technology, 2019, 216, 58-64.	7.9	8
20	Gas separation ceramic membranes. , 2020, , 321-385.		7
21	Catalytic Oxide-Ion Conducting Materials for Surface Activation of 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. ChemistrySelect, 2017, 2, 2949-2955.	1.5	5
22	Ice-Templating for the Elaboration of Oxygen Permeation Asymmetric Tubular Membrane with Radial Oriented Porosity. Ceramics, 2019, 2, 246-259.	2.6	5
23	Progress in Ce <sub>0.8</sub> Gd <sub>0.2</sub> O <sub>2-<math>\delta</math></sub> protective layers for improving the CO <sub>2</sub> stability of 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> O <sub>2</sub> -transport membranes. Sustainable Energy and Fuels, 2020, 4, 3747-3752.	4.9	5
24	The Role of Oxygen Partial Pressure in Controlling the Phase Composition of La <sub>1-<math>x</math></sub> Sr <sub><math>x</math></sub> Co <sub><math>y</math></sub> Fe <sub>1-<math>y</math></sub> O <sub>3-<math>\delta</math></sub> Oxygen Transport Membranes Manufactured by Means of Plasma Spray-Physical Vapor Deposition. Journal of Thermal Spray Technology, 2016, 25, 631-638.	3.1	4
25	Evaluation of Er Doped CeO <sub>2-<math>\delta</math></sub> as Oxygen Transport Membrane. Membranes, 2022, 12, 172.	3.0	2
26	Stable, asymmetric, tubular oxygen transport membranes of (Sc <sub>2</sub> O <sub>3</sub> ) <sub>0.10</sub> (Y <sub>2</sub> O <sub>3</sub> ) <sub>0.01</sub> (ZrO <sub>2</sub> ) <sub>0.89</sub> - $\delta$ LaCr <sub>0.85</sub> Cu <sub>0.10</sub> Ni <sub>0.05</sub> O <sub>3-<math>\delta</math></sub> . Open Ceramics, 2022, 11, 100292.	2.0	0