

# Alessandro Donazzi

## List of Publications by Year in descending order

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45  
papers

1,108  
citations

394421

19  
h-index

395702

33  
g-index

46  
all docs

46  
docs citations

46  
times ranked

946  
citing authors

#	ARTICLE	IF	CITATIONS
1	Catalytic partial oxidation of methane over a 4% Rh/Al <sub>2</sub> O <sub>3</sub> catalyst Part I: Kinetic study in annular reactor. <i>Journal of Catalysis</i> , 2008, 255, 241-258.	6.2	132
2	Catalytic partial oxidation of methane over a 4% Rh/Al <sub>2</sub> O <sub>3</sub> catalyst Part II: Role of CO <sub>2</sub> reforming. <i>Journal of Catalysis</i> , 2008, 255, 259-268.	6.2	95
3	Effects of H <sub>2</sub> O and CO <sub>2</sub> addition in catalytic partial oxidation of methane on Rh. <i>Journal of Catalysis</i> , 2009, 265, 117-129.	6.2	85
4	Microkinetic modeling of spatially resolved autothermal CH <sub>4</sub> catalytic partial oxidation experiments over Rh-coated foams. <i>Journal of Catalysis</i> , 2010, 275, 270-279.	6.2	79
5	Chemical and geometric effects of Ce and washcoat addition on catalytic partial oxidation of CH <sub>4</sub> on Rh probed by spatially resolved measurements. <i>Journal of Catalysis</i> , 2008, 260, 270-275.	6.2	59
6	Catalytic partial oxidation of ethanol over Rh/Al <sub>2</sub> O <sub>3</sub> : Spatially resolved temperature and concentration profiles. <i>Applied Catalysis A: General</i> , 2013, 467, 530-541.	4.3	54
7	Evaluation of Ba deficient NdBaCo <sub>2</sub> O <sub>5+δ</sub> oxide as cathode material for IT-SOFC. <i>Electrochimica Acta</i> , 2015, 182, 573-587.	5.2	48
8	Synergy of Homogeneous and Heterogeneous Chemistry Probed by In-situ Spatially Resolved Measurements of Temperature and Composition. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 3943-3946.	13.8	47
9	Optimal design of a CH <sub>4</sub> CPO-reformer with honeycomb catalyst: Combined effect of catalyst load and channel size on the surface temperature profile. <i>Catalysis Today</i> , 2011, 171, 79-83.	4.4	43
10	Testing in annular micro-reactor and characterization of supported Rh nanoparticles for the catalytic partial oxidation of methane: Effect of the preparation procedure. <i>Applied Catalysis B: Environmental</i> , 2008, 83, 96-109.	20.2	41
11	A kinetic analysis of the partial oxidation of C <sub>3</sub> H <sub>8</sub> over a 2% Rh/Al <sub>2</sub> O <sub>3</sub> catalyst in annular microreactor. <i>Catalysis Today</i> , 2012, 197, 265-280.	4.4	30
12	Surface temperature profiles in CH <sub>4</sub> CPO over honeycomb supported Rh catalyst probed with in situ optical pyrometer. <i>Applied Catalysis A: General</i> , 2011, 402, 41-49.	4.3	29
13	Modification of LSF-YSZ Composite Cathodes by Atomic Layer Deposition. <i>Journal of the Electrochemical Society</i> , 2017, 164, F879-F884.	2.9	26
14	A detailed kinetic model for the reduction of oxygen on LSCF-GDC composite cathodes. <i>Electrochimica Acta</i> , 2020, 335, 135620.	5.2	25
15	Experimental and Modeling Analysis of the Thermal Behavior of an Autothermal C <sub>3</sub> H <sub>8</sub> Catalytic Partial Oxidation Reformer. <i>Industrial &amp; Engineering Chemistry Research</i> , 2012, 51, 7573-7583.	3.7	22
16	Co-precipitation synthesis of SOFC electrode materials. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 480-491.	7.1	21
17	Effect of pressure in the autothermal catalytic partial oxidation of CH <sub>4</sub> and C <sub>3</sub> H <sub>8</sub> : Spatially resolved temperature and composition profiles. <i>Applied Catalysis A: General</i> , 2014, 469, 52-64.	4.3	21
18	A Distributed Charge Transfer Model for IT-SOFCs Based on Ceria Electrolytes. <i>Journal of the Electrochemical Society</i> , 2017, 164, F1249-F1264.	2.9	21

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19	Optimal Design of A CPO-Reformer of Light Hydrocarbons with Honeycomb Catalyst: Effect of Frontal Heat Dispersions on the Temperature Profiles. Topics in Catalysis, 2011, 54, 866-872.	2.8	20
20	Electrical characterization of co-precipitated LaBaCo <sub>2</sub> O <sub>5+δ</sub> and YBaCo <sub>2</sub> O <sub>5+δ</sub> oxides. Journal of the European Ceramic Society, 2014, 34, 4257-4272.	5.7	20
21	Parameter Optimization for the Electrospinning of La <sub>1-x</sub> Sr <sub>x</sub> Co <sub>1-y</sub> Fe <sub>y</sub> O <sub>3+δ</sub> Fibers for IT-SOFC Electrodes. Fuel Cells, 2017, 17, 415-422.		14
22	Structural and Electrochemical Characterization of NdBa <sub>1-x</sub> Co <sub>2-y</sub> Fe <sub>y</sub> O <sub>5+δ</sub> as Cathode for Intermediate Temperature Solid Oxide Fuel Cells. Journal of the Electrochemical Society, 2020, 167, 024502.	2.9	14
23	Microkinetic analysis of CH <sub>4</sub> CPO tests with CO <sub>2</sub> -diluted feed streams. Applied Catalysis A: General, 2011, 391, 350-359.	4.3	13
24	Annular reactor testing and Raman surface characterization in the CPO of methane and propylene. Applied Catalysis A: General, 2014, 474, 149-158.	4.3	12
25	Annular reactor testing and Raman surface characterization of the CPO of i-octane and n-octane on Rh based catalyst. Chemical Engineering Journal, 2016, 294, 9-21.	12.7	12
26	Experimental and model analysis of the co-oxidative behavior of syngas feed in an Intermediate Temperature Solid Oxide Fuel Cell. Journal of Power Sources, 2016, 306, 467-480.	7.8	12
27	In situ near-ambient pressure X-ray photoelectron spectroscopy discloses the surface composition of operating NdBaCo <sub>2</sub> O <sub>5+δ</sub> solid oxide fuel cell cathodes. Journal of Power Sources, 2019, 436, 226815.	7.8	12
28	Development of a Multiscale SOFC Model and Application to Axially Graded Electrode Design. Fuel Cells, 2019, 19, 125-140.	2.4	11
29	A Kinetic Investigation of the Catalytic Partial Oxidation of Propylene over a Rh/Al <sub>2</sub> O <sub>3</sub> Catalyst. Industrial & Engineering Chemistry Research, 2014, 53, 1804-1815.	3.7	10
30	A quasi 2D model for the interpretation of impedance and polarization of a planar solid oxide fuel cell with interconnects. Electrochimica Acta, 2021, 365, 137346.	5.2	10
31	Gaining insight into the kinetics of partial oxidation of light hydrocarbons on Rh, through a multiscale methodology based on advanced experimental and modeling techniques. Catalysis, 2013, , 1-49.	1.0	8
32	A multistep model for the kinetic analysis of the impedance spectra of a novel mixed ionic and electronic conducting cathode. Electrochimica Acta, 2016, 222, 1029-1044.	5.2	7
33	A fast regression model for the interpretation of electrochemical impedance spectra of Intermediate Temperature Solid Oxide Fuel Cells. Journal of Electroanalytical Chemistry, 2018, 823, 697-712.	3.8	7
34	Model analysis of atmospheric non-thermal plasma for methane abatement in a gas phase dielectric barrier discharge reactor. Chemical Engineering Science, 2020, 212, 115340.	3.8	7
35	Catalytic partial oxidation of CH <sub>4</sub> and C <sub>3</sub> H <sub>8</sub> : experimental and modeling study of the dynamic and steady state behavior of a pilot-scale reformer. Studies in Surface Science and Catalysis, 2007, 167, 319-324.	1.5	5
36	Design and testing of an operando-Raman annular reactor for kinetic studies in heterogeneous catalysis. Reaction Chemistry and Engineering, 2017, 2, 908-918.	3.7	5

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37	Electrochemical characterization of $\text{PrBa}_{2-x}\text{Sr}_x\text{Cu}_3\text{O}_{6+\delta}$ layered oxides as innovative and efficient oxygen electrode for IT-SOFCs. <i>Solid State Ionics</i> , 2020, 348, 115286.	2.7	5
38	Preparation, Characterization, and Kinetic Testing of Infiltrated LSF-YSZ Electrodes for Symmetric Solid Oxide Cells. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 6639-6652.	3.7	5
39	Electrochemical and Chemical Characterization of $\text{NdBa}_{1-x}\text{Co}_2\text{YFeYO}_{5+\delta}$ Cathodes for IT-SOFCs. <i>ECS Transactions</i> , 2017, 78, 507-520.	0.5	4
40	Copper Doped $\text{La}_{0.8}\text{Sr}_{1.2}\text{FeO}_4$ Ruddlesden-Popper SOFC Cathode: Synthesis, Characterization and Model Analysis. <i>Fuel Cells</i> , 2018, 18, 27-41.	2.4	4
41	A Multi-Scale Modelling Approach and Experimental Calibration Applied to Commercial SOFCs. <i>ECS Transactions</i> , 2017, 78, 2645-2658.	0.5	3
42	Electrochemical Characterization of $\text{NdBa}_{0.9}\text{Co}_2\text{O}_{5+\delta}$ SOFC Cathodes Prepared by Infiltration into Gd Doped Ceria Scaffolds. <i>Journal of the Electrochemical Society</i> , 0, , .	2.9	2
43	Fuel Processing for Solid Oxide Fuel Cells. <i>Green Energy and Technology</i> , 2018, , 97-141.	0.6	1
44	Distributed-Charge Transfer Model Analysis of SDC-based IT-SOFCs for the Electrochemical Oxidation of Syngas and Biogas. <i>ECS Transactions</i> , 2017, 78, 1305-1318.	0.5	0
45	Analysis of the Impact of Gas-Phase Chemistry in Adiabatic CPO Reactors by Axially Resolved Measurements. <i>Advances in Chemical Engineering</i> , 2017, 50, 161-201.	0.9	0