Pierdomenico Biasi

List of Publications by Year
in descending order

34 papers	814 citations	471477 17 h-index	501174 28 g-index
36 all docs	36 docs citations	36 times ranked	795 citing authors

#	Article	IF	Citations
1	Engineering in direct synthesis of hydrogen peroxide: targets, reactors and guidelines for operational conditions. Green Chemistry, 2014, 16, 2320.	9.0	131
2	Pd-Au and Pd-Pt catalysts for the direct synthesis of hydrogen peroxide in absence of selectivity enhancers. Applied Catalysis A: General, 2013, 468, 160-174.	4.3	47
3	Continuous H2O2 direct synthesis over PdAu catalysts. Chemical Engineering Journal, 2011, 176-177, 172-177.	12.7	44
4	Hydrogen Peroxide Direct Synthesis: Selectivity Enhancement in a Trickle Bed Reactor. Industrial & Engineering Chemistry Research, 2010, 49, 10627-10632.	3.7	43
5	Hemicellulose extraction by hot pressurized water pretreatment at 160 ÂºC for 10 different woods: Yield and molecular weight. Journal of Supercritical Fluids, 2018, 133, 716-725.	3.2	42
6	Mass transfer and kinetics of H 2 O 2 direct synthesis in a batch slurry reactor. Chemical Engineering Journal, 2012, 207-208, 539-551.	12.7	41
7	Optimal conditions for hemicelluloses extraction from Eucalyptus globulus wood: hydrothermal treatment in a semi-continuous reactor. Fuel Processing Technology, 2016, 148, 350-360.	7.2	36
8	The effect of the metal precursor-reduction with hydrogen on a library of bimetallic Pd-Au and Pd-Pt catalysts for the direct synthesis of H2O2. Catalysis Today, 2015, 248, 40-47.	4.4	35
9	Kinetics and Mechanism of H₂O₂ Direct Synthesis over a Pd/C Catalyst in a Batch Reactor. Industrial & Engineering Chemistry Research, 2012, 51, 8903-8912.	3.7	34
10	Direct Synthesis of Hydrogen Peroxide in a Trickle Bed Reactor: Comparison of Pd-Based Catalysts. Industrial & Engineering Chemistry Research, 2012, 51, 8883-8890.	3.7	33
11	Direct synthesis of hydrogen peroxide in water in a continuous trickle bed reactor optimized to maximize productivity. Green Chemistry, 2013, 15, 2502.	9.0	31
12	Bromide and Acids: A Comprehensive Study on Their Role on the Hydrogen Peroxide Direct Synthesis. Industrial & Engineering Chemistry Research, 2017, 56, 13367-13378.	3.7	30
13	Revealing the role of bromide in the H₂O₂ direct synthesis with the catalyst wet pretreatment method (CWPM). AIChE Journal, 2017, 63, 32-42.	3.6	25
14	Hydrothermal extraction of hemicellulose: from lab to pilot scale. Bioresource Technology, 2018, 247, 980-991.	9.6	24
15	The influence of catalyst amount and Pd loading on the H₂O₂ synthesis from hydrogen and oxygen. Catalysis Science and Technology, 2015, 5, 3545-3555.	4.1	23
16	Reactivity Aspects of SBA15-Based Doped Supported Catalysts: H2O2 Direct Synthesis and Disproportionation Reactions. Topics in Catalysis, 2013, 56, 540-549.	2.8	20
17	Residence time and axial dispersion of liquids in Trickle Bed Reactors at laboratory scale. Chemical Engineering Journal, 2014, 250, 99-111.	12.7	20
18	H2 solubility in methanol in the presence of CO2 and O2. Journal of Chemical Thermodynamics, 2012, 54, 1-9.	2.0	17

#	Article	IF	Citations
19	Application of the Catalyst Wet Pretreatment Method (CWPM) for catalytic direct synthesis of H2O2. Catalysis Today, 2015, 246, 207-215.	4.4	15
20	Direct synthesis of H2O2 over Pd supported on rare earths promoted zirconia. Catalysis Today, 2015, 256, 294-301.	4.4	14
21	Effect of low hydrogen to palladium molar ratios in the direct synthesis of H2O2 in water in a trickle bed reactor. Catalysis Today, 2015, 248, 91-100.	4.4	14
22	Taking advantage of hysteresis in methane partial oxidation over Pt on honeycomb monolith. Chemical Engineering Science, 2011, 66, 6341-6349.	3.8	12
23	Role of a Functionalized Polymer (K2621) and an Inorganic Material (Sulphated Zirconia) as Supports in Hydrogen Peroxide Direct Synthesis in a Continuous Reactor. Industrial & Engineering Chemistry Research, 2013, 52, 15472-15480.	3.7	12
24	Modeling of Direct Synthesis of Hydrogen Peroxide in a Packed-Bed Reactor. Industrial & Engineering Chemistry Research, 2012, 51, 13366-13378.	3.7	11
25	The use of modelling to understand the mechanism of hydrogen peroxide direct synthesis from batch, semibatch and continuous reactor points of view. Reaction Chemistry and Engineering, 2016, 1, 300-312.	3.7	10
26	Influence of Metal Precursors and Reduction Protocols on the Chlorideâ€Free Preparation of Catalysts for the Direct Synthesis of Hydrogen Peroxide without Selectivity Enhancers. ChemCatChem, 2016, 8, 1564-1574.	3.7	9
27	Product distribution analysis of the hydrogen peroxide direct synthesis in an isothermal batch reactor. Catalysis Today, 2015, 248, 108-114.	4.4	7
28	TiO₂ nanoparticles vs. TiO₂ nanowires as support in hydrogen peroxide direct synthesis: the influence of N and Au doping. RSC Advances, 2016, 6, 103311-103319.	3.6	7
29	Liquid Holdup by Gravimetric Recirculation Continuous Measurement Method. Application to Trickle Bed Reactors under Pressure at Laboratory Scale. Industrial & Engineering Chemistry Research, 2017, 56, 13294-13300.	3.7	7
30	Hydrogen peroxide obtained via direct synthesis as alternative raw material for ultrapurification process to produce electronic grade chemical. Journal of Chemical Technology and Biotechnology, 2016, 91, 1136-1148.	3.2	6
31	Optimized H 2 O 2 production in a trickled bed reactor, using water and methanol enriched with selectivity promoters. Chemical Engineering Science, 2015, 123, 334-340.	3.8	5
32	Continuous H₂O₂ direct synthesis process: an analysis of the process conditions that make the difference. Green Processing and Synthesis, 2016, 5, 341-351.	3.4	4
33	Is selective hydrogenation of molecular oxygen to H2O2 affected by strong metalâ€“support interactions on Pd/TiO2 catalysts? A case study using commercially available TiO2. Comptes Rendus Chimie, 2016, 19, 1011-1020.	0.5	3
34	Chapter 6. Processing of Lignocellulosic Biomass Derived Monomers using High-pressure CO2 and CO2â€“H2O Mixtures. RSC Green Chemistry, 0, , 115-136.	0.1	1