Pierdomenico Biasi

List of Publications by Citations

34 papers	690 citations	17 h-index	25 g-index
36 ext. papers	761 ext. citations	5.6 avg, IF	3.77 L-index

#	Paper	IF	Citations
34	Engineering in direct synthesis of hydrogen peroxide: targets, reactors and guidelines for operational conditions. *Green Chemistry*, **2014**, 16, 2320	10	101
33	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	5.1	42
32	Continuous H2O2 direct synthesis over PdAu catalysts. *Chemical Engineering Journal*, **2011**, 176-177, 172-177	14.7	41
31	Mass transfer and kinetics of H 2 O 2 direct synthesis in a batch slurry reactor. *Chemical Engineering Journal*, **2012**, 207-208, 539-551	14.7	40
30	Hydrogen Peroxide Direct Synthesis: Selectivity Enhancement in a Trickle Bed Reactor. *Industrial & Engineering Chemistry Research*, **2010**, 49, 10627-10632	3.9	39
29	Kinetics and Mechanism of H2O2 Direct Synthesis over a Pd/C Catalyst in a Batch Reactor. *Industrial & Engineering Chemistry Research*, **2012**, 51, 8903-8912	3.9	33
28	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	5.3	32
27	Direct Synthesis of Hydrogen Peroxide in a Trickle Bed Reactor: Comparison of Pd-Based Catalysts. *Industrial & Engineering Chemistry Research*, **2012**, 51, 8883-8890	3.9	32
26	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	32
25	Direct synthesis of hydrogen peroxide in water in a continuous trickle bed reactor optimized to maximize productivity. *Green Chemistry*, **2013**, 15, 2502	10	30
24	Hemicellulose extraction by hot pressurized water pretreatment at 160 □C for 10 different woods: Yield and molecular weight. *Journal of Supercritical Fluids*, **2018**, 133, 716-725	4.2	26
23	Bromide and Acids: A Comprehensive Study on Their Role on the Hydrogen Peroxide Direct Synthesis. *Industrial & Engineering Chemistry Research*, **2017**, 56, 13367-13378	3.9	23
22	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	20
21	Hydrothermal extraction of hemicellulose: from lab to pilot scale. *Bioresource Technology*, **2018**, 247, 980-991	11	18
20	Reactivity Aspects of SBA15-Based Doped Supported Catalysts: H2O2 Direct Synthesis and Disproportionation Reactions. *Topics in Catalysis*, **2013**, 56, 540-549	2.3	18
19	The influence of catalyst amount and Pd loading on the H2O2 synthesis from hydrogen and oxygen. *Catalysis Science and Technology*, **2015**, 5, 3545-3555	5.5	17
18	Residence time and axial dispersion of liquids in Trickle Bed Reactors at laboratory scale. *Chemical Engineering Journal*, **2014**, 250, 99-111	14.7	17

17	H2 solubility in methanol in the presence of CO2 and O2. *Journal of Chemical Thermodynamics*, **2012**, 54, 1-9	2.9	15
16	Direct synthesis of H2O2 over Pd supported on rare earths promoted zirconia. *Catalysis Today*, **2015**, 256, 294-301	5.3	14
15	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	5.3	13
14	Application of the Catalyst Wet Pretreatment Method (CWPM) for catalytic direct synthesis of H2O2. *Catalysis Today*, **2015**, 246, 207-215	5.3	11
13	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	3.9	11
12	Modeling of Direct Synthesis of Hydrogen Peroxide in a Packed-Bed Reactor. *Industrial & Engineering Chemistry Research*, **2012**, 51, 13366-13378	3.9	9
11	Taking advantage of hysteresis in methane partial oxidation over Pt on honeycomb monolith. *Chemical Engineering Science*, **2011**, 66, 6341-6349	4.4	9
10	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	4.9	8
9	Product distribution analysis of the hydrogen peroxide direct synthesis in an isothermal batch reactor. *Catalysis Today*, **2015**, 248, 108-114	5.3	7
8	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	3.5	6
7	Influence of Metal Precursors and Reduction Protocols on the Chloride-Free Preparation of Catalysts for the Direct Synthesis of Hydrogen Peroxide without Selectivity Enhancers. *ChemCatChem*, **2016**, 8, 1564-1574	5.2	6
6	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	3.9	5
5	Optimized H2O2 production in a trickled bed reactor, using water and methanol enriched with selectivity promoters. *Chemical Engineering Science*, **2015**, 123, 334-340	4.4	4
4	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	3.7	4
3	Continuous H2O2 direct synthesis process: an analysis of the process conditions that make the difference. *Green Processing and Synthesis*, **2016**, 5,	3.9	3
2	Is selective hydrogenation of molecular oxygen to H2O2 affected by strong metal support interactions on Pd/TiO2 catalysts? A case study using commercially available TiO2. *Comptes Rendus Chimie*, **2016**, 19, 1011-1020	2.7	2
1	Chapter 6. Processing of Lignocellulosic Biomass Derived Monomers using High-pressure CO2 and CO2H2O Mixtures. *RSC Green Chemistry*,115-136	0.9	1