# Marcelo Maciel Pereira

List of Publications by Year
in descending order



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|---|---|---|---|
| 66 papers | 1,222 citations | 361296 20 h-index | 434063 31 g-index |
| 68 all docs | 68 docs citations | 68 times ranked | 1342 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Ni-ZSM-5 catalysts: Detailed characterization of metal sites for proper catalyst design. Journal of Catalysis, 2010, 269, 103-109. | 3.1 | 135 |
| 2 | Hierarchical pore ZSM-5 zeolite structures: From micro- to macro-engineering of structured catalysts. Chemical Engineering Journal, 2010, 161, 397-402. | 6.6 | 77 |
| 3 | Design of MFI Zeolite-Based Composites with Hierarchical Pore Structure: A New Generation of Structured Catalysts. Crystal Growth and Design, 2009, 9, 3721-3729. | 1.4 | 47 |
| 4 | Nature and location of cerium in Ce-loaded Y zeolites as revealed by HRTEM and spectroscopic techniques. Microporous and Mesoporous Materials, 2007, 100, 276-286. | 2.2 | 43 |
| 5 | Synthesis of zeolite crystals with unusual morphology: Application in acid catalysis. Applied Catalysis A: General, 2010, 390, 102-109. | 2.2 | 39 |
| 6 | Alkane Activation over Acidic Zeolites: The First Step. Chemistry - A European Journal, 2010, 16, 573-576. | 1.7 | 38 |
| 7 | Interaction between Ni and V with USHY and rare earth HY zeolite during hydrothermal deactivation. Applied Catalysis A: General, 2005, 286, 196-201. | 2.2 | 37 |
| 8 | Waste biomass to liquids: Low temperature conversion of sugarcane bagasse to bio-oil. The effect of combined hydrolysis treatments. Biomass and Bioenergy, 2011, 35, 2106-2116. | 2.9 | 36 |
| 9 | Role of nickel and vanadium over USY and RE-USY coke formation. Applied Catalysis A: General, 2006, 315, 68-73. | 2.2 | 34 |
| 10 | Rational Design of Microporous and Mesoporous Solids for Catalysis: From the Molecule to the Reactor. ChemCatChem, 2011, 3, 1263-1272. | 1.8 | 34 |
| 11 | HUSY zeolite modified by lanthanum: Effect of lanthanum introduction as a vanadium trap. Microporous and Mesoporous Materials, 2010, 133, 75-81. | 2.2 | 32 |
| 12 | Synthesis and characterization of niobium oxide layers on silica and the interaction with nickel. Applied Catalysis A: General, 2000, 197, 99-106. | 2.2 | 31 |
| 13 | How Keggin-Type Polyoxometalates Self-Organize into Crystals. Crystal Growth and Design, 2010, 10, 371-378. | 1.4 | 30 |
| 14 | The effect of alumina on FCC catalyst in the presence of nickel and vanadium. Applied Catalysis A: General, 2010, 388, 15-21. | 2.2 | 28 |
| 15 | SMSI effect in the butadiene hydrogenation on Pd-Cu bimetallic catalysts. Catalysis Today, 1993, 16, 407-415. | 2.2 | 26 |
| 16 | Biomass-mediated ZSM-5 zeolite synthesis: when self-assembly allows to cross the Si/Al lower limit. Chemical Science, 2018, 9, 6532-6539. | 3.7 | 26 |
| 17 | Mechanistic insights of CO2-coke reaction during the regeneration step of the fluid cracking catalyst. Applied Catalysis A: General, 2008, 336, 40-47. | 2.2 | 25 |
| 18 | Gasoline from Biomass through Refineryâ€Friendly Carbohydrateâ€Based Bioâ€Oil Produced by Ketalization. ChemSusChem, 2014, 7, 1627-1636. | 3.6 | 23 |

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|---|---|---|---|
| 19 | Iron doped manganese oxide octahedral molecular sieve as potential catalyst for SO x removal at FCC. Applied Catalysis A: General, 2015, 498, 69-75. | 2.2 | 21 |
| 20 | Effect of iron and calcium over USY coke formation. Applied Catalysis A: General, 2008, 339, 61-67. | 2.2 | 20 |
| 21 | Synthesis of Keggin-type polyoxometalate crystals. Solid State Sciences, 2010, 12, 1866-1869. | 1.5 | 19 |
| 22 | Investigation of the nature of V-species on alumina modified by alkali cations: Development of multi-functional DeSO catalysts. Applied Catalysis A: General, 2012, 449, 23-30. | 2.2 | 17 |
| 23 | Physicochemical Properties of Pyrolysis Bio-Oil from Sugarcane Straw and Sugarcane in Natura. Journal of Biomaterials and Nanobiotechnology, 2013, 04, 10-19. | 1.0 | 17 |
| 24 | Strategy to design zeolite catalysts in the presence of biomass. Microporous and Mesoporous Materials, 2017, 254, 28-36. | 2.2 | 17 |
| 25 | The nickelâ€"niobiaâ€"silica interactions at low nickel contents. Catalysis Today, 2000, 57, 291-296. | 2.2 | 16 |
| 26 | Unveiling the Chemical Composition of Sugar Cane Biocrudes by Liquid Chromatographyâ€"Tandem Mass Spectrometry. Energy & Fuels, 2015, 29, 8082-8087. | 2.5 | 16 |
| 27 | Biohydrocarbons Production under Standard Refinery Conditions by means of a Representative Ketal Compound of Biocrude. Energy Technology, 2017, 5, 428-441. | 1.8 | 16 |
| 28 | Insights to Achieve a Better Control of Silicon-Aluminum Ratio and ZSM-5 Zeolite Crystal Morphology through the Assistance of Biomass. Catalysts, 2016, 6, 30. | 1.6 | 15 |
| 29 | Catalyst regeneration using CO<sub>2</sub> as reactant through reverseâ€Boudouard reaction with coke. , 2017, 7, 843-851. |  | 15 |
| 30 | 1,3-Butadiene hydrogenation on pd-supported systems: geometric effects. Brazilian Journal of Chemical Engineering, 2002, 19, 187-194. | 0.7 | 14 |
| 31 | Biomassâ€assisted Zeolite Syntheses as a Tool for Designing New Acid Catalysts. ChemCatChem, 2017, 9, 2065-2079. | 1.8 | 14 |
| 32 | Effect of vanadium contamination on H-ZSM-5 zeolite deactivation. Catalysis Today, 2008, 133-135, 805-808. | 2.2 | 13 |
| 33 | Nickel-doped small pore zeolite bifunctional catalysts: A way to achieve high activity and yields into olefins. Catalysis Today, 2014, 226, 67-72. | 2.2 | 13 |
| 34 | Vanadium-lithium alumina a potential additive for coke oxidation by CO2 in the presence of O2 during FCC catalyst regeneration. Applied Catalysis B: Environmental, 2016, 196, 117-126. | 10.8 | 13 |
| 35 | Vanadium effect on HUSY zeolite deactivation during hydrothermal treatment and cyclohexane model reaction. Applied Catalysis A: General, 2005, 292, 82-89. | 2.2 | 12 |
| 36 | Valorization of Sugar Cane Bagasse and Jatropha Curcas Cake: Production of a Biocrude by Acetylation Reaction under Microwave Radiation. Energy & Fuels, 2015, 29, 917-921. | 2.5 | 12 |

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|---|---|---|---|
| 37 | Improving textural properties of Î³-alumina by using second generation biomass in conventional hydrothermal method. Microporous and Mesoporous Materials, 2015, 207, 134-141. | 2.2 | 12 |
| 38 | ZSM-5 synthesis by the assistance of biomass and biomass-derivate compounds. Microporous and Mesoporous Materials, 2018, 263, 251-256. | 2.2 | 12 |
| 39 | Evidence of multi-component interaction in a Vâ€"Ceâ€"HUSY catalyst: Is the ceriumâ€"EFAL interaction the key of vanadium trapping?. Microporous and Mesoporous Materials, 2008, 115, 253-260. | 2.2 | 11 |
| 40 | Catalytic sugarcane bagasse transformation into a suitable biocrude for hydrocarbon production in typical refinery processes. Sustainable Energy and Fuels, 2020, 4, 4158-4169. | 2.5 | 11 |
| 41 | Synthesis and characterization of vanadium species coated on alumina, magnesium oxide and hydrotalcite supports to SOx removal. Applied Catalysis A: General, 2013, 462-463, 46-55. | 2.2 | 10 |
| 42 | Vanadiumâ€"potassiumâ€"alumina catalyst: A way of promoting CO2 and coke reaction in the presence of O2 during the FCC catalyst regeneration. Catalysis Communications, 2014, 51, 42-45. | 1.6 | 9 |
| 43 | Sugar ketals as a platform molecule to overcome the limitation of converting biomass into green-hydrocarbons in a typical refinery. Sustainable Energy and Fuels, 2020, 4, 1312-1319. | 2.5 | 9 |
| 44 | Insights into the Role of Framework and Nonframework Aluminum in the Protolytic Reaction of Carbonâ€"Carbon and Tertiary Carbonâ€"Hydrogen Bonds of Isobutane. Journal of Physical Chemistry C, 2021, 125, 11636-11647. | 1.5 | 9 |
| 45 | Use of Nb2O5 as nickel passivating agent: characterisation of the Ni/Nb2O5/SiO2 system. Catalysis Today, 2003, 78, 459-465. | 2.2 | 8 |
| 46 | Isobutane and n-butane cracking on Ni-ZSM-5 catalyst: Effect on light olefin formation. Applied Catalysis A: General, 2011, 403, 58-58. | 2.2 | 8 |
| 47 | Vanadium and alumina modified with groups I and II elements for CO2 and coke reaction under fluid catalytic cracking process. Applied Catalysis B: Environmental, 2015, 164, 225-233. | 10.8 | 8 |
| 48 | Understanding bifunctional behavior of Ni/HZSM5 catalyst under isobutane atmosphere. Molecular Catalysis, 2018, 458, 145-151. | 1.0 | 8 |
| 49 | Application of Response Surface Methodology for Ethanol Conversion into Hydrocarbons Using ZSM-5 Zeolites. Catalysts, 2019, 9, 617. | 1.6 | 7 |
| 50 | Influence of Biomass Residues on the Metastability of Zeolite Structures. Nanoscience and Nanotechnology Letters, 2016, 8, 917-923. | 0.4 | 7 |
| 51 | Nickel Activation for Hydrogenolysis Reaction on USY Zeolite. Catalysis Letters, 2004, 92, 81-86. | 1.4 | 6 |
| 52 | Green-aromatic production in typical conditions of fluidized catalytic cracking. Fuel, 2019, 254, 115684. | 3.4 | 6 |
| 53 | Ketal Sugar Conversion Into Green Hydrocarbons by Faujasite Zeolite in a Typical Catalytic Cracking Process. Frontiers in Chemistry, 2019, 7, 720. | 1.8 | 6 |
| 54 | The effect of cerium introduction on vanadium-USY catalysts. Studies in Surface Science and Catalysis, 2000, 143, 915-923. | 1.5 | 5 |

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|---|---|---|---|
| 55 | Cyclohexane as a Probe to Nickel Vanadium Interaction in FCC Catalysts. Studies in Surface Science and Catalysis, 2001, , 343-350. | 1.5 | 5 |
| 56 | Carbon Dioxide, Chemical Valorization, and Mitigation in the Refinery. , 2013, , 535-562. | | 5 |
| 57 | Coupling CH4 pyrolysis with CO2 activation via reverse Boudouard reaction in the presence of O2 through a multifunctional catalyst Ni-V-Li/Al2O3. Journal of CO2 Utilization, 2016, 16, 458-465. | 3.3 | 5 |
| 58 | Use of <i>Kappaphycus alvarezii</i> Biomass for the Production of Carbohydrate Isopropylidene-Ketal-Based Biocrude. Energy & Fuels, 2017, 31, 9422-9428. | 2.5 | 5 |
| 59 | Hydroconversion of xylose derived ketals: A key strategy for producing A broad range of green-hydrocarbons suitable as fuels and petrochemicals. Applied Catalysis A: General, 2021, 609, 117911. | 2.2 | 5 |
| 60 | Regeneration of Spent HY Zeolite Obtained After Bio-Oil Cracking in the Presence of CO<SUB>2</SUB>. Advanced Chemistry Letters, 2013, 1, 308-316. | 0.1 | 5 |
| 61 | VO<sup>2+</sup> Reaction with Hydrotalcite and Hydrotalciteâ€Derived Oxide: The Effect of the Vanadium Loading on the Structure of Catalyst Precursors and on the Vanadium Species. European Journal of Inorganic Chemistry, 2013, 2013, 241-247. | 1.0 | 4 |
| 62 | Recent progress in the biomass-mediated synthesis of porous materials. Inorganica Chimica Acta, 2019, 487, 379-386. | 1.2 | 4 |
| 63 | Vanadiumâ€“Potassium-Alumina Additives for SOx Removal in FCC: Effect of Vanadium Content. Catalysis Letters, 2015, 145, 1382-1387. | 1.4 | 3 |
| 64 | Propylene conversion in Ferrierite: Effect of mesoporous formation. Applied Catalysis A: General, 2017, 548, 89-95. | 2.2 | 3 |
| 65 | Hydrodeoxygenation of Xylose Isopropylidene Ketal Over Pd/HBEA Catalyst for the Production of Green Fuels. Frontiers in Chemistry, 2021, 9, 729787. | 1.8 | 3 |
| 66 | Thermal treatment study of vanadium-loaded hydrotalcites employing in situ DXAS. Catalysis Today, 2008, 133-135, 210-215. | 2.2 | 2 |