# Michele Aresta

List of Publications by Year
in descending order



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|---|---|---|---|
| 183 papers | 12,531 citations | 41323 49 h-index | 25770 108 g-index |
| 199 all docs | 199 docs citations | 199 times ranked | 10882 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Catalysis for the Valorization of Exhaust Carbon: from CO<sub>2</sub> to Chemicals, Materials, and Fuels. Technological Use of CO<sub>2</sub>. Chemical Reviews, 2014, 114, 1709-1742. | 23.0 | 2,428 |
| 2 | Catalysis Research of Relevance to Carbon Management:â€‰ Progress, Challenges, and Opportunities. Chemical Reviews, 2001, 101, 953-996. | 23.0 | 1,311 |
| 3 | Utilisation of CO2 as a chemical feedstock: opportunities and challenges. Dalton Transactions, 2007, , 2975. | 1.6 | 1,260 |
| 4 | The changing paradigm in CO2 utilization. Journal of CO2 Utilization, 2013, 3-4, 65-73. | 3.3 | 366 |
| 5 | New nickelâ€“carbon dioxide complex: synthesis, properties, and crystallographic characterization of (carbon dioxide)-bis(tricyclohexylphosphine)nickel. Journal of the Chemical Society Chemical Communications, 1975, . | 2.0 | 327 |
| 6 | A study on the carboxylation of glycerol to glycerol carbonate with carbon dioxide: The role of the catalyst, solvent and reaction conditions. Journal of Molecular Catalysis A, 2006, 257, 149-153. | 4.8 | 287 |
| 7 | State of the art and perspectives in catalytic processes for CO2 conversion into chemicals and fuels: The distinctive contribution of chemical catalysis and biotechnology. Journal of Catalysis, 2016, 343, 2-45. | 3.1 | 276 |
| 8 | Utilization of macro-algae for enhanced CO2 fixation and biofuels production: Development of a computing software for an LCA study. Fuel Processing Technology, 2005, 86, 1679-1693. | 3.7 | 208 |
| 9 | Valorization of bio-glycerol: New catalytic materials for the synthesis of glycerol carbonate via glycerolysis of urea. Journal of Catalysis, 2009, 268, 106-114. | 3.1 | 204 |
| 10 | Production of biodiesel from macroalgae by supercritical CO2 extraction and thermochemical liquefaction. Environmental Chemistry Letters, 2005, 3, 136-139. | 8.3 | 187 |
| 11 | The contribution of the utilization option to reducing the CO2 atmospheric loading: research needed to overcome existing barriers for a full exploitation of the potential of the CO2 use. Catalysis Today, 2004, 98, 455-462. | 2.2 | 168 |
| 12 | Role of the macrocyclic polyether in the synthesis of N-alkylcarbamate esters from primary amines, CO2 and alkyl halides in the presence of crown-ethers.. Tetrahedron, 1992, 48, 1515-1530. | 1.0 | 145 |
| 13 | Converting wastes into added value products: from glycerol to glycerol carbonate, glycidol and epichlorohydrin using environmentally friendly synthetic routes. Tetrahedron, 2011, 67, 1308-1313. | 1.0 | 122 |
| 14 | Zinc sulfide functionalized with ruthenium nanoparticles for photocatalytic reduction of CO2. Applied Catalysis B: Environmental, 2015, 178, 170-176. | 10.8 | 120 |
| 15 | Nb(V) compounds as epoxides carboxylation catalysts: the role of the solvent. Journal of Molecular Catalysis A, 2003, 204-205, 245-252. | 4.8 | 115 |
| 16 | Influence of Al2O3 on the performance of CeO2 used as catalyst in the direct carboxylation of methanol to dimethylcarbonate and the elucidation of the reaction mechanism. Journal of Catalysis, 2010, 269, 44-52. | 3.1 | 113 |
| 17 | (Carbon dioxide)bis(trialkylphosphine)nickel complexes. Journal of the Chemical Society Dalton Transactions, 1977, , 708. | 1.1 | 110 |
| 18 | Carbon dioxide as building block for the synthesis of organic carbonates. Journal of Molecular Catalysis A, 2002, 182-183, 399-409. | 4.8 | 105 |

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|---|---|---|---|
| 19 | Hybrid Technologies for an Enhanced Carbon Recycling Based on the Enzymatic Reduction of CO<sub>2</sub> to Methanol in Water: Chemical and Photochemical NADH Regeneration. ChemSusChem, 2012, 5, 373-378. | 3.6 | 99 |
| 20 | Copper(II) Catalysis in Cyanide Conversion into Ethyl Carbamate in Spirits and Relevant Reactions. Journal of Agricultural and Food Chemistry, 2001, 49, 2819-2824. | 2.4 | 97 |
| 21 | Isolation and structural determination of two derivatives of the elusive carbamic acid. Chemical Communications, 2000, , 1099-1100. | 2.2 | 96 |
| 22 | Mechanistic Details of Nickel(0)-Assisted Oxidative Coupling of CO<sub>2</sub> with C<sub>2</sub>H<sub>4</sub>. Organometallics, 2004, 23, 5252-5259. | 1.1 | 95 |
| 23 | Cerium(IV)oxide modification by inclusion of a hetero-atom: A strategy for producing efficient and robust nano-catalysts for methanol carboxylation. Catalysis Today, 2008, 137, 125-131. | 2.2 | 93 |
| 24 | Mechanism of Formation of Organic Carbonates from Aliphatic Alcohols and Carbon Dioxide under Mild Conditions Promoted by Carbodiimides. DFT Calculation and Experimental Study. Journal of Organic Chemistry, 2005, 70, 6177-6186. | 1.7 | 90 |
| 25 | Reaction of silylalkylmono- and silylalkyldi-amines with carbon dioxide: evidence of formation of inter- and intra-molecular ammonium carbamates and their conversion into organic carbamates of industrial interest under carbon dioxide catalysis. Green Chemistry, 2002, 4, 439-443. | 4.6 | 86 |
| 26 | Life cycle analysis applied to the assessment of the environmental impact of alternative synthetic processes. The dimethylcarbonate case: part 1. Journal of Cleaner Production, 1999, 7, 181-193. | 4.6 | 84 |
| 27 | Direct synthesis of organic carbonates by oxidative carboxylation of olefins catalyzed by metal oxides: developing green chemistry based on carbon dioxide. Applied Organometallic Chemistry, 2000, 14, 799-802. | 1.7 | 81 |
| 28 | Direct synthesis of 1,3-benzodioxol-2-one from styrene, dioxygen and carbon dioxide promoted by Rh(I). Journal of Molecular Catalysis, 1987, 41, 355-359. | 1.2 | 80 |
| 29 | Mechanism of Formation of Peroxocarbonates RhOOC(O)O(Cl)(P)3and Their Reactivity as Oxygen Transfer Agents Mimicking Monooxygenases. The First Evidence of CO2Insertion into the Oâ^'O Bond of Rh(Î·2-O2) Complexes. Inorganic Chemistry, 1996, 35, 4254-4260. | 1.9 | 79 |
| 30 | Mechanistic studies on the role of carbon dioxide in the synthesis of methylcarbamates from amines and dimethylcarbonate in the Presence of CO2.. Tetrahedron, 1991, 47, 9489-9502. | 1.0 | 73 |
| 31 | Synthesis and Characterization of Nb(OR)4[OC(O)OR] (R = Me, Et, Allyl) and Their Reaction with the Parent Alcohol To Afford Organic Carbonates. Inorganic Chemistry, 2003, 42, 3256-3261. | 1.9 | 73 |
| 32 | Direct carboxylation of alcohols to organic carbonates: Comparison of the Group 5 element alkoxides catalytic activity. Catalysis Today, 2006, 115, 88-94. | 2.2 | 71 |
| 33 | Selective Aerobic Oxidation of 5â€(Hydroxymethyl)furfural to 5â€Formylâ€2â€furancarboxylic Acid in Water. ChemSusChem, 2016, 9, 1096-1100. | 3.6 | 71 |
| 34 | Reaction Mechanisms in Carbon Dioxide Conversion. , 2016, , . | | 70 |
| 35 | Enzymatic synthesis of 4-OH-benzoic acid from phenol and CO2: the first example of a biotechnological application of a Carboxylase enzyme. Tetrahedron, 1998, 54, 8841-8846. | 1.0 | 69 |
| 36 | The first synthesis of a cyclic carbonate from a ketal in SC-CO2. Journal of Supercritical Fluids, 2003, 25, 177-182. | 1.6 | 69 |

| # | Article | IF | Citations |
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| 37 | Developing Innovative Synthetic Technologies of Industrial Relevance Based on Carbon Dioxide as Raw Material. Energy & Fuels, 2001, 15, 269-273. | 2.5 | 67 |
| 38 | Biocatalytic and Bioelectrocatalytic Approaches for the Reduction of Carbon Dioxide using Enzymes. Energy Technology, 2017, 5, 812-821. | 1.8 | 64 |
| 39 | Enantioselective synthesis of organic carbonates promoted by Nb(IV) and Nb(V) catalysts. Applied Catalysis A: General, 2003, 255, 5-11. | 2.2 | 62 |
| 40 | Evidence for Spontaneous Release of Acrylates from a Transitionâ€Metal Complex Upon Coupling Ethene or Propene with a Carboxylic Moiety or CO<sub>2</sub>. Chemistry - A European Journal, 2007, 13, 9028-9034. | 1.7 | 61 |
| 41 | Palladium-catalyzed synthesis of symmetrical urea derivatives by oxidative carbonylation of primary amines in carbon dioxide medium. Journal of Catalysis, 2011, 282, 120-127. | 3.1 | 57 |
| 42 | Heterogeneous catalysts for the selective aerobic oxidation of 5-hydroxymethylfurfural to added value products in water. Inorganica Chimica Acta, 2018, 470, 11-21. | 1.2 | 57 |
| 43 | Catalytic properties of phenol carboxylase In vitro study of CO2: 4-hydroxybenzoate isotope exchange reaction. FEBS Journal, 1991, 197, 473-479. | 0.2 | 56 |
| 44 | A bonding-reactivity relationship for (carbon dioxide)bis(tricyclohexylphosphine)nickel: a comparative solid-state-solution nuclear magnetic resonance study (phosphorus-31, carbon-13) as a diagnostic tool to determine the mode of bonding of carbon dioxide to a metal center. Inorganic Chemistry, 1992, 31, 4286-4290. | 1.9 | 56 |
| 45 | Biomimetic building-up of the carbamic moiety: the intermediacy of carboxyphosphate analogues in the synthesis of N-aryl carbamate esters from arylamines and organic carbonates promoted by phosphorus acids. Tetrahedron, 1995, 51, 8073-8088. | 1.0 | 55 |
| 46 | Carbon dioxide coordination chemistry. 3. Vibrational, NMR, theoretical studies of (carbon) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 382 Td | 1.9 | 54 |
| 47 | Synthesis, Characterization, and Use of Nb<sup>V</sup>/Ce<sup>IV</sup>â€Mixed Oxides in the Direct Carboxylation of Ethanol by using Pervaporation Membranes for Water Removal. Chemistry - A European Journal, 2012, 18, 10324-10334. | 1.7 | 54 |
| 48 | An integrated photocatalytic/enzymatic system for the reduction of CO<sub>2</sub> to methanol in bioglycerolâ€“water. Beilstein Journal of Organic Chemistry, 2014, 10, 2556-2565. | 1.3 | 53 |
| 49 | Photocatalytic Carboxylation of Organic Substrates with Carbon Dioxide at Zinc Sulfide with Deposited Ruthenium Nanoparticles. ChemPlusChem, 2014, 79, 708-715. | 1.3 | 53 |
| 50 | Reaction mechanism of the direct carboxylation of methanol to dimethylcarbonate: experimental and theoretical studies. Topics in Catalysis, 2006, 40, 71-81. | 1.3 | 50 |
| 51 | Solid state dehalogenation of PCBs in contaminated soil using NaBH4. Waste Management, 2003, 23, 315-319. | 3.7 | 49 |
| 52 | On the Existence of the Elusive Monomethyl Ester of Carbonic Acid [CH3OC(O)OH] at 300 K:1H- and13C NMR Measurements and DFT Calculations. European Journal of Inorganic Chemistry, 2006, 2006, 908-913. | 1.0 | 48 |
| 53 | Synthesis and structural characterization of the nitrosylcobalt complex Co(NO)2[PhP(OCH2CH2)2NH]Cl: a novel carbon dioxide carrier. Journal of the American Chemical Society, 1985, 107, 2994-2995. | 6.6 | 47 |
| 54 | Tetraphenylborate coordination chemistry. Synthesis, solid-state and solution characterization, and properties of {[(C2H4)2Rh(.eta.6-Ph)]2BPh2}O3SCF3 and {[(C2H4)2Rh(.eta.6-Ph)]3BPh}(O3SCF3)2: the first examples of a tetraphenylborate anion acting as a 12- or 18-e donor to metal centers. Organometallics, 1993, 12, 2032-2043. | 1.1 | 45 |

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| 55 | Carbon dioxide as modulator of the oxidative properties of dioxygen in the presence of transition metal systems. Journal of the Chemical Society Chemical Communications, 1992, , 315. | 2.0 | 43 |
| 56 | Conversion of fructose into 5-HMF: a study on the behaviour of heterogeneous cerium-based catalysts and their stability in aqueous media under mild conditions. RSC Advances, 2015, 5, 26941-26948. | 1.7 | 42 |
| 57 | Development of environmentally friendly syntheses: use of enzymes and biomimetic systems for the direct carboxylation of organic substrates. Reviews in Molecular Biotechnology, 2002, 90, 113-128. | 2.9 | 41 |
| 58 | The use of solar energy can enhance the conversion of carbon dioxide into energy-rich products: stepping towards artificial photosynthesis. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2013, 371, 20120111. | 1.6 | 41 |
| 59 | Organic Carbonates: Efficient Extraction Solvents for the Synthesis of HMF in Aqueous Media with Cerium Phosphates as Catalysts. ChemSusChem, 2016, 9, 118-125. | 3.6 | 41 |
| 60 | My journey in the CO2-chemistry wonderland. Coordination Chemistry Reviews, 2017, 334, 150-183. | 9.5 | 41 |
| 61 | Reactivity of phosphacarbamates: transfer of the carbamate group promoted by metal-assisted electrophilic attack at the carbon dioxide moiety. Journal of Organic Chemistry, 1988, 53, 4153-4154. | 1.7 | 40 |
| 62 | Photocatalytic Carbon Dioxide Reduction at pâ€Type Copper(I) Iodide. ChemSusChem, 2016, 9, 2933-2938. | 3.6 | 40 |
| 63 | Selective carbomethoxylation of aromatic diamines. Green Chemistry, 1999, 1, 237-242. | 4.6 | 39 |
| 64 | Synthesis, characterization and reactivity of [Rh(bpy)(C2H4)Cl]. A study on the reaction with C1 molecules (CH2O, CO2) and NaBPh4. Journal of Organometallic Chemistry, 1993, 463, 215-221. | 0.8 | 38 |
| 65 | Ru<sup>II</sup>â€Mediated Hydrogen Transfer from Aqueous Glycerol to CO<sub>2</sub>: From Waste to Valueâ€Added Products. ChemSusChem, 2011, 4, 1311-1315. | 3.6 | 38 |
| 66 | Oxidative Addition of Ammonium and Iminium Tetraphenylborates to Low-Valent Metal Complexes. Evidence of Selective Nâ^'C and Nâ^'H Activation. A New, Easy Route to Cationic Allyl- and Hydridonickel Complexes. Organometallics, 1997, 16, 834-841. | 1.1 | 37 |
| 67 | Methylchloroformate synthesis via direct interaction of palladium di(methoxycarbonyl) complexes with CuCl2: Utilization in the synthesis of carbonates and carbamates. Journal of Organometallic Chemistry, 1993, 451, 243-248. | 0.8 | 35 |
| 68 | Synthesis and Solid State and Solution Characterization of Mono- and Di-(Î·1-C) Carbamoylâ^'Palladium Complexes. New Efficient Palladium-Catalyzed Routes to Carbamoyl Chlorides:â€‰ Key Intermediates to Isocyanates, Carbamic Esters, and Ureas. Organometallics, 2000, 19, 3879-3889. | 1.1 | 35 |
| 69 | Reaction of aromatic diamines with diphenylcarbonate catalyzed by phosphorous acids: a new clean synthetic route to mono- and dicarbamates. Tetrahedron, 1998, 54, 14145-14156. | 1.0 | 34 |
| 70 | Butanol synthesis from ethanol over CuMgAl mixed oxides modified with palladium (II) and indium (III). Fuel Processing Technology, 2018, 177, 353-357. | 3.7 | 34 |
| 71 | Solar energy utilization in the direct photocarboxylation of 2,3-dihydrofuran using CO<sub>2</sub>. Faraday Discussions, 2015, 183, 413-427. | 1.6 | 33 |
| 72 | The kinetics and mechanism of the reaction between carbon dioxide and a series of amines. Journal of Molecular Catalysis A, 2001, 174, 7-13. | 4.8 | 32 |

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| 73 | The solid state structure and reactivity of NbCl5Â·(N,Nâ€²-dicyclohexylurea) in solution: evidence for co-ordinated urea dehydration to the relevant carbodiimide. Dalton Transactions, 2010, 39, 6985. | 1.6 | 31 |
| 74 | Energy issues in the utilization of CO2 in the synthesis of chemicals: The case of the direct carboxylation of alcohols to dialkyl-carbonates. Catalysis Today, 2017, 281, 345-351. | 2.2 | 31 |
| 75 | Reduction of co-ordinated carbon dioxide to carbon monoxide via protonation by thiols and other BrÃ¸nsted acids promoted by Ni-systems: a contribution to the understanding of the mode of action of the enzyme carbon monoxide dehydrogenase. Journal of the Chemical Society Chemical Communications, 1988, , . | 2.0 | 30 |
| 76 | Interaction of Palladium(II) Complexes with Amino-Alcohols: Synthesis of New Amino-Carbonyl Complexes, Key Intermediates to Cyclic Carbamates. Organometallics, 2008, 27, 967-975. | 1.1 | 30 |
| 77 | Sustainable Synthesis of Oxalic and Succinic Acid through Aerobic Oxidation of C6 Polyols Under Mild Conditions. ChemSusChem, 2018, 11, 1073-1081. | 3.6 | 30 |
| 78 | Unique Evidence for a RhIII to RhI Reduction by Deoxygenation of a Carbonate Moiety to CO2 by an Out-of-Sphere Phosphane. European Journal of Inorganic Chemistry, 2001, 2001, 1801-1806. | 1.0 | 29 |
| 79 | Mixed Anhydrides: Key Intermediates in Carbamates Forming Processes of Industrial Interest. Chemistry - A European Journal, 2002, 8, 685-690. | 1.7 | 29 |
| 80 | First in vitro use of the phenylphosphate carboxylase enzyme in supercritical CO2 for the selective carboxylation of phenol to 4-hydroxybenzoic acid. Environmental Chemistry Letters, 2006, 3, 145-148. | 8.3 | 29 |
| 81 | High throughput experiment approach to the oxidation of propene-to-propene oxide with transition-metal oxides as O-donors. Catalysis Today, 2008, 137, 44-51. | 2.2 | 29 |
| 82 | Selective Oxidation of 5-(Hydroxymethyl)furfural to DFF Using Water as Solvent and Oxygen as Oxidant with Earth-Crust-Abundant Mixed Oxides. ACS Omega, 2018, 3, 18724-18729. | 1.6 | 28 |
| 83 | Rh3+ and Rh3+â€“diamine complexes intercalated in Î³-titanium hydrogen phosphate. Synthesis, characterisation and catalytic activity towards aniline oxidative carbonylation processes. Journal of Molecular Catalysis A, 2000, 157, 131-141. | 4.8 | 27 |
| 84 | Impact of heavy metals and PCBs on marine picoplankton. Environmental Toxicology, 2006, 21, 541-551. | 2.1 | 27 |
| 85 | Reaction of alkali-metal tetraphenylborates with amines in the presence of CO2: a new easy way to aliphatic and aromatic alkali-metal carbamates. Journal of the Chemical Society Dalton Transactions, 1995, , 3359. | 1.1 | 26 |
| 86 | Carbon Dioxide Utilization: Greening Both the Energy and Chemical Industry: An Overview. ACS Symposium Series, 2003, , 2-39. | 0.5 | 25 |
| 87 | Biotechnology to develop innovative syntheses using CO2. Environmental Chemistry Letters, 2005, 3, 113-117. | 8.3 | 25 |
| 88 | Interaction of PdCl2-2-(Î²-diphenylphosphine)ethylpyridine Complex with Diols and CO:Â Synthesis of New Alkoxycarbonyl Complexes, Key Intermediates to Cyclic Carbonates. Organometallics, 2006, 25, 2872-2879. | 1.1 | 25 |
| 89 | Synthesis of cyclic carbonates from epoxides: Use of reticular oxygen of Al2O3 or Al2O3-supported CeOx for the selective epoxidation of propene. Catalysis Today, 2006, 115, 117-123. | 2.2 | 25 |
| 90 | Catalytic Synthesis of Hydroxymethylâ€2â€oxazolidinones from Glycerol or Glycerol Carbonate and Urea. ChemSusChem, 2013, 6, 345-352. | 3.6 | 25 |

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| 91 | Alkali-metal-assisted transfer of the carbamate group from phosphocarbamates to alkyl halides: a new easy way to alkali-metal carbamates and to carbamate esters. Journal of the Chemical Society Dalton Transactions, 1992, , 1893. | 1.1 | 24 |
| 92 | Carbamoyl complexes as a source of isocyanates or carbamyl chlorides. Journal of Organometallic Chemistry, 1994, 476, 13-18. | 0.8 | 24 |
| 93 | Comparison of the behaviour of supported homogeneous catalysts in the synthesis of dimethylcarbonate from methanol and carbon dioxide: Polystyrene-grafted tin-metallorganic species versus silesquioxanes linked Nb-methoxo species. Inorganica Chimica Acta, 2008, 361, 3215-3220. | 1.2 | 24 |
| 94 | Tetraphenylborate Anion as a Phenylating Agent: Chemical and Electrochemical Reactivity of BPh4--Rh Complexes toward Mono- and Dienes and Carbon Dioxide. Organometallics, 1995, 14, 3349-3356. | 1.1 | 23 |
| 95 | Carbon Dioxide Reduction and Uses as a Chemical Feedstock. , 2006, , 1-41. | | 23 |
| 96 | Hybrid Materials for CO<sub>2</sub> Uptake from Simulated Flue Gases: Xerogels Containing Diamines. ChemSusChem, 2008, 1, 742-745. | 3.6 | 23 |
| 97 | Bioinorganic chemistry of nickel and carbon dioxide: an Ni complex behaving as a model system for carbon monoxide dehydrogenase enzyme. Inorganica Chimica Acta, 1998, 272, 38-42. | 1.2 | 22 |
| 98 | Unprecedented formal â€˜2+2â€™ addition of allene to CO2 promoted by [RhCl(C2H4)(PiPr3)]2: direct synthesis of the four membered lactone Î±-methylene-Î²-oxiethanone. The intermediacy of [RhH2Cl(PiPr3)]2: theoretical aspects and experiments. Inorganica Chimica Acta, 2002, 334, 294-300. | 1.2 | 22 |
| 99 | Synthesis and characterization of a novel polystyrene-tethered niobium methoxo species. Its application in the CO2-based carboxylation of methanol to afford dimethyl carbonate. Applied Catalysis A: General, 2010, 387, 113-118. | 2.2 | 22 |
| 100 | Reaction Mechanisms in the Direct Carboxylation of Alcohols for the Synthesis of Acyclic Carbonates. Topics in Catalysis, 2015, 58, 2-14. | 1.3 | 22 |
| 101 | Photocatalytic carboxylation of C H bonds promoted by popped graphene oxide (PGO) either bare or loaded with CuO. Journal of CO2 Utilization, 2017, 20, 97-104. | 3.3 | 22 |
| 102 | Behaviour of[PdH(dppe)2]X (X=CF3SO3â˜, SbF6â˜, BF4â˜) as Proton or Hydride Donor: Relevance to Catalysis. Chemistry - A European Journal, 2004, 10, 3708-3716. | 1.7 | 21 |
| 103 | Oxidative Addition of Allylammonium BPh4-to Nickel(0):Â Synthesis, Crystal Structure, Fluxional Behavior, and Catalytic Activity of Chiral [(Î·3-allyl)(NH3)(PCy3)Ni]BPh4. Organometallics, 2000, 19, 4199-4207. | 1.1 | 20 |
| 104 | Carbon Dioxide Fixation into Organic Compounds. , 2003, , 211-260. | | 20 |
| 105 | Prospects for the utilization of carbon dioxide. Energy Conversion and Management, 1992, 33, 495-504. | 4.4 | 18 |
| 106 | New catalysts for the conversion of urea into carbamates and carbonates with C1 and C2 alcohols. Studies in Surface Science and Catalysis, 2004, , 213-220. | 1.5 | 18 |
| 107 | Converting â€œExhaustâ€•Carbon into â€œWorkingâ€•Carbon. Advances in Inorganic Chemistry, 2014, 66, 259-288. | 0.4 | 18 |
| 108 | The reaction mechanism in the ethanolysis of urea with transition metal-based catalysts: DFT calculations and experiments. Journal of CO2 Utilization, 2014, 8, 27-33. | 3.3 | 18 |

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| 109 | ATR Copolymerization of Styrene with 2-Vinylfuran: An Entry to Functional Styrenic Polymers. Macromolecules, 2014, 47, 7129-7137. | 2.2 | 18 |
| 110 | Synthesis, Characterization, and Reactivity of Cationic Hydride [HPd(diphosphine)2]+CF3SO3-, the Missing Member of the Family [HM(dppe)2]+X-(M = Ni, Pd, Pt). DFT QM/MM Structural Predictions for the [HPd(dppe)2]+Moiety. Inorganic Chemistry, 2002, 41, 6550-6552. | 1.9 | 17 |
| 111 | Carbon Recycling Through CO2-Conversion for Stepping Toward a Cyclic-C Economy. A Perspective. Frontiers in Energy Research, 2020, 8, . | 1.2 | 17 |
| 112 | Theoretical IR and Raman spectra of diketene and its 3-methylene isomer. Vibrational Spectroscopy, 2000, 22, 19-28. | 1.2 | 16 |
| 113 | High-energy milling to decontaminate soils polluted by polychlorobiphenyls and atrazine. Environmental Chemistry Letters, 2004, 2, 1-4. | 8.3 | 16 |
| 114 | Isolation and characterization of polyphenols-degrading bacteria from olive-mill wastewaters polluted soil. World Journal of Microbiology and Biotechnology, 2010, 26, 639-647. | 1.7 | 16 |
| 115 | Ceriumâ€Based Binary and Ternary Oxides in the Transesterification of Dimethylcarbonate with Phenol. ChemSusChem, 2014, 7, 1155-1161. | 3.6 | 16 |
| 116 | Perspectives in the use of carbon dioxide. Quimica Nova, 1999, 22, 269-272. | 0.3 | 16 |
| 117 | Key Issues in Carbon Dioxide Utilization as a Building Block for Molecular Organic Compounds in the Chemical Industry. ACS Symposium Series, 2002, , 54-70. | 0.5 | 15 |
| 118 | Rh-ions and Rh-complexes intercalated in Î³-titanium or Î³-zirconium hydrogen phosphate as highly efficient catalysts for arene hydrogenation. Applied Catalysis A: General, 2005, 284, 77-83. | 2.2 | 15 |
| 119 | The Carbon Dioxide Molecule and the Effects of Its Interaction with Electrophiles and Nucleophiles. Topics in Organometallic Chemistry, 2015, , 1-38. | 0.7 | 15 |
| 120 | The need to implement an efficient biomass fractionation and full utilization based on the concept of â€œbiorefineryâ€•for a viable economic utilization of microalgae. Environmental Science and Pollution Research, 2016, 23, 22274-22283. | 2.7 | 15 |
| 121 | Biological activity of metal complexes. Biochemical and Biophysical Research Communications, 1982, 104, 121-125. | 1.0 | 14 |
| 122 | Influence of iron, nickel and cobalt on biogas production during the anaerobic fermentation of fresh residual biomass. Chemistry and Ecology, 2003, 19, 451-459. | 0.6 | 14 |
| 123 | Hydrodechlorination of polychlorobenzenes and polychlorinated aliphatic compounds under mild conditions by Pd and Rh ions or their complexes intercalated in Î³-zirconium phosphate. Journal of Molecular Catalysis A, 2005, 227, 133-140. | 4.8 | 14 |
| 124 | Synthesis of diethylcarbonate by ethanolysis of urea: A study on the recoverability and recyclability of new Zn-based heterogeneous catalysts. Applied Catalysis A: General, 2015, 493, 1-7. | 2.2 | 14 |
| 125 | Synthesis of diethylcarbonate by ethanolysis of urea catalysed by heterogeneous mixed oxides. RSC Advances, 2015, 5, 88401-88408. | 1.7 | 14 |
| 126 | Synthesis and spectroscopic (<sup>1</sup>H NMR, ESR) characterization of new aryloxy-Mn(II) complexes: steric control over O- vs. phenyl-Ï€-coordination of ArO<sup>-</sup> ligands | | |

| # | Article | IF | Citations |
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| 127 | Novel, CO2-promoted synthesis of anhydrous alkylammonium tetraphenylborates: a study on their reactivity as intra- and inter-molecular proton-transfer agents. Journal of Organometallic Chemistry, 1995, 488, 211-222. | 0.8 | 13 |
| 128 | Phenylacetylene carbonylation catalysed by Pd(II) and Rh(III) intercalated in zirconium phosphates. Applied Organometallic Chemistry, 2000, 14, 581-589. | 1.7 | 13 |
| 129 | Structureâ€"biodegradation correlation of polyphenols forThauera aromaticain anaerobic conditions. Chemistry and Ecology, 2006, 22, S133-S143. | 0.6 | 12 |
| 130 | Life Cycle Assessment (LCA) applied to the synthesis of methanol. Comparison of the use of syngas with the use of CO2 and dihydrogen produced from renewables. , 2002, , 331-347. | | 12 |
| 131 | Metal-assisted N-heterocycle synthesis. 5. Conversion of N-allylaniline promoted by rhodium(I): synthesis and molecular structure of 2-ethyl-1,2,3,4-tetrahydro-3-methyl-4-anilinoquinoline. Organometallics, 1988, 7, 577-583. | 1.1 | 10 |
| 132 | The fixation of carbon dioxide in inorganic and organic chemicals. Energy Conversion and Management, 1993, 34, 745-752. | 4.4 | 9 |
| 133 | CO2-catalysed carbamation of aminofunctional silanes. Applied Organometallic Chemistry, 2000, 14, 871-873. | 1.7 | 9 |
| 134 | A technology for the treatment of olive-mill waste water in a continuously fed plant. Environmental Chemistry Letters, 2003, 1, 13-18. | 8.3 | 9 |
| 135 | Synthesis and X-ray characterization of [RhCl(C2H4)(PiPr3)]2. Multinuclear NMR and DFT investigation of its solid-state and solution reaction with dihydrogen. Ethene and propene hydrogenation by the solid Rh-hydrides. Dalton Transactions, 2009, , 7924. | 1.6 | 9 |
| 136 | Carbon dioxide utilization: The way to the circular economy. , 2019, 9, 610-612. | | 9 |
| 137 | Synthesis and Characterization of p-n Junction Ternary Mixed Oxides for Photocatalytic Coprocessing of CO2 and H2O. Catalysts, 2020, 10, 980. | 1.6 | 9 |
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