# Maria E Galvez

## List of Publications by Year in Descending Order



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| 109 papers | 3,945 citations | 39 h-index | 57 g-index |
| 109 ext. papers | 4,588 ext. citations | 5.9 avg, IF | 5.81 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 109 | Alternative ball-milling synthesis of vanadium-substituted polyoxometalates as catalysts for the aerobic cleavage of C-C and C-O bonds. *Dalton Transactions*, **2021**, 50, 12850-12859 | 4.3 | |
| 108 | Tailoring physicochemical and electrical properties of Ni/CeZrOx doped catalysts for high efficiency of plasma catalytic CO2 methanation. *Applied Catalysis B: Environmental*, **2021**, 294, 120233 | 21.8 | 6 |
| 107 | Effect of Na and K impurities on the performance of Ni/CeZrOx catalysts in DBD plasma-catalytic CO2 methanation. *Fuel*, **2021**, 306, 121639 | 7.1 | 5 |
| 106 | Coupling experiment and simulation analysis to investigate physical parameters of CO2 methanation in a plasma-catalytic hybrid process. *Plasma Processes and Polymers*, **2020**, 17, 1900261 | 3.4 | 10 |
| 105 | Ni/zeolite X derived from fly ash as catalysts for CO2 methanation. *Fuel*, **2020**, 267, 117139 | 7.1 | 35 |
| 104 | Effect of Biodiesel impurities (K, Na, P) on non-catalytic and catalytic activities of Diesel soot in model DPF regeneration conditions. *Fuel Processing Technology*, **2020**, 199, 106293 | 7.2 | 13 |
| 103 | Physical and chemical characterization of shock-induced cavitation. *Ultrasonics Sonochemistry*, **2020**, 69, 105270 | 8.9 | 2 |
| 102 | Ni-Fe layered double hydroxide derived catalysts for non-plasma and DBD plasma-assisted CO2 methanation. *International Journal of Hydrogen Energy*, **2020**, 45, 10423-10432 | 6.7 | 30 |
| 101 | Electrocatalytic behaviour of CeZrOx-supported Ni catalysts in plasma assisted CO2 methanation. *Catalysis Science and Technology*, **2020**, 10, 4532-4543 | 5.5 | 14 |
| 100 | Structure, surface and reactivity of activated carbon: From model soot to Bio Diesel soot. *Fuel*, **2019**, 257, 116038 | 7.1 | 23 |
| 99 | Novel Nickel- and Magnesium-Modified Cenospheres as Catalysts for Dry Reforming of Methane at Moderate Temperatures. *Catalysts*, **2019**, 9, 1066 | 4 | 4 |
| 98 | Sonocatalytic oxidation of EDTA in aqueous solutions over noble metal-free Co3O4/TiO2 catalyst. *Applied Catalysis B: Environmental*, **2019**, 241, 570-577 | 21.8 | 25 |
| 97 | Structure-reactivity study of model and Biodiesel soot in model DPF regeneration conditions. *Fuel*, **2019**, 239, 373-386 | 7.1 | 22 |
| 96 | Operando FT-IR study on basicity improvement of Ni(Mg, Al)O hydrotalcite-derived catalysts promoted by glow plasma discharge. *Plasma Science and Technology*, **2019**, 21, 045503 | 1.5 | 9 |
| 95 | Plasma-catalytic hybrid process for CO2 methanation: optimization of operation parameters. *Reaction Kinetics, Mechanisms and Catalysis*, **2019**, 126, 629-643 | 1.6 | 19 |
| 94 | TiO2/clay as a heterogeneous catalyst in photocatalytic/photochemical oxidation of anionic reactive blue 19. *Arabian Journal of Chemistry*, **2019**, 12, 1454-1462 | 5.9 | 40 |
| 93 | Syngas production from dry methane reforming over yttrium-promoted nickel-KIT-6 catalysts. *International Journal of Hydrogen Energy*, **2019**, 44, 274-286 | 6.7 | 52 |

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| 92 | Natural clay based nickel catalysts for dry reforming of methane: On the effect of support promotion (La, Al, Mn). *International Journal of Hydrogen Energy*, **2019**, 44, 246-255 | 6.7 | 36 |
| 91 | Examination of the influence of La promotion on Ni state in hydrotalcite-derived catalysts under CO2 methanation reaction conditions: Operando X-ray absorption and emission spectroscopy investigation. *Applied Catalysis B: Environmental*, **2018**, 232, 409-419 | 21.8 | 58 |
| 90 | The influence of lanthanum incorporation method on the performance of nickel-containing hydrotalcite-derived catalysts in CO2 methanation reaction. *Catalysis Today*, **2018**, 307, 205-211 | 5.3 | 39 |
| 89 | Natural clay-based Ni-catalysts for dry reforming of methane at moderate temperatures. *Catalysis Today*, **2018**, 306, 51-57 | 5.3 | 21 |
| 88 | Efficient removal of cadmium and 2-chlorophenol in aqueous systems by natural clay: Adsorption and photo-Fenton degradation processes. *Comptes Rendus Chimie*, **2018**, 21, 253-262 | 2.7 | 29 |
| 87 | Promotion effect of zirconia on Mg(Ni,Al)O mixed oxides derived from hydrotalcites in CO2 methane reforming. *Applied Catalysis B: Environmental*, **2018**, 223, 36-46 | 21.8 | 73 |
| 86 | Experimental investigation on the influence of the presence of alkali compounds on the performance of a commercial PtPd/Al2O3 diesel oxidation catalyst. *Clean Technologies and Environmental Policy*, **2018**, 20, 715-725 | 4.3 | 5 |
| 85 | Natural Hematite and Siderite as Heterogeneous Catalysts for an Effective Degradation of 4-Chlorophenol via Photo-Fenton Process. *ChemEngineering*, **2018**, 2, 29 | 2.6 | 5 |
| 84 | Dry reforming of methane over Zr- and Y-modified Ni/Mg/Al double-layered hydroxides. *Catalysis Communications*, **2018**, 117, 26-32 | 3.2 | 33 |
| 83 | Yttrium promoted Ni-based double-layered hydroxides for dry methane reforming. *Journal of CO2 Utilization*, **2018**, 27, 247-258 | 7.6 | 58 |
| 82 | MnOx-CeO2 mixed oxides as the catalyst for NO-assisted soot oxidation: The key role of NO adsorption/desorption on catalytic activity. *Applied Surface Science*, **2018**, 462, 678-684 | 6.7 | 27 |
| 81 | Excess-methane dry and oxidative reforming on Ni-containing hydrotalcite-derived catalysts for biogas upgrading into synthesis gas. *International Journal of Hydrogen Energy*, **2018**, 43, 11981-11989 | 6.7 | 16 |
| 80 | Photocatalytic decolorization of cationic and anionic dyes over ZnO nanoparticle immobilized on natural Tunisian clay. *Applied Clay Science*, **2018**, 152, 148-157 | 5.2 | 74 |
| 79 | Ni2Mo 2 C supported on alumina as a substitute for Ni2Mo reduced catalysts supported on alumina material for dry reforming of methane. *Comptes Rendus Chimie*, **2018**, 21, 247-252 | 2.7 | 8 |
| 78 | Nickel Supported Modified Ceria Zirconia Lanthanum/ Praseodymium/Yttrium Oxides Catalysts for Syngas Production through Dry Methane Reforming. *Materials Science Forum*, **2018**, 941, 2214-2219 | 0.4 | 5 |
| 77 | Synthesis Gas Production via Dry Reforming of Methane over Manganese Promoted Nickel/Cerium2Zirconium Oxide Catalyst. *Industrial & Engineering Chemistry Research*, **2018**, 57, 16645-16656 | 3.9 | 34 |
| 76 | New Approach for Understanding the Oxidation Stability of Neopolyol Ester Lubricants Using a Small-Scale Oxidation Test Method. *ACS Omega*, **2018**, 3, 10449-10459 | 3.9 | 5 |
| 75 | Mg-promotion of Ni natural clay-supported catalysts for dry reforming of methane.. *RSC Advances*, **2018**, 8, 19627-19634 | 3.7 | 10 |

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| 74 | Influence of the Alumina Precursor on the Activity of Structured Fe/K/Al2O3 Catalysts Towards the Simultaneous Removal of Soot and NOx. *Topics in Catalysis*, **2017**, 60, 355-360 | 2.3 | |
| 73 | Shock-induced cavitation as a way of accelerating phenol oxidation in aqueous media. *Chemical Engineering and Processing: Process Intensification*, **2017**, 112, 47-55 | 3.7 | 4 |
| 72 | Ceria and zirconia modified natural clay based nickel catalysts for dry reforming of methane. *International Journal of Hydrogen Energy*, **2017**, 42, 23508-23516 | 6.7 | 21 |
| 71 | Influence of Ce/Zr molar ratio on catalytic performance of hydrotalcite-derived catalysts at low temperature CO 2 methane reforming. *International Journal of Hydrogen Energy*, **2017**, 42, 23556-23567 | 6.7 | 46 |
| 70 | Mo-promoted Ni/Al 2 O 3 catalyst for dry reforming of methane. *International Journal of Hydrogen Energy*, **2017**, 42, 23500-23507 | 6.7 | 40 |
| 69 | The influence of nickel content on the performance of hydrotalcite-derived catalysts in CO 2 methanation reaction. *International Journal of Hydrogen Energy*, **2017**, 42, 23548-23555 | 6.7 | 68 |
| 68 | Catalytic activity of hydrotalcite-derived catalysts in the dry reforming of methane: on the effect of Ce promotion and feed gas composition. *Reaction Kinetics, Mechanisms and Catalysis*, **2017**, 121, 185-208 | 1.6 | 32 |
| 67 | Plasma DBD activated ceria-zirconia-promoted Ni-catalysts for plasma catalytic CO2 hydrogenation at low temperature. *Catalysis Communications*, **2017**, 89, 73-76 | 3.2 | 48 |
| 66 | N-Doped Carbon Xerogels as Pt Support for the Electro-Reduction of Oxygen. *Materials*, **2017**, 10, | 3.5 | 19 |
| 65 | A Short Review on the Catalytic Activity of Hydrotalcite-Derived Materials for Dry Reforming of Methane. *Catalysts*, **2017**, 7, 32 | 4 | 78 |
| 64 | Alumina-Supported Ni-Mo Carbides as Promising Catalysts for CO<sub>2</sub> Methanation. *Modern Research in Catalysis*, **2017**, 06, 135-145 | 0.6 | 4 |
| 63 | Nanooxides Derived from Hydrotalcites as Catalysts for Dry Methane Reforming Reaction - Effect of [Ni(EDTA)]2- Adsorption Time. *Materials Science Forum*, **2016**, 879, 396-401 | 0.4 | 0 |
| 62 | Methane dry reforming over hydrotalcite-derived NiMgAl mixed oxides: the influence of Ni content on catalytic activity, selectivity and stability. *Catalysis Science and Technology*, **2016**, 6, 6705-6715 | 5.5 | 90 |
| 61 | Heterogeneous TiO2 Fe-plate catalyst for the discoloration and mineralization of aqueous solutions of cationic and anionic dyes. *Desalination and Water Treatment*, **2016**, 57, 13505-13517 | | 7 |
| 60 | Low temperature dry methane reforming over Ce, Zr and CeZr promoted NiMgAl hydrotalcite-derived catalysts. *International Journal of Hydrogen Energy*, **2016**, 41, 11616-11623 | 6.7 | 90 |
| 59 | Photocatalytic degradation of methyl green dye in aqueous solution over natural clay-supported ZnO-TiO2 catalysts. *Journal of Photochemistry and Photobiology A: Chemistry*, **2016**, 315, 25-33 | 4.7 | 115 |
| 58 | Hybrid plasma-catalytic methanation of CO2 at low temperature over ceria zirconia supported Ni catalysts. *International Journal of Hydrogen Energy*, **2016**, 41, 11584-11592 | 6.7 | 93 |
| 57 | La-promoted Ni-hydrotalcite-derived catalysts for dry reforming of methane at low temperatures. *Fuel*, **2016**, 182, 8-16 | 7.1 | 118 |

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| 56 | Sulfurized carbon xerogels as Pt support with enhanced activity for fuel cell applications. *Applied Catalysis B: Environmental*, **2016**, 192, 260-267 | 21.8 | 35 |
| 55 | Novel Ni-La-hydrotalcite derived catalysts for CO2 methanation. *Catalysis Communications*, **2016**, 83, 5-8 | 3.2 | 112 |
| 54 | Low temperature hybrid plasma-catalytic methanation over Ni-Ce-Zr hydrotalcite-derived catalysts. *Catalysis Communications*, **2016**, 83, 14-17 | 3.2 | 54 |
| 53 | Tailoring carbon xerogels' properties to enhance catalytic activity of Pt catalysts towards methanol oxidation. *International Journal of Hydrogen Energy*, **2015**, 40, 14736-14745 | 6.7 | 11 |
| 52 | Design Principles of Perovskites for Thermochemical Oxygen Separation. *ChemSusChem*, **2015**, 8, 1966-71 | 8.3 | 73 |
| 51 | Ni-containing Ce-promoted hydrotalcite derived materials as catalysts for methane reforming with carbon dioxide at low temperature □On the effect of basicity. *Catalysis Today*, **2015**, 257, 59-65 | 5.3 | 113 |
| 50 | Photo-Fenton oxidation of phenol over a Cu-doped Fe-pillared clay. *Comptes Rendus Chimie*, **2015**, 18, 1161-1169 | 2.7 | 26 |
| 49 | Ni□Al hydrotalcite-like material as the catalyst precursors for the dry reforming of methane at low temperature. *Comptes Rendus Chimie*, **2015**, 18, 1205-1210 | 2.7 | 29 |
| 48 | Carbon-based catalysts: Synthesis and applications. *Comptes Rendus Chimie*, **2015**, 18, 1229-1241 | 2.7 | 29 |
| 47 | Influence of gas hourly space velocity on the activity of monolithic catalysts for the simultaneous removal of soot and NOx. *Comptes Rendus Chimie*, **2015**, 18, 1007-1012 | 2.7 | 11 |
| 46 | Enhanced catalytic stability through non-conventional synthesis of Ni/SBA-15 for methane dry reforming at low temperatures. *Applied Catalysis A: General*, **2015**, 504, 143-150 | 5.1 | 90 |
| 45 | Synthesis strategies of ceria□zirconia doped Ni/SBA-15 catalysts for methane dry reforming. *Catalysis Communications*, **2015**, 59, 108-112 | 3.2 | 67 |
| 44 | Lanthanum Manganite Perovskites with Ca/Sr A-site and Al B-site Doping as Effective Oxygen Exchange Materials for Solar Thermochemical Fuel Production. *Energy Technology*, **2015**, 3, 1130-1142 | 3.5 | 95 |
| 43 | Titanium Dioxide Supported on Different Porous Materials as Photocatalyst for the Degradation of Methyl Green in Wastewaters. *Advances in Materials Science and Engineering*, **2015**, 2015, 1-10 | 1.5 | 11 |
| 42 | Physico-chemical changes in Ca, Sr and Al-doped La-Mn-O perovskites upon thermochemical splitting of CO2 via redox cycling. *Physical Chemistry Chemical Physics*, **2015**, 17, 6629-34 | 3.6 | 84 |
| 41 | Influence of the Synthesis Method for Pt Catalysts Supported on Highly Mesoporous Carbon Xerogel and Vulcan Carbon Black on the Electro-Oxidation of Methanol. *Catalysts*, **2015**, 5, 392-405 | 4 | 23 |
| 40 | Fast and reversible direct CO2 capture from air onto all-polymer nanofibrillated cellulose-polyethylenimine foams. *Environmental Science & Technology*, **2015**, 49, 3167-74 | 10.3 | 100 |
| 39 | Fe-clay-plate as a heterogeneous catalyst in photo-Fenton oxidation of phenol as probe molecule for water treatment. *Applied Clay Science*, **2014**, 91-92, 46-54 | 5.2 | 75 |

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| 38 | Towards new generation fuel cell electrocatalysts based on xerogel–nanofiber carbon composites. *Journal of Materials Chemistry A*, **2014**, 2, 13713 | 13 | 30 |
| 37 | Towards an optimal synthesis route for the preparation of highly mesoporous carbon xerogel-supported Pt catalysts for the oxygen reduction reaction. *Applied Catalysis B: Environmental*, **2014**, 147, 947-957 | 21.8 | 44 |
| 36 | Influence of synthesis parameters of SBA-15 supported palladium catalysts for methane combustion and simultaneous NOx reduction. *Microporous and Mesoporous Materials*, **2014**, 183, 1-8 | 5.3 | 17 |
| 35 | On the influence of the alumina precursor in Fe-K/Al2O3 structured catalysts for the simultaneous removal of soot and NOx: From surface properties to reaction mechanism. *Comptes Rendus Chimie*, **2014**, 17, 681-686 | 2.7 | 5 |
| 34 | Mechanism of Zn Particle Oxidation by HO and CO in the Presence of ZnO. *Chemistry of Materials*, **2014**, 26, 6486-6495 | 9.6 | 28 |
| 33 | Influence of the Alkali Promoter on the Activity and Stability of Transition Metal (Cu, Co, Fe) Based Structured Catalysts for the Simultaneous Removal of Soot and NOx. *Topics in Catalysis*, **2013**, 56, 493-498 | 2.3 | 18 |
| 32 | Influence of Operational Parameters in the Heterogeneous Photo-Fenton Discoloration of Wastewaters in the Presence of an Iron-Pillared Clay. *Industrial & Engineering Chemistry Research*, **2013**, 52, 16656-16665 | 3.9 | 49 |
| 31 | Me (Cu, Co, V)-K/Al2O3 supported catalysts for the simultaneous removal of soot and nitrogen oxides from diesel exhausts. *Chemical Engineering Science*, **2013**, 87, 75-90 | 4.4 | 20 |
| 30 | Platinum Ruthenium Catalysts Supported on Carbon Xerogel for Methanol Electro-Oxidation: Influence of the Catalyst Synthesis Method. *ChemCatChem*, **2013**, 5, 3770-3780 | 5.2 | 18 |
| 29 | Oxygen-Functionalized Highly Mesoporous Carbon Xerogel Based Catalysts for Direct Methanol Fuel Cell Anodes. *Journal of Physical Chemistry C*, **2013**, 117, 13045-13058 | 3.8 | 39 |
| 28 | PtRu Nanoparticles Deposited by the Sulfite Complex Method on Highly Porous Carbon Xerogels: Effect of the Thermal Treatment. *Catalysts*, **2013**, 3, 744-756 | 4 | 8 |
| 27 | Nanostructured Carbon Materials as Supports in the Preparation of Direct Methanol Fuel Cell Electrocatalysts. *Catalysts*, **2013**, 3, 671-682 | 4 | 13 |
| 26 | Cesium as Alkali Promoter in Me-Cs (Me = Cu, Co, Fe)/ Al<sub>2</sub>O<sub>3</sub> Structured Catalysts for the Simultaneous Removal of Soot and NO<sub>x</sub>. *Modern Research in Catalysis*, **2013**, 02, 57-62 | 0.6 | 2 |
| 25 | Catalytic filters for the simultaneous removal of soot and NOx: Influence of the alumina precursor on monolith washcoating and catalytic activity. *Catalysis Today*, **2012**, 191, 96-105 | 5.3 | 31 |
| 24 | Influence of support's oxygen functionalization on the activity of Pt/carbon xerogels catalysts for methanol electro-oxidation. *International Journal of Hydrogen Energy*, **2012**, 37, 7180-7191 | 6.7 | 36 |
| 23 | Tailoring Synthesis Conditions of Carbon Xerogels towards Their Utilization as Pt-Catalyst Supports for Oxygen Reduction Reaction (ORR). *Catalysts*, **2012**, 2, 466-489 | 4 | 27 |
| 22 | Soot oxidation in the presence of NO over alumina-supported bimetallic catalysts K–Me (Me=Cu, Co, V). *Catalysis Today*, **2011**, 176, 361-364 | 5.3 | 11 |
| 21 | Catalytic filters for the simultaneous removal of soot and NOx: Effect of CO2 and steam on the exhaust gas of diesel engines. *Catalysis Today*, **2011**, 176, 134-138 | 5.3 | 7 |

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| 20 | Solar Aluminum Production by Vacuum Carbothermal Reduction of Alumina—Thermodynamic and Experimental Analyses. *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science*, **2011**, 42, 254-260 | 2.5 | 42 |
| 19 | Low-cost carbon-based briquettes for the reduction of NO emissions: Optimal preparation procedure and influence in operating conditions. *Journal of Analytical and Applied Pyrolysis*, **2010**, 88, 80-90 | 6 | 9 |
| 18 | CO2 splitting in an aerosol flow reactor via the two-step Zn/ZnO solar thermochemical cycle. *Chemical Engineering Science*, **2010**, 65, 1855-1864 | 4.4 | 40 |
| 17 | Production of AlN by Carbothermal and Methanothermal Reduction of Al2O3 in a N2 Flow Using Concentrated Thermal Radiation. *Industrial & Engineering Chemistry Research*, **2009**, 48, 528-533 | 3.9 | 22 |
| 16 | CO2 Splitting via Two-Step Solar Thermochemical Cycles with Zn/ZnO and FeO/Fe3O4 Redox Reactions II: Kinetic Analysis. *Energy & Fuels*, **2009**, 23, 2832-2839 | 4.1 | 89 |
| 15 | Ammonia Production via a Two-Step Al2O3/AlN Thermochemical Cycle. 3. Influence of the Carbon Reducing Agent and Cyclability. *Industrial & Engineering Chemistry Research*, **2008**, 47, 2231-2237 | 3.9 | 30 |
| 14 | CO2 Splitting via Two-Step Solar Thermochemical Cycles with Zn/ZnO and FeO/Fe3O4 Redox Reactions: Thermodynamic Analysis. *Energy & Fuels*, **2008**, 22, 3544-3550 | 4.1 | 128 |
| 13 | Solar hydrogen production via a two-step thermochemical process based on MgO/Mg redox reactions—thermodynamic and kinetic analyses. *International Journal of Hydrogen Energy*, **2008**, 33, 2880-2890 | 6.7 | 62 |
| 12 | Carbon based catalytic briquettes for the reduction of NO: Catalyst scale-up. *Catalysis Today*, **2008**, 137, 209-214 | 5.3 | 9 |
| 11 | Novel carbon based catalysts for the reduction of NO: Influence of support precursors and active phase loading. *Catalysis Today*, **2008**, 137, 215-221 | 5.3 | 15 |
| 10 | Carbon-based catalytic briquettes for the reduction of NO: Effect of H2SO4 and HNO3 carbon support treatment. *Fuel*, **2008**, 87, 2058-2068 | 7.1 | 48 |
| 9 | Ammonia Production via a Two-Step Al2O3/AlN Thermochemical Cycle. 1. Thermodynamic, Environmental, and Economic Analyses. *Industrial & Engineering Chemistry Research*, **2007**, 46, 2042-2046 | 3.9 | 68 |
| 8 | Low-cost carbon-based briquettes for the reduction of no emissions from medium—small stationary sources. *Catalysis Today*, **2007**, 119, 175-180 | 5.3 | 14 |
| 7 | Preparation of steam-activated carbons as catalyst supports. *Journal of Analytical and Applied Pyrolysis*, **2007**, 78, 301-315 | 6 | 34 |
| 6 | Hydrogen production by thermo-catalytic decomposition of methane: Regeneration of active carbons using CO2. *Journal of Power Sources*, **2007**, 169, 103-109 | 8.9 | 61 |
| 5 | Ammonia Production via a Two-Step Al2O3/AlN Thermochemical Cycle. 2. Kinetic Analysis. *Industrial & Engineering Chemistry Research*, **2007**, 46, 2047-2053 | 3.9 | 47 |
| 4 | Vanadium loaded carbon-based catalysts for the reduction of nitric oxide. *Applied Catalysis B: Environmental*, **2006**, 68, 130-138 | 21.8 | 30 |
| 3 | Characterization and kinetic study of carbon-based briquettes for the reduction of NO. *Carbon*, **2006**, 44, 2399-2403 | 10.4 | 19 |

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| 2 | Low cost catalytic sorbents for NOx reduction. 3. NO reduction tests using NH3 as reducing agent. *Fuel*, **2004**, 83, 875-884 | 7.1 | 16 |
| 1 | Nickel Supported Modified Zirconia Catalysts for CO2 Methanation in DBD Plasma Catalytic Hybrid Process. *Materials Science Forum*,1016, 894-899 | 0.4 | 3 |