

Selected Academic References - CATALYSIS

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Catalysis Research Centre, Dept of Chemistry, University of Reading, Whiteknights, Reading, RG6 6AD, UK
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Research Laboratory of Materials & Environmental Chemistry, Chemical Research Centre Hungarian Academy of Sciences, P.O. Box 17, Budapest 1525, Hungary
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- G 9. **The detailed kinetics of the adsorption of hydrogen on polycrystalline copper studied by reactive frontal chromatography**
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- G 11. **Characterization & catalytic properties of Pt/TiO₂ catalyst prepared by photochemical deposition**
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- G 12. **Selective & Facile C-F Bond Activation of Trifluoromethyl Groups on Cu(111)**
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- G 37 **The influence of silver on the structural, redox and catalytic properties of the rhytidomelane-type manganese oxides in the low-temperature CO oxidation reaction**
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- G 38 **The influence of the preparation methods and pretreatment conditions on the properties of Ag-MCM-41 catalysts**
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- G 45 **Embedded Rh(1 wt.%)@Al₂O₃: Effects of high temperature and prolonged aging under methane partial oxidation conditions**
 T. Montini^a, A.M. Condò^{b,c}, N. Hickey^a, F.C. Lovey^b, L. De Rogatis^a, P. Fornasiero^{a,*}, M. Graziani^a
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- G 46 **Design and operation of a high pressure reaction cell for in situ X-ray absorption spectroscopy**
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- G 49. **TiO₂ nanopowders doped with boron and nitrogen for photocatalytic applications**
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- G 50 **An integrated system of biological and catalytic oxidation for the removal of o-xylene from exhaust**
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- G 51 **An investigation of NO/CO reaction over perovskite-type oxide La_{0.8}Ce_{0.2}B_{0.4}Mn_{0.6}O₃ (B = Cu or Ag) catalysts synthesized by reverse microemulsion**
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- G 52 **Cu/ZnO/Al₂O₃ catalysts for oxidative steam reforming of methanol: The role of Cu and the dispersing oxide matrix**
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- G 53 **Mechanism of ammonia oxidation over oxides studied by temporal analysis of products**
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- G 54 **Nanosized perovskite-type oxides La_{1-x}Sr_xMO_{3-d} (M = Co, Mn; x = 0, 0.4) for the catalytic removal of ethylacetate**
Jianrong Niu, Jiguang Deng, Wei Liu, Lei Zhang, Guozhi Wang, Hongxing Dai *, Hong He, Xuehong Zi
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- G 55 **Promotion effect of residual K on the decomposition of N₂O over cobalt–cerium mixed oxide catalyst**
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- G 56 **Selective catalytic oxidation of ammonia from MAP decomposition**
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- G 57 **Synthesis of CeO₂–MnO_x mixed oxides and catalytic performance under oxygen-rich condition**
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- G 58 **Significant impact of nitric acid treatment on the cathode performance of Ba_{0.5}Sr_{0.5}Co_{0.8}Fe_{0.2}O_{3-δ} perovskite oxide via combined EDTA–citric complexing process**
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- G 59 **Hydrogen dissociation on oxide covered MgH₂ by catalytically active vacancies**
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- G 60 **New polystyrene sulfonic acid resin catalysts with enhanced acidic and catalytic properties**
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- G 61 **A comparative investigation on the properties of Cr-SBA-15 and CrO_x/SBA-15**
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- G 62 **An investigation of NO/CO reaction over perovskite-type oxide La_{0.8}Ce_{0.2}B_{0.4}Mn_{0.6}O₃ (B = Cu or Ag) catalysts synthesized by reverse microemulsion**
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- G 63 **Coral-like nanostructured α-Mn₂O₃ nanocrystals for catalytic combustion of methane. Part I. Preparation and characterization**
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- G 64 **Re-investigating the CO oxidation mechanism over unsupported MnO, Mn₂O₃ and MnO₂ catalysts**
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School of Mechanical Materials and Manufacturing Engineering, The University of Nottingham, Nottingham NG7 2RD, UK
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- G 66. **Insight into the key aspects of the regeneration process in the NOX Storage Reduction (NSR) reaction probed using fast transient kinetics coupled with isotopically labelled ^{15}NO over Pt and Rh-containing Ba/Al $_2$ O $_3$ catalysts**
J P Breen*, R Burch, C Fontaine-Gautrelet, C Hardacre, C Rioche
CentACat, School of Chemistry and Chemical Engineering, Queen's University of Belfast, Belfast, BT9 5AG, Northern Ireland
To appear in Applied Catalysis B: Environmental
- G 67. **Vanadium-metal(IV)phosphates as catalysts for the oxidative dehydrogenation of ethane**
L. Lisi a, * , G. Ruoppolo a, M.P. Casaletto b, P. Galli c,
M.A. Massucci c, P. Patrono d, F. Pinzari d
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Journal of Molecular Catalysis A: Chemical 232 (2005) 127–134
- G 68. **Evaluating the catalytic performances of SAPO-34 catalysts for the oxidative dehydrogenation of ethane**
L. Lisi^a, L. Marchese^{b*}, H.O. Pastore^c, A. Frache^b, G. Ruoppolo^d and G. Russo^a
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Topics in Catalysis Vol. 22, Nos. 1/2, January 2003 (# 2003)
- G 69. **Effect of interparticle interaction on the low temperature oxidation of CO over size-selected Au nanocatalysts supported on ultrathin TiC films**
Luis K. Ono and Beatriz Roldán-Cuenya*
Department of Physics, University of Central Florida, Orlando, FL 32816, USA
Catalysis Letters (2007) DOI: 10.1007/s10562-007-9027-7
- G 70. **Kinetic and spectroscopic study of methane combustion over α -Mn $_2$ O $_3$ nanocrystal catalysts**
Yi-Fan Han *, Luwei Chen, Kanaparthi Ramesh, Effendi Widjaja, Srilakshmi Chilukoti, Ingrid Kesumawinata Surjami, Junsong Chen
Institute of Chemical and Engineering Sciences, 1, Pesek Road, Jurong Island, 627833 Singapore
Journal of Catalysis 253 (2008) 261–268

- G 71. **Properties and performance of Ba_{0.5}Sr_{0.5}Co_{0.8}Fe_{0.2}O_{3-δ} + Sm_{0.2}Ce_{0.8}O_{1.9} composite cathode**
 Kang Wang ^a, Ran Rana, Wei Zhoua, Hongxia Gua, Zongping Shao ^{a,*}, Jeongmin Ahn^b
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 Xin Mofan Road, Nanjing, JiangSu 210009, PR China
^b School of Mechanical and Materials Engineering, Washington State University,
 Sloan 217, Pullman, WA 99164-2920, USA
Journal of Power Sources xxx (2008) xxx–xxx
- G 72. **Noncatalytic hydrothermolysis of ammonia borane**
 Moiz Diwan, Victor Diakov¹, Evgeny Shafirovich, Arvind Varma
 School of Chemical Engineering, Purdue University, 480 Stadium Mall Drive, West Lafayette,
 IN 47907, USA
journal homepage: www.elsevier.com/locate/ijhydene
- G 73. **Methane oxidation by NO and O₂ from reverse spillover on alumina supported palladium catalysts**
 Rui Marques, Sandra Capela, Stéphanie Da Costa, Franck Delacroix, Gérald Djéga-Mariadassou,
 Patrick Da Costa
Catalysis Communications
- G 74. **Oxygen selective membranes based on B-site cation-deficient (Ba_{0.5}Sr_{0.5}) (Co_{0.8}Fe_{0.2})_yO_{3-δ} perovskite with improved operational stability**
 Lei Ge¹, Ran Ran¹, Kun Zhang¹, Shaomin Liu², Zongping Shao^{1*}
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 Technology, No 5 Xin Mofan Road, Nanjing 210009, P R China
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 Brisbane, Queensland 4072, Australia
To appear in Journal of Membrane Science
- G 75. **Evaluation of Ba_{0.5}Sr_{0.5} Co_{0.8}Fe_{0.2} O_{3-δ} as a potential cathode for an anode-supported proton-conducting solid-oxide fuel cell**
 Ye Lin¹, Ran Ran¹, Yao Zheng¹, Zongping Shao^{1*}, Wanqin Jin¹, Nanping Xu¹, Jeongmin Ahn²
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 Pullman, WA 99164-2920, USA
To appear in Journal of Power Sources
- G 76. **A modified commercial DRIFTS cell for kinetically relevant operando studies of heterogeneous catalytic reactions**
 F C Meunier^{a,*}, A Goguet^{b,*}, S Shekhtman^b, D Rooney^b, H Daly^b
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 Ireland
To appear in Applied Catalysis A: General

- G 77. **[V,Al]-MCM-22 catalyst in the oxidative dehydrogenation of propane**
 A Teixeira-Neto^{a,b,c}, L Marchese^b, G Landi^c, L Lisi^c, H O Pastore^{a,*}
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^c Istituto Ricerche sulla Combustione, CNR, P.le Tecchio, 80 Napoli, Italy
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- G 78. **Barium- and strontium-enriched (Ba_{0.5}Sr_{0.5})_{1+x}Co_{0.8}Fe_{0.2}O_{3-δ} oxides as high-performance cathodes for intermediate-temperature solid-oxide fuel cells**
 Wei Zhou, Ran Ran, Zongping Shao*, Wei Zhuang, Jing Jia, Hongxia Gu, Wanqin Jin, Nanping Xu
 State Key Laboratory of Materials-Oriented Chemical Engineering, Nanjing University of Technology, No 5 Xin Mofan Road, Nanjing, JiangSu, 210009, China
Science Direct – Acta Materialia (2008), doi:10.1016/j.actamat.2008.02.002
- G 79. **Hydrogen desorption studies of the Mg₂₄Y₅-H system: Formation of Mg tubes, kinetics and cycling effects**
 Claudia Zlotea^{a,*}, Martin Sahlberg^b, Sedat Özbilen^a, Pietro Moretto^a, Yvonne Andersson^b
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Science Direct – Acta Materialia (2008), doi:10.1016/j.actamat.2008.01.029
- G 80. **Catalytic Oxidation of CO Gas over Nanocrystallite CuxMn1-xFe2O4**
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 c) Materials Chemistry Department, Faculty of Science, Beni Suef, University, Beni Suef, Egypt
Springer Top Catal (2008) 47:66–72 , DOI 10.1007/s11244-007-9031-6
- G 81. **Enhanced hydrogen storage in Ni/Ce composite oxides**
 Léonard E. A. Berlouis,*a , Clotilde Jubin,a, Brian G. McMillan,a, James Morrow,a, Mark D. Spicer,a, Leung P. Tang,a, Olivier Bordelanne,b, and Michael Weston,b.
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Phys. Chem. Chem. Phys., 2007, 9, 6032–6039
- G 82. **Quantification of Brønsted Acid Sites in Microporous Catalysts by a Combined FTIR and NH₃-TPD Study**
 G. V. A. Martins,†,‡ G. Berlier,*† C. Bisio,§ S. Coluccia,† H. O. Pastore,‡ and L. Marchese*,§
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 § Università del Piemonte Orientale.
J. Phys. Chem. C 2008, 112, 7193-7200
- G 83. **Effect of Pt Impregnation on a Precipitated Iron-based Fischer–Tropsch Synthesis Catalyst**
 Weiqi Yu b), Baoshan Wu a), Jian Xu a), Zhichao Tao a), Hongwei Xiang a), Yongwang Li a)
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Springer Science+Business Media, LLC 2008 - DOI 10.1007/s10562-008-9524-3

- G 84 **High Performance of Fe–K Oxide Catalysts for Dehydrogenation of Ethylbenzene to Styrene with an aid of ppm-order Pd**
 Yasushi Sekine, Ryo Watanabe, Masahiko Matsukata, Eiichi Kikuchi
 Department of Applied Chemistry, School of Science and Engineering, Waseda University, 3-4-1 Okubo, Shinjuku, Tokyo, Japan
Springer Science+Business Media, LLC 2008 DOI 10.1007/s10562-008-9580
- G 85 **A new low temperature approach to developing mesoporosity in metal-doped carbons for adsorption and catalysis**
 H. M. Williams a), E. A. Dawson a), P. A. Barnes a), G. M. B. Parkes a L. A. Pears b), C. J. Hindmarsh b).
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 b) Dstl, Porton Down, Salisbury, Wiltshire SP4 0JQ, UK
Springer Science+Business Media, LLC 2008 DOI 10.1007/s10934-008-9233-8
- G 86 **Preparation and Evaluation of Ammonia Decomposition Catalysts by High-Throughput Technique**
 Hongchao Liu ^{a, b}, Hua Wang ^a, Jianghan Shen ^{a, b}, Ying Sun ^{a, b}, and Zhongmin Liu ^{a*}
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^b Graduate School of the Chinese Academy of Sciences, Beijing 100049, China
React.Kinet.Catal.Lett. Vol. 93, No. 1, 11–17 (2008) 10.1007/s11144-008-5155-3
- G 87 **Single-Crystalline La_{0.6}Sr_{0.4}CoO_{3-d} Nanowires/Nanorods Derived Hydrothermally Without the Use of a Template: Catalysts Highly Active for Toluene Complete Oxidation**
 Jiguang Deng a), Lei Zhang a), Hongxing Dai a), Hong He a), Chak Tong Au b)
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 b) Department of Chemistry, Hong Kong Baptist University, Kowloon Tong, Hong Kong, P.R. China
Springer Science+Business Media, LLC 2008 DOI 10.1007/s10562-008-9422-8
- G 88 **On the Synergy Effect in MoO₃–Fe₂(MoO₄)₃ Catalysts for Methanol Oxidation to Formaldehyde**
 Emma Söderhjelm a), Matthew P. House b), Neil Cruise a), Johan Holmberg c), Michael Bowker b), Jan-Olov Bovin d), Arne Andersson e).
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Springer Science+Business Media, LLC 2008 DOI 10.1007/s11244-008-9112-1
- G 89-
 part 1 **Promotion Effects and Mechanism of Alkali Metals and Alkaline Earth Metals on cobalt#Cerium Composite Oxide Catalysts for N₂O Decomposition**
 Li Xue, Hong He, Chang Liu, Changbin Zhang, and Bo Zhang
 Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, 18 Shuangqing Road, Beijing 100085, PR China
Environ. Sci. Technol., 2009, 43 (3), 890-895 • DOI: 10.1021/es801867y • Publication Date (Web): 05 January 2009

G 89-
part 2 **Supporting Information: Promotion effects and mechanism of alkali metals and alkaline earth metals on cobalt-cerium composite oxide catalysts for N₂O decomposition**

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Environ. Sci. Technol., **2009**, 43 (3), 890-895 • DOI: 10.1021/es801867y • Publication Date (Web): 05 January 2009

G 90 **Investigation of Pt catalytic effects on carbon support corrosion of the cathode catalyst in PEM fuel cells using DEMS spectra**

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