CURRICULUM VITAE

Prof. Changfeng Yan, Ph.D
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Chang-Feng Yan received a B.S. in thermal energy engineering from Xi'an Jiaotong University, a master in the same domain from Guangzhou Institute of Energy Conversion (GIEC), Chinese Academy of Science (CAS) and a Ph.D. in engineering thermophysics from University of Science and Technology of China respectively. He has worked for GIEC until now from 1995. From 2004-2005, he worked in Chemical & Biological Engineering Department, University of British Colombia, Vancouver, Canada as a visiting scientist for one year. Now he has published more than 100 papers. He is board member of China Association for Hydrogen Energy, and China Energy Society. He focused on hydrogen and fuel cell including hydrogen generation from PEM electrolysis of water, photolysis of water, and catalytic reforming of biomass and its derivatives; material for PEMFC, photo-electrical catalysis; functional carbon nanotube and grapheme; reaction mechanism; and heat and mass transfer.

Research Interest

My main research interests focus on 1) hydrogen production from different fuels (such as Natural gas (NG), Dimethly ether (DME), Ethanol, Methanol, biomass and derivatives) via steam reforming 2) membrane for hydrogen separation 3) CO_2 and SO_2 capture using sorbents 4) pyrolysis, gasification and combustion of biomass, municipal solid waste and coal and 5) numerical simulations.

Experience and Education

2009.1-present Professor, Head of Hydrogen Production Lab., Guangzhou Institute of Energy Conversion (GIEC), Chinese Academy of Sciences (CAS)
2003.11-2008.12 Associate professor, Head of Hydrogen Production Lab, GIEC, CAS
2004.2-2005.2 Visiting Scholar, Fluidization Research Center, The University of British Columbia (UBC), Canada (Group of John Grace)
1998.8-2003.11 Assistant Professor, GIEC, CAS
1998.8-2003.11 Assistant Engineer, GIEC, CAS

2001.9-2005.7 Ph. D, Thermal Science and Energy Engineering, University of Science and Technology of China (USTC), CAS
1992.9-1995.7 M. Sc., GIEC, CAS
1998.9-1992.7 B. Sc., Energy & Power Engineering School, Xi'an Jiaotong University

Refereed Publication

1. Ying Huang, Chang-Feng Yan*, Chang-Qing Guo, Zhuo-Xin Lu, Yan Shi, Zhi-Da Wang, Synthesis of GO-modified Cu_2O nanosphere and the photocatalytic mechanism of water splitting for hydrogen production, *International Journal of Hydrogen Energy*, 2017, 42(7), 4007-4016

2. Zhi-Da Wang, Yuan Gan, Changfeng Yan*, Patterning of Au nanoparticles via secondary phase-separation of large-sized compound micelles of amphiphilic block copolymer, *Materials Letters*, 2017, 194, 135-137
3. Zhuo-Xin Lu, Yan Shi, Chang-Feng Yan*, Chang-Qing Guo, Zhi-Da Wang, Investigation on IrO_2 supported on hydrogenated TiO_2 nanotube array as OER electro-catalyst for water electrolysis, *International Journal of Hydrogen Energy*, 2017, 42(6), 3572-3578
4. Zhida Wang, Changfeng Yan, Ying Huang, Liqi Yi, Dependence of Size and Morphology on Shear Flow for PS-based Amphiphilic Block Copolymer Micelles in Aqueous Solution, *Chinese Journal of Polymer Science*, 2017, 35(5), 641-648.
5. Ya-ping Xue, Chang-feng Yan*, Xiao-yong Zhao, Shi-lin Huang, Chang-qing Guo, Ni/La_2O_3-ZrO_2 Catalyst for Hydrogen Production from Steam Reforming of Acetic Acid as a Model Compound of Bio-oil, *Korean Journal of Chemical Engineering*, 2017, 34(2), 305-313
6. Xiao-yong Zhao, Ya-ping Xue, Chang-feng Yan*, Zhi-da Wang, Chang-qing Guo, Shi-lin Huang, Sorbent Assisted Catalyst of Ni-CaO-La_2O_3 for Sorption Enhanced Steam Reforming of Bio-oil with Acetic Acid as the Model Compound, *Chemical Engineering and Processing: Process Intensification*, 2017, 119,106-112.
7. Xiao-yong Zhao, Ya-ping Xue, Zhuo-Xin Lu, Ying Huang, Chang-Qing Guo, Chang-Feng Yan*, Encapsulating Ni/CeO2 -ZrO2 with SiO2 layer to improve it catalytic activity for steam reforming of toluene, *Catalysis Communications*, 2017, 101, 138-141
8. Shi-lin Huang, Juan Li, Chang-feng Yan, Zhi-da Wang, Chang-qing Guo*, Yan Shi, Synthesis and Characterization of Cu-X/γ-Al_2O_3 Catalyst by Intermittent Microwave Irradiation for Hydrogen Generation from Dimethyl Ether Steam Reforming, *Chemical Industry & Chemical Engineering Quarterly*, 2017, in press
9. Yuan Gan, Zhida Wang*, Zhuoxin Lu, Yan Shi, Changfeng Yan, Control on the Morphology of ABA amphiphilic Triblock Copolymer Micelles in Dioxane/Water Mixture Solvent, *Chinese Journal of Polymer Science*, 2017, Accepted.
10. Yuan Gan, Zhida Wang, Changqing Guo, Changfeng Yan*, Effective Size-Controlled Synthesis and Electrochemical Characterization of Ordered Pt Nanopattern Arrays from Self-Assembling Block Copolymer Template, *Journal of Materials Science*, 2017, Accepted.
11. Xiao-yong Zhao, Ya-ping Xue, Chang-Feng Yan*, Ying Huang, Zhuo-Xin Lu, Zhi-da Wang, Liang Zhang, Chang-qing Guo, Promoted activity of porous silica coated Ni/CeO_2 ZrO_2 catalyst for steam reforming of acetic acid, *International Journal of Hydrogen Energy*, 2017, 42(34), 21677-21685
12. Yan Shi, Zhuoxin Lu, Lili Guo, Changfeng Yan, Fabrication of membrane electrode assemblies by direct spray catalyst on water swollen Nafion membrane for PEM water electrolysis, *International Journal of Hydrogen Energy*, 2017, 42(42) 26183-26191
13. Ying Huang, **Chang-Feng Yan***, Chang-Qing Guo, Yan Shi, Experimental and first-principles DFT study on oxygen vacancies on cerium dioxide and its effect on enhanced photocatalytic hydrogen production, International Journal of Hydrogen Energy, 2016 41(19) 7919-7926
14. Zhida Wang*, Wei Jiang, Fengman Sun, Shilin Huang, **Changfeng Yan***, From toroidal to rod-like nanostructure, a mechanism study for the reversible morphological control on

amphiphilic triblock copolymer micelle，Journal of Polymer Science Polymer Physics, 2016 54(15) 1450–1457

15. Zhida Wang*, Yuan Gan, **Changfeng Yan**, Wei Jiang*, Mechanism study of reversible transition between self-assembly and disassembly of ABC triblock copolymer micelles, Polymer, 2016, 90, 276–281
16. Ying Huang, **Chang-Feng Yan***, Wen Ye, Chang-Qing Guo, Shi-ling Huang, Enhanced photoreduction activity of carbon dioxide over Co_3O_4/CeO_2 catalysts under visible light irradiation, International Journal of Photoenergy, 2015, 1-11
17. Feng-man Sun, **Chang-Feng Yan***, Zhi-daWang, Chang-Qing Guo, Shi-ling Huan, Ni/Ce–Zr–O catalyst for high CO_2 conversion during reverse water gas shift reaction (RWGS), International Journal of Hydrogen Energy, 2015, 46（40） 15985-15993
18. **Chang-Feng Yan***, Hang Hai, Rongrong Hu, Effect of Cr promoter on performance of steam reforming of dimethyl ether in a metal foam micro-reactor, International Journal of Hydrogen Energy, 2014, 39(32) 18625-18631
19. **Chang-Feng Yan***, Hang Hai, Rongrong Hu, Hydrogen production by steam reforming of dimethyl ether and CO-PrOx in a metal foam micro-reactor, International Journal of Hydrogen Energy, 2014, 2014 39(20) 10409-10416
20. **Chang-Feng Yan***, Wen Ye, Chang-Qing Guo, Numerical simulation and experimental study of hydrogen production from dimethyl ether steam reforming in a micro-reactor, International Journal of Hydrogen Energy, 2014 18642-18649
21. **Chang-Feng Yan***, Hao Chen, Rong-Rong Hu, Synthesis of mesoporous Co–Ce oxides catalysts by glycine-nitrate combustion approach for CO preferential oxidation reaction in excess H_2, International Journal of Hydrogen Energy, 2014, 39(32) 18695-18701
22. Rong-rong Hu, **Chang-feng Yan***, Xiao-xiao Zheng etc., Carbon deposition on $Ni/ZrO_2–CeO_2$ catalyst during steam reforming of acetic acid, International Journal of Hydrogen Energy, 2013, 38(14) 6033–6038
23. Xiaoxiao Zheng, **Chang-feng Yan***, Rongrong Hu, Juan Li, Hai Hang, Weimin Luo, Changqing Guo, Wenbo Li, Zhouyu Zhou Hydrogen from Acetic Acid as the Model Compound of Biomass Fast-Pyrolysis Oil over Ni Catalyst Supported on Ceria-Zirconia, International Journal of Hydrogen Energy, 2012, 37, 12987-12993
24. Rongrong Hu, **Changfeng Yan**, Lanying Xie, Yi Cheng, Selective oxidation of CO in rich hydrogen stream over Ag/OMS-2 catalyst, International Journal of Hydrogen Energy, 2011, 36(1): 64-71
25. **Changfeng Yan***, Enyuan Hu, Chiliu Cai, Hydrogen production from bio-oil aqueous fraction with in situ carbon dioxide capture, International journal of hydrogen energy, 2010, 35(7): 2612－2616
26. **Chang-Feng Yan***, Fei-Fei Cheng, Rong-Rong Hu, Hydrogen production from catalytic steam reforming of bio-oil aqueous fraction over Ni/CeO_2-ZrO_2 catalysts, International Journal of Hydrogen Energy, 2010, 35(21): 11693-11699
27. **Chang-Feng Yan***, John R Grace and C. Jim Lim, Effects of rapid calcination on properties of calcium-based sorbents, Fuel Processing Technology, 2010, 91(11): 1678-1686