

**LIST OF PUBLICATIONS OF
DR. JIMMY (C.M) KAO
Ph.D, P.E, D.WRE, DEE, F.EWRI, F.ASCE, F.AAAS**

PRODUCTS:

H-Index = 30; Citations > 3000; Patents 19; >190 Peer-Reviewed Journal Papers; 13 Books; 30 Book Chapters; > 200 National and International Conference papers; > 50 Plenary, Keynote, and Invited Presentations and Workshops.

RESEARCH TOPICS

Specialties and Research Interests

- Groundwater and Soil Investigation and Remediation
- Natural Treatment on Waste Treatment
- Bioremediation of Contaminated Sites
- Water Resource and Watershed Management
- Water Quality Modeling
- Water and Wastewater Treatment
- Application of Molecular Microbiology on Site Investigation and Remediation

Patents

- (1) A designed oxygen releasing complex with sustainable oxygen releasing capability
- (2) A designed potassium permanganate method for organic contaminant oxidation without the precipitation of manganese dioxide
- (3) A designed organics releasing complex with sustainable biodegradable organics releasing capability
- (4) Treatment of Chlorinated Solvents Contaminated Groundwater by Three-stage Technology
- (5) A novel method for the analysis of assimilable organic carbon in water
- (6) Method for Remediating Heavy Fuel-oil Contaminated Medium
- (7) A Designed Oxidant Briquet to Continuously Release Potassium Permanganate
- (8) Treatment of Fuel Oil Contaminated Soils by Integrated Remediation Technology
- (9) Using low permeability wrapping film to develop oxygen releasing material
- (10) A designed oxidant releasing material for continuous persulfate release
- (11) Biodegradation of chlorodibenzo-p-dioxins, dibenzofuran, and pentachlorophenol and high Hg resistance of *Pseudomonas mendocina* NSYSU as bioremediation for polluted soil
- (12) Enhancement of PCP-treated inducement, starvation inducement and combined Strains to promote degrading ability of dioxin-degrading bacteria
- (13) Application of Pressure-Assisted Chemical Oxidation System to Remediate Petroleum-Hydrocarbon Contaminated Sediments.
- (14) Method for Degrading Chlorinated-Organic Pollutant.

- (15) An Enhanced Persulfate Oxidation and Surfactant Flushing Technology for the Remediation of Chlorinated-Solvent Contaminated Groundwater.
- (16) Method for Remedying Organic Pollutant Contaminated Medium.
- (17) Method for Promoting Microorganism Decomposition Reaction by Increasing Oxygen and Peroxide Composition.
- (18) Method for Remedying Heavy Fuel-Oil Contaminated Medium.
- (19) Degradable and Slow-Releasing Material for Enhancing Chemical Oxidation of Contaminated Soil and Groundwater.
- (20) A designed pretreatment system to mitigate the clogging of RO membrane.
- (21) A novel oxidation method for chlorinated contaminants treatment.
- (22) Slow-Releasing Polycolloid Substrate to Green-Remediate DNAPL-Contaminated Groundwater.
- (23) Oxidative Treatment for Chloric Contaminants.
- (24) A Wastewater Pretreatment Method for Mitigating the Clogging of Membrane.
- (25) Carbon-Releasing Composition.

Invited Speaker and Section Chair at International Conference

- Keynote Speaker and Program Chair, 2013 International Conference on Frontier of Nanoscience and Technology (ICFNST 2013), Kunming, China, June 16-17, 2013.
- Keynote Speaker and Conference Chair, 2013 International Conference on Frontiers of Manufacturing and Design Science (ICFMD 2013), Taichun, Taiwan, September 20-23, 2013.
- Keynote Speaker and Conference Chair, **2013 International Conference on Frontiers of Mechanical Engineering and Materials Engineering (MEME 2013), Hong Kong**, Hong Kong, Aug. 23-24, 2013.
- Keynote Speaker and Conference Chair, **2013 International Conference on Frontiers of Advanced Materials and Engineering Technology, Shiamen**, China, Nov. 28-29, 2013.
- Invited Speaker and Program Chair, **2012 International Conference on Frontiers of Mechanical Engineering and Materials Engineering (MEME 2012), Hong Kong**, Hong Kong, July 13-14, 2012.
- Invited Speaker and Program Chair, 2012 **The Second International Conference on Green Building, Materials and Civil Engineering (GBMCE 2012)**, SanYa, China, Aug. 22-23, 2012.
- Invited Speaker and Program Chair, 2012 **The International Conference on the Frontier of Environment and Energy**, Hong Kong, China, Dec. 11-13, 2012.
- Invited Speaker and Program Chair, 2011 International Conference on Frontiers of Manufacturing and Design Science (ICFMD 2011), Taichun, Taiwan, December 11-13, 2011.
- Invited Speaker, CleanUp 2011 Conference, CRC Care, CleanUp 2011 Conference, Sep. 9-15, *Adelaide, Australia*.
- Invited Speaker and Program Chair, 2011 International Conference on Frontiers of Manufacturing and Design Science (ICFMD 2011), Taichun, Taiwan, December 11-13, 2011.
- Invited Speaker and Program Chair, 2011 International Conference on Frontier of Nanoscience and Technology (ICFNST 2011), Kunming, China, September 28-29, 2011.
- Program Chair at The Challenges in Environmental Science and Engineering, CESE-2011, Tainan, Taiwan.

- Section Chair at The Challenges in Environmental Science and Engineering, CESE-2010, 26 September -1 October 2010 at the SEBEL, Cairns, Australia.
- Section Chair at The Thirteenth International Conference on Diffuse Pollution and Integrated Watershed Management, DIPCON 2009, Lotte Hotel World, SEOUL, Korea 12-15 October 2009.
- Invited Speaker at The International Maritime Forum, Aug. 10, 2009, Kaohsiung,
- Invited Speaker at The Annual ASCE EWRI Conference, Kansas City, MO, US, May 18-21, 2009.
- Invited Speaker and Section Chair at The Third International Conference on Soil Pollution and Remediation (SoilRem 2008), Nanjing, China, Oct. 18-21, 2008.
- Invited Speaker at the International Soil and Groundwater Conference, Kaohsiung, Taiwan, 2008.
- Invited Speaker at the Annual Chemistry Conference, Chinese Military College, Kaohsiung, Taiwan, 2007.
- Invited Speaker at the First US-Vietnam Dioxin Investigation and Risk Assessment Conference, Ho-Chi-Ming City, Vietnam, 2002.
- Invited Speaker at the Singapore Soil and Groundwater Remediation Forum, Nanyang Technological University, Singapore, 2004.
- Invited Speaker at the International Conference of Water Resources, Hydraulics & Hydrology 2006, The World Scientific and Engineering Academy and Society, Greece, 2006.
- Invited Speaker at the 2007 WSEAS Multiconference, Jan. 17 – 20, Gold Coast, Australia, The World Scientific and Engineering Academy and Society, 2007.
- Invited Speaker at the Annual Water and Wastewater Treatment Conference, Shanghai, China, 2006.
- Invited Speaker at the International Conference on Constructed Wetland Design and Application, Taipei, Taiwan, 2006.
- Invited Speaker at the 3rd International Conference on Sustainable Water Environment, Water Resource and Quality, Hokkaido, Japan, 2007.
- Invited Speaker at The 1st International System Analysis Conference on Water Treatment, Tainan, Taiwan, 1999.
- Invited Speaker at The 2nd International System Analysis Conference on Water Treatment, Tainan, Taiwan, 2000.
- Invited Speaker at The 5th International Watershed Management Conference, Chengdu, China, April, 2007.
- Invited Speaker at the Second International Conference on Environmental Concerns, Sha-Men, China, Oct., 2004.
- Invited Speaker at the Asian Soil and Groundwater Remediation Forum, Stanford University, USA, April, 2007.
- Received "Certificate of Appreciation" for Invaluable Contribution at the 5th Cross-strait Environmental Engineering Conference, Kaohsiung, Taiwan, 2001.
- Received "Certificate of Appreciation" for paper presentation at the 2nd International Conference on Sustainable Water Environment, Water Resource and Quality, Taipei, Nov. 2006.
- Received "Certificate of Appreciation" for paper presentation at the 1st International Conference on Sustainable Water Environment, Water Resource and Quality, Taipei, Nov 2005.
- Received "Certificate of Appreciation" for paper presentation at the International Conference on Drinking Water Quality Management and Treatment Technology, Taipei, June, 2004.
- Received "Certificate of Appreciation" for paper presentation at the International Conference on Drinking Water Quality Management and Treatment Technology, Taipei, June, 2002.
- Received "Certificate of Appreciation" for invaluable contribution and assistance to the Environmental Protection Administration; Industrial Development Bureau, Ministry of Economic

Affairs; Foundation for Reduction, Reuse, and Recovery, Taipei, March, 1999.

Organization Committee of International Conference

- Executive secretariat - The First International Conference on Sustainable Water Environment, Water Resource and Quality Management, Taipei, Taiwan, November 2 - 4, 2005.
- Executive secretariat - The Second International Conference on Sustainable Water Environment: Water Resource and Quality Management, Taipei, Taiwan, October 30 - November 1, 2006.
- Chairman, International Conference on Emerging Water Treatment and Groundwater Remediation Issues, Kaohsiung, Taiwan, November 22, 2007.
- Chairman, International Innovative Chemical and Hog Farm Wastewater Treatment Workshop, Kaohsiung, Taiwan, October, 19-20, 2001.
- Committee, International Soil and Groundwater Investigation/Remediation Conference, Kaohsiung, Taiwan, August, 2008.
- Chairman – The Third Cross-strait and Four Regions Environmental Forum, Nov. 17-19, 2007, Kaohsiung, Taiwan.
- Committee, Singapore Soil and Groundwater Remediation Forum, Nanyang Technological University, Singapore, 2004.
- Executive secretariat - The First International Conference on Sustainable Water Environment, Water Resource and Quality Management, Taipei, Taiwan, November 2 - 4, 2005.
- Executive secretariat - The Second International Conference on Sustainable Water Environment: Water Resource and Quality Management, Taipei, Taiwan, October 30 - November 1, 2006.
- Executive secretariat, The 5th Cross-strait Environmental Engineering Conference, Kaohsiung, Taiwan, 2001.
- Executive secretariat, The 6th Cross-strait Environmental Engineering Conference, Wuhan, China, 2003.
- Executive secretariat, The International Conference on Drinking Water Quality Management and Treatment Technology, Taipei, June, 2004.
- Executive secretariat, The International Conference on Drinking Water Quality Management and Treatment Technology, Taipei, June, 2002.
- Organizing committee, 3rd IWA-ASPIRE Conference and Exhibition to be held in Taipei, Taiwan from October 18 to 22, 2009.
- Organizing committee, The 3rd International Conference on the Challenges in Environmental Science & Engineering, CESE-2010, James Cook University Townsville, QLD, Australia.
- Organizing committee, AOP 2010, March 29-31, 2010, Taichung, Taiwan.
- Organizing committee, 6th International Conference on Sustainable Water Environment, July 29-31, 2010, University of Delaware, Delaware, US.
- Organizing committee, The Challenges in Environmental Science and Engineering, CESE-2010, 26 September -1 October 2010 at the SEBEL, Cairns, Australia.
- Organizing committee and Program Chair, 2011 International Conference on Frontiers of Manufacturing and Design Science (ICFMD 2011), Taichun, Taiwan, December 11-13, 2011.
- Organizing committee and Program Chair, 2011 International Conference on Frontier of Nanoscience and Technology (ICFNST 2011), Kunming, China, September 28-29, 2011.
- Organizing committee at The Challenges in Environmental Science and Engineering, CESE-2011, Tainan, Taiwan.
- Organizing committee, **2012 International Conference on Frontiers of Mechanical Engineering and Materials Engineering (MEME 2012), Hong Kong, Hong Kong, July 13-14,**

- 2012.
- Organizing committee, 2012 **The Second International Conference on Green Building, Materials and Civil Engineering** (GBMCE 2012), SanYa, China, Aug. 22-23, 2012.
 - Organizing committee, 2012 **The International Conference on the Frontier of Environment and Energy**, Hong Kong, China, Dec. 11-13, 2012.
 - Organizing committee, 2012 **The Taipei International Soil and Groundwater Remediation Conference**, Taipei, Taiwan, Oct. 30-31, 2012.
 - Organizing committee, 2013 International Conference on Frontier of Nanoscience and Technology (ICFNST 2013), Kunming, China, June 16-17, 2013.
 - Organizing committee, 2013 International Conference on Frontiers of Manufacturing and Design Science (ICFMD 2013), Taichun, Taiwan, September 20-23, 2013.
 - Organizing committee, **2013 International Conference on Frontiers of Mechanical Engineering and Materials Engineering** (MEME 2013), **Hong Kong**, Hong Kong, Aug. 23-24, 2013.
 - Session Chair, 5th IWA-ASPIRE 2013 Daejeon, Korea, Sep. 8-13, 2013.

Publication

Peer-reviewed Journal Papers (SCI and EI) (SCI H-index = 25)

1. Tu. Y.T., Chiang, P.C., Chen, S.H., Kao, C.M. Application of a Constructed Wetland System for Polluted Stream Remediation, published on line, Journal of Hydrology, 2014. **(SCI)**
2. T. T. Tsai, J. K. Liu, Y. M. Chang, K. F. Chen, C. M. Kao. Application of polycolloid-releasing substrate to remediate trichloroethylene-contaminated groundwater: a pilot-scale study, accepted to J. of Hazardous Materials, 2014. **(SCI)**
3. Yang, S.H., Chen, K.F., Wu, C.S., Kao, C.M. Development of KMnO₄-releasing composites for in situ chemical oxidation of TCE-contaminated groundwater, published on line, Water Research, 2014. **(SCI)**
4. Yang, B.M., Y.M. Chang, Kao, C.M. Application of Multivariate Statistical Analysis to Evaluate the Characteristics of Groundwater Quality in Kaohsiung City, Taiwan. Accepted to Research Journal of Chemistry and Environment, 2014. **(SCI)**
5. Shu-Hao Liang, Wei-Hsiang Huang, Chih-Ching Chien, Chien-Cheng Chen, Chih-Ming Kao. Restoration and Management of Solvent-contaminated Lands Using In Situ Chemical Oxidation, 2014, Disaster Advance (accepted). **(SCI)**
6. Xiaojun Wang; Mingsheng Jia; Xiaohai Chen; Ying Xu; Xiangyu Lin; Chih Ming Kao, Shao-Hua Chen. Greenhouse gas emissions from landfill leachate treatment plants: A comparison of young and aged landfill, accepted to Waste Management, 2014. **(SCI)**
7. Zonghan Yang¹, Po-Jen Lien¹, Sun-Long Lin², Wei-Hsiang Huang¹, Chih-Ming Kao. Development of risk management strategies to reduce the environmental hazard from oil spill. 2014, Disaster Advance (accepted). **(SCI)**
8. Y. C. Kuo, S. Y. Wang, Y. M. Chang, S. H. Chen and C. M. Kao. Control of trichloroethylene plume migration using a biobarrier system: a field-scale study, Wat. Sci. Tech. 2014 (accepted). **(SCI)**
9. Xiaojun Wang, Xiaoru Yang, Zhaoji Zhang, Xin Ye, Chih Ming Kao, Shaohua Chen | Long-term effect of temperature on N₂O emission from the denitrifying activated sludge, Journal of Bioscience and Bioengineering, 117(3), 298e304, 2014. **(SCI)**

10. Y.T. Tu¹, Y.M. Chang², S.F. Cheng³, J.L. Lin¹, C.M. Kao. Using Constructed Wetland and Aerated Gravel-packed Contact Bed System for Polluted River Water Purification, *Wat. Sci. Tech. - Water Supply*, 2014.
11. Yu-Min Chang; Wei-Hsing Hu; Kao-Tung Su; Chieh-Mei Chou; Jimmy C. M. Kao; Kae-Long Lin. PM10 Emissions Reduction from Exposed Areas Using Grass-planted Covering - A Construction Site Field Study, accepted to *J. of Environmental Engineering*, 2014. (SCI)
12. Yih-Terng Sheu, Sih-Yu Wang, Wei-Hsiang Huang, Yu-Sung Hsiao, Chih-Ming Kao. Investigation and Remedial Approach Development for a TCE spill Site: A Case Study, **Advanced Materials Research**, 2014 (accepted).
13. Bo-Ming Yang, Zong-Han Yang, **Jong-Kang Liu**, Hui-Yu Lee, and Chih-Ming Kao. Evaluation of Groundwater Quality at an Industrial Park Site Zone Using Statistical Analyses: A Case Study in Taiwan, **Advanced Materials Research**, 2014 (accepted).
14. Yang B.M., Huang C.J., Lai W.L., Chang C.C., Kao C.M. Development of a three-stage system for the treatment and reclamation of wastewater containing nano-scale particles. *Desalination*, v 284, p 182-190, 04 January 2012. (SCI)
15. W. C. Lin, G. P. Chang-Chien, C. M. Kao, L. Newman, T. Y. Wong, J. K. Liu. Biodegradation of polychlorinated dibenzo-*p*-dioxins by *Pseudomonas mendocina* strain NSYSU, accepted to *Journal of Environmental Quality*, 2013. (SCI)
16. Giannis, A.; Tay, E.; Kao, C.M., J.Y. Wang. Impact of vertical electrokinetic-flushing technology to remove heavy metals and polycyclic aromatic hydrocarbons from contaminated soil. *ELECTROCHIMICA ACTA*, 86, **72-79**, 2012. (SCI)
17. Yu-Min Chang; Wen-Shing Hu; Kao-Tung Su; Jimmy C. M. Kao; Ching-Ho Chen; Chang-Tung Chang. PM10 Emissions Reduction from Exposed Areas using Grass Covering - A Construction Site Field Study, accepted to *J. of Environmental Engineering*, 2013. (SCI)
18. Y.T. Tu, J.L. Lin, S.F. Chen, C.M. Kao. Using Constructed Wetland for Polluted River Water Purification. Accepted to *J. of Environmental Sci.* 2013.
19. Chien, Chih-Ching; Kao, Chih-Ming; Chen, De-Yu; Chen, Ssu Ching; Chen, Chien-Cheng. Biotransformation of trinitrotoluene (TNT) by *Pseudomonas* spp. isolated from a TNT-contaminated environment, accepted to *Environmental Toxicology and Chemistry*.
20. Bo-Ren Lien, Wei-Hsiang Huang, Yih-Terng Sheu, Yu-Sung Hsiao, and Chih-Ming Kao. Risk-based Approaches for the Remediation of a UST Site: A Case Study, accepted to *Applied Mechanics and Materials*, 2013.
21. Chien, Chih-Ching; Kao, Chih-Ming; Chen, De-Yu; Chen, Ssu Ching; Chen, Chien-Cheng. Biotransformation of trinitrotoluene (TNT) by *Pseudomonas* isolated from a TNT-contaminated environment. *Environmental Toxicology and Chemistry*, accepted, 2013.
22. Y.C. Kuo; S.H. Liang; S.Y. Wang; S.H. Chen; C.M. Kao. Application of emulsified substrate biobarrier to remediate TCE-contaminated groundwater: a pilot-scale study, *Journal of Hazardous, Toxic, and Radioactive Waste*, accepted, 2013.
23. Liang S.H., Kuo, Y.C., Chen, S.H., R.Y. Surampalli, Kao, C.M. Development of a slow polycolloid-releasing substrate (SPRS) biobarrier to remediate TCE-contaminated aquifers *Journal of Hazardous Materials*, 254-255:107-15, 2013 (SCI)
24. Y.C. Lai, Y.T. Tu, C.P. Yang, R.Y. Surampalli, C.M. Kao. Development of a Water Quality Modeling System for River Pollution Index and Suspended Solid Loading Evaluation. *Journal of Hydrology* 478 (2013) 89–101 (SCI).

25. Yang B.M., Huang C.J., Lai W.L., Chang C.C., Kao C.M. Development of a three-stage system for the treatment and reclamation of wastewater containing nano-scale particles. *Desalination*, 284, p 182-190, 04 January 2012. (SCI)
26. Chang, Yu-Min; Dai, Wen-Chien; Tsai, Kao-Shen, Kao, Chih-Ming. Reduction of PCDDs/PCDFs in MSWI fly ash using microwave peroxide oxidation in H₂SO₄/HNO₃ solution, *CHEMOSPHERE*, **91 (6)**, **864-868**, 2013. (SCI)
27. Chiu, H. Y.; Liu, J. K.; Chien, H. Y.; Kao, C.M. Evaluation of Enhanced Reductive Dechlorination of Trichloroethylene Using Gene Analysis: Pilot-Scale Study *JOURNAL OF ENVIRONMENTAL ENGINEERING-ASCE*, 139(3), **428-437**, **2013 (SCI)**.
28. H.Y. Chiu, A. Hong, R.Y. Surampalli, S.L. Lin, C.M. Kao. Application of natural attenuation for the control of petroleum hydrocarbon plume: mechanism and effectiveness evaluation. *J. of Hydrology*, 2013 (accepted).
29. Lai W.L., Kao, C.M. Chen S.R., Lin, J.L. Spectrometric Characteristic of Superficial *Chlorella* sp. Grown in Photo-bioreactor under Different Flow Rates. *Asia Journal of Chemistry*, 2013 (accepted).
30. Wang Xiaojun, Chen S.H., Kao, C.M. Long-term effect of temperature on N₂O emission from the denitrifying activated sludge *Journal of Bioscience and Bioengineering*. *Journal of Bioscience and Bioengineering*, 2013 (accepted).
31. Jian Li Lin, Chih Ming Kao, Jen Jeng Chen, Shao Wei Liao, Chung Yi Chung, Wen Liang Lai. Effects of Backwashing on the Characteristics of Sand Filtration Effluents: Organic and Microbial Analyses, *Applied Mechanics and Materials*, 353-356, 2921-2925.
32. T.T. Tsai, J.K. Liu, Y.M. Chang, R.Y. Surampalli, C.M. Kao. Using real-time PCR and gene analysis to evaluate the effectiveness of enhanced bioremediation for TCE-contaminated groundwater. *Journal of Hydrology*, 2013 (accepted).
33. Yi-Chyun Hsu, Hsiao-Jung Ho, Chih-Ming Kao, Jen-Jeng Chen, Chun-Yen Chiu, Wen-Liang Lai. Spectrometric Characteristic of Superficial *Chlorella* sp. Grown in Photo-bioreactor under Different Flow Rates, *Applied Mechanics and Materials*, 2013 accepted.
34. Ho, H.J., Kao, C.M., Cao, J.M. Chen, J.J., Chiu, C.Y. and Lai, W.L. Released Fluorescent Properties of *Chlorella* sp. Grown in Photo-Bioreactor under Different Flow Rates, Third Annual Asian Conference on Sustainability, *Applied Mechanics and Materials*, 2013 accepted.
35. Chou-Ping Yang, Pen-Chi Chiang, E-E Chang, Tsair-Fuh Lin, and Chih-Ming, Kao. Using a Systematic Approach to Develop Water Quality Management Strategies in the Nankan River, Taiwan. *Desalination and Water Treatment*, 51, 6808-6823, 2013. (SCI)
36. Yu-Min Chang, Wen-Chen Dai, Kao-Shen Tsai, Shiao-Shing Chen, Jyh-Herng Chen, Jimmy C.M. Kao. Reduction of PCDDs/PCDFs in MSWI Fly Ash Using Microwave Peroxide Oxidation in H₂SO₄/HNO₃ Solution. Accepted to *Chemosphere*, 2013. (SCI)
37. Anushuya Ramakrishnan, Rao. Y. Surampalli, Tian C. Zhang, R.D. Tyagi and C.M. Kao. New and Emerging Contaminants in Landfill Leachate and their Sustainable Management, *Bioresource Technology* (accepted). (SCI)
38. C.E. Lin, P.K.A. Hong, H.Y. Chiu, R.Y. Surampalli, C.T. Lin, C.M. Kao. Pressure-assisted Cyclic Washing of Heavy-metal Contaminated Sediments. *International Journal of Environmental Science and Technology*, 2013 (in press). (SCI)
39. B. M. Yang, H. Y. Chiu^a, W. L. Lai, R. Y. Surampalli, C. M. Kao. Recovery of chlorinated solvent trichloroethylene contaminated groundwater using a hybrid treatment system. *International Journal of Environmental Science and Technology*, 2013 (in press). (SCI)
40. Chang, Y.M., Wen-Chen Dai, Kao-Shen Tsai, Shiao-Shing Chen, Kao, C.M. PM₁₀ Emissions

- Reduction from Exposed Areas Using Grass Covering - A Construction Site Field Study, *Chemosphere*, 2013 (accepted). (SCI)
41. Sung, W.P., Jimmy C.M. Kao, Chen, R. *Applied Mechanics and Materials*, v 184-185, 2012, *Frontiers of Mechanical Engineering and Materials Engineering*
 42. Liang, S. H.; Liu, J. K.; Lee, K. H., Kao, C.M. Use of specific gene analysis to assess the effectiveness of surfactant-enhanced trichloroethylene cometabolism, *J. Haz. Mat.* 198, 323-330, 2011 (SCI).
 43. Kuo, Y.C., Cheng, S.F., Liu, P.W.G. Liu, Chiou, H.Y., Kao, C.M. Application of enhanced bioremediation for TCE contaminated groundwater: a pilot-scale study. *Desalination and Water Treatment.* 41 (2012) 364–371
 44. Wu C.Y., Kao, C.M., Chen K.S., Sung W.P., Lin C.E. Applying natural treatment systems for the improvement of the quality of river water, 5th International Conference on Responsive Manufacturing - Green Manufacturing, ICRM 2010; January 11, 2010 (EI).
 45. T.Y. Chen, C.M. Kao, H.Y. Chiou, Y.T. Yu, W.P. Sung. Application of oxygen-releasing material to enhance in situ aerobic bioremediation, *Advanced Materials Research Vols.* 430-432 (2012) pp 1401-1404.
 46. Dai W.C., Tsai T.T., Kao C.M., Chang Y.M. Hsi H.C. Application of monitored natural attenuation and risk-based corrective action at a chlorinated hydrocarbon contaminated site. *Research Journal of Chemistry and Environment Vol.16 (3) Sept (2012) (SCI)*
 47. Chih-Feng Chen, Chiu-Wen Chen, Cheng-Di Dong, Chih-Ming Kao. Assessment of toxicity of polycyclic aromatic hydrocarbons in sediments of, Kaohsiung Harbor, Taiwan. Accepted to *Science of the Total Environment*, 463-464: 1174–1181 2013 (SCI).
 48. Jou, C.J., C.L. Lee, Y.T.V. Fu and C.M. Kao, Simulation of a long narrow type constructed wetland using the stream model QUAL2K. *Sustain. Environ. Res.*, 22(4), 255-260 (2012).
 49. Shih-Hsiung Liang; Ssu-Ching Chen; Chien-Yen Chen; Chih-Ming Kao; Yang Jing-Iong; Bao-Sen Shieh; Jiun-Hong Chen; Chien-Cheng Chen. Cadmium-induced earthworm metallothionein-2 correlation to metal accumulation and counteracting oxidative stress, accepted to *Journal of Pedobiologia*, 2012 (SCI).
 50. Chitsan Lin, Der-Shyan Sheu, Ta-Chen Lin, C. M. Kao, Domenico Grasso. Thermophilic Biodegradation of Diesel Oil in Food Waste Composting Processes without Bioaugmentation.” *Environmental Engineering Science*, Vol.29, Issue 2, 117-123. February, 2012.
 51. Chen, C.T., Yang, Z.H., Chen, C.W., Dong, C.D., Kao, C.M. Application of biodegradable surfactant washing to remediate TPH-contaminated sediments, *Advance Science Letter* 13, 584-587.
 52. Kuo Y.C., Liu J.K., 2 Chien H.Y., Chen C.C. and Kao C.M. Remediation of TCE-contaminated groundwater using integrated biosparging and enhanced bioremediation system. *Research Journal of Chemistry and Environment Vol.16 (2) June (2012) (SCI)*
 53. Cheng-Di Dong, Yao-Ting Tu, Chiu-Wen Chen, Chih-Ming Kao and Chih-Feng Chen. Evaluation of the status of copper contamination of surface sediments of Jen-Gen River estuary, Taiwan. accepted to *Applied Mechanics and Materials.* 2012. (EI)
 54. H.Y. Chiou, J.K. Liu, H.Y. Chien, R.Y. Surampalli, C.M. Kao, Evaluation of Enhanced Reductive Dechlorination of TCE Using Gene Analysis: a Pilot-scale Study, accepted to *J. of Environmental Engineering*, 2012 (SCI).
 55. W.Y. Huang, H.Y. Chiu, Z.H. Yang, P.J. Lien, and C.M. Kao, Development of Risk-based Management Strategies at a Brownfield Site, accepted to *Applied Mechanics and Materials.* 2012. (EI)
 56. Chou-Ping Yang, Yao-Ting Yu, Chih-Ming Kao. Impact of Climate Change on Kaoping River Water Quality, accepted to *Applied Mechanics and Materials.* 2013. (EI)
 57. C.C. Chien, Y.T. Tu, H.Y. Chiu, C.M. Kao, Evaluation of Trihalomethanes Risk in Water System: A Case Study. accepted to *Applied Mechanics and Materials.* 2012. (EI)

58. C.Y. Wu, H.Y. Chiu, T.Y. Tu, C.M. Kao. Application of Multivariate Statistical Analysis to Evaluate the Effects of Natural Treatment System on Water Quality Improvement. accepted to Applied Mechanics and Materials. 2012. (EI)
59. Chun-Ting Chen, Chiu-Wen Chen, Chih-Feng Chen, Cheng-Di Dong, Ming-Sheng Ko, Chih-Ming Kao. Evaluation of Zinc Contamination in the Sediments of Salt River Mouth, Taiwan. Applied Mechanics and Materials Vols. 178-181 (2012) pp 893-896.
60. Chun-Yi Wu, Yu-Tung Fu, Zong-Han Yang, Chih-Ming Kao, Yao-Ting Tu. Using Multi-function Constructed Wetland for Urban Stream Restoration. Applied Mechanics and Materials Vols. 121-126 (2012) pp 3072-3076
61. B.M. Yang, C.M. Kao, W.P. Sung, C.P. Yang, and T.Y. Chen. Reclamation of Nano-scale Particle Contained Packing Wastewater Using Chemical Pre-treatment System, accepted to Current Nanoscience, 2012. (SCI).
62. Chun-Ting Chen, Chiu-Wen Chen, Chih-Feng Chen, Cheng-Di Dong, Ming-Sheng Ko, Chih-Ming Kao, Evaluation of Zinc Contamination in the Sediments of Salt River Mouth, Taiwan, Applied Mechanics and Materials Vols. 178-181 (2012) pp 893-896
63. C.T. Chen, Z.H. Yang, C.W. Chen, C.D. Dong, C.M. Kao, Application of Biodegradable Surfactant Washing to Remediate TPH-contaminated Sediments, Adv. Sci. Lett. 13, 579-583, 2012. (EI)
64. B.M. Yang, C.M. Kao, W.P. Sung, C.P. Yang and T.Y. Chen. Removing of Nano-particles from Semiconductor Wastewater Using a Hybrid Treatment System. accepted to Advanced Materials Research, 2012. (EI)
65. W.Y. Huang, Z.H. Yang, C.M. Kao, W.A. Tsai, W.P. Sung. Application of Traid Approach and RBCA for Remedial Strategies Development at a Chlorinated-hydrocarbon Contaminated Site. Accepted to Applied Mechanics and Materials, 2012. (EI)
66. Chun-Ting Chen, Chiu-Wen Chen, Chih-Feng Chen, Cheng-Di Dong, Chih-Ming Kao, Evaluation of Zinc Contamination in the Sediments of Salt River Mouth, Taiwan, accepted to Applied Mechanics and Materials, 2012. (EI)
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