

- Aarthi, T. Narahari, P. and Madras, G. "Photocatalytic degradation of Azure and Sudan dyes using nano TiO₂", Journal of Hazardous Materials, 149(3) (2007) 725-734.
- Abdel-Shafy, H. I. and Mansour, M. S. M. "A review on polycyclic aromatic hydrocarbons: Source, environmental impact, effect on human health and remediation", Egyptian Journal of Petroleum, 25(1) (2016) 107-123.
- Abdul Aziz, A.R. and Daud, W.M.A.W. "Oxidative mineralisation of petroleum refinery effluent using Fenton-like process", Chemical Engineering Research and Design, 90(2), (2012) 298-307.
- Abdullah, A. M. Al-Thani, N. J. Tawbi, K. and Al-Kandari, H. "Carbon/nitrogen-doped TiO₂: New synthesis route, characterization and application for phenol degradation", Arabian Journal of Chemistry, 9(2) (2016) 229-237.
- Abuhamed, T. Bayraktar, E. Mehmetoğlu, T. and Mehmetoğlu, Ü. "Kinetics model for growth of *Pseudomonas putida* F1 during benzene, toluene and phenol biodegradation", Process Biochemistry, 39(8) (2004) 983-988.
- Adam, N. Schmitt, C. De Bruyn, L. Knapen, D. and Blust, R. "Aquatic acute species sensitivity distributions of ZnO and CuO nanoparticles", Science of The Total Environment, 526 (2015) 233-242.
- Adams, F.G. and Marquez, J. "The impact of petroleum and commodity prices in a model of the world economy contributions to economic analysis", (2015) 147: 203–218.
- Ahmed, S. Rasul, M. G. Martens, W. N. Brown, R. Hashib, M. A. "Heterogeneous photocatalytic degradation of phenols in wastewater: A review on current status and developments", Desalination, 261(1-2) (2010) 3-18.
- Akhbarizadeh, R. Moore, F. Keshavarzi, B., and Moeinpour, A. "Aliphatic and polycyclic aromatic hydrocarbons risk assessment in coastal water and sediments of Khark Island, SW Iran", Marine Pollution Bulletin, 108(1-2) (2016) 33-45.
- Akizuki, M. Fujii, T. Hayashi, R. and Oshima, Y. "Effects of water on reactions for waste treatment, organic synthesis, and bio-refinery in sub- and supercritical water", Journal of Bioscience and Bioengineering, 117(1) (2014) 10-18.
- Akpan, U. G. and Hameed, B. H. "Parameters affecting the photocatalytic degradation of dyes using TiO₂-based photocatalysts: a review", Journal of Hazardous Materials, 170(2) (2009) 520–529.

- Alagappan, G. and Cowan, R. M. "Effect of temperature and dissolved oxygen on the growth kinetics of *Pseudomonas putida* F1 growing on benzene and toluene", *Chemosphere*, 54(8) (2004) 1255-1265.
- Albuquerque, M. Coutinho, M. and Borrego, C. "Long-term monitoring and seasonal analysis of polycyclic aromatic hydrocarbons (PAHs) measured over a decade in the ambient air of Porto, Portugal", *Science of The Total Environment*, 543(A) (2016) 439-448.
- Aljuboury, D. A. D. A. Palaniandy, P. Aziz H. B. A. and Feroz, S. "Treatment of petroleum wastewater using combination of solar photo-two catalyst TiO₂ and photo-Fenton process", *Journal of Environmental Chemical Engineering* 3(2) (2015) 1117-1124.
- Anirudhan, T. S. and Ramachandran, M. "Removal of 2,4,6-trichlorophenol from water and petroleum refinery industry effluents by surfactant-modified bentonite", *Journal of Water Process Engineering*, 1 (2014) 46-53.
- Annweiler, E. Richnow, H. H. Antranikian, G. Hebenbrock, S. Grams, C. Franke, S. Francke, W. Michaelis, W. "Naphthalene degradation and incorporation of naphthalene-derived carbon into biomass by the thermophile *Bacillus thermoleovorans*", *Applied and Environmental Microbiology*, 66 (2000) 518-523.
- Arias, A. H. Spetter, C. V. Freije, R. H. and Marcovecchio, J. E. "Polycyclic aromatic hydrocarbons in water, mussels (*Brachidontes* sp., *Tagelus* sp.) and fish (*Odontesthes* sp.) from Bahía Blanca Estuary, Argentina", *Estuarine, Coastal and Shelf Science* 85(1) (2009) 67-81.
- Arora, A. K. Rajalakshmi, M. Ravindran, T. R. and Sivasubramanian, V. "Raman spectroscopy of optical phonon confinement in nanostructured materials", *Journal of Raman Spectroscopy*, 38 (2007) 604-617.
- Asilturk, M. and Sener, S. "TiO₂-activated carbon photocatalysts: Preparation, characterization and photocatalytic activities", *Chemical Engineering Journal*, 180 (2012) 354-363.
- Atlas, R. M. "Effects of hydrocarbons on microorganisms and petroleum biodegradation in arctic ecosystems", *Petroleum Effects in the Arctic Environment*, (1985) 63-100.
- Atlas, R. M. "Petroleum microbiology-I", *In: Encyclopedia of Microbiology*, Academic Press, Baltimore, Md, USA. pp: 363–369, (1992).
- Ba-Abbad, M. M. Kadhum, A. A. H. Mohamad, A. B. Takriff, M. S. and Sopian, K. "Synthesis and catalytic activity of TiO₂ nanoparticles for photochemical

- oxidation of concentrated chlorophenols under direct solar radiation,” International Journal of Electrochemical Science, 7 (2012) 4871–4888.
- Bahadar, H. Mostafalou, S. Abdollahi, M. “Current understandings and perspectives on non-cancer health effects of benzene: A global concern”, Toxicology and Applied Pharmacology, 276(2) (2014) 83-94.
- Bai, C. L. “Ascent of nanoscience in China. Science”, 309 (2005) 61-63.
- Bamforth, S. M. and Singleton, I. “Bioremediation of polycyclic aromatic hydrocarbons: current knowledge and future directions”, Journal of Chemical Technology and Biotechnology, 80(7) (2005) 723-736.
- Bandara, J. Mielczarski, and J. A. Kiwi, J. “Photosensitized Degradation of Azo Dyes on Fe, Ti, and Al Oxides. Mechanism of Charge Transfer during the Degradation”, Langmuir, 15(22) (1999) 7680-7887.
- Barhoumi, B. El Megdiche, Y. Clérandeau , C. Ameur, W. B. Mekni, S. Bouabdallah, S. Derouiche, A. Touil, S. Cachot, J. and Driss, M. R. “Occurrence of polycyclic aromatic hydrocarbons (PAHs) in mussel (*Mytilus galloprovincialis*) and eel (*Anguilla anguilla*) from Bizerte lagoon, Tunisia, and associated human health risk assessment”, Continental Shelf Research, 124 (2016) 104-116.
- Barnes, R. J. Molina, R. Xu, J. B. Dobson, P. J. and Thompson, I. P. “Comparison of TiO₂ and ZnO nanoparticles for photocatalytic degradation of methylene blue and the correlated inactivation of gram-positive and gram-negative bacteria”, Journal of Nanoparticle Research, 15(2) (2013) 1432.
- Barreca, D. Carraro, G. Warwick, M. E. Kaunisto, K. Gasparotto, A. Gombac, V. Fornasiero, P. “Fe₂O₃-TiO₂ nanosystems by a hybrid PE-CVD/ALD approach: controllable synthesis, growth mechanism, and photocatalytic properties”, CrystEngComm, 17(32) (2015) 6219-6226.
- Barreca, D. Ferrucci, A. P. Gasparotto, A. Maccato, C. Maragno, C. Tondello, E. “Temperature-Controlled Synthesis and Photocatalytic Performance of ZnO Nanoplatelets”, Chemical Vapor Deposition, 13(11) (2007) 618-625.
- Bartha, R. and Bossert, I. “The treatment and disposal of petroleum wastes”, Petroleum Microbiology, (1984) 553–578.
- Bartha, R. “Biotechnology of petroleum pollutant biodegradation”, Microbial Ecology, 12(1) (1986) 155-172.
- Beg, M. U. Al-Subiai, S. N. Al-Jandal, N. Butt, S. A. Beg, K. R. Al-Husaini, M. “Seasonal effect on biomarkers of exposure to petroleum hydrocarbons in fish from Kuwait's marine area”, Marine Pollution Bulletin, 100(2) (2015) 673-680.

- Benford, D. DiNovi, M. and Setzer, R.W. "Application of the margin-of-exposure (MoE) approach to substances in food that are genotoxic and carcinogenic e.g.: Benzo[a]pyrene and polycyclic aromatic hydrocarbons", *Food and Chemical Toxicology*, 48 Supplement 1: (2010) S42-S48
- Bhatnagar, A. and Anastopoulos, I. "Adsorptive removal of bisphenol A (BPA) from aqueous solution: A review" *Chemosphere*, 168 (2017) 885-902.
- Bianco-Prevot, A. Baiocchi, C. Brussino, M. C. Pramauro, E. Savarino, P. Augugliaro, V. Marci, G. and Palmisano, L. "Photocatalytic degradation of acid blue 80 in aqueous solutions containing TiO₂ suspensions", *Environmental Science and Technology*, 35 (2001) 971-976.
- Bokare, A. D. Choi, W. "Review of iron-free Fenton-like systems for activating H₂O₂ in advanced oxidation processes", *Journal of Hazardous Materials*, 275 (2014) 121-135.
- Booij, K. Robinson, C. D. Burgess, R. M. Mayer, P. Roberts, C. A. Ahrens, L. Allan, I. J. Brant, J. Jones, L. Kraus, U. R. Larsen, M. M. Lepom, P. Petersen, J. Pröfrock ,D. Roose, P. Schäfer, S. Smedes, F. Tixier, C. Vorkamp, K. Whitehouse, P. "Passive sampling in regulatory chemical monitoring of nonpolar organic compounds in the aquatic environment", *Environmental Science and Technology*, 50(1) (2016) 3-17.
- Boonnarat, J. Chiemchaisri, C. Chiemchaisri, W. and Yamamoto, K. "Kinetics of phenolic and phthalic acid esters biodegradation in membrane bioreactor (MBR) treating municipal landfill leachate", *Chemosphere*, 150 (2016) 639-649.
- Boopathy, R. "Anaerobic biodegradation of no. 2 diesel fuel in soil: a soil column study", *Bioresource Technology*, 94 (2004) 143–151.
- Borràs, E. Caminal, G. Sarrà, M. and Novotný, Č. "Effect of soil bacteria on the ability of polycyclic aromatic hydrocarbons (PAHs) removal by *Trametes versicolor* and *Irpea lacteus* from contaminated soil", *Soil Biology and Biochemistry*, 42(12) (2010) 2087-2093.
- Borska, L. Smejkalova, J. Cerna, M. Hamakova, K. Kucera, I. Kremlacek, J. Pelikanova, D. and Fiala, Z. "Urinary mutagenicity and genotoxic risk in children with psoriasis after therapeutic exposure to polycyclic aromatic hydrocarbons and ultraviolet radiation", *Mutation Research/Genetic Toxicology and Environmental Mutagenesis*, 696(2) (2010) 144-147.
- Bouazza, N. Lillo-Ródenas, M. A. Linares-Solano, A. "Photocatalytic activity of TiO₂-based materials for the oxidation of propene and benzene at low

- concentration in presence of humidity”, Applied Catalysis B: Environmental, 84(3–4) (2008) 691–698.
- Bougheloum, C. and Messalhi, A. “Photocatalytic Degradation of Benzene Derivatives on TiO₂ Catalyst”, Physics Procedia, 2(3) (2009) 1055-1058.
- Boyd, S. A. and Shelton, D. R. “Anaerobic biodegradation of chlorophenols in fresh and acclimated sludge”, Applied and Environmental Microbiology, 47(2) (1984) 272-277.
- Boyjoo, Y. Ang, M. and Pareek, V. “Light intensity distribution in multi-lamp photocatalytic reactors,” Chemical Engineering Science, 93 (2013) 11-21.
- Brodzik, K. Faber, J. Łomankiewicz, D. Gołda-Kopek, A. “In-vehicle VOCs composition of unconditioned, newly produced cars”, Journal of Environmental Sciences, 26(5) (2014) 1052-1061
- Brumfiel, G. “Nanotechnology: a little knowledge”, Nature, 424 (2003) 246-248.
- Bui, X. T. Vo, T. P. T. Ngo, H. H. Guo, W. S. and Nguyen, T. T. “Multicriteria assessment of advanced treatment technologies for micropollutants removal at large-scale applications”, Science of The Total Environment, 563–564 (2016) 1050-1067.
- Byberg, R. Cobb , J. L. Martin, D. Thompson, R. W. Camesano, T. A. Zahraa, O. and Pons, M. N. “Comparison of photocatalytic degradation of dyes in relation to their structure”, Environmental Science and Pollution Research, 20 (2013) 3570–3581.
- Cao, X., Wen, Z., Chen, J., and Li, H. “Contributing to differentiated technology policy-making on the promotion of energy efficiency technologies in heavy industrial sector: a case study of China”, Journal of Cleaner Production, 112(2) (2016) 1486-1497.
- Carbajo, J. Jiménez, M. Miralles, S. Malato, S. Faraldo, M. and Bahamonde, A. “Study of application of titania catalysts on solar photocatalysis: Influence of type of pollutants and water matrices”, Chemical Engineering Journal, 291 (2016) 64-73.
- Carmen, I. U. Chithra, P. Huang, Q. Takhistov, P. Liu, S. and Kokini, J. L. “Nanotechnology: a new frontier in food science,” Food Technology, 57(2003) 24–29.
- Carmichael, L. M. and Pfaender, F. K. “The effect of inorganic and organic supplements on the microbial degradation of phenanthrene and pyrene in soils”, Biodegradation, 8(1) (1997) 1-13.

- Carraro, G. Sugrañez, R. Maccato, C. Gasparotto, A. Barreca, D. Sada, C. and Sánchez, L. “Nanostructured iron (III) oxides: From design to gas-and liquid-phase photo-catalytic applications”, *Thin Solid Films*, 564 (2014) 121-127.
- Caselli, M. De Gennaro, G. Marzocca, A. Trizio, L. and Tutino, M. “Assessment of the impact of the vehicular traffic on BTEX concentration in ring roads in urban areas of Bari (Italy)”, *Chemosphere*, 86 (2010) 306–311.
- Cerniglia, C. E. “Microbial metabolism of polycyclic aromatic hydrocarbons”, *Advances in Applied Microbiology*, 30 (1984) 31–71
- Chaillan, F. Chaineau, C. H. Point, V. Saliot, A. and Oudot, J. “Factors inhibiting bioremediation of soil contaminated with weathered oils and drill cuttings”, *Environmental Pollution*, 144(1) (2006) 255-265.
- Chaillan, F. Le Flèche, A. Bury, E. Phantavong, Y. H. Grimont, P. Saliot, A. and Oudot, J. “Identification and biodegradation potential of tropical aerobic hydrocarbon-degrading microorganisms”, *Research in Microbiology*, 155(7) (2004) 587-595.
- Chakraborty, S. Weindorf, D. C. Li, B. Ali Aldabaa, A. A. Ghosh, R. K. Paul, S. Nasim, Ali, M. “Development of a hybrid proximal sensing method for rapid identification of petroleum contaminated soils”, *Science of The Total Environment*, 514 (2015) 399-408.
- Chang Chien, S. W. Chang, C. H. Chen Wang, M. C. Madhava Rao, M. Satya, V. S. “Effect of sunlight irradiation on photocatalytic pyrene degradation in contaminated soils by micro-nano size TiO₂”, *Science of The Total Environment*, 409(19) (2010) 4101-4108.
- Chen, J. Huang, Y. Li, G. An, T. Hu ,Y. and Li, Y. “VOCs elimination and health risk reduction in e-waste dismantling workshop using integrated techniques of electrostatic precipitation with advanced oxidation technologies”, *Journal of Hazardous Materials*, 302 (2016) 395-403.
- Chen, X. Luo, Q. Wang, D. Gao, J. Wei ,Z. Wang, Z. Zhou, H. Mazumder, A. “Simultaneous assessments of occurrence, ecological, human health, and organoleptic hazards for 77 VOCs in typical drinking water sources from 5 major river basins, China”, *Environmental Pollution*, 206 (2015) 64-72.
- Chong, M. N. Vimonses, V. Lei, S. M. Jin, B. Chow, C. and Saint, C. “Synthesis and characterization of novel titania impregnated kaolinite nano-photocatalyst”, *Microporous and Mesoporous Materials*, 117 (2009) 233–242.

- Coates, J. D. Anderson, R. T. Lovley, D. R. "Oxidation of polycyclic aromatic hydrocarbons under sulphate –reducing conditions". *Applied and Environmental Microbiology*, 62 (1996) 1099.
- Cooney, J. J. "The fate of petroleum pollutants in fresh water ecosystems", *Petroleum Microbiology*, NY, USA, 399–434, (1984).
- Cooper, W. J. Cramer, C. J. Martin, N. H. Mezyk, S. P. O'Shea, K. E. and Sonntag, C. V. "Free radical mechanisms for the treatment of Methyl tert-Butyl Ether (MTBE) via advanced oxidation/reductive processes in aqueous solutions", *Chemical Reviews*, 109(3) (1993) 1302-1345.
- CRC CARE, "CRC CARE annual report 2013/2014 Australia: cooperative research centre for contamination assessment and remediation of the environment", CRC CARE (2013/2014). http://www.crcare.com/files/dmfile/CRCCARE_2013-14annualreport_web.pdf.
- Crini, G. "Non-conventional low-cost adsorbents for dye removal: a review", *Bioresource Technology*, 97 (2006) 1061–1085.
- Cuesta, P. Dhamelincourt, J. Laureyns, A. Martinez-Alonso, J. M. and Tasc, D. "Raman Microprobe Studies On Carbon Materials", *Carbon*, 32 (1994) 523-1532.
- Cui, Y. Liu, X. Y. Chung, T. S. Weber, M. Staudt, C. and Maletzko, C. "Removal of organic micro-pollutants (phenol, aniline and nitrobenzene) via forward osmosis (FO) process: Evaluation of FO as an alternative method to reverse osmosis (RO)", *Water Research*, 91 (2016) 104-114.
- Cunningham, J. Al-Sayyed and Srijaranai, G. S. "Adsorption of model pollutants onto TiO₂ particles in relation to photoremediation of contaminated water, in aquatic and surface photochemistry", Ed by Helz G., Zepp R and Crosby D., Lewis Publishers, CRC Press, Boca Raton, Florida, Chap., 22 (1994) 317–348.
- Dai, K. Lu, L. Liang, C. Liu, Q. Zhu, G. "Heterojunction of facet coupled g-C₃N₄/surface-fluorinated TiO₂ nanosheets for organic pollutants degradation under visible LED light irradiation", *Applied Catalysis B: Environmental*, 156–157 (2014) 331-340.
- Daneshvar, N. Salari, D. and Khataee, A. R. "Photocatalytic degradation of azo dye acid red 14 in water: investigation of the effect of operational parameters", *Journal of Photochemistry and Photobiology A: Chemistry*, 157 (2003) 111.
- Daniel, D. and Gutz, I.G.R. "Microfluidic cell with a TiO₂ -modified gold electrode irradiated by an UV-LED for in situ photocatalytic decomposition of organic

- matter and its potentiality for voltammetric analysis of metal ions”, Electrochemistry Communications, 9 (2007) 522–528
- Das, A. J. and Kumar, R. “Bioremediation of petroleum contaminated soil to combat toxicity on *Withania somnifera* through seed priming with biosurfactant producing plant growth promoting rhizobacteria”, Journal of Environmental Management, 174 (2016) 79-86.
- Dashliborun, A. M. Sotudeh-Gharebagh, R. Hajaghazadeh, M. Kakooei, H. and Afshar, S. “Modeling of the photocatalytic degradation of methyl ethyl ketone in a fluidized bed reactor of nano-TiO₂/γ-Al₂O₃ particles”, Chemical Engineering Journal, 226 (2013) 59-67.
- Daud, N. K. Akpan, U. G. and Hameed, B. H. “Decolorization of Sunzol Black DN conc. In aqueous solution by Fenton oxidation process: effect of system parameters and kinetic study”, Desalination and Water Treatment, 37 (2012) 1-7.
- Davarnejad, R. Mohammadi, M. and Ismail, A. F. “Petrochemical wastewater treatment by electro-Fenton process using aluminum and iron electrodes: Statistical comparison,” Journal of Water Process Engineering, 3 (2014) 18-25.
- Dawson, N. G. Sweating the small stuff, environmental risk and nanotechnology. BioScience 58 (2008) 690.
- De León, M. A. Sergio, M. Bussi, J. Ortiz de la Plata, G. Cassano, A. E. Alfano, O. M. “Optical properties of iron pillared clays as catalysts for heterogeneous Photo-Fenton process”, Industrial and Engineering Chemistry Research, 54(4) (2015) 1228-1235.
- Deary, M. E. Ekumankama, C. C. and Cummings, S. P. “Development of a novel kinetic model for the analysis of PAH biodegradation in the presence of lead and cadmium co-contaminants”, Journal of Hazardous Materials, 307 (2016) 240-252.
- Dehkourdi, E. H. and Mosavi M. “Effect of anatase nanoparticles (TiO₂) on parsley seed germination (*Petroselinum crispum*) in vitro”, Biological Trace Element Research, 155 (2013) 283-286.
- Desai, J.D. “Microbial surfactants-evaluation, types, production and future applications”, Journal of Scientific & Industrial Research, 46(10) (1987) 440-449.
- Díaz, E. Jiménez, J. I. and Nogales, J. “Aerobic degradation of aromatic compounds”, Current Opinion in Biotechnology, 24(3) (2013) 431-442.

- Dietmar, B. Godoy, P. Muñoz-Rojas, J. Duque, E. Moreno-Morillas, S. Sánchez, L. Ramos J.L. "Rhizoremediation of lindane by root-colonizing *Sphingomonas*", Microbial biotechnology, 1 (2008) 87-93.
- Diya'uddeen, B. H., Daud, W. M. A. W. and Abdul Aziz, A. R. "Treatment technologies for petroleum refinery effluents: A review", Process Safety and Environmental Protection, 89(2) (2011) 95-105.
- Dobslaw, D. and Engesser, K. H. "Degradation of toluene by ortho cleavage enzymes in Burkholderia fungorum FLU100", Microbial Biotechnology, 8(1) (2015) 143–154.
- Dominguez-Cuevas, P. González-Pastor, J. E. Marqués, S. Ramos, J. L. and de Lorenzo, V. "Transcriptional tradeoff between metabolic and stress-response programs in *Pseudomonas putida* KT2440 cells exposed to toluene", Journal of Biological Chemistry, 281 (2006) 11981–11991
- Dorer, C., Vogt, C., Neu, T. R., Stryhanyuk, H., Richnow, H. H. "Characterization of toluene and ethylbenzene biodegradation under nitrate-, iron(III)- and manganese(IV)-reducing conditions by compound-specific isotope analysis", Environmental Pollution, 211 (2016) 271-281.
- Dyke, M. I. V. Couture, P. Brauer, M. Lee, H. and Trevors, J. T. "*Pseudomonas aeruginosa* UG2 rhamnolipid biosurfactants: structural characterization and their use in removing hydrophobic compounds from soil", Canadian Journal of Microbiology, 39 (1993) 1071–1078.
- Dzinun, H. Othman, M. H. D. Ismail, A. F. Puteh, M. H. Rahman, M. A. and Jaafar, J. "Photocatalytic degradation of nonylphenol using co-extruded dual-layer hollow fibre membranes incorporated with a different ratio of TiO₂/PVDF", Reactive and Functional Polymers, 99 (2016) 80-87.
- Edokpolo, B. Yu, Q. J. and Connell, D. "Health risk characterization for exposure to benzene in service stations and petroleum refineries environments using human adverse response data", Toxicology Reports, 2 (2015) 917-927.
- El-Naas, M. H. Alhaija, M. A. and Al-Zuhair, S. "Evaluation of a three-step process for the treatment of petroleum refinery wastewater", Journal of Environmental Chemical Engineering, 2(1) (2014b) 56-62.
- El-Naas, M. H. Acio, J. A. and El Telib, A. E. "Aerobic biodegradation of BTEX: progresses and prospects", Journal of Environmental Chemical Engineering, 2(2), (2014a) 1104-1122.
- Elreedy, A. Tawfik, A. "Effect of hydraulic retention time on hydrogen production from the dark fermentation of petrochemical effluents contaminated with ethylene glycol," Energy Procedia, 74 (2015), 1071-1078.

- Epling, G. A. and Lin, C. "Photoassisted bleaching of dyes utilizing TiO₂ and visible light", *Chemosphere*, 46 (2002) 561–570.
- Falahatpisheh, M. H. Donnelly K. C. and Ramos K. S. "Antagonistic interactions among nephrotoxic polycyclic aromatic hydrocarbons", *Journal of Toxicology and Environmental Health*, 62 (2001) 543–560.
- Fan, R. Li, J. Chen, L. Xu, Z. He, D. Zhou, Y. Zhu, Y. Wei, F. Li, J. "Biomass fuels and coke plants are important sources of human exposure to polycyclic aromatic hydrocarbons, benzene and toluene", *Environmental Research*, 135 (2014) 1-8.
- Fan, T. Li, Y. Shen, J. Ye, M. "Novel GQD-PVP-CdS composite with enhanced visible-light-driven photocatalytic properties", *Applied Surface Science*, 367 (2016) 518-527.
- FAO/WHO [Food and Agriculture Organization of the United Nations/World Health Organization]: FAO/WHO Expert meeting on the application of nanotechnologies in the food and agriculture sectors: potential food safety implications. Rome: Meeting report; 2010.
- Feizi, H. Kamali, M. Jafari, L. and Rezvani Moghaddam, P. "Phytotoxicity and stimulatory impacts of nanosized and bulk titanium dioxide on fennel (*Foeniculum vulgare* Mill)", *Chemosphere*, 91 (2013) 506-511.
- Feizi, H. Moghaddam, P. R. Shahtahmassebi, N. and Fotovat, A. "Impact of bulk and nanosized titanium dioxide (TiO₂) on wheat seed germination and seedling growth" *Biological Trace Element Research*, 146(1) (2012) 101-106.
- Felsenstein J. Confidence limits on phylogenies: An approach using the bootstrap. *Evolution*, 39 (1985) 783-791.
- Feng, T. Lin, H. Tang, J. and Feng, Y. "Characterization of polycyclic aromatic hydrocarbons degradation and arsenate reduction by a versatile *Pseudomonas* isolate", *International Biodeterioration and Biodegradation*, 90 (2014) 79-87.
- Feng, X. Guo, H. Patel, K. Zhou, H. and Lou, X. "High performance, recoverable Fe₃O₄ZnO nanoparticles for enhanced photocatalytic degradation of phenol", *Chemical Engineering Journal*, 244 (2014) 327-334.
- Feng, Y. Dionysiou, D. D. Wu, Y. Zhou, H. Xue, L. He, S. and Yang, L. "Adsorption of dyestuff from aqueous solutions through oxalic acid modified swede rape straw: adsorption process and disposal methodology of depleted bio-adsorbents", *Bioresource Technology*, 138 (2013) 191–197.
- Fenoll, J. Hellín, P. Martínez, C. M. Flores, P. and Navarro, S. "Semiconductor-sensitized photodegradation of s-triazine and chloroacetanilide herbicides in

- leaching water using TiO₂ and ZnO as catalyst under natural sunlight”, Journal of Photochemistry and Photobiology A: Chemistry, 238 (2012) 81-87.
- Feo, G. D. and Gisi, S. D. “Using MCDA and GIS for hazardous waste landfill siting considering land scarcity for waste disposal,” Waste Management, 34(11) (2014) 2225-2238.
- Ferrari-Lima, A. M. de Souza, R. P. Mendes, S. S. Marques, R. G. Gimenes, M. L. Fernandes-Machado, N. R. C. “Photodegradation of benzene, toluene and xylenes under visible light applying N-doped mixed TiO₂ and ZnO catalysts”, Catalysis Today, 241(A) (2015) 40-46.
- Fersi, C. and Dhahbi, M. “Treatment of textile plant effluent by ultrafiltration and/or nanofiltration for water reuse”, Desalination, 222 (2008) 263–271.
- Fischer, K. Gläser, R. and Schulze, A. “Nanoneedle and nanotubular titanium dioxide – PES mixed matrix membrane for photocatalysis,” Applied Catalysis B: Environmental, 160–161 (2014) 456-464.
- Floodgate, G. D. “The fate of petroleum in marine ecosystems in Petroleum Microbiology”, R. M. Atlas, Ed., (1984). pp. 355–398, Macmillon, New York, NY, USA.
- Fogler, S. H. “Elements of Chemical Reaction Engineering”, Fourth Edition, PHI Learning Private Limited, (2011) New Delhi-110001.
- Foletto, E. L. Simões, J. M. Mazutti, M. A. Jahn, S. L. Muller, E. I. Pereira, L. S. F. and Flores, E. M. D. M. “Application of Zn₂SnO₄ photocatalyst prepared by microwave-assisted hydrothermal route in the degradation of organic pollutant under sunlight”, Ceramics International, 39(4) (2013) 4569-4574.
- Folwell, B. D. McGenity, T. J. Price, A. Johnson, R. J. and Whitby, C. “Exploring the capacity for anaerobic biodegradation of polycyclic aromatic hydrocarbons and naphthenic acids by microbes from oil-sands-process-affected waters,” International Biodeterioration and Biodegradation, 108 (2016) 214-221.
- Fowles, J. R., Banton, M. I., Boogaard, P. J., Ketelslegers, H. B., Rohde, A. M. “Assessment of petroleum streams for thyroid toxicity”, Toxicology Letters, 254 (2016) 52-62.
- Freije, A. M. “Heavy metal, trace element and petroleum hydrocarbon pollution in the Arabian Gulf: Review”, Journal of the Association of Arab Universities for Basic and Applied Sciences, 17 (2015) 90-100.
- Fu, X. Wang, X. Ding, Z. Leung, D.Y.C. Zhang, Z. Long, J. Zhang, W. Li, Z. Fu, X. “Hydroxide ZnSn(OH)₆: A promising new photocatalyst for benzene degradation”, Applied Catalysis B: Environmental, 91(1–2) (2009) 67-72.

- Fuchs, G. Boll, M. and Heider, J. “Microbial degradation of aromatic compounds— from one strategy to four”, *Nature Reviews Microbiology*, 9(11) (2011) 803-816.
- Fuentes, I. Rodríguez, J. L. Poznyak, T. Chairez, I. “Photocatalytic ozonation of terephthalic acid: a by-product-oriented decomposition study”, *Environmental Science and Pollution Research*, 21: (2014) 12241-12248.
- Fujishima, K. Honda “Electrochemical Photolysis of Water at a Semiconductor Electrode”, *Nature*, 238 (1972) 37-38.
- Galindo, C. Jacques, P. Kalt, A. “Photodegradation of aminoazobenzene Acid red orange 52 by three advanced oxidation process UV/H₂O₂, UV/TiO₂, VIS/TiO₂: comparative mechanistic and kinetic investigation”, *Journal of Photochemistry and Photobiology A: Chemistry* 130 (2000) 35-47.
- Gao, H. T. Si, C. D. Zhou, J. Liu, G. J. “Sound assisted photocatalytic degradation of formaldehyde in fluidized bed reactor”, *Journal of the Taiwan Institute of Chemical Engineers*, 42(1) (2011) 108-113.
- Gao, Y. Yuan, X. Lin, X. Sun, B. Zhao, Z. “Low-molecular-weight organic acids enhance the release of bound PAH residues in soils”, *Soil and Tillage Research*, 145 (2015) 103-110.
- García, A. and Matos, J. “Photocatalytic Activity of TiO₂ on Activated Carbon under Visible Light in the Photodegradation of Phenol”, *The Open Materials Science Journal*, 4 (2010) 2-4.
- Garcia, A. Espinosa, R. Delgado, L. Casals, E. Gonzalez, E. Puntes, V. Barata, C. Font, X. and Sanchez, A. “Acute toxicity of cerium oxide, titanium oxide and iron oxide nanoparticles using standardized tests”, *Desalination* 269 (2011) 136–141.
- Gayaa, U. I. Abdullah, A. H. “Heterogeneous photocatalytic degradation of organic contaminants over titanium dioxide: A review of fundamentals, progress and problems”, *Journal of Photochemistry and Photobiology C: Photochemistry Reviews*, 9 (2008) 1–12.
- Ge, M. Chen, Y. Liu, M. Li, M. “Synthesis of magnetically separable Ag₃PO₄/ZnFe₂O₄ composite photocatalysts for dye degradation under visible LED light irradiation”, *Journal of Environmental Chemical Engineering*, 3(4) (2015) 2809-2815.
- Ghosh, M. Chakraborty, A. Mukherjee, A. “Cytotoxic, genotoxic and the hemolytic effect of titanium dioxide (TiO₂) nanoparticles on human erythrocyte and

- lymphocyte cells in vitro”, Journal of Applied Toxicology, 33(10) (2013) 1097-1110.
- Gibb, A. Chu, A. Wong, R. C. K. and Goodman, R. H. “Bioremediation kinetics of crude oil at 5 °C”, Journal of Environmental Engineering, 127(9) (2001) 818-824.
- Gibson, D. T. Zylstra, G. J. and Chauhan, S. “Biotransformations catalyzed by toluene dioxygenase from *Pseudomonas putida* F1”, American Society for Microbiology, (1990) 121–132.
- Golob, V. Vinder , A. and Simonic, M. “Efficiency of the coagulation/flocculation method for the treatment of dye bath effluents”, Dyes and Pigments, 67 (2005) 93–97.
- Gomes, N. C. Kosheleva, I. A. Abraham, W. R. and Smalla, K. "Effects of the inoculant strain *Pseudomonas putida* KT2442 (pNF142) and of naphthalene contamination on the soil bacterial community", FEMS Microbiology Ecology, 54(1) (2005) 21–33.
- Goncalves, D. M. and Girard, D. “Zinc oxide nanoparticles delay human neutrophil apoptosis by a de novo protein synthesis-dependent and reactive oxygen species-independent mechanism”, Toxicology in Vitro, 28(5) (2014) 926-931.
- Gondal, M. A. and Sayeed, M. N. “Laser-enhanced photocatalytic degradation of organic pollutants from water using ZnO semiconductor catalyst”, Journal of Environmental Science and Health Part A, 43(1) (2007) 70-77.
- Gopinath, M., Mohanapriya, C., Sivakumar, K., Baskar, G., Muthukumaran, C., and Dhanasekar, R. “Microbial abatement of toluene using *Aspergillus niger* in upflow bioreactor” Ecotoxicology and Environmental Safety, 134 (2016) 370-376.
- Goswami, P. Ohura, T. Guruge, K. S. Yoshioka, M. Yamanaka, N. Akiba, M. and Munuswamy, N. “Spatio-temporal distribution, source, and genotoxic potential of polycyclic aromatic hydrocarbons in estuarine and riverine sediments from southern India”, Ecotoxicology and Environmental Safety, 130 (2016) 113-123.
- Gottschalk, F. and Nowack, B. “The release of engineered nanomaterials to the environment,” Journal of Environmental Monitoring, 13 (2011) 1145-1155.
- Goyal, A. K. and Zylstra, G. J. “Genetics of naphthalene and phenanthrene degradation by *Comamonas testosterone*”, Journal of Industrial Microbiology and Biotechnology, 19(5-6) (1997) 401-407.
- Grbic-Galic, D. “Developments in Petroleum Science”. Erle, C. D. (ed), Elsevier, pp. 145-161, (1991).

- Gu, Y. G. Ke, C. L. Liu, Q. Lin, Q. "Polycyclic aromatic hydrocarbons (PAHs) in sediments of Zhelin Bay, the largest mariculture base on the eastern Guangdong coast, South China: Characterization and risk implications", *Marine Pollution Bulletin*, 110(1) (2016) 603-608.
- Guetta, N. and Amar, A. H. "Photocatalytic oxidation of methyl orange in presence of titanium dioxide in aqueous suspension Part II: kinetics study", *Desalination*, 185 (2005) 439–448
- Guo, B. Pasco, E.V. Xagoraraki, I. and Tarabara, V.V. "Virus removal and inactivation in a hybrid microfiltration–UV process with a photocatalytic membrane", *Separation and Purification Technology*, 149 (2015) 245-254.
- Gupta, N. and Pal, B. "Core–shell structure of metal loaded CdS–SiO₂ hybrid nanocomposites for complete photomineralization of methyl orange by visible light", *Journal of Molecular Catalysis A: Chemical*, 391 (2014) 158-167.
- Guthrie, E. A. and Pfaender, F. K. "Reduced pyrene bioavailability in microbially active soils", *Environmental Science and Technology*, 32(4) (1998) 501-508.
- Haghollahi, A. Fazaelipoor, M. H. and Schaffie, M. "The effect of soil type on the bioremediation of petroleum contaminated soils", *Journal of Environmental Management*, 180 (2016) 197-201.
- Hamme, J. D. van Singh, A. and Ward, O. P. "Recent advances in petroleum microbiology", *Microbiology and Molecular Biology Reviews*, 67(4) (2003) 503-549.
- Hao, C. Li, J. Zhang, Z. Ji, Y. Zhan, H. Xiao, F. Wang, D. Liu, B. and Su, F. "Enhancement of photocatalytic properties of TiO₂ nanoparticles doped with CeO₂ and supported on SiO₂ for phenol degradation", *Applied Surface Science*, 331 (2015) 17-26.
- Haque, M. M. Munneer, M. "Photodegradation of norfloxacin in aqueous suspensions of titanium dioxide", *Journal of Hazardous Materials*, 145 (2007) 51-57.
- Hazrati, S. Rostami, R. Fazlzadeh, M. "BTEX in indoor air of waterpipe cafés: Levels and factors influencing their concentrations", *Science of The Total Environment*, 524–525 (2015) 347-353.
- He, F. Ma, F. Li, T. and Li, G . "Solvothermal synthesis of N-doped TiO₂ nanoparticles using different nitrogen sources, and their photocatalytic activity for degradation of benzene", *Chinese Journal of Catalysis*, 34(12) (2013) 2263-2270.

- Hedbavna, P. Rolfe, S. A. Huang, W. E. Thornton, S. F. "Biodegradation of phenolic compounds and their metabolites in contaminated groundwater using microbial fuel cells," *Bioresource Technology*, 200 (2016) 426-434.
- Hema, M. Arasi, A.Y. Tamilselvi, P. Anbarasan, R. "Titania nanoparticles synthesized by Sol-Gel technique", *Chemical Science Transactions*, 2(1) (2013) 239-245.
- Hernandez-Garcia, F. A. Torres-Delgado, G. Castanedo-Perez, R. and Zelaya-Angel, O. "Gaseous benzene degradation by photocatalysis using $ZnO + Zn_2TiO_4$ thin films obtained by sol-gel process", *Environtal Science and Pollution Research*, 23(13) (2016) 13191-9.
- Hernández-García, F. A. Torres-Delgado, G. Castanedo-Pérez, R. and Zelaya-Ángel. O. "Photodegradation of gaseous C_6H_6 using $CdO+CdTiO_3$ and TiO_2 thin films obtained by sol-gel technique", *Journal of Photochemistry and Photobiology A: Chemistry*, 310 (2015) 52-59.
- Hinojosa-Reyes, M. Arriaga, S. Diaz-Torres, L. A. and Rodríguez-González, V. "Gas-phase photocatalytic decomposition of ethylbenzene over perlite granules coated with indium doped TiO_2 ", *Chemical Engineering Journal*, 224 (2013) 106-113.
- Horie, Y. Taya, M. Tone, S. "Effect of Cell Adsorption on Photosterilization of *Escherichia coli* over Titanium Dioxide-Activated Charcoal Granules", *Journal of Chemical Engineering of Japan*, 31(6) (1998) 922-929.
- Hosseinzadeh, R. and Moosavi-Movahedi, A. A. "Human hemoglobin structural and functional alterations and heme degradation upon interaction with benzene: A spectroscopic study", *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 157 (2016) 41-49.
- Houde, M. De Silva, A. O. Muir, D. C. G. and Letcher, R. J. "Monitoring of Perfluorinated Compounds in Aquatic Biota: An Updated Review", *Environmental Science and Technology*, 45(19) (2011) 7962-7973.
- Hruby, M. Cigler, P. and Kuzel, S. "Contribution to understanding the mechanism of titanium action in plant," *Journal of Plant Nutrition*, 25 (2002) 577–598.
- Hu, G. Li, J. and Hou, H. "A combination of solvent extraction and freeze thaw for oil recovery from petroleum refinery wastewater treatment pond sludge", *Journal of Hazardous Materials*, 283 (2015) 832-840.
- Hu, G., Li, J., and Zeng, G. "Recent development in the treatment of oily sludge from petroleum industry: A review," *Journal of Hazardous Materials*, 261 (2013) 470-490.

- Hu, P. and Long, M. "Cobalt-catalyzed sulfate radical-based advanced oxidation: A review on heterogeneous catalysts and applications", *Applied Catalysis B: Environmental*, 181: (2016) 103-117.
- Huang, B. Lei, C. Wei, C. and Zeng, G. "Chlorinated volatile organic compounds (Cl-VOCs) in environment- sources, potential human health impacts, and current remediation technologies", *Environment International*, 71 (2014) 118-138.
- Huang, D. Miyamoto, Y. Matsumoto, T. Tojo, T. Fan, T. Ding, J. Guo, Q. and Zhang, D. "Preparation and characterization of high-surface-area TiO₂/activated carbon by low-temperature impregnation", *Separation and Purification Technology*, 78 (2011) 9-15.
- Huang, Y. and Li, L. "Biodegradation characteristics of naphthalene and benzene, toluene, ethyl benzene, and xylene (BTEX) by bacteria enriched from activated sludge", *Water Environment Research*, 86(3) (2014) 277-284.
- Husen, A. and Siddiqi, K. S. Phytosynthesis of nanoparticles: concept, controversy and application. *Nanoscale Research Letters*, 9 (2014) 1-24.
- Inoue, H. Matsuyama, T. Liu, B. J. Sakata, T. Mori, H. and Yoneyama, H. "Photocatalytic Activities for Carbon Dioxide Reduction of TiO₂ Microcrystals Prepared in SiO₂ Matrices Using a Sol- Gel Method", *Chemistry Letters*, 3 (1994) 653-656.
- Isaac, P. Sánchez, L. A. Bourguignon, N. Cabral, M. E. and Ferrero, M. A. "Indigenous PAH-degrading bacteria from oil-polluted sediments in Caleta Cordova, Patagonia, Argentina", *International Journal on Biodeterioration and Biodegradation*, 82 (2013) 207–214.
- Jagmann, N. Brachvogel, H. P. and Philipp, B. "Parasitic growth of *Pseudomonas aeruginosa* in co-culture with the chitinolytic bacterium *Aeromonas hydrophila*", *Environmental Microbiology*, 12 (2010) 1787–1802.
- Jalil, A. A. Triwahyono, S. Yaakob, M. R. Azmi, Z. Z. Sapawe, N. Kamarudin, N. H. Setiabudi, H. D. Jaafar, N. F. Sidik, S. M. Adam, S. H. and Hameed, B. H. "Utilization of bivalve shell-treated *Zea mays* L. (maize) husk leaf as a low-cost biosorbent for enhanced adsorption of malachite green", *Bioresource Technology*, 120 (2012) 218-224.
- Janbandhu, A. and Fulekar, M. H. "Biodegradation of phenanthrene using adapted microbial consortium isolated from petrochemical contaminated environment", *Journal of Hazardous Materials* 187(1–3) (2011) 333-340.
- Jayamohan, H. Smith, Y. R. Gale, B. K. Mohanty, S. K. and Misra, M. "Photocatalytic microfluidic reactors utilizing titania nanotubes on titanium

- mesh for degradation of organic and biological contaminants,” Journal of Environmental Chemical Engineering, 4(1) (2016) 657-663.
- Jean, J. S. Lee, M. K. and Wang, S. M. Chattopadhyay, P. and Maity, J. P. “Effects of inorganic nutrient levels on the biodegradation of benzene, toluene, and xylene (BTX) by *Pseudomonas* spp. in a laboratory porous media sand aquifer model”, Bioresource technology, 99(16) (2008) 7807-7815.
- Jeong, J. Sekiguchi, K. and Sakamoto, K. “Photochemical and photocatalytic degradation of gaseous toluene using short-wavelength UV irradiation with TiO₂ catalyst: comparison of three UV sources”, Chemosphere, 57(7) (2004) 663-671.
- Ji, Y. “Membrane technologies for water treatment and reuse in the gas and petrochemical industries. in: Advances in Membrane Technologies for Water Treatment”, Woodhead Publishing. Oxford, (2015) pp. 519-536.
- Jin, H. M. Choi, E. J. and Jeon, C. O. “Isolation of a BTEX-degrading bacterium, *Janibacter* sp. SB2, from a sea-tidal flat and optimization of biodegradation conditions”, Bioresource Technology, 145 (2013) 57-64.
- Jin, Q. L. Arimoto, H. Fujishima, M. Tada, H. “Manganese Oxide-Surface Modified Titanium(IV) Dioxide as Environmental Catalyst,” Catalysts, 3(2) (2013) 444-454.
- Jo, M. S. Rene, E. R. Kim, S. H. and Park, H. S. “An analysis of synergistic and antagonistic behavior during BTEX removal in batch system using response surface methodology”, Journal of Hazardous Materials, 152(3) (2008) 1276-1284.
- Jo, W. K. and Tayade, R. J. “Recent developments in photocatalytic dye degradation upon irradiation with energy-efficient light emitting diodes”, Chinese Journal of Catalysis, 35 (2014) 1781–1792.
- Jo, W. K. Park, G. T. and Tajade, R. J. “Synergetic effect of adsorption on degradation of malachite green dye under blue LED irradiation using spiral-shaped photocatalytic reactor”, Journal of Chemical Technology and Biotechnology, 90 (2014) 2280-2289.
- Jo, W. K. Tayade, R. J. “Facile photocatalytic reactor development using nano-TiO₂ immobilized mosquito net and energy efficient UV-LED for industrial dyes effluent treatment,” Journal of Environmental Chemical Engineering, 4(1) (2016) 319-327.
- Jones, D. Head, I. Gray, N. Adams, J. Rowan, A. Aitken, C. Bennett, B. “Crude-oil biodegradation via methanogenesis in subsurface petroleum reservoirs”, Nature, 451(7175) (2007) 176-180.

- Joseph, P. J. Joseph, A. "Microbial enhanced separation of oil from a petroleum refinery sludge", *Journal of Hazardous Materials* 161(1) (2009) 522-525.
- Joško, I. and Oleszczuk, P. "Influence of soil type and environmental conditions on ZnO, TiO₂ and Ni nanoparticles phytotoxicity", *Chemosphere* 92(2013) 91-99.
- Jung, I. G. Park, C. H. "Characteristics of *Rhodococcus pyridinovorans* PYJ-1 for the biodegradation of benzene, toluene, m-xylene (BTX), and their mixtures", *Journal of Bioscience and Bioengineering*, 97(6) (2004) 429-431.
- Kalderis, D. Bethanis, S. Paraskeva, P. and Diamadopoulos, E. "Production of activated carbon from bagasse and rice husk by a single-stage chemical activation method at low retention times", *Bioresource Technology*, 99 (2008) 6809–6816.
- Kalithasan, N. Natarajan, T. S. Bajaj, H. Rajesh, C. and Tayade, J. "Photocatalytic reactor based on UV-LED/TiO₂ coated quartz tube for degradation of dyes", *Chemical Engineering Journal*, 178 (2011) 40-49.
- Karacık, B. Okay, O. S. Henkelmann, B. Bernhöft, S. Schramm, K. W. "Polycyclic aromatic hydrocarbons and effects on marine organisms in the Istanbul Strait", *Environment International*, 35(3) (2009) 599-606.
- Karadag, K. Yati, I. and Bulbul, S. H. "Effective clean-up of organic liquid contaminants including BTEX, fuels, and organic solvents from the environment by poly(alkoxysilane) sorbents", *Journal of Environmental Management*, 174 (2016) 45-54.
- Karci, A. Arslan-Alaton, I. and Bekbolet, M. "Advanced oxidation of a commercially important nonionic surfactant: Investigation of degradation products and toxicity", *Journal of Hazardous Materials*, 263 (2013) 275-282.
- Karunakaran, C. "Photocatalysis with ZrO₂: oxidation of aniline", *Journal of Molecular Catalysis A: Chemical*, 233(1,2) (2005) 1–8.
- Karunakaran, C. and Senthilvelan, S. "A review of classic Fenton's peroxidation as an advanced oxidation technique", *Journal of Hazardous Materials*, 98 (2003) 33–50.
- Khan, W. Z. Najeeb, I. Tuiyebayeva, M. and Makhtayeva, Z. "Refinery wastewater degradation with titanium dioxide, zinc oxide, and hydrogen peroxide in a photocatalytic reactor", *Process Safety and Environmental Protection*, 94 (2015) 479-486.
- Khodakovskaya, M. Dervishi, E. Mahmood, M. Xu, Y. Li, Z. Watanabe, F. and Biris, A.S. "Carbon nanotubes are able to penetrate plant seed coat and dramatically

- affect seed germination and plant growth" (retracted article. see, vol. 6, pp. 7541, 2012). ACS Nano 3(2009) 3221–3227
- Kim, C. S. Shin, J. W. An, S. H. Jang, H. D. Kim, T. O. "Photodegradation of volatile organic compounds using zirconium-doped TiO₂/SiO₂ visible light photocatalysts", Chemical Engineering Journal, 204–206 (2012) 40-47.
- Kim, D. Kim, Y. S. Kim, S. K. Kim, S. W. Zylstra, G. J. Kim, Y. M. and Kim, E. "Monocyclic aromatic hydrocarbon degradation by Rhodococcus sp. strain DK17", Applied and Environmental Microbiology, 68(7) (2002) 3270-3278.
- Kim, J. M. Le, N. T. Chung, B. S. Park, J. H. Bae, J. W. Madsen, E. L. and Jeon, C. O. "Influence of soil components on the biodegradation of benzene, toluene, ethylbenzene, and o-, m-, and p-xyles by the newly isolated bacterium Pseudoxanthomonas spadix BD-a59", Applied and Environmental Microbiology, 74(23), (2008) 7313-7320.
- Kim, J. R. and Kan, E. "Heterogeneous photo-Fenton oxidation of methylene blue using CdS-carbon nanotube/TiO₂ under visible light", Journal of Industrial and Engineering Chemistry, 21 (2015) 644-652.
- Kim, J. Zhang, P. Li, J. Wang, J. and Fu, P. "Photocatalytic degradation of gaseous toluene and ozone under UV254+185 nm irradiation using a Pd-deposited TiO₂ film", Chemical Engineering Journal, 252 (2014) 337-345.
- Kim, K. H. "A review on human health perspective of air pollution with respect to allergies and asthma", Environment International, 59 (2013) 41–52.
- Kim, K. H. Jahan, S. A. Kabir, E. and Brown, R. J. C. "A review of airborne polycyclic aromatic hydrocarbons (PAHs) and their human health effect", Environment International, 60 (2013) 71-80.
- Kim, S. B. Park, C. H. Kim, D. J. and Jury, W. A. "Kinetics of benzene biodegradation by Pseudomonas aeruginosa: parameter estimation", Environmental toxicology and chemistry, 22(5) (2003) 1038-1045.
- Kim, S. Krajmalnik-Brown, R. Kim, J. O. and Chung, J. "Remediation of petroleum hydrocarbon-contaminated sites by DNA diagnosis-based bioslurping technology", Science of the Total Environment, 497-498 (2014) 250-259.
- Kimura M. "A simple method for estimating evolutionary rate of base substitutions through comparative studies of nucleotide sequences", Journal of Molecular Evolution 16 (1980) 111-120.
- Kitajima, M. Hatanaka, S. and Hayashi, S. "Mechanism of O₂-accelerated sonolysis of bisphenol A", Ultrasonics, 44 (2006) 371–373.

- Kodavanti, P. R. S. Royland, J. E. Moore-Smith, D. A. Besas, J. Richards, J. E. Beasley, T. E. Evansky, P. Bushnell, P. J. "Acute and subchronic toxicity of inhaled toluene in male Long-Evans rats: Oxidative stress markers in brain", *NeuroToxicology*, 51 (2015) 10-19.
- Kodavanti, P. R. S. Royland, J. E. Richards, J. E. Besas, J. MacPhail, R. C. "Toluene effects on oxidative stress in brain regions of young-adult, middle-age, and senescent Brown Norway rats", *Toxicology and Applied Pharmacology*, 256(3) (2011) 386-398.
- Konstantinou, I. K. Albanis, T. A. "TiO₂-assisted photocatalytic degradation of azo dyes in aqueous solution: kinetic and mechanistic investigations A review", *Applied Catalysis B: Environmental*, 49 (2004) 1–14
- Korologos, C. A. Nikolaki, M. D. Zerva C. N. Philippopoulos, C. J. and Poulopoulos, S. G. "Photocatalytic oxidation of benzene, toluene, ethylbenzene and m-xylene in the gas-phase over TiO₂-based catalysts", *Journal of Photochemistry and Photobiology A: Chemistry*, 244 (2012) 24-31.
- Kristensen, A. H. Poulsen, T. G. Mortensen, L. Moldrup, P. "Variability of soil potential for biodegradation of petroleum hydrocarbons in a heterogeneous subsurface," *Journal of Hazardous Materials*, 179(1–3) (2010) 573-580.
- Kubo, M. Fukuda, H. Chua, H. J. and Yonemoto, T. "Kinetics of ultrasonic degradation of phenol in the presence of composite particles of titanium dioxide and activated carbon", *Industrial and Engineering Chemistry Research*, 46 (2007) 699-704.
- Kumar, J. Bansal, A. "Photocatalytic degradation in annular reactor: Modelization and optimization using computational fluid dynamics (CFD) and response surface methodology (RSM)", *Journal of Environmental Chemical Engineering*, 1(3) (2013), 398-405.
- Kumar, R. Roopan, S. M. Prabhakarn, A. Khanna, V. G. and Chakroborty, S. "Agricultural waste Annona squamosa peel extract: biosynthesis of silver nanoparticles", *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 90 (2012) 173-176.
- Kurade, M. B. Waghmode, T. R. Khandare, R. V. Jeon, B. H. Govindwar, S. P. "Biodegradation and detoxification of textile dye Disperse Red 54 by *Brevibacillus laterosporus* and determination of its metabolic fate", *Journal of Bioscience and Bioengineering*, 121(4) (2016) 442-449.
- Lachheb, H. Puzenat, E. Houas, A. Ksibi, M. Elaloui, E. Guillard, C. Herrmann, J. M. "Photocatalytic degradation of various types of dyes (Alizarin S, Crocein

- Orange G, Methyl Red, Congo Red, Methylene Blue) in water by UV-irradiated titania”, Applied Catalysis B: Environmental, 39 (2002) 75–90.
- Lal, B. & Khanna, S. “Degradation of crude oil by *Acinetobacter calcoaceticus* and *Alcaligenes odorans*”, Journal of applied bacteriology, 81(4) (1996) 355-362.
- Lan T. T. N. Minh, P. A. “BTEX pollution caused by motorcycles in the megacity of HoChiMinh”, Journal of Environmental Sciences, 25(2) (2013) 348-356.
- Lan, Y. Lu, Y. and Ren, Z. “Mini review on photocatalysis of titanium dioxide nanoparticles and their solar applications” Nano Energy, 2(5) (2013) 1031-1045.
- Leahy, J. G. and Colwell, R. R. “Microbial degradation of hydrocarbons in the environment” Microbiological reviews, 54(3) (1990) 305-315.
- Lee, B.Y. Park, S. H. Kang, M. Lee, S. C. and Choung, S. J. “Preparation of Al/TiO₂ nanometer photo-catalyst film and the effect of H₂O addition on photo-catalytic performance for benzene removal”, Applied Catalysis A: General, 253(2) (2003) 371-380.
- Lee, K. M. Lai, C. W. Ngai, K. S. Juan, J. C. “Recent developments of zinc oxide based photocatalyst in water treatment technology: A review”, Water Research, 88 (2016) 428-448.
- Lee, K. Mazare, A. and Schmuki, P. “One-Dimensional Titanium Dioxide Nanomaterials: Nanotubes” Chemical Reviews, 114(19) (2014) 9385-9454.
- LeFevre, G. H. Hozalski, R. M. Novak, P. J. “The role of biodegradation in limiting the accumulation of petroleum hydrocarbons in raingarden soils,” Water Research, 46(20) (2012), 6753-6762.
- Levchuk, I. Bhatnagar, A. Sillanpää, M. “Overview of technologies for removal of methyl tert-butyl ether (MTBE) from water”, Science of The Total Environment, 476–477 (2014) 415-433.
- Li, F. B. Li, X. Z. Ao, X. Z. Lee, S. C. Hou, H. F. “Enhanced photocatalytic degradation of VOCs using Ln³⁺-TiO₂ catalysts for indoor air purification”, Chemosphere, 59(6) (2005) 787-800.
- Li, G. Wu, S. Wang, L. and Akoh, C. C. “Concentration, dietary exposure and health risk estimation of polycyclic aromatic hydrocarbons (PAHs) in youtiao, a Chinese traditional fried food”, Food Control, 59 (2016a) 328-336.
- Li, J. Wang, G. Xu, Z. “Generation and detection of metal ions and volatile organic compounds (VOCs) emissions from the pretreatment processes for recycling spent lithium-ion batteries”, Waste Management, 52 (2016) 221-227.

- Li, P. Diao, X. Zhang, Y. Xie, Y. Yang, F. Zhou, H. Han, Q. Wang, F. Cheng, H. and Wang, H. "Polycyclic aromatic hydrocarbons in surface sediment from Yangpu Bay, China: Distribution, sources and risk assessment", *Marine Pollution Bulletin*, 99(1–2) (2015) 312-319.
- Li, S. Wang, W. Chen ,Y. Zhang, L. Guo, J. Gong, M. "Fabrication and characterization of $\text{TiO}_2/\text{BaAl}_2\text{O}_4$: Eu^{2+} , Dy^{3+} and its photocatalytic performance towards oxidation of gaseous benzene", *Catalysis Communications*, 10(7) (2009) 1048-1051.
- Li, X. Chen, X. Niu, H. Han, X. Zhang, T. Liu, J. Lin, H. and Qu, F. "The synthesis of CdS/TiO_2 hetero-nanofibers with enhanced visible photocatalytic activity", *Journal of Colloid and Interface Science*, 452 (2015) 89-97.
- Li, X. Zhao, L. and Adam, M. "Biodegradation of marine crude oil pollution using a salt-tolerant bacterial consortium isolated from Bohai Bay, China", *Marine Pollution Bulletin*, 105 (2016) 43-50.
- Li, Y. Wen, B. Ma, W. Chen, C. Zhao, J. "Photocatalytic Degradation of Aromatic Pollutants: A Pivotal Role of Conduction Band Electron in Distribution of Hydroxylated Intermediates", *Environmental Science and Technology*, 46(9) (2012) 5093-5099.
- Liew, W. T. Adhitya, A. Srinivasan, R. "Sustainability trends in the process industries: A text mining-based analysis", *Computers in Industry* 65(3) (2014) 393-400.
- Lin, C. W. Wu, C. H. Tang, C. T. and Chang, S. H. "Novel oxygen-releasing immobilized cell beads for bioremediation of BTEX-contaminated water", *Bioresource technology*, 124 (2012) 45-51.
- Liu, D. Zheng, Z. Wang, C. Yin, Y. Liu, S. Yang, B. and Jiang, Z. "CdTe Quantum Dots Encapsulated ZnO Nanorods for Highly Efficient Photoelectrochemical Degradation of Phenols", *The Journal of Physical Chemistry C*, 117(50) (2013) 26529-26537.
- Liu, G. Zheng, M. Lv, P. Liu, W. Wang, C. Zhang, B. Xiao, K. "Estimation and Characterization of Polychlorinated Naphthalene Emission from Coking Industries", *Environmental Science and Technology*, 44(21) (2010) 8156-8161.
- Liu, L. Chen, F. Yang, F. Chen, Y. and Crittenden, J. "Photocatalytic degradation of 2,4-dichlorophenol using nanoscale Fe/TiO_2 ", *Chemical Engineering Journal*, 181–182 (2012) 189-195.

- Liu, L. Jiang, C. Y. Liu, X. Y. Wu, J. F. Han J. G. and Liu, S. J. "Plant microbe association for rhizoremediation of chloronitroaromatic pollutants", *Environmental Microbiology*, 9 (2007) 465–473.
- Liu, X. Zhang, D. Guo, B. Qu, Y. Tian, G. Yue, H. and Feng, S. "Recyclable and visible light sensitive Ag–AgBr/TiO₂: Surface adsorption and photodegradation of MO", *Applied Surface Science*, 353 (2015) 913-923.
- Liu, Z. Fang, B. Wang, S. Gao, Y. Chen, F. Zheng, F. Liu, Y. and Dai, Y. "Photocatalytic degradation of gaseous benzene with CdS-sensitized TiO₂ film coated on fiber glass cloth", *Journal of Molecular Catalysis A: Chemical*, 363–364 (2012) 159-165.
- Louis, C. Liu, Y. Tassel, P. Perret, P. Chaumond, A. and André, M. "PAH, BTEX, carbonyl compound, black-carbon, NO₂ and ultrafine particle dynamometer bench emissions for Euro 4 and Euro 5 diesel and gasoline passenger cars", *Atmospheric Environment*, 141 (2016) 80-95.
- Luna, J. M. Rufino, R. D. Jara, A. M. A. T. Brasileiro, P. P. F. and Sarubbo, L. A. "Environmental applications of the biosurfactant produced by *Candida sphaerica* cultivated in low-cost substrates", *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 480 (2015) 413-418.
- Luo, Y. Chen, J. Liu, J. Shao, Y. Li, X. and Li, D. "Hydroxide SrSn(OH)₆: A new photocatalyst for degradation of benzene and rhodamine B," *Applied Catalysis B: Environmental* 182 (2016), 533-540.
- Ma, J. Zhu, C. Xu, Y. Lu, J. Huang, L. and Yang, Z. "Photocatalytic degradation of gaseous benzene with H₃PW₁₂O₄₀/TiO₂/palygorskite composite catalyst", *Journal of Saudi Chemical Society*, 21(2) (2015) 132-142.
- Ma, W. Zong, P. Cheng, Z. Wang, B. and Sun, Q. "Adsorption and bio-sorption of nickel ions and reuse for 2-chlorophenol catalytic ozonation oxidation degradation from water", *Journal of Hazardous Materials*, 266 (2014) 19-25.
- Madureira, J. Paciência, I. Rufo, J., Severo, M., Ramos, E., Barros, H. and de Oliveira Fernandes, E. "Source apportionment of CO₂, PM10 and VOCs levels and health risk assessment in naturally ventilated primary schools in Porto, Portugal", *Building and Environment* 96 (2016) 198-205.
- Mahmoodi, N. M., Arami, M., Zhang, J. "Preparation and photo catalytic activity of immobilized composite photo catalyst (titania nanoparticle/activated carbon)", *Journal of Alloys and Compounds*, 509(14) (2011) 4754–4764 .
- Makkar, R. S., and Rockne, K. J. "Comparison of synthetic surfactants 820 and biosurfactants in enhancing biodegradation of polycyclic aromatic

- hydrocarbons”, Environmental Toxicology and Chemistry, 22 (2003) 2280–2292.
- Malekshoar, G. Pal, K. He, Q. Yu, A. and Ray, A. K. “Enhanced Solar Photocatalytic Degradation of Phenol with Coupled Graphene-Based Titanium Dioxide and Zinc Oxide”, Industrial and Engineering Chemistry Research, 53(49) (2014) 18824-18832.
- Manzetti, S. van der Spoel, E. R. van der Spoel, D. “Chemical Properties, Environmental Fate, and Degradation of Seven Classes of Pollutants” Chemical Research in Toxicology, 27(5) (2014) 713-737.
- Mao, J. Luo, Y. Teng, Y. and Li, Z. “Bioremediation of polycyclic aromatic hydrocarbon contaminated soil by a bacterial consortium and associated microbial community changes”, International Journal on Biodegradation and Biodegradation, 70 (2012) 141–147.
- Margesin, R. and Schinner, F. “Biodegradation and bioremediation of hydrocarbons in extreme environments”, Applied Microbiology and Biotechnology 56(5-6) (2001) 650-663.
- Masaki, K. Hiroto, F. Xin, J. C. and Toshikuni, Y. “Kinetics of ultrasonic degradation of phenol in the presence of composite particles of titanium dioxide and activated carbon”, Industrial and Engineering Chemistry Research, 46 (2007) 699-704.
- Mastrangela, G. Emanuela, F. and Vita, M. “Polycyclic aromatic hydrocarbons and cancer in man. Environ”, Health Perspectives, 104 (1997) 1166–1170.
- Mata Sandoval, J. C. Karns, J. and Torrents, A. “Effect of rhamnolipids produced by Pseudomonas aeruginosa UG2 on the solubilization of pesticides”, Environmental Science and Technology, 34 (2000) 4923–4930.
- Mathur, A. K. and Majumder, C. B. “Kinetics modelling of the biodegradation of benzene, toluene and phenol as single substrate and mixed substrate by using Pseudomonas putida”, Chemical and Biochemical Engineering Quarterly, 24(1) (2010) 101-109.
- Mathur, A. K. and Balomajumder, C. “Biological treatment and modeling aspect of BTEX abatement process in a biofilter”, Bioresource technology, 142 (2013) 9-17.
- Mathur, A. K. and Balomajumder, C. “Performance evaluation and model analysis of BTEX contaminated air in corn-cob biofilter system”, Bioresource Technology, 133 (2013) 166-174.

- Matthews, R. W. "Kinetics of photocatalytic oxidation of organic solutes over titanium dioxide", *Journal of Catalysis*, 111 (1988) 264–272.
- Maynard, A. D. Aitken, R. J. Butz, T. Colvin, V. Donaldson, K. Oberdörster, G. Philbert, M. A. Ryan, J. Seaton, A. Stone, V. Tinkle, S. S. Tran, L. Walker, N. J. and Warheit D. B. "Safe handling of nanotechnology," *Nature* 444 (2006) 267-269.
- Mazzeo, D. E. C. Levy, C. E. de Angelis, D. D. F. and Marin-Morales, M. A. "BTEX biodegradation by bacteria from effluents of petroleum refinery", *Science of the Total Environment*, 408(20) (2010) 4334-4340.
- Megharaj, M., Ramakrishnan, B., Venkateswarlu, K., Sethunathan, N., and Naidu, R. "Bioremediation approaches for organic pollutants: A critical perspective," *Environment International*, 37 (2011) 1362-1375.
- Megson, D. Reiner, E. J. Jobst, K. J. Dorman, F. L. Robson, M. and Focant, J. F. "A review of the determination of persistent organic pollutants for environmental forensics investigations", *Analytica Chimica Acta*, 941 (2016) 10-25.
- Mehrotra, K. Yablonsky, G. S. and Ray, A. K. "Kinetic Studies of Photocatalytic Degradation in a TiO₂ Slurry System: Distinguishing Working Regimes and Determining Rate Dependences", *Industrial Engineering and Chemical Research*, (2003) 422273.
- Mello, J. M. M. D. de Lima Brandão, H. de Souza, A. A. U. da Silva, A. and de Souza, S. M. d. A. G. U. "Biodegradation of BTEX compounds in a biofilm reactor-Modeling and simulation," *Journal of Petroleum Science and Engineering*, 70 (2010) 131-139.
- Melo, J. V. Barnes, D. J. "Chronic myeloid leukaemia as a model of disease evolution in human cancer", *Nature Reviews: Cancer*, 7 (2007) 441-453.
- Meng, Z. D. Peng, M. M. Zhu, L. Oh, W. C. and Zhang, F. J. "Fullerene modification CdS/TiO₂ to enhancement surface area and modification of photocatalytic activity under visible light", *Applied Catalysis B: Environmental*, 113–114 (2012) 141-149.
- Michael, E. Nitzan, Y. Langzam, Y. Luboshits, G. and Cahan, R. "Effect of toluene on *Pseudomonas stutzeri* ST-9 morphology — plasmolysis, cell size, and formation of outer membrane vesicles", *Canadian Journal of Microbiology*, 62(8) (2016) 682-691.
- Misra, N. N. "The contribution of non-thermal and advanced oxidation technologies towards dissipation of pesticide residues", *Trends in Food Science and Technology*, 45(2) (2015) 229-244.

- Mohamad Shahimin, M. F. Foght, J. M. and Siddique, T. "Preferential methanogenic biodegradation of short-chain n-alkanes by microbial communities from two different oil sands tailings ponds", *Science of The Total Environment*, 553 (2016) 250-257.
- Mohapatra, D. P. Brar, S. K. Tyagi, R. D. Picard, P. Surampalli, R. Y. "Analysis and advanced oxidation treatment of a persistent pharmaceutical compound in wastewater and wastewater sludge-carbamazepine", *Science of The Total Environment*, 470–471 (2014) 58-75.
- Molinari, R. Argurio, P. and Palmisano, L. "Photocatalytic membrane reactors for water treatment A2 - Basile, Angelo. in: *Advances in Membrane Technologies for Water Treatment*", (Ed.) A. C. K. Rastogi Woodhead Publishing. Oxford, 7: (2015) 205-238.
- Molinari, R. Marino, T. and Argurio, P. "Photocatalytic membrane reactors for hydrogen production from water", *International Journal of Hydrogen Energy*, 39(14) (2014) 7247-7261.
- Molinari, R. Argurio, P. and Lavorato, C. (2015) "Photocatalytic hydrogenation of organic compounds in membrane reactors A2 Basile, Angelo. in: *Membrane Reactors for Energy Applications and Basic Chemical Production*, (Eds.) L. D. P. I. Hai V. Piemonte Woodhead Publishing 20:605-639.
- Molinari, R. Palmisano, L. Loddo, V. Mozia, S. and Morawski, A. W. "Photocatalytic membrane reactors: configurations, performance and applications in water treatment and chemical production A2 - Basile, Angelo in: *Handbook of Membrane Reactors*", Vol. 2 Woodhead Publishing 21 (2013) 808-845.
- Moro, A. M. Brucker, N. Charão, M. Bulcão, R. Freitas, F. Baierle, M. Nascimento, S. Valentini, J. Cassini, C. Salvador, M. Linden, R. Thiesen, F. Buffon, A. Moresco, R. Garcia, S. C. "Evaluation of genotoxicity and oxidative damage in painters exposed to low levels of toluene", *Mutation Research/Genetic Toxicology and Environmental Mutagenesis* 746(1) (2012) 42-48.
- Moscoso, F. Teijiz, I. Deive, F.J. and Sanromán, M.A. "Efficient PAHs biodegradation by a bacterial consortium at flask and bioreactor scale", *Bioresource Technology*, 119 (2012) 270–276.
- Mozia, S. "Photocatalytic membrane reactors (PMRs) in water and wastewater treatment. A review", *Separation and Purification Technology*, 73(2) (2010) 71-91.
- Mozia, S. Darowna, D. Szymański, K. Grondzewska, S. Borchert, K. Wróbel, R. and Morawski, A.W. "Performance of two photocatalytic membrane reactors for

- treatment of primary and secondary effluents”, Catalysis Today, 236(A) (2014) 135-145.
- Mozia, S. Morawski, A. W. Molinari, R. Palmisano, L. and Loddo, V. “Photocatalytic membrane reactors: fundamentals, membrane materials and operational issues A2 - Basile, Angelo”, in: Handbook of Membrane Reactors Vol. 2 Woodhead Publishing, 6 (2013) 236-295.
- Mueller, J. G. Chapman, P. J. and Pritchard, P. H. “Creosote-contaminated sites. Their potential for bioremediation”, Environmental science & technology, 23(10) (1989) 1197-1201.
- Muftah, H. El-Naas, J. A. Acio, A. E. El, T. “Aerobic biodegradation of BTEX: Progresses and Prospects”, Journal of Environmental Chemical Engineering, (2014) 1104–1122.
- Mushtaq Y. K., “Effect of nanoscale Fe₃O₄, TiO₂ and carbon particles on cucumber seed germination. Journal of environmental science and health”, Journal of Environmental Science and Health, Part A. Toxic/Hazardous Substances and Environmental Engineering, 46(2011) 1732-1735.
- Myrrin, V. Pedroso, A. M. Ponte, H. A. Ponte, M. J. J. Alekseev, K. Evaniki, D. and Pan, R. C.Y. “Thermal engineering method application for hazardous spent petrochemical catalyst neutralization,” Applied Thermal Engineering 110 (2017), 1428-1436.
- NAAS (2013) Nanotechnology in agriculture: Scope and Current Relevance. Policy paper no. 63. National Academy of Agricultural Sciences, New Delhi: 20p.
- Nair, R., Mohamed, M. S., Gao, W., Maekawa, T., Yoshida, Y., Ajayan, P. M. and Kumar, D. S. “Effect of carbon nanomaterials on the germination and growth of rice plants”, Journal of Nanoscience and Nanotechnology, 12 (2012) 2212–2220.
- Nakata, H. Uehara, K. Goto, Y. Fukumura, M. Shimasaki, H. Takikawa, K. and Miyawaki, T. “Polycyclic aromatic hydrocarbons in oysters and sediments from the Yatsushiro Sea, Japan: Comparison of potential risks among PAHs, dioxins and dioxin-like compounds in benthic organisms”, Ecotoxicology and Environmental Safety, 99 (2014) 61-68.
- Nasir, M. Lei, J. Iqbal, W. and Zhang, J. “Study of synergistic effect of Sc and C co-doping on the enhancement of visible light photo-catalytic activity of TiO₂”, Applied Surface Science, 364: (2016) 446-454.

- Nath, R. K. Zain, M. F. M. and Jamil, M. "An environment-friendly solution for indoor air purification by using renewable photocatalysts in concrete: A review", *Renewable and Sustainable Energy Reviews*, 62 (2016) 1184-1194.
- Neyens, E. and Baeyens, J. "A review of classic Fenton's peroxidation as an advanced oxidation technique", *Journal of Hazardous Materials*, 98 (2003) 33–50.
- Nidheesh, P. V. Gandhimathi, R. and Ramesh, S.T. "Degradation of dyes from aqueous solution by Fenton processes: a review", *Environmental Science and Pollution Research* 20 (2013) 2099–2132.
- Nzila, A. "Update on the cometabolism of organic pollutants by bacteria", *Environmental Pollution*, 178 (2013) 474-482.
- Oliveira, M. Slezakova, K. Alves, M. J. Fernandes, A. Teixeira, J. P. Delerue, M. C. Pereira, M. D. C. Morais, S. "Polycyclic aromatic hydrocarbons at fire stations: firefighters' exposure monitoring and biomonitoring, and assessment of the contribution to total internal dose" *Journal of Hazardous Materials*, 323 (2016) 184-194.
- Oller, I. Malato, S. and Sánchez-Pérez, J. A. "Combination of Advanced Oxidation Processes and biological treatments for wastewater decontamination-A review", *Science of The Total Environment*, 409(20) (2011) 4141-4166.
- Ong, C. S. Lau, W. J. Goh, P. S. Ng, B. C. and Ismail, A. F. "Investigation of submerged membrane photocatalytic reactor (sMPR) operating parameters during oily wastewater treatment process", *Desalination*, 353 (2014) 48-56.
- Ortega González, D. Cristiani-Urbina, E. Flores-Ortíz, C. Cruz-Maya, J. Cancino-Díaz, J. Jan-Roblero, J. "Evaluation of the removal of pyrene and fluoranthene by Ochrobactrum anthropi, Fusarium sp. and their coculture", *Applied Biochemistry and Biotechnology*, 175 (2015) 1123–1138.
- Otenio, M. H. Silva, M. T. L. D. Marques, M. L. O. Roseiro, J. C. and Bidoia, E. D. "Benzene, toluene and xylene biodegradation by *Pseudomonas putida* CCMI 852", *Brazilian Journal of Microbiology*, 36(3) (2005) 258-261.
- Oturán, M. A. "Advanced Oxidation Processes in Water/Wastewater Treatment: Principles and Applications-A Review", *Critical Reviews in Environmental Science and Technology*, 44(33) (2014) 2577-2641.
- Paje, M. L. Marks, P. and Couperwhite, I. "Degradation of benzene by a *Rhodococcus* sp. using immobilized cell systems", *World Journal of Microbiology and Biotechnology*, 14 (1998), 675-680.
- Palmisano, G. Loddo, V. Nazer, H. H. E. Yurdakal, S. Augugliaro, V. Ciriminna, R. and Pagliaro, M. "Graphite-supported TiO₂ for 4-nitrophenol degradation in a

- photoelectrocatalytic reactor” Chemical Engineering Journal, 155(1–2) (2009) 339-346.
- Pandey, B. Suthar, S. Singh, V. “Accumulation and health risk of heavy metals in sugarcane irrigated with industrial effluent in some rural areas of Uttarakhand, India”, Process Safety and Environmental Protection, 102 (2016) 655-666.
- Parales, R. E. Parales, J. V. Pelletier, D. A. and Ditty, J. L. “Diversity of microbial toluene degradation pathways”, Advances in Applied Microbiology, 64 (2008) 1-73.
- Pardeshi, S. K. Patil, A. B. “Solar photocatalytic degradation of resorcinol a model endocrine disrupter in water using zinc oxide”, Journal of Hazardous Materials, 163(1) (2009) 403-409.
- Parlitz, N. B. and Akten, D. “Application of Box–Wilson experimental design method for the solar photocatalytic degradation of textile dyestuff with Fe(III)/H₂O₂/solar UV process”, Desalination, 260 (2010) 193–198.
- Park , I. S. and Park, J. W. “A novel total petroleum hydrocarbon fractionation strategy for human health risk assessment for petroleum hydrocarbon-contaminated site management”, Journal of Hazardous Materials, 179(1–3) (2010) 1128-1135.
- Park, H. Chah, S. Choi, E. Kim, H. Yi, J. “Releases and transfers from petroleum and chemical manufacturing industries in Korea”, Atmospheric Environment, 36(31) (2002) 4851-4861.
- Peller, J. Wiest, O. Kamat, P.V. “Hydroxy radicals’ role in remediation of common herbicide, 2,4-Dichlorophenoxyacetic acid (2,4-D)”, Environ Sci Technol, 37: (2003) 1926–1932.
- Peng, C. Lee, J. W. Sichani, H. T. and Ng, J. C. “Toxic effects of individual and combined effects of BTEX on Euglena gracilis”, Journal of Hazardous Materials, 284 (2015) 10-18.
- Peng, S. “The nutrient, total petroleum hydrocarbon and heavy metal contents in the seawater of Bohai Bay, China: Temporal–spatial variations, sources, pollution statuses, and ecological risks”, Marine Pollution Bulletin, 95(1) (2015) 445-451.
- Perhar, G. Arhonditsis, G. B. “Aquatic ecosystem dynamics following petroleum hydrocarbon perturbations: A review of the current state of knowledge”, Journal of Great Lakes Research, 40(3) (2014) 56-72.
- Perrichon, P. Akcha, F. Le Menach, K. Goubeau, M. Budzinski, H. Cousin, X. Bustamante, P. “Parental trophic exposure to three aromatic fractions of

- polycyclic aromatic hydrocarbons in the zebrafish: Consequences for the offspring”, *Science of The Total Environment*, 524–525 (2015) 52-62.
- Perry, J. J. "Microbial metabolism of cyclic alkanes", R. M. Atlas, Ed. Macmillan, New York, NY, USA. pp. (1984) 61–98.
- Petit, N. Bouzaza, A. Wolbert, D. Petit, P. Dussaud, J. “Photocatalytic degradation of gaseous perchloroethylene in continuous flow reactors: Rate enhancement by chlorine radicals”, *Catalysis Today*, 124(3–4) (2007) 266-272.
- Petronella, F. Truppi, A. Ingrosso, C. Placido, T. Striccoli, M. Curri, M. L. Agostiano, A. and Comparelli, R. “Nanocomposite materials for photocatalytic degradation of pollutants”, *Catalysis Today*, 281 (2017) 85-100.
- Pimda, W. and Bunnag, S. “Growth performance and biodegradation of waste motor oil by *Nostoc* *piscinale* strain TISTR 8401 in the presence of heavy metals and nutrients as co-contaminants,” *Journal of the Taiwan Institute of Chemical Engineers*, 53 (2015) 74-79.
- Pindado Jiménez, O. Pérez Pastor, R. M. Escolano Segovia, O. and del Reino Querencia, S. “Exploring petroleum hydrocarbons in groundwater by double solid phase extraction coupled to gas chromatography–flame ionization detector”, *Talanta*, 131 (2015) 315-324.
- Poli, D. Andreoli, R. Mutti, A. Alexopoulos, E. C. Bakeas, E. B. Goldoni, M. “Benzene: Environmental Exposure”, In: Reference Module in Earth Systems and Environmental Sciences, Elsevier. (2016)
- Poots, V. J. P. and McKay, J. J. “The removal of acid dye from effluent using natural adsorbents-I Peat”, *Water Res.*, 10(1976) 1061- 1066.
- Prabha, I. and Lathasree, S. “Photodegradation of phenol by zinc oxide, titania and zinc oxide-titania composites: Nanoparticle synthesis, characterization and comparative photocatalytic efficiencies”, *Materials Science in Semiconductor Processing*, 26 (2014) 603-613.
- Qi, J. Wang, B. Li, J. Ning, H. Wang, Y. and Kong, W. “Genetic determinants involved in the biodegradation of naphthalene and phenanthrene in *Pseudomonas aeruginosa* PAO1”, *Environmental Sciecne and Pollution Research*, 22 (2015) 6743–6755.
- Qi, K. Zasada, F. Piskorz, W. Indyka, P. Gryboś, J. Trochowski, M. Buchalska, M. Kobielsz, M. Macyk, W. Sojka, Z. “Self-sensitized photocatalytic degradation of colorless organic pollutants attached to rutile nanorods-experimental and theoretical DFT+D studies”, *The Journal of Physical Chemistry C*, 120(10) (2016) 5442-5456.

- Rajamanickam, R. Kaliyamoorthi, K. Ramachandran, N. Baskaran, D. Krishnan, J. “Batch biodegradation of toluene by mixed microbial consortia and its kinetics”, International Biodeterioration and Biodegradation 119 (2017) 282-288.
- Rajeshwar, K. Osugi, M. E. Chanmanee, W. Chenthamarakshan, C. R. Zanoni, M. V. B. Kajitvichyanukul, P. and Ayer, K. “Heterogeneous photocatalytic treatment of organic dyes in air and aqueous media”, Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 9 (2008) 171–192.
- Ramos, J. L. Molina, L. Segura A. “Removal of organic toxic chemicals in the rhizosphere and phyllosphere of pollutants”, Microbial Biotechnology, 2 (2009) 144–146.
- Ramos, J. L. Wasserfallen, A. Rose, K. Timmis, K. N. “Redesigning metabolic routes: manipulation of TOL plasmid pathway for catabolism of alkylbenzoates”, Science, 235 (1987) 593–596.
- Ramteke, L. P. and Gogate, P. R. “Removal of ethylbenzene and p-nitrophenol using combined approach of advanced oxidation with biological oxidation based on the use of novel modified prepared activated sludge”, Process Safety and Environmental Protection, 95 (2015) 146-158.
- Ramteke, L. P. Gogate, P. R. “Treatment of toluene, benzene, naphthalene and xylene (BTNXs) containing wastewater using improved biological oxidation with pretreatment using Fenton/ultrasound based processes,” Journal of Industrial and Engineering Chemistry, 28 (2015) 247-260.
- Ratna, Padhi, B. S. “Pollution due to synthetic dyes toxicity & carcinogenicity studies and remediation”, International journal of environmental sciences”, 3 (2012) 940-955.
- Rattanajongjitrakorn, P. and Prueksasit, T. “Temporal variation of BTEX at the area of petrol station in Bangkok, Thailand”, APCBEE Procedia, 10 (2014) 37-41.
- Raufflet, E. Barin, C. L. and Bres, L. “An assessment of corporate social responsibility practices in the mining and oil and gas industries”, Journal of Cleaner Production, 84 (2014) 256-270.
- Ravelli, D. Dondi, D. Fagnoni, M. Albini, A. “Titanium dioxide photocatalysis: An assessment of the environmental compatibility for the case of the functionalization of heterocyclics,” Applied Catalysis B: Environmental, 99(3–4) (2010) 442-447.

- Ray, S. Banerjee, A. "Molecular level biodegradation of phenol and its derivatives through dmp operon of *Pseudomonas putida*: A bio-molecular modeling and docking analysis", Journal of Environmental Sciences, 36 (2015) 144-151.
- Reddy, D. A. Lee, S. Choi, J. Park, S. Ma, R. Yang, H. and Kim, T. K. "Green synthesis of AgI-reduced graphene oxide nanocomposites: Toward enhanced visible-light photocatalytic activity for organic dye removal", Applied Surface Science 341 (2015) 175-184.
- Reddy, K. R. Hassan, M. and Gomes, V. G. "Hybrid nanostructures based on titanium dioxide for enhanced photocatalysis," Applied Catalysis A: General, 489 (2015) 1-16.
- Rejeski, D and Lekas, D. "Nanotechnology field observations: scouting the new industrial west", Journal of Cleaner Production, 16 (2008) 1014-1017.
- Ren, C. Qiu, W. Zhang, H. He, Z. and Chen, Y. "Degradation of benzene on TiO₂/SiO₂/Bi₂O₃ photocatalysts under UV and visible light", Journal of Molecular Catalysis A: Chemical, 398 (2015) 215-222.
- Ren, C. Zhou, L. Duan, Y. and Chen, Y. "Synergetic effect of thermo-photocatalytic oxidation of benzene on Pt-TiO₂/Ce-MnO_x", Journal of Rare Earths, 30(11) (2012) 1106-1111.
- Rico, C. M. Majumdar, S. Duarte-Gardea, M. Peralta-Videa, J. R. and Gardea-Torresdey, J. L. "Interaction of nanoparticles with edible plants and their possible implications in the food chain", Journal of Agriculture and Food Chemistry, 59 (2011) 3485-3498.
- Robinson, T. McMullan, G. Marchant , R. and Nigam, P. "Remediation of dyes in textile effluent: a critical review on current treatment technologies with a proposed alternative", Bioresource Technology, 77 (2001) 247-255.
- Roca, A. Rodríguez-Herva, J. J. Duque, E. and Ramos, J. L. "Physiological responses of *Pseudomonas putida* to formaldehyde during detoxification", Microbial Biotechnology, 1 (2008) 158–169.
- Roco, M. C. and Bainbridge, W. S. "Societal Implications of Nanoscience and Nanotechnology", Boston, Kluwer, pp: 3-4, (2001).
- Romão, J. and Mul, G. "Substrate Specificity in photocatalytic degradation of mixtures of organic contaminants in water", ACS Catalysis, 6(2) (2016) 1254-1262.
- Ronchel, M. C. and Ramos, J. L. "Dual system to reinforce biological containment of recombinant bacteria designed for rhizoremediation", Applied and Environmental Microbiology, 67 (2001) 2649–2656.

- Rovira, E. Cuadras, A. Aguilar, X. Esteban, L. Borràs Santos, A. Zock, J. P. and Sunyer, J. "Asthma, respiratory symptoms and lung function in children living near a petrochemical site", *Environmental Research*, 133 (2014) 156-163.
- Royaee, S. J. Sohrabi, M. and Barjesteh, P. J. "Performance evaluation of a continuous flow Photo-Impinging Streams Cyclone Reactor for phenol degradation", *Chemical Engineering Research and Design*, 90(11) (2012) 1923-1929.
- Saeaw, N. and Thepanondh, S. "Source apportionment analysis of airborne VOCs using positive matrix factorization in industrial and urban areas in Thailand", *Atmospheric Pollution Research*, 6(4) (2015) 644-650.
- Saien, J. and Soleymani, A. R. "Degradation and mineralization of Direct Blue 71 in a circulating upflow reactor by UV/TiO₂ process and employing a new method in kinetic study", *Journal of Hazardous Materials*, 144 (2007) 506–512.
- Saien, J. Soleymani, A. R. "Degradation and mineralization of Direct Blue 71 in a circulating upflow reactor by UV/TiO₂ process and employing a new method in kinetic study", *Journal of Hazardous Materials*, 144 (2007) 506–512.
- Saitou N. and Nei M. "The neighbor-joining method: A new method for reconstructing phylogenetic trees", *Molecular Biology and Evolution* 4 (1987) 406-425.
- Sajab, M. S. Chia, C. H. Zakaria, S. Jani, S. M. Ayob, M. K. Chee, K. L. Khiew, P. S. and Chiu, W. S. "Citric acid modified kenaf core fibres for removal of methylene blue from aqueous solution", *Bioresource Technology*, 102 (2011) 7237-7243.
- Samanta, S. K. Singh, O. V. and Jain, R. K. "Polycyclic aromatic hydrocarbons: environmental pollution and bioremediation", *Trends in Biotechnology*, 20(6) (2002) 243-248.
- Sangkhun, W. Laokiat, L. Tanboonchuy, V. Khamdahsag, P. and Grisdanurak, N. "Photocatalytic degradation of BTEX using W-doped TiO₂ immobilized on fiberglass cloth under visible light", *Superlattices and Microstructures*, 52(4) (2012) 632-642.
- Santo, C. E. Vilar, V. J. P. Botelho, C. M. S. Bhatnagar, A. Kumar, E. and Boaventura, R. A. R. "Optimization of coagulation–flocculation and flotation parameters for the treatment of a petroleum refinery effluent from a Portuguese plant", *Chemical Engineering Journal*, 183 (2012) 117-123.

- Saritha, P. Aparna, C. Himabindu, V. and Anjaneyulu, Y. "Comparison of various advanced oxidation processes for the degradation of 4-chloro-2 nitrophenol", Journal of Hazardous Materials, 149(3) (2007) 609-614.
- Sarkar, S. Chakraborty, S. and Bhattacharjee, C. "Photocatalytic degradation of pharmaceutical wastes by alginate supported TiO₂ nanoparticles in packed bed photo reactor (PBPR)", Ecotoxicology and Environmental Safety, 121 (2015) 263-270.
- Saucedo Lucero, J. O. and Arriaga, S. "Photocatalytic degradation of hexane vapors in batch and continuous systems using impregnated ZnO nanoparticles", Chemical Engineering Journal, 218 (2013) 358-367.
- Šćepanović, M. J. Grujić-Brojčin, M. Dohčević-Mitrović, Z. D. Popović, Z. V. "Characterization of Anatase TiO₂ Nanopowder by Variable-Temperature Raman Spectroscopy", Science of Sintering, 41 (2009) 67-73.
- Schaefer, C. E. "Aerobic biodegradation of iso-butanol and ethanol and their relative effects on BTEX biodegradation in aquifer materials", Chemosphere, 81(9) (2010) 1104-1110.
- Schamfu, B. S. Neu, T. R., van der Meer, J. R. Tecon, R. Harms, H. and Wick, L. Y. "Impact of mycelia on the accessibility of fluorene to PAH-degrading bacteria", Environmental Science and Technology, 47 (2013) 6908–6915.
- Seftel, E. M. Puscasu, M. Mertens, M. Cool, P. and Carja, G. "Photo-responsive behavior of γ -Fe₂O₃ NPs embedded into ZnAlFe-LDH matrices and their catalytic efficiency in wastewater remediation", Catalysis Today, 252 (2015) 7-13.
- Selli, E. Bianchi, C. L. Pirola, C. Cappelletti, G. and Ragaini, V. "Efficiency of 1,4-dichlorobenzene degradation in water under photolysis, photocatalysis on TiO₂ and sonolysis", Journal of Hazardous Materials, 153(3) (2008) 1136-1141.
- Serpone, N. Horikoshi, S. and Emeline, A. V. "Microwaves in advanced oxidation processes for environmental applications. A brief review", Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 11(2–3) (2010) 114-131.
- Service RF (2000) Is nanotechnology dangerous. Science 290:1526-1527.
- Service, R. F. "Nanomaterials show signs of toxicity," Science, 300 (2003) 243.
- Shaari, N. Tan, S. H. and Mohamed, A. R. "Synthesis and characterization of CNT/Ce-TiO₂ nanocomposite for phenol degradation", Journal of Rare Earths, 30(7) (2012) 651-658.

- Shahidi, D. Roy, R. and Azzouz, A. "Advances in catalytic oxidation of organic pollutants – Prospects for thorough mineralization by natural clay catalysts", Applied Catalysis B: Environmental, 174–175 (2015) 277-292.
- Shahna, F. G. Golbabaei, F. Hamed, J. Mahjub, H. Darabi, H. R. and Shahtaheri, S. J. "Treatment of benzene, toluene and xylene contaminated air in a bioactive foam emulsion reactor", Chinese Journal of Chemical Engineering, 18(1) (2010) 113-121.
- Shao, X. Lu, W. Zhang, R. and Pan, F. "Enhanced photocatalytic activity of TiO₂-C hybrid aerogels for methylene blue degradation", Scientific Reports, 3(3018) (2013) 1-9.
- Sharma, S. and Rangaiah, G. P. " Computer Aided Chemical Engineering", Jiří Jaromír Klemeš, P. S. V. and Peng Yen, L. (eds), (2014) pp. 1531-1536, Elsevier.
- Shen, Y. Wang, L. Wu, Y. Li, X. Zhao, Q. Hou, Y. and Teng, W. "Facile solvothermal synthesis of MnFe₂O₄ hollow nanospheres and their photocatalytic degradation of benzene investigated by in situ FTIR", Catalysis Communications, 68 (2015) 11-14.
- Shim, H. Shin, E. Yang, S. T. "A continuous fibrous-bed bioreactor for BTEX biodegradation by a co-culture of *Pseudomonas putida* and *Pseudomonas fluorescens*", Advances in Environmental Research, 7(1) (2002) 203-216.
- Shukla, S. K. Mangwani, N. Rao, T. S. Das, S. "8-Biofilm-mediated bioremediation of polycyclic aromatic hydrocarbons", In: Microbial Biodegradation and Bioremediation, Elsevier. Oxford, pp. 203-232 (2014).
- Sia, T. H. Dai, S. Jin, B. Biggs, M. Chong, M. N. "Hybridising nitrogen doped titania with kaolinite: A feasible catalyst for a semi-continuous photo-degradation reactor system", Chemical Engineering Journal, 279 (2015) 939-947.
- Siddique, M. N. I. Abdul Munaim, M. S. Zularisam, A. W. "Feasibility analysis of anaerobic co-digestion of activated manure and petrochemical wastewater in Kuantan (Malaysia)," Journal of Cleaner Production, 106 (2015) 380-388.
- Siddique, M. N. I. Munaim, M. S. A. and Ab. Wahid, Z. "Role of hydraulic retention time in enhancing bioenergy generation from petrochemical wastewater," Journal of Cleaner Production, 133 (2016) 504-510.
- Siddique, M. N. I. Sakinah Abd Munaim, M. Zularisam, A. W. "Mesophilic and thermophilic biomethane production by co-digesting pretreated petrochemical wastewater with beef and dairy cattle manure", Journal of Industrial and Engineering Chemistry, 20(1) (2014) 331-337.

- Silva, C. G. Faria, J. L. "Photocatalytic oxidation of benzene derivatives in aqueous suspensions: Synergic effect induced by the introduction of carbon nanotubes in a TiO₂ matrix", *Applied Catalysis B: Environmental*, 101(1–2) (2010) 81-89.
- Silva, C. G. Sampaio, M. J. Carabineiro, S. A. C. Oliveira, J. W. L. Baptista, D. L. Bacsa, R. Machado, B. F. Serp, P. Figueiredo, J. L. Silva, A. M. T. Faria J. L. "Developing highly active photocatalysts: Gold-loaded ZnO for solar phenol oxidation", *Journal of Catalysis*, 316 (2014) 182-190.
- Silva, E. J. Rocha e Silva, N. M. P. Rufino, R. D. Luna, J. M. Silva, R. O. Sarubbo, L. A. "Characterization of a biosurfactant produced by *Pseudomonas cepacia* CCT6659 in the presence of industrial wastes and its application in the biodegradation of hydrophobic compounds in soil", *Colloids and Biosurfactants*, 117 (2014) 36-41.
- Singh, P. B. Sharma, S. Saini, H. S. and Chadha, B. S. "Biosurfactant production by *Pseudomonas* sp. and its role in aqueous phase partitioning and biodegradation of chlorpyrifos", *Letters in Applied Microbiology*, 49 (2009) 378–383.
- Singh, M. P. Reddy, M. M. K. Mathur, N. Saxena, D. K. Chowdhuri, D. K. "Induction of hsp70, hsp60, hsp83 and hsp26 and oxidative stress markers in benzene, toluene and xylene exposed *Drosophila melanogaster*: Role of ROS generation", *Toxicology and Applied Pharmacology*, 235(2) (2009) 226-243.
- Singh, P. Vishnu, M. C., Sharma, K. K., Singh, R. Madhav, S. Tiwary, D. Mishra, P. K. "Comparative study of dye degradation using TiO₂-activated carbon nanocomposites as catalysts in photocatalytic, sonocatalytic and photosonocatalytic reactor", *Desalination and Water Treatment*, 57(43) (2015), 20552-20564.
- Singh, R. and Celin, S. M. "Biodegradation of BTEX (benzene, toluene, ethyl benzene and xylene) compounds by bacterial strain under aerobic conditions", *Journal of Ecobiotechnology*, 2(4) (2010) 27-32.
- Song, U. Jun, H. Waldman, B. Roh, J. Kim, Y. Yi, J. and Lee, E. J. "Functional analyses of nanoparticle toxicity: A comparative study of the effects of TiO₂ and Ag on tomatoes (*Lycopersicon esculentum*)", *Ecotoxicology and Environmental Safety*, 93 (2013) 60-67.
- Sood, S. Umar, A. Mehta, S. K. and Kansal, S. K. "Highly effective Fe-doped TiO₂ nanoparticles photocatalysts for visible-light driven photocatalytic degradation of toxic organic compounds", *Journal of Colloid and Interface Science*, 450 (2015) 213-223.

- Souza, E. C. Vessoni Penna, T. C. and de Souza Oliveira R. P. "Biosurfactant-enhanced hydrocarbon bioremediation: An overview", International Biodeterioration and Biodegradation, 89 (2014) 88-94.
- Srichandan, H. Singh, S. Blight, K. Pathak, A. Kim, D.J. Lee, S. and Lee, S.W. "An integrated sequential biological leaching process for enhanced recovery of metals from decoked spent petroleum refinery catalyst: A comparative study", International Journal of Mineral Processing, 134 (2015) 66-73.
- Sripapat, W. and Thiravetyan, P. "Efficacy of ornamental plants for benzene removal from contaminated air and water: Effect of plant associated bacteria," International Biodeterioration & Biodegradation, 113 (2016) 262-268.
- Stapleton, R. D. Savage, D. C. Sayler, G. S. and Stacey, G. "Biodegradation of aromatic hydrocarbons in an extremely acidic environment", Applied and Environmental Microbiology, 64 (1998) 4180–4184.
- Stasik, S. Wick, L. Y. and Wendt-Potthoff, K. "Anaerobic BTEX degradation in oil sands tailings ponds: Impact of labile organic carbon and sulfate-reducing bacteria," Chemosphere 138 (2015) 133-139.
- Stegeman, J. J. Schlezinger, J. J. James, E. Craddock, J. E. Tillit, D. E. "Cytochrome P450 1A expression in mid water fishes: potential effects of chemical contaminants in remote oceanic zones", Environmental Science and Technology, 35 (2001) 54–62.
- Su, R. Dimitratos, N. Liu, J. Carter, E. Althahban, S. Wang, X. Shen, Y. Wendt, S. Wen, X. Niemantsverdriet, J. W. Iversen B. B. Kiely, C. J. Hutchings, G. J. and Besenbacher, F. "Mechanistic Insight into the Interaction Between a Titanium Dioxide Photocatalyst and Pd Cocatalyst for Improved Photocatalytic Performance", ACS Catalysis, 6(7) (2016) 4239-4247.
- Suarez, L. Brender, J. D. Langlois, P. H. Zhan, F. B. and Moody, K. "Maternal Exposures to Hazardous Waste Sites and Industrial Facilities and Risk of Neural Tube Defects in Offspring", Annals of Epidemiology, 17(10) (2007) 772-777.
- Sun, J. Qiao, L. Sun, S. and Wang, G. "Photocatalytic degradation of Orange G on nitrogen-doped TiO₂ catalysts under visible light and sunlight irradiation," Journal of Hazardous Materials, 155 (2008) 312-319.
- Sun, J. Watson, S. S. Allsopp, D. A. Stanley, D. and Skrtic, D. "Tuning photocatalytic activities of TiO₂ nanoparticles using dimethacrylate resins," Dental Materials, 32 (2016) 363-372.
- Suslick, K. S. "Sonochemistry", Science, 247 (1990) 1439.

- Szreniawa-Sztajnert, A. Zabiegała, B. and Namieśnik, J. "Developments in ultrasound-assisted microextraction techniques for isolation and preconcentration of organic analytes from aqueous samples" Trends in Analytical Chemistry, 49 (2013) 45-54.
- Szulc, A. Ambrożewicz, D. Sydow, M. Ławniczak, Ł. Piotrowska-Cyplik, A. and Marecik, R. "The influence of bioaugmentation and biosurfactant addition on bioremediation efficiency of diesel-oil contaminated soil: feasibility during field studies", Journal of Environmental Management, 132 (2014) 121–128.
- Tamura, K. Peterson, D. Peterson, N. Stecher, G. Nei, M. and Kumar, S. "MEGA5: Molecular Evolutionary Genetics Analysis using Maximum Likelihood, Evolutionary Distance, and Maximum Parsimony Methods", Molecular Biology and Evolution, 28 (2011) 2731-2739.
- Tanaka, K. Padermpole, K. and Hisanaga, T. "Photocatalytic degradation of commercial azo dyes" Water Research, 34 (2000) 327-333.
- Tedder, D. W. and Pohland, F. G. "Emerging Technologies for Hazardous Waste Management in: Emerging Technologies in Hazardous Waste Management", American Chemical Society III, 518 (1993) pp. 1-15.
- Tian, W. Yao, J. Liu, R. Zhu, M. Wang, F. Wu, X. and Liu, H. "Effect of natural and synthetic surfactants on crude oil biodegradation by indigenous strains", Ecotoxicology and Environmental Safety, 129 (2016) 171-179.
- Tisa, F. Raman, A. A. A. and Daud, W. M. A. W. "Applicability of fluidized bed reactor in recalcitrant compound degradation through advanced oxidation processes: A review", Journal of Environmental Management, 146 (2014) 260-275.
- Tiwari, J. Naoghare, P. Sivanesan, S. and Bafana, A. "Biodegradation and detoxification of chloronitroaromatic pollutant by Cupriavidus," Bioresource Technology, 223 (2017) 184-191.
- Tunesi, S. and Anderson, M. A. "Photocatalysis of 3, 4-DCB in TiO₂ Aqueous suspensions; Effects of temperature and light intensity, CIR-FTIT Interfacial Analysis", Chemosphere, 16 (1987) 1447–1456.
- U.S. Environmental Protection Agency (2005) Nanotechnology White Paper External Review Draft. Available from : <http://www.epa.gov/osa/pdfs/EPA_nanotechnology_white_paper_external_review_draft_12-02-2005.pdf>.
- Uddin, M. K. "A review on the adsorption of heavy metals by clay minerals, with special focus on the past decade," Chemical Engineering Journal, 308 (2017) 438-462.

- Ulrici, W. "Contaminated soil areas, different countries and contaminants, monitoring of contaminants", Biotechnology Set, Second Edition, (2000) 5-41.
- Unuabonah, E.I. and Taubert, A. "Clay–polymer nanocomposites (CPNs): Adsorbents of the future for water treatment," Applied Clay Science, 99 (2014) 83-92.
- Vaferi, B. Bahmani, M. Keshavarz, P. and Mowla, D. "Experimental and theoretical analysis of the UV/H₂O₂ advanced oxidation processes treating aromatic hydrocarbons and MTBE from contaminated synthetic wastewaters", Journal of Environmental Chemical Engineering, 2(3) (2014) 1252-1260.
- Van Geest, J. L. Mackay, D. Poirier , D. G. Sibley, P. K. and Solomon, K. R. "Accumulation and Depuration of Polychlorinated Biphenyls from Field- Collected Sediment in Three Freshwater Organisms", Environmental Science and Technology, 45(16) (2011) 7011-7018.
- Vautier, M. Guillard, C. Hermann, J. M. "Photocatalytic degradation of dyes in water: case study of Indigo and Indigo Carmine", Journal of Catalysis, 201 (2001) 46–59.
- Verbruggen, S. W. "TiO₂ photocatalysis for the degradation of pollutants in gas phase: From morphological design to plasmonic enhancement," Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 24 (2015) 64-82.
- Vincent, G. Marquaire, P. M. and Zahraa, O. "Photocatalytic degradation of gaseous 1-propanol using an annular reactor: Kinetic modelling and pathways", Journal of Hazardous Materials, 161(2–3) (2009) 1173-1181.
- Vinoth, R. Karthik, P. Devan, K. Neppolian, B. Ashokkumar, M. "TiO₂–NiO p–n nanocomposite with enhanced sonophotocatalytic activity under diffused sunlight", Ultrasonics Sonochemistry, 35 (2016) 655-663.
- Vogt, C., Dorer, C., Musat, F., Richnow, H. H. Multi-element isotope fractionation concepts to characterize the biodegradation of hydrocarbons - from enzymes to the environment. Current Opinion in Biotechnology, 41 (2016) 90-98.
- Wang, C. and Wu, T. "TiO₂ nanoparticles with efficient photocatalytic activity towards gaseous benzene degradation", Ceramics International, 41(B) (2015) 2836-2839.
- Wang, D. Xu, Y. Sun, F. Zhang, Q. Wang, P. Wang, X. "Enhanced photocatalytic activity of TiO₂ under sunlight by MoS₂ nanodots modification", Applied Surface Science, 377 (2016) 221-227.
- Wang, H. Yuan, X. Zeng, G. Leng, L. Peng, X. Liao, K. Peng, L. and Xiao, Z. "Removal of malachite green dye from wastewater by different organic acid-

- modified natural adsorbent: kinetics, equilibriums, mechanisms, practical application, and disposal of dye-loaded adsorbent”, Environmental Science and Pollution Research, 21 (2014) 11552-11564.
- Wang, J. Wang, X. Liu, X. Zhu, T. Guo, Y. and Qi, H. "Catalytic oxidation of chlorinated benzenes over V₂O₅/TiO₂ catalysts: The effects of chlorine substituents”, Catalysis Today, 241 (2015) 92-99.
- Wang, K. Hsieh, Y. Ko, R. and Chang, C. "Photocatalytic degradation of wastewater from manufactured fiber by titanium dioxide suspensions in aqueous solution”, Environmental International, 25 (1999) 671–676.
- Wang, L. Barrington, S. and Kim, J. W. "Biodegradation of pentyl amine and aniline from petrochemical wastewater”, Journal of Environmental Management, 83(2) (2007) 191–197.
- Wang, R. Xu, D. Liu, J. Li, K. and Wang, H. "Preparation and photocatalytic properties of CdS/La₂Ti₂O₇ nanocomposites under visible light”, Chemical Engineering Journal, 168(1) (2011) 455-460.
- Wang, X. Hu, Z. Chen, Y. Zhao, G. Liu, Y. and Wen, Z. “A novel approach towards high-performance composite photocatalyst of TiO₂ deposited on activated carbon”, Applied Surface Science, 255 (2009) 3953–3958.
- Wang, Y. Wang, Q. Li, M. Yang, Y. He, W. Yan, G. and Guo, S. "An alternative anaerobic treatment process for treatment of heavy oil refinery wastewater containing polar organics”, Biochemical Engineering Journal, 105 (2016) 44-51.
- Wang, Y. Zhao, D. Wanhong, M.A. Chen, C. and Zhao, J. “Enhanced Sonocatalytic Degradation Of Azo Dyes By Au/TiO₂”, Environmental Science and Technology, 42 (2008) 6173–6178.
- Ward, P. G. Goff, M. Donner, M. Kaminsky, W. and O'Connor, K. E. "A two step chemo-biotechnological conversion of polystyrene to a biodegradable thermoplastic”, Environmental Science and Technology, 40(7) (2006) 2433–2437.
- Weis, L. M. Rummel , A. M. Masten, S. J. Trosko, J. E. and Upham, B. L. “Bay and baylike regions of polycyclic aromatic hydrocarbons were potent inhibitors of gap junctional intercellular communication”, Environment and Health Perspectives, 106 (1998) 17–22.
- Weissenfels, W. D. Klewer, H. J. and Langhoff, J. “Adsorption of polycyclic aromatic hydrocarbons (PAHs) by soil particles: influence on biodegradability

- and biotoxicity”, *Applied Microbiology and Biotechnology*, 36(5) (1992) 689-696.
- Wen, H. Yuan, L. Wei, C. Zhao, Y. Qian, Y. Ma, P. Ding, S. Yang, X. and Wang, X. “Effects of combined exposure to formaldehyde and benzene on immune cells in the blood and spleen in Balb/c mice”, *Environmental Toxicology and Pharmacology*, 45 (2016) 265-273.
- Wilson, W. Manivannan, A. and Subramanian, V. R. “Heterogeneous photocatalytic degradation of recalcitrant pollutants over CdS-TiO₂ nanotubes: Boosting effect of TiO₂ nanoparticles at nanotube CdS interface”, *Applied Catalysis A: General*, 441–442 (2012) 1-9.
- Wincent, E. Jönsson , M. E. Bottai, M. Lundstedt, S. Dreij, K. “Aryl hydrocarbon receptor activation and developmental toxicity in zebrafish in response to soil extracts containing unsubstituted and oxygenated PAHs”, *Environmental Science and Technology*, 49(6) (2015) 3869-3877.
- Wiszniewski, J. Ziemińska, A. and Ciesielski, S. “Removal of petroleum pollutants and monitoring of bacterial community structure in a membrane bioreactor,” *Chemosphere*, 83(1) (2011) 49-56.
- Wu, C. H. wood, T. K. Mulchandani, A. and Chen, W. “Engineering plant-microbe symbiosis for rhizoremediation of heavy metals”, *Applied and Environmental Microbiology*, 72 (2006) 1129–1134.
- Wu, H. Ma, J. Zhang, C. and He, H. “Effect of TiO₂ calcination temperature on the photocatalytic oxidation of gaseous NH₃”, *Journal of Environmental Science (China)*, 26 (2014) 673-682.
- Xia, W. Du, Z. Cui, Q. Dong, H. Wang, F. and He, P. “Biosurfactant produced by novel *Pseudomonas* sp.WJ6with biodegradation of n-alkanes and polycyclic aromatic hydrocarbons”, *Journal of Hazardous Materials*, 276 (2014) 489–498.
- Xia, X. Li, H. Yang, Z. Zhang X. and Wang, H. “How Does Predation Affect the Bioaccumulation of Hydrophobic Organic Compounds in Aquatic Organisms”, *Environmental Science and Technology*, 49(8) (2015) 4911-4920.
- Xiao, X. Tu, S. Lu, M. Zhong, H. Zheng, C. Zuo, X. and Nan, J. “Discussion on the reaction mechanism of the photocatalytic degradation of organic contaminants from a viewpoint of semiconductor photo-induced electrocatalysis”, *Applied Catalysis B: Environmental*, 198 (2016) 124-132.
- Xie, H. Zhu, L. Wang, L. Chen, S. Yang, D. Yang, L. Gao, G. and Yuan, H. “Photodegradation of benzene by TiO₂ nanoparticles prepared by flame CVD process”, *Particuology*, 9(1) (2011) 75-79.

- Xin, B. P., Wu, C. H. Wu, C. H. and Lin, C. W. "Bioaugmented remediation of high concentration BTEX-contaminated groundwater by permeable reactive barrier with immobilized bead", *Journal of Hazardous Materials*, 244–245 (2013) 765-772.
- Xiong, P. and Hu, J. "Decomposition of acetaminophen (Ace) using TiO₂/UVA/LED system", *Catalysis Today*, 282 (2017) 48-56.
- Xu, N. Wang, W. Han, P. and Lu, X. "Effects of ultrasound on oily sludge deoiling", *Journal of Hazardous Materials*, 171 (2009) 914–917.
- Xu, L. Hu, Y.L. Pelligrina, C. Chen, C.H. Jin, L. Huang, H. Sithambaram, S. Aindow ,M. Joesten, R. Suib, S. L. "ZnO with Different Morphologies Synthesized by Solvothermal Methods for Enhanced Photocatalytic Activity", *Chemistry of Materials*, 21(13) (2009) 2875-2885.
- Yang, K. Wang, X. L. Zhu, L. Z. and Xing, B. S. "Competitive sorption of pyrene, phenanthrene, and naphthalene on multiwalled carbon nanotubes," *Environmental Science and Technology*, 40 (2006) 5804-5810.
- Yang, Q. Xiong, P. Ding, P. Chu, L. and Wang, J. "Treatment of petrochemical wastewater by microaerobic hydrolysis and anoxic/oxic processes and analysis of bacterial diversity", *Bioresource Technology*, 196 (2015) 169-175.
- Yao, S. W. and Kuo, H. P. "Photocatalytic Degradation of Toluene on SiO₂/TiO₂ photocatalyst in a fluidized bed reactor", *Procedia Engineering*, 102 (2015) 1254-1260.
- Yaws C. L. "Chemical Properties Handbook", McGraw-Hill Book Co. (1991) 364–378.
- Ye, D. C. Jennifer A. M. and Woo, T. K. "Rhizoremediation of TCE by a recombinant, root-colonizing *Pseudomonas fluorescens* strain expressing toluene ortho-monooxygenase constitutively", *Applied and Environmental Microbiology*, 64, (1998) 112–118.
- Yeh, C. H. Lin, C. W. and Wu, C. H. "A permeable reactive barrier for the bioremediation of BTEX-contaminated groundwater: Microbial community distribution and removal efficiencies," *Journal of Hazardous Materials*, 178(1–3) (2010) 74-80.
- Yeom, S. H. and Daugulis, A. J. "Benzene degradation in a two-phase partitioning bioreactor by *Alcaligenes xylosoxidans* Y234", *Process Biochemistry*, 36(8) (2001) 765-772.
- Yeruva, D. K. Jukuri, S. Velvizhi, G. Naresh Kumar, A. Swamy, Y. V. Venkata Mohan, S. "Integrating sequencing batch reactor with bio-electrochemical

- treatment for augmenting remediation efficiency of complex petrochemical wastewater,” *Bioresource Technology*, 188 (2015) 33-42.
- Yin, H., Qiang, J. Jia, Y. Ye, J. Peng, H. and Qin, H. “Characteristics of biosurfactant produced by *Pseudomonas aeruginosa* S6 isolated from oil-containing wastewater”, *Process Biochemistry* (2009) 44, 302–308.
- Yu, H. Ming, H. Zhang, H. Li. H. Pan, K. Liu, Y. Wang, F. Gong, J. and Kang, Z. “Au/ZnO nanocomposites: Facile fabrication and enhanced photocatalytic activity for degradation of benzene”, *Materials Chemistry and Physics*, 137(1) (2012) 113-117.
- Yu, J. Xiang, Q. and Zhou, M. “Preparation, characterization and visible-light-driven photocatalytic activity of Fe-doped titania nano rods and first-principles study for electronic structures”, *Applied Catalysis B: Environmental*, 90 (2009) 595–602.
- Zangeneh, H. Zinatizadeh, A.A.L. and Feizy, M. “A comparative study on the performance of different advanced oxidation processes (UV/O₃/H₂O₂) treating linear alkyl benzene (LAB) production plant's wastewater”, *Journal of Industrial and Engineering Chemistry*, 20(4) (2014) 1453-1461.
- Zhang, J. and Fan, S. K. “Consistency between health risks and microbial response mechanism of various petroleum components in a typical wastewater-irrigated farmland”, *Journal of Environmental Management*, 174 (2016) 55-61.
- Zhang, L., Zhang, C., Cheng, Z., Yao, Y. and Chen, J. “Biodegradation of benzene, toluene, ethylbenzene, and o-xylene by the bacterium *Mycobacterium cosmeticum* byf-4”, *Chemosphere*, 90(4) (2013) 1340-1347.
- Zhang, Q. Gao, L. and Guo, J. “Effects of calcination on the photocatalytic properties of nanosized TiO₂ powders prepared by TiCl₄ hydrolysis”, *Applied Catalysis B: Environmental*, 26 (2000) 207-215.
- Zhang, Y. Tang, Z. R. Fu, X. and Xu, Y. J. “Nanocomposite of Ag–AgBr–TiO₂ as a photoactive and durable catalyst for degradation of volatile organic compounds in the gas phase”, *Applied Catalysis B: Environmental*, 106(3–4) (2013) 445-452.
- Zhao, S. Wang, P. Wang, C. Langer, J. L. Abulikemu, G. and Sun, X. “Recycling of high temperature steam condensed water from petroleum refinery by thermostable PPESK ultrafiltration membrane”, *Chemical Engineering Journal*, 219 (2013) 419-428.

- Zhong, Y. and Zhu, L. "Distribution, input pathway and soil-air exchange of polycyclic aromatic hydrocarbons in Banshan Industry Park, China", *Science of The Total Environment*, 444 (2013) 177-182.
- Zhou, C. Luo, J. Chen, Q. Jiang, Y. Dong, X. and Cui, F. "Titanate nanosheets as highly efficient non-light-driven catalysts for degradation of organic dyes" *Chemical Communications*, 51(54) (2015) 10847-10849.
- Zhou, X. Guo, W. Yang, S. Zheng, H. and Ren, N. "Ultrasonic-assisted ozone oxidation process of triphenylmethane dye degradation: Evidence for the promotion effects of ultrasonic on malachite green decolorization and degradation mechanism", *Bioresource Technology*, 128 (2012) 827-830.
- Zhou, Y. Gao, F. Zhao, Y. and Lu, J. "Study on the extraction kinetics of phenolic compounds from petroleum refinery waste", *Journal of Saudi Chemical Society*, 18(5) (2014) 589-592.
- Zhu, L. Meng, Z. Cho, K. and Oh, W. "Synthesis of CdS/CNT-TiO₂ with a high photocatalytic activity in photodegradation of methylene blue", *New Carbon Materials*, 27(3) (2012) 166-174.
- Zhuang, Y. Song H. Y. Li, G. and Xu, Y. J "Ti-HMS as a single-site photocatalyst for the gas-phase degradation of benzene", *Materials Letters*, 64(22) (2010) 2491-2493.
- Zolfaghari, R. Fakhru'l-Razi , A. Abdullah, L. C. Elnashaie, S. S. E. H. and Pendashteh, A. "Demulsification techniques of water-in-oil and oil-in-water emulsions in petroleum industry", *Separation and Purification Technology*, 170 (2016) 377-407.
- Zou, L. Luo, Y. Hooper, M. Hu, E. "Removal of VOCs by photocatalysis process using adsorption enhanced TiO₂-SiO₂ catalyst", *Chemical Engineering and Processing: Process Intensification*, 45(11) (2006) 959-964.
