# De-Gao Wang

List of Publications by Year
in descending order

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|---|---|---|---|
| 85 papers | 4,227 citations | 101543<br>36 h-index | 114465<br>63 g-index |
| 85 all docs | 85 docs citations | 85 times ranked | 4376 citing authors |

| # | Article | IF | Citations |
|---|---------|----|-----------| 
| 1 | Performance of nano-Co3O4/peroxymonosulfate system: Kinetics and mechanism study using Acid Orange 7 as a model compound. Applied Catalysis B: Environmental, 2008, 80, 116-121. | 20.2 | 380 |
| 2 | Review of recent advances in research on the toxicity, detection, occurrence and fate of cyclic volatile methyl siloxanes in the environment. Chemosphere, 2013, 93, 711-725. | 8.2 | 203 |
| 3 | Seasonal variations of sources of polycyclic aromatic hydrocarbons (PAHs) to a northeastern urban city, China. Chemosphere, 2010, 79, 441-447. | 8.2 | 193 |
| 4 | Visible Light Driven Photoelectrochemical Water Oxidation by Zn- and Ti-Doped Hematite Nanostructures. ACS Catalysis, 2014, 4, 2006-2015. | 11.2 | 173 |
| 5 | An Asia-Specific Source of Dechlorane Plus: Concentration, Isomer Profiles, and Other Related Compounds. Environmental Science &amp; Technology, 2010, 44, 6608-6613. | 10.0 | 170 |
| 6 | Levels and Isomer Profiles of Dechlorane Plus in Chinese Air. Environmental Science &amp; Technology, 2008, 42, 6476-6480. | 10.0 | 163 |
| 7 | Kinetics of oxidative decolorization and mineralization of Acid Orange 7 by dark and photoassisted Co2+-catalyzed peroxymonosulfate system. Chemosphere, 2007, 67, 802-808. | 8.2 | 131 |
| 8 | Application of positive matrix factorization to identify potential sources of PAHs in soil of Dalian, China. Environmental Pollution, 2009, 157, 1559-1564. | 7.5 | 131 |
| 9 | Polycyclic Aromatic Hydrocarbons in Urban Street Dust and Surface Soil: Comparisons of Concentration, Profile, and Source. Archives of Environmental Contamination and Toxicology, 2009, 56, 173-180. | 4.1 | 117 |
| 10 | Sources and seasonal variation of atmospheric polycyclic aromatic hydrocarbons in Dalian, China: Factor analysis with non-negative constraints combined with local source fingerprints. Atmospheric Environment, 2009, 43, 2747-2753. | 4.1 | 112 |
| 11 | Concentration and Bioaccumulation of Dechlorane Compounds in Coastal Environment of Northern China. Environmental Science &amp; Technology, 2011, 45, 2613-2618. | 10.0 | 110 |
| 12 | Analysis of Polychlorinated Biphenyls in Concurrently Sampled Chinese Air and Surface Soil. Environmental Science &amp; Technology, 2008, 42, 6514-6518. | 10.0 | 108 |
| 13 | Disappearance of polycyclic aromatic hydrocarbons sorbed on surfaces of pine [Pinua thunbergii] needles under irradiation of sunlight: Volatilization and photolysis. Atmospheric Environment, 2005, 39, 4583-4591. | 4.1 | 98 |
| 14 | Concentrations of cyclic volatile methylsiloxanes in biosolid amended soil, influent, effluent, receiving water, and sediment of wastewater treatment plants in Canada. Chemosphere, 2013, 93, 766-773. | 8.2 | 96 |
| 15 | Aquatic behavior and toxicity of polystyrene nanoplastic particles with different functional groups: Complex roles of pH, dissolved organic carbon and divalent cations. Chemosphere, 2019, 228, 195-203. | 8.2 | 91 |
| 16 | Endosulfan in China 1â€"gridded usage inventories. Environmental Science and Pollution Research, 2009, 16, 295-301. | 5.3 | 86 |
| 17 | Levels, distributions and profiles of polychlorinated biphenyls in surface soils of Dalian, China. Chemosphere, 2008, 73, 38-42. | 8.2 | 83 |
| 18 | Monitoring and Modeling Endosulfan in Chinese Surface Soil. Environmental Science &amp; Technology, 2010, 44, 9279-9284. | 10.0 | 72 |

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|---|---------|-----|-----------|
| 19 | Estimating nicotine consumption in eight cities using sewage epidemiology based on ammonia nitrogen equivalent population. Science of the Total Environment, 2017, 590-591, 226-232. | 8.0 | 69 |
| 20 | Dechlorane plus in multimedia in northeastern Chinese urban region. Environment International, 2011, 37, 66-70. | 10.0 | 67 |
| 21 | Fate of anthropogenic cyclic volatile methylsiloxanes in a wastewater treatment plant. Water Research, 2015, 72, 209-217. | 11.3 | 64 |
| 22 | Aqueous 4-nitrophenol decomposition and hydrogen peroxide formation induced by contact glow discharge electrolysis. Journal of Hazardous Materials, 2010, 181, 1010-1015. | 12.4 | 61 |
| 23 | Ecotoxicological effects on Scenedesmus obliquus and Danio rerio Co-exposed to polystyrene nano-plastic particles and natural acidic organic polymer. Environmental Toxicology and Pharmacology, 2019, 67, 21-28. | 4.0 | 55 |
| 24 | Aquatic toxicity of iron-oxide-doped microplastics to Chlorella pyrenoidosa and Daphnia magna. Environmental Pollution, 2020, 257, 113451. | 7.5 | 54 |
| 25 | Seasonal variation of polycyclic aromatic hydrocarbons in soil and air of Dalian areas, China: an assessment of soil–air exchange. Journal of Environmental Monitoring, 2008, 10, 1076. | 2.1 | 47 |
| 26 | Fugacity approach to evaluate the sediment–water diffusion of polycyclic aromatic hydrocarbons. Journal of Environmental Monitoring, 2011, 13, 1589. | 2.1 | 46 |
| 27 | Using wastewater-based epidemiology to estimate consumption of alcohol and nicotine in major cities of China in 2014 and 2016. Environment International, 2020, 136, 105492. | 10.0 | 46 |
| 28 | Assessing the trend of diabetes mellitus by analyzing metformin as a biomarker in wastewater. Science of the Total Environment, 2019, 688, 281-287. | 8.0 | 45 |
| 29 | Determination of cyclic volatile methylsiloxanes in water, sediment, soil, biota, and biosolid using large-volume injection–gas chromatography–mass spectrometry. Chemosphere, 2013, 93, 741-748. | 8.2 | 44 |
| 30 | Methamphetamine use in typical Chinese cities evaluated by wastewater-based epidemiology. Environmental Science and Pollution Research, 2020, 27, 8157-8165. | 5.3 | 44 |
| 31 | Uniform Doping of Titanium in Hematite Nanorods for Efficient Photoelectrochemical Water Splitting. ACS Applied Materials &amp; Interfaces, 2015, 7, 14072-14078. | 8.0 | 43 |
| 32 | Wastewater analysis reveals spatial pattern in consumption of anti-diabetes drug metformin in China. Chemosphere, 2019, 222, 688-695. | 8.2 | 42 |
| 33 | Hierarchical three-dimensional branched hematite nanorod arrays with enhanced mid-visible light absorption for high-efficiency photoelectrochemical water splitting. Nanoscale, 2016, 8, 12697-12701. | 5.6 | 41 |
| 34 | Characteristics of Light Emission and Radicals Formed by Contact Glow Discharge Electrolysis of an Aqueous Solution. Plasma Chemistry and Plasma Processing, 2012, 32, 359-368. | 2.4 | 39 |
| 35 | Using Monte Carlo simulation to assess variability and uncertainty of tobacco consumption in a city by sewage epidemiology. BMJ Open, 2016, 6, e010583. | 1.9 | 39 |
| 36 | TiO2, SiO2 and ZrO2 Nanoparticles Synergistically Provoke Cellular Oxidative Damage in Freshwater Microalgae. Nanomaterials, 2018, 8, 95. | 4.1 | 38 |

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| 37 | Decomposition of polycyclic aromatic hydrocarbons in atmospheric aqueous droplets through sulfate anion radicals: An experimental and theoretical study. Science of the Total Environment, 2008, 393, 64-71. | 8.0 | 36 |
| 38 | Endosulfan in China 2—emissions and residues. Environmental Science and Pollution Research, 2009, 16, 302-311. | 5.3 | 34 |
| 39 | Human health risk assessment of occupational and residential exposures to dechlorane plus in the manufacturing facility area in China and comparison with e-waste recycling site. Science of the Total Environment, 2013, 445-446, 329-336. | 8.0 | 34 |
| 40 | International snapshot of new psychoactive substance use: Case study of eight countries over the 2019/2020 new year period. Water Research, 2021, 193, 116891. | 11.3 | 34 |
| 41 | Illicit drugs and their metabolites in 36 rivers that drain into the Bohai Sea and north Yellow Sea, north China. Environmental Science and Pollution Research, 2016, 23, 16495-16503. | 5.3 | 33 |
| 42 | Applying a population model based on hydrochemical parameters in wastewater-based epidemiology. Science of the Total Environment, 2019, 657, 466-475. | 8.0 | 32 |
| 43 | Aqueous aggregation and stability of graphene nanoplatelets, graphene oxide, and reduced graphene oxide in simulated natural environmental conditions: complex roles of surface and solution chemistry. Environmental Science and Pollution Research, 2018, 25, 10956-10965. | 5.3 | 31 |
| 44 | Analysis and occurrence of emerging chlorinated and brominated flame retardants in surficial sediment of the Dalian costal area in China. Journal of Environmental Monitoring, 2011, 13, 3104. | 2.1 | 30 |
| 45 | Determination of linear and cyclic volatile methylsiloxanes in blood of turtles, cormorants, and seals from Canada. Science of the Total Environment, 2017, 574, 1254-1260. | 8.0 | 30 |
| 46 | Evolution of Toxicity upon Hydrolysis of Fenoxaprop-$p$-ethyl. Journal of Agricultural and Food Chemistry, 2007, 55, 7626-7629. | 5.2 | 29 |
| 47 | Source identification of PCDD/Fs and PCBs in pine (Cedrus deodara) needles: A case study in Dalian, China. Atmospheric Environment, 2008, 42, 4769-4777. | 4.1 | 29 |
| 48 | Trophic magnification of chlorinated flame retardants and their dechlorinated analogs in a fresh water food web. Chemosphere, 2015, 118, 293-300. | 8.2 | 28 |
| 49 | Tracing consumption patterns of stimulants, opioids, and ketamine in China by wastewater-based epidemiology. Environmental Science and Pollution Research, 2021, 28, 16754-16766. | 5.3 | 27 |
| 50 | Aqueous multivariate phototransformation kinetics of dissociated tetracycline: implications for the photochemical fate in surface waters. Environmental Science and Pollution Research, 2018, 25, 15726-15732. | 5.3 | 26 |
| 51 | Reduction in methamphetamine consumption trends from 2015 to 2018 detected by wastewater-based epidemiology in Dalian, China. Drug and Alcohol Dependence, 2019, 194, 302-309. | 3.2 | 26 |
| 52 | Spatial analysis of metformin use compared with nicotine and caffeine consumption through wastewater-based epidemiology in China. Ecotoxicology and Environmental Safety, 2021, 208, 111623. | 6.0 | 25 |
| 53 | Assessment of metformin, nicotine, caffeine, and methamphetamine use during Chinese public holidays. Chemosphere, 2020, 258, 127354. | 8.2 | 23 |
| 54 | Quantitative structure–property relationships for direct photolysis of polybrominated diphenyl ethers. Ecotoxicology and Environmental Safety, 2007, 66, 348-352. | 6.0 | 21 |

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|---|---------|----|-----------| 
| 55 | Experimental and theoretical studies on the photoinduced acute toxicity of a series of anthraquinone derivatives towards the water flea (Daphnia magna). Dyes and Pigments, 2009, 83, 276-280. | 3.7 | 21 |
| 56 | Distribution and Potential Human Risk of Organochlorine Pesticides in Market Mollusks from Dalian, China. Bulletin of Environmental Contamination and Toxicology, 2010, 84, 278-284. | 2.7 | 18 |
| 57 | Physicochemical properties and ecotoxicological effects of yttrium oxide nanoparticles in aquatic media: Role of low molecular weight natural organic acids. Environmental Pollution, 2016, 212, 113-120. | 7.5 | 18 |
| 58 | Seasonal and Spatial Variations of Air Concentrations of Polycyclic Aromatic Hydrocarbons in Northeastern Chinese Urban Region. Bulletin of Environmental Contamination and Toxicology, 2011, 86, 43-49. | 2.7 | 16 |
| 59 | Using Monte Carlo simulation to assess uncertainty and variability of methamphetamine use and prevalence from wastewater analysis. International Journal of Drug Policy, 2016, 36, 1-7. | 3.3 | 16 |
| 60 | Cyclic volatile methyl siloxanes in the environment. Chemosphere, 2013, 93, 709-710. | 8.2 | 15 |
| 61 | Dissolved organic matter and aluminum oxide nanoparticles synergistically cause cellular responses in freshwater microalgae. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2018, 53, 651-658. | 1.7 | 15 |
| 62 | Modeling and monitoring cyclic and linear volatile methylsiloxanes in a wastewater treatment plant using constant water level sequencing batch reactors. Science of the Total Environment, 2015, 512-513, 472-479. | 8.0 | 14 |
| 63 | Co-exposure of Freshwater Microalgae to Tetrabromobisphenol A and Sulfadiazine: Oxidative Stress Biomarker Responses and Joint Toxicity Prediction. Bulletin of Environmental Contamination and Toxicology, 2017, 99, 438-444. | 2.7 | 14 |
| 64 | Concentration, distribution, and human health risk assessment of endosulfan from a manufacturing facility in Huai'an, China. Science of the Total Environment, 2014, 491-492, 163-169. | 8.0 | 13 |
| 65 | An In2.77S4@conductive carbon composite with superior electrocatalytic activity for dye-sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2017, 332, 87-91. | 3.9 | 12 |
| 66 | ALD-coated ultrathin Al2O3 film on BiVO4 nanoparticles for efficient PEC water splitting. Nuclear Science and Techniques/Hewuli, 2016, 27, 1. | 3.4 | 11 |
| 67 | Wastewater analysis reveals urban, suburban, and rural spatial patterns of illicit drug use in Dalian, China. Environmental Science and Pollution Research, 2021, 28, 25503-25513. | 5.3 | 11 |
| 68 | Presence of the ketamine analog of 2â€‘fluorodeschloroketamine residues in wastewater. Drug Testing and Analysis, 2021, 13, 1650-1657. | 2.6 | 11 |
| 69 | Comparison of tobacco use in a university town and a nearby urban area in China by intensive analysis of wastewater over one year period. Water Research, 2021, 206, 117733. | 11.3 | 10 |
| 70 | Assessment of correlations between sildenafil use and comorbidities and lifestyle factors using wastewater-based epidemiology. Water Research, 2022, 218, 118446. | 11.3 | 10 |
| 71 | Dummy molecularly imprinted polymers for class-selective extraction of amphetamine-type stimulants from alcoholic and nonalcoholic beverages. Journal of Chromatography A, 2022, 1663, 462759. | 3.7 | 9 |
| 72 | Combined Toxicity of TiO2 Nanospherical Particles and TiO2 Nanotubes to Two Microalgae with Different Morphology. Nanomaterials, 2020, 10, 2559. | 4.1 | 8 |

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|---|---------|-----|-----------|
| 73 | Elucidating Adsorption Mechanisms of Phthalate Esters upon Carbon Nanotubes/Graphene and Natural Organic Acid Competitive Effects in Water by <scp>DFT</scp> and <scp>MD</scp> Calculations. Bulletin of the Korean Chemical Society, 2015, 36, 1631-1636. | 1.9 | 7 |
| 74 | Estimating dynamic population served by wastewater treatment plants using location-based services data. Environmental Geochemistry and Health, 2021, 43, 4627-4635. | 3.4 | 7 |
| 75 | Selective extraction of synthetic cathinones new psychoactive substances from wastewater, urine and cocktail using dummy molecularly imprinted polymers. Journal of Pharmaceutical and Biomedical Analysis, 2022, 215, 114765. | 2.8 | 7 |
| 76 | The uridine diphosphate glucuronosyltransferases: quantitative structure–activity relationships for hydroxyl polychlorinated biphenyl substrates. Archives of Toxicology, 2005, 79, 554-560. | 4.2 | 6 |
| 77 | Dissolved organic matter heightens the toxicity of tetrabromobisphenol A to aquatic organisms. Ecotoxicology, 2022, 31, 725-734. | 2.4 | 6 |
| 78 | Simulating Molecular Interactions of Carbon Nanoparticles with a Double-Stranded DNA Fragment. Journal of Chemistry, 2015, 2015, 1-6. | 1.9 | 5 |
| 79 | Source Apportionment of Polycyclic Aromatic Hydrocarbons in Sediment by the Application of Non-Negative Factor Analysis: A Case Study of Dalian Bay. International Journal of Environmental Research and Public Health, 2018, 15, 761. | 2.6 | 4 |
| 80 | Impacts of $C_{60}$-Ionic Liquids (ILs) Interactions and IL Alkyl Chain Length on $C_{60}$ Dispersion Behavior: Insights at the Molecular Level. Bulletin of the Korean Chemical Society, 2014, 35, 2679-2683. | 1.9 | 4 |
| 81 | Fate of Volatile Methylsiloxanes in Wastewater Treatment Plants. Handbook of Environmental Chemistry, 2018, , 119-130. | 0.4 | 3 |
| 82 | Dissolved Organic Matter Modulates Algal Oxidative Stress and Membrane System Responses to Binary Mixtures of Nano-Metal-Oxides (nCeO2, nMgO and nFe3O4) and Sulfadiazine. Nanomaterials, 2019, 9, 712. | 4.1 | 3 |
| 83 | Comparative Acute Toxicity and Oxidative Stress Responses in Three Aquatic Species Exposed to Stannic Oxide Nanoparticles and Stannic Chloride. Bulletin of Environmental Contamination and Toxicology, 2020, 105, 841-846. | 2.7 | 3 |
| 84 | Predicting joint toxicity of chemicals by incorporating a weighted descriptor into a mixture model: Cases for binary antibiotics and binary nanoparticles. Ecotoxicology and Environmental Safety, 2022, 236, 113472. | 6.0 | 1 |
| 85 | Soot Nanoparticles Could Partake in Nucleation of Biogenic Particles in the Atmosphere: Using Fullerene as a Model Compound. Atmosphere, 2016, 7, 45. | 2.3 | 0 |