# Kyoungphile Nam

List of Publications by Year
in descending order



| 110 | 2,399 | 218677 | 233421 |
|---|---|---|---|
| papers | citations | 26 h-index | 45 g-index |

| 113 | 113 | 113 | 2609 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Role of Nanoporosity and Hydrophobicity in Sequestration and Bioavailability:Â Tests with Model Solids. Environmental Science & Technology, 1998, 32, 71-74. | 10.0 | 213 |
| 2 | Relationship between Organic Matter Content of Soil and the Sequestration of Phenanthrene. Environmental Science & Technology, 1998, 32, 3785-3788. | 10.0 | 202 |
| 3 | Enhanced degradation of polycyclic aromatic hydrocarbons by biodegradation combined with a modified Fenton reaction. Chemosphere, 2001, 45, 11-20. | 8.2 | 194 |
| 4 | Correlation between biological and physical availabilities of phenanthrene in soils and soil humin in aging experiments. Environmental Toxicology and Chemistry, 1999, 18, 1720-1727. | 4.3 | 109 |
| 5 | Effect of different soil washing solutions on bioavailability of residual arsenic in soils and soil properties. Chemosphere, 2015, 138, 253-258. | 8.2 | 80 |
| 6 | Combined ozonation and biodegradation for remediation of mixtures of polycyclic aromatic hydrocarbons in soil. Biodegradation, 2000, 11, 1-9. | 3.0 | 77 |
| 7 | A long-term performance test on an autotrophic denitrification column for application as a permeable reactive barrier. Chemosphere, 2008, 73, 723-728. | 8.2 | 75 |
| 8 | Effect of reactive media composition and co-contaminants on sulfur-based autotrophic denitrification. Environmental Pollution, 2006, 144, 802-807. | 7.5 | 60 |
| 9 | Survival of introduced phosphate-solubilizing bacteria (PSB) and their impact on microbial community structure during the phytoextraction of Cd-contaminated soil. Journal of Hazardous Materials, 2013, 263, 441-449. | 12.4 | 55 |
| 10 | Changes in soil toxicity by phosphate-aided soil washing: Effect of soil characteristics, chemical forms of arsenic, and cations in washing solutions. Chemosphere, 2015, 119, 1399-1405. | 8.2 | 47 |
| 11 | Prediction of Cd and Pb toxicity to Vibrio fischeri using biotic ligand-based models in soil. Journal of Hazardous Materials, 2012, 203-204, 69-76. | 12.4 | 44 |
| 12 | Effect of pretreatment solutions and conditions on decomposition and anaerobic digestion of lignocellulosic biomass in rice straw. Biochemical Engineering Journal, 2018, 140, 108-114. | 3.6 | 44 |
| 13 | Extended biotic ligand model for prediction of mixture toxicity of Cd and Pb using single metal toxicity data. Environmental Toxicology and Chemistry, 2011, 30, 1697-1703. | 4.3 | 42 |
| 14 | Change in the site density and surface acidity of clay minerals by acid or alkali spills and its effect on pH buffering capacity. Scientific Reports, 2019, 9, 9878. | 3.3 | 39 |
| 15 | Effectiveness of compacted soil liner as a gas barrier layer in the landfill final cover system. Waste Management, 2008, 28, 1909-1914. | 7.4 | 38 |
| 16 | Minimizing mixing intensity to improve the performance of rice straw anaerobic digestion via enhanced development of microbe-substrate aggregates. Bioresource Technology, 2017, 245, 590-597. | 9.6 | 38 |
| 17 | Enhanced uptake and translocation of arsenic in Cretan brake fern (Pteris cretica L.) through siderophorearsenic complex formation with an aid of rhizospheric bacterial activity. Journal of Hazardous Materials, 2014, 280, 536-543. | 12.4 | 36 |
| 18 | Identification of pH-dependent removal mechanisms of lead and arsenic by basic oxygen furnace slag: Relative contribution of precipitation and adsorption. Journal of Cleaner Production, 2021, 279, 123451. | 9.3 | 36 |

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|---|---|---|---|
| 19 | Human health risk assessment of explosives and heavy metals at a military gunnery range. Environmental Geochemistry and Health, 2007, 29, 259-269. | 3.4 | 34 |
| 20 | Effect of C/N ratio on polyhydroxyalkanoates (PHA) accumulation by Cupriavidus necator and its implication on the use of rice straw hydrolysates. Environmental Engineering Research, 2015, 20, 246-253. | 2.5 | 33 |
| 21 | Relationship between biodegradation rate and percentage of a compound that becomes sequestered in soil. Soil Biology and Biochemistry, 2001, 33, 787-792. | 8.8 | 31 |
| 22 | Determination of human health risk incorporating experimentally derived site-specific bioaccessibility of arsenic at an old abandoned smelter site. Environmental Research, 2015, 137, 78-84. | 7.5 | 31 |
| 23 | Evaluation of the effectiveness of in situ stabilization in the field aged arsenic-contaminated soil: Chemical extractability and biological response. Journal of Hazardous Materials, 2019, 367, 137-143. | 12.4 | 31 |
| 24 | Inhibition of urea hydrolysis by free Cu concentration of soil solution in microbially induced calcium carbonate precipitation. Science of the Total Environment, 2020, 740, 140194. | 8.0 | 29 |
| 25 | Initial Alkalinity Requirement and Effect of Alkalinity Sources in Sulfur-Based Autotrophic Denitrification Barrier System. Journal of Environmental Engineering, ASCE, 2006, 132, 971-975. | 1.4 | 28 |
| 26 | Enhancement of aerobic biodegradation in an oxygen-limiting environment using a saponin-based microbubble suspension. Environmental Pollution, 2009, 157, 2197-2202. | 7.5 | 28 |
| 27 | Effect of dissolved humic acid on the Pb bioavailability in soil solution and its consequence on ecological risk. Journal of Hazardous Materials, 2015, 286, 236-241. | 12.4 | 28 |
| 28 | Importance of chemical binding type between As and iron-oxide on bioaccessibility in soil: Test with synthesized two line ferrihydrite. Journal of Hazardous Materials, 2017, 330, 157-164. | 12.4 | 27 |
| 29 | Increased 3HV Concentration in the Bacterial Production of 3-Hydroxybutyrate (3HB) and 3-Hydroxyvalerate (3HV) Copolymer with Acid-Digested Rice Straw Waste. Journal of Polymers and the Environment, 2016, 24, 98-103. | 5.0 | 26 |
| 30 | Response surface modeling with Box-Behnken design for strontium removal from soil by calcium-based solution. Environmental Pollution, 2021, 274, 116577. | 7.5 | 26 |
| 31 | Prediction of landfarming period using degradation kinetics of petroleum hydrocarbons: test with artificially contaminated and field-aged soils and commercially available bacterial cultures. Journal of Soils and Sediments, 2014, 14, 138-145. | 3.0 | 24 |
| 32 | Application of microbially induced calcite precipitation to prevent soil loss by rainfall: effect of particle size and organic matter content. Journal of Soils and Sediments, 2021, 21, 2744-2754. | 3.0 | 24 |
| 33 | Interaction among soil physicochemical properties, bacterial community structure, and arsenic contamination: Clay-induced change in long-term arsenic contaminated soils. Journal of Hazardous Materials, 2019, 378, 120729. | 12.4 | 23 |
| 34 | Microbubble suspension as a carrier of oxygen and acclimated bacteria for phenanthrene biodegradation. Journal of Hazardous Materials, 2009, 163, 761-767. | 12.4 | 22 |
| 35 | Binding strength-associated toxicity reduction by birnessite and hydroxyapatite in Pb and Cd contaminated sediments. Journal of Hazardous Materials, 2011, 186, 2117-2122. | 12.4 | 22 |
| 36 | Movement of Heavy Metals in Soil through Preferential Flow Paths under Different Rainfall Intensities. Clean - Soil, Air, Water, 2008, 36, 984-989. | 1.1 | 21 |

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|---|---|---|---|
| 37 | Optimization of Carbon Dioxide and Valeric Acid Utilization for Polyhydroxyalkanoates Synthesis by Cupriavidus necator. Journal of Polymers and the Environment, 2014, 22, 244-251. | 5.0 | 18 |
| 38 | Experimental determination of nonequilibrium transport parameters reflecting the competitive sorption between Cu and Pb in slag-sand column. Chemosphere, 2016, 154, 335-342. | 8.2 | 18 |
| 39 | Applicability of a submersible microbial fuel cell for Cr(VI) detection in water. Environmental Monitoring and Assessment, 2016, 188, 613. | 2.7 | 17 |
| 40 | Effect of acid-digested rice straw waste feeding methods on the 3HV fraction of bacterial poly(3-hydroxybutyrate-co-3-hydroxyvalerate) production. Process Biochemistry, 2016, 51, 2119-2126. | 3.7 | 17 |
| 41 | Prediction of long-term heavy metal leaching from dredged marine sediment applied inland as a construction material. Environmental Science and Pollution Research, 2018, 25, 27352-27361. | 5.3 | 17 |
| 42 | Flow Characteristics of Microbubble Suspensions in Porous Media as an Oxygen Carrier. Clean - Soil, Air, Water, 2008, 36, 59-65. | 1.1 | 15 |
| 43 | Distribution of the Microbial Community Structure in Sulfur-Based Autotrophic Denitrification Columns. Journal of Environmental Engineering, ASCE, 2010, 136, 481-486. | 1.4 | 15 |
| 44 | Increased ecological risk due to the hyperaccumulation of As in Pteris cretica during the phytoremediation of an As-contaminated site. Chemosphere, 2015, 122, 1-7. | 8.2 | 15 |
| 45 | Use of reporter-gene based bacteria to quantify phenanthrene biodegradation and toxicity in soil. Environmental Pollution, 2011, 159, 509-514. | 7.5 | 14 |
| 46 | Stabilization mechanism of arsenic in mine waste using basic oxygen furnace slag: The role of water contents on stabilization efficiency. Chemosphere, 2018, 208, 916-921. | 8.2 | 14 |
| 47 | Extension of biotic ligand model to account for the effects of pH and phosphate in accurate prediction of arsenate toxicity. Journal of Hazardous Materials, 2020, 385, 121619. | 12.4 | 13 |
| 48 | Persistence and bioavailability of hydrophobic organic compounds in the environment. Geosciences Journal, 2002, 6, 13-21. | 1.2 | 12 |
| 49 | Facilitated desorption and stabilization of sediment-bound Pb and Cd in the presence of birnessite and apatite. Journal of Hazardous Materials, 2011, 188, 206-211. | 12.4 | 12 |
| 50 | Effect of basic oxygen furnace slag addition on enhanced alkaline sludge fermentation and simultaneous phosphate removal. Journal of Environmental Management, 2019, 239, 66-72. | 7.8 | 12 |
| 51 | Combined use of collision cell technique and methanol addition for the analysis of arsenic in a high-chloride-containing sample by ICP-MS. Microchemical Journal, 2015, 120, 77-81. | 4.5 | 11 |
| 52 | Effect of biogeochemical interactions on bioaccessibility of arsenic in soils of a former smelter site in Republic of Korea. Environmental Geochemistry and Health, 2016, 38, 1347-1354. | 3.4 | 11 |
| 53 | Effect of Calcium Organic Additives on the Self-Healing of Concrete Microcracks in the Presence of a New Isolate Bacillus sp. BY1. Journal of Materials in Civil Engineering, 2019, 31, 04019227. | 2.9 | 11 |
| 54 | Role of phosphate and Fe-oxides on the acid-aided extraction efficiency and readsorption of As in field-aged soil. Journal of Hazardous Materials, 2015, 300, 161-166. | 12.4 | 10 |

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|---|---|---|---|
| 55 | Mechanism for alkaline leachate reduction through calcium carbonate precipitation on basic oxygen furnace slag by different carbonate sources: Application of NaHCO3 and CO2 gas. Waste Management, 2020, 103, 122-127. | 7.4 | 10 |
| 56 | Incorporation of Heavy Metals Bioavailability into Risk Characterization. Clean - Soil, Air, Water, 2010, 38, 812-815. | 1.1 | 9 |
| 57 | The effect of arsenic chemical form and mixing regime on arsenic mass transfer from soil to magnetite. Environmental Science and Pollution Research, 2017, 24, 8479-8488. | 5.3 | 9 |
| 58 | Effect of initial pH, operating temperature, and dissolved oxygen concentrations on performance of pyrite-fuel cells in the presence of Acidithiobacillus ferrooxidans. Journal of Hazardous Materials, 2018, 360, 512-519. | 12.4 | 9 |
| 59 | Effect of neutralizing agents on the type of As co-precipitates formed by in situ Fe oxides synthesis and its impact on the bioaccessibility of As in soil. Science of the Total Environment, 2020, 743, 140686. | 8.0 | 9 |
| 60 | Mitigation of Ammonia and Hydrogen Sulfide Emissions by Stable Aqueous Foam-Microbial Media. Environmental Science & Technology, 2006, 40, 3030-3035. | 10.0 | 8 |
| 61 | Reduction of Ammonia and Hydrogen Sulfide Emission from Swine Manure Using Aqueous Foams Amended with Microorganisms and Chemical Additives. Clean - Soil, Air, Water, 2007, 35, 230-234. | 1.1 | 8 |
| 62 | Ecological Risk Characterization in a Military Heavy Metalsâ€“ and Explosives-Contaminated Site. Human and Ecological Risk Assessment (HERA), 2011, 17, 856-872. | 3.4 | 8 |
| 63 | Differential in vitro bioaccessibility of residual As in a field-aged former smelter site and its implication for potential risk. Science of the Total Environment, 2013, 463-464, 348-354. | 8.0 | 8 |
| 64 | Mobility and bioavailability reduction of soil TNT via sorption enhancement using monopotassium phosphate. Journal of Hazardous Materials, 2014, 275, 26-30. | 12.4 | 8 |
| 65 | Characteristics of heavy metal contamination by anthropogenic sources in artificial lakes of urban environment. KSCE Journal of Civil Engineering, 2016, 20, 121-128. | 1.9 | 8 |
| 66 | Long-term leaching prediction of constituents in coal bottom ash used as a structural fill material. Journal of Soils and Sediments, 2017, 17, 2742-2751. | 3.0 | 8 |
| 67 | Contribution of precipitation and adsorption on stabilization of Pb in mine waste by basic oxygen furnace slag and the stability of Pb under reductive condition. Chemosphere, 2021, 263, 128337. | 8.2 | 8 |
| 68 | Effect of monovalent and divalent ion solutions as washing agents on the removal of Sr and Cs from soil near a nuclear power plant. Journal of Hazardous Materials, 2021, 412, 125165. | 12.4 | 7 |
| 69 | Effect of organic substrate and Fe oxides transformation on the mobility of arsenic by biotic reductive dissolution under repetitive redox conditions. Chemosphere, 2022, 305, 135431. | 8.2 | 7 |
| 70 | Release characteristics of molasses from a well-type barrier system in groundwater: a large test tank study for nitrate removal. Environmental Earth Sciences, 2013, 70, 167-174. | 2.7 | 6 |
| 71 | Risk Assessment of Environmental Pollutants in Korea for Soil and Groundwater Remediation. Human and Ecological Risk Assessment (HERA), 2013, 19, 723-723. | 3.4 | 6 |
| 72 | Human Health Risk Assessment of a Civilian-Accessible Active Firing Range. Human and Ecological Risk Assessment (HERA), 2013, 19, 807-818. | 3.4 | 6 |

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| 73 | Availability of coastal groundwater discharge as an alternative water resource in a large-scale reclaimed land, Korea. Environmental Earth Sciences, 2014, 71, 1521-1532. | 2.7 | 6 |
| 74 | Effect of soil conditions on natural attenuation of 2,4,6-trinitrotoluene (TNT) by UV photolysis in soils at an active firing range in South Korea. Journal of Soils and Sediments, 2015, 15, 1455-1462. | 3.0 | 6 |
| 75 | Environmental Compatibility of Lightweight Aggregates from Mine Tailings and Industrial Byproducts. Metals, 2017, 7, 390. | 2.3 | 5 |
| 76 | Estimation of human-origin estrone and 17Î²-estradiol concentrations in the Han River, Seoul, South Korea and its uncertainty-based ecological risk characterization. Science of the Total Environment, 2018, 633, 1148-1155. | 8.0 | 5 |
| 77 | Diffusive gradients in thin films technique coupled to X-ray fluorescence spectrometry for the determination of bioavailable arsenic concentrations in soil. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2020, 164, 105752. | 2.9 | 5 |
| 78 | Applicability of Soil Washing with Neutral Phosphate for Remediation of Arsenic-contaminated Soil at the Former Janghang Smelter Site. Journal of Soil and Groundwater Environment, 2014, 19, 45-51. | 0.1 | 5 |
| 79 | Determination of Human Health Risk Incorporated with Arsenic Bioaccessibility and Remediation Goals at the Former Janghang Smelter Site. Journal of Soil and Groundwater Environment, 2014, 19, 52-61. | 0.1 | 5 |
| 80 | Long-Term Stability of High-n-Caproate Specificity-Ensuring Anaerobic Membrane Bioreactors: Controlling Microbial Competitions through Feeding Strategies. ACS Sustainable Chemistry and Engineering, 2022, 10, 1595-1604. | 6.7 | 5 |
| 81 | Enhanced reactivity of hydroxylated polycyclic aromatic hydrocarbons to birnessite in soil: Reaction kinetics and nonextractable residue formation. Environmental Toxicology and Chemistry, 2008, 27, 1031-1038. | 4.3 | 4 |
| 82 | Potential use of a self-dying reporter bacterium to determine the bioavailability of aged phenanthrene in soil: Comparison with physicochemical measures. Journal of Hazardous Materials, 2014, 265, 1-7. | 12.4 | 4 |
| 83 | Effect of methanol addition on generation of isobaric polyatomic ions in the analysis of arsenic with ICP-MS. Microchemical Journal, 2017, 131, 170-173. | 4.5 | 4 |
| 84 | Shaping a reactor microbiome generating stable n-caproate productivity through Design-Build-Test-Learn approach. Chemical Engineering Journal, 2021, 425, 131587. | 12.7 | 4 |
| 85 | Differential mode of denitrification by Pseudomonas sp. KY1 using molasses as a carbon source. KSCE Journal of Civil Engineering, 2017, 21, 2097-2105. | 1.9 | 3 |
| 86 | Reduction of bioaccessibility of As in soil through in situ formation of amorphous Fe oxides and its long-term stability. Science of the Total Environment, 2020, 745, 140989. | 8.0 | 3 |
| 87 | Derivation of ecotoxicologically acceptable Cu concentrations in the Han River basin, Korea with emphasis on Ca concentration and instantaneously changing water characteristics. Science of the Total Environment, 2022, 828, 154495. | 8.0 | 3 |
| 88 | Mass transport of organic contaminants through a self-sealing/self-healing mineral landfill liner. Journal of Material Cycles and Waste Management, 2003, 5, 130-136. | 3.0 | 2 |
| 89 | Phenanthrene metabolites bound to soil organic matter by birnessite following partial biodegradation. Environmental Toxicology and Chemistry, 2009, 28, 946-952. | 4.3 | 2 |
| 90 | Different fate of Pb and Cu at varied peroxide concentrations during the modified Fenton reaction in soil and its effect on the degradation of 2,4â€dinitrotoluene. Journal of Chemical Technology and Biotechnology, 2013, 88, 1481-1487. | 3.2 | 2 |

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| 91 | Nitrate-N removal using slowly released molasses barrier in a shallow aquifer: Obstacles from lab/pilot-scale results to field application. KSCE Journal of Civil Engineering, 2017, 21, 1096-1101. | 1.9 | 2 |
| 92 | Decision Making Framework for Beneficial use of Dredged Sediment in the Terrestrial Environment based on Environmental Risk Assessment and Sediment Characterization. Daehan Hwan'gyeong Gonghag Hoeji, 2018, 40, 227-238. | 1.1 | 2 |
| 93 | Effect of Aging on the Chemical Forms and Phytotoxicity of Arsenic in Soil. Journal of Soil and Groundwater Environment, 2016, 21, 82-87. | 0.1 | 2 |
| 94 | Determining the reuse of metal mine wastes based on leaching test and human health risk assessment. Environmental Engineering Research, 2019, 24, 82-90. | 2.5 | 2 |
| 95 | Physicochemical and fertility characteristics of microalgal soil ameliorants using harvested cyanobacterial microalgal sludge from a freshwater ecosystem, Republic of Korea. Heliyon, 2022, 8, e09700. | 3.2 | 2 |
| 96 | Determination of phenanthrene bioavailability by using a self-dying reporter bacterium: Test with model solids and soil. Journal of Biotechnology, 2012, 157, 454-459. | 3.8 | 1 |
| 97 | Potential Health Risk of Reused Creosote-Treated Old Railway Ties at Recreational Sites in Korea. Human and Ecological Risk Assessment (HERA), 2013, 19, 778-791. | 3.4 | 1 |
| 98 | Slowly released molasses barrier system for controlling nitrate plumes in groundwater: A pilot-scale tank study. Chemosphere, 2014, 97, 135-139. | 8.2 | 1 |
| 99 | The Toxicity Assessment of Explosives Contaminated Soil using Soil Microbial Activity Tests. Journal of Soil and Groundwater Environment, 2015, 20, 37-45. | 0.1 | 1 |
| 100 | Applicability of Stabilization with Iron Oxides for Arsenic-Contaminated Soil at the Forest Area near the Former Janghang Smelter Site. Journal of Soil and Groundwater Environment, 2016, 21, 14-21. | 0.1 | 1 |
| 101 | Applicability of tire powder for the control of volatile organic compound emission in solid waste landfills. KSCE Journal of Civil Engineering, 2002, 6, 89-95. | 1.9 | 0 |
| 102 | Bioavailability of Organohalides. , 2004, , 291-302. | | 0 |
| 103 | ALTERED MOBILITY OF BENZ[a]ANTHRACENE IN THE PRESENCE OFp-XYLENE AND ITS IMPACT ON RISK IN THE SUBSURFACE. Polycyclic Aromatic Compounds, 2008, 28, 598-610. | 2.6 | 0 |
| 104 | Risk Assessment of Volatile Organic Compounds for Vapor Intrusion Pathway Using Various Estimation Methodology of Indoor Air Concentration. Journal of Soil and Groundwater Environment, 2015, 20, 51-65. | 0.1 | 0 |
| 105 | An Environmental Management Protocol for the Mitigation of Contaminants Migration from Military Operational Ranges. Journal of Soil and Groundwater Environment, 2015, 20, 8-18. | 0.1 | 0 |
| 106 | Risk Evaluation of Monopotassium Phosphate (MKP) and Bentonite Application via the Mobility Reduction of Soil TNT and Heavy Metals. Journal of Soil and Groundwater Environment, 2015, 20, 28-36. | 0.1 | 0 |
| 107 | Application of TREECS Program to Predict the Fate of TNT and RDX from Firing Range. Journal of Soil and Groundwater Environment, 2015, 20, 133-139. | 0.1 | 0 |
| 108 | Study on Determination of Permissible Soil Concentrations for Explosives and Heavy Metals. Journal of Soil and Groundwater Environment, 2015, 20, 19-27. | 0.1 | 0 |

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|---|---|---|---|
| 109 | Applicability of Enhanced-phytoremediation for Arsenic-contaminated Soil. Journal of Soil and Groundwater Environment, 2016, 21, 40-48. | 0.1 | 0 |
| 110 | Effect of Basic Oxygen Furnace Slag used as Structural Filling Materials on the Subsurface Environment. Journal of Soil and Groundwater Environment, 2016, 21, 6-13. | 0.1 | 0 |