

# Christos A Aggelopoulos

## List of Publications by Year in descending order

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Version: 2024-02-01

50  
papers

1,670  
citations

304368

22  
h-index

288905

40  
g-index

51  
all docs

51  
docs citations

51  
times ranked

1690  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Exploring the adsorption mechanisms of cationic and anionic dyes onto agricultural waste peels of banana, cucumber and potato: Adsorption kinetics and equilibrium isotherms as a tool. <i>Journal of Environmental Chemical Engineering</i> , 2018, 6, 6958-6970.            | 3.3  | 138       |
| 2  | Interfacial tension between CO <sub>2</sub> and brine (NaCl+CaCl <sub>2</sub> ) at elevated pressures and temperatures: The additive effect of different salts. <i>Advances in Water Resources</i> , 2011, 34, 505-511.   | 1.7  | 101       |
| 3  | Photocatalytic degradation of Naproxen and methylene blue: Comparison between ZnO, TiO <sub>2</sub> and their mixture. <i>Chemical Engineering Research and Design</i> , 2018, 113, 174-183.  | 2.7  | 100       |
| 4  | Recent advances of cold plasma technology for water and soil remediation: A critical review. <i>Chemical Engineering Journal</i> , 2022, 428, 131657.   | 6.6  | 97        |
| 5  | Degradation of antibiotic enrofloxacin in water by gas-liquid nsp-DBD plasma: Parametric analysis, effect of H <sub>2</sub> O <sub>2</sub> and CaO <sub>2</sub> additives and exploration of degradation mechanisms. <i>Chemical Engineering Journal</i> , 2020, 398, 125622. | 6.6  | 93        |
| 6  | CO <sub>2</sub> /CaCl <sub>2</sub> solution interfacial tensions under CO <sub>2</sub> geological storage conditions: Influence of cation valence on interfacial tension. <i>Advances in Water Resources</i> , 2010, 33, 691-697.   | 1.7  | 91        |
| 7  | Influence of the surface-to-bulk defects ratio of ZnO and TiO <sub>2</sub> on their UV-mediated photocatalytic activity. <i>Applied Catalysis B: Environmental</i> , 2017, 205, 292-301.  | 10.8 | 91        |
| 8  | Degradation of atrazine in soil by dielectric barrier discharge plasma – Potential singlet oxygen mediation. <i>Chemical Engineering Journal</i> , 2018, 347, 682-694.  | 6.6  | 71        |
| 9  | TiO <sub>2</sub> /palygorskite composite nanocrystalline films prepared by surfactant templating route: Synergistic effect to the photocatalytic degradation of an azo-dye in water. <i>Journal of Hazardous Materials</i> , 2012, 211-212, 68-76.                            | 6.5  | 68        |
| 10 | The effect of oxidation treatment on the properties of multi-walled carbon nanotube thin films. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2009, 165, 135-138.   | 1.7  | 62        |
| 11 | Dielectric barrier discharge plasma used as a means for the remediation of soils contaminated by non-aqueous phase liquids. <i>Chemical Engineering Journal</i> , 2015, 270, 428-436.   | 6.6  | 59        |
| 12 | Parametric analysis of the operation of a non-thermal plasma reactor for the remediation of NAPL-polluted soils. <i>Chemical Engineering Journal</i> , 2016, 301, 353-361.  | 6.6  | 45        |
| 13 | Remediation of ciprofloxacin-contaminated soil by nanosecond pulsed dielectric barrier discharge plasma: Influencing factors and degradation mechanisms. <i>Chemical Engineering Journal</i> , 2020, 393, 124768.   | 6.6  | 44        |
| 14 | The effect of micro-heterogeneity and capillary number on capillary pressure and relative permeability curves of soils. <i>Geoderma</i> , 2008, 148, 25-34.   | 2.3  | 40        |
| 15 | The Longitudinal Dispersion Coefficient of Soils as Related to the Variability of Local Permeability. <i>Water, Air, and Soil Pollution</i> , 2007, 185, 223-237.   | 1.1  | 38        |
| 16 | Non-aqueous phase liquid-contaminated soil remediation by ex situ dielectric barrier discharge plasma. <i>International Journal of Environmental Science and Technology</i> , 2015, 12, 1011-1020.  | 1.8  | 34        |
| 17 | Novel combination of high voltage nanopulses and in-soil generated plasma micro-discharges applied for the highly efficient degradation of trifluralin. <i>Journal of Hazardous Materials</i> , 2021, 415, 125646.  | 6.5  | 30        |
| 18 | Atmospheric pressure dielectric barrier discharge for the remediation of soil contaminated by organic pollutants. <i>International Journal of Environmental Science and Technology</i> , 2016, 13, 1731-1740.   | 1.8  | 29        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Open structured in comparison with dense multi-walled carbon nanotube buckypapers and their composites. <i>Composites Science and Technology</i> , 2013, 77, 52-59.   | 3.8 | 28        |
| 20 | Structure-Degradation efficiency studies in the remediation of aqueous solutions of dyes using nanosecond-pulsed DBD plasma. <i>Separation and Purification Technology</i> , 2021, 274, 119031.   | 3.9 | 27        |
| 21 | Removal of anionic dyes from aqueous solution by novel pyrrolidinium-based Polymeric Ionic Liquid (PIL) as adsorbent: Investigation of the adsorption kinetics, equilibrium isotherms and the adsorption mechanisms involved. <i>Journal of Environmental Chemical Engineering</i> , 2019, 7, 103163. | 3.3 | 26        |
| 22 | Highly energy-efficient degradation of antibiotics in soil: Extensive cold plasma discharges generation in soil pores driven by high voltage nanopulses. <i>Science of the Total Environment</i> , 2021, 786, 147420.   | 3.9 | 24        |
| 23 | Remediation of the unsaturated zone of NAPL-polluted low permeability soils with steam injection: an experimental study. <i>Journal of Soils and Sediments</i> , 2011, 11, 72-81.   | 1.5 | 23        |
| 24 | A multi-flowpath model for the interpretation of immiscible displacement experiments in heterogeneous soil columns. <i>Journal of Contaminant Hydrology</i> , 2009, 105, 146-160.   | 1.6 | 22        |
| 25 | A new perspective towards in-situ cold plasma remediation of polluted sites: Direct generation of micro-discharges within contaminated medium. <i>Chemosphere</i> , 2021, 266, 128969.  | 4.2 | 21        |
| 26 | Quantifying soil heterogeneity from solute dispersion experiments. <i>Geoderma</i> , 2008, 146, 412-424.  | 2.3 | 20        |
| 27 | Large-scale effects on resistivity index of porous media. <i>Journal of Contaminant Hydrology</i> , 2005, 77, 299-323.  | 1.6 | 18        |
| 28 | Steady-state two-phase relative permeability functions of porous media: A revisit. <i>International Journal of Multiphase Flow</i> , 2015, 73, 34-42.   | 1.6 | 17        |
| 29 | Key-study on plasma-induced degradation of cephalosporins in water: Process optimization, assessment of degradation mechanisms and residual toxicity. <i>Separation and Purification Technology</i> , 2022, 298, 121639.  | 3.9 | 17        |
| 30 | Cold Atmospheric Plasma Attenuates Breast Cancer Cell Growth Through Regulation of Cell Microenvironment Effectors. <i>Frontiers in Oncology</i> , 2021, 11, 826865.  | 1.3 | 16        |
| 31 | Complex Hydrogel Systems Composed of Polymers, Liposomes, and Cyclodextrins: Implications of Composition on Rheological Properties and Aging. <i>Langmuir</i> , 2009, 25, 8480-8488.  | 1.6 | 15        |
| 32 | Dynamics of surfactant-enhanced oil mobilization and solubilization in porous media: Experiments and numerical modeling. <i>International Journal of Multiphase Flow</i> , 2013, 55, 11-23.   | 1.6 | 15        |
| 33 | Modeling of a DBD plasma reactor for porous soil remediation. <i>Chemical Engineering Journal</i> , 2019, 373, 393-405.   | 6.6 | 14        |
| 34 | Effects of micro-heterogeneity and hydrodynamic dispersion on the dissolution rate of carbon dioxide in water-saturated porous media. <i>International Journal of Greenhouse Gas Control</i> , 2012, 10, 341-350.   | 2.3 | 13        |
| 35 | A Methodology to Estimate the Sorption Parameters from Batch and Column Tests: The Case Study of Methylene Blue Sorption onto Banana Peels. <i>Processes</i> , 2020, 8, 1467.   | 1.3 | 13        |
| 36 | Effects of Carbon Dioxide on the Mobilization of Metals from Aquifers. <i>Environmental Science &amp; Technology</i> , 2014, 48, 4386-4394.   | 4.6 | 12        |

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|----|--|-----|-----------|
| 37 | Mobility of zero valent iron nanoparticles and liposomes in porous media. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2016, 506, 711-722.                              | 2.3 | 12        |
| 38 | A statistical shrinking core model to estimate the overall dechlorination rate of PCE by an assemblage of zero-valent iron nanoparticles. <i>Chemical Engineering Science</i> , 2017, 167, 191-203.  | 1.9 | 12        |
| 39 | Enhancing the adhesion of graphene to polymer substrates by controlled defect formation. <i>Nanotechnology</i> , 2019, 30, 015704.   | 1.3 | 12        |
| 40 | Valorization of fruit wastes (pistachio shells) as adsorbent for the removal of Zn from aqueous solutions under adverse acidic conditions. , 0, 74, 174-183.   |     | 11        |
| 41 | Highly-energy efficient oxidation of MWCNT with nanosecond pulsed dielectric barrier discharge plasma. <i>Applied Surface Science</i> , 2021, 563, 150139.   | 3.1 | 10        |
| 42 | Assessing the capacity of zero valent iron nanofluids to remediate NAPL-polluted porous media. <i>Science of the Total Environment</i> , 2016, 563-564, 866-878.                                     | 3.9 | 9         |
| 43 | From aperture characterization to hydraulic properties of fractures. <i>Geoderma</i> , 2012, 181-182, 65-77.   | 2.3 | 7         |
| 44 | Growth and Characterization of Nanostructured Ag-ZnO for Application in Water Purification. <i>Journal of Nano Research</i> , 2020, 62, 75-86.   | 0.8 | 7         |
| 45 | Using multi-level wavelets to correlate the two-phase flow characteristics of porous media with heterogeneity. <i>Chemical Engineering Science</i> , 2010, 65, 6452-6460.                            | 1.9 | 5         |
| 46 | A Dynamic Network-Type Simulator to Investigate the Multiphase Flow Properties of Heterogeneous Soils. <i>Vadose Zone Journal</i> , 2010, 9, 285-294.  | 1.3 | 5         |
| 47 | Ex Situ Soil Remediation by Cold Atmospheric Plasma Discharge. <i>Procedia Environmental Sciences</i> , 2013, 18, 649-656.   | 1.3 | 4         |
| 48 | Hierarchical modeling of plasma and transport phenomena in a dielectric barrier discharge reactor. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 505202.                                     | 1.3 | 3         |
| 49 | CO <sub>2</sub> -induced release of copper and zinc from model soil in water. <i>International Journal of Greenhouse Gas Control</i> , 2018, 76, 150-157.  | 2.3 | 1         |
| 50 | Microscopic and Macroscopic Properties of Soils Used as Means for the Interpretation of the Efficiency of Soil Remediation Technologies. <i>Procedia Environmental Sciences</i> , 2013, 18, 638-648. | 1.3 | 0         |