

Kathryn A Whitehead

List of Publications by Year in descending order

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Version: 2024-02-01

91
papers

3,120
citations

201674

27
h-index

168389

53
g-index

93
all docs

93
docs citations

93
times ranked

3929
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Microbial fuel cells: An overview of current technology. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 101, 60-81. | 16.4 | 473 |
| 2 | Retention of microbial cells in substratum surface features of micrometer and sub-micrometer dimensions. <i>Colloids and Surfaces B: Biointerfaces</i> , 2005, 41, 129-138. | 5.0 | 263 |
| 3 | The Effect of Surface Topography on the Retention of Microorganisms. <i>Food and Bioprocess Technology</i> , 2006, 84, 253-259. | 3.6 | 184 |
| 4 | Inactivation of <i>Escherichia coli</i> on immobilized TiO ₂ using fluorescent light. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2009, 202, 92-98. | 3.9 | 161 |
| 5 | Comparison of the tribological and antimicrobial properties of CrN/Ag, ZrN/Ag, TiN/Ag, and TiN/Cu nanocomposite coatings. <i>Surface and Coatings Technology</i> , 2010, 205, 1606-1610. | 4.8 | 150 |
| 6 | Use of the atomic force microscope to determine the effect of substratum surface topography on the ease of bacterial removal. <i>Colloids and Surfaces B: Biointerfaces</i> , 2006, 51, 44-53. | 5.0 | 121 |
| 7 | A study of the antimicrobial and tribological properties of TiN/Ag nanocomposite coatings. <i>Surface and Coatings Technology</i> , 2009, 204, 1137-1140. | 4.8 | 116 |
| 8 | Antimicrobial Efficacy and Synergy of Metal Ions against <i>Enterococcus faecium</i> , <i>Klebsiella pneumoniae</i> and <i>Acinetobacter baumannii</i> in Planktonic and Biofilm Phenotypes. <i>Scientific Reports</i> , 2017, 7, 5911. | 3.3 | 111 |
| 9 | Production of hybrid macro/micro/nano surface structures on Ti6Al4V surfaces by picosecond laser surface texturing and their antifouling characteristics. <i>Colloids and Surfaces B: Biointerfaces</i> , 2017, 160, 688-696. | 5.0 | 68 |
| 10 | Antimicrobial strategies to reduce polymer biomaterial infections and their economic implications and considerations. <i>International Biodeterioration and Biodegradation</i> , 2019, 136, 1-14. | 3.9 | 57 |
| 11 | The detection of food soils and cells on stainless steel using industrial methods: UV illumination and ATP bioluminescence. <i>International Journal of Food Microbiology</i> , 2008, 127, 121-128. | 4.7 | 54 |
| 12 | Formation, architecture and functionality of microbial biofilms in the food industry. <i>Current Opinion in Food Science</i> , 2015, 2, 84-91. | 8.0 | 53 |
| 13 | Antimicrobial activity of graphene oxide-metal hybrids. <i>International Biodeterioration and Biodegradation</i> , 2017, 123, 182-190. | 3.9 | 49 |
| 14 | The effect of surface properties and application method on the retention of <i>Pseudomonas aeruginosa</i> on uncoated and titanium-coated stainless steel. <i>International Biodeterioration and Biodegradation</i> , 2007, 60, 74-80. | 3.9 | 47 |
| 15 | The effect of dentifrice abrasion on denture topography and the subsequent retention of microorganisms on abraded surfaces. <i>Journal of Prosthetic Dentistry</i> , 2014, 112, 1513-1522. | 2.8 | 46 |
| 16 | Picosecond laser treatment production of hierarchical structured stainless steel to reduce bacterial fouling. <i>Food and Bioprocess Technology</i> , 2018, 109, 29-40. | 3.6 | 43 |
| 17 | Chapter 8 Microbial Retention on Open Food Contact Surfaces and Implications for Food Contamination. <i>Advances in Applied Microbiology</i> , 2008, 64, 223-246. | 2.4 | 41 |
| 18 | The retention of bacteria on hygienic surfaces presenting scratches of microbial dimensions. <i>Letters in Applied Microbiology</i> , 2010, 50, 258-263. | 2.2 | 41 |

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|----|---|------|-----------|
| 19 | Photoinactivation of <i>Escherichia coli</i> on acrylic paint formulations using fluorescent light. <i>Dyes and Pigments</i> , 2010, 86, 56-62. | 3.7 | 38 |
| 20 | Exploring the electrochemical performance of graphite and graphene paste electrodes composed of varying lateral flake sizes. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 20010-20022. | 2.8 | 35 |
| 21 | The production of surfaces of defined topography and chemistry for microbial retention studies, using ion beam sputtering technology. <i>International Biodeterioration and Biodegradation</i> , 2004, 54, 143-151. | 3.9 | 34 |
| 22 | The antimicrobial effect of metal substrates on food pathogens. <i>Food and Bioproducts Processing</i> , 2019, 113, 68-76. | 3.6 | 32 |
| 23 | Effect of surface conditioning with cellular extracts on <i>Escherichia coli</i> adhesion and initial biofilm formation. <i>Food and Bioproducts Processing</i> , 2017, 104, 1-12. | 3.6 | 31 |
| 24 | Assessment of Organic Materials and Microbial Components on Hygienic Surfaces. <i>Food and Bioproducts Processing</i> , 2006, 84, 260-264. | 3.6 | 30 |
| 25 | Molybdenum doped titanium dioxide photocatalytic coatings for use as hygienic surfaces: the effect of soiling on antimicrobial activity. <i>Biofouling</i> , 2014, 30, 911-919. | 2.2 | 30 |
| 26 | The detection and influence of food soils on microorganisms on stainless steel using scanning electron microscopy and epifluorescence microscopy. <i>International Journal of Food Microbiology</i> , 2010, 141, S125-S133. | 4.7 | 29 |
| 27 | Initial adhesion of <i>Listeria monocytogenes</i> to solid surfaces under liquid flow. <i>International Journal of Food Microbiology</i> , 2012, 152, 181-188. | 4.7 | 29 |
| 28 | The use of physicochemical methods to detect organic food soils on stainless steel surfaces. <i>Biofouling</i> , 2009, 25, 749-756. | 2.2 | 28 |
| 29 | Quantifying the pattern of microbial cell dispersion, density and clustering on surfaces of differing chemistries and topographies using multifractal analysis. <i>Journal of Microbiological Methods</i> , 2014, 104, 101-108. | 1.6 | 27 |
| 30 | Thieno[2,3-b]pyridine derivatives are potent anti-platelet drugs, inhibiting platelet activation, aggregation and showing synergy with aspirin. <i>European Journal of Medicinal Chemistry</i> , 2018, 143, 1997-2004. | 5.5 | 27 |
| 31 | Non-thermal plasma-based inactivation of bacteria in water using a microfluidic reactor. <i>Water Research</i> , 2021, 201, 117321. | 11.3 | 27 |
| 32 | Exploring the putative interactions between chronic kidney disease and chronic periodontitis. <i>Critical Reviews in Microbiology</i> , 2020, 46, 61-77. | 6.1 | 24 |
| 33 | A critical evaluation of sampling methods used for assessing microorganisms on surfaces. <i>Food and Bioproducts Processing</i> , 2010, 88, 335-340. | 3.6 | 23 |
| 34 | Titanium-coating of stainless steel as an aid to improved cleanability. <i>International Journal of Food Microbiology</i> , 2010, 141, S134-S139. | 4.7 | 23 |
| 35 | One-pot bioinspired synthesis of fluorescent metal chalcogenide and carbon quantum dots: Applications and potential biotoxicity. <i>Colloids and Surfaces B: Biointerfaces</i> , 2021, 200, 111578. | 5.0 | 23 |
| 36 | Use of the Atomic Force Microscope to Determine the Strength of Bacterial Attachment to Grooved Surface Features. <i>Journal of Adhesion Science and Technology</i> , 2010, 24, 2271-2285. | 2.6 | 22 |

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|----|--|-----|-----------|
| 37 | The detection of food soils on stainless steel using energy dispersive X-ray and Fourier transform infrared spectroscopy. <i>Biofouling</i> , 2011, 27, 907-917. | 2.2 | 22 |
| 38 | Antimicrobial Activity of Nanocomposite Zirconium Nitride/Silver Coatings to Combat External Bone Fixation Pin Infections. <i>International Journal of Artificial Organs</i> , 2012, 35, 817-825. | 1.4 | 22 |
| 39 | The effect of surface properties of polycrystalline, single phase metal coatings on bacterial retention. <i>International Journal of Food Microbiology</i> , 2015, 197, 92-97. | 4.7 | 22 |
| 40 | Polyamine biomarkers as indicators of human disease. <i>Biomarkers</i> , 2021, 26, 77-94. | 1.9 | 22 |
| 41 | The Effect of Surface Hydrophobicity on the Attachment of Fungal Conidia to Substrates of Polyvinyl Acetate and Polyvinyl Alcohol. <i>Journal of Polymers and the Environment</i> , 2020, 28, 1450-1464. | 5.0 | 20 |
| 42 | A comparative study of fine polished stainless steel, TiN and TiN/Ag surfaces: Adhesion and attachment strength of <i>Listeria monocytogenes</i> as well as anti-listerial effect. <i>Colloids and Surfaces B: Biointerfaces</i> , 2013, 109, 190-196. | 5.0 | 18 |
| 43 | Photocatalytic TiO ₂ and Doped TiO ₂ Coatings to Improve the Hygiene of Surfaces Used in Food and Beverage Processing – A Study of the Physical and Chemical Resistance of the Coatings. <i>Coatings</i> , 2014, 4, 433-449. | 2.6 | 17 |
| 44 | The effects of blood conditioning films on the antimicrobial and retention properties of zirconium-nitride silver surfaces. <i>Colloids and Surfaces B: Biointerfaces</i> , 2019, 173, 303-311. | 5.0 | 17 |
| 45 | Differential fluorescent staining of <i>Listeria monocytogenes</i> and a whey food soil for quantitative analysis of surface hygiene. <i>International Journal of Food Microbiology</i> , 2009, 135, 75-80. | 4.7 | 16 |
| 46 | The effect of surface properties on the strength of attachment of fungal spores using AFM perpendicular force measurements. <i>Colloids and Surfaces B: Biointerfaces</i> , 2011, 82, 483-489. | 5.0 | 16 |
| 47 | Photocatalytic inactivation of <i>Escherichia coli</i> using doped titanium dioxide under fluorescent irradiation. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2014, 276, 50-57. | 3.9 | 16 |
| 48 | Antimicrobial activity of Ti-ZrN/Ag coatings for use in biomaterial applications. <i>Scientific Reports</i> , 2018, 8, 1497. | 3.3 | 16 |
| 49 | Influence of flow direction and flow rate on the initial adhesion of seven <i>Listeria monocytogenes</i> strains to fine polished stainless steel. <i>International Journal of Food Microbiology</i> , 2012, 157, 174-181. | 4.7 | 15 |
| 50 | Ionic gold demonstrates antimicrobial activity against <i>Pseudomonas aeruginosa</i> strains due to cellular ultrastructure damage. <i>Archives of Microbiology</i> , 2021, 203, 3015-3024. | 2.2 | 15 |
| 51 | Additive manufactured graphene-based electrodes exhibit beneficial performances in <i>Pseudomonas aeruginosa</i> microbial fuel cells. <i>Journal of Power Sources</i> , 2021, 499, 229938. | 7.8 | 15 |
| 52 | The Antimicrobial Properties of Titanium Nitride/Silver Nanocomposite Coatings. <i>Journal of Adhesion Science and Technology</i> , 2011, 25, 2299-2315. | 2.6 | 14 |
| 53 | Metal ions and graphene-based compounds as alternative treatment options for burn wounds infected by antibiotic-resistant <i>Pseudomonas aeruginosa</i> . <i>Archives of Microbiology</i> , 2020, 202, 995-1004. | 2.2 | 13 |
| 54 | Molybdenum Disulfide Surfaces to Reduce <i>Staphylococcus aureus</i> and <i>Pseudomonas aeruginosa</i> Biofilm Formation. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 21057-21069. | 8.0 | 13 |

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|----|---|-----|-----------|
| 55 | Single and combined antimicrobial efficacies for nine metal ion solutions against <i>Klebsiella pneumoniae</i> , <i>Acinetobacter baumannii</i> and <i>Enterococcus faecium</i> . <i>International Biodeterioration and Biodegradation</i> , 2019, 141, 39-43. | 3.9 | 12 |
| 56 | Rhenium and yttrium ions as antimicrobial agents against multidrug resistant <i>Klebsiella pneumoniae</i> and <i>Acinetobacter baumannii</i> biofilms. <i>Letters in Applied Microbiology</i> , 2019, 69, 168-174. | 2.2 | 12 |
| 57 | Heat-Transfer Method: A Thermal Analysis Technique for the Real-Time Monitoring of <i>Staphylococcus aureus</i> Growth in Buffered Solutions and Digestate Samples. <i>ACS Applied Bio Materials</i> , 2019, 2, 3790-3798. | 4.6 | 11 |
| 58 | Exploring the reactivity of distinct electron transfer sites at CVD grown monolayer graphene through the selective electrodeposition of MoO ₂ nanowires. <i>Scientific Reports</i> , 2019, 9, 12814. | 3.3 | 11 |
| 59 | Principal Component Analysis to Determine the Surface Properties That Influence the Self-Cleaning Action of Hydrophobic Plant Leaves. <i>Langmuir</i> , 2021, 37, 8177-8189. | 3.5 | 11 |
| 60 | The Influence of Silver Content on the Tribological and Antimicrobial Properties of Zn/Ni/Ag Nanocomposite Coatings. <i>Journal of Nanoscience and Nanotechnology</i> , 2011, 11, 5383-5387. | 0.9 | 10 |
| 61 | Developing application and detection methods for <i>Listeria monocytogenes</i> and fish extract on open surfaces in order to optimize cleaning protocols. <i>Food and Bioprocess Technology</i> , 2015, 93, 224-233. | 3.6 | 10 |
| 62 | The effect of surface properties on bacterial retention: A study utilising stainless steel and TiN/25.65at.%Ag substrata. <i>Food and Bioprocess Technology</i> , 2017, 102, 332-339. | 3.6 | 10 |
| 63 | Modular Synthesis and Biological Investigation of 5-Hydroxymethyl Dibenzyl Butyrolactones and Related Lignans. <i>Molecules</i> , 2018, 23, 3057. | 3.8 | 9 |
| 64 | Photodynamic antimicrobial chemotherapy coupled with the use of the photosensitizers methylene blue and temoporfin as a potential novel treatment for <i>Staphylococcus aureus</i> in burn infections. <i>Access Microbiology</i> , 2021, 3, 000273. | 0.5 | 9 |
| 65 | Surface modification of platelet concentrate bags to reduce biofilm formation and transfusion sepsis. <i>Colloids and Surfaces B: Biointerfaces</i> , 2017, 160, 126-135. | 5.0 | 8 |
| 66 | Poly(para-phenylene ethynylene) (PPE)- and poly(para-phenylene vinylene) (PPV)-poly[[2-(methacryloyloxy)ethyl] trimethylammonium chloride] (PMETAC) graft copolymers exhibit selective antimicrobial activity. <i>European Polymer Journal</i> , 2018, 98, 368-374. | 5.4 | 8 |
| 67 | Drawing inspiration from nature to develop anti-fouling coatings: the development of biomimetic polymer surfaces and their effect on bacterial fouling. <i>Pure and Applied Chemistry</i> , 2021, 93, 1097-1108. | 1.9 | 8 |
| 68 | Efficient chemical hydrophobization of lactic acid bacteria "One-step formation of double emulsion. <i>Food Research International</i> , 2021, 147, 110460. | 6.2 | 8 |
| 69 | Effectiveness of titanium nitride silver coatings against <i>Staphylococcus</i> spp. in the presence of BSA and whole blood conditioning agents. <i>International Biodeterioration and Biodegradation</i> , 2019, 141, 44-51. | 3.9 | 7 |
| 70 | Graphene Matrices as Carriers for Metal Ions against Antibiotic Susceptible and Resistant Bacterial Pathogens. <i>Coatings</i> , 2021, 11, 352. | 2.6 | 7 |
| 71 | The effect of the surface properties of poly(methyl methacrylate) on the attachment, adhesion and retention of fungal conidia. <i>AIMS Bioengineering</i> , 2020, 7, 165-178. | 1.1 | 7 |
| 72 | The influence of picosecond laser generated periodic structures on bacterial behaviour. <i>Applied Surface Science</i> , 2021, 540, 148292. | 6.1 | 6 |

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|----|---|-----|-----------|
| 73 | Poly(<i>p</i> -phenylenevinylene)- <i>g</i> -poly(2-(methacryloyloxy)Ethyl)trimethylammonium chloride (PPV- <i>g</i> -PMETAC): A fluorescent, water-soluble, selective anion sensor. <i>Journal of Polymer Science Part A</i> , 2018, 56, 1997-2003. | 2.3 | 5 |
| 74 | A novel microbiological medium for the growth of periodontitis associated pathogens. <i>Journal of Microbiological Methods</i> , 2019, 163, 105647. | 1.6 | 5 |
| 75 | Electrochemical Decoration of Additively Manufactured Graphene Macroelectrodes with MoO ₂ Nanowires: An Approach to Demonstrate the Surface Morphology. <i>Journal of Physical Chemistry C</i> , 2020, 124, 15377-15385. | 3.1 | 5 |
| 76 | Diverse surface properties reveal that substratum roughness affects fungal spore binding. <i>IScience</i> , 2021, 24, 102333. | 4.1 | 5 |
| 77 | Antimicrobial properties of Modified Graphene and other advanced 2D Material Coated Surfaces. , 2018, , 86-104. | | 5 |
| 78 | Multi-species colloidosomes by surface-modified lactic acid bacteria with enhanced aggregation properties. <i>Journal of Colloid and Interface Science</i> , 2022, 622, 503-514. | 9.4 | 5 |
| 79 | Inactivating pentapeptide insertions in the fission yeast replication factor C subunit Rfc2 cluster near the ATP-binding site and arginine finger motif. <i>FEBS Journal</i> , 2009, 276, 4803-4813. | 4.7 | 4 |
| 80 | The detection and quantification of food components on stainless steel surfaces following use in an operational bakery. <i>Food and Bioprocess Technology</i> , 2019, 116, 258-267. | 3.6 | 4 |
| 81 | The Removal of Meat Exudate and Escherichia coli from Stainless Steel and Titanium Surfaces with Irregular and Regular Linear Topographies. <i>International Journal of Environmental Research and Public Health</i> , 2021, 18, 3198. | 2.6 | 4 |
| 82 | Antimicrobial synergy of cationic grafted poly(<i>para</i> -phenylene ethynylene) and poly(<i>para</i> -phenylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 23433-23441. | 3.6 | 2 |
| 83 | Differential engulfment of and by monocyte-derived macrophages is associated with altered phagocyte biochemistry and morphology. <i>EXCLI Journal</i> , 2020, 19, 1372-1384. | 0.7 | 2 |
| 84 | Multifractal Analysis to Determine the Effect of Surface Topography on the Distribution, Density, Dispersion and Clustering of Differently Organised Coccal-Shaped Bacteria. <i>Antibiotics</i> , 2022, 11, 551. | 3.7 | 2 |
| 85 | Effects of Neutral, Anionic and Cationic Polymer Brushes Grafted from Poly(<i>para</i> -phenylene vinylene) and Poly(<i>para</i> -phenylene ethynylene) on the Polymer's Photoluminescent Properties. <i>Polymers</i> , 2022, 14, 2767. | 4.5 | 2 |
| 86 | The Influence of Surface Topography and Wettability on Escherichia coli Removal from Polymeric Materials in the Presence of a Blood Conditioning Film. <i>International Journal of Environmental Research and Public Health</i> , 2020, 17, 7368. | 2.6 | 1 |
| 87 | Recommendations for Influenza Vaccination in Burns Patients Based on a Systematic Review of the Evidence. <i>Journal of Burn Care and Research</i> , 2021, , . | 0.4 | 1 |
| 88 | Graphene derivatives potentiate the activity of antibiotics against <i>Enterococcus faecium</i> , <i>Klebsiella pneumoniae</i> and <i>Escherichia coli</i> . <i>AIMS Bioengineering</i> , 2020, 7, 106-113. | 1.1 | 1 |
| 89 | A systematic review on the incidence and risk factors of surgical site infections following hepatopancreatobiliary (HPB) surgery. <i>AIMS Bioengineering</i> , 2022, 9, 123-144. | 1.1 | 1 |
| 90 | The use of physicochemical methods to detect organic food soils on stainless steel surfaces. <i>Biofouling</i> , 2012, 28, 879-879. | 2.2 | 0 |

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| 91 | Use of spherical particles to understand conidial attachment to surfaces using atomic force microscopy. IScience, 2021, 24, 101962. | 4.1 | 0 |