

David J Clarke

List of Publications by Year in descending order

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Version: 2024-02-01

60
papers

1,933
citations

201674

27
h-index

276875

41
g-index

65
all docs

65
docs citations

65
times ranked

3182
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Pore dynamics and asymmetric cargo loading in an encapsulin nanocompartment. <i>Science Advances</i> , 2022, 8, eabj4461. | 10.3 | 22 |
| 2 | A native mass spectrometry platform identifies HOP inhibitors that modulate the HSP90α-HOP protein-protein interaction. <i>Chemical Communications</i> , 2021, 57, 10919-10922. | 4.1 | 3 |
| 3 | Native ion mobility mass spectrometry reveals that small organic acid fragments impart gas-phase stability to carbonic anhydrase II. <i>Rapid Communications in Mass Spectrometry</i> , 2020, 34, e8570. | 1.5 | 7 |
| 4 | Dissecting the structural and functional roles of a putative metal entry site in encapsulated ferritins. <i>Journal of Biological Chemistry</i> , 2020, 295, 15511-15526. | 3.4 | 13 |
| 5 | Mass spectrometry reveals the assembly pathway of encapsulated ferritins and highlights a dynamic ferroxidase interface. <i>Chemical Communications</i> , 2020, 56, 3417-3420. | 4.1 | 14 |
| 6 | Isotope Depletion Mass Spectrometry (ID-MS) for Accurate Mass Determination and Improved Top-Down Sequence Coverage of Intact Proteins. <i>Journal of the American Society for Mass Spectrometry</i> , 2020, 31, 700-710. | 2.8 | 10 |
| 7 | Untargeted Metabolite Mapping in 3D Cell Culture Models Using High Spectral Resolution FT-ICR Mass Spectrometry Imaging. <i>Analytical Chemistry</i> , 2019, 91, 9522-9529. | 6.5 | 28 |
| 8 | The pyrenoidal linker protein EPYC1 phase separates with hybrid <i>Arabidopsis</i> - <i>Chlamydomonas</i> Rubisco through interactions with the algal Rubisco small subunit. <i>Journal of Experimental Botany</i> , 2019, 70, 5271-5285. | 4.8 | 36 |
| 9 | Conservation of the structural and functional architecture of encapsulated ferritins in bacteria and archaea. <i>Biochemical Journal</i> , 2019, 476, 975-989. | 3.7 | 23 |
| 10 | Use of isotopically labeled substrates reveals kinetic differences between human and bacterial serine palmitoyltransferase. <i>Journal of Lipid Research</i> , 2019, 60, 953-962. | 4.2 | 7 |
| 11 | High resolution fourier transform ion cyclotron resonance mass spectrometry (FT-ICR MS) for the characterisation of enzymatic processing of commercial lignin. <i>New Biotechnology</i> , 2019, 52, 1-8. | 4.4 | 13 |
| 12 | S-nitrosylation of the zinc finger protein SRG1 regulates plant immunity. <i>Nature Communications</i> , 2018, 9, 4226. | 12.8 | 78 |
| 13 | Complementary Ionization Techniques for the Analysis of Scotch Whisky by High Resolution Mass Spectrometry. <i>Analytical Chemistry</i> , 2018, 90, 11265-11272. | 6.5 | 23 |
| 14 | MALDI Matrix Application Utilizing a Modified 3D Printer for Accessible High Resolution Mass Spectrometry Imaging. <i>Analytical Chemistry</i> , 2018, 90, 8742-8749. | 6.5 | 27 |
| 15 | Interactive van Krevelen diagrams - Advanced visualisation of mass spectrometry data of complex mixtures. <i>Rapid Communications in Mass Spectrometry</i> , 2017, 31, 658-662. | 1.5 | 61 |
| 16 | Autopiquer - a Robust and Reliable Peak Detection Algorithm for Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2017, 28, 253-262. | 2.8 | 18 |
| 17 | Chemical Diversity and Complexity of Scotch Whisky as Revealed by High-Resolution Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2017, 28, 200-213. | 2.8 | 67 |
| 18 | Characterization of homologous sphingosine-1-phosphate lyase isoforms in the bacterial pathogen <i>Burkholderia pseudomallei</i> . <i>Journal of Lipid Research</i> , 2017, 58, 137-150. | 4.2 | 11 |

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|----|--|------|-----------|
| 19 | IL-1 β -Induced Protection of Keratinocytes against Staphylococcus aureus-Secreted Proteases Is Mediated by Human β -Defensin 2. <i>Journal of Investigative Dermatology</i> , 2017, 137, 95-105. | 0.7 | 39 |
| 20 | Insight into Coenzyme A cofactor binding and the mechanism of acyl-transfer in an acylating aldehyde dehydrogenase from <i>Clostridium phytofermentans</i> . <i>Scientific Reports</i> , 2016, 6, 22108. | 3.3 | 18 |
| 21 | New cytotoxic callipeltins from the Solomon Island marine sponge <i>Asteropus</i> sp.. <i>Tetrahedron</i> , 2016, 72, 6929-6934. | 1.9 | 17 |
| 22 | Characterization of secreted sphingosine-1-phosphate lyases required for virulence and intracellular survival of <i>Burkholderia pseudomallei</i> . <i>Molecular Microbiology</i> , 2016, 102, 1004-1019. | 2.5 | 19 |
| 23 | Mass spectrometry analysis of the oxidation states of the pro-oncogenic protein anterior gradient-2 reveals covalent dimerization via an intermolecular disulphide bond. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2016, 1864, 551-561. | 2.3 | 12 |
| 24 | Determination of Protein Thiol Reduction Potential by Isotope Labeling and Intact Mass Measurement. <i>Analytical Chemistry</i> , 2016, 88, 2727-2733. | 6.5 | 5 |
| 25 | Structural characterization of encapsulated ferritin provides insight into iron storage in bacterial nanocompartments. <i>ELife</i> , 2016, 5, . | 6.0 | 77 |
| 26 | Insights into the Conformations of Three Structurally Diverse Proteins: Cytochrome <i>c</i> , p53, and MDM2, Provided by Variable-Temperature Ion Mobility Mass Spectrometry. <i>Analytical Chemistry</i> , 2015, 87, 3231-3238. | 6.5 | 33 |
| 27 | Desalting large protein complexes during native electrospray mass spectrometry by addition of amino acids to the working solution. <i>Analyst</i> , 2015, 140, 2679-2686. | 3.5 | 35 |
| 28 | Garlic Revisited: Antimicrobial Activity of Allicin-Containing Garlic Extracts against <i>Burkholderia cepacia</i> Complex. <i>PLoS ONE</i> , 2014, 9, e112726. | 2.5 | 96 |
| 29 | Dissecting the Dynamic Conformations of the Metamorphic Protein Lymphotactin. <i>Journal of Physical Chemistry B</i> , 2014, 118, 12348-12359. | 2.6 | 32 |
| 30 | Reconstitution of the pyridoxal 5-phosphate (PLP) dependent enzyme serine palmitoyltransferase (SPT) with pyridoxal reveals a crucial role for the phosphate during catalysis. <i>Chemical Communications</i> , 2013, 49, 7058. | 4.1 | 13 |
| 31 | Restriction endonuclease TseI cleaves A:A and T:T mismatches in CAG and CTG repeats. <i>Nucleic Acids Research</i> , 2013, 41, 4999-5009. | 14.5 | 10 |
| 32 | Redox regulation of tumour suppressor protein p53: identification of the sites of hydrogen peroxide oxidation and glutathionylation. <i>Chemical Science</i> , 2013, 4, 1257. | 7.4 | 21 |
| 33 | Probing the Conformational Diversity of Cancer-Associated Mutations in p53 with Ion-Mobility Mass Spectrometry. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 4370-4374. | 13.8 | 41 |
| 34 | The Chemical Basis of Serine Palmitoyltransferase Inhibition by Myriocin. <i>Journal of the American Chemical Society</i> , 2013, 135, 14276-14285. | 13.7 | 98 |
| 35 | L-Penicillamine is a mechanism-based inhibitor of serine palmitoyltransferase by forming a pyridoxal-5-phosphate-thiazolidine adduct. <i>MedChemComm</i> , 2012, 3, 1003. | 3.4 | 14 |
| 36 | An affinity purification procedure to isolate oxidized p53. <i>Analytical Biochemistry</i> , 2012, 420, 96-98. | 2.4 | 2 |

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|----|---|-----|-----------|
| 37 | Cellular redox potential and the biomolecular electrochemical series: A systems hypothesis. <i>Free Radical Biology and Medicine</i> , 2012, 53, 280-288. | 2.9 | 38 |
| 38 | Identification of Two Reactive Cysteine Residues in the Tumor Suppressor Protein p53 Using Top-Down FTICR Mass Spectrometry. <i>Journal of the American Society for Mass Spectrometry</i> , 2011, 22, 888-897. | 2.8 | 43 |
| 39 | Mapping a Noncovalent Proteinâ€“Peptide Interface by Top-Down FTICR Mass Spectrometry Using Electron Capture Dissociation. <i>Journal of the American Society for Mass Spectrometry</i> , 2011, 22, 1432-1440. | 2.8 | 36 |
| 40 | The serine palmitoyltransferase from <i>Sphingomonas wittichii</i> RW1: An interesting link to an unusual acyl carrier protein. <i>Biopolymers</i> , 2010, 93, 811-822. | 2.4 | 37 |
| 41 | Top-down protein sequencing by CID and ECD using desorption electrospray ionisation (DESI) and high-field FTICR mass spectrometry. <i>International Journal of Mass Spectrometry</i> , 2010, 289, 54-57. | 1.5 | 15 |
| 42 | Subdivision of the Bacterioferritin Comigratory Protein Family of Bacterial Peroxiredoxins Based on Catalytic Activity. <i>Biochemistry</i> , 2010, 49, 1319-1330. | 2.5 | 34 |
| 43 | Conformational Preferences of Linear $\hat{1}^2$ -Defensins Are Revealed by Ion Mobility-Mass Spectrometry. <i>Journal of Physical Chemistry B</i> , 2010, 114, 2312-2318. | 2.6 | 15 |
| 44 | Binding a heparin derived disaccharide to defensin inspired peptides: insights to antimicrobial inhibition from gas-phase measurements. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 3589. | 2.8 | 11 |
| 45 | Online Quench-Flow Electrospray Ionization Fourier Transform Ion Cyclotron Resonance Mass Spectrometry for Elucidating Kinetic and Chemical Enzymatic Reaction Mechanisms. <i>Analytical Chemistry</i> , 2010, 82, 1897-1904. | 6.5 | 17 |
| 46 | Inhibition of the PLP-dependent enzyme serine palmitoyltransferase by cycloserine: evidence for a novel decarboxylative mechanism of inactivation. <i>Molecular BioSystems</i> , 2010, 6, 1682. | 2.9 | 39 |
| 47 | Dying and Necrotic Neutrophils Are Anti-Inflammatory Secondary to the Release of $\hat{1}^{\pm}$ -Defensins. <i>Journal of Immunology</i> , 2009, 183, 2122-2132. | 0.8 | 141 |
| 48 | Interrogating the Molecular Details of the Peroxiredoxin Activity of the <i>Escherichia coli</i> Bacterioferritin Comigratory Protein Using High-Resolution Mass Spectrometry. <i>Biochemistry</i> , 2009, 48, 3904-3914. | 2.5 | 18 |
| 49 | Preparation of isotopically labelled recombinant $\hat{1}^2$ -defensin for NMR studies. <i>Protein Expression and Purification</i> , 2009, 65, 179-184. | 1.3 | 6 |
| 50 | Structural and Functional Studies of the Biotin Protein Ligase from <i>Aquifex aeolicus</i> Reveal a Critical Role for a Conserved Residue in Target Specificity. <i>Journal of Molecular Biology</i> , 2009, 387, 129-146. | 4.2 | 39 |
| 51 | Dissection of the DNA Mimicry of the Bacteriophage T7 Ocr Protein using Chemical Modification. <i>Journal of Molecular Biology</i> , 2009, 391, 565-576. | 4.2 | 13 |
| 52 | Efficient Production of Human $\hat{9}46$ -Defensin 2 (HBD2) in <i>Escherichia coli</i> . <i>Protein and Peptide Letters</i> , 2009, 16, 668-676. | 0.9 | 17 |
| 53 | Plant host and sugar alcohol induced exopolysaccharide biosynthesis in the <i>Burkholderia cepacia</i> complex. <i>Microbiology (United Kingdom)</i> , 2008, 154, 2513-2521. | 1.8 | 37 |
| 54 | Analysis and Separation of Residues Important for the Chemoattractant and Antimicrobial Activities of $\hat{1}^2$ -Defensin 3. <i>Journal of Biological Chemistry</i> , 2008, 283, 6631-6639. | 3.4 | 81 |

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|----|--|-----|-----------|
| 55 | Covalent Dimer Species of Î²-Defensin Defr1 Display Potent Antimicrobial Activity against Multidrug-Resistant Bacterial Pathogens. <i>Antimicrobial Agents and Chemotherapy</i> , 2007, 51, 1719-1724. | 3.2 | 29 |
| 56 | Maturation of McjA precursor peptide into active microcin MccJ25. <i>Organic and Biomolecular Chemistry</i> , 2007, 5, 2564. | 2.8 | 49 |
| 57 | Is it biologically relevant to measure the structures of small peptides in the gas-phase?. <i>International Journal of Mass Spectrometry</i> , 2005, 240, 273-284. | 1.5 | 67 |
| 58 | Cloning, expression, purification, crystallization and preliminary X-ray characterization of the full-length single-stranded DNA-binding protein from the hyperthermophilic bacterium <i>Aquifex aeolicus</i> . <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2004, 60, 2009-2012. | 2.5 | 1 |
| 59 | Structure-Activity Relationships in Defensin Dimers. <i>Journal of Biological Chemistry</i> , 2004, 279, 48671-48679. | 3.4 | 85 |
| 60 | Biotinylation in the hyperthermophile <i>Aquifex aeolicus</i> . Isolation of a cross-linked BPL:BCCP complex. <i>FEBS Journal</i> , 2003, 270, 1277-1287. | 0.2 | 14 |