

# David J Clarke

## List of Publications by Year in descending order

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61  
papers

2,008  
citations

186265

28  
h-index

265206

42  
g-index

63  
all docs

63  
docs citations

63  
times ranked

3441  
citing authors

#	ARTICLE	IF	CITATIONS
1	Dying and Necrotic Neutrophils Are Anti-Inflammatory Secondary to the Release of $\alpha$ -Defensins. <i>Journal of Immunology</i> , 2009, 183, 2122-2132.	0.8	141
2	The Chemical Basis of Serine Palmitoyltransferase Inhibition by Myriocin. <i>Journal of the American Chemical Society</i> , 2013, 135, 14276-14285.	13.7	98
3	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
4	Structure-Activity Relationships in Defensin Dimers. <i>Journal of Biological Chemistry</i> , 2004, 279, 48671-48679.	3.4	85
5	Analysis and Separation of Residues Important for the Chemoattractant and Antimicrobial Activities of $\beta$ -Defensin 3. <i>Journal of Biological Chemistry</i> , 2008, 283, 6631-6639.	3.4	81
6	S-nitrosylation of the zinc finger protein SRG1 regulates plant immunity. <i>Nature Communications</i> , 2018, 9, 4226.	12.8	78
7	Structural characterization of encapsulated ferritin provides insight into iron storage in bacterial nanocompartments. <i>ELife</i> , 2016, 5, .	6.0	77
8	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
9	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
10	Microglial cell hyper-ramification and neuronal dendritic spine loss in the hippocampus and medial prefrontal cortex in a mouse model of PTSD. <i>Brain, Behavior, and Immunity</i> , 2019, 80, 889-899.	4.1	64
11	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
12	Maturation of MccJ precursor peptide into active microcin MccJ25. <i>Organic and Biomolecular Chemistry</i> , 2007, 5, 2564.	2.8	49
13	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
14	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
15	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
16	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
17	Molecular basis of <i>Streptococcus mutans</i> sortase A inhibition by the flavonoid natural product trans-chalcone. <i>Chemical Communications</i> , 2015, 51, 10483-10485.	4.1	39
18	IL-1 $\beta$ -Induced Protection of Keratinocytes against <i>Staphylococcus aureus</i> -Secreted Proteases Is Mediated by Human $\beta$ -Defensin 2. <i>Journal of Investigative Dermatology</i> , 2017, 137, 95-105.	0.7	39

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19	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
20	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
21	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
22	Mapping a Noncovalent Protein-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
23	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
24	Subdivision of the Bacterioferritin Comigratory Protein Family of Bacterial Peroxiredoxins Based on Catalytic Activity. <i>Biochemistry</i> , 2010, 49, 1319-1330.	2.5	34
25	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
26	Dissecting the Dynamic Conformations of the Metamorphic Protein Lymphotactin. <i>Journal of Physical Chemistry B</i> , 2014, 118, 12348-12359.	2.6	32
27	Interactions between cannabidiol and $\Delta^9$ -THC following acute and repeated dosing: Rebound hyperactivity, sensorimotor gating and epigenetic and neuroadaptive changes in the mesolimbic pathway. <i>European Neuropsychopharmacology</i> , 2017, 27, 132-145.	0.7	30
28	Covalent Dimer Species of $\Delta^2$ -Defensin Defr1 Display Potent Antimicrobial Activity against Multidrug-Resistant Bacterial Pathogens. <i>Antimicrobial Agents and Chemotherapy</i> , 2007, 51, 1719-1724.	3.2	29
29	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
30	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
31	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
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	Endocannabinoid dysregulation in cognitive and stress-related brain regions in the Nrg1 mouse model of schizophrenia. <i>Progress in Neuro-Psychopharmacology and Biological Psychiatry</i> , 2017, 72, 9-15.	4.8	21
34	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
35	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
36	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

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37	Genetic deletion of P-glycoprotein alters stress responsivity and increases depression-like behavior, social withdrawal and microglial activation in the hippocampus of female mice. <i>Brain, Behavior, and Immunity</i> , 2017, 65, 251-261.	4.1	18
38	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
39	Efficient Production of Human $\alpha$ -Defensin 2 (HBD2) in <i>Escherichia coli</i> . <i>Protein and Peptide Letters</i> , 2009, 16, 668-676.	0.9	17
40	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
41	New cytotoxic callipeltins from the Solomon Island marine sponge <i>Asteropus</i> sp.. <i>Tetrahedron</i> , 2016, 72, 6929-6934.	1.9	17
42	Neuregulin 1 Deficiency Modulates Adolescent Stress-Induced Dendritic Spine Loss in a Brain Region-Specific Manner and Increases Complement 4 Expression in the Hippocampus. <i>Schizophrenia Bulletin</i> , 2019, 45, 339-349.	4.3	16
43	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
44	Conformational Preferences of Linear $\alpha$ -Defensins Are Revealed by Ion Mobility-Mass Spectrometry. <i>Journal of Physical Chemistry B</i> , 2010, 114, 2312-2318.	2.6	15
45	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
46	l-Penicillamine is a mechanism-based inhibitor of serine palmitoyltransferase by forming a pyridoxal-5 $\alpha$ -phosphate-thiazolidine adduct. <i>MedChemComm</i> , 2012, 3, 1003.	3.4	14
47	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
48	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
49	Reconstitution of the pyridoxal 5 $\alpha$ -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
50	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
51	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
52	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
53	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
54	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

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55	Nrg1 deficiency modulates the behavioural effects of prenatal stress in mice. <i>Progress in Neuro-Psychopharmacology and Biological Psychiatry</i> , 2019, 88, 86-95.	4.8	8
56	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
57	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
58	Determination of Protein Thiol Reduction Potential by Isotope Labeling and Intact Mass Measurement. <i>Analytical Chemistry</i> , 2016, 88, 2727-2733.	6.5	5
59	Improved identification and quantification of peptides in mass spectrometry data via chemical and random additive noise elimination (CRANE). <i>Bioinformatics</i> , 2021, 37, 4719-4726.	4.1	4
60	An affinity purification procedure to isolate oxidized p53. <i>Analytical Biochemistry</i> , 2012, 420, 96-98.	2.4	2
61	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