Jim F Huggett

List of Publications by Year
in descending order

122 papers	23,247 citations	61945 43 h-index	21521 114 g-index
126 all docs	126 docs citations	126 times ranked	33547 citing authors

#	Article	IF	Citations
1	The MIQE Guidelines: Minimum Information for Publication of Quantitative Real-Time PCR Experiments. Clinical Chemistry, 2009, 55, 611-622.	1.5	12,487
2	Real-time RT-PCR normalisation; strategies and considerations. Genes and Immunity, 2005, 6, 279-284.	2.2	1,576
3	Validation of housekeeping genes for normalizing RNA expression in real-time PCR. BioTechniques, 2004, 37, 112-119.	0.8	838
4	The Digital MIQE Guidelines: Minimum Information for Publication of Quantitative Digital PCR Experiments. Clinical Chemistry, 2013, 59, 892-902.	1.5	723
5	MIQE prÃ©cis: Practical implementation of minimum standard guidelines for fluorescence-based quantitative real-time PCR experiments. BMC Molecular Biology, 2010, 11, 74.	3.0	563
6	The implications of using an inappropriate reference gene for real-time reverse transcription PCR data normalization. Analytical Biochemistry, 2005, 344, 141-143.	1.1	556
7	Considerations for Digital PCR as an Accurate Molecular Diagnostic Tool. Clinical Chemistry, 2015, 61, 79-88.	1.5	359
8	Comparison of microfluidic digital PCR and conventional quantitative PCR for measuring copy number variation. Nucleic Acids Research, 2012, 40, e82-e82.	6.5	356
9	Evaluation of Digital PCR for Absolute DNA Quantification. Analytical Chemistry, 2011, 83, 6474-6484.	3.2	292
10	Towards standardisation of cell-free DNA measurement in plasma: controls for extraction efficiency, fragment size bias and quantification. Analytical and Bioanalytical Chemistry, 2014, 406, 6499-6512.	1.9	254
11	The need for transparency and good practices in the qPCR literature. Nature Methods, 2013, 10, 1063-1067.	9.0	251
12	Integrating informatics tools and portable sequencing technology for rapid detection of resistance to anti-tuberculous drugs. Genome Medicine, 2019, 11, 41.	3.6	248
13	The Digital MIQE Guidelines Update: Minimum Information for Publication of Quantitative Digital PCR Experiments for 2020. Clinical Chemistry, 2020, 66, 1012-1029.	1.5	247
14	Lung Remodeling in Pulmonary Tuberculosis. Journal of Infectious Diseases, 2005, 192, 1201-1209.	1.9	207
15	Differential susceptibility of PCR reactions to inhibitors: an important and unrecognised phenomenon. BMC Research Notes, 2008, 1, 70.	0.6	191
16	qPCR primer design revisited. Biomolecular Detection and Quantification, 2017, 14, 19-28.	7.0	187
17	Accurate and rapid identification of bacterial species from positive blood cultures with a DNA-based microarray platform: an observational study. Lancet, The, 2010, 375, 224-230.	6.3	186
18	Fundamentals of multiplexing with digital PCR. Biomolecular Detection and Quantification, 2016, 10, 15-23.	7.0	174

#	Article	IF	Citations
19	Evaluation of Digital PCR for Absolute RNA Quantification. PLoS ONE, 2013, 8, e75296.	1.1	149
20	Rapid and Accurate Detection of Mycobacterium tuberculosis in Sputum Samples by Cepheid Xpert MTB/RIF Assayâ€"A Clinical Validation Study. PLoS ONE, 2011, 6, e20458.	1.1	140
21	Methods for Applying Accurate Digital PCR Analysis on Low Copy DNA Samples. PLoS ONE, 2013, 8, e58177.	1.1	132
22	Comparative Study of Sensitivity, Linearity, and Resistance to Inhibition of Digital and Nondigital Polymerase Chain Reaction and Loop Mediated Isothermal Amplification Assays for Quantification of Human Cytomegalovirus. Analytical Chemistry, 2014, 86, 4387-4394.	3.2	126
23	Development of a highly sensitive liquid biopsy platform to detect clinically-relevant cancer mutations at low allele fractions in cell-free DNA. PLoS ONE, 2018, 13, e0194630.	1.1	117
24	Development and evaluation of a real-time PCR assay for detection of Pneumocystis jirovecii DNA in bronchoalveolar lavage fluid of HIV-infected patients. Thorax, 2007, 63, 154-159.	2.7	110
25	Utility of the antigen-specific interferon-?? assay for the management of tuberculosis. Current Opinion in Pulmonary Medicine, 2005, 11, 195-202.	1.2	109
26	A comparison of miRNA isolation and RT-qPCR technologies and their effects on quantification accuracy and repeatability. BioTechniques, 2013, 54, 155-164.	0.8	106
27	Rapid diagnosis of tuberculosis through the detection of mycobacterial DNA in urine by nucleic acid amplification methods. Lancet Infectious Diseases, The, 2009, 9, 505-511.	4.6	104
28	Digital PCR as a Novel Technology and Its Potential Implications for Molecular Diagnostics. Clinical Chemistry, 2013, 59, 1691-1693.	1.5	97
29	Highly Reproducible Absolute Quantification of Mycobacterium tuberculosis Complex by Digital PCR. Analytical Chemistry, 2015, 87, 3706-3713.	3.2	87
30	Minimum Information Necessary for Quantitative Real-Time PCR Experiments. Methods in Molecular Biology, 2014, 1160, 5-17.	0.4	82
31	Different screening strategies (single or dual) for the diagnosis of suspected latent tuberculosis: a cost effectiveness analysis. BMC Pulmonary Medicine, 2010, 10, 7.	0.8	79
32	Low sensitivity of a urine LAM-ELISA in the diagnosis of pulmonary tuberculosis. BMC Infectious Diseases, 2009, 9, 141.	1.3	69
33	Discordant bioinformatic predictions of antimicrobial resistance from whole-genome sequencing data of bacterial isolates: an inter-laboratory study. Microbial Genomics, 2020, 6, .	1.0	69
34	RT-qPCR and RT-Digital PCR: A Comparison of Different Platforms for the Evaluation of Residual Disease in Chronic Myeloid Leukemia. Clinical Chemistry, 2017, 63, 525-531.	1.5	66
35	Considerations for accurate gene expression measurement by reverse transcription quantitative PCR when analysing clinical samples. Analytical and Bioanalytical Chemistry, 2014, 406, 6471-6483.	1.9	65
36	Primer Sequence Disclosure: A Clarification of the MIQE Guidelines. Clinical Chemistry, 2011, 57, 919-921.	1.5	63

#	Article	IF	Citations
37	In VivoandIn VitroStudies of a Novel Cytokine, Interleukin 4Î´2, in Pulmonary Tuberculosis. American Journal of Respiratory and Critical Care Medicine, 2005, 172, 501-508.	2.5	60
38	Application of next generation qPCR and sequencing platforms to mRNA biomarker analysis. Methods, 2013, 59, 89-100.	1.9	55
39	International Interlaboratory Digital PCR Study Demonstrating High Reproducibility for the Measurement of a Rare Sequence Variant. Analytical Chemistry, 2017, 89, 1724-1733.	3.2	54
40	Detection of Rare Drug Resistance Mutations by Digital PCR in a Human Influenza A Virus Model System and Clinical Samples. Journal of Clinical Microbiology, 2016, 54, 392-400.	1.8	52
41	Assessment of Digital PCR as a Primary Reference Measurement Procedure to Support Advances in Precision Medicine. Clinical Chemistry, 2018, 64, 1296-1307.	1.5	50
42	Implications of Storing Urinary DNA from Different Populations for Molecular Analyses. PLoS ONE, 2009, 4, e6985.	1.1	48
43	The open reading frame of the Na+ -dependent glutamate transporter GLAST-1 is expressed in bone and a splice variant of this molecule is expressed in bone and brain. FEBS Letters, 2000, 485, 13-18.	1.3	47
44	Cautionary Note on Contamination of Reagents Used for Molecular Detection of SARS-CoV-2. Clinical Chemistry, 2020, 66, 1369-1372.	1.5	46
45	Myobacterium tuberculosis Induces Selective Up-Regulation of TLRs in the Mononuclear Leukocytes of Patients with Active Pulmonary Tuberculosis. Journal of Immunology, 2006, 176, 3010-3018.	0.4	45
46	The variability and reproducibility of whole genome sequencing technology for detecting resistance to anti-tuberculous drugs. Genome Medicine, 2016, 8, 132.	3.6	44
47	Quantitative analysis of human endogenous retrovirus-K transcripts in postmortem premotor cortex fails to confirm elevated expression of HERV-K RNA in amyotrophic lateral sclerosis. Acta Neuropathologica Communications, 2019, 7, 45.	2.4	44
48	Variation in Gamma Interferon Responses to Different Infecting Strains of Mycobacterium tuberculosis in Acid-Fast Bacillus Smear-Positive Patients and Household Contacts in Antananarivo, Madagascar. Vaccine Journal, 2010, 17, 1094-1103.	3.2	41
49	The use of digital PCR to improve the application of quantitative molecular diagnostic methods for tuberculosis. BMC Infectious Diseases, 2016, 16, 366.	1.3	41
50	The Dangers of Using Cq to Quantify Nucleic Acid in Biological Samples: A Lesson From COVID-19. Clinical Chemistry, 2021, 68, 153-162.	1.5	41
51	Quantification of epigenetic biomarkers: an evaluation of established and emerging methods for DNA methylation analysis. BMC Genomics, 2014, 15, 1174.	1.2	40
52	STROBE-metagenomics: a STROBE extension statement to guide the reporting of metagenomics studies. Lancet Infectious Diseases, The, 2020, 20, e251-e260.	4.6	40
53	Detection of Mycobacterium tuberculosis complex DNA in CD34-positive peripheral blood mononuclear cells of asymptomatic tuberculosis contacts: an observational study. Lancet Microbe, The, 2021, 2, e267-e275.	3.4	38
54	Gene expression of IL17 and IL23 in the lungs of patients with active tuberculosis. Thorax, 2008, 63, 566.3-568.	2.7	36

#	Article	IF	Citations
55	Standardisation and reporting for nucleic acid quantification. Accreditation and Quality Assurance, 2011, 16, 399-405.	0.4	36
56	Standardization of Nucleic Acid Tests for Clinical Measurements of Bacteria and Viruses. Journal of Clinical Microbiology, 2015, 53, 2008-2014.	1.8	36
57	Instability of 8E5 calibration standard revealed by digital PCR risks inaccurate quantification of HIV DNA in clinical samples by qPCR. Scientific Reports, 2017, 7, 1209.	1.6	35
58	Next-Generation Sequencing-Assisted DNA-Based Digital PCR for a Personalized Approach to the Detection and Quantification of Residual Disease in Chronic Myeloid Leukemia Patients. Journal of Molecular Diagnostics, 2016, 18, 176-189.	1.2	34
59	Tuberculosis: amplification-based clinical diagnostic techniques. International Journal of Biochemistry and Cell Biology, 2003, 35, 1407-1412.	1.2	33
60	The glutamate transporter GLAST-I (EAAT-I) is expressed in the plasma membrane of osteocytes and is responsive to extracellular glutamate concentration. Biochemical Society Transactions, 2002, 30, 890-893.	1.6	32
61	A novel approach for evaluating the performance of real time quantitative loop-mediated isothermal amplification-based methods. Biomolecular Detection and Quantification, 2014, 2, 4-10.	7.0	32
62	International Comparison of Enumeration-Based Quantification of DNA Copy-Concentration Using Flow Cytometric Counting and Digital Polymerase Chain Reaction. Analytical Chemistry, 2016, 88, 12169-12176.	3.2	32
63	Clinical features, microbiology and surgical outcomes of infective endocarditis: a 13-year study from a UK tertiary cardiothoracic referral centre. QJM - Monthly Journal of the Association of Physicians, 2015, 108, 219-229.	0.2	30
64	Unreliable Real-Time PCR Analysis of Human Endogenous Retrovirus-W (HERV-W) RNA Expression and DNA Copy Number in Multiple Sclerosis. AIDS Research and Human Retroviruses, 2009, 25, 377-378.	0.5	29
65	Inter-laboratory assessment of different digital PCR platforms for quantification of human cytomegalovirus DNA. Analytical and Bioanalytical Chemistry, 2017, 409, 2601-2614.	1.9	29
66	RNA reference materials with defined viral RNA loads of SARS-CoV-2â€"A useful tool towards a better PCR assay harmonization. PLoS ONE, 2022, 17, e0262656.	1.1	29
67	An assessment of air as a source of DNA contamination encountered when performing PCR. Journal of Biomolecular Techniques, 2009, 20, 236-40.	0.8	28
68	Reflections on the white plague. Lancet Infectious Diseases, The, 2009, 9, 197-202.	4.6	26
69	Expression of a novel cytokine, IL-4delta2, in HIV and HIVâ€"tuberculosis co-infection. Aids, 2005, 19, 1601-1606.	1.0	25
70	Trials and tribulations of an African-led research and capacity development programme: the case for EDCTP investments. Tropical Medicine and International Health, 2010, 15, 489-94.	1.0	24
71	Expression of apoptosisâ€related genes in an Ethiopian cohort study correlates with tuberculosis clinical status. European Journal of Immunology, 2010, 40, 291-301.	1.6	22
72	qPCR, dPCR, NGS â€" A journey. Biomolecular Detection and Quantification, 2015, 3, A1-A5.	7.0	21

#	Article	IF	Citations
73	The stability of mRNA encoding IL-4 is increased in pulmonary tuberculosis, while stability of mRNA encoding the antagonistic splice variant, IL-4δ2, is not. Tuberculosis, 2007, 87, 237-241.	0.8	18
74	Ancient DNA (aDNA) studies of man and microbes: general similarities, specific differences. International Journal of Osteoarchaeology, 2010, 20, 747-751.	0.6	18
75	Considerations for the development and application of control materials to improve metagenomic microbial community profiling. Accreditation and Quality Assurance, 2013, 18, 77-83.	0.4	18
76	Improving the standardization of mRNA measurement by RT-qPCR. Biomolecular Detection and Quantification, 2018, 15, 13-17.	7.0	18
77	Chemical mixtures and fluorescence in situ hybridization analysis of natural microbial community in the Tiber river. Science of the Total Environment, 2019, 673, 7-19.	3.9	18
78	Assessing the Accuracy of Quantitative Molecular Microbial Profiling. International Journal of Molecular Sciences, 2014, 15, 21476-21491.	1.8	17
79	An inter-laboratory study to investigate the impact of the bioinformatics component on microbiome analysis using mock communities. Scientific Reports, 2021, 11, 10590.	1.6	17
80	Nucleic acid detection and quantification in the developing world. Biochemical Society Transactions, 2009, 37, 419-423.	1.6	16
81	An international comparability study on quantification of mRNA gene expression ratios: CCQM-P103.1. Biomolecular Detection and Quantification, 2016, 8, 15-28.	7.0	15
82	G6PD deficiency alleles in a malaria-endemic region in the Western Brazilian Amazon. Malaria Journal, 2017, 16, 253.	0.8	15
83	Systematic review with meta-analysis of diagnostic test accuracy for COVID-19 by mass spectrometry. Metabolism: Clinical and Experimental, 2022, 126, 154922.	1.5	15
84	An assessment of the reproducibility of reverse transcription digital PCR quantification of HIV-1. Methods, 2022, 201, 34-40.	1.9	14
85	Digital PCR can augment the interpretation of RT-qPCR Cq values for SARS-CoV-2 diagnostics. Methods, 2022, 201, 5-14.	1.9	14
86	Comparison of SARS-CoV-2 N gene real-time RT-PCR targets and commercially available mastermixes. Journal of Virological Methods, 2021, 295, 114215.	1.0	14
87	Quality Assessment of Biobanked Nucleic Acid Extracts for Downstream Molecular Analysis. Biopreservation and Biobanking, 2012, 10, 266-275.	0.5	13
88	Distribution of Tetrodotoxin in Pacific Oysters (Crassostrea gigas). Marine Drugs, 2021, 19, 84.	2.2	13
89	The pathogen recognition sensor, NOD2, is variably expressed in patients with pulmonary tuberculosis. BMC Infectious Diseases, 2007, 7, 96.	1.3	12
90	COVID-19 new diagnostics development: novel detection methods for SARS-CoV-2 infection and considerations for their translation to routine use. Current Opinion in Pulmonary Medicine, 2021, 27, 155-162.	1.2	12

#	Article	IF	Citations
91	Report of the 2019 NIST-FDA workshop on standards for next generation sequencing detection of viral adventitious agents in biologics and biomanufacturing. Biologicals, 2020, 64, 76-82.	0.5	11
92	Reproducibility of biomedical research â€“ The importance of editorial vigilance. Biomolecular Detection and Quantification, 2017, 11, 1-3.	7.0	10
93	Screening for gene doping transgenes in horses via the use of massively parallel sequencing. Gene Therapy, 2022, 29, 236-246.	2.3	10
94	Interferon gamma assays for tuberculosis. Lancet Infectious Diseases, The, 2005, 5, 324-325.	4.6	9
95	Seasonal variation in mortality of Pneumocystis jirovecii pneumonia in HIV-infected patients. International Journal of STD and AIDS, 2010, 21, 497-503.	0.5	9
96	Making standards for quantitative real-time pneumococcal PCR. Biomolecular Detection and Quantification, 2014, 2, 1-3.	7.0	9
97	Response to the Letter from Garcia-Montojo and colleagues concerning our paper entitled, Quantitative analysis of human endogenous retrovirus-K transcripts in postmortem premotor cortex fails to confirm elevated expression of HERV-K RNA in amyotrophic lateral sclerosis. Acta Neuropathologica Communications, 2019, 7, 102.	2.4	9
98	Metrological framework to support accurate, reliable, and reproducible nucleic acid measurements. Analytical and Bioanalytical Chemistry, 2022, 414, 791-806.	1.9	8
99	The performance of human cytomegalovirus digital PCR reference measurement procedure in seven external quality assessment schemes over four years. Methods, 2022, 201, 65-73.	1.9	6
100	Current and future challenges in quality assurance in molecular diagnostics. Clinica Chimica Acta, 2021, 519, 239-246.	0.5	6
101	Single base mutations in the nucleocapsid gene of SARS-CoV-2 affects amplification efficiency of sequence variants and may lead to assay failure. Journal of Clinical Virology Plus, 2021, 1, 100037.	0.4	6
102	RT-qPCR Diagnostics: The â€œDrostenâ€•SARS-CoV-2 Assay Paradigm. International Journal of Molecular Sciences, 2021, 22, 8702.	1.8	5
103	Crohn's disease and MAP. Lancet, The, 2004, 364, 2178.	6.3	4
104	Problems of Developing Molecular Diagnostic Tests for Opportunistic Pathogens: The Example of Pneumocystis jirovecii. Journal of Eukaryotic Microbiology, 2006, 53, S85-S86.	0.8	4
105	Phage display of functional Î±Î² single-chain T-cell receptor molecules specific for CD1b:Ac2SGL complexes from Mycobacterium tuberculosis-infected cells. BMC Immunology, 2013, 14, S2.	0.9	4
106	Digital PCR, a technique for the future. Biomolecular Detection and Quantification, 2016, 10, 1.	7.0	4
107	Selection of phage-displayed human antibody fragments specific for CD1b presenting the Mycobacterium tuberculosis glycolipid Ac2SGL. International Journal of Mycobacteriology, 2016, 5, 120-127.	0.3	4
108	Type 2 Cytokines in Respiratory Syncytial Virus Bronchiolitis. American Journal of Respiratory and Critical Care Medicine, 2004, 169, 1167-1168.	2.5	4

#	Article	IF	Citations
109	Pneumocystis jirovecii in pleural infection: a nucleic acid amplification study. Thorax, 2011, 66, 450-451.	2.7	3
110	Direct processing of clinically relevant large volume samples for the detection of sexually transmitted infectious agents from urine on a microfluidic device. Analytical Methods, 2012, 4, 2141.	1.3	3
111	International interlaboratory study comparing single organism 16S rRNA gene sequencing data: Beyond consensus sequence comparisons. Biomolecular Detection and Quantification, 2015, 3, 17-24.	7.0	3
112	Molecular diagnostics of SARS-CoV-2: Findings of an international survey. Clinica Chimica Acta, 2022, 531, 237-242.	0.5	2
113	Assessing the Variability of Cell-Associated HIV DNA Quantification through a Multicenter Collaborative Study. Microbiology Spectrum, 2022, 10, .	1.2	2
114	How to make Mathematics Biology's next and better microscope. Biomolecular Detection and Quantification, 2014, 1, A1-A3.	7.0	1
115	Taking control of the polymerase chain reaction. , 0, , 129-152.		0
116	Expression of IL-4 mRNA in peripheral blood mononuclear cells from normal donors in relation to expression of TLR2. Immunology Letters, 2006, 106, 194-197.	1.1	0
117	Polymerase chain reaction and infectious diseases. , 2009, , 173-188.		0
118	Title is missing!. Transactions of the Royal Society of Tropical Medicine and Hygiene, 2010, 104, 242.	0.7	0
119	Future diagnosis of sepsis â€“ Authors' reply. Lancet, The, 2010, 375, 1780.	6.3	0
120	Progress in metagenomics requires a balanced appraisal of the available technologies. European Journal of Clinical Microbiology and Infectious Diseases, 2013, 32, 1097-1098.	1.3	0
121	Pushing the Envelope with Clinical Use of Digital PCR. Clinical Chemistry, 2021, 67, 921-923.	1.5	0
122	Applicability of Control Materials To Support Gene Promoter Characterization and Expression in Engineered Cells Using Digital PCR. Analytical Chemistry, 2022, , .	3.2	0