Donald R Forsdyke

List of Publications by Year in descending order

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160 papers 2,653 citations

26 h-index

218677

265206 42 g-index

192 all docs

192 docs citations

times ranked

192

1242 citing authors

#	Article	IF	CITATIONS
1	Positive selection of immune repertoires: A short further history. Scandinavian Journal of Immunology, 2022, 95, e13144.	2.7	4
2	When "doping―is OK: The importance not only of basic research, but how it is funded. FASEB Journal, 2022, 36, e22158.	0.5	5
3	Centenary of Haldane's â€~rule': why male sterility may be normal, not â€~idiopathic'. Journal of Genetics, 2022, 101, .	0.7	2
4	Neutralism versus selectionism: Chargaff's second parity rule, revisited. Genetica, 2021, 149, 81-88.	1.1	13
5	Complementary Oligonucleotides Rendered Discordant by Single Base Mutations May Drive Speciation. Biological Theory, 2021, 16, 237-241.	1.5	5
6	Potential Achilles heels of SARS-CoV-2 are best displayed by the base order-dependent component of RNA folding energy. Computational Biology and Chemistry, 2021, 94, 107570.	2.3	6
7	When few survive to tell the tale: thymus and gonad as auditioning organs: historical overview. Theory in Biosciences, 2020, 139, 95-104.	1.4	9
8	Aging, DNA Information, and Authorship: Medawar, Schr \tilde{A} \P dinger, and Samuel Butler. Biological Theory, 2020, 15, 50-55.	1.5	4
9	Metabolic optimization of adoptive T cell transfer cancer immunotherapy: A historical overview. Scandinavian Journal of Immunology, 2020, 92, e12929.	2.7	4
10	Revisiting George Romanes' "Physiological Selection" (1886). Biological Theory, 2020, 15, 143-147.	1.5	3
11	Success of alignment-free oligonucleotide (k-mer) analysis confirms relative importance of genomes not genes in speciation and phylogeny. Biological Journal of the Linnean Society, 2019, , .	1.6	2
12	When acting as a reproductive barrier for sympatric speciation, hybrid sterility can only be primary. Biological Journal of the Linnean Society, 2019, 128, 779-788.	1.6	10
13	On certain twoâ€signal perspectives of lymphocyte activation and inactivation, thymic Gâ€quadruplexes, and the role of aggregation in self/notâ€self discrimination. Scandinavian Journal of Immunology, 2019, 90, e12797.	2.7	2
14	Two signal halfâ€century: From negative selection of selfâ€reactivity to positive selection of nearâ€selfâ€reactivity. Scandinavian Journal of Immunology, 2019, 89, e12746.	2.7	11
15	The chromosomal basis of species initiation: Prdm9 as an anti-speciation gene. Biological Journal of the Linnean Society, 2018, 124, 139-150.	1.6	6
16	Speciation: Goldschmidt's Chromosomal Heresy, Once Supported by Gould and Dawkins, is Again Reinstated. Biological Theory, 2017, 12, 4-12.	1.5	19
17	Base Composition, Speciation, and Why the Mitochondrial Barcode Precisely Classifies. Biological Theory, 2017, 12, 157-168.	1.5	11
18	Evolutionary Bioinformatics. , 2016, , .		29

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19	Chargaff's First Parity Rule. , 2016, , 25-42.		O
20	Meiotic Pairing Inadequacies at the Levels of X Chromosome, Gene, or Base: Epigenetic Tagging for Transgenerational Error-Correction Guided by a Future Homologous Duplex. Biological Theory, 2016, 11, 150-157.	1.5	8
21	The Weak Point. , 2016, , 157-173.		O
22	Almroth Wright, opsonins, innate immunity and the lectin pathway of complement activation: a historical perspective. Microbes and Infection, 2016, 18, 450-459.	1.9	7
23	Self/Not-Self?., 2016,, 279-303.		0
24	Exons and Introns. , 2016, , 235-252.		3
25	Chargaff's Cluster Rule. , 2016, , 103-118.		0
26	Memory: What Is Arranged and Where?., 2016,, 367-380.		1
27	Chargaffâ∈™s Second Parity Rule. , 2016, , 63-82.		0
28	Memory: A Phenomenon of Arrangement. , 2016, , 3-24.		4
29	Homostability. , 2016, , 193-206.		0
30	Stems and Loops. , 2016, , 83-101.		0
31	Chargaff's GC rule. , 2016, , 175-192.		0
32	Rebooting the Genome. , 2016, , 327-350.		0
33	The Crowded Cytosol., 2016,, 305-323.		0
34	Doctor–scientist–patients who barketh not: the quantified selfâ€movement and crowdâ€sourcing research. Journal of Evaluation in Clinical Practice, 2015, 21, 1024-1027.	1.8	5
35	â€ [~] A vehicle of symbols and nothing more'. George Romanes, theory of mind, information, and Samuel Butler. History of Psychiatry, 2015, 26, 270-287.	0.3	15
36	Wittgenstein's Certainty is Uncertain: Brain Scans of Cured Hydrocephalics Challenge Cherished Assumptions. Biological Theory, 2015, 10, 336-342.	1.5	11

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37	Summertime dosage-dependent hypersensitivity to an angiotensin II receptor blocker. BMC Research Notes, 2015, 8, 227.	1.4	10
38	Lymphocyte repertoire selection and intracellular self/nonâ€selfâ€discrimination: historical overview. Immunology and Cell Biology, 2015, 93, 297-304.	2.3	12
39	Long-term memory: scaling of information to brain size. Frontiers in Human Neuroscience, 2014, 8, 397.	2.0	8
40	Implications of HIV RNA structure for recombination, speciation, and the neutralism-selectionism controversy. Microbes and Infection, 2014, 16, 96-103.	1.9	14
41	Introns First. Biological Theory, 2013, 7, 196-203.	1.5	9
42	Base composition, speciation, and barcoding. Trends in Ecology and Evolution, 2013, 28, 73-74.	8.7	8
43	Ohno's hypothesis and Muller's paradox: Sex chromosome dosage compensation may serve collective gene functions. BioEssays, 2012, 34, 930-933.	2.5	8
44	Immunology (1955–1975): The Natural Selection Theory, the Two Signal Hypothesis and Positive Repertoire Selection. Journal of the History of Biology, 2012, 45, 139-161.	0.5	11
45	JoelÂS.ÂSchwartz. Darwin's Disciple: George John Romanes, a Life in Letters. xxi + 806 pp., illus., app., bibl., index. Philadelphia: American Philosophical Society, 2010. \$60 (paper) Isis, 2011, 102, 579-580.	0.5	0
46	The B in â€~BDM.' William Bateson did not advocate a genic speciation theory. Heredity, 2011, 106, 202-202	. 2.6	9
47	Chargaff's First Parity Rule. , 2011, , 27-45.		0
48	Evolutionary Bioinformatics., 2011,,.		11
49	Exons and Introns. , 2011, , 249-266.		1
50	Self/Not-Self?., 2011,, 295-318.		1
51	Stems and Loops. , 2011, , 91-109.		0
52	Homostability., 2011,, 205-218.		0
53	Species Survival and Arrival. , 2011, , 153-169.		0
54	Rebooting the Genome., 2011,, 341-361.		0

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55	Chargaff's GC rule. , 2011, , 189-204.		O
56	CHROMOSOMES AS INTERDEPENDENT ACCOUNTING UNITS: THE ASSIGNED ORIENTATION OF C. ELEGANS CHROMOSOMES MINIMIZES THE TOTAL W-BASE CHARGAFF DIFFERENCE. Journal of Biological Systems, 2010, 18, 1-16.	1.4	8
57	George Romanes, William Bateson, and Darwin's â€~weak point'. Notes and Records of the Royal Society, 2010, 64, 139-154.	0.3	17
58	The Selfish Gene Revisited: Reconciliation of Williams-Dawkins and Conventional Definitions. Biological Theory, 2010, 5, 246-255.	1.5	9
59	Samuel Butler and human long term memory: Is the cupboard bare?. Journal of Theoretical Biology, 2009, 258, 156-164.	1.7	21
60	Scherrer and Jost's symposium: the gene concept in 2008. Theory in Biosciences, 2009, 128, 157-161.	1.4	6
61	X chromosome reactivation perturbs intracellular self/notâ€self discrimination. Immunology and Cell Biology, 2009, 87, 525-528.	2.3	18
62	Microsatellites that violate Chargaff's second parity rule have base order-dependent asymmetries in the folding energies of complementary DNA strands and may not drive speciation. Journal of Theoretical Biology, 2008, 254, 168-177.	1.7	10
63	Treasure Your Exceptions. , 2008, , .		49
64	POSITIVE DARWINIAN SELECTION: DOES THE COMPARATIVE METHOD RULE?. Journal of Biological Systems, 2007, 15, 95-108.	1.4	11
65	Calculation of folding energies of single-stranded nucleic acid sequences: Conceptual issues. Journal of Theoretical Biology, 2007, 248, 745-753.	1.7	23
66	Molecular sex: The importance of base composition rather than homology when nucleic acids hybridize. Journal of Theoretical Biology, 2007, 249, 325-330.	1.7	19
67	Prokaryotes that grow optimally in acid have purine-poor codons in long open reading frames. Extremophiles, 2007, 11, 9-18.	2.3	11
68	Heredity as Transmission of Information: Butlerian 'Intelligent Design'. Centaurus, 2006, 48, 133-148.	0.6	16
69	Evolutionary Bioinformatics. , 2006, , .		19
70	Epilogue To Perceive is Not To Select. , 2006, , 325-335.		0
71	Species Survival and Arrival. , 2006, , 123-154.		0
72	The Crowded Cytosol. , 2006, , 273-290.		0

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73	Chargaff's Cluster Rule. , 2006, , 105-120.		0
74	Self/Not-Self?., 2006,, 250-272.		0
75	Exons and Introns. , 2006, , 207-224.		0
76	"Altered-self―or "near-self―in the positive selection of lymphocyte repertoires?. Immunology Letters, 2005, 100, 103-106.	2.5	13
77	Amino Acids as Placeholders. Applied Bioinformatics, 2005, 4, 117-130.	1.6	12
78	REGIONS OF RELATIVE GC% UNIFORMITY ARE RECOMBINATIONAL ISOLATORS. Journal of Biological Systems, 2004, 12, 261-271.	1.4	17
79	Chromosomal speciation: a reply. Journal of Theoretical Biology, 2004, 230, 189-196.	1.7	21
80	Genomic Conflict Settled in Favour of the Species Rather Than the Gene at Extreme GC Percentage Values. Applied Bioinformatics, 2004, 3, 219-228.	1.6	15
81	Purine loading, stem-loops and Chargaff's second parity rule. Applied Bioinformatics, 2004, 3, 3-8.	1.6	71
82	Optimum growth temperature and the base composition of open reading frames in prokaryotes. Extremophiles, 2003, 7, 443-450.	2.3	52
83	Low-complexity segments in Plasmodium falciparum proteins are primarily nucleic acid level adaptations. Molecular and Biochemical Parasitology, 2003, 128, 21-32.	1.1	50
84	William Bateson, Richard Goldschmidt, and Non-Genic Modes of Speciation. Journal of Biological Systems, 2003, 11, 341-350.	1.4	15
85	Comparison of responses by bacteriophages and bacteria to pressures on the base composition of open reading frames. Applied Bioinformatics, 2003, 2, 47-62.	1.6	10
86	Symmetry observations in long nucleotide sequences: a commentary on the Discovery Note of Qi and Cuticchia. Bioinformatics, 2002, 18, 215-217.	4.1	19
87	Immunity as a function of the unicellular state: implications of emerging genomic data. Trends in Immunology, 2002, 23, 575-579.	6.8	19
88	Selective pressures that decrease synonymous mutations in Plasmodium falciparum. Trends in Parasitology, 2002, 18, 411-417.	3.3	33
89	Introns resolve the conflict between base order-dependent stem-loop potential and the encoding of RNA or protein: further evidence from overlapping genes. Gene, 2001, 270, 181-189.	2.2	15
90	Did Celera invent the internet?. Lancet, The, 2001, 357, 1204.	13.7	1

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91	Double-stranded RNA as a Not-self Alarm Signal: to Evade, most Viruses Purine-load their RNAs, but some (HTLV-1, Epstein-Barr) Pyrimidine-load. Journal of Theoretical Biology, 2001, 208, 475-491.	1.7	43
92	Adaptive Value of Polymorphism in Intracellular Self/Not-self Discrimination?. Journal of Theoretical Biology, 2001, 210, 425-434.	1.7	11
93	Haldane's Rule: Hybrid Sterility Affects the Heterogametic Sex First because Sexual Differentiation is on the Path to Species Differentiation. Journal of Theoretical Biology, 2000, 204, 443-452.	1.7	35
94	Thermophilic Bacteria Strictly Obey Szybalski's Transcription Direction Rule and Politely Purine-Load RNAs with Both Adenine and Guanine. Genome Research, 2000, 10, 228-236.	5 . 5	93
95	Chargaff's legacy. Gene, 2000, 261, 127-137.	2.2	98
96	Crossover hot-spot instigator (Chi) sequences in Escherichia coli occupy distinct recombination/transcription islands. Gene, 2000, 243, 47-57.	2.2	17
97	Tomorrow's Cures Today? How to Reform the Health Research System. Canadian Public Policy/ Analyse De Politiques, 2000, 26, 271.	1.6	1
98	Accounting Units in DNA. Journal of Theoretical Biology, 1999, 197, 51-61.	1.7	44
99	Deviations from Chargaff's Second Parity Rule Correlate with Direction of Transcription. Journal of Theoretical Biology, 1999, 197, 63-76.	1.7	67
100	Two Levels of Information in DNA: Relationship of Romanes' "Intrinsic―Variability of the Reproductive System, and Bateson's "Residue―to the Species-Dependent Component of the Base Composition, (C+G)%. Journal of Theoretical Biology, 1999, 201, 47-61.	1.7	31
101	Heat shock proteins as mediators of aggregation-induced †danger' signals: implications of the slow evolutionary fine-tuning of sequences for the antigenicity of cancer cells. Cell Stress and Chaperones, 1999, 4, 205.	2.9	11
102	An Alternative Way of Thinking about Stem-loops in DNA. A Case Study of the Human GOS2 Gene. Journal of Theoretical Biology, 1998, 192, 489-504.	1.7	38
103	Correlation of Chi orientation with transcription indicates a fundamental relationship between recombination and transcription. Gene, 1998, 216, 285-292.	2.2	25
104	Chargaff difference analysis of the bithorax complex of Drosophila melanogaster. Biochemistry and Cell Biology, 1998, 76, 129-137.	2.0	14
105	The Normal Copy of the <i> GOS19-3 < /i > -Associated, CpG Island-Containing, Upstream Sequence Is Downstream of <i> GOS19-2 MIP1 < /i > $\hat{l} \pm \hat{l} \pm$</i></i>	1.9	1
106	Expression and Processing of <i>GO/G1 Switch Gene 24</i> (<i>GOS24/TIS11/TTP/NUP475</i>) RNA in Cultured Human Blood Mononuclear Cells. DNA and Cell Biology, 1998, 17, 249-263.	1.9	10
107	Chargaff difference analysis of the bithorax complex of <i>Drosophila melanogaster</i> Biochemistry and Cell Biology, 1998, 76, 129-137.	2.0	3
108	Comparison of mRNA Expression of Two Regulators of G-Protein Signaling, RGS1/BL34/1R20 and RGS2/GOS8, in Cultured Human Blood Mononuclear Cells. DNA and Cell Biology, 1997, 16, 589-598.	1.9	74

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109	Cyclosporin A Inhibits Early mRNA Expression of <i>GO/G1 Switch Gene 2</i> (<i>GOS2</i>) in Cultured Human Blood Mononuclear Cells. DNA and Cell Biology, 1997, 16, 1449-1458.	1.9	46
110	Stem-loop potential in MHC genes: a new way of evaluating positive Darwinian selection?. Immunogenetics, 1996, 43, 182-189.	2.4	26
111	Different Biological Species "Broadcast―Their DNAs at Different (G+C)% "Wavelengths― Journal of Theoretical Biology, 1996, 178, 405-417.	1.7	71
112	Sequence Analysis and Expression in Cultured Lymphocytes of the HumanFOSBGene (GOS3). DNA and Cell Biology, 1996, 15, 1025-1038.	1.9	16
113	A "Stealth" Approach to Inhibition of Lymphocyte Activation by Oligonucleotide Complementary to the Putative G ₀ /G ₁ Switch Regulatory Gene <i>GOS30/EGR1/NGFI-A</i> Biology, 1996, 15, 561-570.	1.9	11
114	Fine tuning of intracellular protein concentrations, a collective protein function involved in aneuploid lethality, sex-determination and speciation?. Journal of Theoretical Biology, 1995, 172, 335-345.	1.7	17
115	Reciprocal relationship between stem-loop potential and substitution density in retroviral quasispecies under positive Darwinian selection. Journal of Molecular Evolution, 1995, 41, 1022-37.	1.8	25
116	Jerne and positive selection. Trends in Immunology, 1995, 16, 105.	7.5	5
117	A Human Gene Encoding a Putative Basic Helix–Loop–Helix Phosphoprotein Whose mRNA Increases Rapidly in Cycloheximide-Treated Blood Mononuclear Cells. DNA and Cell Biology, 1994, 13, 125-147.	1.9	125
118	The Heat-shock Response and the Molecular Basis of Genetic Dominance. Journal of Theoretical Biology, 1994, 167, 1-5.	1.7	20
119	Relationship of X Chromosome Dosage Compensation to Intracellular Self/Not-self Discrimination: A Resolution of Muller's Paradox?. Journal of Theoretical Biology, 1994, 167, 7-12.	1.7	27
120	Authorship and misconduct. Nature, 1994, 370, 91-91.	27.8	0
121	A Human Putative Lymphocyte G ₀ /G ₁ Switch Gene Homologous to a Rodent Gene Encoding a Zinc-Binding Potential Transcription Factor. DNA and Cell Biology, 1993, 12, 73-88.	1.9	59
122	Canadian MRC's partnership with the drug industry. Lancet, The, 1993, 342, 181.	13.7	0
123	The Third Human Homolog of a Murine Gene Encoding an Inhibitor of Stem Cell Proliferation Is Truncated and Linked to a CpG Island-Containing Upstream Sequence. DNA and Cell Biology, 1993, 12, 157-175.	1.9	3
124	Two signal model of self/not-self immune discrimination: An update. Journal of Theoretical Biology, 1992, 154, 109-118.	1.7	7
125	Programmed activation of T-lymphocytes. A theoretical basis for short term treatment of AIDS with azidothymidine. Medical Hypotheses, 1991, 34, 24-27.	1.5	4
126	Bicameral Grant Review: An Alternative to Conventional Peer Review. FASEB Journal, 1991, 5, 2313-2313.	0.5	8

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127	Early evolution of MHC polymorphism. Journal of Theoretical Biology, 1991, 150, 451-456.	1.7	26
128	A Human Putative Lymphocyte G ₀ /G ₁ Switch Gene Containing a CpG-Rich Island Encodes a Small Basic Protein with the Potential to Be Phosphorylated. DNA and Cell Biology, 1991, 10, 581-591.	1.9	121
129	Three Human Homologs of a Murine Gene Encoding an Inhibitor of Stem Cell Proliferation. DNA and Cell Biology, 1990, 9, 589-602.	1.9	54
130	A Set of Human Putative Lymphocyte G ₀ /G ₁ Switch Genes Includes Genes Homologous to Rodent Cytokine and Zinc Finger Protein-Encoding Genes. DNA and Cell Biology, 1990, 9, 579-587.	1.9	83
131	An ethical dilemma. Nature, 1988, 332, 200-200.	27.8	2
132	An ethical dilemma. Nature, 1987, 328, 662-662.	27.8	1
133	Heat shock proteins defend against intracellular pathogens: a non-immunological basis for self/non-self discrimination?. Journal of Theoretical Biology, 1985, 115, 471-473.	1.7	33
134	cDNA cloning of mRNAS which increase rapidly in human lymphocytes cultured with concanavalin-A and cycloheximide. Biochemical and Biophysical Research Communications, 1985, 129, 619-625.	2.1	47
135	Purification of oligo dG-tailed Okayama-Berg linker DNA fragments by oligo dC-cellulose chromatography. Analytical Biochemistry, 1984, 137, 143-145.	2.4	7
136	Rapid qualitative changes in mRNA populations in cultured human lymphocytes: comparison of the effects of cycloheximide and concanavalin A. Canadian Journal of Biochemistry and Cell Biology, 1984, 62, 859-864.	1.3	16
137	Rouleaux formation as a measure of the phase separating ability of plasma. Journal of Theoretical Biology, 1983, 103, 467-472.	1.7	10
138	Canadian medical research strategy for the eighties. Medical Hypotheses, 1983, 11, 147-156.	1.5	5
139	Canadian medical research strategy for the eighties. Medical Hypotheses, 1983, 11, 141-145.	1.5	6
140	Role of serum in inhibition of cultured lymphocytes by lysophosphatidylcholine. Lipids and Lipid Metabolism, 1982, 710, 87-98.	2.6	12
141	Formation of erythrocyte rouleaux in preheated normal serum: roles of albumin polymers and lysophosphatidylcholine. Canadian Journal of Biochemistry, 1982, 60, 705-711.	1.4	11
142	Are introns in-series error-detecting sequences?. Journal of Theoretical Biology, 1981, 93, 861-866.	1.7	38
143	Isotope-dilution analysis of the effects of deoxyguanosine and deoxyadenosine on the incorpoŕation of thymidine and deoxycytidine by hydroxyurea-treated thymus cells. Biochemical Journal, 1980, 190, 721-730.	3.7	31
144	Lectin pulses as determinants of lymphocyte activation and inactivation during the first six hours of culture: sequential action of concanavalin A and complement cause cell lysis. Canadian Journal of Biochemistry, 1980, 58, 1387-1396.	1.4	9

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145	Early onset inhibition of lymphocytes in heterologous serum by high concentrations of concanavalin-A: Further studies of the role of complement with suramin and heated serum. International Journal of Immunopharmacology, 1979, 1, 133-139.	1.1	1
146	Serum Factors Affecting the Incorporation of [³ H]thymidine by Lymphocytes Stimulated by Antigen. International Archives of Allergy and Immunology, 1979, 60, 89-96.	2.1	0
147	A comparison of short and multiple choice questions in the evaluation of students of biochemistry. Medical Education, 1978, 12, 351-356.	2.1	9
148	Role of complement in the toxicity of dietary legumes. Medical Hypotheses, 1978, 4, 97-100.	1.5	2
149	Comparison of enhancement by heated serum and 2-mercaptoethanol of lymphocyte transformation induced by high concentrations of concanavalin A. Cellular Immunology, 1978, 36, 86-96.	3.0	11
150	Stimulation by autologous serum preheated at $66 \hat{A}^{\circ} \text{C}$ of the incorporation of [3H]uridine by cultured lymphocytes: comparison with stimulation by concanavalin A. Canadian Journal of Biochemistry, 1977, 55, 215-222.	1.4	3
151	Role of receptor aggregation in complement-dependent inhibition of lymphocytes by high concentrations of concanavalin A. Nature, 1977, 267, 358-360.	27.8	14
152	Isotope-dilution studies of the effects of 5-fluorodeoxyuridine and hydroxyurea on the incorporation of deoxycytidine and thymidine by cultured thymus cells. Canadian Journal of Biochemistry, 1976, 54, 238-248.	1.4	8
153	Serum factors which may regulate lymphocyte responses. Cellular Immunology, 1976, 24, 191.	3.0	0
154	Hemolysis from Hot Dialysate. Annals of Internal Medicine, 1976, 84, 490.	3.9	5
155	Further implications of a theory of immunity. Journal of Theoretical Biology, 1975, 52, 187-198.	1.7	26
156	Evidence for a relationship between chloroquine and complement from studies with lymphocyte mitogens: possible implications for the mechanism of action of chloroquine in disease. Canadian Journal of Microbiology, 1975, 21, 1581-1586.	1.7	5
157	Serum and lymphocyte activation by phytohaemagglutinin (PHA). Experimental Cell Research, 1973, 77, 216-222.	2.6	11
158	A comparison of the activation of thymus and lymph-node cells by concanavalin-A and phytohaemagglutinin. Effects of complement. Journal of Immunological Methods, 1973, 2, 269-277.	1.4	2
159	Inhibition of Lymphocyte Activation at High Ratios of Concanavalin A to Serum depends on Complement. Nature, 1970, 227, 1351-1352.	27.8	17
160	A theory of immunity. Journal of Theoretical Biology, 1969, 25, 173-185.	1.7	12