

# Jan-Willem de Gier

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/256905/publications.pdf>

Version: 2024-02-01

83

papers

6,755

citations

53794

45

h-index

62596

80

g-index

86

all docs

86

docs citations

86

times ranked

4973

citing authors

#	ARTICLE	IF	CITATIONS
1	Strategies to Enhance Periplasmic Recombinant Protein Production Yields in <i>Escherichia coli</i> . <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 797334.	4.1	11
2	N-Linked Glycan Sites on the Influenza A Virus Neuraminidase Head Domain Are Required for Efficient Viral Incorporation and Replication. <i>Journal of Virology</i> , 2020, 94, .	3.4	15
3	Cotranslational folding of alkaline phosphatase in the periplasm of <scp><i>Escherichia coli</i></scp>. <i>Protein Science</i> , 2020, 29, 2028-2037.	7.6	9
4	A mycobacterial ABC transporter mediates the uptake of hydrophilic compounds. <i>Nature</i> , 2020, 580, 409-412.	27.8	72
5	Mutagenesis-Based Characterization and Improvement of a Novel Inclusion Body Tag. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 7, 442.	4.1	4
6	Enhancing Recombinant Protein Yields in the <i>E. coli</i> Periplasm by Combining Signal Peptide and Production Rate Screening. <i>Frontiers in Microbiology</i> , 2019, 10, 1511.	3.5	39
7	Bicistronic Design-Based Continuous and High-Level Membrane Protein Production in <i>Escherichia coli</i>. <i>ACS Synthetic Biology</i> , 2019, 8, 1685-1690.	3.8	23
8	<i>Escherichia coli</i> Can Adapt Its Protein Translocation Machinery for Enhanced Periplasmic Recombinant Protein Production. <i>Frontiers in Bioengineering and Biotechnology</i> , 2019, 7, 465.	4.1	8
9	Optimizing Recombinant Protein Production in the <i>Escherichia coli</i> Periplasm Alleviates Stress. <i>Applied and Environmental Microbiology</i> , 2018, 84, .	3.1	41
10	SRP, FtsY, DnaK and YidC Are Required for the Biogenesis of the <i>E. coli</i> Tail-Anchored Membrane Proteins DjIC and Flk. <i>Journal of Molecular Biology</i> , 2018, 430, 389-403.	4.2	28
11	Revealing the mechanisms of membrane protein export by virulence-associated bacterial secretion systems. <i>Nature Communications</i> , 2018, 9, 3467.	12.8	28
12	Shaping <i>Escherichia coli</i> for recombinant membrane protein production. <i>FEMS Microbiology Letters</i> , 2018, 365, .	1.8	9
13	Functional and structural characterization of an ECF-type ABC transporter for vitamin B12. <i>ELife</i> , 2018, 7, .	6.0	57
14	Cysteine-mediated decyanation of vitamin B12 by the predicted membrane transporter BtuM. <i>Nature Communications</i> , 2018, 9, 3038.	12.8	31
15	Tailoring <i>Escherichia coli</i> for the <scp>l</scp>-Rhamnose P<sub>BAD</sub> Promoter-Based Production of Membrane and Secretory Proteins. <i>ACS Synthetic Biology</i> , 2017, 6, 985-994.	3.8	28
16	Application of an <i>E. coli</i> signal sequence as a versatile inclusion body tag. <i>Microbial Cell Factories</i> , 2017, 16, 50.	4.0	48
17	Isolation and characterization of the <i>E. coli</i> membrane protein production strain Mutant56(DE3). <i>Scientific Reports</i> , 2017, 7, 45089.	3.3	38
18	Isolating <i>Escherichia coli</i> strains for recombinant protein production. <i>Cellular and Molecular Life Sciences</i> , 2017, 74, 891-908.	5.4	25

#	ARTICLE	IF	CITATIONS
19	The tunable pReX expression vector enables optimizing the T7-based production of membrane and secretory proteins in <i>E. coli</i> . <i>Microbial Cell Factories</i> , 2017, 16, 226.	4.0	10
20	Optimizing <i>E. coli</i> -Based Membrane Protein Production Using Lemo21(DE3) or pReX and GFP-Fusions. <i>Methods in Molecular Biology</i> , 2017, 1586, 109-126.	0.9	6
21	High-level production of membrane proteins in <i>E. coli</i> BL21(DE3) by omitting the inducer IPTG. <i>Microbial Cell Factories</i> , 2015, 14, 142.	4.0	54
22	De-convoluting the Genetic Adaptations of <i>E. coli</i> C41(DE3) in Real Time Reveals How Alleviating Protein Production Stress Improves Yields. <i>Cell Reports</i> , 2015, 10, 1758-1766.	6.4	60
23	Autotransporter-Based Antigen Display in Bacterial Ghosts. <i>Applied and Environmental Microbiology</i> , 2015, 81, 726-735.	3.1	22
24	An autotransporter display platform for the development of multivalent recombinant bacterial vector vaccines. <i>Microbial Cell Factories</i> , 2014, 13, 162.	4.0	38
25	Bacterial-based membrane protein production. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2014, 1843, 1739-1749.	4.1	63
26	MemStar: A one-shot <i>&lt; i&gt;Escherichia coli&lt;/i&gt;</i> based approach for high-level bacterial membrane protein production. <i>FEBS Letters</i> , 2014, 588, 3761-3769.	2.8	27
27	Decoration of Outer Membrane Vesicles with Multiple Antigens by Using an Autotransporter Approach. <i>Applied and Environmental Microbiology</i> , 2014, 80, 5854-5865.	3.1	95
28	Optimizing heterologous protein production in the periplasm of <i>E. coli</i> by regulating gene expression levels. <i>Microbial Cell Factories</i> , 2013, 12, 24.	4.0	114
29	Optimizing <i>E. coli</i> -Based Membrane Protein Production Using Lemo21(DE3) and GFP-Fusions. <i>Methods in Molecular Biology</i> , 2013, 1033, 381-400.	0.9	14
30	Optimizing Membrane Protein Overexpression in the <i>Escherichia coli</i> strain Lemo21(DE3). <i>Journal of Molecular Biology</i> , 2012, 423, 648-659.	4.2	132
31	A structurally informed autotransporter platform for efficient heterologous protein secretion and display. <i>Microbial Cell Factories</i> , 2012, 11, 85.	4.0	43
32	Biogenesis of inner membrane proteins in <i>Escherichia coli</i> . <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2012, 1817, 965-976.	1.0	64
33	Consequences of the Overexpression of a Eukaryotic Membrane Protein, the Human KDEL Receptor, in <i>Escherichia coli</i> . <i>Journal of Molecular Biology</i> , 2011, 407, 532-542.	4.2	47
34	<i>Escherichia coli</i> Peptide Binding Protein OppA Has a Preference for Positively Charged Peptides. <i>Journal of Molecular Biology</i> , 2011, 414, 75-85.	4.2	59
35	Role for <i>Escherichia coli</i> YidD in Membrane Protein Insertion. <i>Journal of Bacteriology</i> , 2011, 193, 5242-5251.	2.2	20
36	Consequences of Depletion of the Signal Recognition Particle in <i>Escherichia coli</i> . <i>Journal of Biological Chemistry</i> , 2011, 286, 4598-4609.	3.4	36

#	ARTICLE	IF	CITATIONS
37	Revolutionizing membrane protein overexpression in bacteria. <i>Microbial Biotechnology</i> , 2010, 3, 403-411.	4.2	55
38	The Bam (Omp85) complex is involved in secretion of the autotransporter haemoglobin protease. <i>Microbiology (United Kingdom)</i> , 2009, 155, 3982-3991.	1.8	121
39	YidC is required for the assembly of the Mscl homopentameric pore. <i>FEBS Journal</i> , 2009, 276, 4891-4899.	4.7	22
40	Detection of crossâ€links between FtsH, YidC, HflK/C suggests a linked role for these proteins in quality control upon insertion of bacterial inner membrane proteins. <i>FEBS Letters</i> , 2008, 582, 1419-1424.	2.8	66
41	Immobilization of the first dimension in 2D blue native/SDSâ€“PAGE allows the relative quantification of membrane proteomes. <i>Methods</i> , 2008, 46, 48-53.	3.8	17
42	The structure of the efflux pump AcrB in complex with bile acid. <i>Molecular Membrane Biology</i> , 2008, 25, 677-682.	2.0	60
43	Tuning <i>&lt; i&gt;Escherichia coli&lt;/i&gt;</i> for membrane protein overexpression. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 14371-14376.	7.1	378
44	Biogenesis of MalF and the MalFGK2 Maltose Transport Complex in <i>Escherichia coli</i> Requires YidC. <i>Journal of Biological Chemistry</i> , 2008, 283, 17881-17890.	3.4	58
45	Effects of SecE Depletion on the Inner and Outer Membrane Proteomes of <i>&lt; i&gt;Escherichia coli&lt;/i&gt;</i> . <i>Journal of Bacteriology</i> , 2008, 190, 3505-3525.	2.2	49
46	Consequences of Membrane Protein Overexpression in <i>Escherichia coli</i> . <i>Molecular and Cellular Proteomics</i> , 2007, 6, 1527-1550.	3.8	302
47	Limited tolerance towards folded elements during secretion of the autotransporter Hbp. <i>Molecular Microbiology</i> , 2007, 63, 1524-1536.	2.5	105
48	New <i>Escherichia coli</i> outer membrane proteins identified through prediction and experimental verification. <i>Protein Science</i> , 2006, 15, 884-889.	7.6	43
49	Optimization of membrane protein overexpression and purification using GFP fusions. <i>Nature Methods</i> , 2006, 3, 303-313.	19.0	297
50	Rationalizing membrane protein overexpression. <i>Trends in Biotechnology</i> , 2006, 24, 364-371.	9.3	238
51	Distinct Requirements for Translocation of the N-tail and C-tail of the <i>Escherichia coli</i> Inner Membrane Protein CyoA. <i>Journal of Biological Chemistry</i> , 2006, 281, 10002-10009.	3.4	72
52	Defining the Role of the <i>Escherichia coli</i> Chaperone SecB Using Comparative Proteomics*. <i>Journal of Biological Chemistry</i> , 2006, 281, 10024-10034.	3.4	70
53	A scalable, GFP-based pipeline for membrane protein overexpression screening and purification. <i>Protein Science</i> , 2005, 14, 2011-2017.	7.6	121
54	BIOGENESIS OF INNER MEMBRANE PROTEINS IN <i>&lt; i&gt;ESCHERICHIA COLI&lt;/i&gt;</i> . <i>Annual Review of Microbiology</i> , 2005, 59, 329-355.	7.3	177

#	ARTICLE		IF	CITATIONS
55	Targeting and Translocation of Two Lipoproteins in <i>Escherichia coli</i> via the SRP/Sec/YidC Pathway. <i>Journal of Biological Chemistry</i> , 2004, 279, 31026-31032.		3.4	45
56	Experimentally based topology models for <i>E. coli</i> inner membrane proteins. <i>Protein Science</i> , 2004, 13, 937-945.		7.6	90
57	F1FOATP synthase subunit c is targeted by the SRP to YidC in the <i>E. coli</i> inner membrane. <i>FEBS Letters</i> , 2004, 576, 97-100.		2.8	78
58	The ribosome and YidC. <i>EMBO Reports</i> , 2003, 4, 939-943.		4.5	38
59	Defining the Regions of <i>Escherichia coli</i> YidC That Contribute to Activity. <i>Journal of Biological Chemistry</i> , 2003, 278, 48965-48972.		3.4	84
60	Rapid topology mapping of <i>Escherichia coli</i> inner-membrane proteins by prediction and PhoA/GFP fusion analysis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002, 99, 2690-2695.		7.1	185
61	Secâ€¢-dependent membrane protein insertion: sequential interaction of nascent FtsQ with SecY and YidC. <i>EMBO Reports</i> , 2001, 2, 524-529.		4.5	164
62	Complementation of bacterial SecE by a chloroplastic homologue. <i>FEBS Letters</i> , 2001, 498, 52-56.		2.8	24
63	YidC/Oxa1p/Alb3: evolutionarily conserved mediators of membrane protein assembly. <i>FEBS Letters</i> , 2001, 501, 1-5.		2.8	125
64	Green fluorescent protein as an indicator to monitor membrane protein overexpression in <i>Escherichia coli</i> . <i>FEBS Letters</i> , 2001, 507, 220-224.		2.8	210
65	Biogenesis of inner membrane proteins in <i>Escherichia coli</i>. <i>Molecular Microbiology</i> , 2001, 40, 314-322.		2.5	90
66	Function of YidC for the Insertion of M13 Procoat Protein in <i>Escherichia coli</i> . <i>Journal of Biological Chemistry</i> , 2001, 276, 34847-34852.		3.4	123
67	YidC, the <i>Escherichia coli</i> homologue of mitochondrial Oxa1p, is a component of the Sec translocase. <i>EMBO Journal</i> , 2000, 19, 542-549.		7.8	357
68	The Signal Recognition Particle-targeting Pathway Does Not Necessarily Deliver Proteins to the Sec-translocase in <i>Escherichia coli</i> . <i>Journal of Biological Chemistry</i> , 1999, 274, 20068-20070.		3.4	37
69	Insertion of Leader Peptidase into the Thylakoid Membrane during Synthesis in a Chloroplast Translation System. <i>Plant Cell</i> , 1999, 11, 1553-1564.		6.6	15
70	Competition between Sec- and TAT-dependent protein translocation in <i>Escherichia coli</i> . <i>EMBO Journal</i> , 1999, 18, 2982-2990.		7.8	249
71	The <i>Escherichia coli</i> SRP and SecB targeting pathways converge at the translocon. <i>EMBO Journal</i> , 1998, 17, 2504-2512.		7.8	271
72	Membrane Topology of the 60-kDa Oxa1p Homologue from <i>Escherichia coli</i> . <i>Journal of Biological Chemistry</i> , 1998, 273, 30415-30418.		3.4	86

#	ARTICLE	IF	CITATIONS
73	Differential use of the signal recognition particle translocase targeting pathway for inner membrane protein assembly in <i>&lt; i&gt;Escherichia coli&lt;/i&gt;</i> . Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 14646-14651.	7.1	119
74	The <i>E. coli</i> SRP: preferences of a targeting factor. FEBS Letters, 1997, 408, 1-4.	2.8	60
75	Nascent membrane and presecretory proteins synthesized in <i>&lt; i&gt;Escherichia coli&lt;/i&gt;</i> associate with signal recognition particle and trigger factor. Molecular Microbiology, 1997, 25, 53-64.	2.5	168
76	Assembly of a cytoplasmic membrane protein in <i>Escherichia coli</i> is dependent on the signal recognition particle. FEBS Letters, 1996, 399, 307-309.	2.8	151
77	Structural and functional analysis of aa3-type and cbb3-type cytochrome c oxidases of <i>Paracoccus denitrificans</i> reveals significant differences in proton-pump design. Molecular Microbiology, 1996, 20, 1247-1260.	2.5	100
78	The Oxidation of Methylamine in <i>Paracoccus denitrificans</i> . FEBS Journal, 1995, 229, 148-154.	0.2	16
79	Regulation of oxidative phosphorylation: The flexible respiratory network of <i>Paracoccus denitrificans</i> . Journal of Bioenergetics and Biomembranes, 1995, 27, 499-512.	2.3	42
80	Reversed electron transfer through the bc1complex enables a cytochrome c oxidase mutant ( $\hat{\lambda}$ "aa3/cbb3) of <i>Paracoccus denitrificans</i> to grow on methylamine. FEBS Letters, 1995, 371, 267-270.	2.8	8
81	The terminal oxidases of <i>Paracoccus denitrificans</i> . Molecular Microbiology, 1994, 13, 183-196.	2.5	109
82	Oxidation of methylamine by a <i>Paracoccus denitrificans</i> mutant impaired in the synthesis of the bc1complex and the aa3-type oxidase. Evidence for the existence of an alternative cytochrome oxidase in this bacterium. FEBS Letters, 1992, 306, 23-26.	2.8	14
83	Functioning of the stable signal peptide of the pCloDF13-encoded bacteriocin release protein. Molecular Microbiology, 1991, 5, 393-399.	2.5	28