

Dirk Gärlich

List of Publications by Year in descending order

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117
papers

23,831
citations

10650

74
h-index

23173

116
g-index

128
all docs

128
docs citations

128
times ranked

16797
citing authors

#	ARTICLE	IF	CITATIONS
1	Atomic resolution dynamics of cohesive interactions in phase-separated Nup98 FG domains. <i>Nature Communications</i> , 2022, 13, 1494.	5.8	20
2	Mechanical control of nuclear import by Importin-7 is regulated by its dominant cargo YAP. <i>Nature Communications</i> , 2022, 13, 1174.	5.8	32
3	Inhibitors of dihydroorotate dehydrogenase cooperate with molnupiravir and N4-hydroxycytidine to suppress SARS-CoV-2 replication. <i>iScience</i> , 2022, 25, 104293.	1.9	9
4	Recapitulation of selective nuclear import and export with a perfectly repeated 12mer GLFG peptide. <i>Nature Communications</i> , 2021, 12, 4047.	5.8	21
5	Neutralization of SARS-CoV-2 by highly potent, hyperthermostable, and mutation-tolerant nanobodies. <i>EMBO Journal</i> , 2021, 40, e107985.	3.5	69
6	The folate antagonist methotrexate diminishes replication of the coronavirus SARS-CoV-2 and enhances the antiviral efficacy of remdesivir in cell culture models. <i>Virus Research</i> , 2021, 302, 198469.	1.1	28
7	F-Actin Interactome Reveals Vimentin as a Key Regulator of Actin Organization and Cell Mechanics in Mitosis. <i>Developmental Cell</i> , 2020, 52, 210-222.e7.	3.1	70
8	A Method to Quantify Molecular Diffusion within Thin Solvated Polymer Films: A Case Study on Films of Natively Unfolded Nucleoporins. <i>ACS Nano</i> , 2020, 14, 9938-9952.	7.3	2
9	The copper(II)-binding tripeptide GHK, a valuable crystallization and phasing tag for macromolecular crystallography. <i>Acta Crystallographica Section D: Structural Biology</i> , 2020, 76, 1222-1232.	1.1	2
10	Structural basis for the nuclear import and export functions of the biportin Pdr6/Kap122. <i>Journal of Cell Biology</i> , 2019, 218, 1839-1852.	2.3	8
11	Engineered SUMO/protease system identifies Pdr6 as a bidirectional nuclear transport receptor. <i>Journal of Cell Biology</i> , 2019, 218, 2006-2020.	2.3	25
12	Reversible Immobilization of Proteins in Sensors and Solid-State Nanopores. <i>Small</i> , 2018, 14, e1703357.	5.2	30
13	A toolbox of anti-mouse and anti-rabbit IgG secondary nanobodies. <i>Journal of Cell Biology</i> , 2018, 217, 1143-1154.	2.3	111
14	Spatial structure of disordered proteins dictates conductance and selectivity in nuclear pore complex mimics. <i>ELife</i> , 2018, 7, .	2.8	37
15	Surface Properties Determining Passage Rates of Proteins through Nuclear Pores. <i>Cell</i> , 2018, 174, 202-217.e9.	13.5	128
16	Xpo7 is a broad-spectrum exportin and a nuclear import receptor. <i>Journal of Cell Biology</i> , 2018, 217, 2329-2340.	2.3	39
17	Strong signal increase in STED fluorescence microscopy by imaging regions of subdiffraction extent. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 2125-2130.	3.3	93
18	Effects of the Bowen-Conradi syndrome mutation in EMC1 on its nuclear import, stability and nucleolar recruitment. <i>Human Molecular Genetics</i> , 2016, 25, ddw351.	1.4	36

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19	Structure of the exportin Xpo4 in complex with RanGTP and the hypusine-containing translation factor eIF5A. <i>Nature Communications</i> , 2016, 7, 11952.	5.8	42
20	Editorial Overview: Functional and Mechanistic Landscape of the Nuclear Pore Complex. <i>Journal of Molecular Biology</i> , 2016, 428, 1947-1948.	2.0	2
21	Transport Selectivity of Nuclear Pores, Phase Separation, and Membraneless Organelles. <i>Trends in Biochemical Sciences</i> , 2016, 41, 46-61.	3.7	343
22	A physical model describing the interaction of nuclear transport receptors with FG nucleoporin domain assemblies. <i>ELife</i> , 2016, 5, .	2.8	69
23	Erythroid-Specific Variant of the Nuclear Exportin Xpo7 Conserved Only in Mammals May Explain Functional Differences Between Mammalian Definitive and Lower Vertebrate (or Primitive) Erythropoiesis. <i>Blood</i> , 2016, 128, 2440-2440.	0.6	0
24	A deep proteomics perspective on CRM1-mediated nuclear export and nucleocytoplasmic partitioning. <i>ELife</i> , 2015, 4, .	2.8	177
25	The <i>Xenopus laevis</i> Atg4B Protease: Insights into Substrate Recognition and Application for Tag Removal from Proteins Expressed in Pro- and Eukaryotic Hosts. <i>PLoS ONE</i> , 2015, 10, e0125099.	1.1	7
26	Nanobodies: site-specific labeling for super-resolution imaging, rapid epitope-mapping and native protein complex isolation. <i>ELife</i> , 2015, 4, e11349.	2.8	177
27	Crystal structure of the metazoan Nup62â€¢Nup58â€¢Nup54 nucleoporin complex. <i>Science</i> , 2015, 350, 106-110.6.0		110
28	Nup98 FG domains from diverse species spontaneously phase-separate into particles with nuclear pore-like permselectivity. <i>ELife</i> , 2015, 4, .	2.8	264
29	Purification of protein complexes of defined subunit stoichiometry using a set of orthogonal, tag-cleaving proteases. <i>Journal of Chromatography A</i> , 2014, 1337, 106-115.	1.8	51
30	A new set of highly efficient, tag-cleaving proteases for purifying recombinant proteins. <i>Journal of Chromatography A</i> , 2014, 1337, 95-105.	1.8	133
31	Histones to the cytosol: exportin 7 is essential for normal terminal erythroid nuclear maturation. <i>Blood</i> , 2014, 124, 1931-1940.	0.6	51
32	Cohesiveness tunes assembly and morphology of FG nucleoporin domain meshworks â€“ Implications for nuclear pore permeability. <i>Biophysical Journal</i> , 2013, 105, 1860-1870.	0.2	42
33	Myelin Membrane Assembly Is Driven by a Phase Transition of Myelin Basic Proteins Into a Cohesive Protein Meshwork. <i>PLoS Biology</i> , 2013, 11, e1001577.	2.6	148
34	The nuclear F-actin interactome of <i>Xenopus</i> oocytes reveals an actin-bundling kinesin that is essential for meiotic cytokinesis. <i>EMBO Journal</i> , 2013, 32, 1886-1902.	3.5	62
35	Systematic analysis of barrier-forming FG hydrogels from <i>Xenopus</i> nuclear pore complexes. <i>EMBO Journal</i> , 2012, 32, 204-218.	3.5	175
36	The Permeability of Reconstituted Nuclear Pores Provides Direct Evidence for the Selective Phase Model. <i>Cell</i> , 2012, 150, 738-751.	13.5	258

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37	Structural Characterization of Nanoscale Meshworks within a Nucleoporin FG Hydrogel. <i>Biomacromolecules</i> , 2012, 13, 1882-1889.	2.6	27
38	Structural Analysis of Large Protein Complexes Using Solvent Paramagnetic Relaxation Enhancements. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 3993-3997.	7.2	71
39	Ran-dependent nuclear export mediators: a structural perspective. <i>EMBO Journal</i> , 2011, 30, 3457-3474.	3.5	179
40	NES consensus redefined by structures of PKI-type and Rev-type nuclear export signals bound to CRM1. <i>Nature Structural and Molecular Biology</i> , 2010, 17, 1367-1376.	3.6	226
41	Ultrathin nucleoporin phenylalanine-glycine repeat films and their interaction with nuclear transport receptors. <i>EMBO Reports</i> , 2010, 11, 366-372.	2.0	101
42	Amyloid-like interactions within nucleoporin FG hydrogels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 6281-6285.	3.3	172
43	Crystal Structure of the Nuclear Export Receptor CRM1 in Complex with Snurportin1 and RanGTP. <i>Science</i> , 2009, 324, 1087-1091.	6.0	189
44	Inducible expression of coding and inhibitory RNAs from retargetable genomic loci. <i>Nucleic Acids Research</i> , 2009, 37, e50-e50.	6.5	71
45	Exportin 4 mediates a novel nuclear import pathway for Sox family transcription factors. <i>Journal of Cell Biology</i> , 2009, 185, 27-34.	2.3	73
46	FG/FxFG as well as GLFG repeats form a selective permeability barrier with self-healing properties. <i>EMBO Journal</i> , 2009, 28, 2554-2567.	3.5	111
47	Characterisation of the passive permeability barrier of nuclear pore complexes. <i>EMBO Journal</i> , 2009, 28, 2541-2553.	3.5	309
48	Transport of hypoxia-inducible factor HIF-1 β into the nucleus involves importins 4 and 7. <i>Biochemical and Biophysical Research Communications</i> , 2009, 390, 235-240.	1.0	62
49	A Saturated FG-Repeat Hydrogel Can Reproduce the Permeability Properties of Nuclear Pore Complexes. <i>Cell</i> , 2007, 130, 512-523.	13.5	460
50	A selective block of nuclear actin export stabilizes the giant nuclei of <i>Xenopus</i> oocytes. <i>Nature Cell Biology</i> , 2006, 8, 257-263.	4.6	180
51	NDC1: a crucial membrane-integral nucleoporin of metazoan nuclear pore complexes. <i>Journal of Cell Biology</i> , 2006, 173, 509-519.	2.3	158
52	Nuclear pore complex assembly and maintenance in POM121- and gp210-deficient cells. <i>Journal of Cell Biology</i> , 2006, 173, 477-483.	2.3	71
53	NuSAP, a Mitotic RanGTP Target That Stabilizes and Cross-links Microtubules. <i>Molecular Biology of the Cell</i> , 2006, 17, 2646-2660.	0.9	107
54	FG-Rich Repeats of Nuclear Pore Proteins Form a Three-Dimensional Meshwork with Hydrogel-Like Properties. <i>Science</i> , 2006, 314, 815-817.	6.0	555

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55	Structural Basis for the Cytoskeletal Association of Bcr-Abl/c-Abl. <i>Molecular Cell</i> , 2005, 19, 461-473.	4.5	63
56	Exportin 5 is a RanGTP-dependent dsRNA-binding protein that mediates nuclear export of pre-miRNAs. <i>Rna</i> , 2004, 10, 185-191.	1.6	1,125
57	Exportin 7 defines a novel general nuclear export pathway. <i>EMBO Journal</i> , 2004, 23, 3227-3236.	3.5	96
58	Characterization of Ran-driven cargo transport and the RanGTPase system by kinetic measurements and computer simulation. <i>EMBO Journal</i> , 2003, 22, 1088-1100.	3.5	207
59	Exportin 6: a novel nuclear export receptor that is specific for profilin{middle dot}actin complexes. <i>EMBO Journal</i> , 2003, 22, 5928-5940.	3.5	288
60	Nuclear import of HIV-1 intracellular reverse transcription complexes is mediated by importin 7. <i>EMBO Journal</i> , 2003, 22, 3675-3685.	3.5	155
61	Nucleocytoplasmic Transport. , 2002, , 293-321.		0
62	The permeability barrier of nuclear pore complexes appears to operate via hydrophobic exclusion. <i>EMBO Journal</i> , 2002, 21, 2664-2671.	3.5	501
63	Importins fulfil a dual function as nuclear import receptors and cytoplasmic chaperones for exposed basic domains. <i>EMBO Journal</i> , 2002, 21, 377-386.	3.5	281
64	Exp5 exports eEF1A via tRNA from nuclei and synergizes with other transport pathways to confine translation to the cytoplasm. <i>EMBO Journal</i> , 2002, 21, 6205-6215.	3.5	203
65	Adenoviral E1A Protein Nuclear Import Is Preferentially Mediated by Importin Î±3 in Vitro. <i>Virology</i> , 2001, 289, 186-191.	1.1	37
66	Importin 13: a novel mediator of nuclear import and export. <i>EMBO Journal</i> , 2001, 20, 3685-3694.	3.5	192
67	Kinetic analysis of translocation through nuclear pore complexes. <i>EMBO Journal</i> , 2001, 20, 1320-1330.	3.5	655
68	Caspases mediate nucleoporin cleavage, but not early redistribution of nuclear transport factors and modulation of nuclear permeability in apoptosis. <i>Cell Death and Differentiation</i> , 2001, 8, 495-505.	5.0	96
69	Nucleus and gene expression. <i>Current Opinion in Cell Biology</i> , 2001, 13, 261-262.	2.6	1
70	Exportin 4: a mediator of a novel nuclear export pathway in higher eukaryotes. <i>EMBO Journal</i> , 2000, 19, 4362-4371.	3.5	174
71	The C-terminal domain of TAP interacts with the nuclear pore complex and promotes export of specific CTE-bearing RNA substrates. <i>Rna</i> , 2000, 6, 136-158.	1.6	298
72	Identification of Two Novel RanGTP-binding Proteins Belonging to the Importin Î² Superfamily. <i>Journal of Biological Chemistry</i> , 2000, 275, 40163-40168.	1.6	54

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73	Different Structural and Kinetic Requirements for the Interaction of Ran with the Ran-Binding Domains from RanBP2 and Importin- β . <i>Biochemistry</i> , 2000, 39, 11629-11639.	1.2	65
74	Acetylation of importin- β nuclear import factors by CBP/p300. <i>Current Biology</i> , 2000, 10, 467-470.	1.8	171
75	The <i>Ketel</i> Gene Encodes a Drosophila Homologue of Importin- β . <i>Genetics</i> , 2000, 156, 1889-1900.	1.2	50
76	Coordination of tRNA nuclear export with processing of tRNA. <i>Rna</i> , 1999, 5, 539-549.	1.6	123
77	CRM1-mediated Recycling of Snurportin 1 to the Cytoplasm. <i>Journal of Cell Biology</i> , 1999, 145, 255-264.	2.3	158
78	Import of DNA into mammalian nuclei by proteins originating from a plant pathogenic bacterium. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1999, 96, 3729-3733.	3.3	78
79	Nuclear import of RPA in <i>Xenopus</i> egg extracts requires a novel protein XRIPalpha but not importin alpha. <i>EMBO Journal</i> , 1999, 18, 4348-4358.	3.5	65
80	The importin β /importin 7 heterodimer is a functional nuclear import receptor for histone H1. <i>EMBO Journal</i> , 1999, 18, 2411-2423.	3.5	230
81	The translocation of transportin ¹ cargo complexes through nuclear pores is independent of both Ran and energy. <i>Current Biology</i> , 1999, 9, 47-S1.	1.8	122
82	Structural View of the Ran-Importin β Interaction at 2.3 Å Resolution. <i>Cell</i> , 1999, 97, 635-646.	13.5	335
83	Transport Between the Cell Nucleus and the Cytoplasm. <i>Annual Review of Cell and Developmental Biology</i> , 1999, 15, 607-660.	4.0	1,854
84	Interaction between NTF2 and xFG-containing nucleoporins is required to mediate nuclear import of RanGDP 1 Edited by I. B. Holland. <i>Journal of Molecular Biology</i> , 1999, 293, 579-593.	2.0	171
85	Evidence for Distinct Substrate Specificities of Importin β Family Members in Nuclear Protein Import. <i>Molecular and Cellular Biology</i> , 1999, 19, 7782-7791.	1.1	301
86	Transport into and out of the cell nucleus. <i>EMBO Journal</i> , 1998, 17, 2721-2727.	3.5	298
87	Importin beta, transportin, RanBP5 and RanBP7 mediate nuclear import of ribosomal proteins in mammalian cells. <i>EMBO Journal</i> , 1998, 17, 4491-4502.	3.5	456
88	NTF2 mediates nuclear import of Ran. <i>EMBO Journal</i> , 1998, 17, 6587-6598.	3.5	390
89	Identification of a tRNA-Specific Nuclear Export Receptor. <i>Molecular Cell</i> , 1998, 1, 359-369.	4.5	342
90	A Novel Class of RanGTP Binding Proteins. <i>Journal of Cell Biology</i> , 1997, 138, 65-80.	2.3	398

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91	Ran-Binding Protein 5 (RanBP5) Is Related to the Nuclear Transport Factor Importin- β^2 but Interacts Differently with RanBP1. <i>Molecular and Cellular Biology</i> , 1997, 17, 5087-5096.	1.1	83
92	Nuclear protein import. <i>Current Opinion in Cell Biology</i> , 1997, 9, 412-419.	2.6	282
93	Export of Importin β from the Nucleus Is Mediated by a Specific Nuclear Transport Factor. <i>Cell</i> , 1997, 90, 1061-1071.	13.5	573
94	RanBP1 is crucial for the release of RanGTP from importin β^2 -related nuclear transport factors. <i>FEBS Letters</i> , 1997, 419, 249-254.	1.3	237
95	Yrb4p, a yeast Ran-GTP-binding protein involved in import of ribosomal protein L25 into the nucleus. <i>EMBO Journal</i> , 1997, 16, 6237-6249.	3.5	151
96	The asymmetric distribution of the constituents of the Ran system is essential for transport into and out of the nucleus. <i>EMBO Journal</i> , 1997, 16, 6535-6547.	3.5	557
97	Dominant-negative mutants of importin-beta block multiple pathways of import and export through the nuclear pore complex. <i>EMBO Journal</i> , 1997, 16, 1153-1163.	3.5	338
98	Regulatory Roles of the Nuclear Envelope. <i>Experimental Cell Research</i> , 1996, 229, 204-211.	1.2	26
99	Importin Provides a Link between Nuclear Protein Import and U snRNA Export. <i>Cell</i> , 1996, 87, 21-32.	13.5	194
100	Nucleocytoplasmic Transport. <i>Science</i> , 1996, 271, 1513-1519.	6.0	1,169
101	A yeast cap binding protein complex (γ CBC) acts at an early step in pre-mRNA splicing. <i>Nucleic Acids Research</i> , 1996, 24, 3332-3336.	6.5	102
102	Two different subunits of importin cooperate to recognize nuclear localization signals and bind them to the nuclear envelope. <i>Current Biology</i> , 1995, 5, 383-392.	1.8	472
103	Distinct functions for the two importin subunits in nuclear protein import. <i>Nature</i> , 1995, 377, 246-248.	13.7	463
104	The Sec61 complex is essential for the insertion of proteins into the membrane of the endoplasmic reticulum. <i>FEBS Letters</i> , 1995, 362, 126-130.	1.3	57
105	A Ran-binding motif in nuclear pore proteins. <i>Trends in Cell Biology</i> , 1995, 5, 192-193.	3.6	33
106	Binding of ribosomes to the rough endoplasmic reticulum mediated by the Sec61p-complex.. <i>Journal of Cell Biology</i> , 1994, 126, 925-934.	2.3	177
107	Evolutionary conservation of components of the protein translocation complex. <i>Nature</i> , 1994, 367, 654-657.	13.7	290
108	Isolation of a protein that is essential for the first step of nuclear protein import. <i>Cell</i> , 1994, 79, 767-778.	13.5	692

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109	A tetrameric complex of membrane proteins in the endoplasmic reticulum. FEBS Journal, 1993, 214, 375-381.	0.2	149
110	Protein translocation into proteoliposomes reconstituted from purified components of the endoplasmic reticulum membrane. Cell, 1993, 75, 615-630.	13.5	622
111	Sec61p is adjacent to nascent type I and type II signal-anchor proteins during their membrane insertion.. Journal of Cell Biology, 1993, 121, 743-750.	2.3	107
112	A mammalian homolog of SEC61p and SECYp is associated with ribosomes and nascent polypeptides during translocation. Cell, 1992, 71, 489-503.	13.5	459
113	Components and mechanism of protein translocation across the ER membrane. Antonie Van Leeuwenhoek, 1992, 61, 119-122.	0.7	3
114	A protein of the endoplasmic reticulum involved early in polypeptide translocation. Nature, 1992, 357, 47-52.	13.7	310
115	Chapter 11 Probing the Molecular Environment of Translocating Polypeptide Chains by Cross-Linking. Methods in Cell Biology, 1991, 34, 241-262.	0.5	32
116	The identification of proteins in the proximity of signal-anchor sequences during their targeting to and insertion into the membrane of the ER.. Journal of Cell Biology, 1991, 113, 35-44.	2.3	103
117	The signal sequence receptor has a second subunit and is part of a translocation complex in the endoplasmic reticulum as probed by bifunctional reagents.. Journal of Cell Biology, 1990, 111, 2283-2294.	2.3	97