

# Dirk Grlich

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

120  
papers

20,288  
citations

71  
h-index

128  
g-index

128  
ext. papers

22,199  
ext. citations

14.6  
avg, IF

6.82  
L-index

#	Paper	IF	Citations
120	Atomic resolution dynamics of cohesive interactions in phase-separated Nup98 FG domains.. <i>Nature Communications</i> , <b>2022</b> , 13, 1494	17.4	0
119	Mechanical control of nuclear import by Importin-7 is regulated by its dominant cargo YAP.. <i>Nature Communications</i> , <b>2022</b> , 13, 1174	17.4	2
118	Inhibitors of dihydroorotate dehydrogenase cooperate with Molnupiravir and N4-hydroxycytidine to suppress SARS-CoV-2 replication.. <i>IScience</i> , <b>2022</b> , 104293	6.1	0
117	Recapitulation of selective nuclear import and export with a perfectly repeated 12mer GLFG peptide. <i>Nature Communications</i> , <b>2021</b> , 12, 4047	17.4	1
116	Neutralization of SARS-CoV-2 by highly potent, hyperthermostable, and mutation-tolerant nanobodies. <i>EMBO Journal</i> , <b>2021</b> , 40, e107985	13	19
115	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> , <b>2021</b> , 302, 198469	6.4	11
114	The copper(II)-binding tripeptide GHK, a valuable crystallization and phasing tag for macromolecular crystallography. <i>Acta Crystallographica Section D: Structural Biology</i> , <b>2020</b> , 76, 1222-1232	5.5	0
113	F-Actin Interactome Reveals Vimentin as a Key Regulator of Actin Organization and Cell Mechanics in Mitosis. <i>Developmental Cell</i> , <b>2020</b> , 52, 210-222.e7	10.2	26
112	A Method to Quantify Molecular Diffusion within Thin Solvated Polymer Films: A Case Study on Films of Natively Unfolded Nucleoporins. <i>ACS Nano</i> , <b>2020</b> , 14, 9938-9952	16.7	0
111	Structural basis for the nuclear import and export functions of the biportin Pdr6/Kap122. <i>Journal of Cell Biology</i> , <b>2019</b> , 218, 1839-1852	7.3	5
110	Engineered SUMO/protease system identifies Pdr6 as a bidirectional nuclear transport receptor. <i>Journal of Cell Biology</i> , <b>2019</b> , 218, 2006-2020	7.3	6
109	Reversible Immobilization of Proteins in Sensors and Solid-State Nanopores. <i>Small</i> , <b>2018</b> , 14, e1703357	11	22
108	A toolbox of anti-mouse and anti-rabbit IgG secondary nanobodies. <i>Journal of Cell Biology</i> , <b>2018</b> , 217, 1143-1154	7.3	65
107	Xpo7 is a broad-spectrum exportin and a nuclear import receptor. <i>Journal of Cell Biology</i> , <b>2018</b> , 217, 2329-2340	7.3	25
106	Spatial structure of disordered proteins dictates conductance and selectivity in nuclear pore complex mimics. <i>ELife</i> , <b>2018</b> , 7,	8.9	15
105	Surface Properties Determining Passage Rates of Proteins through Nuclear Pores. <i>Cell</i> , <b>2018</b> , 174, 202-217.e9	17.2	70
104	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> , <b>2017</b> , 114, 2125-2130	11.5	71

103	Transport Selectivity of Nuclear Pores, Phase Separation, and Membraneless Organelles. <i>Trends in Biochemical Sciences</i> , <b>2016</b> , 41, 46-61	10.3	226
102	A physical model describing the interaction of nuclear transport receptors with FG nucleoporin domain assemblies. <i>ELife</i> , <b>2016</b> , 5,	8.9	46
101	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> , <b>2016</b> , 128, 2440-2440	2.2	
100	Effects of the Bowen-Conradi syndrome mutation in EMG1 on its nuclear import, stability and nucleolar recruitment. <i>Human Molecular Genetics</i> , <b>2016</b> , 25, 5353-5364	5.6	23
99	Structure of the exportin Xpo4 in complex with RanGTP and the hypusine-containing translation factor eIF5A. <i>Nature Communications</i> , <b>2016</b> , 7, 11952	17.4	27
98	Crystal structure of the metazoan Nup62-Nup58-Nup54 nucleoporin complex. <i>Science</i> , <b>2015</b> , 350, 106-10	33.3	78
97	A deep proteomics perspective on CRM1-mediated nuclear export and nucleocytoplasmic partitioning. <i>ELife</i> , <b>2015</b> , 4,	8.9	125
96	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> , <b>2015</b> , 10, e0125099	3.7	3
95	Nanobodies: site-specific labeling for super-resolution imaging, rapid epitope-mapping and native protein complex isolation. <i>ELife</i> , <b>2015</b> , 4, e11349	8.9	133
94	Nup98 FG domains from diverse species spontaneously phase-separate into particles with nuclear pore-like permselectivity. <i>ELife</i> , <b>2015</b> , 4,	8.9	166
93	Purification of protein complexes of defined subunit stoichiometry using a set of orthogonal, tag-cleaving proteases. <i>Journal of Chromatography A</i> , <b>2014</b> , 1337, 106-15	4.5	28
92	A new set of highly efficient, tag-cleaving proteases for purifying recombinant proteins. <i>Journal of Chromatography A</i> , <b>2014</b> , 1337, 95-105	4.5	70
91	Histones to the cytosol: exportin 7 is essential for normal terminal erythroid nuclear maturation. <i>Blood</i> , <b>2014</b> , 124, 1931-40	2.2	38
90	Cohesiveness tunes assembly and morphology of FG nucleoporin domain meshworks - Implications for nuclear pore permeability. <i>Biophysical Journal</i> , <b>2013</b> , 105, 1860-70	2.9	33
89	Myelin membrane assembly is driven by a phase transition of myelin basic proteins into a cohesive protein meshwork. <i>PLoS Biology</i> , <b>2013</b> , 11, e1001577	9.7	120
88	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> , <b>2013</b> , 32, 1886-902	13	46
87	Systematic analysis of barrier-forming FG hydrogels from <i>Xenopus</i> nuclear pore complexes. <i>EMBO Journal</i> , <b>2013</b> , 32, 204-18	13	134
86	The permeability of reconstituted nuclear pores provides direct evidence for the selective phase model. <i>Cell</i> , <b>2012</b> , 150, 738-51	56.2	200

85	Structural characterization of nanoscale meshworks within a nucleoporin FG hydrogel. <i>Biomacromolecules</i> , <b>2012</b> , 13, 1882-9	6.9	19
84	Structural Analysis of Large Protein Complexes Using Solvent Paramagnetic Relaxation Enhancements. <i>Angewandte Chemie</i> , <b>2011</b> , 123, 4079-4083	3.6	10
83	Structural analysis of large protein complexes using solvent paramagnetic relaxation enhancements. <i>Angewandte Chemie - International Edition</i> , <b>2011</b> , 50, 3993-7	16.4	62
82	Ran-dependent nuclear export mediators: a structural perspective. <i>EMBO Journal</i> , <b>2011</b> , 30, 3457-74	13	149
81	NES consensus redefined by structures of PKI-type and Rev-type nuclear export signals bound to CRM1. <i>Nature Structural and Molecular Biology</i> , <b>2010</b> , 17, 1367-76	17.6	180
80	Ultrathin nucleoporin phenylalanine-glycine repeat films and their interaction with nuclear transport receptors. <i>EMBO Reports</i> , <b>2010</b> , 11, 366-72	6.5	86
79	Amyloid-like interactions within nucleoporin FG hydrogels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2010</b> , 107, 6281-5	11.5	136
78	Crystal structure of the nuclear export receptor CRM1 in complex with Snurportin1 and RanGTP. <i>Science</i> , <b>2009</b> , 324, 1087-91	33.3	165
77	Inducible expression of coding and inhibitory RNAs from retargetable genomic loci. <i>Nucleic Acids Research</i> , <b>2009</b> , 37, e50	20.1	51
76	Exportin 4 mediates a novel nuclear import pathway for Sox family transcription factors. <i>Journal of Cell Biology</i> , <b>2009</b> , 185, 27-34	7.3	64
75	FG/FxFG as well as GLFG repeats form a selective permeability barrier with self-healing properties. <i>EMBO Journal</i> , <b>2009</b> , 28, 2554-67	13	93
74	Characterisation of the passive permeability barrier of nuclear pore complexes. <i>EMBO Journal</i> , <b>2009</b> , 28, 2541-53	13	244
73	Transport of hypoxia-inducible factor HIF-1alpha into the nucleus involves importins 4 and 7. <i>Biochemical and Biophysical Research Communications</i> , <b>2009</b> , 390, 235-40	3.4	50
72	A saturated FG-repeat hydrogel can reproduce the permeability properties of nuclear pore complexes. <i>Cell</i> , <b>2007</b> , 130, 512-23	56.2	364
71	NDC1: a crucial membrane-integral nucleoporin of metazoan nuclear pore complexes. <i>Journal of Cell Biology</i> , <b>2006</b> , 173, 509-19	7.3	133
70	Nuclear pore complex assembly and maintenance in POM121- and gp210-deficient cells. <i>Journal of Cell Biology</i> , <b>2006</b> , 173, 477-83	7.3	54
69	NuSAP, a mitotic RanGTP target that stabilizes and cross-links microtubules. <i>Molecular Biology of the Cell</i> , <b>2006</b> , 17, 2646-60	3.5	93
68	FG-rich repeats of nuclear pore proteins form a three-dimensional meshwork with hydrogel-like properties. <i>Science</i> , <b>2006</b> , 314, 815-7	33.3	432

67	A selective block of nuclear actin export stabilizes the giant nuclei of <i>Xenopus</i> oocytes. <i>Nature Cell Biology</i> , <b>2006</b> , 8, 257-63	23.4	143
66	Structural basis for the cytoskeletal association of Bcr-Abl/c-Abl. <i>Molecular Cell</i> , <b>2005</b> , 19, 461-73	17.6	57
65	Exportin 5 is a RanGTP-dependent dsRNA-binding protein that mediates nuclear export of pre-miRNAs. <i>Rna</i> , <b>2004</b> , 10, 185-91	5.8	965
64	Exportin 7 defines a novel general nuclear export pathway. <i>EMBO Journal</i> , <b>2004</b> , 23, 3227-36	13	75
63	Characterization of Ran-driven cargo transport and the RanGTPase system by kinetic measurements and computer simulation. <i>EMBO Journal</i> , <b>2003</b> , 22, 1088-100	13	182
62	Exportin 6: a novel nuclear export receptor that is specific for profilin.actin complexes. <i>EMBO Journal</i> , <b>2003</b> , 22, 5928-40	13	230
61	Nuclear import of HIV-1 intracellular reverse transcription complexes is mediated by importin 7. <i>EMBO Journal</i> , <b>2003</b> , 22, 3675-85	13	141
60	The permeability barrier of nuclear pore complexes appears to operate via hydrophobic exclusion. <i>EMBO Journal</i> , <b>2002</b> , 21, 2664-71	13	406
59	Importins fulfil a dual function as nuclear import receptors and cytoplasmic chaperones for exposed basic domains. <i>EMBO Journal</i> , <b>2002</b> , 21, 377-86	13	220
58	Exp5 exports eEF1A via tRNA from nuclei and synergizes with other transport pathways to confine translation to the cytoplasm. <i>EMBO Journal</i> , <b>2002</b> , 21, 6205-15	13	193
57	Nucleocytoplasmic Transport <b>2002</b> , 293-321		
56	Adenoviral E1A protein nuclear import is preferentially mediated by importin alpha3 in vitro. <i>Virology</i> , <b>2001</b> , 289, 186-91	3.6	34
55	Importin 13: a novel mediator of nuclear import and export. <i>EMBO Journal</i> , <b>2001</b> , 20, 3685-94	13	171
54	Kinetic analysis of translocation through nuclear pore complexes. <i>EMBO Journal</i> , <b>2001</b> , 20, 1320-30	13	565
53	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> , <b>2001</b> , 8, 495-505	12.7	89
52	Exportin 4: a mediator of a novel nuclear export pathway in higher eukaryotes. <i>EMBO Journal</i> , <b>2000</b> , 19, 4362-71	13	151
51	The C-terminal domain of TAP interacts with the nuclear pore complex and promotes export of specific CTE-bearing RNA substrates. <i>Rna</i> , <b>2000</b> , 6, 136-58	5.8	268
50	Identification of two novel RanGTP-binding proteins belonging to the importin beta superfamily. <i>Journal of Biological Chemistry</i> , <b>2000</b> , 275, 40163-8	5.4	42

49	Different structural and kinetic requirements for the interaction of Ran with the Ran-binding domains from RanBP2 and importin-beta. <i>Biochemistry</i> , <b>2000</b> , 39, 11629-39	3.2	59
48	Acetylation of importin-alpha nuclear import factors by CBP/p300. <i>Current Biology</i> , <b>2000</b> , 10, 467-70	6.3	162
47	The Ketel gene encodes a Drosophila homologue of importin-beta. <i>Genetics</i> , <b>2000</b> , 156, 1889-900	4	40
46	Coordination of tRNA nuclear export with processing of tRNA. <i>Rna</i> , <b>1999</b> , 5, 539-49	5.8	105
45	CRM1-mediated recycling of snurportin 1 to the cytoplasm. <i>Journal of Cell Biology</i> , <b>1999</b> , 145, 255-64	7.3	150
44	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> , <b>1999</b> , 96, 3729-33	11.5	71
43	Nuclear import of RPA in Xenopus egg extracts requires a novel protein XRIPalpha but not importin alpha. <i>EMBO Journal</i> , <b>1999</b> , 18, 4348-58	13	55
42	The importin beta/importin 7 heterodimer is a functional nuclear import receptor for histone H1. <i>EMBO Journal</i> , <b>1999</b> , 18, 2411-23	13	206
41	The translocation of transportin-cargo complexes through nuclear pores is independent of both Ran and energy. <i>Current Biology</i> , <b>1999</b> , 9, 47-50	6.3	113
40	Structural view of the Ran-Importin beta interaction at 2.3 Å resolution. <i>Cell</i> , <b>1999</b> , 97, 635-46	56.2	291
39	Transport between the cell nucleus and the cytoplasm. <i>Annual Review of Cell and Developmental Biology</i> , <b>1999</b> , 15, 607-60	12.6	1685
38	Interaction between NTF2 and xFG-containing nucleoporins is required to mediate nuclear import of RanGDP. <i>Journal of Molecular Biology</i> , <b>1999</b> , 293, 579-93	6.5	149
37	Evidence for distinct substrate specificities of importin alpha family members in nuclear protein import. <i>Molecular and Cellular Biology</i> , <b>1999</b> , 19, 7782-91	4.8	277
36	Transport into and out of the cell nucleus. <i>EMBO Journal</i> , <b>1998</b> , 17, 2721-7	13	258
35	Importin beta, transportin, RanBP5 and RanBP7 mediate nuclear import of ribosomal proteins in mammalian cells. <i>EMBO Journal</i> , <b>1998</b> , 17, 4491-502	13	396
34	NTF2 mediates nuclear import of Ran. <i>EMBO Journal</i> , <b>1998</b> , 17, 6587-98	13	343
33	Identification of a tRNA-specific nuclear export receptor. <i>Molecular Cell</i> , <b>1998</b> , 1, 359-69	17.6	324
32	A novel class of RanGTP binding proteins. <i>Journal of Cell Biology</i> , <b>1997</b> , 138, 65-80	7.3	374

31	Ran-binding protein 5 (RanBP5) is related to the nuclear transport factor importin-beta but interacts differently with RanBP1. <i>Molecular and Cellular Biology</i> , <b>1997</b> , 17, 5087-96	4.8	75
30	Nuclear protein import. <i>Current Opinion in Cell Biology</i> , <b>1997</b> , 9, 412-9	9	257
29	Export of importin alpha from the nucleus is mediated by a specific nuclear transport factor. <i>Cell</i> , <b>1997</b> , 90, 1061-71	56.2	525
28	RanBP1 is crucial for the release of RanGTP from importin beta-related nuclear transport factors. <i>FEBS Letters</i> , <b>1997</b> , 419, 249-54	3.8	201
27	Yrb4p, a yeast ran-GTP-binding protein involved in import of ribosomal protein L25 into the nucleus. <i>EMBO Journal</i> , <b>1997</b> , 16, 6237-49	13	142
26	The asymmetric distribution of the constituents of the Ran system is essential for transport into and out of the nucleus. <i>EMBO Journal</i> , <b>1997</b> , 16, 6535-47	13	503
25	Dominant-negative mutants of importin-beta block multiple pathways of import and export through the nuclear pore complex. <i>EMBO Journal</i> , <b>1997</b> , 16, 1153-63	13	310
24	Regulatory roles of the nuclear envelope. <i>Experimental Cell Research</i> , <b>1996</b> , 229, 204-11	4.2	22
23	Importin provides a link between nuclear protein import and U snRNA export. <i>Cell</i> , <b>1996</b> , 87, 21-32	56.2	178
22	Nucleocytoplasmic transport. <i>Science</i> , <b>1996</b> , 271, 1513-8	33.3	1090
21	A yeast cap binding protein complex (yCBC) acts at an early step in pre-mRNA splicing. <i>Nucleic Acids Research</i> , <b>1996</b> , 24, 3332-6	20.1	98
20	Distinct functions for the two importin subunits in nuclear protein import. <i>Nature</i> , <b>1995</b> , 377, 246-8	50.4	426
19	The Sec61 complex is essential for the insertion of proteins into the membrane of the endoplasmic reticulum. <i>FEBS Letters</i> , <b>1995</b> , 362, 126-30	3.8	46
18	Two different subunits of importin cooperate to recognize nuclear localization signals and bind them to the nuclear envelope. <i>Current Biology</i> , <b>1995</b> , 5, 383-92	6.3	425
17	A Ran-binding motif in nuclear pore proteins. <i>Trends in Cell Biology</i> , <b>1995</b> , 5, 192-3	18.3	31
16	Binding of ribosomes to the rough endoplasmic reticulum mediated by the Sec61p-complex. <i>Journal of Cell Biology</i> , <b>1994</b> , 126, 925-34	7.3	163
15	Evolutionary conservation of components of the protein translocation complex. <i>Nature</i> , <b>1994</b> , 367, 654-7	50.4	253
14	Isolation of a protein that is essential for the first step of nuclear protein import. <i>Cell</i> , <b>1994</b> , 79, 767-78	56.2	638

13	Protein translocation into proteoliposomes reconstituted from purified components of the endoplasmic reticulum membrane. <i>Cell</i> , <b>1993</b> , 75, 615-30	56.2	561
12	Sec61p is adjacent to nascent type I and type II signal-anchor proteins during their membrane insertion. <i>Journal of Cell Biology</i> , <b>1993</b> , 121, 743-50	7.3	93
11	A tetrameric complex of membrane proteins in the endoplasmic reticulum. <i>FEBS Journal</i> , <b>1993</b> , 214, 375-81		123
10	A mammalian homolog of SEC61p and SECYp is associated with ribosomes and nascent polypeptides during translocation. <i>Cell</i> , <b>1992</b> , 71, 489-503	56.2	412
9	Components and mechanism of protein translocation across the ER membrane. <i>Antonie Van Leeuwenhoek</i> , <b>1992</b> , 61, 119-22	2.1	3
8	A protein of the endoplasmic reticulum involved early in polypeptide translocation. <i>Nature</i> , <b>1992</b> , 357, 47-52	50.4	281
7	Probing the molecular environment of translocating polypeptide chains by cross-linking. <i>Methods in Cell Biology</i> , <b>1991</b> , 34, 241-62	1.8	30
6	The identification of proteins in the proximity of signal-anchor sequences during their targeting to and insertion into the membrane of the ER. <i>Journal of Cell Biology</i> , <b>1991</b> , 113, 35-44	7.3	95
5	The signal sequence receptor has a second subunit and is part of a translocation complex in the endoplasmic reticulum as probed by bifunctional reagents. <i>Journal of Cell Biology</i> , <b>1990</b> , 111, 2283-94	7.3	86
4	The folate antagonist methotrexate diminishes replication of the coronavirus SARS-CoV-2 and enhances the antiviral efficacy of remdesivir in cell culture models		5
3	A toolbox of anti-mouse and rabbit IgG secondary nanobodies		2
2	Nanobodies combined with DNA-PAINT super-resolution reveal a staggered titin nano-architecture in flight muscles		1
1	A nanobody toolbox to investigate localisation and dynamics of <i>Drosophila</i> titins		1