

# Roman A Melnyk

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/5835256/roman-a-melnyk-publications-by-citations.pdf>  
**Version:** 2024-04-09

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.  
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

38 papers	1,433 citations	18 h-index	37 g-index
46 ext. papers	1,706 ext. citations	10.7 avg, IF	4.42 L-index

#	Paper	IF	Citations
38	A phenylalanine clamp catalyzes protein translocation through the anthrax toxin pore. <i>Science</i> , <b>2005</b> , 309, 777-81	33.3	242
37	Structure of heptameric protective antigen bound to an anthrax toxin receptor: a role for receptor in pH-dependent pore formation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2004</b> , 101, 13147-51	11.5	184
36	Exopolysaccharide biosynthetic glycoside hydrolases can be utilized to disrupt and prevent <i>Pseudomonas aeruginosa</i> biofilms. <i>Science Advances</i> , <b>2016</b> , 2, e1501632	14.3	119
35	The affinity of GXXXG motifs in transmembrane helix-helix interactions is modulated by long-range communication. <i>Journal of Biological Chemistry</i> , <b>2004</b> , 279, 16591-7	5.4	97
34	Retention of native-like oligomerization states in transmembrane segment peptides: application to the <i>Escherichia coli</i> aspartate receptor. <i>Biochemistry</i> , <b>2001</b> , 40, 11106-13	3.2	87
33	Polar residue tagging of transmembrane peptides. <i>Biopolymers</i> , <b>2003</b> , 71, 675-85	2.2	80
32	Crystal structure of <i>Clostridium difficile</i> toxin A. <i>Nature Microbiology</i> , <b>2016</b> , 1, 15002	26.6	62
31	Transmembrane domain mediated self-assembly of major coat protein subunits from Ff bacteriophage. <i>Journal of Molecular Biology</i> , <b>2002</b> , 315, 63-72	6.5	62
30	Small molecule inhibitors of <i>Clostridium difficile</i> toxin B-induced cellular damage. <i>Chemistry and Biology</i> , <b>2015</b> , 22, 175-85		54
29	A loop network within the anthrax toxin pore positions the phenylalanine clamp in an active conformation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2006</b> , 103, 9802-7	11.5	49
28	Translocation domain mutations affecting cellular toxicity identify the <i>Clostridium difficile</i> toxin B pore. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 3721-6	11.5	46
27	Functional defects in TcdB toxin uptake identify CSPG4 receptor-binding determinants. <i>Journal of Biological Chemistry</i> , <b>2017</b> , 292, 17290-17301	5.4	36
26	Structural determinants for the binding of anthrax lethal factor to oligomeric protective antigen. <i>Journal of Biological Chemistry</i> , <b>2006</b> , 281, 1630-5	5.4	35
25	Repurposing bacterial toxins for intracellular delivery of therapeutic proteins. <i>Biochemical Pharmacology</i> , <b>2017</b> , 142, 13-20	6	30
24	Efficient Delivery of Structurally Diverse Protein Cargo into Mammalian Cells by a Bacterial Toxin. <i>Molecular Pharmaceutics</i> , <b>2015</b> , 12, 2962-71	5.6	27
23	bioPROTACs as versatile modulators of intracellular therapeutic targets including proliferating cell nuclear antigen (PCNA). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 5791-5800	11.5	26
22	Host-targeted niclosamide inhibits <i>C. difficile</i> virulence and prevents disease in mice without disrupting the gut microbiota. <i>Nature Communications</i> , <b>2018</b> , 9, 5233	17.4	26

21	Clostridium difficile toxins A and B: Receptors, pores, and translocation into cells. <i>Critical Reviews in Biochemistry and Molecular Biology</i> , <b>2017</b> , 52, 461-473	8.7	24
20	Intestinal bile acids directly modulate the structure and function of TcdB toxin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 6792-6800	11.5	18
19	Drug Screen Identifies Leflunomide for Treatment of Inflammatory Bowel Disease Caused by TTC7A Deficiency. <i>Gastroenterology</i> , <b>2020</b> , 158, 1000-1015	13.3	16
18	Comment on "A small-molecule antivirulence agent for treating Clostridium difficile infection". <i>Science Translational Medicine</i> , <b>2016</b> , 8, 370tc2	17.5	13
17	A neutralizing antibody that blocks delivery of the enzymatic cargo of toxin TcdB into host cells. <i>Journal of Biological Chemistry</i> , <b>2018</b> , 293, 941-952	5.4	11
16	Recognition of Semaphorin Proteins by P. <i>fordellii</i> Lethal Toxin Reveals Principles of Receptor Specificity in Clostridial Toxins. <i>Cell</i> , <b>2020</b> , 182, 345-356.e16	56.2	10
15	Identification of a diphtheria toxin-like gene family beyond the Corynebacterium genus. <i>FEBS Letters</i> , <b>2018</b> , 592, 2693-2705	3.8	10
14	Attenuated diphtheria toxin mediates siRNA delivery. <i>Science Advances</i> , <b>2020</b> , 6,	14.3	9
13	An engineered chimeric toxin that cleaves activated mutant and wild-type RAS inhibits tumor growth. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 16938-16948	11.5	9
12	The C. difficile toxin B membrane translocation machinery is an evolutionarily conserved protein delivery apparatus. <i>Nature Communications</i> , <b>2020</b> , 11, 432	17.4	9
11	Large Clostridial Toxins: Mechanisms and Roles in Disease. <i>Microbiology and Molecular Biology Reviews</i> , <b>2021</b> , 85, e0006421	13.2	9
10	Intracellular Delivery of Human Purine Nucleoside Phosphorylase by Engineered Diphtheria Toxin Rescues Function in Target Cells. <i>Molecular Pharmaceutics</i> , <b>2018</b> , 15, 5217-5226	5.6	8
9	The glucosyltransferase activity of C. difficile Toxin B is required for disease pathogenesis. <i>PLoS Pathogens</i> , <b>2020</b> , 16, e1008852	7.6	6
8	Small Molecules Take A Big Step Against Clostridium difficile. <i>Trends in Microbiology</i> , <b>2015</b> , 23, 746-748	12.4	5
7	Defective mutations within the translocation domain of Clostridium difficile toxin B impair disease pathogenesis. <i>Pathogens and Disease</i> , <b>2016</b> , 74, ftv098	4.2	4
6	Direct Detection of Membrane-Inserting Fragments Defines the Translocation Pores of a Family of Pathogenic Toxins. <i>Journal of Molecular Biology</i> , <b>2018</b> , 430, 3190-3199	6.5	4
5	Exploiting the diphtheria toxin internalization receptor enhances delivery of proteins to lysosomes for enzyme replacement therapy. <i>Science Advances</i> , <b>2020</b> , 6,	14.3	3
4	Inhibition of tumor growth by a novel engineered chimeric toxin that cleaves activated mutant and wild-type RAS		1

- 3 Structures of distant diphtheria toxin homologs reveal functional determinants of an evolutionarily conserved toxin scaffold.. *Communications Biology*, **2022**, 5, 375 6.7 o
- 2 Dismantling a Toxin to Disarm a Superbug. *Trends in Pharmacological Sciences*, **2019**, 40, 155-156 13.2
- 1 Translocation expands the scope of the large clostridial toxin family. *Trends in Biochemical Sciences*, **2021**, 46, 953-959 10.3