

Prof. Benjamin AROETI - List of Publications

July 29, 2019

1. Kassa, EG., Zlotkin-Rivkin, E., Friedman, G., Ramachandran, RP, Melamed-Book, N., Weiss, AM., Belenky, M., Reichmann, D., Breuer, W., Pal, RR., Rosenshine, I., Lapierre, LA., Goldenring, JR & **Aroeti, B.** (2019) Enteropathogenic Escherichia coli remodels host endosomes to promote endocytic turnover. PLoS Pathogens 15(6): e1007851. [*Impact Factor – 6.946; the journal is placed 16th in the list of 133 journals in the field of Microbiology, and the article is cited 0 times by others*].
2. Ramachandran, RP., Vences-Catalán, F., Weiseman, D., Zlotkin-Rivkin, E., Shteyer, E., Melamed-Book, N., Rosenshine, I., Levy, S & **Aroeti, B.** (2018) EspH suppresses Erk by spatial segregation from CD81 tetraspanin microdomains. Infection and Immunity 86(10) e00303-18. [*Impact Factor – 3.533; the journal is placed 34th in the list of 89 journals in that field, and the article is cited 0 times by others*].
3. **Aroeti, B** & Kassa GE. (2018). Stinging tight junctions with WASPS. Cellular and Molecular Gastroenterology and Hepatology (CMGH) 5(3) 420-421. **Invited Editorial Review.**
4. Brahami, A., Levy, H., Zlotkin-Rivkin, E., Melamed-Book, N., Tal, N., Lev, D., Yeshua, T., Fedosyeyev, O., **Aroeti, B** & Lewis, A. (2017) Live cell near-field optical imaging and voltage sensing with ultrasensitive force control. Optics Express 25(11), 12131-12143. [*Impact Factor – 3.531; the journal is placed 20th in the list of 95 journals in the field of Optics, and the article is cited 1 time by others*].
5. Yashunsky V & **Aroeti, B.** (2015) Infrared surface plasmon spectroscopy decodes cellular processes in epithelial host cells upon enteropathogenic *E. coli* infection; chapter 20. Ye Fang (ed.), Label-Free Biosensor Methods in Drug Discovery, Methods in Pharmacology and Toxicology, © Springer Science+Business Media New York. **Book Chapter.**
6. Cohen, M., Kitsberg, D., Tsytkin, S., Shulman, M., **Aroeti, B** & Nahmias, Y. (2014) Live imaging of GLUT2 glucose dependent trafficking and its inhibition in polarized epithelial cells. Open Biology 4(7) e140091 ***Received Cover.** [*Impact Factor – 4.124; the journal is placed 92nd in the list of 298 journals in the field of Biochemistry and Molecular Biology, and the article is cited 14 times by others*].
7. Yashunsky, V., Kharliker, L., Zlotkin-Rivkin, E., Rund, D., Melamed-Book, N., Zahavi, EE., Perlson, E., Merccone, S., Golosovsky, M., Davidov, D & **Aroeti, B.** (2013) Real-time sensing of enteropathogenic *E. coli*-induced effects on epithelial host cell height, cell-substrate interactions, and endocytic processes by infrared surface plasmon spectroscopy. PLoS ONE 8(10) e78431. [*Impact Factor – 3.337; the journal is placed 24th in the list of 69 journals in the field of Multidisciplinary Sciences, and the article is cited 5 times by others*].

8. Yashunsky, V., Marciano, T., Lirtsman, V., Golsovsky, M., Davidov, D & **Aroeti, B.** (2012) Real-time sensing of cell morphology by infrared waveguide spectroscopy. PLoS ONE 7(10) e48454. [*Impact Factor – 3.337; the journal is placed 24th in the list of 69 journals in the field of Multidisciplinary Sciences, and the article is cited 7 times by others*].
9. Yashunsky, V., Lirtsman, V., Zilbershtein, A., Bein, A., Schwartz, B., **Aroeti, B.**, Golosovsky, M & Davidov, D. (2012) Surface plasmon based infrared spectroscopy for cell biosensing. The Journal of Biomedical Optics 17(8) 081409 (1-8). [*Impact Factor – 2.578; the journal is placed 35th in the list of 79 journals in the field of Biochemical Research Methods, and the article is cited 10 times by others*].
10. Yashunsky, V., Zilbershtein, A., Lirtsman, V., Marciano, T., **Aroeti, B.**, Golosovsky, M & Davidov, D. (2012) Infrared surface plasmon spectroscopy and biosensing. Proceedings SPIE 8234, Plasmonics in Biology and Medicine IX, 823419-823419-7.
11. Zilbershtein, A., Golosovsky, M., Lirtsman, V., **Aroeti, B** & Davidov, D. (2012) Quantitative surface plasmon spectroscopy: Determination of the infrared optical constants of living cells. Vibrational Spectroscopy 61, 43-49. [*Impact Factor – 1.844; the journal is placed 23rd in the list of 41 journals in the field of Spectroscopy, and the article is cited 13 times by others*].
12. **Aroeti, B.**, Friedman, G., Zlotkin-Rivkin, E & Donnenberg, MS. (2012) Retraction of enteropathogenic E. coli type IV pili promotes efficient host cell colonization, effector translocation, and tight junction disruption. Gut Microbes 3:3, 1-5. [*Impact Factor – 7.823; the journal is placed 12th in the list of 133 journals in the field of Microbiology, and the article is cited 13 times by others*]. **Invited Review.**
13. Yashunsky, V., Zilbershtein, A., Lirtsman, V., Marciano, T., **Aroeti, B.**, Golosovsky, M & Davidov, D. (2012) "Infrared surface plasmon spectroscopy and biosensing" in Plasmonics in Biology and Medicine IX, edited by Tuan Vo-Dinh, Joseph R. Lakowicz, Proceedings of SPIE Vol. 8234 (SPIE, Bellingham, WA) 823419. **Book Chapter.**
14. Zahavi, EE., Lieberman, JA., Donnenberg, MS., Nitzan, M., Baruch, K., Rosenshine, I., Turner, JR., Melamed-Book, N., Feinstein, N., Zlotkin-Rivkin, E & **Aroeti, B.** (2011) Bundle-forming pilus retraction enhances enteropathogenic Escherichia coli infectivity. Molecular Biology of the Cell 22, 2436-2437. **Highlighted by MBoC.** [*Impact Factor – 4.084; the journal is placed 82nd in the list of 193 journals in the field of Cell Biology, and the article is cited 26 times by others*].
15. Matto, M., Sklan, EH., David, N., Melamed-Book, N., Casanova, JE., Glenn, JS & **Aroeti, B.** (2011) Role for ADP ribosylation factor 1 in the regulation of hepatitis C virus replication. Journal of Virology 85, 946-956. [*Impact Factor – 4.259; the journal is placed 8th in the list of 36 journals in the field of Virology, and the article is cited 27 times by others*].

16. Yashunsky, V., Zilberstein, A., Marciano, T., Lirtsman, V., Golosovsky, M., **Aroeti, B** & Davidov, D. (2011) Studying Living Cells by Infrared Surface Plasmon Spectroscopy. Chapter 6 In: Plasmoms: Structure, Properties. Editor: Anton E. Turumen. Nova Science Publishers. **Book Chapter**.
17. Yashunsky, V., Lirtsman, V., Golosovsky, M., Davidov, D & **Aroeti, B**. (2010) Real-time monitoring of epithelial cell-cell and cell-substrate interactions by infrared surface plasmon spectroscopy. Biophysical Journal 99, 4028-4036. [*Impact Factor – 3.845; the journal is placed 20th in the list of 72 journals in the field of Biophysics, and the article is cited 47 times by others*].
18. Golosovsky, M., Yashunsky, V., Zilberstein A., Marciano, T., Lirtsman, V., Davidov, D & **Aroeti, B**. (2010) Infrared surface plasmon spectroscopy of living cells. Chapter 14 In Plasmons: Theory and Applications. Editor: Kristina N. Helsey. Nova Science Publishers. **Book Chapter**.
19. Simovitch, M., Sason, H., Cohen, S., Zahavi, EE., Melamed-Book, N., Weiss, A., **Aroeti, B** & Rosenshine I. (2010) EspM inhibits pedestal formation by enterohaemorrhagic Escherichia coli and enteropathogenic E. coli and disrupts the architecture of a polarized epithelial monolayer. Cellular Microbiology 12, 489-505. [*Impact Factor – 4.404; the journal is placed 31st in the list of 133 journals in the field of Microbiology, and the article is cited 30 times by others*].
20. Yashunsky, V., Shimron, S., Lirtsman, V., Weiss, AM., Melamed-Book, N., Golosovsky, M., Davidov, D & **Aroeti, B**. (2009) Real-time monitoring of transferrin-induced endocytic vesicle formation by mid-infrared surface plasmon resonance. Biophysical Journal 19, 1003-12. [*Impact Factor – 3.845; the journal is placed 20th in the list of 72 journals in the field of Biophysics, and the article is cited 27 times by others*].
21. Sason, H., Milgrom, M., Weiss, AM., Melamed-Book, N., Balla, T., Grinstein, S., Backert, S., Rosenshine, I & **Aroeti B**. (2009) Enteropathogenic Escherichia coli subverts phosphatidylinositol 4,5-bisphosphate and phosphatidylinositol 3,4,5-trisphosphate upon epithelial cell infection. Molecular Biology of the Cell 20, 544-55. [*Impact Factor – 4.084; the journal is placed 82nd in the list of 193 journals in the field of Cell Biology, and the article is cited 49 times by others*].
22. Golosovsky, M., Lirtsman, V., Yashunsky, V., Davidov, D & **Aroeti, B**. (2009) Mid-Infrared Surface-Plasmon-Resonance - a novel biophysical tool for studying living cells. Journal of Applied Physics 105, 102036. [*Impact Factor – 2.224; the journal is placed 59th in the list of 148 journals in the field of Applied Physics, and the article is cited 1 times by others*].
23. Golosovsky, M., Davidov, D & **Aroeti, B**. (2008) SPR reaches new depths. BioOptics World. **Invited Review**.
24. Sklan, EH., Staschke, K., Oakes, M., Elazar, M., Winters, M., **Aroeti, B.**, Danieli, T & Glenn, JS. (2007) A Rab-GAP TBC domain protein binds hepatitis C virus. Journal of Virology 81, 11096-11105. [*Impact Factor – 4.259; the journal is placed 8th in the list of 36 journals in the field of Virology, and the article is cited 57 times by others*].

25. Leyt, J., Melamed-Book, N., Vaerman, J-P., Cohen, S., Weiss, AM & **Aroeti, B.** (2007) Cholesterol-sensitive modulation of transcytosis. Molecular Biology of the Cell 18, 2057-2071. [*Impact Factor – 4.084; the journal is placed 82nd in the list of 193 journals in the field of Cell Biology, and the article is cited 6 times by others*].
26. Ziblat, R., Lirtsman, V., Davidov, D & **Aroeti, B.** (2006) Infrared surface plasmon resonance-a novel tool for real-time sensing of variations in living cells. Biophysical Journal 90, 2592-2599. *The paper has been selected for review in the 'News' section of Analytical Chemistry June 1st 2006, page 3485. [Impact Factor – 3.845; the journal is placed 20th in the list of 72 journals in the field of Biophysics, and the article is cited 77 times by others]*.
27. Matto, M., Rice, CM., **Aroeti, B*** & Glenn, JS*. (2004) Hepatitis C virus core protein associates with detergent resistant membranes distinct from classical plasma membrane rafts. Journal of Virology 78, 12047-12053. * Equal Contribution. [*Impact Factor – 4.259; the journal is placed 8th in the list of 36 journals in the field of Virology, and the article is cited 41 times by others*].
28. Shelly, M., Mosesson, Y., Citri, A., Lavi, S., Zwang, Y., Melamed-Book, N., **Aroeti, B** & Yarden, Y. (2003) Polar Expression of ErbB-2/HER2 in Epithelia: Bimodal Regulation by Lin-7. Developmental Cell 5, 475-486. [*Impact Factor – 9.878; the journal is placed 20th in the list of 196 journals in the field of Cell Biology, and the article is cited 40 times by others*].
29. Orzech, E., Livshits, L., Leyt, J., Okhrimenko, H., Reich, V., Cohen, S., Weiss, AM., Melamed-Book, N., Lebendiker, M., Altschuler, Y & **Aroeti, B.** (2001) Interactions between AP-1 adaptor of the clathrin coat and microtubules, potentially mediated via type 1a microtubule-associated proteins. Journal of Biological Chemistry 276, 31340-31348. [*Impact Factor – 4.279; the journal is placed 81st in the list of 298 journals in the field of Biochemistry and Molecular Biology, and the article is cited 40 times by others*].
30. Wang, E., Brown, PS., **Aroeti, B.**, Chapin, SJ., Mostov, KE & Dunn, KW. (2000) Apical and basolateral endocytic pathways of MDCK cells meet in acidic common endosomes distinct from a nearly-neutral apical recycling endosomes. Traffic 1, 480-493. [*Impact Factor – 4.106; the journal is placed 77th in the list of 193 journals in the field of Cell Biology, and the article is cited 107 times by others*].
31. Orzech, E., Cohen, S., Weiss, A & **Aroeti, B.** (2000) Interactions between the endocytic and exocytic pathways in polarized Madin Darby canine kidney cells. Journal of Biological Chemistry 275, 15207-15219. [*Impact Factor – 4.279; the journal is placed 81st in the list of 298 journals in the field of Biochemistry and Molecular Biology, and the article is cited 58 times by others*].
32. Brown, SP., Wang, E., **Aroeti, B.**, Chapin, SJ., Mostov, K & Dunn, KW. (2000) Definition of distinct compartments in polarized Madin-Darby canine kidney (MDCK) cells for membrane-volume sorting, polarized sorting and apical recycling. Traffic 1, 124-140. [*Impact Factor – 4.106;*

the journal is placed 77th in the list of 193 journals in the field of Cell Biology, and the article is cited 122 times by others].

33. Orzech, E., Schlessinger, K., Weiss, AM., Okamoto, TC & **Aroeti, B.** (1999) Interactions of the AP-1 Golgi adaptor with the polymeric immunoglobulin receptor and their possible role in mediating BFA-sensitive basolateral targeting from the *trans*-Golgi network. Journal of Biological Chemistry 274, 2201-2215. [Impact Factor – 4.279; the journal is placed 81st in the list of 298 journals in the field of Biochemistry and Molecular Biology, and the article is cited 40 times by others].
34. Yelin, R., Steiner-Mordoch, S., **Aroeti, B** & Schuldiner, S. (1998) Glycosylation of a vesicular monoamine transporter: a mutation in a conserved proline residue affects the activity, glycosylation and localization of the transporter. Journal of Neurochemistry 71, 2518-2527. [Impact Factor – 4.371; the journal is placed 49th in the list of 298 journals in the field of Biochemistry and Molecular Biology, and the article is cited 10 times by others].
35. Chapin, SJ., Enrich, C., **Aroeti, B.**, Havel, RJ & Mostov, KE. (1996) Calmodulin binds to the basolateral targeting signal of the polymeric immunoglobulin receptor. Journal of Biological Chemistry 271, 1336-1342. [Impact Factor – 4.279; the journal is placed 81st in the list of 298 journals in the field of Biochemistry and Molecular Biology, and the article is cited 33 times by others].
36. Reich, V., Mostov, KE & **Aroeti, B.** (1996) The basolateral sorting signal of the polymeric immunoglobulin receptor contains two functional domains Journal of Cell Science 109, 2133-2139. [Impact Factor – 4.831; the journal is placed 65th in the list of 193 journals in the field of Cell Biology, and the article is cited 34 times by others].
37. **Aroeti, B** & Mostov, KE. (1994) Polarized sorting of the polymeric immunoglobulin receptor in the exocytotic and endocytotic pathways is controlled by the same amino acids. EMBO Journal 13, 2297-2304. [Impact Factor – 10.568; the journal is placed 13th in the list of 298 journals in the field of Cell Biology, and the article is cited 92 times by others]
38. Apodaca, G., **Aroeti, B.**, Tang, K & Mostov, KE. (1993) Brefeldin A inhibits the delivery of the polymeric immunoglobulin receptor to the basolateral surface of MDCK cells. Journal of Biological Chemistry 268, 20380-20385. [Impact Factor – 4.279; the journal is placed 81st in the list of 298 journals in the field of Biochemistry and Molecular Biology, and the article is cited 36 times by others].
39. **Aroeti, B.**, Kosen, PA., Kuntz, ID., Cohen, FE. & Mostov, KE. (1993) Mutational and secondary structural analysis of the basolateral sorting signal of the polymeric immunoglobulin receptor. The Journal of Cell Biology 123, 1149-1160. [Impact Factor – 9.362; the journal is placed 23rd in the list of 193 journals in the field of Cell Biology, and the article is cited 123 times by others].
40. Mostov, KE., Apodaca, G., **Aroeti, B** & Okamoto, C. (1992) Plasma membrane protein sorting in polarized epithelial cells. The Journal of Cell Biology 116, 577-583. [Impact Factor – 9.362; the

journal is placed 23rd in the list of 193 journals in the field of Cell Biology, and the article is cited 246 times by others].

41. **Aroeti, B.**, Gutman, O & Henis, YI. (1992) Transient alterations in the lateral mobility of erythrocyte membrane components during Sendai virus-mediated fusion. The Journal of Biological Chemistry 267, 13272-13277. [*Impact Factor – 4.279; the journal is placed 81st in the list of 298 journals in the field of Biochemistry and Molecular Biology, and the article is cited 4 times by others*].
42. **Aroeti, B** & Henis, YI. (1991) Accumulation of Sendai virus glycoproteins in cell-cell contact regions and its role in cell fusion. The Journal of Biological Chemistry 266, 15845-15849. [*Impact Factor – 4.279; the journal is placed 81st in the list of 298 journals in the field of Biochemistry and Molecular Biology, and the article is cited 25 times by others*].
43. **Aroeti, B.**, Casanova, JE., Okamoto, C., Cardone, M., Pollack, A., Tang, K & Mostov, KM. (1991) Polymeric immunoglobulin receptor. In: Molecular Biology of Receptors and Transporters (Friedlander, M. and Mueckler, M. eds.) International Review of Cytology vol. 137B Academic Press, Inc. pp. 157-168. **Book Chapter**.
44. **Aroeti, B.**, Jovin, TM & Henis, YI. (1990) Rotational mobility of Sendai virus glycoproteins in membranes of fused human erythrocytes and in the envelopes of cell-bound virions. Biochemistry 29, 9119-9125. [*Impact Factor – 2.791; the journal is placed 142nd in the list of 298 journals in the field of Cell Biology, and the article is cited 13 times by others*].
45. Henis, YI., Herman-Barhom, Y., **Aroeti, B** & Gutman, O. (1989) Lateral mobility of both envelope proteins (F and HN) of Sendai virus in the cell membrane is essential for cell-cell fusion. The Journal of Biological Chemistry 264, 17119-17125.
46. **Aroeti, B** & Henis YI. (1988) Effects of fusion temperature on the lateral mobility of Sendai virus glycoproteins in erythrocyte membranes and on cell fusion indicate that glycoprotein mobilization is required for cell fusion. Biochemistry 27, 5654-5661. [*Impact Factor – 2.791; the journal is placed 142nd in the list of 298 journals in the field of Cell Biology, and the article is cited 23 times by others*].
47. **Aroeti, B** & Henis, YI. (1988) Fusion of native Sendai virions with human erythrocytes: quantitation by fluorescence photobleaching recovery. Experimental Cell Research 170, 322-337. [*Impact Factor – 3.317; the journal is placed 105th in the list of 193 journals in the field of Cell Biology, and the article is cited 16 times by others*].
48. **Aroeti, B.**, Okhrimenko, H., Reich, V & Orzech, E. (1998) Polarized trafficking of plasma membrane proteins: emerging roles for coats, SNAREs, GTPases and their link to the cytoskeleton. Biochimica et Biophysica Acta-Biomembranes 1376, 57-90. [*Impact Factor – 3.807; the journal is placed 16th in the list of 72 journals in the field of Biophysics, and the article is cited 47 times by others*]. **Invited Review**.

49. **Aroeti, B** & Henis YI. (1986) Fluorescence photobleaching recovery as a method to quantitate viral envelope-cell fusion: application to study fusion of Sendai virus envelope with cells. Biochemistry 25, 4588-4596. [*Impact Factor – 2.791; the journal is placed 142nd in the list of 298 journals in the field of Cell Biology, and the article is cited 14 times by others*].
50. **Aroeti, B** & Henis, YI. (1986) The lateral mobility of cell membrane components is not altered following cell fusion induced by Sendai virus. Experimental Cell Research 162, 243-254. [*Impact Factor – 3.317; the journal is placed 105th in the list of 193 journals in the field of Cell Biology, and the article is cited 6 times by others*].