

50 most cited papers by IMG authors (first or corresponding) since the establishment of the Institute of Experimental Biology and Genetics in 1962

(Times cited in red)

1. Bubenik, J; Baresova, M; **Viklicky, V**; Jakoubkova J; Sainerova H; Donner, J. Established cell line of urinary-bladder carcinoma (T-24) containing tumor-specific antigen. **Int J Cancer**. **1973**;11:765-773: **450**
2. **Brdicka T, Pavlistová D**, Leo A, Bruyns E, **Korínek V, Angelisová P**, Scherer J, Shevchenko A, **Hilgert I, Cerný J, Drbal K**, Kuramitsu Y, Kornacker B, **Horejsí V**, Schraven B. Phosphoprotein associated with glycosphingolipid-enriched microdomains (PAG), a novel ubiquitously expressed transmembrane adaptor protein, binds the protein tyrosine kinase csk and is involved in regulation of T cell activation. **J Exp Med**. **2000**;191:1591-604: **284**
3. **Cinek, T; Horejsi, V**. The nature of large noncovalent complexes containing glycosyl-phosphatidylinositol-anchored membrane-glycoproteins and protein tyrosine kinases. **J Immunol**. **1992**;149:2262-2270: **272**
4. Zavadil, J; **Cermak, L**; Soto-Nieves, N; Bottinger, EP. Integration of TGF-beta/Smad and Jagged1/Notch signalling in epithelial-to-mesenchymal transitiv. **EMBO J**. **2004**;23:1155-1165: **253**
5. **Bazil, V; Horejsi, V**; Baudys, M; **Kristofova, H**; Strominger, JI; Kostka, V; **Hilgert, I**. Biochemical-characterization of a soluble form of the 53-kDa monocyte surface-antigen. **Eur J Immunol**. **1986**;16:1583-1589: **234**
6. **Horejsi, V; Drbal, K; Cebecauer, M; Cerny, J; Brdicka, T; Angelisova, P**; Stockinger, H. GPI-microdomains: a role in signalling via immunoreceptors. **Immunol Today**. **1999**;20:356-361: **228**
7. **Pavlicek, A**; Hrda, S; Flegr, J. FreeTree-freeware program for construction of phylogenetic trees on the basis of distance data and bootstrap jackknife analysis of the tree robustness. Application in the RAPD analysis of genus Frenkelia. **Folia Biol**. **1999**;45:97-99: **184**
8. Sinkkonen, L; Hugenschmidt, T; Berninger, P; Gaidatzis, D; Mohn, F; Artus-Revel, CG; Zavolan, M; **Svoboda, P***; Filipowicz, W. MicroRNAs control de novo DNA methylation through regulation of transcriptional repressors in mouse embryonic stem cells. **Nat Struct Mol Biol**. **2008**;15:259-267: **178**
9. **Svoboda, J; Hilgert, I**; Simkovic, D; **Chyle, P**. Demonstration of absence of infectious Rous virus in rat tumour XC, whose structurally intact cells produce Rous sarcoma when transferred to chicks. **Folia Biol**. **1963**;9:77-81: **170**
10. **Holan, V; Hasek, M; Bubenik, J; Chutna, J**. Antigen-mediated macrophage adherence inhibition. **Cell Immunol**. **1974**;13:107-116: **151**

11. Angelisova, P; Hilgert, I; Horejsi, V. Association of 4 antigens of the tetraspans family (CD37, CD53, TAPA-1, and R2/C33) with MHC class-II glycoproteins. **Immunogenetics**. **1994**;39:249-256: **145**
12. Horejsi V, Vlcek C. Novel structurally distinct family of leucocyte surface glycoproteins including CD9, CD37, CD53 and CD63. **Review**. **FEBS Lett**. **1991**;288:1-4. **144**
13. Stefanova, I; Hilgert, I; Kristofova, H; Brown, R; Low, MG; Horejsi, V. Characterization of a broadly expressed human-leukocyte surface-antigen MEM-43 anchored in membrane through phosphatidylinositol. **Mol Immunol**. **1989**;26:153-161: **142**
14. Demant, P; Capkova, J; Hinzova, E; Voracova, B. Role of histocompatibility-2-linked s-slp region in control of mouse complement. **Proc Natl Acad Sci USA**. **1973**;70:863-864: **137**
15. Brdicka, T; Imrich, M; Angelisova, P; Brdickova, N; Horvath, O; Spicka, J; Hilgert, I; Luskova, P; Draber, P; Novak, P; Engels, N; Wienands, J; Simeoni, L; Osterreicher, J; Aguado, E; Malissen, M; Schraven, B; Horejsi, V. Non-T cell activation linker (NTAL): A transmembrane adaptor protein involved in immunoreceptor signaling. **J Exp Med**. **2002**;196:1617-1626: **131**
16. Forejt, J; Ivanyi, P. Genetic studies on male-sterility of hybrids between laboratory and wild mice (*Mus-musculus* L). **Genet Res**. **1974**;24:189-206: **129**
17. Draberova L, Draber P. Thy-1 glycoprotein and src-like protein-tyrosine kinase p53/p56Lyn are associated in large detergent-resistant complexes in rat basophilic leukemia cells. **Proc Natl Acad Sci USA**. **1993**;90:3611-3615: **121**
18. Fidlerova, H; Senger, G; Kost, M; Sanseau, P; Sheer, D. 2 simple procedures for releasing chromatin from routinely fixed cells for fluorescence in-situ hybridization. **Cytogenet Cell Genet**. **1994**;65: 203-205: **118**
19. Horejsi, V; Smolek, P; Kocourek, J. Studies on lectins. 35. Water-soluble O-glycosyl polyacrylamide derivatives for specific precipitation of lectins. **Biochim Biophys Acta**. **1978**;538:293-298: **116**
20. Bubenik J, Simova J, Jandlova T. Immunotherapy of cancer using local administration of lymphoid cells transformed by IL-2 cDNA and constitutively producing IL-2. **Immunol Lett**. **1990**;23:287-92: **113**
21. Urbanek, P; Fetka, I; Meisler, MH; Busslinger, M. Cooperation of Pax2 and Pax5 in midbrain and cerebellum development. **Proc Natl Acad Sci USA**. **1997**;94:5703-5708: **112**
22. Bazil, V; Strominger, JL. Metalloprotease and serine-protease are involved in cleavage of CD43, CD44, and CD16 from stimulated human granulocytes - induction of cleavage of I-selectin via CD16. **J Immunol**. **1994**;152:1314-1322: **112**
23. Bazil, V; Baudys, M; Hilgert, I; Stefanova, I; Low, MG; Zbrozek, J; Horejsi, V. Structural relationship between the soluble and membrane-bound forms of human monocyte surface glycoprotein-CD14. **Mol Immunol**. **1989**;26:657-662: **112**

24. [Viklicky V](#), [Draber P](#), Hasek J, [Bartek J](#). Production and characterization of a monoclonal antitubulin antibody. **Cell Biol. Int. Rep.** **1982**;6:725-31: **110**
25. [Kozmik Z](#), Holland ND, [Kalousova A](#), [Paces J](#), Schubert M, Holland LZ. Characterization of an amphioxus paired box gene, *AmphiPax2/5/8*: developmental expression patterns in optic support cells, nephridium, thyroid-like structures and pharyngeal gill slits, but not in the midbrain-hindbrain boundary region. **Development.** **1999**;126:1295-304: **110**
26. [Demant, P](#). H-2 gene complex and its role in alloimmune reactions. *Transplant Rev.* 1973;15:162-200: **106**
27. [Horejsi, V](#); Zhang, WG; Schraven, B. Transmembrane adaptor proteins: Organizers of immunoreceptor signalling. **Nat Rev Immunol.** **2004**;4:603-616: **105**
28. [Bubenik, J](#); Voitenok, NN; Kieler, J; Prassolov, VS; Chumakov, PM; Bubenikova, D; [Simova, J](#); [Jandlova, T](#). Local-administration of cells containing an inserted IL-2 gene and producing IL-2 inhibits growth of human-tumors in nu nu mice. **Immunol Lett.** **1988**;19:279-282: **105**
29. [Forejt, J](#); [Gregorova, S](#). Genetic-analysis of genomic imprinting - an imprintor-1 gene controls inactivation of the paternal copy of the mouse *tme* locus. **Cell.** **1992**;70:443-450: **103**
30. [Hala, K](#); [Vilhelmova, M](#); [Hartmanova, J](#). Probable crossing-over in b-blood group system of chickens. **Immunogenetics** **1976**;3:97-103: **102**
31. [Hasek, M](#); [Knizetova F](#); [Mervartova H](#). Syngeneic lines of chickens. I. Inbreeding and selection by means of skin grafts and tests for erythrocyte antigens in C line chickens. **Folia Biol.** **1966**;12:335-341: **101**
32. Cigler, P; Kozisek, M; [Rezacova, P](#); [Brynda, J](#); Otwinowski, Z; Pokorna, J; Plesek, J; Gruner, B; Doleckova-Maresova, L; Masa, M; [Sedlacek, J](#); Bodem, J; Krausslich, HG; Kral, V; Konvalinka, J. From nonpeptide toward noncarbon protease inhibitors: Metallacarboranes as specific and potent inhibitors of HIV protease. **Proc Natl Acad Sci USA.** **2005**;102:15394-15399: **100**
33. [Horejsi, V](#). The roles of membrane microdomains (rafts) in T cell activation. **Immunol Rev.** **2003**;191:148-164: **100**
34. [Bazil, V](#); [Horejsi, V](#). Shedding of the CD44 adhesion molecule from leukocytes induced by anti-CD44 monoclonal-antibody simulating the effect of a natural receptor ligand. **J Immunol.** **1992**;149:747-753: **98**
35. Lachmann, PJ; Grennan, D; Martin, A; [Demant P](#). Identification of Ss protein as murine C4. **Nature.** **1975**;258:242-243: **98**
36. [Forejt, J](#). Hybrid sterility in the mouse. **Trends Genet.** **1996**;12:412-417: **97**
37. [Ivanyi, P](#); Starka, L; Hampl, R; Mickova, M. Genetic association between H-2 gene and testosterone metabolism in mice. **Nature New Biol.** **1972**;238: 280-281: **97**

38. Machon O, Van den Bout CJ, Backman M, Kemler R, Krauss S. Role of beta-catenin in the developing cortical and hippocampal neuroepithelium. **Neuroscience**. **2003**;122:129-143: **96**
39. Bohuslav, J Cinek, T; Horejsi, V. Large, detergent-resistant complexes containing murine antigens Thy-1 and Ly-6 and protein tyrosine kinase p56(Lck*) **Eur J Immunol**. **1993**;23:825-831: **94**
40. Stefanova, I; Horejsi, V. Association of the CD59 and CD55 cell-surface glycoproteins with other membrane molecules. **J Immunol**. **1991**;147:1587-1592: **91**
41. Bubenik J, Perlmann P, Indrova M, Simova J, Jandlova T, Neuwirt J. Growth inhibition of MC-induced mouse sarcoma by TCGF (IL-2)-containing preparations. **Cancer Immunol Immunother**. **1983**;14:205-206: **89**
42. Hala, K; Hasek, M; Hlozaneck, I; Hort, J; Knizetova F; Mervartova H. Syngeneic lines of chickens. 2. Inbreeding and selection within M W and I lines and crosses between C M and W lines. **Folia Biol**. **1966**;12:407-422: **89**
43. Lemonnier, F; Neauportsautes, C; Kourilsky, FM; Demant, P. Relationships between private and public H-2 specificities on cell-surface. **Immunogenetics**. **1975**;2:517-529: **88**
44. Kalab, P; Peknicova, J; Geussova, G; Moos, J. Regulation of protein tyrosine phosphorylation in boar sperm through a cAMP-dependent pathway. **Mol Reprod Dev**. **1998**;51: 304-314: **85**
45. Cerny, J; Stockinger, H; Horejsi, V. Noncovalent associations of T lymphocyte surface proteins. **Eur J Immunol**. **1996**;26:2335-2343: **85**
46. Forejt, J; Gregorova, S. Meiotic studies of translocations causing male-sterility in mouse. 1. Autosomal reciprocal translocations. **Cytogenet Cell Genet**. **1977**;19:159-179: **85**
47. Mihola O, Trachtulec Z, Vlcek C, Schimenti JC, Forejt J. A mouse speciation gene encodes a meiotic histone H3 methyltransferase. **Science** **2009**;323:373-375: **82**
48. Dostalova, Z; Calvete, JJ; Sanz, L; Topferpetersen, E. Quantitation of boar spermadhesins in accessory sex gland fluids and on the surface of epididymal, ejaculated and capacitated spermatozoa. **Biochim Biophys Acta-Gen Subj**. **1994**;1200:48-54: **81**
49. Bazil, V; Strominger, JL. CD43, the major sialoglycoprotein of human-leukocytes, is proteolytically cleaved from the surface of stimulated lymphocytes and granulocytes. **Proc Natl Acad Sci USA**. **1993**;90:3792-3796: **81**
50. Volna, P; Lebduska, P; Draberova, L; Simova, S; Heneberg, P; Boubelik, M; Bugajev, V; Malissen, B; Wilson, BS; Horejsi, V; Malissen, M; Draber, P. Negative regulation of mast cell signaling and function by the adaptor LAB/NTAL. **J Exp Med**. **2004**;200:1001-1013: **77**