

## 7 References

- Akerstrom, S., A. Mirazimi and Y. J. Tan (2007). "Inhibition of SARS-CoV replication cycle by small interference RNAs silencing specific SARS proteins, 7a/7b, 3a/3b and S." *Antiviral Res* **73**(3): 219-27.
- Akerstrom, S., Y. J. Tan and A. Mirazimi (2006). "Amino acids 15-28 in the ectodomain of SARS coronavirus 3a protein induces neutralizing antibodies." *FEBS Lett* **580**(16): 3799-803.
- Alexander, S. and J. H. Elder (1984). "Carbohydrate dramatically influences immune reactivity of antisera to viral glycoprotein antigens." *Science* **226**(4680): 1328-30.
- Almeida, J. D. and D. A. Tyrrell (1967). "The morphology of three previously uncharacterized human respiratory viruses that grow in organ culture." *J Gen Virol* **1**(2): 175-8.
- Andries, K. and M. Pensaert (1981). "Vomiting and wasting disease, a coronavirus infection of pigs." *Adv Exp Med Biol* **142**: 399-408.
- Arden, K. E., M. D. Nissen, T. P. Sloots and I. M. Mackay (2005). "New human coronavirus, HCoV-NL63, associated with severe lower respiratory tract disease in Australia." *J Med Virol* **75**(3): 455-62.
- Aslund, F. and J. Beckwith (1999). "Bridge over troubled waters: sensing stress by disulfide bond formation." *Cell* **96**(6): 751-3.
- Bastien, N., K. Anderson, L. Hart, P. Van Caeseele, K. Brandt, D. Milley, T. Hatchette, E. C. Weiss and Y. Li (2005a). "Human coronavirus NL63 infection in Canada." *J Infect Dis* **191**(4): 503-6.
- Bastien, N., J. L. Robinson, A. Tse, B. E. Lee, L. Hart and Y. Li (2005b). "Human coronavirus NL-63 infections in children: a 1-year study." *J Clin Microbiol* **43**(9): 4567-73.
- Berry, J. D., S. Jones, M. A. Drebot, A. Andonov, M. Sabara, X. Y. Yuan, H. Weingartl, L. Fernando, P. Marszal, J. Gren, B. Nicolas, M. Andonova, F. Ranada, M. J. Gubbins, T. B. Ball, P. Kitching, Y. Li, A. Kabani and F. Plummer (2004). "Development and characterisation of neutralising monoclonal antibody to the SARS-coronavirus." *J Virol Methods* **120**(1): 87-96.
- Bos, E. C., W. Luytjes, H. V. van der Meulen, H. K. Koerten and W. J. Spaan (1996). "The production of recombinant infectious DI-particles of a murine coronavirus in the absence of helper virus." *Virology* **218**(1): 52-60.
- Braakman, I. and E. van Anken (2000). "Folding of viral envelope glycoproteins in the endoplasmic reticulum." *Traffic* **1**(7): 533-9.
- Bradburne, A. F., M. L. Bynoe and D. A. Tyrrell (1967). "Effects of a "new" human respiratory virus in volunteers." *Br Med J* **3**(5568): 767-9.
- Brian, D. A. and R. S. Baric (2005). "Coronavirus genome structure and replication." *Curr Top Microbiol Immunol* **287**: 1-30.
- Calisher, C. H., J. E. Childs, H. E. Field, K. V. Holmes and T. Schountz (2006). "Bats: important reservoir hosts of emerging viruses." *Clin Microbiol Rev* **19**(3): 531-45.
- Calvo, E., D. Escors, J. A. Lopez, J. M. Gonzalez, A. Alvarez, E. Arza and L. Enjuanes (2005). "Phosphorylation and subcellular localization of transmissible gastroenteritis virus nucleocapsid protein in infected cells." *J Gen Virol* **86**(Pt 8): 2255-67.
- Cavaleros, M., R. Buffenstein, F. P. Ross and J. M. Pettifor (2003). "Vitamin D metabolism in a frugivorous nocturnal mammal, the Egyptian fruit bat (*Rousettus aegyptiacus*)."*Gen Comp Endocrinol* **133**(1): 109-17.
- Cavanagh, D. (2007). "Coronavirus avian infectious bronchitis virus." *Vet Res* **38**(2): 281-97.
- Chan-Yeung, M. and R. H. Xu (2003). "SARS: epidemiology." *Respirology* **8 Suppl**: S9-14.

- Chan, P. K., K. F. To, A. W. Lo, J. L. Cheung, I. Chu, F. W. Au, J. H. Tong, J. S. Tam, J. J. Sung and H. K. Ng (2004). "Persistent infection of SARS coronavirus in colonic cells in vitro." *J Med Virol* **74**(1): 1-7.
- Chang, C. K., S. C. Sue, T. H. Yu, C. M. Hsieh, C. K. Tsai, Y. C. Chiang, S. J. Lee, H. H. Hsiao, W. J. Wu, W. L. Chang, C. H. Lin and T. H. Huang (2006). "Modular organization of SARS coronavirus nucleocapsid protein." *J Biomed Sci* **13**(1): 59-72.
- Chasey, D. and D. J. Alexander (1976). "Morphogenesis of avian infectious bronchitis virus in primary chick kidney cells." *Arch Virol* **52**(1-2): 101-11.
- Chen, H., A. Gill, B. K. Dove, S. R. Emmett, C. F. Kemp, M. A. Ritchie, M. Dee and J. A. Hiscox (2005). "Mass spectroscopic characterization of the coronavirus infectious bronchitis virus nucleoprotein and elucidation of the role of phosphorylation in RNA binding by using surface plasmon resonance." *J Virol* **79**(2): 1164-79.
- Chen, W. and R. S. Baric (1996). "Molecular anatomy of mouse hepatitis virus persistence: coevolution of increased host cell resistance and virus virulence." *J Virol* **70**(6): 3947-60.
- Chiu, S. S., K. H. Chan, K. W. Chu, S. W. Kwan, Y. Guan, L. L. Poon and J. S. Peiris (2005). "Human coronavirus NL63 infection and other coronavirus infections in children hospitalized with acute respiratory disease in Hong Kong, China." *Clin Infect Dis* **40**(12): 1721-9.
- Compton, S. J. and C. G. Jones (1985). "Mechanism of dye response and interference in the Bradford protein assay." *Anal Biochem* **151**(2): 369-74.
- Corse, E. and C. E. Machamer (2002). "The cytoplasmic tail of infectious bronchitis virus E protein directs Golgi targeting." *J Virol* **76**(3): 1273-84.
- Corse, E. and C. E. Machamer (2003). "The cytoplasmic tails of infectious bronchitis virus E and M proteins mediate their interaction." *Virology* **312**(1): 25-34.
- de Haan, C. A., M. de Wit, L. Kuo, C. Montalto-Morrison, B. L. Haagmans, S. R. Weiss, P. S. Masters and P. J. Rottier (2003). "The glycosylation status of the murine hepatitis coronavirus M protein affects the interferogenic capacity of the virus in vitro and its ability to replicate in the liver but not the brain." *Virology* **312**(2): 395-406.
- de Haan, C. A., P. S. Masters, X. Shen, S. Weiss and P. J. Rottier (2002). "The group-specific murine coronavirus genes are not essential, but their deletion, by reverse genetics, is attenuating in the natural host." *Virology* **296**(1): 177-89.
- de Haan, C. A., M. Smeets, F. Vernooij, H. Vennema and P. J. Rottier (1999). "Mapping of the coronavirus membrane protein domains involved in interaction with the spike protein." *J Virol* **73**(9): 7441-52.
- de Souza Luna, L. K., V. Heiser, N. Regamey, M. Panning, J. F. Drexler, S. Mulangu, L. Poon, S. Baumgarte, B. J. Haijema, L. Kaiser and C. Drosten (2007). "Generic detection of coronaviruses and differentiation at the prototype strain level by reverse transcription-PCR and nonfluorescent low-density microarray." *J Clin Microbiol* **45**(3): 1049-52.
- Delmas, B., J. Gelfi, R. L'Haridon, L. K. Vogel, H. Sjostrom, O. Noren and H. Laude (1992). "Aminopeptidase N is a major receptor for the enteropathogenic coronavirus TGEV." *Nature* **357**(6377): 417-20.
- Dijkman, R., M. F. Jebbink, B. Wilbrink, K. Pyrc, H. L. Zaaijer, P. D. Minor, S. Franklin, B. Berkhouit, V. Thiel and L. van der Hoek (2006). "Human coronavirus 229E encodes a single ORF4 protein between the spike and the envelope genes." *Virol J* **3**: 106.
- Ding, Y., L. He, Q. Zhang, Z. Huang, X. Che, J. Hou, H. Wang, H. Shen, L. Qiu, Z. Li, J. Geng, J. Cai, H. Han, X. Li, W. Kang, D. Weng, P. Liang and S. Jiang (2004). "Organ distribution of severe acute respiratory syndrome (SARS) associated coronavirus (SARS-CoV) in SARS patients: implications for pathogenesis and virus transmission pathways." *J Pathol* **203**(2): 622-30.

- Doughri, A. M., J. Storz, I. Hajar and H. S. Fernando (1976). "Morphology and morphogenesis of a coronavirus infecting intestinal epithelial cells of newborn calves." *Exp Mol Pathol* **25**(3): 355-70.
- Drickamer, K. and M. E. Taylor (1998). "Evolving views of protein glycosylation." *Trends Biochem Sci* **23**(9): 321-4.
- Drosten, C., S. Gunther, W. Preiser, S. van der Werf, H. R. Brodt, S. Becker, H. Rabenau, M. Panning, L. Kolesnikova, R. A. Fouchier, A. Berger, A. M. Burguiere, J. Cinatl, M. Eickmann, N. Escriou, K. Grywna, S. Kramme, J. C. Manuguerra, S. Muller, V. Rickerts, M. Sturmer, S. Vieth, H. D. Klenk, A. D. Osterhaus, H. Schmitz and H. W. Doerr (2003). "Identification of a novel coronavirus in patients with severe acute respiratory syndrome." *N Engl J Med* **348**(20): 1967-76.
- Dveksler, G. S., M. N. Pensiero, C. B. Cardellichio, R. K. Williams, G. S. Jiang, K. V. Holmes and C. W. Dieffenbach (1991). "Cloning of the mouse hepatitis virus (MHV) receptor: expression in human and hamster cell lines confers susceptibility to MHV." *J Virol* **65**(12): 6881-91.
- Eaton, B. T., C. C. Broder and L. F. Wang (2005). "Hendra and Nipah viruses: pathogenesis and therapeutics." *Curr Mol Med* **5**(8): 805-16.
- Ebihara, T., R. Endo, X. Ma, N. Ishiguro and H. Kikuta (2005). "Detection of human coronavirus NL63 in young children with bronchiolitis." *J Med Virol* **75**(3): 463-5.
- Edwards, J. A., F. Denis and P. J. Talbot (2000). "Activation of glial cells by human coronavirus OC43 infection." *J Neuroimmunol* **108**(1-2): 73-81.
- Eleouet, J. F., S. Chilmonczyk, L. Besnardieu and H. Laude (1998). "Transmissible gastroenteritis coronavirus induces programmed cell death in infected cells through a caspase-dependent pathway." *J Virol* **72**(6): 4918-24.
- Enjuanes, L., C. Sanchez, A. Mendez and M. L. Ballesteros (1995). "Tropism and immunoprotection in transmissible gastroenteritis coronaviruses." *Dev Biol Stand* **84**: 145-52.
- Escors, D., E. Camafeita, J. Ortego, H. Laude and L. Enjuanes (2001a). "Organization of two transmissible gastroenteritis coronavirus membrane protein topologies within the virion and core." *J Virol* **75**(24): 12228-40.
- Escors, D., J. Ortego, H. Laude and L. Enjuanes (2001b). "The membrane M protein carboxy terminus binds to transmissible gastroenteritis coronavirus core and contributes to core stability." *J Virol* **75**(3): 1312-24.
- Fuhrmann, M., A. Hausherr, L. Ferbitz, T. Schodl, M. Heitzer and P. Hegemann (2004). "Monitoring dynamic expression of nuclear genes in *Chlamydomonas reinhardtii* by using a synthetic luciferase reporter gene." *Plant Mol Biol* **55**(6): 869-81.
- Garcia-Vallejo, J. J., B. Van Het Hof, J. Robben, J. A. Van Wijk, I. Van Die, D. H. Joziasse and W. Van Dijk (2004). "Approach for defining endogenous reference genes in gene expression experiments." *Anal Biochem* **329**(2): 293-9.
- Garwes, D. J. (1988). "Transmissible gastroenteritis." *Vet Rec* **122**(19): 462-3.
- Giroglou, T., J. Cinatl, Jr., H. Rabenau, C. Drosten, H. Schwalbe, H. W. Doerr and D. von Laer (2004). "Retroviral vectors pseudotyped with severe acute respiratory syndrome coronavirus S protein." *J Virol* **78**(17): 9007-15.
- Godeke, G. J., C. A. de Haan, J. W. Rossen, H. Vennema and P. J. Rottier (2000). "Assembly of spikes into coronavirus particles is mediated by the carboxy-terminal domain of the spike protein." *J Virol* **74**(3): 1566-71.
- Gorbalenya, A. E., E. J. Snijder and W. J. Spaan (2004). "Severe acute respiratory syndrome coronavirus phylogeny: toward consensus." *J Virol* **78**(15): 7863-6.
- Gothel, S. F. and M. A. Marahiel (1999). "Peptidyl-prolyl cis-trans isomerases, a superfamily of ubiquitous folding catalysts." *Cell Mol Life Sci* **55**(3): 423-36.

- Guan, Y., B. J. Zheng, Y. Q. He, X. L. Liu, Z. X. Zhuang, C. L. Cheung, S. W. Luo, P. H. Li, L. J. Zhang, Y. J. Guan, K. M. Butt, K. L. Wong, K. W. Chan, W. Lim, K. F. Shortridge, K. Y. Yuen, J. S. Peiris and L. L. Poon (2003). "Isolation and characterization of viruses related to the SARS coronavirus from animals in southern China." *Science* **302**(5643): 276-8.
- Haijema, B. J., H. Volders and P. J. Rottier (2004). "Live, attenuated coronavirus vaccines through the directed deletion of group-specific genes provide protection against feline infectious peritonitis." *J Virol* **78**(8): 3863-71.
- Hamming, I., W. Timens, M. L. Bulthuis, A. T. Lely, G. J. Navis and H. van Goor (2004). "Tissue distribution of ACE2 protein, the functional receptor for SARS coronavirus. A first step in understanding SARS pathogenesis." *J Pathol* **203**(2): 631-7.
- Han, T. H., J. Y. Chung, S. W. Kim and E. S. Hwang (2007). "Human Coronavirus-NL63 infections in Korean children, 2004-2006." *J Clin Virol* **38**(1): 27-31.
- Hanahan, D. (1983). "Studies on transformation of Escherichia coli with plasmids." *J Mol Biol* **166**(4): 557-80.
- Hartlieb, B., T. Muziol, W. Weissenhorn and S. Becker (2007). "Crystal structure of the C-terminal domain of Ebola virus VP30 reveals a role in transcription and nucleocapsid association." *Proc Natl Acad Sci U S A* **104**(2): 624-9.
- Hattermann, K., M. A. Muller, A. Nitsche, S. Wendt, O. Donoso Mantke and M. Niedrig (2005). "Susceptibility of different eukaryotic cell lines to SARS-coronavirus." *Arch Virol* **150**(5): 1023-31.
- He, R., F. Dobie, M. Ballantine, A. Leeson, Y. Li, N. Bastien, T. Cutts, A. Andonov, J. Cao, T. F. Booth, F. A. Plummer, S. Tyler, L. Baker and X. Li (2004a). "Analysis of multimerization of the SARS coronavirus nucleocapsid protein." *Biochem Biophys Res Commun* **316**(2): 476-83.
- He, R., A. Leeson, M. Ballantine, A. Andonov, L. Baker, F. Dobie, Y. Li, N. Bastien, H. Feldmann, U. Strocher, S. Theriault, T. Cutts, J. Cao, T. F. Booth, F. A. Plummer, S. Tyler and X. Li (2004b). "Characterization of protein-protein interactions between the nucleocapsid protein and membrane protein of the SARS coronavirus." *Virus Res* **105**(2): 121-5.
- He, Y., J. Li, L. Du, X. Yan, G. Hu, Y. Zhou and S. Jiang (2006). "Identification and characterization of novel neutralizing epitopes in the receptor-binding domain of SARS-CoV spike protein: revealing the critical antigenic determinants in inactivated SARS-CoV vaccine." *Vaccine* **24**(26): 5498-508.
- He, Y., H. Lu, P. Siddiqui, Y. Zhou and S. Jiang (2005a). "Receptor-binding domain of severe acute respiratory syndrome coronavirus spike protein contains multiple conformation-dependent epitopes that induce highly potent neutralizing antibodies." *J Immunol* **174**(8): 4908-15.
- He, Y., Q. Zhu, S. Liu, Y. Zhou, B. Yang, J. Li and S. Jiang (2005b). "Identification of a critical neutralization determinant of severe acute respiratory syndrome (SARS)-associated coronavirus: importance for designing SARS vaccines." *Virology* **334**(1): 74-82.
- Helenius, A. and M. Aebi (2001). "Intracellular functions of N-linked glycans." *Science* **291**(5512): 2364-9.
- Hendley, J. O., H. B. Fishburne and J. M. Gwaltney, Jr. (1972). "Coronavirus infections in working adults. Eight-year study with 229 E and OC 43." *Am Rev Respir Dis* **105**(5): 805-11.
- Herrewegh, A. A., H. Vennema, M. C. Horzinek, P. J. Rottier and R. J. de Groot (1995). "The molecular genetics of feline coronaviruses: comparative sequence analysis of the ORF7a/7b transcription unit of different biotypes." *Virology* **212**(2): 622-31.

- Hiscox, J. A., T. Wurm, L. Wilson, P. Britton, D. Cavanagh and G. Brooks (2001). "The coronavirus infectious bronchitis virus nucleoprotein localizes to the nucleolus." *J Virol* **75**(1): 506-12.
- Hodgson, T., P. Britton and D. Cavanagh (2006). "Neither the RNA nor the proteins of open reading frames 3a and 3b of the coronavirus infectious bronchitis virus are essential for replication." *J Virol* **80**(1): 296-305.
- Hofmann, H., M. Geier, A. Marzi, M. Krumbiegel, M. Peipp, G. H. Fey, T. Gramberg and S. Pohlmann (2004a). "Susceptibility to SARS coronavirus S protein-driven infection correlates with expression of angiotensin converting enzyme 2 and infection can be blocked by soluble receptor." *Biochem Biophys Res Commun* **319**(4): 1216-21.
- Hofmann, H., K. Hattermann, A. Marzi, T. Gramberg, M. Geier, M. Krumbiegel, S. Kuate, K. Uberla, M. Niedrig and S. Pohlmann (2004b). "S protein of severe acute respiratory syndrome-associated coronavirus mediates entry into hepatoma cell lines and is targeted by neutralizing antibodies in infected patients." *J Virol* **78**(12): 6134-42.
- Hofmann, H. and S. Pohlmann (2004). "Cellular entry of the SARS coronavirus." *Trends Microbiol* **12**(10): 466-72.
- Hofmann, H., K. Pyrc, L. van der Hoek, M. Geier, B. Berkhouit and S. Pohlmann (2005). "Human coronavirus NL63 employs the severe acute respiratory syndrome coronavirus receptor for cellular entry." *Proc Natl Acad Sci U S A* **102**(22): 7988-93.
- Holmes, K. V. and L. Enjuanes (2003). "Virology. The SARS coronavirus: a postgenomic era." *Science* **300**(5624): 1377-8.
- Hughey, P. G., R. W. Compans, S. L. Zebedee and R. A. Lamb (1992). "Expression of the influenza A virus M2 protein is restricted to apical surfaces of polarized epithelial cells." *J Virol* **66**(9): 5542-52.
- Ignjatovic, J. and S. Sapats (2000). "Avian infectious bronchitis virus." *Rev Sci Tech* **19**(2): 493-508.
- Ito, N., E. C. Mossel, K. Narayanan, V. L. Popov, C. Huang, T. Inoue, C. J. Peters and S. Makino (2005). "Severe acute respiratory syndrome coronavirus 3a protein is a viral structural protein." *J Virol* **79**(5): 3182-6.
- Jackson, D. C., X. L. Tang, K. G. Murti, R. G. Webster, G. W. Tregeair and W. J. Bean (1991). "Electron microscopic evidence for the association of M2 protein with the influenza virion." *Arch Virol* **118**(3-4): 199-207.
- Jakob, U., W. Muse, M. Eser and J. C. Bardwell (1999). "Chaperone activity with a redox switch." *Cell* **96**(3): 341-52.
- Jayaram, J., S. Youn and E. W. Collisson (2005). "The virion N protein of infectious bronchitis virus is more phosphorylated than the N protein from infected cell lysates." *Virology* **339**(1): 127-35.
- Jeffers, S. A., S. M. Tusell, L. Gillim-Ross, E. M. Hemmila, J. E. Achenbach, G. J. Babcock, W. D. Thomas, Jr., L. B. Thackray, M. D. Young, R. J. Mason, D. M. Ambrosino, D. E. Wentworth, J. C. Demartini and K. V. Holmes (2004). "CD209L (L-SIGN) is a receptor for severe acute respiratory syndrome coronavirus." *Proc Natl Acad Sci U S A* **101**(44): 15748-53.
- Jeong, Y. S. and S. Makino (1994). "Evidence for coronavirus discontinuous transcription." *J Virol* **68**(4): 2615-23.
- Jia, W., K. Karaca, C. R. Parrish and S. A. Naqi (1995). "A novel variant of avian infectious bronchitis virus resulting from recombination among three different strains." *Arch Virol* **140**(2): 259-71.
- Jia, W., S. P. Mondal and S. A. Naqi (2002). "Genetic and antigenic diversity in avian infectious bronchitis virus isolates of the 1940s." *Avian Dis* **46**(2): 437-41.

- Kaiser, L., N. Regamey, H. Roiha, C. Deffernez and U. Frey (2005). "Human coronavirus NL63 associated with lower respiratory tract symptoms in early life." *Pediatr Infect Dis J* **24**(11): 1015-7.
- Keck, J. G., L. H. Soe, S. Makino, S. A. Stohlman and M. M. Lai (1988). "RNA recombination of murine coronaviruses: recombination between fusion-positive mouse hepatitis virus A59 and fusion-negative mouse hepatitis virus 2." *J Virol* **62**(6): 1989-98.
- Kim, L., J. Hayes, P. Lewis, A. V. Parwani, K. O. Chang and L. J. Saif (2000). "Molecular characterization and pathogenesis of transmissible gastroenteritis coronavirus (TGEV) and porcine respiratory coronavirus (PRCV) field isolates co-circulating in a swine herd." *Arch Virol* **145**(6): 1133-47.
- Klumperman, J., J. K. Locker, A. Meijer, M. C. Horzinek, H. J. Geuze and P. J. Rottier (1994). "Coronavirus M proteins accumulate in the Golgi complex beyond the site of virion budding." *J Virol* **68**(10): 6523-34.
- Krzystyniak, K. and J. M. Dupuy (1984). "Entry of mouse hepatitis virus 3 into cells." *J Gen Virol* **65 ( Pt 1)**: 227-31.
- Ksiazek, T. G., D. Erdman, C. S. Goldsmith, S. R. Zaki, T. Peret, S. Emery, S. Tong, C. Urbani, J. A. Comer, W. Lim, P. E. Rollin, S. F. Dowell, A. E. Ling, C. D. Humphrey, W. J. Shieh, J. Guarner, C. D. Paddock, P. Rota, B. Fields, J. DeRisi, J. Y. Yang, N. Cox, J. M. Hughes, J. W. LeDuc, W. J. Bellini and L. J. Anderson (2003). "A novel coronavirus associated with severe acute respiratory syndrome." *N Engl J Med* **348**(20): 1953-66.
- Kusanagi, K., H. Kuwahara, T. Katoh, T. Nunoya, Y. Ishikawa, T. Samejima and M. Tajima (1992). "Isolation and serial propagation of porcine epidemic diarrhea virus in cell cultures and partial characterization of the isolate." *J Vet Med Sci* **54**(2): 313-8.
- Lai, M. M. (1990). "Coronavirus: organization, replication and expression of genome." *Annu Rev Microbiol* **44**: 303-33.
- Lapps, W., B. G. Hogue and D. A. Brian (1987). "Sequence analysis of the bovine coronavirus nucleocapsid and matrix protein genes." *Virology* **157**(1): 47-57.
- Lau, S. K., P. C. Woo, K. S. Li, Y. Huang, H. W. Tsui, B. H. Wong, S. S. Wong, S. Y. Leung, K. H. Chan and K. Y. Yuen (2005). "Severe acute respiratory syndrome coronavirus-like virus in Chinese horseshoe bats." *Proc Natl Acad Sci U S A* **102**(39): 14040-5.
- Lau, S. K., P. C. Woo, C. C. Yip, H. Tse, H. W. Tsui, V. C. Cheng, P. Lee, B. S. Tang, C. H. Cheung, R. A. Lee, L. Y. So, Y. L. Lau, K. H. Chan and K. Y. Yuen (2006). "Coronavirus HKU1 and other coronavirus infections in Hong Kong." *J Clin Microbiol* **44**(6): 2063-71.
- Lau, Y. L. and J. S. Peiris (2005). "Pathogenesis of severe acute respiratory syndrome." *Curr Opin Immunol* **17**(4): 404-10.
- Law, P. T., C. H. Wong, T. C. Au, C. P. Chuck, S. K. Kong, P. K. Chan, K. F. To, A. W. Lo, J. Y. Chan, Y. K. Suen, H. Y. Chan, K. P. Fung, M. M. Waye, J. J. Sung, Y. M. Lo and S. K. Tsui (2005). "The 3a protein of severe acute respiratory syndrome-associated coronavirus induces apoptosis in Vero E6 cells." *J Gen Virol* **86**(Pt 7): 1921-30.
- Lee, Y. N., L. K. Chen, H. C. Ma, H. H. Yang, H. P. Li and S. Y. Lo (2005). "Thermal aggregation of SARS-CoV membrane protein." *J Virol Methods* **129**(2): 152-61.
- Leibowitz, J. L., K. C. Wilhelmsen and C. W. Bond (1981). "The virus-specific intracellular RNA species of two murine coronaviruses: MHV-a59 and MHV-JHM." *Virology* **114**(1): 39-51.
- Leroy, E. M., B. Kumulungui, X. Pourrut, P. Rouquet, A. Hassanin, P. Yaba, A. Delicat, J. T. Paweska, J. P. Gonzalez and R. Swanepoel (2005). "Fruit bats as reservoirs of Ebola virus." *Nature* **438**(7068): 575-6.

- Li, W., M. J. Moore, N. Vasilieva, J. Sui, S. K. Wong, M. A. Berne, M. Somasundaran, J. L. Sullivan, K. Luzuriaga, T. C. Greenough, H. Choe and M. Farzan (2003). "Angiotensin-converting enzyme 2 is a functional receptor for the SARS coronavirus." *Nature* **426**(6965): 450-4.
- Li, W., Z. Shi, M. Yu, W. Ren, C. Smith, J. H. Epstein, H. Wang, G. Crameri, Z. Hu, H. Zhang, J. Zhang, J. McEachern, H. Field, P. Daszak, B. T. Eaton, S. Zhang and L. F. Wang (2005). "Bats are natural reservoirs of SARS-like coronaviruses." *Science* **310**(5748): 676-9.
- Livak, K. J. and T. D. Schmittgen (2001). "Analysis of relative gene expression data using real-time quantitative PCR and the 2(-Delta Delta C(T)) Method." *Methods* **25**(4): 402-8.
- Locker, J. K., D. J. Opstelten, M. Ericsson, M. C. Horzinek and P. J. Rottier (1995). "Oligomerization of a trans-Golgi/trans-Golgi network retained protein occurs in the Golgi complex and may be part of its retention." *J Biol Chem* **270**(15): 8815-21.
- Lontok, E., E. Corse and C. E. Machamer (2004). "Intracellular targeting signals contribute to localization of coronavirus spike proteins near the virus assembly site." *J Virol* **78**(11): 5913-22.
- Lu, W., B. J. Zheng, K. Xu, W. Schwarz, L. Du, C. K. Wong, J. Chen, S. Duan, V. Deubel and B. Sun (2006). "Severe acute respiratory syndrome-associated coronavirus 3a protein forms an ion channel and modulates virus release." *Proc Natl Acad Sci U S A* **103**(33): 12540-5.
- Makino, S., J. G. Keck, S. A. Stohlman and M. M. Lai (1986). "High-frequency RNA recombination of murine coronaviruses." *J Virol* **57**(3): 729-37.
- Masters, P. S. (2006). "The molecular biology of coronaviruses." *Adv Virus Res* **66**: 193-292.
- Matthews, A. E., S. R. Weiss and Y. Paterson (2002). "Murine hepatitis virus--a model for virus-induced CNS demyelination." *J Neurovirol* **8**(2): 76-85.
- Moore, M. J., T. Dorfman, W. Li, S. K. Wong, Y. Li, J. H. Kuhn, J. Coderre, N. Vasilieva, Z. Han, T. C. Greenough, M. Farzan and H. Choe (2004). "Retroviruses pseudotyped with the severe acute respiratory syndrome coronavirus spike protein efficiently infect cells expressing angiotensin-converting enzyme 2." *J Virol* **78**(19): 10628-35.
- Nal, B., C. Chan, F. Kien, L. Siu, J. Tse, K. Chu, J. Kam, I. Staropoli, B. Crescenzo-Chaigne, N. Escriou, S. van der Werf, K. Y. Yuen and R. Altmeyer (2005). "Differential maturation and subcellular localization of severe acute respiratory syndrome coronavirus surface proteins S, M and E." *J Gen Virol* **86**(Pt 5): 1423-34.
- Nelson, G. W. and S. A. Stohlman (1993). "Localization of the RNA-binding domain of mouse hepatitis virus nucleocapsid protein." *J Gen Virol* **74** ( Pt 9): 1975-9.
- Niedrig, M., M. Lademann, P. Emmerich and M. Lafrenz (1999). "Assessment of IgG antibodies against yellow fever virus after vaccination with 17D by different assays: neutralization test, haemagglutination inhibition test, immunofluorescence assay and ELISA." *Trop Med Int Health* **4**(12): 867-71.
- Nitsche, A., B. Schweiger, H. Ellerbrok, M. Niedrig and G. Pauli (2004). "SARS coronavirus detection." *Emerg Infect Dis* **10**(7): 1300-3.
- Oostra, M., C. A. de Haan, R. J. de Groot and P. J. Rottier (2006). "Glycosylation of the severe acute respiratory syndrome coronavirus triple-spanning membrane proteins 3a and M." *J Virol* **80**(5): 2326-36.
- Opstelten, D. J., P. de Groote, M. C. Horzinek and P. J. Rottier (1994). "Folding of the mouse hepatitis virus spike protein and its association with the membrane protein." *Arch Virol Suppl* **9**: 319-28.
- Opstelten, D. J., M. J. Raamsman, K. Wolfs, M. C. Horzinek and P. J. Rottier (1995). "Coexpression and association of the spike protein and the membrane protein of mouse hepatitis virus." *Adv Exp Med Biol* **380**: 291-7.

- Parker, M. M. and P. S. Masters (1990). "Sequence comparison of the N genes of five strains of the coronavirus mouse hepatitis virus suggests a three domain structure for the nucleocapsid protein." *Virology* **179**(1): 463-8.
- Peiris, J. S., S. T. Lai, L. L. Poon, Y. Guan, L. Y. Yam, W. Lim, J. Nicholls, W. K. Yee, W. W. Yan, M. T. Cheung, V. C. Cheng, K. H. Chan, D. N. Tsang, R. W. Yung, T. K. Ng and K. Y. Yuen (2003). "Coronavirus as a possible cause of severe acute respiratory syndrome." *Lancet* **361**(9366): 1319-25.
- Pendleton, A. R. and C. E. Machamer (2005). "Infectious bronchitis virus 3a protein localizes to a novel domain of the smooth endoplasmic reticulum." *J Virol* **79**(10): 6142-51.
- Pene, F., A. Merlat, A. Vabret, F. Rozenberg, A. Buzyn, F. Dreyfus, A. Cariou, F. Freymuth and P. Lebon (2003). "Coronavirus 229E-related pneumonia in immunocompromised patients." *Clin Infect Dis* **37**(7): 929-32.
- Perlman, S., R. Schelper, E. Bolger and D. Ries (1987). "Late onset, symptomatic, demyelinating encephalomyelitis in mice infected with MHV-JHM in the presence of maternal antibody." *Microb Pathog* **2**(3): 185-94.
- Pfaffl, M. W., A. Tichopad, C. Prgomet and T. P. Neuvians (2004). "Determination of stable housekeeping genes, differentially regulated target genes and sample integrity: BestKeeper--Excel-based tool using pair-wise correlations." *Biotechnol Lett* **26**(6): 509-15.
- Poon, L. L., D. K. Chu, K. H. Chan, O. K. Wong, T. M. Ellis, Y. H. Leung, S. K. Lau, P. C. Woo, K. Y. Suen, K. Y. Yuen, Y. Guan and J. S. Peiris (2005). "Identification of a novel coronavirus in bats." *J Virol* **79**(4): 2001-9.
- Poon, L. L., Y. Guan, J. M. Nicholls, K. Y. Yuen and J. S. Peiris (2004). "The aetiology, origins, and diagnosis of severe acute respiratory syndrome." *Lancet Infect Dis* **4**(11): 663-71.
- Pyrc, K., B. Berkhout and L. Van der Hoek (2005). "Molecular characterization of human coronavirus NL63." *Recent Research in Development of Infection & Immunity* **3**: 25-48.
- Pyrc, K., B. Berkhout and L. van der Hoek (2007). "The novel human coronaviruses NL63 and HKU1." *J Virol* **81**(7): 3051-7.
- Pyrc, K., M. F. Jebbink, B. Berkhout and L. van der Hoek (2004). "Genome structure and transcriptional regulation of human coronavirus NL63." *Virol J* **1**: 7.
- Qinfen, Z., C. Jinming, H. Xiaojun, Z. Huanying, H. Jicheng, F. Ling, L. Kunpeng and Z. Jingqiang (2004). "The life cycle of SARS coronavirus in Vero E6 cells." *J Med Virol* **73**(3): 332-7.
- Raamsman, M. J., J. K. Locker, A. de Hooge, A. A. de Vries, G. Griffiths, H. Vennema and P. J. Rottier (2000). "Characterization of the coronavirus mouse hepatitis virus strain A59 small membrane protein E." *J Virol* **74**(5): 2333-42.
- Radonic, A., S. Thulke, I. M. Mackay, O. Landt, W. Siegert and A. Nitsche (2004). "Guideline to reference gene selection for quantitative real-time PCR." *Biochem Biophys Res Commun* **313**(4): 856-62.
- Ren, W., W. Li, M. Yu, P. Hao, Y. Zhang, P. Zhou, S. Zhang, G. Zhao, Y. Zhong, S. Wang, L. F. Wang and Z. Shi (2006). "Full-length genome sequences of two SARS-like coronaviruses in horseshoe bats and genetic variation analysis." *J Gen Virol* **87**(Pt 11): 3355-9.
- Rota, P. A., M. S. Oberste, S. S. Monroe, W. A. Nix, R. Campagnoli, J. P. Icenogle, S. Penaranda, B. Bankamp, K. Maher, M. H. Chen, S. Tong, A. Tamin, L. Lowe, M. Frace, J. L. DeRisi, Q. Chen, D. Wang, D. D. Erdman, T. C. Peret, C. Burns, T. G. Ksiazek, P. E. Rollin, A. Sanchez, S. Liffick, B. Holloway, J. Limor, K. McCaustland, M. Olsen-Rasmussen, R. Fouchier, S. Gunther, A. D. Osterhaus, C. Drosten, M. A. Pallansch, L. J. Anderson and W. J. Bellini (2003). "Characterization of a novel

- coronavirus associated with severe acute respiratory syndrome." *Science* **300**(5624): 1394-9.
- Rottier, P. J. M. (1995). "The coronavirus membrane protein." In S.G. Siddell (ed.), *The Coronaviridae*. Plenum Press, New York, N.Y.: p. 115-39.
- Saif, L. J. (2004). "Animal coronavirus vaccines: lessons for SARS." *Dev Biol (Basel)* **119**: 129-40.
- Sanchez, C. M., F. Gebauer, C. Sune, A. Mendez, J. Dopazo and L. Enjuanes (1992). "Genetic evolution and tropism of transmissible gastroenteritis coronaviruses." *Virology* **190**(1): 92-105.
- Sanger, F., S. Nicklen and A. R. Coulson (1977). "DNA sequencing with chain-terminating inhibitors." *Proc Natl Acad Sci U S A* **74**(12): 5463-7.
- Schickli, J. H., B. D. Zelus, D. E. Wentworth, S. G. Sawicki and K. V. Holmes (1997). "The murine coronavirus mouse hepatitis virus strain A59 from persistently infected murine cells exhibits an extended host range." *J Virol* **71**(12): 9499-507.
- Schildgen, O., M. F. Jebbink, M. de Vries, K. Pyrc, R. Dijkman, A. Simon, A. Muller, B. Kupfer and L. van der Hoek (2006). "Identification of cell lines permissive for human coronavirus NL63." *J Virol Methods* **138**(1-2): 207-10.
- Schulze, A., S. Standera, E. Buerger, M. Kikkert, S. van Voorden, E. Wiertz, F. Koning, P. M. Kloetzel and M. Seeger (2005). "The ubiquitin-domain protein HERP forms a complex with components of the endoplasmic reticulum associated degradation pathway." *J Mol Biol* **354**(5): 1021-7.
- Selvey, S., E. W. Thompson, K. Matthaei, R. A. Lea, M. G. Irving and L. R. Griffiths (2001). "Beta-actin--an unsuitable internal control for RT-PCR." *Mol Cell Probes* **15**(5): 307-11.
- Shen, S., P. S. Lin, Y. C. Chao, A. Zhang, X. Yang, S. G. Lim, W. Hong and Y. J. Tan (2005). "The severe acute respiratory syndrome coronavirus 3a is a novel structural protein." *Biochem Biophys Res Commun* **330**(1): 286-92.
- Shibata, I., T. Tsuda, M. Mori, M. Ono, M. Sueyoshi and K. Uruno (2000). "Isolation of porcine epidemic diarrhea virus in porcine cell cultures and experimental infection of pigs of different ages." *Vet Microbiol* **72**(3-4): 173-82.
- Shin, G. C., Y. S. Chung, I. S. Kim, H. W. Cho and C. Kang (2007). "Antigenic characterization of severe acute respiratory syndrome-coronavirus nucleocapsid protein expressed in insect cells: The effect of phosphorylation on immunoreactivity and specificity." *Virus Res* **127**(1): 71-80.
- Smith, G. J., X. H. Fan, J. Wang, K. S. Li, K. Qin, J. X. Zhang, D. Vijaykrishna, C. L. Cheung, K. Huang, J. M. Rayner, J. S. Peiris, H. Chen, R. G. Webster and Y. Guan (2006). "Emergence and predominance of an H5N1 influenza variant in China." *Proc Natl Acad Sci U S A* **103**(45): 16936-41.
- Song, D. S., J. S. Yang, J. S. Oh, J. H. Han and B. K. Park (2003). "Differentiation of a Vero cell adapted porcine epidemic diarrhea virus from Korean field strains by restriction fragment length polymorphism analysis of ORF 3." *Vaccine* **21**(17-18): 1833-42.
- Song, H. D., C. C. Tu, G. W. Zhang, S. Y. Wang, K. Zheng, L. C. Lei, Q. X. Chen, Y. W. Gao, H. Q. Zhou, H. Xiang, H. J. Zheng, S. W. Chern, F. Cheng, C. M. Pan, H. Xuan, S. J. Chen, H. M. Luo, D. H. Zhou, Y. F. Liu, J. F. He, P. Z. Qin, L. H. Li, Y. Q. Ren, W. J. Liang, Y. D. Yu, L. Anderson, M. Wang, R. H. Xu, X. W. Wu, H. Y. Zheng, J. D. Chen, G. Liang, Y. Gao, M. Liao, L. Fang, L. Y. Jiang, H. Li, F. Chen, B. Di, L. J. He, J. Y. Lin, S. Tong, X. Kong, L. Du, P. Hao, H. Tang, A. Bernini, X. J. Yu, O. Spiga, Z. M. Guo, H. Y. Pan, W. Z. He, J. C. Manuguerra, A. Fontanet, A. Danchin, N. Niccolai, Y. X. Li, C. I. Wu and G. P. Zhao (2005). "Cross-host evolution of severe acute respiratory syndrome coronavirus in palm civet and human." *Proc Natl Acad Sci U S A* **102**(7): 2430-5.

- Stadler, K., V. Masianni, M. Eickmann, S. Becker, S. Abrignani, H. D. Klenk and R. Rappuoli (2003). "SARS--beginning to understand a new virus." *Nat Rev Microbiol* **1**(3): 209-18.
- Stern, D. F. and S. I. Kennedy (1980). "Coronavirus multiplication strategy. I. Identification and characterization of virus-specified RNA." *J Virol* **34**(3): 665-74.
- Stertz, S., M. Reichelt, M. Spiegel, T. Kuri, L. Martinez-Sobrido, A. Garcia-Sastre, F. Weber and G. Kochs (2007). "The intracellular sites of early replication and budding of SARS-coronavirus." *Virology* **361**(2): 304-15.
- Stohlman, S. A., J. O. Fleming, C. D. Patton and M. M. Lai (1983). "Synthesis and subcellular localization of the murine coronavirus nucleocapsid protein." *Virology* **130**(2): 527-32.
- Sturzenbaum, S. R. and P. Kille (2001). "Control genes in quantitative molecular biological techniques: the variability of invariance." *Comp Biochem Physiol B Biochem Mol Biol* **130**(3): 281-9.
- Sui, J., W. Li, A. Roberts, L. J. Matthews, A. Murakami, L. Vogel, S. K. Wong, K. Subbarao, M. Farzan and W. A. Marasco (2005). "Evaluation of human monoclonal antibody 80R for immunoprophylaxis of severe acute respiratory syndrome by an animal study, epitope mapping, and analysis of spike variants." *J Virol* **79**(10): 5900-6.
- Supekar, V. M., C. Bruckmann, P. Ingallinella, E. Bianchi, A. Pessi and A. Carfi (2004). "Structure of a proteolytically resistant core from the severe acute respiratory syndrome coronavirus S2 fusion protein." *Proc Natl Acad Sci U S A* **101**(52): 17958-63.
- Suzuki, A., M. Okamoto, A. Ohmi, O. Watanabe, S. Miyabayashi and H. Nishimura (2005). "Detection of human coronavirus-NL63 in children in Japan." *Pediatr Infect Dis J* **24**(7): 645-6.
- Suzuki, T., P. J. Higgins and D. R. Crawford (2000). "Control selection for RNA quantitation." *Biotechniques* **29**(2): 332-7.
- Takuma, T., T. Arakawa, M. Okayama, I. Mizoguchi, A. Tanimura and Y. Tajima (2002). "Trafficking of green fluorescent protein-tagged SNARE proteins in HSY cells." *J Biochem (Tokyo)* **132**(5): 729-35.
- Tan, Y. J. (2005). "The Severe Acute Respiratory Syndrome (SARS)-coronavirus 3a protein may function as a modulator of the trafficking properties of the spike protein." *J Virol* **79**: 5.
- Tan, Y. J., P. Y. Goh, B. C. Fielding, S. Shen, C. F. Chou, J. L. Fu, H. N. Leong, Y. S. Leo, E. E. Ooi, A. E. Ling, S. G. Lim and W. Hong (2004a). "Profiles of antibody responses against severe acute respiratory syndrome coronavirus recombinant proteins and their potential use as diagnostic markers." *Clin Diagn Lab Immunol* **11**(2): 362-71.
- Tan, Y. J., S. G. Lim and W. Hong (2005a). "Characterization of viral proteins encoded by the SARS-coronavirus genome." *Antiviral Res* **65**(2): 69-78.
- Tan, Y. J., S. G. Lim and W. Hong (2006). "Understanding the accessory viral proteins unique to the severe acute respiratory syndrome (SARS) coronavirus." *Antiviral Res* **72**(2): 78-88.
- Tan, Y. J., E. Teng, S. Shen, T. H. Tan, P. Y. Goh, B. C. Fielding, E. E. Ooi, H. C. Tan, S. G. Lim and W. Hong (2004b). "A novel severe acute respiratory syndrome coronavirus protein, U274, is transported to the cell surface and undergoes endocytosis." *J Virol* **78**(13): 6723-34.
- Tan, Y. J., P. Y. Tham, D. Z. Chan, C. F. Chou, S. Shen, B. C. Fielding, T. H. Tan, S. G. Lim and W. Hong (2005b). "The severe acute respiratory syndrome coronavirus 3a protein up-regulates expression of fibrinogen in lung epithelial cells." *J Virol* **79**(15): 10083-7.
- Tang, X. C., J. X. Zhang, S. Y. Zhang, P. Wang, X. H. Fan, L. F. Li, G. Li, B. Q. Dong, W. Liu, C. L. Cheung, K. M. Xu, W. J. Song, D. Vijaykrishna, L. L. Poon, J. S. Peiris, G.

- J. Smith, H. Chen and Y. Guan (2006). "Prevalence and genetic diversity of coronaviruses in bats from China." *J Virol* **80**(15): 7481-90.
- ter Meulen, J., E. N. van den Brink, L. L. Poon, W. E. Marissen, C. S. Leung, F. Cox, C. Y. Cheung, A. Q. Bakker, J. A. Bogaards, E. van Deventer, W. Preiser, H. W. Doerr, V. T. Chow, J. de Kruif, J. S. Peiris and J. Goudsmit (2006). "Human monoclonal antibody combination against SARS coronavirus: synergy and coverage of escape mutants." *PLoS Med* **3**(7): e237.
- Thiel, V., J. Herold, B. Schelle and S. G. Siddell (2001). "Viral replicase gene products suffice for coronavirus discontinuous transcription." *J Virol* **75**(14): 6676-81.
- To, K. F. and A. W. Lo (2004). "Exploring the pathogenesis of severe acute respiratory syndrome (SARS): the tissue distribution of the coronavirus (SARS-CoV) and its putative receptor, angiotensin-converting enzyme 2 (ACE2)." *J Pathol* **203**(3): 740-3.
- Tripp, R. A., L. M. Haynes, D. Moore, B. Anderson, A. Tamin, B. H. Harcourt, L. P. Jones, M. Yilla, G. J. Babcock, T. Greenough, D. M. Ambrosino, R. Alvarez, J. Callaway, S. Cavitt, K. Kamrud, H. Alterson, J. Smith, J. L. Harcourt, C. Miao, R. Razdan, J. A. Comer, P. E. Rollin, T. G. Ksiazek, A. Sanchez, P. A. Rota, W. J. Bellini and L. J. Anderson (2005). "Monoclonal antibodies to SARS-associated coronavirus (SARS-CoV): identification of neutralizing and antibodies reactive to S, N, M and E viral proteins." *J Virol Methods* **128**(1-2): 21-8.
- Tyrrell, D. A. and M. L. Bynoe (1965). "Cultivation Of A Novel Type Of Common-Cold Virus In Organ Cultures." *Br Med J* **1**(5448): 1467-70.
- Tyrrell, D. A., S. Cohen and J. E. Schlarb (1993). "Signs and symptoms in common colds." *Epidemiol Infect* **111**(1): 143-56.
- Vabret, A., T. Mourez, J. Dina, L. van der Hoek, S. Gouarin, J. Petitjean, J. Brouard and F. Freymuth (2005). "Human coronavirus NL63, France." *Emerg Infect Dis* **11**(8): 1225-9.
- Van den Steen, P., P. M. Rudd, R. A. Dwek and G. Opdenakker (1998). "Concepts and principles of O-linked glycosylation." *Crit Rev Biochem Mol Biol* **33**(3): 151-208.
- van der Hoek, L., K. Pyrc and B. Berkhout (2006a). "Human coronavirus NL63, a new respiratory virus." *FEMS Microbiol Rev* **30**(5): 760-73.
- van der Hoek, L., K. Pyrc, M. F. Jebbink, W. Vermeulen-Oost, R. J. Berkhout, K. C. Wolthers, P. M. Wertheim-van Dillen, J. Kaandorp, J. Spaargaren and B. Berkhout (2004). "Identification of a new human coronavirus." *Nat Med* **10**(4): 368-73.
- van der Hoek, L., K. Sure, G. Ihorst, A. Stang, K. Pyrc, M. F. Jebbink, G. Petersen, J. Forster, B. Berkhout and K. Uberla (2005). "Croup is associated with the novel coronavirus NL63." *PLoS Med* **2**(8): e240.
- van der Hoek, L., K. Sure, G. Ihorst, A. Stang, K. Pyrc, M. F. Jebbink, G. Petersen, J. Forster, B. Berkhout and K. Uberla (2006b). "Human coronavirus NL63 infection is associated with croup." *Adv Exp Med Biol* **581**: 485-91.
- van Kuppeveld, F. J., W. J. Melchers, H. F. Willemse, J. Kissing, J. M. Galama and J. T. van der Logt (1993). "Detection of Mycoplasma pulmonis in experimentally infected laboratory rats by 16S rRNA amplification." *J Clin Microbiol* **31**(3): 524-7.
- Vandesompele, J., K. De Preter, F. Pattyn, B. Poppe, N. Van Roy, A. De Paepe and F. Speleman (2002). "Accurate normalization of real-time quantitative RT-PCR data by geometric averaging of multiple internal control genes." *Genome Biol* **3**(7): RESEARCH0034.
- Vennema, H., G. J. Godeke, J. W. Rossen, W. F. Voorhout, M. C. Horzinek, D. J. Opstelten and P. J. Rottier (1996). "Nucleocapsid-independent assembly of coronavirus-like particles by co-expression of viral envelope protein genes." *Embo J* **15**(8): 2020-8.
- Vijaykrishna, D., G. J. Smith, J. X. Zhang, J. S. Peiris, H. Chen and Y. Guan (2007). "Evolutionary insights into the ecology of coronaviruses." *J Virol* **81**(8): 4012-20.

- Vijgen, L., P. Lemey, E. Keyaerts and M. Van Ranst (2005). "Genetic variability of human respiratory coronavirus OC43." *J Virol* **79**(5): 3223-4; author reply 24-5.
- Voss, D., A. Kern, E. Traggiai, M. Eickmann, K. Stadler, A. Lanzavecchia and S. Becker (2006). "Characterization of severe acute respiratory syndrome coronavirus membrane protein." *FEBS Lett* **580**(3): 968-73.
- Wang, H., Y. Mao, L. Ju, J. Zhang, Z. Liu, X. Zhou, Q. Li, Y. Wang, S. Kim and L. Zhang (2004). "Detection and monitoring of SARS coronavirus in the plasma and peripheral blood lymphocytes of patients with severe acute respiratory syndrome." *Clin Chem* **50**(7): 1237-40.
- Wang, L., D. Junker and E. W. Collisson (1993). "Evidence of natural recombination within the S1 gene of infectious bronchitis virus." *Virology* **192**(2): 710-6.
- Wang, Y. and X. Zhang (1999). "The nucleocapsid protein of coronavirus mouse hepatitis virus interacts with the cellular heterogeneous nuclear ribonucleoprotein A1 in vitro and in vivo." *Virology* **265**(1): 96-109.
- Warren, M. A., L. M. Kucharski, A. Veenstra, L. Shi, P. F. Grulich and M. E. Maguire (2004). "The CorA Mg<sup>2+</sup> transporter is a homotetramer." *J Bacteriol* **186**(14): 4605-12.
- Weingartl, H. M., J. Copps, M. A. Drebot, P. Marszal, G. Smith, J. Gren, M. Andova, J. Pasick, P. Kitching and M. Czub (2004). "Susceptibility of pigs and chickens to SARS coronavirus." *Emerg Infect Dis* **10**(2): 179-84.
- White, T. C., Z. Yi and B. G. Hogue (2007). "Identification of mouse hepatitis coronavirus A59 nucleocapsid protein phosphorylation sites." *Virus Res* **126**(1-2): 139-48.
- Wilbur, S. M., G. W. Nelson, M. M. Lai, M. McMillan and S. A. Stohlman (1986). "Phosphorylation of the mouse hepatitis virus nucleocapsid protein." *Biochem Biophys Res Commun* **141**(1): 7-12.
- Wilson, L., C. McKinlay, P. Gage and G. Ewart (2004). "SARS coronavirus E protein forms cation-selective ion channels." *Virology* **330**(1): 322-31.
- Wissink, E. H., M. V. Kroese, J. G. Maneschijn-Bonsing, J. J. Meulenberg, P. A. van Rijn, F. A. Rijsewijk and P. J. Rottier (2004). "Significance of the oligosaccharides of the porcine reproductive and respiratory syndrome virus glycoproteins GP2a and GP5 for infectious virus production." *J Gen Virol* **85**(Pt 12): 3715-23.
- Wong, S., S. Lau, P. Woo and K. Y. Yuen (2006). "Bats as a continuing source of emerging infections in humans." *Rev Med Virol*.
- Woo, P. C., S. K. Lau, K. S. Li, R. W. Poon, B. H. Wong, H. W. Tsoi, B. C. Yip, Y. Huang, K. H. Chan and K. Y. Yuen (2006). "Molecular diversity of coronaviruses in bats." *Virology* **351**(1): 180-7.
- Woods, R. D. (2001). "Efficacy of a transmissible gastroenteritis coronavirus with an altered ORF-3 gene." *Can J Vet Res* **65**(1): 28-32.
- Wu, D., C. Tu, C. Xin, H. Xuan, Q. Meng, Y. Liu, Y. Yu, Y. Guan, Y. Jiang, X. Yin, G. Crameri, M. Wang, C. Li, S. Liu, M. Liao, L. Feng, H. Xiang, J. Sun, J. Chen, Y. Sun, S. Gu, N. Liu, D. Fu, B. T. Eaton, L. F. Wang and X. Kong (2005). "Civets are equally susceptible to experimental infection by two different severe acute respiratory syndrome coronavirus isolates." *J Virol* **79**(4): 2620-5.
- Wurm, T., H. Chen, T. Hodgson, P. Britton, G. Brooks and J. A. Hiscox (2001). "Localization to the nucleolus is a common feature of coronavirus nucleoproteins, and the protein may disrupt host cell division." *J Virol* **75**(19): 9345-56.
- Yamashita, M., M. Yamate, G. M. Li and K. Ikuta (2005). "Susceptibility of human and rat neural cell lines to infection by SARS-coronavirus." *Biochem Biophys Res Commun* **334**(1): 79-85.

- Yeager, C. L., R. A. Ashmun, R. K. Williams, C. B. Cardellichio, L. H. Shapiro, A. T. Look and K. V. Holmes (1992). "Human aminopeptidase N is a receptor for human coronavirus 229E." *Nature* **357**(6377): 420-2.
- You, J., B. K. Dove, L. Enjuanes, M. L. DeDiego, E. Alvarez, G. Howell, P. Heinen, M. Zambon and J. A. Hiscox (2005). "Subcellular localization of the severe acute respiratory syndrome coronavirus nucleocapsid protein." *J Gen Virol* **86**(Pt 12): 3303-10.
- Yount, B., R. S. Roberts, A. C. Sims, D. Deming, M. B. Frieman, J. Sparks, M. R. Denison, N. Davis and R. S. Baric (2005). "Severe acute respiratory syndrome coronavirus group-specific open reading frames encode nonessential functions for replication in cell cultures and mice." *J Virol* **79**(23): 14909-22.
- Yu, I. M., C. L. Gustafson, J. Diao, J. W. Burgner, 2nd, Z. Li, J. Zhang and J. Chen (2005). "Recombinant severe acute respiratory syndrome (SARS) coronavirus nucleocapsid protein forms a dimer through its C-terminal domain." *J Biol Chem* **280**(24): 23280-6.
- Yuan, X., J. Li, Y. Shan, Z. Yang, Z. Zhao, B. Chen, Z. Yao, B. Dong, S. Wang, J. Chen and Y. Cong (2005). "Subcellular localization and membrane association of SARS-CoV 3a protein." *Virus Res* **109**(2): 191-202.
- Zhang, X. M., K. G. Kousoulas and J. Storz (1992). "The hemagglutinin/esterase gene of human coronavirus strain OC43: phylogenetic relationships to bovine and murine coronaviruses and influenza C virus." *Virology* **186**(1): 318-23.