

Peer-reviewed Journal Publications

100. Chandra Podder, Oluwaseun Sharomi, Abba Gumel and Eva Strawbridge. Mathematical analysis of a model for assessing the impact of antiretroviral therapy, voluntary testing and condom use in curtailing HIV. *Differential Equations and Dynamical Systems*. To appear.
99. M. Safi and A.B. Gumel. Mathematical analysis of a disease transmission model with quarantine, isolation and an imperfect vaccine. *Computers and Mathematics with Applications*. To appear.
98. E.H. Elbasha, C.N. Podder and A.B. Gumel. Analyzing the dynamics of an SVIRS model with waning natural and vaccine-induced immunity. *Nonlinear Analysis: Real World Applications*. To appear.
97. O. Sharomi and A.B. Gumel. Mathematical study of the in-host dynamics of *Chlamydia trachomatis*. *IMA Journal of Applied Mathematics*. To appear.
96. T. Malik, A. Gumel, T. Strome and S. Mahmud. Google flu trends and Emergency Department triage data predicted the 2009 pandemic H1N1 waves in Manitoba. *Canadian Journal of Public Health*. To appear.
95. F. Agosto, S. Lenhart, A. Gumel and A. Odoi. Mathematical analysis of a model for the transmission dynamics of bovine tuberculosis. *Mathematical Methods in the Applied Sciences*. To appear.
94. A. Niger and A.B. Gumel. Mathematical analysis of the role of immune response on malaria parasite dynamics. *Mathematical Population Studies*. To appear.
93. O. Sharomi and A.B. Gumel. Mathematical study of the in-host dynamics of *trachomatis*. *IMA Journal of Applied Mathematics*. To appear.
92. Nafiu Hussaini, Mathias Winter and Abba B. Gumel. Qualitative assessment of the role of public health education program on HIV transmission dynamics. *Mathematical Medicine and Biology: A Journal of the IMA*. To appear.
91. M. Safi and A.B. Gumel. Effect of incidence function on the dynamics of quarantine/isolation model with time delay. *Nonlinear Analysis Series B: Real World Applications*. 12(1)(2011): 215-235.
90. S.M. Garba, A.B. Gumel and J.M. Lubuma. Dynamically-consistent non-standard finite-difference method for an epidemic model. *Mathematical and Computer Modelling*. 53(2011): 131-150.
89. O. Sharomi and A.B. Gumel. Dynamical analysis of a sex- structured *Chlamydia trachomatis* transmission model with time delay. *Nonlinear Analysis Series B: Real World Applications*. 12(2)(2011): 837-866.
88. M. Safi and A.B. Gumel. Effect of incidence function on the dynamics of quarantine/isolation model with time delay. *Nonlinear Analysis Series B: Real World Applications*. 12(1)(2011): 215-235.
87. O. Sharomi, C. Podder, A.B. Gumel, S. Mahmud and E. Rubinstein. Modelling the transmission dynamics and control of the novel 2009 swine influenza (H1N1) pandemic. *Bulletin of Mathematical Biology*. 73(2011): 515-548.

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85. Dessalegn Y. Melesse and A.B. Gumel. Global asymptotic properties of an *SEIRS* model with multiple infectious stages. *Journal of Mathematical Analysis and Applications*.366(2010): 202-217.
84. M.A. Safi and A.B. Gumel. Global asymptotic dynamics of a model for quarantine and isolation. *DCDS-B*. 14(1)(2010): 209-231.
83. K. Blayneh, A.B. Gumel, S. Lenhart and T. Clayton. Backward bifurcation analysis and optimal control of West Nile virus. *Bulletin of Mathematical Biology*. 72(4)(2010): 1006-1028.
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78. F. Augusto and A.B. Gumel. Theoretical assessment of avian influenza vaccine. *Discrete and Continuous Dynamical Systems B*. 13(1)(2010): 1-25.
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- 51 Ruppa K. Thulasiram , Chen Zhen, Amit Chhabra, Parimala Thulasiraman and Abba B. Gumel. A Second-order L_0 -Stable algorithm for evaluating European options. *International Journal of High Performance Computing and Networking.* 4(5/6)(2006): 311-320.
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