

1. Acquistapace, P. and Terreni, B.: On the abstract nonautonomous parabolic Cauchy problem in the case of constant domains., *Ann. Mat. Pura Appl.*, 140 (1985), 1{55.
2. Alexander, M.E., Bowman, C., Moghadas, S.M., Summers, R., Gumel, A.B., and Sahai, B.M.: A vaccination model for transmission dynamics of influenza, *SIAM J. Appl. Dyn. Syst.*, 3 (2004), 503{524.
<https://doi.org/10.1137/030600370>
3. Arendt, W.: Semigroups and Evolution Equations: Functional Calculus, Regularity and Kernel Estimates, in *Handbook of Differential Equations: Evolutionary Differential Equations*, C.M. Dafermos, E. Feireisl eds, Elsevier/North Holland.
4. Ball, F. and Sirl, D.: An SIR epidemic model on a population with random network and household structure, and several types of individuals, *Adv. in Appl. Probab.*, 44 (2012), 63{86.
5. Bao, J., Yin, G., and Yuan, C.: Two-time-scale stochastic partial differential equations driven by alpha-stable noises: Averaging principles, *Bernoulli*, 23 (2017), 645{669.
<https://doi.org/10.3150/14-BEJ677>
6. Brze'zniak, Z., van Neerven, J. M. A. M., Veraar, M. C., and Weis, L.: It^o's formula in UMD Banach spaces and regularity of solutions of the Zakai equation. *J. Differential Equations.*, 245 (2008), 30{58.
<https://doi.org/10.3917/fbc.030.0058>
7. Capasso, V.: *Mathematical Structures of Epidemic Systems*, Springer-Verlag, Berlin, 1993.
<https://doi.org/10.1007/978-3-540-70514-7>
8. Chen, X., Chen, Z.-Q., Tran, K., and Yin, G.: Properties of switching jump diffusions: Maximum principles and Harnack inequalities, *Bernoulli* 25 (2019), 1045{1075.
<https://doi.org/10.3150/17-BEJ1012>
9. Cerrai, S.: *Second order PDEs in finite and infinite dimension: A probabilistic approach*, Lecture Notes in Mathematics Series 1762, Springer Verlag, 2001.

10. Choulli, M. and Kayser, L.: Observations on Gaussian upper bounds for Neumann Heat Kernels, Bull. Australian Math. Soc., 92 (2015), 429{439.
<https://doi.org/10.1017/S0004972715000611>
11. Chow, P.-L.: Stochastic Partial Differential Equations, Chapman & Hall/CRC, Boca Raton, FL, 2007.
12. Curtain, R. F. and Falez, P. L.: It^o's Lemma in infinite dimensions, J. Math. Anal. Appl. 31 (1970), 434{448.
13. Da Prato, G., Jentzen, A., and Röckner, M.: A mild It^o's formula for SPDEs. arXiv:1009.3526 (2012).
14. Da Prato, G. and Tubaro, L.: Some results on semilinear stochastic differential equations in hilbert spaces, Stochastics, 15 (1985), 271{281.
<https://doi.org/10.1080/17442508508833360>
15. Da Prato, G. and Zabczyk, J.: Stochastic Equations in Infinite Dimensions, Cambridge Univ. Press, Cambridge, 1992.
16. Davies, E. B.: Heat Kernels and Spectral Theory, Cambridge Univ. Tracts in Math. 92, Cambridge University Press, London, 1989.
17. Dieu, N. T., Du, N. H., and Nhu, N. N.: Conditions for Permanence and Ergodicity of Certain SIR Epidemic Models, Acta. Appl. Math., 160 (2019), 81{99.
<https://doi.org/10.1007/s10440-018-0196-8>
18. Dieu, N. T., Nguyen, D. H., Du, N. H., and Yin, G.: Classification of asymptotic behavior in a stochastic SIR model, SIAM J. Appl. Dynamic Sys., 15 (2016), 1062{1084.
<https://doi.org/10.1137/15M1043315>
19. Du, N. H., Nguyen, D. H., and Yin, G.: Conditions for permanence and ergodicity of certain stochastic predator-prey models, J. Appl. Probab., 53 (2016), 187{202.
<https://doi.org/10.1017/jpr.2015.18>
20. Du, N. H. and Nhu, N. N.: Permanence and extinction of certain stochastic SIR models perturbed by a complex type of noises, Appl. Math. Lett., 64 (2017), 223-230.
<https://doi.org/10.1016/j.aml.2016.09.012>

21. Du, N. H. and Nhu, N. N.: Permanence and Extinction for the Stochastic SIR Epidemic Model, submitted.
22. Fang, L. and Yip, N. K.: Long time behavior of some epidemic models, *Discrete and Continuous Dynamical Sys.- B*, 16 (2011), 867{881.
<https://doi.org/10.3934/dcdsb.2011.16.867>
23. Gathy, M. and Lefevre, C.: From damage models to SIR epidemics and cascading failures, *Adv. in Appl. Probab.*, 41 (2009), 247{269.
<https://doi.org/10.1017/S0001867800003219>
24. Gradinaru, M., Nourdin, I., and Tindel, S.: Itô's- and Tanaka's-type formulae for the stochastic heat equation: the linear case. *J. Funct. Anal.*, 228 (2005), 114{143.
<https://doi.org/10.1016/j.jfa.2005.02.008>
25. Hening, A. and Nguyen, D.: Coexistence and extinction for stochastic Kolmogorov systems, *Ann. Appl. Probab.*, 28 (2018), 1893{1942.
<https://doi.org/10.1214/17-AAP1347>
26. Hening, A., Nguyen, D., and Yin, G.: Stochastic population growth in spatially heterogeneous environments: The density-dependent case, *J. Math. Bio.*, 76 (2018), 697{754.
<https://doi.org/10.1007/s00285-017-1153-2>
27. Kermack, W. O. and McKendrick, A. G.: Contributions to the mathematical theory of epidemics, (part I), *Proc. Royal Soc. London Ser. A*, 115 (1927), 700{721.
<https://doi.org/10.1098/rspa.1927.0118>
28. Kermack, W. O. and McKendrick, A. G.: Contributions to the mathematical theory of epidemics, (part II), *Proc. Royal Soc. Ser. A*, 138 (1932), 55{83.
<https://doi.org/10.1098/rspa.1932.0171>
29. Knipf, D. H., Rost, G., and Wu, J.: Epidemic spread and variation of peak times in connected regions due to travel-related infections-dynamics of an antigravity-type delay differential model. *SIAM J. Appl. Dyn. Syst.*, 12 (2013), 1722{1762.
<https://doi.org/10.1137/130914127>
30. Kortchemski, I.: A predator-prey SIR type dynamics on large complete graphs with three phase transitions, *Stochastic Process. Appl.*, 125 (2015), no. 3, 886{917.

<https://doi.org/10.1016/j.spa.2014.10.005>

31. Lanconelli, A.: White noise approach to the It^o's formula for the stochastic heat equation. Commun. Stoch. Anal. 1, 2 (2007), 311{320.
32. Mao, X.: Stochastic Differential Equations and Their Applications, Horwood Publishing Chichester, 1997.
33. Nguyen, D. H., Nguyen, N. N., and Yin, G.: Analysis of A Spatially Inhomogeneous Stochastic Partial Differential Equation Epidemic Model, submitted.
34. Nguyen, N. N. and Yin, G.: Stochastic Partial Differential Equation Models for Spatially Dependent Predator-Prey Equations, to appear in Discrete and Continuous Dynamical Systems-Series B.
35. Pardoux, E.: Two-sided stochastic calculus for SPDEs. In Stochastic partial differential equations and applications (Trento, 1985), vol. 1236 of Lecture Notes in Math. Springer, Berlin, 1987, pp. 200{207.
<https://doi.org/10.3817/0387071200>
36. Pr ev^{ot}, C. and and R ockner, M.: A Concise Course on Stochastic Partial Equations, Springer, Berlin, 2007.
37. Yin, G. and Zhu, C.: Hybrid Switching Di usions: Properties and Applications, Springer, New York, 2010.
38. Zambotti, L.: It^o-Tanaka's formula for stochastic partial differential equations driven by additive spacetime white noise. In Stochastic partial differential equations and applicationsVII, vol. 245 of Lect. Notes Pure Appl. Math. Chapman-Hall/CRC, Boca Raton, FL, 2006, 337{347.