

# The Bibliography

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## Abstract

This manuscript contains some publications about oscillation and comparison theory on (ordinary, impulsive, functional) differential equations.

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## References

- [1]
- [2] R. P. Agarwal, *Interval oscillation criteria for second-order nonlinear perturbed differential equations*, *Comput. Math. Appl.* **47** (2004), 751–765.
- [3] R. P. Agarwal, Martin Bohner, Wing-Sum Cheung, and S. R. Grace, *Oscillation criteria for first and second order forced difference equations with mixed nonlinearities*, *Math. Comput. Modelling* **45** (2007), 965–973.
- [4] R. P. Agarwal and Alexander Domoshnitsky, *Non-oscillation of the first-order differential equations with unbounded memory for stabilization by control signal*, *Appl. Math. Comput.* **173** (2006), 177–195.
- [5] R. P. Agarwal and S. R. Grace, *Forced oscillation of  $n^{\text{th}}$ -order nonlinear differential equations*, *Appl. Math. Lett.* **13** (2000), 53–57.
- [6] R. P. Agarwal, S. R. Grace, I. Kiguradze, and D. O'Regan, *Oscillation of functional differential equations*, *Math. Comput. Modelling* **41** (2005), 417–461.

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- [7] R. P. Agarwal, S. R. Grace, and J. Manojlovic, *On the oscillatory properties of certain fourth order nonlinear difference equations*, J. Math Anal. Appl. **322** (2006), 930–956.
- [8] ———, *Oscillation criteria for certain fourth order nonlinear functional differential equations*, Math. Comput. Modelling **44** (2006), 163–187.
- [9] R. P. Agarwal, S. R. Grace, and D. O’Regan, *Linearization of second-order superlinear oscillation theorems*, Math. Comput. Modelling **39** (2004), 1165–1183.
- [10] R. P. Agarwal, Wei-Cheng Lian, and Cheh-Chih Yeh, *Levin’s comparison theorems for nonlinear second order differential equations*, Appl. Math. Lett. **9** (1996), 29–35.
- [11] Ravi P. Agarwal, Martin Bohner, and Patricia J. Y. Wong, *Sturm-lioville eigenvalue problems on time scales*, Appl. Math. Comput. **99** (1999), 153–166.
- [12] Ravi P. Agarwal, Said R. Grace, and Donal O’Regan, *Oscillation theory for second order linear, half-linear, superlinear and sublinear dynamic equations*, Kluwer Academic Publishers, Dordrecht, Boston, London, 2002.
- [13] A. Aghajani and A. Moradifam, *Oscillation of solutions of second-order nonlinear differential equations of euler type*, J. Math. Anal. Appl. **326** (2007), 1076–1089.
- [14] Shair Ahmad, *On sturmian theory for second order systems*, Proc. Amer. Math. Soc. **87** (1983), no. 4, 661–665.
- [15] Shair Ahmad and Alan C. Lazer, *Component properties of second order linear systems*, Bull. Amer. Math. Soc. **82** (1976), no. 2, 287–289.
- [16] ———, *A new generalizations of the sturm comparison theorem to selfadjoint systems*, Proc. Amer. Math. Soc. **68** (1978), no. 2, 185–188.
- [17] ———, *On an extension of sturm’s comparison theorem to a class of nonselfadjoint second-order systems*, Nonlinear Anal. **4** (1980), no. 3, 497–501.
- [18] M. U. Akhmet, *On the general problem of stability for impulsive differential equations*, J. Math. Anal. Appl. **288** (2003), 182–196.
- [19] M. U. Akhmet and R. Sejilova, *The control of boundary value problem for linear impulsive integro-differential systems*, J. Math. Anal. Appl. **236** (1999), 312–326.
- [20] M. U. Akhmet and A. Zafer, *Controllability of two-point nonlinear boundary value problems by the numerical analytic method*, Appl. Math. Comput. **151** (2004), 729–744.
- [21] Walter Allegretto and Yin Xi Huang, *A picone’s identity for the laplacian and applications*, Nonlinear Anal. **32** (1998), no. 7, 819–830.
- [22] J. D. Bankier and W. Leighton, *Numerical continued fractions*, Amer. J. Math. **64** (1942), no. 1/4, 653–668.

- [23] J. Angelova, A. Dishliev, and S. Neov, *I- optimal curve for impulsive lotka-volterra predator-prey model*, Comput. Math. Appl. **43** (2002), no. 10-11, 1203–1218.
- [24] F. V. Atkinson, *On second-order non-linear oscillations*, Pacific J. Math. **5** (1955), 643–647.
- [25] B. Ayanlar and A. Tiryaki, *Oscillation theorems for nonlinear second-order differential equations*, Comput. Math. Appl. **44** (2002), 529–538.
- [26] Blanka Baculíková, *Oscillation criteria for second order nonlinear differential equations*, Arch. Math.(Brno) **Tomus 42** (2006), 141–149.
- [27] D. D. Bainov, Cui Baotong, and Emil Minchev, *Forced oscillation of certain hyperbolic equations of neutral type*, J. Comput. Appl. Math. **72** (1996), 309–318.
- [28] D. D. Bainov, M. B. Dimitrova, and A. B. Dishliev, *Oscillation of the bounded solutions of impulsive differential-difference equations of second-order*, Appl. Math. Comput. **114** (2000), 61–68.
- [29] D. D. Bainov, M. B. Dimitrova, and V. A. Petrov, *Oscillatory properties of solutions of impulsive differential equations with several retarded arguments*, Georgian Math. J. **5** (1998), 201–212.
- [30] D. D. Bainov, Yu. I. Domshlak, and P. S. Simeonov, *Sturmian comparison theory for impulsive differential inequalities and equations*, Arch. Math.(Basel) **67** (1996), 35–49.
- [31] D. D. Bainov, Zdzislaw Kamont, and Emil Minchev, *Comparison principles for impulsive hyperbolic equations of first order*, J. Comput. Appl. Math. **60** (1995), 379–388.
- [32] D. D. Bainov, S. I. Kostadinov, and A. D. Myshkis, *Properties of the  $l_p$ -solutions of linear impulsive equations in a banach space*, Aequationes Math. **41** (1991), 212–221.
- [33] D. D. Bainov and Emil Minchev, *Oscillation of solution of impulsive parabolic equations*, J. Comput. Appl. Math. **69** (1996), 207–214.
- [34] ———, *Oscillation of solutions of impulsive nonlinear parabolic differential and difference equations*, Internat. J. Theoret. Phys. **35** (1996), no. 1, 207–215.
- [35] D. D. Bainov and P. S. Simeonov, *Systems with impulse effect: Stability, theory and applications*, Ellis Horwood, Chichester, 1989.
- [36] ———, *Impulsive differential equations: Periodic solutions and applications*, Longman Scientific and Technical, Harlow, 1993.
- [37] ———, *Impulsive differential equations, asymptotic properties of the solutions*, Series on Advances in Mathematics for Applied Sciences, vol. 28, World Scientific Publishing Co. Pte. Ltd., Singapore, New Jersey, London, Hong Kong, 1995.

- [38] ———, *Oscillation theory of impulsive differential equations*, International Publications, Orlando, Florida, 1998.
- [39] Miroslav Bartušek, *On the structure of oscillatory solutions of third order differential equation*, Arch. Math. (Brno) **33** (1997), 323–334.
- [40] ———, *On existence of oscillatory solutions of  $n$ th order differential equations with quasiderivatives*, Arch. Math. (Brno) **34** (1998), 1–12.
- [41] Boris Belinskiy, John R. Graef, and Sonja Petrovič, *A nonlinear sturm-picone comparison theorem for dynamic equations on time scales*, Int. J. Difference Equations **2** (2007), no. 1, 25–35.
- [42] Richard Bellman, *The boundedness of solutions of linear differential equations*, Duke Math. J. **14** (1947), 83–97.
- [43] M. Benchohra, J. Henderson, and S. K. Ntouyas, *On first order impulsive semilinear functional differential inclusions*, Arch. Math. (Brno) **39** (2003), 129–139.
- [44] Mouffak Benchohra, Samira Hamani, and Johnny Henderson, *Oscillation and nonoscillation for impulsive dynamic equations on certain time scales*, Adv. Differential Equations **06** (2006), 1–12.
- [45] Donald C. Benson and Kurt Kreith, *On abstract pruefer transformations*, Proc. Amer. Math. Soc. **26** (1970), no. 1, 137–140.
- [46] Leonid Berezanski and Elena Braverman, *Oscillation for equations with positive and negative coefficients and with distributed delay  $i$ : General results*, Electron. J. Differential Equations **2003** (2003), no. 12, 1–21, (electronic).
- [47] Leonid Berezanski and Yury Domshlak, *First order differential equations with several deviating arguments: Sturmian comparison method in oscillatory theory: I*, Electron. J. Differential Equations **2001** (2001), no. 40, 1–19, (electronic).
- [48] ———, *Damped second order linear differential equation with deviating arguments: sharp results in oscillation properties*, Electron. J. Differential Equations **2002** (2002), no. 31, 1–18, (electronic).
- [49] ———, *Differential equations with several deviating arguments: Sturmian comparison method in oscillatory theory, ii*, Electron. J. Differential Equations **2002** (2002), no. 31, 1–18, (electronic).
- [50] Leonid Berezansky and Elena Braverman, *Linerized oscillation theory for a nonlinear delay impulsive equation*, J. Comput. Appl. Math. **161** (2003), no. 2, 35–49.
- [51] ———, *Oscillation and other properties of linear impulsive and nonimpulsive delay equations*, Appl. Math. Lett. **16** (2003), 1025–1030.
- [52] L. E. Bobisud, *Oscillation nonlinear differential equations with small nonlinear damping*, SIAM J. Appl. Math. **18** (1970), no. 1, 74–76.

- [53] M. Bognár and O. Došlý, *The application of picone-type identity for some nonlinear elliptic differential equations*, Acta Math. Univ. Comenian. **LXXII** (2003), 45–57.
- [54] M. Bohner and O. Došlý, *The discrete prüfer transform*, Proc. Amer. Math. Soc. **129** (2001), no. 9, 2715–2726.
- [55] Martin Bohner and G. Sh. Guseinov, *Double integral calculus of variation on time scales*, Comput. Math. Appl. ?? (2007), no. ??, ??–??
- [56] Yasar Bolat and Omer Akin, *Oscillatory behaviour of higher order neutral type nonlinear forced differential equation with oscillating coefficients*, J. Math. Anal. Appl. **290** (2004), 302–309.
- [57] Mihai Bostan, *Periodic solutions for evolution equations*, Electron. J. Differential Equations (2002), 1–41.
- [58] R. C. Brown and D. B. Hinton, *Opial’s inequality and oscillation of 2nd order equations*, Proc. Amer. Math. Soc. **125** (1997), no. 4, 1123–1129.
- [59] F. D. Burgoyne, *Generalized trigonometric functions*, Math. Comput. **18** (1964), no. 86, 314–316.
- [60] G. Buttler and J. W. Macki, *Oscillation and comparison theorems for second order linear differential equations with integrable coefficients*, Canad. J. Math. **26** (1974), no. 2, 294–301.
- [61] G.J. Buttler, *Oscillation theorems for a nonlinear analogue of hill’s equation*, Quart. J. Math. Oxford **27** (1976), no. 2, 159–171.
- [62] ———, *Hille-wintner type comparison theorems for second order ordinary differential equations*, Proc. Amer. Math. Soc. **76** (1979), no. 1, 51–59.
- [63] G.J. Buttler, L. H. Erbe, and A. B. Mingarelli, *Riccati techniques and variational principles in oscillation theory for linear systems*, Trans. Amer. Math. Soc. **303** (1987), no. 1, 263–282.
- [64] A. Cabada and S. Heikkila, *Uniqueness, comparison, and existence results for third-order initial boundary value problems*, Comput. Math. Appl. **41** (2001), 607–618.
- [65] Alberto Cabada, Juan B. Frreiro, and Juan J. Nieto, *Green’s function and comparison principles for first order periodic differential equations with piecewise constant arguments*, J. Math. Anal. Appl. **291** (2004), 690–697.
- [66] T. Candan and R. S. Dahiya, *Oscillation behavior of nth order neutral differential equations with continuous delay*, J. Math. Anal. Appl. **290** (2004), 105–112.
- [67] ———, *Oscillation behavior higher order neutral differential equations*, Appl. Math. Comput. **167** (2005), 1267–1280.
- [68] ———, *Oscillation theorems for nth-order neutral functional differential equations*, Math. Comput. Modelling **43** (2006), 357–367.

- [69] Tiziana Cardinali, Nikolaos Papageorgiou, and Rafaella Servadei, *The neumann problem for quasilinear differential equations*, Arch. Math. (Brno) **Tomus 40** (2004), 321–333.
- [70] D. Çakmak, *Integral averaging technique for the interval oscillation criteria of certain second-order nonlinear differential equations*, J. Math. Anal. Appl. **300** (2004), 408–425.
- [71] D. Çakmak and A. Tiryaki, *Oscillation criteria for  $n$ th-order forced functional differential equations*, J. Math. Anal. Appl. **278** (2003), 562–576.
- [72] ———, *Oscillation criteria for certain forced second-order nonlinear differential equations*, Appl. Math. Lett. **17** (2004), 275–279.
- [73] ———, *Oscillation criteria for certain forced second-order nonlinear differential equations with delayed argument*, Comput. Math. Appl. **49** (2005), 1647–1653.
- [74] ———, *Comment on the paper "oscillation of second-order nonlinear ode with damping*, Appl. Math. Comput. **191** (2007), 298.
- [75] Mariella Cecchi, Zuzana Došla, and Mauro Marini, *On recessive and dominant solutions for half-linear difference equations*, J. Differ. Equations **10** (2004), no. 9, 797–808.
- [76] ———, *Half-linear equations and characteristic properties of the principal solutions*, J. Differential Equations **208** (2005), 494–507.
- [77] ———, *Corrigendum to "half-linear equations equations and characteristic properties of the principal solution " [j. differential equations 208 (2005) 494-507]*, J. Differential Equations **221** (2006), 272–274.
- [78] Mariella Cecchi, Zuzana Došla, Mauro Marini, and Ivo Vrkoč, *Integral conditions for nonoscillation of second order nonlinear differential equations*, Nonlinear Anal. **64** (2006), 1278–1289.
- [79] C. Y. Chan and S. I. Yuen, *Impulsive effects on global existence of solutions for degenerate semilinear parabolic equations*, Appl. Math. Comput. (1998), no. 2-3, 97–116.
- [80] B. Chanane, *Sturm-liouville problems with impulse effects*, Appl. Math. Comput. **190** (2007), 610–626.
- [81] Valter Šeda, *Some classes of linear  $n$ -th order differential equations*, Arch. Math. (Brno) **33** (1997), 157–165.
- [82] Anton Škerlík, *An integral condition of oscillation for equation  $y''' + p(t)y' + q(t)y = 0$  with nonnegative coefficients*, Arch. Math. (Brno) **31** (1995), 155–161.
- [83] Marko Švec and Daniela Hricišáková, *Some remarks about the nonoscillatory solutions*, Arch. Math. (Brno) **36** (2000), 617–622.

- [84] Hung-Yih Chen, Huei-Lin Hong, and Cheh-Chih Yeh, *A general comparison theorem for nonlinear equations*, *Comput. Math. Appl.* **42** (2001), 917–925.
- [85] Lijing Chen and Jitao Sun, *Nonlinear boundary problem of first order impulsive integro-differential equations*, *J. Comput. Appl. Math.* **202** (2007), 392–401.
- [86] Y. S. Chen and W. Z. Feng, *Oscillations of second order nonlinear ode with impulses*, *J. Math. Anal. Appl.* **210** (1997), 150–169.
- [87] Zhi cheng Wang, Ioannis Strvroulakis, and Xiang zheng Qian, *A survey on the oscillation of solutions of first order linear differential equations with deviating arguments*, *Appl. Math. E-Notes* **2** (2002), 171–191.
- [88] W. J. Coles, *A note on matrix riccati systems*, *Proc. Amer. Math. Soc.* **12** (1961), no. 4, 557–559.
- [89] ———, *Matrix riccati differential equations*, *SIAM J. Appl. Math.* **13** (1965), no. 3, 627–634.
- [90] ———, *Shorter notes: A simple proof of a well-known oscillation theorem*, *Proc. Amer. Math. Soc.* **19** (1967), 507–507.
- [91] ———, *An oscillation criterion for second-order linear differential equations*, *Proc. Amer. Math. Soc.* **19** (1968), no. 3, 755–759.
- [92] W. A. Coppel, *Stability and asymptotic behaviour of differential equations*, D. C. Heath and Company Boston, Boston, Englewood, Chicago etc., 1965.
- [93] Bao-Tong Cui, *Oscillation properties for parabolic equations of neutral type*, *Comment. Math. Univ. Carolin.* **33** (1992), no. 4, 581–588.
- [94] Bao-Tong Cui, Maoan Han, and Huizhong Yang, *Some sufficient conditions for oscillation of impulsive delay hyperbolic systems with robin boundary conditions*, *J. Comput. Appl. Math.* **180** (2005), 365–375.
- [95] Bao-Tong Cui and Yongqing Liu, *Oscillation of partial difference equations with continuous variable*, *J. Comput. Appl. Math.* **154** (2003), 373–391.
- [96] Bao-Tong Cui, Yongqing Liu, and Feiqi Deng, *Some oscillation problems for impulsive hyperbolic differential systems with several delays*, *Appl. Math. Comput.* **146** (2003), 667–679.
- [97] R. S. Dahiya and T. Candan, *Oscillation behavior of arbitrary order neutral differential equations*, *Appl. Math. Lett.* **17** (2004), 953–958.
- [98] Fozi M. Dannan, *Sturmian theory and disconjugacy of second order systems*, *Proc. Amer. Math. Soc.* **90** (1984), no. 4, 563–566.
- [99] Jozef Džurina, *Oscillatory and asymptotic behaviour of solutions of advanced functional equations*, *Arch. Math. (Brno)* **29** (1993), 161–166.
- [100] ———, *A comparison theorem for linear delay differential equations*, *Arch. Math. (Brno)* **31** (1995), 113–120.

- [101] Weibing Deng, Yuxiang Li, and Chunhong Xie, *Existence and nonexistence of global solutions of some nonlocal degenerate parabolic equations*, Appl. Math. Lett. **16** (2003), 803–808.
- [102] J. B. Diaz and Joyce R. McLaughlin, *Sturmian comparison theorems for ordinary and partial differential equations*, Bull. Proc. Amer. Math. Soc. **75** (1969), 335–339.
- [103] Y. Domshlak, G. Kvinikadze, and I. P. Stavroulakis, *Sturmian comparison method: the version for first order neutral differential equations*, Math. Ineq. Appl. **5** (2002), no. 2, 247–256.
- [104] O. Došlý and P. Řehák, *Half-linear differential equations*, Elsevier Ltd., Amsterdam, Boston, Heidelberg etc., 2005.
- [105] Ondřej Došlý, *A remark on the half-linear extension of the hartman-wintner theorem*, Electron. J. Differential Equations (1999), 29–37, Conference 03.
- [106] ———, *Methods of oscillation theory of half-linear second order differential equations*, Czechoslovak Math. J. **50** (2000), no. 125, 657–671.
- [107] ———, *Oscillation theory of linear difference equations*, Arch. Math.(Brno) **Tomus 36** (2000), 329–342.
- [108] Ondřej Došlý and Simona Fišnarová, *Oscillation and nonoscillation of solutions to even order self-adjoint differential equations*, Electron. J. Differential Equations **2003** (2003), no. 115, 1–21.
- [109] Ondřej Došlý, J. R. Graef, and J. Jaroš, *Forced oscillation of second order linear and half-linear difference equations*, Proc. Amer. Math. Soc. **131** (2002), no. 9, 2859–2867.
- [110] Ondřej Došlý and J. Jaroš, *A singular version of leighton’s comparison theorem for forced quasilinear second order differential equations*, Arch. Math.(Brno) **Tomus 39** (2003), 335–345.
- [111] Ondřej Došlý and Alexander Lomtatidze, *Oscillation and nonoscillation criteria for half-linear second order differential equations*, Hiroshima Math. J. **36** (2006), 203–219.
- [112] Ondřej Došlý and Mehmet Ünal, *Half-linear differential equations: Linearization technique and its applications*, (2007).
- [113] Ondřej Došlý and Zuzana Pátiková, *Hille-wintner type comparison criteria for half-linear second order differential equations*, Arch. Math.(Brno) **Tomus 42** (2006), 185–194.
- [114] A. Dress and T. Lokot, *A simple proof of the triangle inequality for ntv metric*, Appl. Math. Lett. **16** (2003), 809–813.
- [115] Lili Du, Wei Fu, and Mingshu Fan, *Oscillatory solutions of delay hyperbolic system with distributed deviated arguments*, Appl. Math. Comput. **154** (2004), 521–529.



- [116] Samuel G. Dube and Angelo B. Mingarelli, *A note on non-oscillation theorem of atkinson*, Electron. J. Differential Equations **2004** (2004), no. 22, 1–6.
- [117] ———, *A non-oscillation theorem for differential matrix systems*, J. Math. Anal. Appl. **306** (2005), 349–363.
- [118] Hassan El-Morshedy and S. R. Grace, *comparison theorems for second order nonlinear difference equations*, J. Math. Anal. Appl. **306** (2005), 106–121.
- [119] M. A. El-Sayed, *An oscillation criterion for a forced-second order linear differential equation*, Proc. Amer. Math. Soc. **118** (1993), no. 3, 813–817.
- [120] Á. Elbert, *A half-linear differential equation*, in: Colloq. Math. Soc. Janos Bolyai 30: Qualitative Theory of Differential Equations, Szeged (1979), 153–180.
- [121] ———, *On the half-linear second order differential equations*, Acta Math. Hung. **49** (1987), no. 3-4, 487–508.
- [122] ———, *On solutions of differential equations with "common zero" at infinity*, Arch. Math. (Brno) **33** (1997), 109–120.
- [123] ———, *Oscillation/nonoscillation criteria for linear second order differential equations*, J. Math. Anal. Appl. **226** (1998), 207–219.
- [124] Á. Elbert, T. Kusano, and T. Tanigawa, *An oscillatory half-linear differential equation*, Arch. Math. (Brno) **33** (1997), 355–361.
- [125] Á. Elbert and P. Stavroulakis, *Oscillation and nonoscillation criteria for delay differential equation*, Proc. Amer. Math. Soc. **123** (1995), no. 5, 1503–1510.
- [126] Uri Elias, *Integral means and polya factorizations*, Proc. Amer. Math. Soc. **126** (1998), no. 7, 2071–2075.
- [127] Stanley B. Eliason, *Lyapunov type inequalities for certain second order functional differential equations*, SIAM J. Appl. Math. **27** (1974), no. 1, 180–199.
- [128] L. Erbe, *Oscillation theorems for second-order nonlinear differential equations*, Proc. Amer. Math. Soc. **24** (1970), 811–814.
- [129] ———, *Hille-wintner type comparison theorem for selfadjoint fourth-order linear differential equations*, Proc. Amer. Math. Soc. **80** (1980), no. 3, 417–422.
- [130] ———, *Integral comparison theorems for riccati equations and applications*, Canad. Math. Bull. **25** (1982), no. 1, 82–97.
- [131] L. Erbe and S. Mysore, *Comparison theorems and non-occillation for differential equations in a b-algebra*, Nonlinear Anal. **6** (1982), no. 1, 21–33.
- [132] Lynn Erbe, Ronald M. Madsen, and Allan Peterson, *Factoring linear differential operators on measure chains*, J. of Inequal. **6** (2001), 287–303.

- [133] Garret J. Etgen and James F. Pawlowski, *A comparison theorem and oscillation criteria for second order differential systems*, Pacific J. Math. **72** (1977), no. 1, 59–69.
- [134] William Benjamin Fite, *The relation between the zeros of a solution of a linear homogenous differential equation and those of its derivatives*, Ann. of Math. (2) **18** (1917), no. 4, 214–220.
- [135] ———, *Concerning the zeros of the solutions of certain differential equations*, Trans. Amer. Math. Soc. **19** (1918), no. 4, 341–352.
- [136] ———, *Properties of solutions of certain functional differential equations*, Trans. Amer. Math. Soc. **22** (1921), no. 3, 311–319.
- [137] ———, *Periodic solutions of a linear differential equations*, Ann. Math. (2) **28** (1927), no. 1/4, 59–64.
- [138] Simona Fišnarová, *Oscillatory properties of fourth order self-adjoint differential equations*, Arch. Math.(Brno) **Tomus 40** (2004), 457–469.
- [139] K. E. Foster and R. C. Grimmer, *Nonoscillatory solutions of higher order delay equations*, J. Math. Anal. Appl. **77** (1980), 150–164.
- [140] Xilin Fu, Xinzhi Liu, and S. Sivaloganathan, *Oscillation criteria for impulsive parabolic differential equations with delay*, J. Math. Anal. Appl. **268** (2002), 647–664.
- [141] Xilin Fu, Jianganq Qi, and Yansheng Liu, *General comparison principle for impulsive variable time differential equations with application*, Nonlinear Anal. **42** (2000), 1421–1429.
- [142] Xilin Fu and LieJune Shiau, *Oscillation criteria for impulsive parabolic differential equations with delay*, Appl. Math. Comput. **153** (2004), 587–599.
- [143] Xilin Fu and Liqin Zhang, *Forced oscillation for impulsive hyperbolic boundary value problems*, Appl. Math. Comput. **158** (2004), 761–780.
- [144] Victor A. Galaktionov and Howard A. Levine, *A general approach to critical fujita exponents in nonlinear parabolic problems*, Nonlinear Anal. **34** (1998), no. 7, 1005–1027.
- [145] Wenliang Gao and Jinghua Wang, *Estimates of solutions of impulsive parabolic equations under neumann boundary condition*, J. Math. Anal. Appl. **283** (2003), 478–498.
- [146] H. Gauchman, *Integral inequalities in q-calculus*, Comput. Math. Appl. **47** (2004), 281–300.
- [147] Peiguang Wang Weigao Ge, *Oscillation of a clas of higher order functional differential equations with damped term*, Appl. Math. Comput. **148** (2004), 351–358.
- [148] K. Gopalsamy and B. G. Zhang, *On delay differential equations with impulses*, J. Math. Anal. Appl. **139** (1989), 110–122.

- [149] S. R. Grace, *Oscillation theorems for second order nonlinear differential equations with damping*, Math. Nachr. **141** (1989), 117–127.
- [150] ———, *Oscillation criteria for second order differential equations with damping*, J. Austral. Math. Soc. Ser. A **49** (1990), 43–54.
- [151] ———, *Oscillation theorems for nonlinear differential equations of second order*, J. Math. Anal. Appl. **171** (1992), 220–241.
- [152] S. R. Grace and B. S. Lalli, *Integral averaging techniques for the oscillation of second order nonlinear differential equations*, J. Math. Anal. and Appl. **149** (1990), 277–311.
- [153] S. R. Grace, B. S. Lalli, and C. C. Yeh, *Oscillation theorems for nonlinear second order differential equations with a nonlinear damping term*, SIAM J. Math. Anal. **15** (1984), 1082–1093.
- [154] ———, *Addendum: Oscillation theorems for nonlinear second order differential equations with a nonlinear damping term*, SIAM J. Math. Anal. **19** (1988), 1252–1253.
- [155] J. R. Graef, A. M. Carino, and C. Qian, *A comparison result for nonlinear difference equations*, Nonlinear Anal. **30** (1997), no. 3, 1547–1553.
- [156] J. R. Graef and J. Karsai, *On the oscillation of impulsively damped half-linear oscillators*, Electron. J. Qual. Theor. Differ. Equ. (2000), no. 14, Proc. 6th Coll. QTDE.
- [157] J. R. Graef, S. M. Rankin, and P. W. Spikes, *Oscillation results for nonlinear functional differential equations*, Funkcial. Ekvac. **27** (1984), 255–260.
- [158] J. R. Graef, Bo Yang, and B.G. Zhang, *A note on the existence of oscillatory solutions of higher order neutral differential equations*, Acta. Sci. Math. **66** (2000), 63–70, (Szeged).
- [159] M. K. Grammatikopoulos and P. Marušlak, *Oscillatory properties of solutions of second order nonlinear neutral differential inequalities with oscillating coefficients*, Arch. Math. (Brno) **31** (1995), 29–36.
- [160] Aaron Gray, David Lovit, and Steven Spriggs, *Oscillation theorems for a self-adjoint dynamic equation on time scales*, Panamer. Math. J. **15** (2005), no. 2, 49–64.
- [161] M. Greguš and M. Greguš Jr., *Remark concerning oscillatory properties of solutions of a certain nonlinear equation of third order*, Arch. Math. (Brno) **28** (1992), 51–55.
- [162] Michal Greguš, *On the oscillatory behaviour of certain third order nonlinear differential equation*, Arch. Math. (Brno) **28** (1992), 221–228.
- [163] G. Sh. Guseinov, *Instability interval of hill's equation with piecewise constant and alternating coefficient*, Comput. Math. Appl. **47** (2004), 319–326.

- [164] G. Sh. Guseinov and A. Zafer, *Stability criteria for second order linear impulsive differential equations with periodic coefficients*, Math. Nachr., to appear.
- [165] A. F. Güvenilir and A. Zafer, *Second-order oscillation of forced functional differential equations with oscillatory potentials*, Comput. Math. Appl. **51** (2006), 1395–1404.
- [166] I. Györi and T. Krisztin, *Oscillation results for linear autonomous partial delay differential equations*, J. Math. Anal. Appl. **174** (1993), 204–217.
- [167] Maurice Hanan, *Oscillation criteria for third-order linear differential equations*, Pacific J. Math. **11** (1961), 919–944.
- [168] G. H. Hardy, J. E. Littlewood, and G. Pólya, *Inequalities*, Cambridge university press, Cambridge, 1964.
- [169] B. J. Harris, *On an inequality of lyapunov for disfocality*, J. Math. Anal. Appl. **146** (1990), 495–500.
- [170] B. J. Harris and Q. Kong, *On the oscillation of differential equations with an oscillatory coefficient*, Trans. Amer. Math. Soc. **347** (1995), no. 5, 1831–1839.
- [171] Philip Hartman, *On non-oscillatory linear differential equations of second order*, Amer. J. Math. **74** (1952), 389–400.
- [172] ———, *Ordinary differential equations*, John Willey and Soons, Inc., New York. London. Sydney., 1974.
- [173] ———, *On nonoscillatory linear differential equations of second order*, Proc. Amer. Math. Soc. **64** (1977), no. 2, 251–259.
- [174] Philip Hartman and Aurel Wintner, *On the classical existence theorem of linear differential equations*, Amer. J. Math. **71** (1949), no. 4, 859–864.
- [175] ———, *Oscillatory and non-oscillatory linear differential equations*, Amer. J. Math. **71** (1949), no. 3, 627–649.
- [176] ———, *Gaussian curvature and local embedding*, Amer. J. Math. **73** (1951), no. 4, 876–884.
- [177] ———, *On an oscillation criterion of liapunoff*, Amer. J. Math. **73** (1951), no. 4, 885–890.
- [178] ———, *On non-oscillatory linear differential equations*, Amer. J. Math. **75** (1953), no. 4, 717–730.
- [179] ———, *On th local behavior of solutions of non-parabolic partial differential equations*, Amer. J. Math. **75** (1953), no. 3, 449–476.
- [180] ———, *On a comparison theorem for self-adjoint partial differential equations of elliptic type*, Amer. Math. Soc. **6** (1955), 862–865.
- [181] Mengxing He and Anping Liu, *The oscillation of hyperbolic functional differential equations*, Appl. Math. Comput. **142** (2003), 205–224.

- [182] Mengxing He, Zhuoling Ou, and Anping Liu, *Comparison method of functional differential equations and its application*, Appl. Math. Comput. **125** (2002), 271–286.
- [183] Z. He and W. Ge, *Oscillations of second-order nonlinear impulsive ordinary differential equations*, J. Comput. Appl. Math. **158** (2003), no. 2, 397–406.
- [184] V. B. Headley and C. A. Swanson, *Oscillation criteria for elliptic equations*, Pacific J. Math. **27** (1968), no. 3, 501–506.
- [185] Einar Hille, *Non-oscillation theorems*, Trans. Amer. Math. Soc. **64** (1948), no. 2, 234–252.
- [186] ———, *Lectures on ordinary differential equations*, Addison Wesley publishing company, Reading etc., 1969.
- [187] H. L. Hong, *On the oscillatory behaviour of solutions of second order nonlinear differential equations*, Publ. Math. Debrecen **52** (1998), 55–68.
- [188] Wu-Teh Hsiang and Man Kam Kwong, *On the oscillation of nonlinear hyperbolic equations*, J. Math. Anal. Appl. **85** (1982), 31–45.
- [189] H. B. Hsu and C. C. Yeh, *Oscillation theorems for second-order half-linear differential equations*, Appl. Math. Lett. **9** (1996), no. 6, 71–77.
- [190] Manfeng Hu and Jiang Zhu, *N-th order impulsive integro-differential equations in banach spaces*, Electron. J. Qual. Theor. Differ. Equ. **2004** (2004), no. 31, 1–14.
- [191] C. C. Huang, *Oscillation and nonoscillation for second-order linear differential equations*, J. Math. Anal. Appl. **210** (1997), 712–723.
- [192] Chunchao Huang, *Oscillation and nonoscillation for second-order linear impulsive differential equations*, J. Math. Anal. Appl. **214** (1997), 378–394.
- [193] E. L. Ince, *Ordinary differential equations*, Dover publications, New York, 1956.
- [194] P. Jain and R. Hassija, *Some remarks on two-dimensional knopp type inequalities*, Appl. Math. Lett. **16** (2003), 459–464.
- [195] Tadeusz Jankowski, *First-order impulsive ordinary differential equations with advanced arguments*, J. Math. Anal. Appl. **331** (2007), 1–12.
- [196] Jaroslav Jaroš and Takashi Kusano, *On second order half-linear differential equations with forcing term*, Sürükaisekikenkyūsho Kökyūroku **984** (1997), 191–197.
- [197] ———, *A picone type identity for second-order half-linear differential equations*, Acta. Math. Univ. Comenian **68** (1999), no. 1, 137–151.
- [198] ———, *Self-adjoint differential equations and generalized karamata functions*, (2004), 25–60.

- [199] Jaroslav Jaroš, Takashi Kusano, and Norio Yoshida, *Forced superlinear oscillations via picone's identity*, Acta. Math. Univ. Comenian **69** (2000), no. 1, 107–113.
- [200] ———, *Generalized picone's formula and forced oscillation in quasilinear differential equations of the second order*, Arch. Math. (Brno) **38** (2002), 53–59, Tomus.
- [201] ———, *Oscillation properties of solutions of a class of nonlinear parabolic equations*, J. Comput. Appl. Math. **146** (2002), no. 2, 277–284.
- [202] ———, *Picone-type inequalities for nonlinear elliptic equations with first-order terms and their applications*, J. Ineq. Appl. **2006** (2006), 1–17.
- [203] Charles Kahane, *Oscillation theorems for solutions of hyperbolic equations*, Proc. Amer. Math. Soc. **41** (1973), no. 1, 183–188.
- [204] I. V. Kamenev, *An integral criterion for oscillation of linear differential equations of second order*, Mat. Zametki **23** (1978), 249–251.
- [205] A. G. Kartsatos, *Maintenance of oscillations under the effect of a periodic forcing term*, Proc. Amer. Math. Soc. **33** (1972), no. 1, 377–383.
- [206] S. Kaul, V. Lakshmikantham, and S. Leela, *Extremal solutions, comparison principle and stability criteria for impulsive differential equations with variable times*, Nonlinear Anal. **22** (1993), no. 10, 1263–1270.
- [207] N. Kawano, T. Kusano, and M. Naito, *Nonoscillatory solutions of forced differential equations of the second-order*, J. Math. Anal. Appl. **90** (1982), 323–342.
- [208] ———, *On the elliptic equation  $\delta u = \phi(x)u^\gamma$  in  $r^2$* , Proc. Amer. Math. Soc. **93** (1985), no. 1, 73–85.
- [209] M. S. Keener, *Solutions of a linear nonhomogenous second order differential equations*, Appl. Anal. **1** (1971), 57–63.
- [210] Mokhtar Kirane and Yuri V. Rogovchenko, *Comparison results for systems of impulsive parabolic equations with applications to population dynamics*, Nonlinear Anal. **28** (1997), no. 2, 263–276.
- [211] ———, *Oscillation results for a second order damped differential equations with non monotonous non linearity*, J. Math. Anal. Appl. **250** (2000), 118–138.
- [212] Y. Kitamura and T. Kusano, *Oscillation of first-order nonlinear differential equations with deviating arguments*, Proc. Amer. Math. Soc. **78** (1980), no. 1, 64–68.
- [213] A. Kneser, *Untersuchungen über die reelen nullstellen der integrale lin earer differentialgleichungen*, Math. Ann. **42** (1893), 409–435.
- [214] ———, *Untersuchungen über die reelen nullstellen der integrale lin earer differentialgleichungen*, J. Reine Angew. Math. **116** (1896), 178–212.

- [215] N. Kokschi, *Comparison theorems for multi-point first-order problems*, Nonlinear Anal. **29** (1997), no. 11, 1237–1252.
- [216] Q. Kong, *Interval criteria for oscillation of second-order linear ordinary differential equations*, J. Math. Anal. Appl. **229** (1999), 258–270.
- [217] Qingkai Kong, *Nonoscillation and oscillation of second order half-linear differential equations*, J. Math. Anal. Appl. **332** (2007), 512–522.
- [218] Kurt Kreith, *A new proof of a comparison theorem for elliptic equations*, Proc. Amer. Math. Soc. **14** (1963), 33–35.
- [219] ———, *Comparison theorems for constrained roots*, SIAM Rev. **6** (1964), no. 1, 31–36.
- [220] ———, *Oscillation theorems for elliptic equations*, Proc. Amer. Math. Soc. **15** (1964), 341–344.
- [221] ———, *An abstract oscillation theorem*, Proc. Amer. Math. Soc. **19** (1968), no. 1, 17–20.
- [222] ———, *A strong comparison theorem for selfadjoint elliptic equations*, Proc. Amer. Math. Soc. **19** (1968), 989–990.
- [223] ———, *Errata to volume 139*, Trans. Amer. Math. Soc. **146** (1969), 549.
- [224] ———, *A remark on comparison theorem of swanson*, Proc. Amer. Math. Soc. **20** (1969), no. 2, 549–550.
- [225] ———, *Sturmian theorems and positive resolvents*, Trans. Amer. Math. Soc. **139** (1969), 319–327.
- [226] ———, *Sturmian theorems for hyperbolic equations*, Proc. Amer. Math. Soc. **22** (1969), no. 1, 277–281.
- [227] ———, *A comparison theorem for conjugate points of general selfadjoint differential equations*, Proc. Amer. Math. Soc. **25** (1970), no. 3, 656–661.
- [228] ———, *Oscillation criteria for nonlinear matrix differential equations*, Proc. Amer. Math. Soc. **26** (1970), 270–272.
- [229] ———, *A class of comparison theorems for non-selfadjoint elliptic equations*, Proc. Amer. Math. Soc. **29** (1971), no. 3, 547–552.
- [230] ———, *Comparison theorems for nonselfadjoint differential equations based on integral inequalities*, Proc. Amer. Math. Soc. **34** (1972), no. 1, 105–109.
- [231] ———, *Oscillation criteria for a class of fourth order differential equations*, SIAM J. Appl. Math. **22** (1972), no. 1, 135–137.
- [232] ———, *A pruffer transformation for nonselfadjoint systems*, Proc. Amer. Math. Soc. **31** (1972), no. 1, 147–151.
- [233] ———, *Oscillation theory*, Lecture Notes in Mathematics, vol. 324, Springer-Verlag, Berlin. Heidelberg. New York, 1973.

- [234] ———, *Comparison theorems for special classes of nonselfadjoint elliptic equations*, Proc. Amer. Math. Soc. **42** (1974), no. 1, 186–191.
- [235] ———, *Picone's identity and generalizations*, Rend. Math. Appl. (7) **8** (1975), 251–261.
- [236] ———, *Comparison theorems for a class of selfadjoint fourth order differential equations*, Proc. Amer. Math. Soc. **67** (1977), no. 1, 67–73.
- [237] ———, *Extremal solutions for a class of nonlinear differential equations*, Proc. Amer. Math. Soc. **79** (1980), no. 3, 415–421.
- [238] I. Kubiacyk and S. H. Saker, *Oscillation of parabolic delay differential equations with positive and negative coefficients*, Comment. Math. Prace Mat. **42** (2002), no. 2, 221–236.
- [239] I. Kubiacyk, S. H. Saker, and J. Morchalo, *New oscillation criteria for first order nonlinear neutral delay differential equations*, Appl. Math. Comput. **142** (2003), 225–242.
- [240] T. Kusano, J. Jaros, and N. Yoshida, *A picone identity and sturmian comparison and oscillation theorems for a class of half-linear partial differential equations of second order*, Nonlinear Anal. **40** (2000), 381–395.
- [241] T. Kusano and M. Kitano, *On a class of pof second order quasilinear ordinary differential equations*, Hiroshima Math. J. **25** (1995), 321–355.
- [242] T. Kusano and M. Naito, *On the number of zeros of nonoscillatory solutions to half-linear ordinary differential equations involving a parameter*, Trans. Amer. Math. Soc. **354** (2002), no. 12, 4751–4765.
- [243] T. Kusano and Y. Naito, *Oscillation and nonoscillation criteria for second order quasilinear differential equations*, Acta Math. Hungar. **76** (1997), no. 1–2, 81–99.
- [244] T. Kusano, E. S. Noussair, and C. A. Swanson, *Existence of decaying entire solutions of class of semilinear elliptic equations*, Proc. Amer. Math. Soc. **104** (1988), no. 4, 1141–1147.
- [245] T. Kusano and H. Onose, *Nonlinear oscillation of a sublinear delay equation of arbitrary order*, Proc. Amer. Math. Soc. **40** (1973), no. 1, 219–224.
- [246] ———, *Asymptotic decay of oscillatory solutions of second order differential equations with forcing term*, Proc. Amer. Math. Soc. **66** (1977), no. 2, 251–257.
- [247] T. Kusano and N. Yoshida, *Nonoscillation theorems for a class of quasilinear differential equations of second order*, J. Math. Anal. Appl. **189** (1995), 115–127.
- [248] M. K. Kwong, *On lyapunov's inequality for disfocality*, J. Math. Anal. Appl. **83** (1981), 486–494.



- [249] M. K. Kwong and J. S. W. Wong, *On the oscillation and nonoscillation of second order sublinear equations*, Proc. Amer. Math. Soc. **85** (1982), no. 4, 547–551.
- [250] ———, *Linearization of second-order nonlinear oscillation theorems*, Trans. Amer. Math. Soc. **279** (1983), no. 2, 705–722.
- [251] M. K. Kwong and James S. W. Wong, *An application of integral inequality to second order nonlinear oscillation*, J. Differential Equations **46** (1982), 63–77.
- [252] M. K. Kwong and A. Zettl, *Integral inequalities and second order linear oscillation*, J. Differential Equations **45** (1982), 16–33.
- [253] ———, *Asymptotically constant functions and second order linear oscillation*, J. Math. Anal. Appl. **93** (1983), 475–494.
- [254] Man Kam Kwong, *On certain comparison theorems for second order linear oscillation*, Proc. Amer. Math. Soc. **84** (1982), no. 4, 539–542.
- [255] ———, *Integral criteria for second-order linear oscillation*, EJQTDE **10** (2006), 1–18.
- [256] Man Kam Kwong, Hans G. Kaper, Kazuo Akiyama, and Angelo B. Mingarelli, *Oscillation of linear second order differential systems*, Proc. Amer. Math. Soc. **91** (1984), no. 1, 85–91.
- [257] Man Kam Kwong and James S. W. Wong, *On certain riccati integral equations and second-order linear oscillation*, J. Math. Anal. Appl. **85** (1982), 315–330.
- [258] ———, *Oscillation and nonoscillation of hill's equation with periodic damping*, J. Math. Anal. Appl. **288** (2003), 15–19.
- [259] ———, *A nonoscillation theorem for sublinear emden-fowler equations*, Nonlinear Anal. **64** (2006), 1641–1646.
- [260] ———, *On the oscillation of hill's equations under periodic forcing*, J. Math. Anal. Appl. **320** (2006), 37–55.
- [261] G. Ladas, Ch. G. Philos, and Y. G. Sficas, *Note on some oscillation criteria*, Proc. Amer. Math. Soc. **113** (1991), no. 1, 123–134.
- [262] Andrea Laforgia and Martin E. Muldoon, *Some consequences of the sturm comparison theorem*, Amer. Math. Monthly **93** (1986), no. 2, 89–94.
- [263] V. Lakshmikantham, D. D. Bainov, and P. S. Simeonov, *Theory of impulsive differential equations*, Series in Modern Applied Mathematics, vol. 6, World Scientific Publishing Co. Pte. Ltd., Singapore. New Jersey. London. Hong Kong, 1989.
- [264] V. Lakshmikantham, S. Leela, and S. Kaul, *Comparison principle for impulsive differential equations with variable times and stability theory*, Nonlinear Anal. **22** (1994), no. 4, 499–503.

- [265] Chung-Fen Lee and Cheh-Chih Yeh, *A maximum principles for nonlinear differential inequalities*, Appl. Math. Lett. **16** (2003), 345–349.
- [266] ———, *An oscillation theorem*, Appl. Math. Lett. **20** (2007), 238–240.
- [267] Chung-Fen Lee, Cheh-Chih Yeh, and Chuen-Yu Gau, *Some oscillation theorems for second order differential equations*, Czechoslovak Math. J. **55** (2005), no. 130, 845–861.
- [268] Walter Leighton, *Proper continued fractions*, Amer. Math. Monthly **47** (1940), no. 5, 274–280.
- [269] ———, *Bounds for the solutions of a second-order linear differential equations*, Proc. Nat. Acad. Sci. **35** (1949), 190–191.
- [270] ———, *On self-adjoint differential equations of second-order*, Proc. Nat. Acad. Sci. **35** (1949), 656–657.
- [271] ———, *Principal quadratic functionals*, Trans. Amer. Math. Soc. **67** (1949), no. 1, 253–274.
- [272] ———, *Principal quadratic functionals and self-adjoint second-order differential equations*, Proc. Nat. Acad. Sci. **35** (1949), 192–193.
- [273] ———, *A substitute for the picone formula*, Bull. Amer. Math. Soc. **55** (1949), 325–328.
- [274] ———, *The detection of the oscillation of the solutions of a second order linear differential equation*, Duke Math. J. **17** (1950), 57–61.
- [275] ———, *On self-adjoint differential equations of second order*, J. London Math. Soc. (2) **27** (1952), 37–47.
- [276] ———, *Comparison theorems for linear differential equations of second order*, Proc. Amer. Math. Soc. **13** (1962), no. 4, 603–610.
- [277] ———, *Remarks on certain eulerian constants*, Amer. Math. Monthly **75** (1968), no. 3, 283–285.
- [278] ———, *Some elementary sturm theory*, J. Differential Equations **4** (1968), 187–193.
- [279] ———, *The conjugacy function*, Proc. Amer. Math. Soc. **24** (1970), no. 4, 820–823.
- [280] ———, *Quadratic functionals of second order*, Trans. Amer. Math. Soc. **151** (1970), 309–322.
- [281] ———, *Shorter notes: On liapunov's inequality*, Proc. Amer. Math. Soc. **33** (1972), no. 2, 627–628.
- [282] ———, *More elementary sturm theory*, Appl. Anal. **3** (1973), 187–203.
- [283] ———, *Some sturm theory*, J. D'Anal. Math. **36** (1979), 191–197.

- [284] ———, *A useful lemma in the theory of second-order linear differential equations*, Amer. Math. Monthly **86** (1979), no. 8, 693–694.
- [285] ———, *A comparison theorem*, J. Math. Anal. Appl. **106** (1985), 188–195.
- [286] Walter Leighton and William Oo Kian Ke, *A comparison theorem*, Proc. Amer. Math. Soc. **28** (1971), no. 1, 185–188.
- [287] Walter Leighton and Allan D. Martin, *Quadratic functionals with a singular end point*, Trans. Amer. Math. Soc. **78** (1955), no. 1, 98–128.
- [288] Walter Leighton and Zeev Nehari, *On the oscillation of solutions of self-adjoint linear differential equations of the fourth order*, Trans. Amer. Math. Soc. **89** (1958), no. 2, 325–377.
- [289] Walter Leighton and W. J. Thron, *On the convergence of continued fractions to meromorphic functions*, Ann. Math. **44** (1943), no. 1, 80–89, 2nd Ser.
- [290] Horng Jaan Li, *Oscillation criteria for second order linear differential equations*, J. Math. Anal. Appl. **194** (1995), 217–234.
- [291] Horng Jaan Li and Cheh Chih Yeh, *An integral criterion for oscillation of nonlinear differential equations*, Math. Japon. **41** (1995), no. 1, 185–188.
- [292] ———, *Nonoscillation criteria for second order half-linear differential equations*, Appl. Math. Lett. **8** (1995), 63–70.
- [293] ———, *Nonoscillation theorems for second order quasilinear differential equations*, Publ. Math. Debrecen **47** (1995), no. 3-4, 271–279.
- [294] ———, *Oscillation criteria for nonlinear differential equations*, Houston J. Math. **21** (1995), 801–811.
- [295] ———, *Oscillations of half-linear second-order differential equations*, Hiroshima Math. J. **25** (1995), 585–594.
- [296] ———, *Sturmian comparison theorem for half-linear second-order differential equations*, Proc. Roy. Soc. Edinburgh Sect. A **125A** (1995), 1193–1204.
- [297] Wan-Tong Li, *Interval criteria for oscillation second-order half-linear ordinary differential equation*, ACTA Math. Sinica **45** (2002), no. 13, chinese.
- [298] ———, *Interval oscillation criteria for second order damped half-linear differential equations with forcing term*, Math. Ineq. Appl. **6** (2003), no. 3, 487–495.
- [299] ———, *Interval oscillation of second-order half-linear functional differential equations*, Appl. Math. Comput. **155** (2004), 451–468.
- [300] ———, *Interval oscillation theorems for second-order quasi-linear nonhomogenous differential equations with damping*, Appl. Math. Comput. **147** (2004), 753–763.

- [301] Wan-Tong Li and R. P. Agarwal, *Interval oscillation criteria for second order nonlinear differential equations with damping*, Comput. Math. Appl. **40** (2000), no. 2-3, 217–230.
- [302] ———, *Interval oscillation criteria related to integral averaging technique for certain nonlinear differential equations*, J. Math. Anal. Appl. **245** (2000), 171–188.
- [303] Wan-Tong Li and Sui Sun Cheng, *An oscillation criterion for nonhomogenous half-linear differential equations*, Appl. Math. Lett. **15** (2002), 259–263.
- [304] ———, *An oscillation theorem for higher order nonhomogenous superlinear differential equations*, Appl. Math. E-Notes **3** (2003), 58–61.
- [305] ———, *Remarks on two recent oscillation theorems for second-order linear difference equations*, Appl. Math. Lett. **16** (2003), 161–163.
- [306] Wan-Tong Li, Sui Sun Cheng, and Tzon Tzer Lu, *Closed form solutions of iterative functional differential equations*, Appl. Math. E-Notes **1** (2001), 1–4.
- [307] Wan-Tong Li and Xiaohu Li, *Oscillation criteria for second-order nonlinear differential equation with integrable coefficient*, Appl. Math. Lett. **13** (2000), 1–6.
- [308] Wan-Tong Li and C. C. Yeh, *Oscillation of second order sublinear differential equations*, Dynam. Systems Appl. **6** (1997), 529–534.
- [309] Wan-Tong Li and Peihao Zhao, *Oscillation theorems for second-order nonlinear differential equations*, Math. Comput. Modelling **39** (2004), 457–471.
- [310] Wan-Tong Li and Cheng-Kui Zhong, *Integral averages and interval oscillation of second-order nonlinear differential equations*, Math. Nachr. **246/247** (2002), 156–169.
- [311] Wan-Tong Li and Rong-Kun Zhuang, *Interval oscillation of second-order forced non-linear matrix differential equations*, Electron. J. Differential Equations **2005** (2005), no. 69, 1–6.
- [312] Wei Nian Li, *Oscillation for solutions of partial differential equations*, Demonstratio Math. **33** (2000), no. 2, 319–332.
- [313] ———, *Oscillation properties for systems of hyperbolic differential equations of neutral type*, J. Math. Anal. Appl. **248** (2000), 369–384.
- [314] ———, *Forced oscillation properties for certain systems of partial functional differential equations*, Appl. Math. Comput. **143** (2003), 223–232.
- [315] ———, *On the forced oscillation of solutions for systems of impulsive parabolic differential equations with several delays*, J. Comp. Appl. Math. **181** (2005), 46–57.
- [316] Wei Nian Li and Bao Tong Cui, *Oscillation of solutions of neutral partial functional differential equations*, J. Math. Anal. Appl. **234** (1999), 123–146.

- [317] ———, *Necessary and sufficient conditions for oscillation of neutral delay parabolic differential equations*, Appl. Math. Comput. **121** (2001), 147–153.
- [318] Wei Nian Li and L. Debnath, *Oscillation of higher order neutral partial functional differential equations*, Appl. Math. Lett. **16** (2003), 525–530.
- [319] Wei Nian Li, Maohan Han, and Fan Wei Meng, *Necessary and sufficient conditions for oscillation of impulsive parabolic differential equations with delays*, Appl. Math. Lett. **18** (2005), 1149–1155.
- [320] Wei Nian Li and Fan Wei Meng, *Forced oscillation for certain systems of hyperbolic differential equations*, Appl. Math. Comput. **141** (2003), 313–320.
- [321] ———, *On the forced oscillation of systems of neutral parabolic differential equations with deviating arguments*, J. Math. Anal. Appl. **288** (2003), 20–27.
- [322] Wei Cheng Lian, Cheh Chih Yeh, and Horng Jaan Li, *The distance between zeros of an oscillatory solution to a half-linear differential equation*, Comput. Math. Appl. **29** (1995), no. 8, 39–43.
- [323] Haihua Liang and Weizhen Feng, *Oscillation of high order linear functional differential equation with impulses*, Electron. J. Differential Equations **2005** (2005), no. 91, 1–14.
- [324] Wen-Xian Lin, *A note on oscillation for systems of higher order quasilinear partial differential equations of neutral type*, Appl. Math. Comput. **156** (2004), 563–576.
- [325] ———, *Oscillation for systems of higher-order neutral type delay partial differential equations*, Appl. Math. Comput. **156** (2004), 107–114.
- [326] ———, *Some oscillation theorems for systems of even order quasilinear partial differential equations*, Appl. Math. Comput. **152** (2004), 337–349.
- [327] Xioyan Lin, *Oscillation of second-order nonlinear neutral differential equations*, J. Math. Anal. Appl. **309** (2005), 442–452.
- [328] X. Liu and G. Ballinger, *Boundedness for impulsive delay differential equations and applications to population growth models*, Nonlinear Anal. **53** (2003), 1041–1062.
- [329] Xiuxiang Liu and Zhiting Xu, *Oscillation of a forced super-linear second order differential equation with impulses*, Comput. Math. Appl., to appear.
- [330] Yuji Liu and Weigao Ge, *Global attractivity in delay "food-limited" models with exponential impulses*, J. Math. Anal. Appl. **287** (2003), 200–216.
- [331] A. Lomtatidze, *Oscillation and nonoscillation of emden-fowler type equation of second order*, Arch. Math. (Brno) **32** (1996), 181–193.
- [332] M. Lucia and S. Prashhanth, *Strong comparison principle for solutions of quasilinear equations*, Appl. Math. Comput. **132** (2003), no. 4, 1005–1011.

- [333] J. Luo, *Second-order quasilinear oscillation with impulses*, Comput. Math. Appl. **46** (2003), no. 2-3, 279–291.
- [334] Jiowan Luo, *Oscillation of hyperbolic partial differential equations with impulses*, Appl. Math. Comput. **133** (2002), 309–318.
- [335] Zhiguo Luo and Jianhua Shen, *Oscillation of second order linear differential equations with impulses*, Appl. Math. Lett. **20** (2007), 75–81.
- [336] Manjun Ma, *Dominant and recessive solutions for second order self-adjoint linear difference equations*, Appl. Math. Lett. **18** (2005), 179–185.
- [337] Robert Mařík, *Nonnegativity of functionals corresponding to the second order half-linear differential equation*, Arch. Math. (Brno) **35** (1999), 155–164.
- [338] ———, *Comparison theorems for half-linear second order difference equations*, Arch. Math. **36** (2000), 513–518.
- [339] ———, *Hartman-wintner type theorem for pde with p-laplacian*, Electron. J. Qual. Theor. Differ. Equ. **18** (2000), 1–7, Proc. 6th Coll. QTDE.
- [340] ———, *Oscillation criteria for pde with p-laplacian via the ricatti technique*, J. Math. Anal. Appl. **248** (2000), 290–308.
- [341] ———, *A half-linear differential equation and variational problem*, Nonlinear Anal. **45** (2001), 203–211.
- [342] ———, *Integral averages and oscillation criteria for half-linear partial differential equation*, Appl. Math. Comput. **150** (2004), 69–87.
- [343] J. W. Macki, *An example in the theory of nonlinear oscillations*, SIAM J. Appl. Math. **17** (1969), no. 3, 516–519.
- [344] J. W. Macki and J. S. W. Wong, *Oscillation theorems for linear second order ordinary differential equations*, Proc. Amer. Math. Soc. **20** (1969), 67–72.
- [345] Geza Makay, *A simple proof of sturm’s seperation theorem*, Amer. Math. Monthly **99** (1992), no. 3, 218–219.
- [346] J. V. Manojlovic, *Oscillation criteria for second-order half-linear differential equations*, Math. Comput. Modelling **30** (1999), 109–119.
- [347] ———, *Oscillation criteria for second-order sub-linear differential equation*, Comput. Math. Appl. **39** (2000), 161–172.
- [348] ———, *Oscillation theorems for nonlinear differential equations of second order*, Electron. J. Qual. Theor. Differ. Equ. (2000), no. 1, 1.
- [349] ———, *Integral averages and oscillation of second-order nonlinear differential equations*, Comput. Math. Appl. **41** (2001), 1521–1531.
- [350] Robert Marik, *Oscillation criteria for a class of nonlinear partial differential equations*, Electron. J. Differential Equations **2002** (2002), no. 28, 1–10.

- [351] ———, *Riccati-type inequality and oscillation criteria for a half-linear pde with damping*, Electron. J. Differential Equations **2004** (2004), no. 11, 1–17.
- [352] M. P. Markakis, *On the reduction of non-linear oscillator-equations to abel forms*, Appl. Math. Comput. **157** (2004), 357–368.
- [353] Vittorio Massidda, *Analytical calculation of a class of integrals containing exponential and trigonometric functions*, Math. Comput. **41** (1983), no. 164, 555–557.
- [354] Malcolm T. McGregor, *Short proofs of some inequalities of horst alzer*, Arch. Math. (Brno) **29** (1993), 167–168.
- [355] Fanwei Meng and Cuiqin Ma, *Oscillation results for linear second order matrix differential systems with damping*, Appl. Math. Comput. **187** (2007), 844–855.
- [356] Fanwei Meng and Yuan Gong Sun, *Interval criteria for oscillation of linear hamiltonian systems*, Math. Comput. Modelling **40** (2004), 735–743.
- [357] Emil Minchev, *On the oscillations of solutions of nonlinear parabolic equations*, Appl. Math. Comput. **136** (2003), 453–462.
- [358] ———, *Forced oscillations of solutions of systems of hyperbolic equations of neutral type*, Appl. Math. Comput. **155** (2004), 427–438.
- [359] Emil Minchev and Norio Yoshida, *Oscillation of solutions of nonlinear parabolic equations via comparison method*, Appl. Math. Comput. **134** (2003), no. 2-3, 561–566.
- [360] J. D. Mirzov, *On some analogs of sturm’s and kneser’s theorems for nonlinear systems*, J. Math. Anal. Appl. **53** (1976), 418–425.
- [361] Jozef Moravčák, *Some oscillatory properties of the perturbed linear differential equations of order  $n$* , Arch. Math. (Brno) **31** (1995), 305–311.
- [362] Marston Morse, *A generalization of sturm seperation and comparison theorems in  $n$ -space*, Math. Ann. **103** (1930), 52–69.
- [363] ———, *Singular quadratic functionals*, Trans. Amer. Math. Soc. **40** (1936), no. 2, 252–286.
- [364] Adil Msr and Aydn Tiryaki, *More on explicit solutions for a second order nonlinear boundary value problems*, Appl. Math. Lett. ?? (2007), ??–??, to appear.
- [365] Gulomjon M. Muminov, *Wirtinger -beesack ntegral inequalities*, Electron. J. Differential Equations **2005** (2005), no. 98, 1–7.
- [366] M. Naito, *Oscillation criteria for second order differential equation with a damping term*, Hiroshima Math. J. **4** (1974), 285–291.
- [367] Yuki Naito and Hiroyuki Usami, *Oscillation criteria for quasilinear elliptic equations*, Nonlinear Anal. **46** (2001), 629–652.

- [368] John Nash, *Parabolic equations*, Proc. N. A. S. **43** (1957), 754–758.
- [369] ———, *Le probleme de cauchy pour les equations differentielles d'un flude general*, Bull. Soc. Math. France **90** (1962), 487–497.
- [370] A. H. Nasr, *Sufficient conditions for the oscillation of forced super-linear second order differential equations with oscillatory potential*, Proc. Amer. Math. Soc. **126** (1998), no. 1, 123–125.
- [371] Zeev Nehari, *On the zeros of solutions of second-order linear differential equations*, Amer. J. Math. **76** (1954), no. 3, 689–697.
- [372] ———, *Oscillation criteria for second-order linear differential equations*, Trans. Amer. Math. Soc. **85** (1957), 428–445.
- [373] J. J. Nieto, *Impulsive resonance periodic problems of first order*, Appl. Math. Lett. **15** (2002), no. 4, 489–493.
- [374] J. J. Nieto, Y. Jiang, and Y. Jurang, *Comparison results and monotone iterative technique for impulsive delay differential equations*, Acta Sci. Math. **65** (1999), 121–130.
- [375] W. Nowakowska and J. Werbowski, *Oscillation of linear functional equations of higher order*, Arch. Math. (Brno) **31** (1995), 251–258.
- [376] Hiroshi Onose, *Oscillation theorems for nonlinear second order differential equations*, Proc. Amer. Math. Soc. **26** (1970), no. 3, 461–464.
- [377] ———, *Oscillatory property of certain nonlinear ordinary differential equations*, Nonlinear Anal. **18** (1970), no. 3, 715–719.
- [378] ———, *Oscillation criteria for second order nonlinear differential equations*, Proc. Amer. Math. Soc. **51** (1975), no. 1, 67–73.
- [379] ———, *Oscillation criteria for the sublinear schrodinger equation*, Proc. Amer. Math. Soc. **85** (1982), no. 1, 69–72.
- [380] ———, *Oscillations of first order functional differential equations and parabolic equations*, Nonlinear Anal. **30** (1997), no. 3, 1555–1560.
- [381] ———, *Oscillation and hazard functions*, Math. Comput. Modelling **31** (2000), 161–165.
- [382] C. H. Ou and James S. W. Wong, *Forced oscillation of  $n$ th order functional differential equations*, J. Math. Anal. Appl. **262** (2001), 722–732.
- [383] ———, *On existence of oscillatory solutions of second order emden-fowler equations*, J. Math. Anal. Appl. **277** (2003), 670–680.
- [384] ———, *Oscillation and non-oscillation theorems for superlinear emden-fowler equations of the fourth order*, Ann. di Math. **183** (2004), 25–43.
- [385] Zigen Ouyang, *Necessary and sufficient conditions for oscillation of odd order neutral delay parabolic differential equations*, Comput. Math. Appl. **16** (2003), 1039–1045.



- [386] Zigen Ouyang, Shengfan Zhou, and Fuqi Yin, *Oscillation for a class of neutral parabolic differential equations*, *Comput. Math. Appl.* **50** (2005), 145–155.
- [387] A. Özbekler and A. Zafer, *Sturmian comparison theory for linear and half-linear impulsive differential equations*, *Nonlinear Anal.* **63** (2005), 289–297.
- [388] ———, *Picone’s formula for linear non-selfadjoint impulsive differential equations*, *J. Math. Anal. Appl.* **319** (2006), no. 2, 410–423.
- [389] ———, *Forced oscillation of super-half-linear impulsive differential equations*, *Comput. Math. Appl.* **54** (2007), 785–792.
- [390] N. Parhi and P. Das, *On the oscillation of a class of linear homogenous third order differential equations*, *Arch. Math. (Brno)* **34** (1998), 435–443.
- [391] N. Parhi and Seshadev Padhi, *On oscillatory linear differential equations*, *Arch. Math.* **37** (2001), 33–38.
- [392] N. Parhi and S. Panigrahi, *Disfocality and liapunov-type inequalities for third order equations*, *Appl. Math. Lett.* **16** (2003), 227–233.
- [393] William Patula, *On the distance between zeroes*, *Proc. Amer. Math. Soc.* **52** (1975), no. 1, 247–251.
- [394] Simón Peña, *Conjugacy criteria for half-linear differential equations*, *Arch. Math. (brno)* **34** (1998), 1–11.
- [395] Mingsu Peng, *Oscillation caused by impulses*, *J. Math. Anal. Appl.* **255** (2001), 163–176.
- [396] Mingsu Peng and Weigao Ge, *Oscillation criteria for second order nonlinear differential equations with impulses*, *Comput. Math. Appl.* **39** (2000), 217–225.
- [397] Mingsu Peng, Weigao Ge, and Qianli Xu, *The oscillation/nonoscillation of nonlinear difference equations*, *Math. Comput. Modelling* **31** (2000), 227–235.
- [398] ———, *Preservation of nonoscillatory behavior of solutions of second-order delay differential equations under impulsive perturbations*, *appl. Math. Lett.* **15** (2002), 203–210.
- [399] Ch. G. Philos, *On second order sublinear oscillation*, *Aequationes Math.* **27** (1984), 242–254.
- [400] ———, *Integral averages and second order superlinear oscillation*, *Math. Nachr.* **120** (1985), 127–138.
- [401] ———, *Oscillation theorems for linear differential equations of second order*, *Arch. Math.* **53** (1989), 482–492.
- [402] ———, *On the oscillation of differential equations with periodic coefficients*, *Proc. Amer. Math. Soc.* **111** (1991), no. 2, 433–440.
- [403] Ch. G. Philos and I. K. Purnaras, *Sufficient conditions for oscillation of linear difference equations with variable delay*, *J. Differ. Equations Appl.* (2008), 1–16.

- [404] E. Picard, *Lecons sur quelques problemes aux limites de la théorie des Équations différentielles*, Paris, 1930.
- [405] M. Picone, *Sui valori eccezionali di un parametro da cui dipende un equazione differenziale lineare ordinaria del second ordine*, Ann. Scuola. Norm. Sup. Pisa Cl. Sci. (4) **11** (1909), 1–141.
- [406] Georg Pólya, *On the mean-value theorem corresponding to a given linear homogenous differential equation*, Trans. Amer. Math. Soc. **124** (1922), no. 4, 312–324.
- [407] C. R. Putnam, *Note on some oscillation criteria*, Proc. Amer. Math. Soc. **6** (1955), 950–952.
- [408] S. M. Rainkin, *Oscillation theorems for second-order nonhomogenous linear differential equations*, J. Math. Anal. Appl. **53** (1976), 550–553.
- [409] M. Růžičková and E. Špániková, *Oscillation theorems for neutral differential equations with the quasi-derivatives*, Arch. Math. (Brno) **30** (1994), 293–300.
- [410] Pavel Rehak, *Half-linear discrete oscillation theory*, Electron. J. Qual. Theor. Differ. Equ. (1999), no. 24, 1, Proc. 6th Coll. QTDE.
- [411] ———, *Half-linear discrete oscillation theory*, Electron. J. Qual. Theor. Differ. Equ. (2000), no. 24, 1, Proc. 6th Coll. QTDE.
- [412] William T. Reid, *Ordinary differential equations*, Applied Mathematics Series, John Willey and Soons, Inc., New York. London. Sydney. Toronto, 1971.
- [413] ———, *Riccati differential equations*, Mathematics in Science and Engineering, vol. 86, Academic Press Inc., New York and London, 1972.
- [414] ———, *Sturmian theory for ordinary differential equations*, Applied Mathematics Series, vol. 31, Springer-Verlag, Berlin. Heidelberg. New York, 1977.
- [415] Hong-Shan Ren, *Exact solutions of a linear functional differential equation*, Appl. Math. E-Notes **1** (2001), 40–46.
- [416] S. P. Rogovchenko and Y. V. Rogovchenko, *Oscillation theorems for differential equations with a nonlinear damping term*, J. Math. Anal. Appl. **279** (2003), 121–134.
- [417] Y. Rogovchenko, *Oscillation criteria for certain nonlinear differential equations*, J. Math. Anal. Appl. **229** (1999), 399–416.
- [418] Eva Rovderova and Jozef Rovder, *On the number of solutions of a fourth-order boundary value problem*, Nonlinear Anal. **30** (1997), no. 8, 4875–4880.
- [419] Samir H. Saker, Ravi P. Agarwal, and Donal O'Regan, *Oscillation of second-order damped dynamic equations on time scales*, J. Math. Anal. Appl. **330** (2007), 1317–1337.

- [420] Samir H. Saker and J. V. Manojlović, *Oscillation criteria for second order superlinear neutral delay differential equations*, *EJQTDE* (2004), no. 10, 1–22.
- [421] A. M. Samoilenko and N. A. Perestjuk, *Impulsive differential equations*, Series A, vol. 14, World Scientific Publishing Co. Pte. Ltd., Singapore. New Jersey. London. Hong Kong, 1995.
- [422] S. Seikkala and S. Heikkilä, *Uniqueness, comparison and existence results for discontinuous implicit differential equations*, *Nonlinear Anal.* **30** (1997), no. 3, 1771–1780.
- [423] Jan Seman, *Oscillation of solutions to second order linear differential equations*, *EQJDE* **2004** (2004), no. 28, 1–9.
- [424] Y. G. Sficas and I. P. Stavroulakis, *Oscillation criteria for first-order delay equations*, *Bull. London Soc.* **35** (2003), 239–246.
- [425] Cui Shangbin, *Some comparison and uniqueness theorems for nonlinear elliptic boundary value problems and nonlinear parabolic initial-boundary value problems*, *Nonlinear Anal.* **29** (1997), no. 9, 1079–1090.
- [426] David Shelupsky, *A generalization of the trigonometric functions*, *Amer. Math. Monthly* **66** (1959), no. 10, 879–884.
- [427] J. Shen, *Qualitative properties of solutions of second-order linear ode with impulses*, *Math. Comput. Modelling* **40** (2004), no. 3-4, 337–344.
- [428] Jianhua Shen and Xianhua Tang, *New nonoscillation criteria for delay differential equations*, *J. Math. Anal. Appl.* **290** (2004), 1–9.
- [429] Jianhua Shen and Ziran Zou, *Oscillation criteria for first-order impulsive differential equations with positive and negative coefficients*, *J. Comput. Appl. Math.* ?? (2008), ??–??
- [430] Wenying Shi, *Interval oscillation criteria for a forced second-order differential equation with nonlinear damping*, *Math. Comp. Modelling* **43** (2006), 170–177.
- [431] Wenying Shi and Peiguang Wang, *Oscillation criteria of a class of second order neutral functional differential equations*, *Appl. Math. Comput.* **146** (2003), 211–226.
- [432] ———, *Oscillation criteria of second order nonlinear matrix differential systems*, *Appl. Math. Comput.* **156** (2004), 831–846.
- [433] A. Skidmore and J. J. Bowers, *Oscillatory behaviour of solutions of  $y'' + p(x)y = f(x)$* , *J. Math. Anal. Appl.* **49** (1975), 317–323.
- [434] A. Skidmore and W. Leighton, *On the differential equation  $y'' + p(x)y = f(x)$* , *J. Math. Anal. Appl.* **43** (1973), 46–55.
- [435] Monika Sobalová, *asymptotic behaviour of nonoscillatory solutions of the fourth order differential equations*, *Arch. Math.* **38** (2002), 311–317.

- [436] C. Sturm, *sur les équations différentielles linéaires du second ordre*, J. Math. Pures Appl. (9) **1** (1836), 106–186.
- [437] Jitsuro Sugie and Kazuhisa Kita, *Oscillation criteria for second order nonlinear differential equations of euler type*, J. Math. Anal. Appl. **253** (2001), 414–439.
- [438] Jitsuro Sugie and Naoto Yamaoka, *Oscillation of solution of second-order nonlinear self-adjoint differential equations*, J. Math. Anal. Appl. **291** (2004), 387–405.
- [439] ———, *Comparison theorems for oscillation of second-order half-linear differential equations*, Acta Math. Hungar. **111** (2006), no. 1-2, 165–179.
- [440] J. Sun and Y. Zhang, *Impulsive control of a nuclear spin generator*, J. Comput. Appl. Math. **157** (2003), no. 1, 235–242.
- [441] ———, *Impulsive control of rössler systems*, Phys. Lett. A **306** (2003), no. 5-6, 306–312.
- [442] J. Sun, Y. Zhang, and Q. Wu, *Less conservative conditions for asymptotic stability of impulsive control systems*, IEEE Trans. Automat. Control **48** (2003), no. 5, 829–831.
- [443] Yuan Gong Sun, *A note on nasr's and wong's papers*, J. Math. Anal. Appl. **286** (2003), 363–367.
- [444] ———, *New kamenev type oscillation criteria for linear matrix hamiltonian systems*, Appl. Math. Comput. **158** (2004), 69–78.
- [445] ———, *New kamenev-type oscillation criteria for second-order nonlinear differential equations with damping*, J. Math. Anal. Appl. **291** (2004), 341–351.
- [446] Yuan Gong Sun and Fan Wei Meng, *New oscillation criteria for linear matrix hamiltonian systems*, Appl. Math. Comput. **155** (2004), 259–268.
- [447] ———, *Oscillation results for matrix differential systems with damping*, Appl. Math. Comput. **170** (2005), 545–555.
- [448] ———, *Oscillation results for matrix differential systems with damping*, Appl. Math. Comput. **175** (2006), 212–220.
- [449] Yuan Gong Sun and A. B. Mingarelli, *Oscillation of higher-order forced nonlinear differential equations*, Appl. Math. Comput. ?? (2007), no. ??, ??–??
- [450] Yuan Gong Sun and S. H. Saker, *Forced oscillation of higher-order nonlinear differential equations*, Appl. Math. Comput. **173** (2006), 1219–1226.
- [451] Yuan Gong Sun and James S. W. Wong, *Note on forced oscillation of nth-order sublinear differential equations*, J. Math. Anal. Appl. **298** (2004), 114–119.
- [452] ———, *Forced oscillation of second order superlinear differential equations*, Math. Nachr. **278** (2005), no. 12-13, 1621–1628.

- [453] ———, *Oscillation criteria for second order forced ordinary differential equations with mixed nonlinearities*, J. Math. Anal. Appl. **334** (2007), 549–560.
- [454] C. A. Swanson, *Comparison and oscillation theory of linear differential equations*, Academic Press, New York, 1968.
- [455] ———, *Picone's identity*, Rend. Math. Appl. (7) **8** (1975), 373–397.
- [456] S. Tang and L. Chen, *Global attractivity in a "food-limited" population model with impulsive effects*, J. Math. Anal. Appl. **292** (2004), no. 1, 211–221.
- [457] X. H. Tang, *Oscillation of first order delay differential equations with distributed delay*, J. Math. Anal. Appl. **289** (2004), 367–378.
- [458] X. H. Tang and Yuji Liu, *Bounded oscillation for second-order delay differential equations with unstable type in a critical case*, Appl. Math. Lett. **16** (2003), 263–268.
- [459] Y. Tang and Q. Yang, *Oscillation of even order nonlinear functional differential equations with damping*, Acta Math. Hungar. **102** (2004), no. 3, 223–238.
- [460] Nasser-Eddine Tatar, *an impulsive nonsingular version of the Gronwall-Bihari inequality*, J. Ineq. Appl. **2006** (2006), 1–12.
- [461] H. Teufel, *Forced second order nonlinear oscillations*, J. Math. Anal. Appl. **40** (1972), 148–152.
- [462] E. Thandapani, K. Ravi, and J. R. Graef, *Oscillation and comparison theorem for half-linear second-order difference equations*, Comput. Math. Appl. **42** (2001), 953–960.
- [463] Louis H. Thurston and James S. W. Wong, *On global asymptotic stability of certain second order differential equations with integrable forcing term*, SIAM J. Appl. Math. **24** (1973), no. 1, 50–61.
- [464] Y. P. Tian, X. Yu, and O. L. Chua, *Time-delayed impulsive control of chaotic hybrid systems*, Internat. J. Bifur. Chaos Appl. Sci. Engrg. **14** (2004), no. 3, 1091–1104.
- [465] A. Tiryaki and M. F. Aktas, *Oscillation criteria of a certain class of third order nonlinear delay differential equations with damping*, J. Math. Anal. Appl. **325** (2007), 54–68.
- [466] A. Tiryaki and B. Ayanlar, *Oscillation theorems for certain nonlinear differential equations of second order*, Comput. Math. Appl. **47** (2004), 149–159.
- [467] A. Tiryaki and D. Çakmak, *Integral averages and oscillation criteria of second-order nonlinear differential equations*, Comput. Math. Appl. **47** (2004), 1495–1506.

- [468] A. Tiryaki, D. Çakmak, and B. Ayanlar, *On the oscillation of certain second-order nonlinear differential equations*, J. Math. Anal. Appl. **281** (2003), 565–574.
- [469] A. Tiryaki, Mehmet nal, and Devrim akmak, *Lyapunov-type inequalities for nonlinear systems*, J. Math. Anal. Appl. **332** (2007), 497–511.
- [470] A. Tiryaki and A. Zafer, *Oscillation criteria for second order nonlinear differential equations with damping*, Turkish J. Math. **24** (2000), 185–196.
- [471] ———, *Oscillation of second-order nonlinear differential equations with nonlinear damping*, Math. Comput. Modelling **197** (2004), 197–208.
- [472] ———, *Interval oscillation of a general class of second-order nonlinear differential equations with nonlinear damping*, Nonlinear Anal. **49** (2005), 49–63.
- [473] E. C. Tomastik, *Oscillation of nonlinear matrix differential equations of second order*, Proc. Amer. Math. Soc. **19** (1968), 1427–1431.
- [474] Betty Travis, *Nth order extension of the wintner-leighton theorem*, Appl. Math. Comput. **110** (2000), 115–119.
- [475] C.C. Travis and G.F. Webb, *Existence and stability for partial functional differential equations*, Amer. Math. Soc. **200** (1974), 395–418.
- [476] W. F. Trench and T. Kusano, *Systems of functional differential equations with asymptotically constant solutions*, Proc. Amer. Math. Soc. **104** (1988), no. 4, 1091–1097.
- [477] S. Umamaheswaram, *An analogue of lyapunov’s criterion for  $(m, n - m)$  - disfocality*, Proc. Amer. Math. Soc. **117** (1993), no. 3, 665–671.
- [478] Mehmet Unal, Devrim akmak, and Aydn Tiryaki, *A discrete analogue of lyapunov-type inequalities for nonlinear systems*, Comput. Math. Appl. ?? (2007), ??–??
- [479] Luis Verde-Star, *On linear matrix differential equations*, Adv. Appl. Math. **39** (2007), 329–344.
- [480] Paul Waltman and James S. W. Wong, *Two point boundary value problems for nonlinear functional differential equations*, Trans. Amer. Math. Soc. **164** (1972), 39–54.
- [481] J. Wang, *Oscillation and nonoscillation theorems for a class of second order quasilinear functional differential equations*, Hiroshima Math. J. **27** (1997), 449–466.
- [482] ———, *On second order quasilinear oscillations*, Funkcial. Ekvac. **41** (1998), 25–54.
- [483] Lin Wang and Xilin Fu, *A new comparison principle for impulsive differential systems with variable impulsive perturbations and stability theory*, Comput. Math. Appl. **54** (2007), 730–736.

- [484] Peiguang Wang, *Forced oscillation of a class of delay hyperbolic equation boundary value problem*, Appl. Math. Comput. **103** (1999), 15–25.
- [485] ———, *Oscillation criteria of nonlinear hyperbolic equations with continuous deviating arguments*, Appl. Math. Comput. **106** (1999), 163–169.
- [486] ———, *Oscillation for certain nonlinear delay hyperbolic equations*, Indian J. Pure Appl. Math. **30** (1999), no. 6, 557–565.
- [487] ———, *Oscillatory criteria for a class of delay hyperbolic equations boundary value problem (ii)*, Appl. Math. Comput. **100** (1999), 189–199.
- [488] ———, *Oscillation of solutions for a class of nonlinear neutral parabolic differential equations boundary value problem*, Appl. Math. Mech. **21** (2000), no. 5, 585–590.
- [489] Peiguang Wang and Feng Chunhua, *Oscillation of parabolic equations of neutral type*, J. Math. Anal. Appl. **126** (2000), 111–120.
- [490] Peiguang Wang and Weigao Ge, *Oscillation of a class of hyperbolic equations*, Appl. Math. Comput. **113** (2000), 101–110.
- [491] ———, *Oscillation properties for certain hyperbolic equations with distributed arguments*, Demonstratio Math. **33** (2000), no. 1, 83–89.
- [492] Peiguang Wang and Wenying Shi, *Oscillatory theorems of a class of even-order neutral equations*, Appl. Math. Lett. **16** (2003), 1011–1018.
- [493] Peiguang Wang, K. L. Teo, and Yanqun Liu, *Oscillation properties for even order neutral equations with distributed deviated arguments*, J. Comput. Appl. Math. **182** (2005), 290–303.
- [494] Peiguang Wang and Yuanhong Yu, *Oscillation criteria for nonlinear hyperbolic equation boundary value problem*, Appl. Math. Lett. **12** (1999), 91–98.
- [495] Peiguang Wang, Jiuli Zhao, and Weigao Ge, *Oscillation criteria of nonlinear hyperbolic equations with functional arguments*, Comput. Math. Appl. **40** (2000), 513–521.
- [496] Qi-Ru Wang, *Oscillation theorems for first order nonlinear neutral functional differential equations*, Comput. Math. Appl. **39** (2000), 19–28.
- [497] ———, *Oscillation and asymptotics for second-order half-linear differential equations*, Appl. Math. Comput. **122** (2001), 253–266.
- [498] ———, *Interval criteria for oscillation of certain matrix differential systems*, J. Math. Anal. Appl. **276** (2002), 373–395.
- [499] ———, *Oscillation criteria for even order nonlinear damped differential equations*, Acta Math. Hungar. **95** (2002), no. 3, 169–178.
- [500] ———, *Oscillation criteria for first order neutral differential equations*, Appl. Math. Lett. **15** (2002), 1025–1033.

- [501] ———, *Oscillation criteria for nonlinear second order damped differential equations*, Acta Math. Hungar. **102** (2004), no. (1-2), 117–139.
- [502] ———, *Oscillation criteria related to integral averaging technique for linear matrix hamiltonian systems*, J. Math. Anal. Appl. **295** (2004), 40–54.
- [503] ———, *Interval criteria for oscillation of second-order nonlinear differential equations*, J. Comput. Appl. Math. **205** (2007), 231–238.
- [504] Qi-Ru Wang, Xiao-Ming Wu, and Si-Ming Zhu, *Kamenev type oscillation criteria for second-order matrix differential systems*, Appl. Math. Lett. **16** (2003), 821–826.
- [505] ———, *Oscillation criteria for second-order nonlinear damped differential equations*, Comput. Math. Appl. **46** (2003), 1253–1262.
- [506] Qi-Ru Wang and Qi-Gui Yang, *Interval criteria for oscillation of second-order half-linear differential equations*, J. Math. Anal. Appl. **291** (2004), 224–236.
- [507] Xiaoping Wang, *Oscillation for higher order nonlinear delay differential equations*, Appl. Math. Comput. **157** (2004), 287–294.
- [508] ———, *Oscillation for higher order superlinear delay differential equations with unstable type*, J. Math. Anal. Appl. **379** (2004), 379–385.
- [509] A. Wintner, *A norm criterion for non-oscillatory differential equations*, Quart. Appl. Math. **6** (1948), 183–185.
- [510] ———, *A criterion of oscillatory stability*, Quart. Appl. Math. **7** (1949), 115–117.
- [511] ———, *On non-existence of conjugate points*, Amer. J. Math. **73** (1951), 368–380.
- [512] ———, *A comparison theorem for sturmian oscillation numbers of linear systems of second order*, Duke Math. J. **25** (1958), 515–518.
- [513] Fu-Hsiang Wong, Cheh-Chih Yeh, Shiuen-Ling Yu, and Chen-Huang Hong, *Young's inequality and related results on time scales*, Appl. Math. Lett. **18** (2005), 983–988.
- [514] James S. W. Wong, *A note on boundedness theorems of certain second order differential equations*, SIAM Rev. **6** (1964), no. 2, 175–176.
- [515] ———, *On solutions of certain riccati differential equations*, Math. Mag. **39** (1966), no. 3, 141–143.
- [516] ———, *On two theorems of waltman*, SIAM J. Appl. Math. **14** (1966), no. 4, 724–728.
- [517] ———, *Remarks on global asymptotic stability of certain quasi-linear differential equations*, Proc. Amer. Math. Soc. **17** (1966), no. 4, 815–818.
- [518] ———, *Some properties of solutions of  $u'' + a(t)f(u)g(u') = 0$* , SIAM J. Appl. Math. **14** (1966), no. 2, 209–214.



- [519] ———, *Some stability conditions for  $x'' + a(t)x^{2n-1} = 0$* , SIAM J. Appl. Math. **15** (1967), no. 4, 889–892.
- [520] ———, *On vector representation of rigid body rotation*, Math. Mag. **41** (1968), no. 1, 28–29.
- [521] ———, *Short notes: A note on second order nonlinear oscillation*, SIAM Rev. **10** (1968), no. 1, 88–91.
- [522] ———, *Shorter notes: A uniqueness theorem for certain two-point boundary value problems*, Proc. Amer. Math. Soc. **19** (1968), no. 1, 249–250.
- [523] ———, *Oscillation and nonoscillation of solutions of second order linear differential equations with integrable coefficients*, Trans. Amer. Math. Soc. **144** (1969), no. 3, 197–215.
- [524] ———, *Some remarks on hermitian and anti-hermitian properties of green's matrices*, SIAM J. Appl. Math. **17** (1969), no. 4, 615–623.
- [525] ———, *A second-order nonlinear oscillation theorem*, Proc. Amer. Math. Soc. **40** (1973), no. 2, 487–491.
- [526] ———, *A note on subadditive functions*, Proc. Amer. Math. Soc. **44** (1974), no. 1, 106.
- [527] ———, *On the generalized emden-fowler equation*, SIAM Rev. **17** (1975), no. 2, 339–360.
- [528] ———, *Remarks on nonoscillation theorems for a second-order nonlinear differential equation*, Proc. Amer. Math. Soc. **83** (1981), no. 3, 541–546.
- [529] ———, *On existence of oscillatory solutions for a second-order sublinear differential equation*, Proc. Amer. Math. Soc. **92** (1984), no. 3, 367–371.
- [530] ———, *An oscillation criterion for second-order nonlinear differential equations*, Proc. Amer. Math. Soc. **98** (1986), no. 1, 109–112.
- [531] ———, *Second order nonlinear forced oscillations*, SIAM J. Math. Anal. **19** (1988), no. 3, 667–675.
- [532] ———, *Oscillation theorems for second-order nonlinear differential equations*, Proc. Amer. Math. Soc. **106** (1989), no. 4, 1069–1077.
- [533] ———, *An oscillation theorem for second order sublinear differential equations*, Proc. Amer. Math. Soc. **110** (1990), no. 3, 633–637.
- [534] ———, *Oscillation criteria for second order nonlinear differential equations with integrable coefficients*, Proc. Amer. Math. Soc. **115** (1992), no. 2, 389–395.
- [535] ———, *Nonoscillation theorems for second-order nonlinear differential equations*, Proc. Amer. Math. Soc. **127** (1999), no. 5, 1387–1395.
- [536] ———, *Oscillation criteria for forced second-order linear differential equation*, J. Math. Anal. Appl. **231** (1999), 235–240.

- [537] ———, *Necessary and sufficient conditions for oscillation of second-order neutral differential equations*, J. Math. Anal. Appl. **252** (2000), 342–352.
- [538] ———, *Oscillation criteria for second-order nonlinear differential equations involving general means*, J. Math. Anal. Appl. **247** (2000), 489–505.
- [539] ———, *On kamenev-type oscillation theorems for second-order differential equations with damping*, J. Math. Anal. Appl. **258** (2001), 244–257.
- [540] ———, *A nonoscillation theorem for emden-fowler equations*, J. Math. Anal. Appl. **274** (2002), 746–754.
- [541] ———, *Remarks on a paper of c. huang*, J. Math. Anal. Appl. **291** (2004), 180–188.
- [542] James S. W. Wong and C. C. Yeh, *An oscillation criterion for second order sublinear differential equations*, J. Math. Anal. and Appl. **171** (1992), 346–351.
- [543] P. J. Y. Wong and R. P. Agarwal, *Comparison theorems for the oscillation of higher order difference equations with deviating arguments*, Math. Comput. Modelling **24** (1996), no. 12, 39–48.
- [544] ———, *On the oscillation of an  $m$ th order perturbed nonlinear difference equation*, Arch. Math. **32** (1996), 13–27.
- [545] ———, *Oscillatory behaviour of solutions of certain second order nonlinear differential equations*, J. Math. Anal. Appl. **198** (1996), 337–354.
- [546] X. Wu, S. Chen, and H. Tang, *Oscillation of a class of second-order delay differential equation with impulses*, Appl. Math. Comput. **145** (2003), 561–567.
- [547] Wu Xiu-li, Chen Si-yang, and Tang Hong-ji, *Oscillation of a class of second-order delay differential equation with impulses*, Appl. Math. Comput. **145** (2003), 561–567.
- [548] Wu Xiu-li, Chen Si-Yang, and Hong Ji, *Oscillation of a class of second-order nonlinear ode with impulses*, Appl. Math. Comput. **138** (2003), 181–188.
- [549] Zhiting Xu, *Riccati inequality and oscillation criteria for pde with  $p$ -laplacian*, J. Ineq. Appl. **2006** (2006), 1–10.
- [550] Zhiting Xu, Baoguo Jia, and Dongkui Ma, *Oscillation theorems for elliptic equations with damping*, Appl. Math. Comput. **156** (2004), 93–106.
- [551] Zhiting Xu and Xiuxiang Liu, *Philos-type oscillation criteria for emden-fowler neutral delay differential equations*, J. Comp. Appl. Math. **206** (2007), 1116–1126.
- [552] Zhiting Xu and Yong Xia, *Interval averaging technique and oscillation of certain even order delay differential equations*, J. Math. Anal. Appl. **292** (2004), 238–246.

- [553] Zhiting Xu and Hong-Yan Xing, *Oscillation criteria of kamenev-type for pde with p-laplacian*, Appl. Math. Comput. **145** (2003), 735–745.
- [554] Jurang Yan, *A note on an oscillation criterion for an equation with damped term*, Proc. Amer. Math. Soc. **90** (1984), no. 2, 277–280.
- [555] ———, *Oscillation theorems for second order linear differential equations with damping*, Proc. Amer. Math. Soc. **98** (1986), no. 2, 276–282.
- [556] ———, *On the distance between zeroes and limit-point problem*, Proc. Amer. Math. Soc. **107** (1989), no. 4, 971–975.
- [557] ———, *Comparison results for impulsive delay differential inequalities and equations*, Portugal. Math. **54** (1997), 255–261, Fasc. 3.
- [558] ———, *Oscillations of second order neutral functional differential equations*, Appl. Math. Comput. **83** (1997), 27–41.
- [559] ———, *Oscillation of first-order impulsive differential equations with advanced argument*, Comput. Math. Appl. **42** (2001), 1353–1363.
- [560] ———, *Oscillation of solutions of impulsive delay differential equations*, J. Math. Anal. Appl. **254** (2001), 358–370.
- [561] ———, *Oscillation of nonlinear delay impulsive differential equations and inequalities*, J. Math. Anal. Appl. **265** (2002), 332–342.
- [562] ———, *Oscillation properties of a second-order impulsive delay differential equation*, Comput. Math. Appl. **47** (2004), 253–258.
- [563] Qigui Yang, *Interval oscillation criteria for a forced second order nonlinear ordinary differential equations with oscillatory potential*, Appl. Math. Comput. **135** (2003), 49–64.
- [564] Qigui Yang and Yun Tang, *Oscillation theorems for certain second order self-adjoint matrix differential systems*, J. Math. Anal. Appl. **288** (2003), 565–585.
- [565] X. Yang, *An oscillation criterion for generalized linéard equations*, Appl. Math. Comput. **145** (2003), 233–239.
- [566] Xiaojing Yang, *Nonoscillation criteria for second-order nonlinear differential equations*, Appl. Math. Comput. **131** (2002), 125–131.
- [567] ———, *Oscillation criteria for certain second order matrix differential equations*, J. Math. Anal. Appl. **265** (2002), 285–295.
- [568] ———, *Oscillation results for second-order half-linear differential equations*, Math. Comput. Modelling **36** (2002), 503–507.
- [569] ———, *Forced oscillation of nth order nonlinear differential equations*, Appl. Math. Comput. **134** (2003), 301–305.
- [570] ———, *Hölder’s inequality*, Appl. Math. Lett. **16** (2003), 897–903.

- [571] ———, *Nonoscillatory solutions of nonlinear differential systems*, Comput. Math. Appl. **46** (2003), 1347–1362.
- [572] ———, *A note on hölder’s inequality*, Appl. Math. Comput. **134** (2003), 319–322.
- [573] ———, *On inequalities of lyapunov type*, Appl. Math. Comput. **134** (2003), 293–300.
- [574] ———, *On lyapunov type inequality for certain higher order differential equations*, Appl. Math. Comput. **134** (2003), 307–317.
- [575] ———, *Oscillation criteria for nonlinear differential equations with damping*, Appl. Math. Comput. **136** (2003), 549–557.
- [576] ———, *Sturm type problems for singular  $p$ -laplacian boundary value problems*, Appl. Math. Comput. **136** (2003), 181–193.
- [577] ———, *Oscillation and nonoscillation criteria for quasilinear differential equations*, J. Math. Anal. Appl. **298** (2004), 363–373.
- [578] ———, *Oscillation criteria for second-order matrix differential systems*, Appl. Math. Comput. **148** (2004), 299–306.
- [579] ———, *Oscillation criterion for a class of quasilinear differential equations*, Appl. Math. Comput. **153** (2004), 225–229.
- [580] C. C. Yeh, *An oscillation criterion for second order nonlinear differential equations with functional arguments*, J. Math. Anal. and Appl. **76** (1980), 72–76.
- [581] ———, *Oscillation theorems for linear second order differential equations with damped term*, Proc. Amer. Math. Soc. **84** (1982), no. 3, 397–402.
- [582] ———, *Oscillation criteria for second order differential equations*, J. Math. Anal. and Appl. **138** (1989), 157–165.
- [583] Norio Yoshida, *An oscillation theorem for characteristic initial value problems for nonlinear hyperbolic equations*, Proc. Amer. Math. Soc. **76** (1979), no. 1, 95–100.
- [584] Y. H. Yu, *Leighton type oscillation criterion and sturm type comparison theorem*, Math. Nachr. **153** (1991), 137–143.
- [585] Wenjun Yuan, *A note on riccati differential equation*, J. Math. Anal. Appl. **277** (2003), 367–374.
- [586] A. Zafer, Y. Yalçın, and Y. Şahiner, *Positive solutions and oscillation of higher order neutral difference equations*, Arch. Math. (Brno) **36** (2000), 623–636.
- [587] S. Zhang, L. dong, and L. Chen, *The study of predator-prey system with defensive ability of prey and impulsive perturbation on the predator*, Chaos Solitons Fractals **23** (2005), no. 2, 631–643.

- [588] Xiaosheng Zhang and Jurang Yan, *Oscillation theorems for certain second order self-adjoint matrix differential systems*, J. Math. Anal. Appl. **253** (2001), 204–214.
- [589] Yuzhu Zhang, Aimin Zhao, and Jurang Yan, *Oscillation criteria for impulsive delay differential equations*, J. Math. Anal. Appl. **205** (1997), 461–470.
- [590] Aimin Zhao and Jurang Yan, *Existence of positive solutions for delay differential equations with impulses*, J. Math. Anal. Appl. **210** (1997), 667–678.
- [591] ———, *Necessary and sufficient conditions for oscillations of delay equations with impulses*, Appl. Math. Lett. **10** (1997), no. 1, 23–29.
- [592] Zhaowen Zheng, *Note on wong’s paper*, J. Math. Anal. Appl. **274** (2002), 466–473.
- [593] Zhaowen Zheng and Fanwei Meng, *Oscillation criteria for forced second-order quasi-linear differential equations*, Math. Comput. Modelling **45** (2007), 215–220.
- [594] Rong-Kun Zhuang and Wan-Tong Li, *Interval oscillation criteria for second order neutral nonlinear differential equations*, Appl. Math. Comput. **157** (2004), 39–51.
- [595] Rong-Kun Zhuang and Hong-Wu Wu, *Sturm comparison theorem of solution for second order nonlinear differential equations*, Appl. Math. Comput. **162** (2005), 1227–1235.