A BIBLIOGRAPHY ON GAMMA FUNCTIONS: INEQUALITIES AND APPLICATIONS

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1. Adiga, C. and Kim, T., *On a generalization of Sándor's function*, Proc. Jangjeon Math. Soc., **5**(2002), no.2, 121-124.

2. Adiga, C. et al., *On a q-analogue of Sándor's function*, J. Ineq. Pure Appl. Math., **4**(2003), no.5, art.84 (electronic).

3. Afuwape, A.U. and Imoru, C.O., *Bounds for the beta function*, Bolletino U.M.I., (5)**17-A**(1980), 330-334.

4. Agarwal, R.P., *Difference equations and inequalities*, 2nd ed., Marcel Dekker, Inc., 2000.

5. Alikhani, A. and Hassani, M., *Approximation of P_n by H_n*, RGMIA Research Report Collection, **8**(2005), no.4, article 5.

6. Allouche, J.P., *Transcendence of the Carlitz-Goss gamma function at rational arguments*, J. Number Theory, **60**(1996), no.2, 318-328.

7. Alsina, C., Tomás, M.S., *A geometrical proof of a new inequality for the gamma function*, J. Ineq. Pure Appl. Math., vol.**6**(2005), no.2, article 48.

8. Alyakrinskii, A.A., *On the representation of the values of Euler's gamma function at some rational points in the form of an infinite product* (Russian), Investigations in complex analysis (Russian), 123-128, Krasnoyarsk. Gos. Univ., 1989.

9. Alzer, H. and Ruscheweyh, S., *A subadditive property of the gamma function*, J. Math. Anal. Appl., **285**(2003), 564-577.

10. Alzer, H., *A mean-value inequality for the gamma function*, Applied Math. Letters, **13**(2000), 111-114.

11. Alzer, H., *A power mean inequality for the gamma function*, Monatsh. Math., **131**(2000), 179-188.

12. Alzer, H., *Characterizations of the ratio of gamma and q-gamma functions*, Abh. Math. Sem. Univ. Hamburg, **70**(2000), 165-174.

13. Alzer, H., *Inequalities for the beta function of n variables*, The ANZIAM Journal, **44**(2003), Part 4, 609-623.

14. Alzer, H., *Inequalities for the gamma function*, Proc. Amer. Math. Soc., **128**(2000), 141-147.

15. Alzer, H., *Note on an inequality involving* $(n!)^{1/n}$, Acta Math. Univ. Comen. New Ser., **64**(1995), 283-285.

16. Alzer, H., *On Ramanujan's double inequality for the gamma function*, Bull. London Math. Soc., **35**(2003), 601-607.

17. Alzer, H., *On some inequalities involving* $(n!)^{1/n}$, *II*, Period. Math. Hung., **28**(3)(1994), 229-233.

18. Alzer, H., *Sharp bounds for the ratio of q-gamma functions*, Math. Nachr., **222**(2001), 5-14.

19. Alzer, H., *Sharp inequalities for the beta function*, Indag Math. (N.S.), **12**(2001), 15-21.

20. Amou, M., *Irrationality results for values of certain q-functions*, Proc. Jangjeon Math. Soc., 2000, 27-36.

21. Anastassiadis, J., *Définition des fonctions eulériennes par des équations fonctionnelles*, Mémorial des sci. math., fasc. CLVI, Paris, Gauthier-Villars, 1964.

22. Anderson, G.D., Vamanamurthy, M.K. and Vuorinen, M., *Conformal invariants, inequalities and quasiconformal maps*, Wiley, New York, 1997.

23. Anderson, G.D., Vamanamurthy, M.K. and Vuorinen, M., *Topics in special functions*, in: Papers on Analysis, a volume dedicated to Olli Martio, Report Univ. Jyväskylä, **83**(2001), 5-26.

24. Andrews, G.E. and Askey, R., *Another q-extension of the beta function*, Proc. A.M.S., **81**(1981), 97-100.

25. Andrews, G.E. and Askey, R., *Another q-extension of the beta function*, Proc. AMS **81**(1981), no.1, 97-100.

26. Andrews, G.E., *q-Series: Their development and applications in Analysis, Number theory, Combinatorics, Physics and Computer algebra*, 1986, reprinted 1991, Chelsea, USA.

27. Andrews, G.E., Askey, R. and Roy, R., *Special functions*, Cambridge Univ. Press, 1999.

28. Appell, P., *Sur un classe de fonctions analogues aux fonctions eulériennes étudiées par M. Heine*, C.R. Acad. Sci. Paris, **89**(1979), 841-844.

29. Appell, P., *Sur une classe de fonctions analogues aux fonctions Eulériennes étudiées par M. Heine*, Comptes Rendues, **89**(1879), 841-844.

30. Artin, E., *Einführung in die theorie der Gammafunktion*, B.G. Teubner, Leipzig, 1931.

31. Askey R., *Ramanujan's extensions of the gamma and beta functions*, Amer. Math. Monthly, **87**(1980), 346-359.

32. Askey, R., *A q-extension of Cauchy's form of the beta integral*, Quart. J. Math. Oxford Ser. (2)**32**(1981), no.127, 255-266.

33. Badiale, M., *Some characterization of the q-gamma function by functional equations I*, Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur., (8)**74**(1983), no.1,7-11; II, ibid., (8)**74**(1983), no.2, 49-54.

34. Bailey W.N., *Generalized hypergeometric series*, Cambridge Math. Tract. no.32, Cambridge Univ. Press, 1935.

35. Bailey, D.H., *Numerical results on the transcendence of constants involving π, e, and Euler's constant*, Math. Comp., **50**(1988), no. 181, 275-281.

36. Bank, S.B., *Some results on the gamma function and other hypertranscendental functions*, Proc. Royal Soc. Edinb. Sect. A **79**(1977/78), no.3-4, 335-341.

37. Barnes, E.W., *On the theory of the multiple gamma-function*, Cambr. Trans., **19**(1904), 374-425.

38. Barnes, E.W., *The theory of the double Gamma function*, Philos. Trans. Roy. Soc. London Ser. A, **196**(1901), 265-388.

39. Barnes, E.W., *The theory of the G-function*, Quart. J. Math., **31**(1899), 264-314.

40. Bastero, J., Galve, F., Peña, A. and Romano, M., *Inequalities for the gamma function and estimates for the volume of sections of B_p^n*, Proc. A.M.S., **130**(2001), no.1, 183-192.

41. Bastien, G. and Rogalski, M., *Convexité, complete monotonie et inegalités sur les fonctions zeta et gamma sur les fonctions des operateurs de Baskarov et sur des fonctions arithmetiques*, Canad. J. Math., **54**(2002), no.5, 916-944.

42. Bateman, H. and Erdélyi, A., *Higher transcendental functions*, McGraw-Hill, New York, 1955.

43. Batir, N., *Sharp inequalities for factorial n*, RGMIA Research Report Collection, **9**(2006), no.3, article 10.

44. Batir, N., *Some gamma function inequalities*, RGMIA Research Report Collection, **9**(2006), no.3, article 5.

45. Batir, N., *Some new inequalities for gamma and polygamma functions*, J. Ineq. Pure Appl. Math., vol.**6**(2005), no.4, article 103.

46. Batir, N., *An interesting double inequality for Euler's gamma function*, J. Ineq. Pure Appl. Math., vol.**5**(2004), issue 4, article 97.

47. Beckenbach, E.F. and Bellman, R., *Inequalities*, 4th printing 1983, Springer Verlag (first ed., 1961).

48. Beesack, P.R., *Inequalities for absolute moments of a distribution: from Laplace to von Mises*, J. Math. Anal. Appl., **98**(1984), 435-457.

49. Bencze, M. and Bătineţu Giurgiu, D.M., *Inequalities for the gamma function*, Octogon Math. M., **10**(2002), no.1, 233-246.

50. Bencze, M. and Bătineţu-Giurgiu, D.M., *Inequalities for gamma function*, Octogon Math. Mag., **10**(2002), no.1, 233-246.

51. Bencze, M. and Zhao, C.-J., *The lambda-multiplicatively convex (concave) version of Hadamard's inequality*, Octogon Math. M., **10**(2002), no.1, 93-102.

52. Bencze, M., *An inequality for convex functions*, Octogon Math. M., **11**(2003), no.2, 504-507.

53. Bencze, M., *Inequalities for gamma function*, Octogon Math. M., **13**(2005), no.2, 982-984.

54. Bencze, M., *New generalization of the convexity (concavity)*, Octogon Math. M., **10**(2002), no.1, 43-50.

55. Bencze, M., *Special inequalities for increasing and convex functions*, Octogon Math. M., **10**(2002), no.1, 296-321.

56. Bendersky, L., *Sur la fonction gamma généralisée*, Acta Math., **61**(1933), 263-322.

57. Berg, C. and Forst, G., *Potential theory on locally compact Abelian groups*, Springer-Verlag, Berlin, 1975.

58. Berger, A., *Sur quelques applications de la fonction gamma à la théorie des nombres*, Akad. Afhandt. Uppsala 1880.

59. Berndt, B.C. and Sohn, J., *Asymptotic formulas for two continued fractions in Ramanujan's lost notebook*, J. London Math. Soc.,

(2)**65**(2002), 271-284.

60. Berndt, B.C., *The gamma function and the Hurwitz zeta function*, Amer. Math. Monthly, **92**(1985), 126-130.

61. Bicheng Yang and Gao Mingzhe, *On a best value of Hardy-Hilbert's inequality*, Advances in Math., **26**(2)(1997), 159-164.

62. Bicheng Yang, *On a new extension of Hilbert's double series theorem and applications*, Int. J. Appl. Math. Sci., **2**(2005), no.2, 230-239.

63. Bloom, D.M. and Booth, G., *Problem 10521*, Amer. Math. Monthly, **103**(1996), 347.

64. Blyth, C. and Pathak, P.K., *A note on easy proofs of Stirling's theorem*, Amer. Math. Monthly, **93**(1986), 376-379.

65. Bonan-Hamada, C.M. and Jones, W.B., *Stieltjes continued fractions for polygamma functions*, speed of convergence, J. Comp. Appl. Math., **179**(2005), no.1-2, 47-55.

66. Bondesson, L., *Generalized Gamma convolutions and related classes of distributions and densities*, Lecture Notes in Statistics **76**, Springer Verlag, New York, 1992.

67. Bondesson, L., *On infinite divisibility of powers of a gamma variable*, Scand. Actuarial J., (1978), 48-61.

68. Borelli Forti, C. and Fenyö, I., *On a generalization of gamma functional equation*, C.R. Math. Rep. Acad. Sci. Canada, **4**(1982), no.5, 261-265.

69. Borwein, J.M. and Zucker, I.J., *Fast evaluation of the gamma function for small rational fractions using complete elliptic integrals of the first kind*, IMA J. of Num. Analysis, **12**(1992), 519-526.

70. Bourbaki, N., *Fonctions d'une variable réelle*, Hermann, Paris, 1951.

71. Boyd, D.W., *A p-adic study of the partial sums of the harmonic series*, Experimental Math., **3**(1994), no.4, 287-302.

72. Bracken, P., *Properties of certain sequences related to Stirling's approximation for the gamma function*, Exp. Mathematicae, **21**(2003), 171-178.

73. Brent, R.P., *Ramanujan and Euler's constant*, Math. Comp. 1943-1993: a half-century of comp. math. (Vancouver, BC, 1993), 541-545, Proc. Sympos. Appl. Math. 48, AMS, 1994.

74. Brunel, G., *Monographie de la fonction gamma*, Mém. de Bordeaux (3) Bd.3, 1886, 1-184.

75. Burkhardt, H., *Zur Theorie der Gammafunktion, besonders über ihre analytische Darstellung für große positive werte des Arguments*, Sitzungsber. math.-phys. Kl. d. Kgl. Bayerischen Akad. Wiss. München (1913), 383-396.

76. Butzer, P.L. and Hauss, M., *On Stirling functions of the second kind*, Stud. Appl. Math., **84**(1991), no.1, 71-91.

77. Campbell, R., *Les intǵrales Euleriennes et leurs applications*, Dunod, Paris, 1966.

78. Carlson, B.C., *Special functions of applied mathematics*, Academic Press, 1977.

79. Char, B.W., *On Stieltjes' continued fraction for the gamma function*, Math. Comp., **34**(150)(1980), 547-551.

80. Chen, C.P. and Qi, F., *The best lower and upper bounds of harmonic sequence*, RGMIA Research Report Collection, **6**(2003), no.2, article 14.

81. Chen, C.P., *Monotonicity and convexity for the gamma function*, J. Ineq. Pure Appl. Math., vol.**6**(2005), no.4, article 100.

82. Choi, J. and Quine, J.R., *Barnes' approach of the multiple gamma functions*, J. Korean Math. Soc., **29**(1992), 127-140.

83. Choi, J. and Seo, T.Y., *Integral formulas for Euler's constant*, Commun. Korean Math. Soc., **13**(1998), no.3, 683-689.

84. Choi, J. and Seo, T.Y., *The double gamma function*, East Asian Math. J., **13**(1997), 159-174.

85. Choi, J. and Srivastava, H.M., *An application of the theory of the double gamma function*, Kyushu J. Math., **53**(1999), no.1, 209-222.

86. Choi, J. et al., *Series involving the zeta function and multiple gamma functions*, Appl. Math. Comp., **159**(2004), 509-537.

87. Chu, J.T., *A modified Wallis product and some applications*, Amer. Math. Monthly, **69**(1962), 402-404.

88. Cizek, J. and Vrscay, E.R., *Asymptotic estimation of the coefficients of the continued fraction representing the Binet function*, C.R. Math. Rep. Acad. Sci. Canada, IV(4)(1982), 201-206.

89. Davis, H.T., *An extension to polygamma functions of a theorem of Gauss*, Bull. Amer. M.S., **41**(1935), 243-247.

90. Diaconis, P. and Freedman, D., *An elementary proof of Stirling's formula*, Amer. Math. Monthly, **93**(1986), 123-125.

91. Diamond, J., *The p-adic log gamma function and p-adic Euler constants*, Trans. Amer. Math. Soc., **233**(1977), 321-337.

92. DiDonato, A.R. and Morris Jr., A.H., *Computation of the incomplete gamma functions*, ACM Trans. Math. Software, **12**(1986), 377-393.

93. Dinghas, A., *Zur Theorie der Gammafunktion*, Math.-Phys. Semesterber, **6**(1958/59), 245-252.

94. Dirichlet, G.L., *Werke*, vol.1, pp. 375-380, G. Reimer, Berlin, 1897 (see also C.R. Acad. Sci. Paris **8**(1839), 156-160).

95. Doob, J.L., *Classical potential theory and its probabilistic counterpart*, Springer-Verlag, New York, 1984.

96. Dragomir, S.S., Agarwal, R.P. and Barnett, N.S., *Inequalities for beta and gamma functions via some classical and new inequalities*, RGMIA Research Report Collection (Australia), **2**(1999), no.3, 283-333.

97. Dragomir, S.S., Pečarić, J. and Sándor, J., *A note on the Jensen-Hadamard inequality*, l'Anal. Numér. Th. Approx. (Cluj), **19**(1990), 29-34.

98. Dubey, S.D., *Statistical determination of certain mathematical constants and functions using computers*, J. Assoc. Comput. Mach., **13**(1966), 511-525.

99. Dwight, H.B., *Tables of integrals and other mathematical data*, Macmillan Comp., N.Y. Fourth ed., 1961.

100. Eagle, A., *A simple theory of the gamma function*, Math. Gaz., **14**(1928), 118-127.

101. Elezorić, N., Giordano, C. and Pečarić, J., *Convexity and q-gamma function*, Rend. Circ. Mat. Palermo, XLVIII (2)(1999), 285-298.

102. Elezović, N., Giordano, C. and Pečarić, J., *The best bound in Gautschi's inequality*, Math. Ineq. Appl., **3**(2000), 239-259.

103. Evans, R.J., *Multidimensional beta and gamma integrals*, The

Rademacher legacy to mathematics (Univ. Park, PA, 1992), 341-357, Contemp. Math. 166, AMS, 1994.

104. Evans, R.J., *Multidimensional q-beta integrals*, SIAM J. Math. Anal., **23**(1992), no.3, 758-765.

105. Everett, C.J., *Inequalities for the Wallis product*, Math. Mag., **43**(1970), 30-33.

106. Evgrafov, M.A., *Asymptotic estimates and entire functions* (A.L. Shields, Transl.), Gordon and Breach, New York, 1961.

107. Feller, W., *A direct proof of Stirling's formula*, Amer. Math. Monthly, **74**(1967), 1223-1225, Correction: ibid: **75**(1968), 518.

108. Feller, W., *An introduction to Probability theory and its Applications*, vol.2, New York, Wiley, 1966.

109. Finch, S., *Mathematical constants*, http://www.mathsoft.com/asolve/constant/constant.html

110. Floreani, R. and Vinet, L., *q-gamma and q-beta functions in quantum algebra representation theory*, J. Comput. Appl. Math., **68**(1996), no.1-2, 57-68.

111. Frenzen, C.L., *Error bounds for asymptotic expansions of the ratio of two gamma functions*, SIAM J. Math. Anal., **18**(1987), 890-896.

112. Fricker, F., *Einführung in die Gitterpunktlehre*, Birkhäuser Verlag, 1982.

113. Gao, P., *A subadditive property of the digamma function*, RGMIA Research Report Collection **8**(2005), no.3, article 9.

114. Gao, P., *Some monotonicity properties of the q-gamma function*, RGMIA Research Report Collection, **8**(2005), no.3, article 4.

115. Gelfand, I.M., Kapranov, M.M. and Zelevinsky, A.V., *Generalized Euler Integrals and A-hypergeometric functions*, Adv. Math., **84**(1990), 255-271.

116. Gertsch, A., *Nombres harmoniques généralisés*, C.R. Acad. Sci. Paris, **324**(1997), Série I, 7-10.

117. Ghelfond, A.O., *Calculus of finite differences* (Romanian), Ed. Tehnică, Bucureşti, 1956 (translated from the Russian ed. of 1952).

118. Giordano, C., Laforgia, A. and Pečarić, J., *Supplements to known inequalities for some special functions*, J. Math. Anal. Appl., **200**(1996), no.1, 34-41.

119. Giordano, C., Laforgia, A. and Pečarić, J., *Unified treatment of Gautschi-Kershan type inequalities for the gamma function*, J. Comp. Appl. Math., **99**(1998), 167-175.

120. Glaisher, J.W.L., *On the history of Euler's constant*, Messenger Math., **1**(1872), 25-30.

121. Glaisher, J.W.L., *On the product* $1^1 \cdot 2^2 \cdot 3^3 \ldots n^n$, Messenger Math., (2)**7**(1877), 43-47.

122. Good, I.J., *Short proof of a conjecture of Dyson*, J. Math. Phys., **11**(1970), 1884.

123. Gordon, L., *A stochastic approach to the gamma function*, Amer. Math. Monthly, **101**(1994), 858-865.

124. Goss, D., *The Γ-function in the arithmetic of function fields*, Duke Math. J., **56**(1988), 163-191.

125. Gould, H.W., *Bibliography on Euler's constant*, Unpublished manuscript.

126. Gould, H.W., *Some formulas for Euler's constant*, Bulletin of number theory, **10**(1986), no.2, 2-9.

127. Grabner, P.J., Tichy, R. and Zimmermann, U.T., *Inequalities for the gamma function with applications to permanents*, Discr. Math., **154**(1996), 53-62.

128. Graham, R.L., Knuth, D.E. and Patashnik, O., *Concrete mathematics*, Addison-Wesley, Reading MA, 1989.

129. Gronau, D. and Matkowski, J., *Geometrically convex solutions of certain difference equations and generalized Bohr-Mollerup theorems*, Results Math., **26**(1994), no.3-4, 290-297.

130. Gronwall, T.H., *On the convergence of Binet's factorial series for* $\log \Gamma(s)$ *and* $\psi(s)$, Annals of Math., **18**(1916-1917), 74-78.

131. Gronwall, T.H., *The gamma function in the integral calculus*, Annals of Math., **20**(1918-19), 35-124.

132. Guo, B.N. and Qi, F., *Inequalities and monotonicity for the ratio of gamma functions*, Taiwanese J. Math., **7**(2003), no.2, 239-247.

133. Guo, S., *Monotonicity and concavity properties of some functions involving the gamma functions with applications*, J. Ineq. Pure Appl. Math., vol.**7**(2006), no.1, article 45.

134. Gupta, A., *A q-extension of incomplete gamma function II, Some further properties and associated functions*, J. Math. Phys. Sci., **28**(1994), no.6, 271-285.

135. Habsieger L., *Une q-conjecture d'Askey*, C.R. Acad. Sci. Paris, **302**(1986), Série 1, 17, 615-618.

136. Habsieger, L., *Conjecture de MacDonald et q-intégrale de Selberg-Askey*, Thèse, Univ. Louis Pasteur, Strasbourg, 1987.

137. Habsieger, L., *Une q-conjecture d'Askey*, C.R. Acad. Sci. Paris, **302**(1986), Série I, no.17, 615-618.

138. Haruki, H., *A new characterization of Euler's gamma function by a functional equation*, Aeq. Math., **31**(1986), no.2-3, 173-183.

139. Hassani, M., *An equivalent for prime number theorem*, RGMIA Research Report Collection, **8**(2005), no.2, article 9.

140. Hassani, M., *Approximation of $\pi(x)$ by $\psi(x)$*, J. Ineq. Pure Appl. Math., vol.**7**(2006), no.1, article 7.

141. Hassani, M., *Approximation of the dilogarithm function*, RGMIA Research Report Collection, no.4, article 18.

142. Havil, J., *Gamma. Exploring Euler's constant*, Princeton Univ. Press, 2003.

143. Hayman, W.K., *A generalization of Stirling's formula*, J. Reine Angew. Math., **196**(1956), 67-95.

144. Hermite, Ch., *Sur le logarithme de la fonction gamma*, American Journal Bd., **17**(1895), 111-116.

145. Hessami, T.P. and Hessami, Kh.P., *Criteria for irrationality of generalized Euler's constant*, J. Number Theory **108**(2004), no.1, 169-185.

146. Hou, Z.H., *The total mean curvature of submanifolds in an Euclidean space*, Michigan Math. J., **45**(1998), 497-505.

147. Ismail, M.E.H., *A remark on a paper by Giordano, Laforgia and Pečarić*, J. Math. Anal. Appl., **211**(1997), no.2, 621-625.

148. Ivić, A., *The Riemann zeta-function*, John Wiley, 1985.

149. Jackson F.H., *Certain q-identities*, Quart. J. Math., **12**(1941), 167-172.

150. Jackson, F.H., *A generalization of the functions $\Gamma(n)$ and x^n*, Proc. Roy. Soc. London, **74**(1904), 64-72.

151. Jackson, F.H., *On q-definite integrals*, Quart. J. Pure and Appl. Math., **41**(1910), 193-203.

152. Jacobsen, L., *General convergence of continued fractions*, Trans. Amer. Math. Soc., **294**(1986), 477-485.

153. Janous, W., *Inequalities for parts of the harmonic series*, Univ. Beograd Publ. Elek. Fak. Ser. Mat., **12**(2001), 38-40.

154. Jensen, J.L.W.V., *An elementary exposition of the theory of the gamma-function*, Annals of Math., (2) **17**(1916), 124-166.

155. John, F., *Special solutions of certain difference equations*, Acta Math., **71**(1939), 175-189.

156. Jones, W.B. and Thron, W.J., *Continued fractions in numerical analysis*, Appl. Numerical Math., **4**(1988), 143-230.

157. Jones, W.B. and Thron, W.J., *On the computation of in complete gamma functions in the complex domain*, J. Comput. Appl. Math., **12-13**(1985), 401-417.

158. Jordan, Ch., *Calculus of finite differences*, Budapest, 1939.

159. Kairies, H.H., *Charakterisierungen und Ungleichungen für die q-Factorial-Funktionen*, In: General Inequalities **4** (ISNM, vol.71), Birkhäuser, Basel, 1984, 257-267.

160. Kanold, H.J., *Ein einfacher Beweis der Stirlingschen Formel*, Elem. Math. (Basel), **24**(1969), no.5, 109-110.

161. Kapur, J.N., *Logarithmic convexity of the beta and gamma functions*, J. Nat. Acad. Math. India, **3**(1985), 67-77.

162. Karatsuba, A.A. and Voronin, S.M., *The Riemann zeta-function*, de Gruyter, 1992.

163. Karatsuba, E.A., *On the asymptotic representation of the Euler gamma function by Ramanujan*, J. Comput. Appl. Math., **135**(2001), 225-240.

164. Karatsuba, E.A., *On the computation of the Euler constant γ*, Numer. Algorithms, **24**(2000), 83-87.

165. Kazarinoff, D.K., *On Wallis' formula*, Edinburgh Math. Notes, No.**40**(1956), 19-21.

166. Kenter, F.K., *A matrix representation for Euler's constant γ*, Amer. Math. Monthly, **106**(1999), 452-454.

167. Kim, T. and Adiga, C., *On the q-analogue of Gamma functions and related inequalities*, J. Ineq. Pure Appl. Math., vol.**6**(2005), no.4, article 118.

168. Kim, T., *On a q-analogue of the p-adic log gamma functions and related integrals*, J. Number Theory, **76**(1999), no.2, 320-329.

169. Kim, T., *q-Volkenborn integration*, Russ. J. Math. Phys., **9**(2002), 288-299.

170. Kim, Y.S., *q-analogues of p-adic gamma functions and p-adic Euler constants*, Commun. Korean Math. Soc., **13**(1998), no.4, 735-741.

171. Kim, Y.S., *q-analogues of p-adic gamma functions, and p-adic Euler constants*, Commun. Korean Math. Soc., **13**(1998), no.4, 735-741.

172. Klamkin, M.S., *Extensions of Dirichlet's multiple integral*, SIAM J. Math. Anal., **2**(1971), 467-469.

173. Kline, M., *Mathematical thought from ancient to modern times*, Oxford Univ. Press, 1972.

174. Knopp, M.I., *Modular functions in analytic number theory*, Markham, Chicago, 1970.

175. Koblitz, N., *Interpretation of the p-adic log gamma function and Euler constants using the Bernoulli measure*, Trans. Amer. Math. Soc., **242**(1978), 261-269.

176. Koblitz, N., *q-extension of the p-adic gamma function*, Trans. Amer. Math. Soc., **260**(1980), 449-457.

177. Kocić, V.L., *A note on q-gamma function*, Univ. Beograd Publ. Elektr. Fak. Ser. Mat., **1**(1990), 31-34.

178. Kovalevski, M.A., *The asymptotic behavior of functions that generalize the Euler gamma function* (Russian), Math. questions in the theory of wave propagation, 11. Zap. Nauchn. Sem. Leningrad. Otdel. Inst. Steklov (LOMI), **104**(1981), 123-129, 238.

179. Krätzel, E., *Lattice Points*, WEB Deutscher Verlag der Wissenschaften, Berlin, 1988.

180. Krull, W., *Bemerkungen zur Differenzengleichung $g(x+1)-g(x) = \varphi(x)$*, Math. Nachrichten, **1**(1948), 365-376.

181. Kuczma, M., *Functional equations in a single variable*, Polish Scientific Publishers, Warszawa, 1968.

182. Kumar, P., Singh, S.P. and Dragomir, S.S., *Some inequalities involving beta and gamma functions*, Nonlinear Analysis Forum, **6**(2001), no.1, 143-150.

183. Kummer, E.E., *Beitrag zur Theorie der Funktion $\Gamma(x)$*, J. Reine Angew. Math., **35**(1947), 1-4.

184. Kurepa, D., *Left factorial function in the complex domain*, Math. Balkanica, **3**(1973), 297-307.

185. Labelle, G., *Á propos d'un q-analogue pour la fonction gamma d'Euler*, Ann. Sci. Math. Québec, **6**(1982), no.2, 163-196.

186. Lanczos, C., *A precision approximation of the gamma function*, SIAM J. Numer. Anal., **B1**(1964), 86-96.

187. Landau, E., *Zur Theorie der Gamma funktion*, Journal für Math., **123**(1901), 276-283.

188. Lange, L.J., *Continued fraction representations for functions related to the Gamma function*, in: S. Clement Cooper, W.J. Thron (Eds.), Continued fractions and Orthogonal functions: Theory and applications, Lecture Notes in Pure and Applied Math., vol.154, 1994, 233-279.

189. Lavrentiev, M. and Chebat, B., *Méthodes de la théorie des fonctions d'un variables complexe*, Editions Mir, Moscou, 1972.

190. Lazarević, I. and Lupaş, A., *An inequality for the gamma function*, Gaz. Mat. Perf. Met., **3**(1982), no.1-2, 82-84.

191. Lehmer, D.H., *Euler constants for arithmetical progressions*, Acta Arith., **27**(1975), 125-142.

192. Leighton, W., *Remarks on certain Eulerian constants*, Amer. Math. Monthly, **75**(1968), 283-285.

193. Lerch, M., *Theorie der Gammafunktion*, Vestnik, 1899, 17 pp.

194. Lewin, L., *Polylogarithms and associated functions*, North Holland, 1981.

195. Limbourg, H., *Théorie de la fonction gamma*, Gent 1859.

196. Liouville, J., *Note sur quelques intégrales définie*, J. Math. Pures Appl., (1)**4**(1839), 225-235.

197. Lorch, L., *Comparison of a pair of upper bounds for a ratio of gamma functions*, Math. Balkanica (N.S.), **16**(2002), Fasc.1-4, 195-202.

198. Lorentzen, L. and Wandeland, *Continued fractions with applications*, North Holland, Amsterdam, 1992.

199. Lösch, F. and Schoblik, F., *Die Fakultät (Gamma funktion) und verwandte Funktionen*, Leipzig, 1951.

200. Luke, Y.L., *Evaluation of the Gamma function by means of Padé approximations*, SIAM J. Math. Anal., **1**(1970), 266-281.

201. Luke, Y.L., *Inequalities for the gamma function and its logarithmic derivative*, Math. Balkanica, **2**(1972), 118-123.

202. Luke, Y.L., *The special functions and their approximations*, Academic Press, New York, 1969.

203. Lupaş, A. and Lupaş, L., *On certain special functions* (Romanian), Seminarul itinerant ec. funcţionale, aprox., convexitate, 1980, Timişoara, 55-68.

204. Lupaş, A. and Vernescu, A., *On an inequality* (Romanian), Gaz. Mat. A **17**(1999), no.3, 201-210.

205. Lupaş, A., *Mean value theorems for the Fourier-Jacobi coefficients* (Romanian), Rev. Anal. Numer. Theor. Approx. (Cluj), **3**(1974), 79-84.

206. Lupaş, A., *Open Problems* (Romanian), Gaz. Mat. (Bucureşti), 2/1979.

207. Magnus, W. et al., *Formulas and theorems for the special functions of mathematical physics*, 3rd ed., Springer Verlag, 1966.

208. Malesević, B.J., *Some inequalities for Kurepa's function*, J. Ineq. Pure Appl. Math., vol.5(2004), issue 4, article 84.

209. Mansion, P., *Sur la fonction gamma*, Annales de la Soc. Scient. Bruxelles, **17**(1893), 4-8.

210. Marichev, O.I. and Vu Kim Tuan, *Some properties of the q-gamma function*, Dokl. Akad. Nauk BSSR, **26**(1982), no.6, 488-491.

211. Matsumoto, K., *Asymptotic series for double zeta and double gamma functions of Barnes*, Analytic number theory (Japanese) (Kyoto, 1994), No.**958**(1996), 162-165.

212. Matsumoto, K., *Asymptotic series for double zeta, double gamma, and Hecke L-functions*, Math. Proc. Cambr. Phil. Soc., **123**(1998), 385-405.

213. Matsuoka, Y., *Generalized Euler constants associated with the Riemann zeta function*, Number Theory and Combinatorics, Proc. 1984 Tokyo Conf., pp. 279-295.

214. McAnally, D.S., *q-exponential functions and q-gamma functions*, Confronting the infinite (Adelaide, 1994), 246-253, World Sci. Publ., River Edge, NJ, 1995.

215. McDMercer, A., *Some new inequalities for the gamma, beta and zeta functions*, J. Ineq. Pure Appl. Math., vol.**7**(2006), no.1, article 29.

216. Mellin, H., *Zur Theorie der Gamma funktion*, Acta Mathematica, **8**(1886), 37-80.

217. Mendès France, M. and Jia, J.J., *Transcendence and the Carlitz-Goss gamma function*, J. Number Theory, **63**(1997), no.2, 396-402.

218. Meyer, M. and Pajor, A., *Sections of the unit ball of l_p^n*, J. of Funct. Anal., **80**(1988), no.1, 109-123.

219. Mikolás, M., *Über die Beziehung zwischen der Gammafunktion un den trigonometrischen funktionen*, Acta Math. Acad. Sci. Hung., **4**(1953), Fasc.1-2, 143-157.

220. Mikolás, M., *Zur Theorie der Gammafunction, der Riemannschen Zetafunktion und verwandter Funktionen, I*, Acta Math. Acad. Sci. Hung., **6**(1955), Fasc.3-4, 381-438.

221. Miller, C., *An extension of Hölder's theorem on the gamma function*, Israel J. Math., **97**(1997), 183-187.

222. Milne-Thomson, L.M., *The calculus of finite differences*, Macmillan, London, 1960.

223. Milovanović, G.V., *Recent progress in inequalities*, Kluwer Acad. Publ., 1998.

224. Mitrinović, D.S., Pečarić, J.E., *Note on the Gauss-Winkler inequality*, Anzeiger Öster. Akad. Wiss. Math.-Nat. Kl., Jahrgang 1986, no.6, 89-92.

225. Moak, D.S., *The q-gamma function for q > 1*, Aeq. Math., **20**(1980), 278-285.

226. Moak, D.S., *The q-analogue of Stirling's formula*, Rocky Mountain J. Math., **14**(1984), no.2, 403-413.

227. Moak, D.S., *The q-gamma function for x < 0*, Aeq. Math., **21**(1980), no.2-3, 179-191.

228. Morita, Y., *A p-adic integral representation of the p-adic L-function*, J. Reine Angew. Math., **302**(1978), 71-95.

229. Müller, M. and Schleicher, D., *Fractional sums and Euler-like identities*, Preprint (2005).

230. Müller, M. and Schleicher, D., *How to add a non-integer number of terms, and how to produce unusual infinite summations*, J. Comp. Appl. Math., **178**(2005), 347-360.

231. Namias, V., *A simple derivation of Stirling's asymptotic series*, Amer. Math. Monthly, **93**(1986), 25-29.

232. Natalini, P. and Palumbo, B., *Some inequalities for gamma function*, A.M.A.S.E.S. - Associazione per la Mat. Appl. alle Sci. Eq. et Sco., Rapporto no. **9**(2001).

233. Negoi, T., *A quicker convergence to Euler's constant* (Romanian), GMA (Bucureşti), **15**(1997), no.2, 111-113.

234. Nesterenko, Yu.V., *Modular functions and transcendence questions*, Mat. Sb., **187**(1996), 65-96.

235. Neuman, E., *Ineqalities involving a logarithmically convex function and their applications to special functions*, J. Ineq. Pure Appl. Math., vol.**7**(2006), issue 1, article 16.

236. Nikiforov, A. and Ouvarov, V., *Elements de la théorie des fonctions spéciales*, Ed. Mir, Moscou, 1976.

237. Nishizawa, M., *On a q-analogue of the multiple gamma functions*, Lett. Math. Phys., **37**(1996), no.2, 201-209.

238. Nunemacher, J., *On computing Euler's constant*, Math. Mag., **65**(1992), 313-322.

239. Olde Daalhuis, A.B., *Asymptotic expansions for q-gamma, q-exponential, and q-Bessel functions*, J. Math. Anal. Appl., **186**(1994), no.3, 896-913.

240. Oler, F.W.G., *Asymptotics and special functions*, Academic Press, New York and London, 1974.

241. Ostrowski, A., *On the remainder term of the Euler-Maclaurin formula*, J. Reine Angew. Math., **239/240**(1970), 268-286.

242. Panaitopol, L., *Refinement of Stirling's formula* (Romanian), Gaz. Mat. (Bucureşti), 9/1985, 329-332.

243. Pečarić, J., Allasia, G. and Giordano, C., *Convexity and the gamma function*, Indian J. Math., **41**(1999), 79-93.

244. Peretti, A., *The irrationality of Euler's constant, III*, Notes Numb. Th. Discr. Math., **3**(1997), no.4, 183-193.

245. Perron, O., *Die Lehre von den Kettenbrüche*, 3rd ed., vol.2, Teubner, Stuttgart, 1957.

246. Pincherle, S., *Sur une généralisation des fonctions Eulériennes*, Comptes Rendues, **106**(1888), 265-268.

247. Piros, M., *A generalization of the Wallis formula*, Miskolc Math. Notes, **4**(2003), no.2, 151-155.

248. Pólya, G., Szegö, G., *Problems and theorems in analysis*, vol.I, Springer Verlag, 1972/78; Reprint 1998.

249. Ponnusamy, S. and Vuorinen, M., *Asymptotic expansions and inequalities for hypergeometric functions*, Mathematika, **44**(1997), 278-301.

250. Post, E.L., *The generalized gamma functions*, Annals of Math., **20**(1918-19), 202-217.

251. Pringsheim, A., *Zur Theorie der Gammafunktion*, Journal für Math., **31**(1888), 455-481.

252. Pringsheim, A., *Zur Theorie der Gammafunktion*, Math. Ann., **31**(1888), 455-481.

253. Prudnikov, A.P. et al., *Integrals and Series (Supplementary Chapters)*, Nauka, Moscow, 1986 (Russian); see also: Integrals and Series, vol.22, Special functions (trans. from the Russian by N.M. Queen) end ed., Gordon and Breach, New York, 1988.

254. Prym, F.E., *Zur Theorie der Gammafunktion*, J. Reine Angew. Math., **82**(1877), 165-172.

255. Qi, F. amd Chen, C.P., *A new proof of the best bounds in Wallis' inequality*, RGMIA Research Report Collection, **6**(2003), no.2, article 2.

256. Qi, F. amd Wei Li, *Two logarithmically completely monotonic functions connected with the gamma function*, RGMIA Research Report Collection, **8**(2005), no.3, article 13.

257. Qi, F. and Chen, C.P., *A complete monotonicity of the gamma function*, RGMIA Research Collection, **7**(2004), no.1, article 1.

258. Qi, F. and Mei, J.Q., *Some inequalities of the incomplete gamma and related functions*, Z. Anal. Anwendungen, **18**(1999), no.3, 793-799.

259. Qi, F., *A class of logaritmically completely monotonic functions and application to the best bounds in the second Gautschi-Kershaw's in-*

equality, RGMIA Research Report Collection, **9**(2006), no.4, article 11.

260. Qi, F., *The best bound in Kershaw's inequality and two completely monotonic functions*, RGMIA Research Report Collection, **9**(2006), no.4, article 2.

261. Qiu, S.L. and Vuorinen, M., *Some properties of the gamma and psi functions, with applications*, Math. Comp. (2004), electronic; **74**(2005), 723-742.

262. Rainville, E.D., *Special functions*, Chelsea Publ. Company, New York, 1960.

263. Ramanujan, S., *Some definite integrals*, Messenger of Math., **44**(1915), 10-18; see also Collected papers of Srinivasa Ramanujan, ed. by G.H. Hardy, P.V. Seshu Aiyar and B.M. Wilson, Cambridge Univ. Press, 1927; reprinted by Chelsea, New York, 1962.

264. Ramanujan, S., *The lost notebook and other unpublished manuscripts*, Springer-Verlag, Berlin, 1988.

265. Rash, G., *Notes on the gamma-funktion*, Ann. of Math., (2)**32**(1931), 591-599.

266. Remmert, R., *Classical topics in complex function theory*, Springer-Verlag, 1998.

267. Robbins, H., *A remark on Stirling's formula*, Amer. Math. Monthly, **62**(1955), 26-29.

268. Rouché, E., *Sur la formule de Stirling*, Comptes Rendus, **110**(1890), 513-515.

269. Rowe, Ch.H., *A proof of the asymptotic series for* $\log \Gamma(z)$ *and* $\log \Gamma(z+1)$, Ann. of Math., (2)**32**(1931), 10-16.

270. Ruben, H., *Variance bounds and orthogonal expansions in Hilbert space with an application to inequalities for gamma functions and* π, Journal für Mathematik Band 225, 19-25.

271. Rudin, W., *Principles of mathematical analysis*, McGraw-Hill, New York, 1953.

272. Samoletov, A.A., *A sum containing factorials*, J. Comput. Appl. Math., **131**(2001), 503-504.

273. Sándor, J. and Crstici, B., *Handbook of number theory, II*, Springer Verkag, 2005.

    Sándor, J. and Debnath, L., *On certain inequalities involving the constant e and their applications*, J. Math. Anal. Appl., **249**(2000), 569-582.

274. Sándor, J. and Tóth, L., *A remark on the gamma function*, Elem. Math., **44**(1989), no.3, 73-76.

275. Sándor, J. and Tóth, L., *On some arithmetical products*, Publ. Centre Rech. Mat. Pures, Neuchâtel, Série I, 20, 1990, 5-8.

276. Sándor, J., *A note on certain inequalities for the gamma function*, J. Ineq. Pure Appl. Math., **6**(2005), no.3, art.61 (electronic).

277. Sándor, J., *Generalized Euler constants and Schlömilch-Lemonnier type inequalities*, J. Math. Anal. Appl., in press.

278. Sándor, J., *On a limit involving the Euler beta-function*, Octogon Math. Mag., **11**(2003), no.1, 251-252.

279. Sándor, J., *On a limit involving the Euler gamma function*, Octogon Math. Mag., **11**(2003), no.1, 262-264.

280. Sándor, J., *On a property of the gamma function*, Octogon Math. Mag., **11**(2003), no.1, 198-109.

281. Sándor, J., *On a property of the harmonic series* (Romanian), Gaz. Mat. (Bucureşti), **93**(1988), no.8, 311-312.

282. Sándor, J., *On certain inequalities for the gamma function*, RGMIA Research Report Collection, **9**(2006), no.1, article 11.

283. Sándor, J., *On certain inequalities for the ratios of gamma functions*, Octogon Math. Mag., **12**(2004), no.2B, 1052-1059.

284. Sándor, J., *On certain limits involving the Euler constants e and γ*, Octogon Math. Mag., **13**(2005), no.1A, 358-361.

285. Sándor, J., *On convex functions involving Euler's gamma function*, Octogon Math. Mag., **8**(2000), 514-516.

286. Sándor, J., *On Stirling's formula* (Romanian), Lucr. Semin. Did. Mat. (Cluj), **14**(1998), 235-240.

287. Sándor, J., *On the gamma function II*, Publ. Centre Rech. Math. Pures Chambéry, Série 1, Fasc. 28, 1997, 10-12.

288. Sándor, J., *On the gamma function III*, Centre Rech. Math. Pures Neuchâtel, Série 2, **19**(2001), 33-40.

289. Sándor, J., *Remark on a function which generalizes the harmonic series*, C.R. Acad. Bulg. Sci., **41**(1988), no.5, 19-21.

290. Sándor, J., *Selected chapters of geometry, analysis and number theory*, RGMIA Monographs on Mathematics, Victoria University of Technology, Melbourne, Australia, 2005 (e-book).

291. Sándor, J., *Selected Chapters of Geometry, Analysis and Number Theory*, RGMIA Monographs, Victoria University, 2005 (ONLINE: http://rgmia.vu.edu.au/monographs).

292. Sándor, J., *Two theorems on convexity or concavity of functions*, Octogon Math. Mag., **8**(2000), no.2, 337-339.

293. Sándor, J., Mitrinović, D.S. and Crstici, B., *Handbook of number theory I*, Springer Verlag, 2006.

294. Sansone, G. and Gerretsen, J., *Lectures on the theory of functions of a complex variable*, Noordhoff, Groningen, 1960.

295. Sasvári, Z., *An elementary proof of Binet's formula for the gamma function*, Amer. Math. Monthly, **106**(1999), no.2, 156-158.

296. Schlömilch, O., *Über den Quotienten zweier Gammafunktionen*, Zeitschrift für Math. u. Physik, **25**(1880), 351-352.

297. Schobloch, J.A., *Über Beta und Gammafunktionen*, Halle 1884.

298. Selberg, A., *Bemerkinger on et multipelt integral*, Norsk. Mat. Tidsskr., **26**(1944), 71-78.

299. Shafer, R.E., *Inequality on psi(x)*, solution to problem 6456, Amer. Math. Monthly, **92**(1985), 598.

300. Shenton, L.R. and Bonne, K.O., *Continued fractions for the psi function and its derivatives*, SIAM J. Appl. Math., **20**(4)(1971), 547-554.

301. Son, J.W. and Jang, D.S., *On q-analogues of Stirling series*, Commun. Korean Math. Soc., **14**(1999), no.1, 57-68.

302. Sondow, J., *Criteria for irrationality of Euler's constant*, Proc. Amer. M.S., **131**(2003), no.11, 3335-3344 (electronic).

303. Soules, G.W., *New permanental upper bounds for nonnegative matrices*, Linear and Multilinear Algebra, **51**(2003), no.4, 319-337.

304. Soules, G.W., *Permanental bounds for nonnegative matrices via decomposition*, Linear Algebra Appl., **394**(2005), 73-89.

305. Soules, G.W., *Permanental bounds for nonnegative matrices*, Linear Algebra Appl., **394**(2005), 73-89.

306. Spanier, J. and Oldham, K.B., *An atlas of functions*, Springer Verlag, Berlin, 1987.

307. Spira, R., *Calculation of the gamma function by Stirling's formula*, Math. Comp., **25**(1971), no.114, 317-322.

308. Spouge, J.L., *Computation of the gamma, digamma and trigamma functions*, SIAM J. Numer. Anal., **31**(1994), 931-944.

309. Srivastava, H.M. and Choi, J., *Series associated with the zeta and related functions*, Kluwer Acad. Publ., 2001.

310. Srivastava, H.M., *Remarks on a sum containing factorials*, J. Comput. Appl. Math., **142**(2002), 441-444.

311. Stancu, D.D. and Occorsio, M.R., *Mean-value formulae for integrals obtained by using Gaussian-type quadratures*, Rend. Circ. Mat. Palermo, Serie II, Numero 33, 1993, 463-478.

312. Stanković, J., *Über einige Relationen zwischen Fakultäten und den linken Fakultäten*, Math. Balkanica, **3**(1973), 488-495.

313. Stern, M.A., *Zur Theorie des Eulerschen Integrale*, Göttinger Studien, 1847.

314. Sullivan, F.J., *A note on the q-gamma functions*, Riv. Mat. Univ. Parma, **13**(1987), (4), 401-405.

315. Sun, J.S., *Monotonicity results and inequalities involving the gamma function*, RGMIA Research Report Collection, **7**(2004),

no.3, article 14.

316. Tanney, J., *Sur les intégrales Eulériennes*, Comptes Rendues, **94**(1881), 1698-1701; **95**(1882), 75.

317. Temme, N.M., *Asymptotic inversion of incomplete gamma functions*, Math. Comp., **58**(1992), no.198, 755-764.

318. Temme, N.M., *The asymptotic expansions of the incomplete gamma functions*, SIAM J. Math. Anal., **10**(1979), 757-766.

319. Thakur, D., *Gamma functions for function fields and Drinfeld modules*, Ann Math., **134**(1991), 25-64.

320. Thakur, D.S., *On gamma functions for function fields*, The arithmetic of function fields (Columbus, OH, 1991), 75-86, de Gruyter, Berlin (1992).

321. Thakur, D.S., *Transcendence of gamma values for $F_q[T]$*, Annals of Math., (2)**144**(1996), no.1, 181-188.

322. Tims, S.R. and Tyrrell, J.A., *Approximate evaluation of Euler's constant*, Math. Gaz. **55**(1971), 65-67.

323. Titchmarsh, E.C., *The theory of the Riemann zeta function*, Oxford, 1951 (2n ed. Revised by D.R. Heath-Brown, 1986).

324. Tóth, L., *On Wallis' formula* (Hungarian), Mat. Lapok (Cluj), **98**(41)(1993), no.4, 128-130.

325. Trimble, S.Y., Wells, J. and Wright, F.T., *Superadditive functions and a statistical application*, SIAM J. Math. Anal., **20**(1989), 1255-1259.

326. Tsumura, H., *On a q-analogue of the log-Gamma function*, Nagoya Math. J., **134**(1994), 57-64.

327. Tsumura, H., *On p-adic log-Γ-functions associated to the Lubin-Tate formal groups*, Tokyo J. Math., **19**(1996), 147-153.

328. Ueno, K., Nishizawa, M., *Multiple gamma functions and multiple q-gamma functions*, Publ. Res. Inst. Math. Sci., **33**(1997), no.5, 813-838.

329. Uppuluri, V. and Rao, R., *A stronger version of Gautschi's inequality satisfied by the gamma function*, Skand. Aktuarietidskr., 1965, 51-52.

330. Van de Lune, J. and Voorhoeve, M., *On the values of a function related to Euler's gamma function*, Math. Centrum, Amsterdam, 1981, i+9 pp.

331. Van de Lune, J., *Some convexity properties of Euler's gamma function*, Math. Centrum, Amsterdam, 1978, 13 pp.

332. Vernescu, A., *On the asymptotic analysis of the functions of discrete variable*, Bul. Şt. Univ. Baia Mare, Seria B, Mat.-Inf., **17**(2001), no.1-2, 173-185.

333. Vernescu, A., *Sur l'approximation et le devéloppement asymptotique de la série de terme général* $\dfrac{(2n-1)!!}{(2n)!!}$, Proc. Annual Meeting Romanian Soc. Math. Sci. Buch., 1977, Tome 1, 205-213.

334. Vernescu, A., *The natural proof of the inequalities of Wallis type*, Libertas Mathematica, **24**(2004), 183-190.

335. Vogt, H. and Voigt, J., *A monotonocity property of the Γ-function*, J. Ineq. Pure Appl. Math., **3**(2002), no.5, article 73 (electronic).

336. Wadhwa, A.D., *An interesting subseries of the harmonic series*, Amer. Math. Monthly, **82**(1975), 931-933.

337. Webster, R., *Log-convex solutions to the functional equation $f(x+1) = g(x)f(x)$: Γ-type functions*, J. Math. Anal. Appl., **209**(1997), 605-623.

338. Weijian, J., Mingzhe, G. and Kuemei, G., *On an extension of the Jardy-Hilbert theorem*, Studia Sci. Math. Hung., **42**(1)(2005), 21-35.

339. Weisstein, E.W., *CRC Concise Encyclopedia of Mathematics*, Boca Raton, Washington D.C., 1998 (see also www.mathworld.wolfram.com).

340. Wen, Z.Y. and Yao, J.Y., *Transcendence, automate theory and gamma functions for polynomial rings*, Acta Arith., **101**(2002), no.1, 39-51.

341. Wendel, J.G., *Note on the gamma function*, Amer. Math. Monthly, **55**(1948), 553-564.

342. Wilf, H.S., *The asymptotic behaviour of the Stirling numbers of the first kind*, J. Combin. Theory Ser. A, **64**(1993), 344-349.

343. William Gosper, R., Ismail, M.E.H. and Zhang, Ruiming, *On some strange summation formulas*, Illinois J. Math., **37**(1993), no.2, 240-277.

344. Williams, K.P., *The asymptotic form of the function $\psi(x)$*, Bull. Amer. M.S., **19**(1913), 472-479.

345. Wilson K.G., *Proof of a conjecture of Dyson*, J. Math. Phys., **3**(1962), 1040-1043.

346. Wolfe, W., *The asymptotic distribution of lattice points in hyperbolic space*, J. Funct. Analysis, **31**(1979), 333-340.

347. Wrench Jr., J.W., *Concerning two series for the gamma function*, Math. Comp., **22**(1968), 617-626.

348. Xiong Guijing, *On a kind of the best estimates for the Euler constant γ*, Acta Math. Scientia: English Ed., **16**(1996), 458-468.

349. Zucker, I.J., *The evaluation in terms of Γ-functions of the periods of elliptic curves admitting complex multiplication*, Proc. Camb. Phil. Soc., **82**(1977), 111-118.

350. Zudilin, V.V., *Remarks on irrationality of q-harmonic series*, Manuscripta Math., **107**(2002), no.4, 463-477.