A. Vogt – List of Publications

1. *Dimensionale Regularisierung von Infrarotsingularitäten*  

2. *Radiatively generated hadronic photon structure at low* \( Q^2 \)  

3. *Radiatively generated parton distributions for high energy collisions*  
   Z. Phys. C48 (1990) 471-482; with M. Glück and E. Reya

4. *Parton distributions at small* \( x \)  

5. *Parton distributions for high energy collisions*  

6. *Pionic parton distributions*  

7. *Parton structure of the photon beyond the leading order*  

8. *Photonic parton distributions*  

9. *Photonic parton distributions beyond the leading order: heavy quark and dilepton production at ep colliders*  

10. *The partonic structure of hadrons and photons*  

11. *Higher order QCD analysis of the photon structure*  

12. *Parton fragmentation into photons beyond the leading order*  

13. *Comparing radiatively generated parton distributions with recent measurements of* \( F_2^{hp}(x,Q^2) \) *in the small-* \( x \) *region*  

14. *\( Z^0 \rightarrow (J/\Psi \text{ or } \Upsilon) + \gamma \) revisited*  
    Munich Univ. Report LMU–11/93 (unpublished); with R. Rückl
15. **Light gluinos and the parton structure of the nucleon**  

16. **Photon structure: QCD treatment and parton densities**  

17. **Dynamical parton distributions of the proton and small-x physics**  

18. **Dynamical parton distributions for \(\alpha_s\) determinations**  

19. **Constraints on the proton’s gluon distribution from prompt photon production**  

20. **The Mellin transform technique for the extraction of the gluon density**  

21. **On dynamical parton distributions of hadrons and photons**  

22. **On the behaviour of non-singlet structure functions at small x**  

23. **\(\gamma\gamma\) physics at LEP2: structure functions**  

24. **Working group report on the structure of the proton**  

25. **Parton distributions of real and virtual photons**  

26. **Kinematical coverage for determining the photon structure function \(F_2^\gamma\) at linear colliders**  

27. **On the resummation of \(\alpha \ln^2 x\) terms for non-singlet structure functions in QED and QCD**  

28. **The singlet contribution to the structure function \(g_1(x, Q^2)\) at small x**  
29. *Constraining the proton’s gluon density by charm electroproduction at HERA*

30. *On small-x resummations for the evolution of unpolarized and polarized non-singlet and singlet structure functions*

31. *The evolution of unpolarized and polarized structure functions at small x*

32. *Theoretical uncertainties in the QCD evolution of structure functions and their impact on $\alpha_s(M_Z^2)$*

33. *Structure functions in deep inelastic scattering at HERA*

34. *A detailed comparison of NLO QCD evolution codes*

35. *Theoretical uncertainties in the determination of $\alpha_s$ from $F_2^p$ at HERA*
   Ibid., pp. 52-55; with J. Blümlein, S. Riemersma and W.L. van Neerven

36. *The extraction of the gluon density from jet production in deep-inelastic scattering*
   Ibid., pp. 541-544, hep-ph/9609446; with D. Graudenz and M. Hampel

37. *The effect of small-x resummations on the evolution of polarized structure functions*

38. *On the resummation of the $\alpha ln^2 x$ terms for QED corrections to deep-inelastic scattering and $e^+e^-$ annihilation*

39. *Parton distributions in deep-inelastic scattering and related processes*
   Habilitation Thesis, Würzburg University, April 1997 (unpublished)
40. *Physics with e\textsuperscript{+}e\textsuperscript{−} linear colliders*

41. *Small-x resummations for the structure functions F\textsubscript{2}\textsuperscript{p}, F\textsubscript{L}\textsuperscript{p} and F\textsubscript{2}\textsuperscript{γ}*
   hep-ph/9706371, proceedings of the Workshop on Deep Inelastic Scattering & QCD (DIS97),

42. *On small-x resummations for the evolution of deep-inelastic structure functions*
   Proceedings of the Workshop on New Non Perturbative Methods and Quantisation on the
   Light Cone, Les Houches, France, February 1997, eds. P. Grangé et al. (Springer 1998),
   pp. 237-241; with J. Blümlein

43. *The resummed gluon anomalous dimension and structure functions at small x*

44. *The parton structure of real photons*
   hep-ph/9709345, proceedings of the international conference PHOTON’97, Egmond aan Zee,

45. *The evolution of unpolarized singlet structure functions at small x*

46. *The unpolarized gluon anomalous dimension at small x*
   hep-ph/9806368, proceedings of the Workshop on Deep Inelastic Scattering & QCD (DIS98),
   with J. Blümlein, V. Ravindran and W.L. van Neerven

47. *DIS’98 structure functions summary, part 2 (theoretical aspects)*
   Ibid., pp. 792-800, hep-ph/9807369

48. *Dynamical parton distributions revisited*

49. *Structure function evolution at next-to-leading order and beyond*

50. *Real photon structure at an e\textsuperscript{+}e\textsuperscript{−} linear collider*

51. *NNLO evolution of deep-inelastic structure functions: the non-singlet case*

52. *On soft gluon effects in deep inelastic structure functions*
53. **QCD at the Large Hadron Collider**


54. **NNLO evolution of deep-inelastic structure functions: the singlet case**


55. **Parton densities and structure functions beyond the next-to-leading order**


56. **Improved approximations for the three-loop splitting functions in QCD**


57. **Real photon structure at an $e^+e^-$ linear collider**


58. **Next-to-next-to-leading logarithmic threshold resummation for deep-inelastic scattering and the Drell-Yan process**


59. **Non-singlet structure functions beyond the next-to-next-to-leading order**


60. **TESLA technical design report, part 3: physics at an $e^+e^-$ linear collider**

DESY-2001-011, hep-ph/0106315; ECFA/DESY Linear Collider Physics Working Group (J.A. Aguilar-Saavedra et al.)

61. **Parton densities and structure functions at NNLO and beyond**


62. **Next-to-next-to leading order QCD corrections to the photon’s parton structure**


63. **Reference results for the evolution of parton distributions**


64. **Questions on uncertainties in parton distributions**


65. **Non-singlet structure functions at three loops: fermionic contributions**

66. *First results for three-loop deep-inelastic structure functions in QCD*  

67. *Three-loop results and soft-gluon effects in deep-inelastic scattering*  

68. *The three-loop splitting functions in QCD: the non-singlet case*  

69. *The three-loop splitting functions in QCD: the singlet case*  

70. *The three-loop splitting functions in QCD*  

71. *The QCD splitting functions at three loops: methods and results*  

72. *Efficient evolution of unpolarized and polarized parton distributions with QCD-Pegasus*  

73. *The longitudinal structure function at the third order*  

74. *The third-order QCD corrections to deep-inelastic scattering by photon exchange*  

75. *Higher-order corrections in threshold resummation*  

76. *The quark form factor at higher orders*  
   JHEP 0508 (2005) 049 (20 pp), hep-ph/0507039; with S. Moch and J. Vermaseren

77. *Three-loop results for quark and gluon form factors*  

78. *Higher-order soft corrections to lepton pair and Higgs boson production*  
79. *Precision predictions for deep inelastic scattering*

80. *Updated reference results for the evolution of parton distributions*
   Ibid., pp. 93-102; with G. Salam

81. *Sudakov resummations at higher orders*

82. *Photon-parton splitting functions at the next-to-next-to-leading order of QCD*

83. *Next-to-next-to-leading order evolution of non-singlet fragmentation functions*

84. *Third-order QCD results on form factors and coefficient functions*

85. *NNLO splitting functions and coefficient functions with time-like kinematics*

86. *Parton distributions: progress and challenges*

87. *Differences between charged-current coefficient functions*

88. *On third-order timelike splitting functions and top-mediated Higgs decay to hadrons*

89. *NNLO time-like splitting functions in QCD*

90. *Towards the NNLO evolution of polarised parton distributions*

91. *Third-order QCD corrections to the charged-current structure function F3*
92. **Threshold Resummation of the Structure Function $F_L$**

93. **Precision calculations for deep-inelastic scattering: an update**

94. **Higher-Order Threshold Resummation for Semi-Inclusive $e^+e^-$ Annihilation**

95. **On non-singlet physical evolution kernels and large-x coefficient functions in perturbative QCD**

96. **On Higgs-exchange DIS, physical evolution kernels and fourth-order splitting functions at large x**

97. **Higher-order predictions from physical evolution kernels**

98. **Leading logarithmic large-x resummation of off-diagonal splitting and coefficient functions**

99. **Threshold-improved predictions for charm production in deep-inelastic scattering**

100. **On higher-order flavour-singlet splitting functions and coefficient functions at large x**

101. **Fragmentation functions in $e^+e^-$, DIS and hadron collisions**

102. **Generalized double-logarithmic large-x resummation in inclusive deep-inelastic scattering**
    JHEP 03 (2011) 030 (42 pp.), arXiv:1012.3352; with A. Almasy and G. Soar

103. **On the next-to-next-to-leading order evolution of flavour-singlet fragmentation functions**

104. **Resummation of small-x double logarithms in QCD: semi-inclusive $e^+e^-$ annihilation**
105. Generalized threshold resummation for semi-inclusive $e^+ e^-$ annihilation

106. On top-quark hadro-production at next-to-next-to-leading order

107. On the next-to-next-to-leading order corrections to deep-inelastic heavy-quark production
   To appear in April/May 2012; with N.A. Lo Presti, H. Kawamura and S. Moch

108. Generalized double-logarithmic large-x resummation in semi-inclusive $e^+ e^-$ annihilation
   To appear in May 2012; with N.A. Lo Presti and A. Almasy

109. Resummation of small-x double logarithms in QCD: inclusive deep-inelastic scattering
   To appear in May/June 2012; with C.H. Kom