

# **SIR AARON KLUG OM**

## **Bibliography**

## **PUBLICATIONS**

1. Klug, A. Nature 160, 570, 1947.  
'Crystal structure of para-bromochlorobenzene'
2. Klug, A. Acta Cryst. 3, 165-175, 1950.  
'The crystal and molecular structure of triphenylene, C<sub>18</sub>H<sub>12</sub>'
3. Klug, A. Acta Cryst. 3, 176-181, 1950.  
'The application of the Fourier-transform method to the analysis of the structure of triphenylene C<sub>18</sub>H<sub>12</sub>'
4. Klug, A. Dissertation for the Ph.D. degree, 1952. University of Cambridge  
'The kinetics of phase changes in solids'
5. Klug, A. and Roughton, F.J.W. Faraday Society Discussions, No. 20, 1955.  
In 'The physical chemistry of enzymes – General discussion'
6. Franklin, R.E. and Klug, A. Acta Cryst. 8, 777-780, 1955.  
'The splitting of layer lines in X-ray fibre diagrams of helical structures; application to tobacco mosaic virus'
7. Klug, A., Kreuzer, F. and Roughton, F.J.W. Proc. Roy. Soc. B 145, 452-472, 1956.  
'Simultaneous diffusion and chemical reaction in thin layers of haemoglobin solution'
8. Klug, A., Kreuzer, F. and Roughton, F.J.W. Helvetica Physiological et Pharmacological Acta 14, 121-127, 1956.  
'The diffusion of oxygen in concentrated haemoglobin solutions'
9. Franklin, R.E. and Klug, A. Biochimica et Biophysica Acta 19, 403-419, 1956.  
'The nature of the helical groove on the tobacco mosaic virus particle'
10. Franklin, R.E. and Klug, A. and Holmes, K.C. CIBA Found. Symp. 1956, 39-52.  
'X-ray diffraction studies of the structure and morphology of tobacco mosaic virus'
11. Klug, A., Finch, J.T. and Franklin, R.E. Nature 179, 683-684, 1957.  
'Structure of turnip yellow mosaic virus'
12. Gibson, Q.H. and Roughton, F.J.W. with an Appendix by A. Klug. Proc. Roy Soc. B 146, 205-224, 1957.  
'The determination of the velocity constants of the four successive reactions of carbon monoxide with sheep haemoglobin'
13. Klug, A. and Franklin, R.E. Biochim. Biophys. Acta 23, 199-201, 1957.  
'The reaggregation of the A-protein of tobacco mosaic virus'
14. Klug, A., Finch, J.T. and Franklin, R.E. Biochim, Biophys. Acta 25, 242-252, 1957.  
'The structure of turnip yellow mosaic virus; X-ray diffraction studies'
15. Klug, A., Crick, F.H.C. and Wyckoff, H.W. Acta Cryst. 11, Pt. 3, 199-213, 1958.  
'Diffraction by helical structures'
16. Klug, A. Acta Cryst. 11, 515-543, 1958.

- 'Joint probability distributions of structure factors and the phase problem'
17. Klug, A. and Franklin, R.E. Faraday Soc. Discussions No. 25, 1958.  
'Order-disorder transitions in structures containing helical molecules'
  18. Franklin, R.E., Klug, A., Finch, J.T. and Holmes, K.C. Faraday Soc. Discussions No. 25, 1958.  
'On the structure of some ribonucleoprotein particles'
  19. Finch, J.T. and Klug, A. Nature 183, 1709-1714, 1959.  
'Structure of poliomyelitis virus'
  20. Klug, A. Acta Cryst. 12, 943, 1959  
'A reply to some comments by Karle and Hauptman'
  21. Klug, A., Franklin, R.E. and Humphreys-Owen, S.P.F. Biochimica et Biophysica Acta 32, 203-219, 1959.  
'The crystal structure of Tipula Iridescent virus as determined by Bragg reflection of visible light'
  22. Franklin, R.E., Caspar, D.L.D. and Klug, A. Plant Pathology: Problems and Progress, 1908-1958 (Golden Jubilee Volume of the American Phytopathological Society), University of Wisconsin Press, Madison 1959.
  23. Finch, J.T., and Klug, A. Biochim. Biophys. Acta 41, 430-433, 1960.  
'The form of crystals of mahoney poliovirus grown in phosphate-saline'
  24. Klug, A. and Finch, J.T. J. Mol. Biol. 2, 201-215, 1960.  
'The symmetries of the protein and nucleic acid in turnip yellow mosaic virus; X-ray diffraction studies'
  25. Klug, A. and Caspar, D.L.D. Adv. Virus Res. 7, 225-325, 1960.  
'The structure of small viruses'
  26. Finch, J.T. and Klug, A. J. Mol. Biol. 2, 434-435, 1960.  
'X-ray "powder" diagrams of crystals of an artificial top component from turnip yellow mosaic virus'
  27. Klug, A., Holmes, K.C. and Finch, J.T. J. Mol. Biol. 3, 87-100, 1961  
'X-ray diffraction studies on ribosomes from various sources'
  28. Caspar, D.L.D. and Klug, A. Cold Spring Harb. Symp. Quant. Biol. 27, 1-24, 1962.  
'Physical principles in the construction of regular viruses'
  29. Caspar, D.L.D. and Klug, A. MD Anderson Symposium: Viruses, Nucleic Acid and Cancer, 27-39, 1963.  
'Structure and assembly of regular virus particles'
  30. Klug, A. and Berger, J.E. J. Mol. Biol. 10, 565-569, 1964.  
'An optical method for the analysis of periodicities in electron micrographs, and some observations on the mechanism of negative staining'
  31. Finch, J.T., Klug, A. and Stretton, A.O.W. J. Mol. Biol. 10, 570-575, 1964.  
'The structure of the "polyheads" of T4 bacteriophage'

32. Finch, J.T. and Klug, A. *J. Mol. Biol.* 13, 1-12, 1965.  
'The structure of viruses of the papilloma-polyoma type. III. Structure of rabbit papilloma virus'
33. Klug, A. and Finch, J.T. *J. Mol. Biol.* 11, 403-423, 1965.  
'Structure of viruses of the papilloma-polyoma type. I. Human wart virus'
34. Klug, A. *J. Mol. Biol.* 11, 424-431, 1965.  
'Structure of viruses of the papilloma-polyoma type. II. Comments on other work'
35. Klug, A. and Finch, J.T. *J. Mol. Biol.* 13, 961-962, 1965.  
'Structure of viruses of the papilloma-polyoma type'
36. Klug, A., Finch, J.T., Leberman, R. And Longley, W. *CIBA Found. Symp. 1966 on Principles of Biomolecular Organisation*, 158-189 (Eds. G.E.W. Wolstenholme and Maeve O'Connor), Design and Structure of Regular Virus Particles.
37. Grimstone, A.V. and Klug A. *J. Cell Sci.* 1, 351-362, 1966.  
'Observations on the substructure of flagellar fibres'
38. Klug, A., Longley, W. and Leberman, R. *J. Mol. Biol.* 15, 315-343, 1966.  
'Arrangement of protein subunits and the distribution of nucleic acid in turnip yellow mosaic virus. I. X-ray diffraction studies'
39. Finch, J.T. and Klug, A. *J. Mol. Biol.* 15, 344-364, 1966.  
'Arrangement of protein subunits and the distribution of nucleic acid in turnip yellow mosaic virus. II. Electron microscope studies'
40. Klug, A. and DeRosier, D.J. *Nature* 212, 29-32, 1966.  
'Optical filtering of electron micrographs: reconstruction of one-sided images'
41. Finch, J.T., Leberman, R., Chang, Y.-S. and Klug, A. *Nature* 212, 349-351, 1966  
'Rotational symmetry of the two turn disk aggregate of tobacco mosaic virus protein'
42. Harrison, B.D. and Klug, A. *Virology* 30, 738-740, 1966.  
'Relation between length and sedimentation coefficient for particles of tobacco rattle viruses'
43. Finch, J.T. and Klug, A. *J. Mol. Biol.* 24, 289-302, 1967.  
'Structure of broad beam mottle virus. I. Analysis of electron micrographs and comparison with turnip yellow mosaic virus and its top component'
44. Finch, J.T., Klug, A. and van Regenmortel, M.H.V. *J. Mol. Biol.* 24, 303-305 1967.  
'The structure of cucumber mosaic virus'
45. Klug, A. *Symp. Int. Soc. for Cell Biol.* 6, 1967. (Academic Press)  
'The design of self-assembling systems of equal units'
46. Finch, J.T., Klug, A. and Nermut, M.V. *J. Cell Sci.* 2, 587-590, 1967.  
'The structure of the macromolecular units on the cell walls of bacillus

polymyxa'

47. DeRosier, D.J. and Klug, A. *Nature* 217, 130-134, 1968.  
'Reconstruction of three-dimensional structures from electron micrographs'
48. Klug, A. and Finch, J.T. *J. Mol. Biol.* 31, 1-12, 1968.  
'Structure of viruses of the papilloma-polyoma type. IV. Analysis of tilting experiments in the electron microscope'
49. Kiselev, N.A., DeRosier, D.J. and Klug, A. *J. Mol. Biol.* 35, 561-566, 1968.  
'Structure of the tubes of catalase: analysis of electron micrographs by optical filtering'
50. Klug, A. *Nature* 219, 808-810, 1968.  
'Rosalind Franklin and the discovery of the structure of DNA'
51. Clark, B.F.C., Doctor, B.P., Holmes, K.C., Klug, A., Marcker, K.A. and Morris S.J. *Nature* 219, 1222-1224, 1968.  
'Crystallisation of transfer RNA'
52. DeRosier, D.J. and Klug, A. *Science* 163, 1470, 1969.  
'Positions of ribosomal subunits'
53. Kiselev, N.A. and Klug, A. *J. Mol. Biol.* 40, 155-171, 1969.  
'The structure of viruses of the papilloma-polyoma type. V. Tubular variants built of pentamers'
54. Klug, A. *Nobel Symposium 11: Symmetry and function of biological systems at the macromolecular level. Point groups and the design of aggregates*, 1968.
55. Finch, J.T. and Klug, A. *J. Mol. Biol.* 46, 597-598, 1969.  
'Two double helical forms of polyriboadenylic acid and the pH-dependent transition between them'
56. Fowle, L.G., Juritz, J.F.W., Klug, A. and Stephen, A.M. *S.A. Medical Journal* 44, 152, 1970.  
'Crystallinity of the gummy polysaccharide from *Watsonia Pyramidata* Corm-Sacs'
57. Crowther, R.A., DeRosier, D.J. and Klug, A. *Proc. Roy. Soc. London A* 317, 319-340, 1970.  
'The reconstruction of a three-dimensional structure from projections and its application to electron microscopy'
58. Crowther, R.A., Amos, L.A., Finch, J.T., DeRosier, D.J. and Klug, A. *Nature* 226, 421-425, 1970.  
'Three dimensional reconstruction of spherical viruses by fourier synthesis from electron micrographs'
59. Finch, J.T., Klug, A. and Leberman, R. *J. Mol. Biol.* 50, 215-222, 1970.  
'The structures of turnip crinkle and tomato bushy stunt viruses. II. The surface structure; dimer clustering patterns'

60. Erickson, H.P. and Klug, A. Bericht der Bunsen-Gessellschaft für Physikalische Chemie (früher Zeitschrift für Electrochemie) Bank 74, Heft 11, 1970.  
'The Fourier transform of an electron micrograph; effects of defocussing and aberrations, and implications for the use of underfocus contrast enhancement'
61. Erickson, H.P. and Klug, A. Phil. Trans. Roy. Soc. B 261, 105-118, 1971.  
'Measurement and compensation of defocusing and aberrations by Fourier processing of electron micrographs'
62. Klug, A. Phil. Trans. Roy. Soc. B 261, 173-179, 1971.  
'Applications of image analysis technique in electron microscopy'
63. Finch, J.T. and Klug, A. Phil. Trans. Roy. Soc. B 261, 211-219, 1971.  
'Three-dimensional reconstruction of the stacked-disk aggregate of tobacco mosaic virus protein from electron micrographs'
64. Durham, A.C.H., Finch, J.T. and Klug, A. Nature New Biol. 229, 37-42, 1971.  
'States of aggregation of tobacco mosaic virus protein'
65. Durham, A.C.H. and Klug, A. Nature New Biol. 229, 42-46, 1971.  
'Polymerisation of protein subunits and its control'
66. Butler, P.J.G. and Klug, A. Nature New Biol. 229, 47-50, 1971.  
'Assembly of the particles from RNA and disks of protein'
67. Crowther, R.A. and Klug, A. J. Theor. Biol. 32, 199-203, 1971.  
'ART and science or conditions for three-dimensional reconstruction from electron microscope images'
68. Klug, A. and Durham, A.C.H. Cold Spring Harb. Symp. Quant. Biol. 36, 449-460, 1971.  
'The disk of TMV protein and its relation to the helical and other modes of aggregation'
69. Klug, A. Cold Spring Harb. Symp. Quant. Biol. 36, 483-486, 1971.  
'Interpretation of the rotation function map of satellite tobacco necrosis virus; octahedral packing of icosahedral particles'
70. Barrett, A.N., Barrington-Leigh, J., Holmes, K.C., Leberman, R., Mandelkow, E. von engbusch, P. and Klug, A. Cold Spring Harb. Symp. Quant. Biol. 36, 433-448, 1971.  
'An electron density map of tobacco mosaic virus at 10 Å resolution'
71. DeRosier, D.J. and Klug, A. J. Mol. Biol. 65, 469-488, 1972.  
'Structure of the tubular variants of the head of bacteriophage T4 (polyheads). I. Arrangement of subunits in some classes of polyheads'
72. Yanagida, M., DeRosier, D.J. and Klug, A. J. Mol. Biol. 65, 489-499, 1972.  
'The structure of the tubular variants of the head of bacteriophage T5 (polyheads). II. Structural transition from a hexamer to a 6 + 1 morphological unit'
73. Klug, A. Fed. Proc. 31, 1, 1972.  
'Assembly of tobacco mosaic virus'
74. Durham, A.C.H. and Klug, A. J. Mol. Biol. 67, 315-332, 1972.

- 'Structures and roles of the polymorphic forms of tobacco mosaic virus protein; III. A model for the association of A-protein into discs'
75. Mirzabekov, A.D., Rhodes, D., Finch, J.T., Klug, A. and Clark, B.F.C. *Nature New Biol.* 237, 27-28, 1972.  
'Crystallization of tRNAs as cetyltrimethylammonium salts'
  76. Crowther, R.A., Amos, L.A. and Klug, A. *Proc. Fifth European Congress on Electron Microscopy, Manchester, 1972*, p. 539.  
'Three-dimensional image reconstruction using functional expansions'
  77. Amos, L.A. and Klug, A. *Proc. Fifth European Congress on Electron Microscopy, Manchester, 1972*, p. 580.  
'Image filtering by computer'
  78. Klug, A. *CIBA Found. Symp.* 7, 1972.  
'The polymorphism of tobacco mosaic virus protein and its significance for the assembly of the virus'
  79. Butler, P.J.G. and Klug, A. *Proc. Nat. Acad. Sci. U.S.A.* 69, 2950-2953, 1972.  
'Assembly of tobacco mosaic virus *in vitro*: effect of state of polymerisation of the protein component'
  80. Klug, A. and Crowther, R.A. *Nature* 238, 435-440, 1972.  
'Three-dimensional image reconstruction from the viewpoint of information theory'
  81. Mellema, J.E. and Klug, A. *Nature* 239, 146-150, 1972.  
'Quaternary structure of gastropod haemocyanin'
  82. Ladner, J.E., Finch, J.T., Klug, A. and Clark, B.F.C. *J. Mol. Biol.* 72, 99-101, 1972.  
'High resolution X-ray diffraction studies on a pure species of transfer RNA'
  83. Brown R.S., Clark, B.F.C., Coulson, R.R., Finch, J.T., Klug, A. and Rhodes, D. *Eur. J. Biochem.* 31, 130-134, 1972.  
'Crystallisation of pure species of bacterial tRNA for X-ray diffraction studies'
  84. Butler, P.J.G., Durham, A.C.H. and Klug, A. *J. Mol. Biol.* 72, 1-18, 1972.  
'Structures and roles of the polymorphic forms of tobacco mosaic virus protein. IV. Control of mode of aggregation of tobacco mosaic virus protein by proton binding'
  85. Finch, J.T. and Klug, A. *First John Innes Symp., Norwich, 1972*.  
'The Generation of Subcellular Structures (Eds. Markham and Bancroft) . The helical surface lattice of bacterial flagella.
  86. Butler, P.J.G. and Klug, A. *Molec. Gen. Genet.* 120, 91-93, 1973.  
'Effect of state of polymerisation of the protein component on the assembly of tobacco mosaic virus'
  87. Klug, A. and Butler, P.J.G. *Nature* 244, 115-116, 1973.  
'Dislocations in tobacco mosaic virus'
  88. Amos, L.A. and Klug, A. *J. Cell Sci.* 14, 523-549, 1974.  
'Arrangement of subunits in flagellar microtubules'
  89. Klug, A. *Nature* 248, 787-788, 1974.

'Rosalind Franklin and the double helix'

90. Leberman, R., Finch, J.T., Gilbert, P.F.C., Witz, J. and Klug, A. *J. Mol. Biol.* 86, 179-182, 1974.  
'X-ray analysis of the disk of tobacco mosaic virus protein. I. Crystallization of protein and of a heavy atom derivative'
91. Finch, J.T., Gilbert, P.F.C., Klug, A. and Leberman, R. *J. Mol. Biol.* 86, 183-192, 1974.  
'X-ray analysis of the disk of tobacco mosaic virus protein. II. The packing arrangement in the crystal'
92. Gilbert, P.F.C. and Klug, A. *J. Mol. Biol.* 86, 193-207, 1974.  
'X-ray analysis of the disk of tobacco mosaic virus protein. III. A low resolution electron density map'
93. Unwin, P.N.T. and Klug, A. *J. Mol. Biol.* 87, 641-656, 1974.  
'Electron microscopy of the stacked disk aggregate of TMV protein. I. 3-dimensional image reconstruction'
94. Finch, J.T. and Klug, A. *J. Mol. Biol.* 87, 633-640, 1974.  
'The structural relationship between the stacked disk and helical polymers of TMV protein'
95. Robertus, J.D., Ladner, J., Finch, J.T., Rhodes, D., Brown, R., Clark, B.F.C. and Klug, A. *Nature* 250, 546-551, 1974.  
'Structure of yeast phenylalanine tRNA at 3 Å resolution'
96. Robertus, J.D., Ladner, J., Finch, J.T., Rhodes, D., Brown, R., Clark, B.F.C. and Klug, A. *Nucleic Acids Res.* 1, 927-932, 1974.  
'Correlation between three-dimensional structure of tRNA and chemical reactivity'
97. Klug, A., Robertus, J.D., Ladner, J., Brown, R., and Finch, J.T. *Proc. Nat. Acad. Sci.* 71, 3711-3715, 1974.  
'Conservation of the molecular structure of yeast phenylalanine transfer RNA in two crystal forms'
98. Klug, A., Ladner, J. and Robertus, J.D. *J. Mol. Biol.* 89, 511-516, 1974.  
'The structural geometry of coordinated base changes in transfer RNA'
99. Crowther, R.A. and Klug, A. *Nature* 251, 490-492, 1974  
'3-dimensional image reconstruction on an extended field: a fast stable algorithm'
100. Branton, D. and Klug, A. *J. Mol. Biol.* 92, 559-565, 1975.  
'Capsid geometry of bacteriophage T2: a freeze-etching study'
101. Sperling, R., Amos, L.A. and Klug, A. *J. Mol. Biol.* 92, 541-558, 1975.  
'A study of the pairing interaction between protein subunits in the tobacco mosaic virus family by image reconstruction from electron micrographs'
102. Wakabayashi, T., Huxley, H.E., Amos, L.A. and Klug, A. *J. Mol. Biol.* 93, 477-497, 1975.  
'Three-dimensional image reconstruction of actin-tropomyosin complex and actin-tropomyosin-troponin T-troponin I complex'
103. Sperling, R. and Klug, A. *J. Mol. Biol.* 96, 425-430, 1975.



- 'States of aggregation of the Dahlemense strain of tobacco mosaic virus protein and their relation to crystal formation'
104. Crowther, R.A. and Klug, A. *Ann. Rev. Biochem.* 44, 161-182, 1975.  
'Structural analysis of macromolecular assemblies by image reconstruction from electron micrographs'
  105. Ladner, J.E., Jack, A., Robertus, J.D., Brown, R.S., Rhodes, D., Clark, B.F.C. and Klug, A. *Nucleic Acids Res.* 2, 1629-1637, 1975.  
'Atomic co-ordinates for yeast phenylalanine tRNA'
  106. Crick, F.H.C. and Klug, A. *Nature* 255, 530-533, 1975.  
'Kinky helix'
  107. Amos, L.A. and Klug, A. *J. Mol. Biol.* 99, 51-73, 1975.  
'Three-dimensional image reconstructions of the contractile tail of T4 bacteriophage'
  108. Ladner, J.E., Jack, A., Robertus, J.D., Brown, R.S., Rhodes, D., Clark, B.F.C. and Klug, A. *Proc. Nat. Acad. Sci. USA*, 72, 4414-4418, 1975.  
'Structure of yeast phenylalanine transfer RNA at 2.5 Å resolution'
  109. Clark, B.F.C. and Klug, A. *Proc. 10th FEBS Meeting*, 183-206, 1975.  
'Structure and function of tRNA with special reference to the three dimensional structure of yeast phenylalanine tRNA'
  110. Champness, J.N., Bloomer, A.C., Bricogne, G., Butler, P.L.G. and Klug, A. *Nature* 259, 20-24, 1976.  
'The structure of the protein disk of tobacco mosaic virus to 5 Å resolution'
  111. Laemmli, U.K., Amos, L.A. and Klug, A. *Cell* 7, 191-203, 1976.  
'Correlation between structural transformation and cleavage of the major head protein of T4 bacteriophage'
  112. Jack, A., Klug, A. and Ladner, J.E. *Nature* 261, 250-251, 1976.  
'Non-rigid" nucleotides in tRNA: a new correlation in the conformation of a ribose'
  113. Finch, J.T. and Klug, A. *Proc. Nat. Acad. Sci. USA*, 73, 1897-1901, 1976.  
'A solenoidal model for superstructure in chromatin'
  114. Butler, P.J.G., Bloomer, A.C., Bricogne, G., Champness, J.N., Graham, J., Guilley, H., Klug, A. and Zimmern, D. *Proc. Third John Innes Symposium 1976*, 101-110.  
'Tobacco mosaic virus assembly - specificity and the transition in protein structure during RNA packaging'
  115. Amos, L.A., Linck, R.W. and Klug, A. In *Cell Motility (Cold Spring Harbor)*, 847-867, 1976.  
'Molecular structure of flagellar microtubules'
  116. Jack, A., Ladner, J.E. and Klug, A. *J. Mol. Biol.* 108, 619-649, 1976.  
'Crystallographic refinement of yeast phenylalanine transfer RNA at 2.5 Å resolution'
  117. Crick, F.H.C., Brenner, S., Klug, A. and Piecznik, G. *Origins of Life* 7, 389-397, 1976.  
'A speculation on the origin of protein synthesis'
  118. Jack, A., Ladner, J.E., Rhodes, D. Brown, R.S. and Klug, A. *J. Mol. Biol.* 111,

- 315-328, 1977.  
'A crystallographic study of metal-binding to yeast phenylalanine transfer RNA'
119. Sperling, L. and Klug, A. *J. Mol. Biol.* 112, 253-263, 1977.  
'X-ray studies on "native" chromatin'
  120. Finch, J.T., Lutter, L.C., Rhodes, D., Brown, R.S., Rushton, B., Levitt, M. and Klug, A. *Nature* 269, 29-36, 1977.  
'Structure of nucleosome core particles of chromatin'
  121. Klug, A., Lutter, L.C., Rhodes, D., Brown, R.S., Rushton, B. and Finch, J.T. FEBS 11th Meeting, Copenhagen, 1977. *Gene Expression* 43, Symp. A2, 233-235, 1977.  
'X-ray crystallographic and enzymatic analysis of nucleosome cores'
  122. Klug, A. *Phil. Trans. Roy. Soc. Lond. B* 283, 233-239, 1978.  
'I. Structure of chromatin. Introductory remarks'
  123. Finch, J.T. and Klug, A. *Cold Spring Harb. Symp. Quant. Biol.* 42, 1-9, 1978.  
'X-ray and electron microscope analysis of crystals of nucleosome cores'
  124. Butler, P.J.G. and Klug, A. *Scientific American* 239, 62-69, 1978.  
'The assembly of a virus'
  125. Bloomer, A.C., Champness, J.N., Bricogne, G., Staden, R. and Klug, A. *Nature* 276, 362-368, 1978,  
'Protein disk of tobacco mosaic virus at 2.8 Å resolution showing the interactions within and between subunits'
  126. Finch, J.T., Lutter, L.C., Rhodes, D., Brown, R.S., Rushton, B. and Klug, A. FEBS 12th Meeting, Dresden, 1978. *Gene Functions* 51, 193-197, 1978.  
'X-ray and electron microscope studies on nucleosome structure'
  127. Klug, A., Jack, A., Viswamitra, M.A., Kennard, O., Shakked, Z. and Steitz, T.A. *J. Mol. Biol.* 131, 669-680, 1979.  
'A hypothesis on a specific sequence-dependent conformation of DNA and its relation to the binding of the lac-repressor protein'
  128. Prunell, A., Kornberg, R.D., Lutter, L.C., Klug, A., Levitt, M. and Crick, F.H.C. *Science* 204, 855-858, 1979.  
'Periodicity of deoxyribonuclease I digestion of chromatin'
  129. Thoma, F., Koller, Th. and Klug, A. *J. Cell Biol.* 83, 403-427, 1979.  
'Involvement of histone H1 in the organization of the nucleosome and of the salt-dependent superstructures of chromatin'
  130. Klug, A., Address on award of Heineken Prize: "From Macromolecules to Biological Assemblies". *Proceedings of the Royal Netherlands Academy of Sciences*, April, 1979.
  131. Klug, A., *Chemica Scripta* 14, (Proceedings of the 47th Nobel Symposium) 245-256, 1978/79.  
'Image analysis and reconstruction in the electron microscope of biological macromolecules'
  132. Klug, A. *Chemica Scripta* 14, (Proceedings of the 47th Nobel Symposium) 291-293, 1978/79.

- 'Direct imaging of atoms in crystals and molecules. Status and prospects for biological sciences'
133. Klug, A. Harvey Lecture, 1978. The Harvey Lectures, Series 74, pp. 141-172, 1979.  
'The assembly of tobacco mosaic virus: Structure and specificity'
  134. Rhodes, D. and Klug, A. Nature 286, 573-578, 1980.  
'Helical periodicity of DNA determined by enzyme digestion'
  135. Klug, A., Rhodes, D., Smith, J., Finch, J.T. and Thomas, J.O., Nature 287, 509-515, 1980.  
'A low resolution structure for the histone core of the nucleosome'
  136. Finch, J.T., Brown, R.S., Rhodes, D., Richmond, T.J., Rushton, B., Lutter, L.C. and Klug, A. J. Mol. Biol. 145, 757-769, 1980.  
'X-ray diffraction study of a new crystal form of the nucleosome core showing higher resolution'
  137. Bloomer, A.C., Graham, J., Hovmoller, S., Butler, P.J.G. and Klug, A.  
In: Structural Aspects of Recognition and Assembly in Biological Macromolecules. Proc 7th Aharon Katzir-Katchalsky Conf, Rehovot, February 1980. pp 851-864, 1981.  
'Tobacco mosaic virus: Interaction of the protein disk with oligonucleotides and its implications for virus structure and assembly'
  138. Kornberg, R.D. and Klug, A. Scientific American 244, No.2, 52-64, 1981.  
'The Nucleosome'
  139. Klug, A. and Lutter, L.C. Nucleic Acids Res. 9, 4267-4283, 1981.  
'The helical periodicity of DNA on the nucleosome'
  140. Richmond, T.J., Klug, A., Finch, J.T. & Lutter, L.C. In: Biomolecular Stereodynamics, Vol. II, Ed. Sarma, R.H., Adenine Press, New York, pp. 109-124, 1981.  
'The organization of DNA in the nucleosome core particle'
  141. Lomonosoff, G.P., Butler, P.J.G. and Klug, A. J. Mol. Biol. 149, 745-760, 1981.  
'Sequence-dependent variation in the conformation of DNA'
  142. Rhodes, D. and Klug, A. Nature 292, 378-380, 1981.  
'Sequence dependent helical periodicity of DNA'
  143. Hingerty, B.E., Brown, R.S. and Klug, A. Biochim. Biophys. Acta 697, 78-82, 1982  
'Stabilization of the tertiary structure of yeast phenylalanine tRNA by [Co(NH<sub>3</sub>)<sub>6</sub>]<sup>3+</sup>. X-ray evidence for hydrogen bonding to pairs of guanine bases in the major groove'
  144. Klug, A. Lutter, L.C. and Rhodes, D. Cold Spring Harb. Symp. Quant. Biol., XLVII, 285-292, 1982.  
'Helical periodicity of DNA on and off the nucleosome as probed by nucleases'
  145. Richmond, T.J., Finch, J.T. and Klug, A. Cold Spring Har. Quant. Biol., XLVII 493-501, 1982.  
'Studies of nucleosome structure'

146. Klug, A. Cold Spring Harb. Symp. Quant. Biol., XLVII, 1215-1223, 1982.  
'Structures of DNA: A summary'
147. Brown, R.S., Hingerty, B.E., Dewan, J.C. and Klug, A. Nature 303, 543-546, 1983.  
'Pb (II) - catalysed cleavage of the sugar-phosphate backbone of yeast tRNA<sup>Phe</sup> - implications for lead toxicity and self-splicing RNA'
148. Klug, A. Nature 303 378-379, 1983  
'Architectural design of spherical viruses'
149. Klug, A. In: The Nobel Foundation, 1983, 93-125. Les Prix Nobel en 1982.  
'From macromolecules to Biological Assemblies'
- Nobel lecture also published in:  
a) Bioscience Reports 3, 395-430 (1983)  
b) Angewandte Chemie 22, 565-582 (1983) (Int ed), 95, 579-596 (German ed)
150. Cockell, M., Rhodes, D. and Klug, A. J. Mol. Biol. 170, 423-446, 1983.  
'Location of the primary sites of micrococcal nuclease cleavage on the nucleosome core'
151. Klug, A. In: Nucleic Acids Research. Proceedings of the AMBO Symposium pp. 91-112, Academic Press, 1983  
'Nucleosome Structure and Chromatin Superstructure'
152. Klug, A. and Butler, P.J.G. In: Genes: Structure and Expression (ed. A.M. Kroon) pp. 1-41, 1983  
'The structure of nucleosomes and chromatin'
153. de Bruijn, M.H.L. and Klug, A. EMBO J 2, 1309-1321, 1983.  
'A model for the tertiary structure of mammalian mitochondrial transfer RNAs lacking the entire 'dihydrouridine' loop and stem'
154. de Bruijn, M.H.L. and Klug, A. 'A model for the structure of a small mitochondrial tRNA'. In: Gene Expression, Alfred Benzon Symposium 19, ed. B. F. C. Clark and H.U. Petersen, pp. 259-278, 1984, Munksgaard, Copenhagen.
155. Westhof, E., Altschuh, D., Moras, D., Bloomer, A.C., Mondragon, A. Klug, A. and Van Regenmortel, M.H.V. Nature 311, 123-126, 1984.  
'Correlation between segmental mobility and the location of antigenic determinants in proteins'
156. Richmond, T.J., Finch, J.T., Rushton, B., Rhodes, D. and Klug, A. Nature 311, 532-537, 1984.  
'Structure of the nucleosome core particle at 7 Å resolution'
157. Brown, R., Dewan, J.C. and Klug, A. Biochemistry, 24, 4785, 1985.  
'Crystallographic and biochemical investigation of the lead (II)-catalyzed hydrolysis of yeast phenylalanine tRNA'
158. Miller, J., McLachlan, A.D. and Klug, A. EMBO J. 4, 1609-1614, 1985.  
'Repetitive zinc-binding domains in the protein transcription factor III A from *Xenopus oocytes*'

159. Widom, J. and Klug, A. *Cell* **43**, 207-213, 1985  
'Structure of the 300 Å chromatin filament: X-ray diffraction from oriented samples'
160. Klug, A. In: The Robert A. Welch Foundation Conf. on Chem. Res. XXXIX.  
Genetic Chemistry: The Molecular Basis of Heredity. Houston, Texas. pp. 133-160,  
1985  
'The higher order structure of chromatin'
161. Klug, A., Finch, J.T. and Richmond, T.J. *Science* **229**, 1109-1110, 1985.  
'Crystallographic structure of the octamer histone core of the nucleosome'
162. Van Regenmortel, M.H.V., Altschuh, D. and Klug, A. In: "Synthetic Peptides as  
Antigens" CIBA Symp., 119, 76-84, 1986  
'Influence of local structure on the location of antigenic determinants in tobacco  
mosaic virus protein'
163. Rhodes, D. and Klug, A. *Cell* **46**, 123-132, 1986.  
'An underlying repeat in some transcriptional control sequences corresponding to half  
a double helical turn of DNA'
164. Fairall, L., Rhodes, D. and Klug, A. *J. Mol. Biol.* **192**, 577-591, 1986.  
'Mapping of the sites of protection on a 5S RNA gene by the Xenopus transcription  
factor IIIA: A model for the interaction'
165. Diakun, G.P., Fairall, L. and Klug, A.  
'EXAFS study of the zinc-binding sites in the protein transcription factor IIIA'  
*Nature* **324**, 698-699. 1986.
166. Altschuh, D., Lesk, A.M., Bloomer, A.C. and Klug, A.  
'Correlation of co-ordinated amino acid substitutions with function in viruses  
related to tobacco mosaic virus'  
*J. Mol. Biol.* **193**, 693-707, 1987.
167. Nelson, H.C.M., Finch, J.T., Luisi, B.F. and Klug, A.  
'The structure of an oligo (dA)-oligo (dT) tract and its biological implications'  
*Nature* **330**, 221-226, 1987.
168. Travers, A.A. and Klug, A.  
'The bending of DNA in nucleosomes and its wider implications'  
*Phil. Trans. R. Soc. Lond. B* **317**, 537-561, 1987.
169. Travers, A.A. and Klug, A.  
'Nucleoprotein complexes: DNA wrapping and writhing'  
*Nature* **327**, 280-281, 1987.
170. Klug, A. and Rhodes, D.  
'Zinc fingers', a novel protein motif for nucleic acid recognition  
*Trends in Biochemical Science* **12**, 464-469, 1987.
- 170a. Rhodes D and Klug A  
'Zinc Fingers': A novel motif for nucleic acid binding  
In: *Nucleic Acids and Molecular Biology*, **2**, 149-166.  
Ed: F Eckstein and D M J Lilley. Springer-Verlag 1988

171. Klug, A. and Rhodes, D.  
"Zinc fingers: A novel protein fold for nucleic acid recognition  
Cold Spring Harbor Symp. Quant. Biol. **LII**, 473-482, 1987.
172. O'Halloran T V, Lippard S J, Richmond T J and Klug A  
Multiple heavy-atom reagents for macromolecular X-ray structure determination.  
Application to the nucleosome core particle  
J Mol Biol **194**, 705-712, 1987
173. Goedert, M. , Wischik, C.M., Crowther, R.A., Walker, J.E. and Klug, A.  
Cloning and sequencing of the cDNA encoding a core protein of the paired helical  
filament of Alzheimer disease: identification as the microtubule associated protein  
tau  
*Proc. Natl. Acad. Sci. USA* **85**, 4051-4055, 1988.
174. Wischik, C.M. , Novak, M., Thogersen, H-C., Edwards, P.C., Runswick, M.J.,  
Jakes, R., Walker, J.E., Milstein, C., Roth, M. and Klug, A.  
'Isolation of a fragment of tau derived from the core of the paired helical filament of  
Alzheimer disease'  
*Proc. Natl. Acad. Sci. USA* **85**, 4506-4510, 1988.
175. Wischik, C.M., Novak, M., Edwards, P.C., Klug, A., Tichelaar, W. and Crowther,  
R.A.  
Structural characterization of the core of the paired helical filament of Alzheimer  
disease  
*Proc. Natl. Acad. Sci. USA* **85**, 4884-4888, 1988.
176. Klug, A. & Travers, A.A.  
The helical repeat of nucleosome-wrapped DNA  
*Cell* **56**, 9-11, 1989.
177. Klug A.  
Zinc fingers: ubiquitous protein modules for nucleic acid recognition  
*South African Jour. Sci.* **85**, 576-581, 1989.
178. Sundquist, W.I. & Klug, A.  
Telomeric DNA dimerizes by formation of guanine tetrads between hairpin loops  
*Nature*, **342**, 825-829, 1989.
179. Rhodes, D., Brown, R.S. and Klug, A.  
Crystallisation of nucleosome core particles  
*In: Methods in Enzymology.* (Eds P M Wassarman and R D Kornberg) **170**, 420-  
428, 1989
180. Spillantini M G, Goedert M, Jakes R, and Klug A.  
Different configurational states of  $\beta$ -amyloid and their distributions relative to  
plaques and tangles in Alzheimer disease  
*Proc. Natl. Acad. Sci. USA.*, **87**, 3947-3951 1990
181. Spillantini M G, Goedert M, Jakes R and Klug A.  
Topographical relationship between  $\beta$ -amyloid and tau protein epitopes  
in tangle-bearing cells in Alzheimer disease  
*Proc. Natl. Acad. Sci. USA.* **87**, 3952-3956 1990.
182. Travers A A and Klug A.

Bending of DNA in nucleoprotein complexes

*In: DNA Topology and its Biological Effects.* (Eds. Cozzarelli, N.R & Wang, J.C.)  
Cold Spring Harbor Laboratory Press, 1990. PP 57-106.

183. Churchill M E A, Tullius T D and Klug A.  
Mode of interaction of the zinc finger protein TFIIIA with 5S RNA gene of *Xenopus*  
*Proc. Natl. Acad. Sci. USA*, **87**, 5528-5532 1990.
184. Neuhaus D, Nakaseko Y, Nagai K and Klug A.  
Sequence-specific [<sup>1</sup>H]NMR resonance assignments and secondary structure  
identification for 1- and 2-zinc finger constructs from SW15. A hydrophobic core  
involving four invariant residues  
*FEBS Letts.* **262**, 179-184, 1990.
185. Bondareff W, Wischik C M, Novak M, Amos W B, Klug A and Roth M  
Molecular analysis of neurofibrillary degeneration in Alzheimer's Disease  
*Amer J Path* **137**, 711-723, 1990.
186. Klug A  
Reminiscences of Sir Lawrence Bragg  
In: Selections and Reflections: The Legacy of Sir Lawrence Bragg. Eds John M  
Thomas and Sir David Phillips. pp 129-133. Science Reviews Limited, 1990
187. Klug A  
Order in molecular biology  
In: Evolutionary Trends in the Physical Sciences. Springer Proc in Physics, **57**. Eds: M  
Suzuki and R Kubo. pp 225-237. Springer-Verlag Berlin Heidelberg 1991.
188. Struck M-M, A Klug and T J Richmond  
Comparison of X-ray structures of the nucleosome core particle in two different  
hydration states  
*J Mol Biol*, **224**, 253-264, 1992
189. Nakaseko Y, D Neuhaus, A Klug and D Rhodes  
Adjacent zinc finger motifs in multiple zinc finger peptides from SWI5 form structurally  
independent, flexibly linked domains  
*J Mol Biol*, **228**, 619-636, 1992
190. Neuhaus D, Y Nakaseko, J W R Schwabe and A Klug  
Solution structures of two zinc finger domains from SWI5, obtained using two-  
dimensional <sup>1</sup>H NMR spectroscopy: a zinc finger structure with a third strand of β-  
sheet  
*J Mol Biol*, **228**, 637-651, 1992
191. Klug A, D Neuhaus, J Schwabe, Y Nakaseko, L Fairal, K Nagai and D Rhodes  
The structures of two classes of zinc-finger domains and their modes of interaction with  
DNA.  
*Science and Technology in Japan*, **33**, 60-80, 1992
192. Rhodes D and A Klug  
Zinc Fingers  
*Scientific American*, **268**, 56-65, 1993
193. Klug A  
Transcription: Opening the gateway

- Nature*, **365**, 486-487, 1993
194. Choo Y and A Klug  
A role in DNA binding for the linker sequences of the first three zinc fingers of TFIIIA  
*Nucleic Acids Research*, **21**, 3341-3346, 1993
  195. Klug A  
Protein designs for the specific recognition of DNA.  
*Gene*, **135**, 83-92, 1993
  196. Schwabe J W R and A Klug  
Zinc mining for protein domains  
*Nature Structural Biology*, **1**, 345-349, 1994
  197. Klug A  
Macromolecular order in biology.  
a. *Phil Trans R Soc Lond A*, **348**, 167-178, 1994.  
b. *4th William and Mary Lecture, Leiden University, 30th October 1996*
  198. Jakes, R, C R Harrington, M G Spillantini, M Goedert and A Klug  
Characterisation of an antibody relevant to the neuropathology of Alzheimer disease  
*Alzheimer Disease and Associated Disorders*, **9**, 47-51, 1995.
  199. Choo Y and A Klug  
Towards a code for the interactions of zinc fingers with DNA: selection of randomised fingers displayed on phage  
*Proc Natl Acad Sci USA*. **91**, 11163-11167, 1994
  200. Choo Y and A Klug  
Selection of DNA binding sites for zinc fingers using rationally randomised DNA reveals coded interactions.  
*Proc Natl Acad Sci USA* **91**, 11168-11172, 1994
  201. Choo Y, I Sánchez-García and A Klug  
*In vivo* repression by a site-specific DNA-binding protein designed against an oncogenic sequence.  
*Nature*, **372**, 642-645, 1994
  202. Klug A and J W R Schwabe  
Zinc fingers  
*FASEB J*, **9(8)**, 597-604, 1995
  203. Scott W G, J T Finch, R Grenfell, J Fogg, T Smith, M J Gait and A Klug  
Rapid crystallization of chemically synthesized hammerhead RNAs using a double screening procedure.  
*J Mol Biol*, **250**, 327-332, 1995
  204. Scott W G, J T Finch and A Klug  
The crystal structure of an all-RNA hammerhead ribozyme: A proposed mechanism for RNA catalytic cleavage  
*Cell*, **81**, 991-1002, 1995
  205. Choo Y and A Klug  
Designing DNA-binding proteins on the surface of filamentous phage  
*Current Opinion in Biotechnology*, **6**, 431-436, 1995



206. Klug A  
Gene regulatory proteins and their interaction with DNA  
*In: DNA: The Double Helix. Perspective and Prospective at Forty Years.* Ed: Donald A Chambers. *Annals of the New York Academy of Sciences*, **758**, pp 143-160, 1995
207. Klug A  
Protein designs for the specific recognition of DNA.  
(a) *In: Molecular Biology and Biotechnology. A Comprehensive Desk Reference.* Ed: Robert A Meyers. VCH Publishers Inc. pp 746-753, 1995  
  
(b) *In: Encyclopaedia of Molecular Biology and Molecular Medicine.* Ed Robert A Meyers. VCH Weinheim, New York, Basel, Cambridge, Tokyo. pp 127-135, 1996
208. Scott W G , J T Finch and A Klug  
The crystal structure of an all-RNA hammerhead ribozyme  
*In: Nucleic Acids Symposium Series 34*, pp 214-216. Proc 22nd Symposium on Nucleic Acids Chemistry, Japan November 1995. Oxford University Press 1995
209. Goedert M, M G Spillantini, M Hasegawa, R Jakes, R A Crowther and A Klug  
Molecular Dissection of the Neurofibrillary Lesions of Alzheimer's Disease.  
*Cold Spring Harbor Symp. Quant. Biol.* **61**, 565-573, 1996
210. Scott W G and A Klug  
Ribozymes: structure and mechanism in RNA catalysis  
*TIBS*, **21**, 220-224, 1996
211. Scott W G, J B Murray, J R P Arnold, B L Stoddard and A Klug  
Capturing the structure of a catalytic RNA intermediate: The hammerhead ribozyme  
*Science* **274**, 2065-2069, 1996
212. Choo Y and A Klug  
Physical basis of a protein-DNA recognition code  
*Current Opinion in Structural Biology*, **7**, 117-125, 1997
213. Isalan M, Y Choo and A Klug  
Synergy between adjacent zinc fingers in sequence-specific DNA recognition.  
*Proc. Natl. Acad. Sci. USA.*, **94**, 5617-5621, 1997
214. Choo Y, A Castellanos, B García-Hernández, I Sánchez-García and A Klug  
Promoter-specific activation of gene expression directed by bacteriophage-selected zinc fingers  
*J Mol Biol* **273**, 525-532, 1997
215. Nowak M, D Krakauer, Klug A and May R  
Prion infection dynamics  
*Integrative Biology* **1**, 3-15, 1998
216. Spillantini M G, Murrell J R, Goedert, M, Farlow M R, Klug A and Ghetti B  
Mutation in the tau gene in familial multiple system tauopathy with presenile dementia  
*Proc. Natl. Acad. Sci. USA* **95**, 7737-7741, 1998
217. Isalan M, A Klug and Y Choo  
Comprehensive DNA recognition through concerted interactions from adjacent zinc fingers

- 217a. Klug A  
Commentary on the two papers by Caspar and Franklin pp 119-121 in "Tobacco Mosaic Virus: One Hundred Years of Contribution to Virology. (Ed: K-B G Scholthof, J G Shaw, M Zaitlin). *American Phytopathology Society Press*, St Paul, Minnesota, 1999.
218. Klug A  
The tobacco mosaic virus particle: structure and assembly  
*Phil. Tran. R. Soc. Lond.* **354**, 531-535, 1999
219. Varani L, Hasegawa M, Spillantini M G, Smith M J, Murrell JR, Ghetti B, Klug A, Goedert M, and Varani G.  
Structure of tau exon 10 splicing regulatory element RNA and destabilization by mutations of frontotemporal dementia and parkinsonism linked to chromosome 17.  
*Proc. Natl. Acad. Sci. USA* **96**, 8229-8234, 1999
220. Klug A  
Zinc finger peptides for the regulation of gene expression  
*J. Mol. Biol.* **293**, 215-218, 1999
221. Goedert M and Klug A  
Tau protein and the paired helical filament of Alzheimer's disease. Special Millenium Issue. A hundred years of neuroscience.  
*Brain Research Bulletin*, **50**, Nos. 5/6, 469-470, 1999
222. Searles M A, Lu D and Klug A  
The role of the central zinc fingers of transcription factor IIIA in binding to 5SRNA  
*J. Mol. Biol.*, **301**, 47-60, 2000
223. Moore M, Choo Y and Klug A  
Design of polyzinc finger peptides with structured linkers  
*Proc. Natl. Acad. Sci. USA*, **98**, 1432-1436, 2001
224. Moore M, Klug A and Choo Y  
Improved DNA binding specificity from polyzinc finger peptides by using strings of two-finger units  
*Proc. Natl. Acad. Sci. USA*, **98**, 1437-1441, 2001
225. Klug A  
The Human Genome Project  
*IUBMB Life*, **51**, 1-4, 2001
226. Klug, A  
RNA Polymerase II: A marvellous machine for making messages  
*Science*, **292**, 1844-1846, 2001
227. Isalan M, Klug A and Choo Y  
A rapid, generally applicable method to engineer zinc fingers illustrated by targeting the HIV-1 promoter  
*Nature Biotechnology*, **19**, 656-660, 2001
228. Klug A  
Retrospective: Max Perutz (1914-2002)  
*Science*, **295**, 2382-2383, 2002
229. Klug A.  
Chris Calladine and Biological Structures: A Personal Account  
H. R. Drew & S. Pellegrine (eds). *New Approaches to Structural Mechanics, Shells and Biological Structures*, 413-419. 2002 Kluwer Academic Publishers
230. Klug A.

The development of image analysis and 3D-reconstruction in the electron microscopy of biomolecular assemblies  
ICEM –15 Durban 2002

- 231 Reynolds L, Ullman C, Moore M, Isalan M, West MJ, Clapham P, Klug A., Choo Y. Repression of the HIV-1 5 LTR promoter and inhibition of HIV-1 replication by using engineered zinc-finger transcription factors  
*Proc. Natl. Acad. Sci. USA*, **100**, 1615-1620 (2003).
232. Papworth M, Moore M, Isalan M, Minczuk M, Choo Y and Klug A  
Inhibition of herpes simplex virus 1 gene expression by designer zinc-finger transcription factors  
*Proc. Natl. Acad. Sci. USA*, **100**, 1621-1626 (2003).
233. Klug, A  
The life of George Porter OM FRS  
*Notes Rec. R. Soc. Lond.* **57** (2), 261-264 (2003).
234. Lu D, Searles MA & Klug A  
Crystal structure of a zinc finger RNA complex reveals two modes of molecular recognition  
*Nature*, **426**, 96-100 (2003).
235. Klug A  
The discovery of the DNA Double Helix  
*J. Mol. Biol.*, **335**, 3-26 (2004).
236. Klug A  
The discovery of zinc fingers and their practical applications in gene regulation: A personal account  
*In: Zinc Finger Proteins: From Atomic Contact to Cellular Function.* Eds: S Iuchi & N Kuldell, pp.1-6. Kluwer Academic/Plenum Publishers (2004).
- 237 Klug A  
Obituary: Francis Crick (8 June 1916-28 July 2004): A Memoir  
An expanded version of the Obituary, which appeared in the September (2004) issue of *Nature Cell Biology*  
*FEBS Letts*, **579**, 852-854 (2005).
- 238 Klug A  
Introduction to eukaryotic transcription and chromatin  
*FEBS Letts* **579**, 890-891 (2005).
- 239 Klug A  
Towards therapeutic applications of engineered zinc finger proteins  
Proc Nobel Symposium 130, in *FEBS Letts*, **579**, 892-894 (2005).
- 240 Klug A  
Review: The discovery of zinc fingers and their development for practical applications in gene regulation  
*Proceedings of the Japan Academy*, **81**, 87-102 (2005).
241. Minczuk M, Papworth MA, Kolasinska P, Murphy MP and Klug A  
Sequence-specific modification of mitochondrial DNA using a chimeric zinc finger methylase  
*Proc. Natl. Acad. Sci. USA*. **103**. 19689-19694 (2006).
- 241a. Goedert M, Klug A and Crowther RA  
Tau protein, the paired helical filament and Alzheimer's disease  
*Journal of Alzheimer's Disease* **9**, 195-207 (2006).
- 241b. Goedert M, Spillantini MG, Ghetti B, Crowther RA and Klug A  
Discovery of the tangle

- Alzheimer: 100 years and beyond.* Jucker et al, Springer-Verlag, 297-304 (2006).
- 241c. Spillantini MG, Murrell JR, Goedert M, Farlow M, Klug A and Ghetti, B  
Mutations in the tau gene (MAPT) in FTDP-17: the family with multiple system  
tauopathy with presenile dementia (MSTD)  
*Journal of Alzheimer's Disease* **9**, 373-380 (2006).
242. Lu D and Klug A  
Invariance of the zinc finger module: A comparison of the free structure with those in  
nucleic-acid complexes  
*Proteins* **67**, 508-512 (2007).
- 242a Shieh J-C, Cheng Y-C, Su M-C, Moore M, Choo Y and Klug A  
Tailor-made zinc-finger transcription factors activate FLO11 gene expression with  
phenotypic consequences in the yeast *Saccharomyces cerevisiae*  
*PLoS ONE*, 2(8), e746 (2007).
243. Santiago Y, Chan E, Liu PQ, Orlando S, Zhang L, Urnov FD, Holmes MC, Guschin  
D, Waite A, Miller JC, Rebar EJ, Gregory PD, Klug A. and Collingwood TN  
Targeted gene knockout in mammalian cells using engineered zinc-finger nucleases  
*Proc. Natl. Acad. Sci. USA*, **105**, 5809-5814 (2008).
244. Minczuk M, Papworth MA, Miller JC, Murphy MP. and Klug A  
Development of a single-chain, quasi-dimeric zinc-finger nuclease for the selective  
degradation of mutated human mitochondrial DNA  
*Nucleic Acids Res.*, **36**, 3926-3938 (2008).
245. Klug A  
The discovery of zinc fingers and their applications in gene regulation and genome  
manipulation  
*Ann. Rev. Biochem.*, **79**, 213-231 (2010).
246. Klug A  
From virus structure to chromatin: X-ray diffraction to three-dimensional electron  
microscopy  
*Ann. Rev. Biochem.*, **79**, 1-35 (2010).
247. Klug A  
The discovery of zinc fingers and their development for practical applications in gene  
regulation and genome manipulation  
*Q. Rev. Biophys.*, **43**, 1-21 (2010).

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