

# Werner W. Franke

## List of Publications

### (Verzeichnis der Veröffentlichungen)

#### 1966

1. FRANKE, W.W. 1966.  
Isolated nuclear membranes.  
J. Cell Biol. **31**, 619-623.

#### 1967

2. FRANKE, W.W. 1967.  
Zur Feinstrukturierung isolierter Kernmembranen aus tierischen Zellen.  
Z. Zellforsch. **80**, 585-593.
3. FRANKE, W.W. 1967.  
Zur Feinstrukturierung isolierter Kernmembranen.  
Thesis, University of Heidelberg, Germany.

#### 1968

4. FRANKE, W.W., FALK, H. 1968.  
Enzymatisch isolierte Cellulose-Fibrillen der Valonia-Zellwand.  
Z. Naturforsch. **23b**, 272-274.
5. FALK, H., WUNDERLICH, F., FRANKE, W.W. 1968.  
Microtubular structures in macronuclei of synchronously dividing *Tetrahymena pyriformis*.  
J. Protozool. **15**, 776-780.
6. WUNDERLICH, F., FRANKE, W.W. 1968.  
Structure of macronuclear envelopes of *Tetrahymena pyriformis* in the stationary phase of growth.  
J. Cell Biol. **38**, 458-462.

#### 1969

7. BROWN Jr., R.M., FRANKE, W.W., KLEINIG, H., FALK, H., SITTE, P. 1969.  
Cellulosic wall component produced by the Golgi apparatus of *Pleurochrysis scherffellii*.  
Science **166**, 894-896.
8. FRANKE, W.W., ERMEN, B. 1969.  
Negative staining of plant slime cellulose: An examination of the elementary fibril concept.  
Z. Naturforsch. **24b**, 918-922.
9. FRANKE, W.W., KARTENBECK, J. 1969.  
Structure of nuclear membranes isolated from brain cells.  
Experientia **25**, 396-398.

10. FRANKE, W.W., SCHINKO, W. 1969.  
Nuclear shape in muscle cells.  
*J. Cell Biol.* **42**, 326-331.
11. FRANKE, W.W., KRIEN, S., BROWN Jr., R.M. 1969.  
Simultaneous glutaraldehyde-osmium tetroxide fixation with postosmication. An improved fixation procedure for electron microscopy of plant and animal cells.  
*Histochemie* **19**, 162-164.
12. FRANKE, W.W., KRIEN, S., SAMEK, H. 1969.  
Stability of cytoplasmic microtubules at low temperatures.  
*Naturwissenschaften* **56**, 332-333.
13. SCHEER, U., FRANKE, W.W. 1969.  
Negative staining and adenosine triphosphatase activity of annulate lamellae of newt oocytes.  
*J. Cell Biol.* **42**, 519-533.
14. ZENTGRAF, H., DEUMLING, B., FRANKE, W.W. 1969.  
Isolation and characterization of nuclei from bird erythrocytes.  
*Exp. Cell Res.* **56**, 333-337.

## **1970**

15. BROWN Jr., R.M., FRANKE, W.W., KLEINIG, H., FALK, H., SITTE, P. 1970.  
Scale formation in chrysophycean algae. I. Cellulosic and noncellulosic wall components made by the Golgi apparatus.  
*J. Cell Biol* **44**, 246-271.
16. COMES, P., FRANKE, W.W. 1970.  
Composition, structure and function of HeLa cell nuclear envelope.  
I. Structural data.  
*Z. Zellforsch.* **107**, 240-248.
17. FRANKE, W.W. 1970.  
Central dilations in maturing Golgi cisternae - a common structural feature among plant cells?  
*Planta (Berlin)* **90**, 370-373.
18. FRANKE, W.W. 1970.  
Nuclear pore flow rate.  
*Naturwissenschaften* **57**, 44-45.
19. FRANKE, W.W. 1970.  
Flagellar rootlet attached to the nuclear envelope.  
*Naturwissenschaften* **57**, 503-504.
20. FRANKE, W.W. 1970.  
On the universality of nuclear pore complex structure.  
*Z. Zellforsch.* **105**, 405-429.
21. FRANKE, W.W. 1970.  
Attachment of muscle filaments to the outer membrane of the nuclear envelope.  
*Z. Zellforsch.* **111**, 143-148.
22. FRANKE, W.W., FALK, H. 1970.  
Appearance of nuclear pore complexes after Bernhard's staining procedure.  
*Histochemie* **34**, 266-278.

23. FRANKE, W.W., SCHEER, U. 1970.  
The ultrastructure of the nuclear envelope of amphibian oocytes: A reinvestigation. I. The mature oocyte.  
J. Ultrastruct. Res. **30**, 288-316.
24. FRANKE, W.W., SCHEER, U. 1970.  
The ultrastructure of the nuclear envelope of amphibian oocytes: A reinvestigation. II. The immature oocyte and dynamic aspects.  
J. Ultrastruct. Res. **30**, 317-327.
25. FRANKE, W.W., DEUMLING, B., ERMEN, B., JARASCH, E.-D., KLEINIG, H. 1970.  
Nuclear membranes from mammalian liver. I. Isolation procedure and general characterization.  
J. Cell Biol **46**, 379-395.

## 1971

26. BROWN Jr., R.M., FRANKE, W.W. 1971.  
A microtubular crystal associated with the Golgi field of *Pleurochrysis scherffellii*.  
Planta **96**, 354-363.
27. FRANKE, W.W. 1971.  
Relationship of nuclear membranes with filaments and microtubules.  
Protoplasma **73**, 263-292.
28. FRANKE, W.W. 1971.  
Cross-bridges between intramacronuclear microtubules and inner nuclear membrane.  
Z. Naturforsch. **26b**, 626-627.
29. FRANKE, W.W. 1971.  
Cytoplasmic microtubules linked to endoplasmic reticulum with cross-bridges.  
Exp. Cell Res. **66**, 486-489.
30. FRANKE, W.W. 1971.  
Strukturen und Funktionen der Zellkernmembran: Zur Nukleinsäure-Interaktion.  
Cytobiologie **4**, 150-151.
31. FRANKE, W.W. 1971.  
Membrane-microtubule-microfilament-relationships in the ciliate pellicle.  
Cytobiologie **4**, 307-316.
32. FRANKE, W.W., BROWN Jr., R.M., 1971.  
Scale formation in chrysophycean algae. III. Negatively stained scales of the coccolithophorid *Hymenomonas*.  
Arch. Microbiol. **77**, 12-19.
33. FRANKE, W.W., ECKERT, W. 1971.  
Cytomembrane differentiation in a ciliate, *Tetrahymena pyriformis*. II. Bifacial cisternae and tubular formations.  
Z. Zellforsch. **122**, 244-253.
34. FRANKE, W.W., KARTENBECK, J. 1971.  
Outer mitochondrial membrane continuous with endoplasmic reticulum.  
Protoplasma **73**, 35-41.

35. FRANKE, W.W., SCHEER, U. 1971.  
Some structural differentiations in the HeLa cell: heavy bodies, annulate lamellae, and cote de maillet endoplasmic reticulum.  
*Cytobiologie* **4**, 317-329.
36. FRANKE, W.W., ECKERT, W.A., KRIEN, S. 1971.  
Cyto-membrane differentiation in a ciliate, *Tetrahymena pyriformis*. I. Endoplasmic reticulum and dictyosomal equivalents.  
*Z. Zellforsch.* **119**, 577-604.
37. FRANKE, W.W., KARTENBECK, J., DEUMLING, B. 1971.  
Nuclear pore flow rates of ribonucleic acids in the mature rat hepatocyte.  
*Experientia* **27**, 372-373.
38. FRANKE, W.W., KARTENBECK, J., ZENTGRAF, H.W., SCHEER, U., FALK, H. 1971.  
Membrane-to-membrane cross-bridges. A means of orientation and interaction of membrane faces.  
*J. Cell Biol.* **51**, 881-888.
39. FRANKE, W.W., MORRE, D.J., DEUMLING, B., CHEETHAM, R.D., KARTENBECK, J., JARASCH, E.-D., ZENTGRAF, H.W. 1971.  
Synthesis and turnover of membrane proteins in rat liver: An examination of the membrane flow hypothesis.  
*Z. Naturforsch.* **26b**, 1031-1039.
40. KARTENBECK, J., FRANKE, W.W. 1971.  
Dense cytoplasmic aggregates associated with Golgi apparatus cisternae in rat hepatocytes.  
*Protoplasma* **72**, 49-53.
41. KARTENBECK, J., ZENTGRAF, H.W., SCHEER, U., FRANKE, W.W. 1971.  
The nuclear envelope in freeze-etching.  
**In:** *Advances in Anatomy, Embryology and Cell Biology*. Vol. **45**. Springer-Verlag, Berlin; pp. 1-55.
42. MORRÉ, D.J., FRANKE, W.W., DEUMLING, B., NYQUIST, S.E., OVTRACHT, L. 1971.  
Golgi apparatus function in membrane flow and differentiation.  
**In:** *Biomembranes*. Vol. **2** (L.A. Manson, ed.) Plenum Press, New York; pp. 95-104.
43. ZENTGRAF, H.W., DEUMLING, B., JARASCH, E.-D., FRANKE, W.W. 1971.  
Nuclear membranes and plasma membranes from hen erythrocytes. I. Isolation characterization, and comparison.  
*J. Biol. Chem.* **246**, 2986-2995.

## 1972

44. DEUMLING, B., FRANKE, W.W. 1972.  
Nuclear membranes from mammalian liver. V. On the question of DNA polymerase activities associated with the nuclear envelope.  
*Hoppe Seyler's Z. Physiol. Chem.* **353**, 287-297.
45. ECKERT, W., FRANKE, W.W., SCHEER, U. 1972.  
Actinomycin D and the central granules in the nuclear pore complex: Thin sectioning versus negative staining.  
*Z. Zellforsch.* **127**, 230-239.

46. FRANKE, W.W., KRIEN, S. 1972.  
Nuclear membrane-attached DNA enriched in repetitive sequences.  
*Naturwissenschaften* **59**, 37-38.
47. FRANKE, W.W., SCHEER, U. 1972.  
Structural details of dictyosomal pores.  
*J. Ultrastruct. Res.* **40**, 132-144.
48. FRANKE, W.W., HERTH, W., VANDERWOUDE, W.J., MORRÉ, D.J. 1972.  
Tubular and filamentous structures in pollen tubes: Possible involvement as guide elements in protoplasmic streaming and vectorial migration of secretory vesicles.  
*Planta* **105**, 317-341.
49. FRANKE, W.W., KARTENBECK, J., KRIEN, S., VANDERWOUDE, W.J., SCHEER, U., MORRÉ, D.J. 1972.  
Inter- and intracisternal elements of the Golgi apparatus. A system of membrane-to-membrane cross-links.  
*Z. Zellforsch.* **132**, 365-380.
50. FRANKE, W.W., SCHEER, U., FRITSCH, H. 1972.  
Intranuclear and cytoplasmic annulate lamellae in plant cells.  
*J. Cell Biol* **53**, 823-827.
51. FRANKE, W.W., STADLER, J., KRIEN, S. 1972.  
Autoradiographic localization of colchicine-binding sites.  
*Beitr. Pathol.* **146**, 289-291.
52. HERTH, W., FRANKE, W.W., STADLER, J., BITTIGER, H., KEILICH, G., BROWN Jr., R.M. 1972.  
Further characterization of the alkali-stable material from the scales of *Pleurochrysis scherffellii*: a cellulosic glycoprotein.  
*Planta* **105**, 79-92.
53. HERTH, W., FRANKE, W.W., VANDERWOUDE, W.J. 1972.  
Cytochalasin stops tip growth in plants.  
*Naturwissenschaften* **59**, 38.
54. RAE, P.M.M., FRANKE, W.W. 1972.  
The interphase distribution of satellite DNA-containing heterochromatin in mouse nuclei.  
*Chromosoma* **39**, 443-456.
55. SCHEER, U., FRANKE, W.W. 1972.  
Annulate lamellae in plant cells: Formation during microsporogenesis and pollen development in *Canna generalis* Bailey.  
*Planta* **107**, 145-159.
56. STADLER, J., FRANKE, W.W. 1972.  
Colchicine-binding proteins in chromatin and membranes.  
*Nature New Biology*, **237**, 237-238.
57. ZENTRGRAF, H., LAUBE-BOICHUT, E., FRANKE, W.W. 1972.  
On the presence of hemoglobin in the avian erythrocyte nucleus.  
*Cytobiologie* **6**, 51-57.

**1973**

58. BROWN Jr., R.M., HERTH, W., FRANKE, W.W., ROMANOVICZ, D. 1973.  
The role of the Golgi apparatus in the biosynthesis and secretion of cellulosic glycoprotein in *Pleurochrysis*: A model system for the synthesis of structure polysaccharides.  
**In:** Biogenesis of Plant Cell Wall Polysaccharides (F.Loewus, ed.) Academic Press, New York; pp. 207-257.
59. DERKSEN, J., TRENDELENBURG, M.F., SCHEER, U., FRANKE, W.W. 1973.  
Spread chromosomal nucleoli of chironomus salivary glands.  
*Exp. Cell Res.* **80**, 476-479.
60. FRANKE, W.W., HERTH, W. 1973.  
Cell and lorica fine structure of the chrysomonad alga, *Dinobryon sertularia* Ehr.  
(Chrysophyceae).  
*Arch. Mikrobiol.* **90**, 323-344.
61. FRANKE, W.W., REAU, P. 1973.  
The mitotic apparatus of a zygomycete, *Phycomyces blakesleeanus*.  
*Arch. Mikrobiol.* **90**, 121-129.
62. FRANKE, W.W., DEUMLING, B., ZENTGRAF, H. 1973.  
Losses of material during cytological preparation of nuclei and chromosomes.  
*Exp. Cell Res.* **80**, 445-449.
63. FRANKE, W.W., DEUMLING, B., ZENTGRAF, H., FALK, H., RAE, P.M.M. 1973.  
Nuclear membranes from mammalian liver. IV. Characterization of membrane-attached DNA.  
*Exp. Cell Res.* **81**, 365-392.
64. FRANKE, W.W., TRENDELENBURG, M.F., SCHEER, U. 1973.  
Natural segregation of nucleolar components in the course of a plant cell differentiation.  
*Planta* **110**, 159-164.
65. FRANKE, W.W., ZENTGRAF, H.W., SCHEER, U., KARTENBECK, J. 1973.  
Membrane linkages at the nuclear envelope.  
*Cytobiologie* **7**, 89-100.
66. JARASCH, E.-D., REILLY, C.E., COMES, P., KARTENBECK, J., FRANKE, W.W. 1973.  
Isolation and characterization of nuclear membranes from calf and rat thymus.  
*Hoppe-Seyler's Z. Physiol. Chem.* **354**, 974-986.
67. KARTENBECK, J., JARASCH, E.-D., FRANKE, W.W. 1973.  
Nuclear membranes from mammalian liver. VI. Glucose-6-phosphatase in rat liver, a cytochemical and biochemical study.  
*Exp. Cell Res.* **81**, 175-194.
68. SCHEER, U., TRENDELENBURG, M.F., FRANKE, W.W. 1973.  
Transcription of ribosomal RNA cistrons. Correlation of morphological and biochemical data.  
*Exp. Cell Res.* **80**, 175-190.
69. STADLER, J., FRANKE, W.W. 1973.  
Nuclear membranes and plasma membranes from hen erythrocytes.  
III. Localization of activities incorporating fatty acids into phospholipids.  
*Biochim. Biophys. Acta* **311**, 205-213.
70. TRENDELENBURG, M.F., SCHEER, U., FRANKE, W.W. 1973.  
Structural organization of the transcription of ribosomal DNA in oocytes of the house cricket.  
*Nature New Biol.* **245**, 167-170.

**1974**

71. FRAHM, J., KLÖTERS, M., FRANKE, W.W., FALK, H., DEIMLING, O. 1974.  
Structure and function of the stimulated adrenal cortex. 2. Early effects of ACTH on the ultrastructure of the zona fasciculata in dexamethasone-treated rats.  
Beitr. Path. **153**, 262-279.
72. FRANKE, W.W. 1974.  
Zellkerne und Kernbestandteile.  
**In:** Biochemische Cytologie der Pflanzenzelle (G. Jacobi, ed.) Thieme-Verlag, Stuttgart; pp. 15-40.
73. FRANKE, W.W. 1974.  
Structure, biochemistry and functions of the nuclear envelope.  
Int. Rev. Cytol. **39**, Suppl. 4, 71-236.
74. FRANKE, W.W. 1974.  
Nuclear envelopes. Structure and biochemistry of the nuclear envelope.  
Phil. Trans. R. Soc. Lond. B. **268**, 67-93.
75. FRANKE, W.W., HERTH, W. 1974.  
Morphological evidence for de novo formation of plasma membrane from coated vesicles in exponentially growing cultured plant cells.  
Exp. Cell Res. **89**, 447-451.
76. FRANKE, W.W., SCHEER, U. 1974.  
Structures and functions of the nuclear envelope.  
**In:** The Nucleus. Vol. **1** (H. Busch, ed.) Academic Press, New York; pp. 220-348.
77. FRANKE, W.W., SCHEER, U. 1974.  
Pathways of nucleocytoplasmic translocation of ribonucleoproteins.  
**In:** Transport at the Cellular Level. Vol. **28** (Symp. British Soc. Exp. Biol.) Cambridge, University Press; pp. 249-282.
78. FRANKE, W.W., SCHEER, U. 1974.  
Biochemical and structural aspects of nucleocytoplasmic transfer of ribonucleoproteins at the nuclear envelope level.  
Proc. 9th FEBS Meeting 1974, Budapest, 205-211.
79. FRANKE, W.W., BERGER, S., FALK, H., SPRING, H., SCHEER, U., HERTH, W., TRENDLENBURG, M.F., SCHWEIGER, H.G. 1974.  
Acetabularia cells. I. The vegetative phase.  
Protoplasma **82**, 249-282.
80. FRANKE, W.W., SCHEER, U., HERTH, W. 1974.  
General and molecular cytology.  
Progr. Botany, Springer-Verlag, Berlin; **36**, 1-20.
81. FRANKE, W.W., SCHEER, U., HERTH, W. 1974.  
82. Morphologie. I. Cytologie. a) Allgemeine und molekulare Cytologie.  
**In:** Fortschritte der Botanik. Vol. **35** (H. Ellenberg et al., eds.) Springer-Verlag, Berlin; pp. 1-10.
82. HERTH, W., FRANKE, W.W., BITTIGER, H., KUPPEL, A., KEILICH, G. 1974.  
Alkali-resistant fibrils of  $\beta$ -1,2- and  $\beta$ -1,4-glucans: Structural polysaccharides in the pollen tube wall of *Lilium longiflorum*.  
Cytobiologie **9**, 344-367.

83. JARASCH, E.-D., FRANKE, W.W. 1974.  
Is cytochrome oxidase a constituent of nuclear membranes?  
J. Biol. Chem. **249**, 7245-7254.
84. KARTENBECK, J., FRANKE, W.W. 1974.  
Membrane relationships between endoplasmic reticulum and peroxisomes in rat hepatocytes and Morris hepatoma cells.  
Cytobiologie **10**, 152-156.
85. KEENAN, T.W., FRANKE, W.W., KARTENBECK, J. 1974.  
Concanavalin A binding by isolated plasma membranes and endomembranes from liver and mammary glands.  
FEBS Letters **44**, 274-278.
86. KEENAN, T.W., FRANKE, W.W., WIEGANDT, H. 1974.  
Ganglioside accumulation by transformed murine fibroblast (3T3) cells and canine erythrocytes.  
Hoppe Seyler's Z. Physiol. Chemie **355**, 1543-1558.
87. SPRING, H., TRENDELENBURG, M.F., SCHEER, U., FRANKE, W.W., HERTH, W. 1974.  
Structural and biochemical studies of the primary nucleus of two green algal species, *Acetabularia mediterranea* and *Acetabularia major*.  
Cytobiologie **10**, 1-65.
88. STADLER, J., FRANKE, W.W. 1974.  
Characterization of the colchicine binding of membrane fractions from rat and mouse liver.  
J. Cell Biol. **60**, 297-303.
89. TRENDELENBURG, M.F., FRANKE, W.W., SPRING, H., SCHEER, U. 1974.  
Ultrastructure of transcription in nucleoli.  
Proc. 9th FEBS Meeting 1974, Budapest, 159-168.
90. TRENDELENBURG, M.F., SPRING, H., SCHEER, U., FRANKE, W.W. 1974.  
Morphology of nucleolar cistrons in a plant cell, *Acetabularia mediterranea*.  
Proc. Natl. Acad. Sci. USA **71**, 3626-3630.
91. WEBER, C., FRANKE, W.W., KARTENBECK, J. 1974.  
Structure and biochemistry of phloem-proteins from *Cucurbita maxima*.  
Exp. Cell Res. **87**, 79-106.
92. ZENTGRAF, H., FRANKE, W.W. 1974.  
Breakdown of the nuclear envelope in hen erythrocytes after phenylhydrazine treatment.  
Beitr. Path. **151**, 169-178.

## **1975**

93. BERGER, S., HERTH, W., FRANKE, W.W., SPRING, H., FALK, H., SCHWEIGER, H.G. 1975.  
Morphology of the nucleo-cytoplasmic interactions during the development of *Acetabularia* cells.  
II. The generative phase.  
Protoplasma **84**, 223-256.
94. ECKERT, W.A., FRANKE, W.W. 1975.  
Changes in fine structure and composition of macronuclei of *Tetrahymena pyriformis* induced by drug interfering with RNA synthesis and processing.  
Cytobiologie **11**, 392-418.



95. ECKERT, W.A., FRANKE, W.W., SCHEER, U. 1975.  
Nucleocytoplasmic translocation of RNA in *Tetrahymena pyriformis* and its inhibition by Actinomycin D and Cycloheximide.  
Exp. Cell Res. **94**, 31-46.
96. FRANKE, W.W., SPRING, H., SCHEER, U., ZERBAN, H. 1975.  
Growth of the nuclear envelope in the vegetative phase of the green alga *Acetabularia*.  
J. Cell Biol. **66**, 681-689.
97. HERTH, W., KUPPEL, A., FRANKE, W.W. 1975.  
Cellulose in *Acetabularia* cyst walls.  
J. Ultrastruct. Res. **50**, 289-292.
98. HERTH, W., KUPPEL, A., FRANKE, W.W., BROWN, R.M. 1975.  
The ultrastructure of the scler cellulose from *Pleurochrysis scherffelii* under various experimental conditions.  
Cytobiologie **10**, 268-284.
99. KEENAN, T.W., SCHMID, E., FRANKE, W.W., WIEGANDT, H. 1975.  
Exogenous glycosphingolipids suppress growth rate of transformed and untransformed 3T3 mouse cells.  
Exp. Cell Res. **92**, 259-270.
100. RATHKE, P., SCHMID, E., FRANKE, W.W. 1975.  
The action of the cytochalasin at the subcellular level. I. Effects and binding of cytochalasin B in cells of a line derived from a rat mammary adenocarcinoma and in rat erythrocytes.  
Cytobiologie **10**, 366-396.
101. SCHEER, U., TRENDELENBURG, M.F., FRANKE, W.W. 1975.  
Effects of Actinomycin D on the association of newly formed ribonucleoproteins with the cistrons of ribosomal RNA in *Triturus* oocytes.  
J. Cell Biol. **65**, 163-179.
102. SPRING, H., SCHEER, U., FRANKE, W.W., TRENDELENBURG, M.F. 1975.  
Lampbrush-type chromosomes in the primary nucleus of the green alga *Acetabularia mediterranea*.  
Chromosoma **50**, 25-43.
103. ZENTGRAF, H., FALK, H., FRANKE, W.W. 1975.  
Nuclear membranes and plasma membranes from hen erythrocytes. IV. Characterization of nuclear membrane attached DNA.  
Cytobiologie **11**, 10-29.
104. ZENTGRAF, H., SCHEER, U., FRANKE, W.W. 1975.  
Characterization and localization of the RNA synthesized in mature avian erythrocytes.  
Exp. Cell Res. **96**, 81-95.

## **1976**

105. FRANKE, W.W., KARTENBECK. 1976.  
Some principles of membrane differentiation.  
**In:** Progress in Differentiation Research (N.-Müller-Bérat et al., eds.) North-Holland Publishing Company, Amsterdam; pp. 213-243.

106. FRANKE, W.W., KARTENBECK, J., SPRING, H. 1976.  
Involvement of bristle coat structures in surface membrane formations and membrane interactions during coenocytotomic cleavage in caps of *Acetabularia mediterranea*.  
*J. Cell Biol* **71**, 196-206.
107. FRANKE, W.W., KEENAN, T.W., STADLER, J., GENZ, R., JARASCH, E.-D.,  
KARTENBECK, J. 1976.  
Nuclear membranes from mammalian liver. VII. Characteristics of highly purified nuclear membranes in comparison with other membranes.  
*Cytobiologie* **13**, 28-56.
108. FRANKE, W.W., LÜDER, M.R., KARTENBECK, J., ZERBAN, H., KEENAN, T.W. 1976.  
Involvement of vesicle coat material in casein secretion and surface regeneration.  
*J. Cell Biol.* **69**, 173-195.
109. FRANKE, W.W., MORRÉ, J., HERTH, W., ZERBAN, H. 1976.  
Morphology. I. Cytology. a) General and molecular cytology.  
**In:** Progress in Botany. Vol. **38** (H. Ellenberg et al., eds.) Springer-Verlag, Berlin; pp. 1-16.
110. FRANKE, W.W., RATHKE, P.C., SEIB, E., TRENDELENBURG, M.F., OSBORN, M.,  
WEBER, K. 1976.  
Distribution and mode of arrangement of microfilamentous structures and actin in the cortex of the amphibian oocyte.  
*Cytobiologie* **14**, 111-130.
111. FRANKE, W.W., SCHEER, U., SPRING, H., TRENDELENBURG, M.F., KROHNE, G. 1976.  
Morphology of transcriptional units of rDNA.  
*Exp. Cell Res.* **100**, 233-244.
112. FRANKE, W.W., SCHEER, U., TRENDELENBURG, M.F., SPRING, H., ZENTGRAF, H. 1976.  
Absence of nucleosomes in transcriptionally active chromatin.  
*Cytobiologie* **13**, 401-434.
113. ISENBERG, G., RATHKE, P.C., HÜLSMANN, N., FRANKE, W.W., WOHLFARTH-  
BOTTERMANN, K.E. 1976.  
Cytoplasmic actomyosin fibrils in tissue culture cells.  
*Cell Tiss. Res.* **166**, 427-443.
114. KEENAN, T.W., MATHER, I.H., STADLER, J., FRANKE, W.W. 1976.  
Measurement of Concanavalin A binding to isolated membrane fractions.  
**In:** Concanavalin A as a Tool (H. Bittiger, H.P. Schnebli, eds.) John Wiley & Sons, New York; pp. 213-219.
115. KEILICH, G., BROSSMER, R., MÜLLER, H., PECH, H., FRANKE, W.W., SPRING, H. 1976.  
Release by agitation of constituents from cell walls of *Pseudomonas aeruginosa*. II.  
Communication: Biochemistry of released components.  
*Zbl. Bakt. Hyg. I. Abt. Orig. A.* **234**, 317-326.
116. MÜLLER, H., PECH, H., KEILICH, G., BROSSMER, R., FRANKE, W.W., SPRING, H. 1976.  
Release by agitation of constituents from cell walls of *Pseudomonas aeruginosa*. II.  
Communication: Serology.  
*Zbl. Bakt. Hyg. I. Abt. Orig. A.* **234**, 305-316.
117. MÜLLER, H., SPRING, H., FRANKE, W.W., PECH, H., KEILICH, G., BROSSMER, R. 1976.  
Release by agitation of constituents from cell walls of *Pseudomonas aeruginosa*. III. Electron microscopy.  
*Zbl. Bakt. Hyg. I. Abt. Orig. A.* **234**, 327-245.

118. PHILIPP, E.I., FRANKE, W.W., KEENAN, T.W., STADLER, J., JARASCH, E.-D. 1976.  
Characterization of nuclear membranes and endoplasmic reticulum isolated from plant tissue.  
*J. Cell Biol.* **68**, 11-29.
119. SCHEER, U., FRANKE, W.W. 1976.  
Transcriptional complexes of nucleolar genes.  
*Proc. Sixth European Congress on Electron Microscopy, Jerusalem 1976*; pp. 26-29.
120. SCHEER, U., FRANKE, W.W., TRENDELENBURG, M.F., SPRING, H. 1976.  
Classification of loops of lampbrush chromosomes according to the arrangement of transcriptional complexes.  
*J. Cell Sci.* **22**, 503-519.
121. SCHEER, U., KARTENBECK, J., TRENDELENBURG, M.F., STADLER, J., FRANKE, W.W. 1976.  
Experimental disintegration of the nuclear envelope.  
*J. Cell Biol.* **69**, 1-18.
122. SCHEER, U., TRENDELENBURG, M.F., FRANKE, W.W. 1976.  
Regulation of transcription of genes of ribosomal RNA during amphibian oogenesis.  
*J. Cell Biol.* **69**, 465-489.
123. SCHEER, U., TRENDELENBURG, M.F., FRANKE, W.W. 1976.  
Regulation of transcription of ribosomal RNA-genes during amphibian oogenesis.  
**In:** *Progress in Differentiation Research* (N. Müller-Bérat et al., eds.) North-Holland Publishing Company, Amsterdam; pp.105-118.
124. SPRING, H., KROHNE, G., FRANKE, W.W., SCHEER, U., TRENDELENBURG, M.F. 1976.  
Homogeneity and heterogeneity of sizes of transcriptional units and spacer regions in nucleolar genes of *Acetabularia*.  
*J. Microsc. Biol. Cell.* **25**, 107-116.
125. TRENDELENBURG, M.F., SCHEER, U., ZENTGRAF, H., FRANKE, W.W. 1976.  
Heterogeneity of spacer lengths in circles of amplified ribosomal DNA of two insect species, *Dytiscus marginalis* and *Acheta domesticus*.  
*J. Mol. Biol.* **108**, 453-470.
126. WEBER, K., RATHKE, P.C., OSBORN, M., FRANKE, W.W. 1976.  
Distribution of actin and tubulin in cells and in glycerinated cell models after treatment with cytochalasin B (CB).  
*Exp. Cell Res.* **102**, 285-297.
127. ZENTGRAF, H., SCHEER, U., FRANKE, W.W. 1976.  
On the existence of arrested transcriptional machinery in the late stages of avian erythropoiesis.  
**In:** *Progress in Differentiation Research* (N. Müller-Bérat et al., eds.) North-Holland Publishing Company, Amsterdam; pp. 119-123.

## 1977

128. FRANKE, W.W. 1977.  
Genexpression der Eukaryontenzelle und Prinzipien ihrer Regulation.  
*Arzneimittelforsch. (Drug. Res.)* **27**, 190-199.
129. FRANKE, W.W. 1977.  
Membrane changes during neoplastic transformation.  
**In:** *Neoplastic Transformation: Mechanisms and Consequences* (H. Koprowski, ed.) Dahlem Konferenzen, Berlin; pp. 181-195.

130. FRANKE, W.W. 1977.  
Structure and function of nuclear membranes.  
*Biochem. Soc. Symp.* **42**, 125-135.
131. FRANKE, W.W., KARTENBECK, J. 1977.  
Principles of membrane differentiation.  
**In:** *Membrane Alterations as Basis of Liver Injury* (H. Popper et al., eds.) MIT Press, Lancaster;  
pp. 1-13.
132. FRANKE, W.W., KARTENBECK, J., SPRING, H. 1977.  
Modes of surface membrane formation during cytotoxic cleavage in caps of *Acetabularia*.  
*Protoplasma* **91**, 223.
133. FRANKE, W.W., SEIB, E., HERTH, W., OSBORN, M., WEBER, K. 1977.  
Reaction of the anastral mitotic apparatus of endosperm cells of the plant *Leucojum aestivum* with  
antibodies to tubulin from porcine brain as revealed by immunofluorescence microscopy.  
*Cell Biol. Int. Rep.* **1**, 75-83.
134. FRANKE, W.W., SEIB, E., OSBORN, M., WEBER, K., HERTH, W., FALK, H. 1977.  
Tubulin-containing structures in the anastral mitotic apparatus of endosperm cells of the plant  
*Leucojum aestivum* as revealed by immunofluorescence microscopy.  
*Cytobiologie* **15**, 24-48.
135. FRANKE, W.W., SPRING, H., KARTENBECK, J., FALK, H. 1977.  
Cyst formation in some Dasycladacean green algae. I. Vesicle formations during doenocytotomy  
in *Acetabularia mediterranea*.  
*Cytobiologie* **14**, 229-252.
136. JARASCH, E.-D., FRANKE, W.W. 1977.  
Absence of cytochrome oxidase in nuclear membranes from hepatocytes.  
*Exp. Cell Res.* **109**, 450-454.
137. JARASCH, E.-D., BRUDER, G., KEENAN, T.W., FRANKE, W.W. 1977.  
Redox constituents in milk fat globule membranes and rough endoplasmic reticulum from  
lactating mammary gland.  
*J. Cell Biol.* **73**, 223-241.
138. KARTENBECK, J., FRANKE, W.W., MORRÉ, D.J. 1977.  
Polygonal coat structures on secretory vesicles of rat hepatocytes.  
*Cytobiologie* **14**, 284-291.
139. KEENAN, T.W., FREUDENSTEIN, C., FRANKE, W.W. 1977.  
Membranes in mammary gland. XIII. A lipoprotein complex derived from bovine milk fat globule  
membrane with some preparative characteristics resembling those of actin.  
*Cytobiologie* **14**, 259-278.
140. KEENAN, T.W., POWELL, K.M., SASAKI, M., EIGEL, W.N., FRANKE, W.W. 1977.  
Membranes of mammary gland. XIV. Isolation and partial characterization of a high molecular  
weight glycoprotein fraction from bovine milk fat globule membrane.  
*Cytobiologie* **15**, 96-115.
141. MERRIT, W.D., MORRÉ, D.J., FRANKE, W.W., KEENAN, T.W. 1977.  
Glycosyltransferases with endogenous acceptor activity in plasma membranes isolated from rat  
liver.  
*Biochim. Biophys. Acta* **497**, 820-824.

142. MORRÉ, D.J., FRANKE, W.W., KARTENBECK, J. 1977.  
Flow dynamics of intracellular membranes of rat-liver parenchymal cells.  
**In:** Methodological Surveys in Biochemistry. Vol. 6 (E. Reid, ed.) E. Horwood Ltd., Chichester; 309-336.
143. OSBORN, M., FRANKE, W.W., WEBER, K. 1977.  
Visualizaiton of a system of filaments 7 - 10 nm thick in cultured cells of an epithelioid line (PtK<sub>2</sub>) by immunofluorescence microscopy.  
Proc. Natl. Acad. Sci. USA **74**, 2490-2494.
144. RATHKE, P.C., SEIB, E., WEBER, K., OSBORN, M., FRANKE, W.W. 1977.  
Rod-like elements from actin-containing microfilament bundles observed in cultured cells after treatment with cytochalasin A (CA).  
Exp. Cell Res. **105**, 253-262.
145. SCHEER, U., TRENDELENBURG, M.F., KROHNE, G., FRANKE, W.W. 1977.  
Lengths and patterns of transcriptional units in the amplified nucleoli of oocytes of *Xenopus laevis*.  
Chromosoma **60**, 147-167.
146. TRENDELENBURG, M.F., FRANKE, W.W., SCHEER, U. 1977.  
Frequencies of circular units of nucleolar DNA in oocytes of two insects, *Acheta domesticus* and *Dytiscus marginalis*, and changes of nucleolar morphology during oogenesis.  
Differentiation **7**, 133-158.
147. WEBER, K., OSBORN, M., FRANKE, W.W., SEIB, E., SCHEER, U., HERTH, W. 1977.  
Identification of microtubular structures in diverse plant and animal cells by immunological cross-reaction revealed in immunofluorescence microscopy using antibody against tubulin from porcine brain.  
Cytobiologie, **15**, 285-302.
148. ZERBAN, H., FRANKE, W.W. 1977.  
Structures indicative of keratinization in lactating cells of bovine mammary gland.  
Differentiation **7**, 127-131.

## 1978

149. DROCHMANS, P., FREUDENSTEIN, C., WANSON, J.-C, LAURENT, L., KEENAN, T.W., STADLER, J., LELOUP, R., FRANKE, W.W. 1978.  
Structure and biochemical composition of desmosomes and tonofilaments isolated from calf muzzle epidermis.  
J. Cell Biol. **79**, 427-443.
150. ECKERT, W.A., KAPFENBERGER, W., KROHNE, G., FRANKE, W.W. 1978.  
Introduction of hidden breaks during rRNA maturation and ageing in *Tetrahymena pyriformis*.  
Eur. J. Biochem. **87**, 607-616.
151. FRANKE, W.W., SCHEER, U. 1978.  
Morphology of transcriptional units at different stages of activity.  
Phil. Trans. R. Soc. Lond. B. **283**, 333-342.
152. FRANKE, W.W., FINK, A., SCHMID, E. 1978.  
Demonstration of the display of components of the endoplasmic reticulum system by indirect immunofluorescence microscopy using antibodies against cytochrome b<sub>5</sub> from rat liver microsomes.  
Cell Biol. Int. Rep. **2**, 465-474.

153. FRANKE, W.W., GRUND, C., FINK, A., WEBER, K., JOCKUSCH, B.M., ZENTGRAF, H., OSBORN, M. 1978.  
Location of actin in the microfilament bundles associated with the junctional specializations between Sertoli cells and spermatids.  
*Biol. Cell.* **31**, 7-14.
154. FRANKE, W.W., GRUND, C., OSBORN, M., WEBER, K. 1978.  
The intermediate-sized filaments in rat kangaroo PtK<sub>2</sub> cells. I. Morphology *in situ*.  
*Cytobiologie* **17**, 365-391.
155. FRANKE, W.W., GRUND, C., SCHMID, E., MANDELKOW, E. 1978.  
Paracrystalline arrays of membrane-to-membrane cross bridges associated with the inner surface of plasma membrane.  
*J. Cell Biol.* **77**, 323-328.
156. FRANKE, W.W., SCHEER, U., TRENDELENBURG, M.F., ZENTGRAF, H., SPRING, H. 1978.  
Morphology of transcriptionally active chromatin.  
*Cold Spring Harbor Symp. Quant. Biol.* **42**, 755-772.
157. FRANKE, W.W., SCHMID, E., OSBORN, M., WEBER, K. 1978.  
The intermediate-sized filaments in rat kangaroo PtK<sub>2</sub> cells. II. Structure and composition of isolated filaments.  
*Cytobiologie* **17**, 392-411.
158. FRANKE, W.W., SCHMID, E., OSBORN, M., WEBER, K. 1978.  
Different intermediate-sized filaments distinguished by immunofluorescence microscopy.  
*Proc. Natl. Acad. Sci. USA* **75**, 5034-5038.
159. FRANKE, W.W., WEBER, K., OSBORN, M., SCHMID, E., FREUDENSTEIN, C. 1978.  
Antibody to prekeratin. Decoration of tonofilament-like arrays in various cells of epithelial character.  
*Exp. Cell Res.* **116**, 429-445.
160. FRANKE, W.W., ZENTGRAF, H., SCHEER, U. 1978.  
Supranucleosomal and non-nucleosomal chromatin configurations.  
*Proc. Ninth Int. Congr. Electron Microscopy, Vol. 3*, 573-586.
161. FREUDENSTEIN, C., FRANKE, W.W., OSBORN, M., WEBER, K. 1978.  
Reaction of tonofilament-like intermediate-sized filaments with antibodies raised against isolated defined polypeptides of bovine hoof prekeratin.  
*Cell Biol. Int. Rep.* **2**, 591-600.
162. KEENAN, T.W., FRANKE, W.W., MATHER, I.H., MORRÉ, D.J. 1978.  
Endomembrane composition and function in milk formation.  
**In:** *Lactation: A Comprehensive Treatise*. Academic Press, New York; pp. 405-436.
163. KEENAN, T.W., SCHMID, E., FRANKE, W.W. 1978.  
Gangliosides of cultured cells of a rat mammary carcinoma cell line.  
*Lipids* **13**, 451-454.
164. KROHNE, G., FRANKE, W.W., ELY, S., D'ARCY, A., JOST, E. 1978.  
Localization of a nuclear envelope-associated protein by indirect immunofluorescence using antibodies against a major polypeptide from rat liver fractions enriched in nuclear envelope-associated material  
*Cytobiologie* **18**, 22-38.

165. KROHNE G., FRANKE, W.W., SCHEER, U. 1978.  
The major polypeptides of the nuclear pore complex.  
Exp. Cell Res. **116**, 85-102.
166. RUNGGER, D., CRIPPA, M., TRENDELENBURG, M.F., SCHEER, U., FRANKE, W.W. 1978.  
Visualization of rDNA spacer transcription in *Xenopus* oocytes treated with fluorouridine.  
Exp. Cell Res. **116**, 481-486.
167. RUNGGER-BRÄNDLE, E., FRANKE, W.W., OSBORN, M., WEBER, K. 1978.  
Indirect immunofluorescence microscopy of microtubular structures in male germ cells of wildtype and l(3)pl (lethal-polyploid) *Drosophila hydei*.  
Differentiation **10**, 187-191.
168. SPRING, H., GRIERSON, D., HEMLEBEN, V., STÖHR, M., KROHNE, G., STADLER, J., FRANKE, W.W. 1978.  
DNA contents and numbers of nucleoli and pre-rRNA genes in nuclei of gametes and vegetative cells of *Acetabularia mediterranea*.  
Exp. Cell Res. **114**, 203-215.
169. TRENDELENBURG, M.F., ZENTGRAF, H., FRANKE, W.W., GURDON, J.B. 1978.  
Transcription patterns of amplified Dytiscus genes coding for ribosomal RNA after injection into *Xenopus* oocyte nuclei.  
Proc. Natl. Acad. Sci. USA **75**, 3791-3795.
170. ZERBAN, H., FRANKE, W.W. 1978.  
Milk fat globule membranes devoid of intramembraneous particles.  
Cell Biol. Int. Rep. **2**, 87-98.
171. ZERBAN, H., FRANKE, W.W. 1978.  
Modified desmosomes in cultured epithelial cells.  
Cytobiologie **18**, 360-373.

## **1979**

172. DENK, H., FRANKE, W.W., ECKERSDORFER, E., SCHMID, E., KERJASCHKI, D. 1979.  
Formation and involution of Mallory bodies ("alcoholic hyalin") in murine and human liver revealed by immunofluorescence microscopy with antibodies to prekeratin.  
Proc. Natl. Acad. Sci. USA **76**, 4112-4116.
173. DENK, H., FRANKE, W.W., KERJASCHKI, D., ECKERSDORFER, R. 1979.  
Mallory bodies in experimental animals and man.  
Intern. Rev. Exp. Pathol. **20**, 77-121.
174. FRANKE, W.W., KEENAN, T.W. 1979.  
Interaction of secretory vesicle membrane coat structures with membrane free areas of forming milk lipid globules.  
Dairy Sciences **62**, 1322-1325.
175. FRANKE, W.W., KEENAN, T.W. 1979.  
Mitosis in milk secreting epithelial cells of mammary gland. An ultrastructural study.  
Differentiation **13**, 81-88.
176. FRANKE, W.W., APPELHANS, B., SCHMID, E., FREUDENSTEIN, C., OSBORN, M., WEBER, K. 1979.  
The organization of cytokeratin filaments in the intestinal epithelium.  
Eur. J. Cell Biol. **19**, 255-268.

177. FRANKE, W.W., APPELHANS, B., SCHMID, E., FREUDENSTEIN, C., OSBORN, M., WEBER, K. 1979.  
Identification and characterization of epithelial cells in mammalian tissues by immunofluorescence microscopy using antibodies to prekeratin.  
*Differentiation* **15**, 7-25.
178. FRANKE, W.W., DENK, H., SCHMID, E., OSBORN, M., WEBER, K. 1979.  
Ultrastructural, biochemical and immunologic characterization of Mallory bodies in livers of griseofulvin-treated mice. Fimbriated rods of filaments containing prekeratin-like polypeptides.  
*Lab. Invest.* **40**, 207-220.
179. FRANKE, W.W., GRUND, C., SCHMID, E. 1979.  
Intermediate-sized filaments present in Sertoli cells are of the vimentin type.  
*Eur. J. Cell Biol.* **19**, 269-275.
180. FRANKE, W.W., SCHEER, U., SPRING, H., TRENDELENBURG, M.F., ZENTGRAF, H. 1979.  
Organization of nucleolar chromatin.  
**In:** *The Cell Nucleus*. Vol. **7** (H. Busch, ed.) Academic Press, New York; pp. 49-95.
181. FRANKE, W.W., SCHMID, E., BREITKREUTZ, D., LÜDER, M., BOUKAMP, P., FUSENIG, N.E., OSBORN, M., WEBER, K. 1979.  
Simultaneous expression of two different types of intermediate-sized filaments in mouse keratinocytes proliferating *in vitro*.  
*Differentiation* **14**, 35-50.
182. FRANKE, W.W., SCHMID, E., KARTENBECK, J., MAYER, D., HACKER, H.J., BANNASCH, P., OSBORN, M., WEBER, K., DENK, H., WANSON, J.-C., DROCHMANS, P. 1979.  
Characterization of the intermediate-sized filaments in liver cells by immunofluorescence and electron microscopy.  
*Biol. Cell.* **34**, 99-110.
183. FRANKE, W.W., SCHMID, E., OSBORN, M., WEBER, K. 1979.  
Intermediate-sized filaments of human endothelial cells.  
*J. Cell Biol.* **81**, 570-580.
184. FRANKE, W.W., SCHMID, E., WEBER, K., OSBORN, M. 1979.  
HeLa cells contain intermediate-sized filaments of the prekeratin type.  
*Exp. Cell Res.* **118**, 95-109.
185. FRANKE, W.W., SCHMID, E., WINTER, S., OSBORN, M., WEBER, K. 1979.  
Widespread occurrence of intermediate-sized filaments of the vimentin-type in cultured cells from diverse vertebrates.  
*Exp. Cell Res.* **123**, 25-46.
186. FREUDENSTEIN, C., KEENAN, T.W., EIGEL, W.N., SASAKI, M., STADLER, J., FRANKE, W.W. 1979.  
Preparation and characterization of the inner coat material associated with fat globule membranes from bovine and human milk.  
*Exp. Cell Res.* **118**, 277-294.
187. JARASCH, E.-D., KARTENBECK, J., BRUDER, G., FINK, A., MORRÉ, D.J., FRANKE, W.W., 1979.  
B-type cytochromes in plasma membranes isolated from rat liver, in comparison with those of endomembranes.  
*J. Cell Biol.* **80**, 37-52.



188. KEENAN, T.W., SASAKI, M., EIGEL, W.N., MORRÉ, D.J., FRANKE, W.W., ZULAK, I.M., BUSHWAY, A.A. 1979.  
Characterization of a secretory vesicle-rich fraction from lactating bovine mammary gland.  
*Exp. Cell Res.* **124**, 47-61.
189. MORRÉ, D.J., KARTENBECK, J., FRANKE, W.W. 1979.  
Membrane flow and interconversions among endomembranes.  
*Biochim. Biophys. Acta* **559**, 71-152.
190. MORRÉ, D.J., SCHIRRMACHER, V., ROBINSON, P., HESS, K., FRANKE, W.W., 1979.  
H-2-histocompatibility antigens of subcellular membranes of mouse liver.  
*Exp. Cell Res.* **119**, 265-275.
191. SCHMID, E., TAPSCOTT, S., BENNETT, G.S., CROOP, J., FELLINI, S.A., HOLTZER, H., FRANKE, W.W. 1979.  
Differential location of different types of intermediate-sized filaments in various tissues of the chicken embryo.  
*Differentiation* **15**, 27-40.
192. ZENTGRAF, H., TRENDELENBURG, M.F., SPRING, H., SCHEER, U., FRANKE, W.W., MÜLLER, U., DRURY, K.C., RUNGGER, D. 1979.  
Mitochondrial DNA arranged into chromatin-like structures after injection into amphibian oocyte nuclei.  
*Exp. Cell Res.* **122**, 363-375.

## **1980**

193. AUBIN, J.E., OSBORN, M., FRANKE, W.W., WEBER, K. 1980.  
Intermediate filaments of the vimentin-type and the cytokeratin-type are distributed differently during mitosis.  
*Exp. Cell Res.* **129**, 149-165.
194. BANNASCH, P., ZERBAN, H., SCHMID, E., FRANKE, W.W. 1980.  
Liver tumors distinguished by immunofluorescence microscopy with antibodies to proteins of intermediate-sized filaments.  
*Proc. Natl. Acad. Sci. USA* **77**, 4948-4952.
195. BANNASCH, P., ZERBAN, H., SCHMID, E., FRANKE, W.W. 1980.  
Differential diagnosis of liver tumors by immunofluorescence microscopy using antibodies to different intermediate filament proteins.  
*Verh. Dtsch. Ges. Path.* **64**, 414-417.
196. BORENFREUND, E., SCHMID, E., BENDICH, A., FRANKE, W.W., 1980.  
Constitutive aggregates of intermediate-sized filaments of the vimentin and cytokeratin type in cultured hepatoma cells and their dispersal by butyrate.  
*Exp. Cell Res.* **127**, 215-235.
197. BRUDER, G., BRETSCHER, A., FRANKE, W.W., JARASCH, E.-D. 1980.  
Plasma membranes from intestinal microvilli and erythrocytes contain cytochromes b<sub>5</sub> and P-420.  
*Biochim. Biophys. Acta* **600**, 739-755.
198. FRANKE, W.W., SCHEER, U., ZENTGRAF, H., TRENDELENBURG, M.F., MÜLLER, U., KROHNE, G., SPRING, H. 1980.  
Organization of transcribed and non-transcribed chromatin.  
**In:** Results and Problems in Cell Differentiation. Vol. **11** (R.G. McKinnell et al., eds.) Springer-Verlag, Berlin; pp. 15-36.

199. FRANKE, W.W., SCHMID, E., VANDEKERCKHOVE, J., WEBER, K. 1980.  
A permanently proliferating rat vascular smooth muscle cell with maintained expression of smooth muscle characteristics, including actin of the vascular smooth muscle type.  
*J. Cell Biol.* **87**, 594-600.
200. FRANKE, W.W., SCHMID, E., FREUDENSTEIN, C., APPELHANS, B., OSBORN, M., WEBER, K., KEENAN, T.W. 1980.  
Intermediate-sized filaments of the prekeratin type in myoepithelial cells.  
*J. Cell Biol.* **84**, 633-654.
201. JACKSON, B.W., GRUND, C., SCHMID, E., BÜRKI, K., FRANKE, W.W., ILLMENSEE, K., 1980.  
Formation of cytoskeletal elements during mouse embryogenesis.  
*Differentiation* **17**, 161-179.
202. KROHNE, G., FRANKE, W.W. 1980.  
A major soluble acidic protein located in nuclei of diverse vertebrate species.  
*Exp. Cell Res.* **129**, 167-189.
203. KROHNE, G., FRANKE, W.W. 1980.  
Immunological identification and localization of the predominant nuclear protein of the amphibian oocyte nucleus.  
*Proc. Natl. Acad. Sci. USA* **77**, 1034-1038.
204. MÜLLER, U., SCHRÖDER, C.H., ZENTGRAF, H., FRANKE, W.W. 1980.  
Coexistence of nucleosomal and various non-nucleosomal chromatin configurations in cells infected with herpes simplex virus.  
*Eur. J. Cell Biol.* **23**, 197-203.
205. OLINS, A.L., OLINS, D.E., FRANKE, W.W. 1980.  
Stereo-electron microscopy of nucleoli, Balbiani rings and endoplasmic reticulum in *Chironomus* salivary gland cells.  
*Eur. J. Cell Biol.* **22**, 714-723.
206. OLINS, A.L., OLINS, D.E., ZENTGRAF, H., FRANKE, W.W. 1980.  
Visualization of nucleosomes in thin sections by stereo-electron microscopy.  
*J. Cell Biol.* **87**, 833-836.
207. OSBORN, M., FRANKE, W.W., WEBER, K. 1980.  
Direct demonstration of the presence of two immunologically distinct intermediate-sized filament systems in the same cell by double immunofluorescence microscopy. Vimentin and cytokeratin fibers in cultured epithelial cells.  
*Exp. Cell Res.* **125**, 37-46.
208. RAMAEKERS, F.C.S., OSBORN, M., SCHMID, E., WEBER, K., BLOEMENDAL, H., FRANKE, W.W. 1980.  
Identification of the cytoskeletal proteins in lens-forming cells, a special epithelioid cell type.  
*Exp. Cell Res.* **127**, 309-327.
209. STASIECKI, P., OESCH, P., BRUDER, G., JARASCH, E.-D., FRANKE, W.W. 1980.  
Distribution of enzymes involved in metabolism of polycyclic aromatic hydrocarbons among rat liver endomembranes and plasma membranes.  
*Eur. J. Cell Biol.* **21**, 79-92.
210. WEBER, K., OSBORN, M., FRANKE, W.W. 1980.  
Antibodies against merokeratin from sheep wool decorate cytokeratin filaments in non-keratinizing epithelial cells.  
*Eur. J. Cell Biol.* **23**, 110-114.

211. ZENTGRAF, H., MÜLLER, U., FRANKE, W.W. 1980.  
Supranucleosomal organization of sea urchin sperm chromatin in regularly arranged 40-50 nm large granular subunits.  
Eur. J. Cell Biol. **20**, 254-264.
212. ZENTGRAF, H., MÜLLER, U., FRANKE, W.W. 1980.  
Reversible *in vitro* packing of nucleosomal filaments into globular supranucleosomal units in chromatin of whole chick erythrocyte nuclei.  
Eur. J. Cell Biol **23**, 171-188.

## **1981**

213. BANNASCH, P., ZERBAN, H., SCHMID, E., FRANKE, W.W. 1981.  
Characterization of cytoskeletal components in epithelial and mesenchymal liver tumors by electron and immunofluorescence microscopy.  
Virchows Arch. **36**, 139-158.
214. CREMER, M., TREISS, I., CREMER, T., HAGER, D., FRANKE, W.W. 1981.  
Characterization of cells of amniotic fluids by immunological identification of intermediate-sized filaments: Presence of cells of different tissue origin.  
Hum. Genet. **59**, 373-379.
215. DENK, H., FRANKE, W.W. 1981.  
Rearrangement of the hepatocyte cytoskeleton after toxic damage: Involution, dispersal and peripheral accumulation of Mallory body material after drug withdrawal.  
Eur. J. Cell Biol. **23**, 241-249.
216. DENK, H., FRANKE, W.W., DRAGOSICS, B., ZEILER, I. 1981.  
Pathology of cytoskeleton of liver cells: Demonstration of Mallory bodies (alcoholic hyalin) in murine and human hepatocytes by immunofluorescence microscopy using antibodies to cytokeratin polypeptides from hepatocytes.  
Hepatology **1**, 9-20.
217. FRANKE, W.W., DENK, H., KALT, R., SCHMID, E. 1981.  
Biochemical and immunological identification of cytokeratin proteins present in hepatocytes of mammalian liver tissue.  
Exp. Cell Res. **131**, 299-318.
218. FRANKE, W.W., HEID, H.W., GRUND, C., WINTER, S., FREUDENSTEIN, C., SCHMID, E., JARASCH, E.-D., KEENAN, T.W. 1981.  
Antibodies to the major insoluble milk fat globule membrane-associated protein: specific location in apical regions of lactating epithelial cell.  
J. Cell Biol. **89**, 485-494.
219. FRANKE, W.W., KLEINSCHMIDT, J.A., SPRING, H., KROHNE, G., GRUND, C., TRENDELENBURG, M.F., STOEHR, M., SCHEER, U. 1981.  
A nucleolar skeleton of protein filaments demonstrated in amplified nucleoli of *Xenopus laevis*.  
J. Cell Biol. **90**, 289-299.
220. FRANKE, W.W., MAYER, D., SCHMID, E., DENK, H., BORENFREUND, E. 1981.  
Differences of expression of cytoskeletal proteins in cultured rat hepatocytes and hepatoma cells.  
Exp. Cell Res. **134**, 345-365.
221. FRANKE, W.W., SCHEER, U., KROHNE, G., JARASCH, E.-D. 1981.  
The nuclear envelope and the architecture of the nuclear periphery.  
J. Cell Biol. **91**, 39s-50s.

222. FRANKE, W.W., SCHILLER, D.L., MOLL, R., WINTER, S., SCHMID, E., ENGELBRECHT, I., DENK, H., KREPLER, R., PLATZER, B. 1981.  
Diversity of cytokeratins. Differentiation specific expression of cytokeratin polypeptides in epithelial cells and tissues.  
*J. Mol. Biol.* **153**, 933-959.
223. FRANKE, W.W., SCHMID, E., FREUDENSTEIN, C., OSBORN, M., WEBER, K. 1981.  
Characterization and localization of cytokeratins by antibodies against purified prekeratin polypeptides in different epithelial cells.  
*Front. Matrix Biol.* **9**, 112-126.
224. FRANKE, W.W., SCHMID, E., GRUND, C., MÜLLER, H., ENGELBRECHT, I., MOLL, R., STADLER, J., JARASCH, E.-D. 1981.  
Antibodies to high molecular weight polypeptides of desmosomes: Specific localization of a class of junctional proteins in cells and tissues.  
*Differentiation* **20**, 217-241.
225. FRANKE, W.W., WINTER, S., GRUND, C., SCHMID, E., SCHILLER, D.L., JARASCH, E.-D. 1981.  
Isolation and characterization of desmosome-associated tonofilaments from rat intestinal brush border.  
*J. Cell Biol.* **90**, 116-127.
226. FRANKE, W.W., ZERBAN, H., GRUND, C., SCHMID, E. 1981.  
Electron microscopy of vimentin filaments and associated whisker structures in thin sections and freeze-fractures.  
*Biol. Cell.* **41**, 173-178.
227. GABBIANI, G., KAPANCI, Y., BARAZZONE, P., FRANKE, W.W. 1981.  
Immunochemical identification of intermediate-sized filaments in human neoplastic cells. A diagnostic aid for the surgical pathologist.  
*Am. J. Pathol.* **104**, 206-216.
228. GABBIANI, G., SCHMID, E., WINTER, S., CHAPONNIER, C., DE CHASTONAY, C., VANDEKERCKHOVE, J., WEBER, K., FRANKE, W.W. 1981.  
Vascular smooth muscle cells differ from other smooth muscle cells: Predominance of vimentin filaments and a specific  $\alpha$ -type actin.  
*Proc. Natl. Acad. Sci. USA* **78**, 298-302.
229. JACKSON, B.W., GRUND, C., WINTER, S., FRANKE, W.W., ILLMENSEE, K. 1981.  
Formation of cytoskeletal elements during mouse embryogenesis. II. Epithelial differentiation and intermediate-sized filaments in early postimplantation embryos.  
*Differentiation* **20**, 203-216.
230. JARASCH, E.-D., GRUND, C., BRUDER, G., HEID, H.W., KEENAN, T.W., FRANKE, W.W. 1981.  
Localization of xanthine oxidase in mammary-gland epithelium and capillary endothelium.  
*Cell* **25**, 67-82.
231. KARTENBECK, J., SCHMID, E., MÜLLER, H., FRANKE, W.W. 1981.  
Immunological identification and localization of clathrin and coated vesicles in cultured cells and in tissues.  
*Exp. Cell Res.* **133**, 191-211.
232. KREPLER, R., DENK, H., WEIRICH, E., SCHMID, E., FRANKE, W.W. 1981.  
Keratin-like proteins in normal and neoplastic cells of human and rat mammary gland as revealed by immunofluorescence microscopy.  
*Differentiation* **20**, 242-252.

233. KROHNE, G., DABAUVALLE, M.-C., FRANKE, W.W. 1981.  
Cell type-specific differences in protein composition of nuclear pore complex-lamina structures in oocytes and erythrocytes of *Xenopus laevis*.  
J. Mol. Biol. **151**, 121-141.
234. OLINS, A.L., OLINS, D.E., FRANKE, W.W., LIPPS, H.J., PRESCOTT, D.M., 1981.  
Stereo-electron microscopy of nuclear structure and replication in ciliated protozoa (Hypotricha).  
Eur. J. Cell Biol. **25**, 120-130.
235. RENNER, W., FRANKE, W.W., SCHMID, E., GEISLER, N., WEBER, K., MANDELKOW, E. 1981.  
Reconstitution of intermediate-sized filaments from denatured monomeric vimentin.  
J. Mol. Biol. **149**, 285-306.
236. SCHNITZER, J., FRANKE, W.W., SCHACHNER, M. 1981.  
Immunocytochemical demonstration of vimentin in astrocytes and ependymal cells of developing and adult mouse nervous system.  
J. Cell Biol. **90**, 435-447.
237. SPRING, H., FRANKE, W.W. 1981.  
Transcriptionally active chromatin in loops of lampbrush chromosomes at physiological salt concentrations as revealed by electron microscopy of sections.  
Eur. J. Cell Biol. **24**, 298-308.
238. VANDEKERCKHOVE, J., FRANKE, W.W., WEBER, K. 1981.  
Diversity of expression of non-muscle actin in amphibia.  
J. Mol. Biol. **152**, 413-426.
239. WILLIAMS, M.A., TRENDELENBURG, M.F., FRANKE, W.W. 1981.  
Patterns of transcriptional activity of nucleolar genes during progesterone-induced maturation of oocytes of *Xenopus laevis*.  
Differentiation **20**, 36-44.
240. ZENTGRAF, H., MÜLLER, U., SCHEER, U., FRANKE, W.W. 1981.  
Evidence for the existence of globular units in the supranucleosomal organization of chromatin.  
**In:** International Cell Biology (H.G. Schweiger, ed.) Springer-Verlag, Berlin; pp. 139-151.

## 1982

241. CROZE, E.M., MORRÉ, D.J., MORRÉ, D.M., KARTENBECK, J., FRANKE, W.W. 1982.  
Distribution of clathrin and spiny-coated vesicles on membranes within mature Golgi apparatus elements of mouse liver.  
Eur. J. Cell Biol. **28**, 130-138.
242. DABAUVALLE, M.-C., FRANKE, W.W., 1982.  
Karyophilic proteins: Polypeptides synthesized in vitro accumulate in the nucleus on microinjection into the cytoplasm of amphibian oocytes.  
Proc. Natl., Acad. Sci. USA **79**, 5302-5306.
243. DENK, H., FRANKE, W.W. 1982.  
Cytoskeletal filaments.  
**In:** The Liver: Biology and Pathobiology (H. Popper et al., eds.) Raven Press, New York; pp. 55-71.

244. DENK, H., KREPLER, R., LACKINGER, E., ARTLIEB, U., FRANKE, W.W. 1982.  
Immunological and biochemical characterization of the keratin-related component of Mallory bodies: A pathological pattern of hepatocytic cytokeratins.  
*Liver* **2**, 165-175.
245. DENK, H., KREPLER, R., LACKINGER, E., ARTLIEB, U., FRANKE, W.W. 1982.  
Biochemical and immunocytochemical analysis of the intermediate filament cytoskeleton in human hepatocellular carcinomas and in hepatic neoplastic nodules of mice.  
*Lab. Invest.* **46**, 584-596.
246. FRANKE, W.W., GRUND, C., KUHN, C., JACKSON, B.W., ILLMENSEE, K. 1982.  
Formation of cytoskeletal elements during mouse embryogenesis. III. Primary mesenchymal cells and the first appearance of vimentin filaments.  
*Differentiation* **23**, 43-59.
247. FRANKE, W.W., MOLL, R., SCHILLER, D.L., SCHMID, E., KARTENBECK, J., MÜLLER, H. 1982.  
Desmoplakins of epithelial and myocardial desmosomes are immunologically and biochemically related.  
*Differentiation* **23**, 115-127.
248. FRANKE, W.W., SCHILLER, D.L., GRUND, C. 1982.  
Protofilamentous and annular structures as intermediate during reconstitution of cytokeratin filaments *in vitro*.  
*Biol. Cell.* **46**, 257-268.
249. FRANKE, W.W., SCHMID, E., GRUND, C., GEIGER, B. 1982.  
Intermediate filament proteins in non-filamentous structures: Transient disintegration and inclusion of subunit proteins in granular aggregates.  
*Cell* **30**, 103-113.
250. FRANKE, W.W., SCHMID, E., SCHILLER, D.L., WINTER, S., JARASCH, E.-D., MOLL, R., DENK, H., JACKSON, B.W., ILLMENSEE, K. 1982.  
Differentiation-related patterns of expression of proteins of intermediate-size filaments in tissues and cultured cells.  
*Cold Spring Harb. Symp. Quant. Biol.* **46**, 431-453.
251. GABBIANI, G., RUNGGER-BRÄNDLE, E., DE CHASTONAY, FRANKE, W.W., 1982.  
Vimentin-containing smooth muscle cells in aortic intimal thickening after endothelial injury.  
*Lab. Invest.* **47**, 265-269.
252. GARRIGUES, H.J., TILGEN, W., HELLSTRÖM, I., FRANKE, W.W., HELLSTRÖM, K.E. 1982.  
Detection of a human melanoma-associated antigen, p97, in histological sections of primary human melanomas.  
*Int. J. Cancer* **29**, 511-515.
253. GIGI, O., GEIGER, B., ESHHAR, Z., MOLL, R., SCHMID, E., WINTER, S., SCHILLER, D.L., FRANKE, W.W. 1982.  
Detection of a cytokeratin determinant common to diverse epithelial cells by a broadly cross-reacting monoclonal antibody.  
*EMBO J.* **1**, 1429-1437.
254. KARTENBECK, J., SCHMID, E., FRANKE, W.W., GEIGER, B. 1982.  
Different modes of internalization of proteins associated with adherens junctions and desmosomes: experimental separation of lateral contacts induces endocytosis of desmosomal plaque material.  
*EMBO J.* **1**, 725-732.

255. KEENAN, T.W., HEID, H.W., STADLER, J., JARASCH, E.-D., FRANKE, W.W. 1982.  
Tight attachment of fatty acids to proteins associated with milk lipid globule membranes.  
*Eur. J. Cell Biol.* **26**, 270-276.
256. KLEINSCHMIDT, J.A., FRANKE, W.W. 1982.  
Soluble acidic complexes containing histones H3 and H4 in nuclei of *Xenopus laevis* oocytes.  
*Cell* **29**, 799-809.
257. KROHNE, G., STICK, R., HAUSEN, P., KLEINSCHMIDT, J.A., DABAUVALLE, M.-C.,  
FRANKE, W.W. 1982.  
The major karyoskeletal proteins of oocytes and erythrocytes of *Xenopus laevis*.  
**In:** *The Nuclear Envelope and the Nuclear Matrix*. Alan R. Liss, Inc., New York; pp. 135-144.
258. KROHNE, G., STICK, R., KLEINSCHMIDT, J.A., MOLL, R., FRANKE, W.W., HAUSEN, P.  
1982.  
Immunological localization of a major karyoskeletal protein in nucleoli of oocytes and somatic  
cells of *Xenopus laevis*.  
*J. Cell Biol.* **94**, 749-754.
259. MOLL, R., FRANKE, W.W. 1982.  
Intermediate filaments and their interaction with membranes.  
*Path. Res. Pract.* **175**, 146-161.
260. MOLL, R., VON BASSEWITZ, D.B., SCHULZ, U., FRANKE, W.W. 1982.  
An unusual type of cytokeratin filament in cells of a human cloacogenic carcinoma derived from  
the anorectal transition zone.  
*Differentiation* **22**, 25-40.
261. MOLL, R., FRANKE, W.W., SCHILLER, D., GEIGER, B., KREPLER, R. 1982  
The catalog of human cytokeratins: Patterns of expression in normal epithelia, tumors and cultured  
cells.  
*Cell* **31**, 11-24.
262. MOLL, R., FRANKE, W.W., VOLC-PLATZER, B., KREPLER, R. 1982.  
Different keratin polypeptides in epidermis and other epithelia of human skin: A specific  
cytokeratin of molecular weight 46,000 in epithelia of the pilosebaceous tract and basal cell  
epitheliomas.  
*J. Cell Biol.* **95**, 285-295.
263. MORENO DIAZ de la ESPINA, S., FRANKE, W.W., KROHNE, G., TRENDELENBURG, M.F.,  
GRUND, C., SCHEER, U. 1982.  
Medusoid fibril bodies: A novel type of nuclear filament of diameter 8 to 12 nm with periodic  
ultrastructure demonstrated in oocytes of *Xenopus laevis*.  
*Eur. J. Cell Biol.* **27**, 141-150.
264. QUINLAN, R.A., FRANKE, W.W. 1982.  
Heteropolymer filaments of vimentin and desmin in vascular smooth muscle tissue and cultured  
baby hamster kidney cells demonstrated by chemical crosslinking.  
*Proc. Natl. Acad. Sci. USA* **79**, 3452-3456.
265. SCHEER, U., KLEINSCHMIDT, J.A., FRANKE, W.W. 1982.  
Transcriptional and skeletal elements in nucleoli of amphibian oocytes.  
**In:** *The Nucleolus* (E.G. Jordan, C.A. Cullis, eds.) Cambridge University Press. pp. 25-42.
266. SCHILLER, D.L., FRANKE, W.W., GEIGER, B. 1982.  
A subfamily of relatively large and basic cytokeratin polypeptides as defined by peptide mapping  
is represented by one or several polypeptides in epithelial cells.  
*EMBO J.* **1**, 761-769.

267. SCHMID, E., OSBORN, M., RUNGGER-BRÄNDLE, E., GABBIANI, G., WEBER, K., FRANKE, W.W. 1982.  
Distribution of vimentin and desmin filaments in smooth muscle tissue of mammalian and avian aorta.  
Exp. Cell Res. **137**, 329-340.
268. WILLIAMS, M.A., KLEINSCHMIDT, J.A., KROHNE, G., FRANKE, W.W. 1982.  
Argyrophilic nuclear and nucleolar proteins of *Xenopus laevis* oocytes identified by gel electrophoresis.  
Exp. Cell Res. **137**, 341-351.

### **1983**

269. BACHMANN, S., KRIZ, W., KUHN, C., FRANKE, W.W. 1983.  
Differentiation of cell types in the mammalian kidney by immunofluorescence microscopy using antibodies to intermediate filament proteins and desmoplakins.  
Histochemistry **77**, 365-394.
270. DENK, H., KREPLER, R., ARTLIEB, U., GABBIANI, G., RUNGGER-BRÄNDLE, E., LEONCINI, P., FRANKE, W.W. 1983.  
Proteins of intermediate filaments. An immunohistochemical and biochemical approach to the classification of soft tissue tumors.  
Am. J. Pathol. **110**, 193-208.
271. FRANKE, W.W. 1983.  
Cytoskeletal architecture of epithelial cells: The desmosome-cytokeratin complex (abstract).  
**In:** Structural Carbohydrates in the Liver. Falk Symposium 34 (H. Popper et al., eds.) MTP Press Ltd., Boston; pp. 195-197.
272. FRANKE, W.W., QUINLAN, R.A. 1983.  
Intermediate filaments of the vascular wall.  
**In:** Atherosclerosis VI. Proceedings of the Sixth International Symposium (F.G. Schettler et al., eds.) Springer-Verlag, Berlin; pp. 390-394.
273. FRANKE, W.W., GRUND, C., JACKSON, B.W., ILLMENSEE, K. 1983.  
Formation of cytoskeletal elements during mouse embryogenesis. IV. Ultra-structure of primary mesenchymal cells and their cell-cell interactions.  
Differentiation **25**, 121-141.
274. FRANKE, W.W., KAPPRELL, H.-P., MÜLLER, H. 1983.  
Isolation and symmetrical splitting of desmosomal structures in 9 M urea.  
Eur. J. Cell Biol. **32**, 117-130.
275. FRANKE, W.W., MOLL, R., MÜLLER, H., SCHMID, E., KUHN, C., KREPLER, R., ARTLIEB, U., DENK, H. 1983.  
Immunocytochemical identification of epithelium-derived human tumors with antibodies to desmosomal plaque proteins.  
Proc. Natl. Acad. Sci. USA **80**, 543-547.
276. FRANKE, W.W., MUELLER, H., MITTNACHT, S., KAPPRELL, H.-P., JORCANO, J.L. 1983.  
Significance of two desmosome plaque-associated polypeptides of molecular weights 75,000 and 83,000.  
EMBO J. **2**, 2211-2215.



277. FRANKE, W.W., SCHILLER, D.L., HATZFELD, M., WINTER, S. 1983.  
Protein complexes of intermediate-sized filaments: Melting of cytokeratin complexes in urea reveals different polypeptide separation characteristics.  
Proc. Natl. Acad. Sci. USA **80**, 7113-7117.
278. FRANKE, W.W., SCHMID, E., MOLL, R. 1983.  
The intermediate filament cytoskeleton in tissues and in cultured cells: Differentiation specificity of expression of cell architectural elements.  
**In:** Human Carcinogenesis (C.C. Harris, H.N. Autrup, eds.) Academic Press, New York; pp. 3-34.
279. FRANKE, W.W., SCHMID, E., WELLSTEED, J., GRUND, C., GIGI, O., GEIGER, B. 1983.  
Change of cytokeratin filament organization during the cell cycle: Selective masking of an immunologic determinant in interphase PtK<sub>2</sub> cells.  
J. Cell Biol. **97**, 1255-1260.
280. FRANZ, J.K., GALL, L., WILLIAMS, M.A., PICHERAL, B., FRANKE, W.W. 1983.  
Intermediate-size filaments in germ cells: Expression of cytokeratins in oocytes and eggs of the frog *Xenopus*.  
Proc. Natl. Acad. Sci. USA **80**, 6254-6258.
281. GEIGER, B., SCHMID, E., FRANKE, W.W. 1983.  
Spatial distribution of proteins specific for desmosomes and adherens junctions in epithelial cells demonstrated by double immunofluorescence microscopy.  
Differentiation **23**, 189-205.
282. HÜGLE, B., KLEINSCHMIDT, J.A., FRANKE, W.W. 1983.  
The 22 S cylinder particles of *Xenopus laevis*. II. Immunological characterization and localization of their proteins in tissues and cultured cells.  
Eur. J. Cell Biol. **32**, 157-163.
283. KARTENBECK, J., FRANKE, W.W., MOSER, J.G., STOFFELS, U. 1983.  
Specific attachment of desmin filaments to desmosomal plaques in cardiac myocytes.  
EMBO J. **2**, 735-742.
284. KLEINSCHMIDT, J.A., HÜGLE, B., GRUND, C., FRANKE, W.W. 1983.  
The 22 S cylinder particles of *Xenopus laevis*. I. Biochemical and electron microscopic characterization.  
Eur. J. Cell Biol. **32**, 143-156.
285. KLEINSCHMIDT, J.A., SCHEER, U., DABAUVALLE, M.-C., BUSTIN, M., FRANKE, W.W. 1983.  
High mobility group proteins of amphibian oocytes: A large storage pool of a soluble high mobility group-1-like protein and involvement in transcriptional events.  
J. Cell Biol. **97**, 838-848.
286. KREIS, T.E., GEIGER, B., SCHMID, E., JORCANO, J.-L., FRANKE, W.W. 1983.  
De novo synthesis and specific assembly of keratin filaments in nonepithelial cells after microinjection of mRNA for epidermal keratin.  
Cell **32**, 1125-1137.
287. KROHNE, G., FRANKE, W.W. 1983.  
Proteins of pore complex-lamina structures from nuclei and nuclear membranes.  
**In:** Methods in Enzymology. Vol. **96** (S. Fleischer, B. Fleischer, eds.) Academic Press, New York; pp. 597-608.
288. MAGIN, T.M., JORCANO, J.L., FRANKE, W.W. 1983.  
Translational products of mRNAs coding for non-epidermal cytokeratins.  
EMBO J. **2**, 1387-1392.

289. MOLL, R., KREPLER, R., FRANKE, W.W. 1983.  
Complex cytokeratin polypeptide patterns observed in certain human carcinomas.  
*Differentiation* **23**, 256-269.
290. MOLL, R., LEVY, R., CZERNOBILSKY, B., HOHLWEG-MAJERT, P., DALLENBACH-HELLWEG, G., FRANKE, W.W. 1983.  
Cytokeratins of normal epithelia and some neoplasms of the female genital tract.  
*Lab. Invest.* **49**, 599-610.
291. MUELLER, H., FRANKE, W.W. 1983.  
Biochemical and immunological characterization of desmoplakins I and II, the major polypeptides of the desmosomal plaque.  
*J. Mol. Biol.* **163**, 647-671.
292. OCHS, B.A., FRANKE, W.W., MOLL, R., GRUND, C., CREMER, M., CREMER, T. 1983.  
Epithelial character and morphologic diversity of cell cultures from human amniotic fluids examined by immunofluorescence microscopy and gel electrophoresis of cytoskeletal proteins.  
*Differentiation* **24**, 153-173.
293. QUINLAN, R.A., FRANKE, W.W. 1983.  
Molecular interactions in intermediate-sized filaments revealed by chemical cross-linking. Heteropolymers of vimentin and glial filament protein in cultured human glioma cells.  
*Eur. J. Biochem.* **132**, 477-484.
294. SCHEER, U., LANFRANCHI, G., ROSE, K.M., FRANKE, W.W., RINGERTZ, N.R. 1983.  
Migration of rat RNA polymerase I into chick erythrocyte nuclei undergoing reactivation in chick-rat heterokaryons.  
*J. Cell Biol.* **97**, 1641-1643.
295. SCHILLER, D.L., FRANKE, W.W. 1983.  
Limited proteolysis of cytokeratin A by an endogenous protease: Removal of positively charged terminal sequences.  
*Cell Biol. Int. Rep.* **7**, 3.
296. SCHMID, E., FRANKE, W.W., GRUND, C., SCHILLER, D.L., KOLB, H., PAWELETZ, N. 1983.  
An epithelial cell line with elongated myoid morphology derived from bovine mammary gland. Expression of cytokeratins and desmosomal plaque proteins in unusual arrays.  
*Exp. Cell Res.* **146**, 309-328.
297. SCHMID, E., SCHILLER, D.L., GRUND, C., STADLER, J., FRANKE, W.W. 1983.  
Tissue type-specific expression of intermediate filament proteins in a cultured epithelial cell line from bovine mammary gland.  
*J. Cell Biol.* **96**, 37-50.
298. SCHWECHHEIMER, K., KARTENBECK, J., MOLL, R., FRANKE, W.W. 1983.  
Immunologische und biochemische Charakterisierung des Zytoskeletts menschlicher Meningiome.  
*Verh. Dtsch. Ges. Path.* **67**, 695.
299. VENETIANER, A., SCHILLER, D.L., MAGIN, T., FRANKE, W.W. 1983.  
Cessation of cytokeratin expression in a rat hepatoma cell line lacking differentiated functions.  
*Nature* **305**, 730-733.

**1984**

300. BENAVENTE, R., KROHNE, G., SCHMIDT-ZACHMANN, M.S., HÜGLE, B., FRANKE, W.W. 1984.  
Karyoskeletal proteins and the organization of the amphibian oocyte nucleus.  
J. Cell Sci., Suppl **1**, 161-186.
301. BENAVENTE, R., KROHNE, G., STICK, R., FRANKE, W.W. 1984.  
Electron microscopic immunolocalization of a karyoskeletal protein of molecular weight 145 000 in nucleoli and perinucleolar bodies of *Xenopus laevis*.  
Exp. Cell Res. **151**, 224-235.
302. BLOBEL, G.A., MOLL, R., FRANKE, W.W., VOGT-MOYKOPF, I. 1984.  
Cytokeratins in normal lung and lung carcinomas: I. Adenocarcinomas, squamous cell carcinomas and cultured cell lines.  
Virchows Arch. (Cell Pathol.) **45**, 407-429.
303. CZERNOBILSKY, B., MOLL, R., FRANKE, W.W., DALLENBACH-HELLWEG, G., HOHLWEG-MAJERT, P. 1984.  
Intermediate filaments of normal and neoplastic tissues of the female genital tract with emphasis on problems of differential tumor diagnosis.  
Path. Res. Pract. **179**, 31-37.
304. DABAUVALLE, M.-C., FRANKE, W.W. 1984.  
Karyophobic proteins. A category of abundant soluble proteins which accumulate in the cytoplasm.  
Exp. Cell Res. **153**, 308-326.
305. DEBUS, E., MOLL, R., FRANKE, W.W., WEBER, K., OSBORN, M. 1984.  
Immunohistochemical distinction of human carcinomas by cytokeratin typing with monoclonal antibodies.  
Am. J. Pathol **114**, 121-130.
306. FRANKE, W.W., GRUND, C., KUHN, C., LEHTO, V.-P., VIRTANEN, I. 1984.  
Transient change of organization of vimentin filaments during mitosis as demonstrated by a monoclonal antibody.  
Exp. Cell Res. **154**, 567-580.
307. FRANKE, W.W., SCHEER, U., ZENTGRAF, H., 1984.  
Organization of transcriptionally active and inactive chromatin.  
Ber. Deutsch. Bot. Ges. **97**, 315-326.
308. FRANKE, W.W., SCHILLER, D.L., HATZFELD, M., MAGIN, T.M., JORCANO, J.L., MITTNACHT, S., SCHMID, E., COHLBERG, J.A., QUINLAN, R.A. 1984.  
Cytokeratins: Complex formation, biosynthesis, and interactions with desmosomes.  
**In:** Cancer Cells 1, The Transformed Phenotype (A.J. Levine, G.F. Vande Woude, W.C. Topp, J.D. Watson, eds.) Cold Spring Harbor Laboratory, Cold Spring Harbor; pp. 177-190.
309. FRANKE, W.W., SCHMID, E., MITTNACHT, S., GRUND, C., JORCANO, J.L. 1984.  
Integration of different keratins into the same filament system after microinjection of mRNA for epidermal keratins into kidney epithelial cells.  
Cell **36**, 813-825.
310. GEIGER, B., KREIS, T.E., GIGI, O., SCHMID, E., MITTNACHT, S., JORCANO, J.L., von BASSEWITZ, D.B., FRANKE, W.W. 1984.  
Dynamic rearrangements of cytokeratins in living cells.  
**In:** Cancer Cells 1, The Transformed Phenotype (A.J. Levine, G.F. Vande Woude, W.C. Topp, J.D. Watson, eds.) Cold Spring Harbor Laboratory, Cold Spring Harbor, pp. 201-215.

311. JORCANO, J.L., FRANZ, J.K., FRANKE, W.W., 1984.  
Amino acid sequence diversity between bovine epidermal cytokeratin polypeptides of the basic (type II) subfamily as determined from cDNA clones.  
*Differentiation* **28**, 155-163.
312. JORCANO, J.L., FRANZ, J.K., RIEGER, M., MAGIN, T.M., FRANKE, W.W. 1984.  
Identification of different types of keratin polypeptides distinguished within the acidic cytokeratin subfamily: Corresponding cytokeratins in diverse species.  
**In:** *Molecular Biology of the Cytoskeleton* (G.G. Borisy et al., eds.) Cold Spring Harbor Laboratory, Cold Spring Harbor; pp. 395-408.
313. JORCANO, J.L., MAGIN, T.M., FRANKE, W.W. 1984.  
Cell type-specific expression of bovine keratin genes as demonstrated by the use of complementary DNA clones.  
*J. Mol. Biol.* **176**, 21-37.
314. JORCANO, J.L., RIEGER, M., FRANZ, J.K., SCHILLER, D.L., MOLL, R., FRANKE, W.W. 1984.  
Identification of two types of keratin polypeptides within the acidic cytokeratin subfamily I.  
*J. Mol. Biol.* **179**, 257-281.
315. KARTENBECK, J., SCHWECHHEIMER, K., MOLL, R., FRANKE, W.W., 1984.  
Attachment of vimentin filaments to desmosomal plaques in human meningioma cells and arachnoidal tissue.  
*J. Cell Biol.* **98**, 1072-1081.
316. KROHNE, G., DEBUS, E., OSBORN, M., WEBER, K., FRANKE, W.W. 1984.  
A monoclonal antibody against nuclear lamina proteins reveals cell type-specificity in *Xenopus laevis*.  
*Exp. Cell Res.* **150**, 47-59.
317. LEHNERT, M.E., JORCANO, J.L., ZENTGRAF, H., BLESSING, M., FRANZ, J.K., FRANKE, W.W. 1984.  
Characterization of bovine keratin genes: Similarities of exon patterns in genes coding for different keratins.  
*EMBO J.* **3**, 3279-3287.
318. MOLL, R., FRANKE, W.W. 1984.  
Cytokeratins and desmoplakins: Cytoskeletal proteins characteristic of epithelial and carcinoma cells.  
*J. Submicrosc. Cytol.* **16**, 75-76.
319. MOLL, R., MOLL, I., FRANKE, W.W. 1984.  
Differences of expression of cytokeratin polypeptides in various epithelial skin tumors.  
*Arch. Dermatol. Res.* **276**, 349-363.
320. MOLL, R., MOLL, I., FRANKE, W.W. 1984.  
Identification of Merkel cells in human skin by specific cytokeratin antibodies: Changes of cell density and distribution in fetal and adult plantar epidermis.  
*Differentiation* **28**, 136-154.
321. QUINLAN, R.A., COHLBERG, J.A., SCHILLER, D.L., HATZFELD, M., FRANKE, W.W. 1984.  
Heterotypic tetramer (A<sub>2</sub>D<sub>2</sub>) complexes of non-epidermal keratins isolated from cytoskeletons of rat hepatocytes and hepatoma cells.  
*J. Mol. Biol.* **178**, 265-288.

322. SCHEER, U., HINSSEN, H., FRANKE, W.W., JOCKUSCH, B.M. 1984.  
Microinjection of actin-binding proteins and actin antibodies demonstrates involvement of nuclear actin in transcription of lampbrush chromosomes.  
Cell **39**, 111-122.
323. SCHMIDT-ZACHMANN, M.S., HÜGLE, B., SCHEER, U., FRANKE, W.W. 1984.  
Identification and localization of a novel nucleolar protein of high molecular weight by a monoclonal antibody.  
Exp. Cell Res. **153**, 327-346.
324. SCHWECHHEIMER K., KARTENBECK, J., MOLL, R., FRANKE, W.W. 1984.  
Vimentin filament-desmosome cytoskeleton of diverse types of human meningiomas. A distinctive diagnostic feature.  
Lab. Invest. **51**, 584-591.
325. ZENTGRAF, H., FRANKE, W.W. 1984.  
Differences of supranucleosomal organization in different kinds of chromatin: Cell type-specific globular subunits containing different numbers of nucleosomes.  
J. Cell Biol. **99**, 272-286.

## **1985**

326. ACHTSTÄTTER, T., MOLL, R., MOORE, B., FRANKE, W.W. 1985.  
Cytokeratin polypeptide patterns of different epithelia of the human male urogenital tract: Immunofluorescence and gel electrophoretic studies.  
J. Histochem. Cytochem. **33**, 415-426.
327. BENAVENTE, R., KROHNE, G., FRANKE, W.W. 1985.  
Cell type-specific expression of nuclear lamina proteins during development of *Xenopus laevis*.  
Cell **41**, 177-190.
328. BLOBEL, G.A., GOULD, V.E., MOLL, R., LEE, I., HUSZAR, M., GEIGER, B., FRANKE, W.W. 1985.  
Coexpression of neuroendocrine markers and epithelial cytoskeletal proteins in bronchopulmonary neuroendocrine neoplasms.  
Lab. Invest. **52**, 39-51.
329. BLOBEL, G.A., MOLL, R., FRANKE, W.W., KAYSER, K.W., GOULD, V.E. 1985.  
The intermediate filament cytoskeleton of malignant mesotheliomas and its diagnostic significance.  
Am. J. Pathol. **121**, 235-247.
330. COWIN, P., FRANKE, W.W., GRUND, C., KAPPRELL, H.-P., KARTENBECK, J. 1985.  
The desmosome-intermediate filament complex.  
**In:** The Cell in Contact. (G.M. Edelman, J.-P. Thiery, eds.) John Wiley & Sons, New York; pp. 427-460.
331. COWIN, P., KAPPRELL, H.-P., FRANKE, W.W. 1985.  
The complement of desmosomal plaque proteins in different cell types.  
J. Cell Biol. **101**, 1442-1454.
332. CZERNOBILSKY, H., CZERNOBILSKY, B., SCHNEIDER, H.G., FRANKE, W.W., ZIEGLER, R. 1985.  
Characterization of a feminizing testicular Leydig cell tumor by hormonal profile, immunocytochemistry, and tissue culture.  
Cancer **56**, 1667-1676.

333. CZERNOBILSKY, B., MOLL, R., LEVY, R., FRANKE, W.W. 1985.  
Co-expression of cytokeratin and vimentin filaments in mesothelial, granulosa and rete ovarii cells of the human ovary.  
*Eur. J. Cell Biol.* **37**, 175-190.
334. DENK, H., HAZAN, R., LACKINGER, E., SCHILLER, D.L., FRANKE, W.W. 1985.  
Studies on the development of Mallory bodies.  
**In:** Trends in Hepatology (L. Bianchi et al., eds.) MTP Press Ltd., Boston, USA; pp. 175-178
335. DENK, H., LACKINGER, E., COWIN, P., FRANKE, W.W. 1985.  
Maintenance of desmosomes in mouse hepatocytes after drug-induced rearrangement of cytokeratin filament material.  
*Exp. Cell. Res.* **161**, 161-171.
336. DENK, H., WEYBORA, W., RATSCHKE, M., SOHAR, R., FRANKE, W.W. 1985.  
Distribution of vimentin, cytokeratins, and desmosomal-plaque proteins in human nephroblastoma as revealed by specific antibodies: Co-existence of cell groups of different degrees of epithelial differentiation.  
*Differentiation* **29**, 88-97.
337. FRANKE, W.W., QUINLAN, R.A. 1985.  
The intermediate filament-desmosome cytoskeleton complex.  
**In:** Hormones and Cell Regulation. Vol. **9**, INSERM European Symposium (J.E. Dumont et al., eds.) Elsevier Science Publishers, Netherlands; pp. 123-134.
338. FRANKE, W.W., QUINLAN, R.A. 1985.  
Intermediate filament diversity as detected by antibodies.  
**In:** Investigation and Exploitation of Antibody Combining Sites. (E. Reid et al., eds.) Plenum Press, New York, pp. 223-226.
339. FRANKE, W.W., KAPPRELL, H.-P., COWIN, P. 1985.  
The desmosomal domain, an example of cell-cell as well as membrane-cytoskeleton interaction.  
**In:** Cellular and Molecular Control of Direct Cell Interactions. (H.J. Marthy, ed.) Plenum Publishing Corp.; pp. 315-318.
340. GOULD, V.E., MOLL, R., MOLL, I., LEE, I., FRANKE, W.W. 1985.  
Biology of disease. Neuroendocrine (Merkel) cells of the skin: Hyperplasias, dysplasias, and neoplasms.  
*Lab. Invest.* **52**, 334-353.
341. HATZFELD, M., FRANKE, W.W. 1985.  
Pair formation and promiscuity of cytokeratins: Formation in vitro of heterotypic complexes and intermediate-sized filaments by homologous and heterologous recombinations of purified polypeptides.  
*J. Cell Biol.* **101**, 1826-1841.
342. HOFFMAN, W., FRANZ, J.K., FRANKE, W.W. 1985.  
Amino acid sequence microheterogeneities of basic (type II) cytokeratins of *Xenopus laevis* epidermis and evolutionary conservativity of helical and non-helical domains.  
*J. Mol. Biol.* **184**, 713-724.
343. HÜGGE, B., HAZAN, R., SCHEER, U., FRANKE, W.W. 1985.  
Localization of ribosomal protein S1 in the granular component of the interphase nucleolus and its distribution during mitosis.  
*J. Cell Biol.* **100**, 873-886.

344. HÜGLE, B., SCHEER, U., FRANKE, W.W. 1985.  
Ribocharin: A nuclear  $M_r$  40,000 protein specific to precursor particles of the large ribosomal subunit.  
*Cell* **41**, 615-627.
345. KAPPRELL, H.-P., COWIN, P., FRANKE, W.W., PONSTINGL, H., OPFERKUCH, H.J. 1985.  
Biochemical characterization of desmosomal proteins isolated from bovine muzzle epidermis: amino acid and carbohydrate composition.  
*Eur. J. Cell Biol* **36**, 217-229.
346. KLEINSCHMIDT, J.A., FORTKAMP, E., KROHNE, G., ZENTGRAF, H., FRANKE, W.W. 1985.  
Co-existence of two different types of soluble histone complexes in nuclei of *Xenopus laevis* oocytes.  
*J. Biol. Chem.* **260**, 1166-1176.
347. LEE, I., FRANKE, W.W., GOULD, V. 1985.  
Immunohistochemistry of neuroendocrine neoplasms of the bronchopulmonary tract and skin.  
**In:** Immunocytochemistry in Tumor Diagnosis (J. Russo, ed.), Nijhoff Publishing, Boston; pp. 174-182.
348. MOLL, R., FRANKE, W.W. 1985.  
Cytoskeletal differences between human neuroendocrine tumors: A cytoskeletal protein of molecular weight 46,000 distinguishes cutaneous from pulmonary neuroendocrine neoplasms.  
*Differentiation* **30**, 165-175.
349. MOLL, R., G.A. BLOBEL, FRANKE, W.W. 1985.  
Cytoskelett-Proteine in der Diagnostik der Bronchialkarzinome.  
**In:** Bronchialkarzinom (P. Drings, et al., eds.) Zuckschwerdt-Verlag, München, Bern, Wien; pp. 81-92.
350. MOLL, R., LEVY, R., CZERNOBILSKY, B., HOHLWEG-MAJERT, P., DALLENBACH-HELLWEG, G., FRANKE, W.W. 1985.  
Cytokeratins of normal epithelia and some neoplasms of the female genital tract.  
**In:** The Year Book of Cancer 1985. (R.C. Hickey et al., eds.) Year Book Medical Publishers Inc., Chicago; pp. 214-215.
351. NAGLE, R.B., MOLL, R., WEIDAUER, H., NEMETSCHKEK, H., FRANKE, W.W. 1985.  
Different patterns of cytokeratin expression in the normal epithelia of the upper respiratory tract.  
*Differentiation* **30**, 130-140.
352. OTTO, H.F., WEIDAUER, H., MÖLLER, P., NEMETSCHKEK-GANSLER, H., FRANKE, W.W., de VILLIERS, E.-M., BRAUN, R.W. 1985.  
Kaposi-Sarkom bei erworbenem Immundefekt-Syndrom (AIDS) Teil II: Lichtelektronenmikroskopische und immunhistochemische Besonderheiten einschließlich Cytoskelett.  
*Laryng. Rhinol. Otol.* **64**, 481-488.
353. OUHAYOUN, J.-P., GOSSELIN, F., FOREST, N., WINTER, S., FRANKE, W.W. 1985.  
Cytokeratin patterns of human oral epithelia: Differences in cytokeratin synthesis in gingival epithelium and the adjacent alveolar mucosa.  
*Differentiation* **20**, 123-129.
354. QUINLAN, R.A., SCHILLER, D.L., HATZFELD, M., ACHTSTÄTTER, T., MOLL, R., JORCANO, J.L. MAGIN, T.M., FRANKE, W.W. 1985.  
Patterns of expression and organization of cytokeratin intermediate filaments.  
**In:** Intermediate Filaments. *Annals New York Acad. Sci.* Vol. **455** (E. Wang, D. Fischman, R.K.H. Liem, T.-T. Sun, eds.) The New York Acad. Sci., New York; 282-306.

355. REGAUER, S., FRANKE, W.W., VIRTANEN, I. 1985.  
Intermediate filament cytoskeleton of amnion epithelium and cultured amnion epithelial cells: Expression of epidermal cytokeratins in cells of a simple epithelium.  
J. Cell Biol. **100**, 997-1009.
356. RIEGER, M., JORCANO, J.L., FRANKE, W.W. 1985.  
Complete sequence of a bovine type I cytokeratin gene: conserved and variable intron positions in genes of polypeptides of the same cytokeratin subfamily.  
EMBO J. **4**, 2261-2267.
357. SOELLNER, P., QUINLAN, R.A., FRANKE, W.W. 1985.  
Identification of a distinct soluble subunit of an intermediate filament protein: Tetrameric vimentin from living cells.  
Proc. Natl. Acad. Sci. USA **82**, 7929-7933.
358. THORNELL, L.-E., ERIKSSON, A., JOHANSSON, B., KJÖRELL, U., FRANKE, W.W., VIRTANEN, I., LEHTO, V.-P. 1985.  
Intermediate filament and associated proteins in heart Purkinje fibers: A membrane-myofibril anchored cytoskeletal system.  
**In:** Intermediate Filaments. Annals New York Acad. Sci. Vol. **455** (E. Wang, D. Fischman, R.K.H. Liem, T.-T. Sun, eds.) The New York Acad. Sci., New York; 213-240.
359. WIEDENMANN, B., FRANKE, W.W. 1985.  
Identification and localization of synaptophysin, an integral membrane glycoprotein of M<sub>r</sub> 38,000 characteristic of presynaptic vesicles.  
Cell **41**, 1017-1028.

## **1986**

360. ACHTSTAETTER, T., HATZFELD, M., QUINLAN, R.A., PARMELEE, D.C., FRANKE, W.W. 1986.  
Separation of cytokeratin polypeptides by gel electrophoretic and chromatographic techniques and their identification by immunoblotting.  
Meth. Enzymol. **134**, 355-371.
361. ACHTSTÄTTER, T., MOLL, R., ANDERSON, A., KUHN, C., PITZ, S., SCHWECHHEIMER, K., FRANKE, W.W. 1986.  
Expression of glial filament protein (GFP) in nerve sheaths and non-neural cells re-examined using monoclonal antibodies, with special emphasis on the co-expression of GFP and cytokeratins in epithelial cells of human salivary gland and pleomorphic adenomas.  
Differentiation **31**, 206-227.
362. BADER, B.L., MAGIN, T.M., HATZFELD, M., FRANKE, W.W. 1986.  
Amino acid sequence and gene organization of cytokeratin no. 19, an exceptional tailless intermediate filament protein: Change in protein conformation corresponds to presence of a landmark intron.  
EMBO J. **5**, 1865-1875.
363. COWIN, P., KAPPRELL, H.-P., FRANKE, W.W., TAMKUN, J., HYNES, R.O. 1986.  
Plakoglobin: A protein common to different kinds of intercellular adhering junctions.  
Cell **46**, 1063-1073.
364. DABAUVALLE, M.-C., FRANKE, W.W. 1986.  
Determination of the intracellular state of soluble macromolecules by gel filtration *in vivo* in the cytoplasm of amphibian oocytes.  
J. Cell Biol. **102**, 2006-2014.



365. DENK, H., KREPLER, R., ARTLIEB, U., GABBIANI, G., RUNGGER-BRÄNDLE, E., LEONCINI, P., FRANKE, W.W. 1986.  
Proteins of intermediate filaments. An immunohistochemical and biochemical approach to the classification of soft tissue tumors.  
Am. J. Pathol. **110**, 193-208.
366. EBERLEIN-GONSKA, M., WALDHERR, R., SCHWECHHEIMER, K., WIEDENMANN, B., FRANKE, W.W. 1986.  
Synaptophysin - ein Markerprotein peripherer neuroendokriner Tumoren  
Verh. Dtsch. Ges. Path. **70**, 589.
367. FRANKE, W.W., GRUND, C., ACHTSTÄTTER, T., 1986.  
Co-expression of cytokeratins and neurofilament proteins in a permanent cell line: Cultured rat PC12 cells combine neuronal and epithelial features.  
J. Cell Biol. **103**, 1933-1943.
368. FRANKE, W.W., MOLL, R., ACHTSTÄTTER, T., KUHN, C. 1986.  
Cell typing of epithelia and carcinomas of the female genital tract using cytoskeletal proteins as markers.  
**In:** Viral Etiology of Cervical Cancer (Banbury Report **21**) Cold Spring Harbor Laboratory, Cold Spring Harbor; pp. 121-148.
369. FRANZ, J.K., FRANKE, W.W. 1986.  
Cloning of cDNA and amino acid sequence of a cytokeratin expressed in oocytes of *Xenopus laevis*.  
Proc. Natl. Acad. Sci. USA **83**, 6475-6479.
370. GOULD, V.E., LEE, I., WIEDENMANN, B., MOLL, R., CHEJFEC, G., FRANKE, W.W. 1986.  
Synaptophysin: A novel marker for neurons, certain neuroendocrine cells and their neoplasms.  
Hum. Pathol. **17**, 979-983.
371. GOULD, V.E., MOLL, R., MOLL, I., LEE, I., SCHWECHHEIMER, K., FRANKE, W.W. 1986.  
The intermediate filament complement of the spectrum of nerve sheath neoplasms.  
Lab. Invest. **55**, 463-474.
372. HAZAN, R., DENK, H., FRANKE, W.W., LACKINGER, E., SCHILLER, D.L. 1986.  
Change of cytokeratin organization during development of Mallory bodies as revealed by a monoclonal antibody.  
Lab. Invest. **54**, 543-553.
373. HEID, H.W., WERNER, E., FRANKE, W.W. 1986.  
The complement of native  $\alpha$ -keratin polypeptides of hair-forming cells: A subset of eight polypeptides that differ from epithelial cytokeratins.  
Differentiation **32**, 101-119.
374. HUSZAR, M., GIGI-LEITNER, O., MOLL, R., FRANKE, W.W., GEIGER, B. 1986.  
Monoclonal antibodies to various acidic (type I) cytokeratins of stratified epithelia. Selective markers for stratification on squamous cell carcinomas.  
Differentiation **31**, 141-153.
375. KLEINSCHMIDT, J.A., DINGWALL, C., MAIER, G., FRANKE, W.W. 1986.  
Molecular characterization of a karyophilic, histone-binding protein: cDNA cloning, amino acid sequence and expression of nuclear protein N1/N2 of *Xenopus laevis*.  
EMBO J. **5**, 3547-3552.

376. KNAPP, A.C., FRANKE, W.W., HEID, H., HATZFELD, M., JORCANO, J.L., MOLL, R. 1986.  
Cytokeratin no. 9, an epidermal type I keratin characteristic of a special program of keratinocyte differentiation displaying body site specificity.  
*J. Cell Biol.* **103**, 657-667.
377. LEE, I., BLOBEL, G.A., FRANKE, W.W., GOULD, V.E. 1986.  
Bronchopulmonary carcinoid coexpressing neuroendocrine markers and cytokeratin.  
*Ultrastruct. Pathol.* **9**, 331-336.
378. LEUBE, R.E., BOSCH, F.X., ROMANO, V., ZIMBELMANN, R., HÖFLER, H., FRANKE, W.W. 1986.  
Cytokeratin expression in simple epithelia. III. Detection of mRNAs encoding human cytokeratins nos. 8 and 18 in normal and tumor cells by hybridization with cDNA sequences *in vitro* and *in situ*.  
*Differentiation* **33**, 69-85.
379. MAGIN, T.M., JORCANO, J.L., FRANKE, W.W. 1986.  
Cytokeratin expression in simple epithelia. II. cDNA cloning and sequence characteristics of bovine cytokeratin A (no. 8).  
*Differentiation* **30**, 254-264.
380. MOLL, I., MOLL, R., FRANKE, W.W. 1986.  
Formation of epidermal and dermal Merkel cells during human fetal skin development.  
*J. Invest. Dermatol.* **87**, 779-787.
381. MOLL, R., FRANKE, W.W. 1986.  
Cytochemical cell typing of metastatic tumors according to their cytoskeletal proteins.  
**In:** *Biochemistry and Molecular Genetics of Cancer Metastasis*. (K. Lapis, L.A. Liotta, A.S. Rabson, eds.) M. Nijhoff Publishing, Boston; pp. 101-114.
382. MOLL, R., BLOBEL, G.A., FRANKE, W.W. 1986.  
Zytoskelett-Proteine in der Diagnostik der Bronchialkarzinome.  
**In:** *Bronchialkarzinom. Aktuelle Onkologie* **26** (P. Drings et al., eds.) Zuckschwerdt-Verlag, München; pp. 81-92.
383. MOLL, R., COWIN, P., KAPPRELL, H.-P., FRANKE, W.W. 1986.  
Biology of disease. Desmosomal proteins: New markers for identification and classification of tumors.  
*Lab. Invest.* **54**, 4-25.
384. MOLL, R., MOLL, I., FRANKE, W.W. 1986.  
Intermediärfilamente als Kriterium bei der Diagnostik von Hauttumoren.  
*Pathologie* **7**, 164-174.
385. QUINLAN, R.A., HATZFELD, M., FRANKE, W.W., LUSTIG, A., SCHULTHESS, T., ENGEL, J. 1986.  
Characterization of dimer subunits of intermediate filament proteins.  
*J. Mol. Biol.* **192**, 337-349.
386. ROMANO, V., HATZFELD, M., MAGIN, T.M., ZIMBELMANN, R., FRANKE, W.W. MAIER, G., PONSTINGL, H. 1986.  
Cytokeratin expression in simple epithelia. I. Identification of mRNA coding for human cytokeratin no. 18 by a cDNA clone.  
*Differentiation* **30**, 244-253.

387. SCHMELZ, M., DUDEN, R., COWIN, P., FRANKE, W.W. 1986.  
A constitutive transmembrane glycoprotein of  $M_r$  165,000 (desmoglein) in epidermal and non-epidermal desmosomes: I. Biochemical identification of the polypeptide.  
*Eur. J. Cell Biol.* **42**, 177-183.
388. SCHMELZ, M., DUDEN, R., COWIN, P., FRANKE, W.W. 1986.  
A constitutive transmembrane glycoprotein of  $M_r$  165,000 (desmoglein) in epidermal and non-epidermal desmosomes: II. Immunolocalization and microinjection studies.  
*Eur. J. Cell Biol.* **42**, 184-199.
389. SCHRÖDER, S., DOCKHORN-DWORNICZAK, KASTENDIECK, H., BÖCKER, W.,  
FRANKE, W.W. 1986.  
Intermediate-filament expression in thyroid gland carcinomas.  
*Virchows Arch. (Pathol. Anat.)* **409**, 751-766.
390. VAN MUIJEN, G.N.P., RUITER, D.J., FRANKE, W.W., ACHTSTÄTTER, T., HAASNOOT,  
W.H.B., PONEC, M., WARNAAR, S.O. 1986.  
Cell type heterogeneity of cytokeratin expression in complex epithelia and carcinomas as  
demonstrated by monoclonal antibodies specific for cytokeratins nos. 4 and 13.  
*Exp. Cell Res.* **162**, 97-113.
391. VOLBERG, T., GEIGER, B., KARTENBECK, J., FRANKE, W.W. 1986.  
Changes of membrane-microfilament interaction in intercellular adherens junctions upon removal  
of extracellular  $Ca^{2+}$  ions.  
*J. Cell Biol.* **192**, 1832-1842.
392. WEIDAUER, H., NAGLE, R.B., MOLL, R., FRANKE, W.W. 1986.  
Die Zytokeratin-Expression des normalen und malignen Zungenepithels.  
*Laryng. Rhinol. Otol.* **65**, 164-168.
393. WIEDENMANN, B., FRANKE, W.W., KUHN, C., MOLL, R., GOULD, V.E. 1986.  
Synaptophysin: A marker protein for neuroendocrine cells and neoplasms.  
*Proc. Natl. Acad. Sci. USA* **83**, 3500-3504.

## **1987**

394. CHEJFEC, G., FALKMER, S., GRIMELIUS, L., JACOBSSON, B., RODENSIÖ, M.,  
WIEDENMANN, B., FRANKE, W.W., LEE, I., GOULD, V.E. 1987.  
Synaptophysin. A new marker for pancreatic neuroendocrine tumors.  
*Am. J. Surg. Pathol.* **11**, 241-247.
395. CZERNOBILSKY, B., MOLL, R., LEPIEN, G., SCHWEIKHART, G., FRANKE, W.W. 1987.  
Desmosomal plaque-associated vimentin filaments in human ovarian granulosa cell tumors of  
various histologic patterns.  
*Am. J. Pathol.* **126**, 476-486.
396. DENK, H., LACKINGER, E., ZATLOUKAL, K., FRANKE, W.W. 1987.  
Turnover of cytokeratin polypeptides in mouse hepatocytes.  
*Exp. Cell Res.* **173**, 137-143.
397. DENK, H., MOLL, R., WEYBORA, W., LACKINGER, E., VENNIGERHOLZ, F., BEHAM, A.,  
FRANKE, W.W. 1987.  
Intermediate filaments and desmosomal plaque proteins in testicular seminomas and  
nonseminomatous germ cell tumours as revealed by immunohistochemistry.  
*Virchows Arch. A* **410**, 295-307.

398. DOCKHORN-DWORNICZAK, B., FRANKE, W.W., SCHRÖDER, S., CZERNOBILSKY, B., GOULD, V.E., BÖCKER, W. 1987.  
Patterns of expression of cytoskeletal proteins in human thyroid gland and thyroid carcinomas. *Differentiation* **35**, 53-71.
399. FRANKE, W.W. 1987.  
Nuclear lamins and cytoplasmic intermediate filament proteins: a growing multigene family. *Cell* **48**, 3-4.
400. FRANKE, W.W. 1987.  
Homology of a conserved sequence in the tail domain of intermediate filament proteins with the loop region of calcium binding proteins. *Cell Biol. Int. Rep.* **11**, 831.
401. FRANKE, W.W., MOLL, R. 1987.  
Cytoskeletal components of lymphoid organs. I. Synthesis of cytokeratins 8 and 18 and desmin in subpopulations of extrafollicular reticulum cells of human lymph nodes, tonsils, and spleen. *Differentiation* **36**, 145-163.
402. FRANKE, W.W., COWIN, P., SCHMELZ, M., KAPPRELL, H.-P. 1987.  
The desmosomal plaque and the cytoskeleton.  
**In:** *Junctional Complexes of Epithelial Cells* (Ciba Found. Symp. **125**) J. Wiley & Sons, Chichester; pp. 26-44.
403. FRANKE, W.W., HERGT, M., GRUND, C. 1987.  
Rearrangement of the vimentin cytoskeleton during adipose conversion: Formation of an intermediate filament cage around lipid globules. *Cell* **49**, 131-141.
404. FRANKE, W.W., KAPPRELL, H.-P., COWIN, P. 1987.  
Immunolocalization of plakoglobin in endothelial junctions: Identification as a special type of *Zonulae adhaerentes*. *Biol. Cell (Biology of the Cell)* **59**, 205-218.
405. FRANKE, W.W., KAPPRELL, H.-P., COWIN, P. 1987.  
Plakoglobin is a component of the filamentous subplasmalemmal coat of lens cells. *Eur. J. Cell Biol.* **43**, 301-315.
406. FRANKE, W.W., WINTER, S., VON OVERBECK, J., GUDAT, F., HEITZ, P.U., STÄHLI, C. 1987.  
Identification of the conserved, conformation-dependent cytokeratin epitope recognized by monoclonal antibody (lu-5). *Virchows Arch. A* **411**, 137-147.
407. FRANKE, W.W., WINTER, S., SCHMID, E., SÖLLNER, P., HÄMMERLING, G., ACHTSTÄTTER, T. 1987.  
Monoclonal cytokeratin antibody recognizing a heterotypic complex: Immunological probing of conformational states of cytoskeletal proteins in filaments and in solution. *Exp. Cell Res.* **173**, 17-37.
408. GOULD, V.E., WIEDENMANN, B., LEE, I., SCHWECHHEIMER, K., DOCKHORN-DWORNICZAK, B., RADOSEVICH, J.A., MOLL, R., FRANKE, W.W. 1987.  
Synaptophysin expression in neuroendocrine neoplasms as determined by immunocytochemistry. *Am. J. Pathol.* **126**, 243-257.

409. HATZFELD, M., MAIER, G., FRANKE, W.W. 1987.  
Cytokeratin domains involved in heterotypic complex formation determined by *in vitro* binding assays.  
J. Mol. Biol. **197**, 237-255.
410. JAHN, L., FOUQUET, B., ROHE, K., FRANKE, W.W. 1987.  
Cytokeratins in certain endothelial and smooth muscle cells of two taxonomically distant vertebrate species, *Xenopus laevis* and man.  
Differentiation **36**, 234-254.
411. KAPPRELL, H.-P., COWIN, P., FRANKE, W.W. 1987.  
Biochemical characterization of the soluble form of the junctional plaque protein, plakoglobin, from different cell types.  
Eur. J. Biochem. **166**, 505-517.
412. KROHNE, G., WOLIN, S.L., McKEON, F.D., FRANKE, W.W., KIRSCHNER, M.W. 1987.  
Nuclear lamin L1 of *Xenopus laevis*: cDNA cloning, amino acid sequence and binding specificity of a member of the lamin B subfamily.  
EMBO J. **6**, 3801-3808.
413. LEE, I., GOULD, V.E., MOLL, R., WIEDENMANN, B., FRANKE, W.W. 1987.  
Synaptophysin expression in pulmonary neuroendocrine cells, neuroepithelial bodies and neuroendocrine neoplasms.  
Differentiation **34**, 115-125.
414. LEUBE, R.E., KAISER, P., SEITER, A., ZIMBELMANN, R., FRANKE, W.W., REHM, H., KNAUS, P., PRIOR, P., BETZ, H., REINKE, H., BEYREUTHER, K., WIEDENMANN, B. 1987.  
Synaptophysin: molecular organization and mRNA expression as determined from cloned cDNA.  
EMBO J. **6**, 3261-3268.
415. LIFSCHITZ-MERCER, B., CZERNOBILSKY, B., DEGANI, R., DALLENBACH-HELLWEG, G., MOLL, R., FRANKE, W.W. 1987.  
Immunocytochemical study of an endometrial diffuse clear cell stromal sarcoma and other endometrial stromal sarcomas.  
Cancer **59**, 1494-1499.
416. LONGO, F.J., KROHNE, G., FRANKE, W.W. 1987.  
Basic proteins of the perinuclear theca of mammalian spermatozoa and spermatids. A novel class of cytoskeletal elements.  
J. Cell Biol. **105**, 1105-1120.
417. MAGIN, T.M., HATZFELD, M., FRANKE, W.W. 1987.  
Analysis of cytokeratin domains by cloning and expression of intact and deleted polypeptides in *Escherichia coli*.  
EMBO J. **6**, 2607-2615.
418. MOLL, I., HEID, H., FRANKE, W.W., MOLL, R. 1987.  
Distribution of a special subset of keratinocytes characterized by the expression of cytokeratin 9 in adult and fetal human epidermis of various body sites.  
Differentiation **33**, 254-265.
419. MOLL, R., LEE, I., GOULD, V.E., BERNDT, R., ROESSNER, A., FRANKE, W.W. 1987.  
Immunocytochemical analysis of Ewing's tumors: patterns of expression of intermediate filaments and desmosomal proteins indicate cell type heterogeneity and pluripotential differentiation.  
Am. J. Pathol. **127**, 288-304.

420. ROSEN, S.T., GOULD, V.E., SALWEN, H.R., HERST, C.V., LE BEAU, M.M., LEE, I., BAUER, K., MARDER, R.J., ANDERSEN, R., KIES, M.S., MOLL, R., FRANKE, W.W., RADOSEVICH, J. 1987.  
Establishment and characterization of a neuroendocrine skin carcinoma cell line.  
Lab. Invest. **56**, 302-312.
421. SCHEER, U., MESSNER, K., HAZAN, R., RASKA, I., HANSMANN, P., FALK, H., SPIESS, E., FRANKE, W.W. 1987.  
High sensitivity immunolocalization of double and single-stranded DNA by a monoclonal antibody.  
Eur. J. Cell Biol. **43**, 358-371.
422. SCHMIDT-ZACHMANN, M.S., HÜGLE-DÖRR, B., FRANKE, W.W. 1987.  
A constitutive nucleolar protein identified as a member of the nucleoplasmin family.  
EMBO J. **6**, 1881-1890.
423. SCHWECHHEIMER, K., WIEDENMANN, B., FRANKE, W.W. 1987.  
Synaptophysin: a reliable marker for medulloblastomas.  
Virchows Arch. A **411**, 53-59.
424. WIEDENMANN, B., KUHN, C., SCHWECHHEIMER, K., WALDHERR, R., RAUE, F., BRANDEIS, W.E., KOMMERELL, B., FRANKE, W.W. 1987.  
Synaptophysin identified in metastases of neuroendocrine tumors by immunocytochemistry and immunoblotting.  
Am. J. Clin. Pathol. **88**, 560-569.
425. WIEDENMANN, B., REHM, H., FRANKE, W.W. 1987.  
Synaptophysin, an integral membrane protein of vesicles present in normal and neoplastic neuroendocrine cells.  
Ann. New York Acad. Sci. **493**, 500-503.

## **1988**

426. ANKENBAUER, T., KLEINSCHMIDT, J.A., VANDERKERCKHOVE, J., FRANKE, W.W. 1988.  
Proteins regulating actin assembly in oogenesis and early embryogenesis of *Xenopus laevis*: I. Gelsolin is the major cytoplasmic actin-binding protein.  
J. Cell Biol. **107**, 1489-1498.
427. BADER, B.L., JAHN, L., FRANKE, W.W. 1988.  
Low level expression of cytokeratins 8, 18 and 19 in vascular smooth muscle cells of human umbilical cord and in cultured cells derived therefrom, with an analysis of the chromosomal locus containing the cytokeratin 19 gene.  
Eur. J. Cell Biol. **47**, 300-319.
428. BOSCH, F.X., LEUBE, R.E., ACHTSTÄTTER, T., MOLL, R., FRANKE, W.W. 1988.  
Expression of simple epithelial type cytokeratins in stratified epithelia as detected by immunolocalization and hybridization *in situ*.  
J. Cell Biol. **106**, 1635-1648.
429. CHOI, J., SCHULTHEISS, T., LU, M., WACHTLER, F., KURUC, N., FRANKE, W.W., BADER, D., FISCHMAN, D.A., HOLTZER, H. 1988.  
Founder cells for the cardiac and skeletal myogenic lineages.  
**In:** Cellular and Molecular Biology of Muscle Development. UCLA Symposia on Molecular and Cellular Biology, 1988.

430. DUDEN, R., FRANKE, W.W. 1988.  
Organization of desmosomal plaque proteins in cells growing at low calcium concentrations.  
*J. Cell Biol.* **107**, 1049-1063.
431. FOUQUET, B., HERRMANN, H., FRANZ, J.K., FRANKE, W.W. 1988.  
Expression of intermediate filament proteins during development of *Xenopus laevis*. III.  
Identification of mRNAs encoding cytokeratins typical of complex epithelia.  
*Development* **104**, 533-548.
432. FRANKE, W.W. 1988.  
Matthias Jacob Schleiden and the definition of the cell nucleus.  
*Eur. J. Cell Biol* **47**, 145-156.
433. FRANKE, W.W. 1988.  
In memoriam: Jean Brachet 1909-1988.  
*Differentiation* **39**, 1-3.
434. FRANKE, W.W., COWIN, P., GRUND, C., KUHN, C., KAPPRELL, H.-P. 1988.  
The endothelial junction. The plaque and its components.  
**In:** Endothelial Cell Biology in Health and Disease (N. Simionescu, M. Simionescu, eds.) Plenum  
Publishing Corp., New York; pp. 147-166.
435. FRANKE, W.W., MAGIN, T.M., HERRMANN, H. 1988.  
Ordnungsstrukturen der Zelle: Filamente und Plaques.  
**In:** Ordnung und Chaos in der unbelebten und belebten Natur (115. Versammlung. Verhandlung  
der Gesellschaft Deutscher Naturforscher und Ärzte - Freiburg i. Br.) Naturwissenschaftliche  
Verlagsgesellschaft mbH, Stuttgart; pp. 153-164.
436. GOULD, V., MOLL, R., CHEJFEC, G., FRANKE, W.W. 1988.  
Cytoskeletal characteristics of epithelial neoplasms of the lung.  
**In:** Biology of the Lung Cancer. Diagnosis and Treatment (S.T. Rosen et al., eds.) Marcel Dekker  
Inc., New York, Basel; pp. 121-154.
437. HEID, H.W., MOLL, I., FRANKE, W.W. 1988.  
Patterns of expression of trichocytic and epithelial cytokeratins in mammalian tissues. I. Human  
and bovine hair follicles.  
*Differentiation* **37**, 137-157.
438. HEID, H.W., MOLL, I., FRANKE, W.W. 1988.  
Patterns of expression of trichocytic and epithelial cytokeratins in mammalian tissues. II.  
Concomitant and mutually exclusive synthesis of trichocytic and epithelial cytokeratins in diverse  
human and bovine tissues (hair follicle, nail bed and matrix, lingual papilla, thymic reticulum).  
*Differentiation* **37**, 215-230.
439. HÖGER, T., KROHNE, G., FRANKE, W.W. 1988.  
Amino acid sequence and molecular characterization of murine lamin B as deduced from cDNA  
clones.  
*Eur. J. Cell Biol.* **47**, 283-290.
440. HOOG, A., GOULD, V.E., GRIMELIUS, L., FRANKE, W.W., FALKMER, S., CHEJFEC, G.  
1988.  
Tissue fixation methods alter the immunohistochemical demonstrability of synaptophysin.  
*Ultrastruct. Pathol.* **12**, 673-678.
441. KAPPRELL, H.-P., OWARIBE, K., FRANKE, W.W. 1988.  
Identification of a basic protein of M<sub>r</sub> 75,000 as an accessory desmosomal plaque protein in  
stratified and complex epithelia.  
*J. Cell Biol.* **106**, 1679-1691.

442. KURUC, N., FRANKE, W.W. 1988.  
Transient coexpression of desmin and cytokeratins 8 and 18 in developing myocardial cells of some vertebrate species.  
*Differentiation* **38**, 177-193.
443. LEUBE, R.E., BADER, B.L., BOSCH, F.X., ZIMBELMANN, R., ACHTSTÄTTER, T., FRANKE, W.W. 1988.  
Molecular characterization and expression of the stratification-related cytokeratins 4 and 15.  
*J. Cell Biol.* **106**, 1249-1261.
444. LEUBE, R.E., WIEDENMANN, B., FRANKE, W.W. 1988.  
Differentiation markers as an aid in the histological diagnosis of small-cell carcinoma of the lung: synopsis of intermediate filament protein and synaptophysin expression.  
*Klin. Wochenschr.* **66**, 80-86.
445. MARKL, J., FRANKE, W.W. 1988.  
Localization of cytokeratins in tissues of the rainbow trout: Fundamental differences in expression pattern between fish and higher vertebrates.  
*Differentiation* **39**, 97-122.
446. MOLL, I., HEID, H.W., FRANKE, W.W., MOLL, R. 1988.  
Patterns of expression of trichocytic and epithelial cytokeratins in mammalian tissues. III. Hair and nail formation during human fetal development.  
*Differentiation* **39**, 167-184.
447. MOLL, R., ACHTSTÄTTER, T., BECHT, E., BALCAROVA-STÄNDER, J., ITTENSOHN, M., FRANKE, W.W. 1988.  
Cytokeratins in normal and malignant transitional epithelium. Maintenance of expression of urothelial differentiation features in transitional cell carcinomas and bladder carcinoma cell culture lines.  
*Am. J. Pathol.* **132**, 123-144.
448. OWARIBE, K., KARTENBECK, J., RUNGGER-BRÄNDLE, E., FRANKE, W.W. 1988.  
Cytoskeletons of retinal pigment epithelial cells: Interspecies differences of expression patterns indicate independence of cell function from the specific complement of cytoskeletal proteins.  
*Cell Tissue Res.* **254**, 301-315.
449. PARANKO, J., LONGO, F., POTTS, J., KROHNE, G., FRANKE, W.W. 1988.  
Widespread occurrence of calicin, a basic cytoskeletal protein of sperm cells, in diverse mammalian species.  
*Differentiation* **38**, 21-27.
450. RIEGER, M., FRANKE, W.W. 1988.  
Identification of an orthologous mammalian cytokeratin gene.  
*J. Mol. Biol.* **204**, 841-856.
451. ROMANO, V., BOSCO, P., ROCCHI, M., COSTA, G., LEUBE, R.E., FRANKE, W.W., ROMEO, G. 1988.  
Chromosomal assignments of human type I and type II cytokeratin genes to different chromosomes.  
*Cytogenet. Cell Genet.* **48**, 148-151.
452. SCHMIDT-ZACHMANN, M.S., FRANKE, W.W. 1988.  
DNA cloning and amino acid sequence determination of a major constituent protein of mammalian nucleoli: Correspondence of the nucleoplamin-related protein NO38 to mammalian protein B23.  
*Chromosoma* **96**, 417-426.



453. THOMAS, L., HARTUNG, K., LANGOSCH, D., REHM, H., BAMBERG, E., FRANKE, W.W., BETZ, H. 1988.  
Identification of synaptophysin as a hexameric channel protein of the synaptic vesicle membrane. *Science* **242**, 1050-1053.
454. WIEDENMANN, B., FRANKE, W.W. 1988.  
Synaptophysin, a major cell type-specific vesicle protein of neuroendocrine cells.  
**In:** Cellular and Molecular Basis of Synaptic Transmission. NATO ASI Series, Vol **H21** (H. Zimmermann, ed.) Springer-Verlag, Berlin; pp. 351-356.

## 1989

455. ACHTSTÄTTER, T., FOUQUET, B., RUNGGER-BRÄNDLE, E., FRANKE, W.W. 1989.  
Cytokeratin filaments and desmosomes in the epithelioid cells of the perineurial and arachnoidal sheaths of some vertebrate species.  
*Differentiation* **40**, 129-149.
456. ANKENBAUER, T., KLEINSCHMIDT, J.A., WALSH, M.J., WEINER, O.H., FRANKE, W.W. 1989.  
Identification of a widespread nuclear actin-binding protein.  
*Nature* **342**, 822-825.
457. BLESSING, M., JORCANO, J.L., FRANKE, W.W. 1989.  
Enhancer elements directing cell-type-specific expression of cytokeratin genes and changes of the epithelial cytoskeleton by transfections of hybrid cytokeratin genes.  
*EMBO J.* **8**, 117-126.
458. BOSCH, F.X., OUHAYOUN, J.-P., BADER, B.L., COLLIN, C., GRUND, C., LEE, I., FRANKE, W.W. 1989.  
Extensive changes in cytokeratin expression patterns in pathologically affected human gingiva.  
*Virchows Arch. B*, **58**, 59-77.
459. BOYER, B., TUCKER, G.C., VALLÉS, A.M., FRANKE, W.W., THIERY, J.-P. 1989.  
Rearrangements of desmosomal and cytoskeletal proteins during the transition from epithelial to fibroblastoid organization in cultured rat bladder carcinoma cells.  
*J. Cell Biol.* **109**, 1495-1509.
460. DIEL, I., KAUFMANN, M., KREMPIEN, B., SCHMIDT, B., FRANKE, W.W. 1989.  
Immunohistochemischer Nachweis von Tumorzellen im Knochenmark bei Patientinnen mit operablem Mammakarzinom.  
**In:** Klinische Tumorimmunologie in der Gynäkologie (M. Kaufmann et al., eds.) Zuckschwerdt-Verlag, München; pp. 105-109.
461. FRANKE, W.W., HEID, H. 1989.  
Desmosomal proteins and cytokeratins in the hair follicle.  
**In:** The Biology of Wool and Hair (G.E. Rogers, P.J. Reis, K.A. Ward, R.C. Marshall, eds.) Chapman & Hall, London; pp. 403-416.
462. FRANKE, W.W., GOLDSCHMIDT, M.D., ZIMBELMANN, R., MUELLER, H.M., SCHILLER, D.L., COWIN, P. 1989.  
Molecular cloning and amino acid sequence of human plakoglobin, the common junctional plaque protein.  
*Proc. Natl. Acad. Sci. USA* **86**, 4027-4031.

463. FRANKE, W.W., JAHN, L., KNAPP, A.C. 1989.  
Cytokeratins and desmosomal proteins in certain epithelioid and nonepithelial cells.  
**In:** Cytoskeletal Proteins in Tumor Diagnosis. Curr. Comm. Mol. Biol. (M. Osborn, K. Weber, eds.) Cold Spring Harbor Laboratories, Cold Spring Harbor; pp. 151-172.
464. HERRMANN, H., FOUQUET, B., FRANKE, W.W. 1989.  
Expression of intermediate filament proteins during development of *Xenopus laevis*. I. cDNA clones encoding different forms of vimentin.  
Development **105**, 279-298.
465. HERRMANN, H., FOUQUET, B., FRANKE, W.W. 1989.  
Expression of intermediate filament proteins during development of *Xenopus laevis*. II. Identification and molecular characterization of desmin.  
Development **105**, 299-307.
466. JAHN, L., FRANKE, W.W. 1989.  
High frequency of cytokeratin producing smooth muscle cells in human atherosclerotic plaques.  
Differentiation **40**, 55-62.
467. KNAPP, A.C., FRANKE, W.W. 1989.  
Spontaneous losses of control of cytokeratin gene expression in transformed, non-epithelial human cells occurring at different levels of regulation.  
Cell **59**, 67-79.
468. KNAPP, A.C., BOSCH, F.X., HERGT, M., KUHN, C., WINTER-SIMANOWSKI, S., SCHMID, E., REGAUER, S., BARTEK, J., FRANKE, W.W. 1989.  
Cytokeratins and cytokeratin filaments in subpopulations of cultured human and rodent cells of nonepithelial origin: modes and patterns of formation.  
Differentiation **42**, 81-102.
469. KURUC, N., LEUBE, R.E., MOLL, I., BADER, B.L., FRANKE, W.W. 1989.  
Synthesis of cytokeratin 13, a component characteristic of internal stratified epithelia, is not induced in human epidermal tumors.  
Differentiation **42**, 111-123.
470. LEUBE, R.E., WIEDENMANN, B., FRANKE, W.W. 1989.  
Topogenesis and sorting of synaptophysin: Synthesis of a synaptic vesicle protein from a gene transfected into non-neuroendocrine cells.  
Cell **59**, 433-446.
471. LIN, Z., ESHLEMAN, J., GRUND, C., FISCHMAN, D.A., MASAKI, T., FRANKE, W.W., HOLTZER, H. 1989.  
Differential response of myofibrillar and cytoskeletal proteins in cells treated with phorbol myristate acetate.  
J. Cell Biol. **108**, 1079-1091.
472. MARKL, J., WINTER, S., FRANKE, W.W. 1989.  
The catalog and the expression complexity of cytokeratins in a lower vertebrate: Biochemical identification of cytokeratins in a teleost fish, the rainbow trout.  
Eur. J. Cell Biol. **50**, 1-16.
473. MOLENAAR, W.M., JANSSON, D.S., GOULD, V.E., RORKE, L.B., FRANKE, W.W., LEE, V.M.-Y., PACKER, R.J., TROJANOWSKI, J.Q. 1989.  
Molecular markers of primitive neuroectodermal tumors (PNETs) and other pediatric central nervous system tumors.  
Lab. Invest. **61**, 635-643.

474. RUNGGER-BRÄNDLE, E., ACHTSTÄTTER, T., FRANKE, W.W. 1989.  
An epithelium-type cytoskeleton in a glial cell: Astrocytes of amphibian optic nerves contain cyokeratin filaments and are connected by desmosomes.  
*J. Cell Biol.* **109**, 705-716.

## **1990**

475. BADER, B.L., FRANKE, W.W. 1990.  
Cell type-specific and efficient synthesis of human cytokeratin 19 in transgenic mice.  
*Differentiation* **45**, 109-118.
476. FOGEL, M., LIFSCHITZ-MERCER, B., MOLL, R., KUSHNIR, I., JACOB, N., WALDHERR, R., LIVOFF, A., FRANKE, W.W., CZERNOBILSKY, B. 1990.  
Heterogeneity of intermediate filament expression in human testicular seminomas.  
*Differentiation* **45**, 242-249.
477. GOULD, V.E., JANSSON, D.S., MOLENAAR, W.M., RORKE, L.B., TROJANOWSKI, J.Q., LEE, V.M.Y., PACKER, R.J., FRANKE, W.W. 1990.  
Primitive neuroectodermal tumors of the central nervous system. Patterns of expression of neuroendocrine markers, and all classes of intermediate filament proteins.  
*Lab. Invest.* **62**, 498-509.
478. GOULD, V.E., KOUKOULIS, G.K., JANSSON, D.S., NAGLE, R.B., FRANKE, W.W., MOLL, R. 1990.  
Coexpression patterns of vimentin and glial filament protein with cytokeratins in the normal, hyperplastic and neoplastic breast.  
*Am. J. Pathol.* **137**, 1143-1155.
479. GOULD, V.E., RORKE, L.B., JANSSON, D.S., MOLENAAR, W.M., TROJANOWSKI, J.Q., LEE, V.M.Y., PACKER, R.J., FRANKE, W.W. 1990.  
Primitive neuroectodermal tumors of the central nervous system express neuroendocrine markers and may express all classes of intermediate filaments.  
*Hum. Pathol.* **21**, 245-252.
480. GOULD, V.E., WARREN, W.H., FABER, P.P., KUHN, C., FRANKE, W.W. 1990.  
Malignant cells of epithelial phenotype limited to thoracic lymph nodes.  
*Eur. J. Cancer* **26**, 1121-1126.
481. KAPPRELL, H.-P., DUDEN, R., OWARIBE, K., SCHMELZ, M., FRANKE, W.W. 1990.  
Subplasmalemmal plaques of intercellular junctions: common and distinguishing proteins.  
**In:** Morphoregulatory Molecules (G.M. Edelman, B.A. Cunningham, J.P. Thiery, eds.) John Wiley & Sons, New York; pp. 285-314.
482. KOCH, P.J., WALSH, M.J., SCHMELZ, M., GOLDSCHMIDT, M.D., ZIMBELMANN, R., FRANKE, W.W. 1990.  
Identification of desmoglein, a constitutive desmosomal glycoprotein, as a member of the cadherin family of cell adhesion molecules.  
*Eur. J. Cell Biol.* **53**, 1-12.
483. KRAUSS, S., FRANKE, W.W. 1990.  
Organization and sequence of the human gene encoding cytokeratin 8.  
*Gene* **86**, 241-249.
484. MAGIN, T.M., BADER, B.L., FREUDENMANN, M., FRANKE, W.W. 1990.  
De novo formation of cytokeratin filaments in calf lens cells and cytoplasts after transfection with cDNAs or microinjection with mRNAs encoding human cytokeratins.  
*Eur. J. Cell Biol.* **53**, 333-348.

485. MOLL, I., LANE, A.T., FRANKE, W.W., MOLL, R. 1990.  
Intraepidermal formation of Merkel cells in xenografts of human fetal skin.  
*J. Invest. Dermatol.* **94**, 359-364.
486. MOLL, R., SCHILLER, D.L., FRANKE, W.W. 1990.  
Identification of protein IT of the intestinal cytoskeleton as a novel type I cytokeratin with unusual properties and expression patterns.  
*J. Cell Biol.* **111**, 567-580.
487. OWARIBE, K., KARTENBECK, J., STUMPP, S., MAGIN, T.M., KRIEG, T., DIAZ, L.A.,  
FRANKE, W.W. 1990.  
The hemidesmosomal plaque: I. Characterization of a major constituent protein as a differentiation marker for certain forms of epithelia.  
*Differentiation* **45**, 207-220.
488. PETERS, J.-M., WALSH, M.J., FRANKE, W.W. 1990.  
An abundant and ubiquitous homo-oligomeric ring-shaped ATPase particle related to the putative vesicle fusion proteins Sec 18p and NSF.  
*EMBO J.* **9**, 1757-1767.
489. SCHWARZ, M.A., OWARIBE, K., KARTENBECK, J., FRANKE, W.W. 1990.  
Desmosomes and hemidesmosomes: constitutive molecular components.  
*Annu. Rev. Cell Biol.* **6**, 461-491.
490. ZATLOUKAL, K., DENK, H., SPUREJ, G., LACKINGER, E., PREISEGGER, K.-H., FRANKE,  
W.W. 1990.  
High molecular weight component of Mallory bodies detected by a monoclonal antibody.  
*Lab. Invest.* **62**, 427-434.

## **1991**

491. BADER, B.L., MAGIN, T.M., FREUDENMANN, M., STUMPP, S., FRANKE, W.W. 1991.  
Intermediate filaments formed de novo from tail-less cytokeratins in the cytoplasm and in the nucleus.  
*J. Cell Biol.* **115**, 1293-1307.
492. HOFMANN, I., HERRMANN, H., FRANKE, W.W. 1991.  
Assembly and structure of calcium-induced thick vimentin filaments.  
*Eur. J. Cell Biol.* **56**, 328-341.
493. HÖGER, T.H., GRUND, C., FRANKE, W.W., KROHNE, G. 1991.  
Immunolocalization of lamins in the thick nuclear lamina of human synovial cells.  
*Eur. J. Cell Biol.* **54**, 150-156.
494. KARTENBECK, J., SCHMELZ, M., FRANKE, W.W., GEIGER, B. 1991.  
Endocytosis of junctional cadherins in bovine kidney epithelial (MDBK) cells cultured in low Ca<sup>2+</sup> ion medium.  
*J. Cell Biol.* **113**, 881-892.
495. KOCH, P.J., GOLDSCHMIDT, M.D., WALSH, M.J., ZIMBELMANN, R., FRANKE, W.W. 1991.  
Complete amino acid sequence of the epidermal desmoglein precursor polypeptide and identification of a second type of desmoglein gene.  
*Eur. J. Cell Biol.* **55**, 200-208.

496. KOCH, P.J., GOLDSCHMIDT, M.D., WALSH, M.J., ZIMBELMANN, R., SCHMELZ, M., FRANKE, W.W. 1991.  
Amino acid sequence of bovine muzzle epithelial desmocollin derived from cloned cDNA: A novel subtype of desmosomal cadherins.  
*Differentiation* **47**, 29-36.
497. LIFSCHITZ-MERCER, B., FOGEL, M., MOLL, R., JACOB, N., KUSHNIR, I., LIVOFF, A., WALDHERR, R., FRANKE, W.W., CZERNOBILSKY, B. 1991.  
Intermediate filament protein profiles of human testicular non-seminomatous germ cell tumors: Correlation of cytokeratin synthesis to cell differentiation.  
*Differentiation* **48**, 191-198.
498. MOLL, R., PITZ, S., LEVY, R., WEIKEL, W., FRANKE, W.W., CZERNOBILSKY, B. 1991.  
Complexity of expression of intermediate filament proteins, including glial filament protein, in endometrial and ovarian adenocarcinomas.  
*Hum. Pathol.* **22**, 989-1001.
499. MURRAY, M.T., KROHNE, G., FRANKE, W.W. 1991.  
Different forms of soluble cytoplasmic mRNA binding proteins and particles in *Xenopus laevis* oocytes and embryos.  
*J. Cell Biol.* **112**, 1-11.
500. OWARIBE, K., NISHIZAWA, Y., FRANKE, W.W. 1991.  
Isolation and characterization of hemidesmosomes from bovine corneal epithelial cells.  
*Exp. Cell Res.* **192**, 622-630.
501. ZEWE, M., HÖGER, T.H., FINK, T., LICHTER, P., KROHNE, G., FRANKE, W.W. 1991.  
Gene structure and chromosomal localization of the murine lamin B<sub>2</sub> gene.  
*Eur. J. Cell Biol.* **56**, 342-350.

## **1992**

502. COLLIN, C., MOLL, R., KUBICKA, S., OUHAYOUN, J.-P., FRANKE, W.W. 1992.  
Characterization of human cytokeratin 2, an epidermal cytoskeletal protein synthesized late during differentiation.  
*Exp. Cell Res.* **202**, 132-141.
503. COLLIN, C., OUHAYOUN, J.-P., GRUND, C., FRANKE, W.W. 1992.  
Suprabasal marker proteins distinguishing keratinizing squamous epithelia: Cytokeratin 2 polypeptides of oral masticatory epithelium and epidermis are different.  
*Differentiation* **51**, 137-148.
504. ECKELT, A., HERRMANN, H., FRANKE, W.W. 1992.  
Assembly of a tail-less mutant of the intermediate filament protein, vimentin, in vitro and in vivo.  
*Eur. J. Cell Biol.* **58**, 319-330.
505. FOUQUET, B., ZIMBELMANN, R., FRANKE, W.W. 1992.  
Identification of plakoglobin in oocytes and early embryos of *Xenopus laevis*: Maternal expression of a gene encoding a junctional plaque protein.  
*Differentiation* **51**, 187-194.
506. FRANKE, W.W., TROYANOVSKY, S.M., KOCH, P.J., TROYANOVSKY, R., FOUQUET, B., LEUBE, R.E. 1992.  
Desmosomal proteins - mediators of intercellular coupling and intermediate filament anchorage.  
*Cold Spring Harbor Symp. Quant. Biol.* **57**, 643-652.

507. HERRMANN, H., HOFMANN, I., FRANKE, W.W. 1992.  
Identification of a nonapeptide motif in the vimentin head domain involved in intermediate filament assembly.  
*J. Mol. Biol.* **223**, 637-650.
508. KOCH, P.J., GOLDSCHMIDT, M.D., ZIMBELMANN, R., TROYANOVSKY, R., FRANKE, W.W. 1992.  
Complexity and expression patterns of the desmosomal cadherins.  
*Proc. Natl. Acad. Sci. USA* **89**, 353-357.
509. MOLL, R., LÖWE, A., LAUFER, J., FRANKE, W.W. 1992.  
Cytokeratin 20 in human carcinomas. A new diagnostic marker detected by monoclonal antibodies.  
*Am. J. Pathol.* **140**, 427-447.
510. MURRAY, M.T., SCHILLER, D.L., FRANKE, W.W. 1992.  
Sequence analysis of cytoplasmic mRNA-binding proteins of *Xenopus* oocytes identifies a novel family of RNA-binding proteins.  
*Proc. Natl. Acad. Sci. USA* **89**, 11-15.
511. PETERS, J.-M., HARRIS, J.R., LUSTIG, A., MÜLLER, S., ENGEL, A., VOLKER, S., FRANKE, W.W. 1992.  
The ubiquitous Mg<sup>2+</sup>-ATPase complex: A structural study.  
*J. Mol. Biol.* **223**, 557-571.
512. ROSEWICZ, S., VOGT, D., HARTH, N., GRUND, C., FRANKE, W.W., RUPPERT, S., SCHWEITZER, E., RIECKEN, E.-O., WIEDENMANN, B. 1992.  
An amphicine pancreatic cell line: AR42J cells combine exocrine and neuroendocrine properties.  
*Eur. J. Cell Biol.* **59**, 80-91.
513. TROYANOVSKY, S.M., LEUBE, R.E., FRANKE, W.W. 1992.  
Characterization of the human gene encoding cytokeratin 17 and its expression pattern.  
*Eur. J. Cell Biol.* **59**, 127-137.

### **1993**

514. BLESSING, M., RÜTHER, U., FRANKE, W.W. 1993.  
Ectopic synthesis of epidermal cytokeratins in pancreatic islet cells of transgenic mice interferes with cytoskeletal order and insulin production.  
*J. Cell Biol.* **120**, 743-755.
515. BUXTON, R.S., COWIN, P., FRANKE, W.W., GARROD, D.R., GREEN, K.J., KING, I.A., KOCH, P.J., MAGEE, A.I., REES, D.A., STANLEY, J.R., STEINBERG, M.S. 1993.  
Nomenclature of the desmosomal cadherins.  
*J. Cell Biol.* **121**, 481-483.
516. CORDES, V.C., REIDENBACH, S., KÖHLER, A., STUURMAN, N., van DRIEL, R., FRANKE, W.W. 1993.  
Intranuclear filaments containing a nuclear pore complex protein.  
*J. Cell Biol.* **123**, 1333-1344.
517. FRANKE, W.W. 1993.  
The intermediate filaments and associated proteins.  
**In:** Guidebook to the Cytoskeletal and Motor Proteins (T. Kreis, R. Vale, eds.) Oxford University Press, Oxford; pp. 137-143.

518. FRANKE, W.W., KARTENBECK, J. 1993.  
Cytokeratins.  
**In:** Guidebook to the Cytoskeletal and Motor Proteins (T. Kreis, R. Vale, eds.) Oxford University Press, Oxford; pp. 145-148.
519. HERRMANN, H., ECKELT, A., BRETTEL, M., GRUND, C., FRANKE, W.W. 1993.  
Temperature-sensitive intermediate filament assembly: Alternative structures of *Xenopus laevis* vimentin *in vitro* and *in vivo*.  
J. Mol. Biol. **234**, 99-113.
520. HESS, H., HEID, H., FRANKE, W.W. 1993.  
Molecular characterization of mammalian cylicin, a basic protein of the sperm head cytoskeleton.  
J. Cell Biol. **122**, 1043-1052.
521. JAHN, L., KREUZER, J., von HODENBERG, E., KÜBLER, W., FRANKE, W.W., ALLENBERG, J., IZUMO, S. 1993.  
Cytokeratins 8 and 18 in smooth muscle cells. Detection in human coronary artery, peripheral vascular, and vein graft disease and in transplantation-associated arteriosclerosis.  
Arterioscler. Thromb. **13**, 1631-1639.
522. KARTENBECK, J., FRANKE, W.W. 1993.  
Band 6 polypeptide.  
**In:** Guidebook to the Cytoskeletal and Motor Proteins (T. Kreis, R. Vale, eds.) Oxford University Press, Oxford; pp. 223-224.
523. KARTENBECK, J., FRANKE, W.W. 1993.  
Desmoplakins.  
**In:** Guidebook to the Cytoskeletal and Motor Proteins (T. Kreis, R. Vale, eds.) Oxford University Press, Oxford; pp. 228-230.
524. KARTENBECK, J., KOCH, P.J., FRANKE, W.W. 1993.  
Desmoglein.  
**In:** Guidebook to the Extracellular Matrix and Adhesion Proteins (T. Kreis, R. Vale, eds.) Oxford University Press, Oxford; pp. 133-135.
525. KOCH, P.J., FRANKE, W.W. 1993.  
Desmosomen: Von der Ultrastruktur zum molekularen Bauplan.  
**In:** Zellbiologie und Klinische Pharmakologie (H.J. Dengler, S.C. Meuer, eds.) Gustav Fischer Verlag, Stuttgart; pp. 110-123.
526. LANGBEIN, L., HEID, H.W., MOLL, I., FRANKE, W.W. 1993.  
Molecular characterization of the body site-specific human epidermal cytokeratin 9: cDNA cloning, amino acid sequence, and tissue specificity of gene expression.  
Differentiation **55**, 57-71.
527. MOLL, R., ZIMBELMANN, R., GOLDSCHMIDT, M.D., KEITH, M., LAUFER, J., KASPER, M., KOCH, P.J., FRANKE, W.W. 1993.  
The human gene encoding cytokeratin 20 and its expression during fetal development and in gastrointestinal carcinomas.  
Differentiation **53**, 75-93.
528. SCHÄFER, S., TROYANOVSKY, S.M., HEID, H.W., ESHKIND, L.G., KOCH, P.J., FRANKE, W.W. 1993.  
Cytoskeletal architecture and epithelial differentiation: Molecular determinants of cell interaction and cytoskeletal filament anchorage.  
C. R. Acad. Sci. III, Sci. Vie **316**, 1316-1323.

529. SCHMELZ, M., FRANKE, W.W. 1993.  
Complexus adherentes, a new group of desmoplakin-containing junctions in endothelial cells: The syndesmos connecting rethelial cells of lymph nodes.  
*Eur. J. Cell Biol.* **61**, 274-289.
530. THEIS, D.G., KOCH, P.J., FRANKE, W.W. 1993.  
Differential synthesis of type 1 and type 2 desmocollin mRNAs in human stratified epithelia.  
*Int. J. Dev. Biol.* **37**, 101-110.
531. TROYANOVSKY, S.M., ESHKIND, L.G., TROYANOVSKY, R.B., LEUBE, R.E., FRANKE, W.W. 1993.  
Contributions of cytoplasmic domains of desmosomal cadherins to desmosome assembly and intermediate filament anchorage.  
*Cell* **72**, 561-574.

## **1994**

532. DMOCHOWSKI, M., HASHIMOTO, T., AMAGAI, M., KUDOH, J., SHIMIZU, N., KOCH, P.J., FRANKE, W.W., NISHIKAWA, T. 1994.  
The extracellular aminoterminal domain of bovine desmoglein 1 (Dsg1) is recognized only by certain pemphigus foliaceus sera, whereas its intracellular domain is recognized by both pemphigus vulgaris and pemphigus foliaceus sera.  
*J. Invest. Dermatol.* **103**, 173-177.
533. FRANKE, W.W., KOCH, P.J., SCHÄFER, S., HEID, H.W., TROYANOVSKY, S.M., MOLL, I., MOLL, R. 1994.  
The desmosome and the syndesmos: Cell junctions in normal development and in malignancy.  
**In:** *Molecular and Cellular Basis for Cell to Cell Interaction: Its Significance in Cancer* (Proc. 24th Int. Symp. Princess Takamatsu Cancer Res. Fund; S. Hirohashi et al., eds.) Princeton Scientific Publishing; pp.14-27.
534. FRANKE, W.W., NUBER, U.A., SCHMIDT, A., SCHÄFER, S. 1994.  
Desmosomes - dual junctional principles of intra- and supracellular order in epithelial differentiation and tissue formation.  
*Verh. Dtsch. Ges. Pathol.* **78**, 8-14.
535. HEID, H.W., SCHMIDT, A., ZIMBELMANN, R., SCHÄFER, S., WINTER-SIMANOWSKI, S., STUMPP, S., KEITH, M., FIGGE, U., SCHNÖLZER, M., FRANKE, W.W. 1994.  
Cell type-specific desmosomal plaque proteins of the plakoglobin family: plakophilin 1 (band 6 protein).  
*Differentiation* **58**, 113-131.
536. KOCH, P.J., FRANKE, W.W. 1994.  
Desmosomal cadherins: another growing multigene family of adhesion molecules.  
*Curr. Opin. Cell Biol.* **6**, 682-687.
537. LEUBE, R.E., LEIMER, U., GRUND, C., FRANKE, W.W., HARTH, N., WIEDENMANN, B. 1994.  
Sorting of synaptophysin into special vesicles in nonneuroendocrine epithelial cells.  
*J. Cell Biol.* **127**, 1589-1601.
538. MOLL, I., BOHNERT, E., HERBST, C., FÖRSTER, W., MOLL, R., FRANKE, W.W. 1994.  
The establishment and characterization of two Merkel cell tumor cultures.  
*J. Invest. Dermatol.* **102**, 346-353.



539. PETERS, J.-M., FRANKE, W.W., KLEINSCHMIDT, J. 1994.  
Distinct 19S and 20S subcomplexes of the 26S proteasome and their distribution in the nucleus and the cytoplasm.  
J. Biol. Chem. **269**, 7709-7718.
540. REIS, A., HENNIES, H.-C., LANGBEIN, L., DIGWEED, M., MISCHKE, D., DRECHSLER, M., SCHRÖCK, E., ROYER-POKORA, B., FRANKE, W.W., SPERLING, K., KÜSTER, W. 1994.  
Keratin 9 gene mutations in epidermolytic palmoplantar keratoderma (EPPK).  
Nature Genetics **6**, 174-179.
541. SCHÄFER, S., KOCH, P.J., FRANKE, W.W. 1994.  
Identification of the ubiquitous human desmoglein, Dsg2, and the expression catalogue of the desmoglein subfamily of desmosomal cadherins.  
Exp. Cell Res. **211**, 391-399.
542. SCHMELZ, M., MOLL, R., KUHN, C., FRANKE, W.W. 1994.  
*Complexus adhaerentes*, a new group of desmoplakin-containing junctions in endothelial cells: II. Different types of lymphatic vessels.  
Differentiation **57**, 97-117.
543. SCHMIDT, A., HEID, H.W., SCHÄFER, S., NUBER, U.A., ZIMBELMANN, R., FRANKE, W.W. 1994.  
Desmosomes and cytoskeletal architecture in epithelial differentiation: cell type-specific plaque components and intermediate filament anchorage.  
Eur. J. Cell Biol. **65**, 229-245.
544. SPARN, H.G., LIEDER-OCHS, B.A., FRANKE, W.W. 1994.  
Immunohistochemical identification and characterization of a special type of desmin-producing stromal cells in human placenta and other fetal tissues.  
Differentiation **56**, 191-199.
545. TORCHARD, D., BLANCHET-BARDON, C., SEROVA, O., LANGBEIN, L., NAROD, S., JANIN, N., GOGUEL, A.F., BERNHEIM, A., FRANKE, W.W., LENOIR, G.M., FEUNTEUN, J. 1994.  
Epidermolytic palmoplantar keratoderma cosegregates with a keratin 9 mutation in a pedigree with breast and ovarian cancer.  
Nature Genetics **6**, 106-109.
546. TROYANOVSKY, S.M., TROYANOVSKY, R.B., ESHKIND, L.G., KRUTOVSKIKH, V.A., LEUBE, R.E., FRANKE, W.W. 1994.  
Identification of the plakoglobin-binding domain in desmoglein and its role in plaque assembly and intermediate filament anchorage.  
J. Cell Biol. **127**, 151-160.
547. TROYANOVSKY, S.M., TROYANOVSKY, R.B., ESHKIND, L.G., LEUBE, R.E., FRANKE, W.W. 1994.  
Identification of amino acid sequence motifs in desmocollin, a desmosomal glycoprotein, that are required for plakoglobin binding and plaque formation.  
Proc. Natl. Acad. Sci. USA. **91**, 10790-10794.

## **1995**

548. CORDES, V.C., REIDENBACH, S., FRANKE, W.W. 1995.  
High content of a nuclear pore complex protein in cytoplasmic annulate lamellae of *Xenopus* oocytes.  
Eur. J. Cell Biol. **68**, 240-255.

549. DEMLEHNER, M.P., SCHÄFER, S., GRUND, C., FRANKE, W.W. 1995.  
Continual assembly of half-desmosomal structures in the absence of cell contacts and their frustrated endocytosis: a coordinated Sisyphus cycle.  
*J. Cell Biol.* **131**, 745-760.
550. GOULD, V.E., BLOOM, K.J., FRANKE, W.W., WARREN, W.H., MOLL, R. 1995.  
Increased numbers of cytokeratin-positive interstitial reticulum cells (CIRC) in reactive, inflammatory and neoplastic lymphadenopathies: hyperplasia or induced expression?  
*Virchows Arch.* **425**, 617-629.
551. HESS, H., HEID, H., ZIMBELMANN, R., FRANKE, W.W. 1995.  
The protein complexity of the cytoskeleton of bovine and human sperm heads: The identification and characterization of cylicin II.  
*Exp. Cell Res.* **218**, 174-182.
552. NUBER, U.A., SCHÄFER, S., SCHMIDT, A., KOCH, P.J., FRANKE, W.W. 1995.  
The widespread human desmocollin Dsc2 and tissue-specific patterns of synthesis of various desmocollin subtypes.  
*Eur. J. Cell Biol.* **66**, 69-74.
553. PETERS, B.H., PETERS, J.-M., KUHN, C., ZÖLLER, J., FRANKE, W.W. 1995.  
Maintenance of specific epithelial character in cells out of epithelial context: Patterns of cytokeratins and other cytoskeletal proteins in the rests of Malassez of the periodontal ligament.  
*Differentiation* **59**, 113-126.
554. ROGERS, K.R., ECKELT, A., NIMMRICH, V., JANSSEN, K.-P., SCHLIWA, M., HERRMANN, H., FRANKE, W.W. 1995.  
Truncation mutagenesis of the non- $\alpha$ -helical carboxyterminal tail domain of vimentin reveals contributions to cellular localization but not to filament assembly.  
*Eur. J. Cell Biol.* **66**, 136-150.
555. ROSE, O., GRUND, C., REINHARDT, S., STARZINSKI-POWITZ, A., FRANKE, W.W. 1995.  
Contactus adherens, a special type of plaque-bearing adhering junction containing M-cadherin, in the granule cell layer of the cerebellar glomerulus.  
*Proc. Natl. Acad. Sci. USA* **92**, 6022-6026.
556. SOLINAS-TOLDO, S., TROYANOVSKY, R., WEITZ, S., LICHTER, P., FRANKE, W.W., FRIES, R. 1995.  
Bovine desmocollin genes (DSC1, DSC2, DSC3) cluster on chromosome 24q21/q22.  
*Mammalian Genome* **6**, 484-486.
557. von BÜLOW, HEID, H., HESS, H., FRANKE, W.W. 1995.  
Molecular nature of calicin, a major basic protein of the mammalian sperm head cytoskeleton.  
*Exp. Cell Res.* **219**, 407-413.

## **1996**

558. CHITAEV, N.A., LEUBE, R.E., TROYANOVSKY, R.B., ESHKIND, L.G., FRANKE, W.W., TROYANOVSKY, S.M. 1996.  
The binding of plakoglobin to desmosomal cadherins: patterns of binding sites and topogenic potential.  
*J. Cell Biol.* **133**, 359-369.
559. CORDES, V.C., REIDENBACH, S., FRANKE, W.W. 1996.  
Cytoplasmic annulate lamellae in cultured cells: composition, distribution, and mitotic behavior.  
*Cell Tissue Res.* **284**, 177-191.

560. FRANKE, W.W., STEHR, S., STUMPP, S., KUHN, C., HEID, H., RACKWITZ, H.-R., SCHNÖLZER, M., BAUMANN, R., HOLZHAUSEN, H.-J., MOLL, R. 1996.  
Specific immunohistochemical detection of cardiac/fetal  $\alpha$ -actin in human cardiomyocytes and regenerating skeletal muscle cells.  
*Differentiation* **60**, 245-250.
561. HERRMANN, H., HÄNER, M., BRETTEL, M., MÜLLER, S.A., GOLDIE, K.N., FEDTKE, B., LUSTIG, A., FRANKE, W.W., AEBI, U. 1996.  
Structure and assembly properties of the intermediate filament protein vimentin: the role of its head, rod and tail domains.  
*J. Mol. Biol.* **264**, 933-953.
562. KEON, B.H., SCHÄFER, S., KUHN, C., GRUND, C., FRANKE, W.W. 1996.  
Symplekin, a novel type of tight junction plaque protein.  
*J. Cell Biol.* **134**, 1003-1018.
563. LEIMER, U., FRANKE, W.W., LEUBE, R.E. 1996.  
Synthesis of the mammalian synaptic vesicle protein synaptophysin in insect cells: a model for vesicle biogenesis.  
*Exp. Cell Res.* **224**, 88-95.
564. MERTENS, C., KUHN, C., FRANKE, W.W. 1996.  
Plakophilins 2a and 2b: Constitutive proteins of dual location in the karyoplasm and the desmosomal plaque.  
*J. Cell Biol.* **135**, 1009-1025.
565. NUBER, U.A., SCHÄFER, S., STEHR, S., RACKWITZ, H.-R., FRANKE, W.W. 1996.  
Patterns of desmocollin synthesis in human epithelia: Immunolocalization of desmocollins 1 and 3 in special epithelia and in cultured cells.  
*Eur. J. Cell Biol.* **71**, 1-13.
566. ROGERS, K.R., HERRMANN, H., FRANKE, W.W. 1996.  
Characterization of disulfide crosslink formation of human vimentin at the dimer, tetramer and intermediate filament levels.  
*J. Struct. Biol.* **117**, 55-69.
567. RUIZ, P., BRINKMANN, V., LEDERMANN, B., BEHREND, M., GRUND, C., THALHAMMER, C., VOGEL, F., BIRCHMEIER, C., GÜNTHER, U., FRANKE, W.W., BIRCHMEIER, W. 1996.  
Targeted mutation of plakoglobin in mice reveals essential functions of desmosomes in the embryonic heart.  
*J. Cell Biol.* **135**, 215-225.
568. SCHÄFER, S., STUMPP, S., FRANKE, W.W. 1996.  
Immunological identification and characterization of the desmosomal cadherin Dsg2 in coupled and uncoupled epithelial cells and in human tissues.  
*Differentiation* **60**, 99-108.

## 1997

569. BRANDNER, J.M., REIDENBACH, S., FRANKE, W.W. 1997.  
Evidence that "pinin", reportedly a differentiation-specific desmosomal protein, is actually a widespread nuclear protein.  
*Differentiation* **62**, 119-127.

570. CORDES, V.C., REIDENBACH, S., RACKWITZ, H.-R., FRANKE, W.W. 1997.  
Identification of protein p270/Tpr as a constitutive component of the nuclear pore complex-attached intranuclear filaments.  
J. Cell Biol. **136**, 515-529.
571. FISCHER, R., CORDES, V.C., FRANKE, W.W. 1997.  
Sequence analysis of a nuclear pore complex protein in a lower metazoan: nucleoporin p62 of the coelenterate, *Hydra vulgaris*.  
Gene **195**, 285-293.
572. FRANKE, W.W., BERENDONK, B. 1997.  
Hormonal doping and androgenization of athletes: a secret program of the German Democratic Republic government.  
Clin. Chem. **43**, 1262-1279.
573. HOFMANN, I., FRANKE, W.W. 1997.  
Heterotypic interactions and filament assembly of type I and type II cytokeratins in vitro: viscometry and determinations of relative affinities.  
Eur. J. Cell Biol. **72**, 122-132.
574. KÖHLER, A., SCHMIDT-ZACHMANN, M.S., FRANKE, W.W. 1997.  
AND-1, a natural chimeric DNA-binding protein, combines an HMG-box with regulatory WD-repeats.  
J. Cell Sci. **110**, 1051-1062.
575. MOLL, I., KURZEN, H., LANGBEIN, L., FRANKE, W.W. 1997.  
The distribution of the desmosomal protein, plakophilin 1, in human skin and skin tumors.  
J. Invest. Dermatol. **108**, 139-146.
576. PAFFENHOLZ, R., FRANKE, W.W. 1997.  
Identification and localization of a neurally expressed member of the plakoglobin/*armadillo* multigene family.  
Differentiation **61**, 293-304.
577. SCHÄFER, S., NUBER, U.A., MOLL, R., FRANKE, W.W. 1997.  
Desmosomes and hemidesmosomes: differences and similarities in skin and mucosae.  
**In:** Oculodermal Diseases (Pleyer, U., Hartmann, C., Sterry, W., eds.) Æolus Press, Buren, The Netherlands; pp. 75-94.
578. SCHMIDT, A., LANGBEIN, L., RODE, M., PRÄTZEL, S., ZIMBELMANN, R., FRANKE, W.W. 1997.  
Plakophilins 1a and 1b: Widespread nuclear proteins recruited in specific epithelial cells as desmosomal plaque components.  
Cell Tissue Res. **290**, 481-499.
579. von BÜLOW, M., RACKWITZ, H.-R., ZIMBELMANN, R., FRANKE, W.W. 1997.  
CP  $\beta$ 3, a novel isoform of an actin-binding protein, is a component of the cytoskeletal calyx of the mammalian sperm head.  
Exp. Cell Res. **233**, 216-224.
580. ZIRWES, R.F., KOUZMENKO, A.P., PETERS, J.-M., FRANKE, W.W., SCHMIDT-ZACHMANN, M.S. 1997.  
Topogenesis of a nucleolar protein: determination of molecular segments directing nucleolar association.  
Mol. Biol. Cell **8**, 231-248.

581. ZIRWES, R.F., SCHMIDT-ZACHMANN, M.S., FRANKE, W.W. 1997.  
Identification of a small, very acidic constitutive nucleolar protein (NO29) as a member of the nucleoplasmin family.  
Proc. Natl. Acad. Sci. USA **94**, 11387-11392.

## **1998**

582. BRANDNER, J.M., REIDENBACH, S., KUHN, C., FRANKE, W.W. 1998.  
Identification and characterization of a novel kind of nuclear protein occurring free in the nucleoplasm and in ribonucleoprotein structures of the "speckle" type.  
Eur. J. Cell Biol. **75**, 295-308.
583. KURZEN, H., MOLL, I., MOLL, R., SCHÄFER, S., SIMICS, E., AMAGAI, M., WHEELLOCK, M.J., FRANKE, W.W. 1998.  
Compositionally different desmosomes in the various compartments of the human hair follicle.  
Differentiation **63**, 295-304.
584. SCHMELZ, M., WAY, D.L., BORGS, P., PEITSCH, W.K., SCHMIDT, H., WITTE, M.H., WITTE, C.L., FRANKE, W.W., MOLL, R. 1998.  
A novel type of adhering junction in an epithelioid tumorigenic rat cell culture line.  
Cell Tissue Res. **294**, 11-25.

## **1999**

585. CERDÀ, J., REIDENBACH, S., PRÄTZEL, S., FRANKE, W.W. 1999.  
Cadherin-catenin complexes during zebrafish oogenesis: heterotypic junctions between oocytes and follicle cells.  
Biol. Reprod. **61**, 692-704.
586. FRANKE, W.W. 1999.  
Einheit des Lebens - Bau und Bild der Zelle.  
**In:** Jahrhundertwissenschaft Biologie: die großen Themen (P. Sitte, ed.), Beck-Verlag, München; pp. 43-64.
587. FRANKE, W.W., KARTENBECK, J. 1999.  
Cytokeratins.  
**In:** Guidebook to the Cytoskeletal and Motor Proteins, 2. ed. (T. Kreis, R. Vale, eds.) Oxford University Press, Oxford; pp. 297-300.
588. KURZEN, H., JUNG, E.G., HARTSCHUH, W., MOLL, I., FRANKE, W.W., MOLL, R. 1999.  
Forms of epithelial differentiation of draining sinus in acne inversa (hidradenitis suppurativa).  
Br. J. Dermatol. **141**, 231-239.
589. MERTENS, C., KUHN, C., MOLL, R., SCHWETLICK, I., FRANKE, W.W. 1999.  
Desmosomal plakophilin 2 as a differentiation marker in normal and malignant tissues.  
Differentiation **64**, 277-290.
590. PAFFENHOLZ, R., KUHN, C., GRUND, C., STEHR, S., FRANKE, W.W. 1999.  
The *arm*-repeat protein NPRAP (neurojungin) is a constituent of the plaques of the outer limiting zone in the retina, defining a novel type of adhering junction.  
Exp. Cell Res. **250**, 452-464.
591. PEITSCH, W.K., GRUND, C., KUHN, C., SCHNÖLZER, M., SPRING, H., SCHMELZ, M., FRANKE, W.W. 1999.  
Drebrin is a widespread actin-associating protein enriched at junctional plaques, defining a specific microfilament anchorage system in polar epithelial cells.  
Eur. J. Cell Biol. **78**, 767-778.

592. SCHMIDT, A., LANGBEIN, L., PRÄTZEL, S., RODE, M., RACKWITZ, H.-R., FRANKE, W.W. 1999.  
Plakophilin 3 - a novel cell-type-specific desmosomal plaque protein.  
*Differentiation* **64**, 291-306.
593. YAOITA, E., FRANKE, W.W., YAMAMOTO, T., KAWASAKI, K., KIHARA, I. 1999.  
Identification of renal podocytes in multiple species: higher vertebrates are vimentin positive/lower vertebrates are desmin positive.  
*Histochem. Cell Biol.* **111**, 107-115.

## **2000**

594. BORRMANN, C.M., MERTENS, C., SCHMIDT, A., LANGBEIN, L., KUHN, C., FRANKE, W.W. 2000.  
Molecular diversity of plaques of epithelial adhering junctions.  
*Ann. NY Acad. Sci.* **915**, 144-150.
595. ZATLOUKAL, K., STUMPTNER, C., LEHNER, M., DENK, H., BARIBAULT, H., ESHKIND, L.G., FRANKE, W.W. 2000.  
Cytokeratin 8 protects from hepatotoxicity, and its ratio to cytokeratin 18 determines the ability of hepatocytes to form Mallory bodies.  
*Am. J. Pathol.* **156**, 1263-1274.

## **2001**

596. KNEISSEL, S., FRANKE, W.W., GALL, J.G., HEID, H., REIDENBACH, S., SCHNÖLZER, M., SPRING, H., ZENTGRAF, H., SCHMIDT-ZACHMANN, M.S. 2001.  
A novel kind of karyoskeletal protein: characterization of protein NO145, the major component of the nucleolar cortical skeleton in *Xenopus* oocytes.  
*Mol. Biol. Cell* **12**, 3904-3918.
597. MERTENS, C., HOFMANN, I., WANG, Z., TEICHMANN, M., SEPEHRI CHONG, S., SCHNÖLZER, M., FRANKE, W.W. 2001.  
Nuclear particles containing RNA polymerase III complexes associated with the junctional plaque protein plakophilin 2.  
*Proc. Natl. Acad. Sci. USA* **98**, 7795-7800.
598. PEITSCH, W.K., HOFMANN, I., PRÄTZEL, S., GRUND, C., KUHN, C., MOLL, I., LANGBEIN, L., FRANKE, W.W. 2001.  
Drebrin particles: components in the ensemble of proteins regulating actin dynamics of lamellipodia and filopodia.  
*Eur. J. Cell Biol.* **80**, 567-579.

## **2002**

599. BRANDNER, J.M., KIEF, S., GRUND, C., RENDL, M., HOUDEK, P., KUHN, C., TSCHACHLER, E., FRANKE, W.W., MOLL, I. 2002.  
Organization and formation of the tight junction-system in human epidermis and cultured keratinocytes.  
*Eur. J. Cell Biol.* **81**, 253-263.
600. CERDÀ, J., GRUND, C., FRANKE, W.W., BRAND, M. 2002.  
Molecular characterization of calymin, a novel notochord sheath-associated extracellular matrix protein in the zebrafish embryo.  
*Dev. Dynamics* **224**, 200-209.

601. ESHKIND, L., TIAN, Q., SCHMIDT, A., FRANKE, W.W., WINDOFFER, R., LEUBE, R.E. 2002.  
Loss of desmoglein 2 suggests essential functions for early embryonic development and proliferation of embryonal stem cells.  
*Eur. J. Cell Biol.* **81**, 592-598.
602. HEID, H.W., FIGGE, U., WINTER, S., KUHN, C., ZIMBELMANN, R., FRANKE, W.W. 2002.  
Novel actin-related proteins Arp-T1 and Arp-T2 as components of the cytoskeletal calyx of the mammalian sperm head.  
*Exp. Cell Res.* **279**, 177-187.
603. HOFEMEISTER, H., KUHN, C., FRANKE, W.W., WEBER, K., STICK, R. 2002.  
Conservation of the gene structure and membrane targeting signals of germ cell specific lamin LIII in amphibians and fish.  
*Eur. J. Cell Biol.* **81**, 51-60.
604. HOFMANN, I., SCHNÖLZER, M., KAUFMANN, I., FRANKE, W.W. 2002.  
Symplekin, a constitutive protein of karyo- and cytoplasmic particles involved in mRNA biogenesis in *Xenopus laevis* oocytes.  
*Mol. Biol. Cell* **13**, 1665-1676.
605. HOLLNAGEL, A., GRUND, C., FRANKE, W.W., ARNOLD, H.-H. 2002.  
The cell adhesion molecule M-cadherin is not essential for muscle development and regeneration.  
*Mol. Cell. Biol.* **22**, 4760-4770.
606. LANGBEIN, L., GRUND, C., KUHN, C., PRAETZEL, S., KARTENBECK, J., BRANDNER, J.M., MOLL, I., FRANKE, W.W. 2002.  
Tight junctions and compositionally related junctional structures in mammalian stratified epithelia and cell cultures derived therefrom.  
*Eur. J. Cell Biol.* **81**, 419-435.

## **2003**

607. CUI, Y., KÖNIG, J., NIES, A.T., PFANNSCHMIDT, M., HERGT, M., FRANKE, W.W., ALT, W., MOLL, R., KEPPLER, D. 2003.  
Detection of the human organic anion transporters SLC21A6 (OATP2) and SLC21A8 (OATP8) in liver and hepatocellular carcinoma.  
*Lab. Invest.* **83**, 527-538.
608. KOESER, J., TROYANOVSKY, S.M., GRUND, C., FRANKE, W.W. 2003.  
De novo formation of desmosomes in cultured cells upon transfection of genes encoding specific desmosomal components.  
*Exp. Cell Res.* **285**, 114-130.
609. LANGBEIN, L., PAPE, U.-F., GRUND, C., KUHN, C., PRAETZEL, S., MOLL, I., MOLL, R., FRANKE, W.W. 2003.  
Tight junction-related structures in the absence of a lumen: Occludin, claudins and tight junction plaque proteins in densely packed cell formations of stratified epithelia and squamous cell carcinomas.  
*Eur. J. Cell Biol.* **82**, 385-400.
610. PEITSCH, W.K., HOFMANN, I., ENDLICH, N., PRÄTZEL, S., KUHN, C., SPRING, H., GRÖNE, H.-J., KRIZ, W., FRANKE, W.W. 2003.  
Cell biological and biochemical characterization of drebrin complexes in mesangial cells and podocytes of renal glomeruli.  
*J. Am. Soc. Nephrol* **14**, 1452-1463.

611. STRAUB, B.K., BODA, J., KUHN, C., SCHNOELZER, M., KORF, U., KEMPF, T., SPRING, H., HATZFELD, M., FRANKE, W.W. 2003.  
A novel cell-cell junction system: the cortex adhaerens mosaic of lens fiber cells.  
J. Cell Sci. **116**, 4985-4995.
612. ZHOU, Q., TOIVOLA, D.M., FENG, N., GREENBERG, H.B., FRANKE, W.W., OMARY, M.B. 2003.  
Keratin 20 helps maintain intermediate filament organization in intestinal epithelia.  
Mol. Biol. Cell **14**, 2959-2971.

## **2004**

613. EILBRACHT, J., REICHENZELLER, M., HERGT, M., SCHNÖLZER, M., HEID, H., STÖHR, M., FRANKE, W.W., SCHMIDT-ZACHMANN, M. 2004.  
NO66 – a highly conserved dual location protein in the nucleolus and in a special type of synchronously replicating chromatin.  
Mol. Biol. Cell **15**, 1816-1832 (published online Jan 23, 2004).
614. FRANKE, W.W. 2004.  
Actin's many actions start at the genes. (News & Views article).  
Nat. Cell Biol. **6**, 1013-1014.
615. GROSSMANN, K.S., GRUND, C., HUELSKEN, J., BEHREND, M., ERDMANN, B., FRANKE, W.W., BIRCHMEIER, W. 2004.  
Requirement of plakophilin 2 for heart morphogenesis and cardiac junction formation.  
J. Cell Biol. **167**, 149-160.
616. RALLE, T., GRUND, C., FRANKE, W.W., STICK, R. 2004.  
Intranuclear membrane structure formations by CaaX-containing nuclear proteins.  
J. Cell Sci. **117**, 6095-6104.
617. SCHLÜTER, H., WEPF, R., MOLL, I., FRANKE, W.W. 2004.  
Sealing the live part of the skin: The integrated meshwork of desmosomes, tight junctions and curvilinear ridge structures in the cells of the uppermost granular layer of the human epidermis.  
Eur. J. Cell Biol. **83**, 655-665.

## **2005**

618. LADWEIN, M., PAPE, U.-F., SCHMIDT, D.-S., SCHNÖLZER, M., FIEDLER, S., LANGBEIN, L., FRANKE, W.W., MOLDENHAUER, G., ZÖLLER, M. 2005.  
The cell-cell adhesion molecule EpCAM interacts directly with the tight junction protein claudin-7.  
Exp. Cell Res. **309**, 345-357.
619. PEITSCH, W.K., HOFMANN, I., BULKESCHER, J., HERGT, M., SPRING, H., BLEYL, U., GOERDT, S., FRANKE, W.W. 2005.  
Drebrin, an actin-binding, cell type characteristic protein: induction and localization in epithelial skin tumors and cultured keratinocytes.  
J. Invest. Dermatol. **125**, 761-774.

## **2006**

620. BORRMANN, C.M., GRUND, C., KUHN, C., HOFMANN, I., PIEPERHOFF, S., FRANKE, W.W. 2006.  
The *area composita* of adhering junctions connecting heart muscle cells of vertebrates. II. Colocalizations of desmosomal and *fascia adhaerens* molecules in the intercalated disk.  
Eur. J. Cell Biol. **85**, 469-485.



621. FRANKE, W.W., BORRMANN, C.M., GRUND, C., PIEPERHOFF, S. 2006.  
The *area composita* of adhering junctions connecting heart muscle cells of vertebrates.  
I. Molecular definition in intercalated disks of cardiomyocytes by immunoelectron microscopy of desmosomal proteins.  
Eur. J. Cell Biol. **85**, 69-82.
622. FRANKE, W.W., HEID, H. 2006.  
Pitfalls, errors and risks of false-positive results in urinary EPO drug tests.  
Clin. Chim. Acta **373**, 189-190. (Letter to the Editor)
623. HÄMMERLING, B., GRUND, C., BODA-HEGGEMANN, J., \*MOLL, R., FRANKE, W.W. 2006.  
The *complexus adhaerens* of mammalian lymphatic endothelia revisited: a junction even more complex than hitherto thought.  
Cell Tissue Res. **324**, 55-67.
624. HOFMANN, I., CASELLA, M., SCHNÖLZER, M., SCHLECHTER, T. SPRING, H., FRANKE, W. W. 2006.  
Identification of the junctional plaque protein plakophilin 3 in cytoplasmic particles containing RNA-binding proteins and the recruitment of plakophilins 1 and 3 to stress granules.  
Mol. Biol. Cell **17**, 1388-1398.
625. MOLL, R., HOLZHAUSEN, H.-J., MENNEL, H.-D., KUHN, C., BAUMANN, R., TAEGE, C., FRANKE, W.W. 2006.  
The cardiac isoform of  $\alpha$ -actin in regenerating and atrophic skeletal muscle, myopathies and rhabdomyomatous tumors: an immunohistochemical study using monoclonal antibodies.  
Virchows Arch. **449**, 175-191.
626. PEITSCH, W.K., BULKESCHER, J., SPRING, H., HOFMANN, I., GOERDT, S., FRANKE, W.W. 2006.  
Dynamics of the actin-binding protein drebrin in motile cells and definition of a juxtannuclear drebrin-enriched zone  
Exp. Cell Res. **312**, 2605-2618.

## 2007

627. FRANKE, W.W., SCHUMACHER, H., BORRMANN, C.M., GRUND, C., WINTER-SIMANOWSKI, S., SCHLECHTER, T., PIEPERHOFF, S., HOFMANN, I. 2007.  
The *area composita* of adhering junctions connecting heart muscle cells of vertebrates – III: Assembly and disintegration of intercalated disks in rat cardiomyocytes growing in culture.  
Eur. J. Cell Biol. **86**, 127-142.
628. KUHN, S., KOCH, M., NÜBEL, T., LADWEIN, M., ANTOLOVIC, D., KLINGBEIL, P., HILDEBRAND, D., MOLDENHAUER, G., LANGBEIN, L., FRANKE, W.W., WEITZ, J., ZÖLLER, M. 2007.  
A complex of EpCAM, claudin-7, CD44 variant isoforms, and tetraspanins promotes colorectal cancer progression.  
Mol. Cancer Res. **5**, 553-567.
629. PIEPERHOFF, S., FRANKE, W.W. 2007.  
The *area composita* of adhering junctions connecting heart muscle cells of vertebrates – IV: Coalescence and amalgamation of desmosomal and adhaerens junction components – late processes in mammalian heart development.  
Eur. J. Cell Biol. **86**, 377-391.

630. SCHLÜTER, H., MOLL, I., WOLBURG, H., FRANKE, W.W. 2007.  
The different structures containing tight junction proteins in epidermal and other stratified epithelial cells, including squamous cell metaplasia.  
*Eur. J. Cell Biol.* **86**, 645-655.
631. SCHMITT, C.J., FRANKE, W.W., GOERDT, S., FALKOWSKA-HANSEN, B., RICKELT, S., PEITSCH, W.K. 2007.  
Homo- and heterotypic cell contacts in malignant melanoma cells and desmoglein 2 as a novel solitary surface glycoprotein.  
*J. Invest. Dermatol.* **127**, 2191-2206.
632. #WUCHTER, P., #BODA-HEGGEMANN, J., STRAUB, B.K., GRUND, C., KUHN, C., KRAUSE, U., SECKINGER, A., PEITSCH, W.K., SPRING, H., HO, A.D., FRANKE, W.W. (#equal contribution). 2007.  
*Processus and recessus adhaerentes*: giant adherens cell junction systems connect and attract human mesenchymal stem cells.  
*Cell Tissue Res.* **328**, 499-514.

## **2008**

633. HO, A.D., WAGNER, W., FRANKE, W. 2008.  
Heterogeneity of mesenchymal stromal cell preparations. (Review)  
*Cytotherapy*, **10**, 320-330.
634. HOFMANN, I., KUHN, C., FRANKE, W.W. 2008.  
Protein p0071, a major plaque protein of non-desmosomal adhering junctions, is a selective cell-type marker.  
*Cell Tissue Res.* **334**, 381-399.
635. PIEPERHOFF, S., FRANKE, W.W. 2008.  
The area composita of adhering junctions connecting heart muscle cells of vertebrates. –VI. Different precursor structures in non-mammalian species.  
*Eur. J. Cell Biol.* **87**, 413-430.
636. PIEPERHOFF, S., SCHUMACHER, H., FRANKE, W.W. 2008.  
The area composita of adhering junctions connecting heart muscle cells of vertebrates –V. The importance of plakophilin-2 demonstrated by small interference RNA-mediated knockdown in cultured rat cardiomyocytes.  
*Eur. J. Cell Biol.* **87**, 399-411.
637. RICKELT, S., FRANKE, W.W., DOERFLINGER, Y., GOERDT, S., BRANDNER, J.M., PEITSCH, W.K. 2008.  
Subtypes of melanocytes and melanoma cells distinguished by their intercellular contacts: Heterotypic adherens junctions, adhesive associations, and dispersed desmoglein 2 glycoproteins.  
*Cell Tissue Res.* **334**, 401-422.

## **2009**

638. BARTH, M., SCHUMACHER, H., KUHN, C., AKHYARI, P., LICHTENBERG, A., FRANKE, W.W. 2009.  
Cordial connections: The molecular ensemble and the structures of the adhering junctions connecting interstitial cells of cardiac valves in situ and in cell culture.  
*Cell Tissue Res.* **337**, 63-77.

639. BODA-HEGGEMANN, J., RÉGNIER-VIGOUROUX, A., FRANKE, W.W. 2009.  
Beyond vessels: occurrence and regional clustering of vascular endothelial (VE-)cadherin-containing junctions in non-endothelial cells.  
Cell Tissue Res. **335**, 49-65.
640. FRANKE, W.W. 2009.  
Discovering the molecular components of intercellular junctions – a historical view.  
- online article (2009): Cold Spring Harb. Perspect. Biol. **1**, a003061.  
- book chapter (2010) **In:** Cell-Cell Junctions. A Subject Collection from Cold Spring Harbor Perspectives in Biology. (W.J. Nelson, E. Fuchs, eds.) Cold Spring Harbor Laboratory Press, Woodbury/NY; pp. 1-34. (with book cover illustration)
641. FRANKE, W.W., RICKELT, S., BARTH, M., PIEPERHOFF, S. 2009.  
The junctions that don't fit the scheme: special symmetrical cell-cell junctions of their own kind.  
Cell Tissue Res. **338**, 1-17.
642. HOFMANN, I., SCHLECHTER, T., KUHN, C., HERGT, M., FRANKE, W.W. 2009.  
Protein p0071 – an armadillo plaque protein that characterizes a specific subtype of adherens junctions.  
J. Cell Sci. **122**, 21-24.
643. MOLL, R. SIEVERS, E., HÄMMERLING, B., SCHMIDT, A., BARTH, M., KUHN, C., GRUND, C., HOFMANN, I., FRANKE, W.W. 2009.  
Endothelial and virgular cell formations in the mammalian lymph node sinus: Endothelial differentiation morphotypes characterized by a special kind of junction (*complexus adhaerens*) (Review).  
Cell Tissue Res. **335**, 109-141.
644. RICKELT, S., WINTER-SIMANOWSKI, S., NOFFZ, E., KUHN, C., FRANKE, W.W. 2009.  
Upregulation of plakophilin-2 and its acquisition to adherens junctions identifies a novel molecular ensemble of cell-cell-attachment characteristic for transformed mesenchymal cells.  
Int. J. Cancer **125**, 2036-2048.

## **2010**

645. PIEPERHOFF, S., BARTH, M., RICKELT, S., FRANKE, W.W. 2010.  
Desmosomal molecules in and out of adhering junctions: Normal and diseased states of epidermal, cardiac, and mesenchymally derived cells. (Review)  
Dermatol. Res. Pract. 2010: 139167.
646. PIEPERHOFF, S., BORRMANN, C., GRUND, C., BARTH, M., RIZZO, S., FRANKE W.W. 2010.  
The *area composita* of adhering junctions connecting heart muscle cells of vertebrates. VII. The different types of lateral junctions between the special cardiomyocytes of the conduction system of ovine and bovine hearts.  
Eur. J. Cell Biol. **89**, 365-378.
647. RICKELT, S.<sup>#</sup>, RIZZO, S.<sup>#</sup>, DÖRFLINGER, Y., ZENTGRAF, H., BASSO, C., GEROSA, G., THIENE, G., MOLL, R., FRANKE, W.W. 2010. (<sup>#</sup>equal contribution)  
A novel kind of tumor type-characteristic junction: plakophilin-2 as a major protein of adherens junctions in cardiac myxomata.  
Mod. Pathol. **23**, 1429-1437.

648. SEEGER, T.S., FRANK, D., ROHR, C., WILL, R., JUST, S., GRUND, C., LYON, R., LUEDDE, M., KOEGL, M., SHEIKH, F., ROTTBAUER, W., FRANKE, W.W., KATUS, H.A., OLSON, E.N., FREY, N. 2010.  
Myozap, a novel intercalated disc protein, activates serum response factor-dependent signaling and is required to maintain cardiac function in vivo.  
Circ. Res. **106**, 880-890.

## 2011

649. FABRITZ, L., HOOGENDIJK, M., SCICLUNA, B.P., VAN AMERSFOORTH, S.C., FORTMUELLER, L., WOLF, S., LAAKMANN, S., KREIENKAMP, N., PICCINI, I., BREITHARDT, G., RUIZ, P., WITT, H., EBNET, K., WICHTER, T., LEVKAU, B., FRANKE, W.W., PIEPERHOFF, S., DE BAKKER, J., CORONEL, R., KIRCHHOF, P. 2011.  
Load-reducing therapy prevents development of arrhythmogenic right ventricular cardiomyopathy in plakoglobin-deficient mice.  
J. Am. Coll. Cardiol. **57**, 740-750.  
  
with Editorial Comment: CALKINS, H. 2011. Use of mouse models to evaluate novel therapeutic approaches to treatment of arrhythmogenic right ventricular cardiomyopathy: The future is now. J. Am. Coll. Cardiol. **57**, 751-752.
650. FRANKE, W.W., RICKELT, S. 2011.  
Mesenchymal-epithelial transitions: Spontaneous and cumulative syntheses of epithelial marker molecules and their assemblies to novel cell junctions connecting human hematopoietic tumor cells to carcinomatoid tissue structures.  
Int. J. Cancer **129**, 2588-2599.
651. RICKELT, S., KUHN, C., WINTER-SIMANOWSKI, S., ZIMBELMANN, R., FREY, N., FRANKE, W.W. 2011.  
Protein myozap – a late addition to the molecular ensembles of various kinds of adherens junctions.  
Cell Tissue Res. **346**, 347-359.
652. RICKELT, S., MOLL, I., FRANKE, W.W. 2011.  
Intercellular adhering junctions with an asymmetric molecular composition: desmosomes connecting Merkel cells and keratinocytes.  
Cell Tissue Res. **346**, 65-77.
653. STRAUB, B.K., RICKELT, S., ZIMBELMANN, R., GRUND, C., KUHN, C., IKEN, M., OTT, M., SCHIRMACHER, P., FRANKE, W.W. 2011.  
E–N-cadherin heterodimers define novel adherens junctions connecting endoderm-derived cells.  
J. Cell Biol. **195**, 873-887.

## 2012

- FRANKE, W.W., BIRCHMEIER, W. (Guest Eds.) 2012. Special Issue 'Molecular Biology meets Cardiology'. Cell Tissue Res. 348, No. 2.
- FRANKE, W.W. (Ed.) 2012. Special Helmholtz Workshop 'Heidelberg Heart II': Abstracts of oral and poster presentations. Cell Tissue Res. 348, 335-370.

654. BARTH, M., RICKELT, S., NOFFZ, E., WINTER-SIMANOWSKI, S., NIEMANN, H., AKHYARI, P., LICHTENBERG, A., FRANKE, W.W. 2012.  
The adhering junctions of valvular interstitial cells: molecular composition in fetal and adult hearts and the comings and goings of plakophilin-2 in situ, in cell culture and upon re-association with scaffolds.  
*Cell Tissue Res.* **348**, 295-307.
655. BIEBACK, K., WUCHTER, P., BESSER, D., FRANKE, W., BECKER, M., OTT, M., PACHER, M., MA, N., STAMM, C., KLÜTER, H., MÜLLER, A., HO, A.D. for the START-MSC consortium. 2012.  
Mesenchymal stromal cells (MSCs): Science and f(r)iction  
*J. Mol. Med.* **90**, 773-782.
656. FRANKE, W.W., PAPE, U.-F. 2012.  
Diverse types of junctions containing tight junction proteins in stratified mammalian epithelia.  
*Ann. NY Acad. Sci.* **1257**, 152-157.
657. PIEPERHOFF, S., RICKELT, S., HEID, H., CLAYCOMB, W.C., ZIMBELMANN, R., KUHN, C., WINTER-SIMANOWSKI, S., KUHN, C., FREY, N., FRANKE, W.W. 2012.  
The plaque protein myozap identified as a novel major component of adhering junctions in endothelia of the blood and lymph vascular systems.  
*J. Cell. Mol. Med.* **16**, 1709-1719 (published online 13. Oct. 2011)

## **2013**

658. FRANKE, W.W., HEID, H., ZIMBELMANN, R., KUHN, C., WINTER-SIMANOWSKI, S., DÖRFLINGER, Y., GRUND, C., RICKELT, S. 2013.  
Transmembrane protein PERP is a component of tessellate junctions and of other junctional and non-junctional plasma membrane regions in diverse epithelial and epithelium-derived cells.  
*Cell Tissue Res.* **353**, 99-115. (with journal cover illustration)

## **2014**

659. DOMKE, L.M., RICKELT, S., DÖRFLINGER, Y., KUHN, C., WINTER-SIMANOWSKI, S., ZIMBELMANN, R., ROSIN-ARBESFELD, R., HEID, H., FRANKE, W.W. 2014.  
The cell-cell junctions of mammalian testes: I. The adhering junctions of the seminiferous tubule epithelium represent special differentiation structures.  
*Cell Tissue Res.* **357**, 645-665 (online 8 June 2014; DOI 10.1007/s00441-014-1906-9).
660. FRANK, D., RANGREZ, A.Y., POYANMEHR, R., SEEGER, T.S., KUHN, C., EDEN, M., STIEBELING, K., BERNT, A., GRUND, C., FRANKE, W.W., FREY, N. 2014.  
Mice with cardiac-restricted overexpression of Myozap are sensitized to biomechanical stress and develop a protein-aggregate associated cardiomyopathy.  
*J. Mol. Cell. Cardiol.* **72**, 196-207 (online 31 March 2014; DOI:10.1016/j.yjmcc.2014.03.016).
661. FRANKE, W.W., DÖRFLINGER, Y., KUHN, C., ZIMBELMANN, R., WINTER-SIMANOWSKI, S., FREY, N., HEID, H. 2014.  
Protein LUMA is a cytoplasmic plaque constituent of various epithelial adherens junctions and the composite junctions of the myocardial intercalated disks: a unifying finding for cell biology and cardiology.  
*Cell Tissue Res.* **357**, 159-172 (online 29 April 2014; DOI: 10.1007/s00441-014-1865-1).

662. FRANKE, W.W., RICKELT, S., ZIMBELMANN, R., DÖRFLINGER, Y., KUHN, C., FREY, N., HEID, H., ROSIN-ARBESFELD, R. 2014.  
Striatins as plaque molecules of zonulae adhaerentes in simple epithelia, of tessellate junctions in stratified epithelia, of cardiac composite junctions and of various size classes of lateral adherens junctions in cultures of epithelia- and carcinoma-derived cells  
Cell Tissue Res., in press.
663. HEID, H., RICKELT, S., ZIMBELMANN, R., WINTER, S., SCHUMACHER, H., DÖRFLINGER, Y., KUHN, C., FRANKE, W.W. 2014.  
On the formation of lipid droplets in human adipocytes: The organization of the perilipin-vimentin cortex.  
PLoS One **9**, e90386.