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RESEARCH PUBLICATIONS

BOOKS

1. T. Kametani and K. Fukumoto, "Inorganic Synthesis", Ishiyaku Book Compnay, 1960.
2. T. Kametani and K. Fukumoto, "Phenol Oxidation", Gihoudo, 1969.
3. T. Kametani and K. Fukumoto, "Index of Organic Reactions", Nankoudo, 1971.
4. T. Kametani and K. Fukumoto, "Benzyloisoquinoline and Homobenzyloisoquinoline Alkaloids", *MTP International Review of Sciences, Alkaloids, Organic*, 1973, **9**, pp. 181-234.
5. T. Kametani and K. Fukumoto, "Organic Synthesis I", Nankoudo, 1974.
6. T. Kametani and K. Fukumoto, "Organic Synthesis IV", Nankoudo, 1977.
7. T. Kametani and K. Fukumoto, "Synthetic and Natural Sources of the Isoquinoline Nucleus: Isoquinolines", Wiley, Interscience, 1981, Part I, pp. 139-274.
8. K. Fukumoto, "Dictionary of Organic Compounds", ed. by The Society of Synthetic Organic Chemistry, Japan, Gihoudo, 1984.
9. T. Kametani, T. Honda, K. Fukumoto, and M. Ihara, "Alkaloids", *Ullmann's Encyclo. Ind. Chem.*, 1985, A1, pp. 353-407.
10. M. Ihara and K. Fukumoto, "Asymmetric Synthesis of Bioactive Natural Products and Related Compounds from Chiral Propane-1,3-diols and Analogues", *Studies in Natural Products Chemistry*, Elsevier, 1993, **13**, pp. 53-105.

INTRODUCTIONS AND COMMENTARIES

1. T. Kametani and K. Fukumoto, "The Synthesis of Natural Products by Phenol Oxidation", *Yakugaku Kenkyu*, 1963, **35**, 426.
2. T. Kametani and K. Fukumoto, "Phenol Oxidation", *Farumashia*, 1968, **4**, 144.
3. T. Kametani and K. Fukumoto, "Synthesis of Dienone-type Isoquinoline Alkaloids by Pschorr Reaction", *Farumashia*, 1970, **6**, 457.
4. T. Kametani and K. Fukumoto, "Synthesis of Morphinandienone Alkaloids by Phenol Oxidation and the Pschorr Reaction", *J. Heterocyclic Chem.*, 1971, **8**, 341.
5. K. Fukumoto, "The Synthesis of Morphinandienone-type Alkaloids", *Kagaku no Ryoiki Zokan*,

- 1971, **94**, 133.
6. T. Kametani and K. Fukumoto, "Photochemical Synthesis of Isoquinoline Alkaloids", *Acc. Chem. Res.*, 1972, **5**, 212.
 7. T. Kametani and K. Fukumoto, "Application of Phenolic Oxidation to the Total Syntheses of the Isoquinoline and Related Alkaloids; Biogenetic Type Syntheses", *Synthesis*, 1972, 657.
 8. T. Kametani and K. Fukumoto, "Syntheses of Isoquinoline Alkaloids by a Systematic Design", *Heterocycles*, 1973, **1**, 129.
 9. T. Kametani, K. Fukumoto, and M. Koizumi, "Synthesis of Androcymbine and Related Homomorphinandienones", *Heterocycles*, 1973, **1**, 327.
 10. T. Kametani, K. Fukumoto, and F. Satoh, "The Syntheses of Isoquinoline Alkaloids and Related Compounds by Biogenetic Type Reaction", *Bioorg. Chem.*, 1974, **3**, 430.
 11. T. Kametani and K. Fukumoto, "Sekiyukagaku to Iyakuin", *J. Jpn. Petroleum Institute*, 1975, **18**, 363.
 12. T. Kametani and K. Fukumoto, "Total Synthesis of Certain Isoquinoline and Indole Alkaloids by Thermolysis", *Heterocycles*, 1975, **3**, 29.
 13. T. Kametani, K. Fukumoto, K. Kigasawa, M. Hiiragi, and H. Ishimaru, "Synthesis of the 1,2,3,4-Tetrahydroisoquinolines and Related Compounds by Phenolic Cyclization", *Heterocycles*, 1975, **3**, 311.
 14. T. Kametani and K. Fukumoto, "Synthesis of Benzazepine Alkaloids and Related Compounds", *Heterocycles*, 1975, **3**, 931.
 15. T. Kametani and K. Fukumoto, "Total Synthesis of Natural Products by Retro Mass Spectral Synthesis", *J. Synth. Org. Chem. Japan*, 1976, **34**, 934.
 16. T. Kametani and K. Fukumoto, "Total Synthesis of Natural Products by Retro Mass Spectral Synthesis", *Acc. Chem. Res.*, 1976, **9**, 319.
 17. T. Kametani, H. Nemoto, and K. Fukumoto, "Annulation — Synthesis of Natural Products", *J. Synth. Org. Chem. Japan*, 1977, **35**, 1009.
 18. T. Kametani and K. Fukumoto, "Synthesis of Quinazolone Alkaloids and Benzoxazinones by Retro Mass Spectral Synthesis and Related Analysis", *Heterocycles*, 1977, **7**, 615.
 19. T. Kametani and K. Fukumoto, "Newer Method in the Total Syntheses of Natural Products", *Heterocycles*, 1977, **8**, 465.
 20. T. Kametani and K. Fukumoto, "Total Syntheses of Natural Products from Five-membered

- Heterocyclic Compounds as Starting Materials”, *Heterocycles*, 1978, **10**, 469.
21. T. Kametani, K. Fukumoto, and M. Ihara, “Bioformation and Biotransformation of Isoquinoline Alkaloids and Related Compounds”, *Bio. Org. Chem.*, 1978, **11**, 153.
 22. T. Kametani and K. Fukumoto, “Syntheses of Physiologically Active Nitrogen Compounds — Syntheses of Analgesics Having 6,7-Benzomorphan System”, *Kagaku*, 1979, **34**, 105.
 23. T. Kametani and K. Fukumoto, “Synthesis of Tetracyclic Antibiotics — Tetracyclines and Anthracyclines”, *Kagaku Kogyo*, 1979, **30**, 1023.
 24. T. Kametani and K. Fukumoto, “Syntheses of Natural Products by Ring Opening Reaction of Five-membered Heterocyclic Compounds”, *Kagaku no Ryoiki Zokan*, 1979, **123**, 153.
 25. T. Kametani and K. Fukumoto, “Physiological Activity of Aza Organic Compounds — Syntheses of Morphine-type Analgesics”, *Kagaku Zokan*, 1979, **79**, 77.
 26. T. Kametani and K. Fukumoto, “Total Synthesis of Natural Products *via* Intramolecular Diels-Alder Reactions”, *Farumashia*, 1980, **16**, 295.
 27. T. Kametani and K. Fukumoto, “Synthesis of Natural Products *via* Benzocyclobutenes”, *Kagaku no Ryoiki Zokan*, 1980, **125**, 81.
 28. T. Kametani and K. Fukumoto, “Syntheses of Linear Tetracyclic Antibiotics — Tetracyclines and Anthracyclines”, *Medicin. Res. Revs.*, 1980, **1**, 23.
 29. T. Kametani and K. Fukumoto, “Progress in the Synthesis of Natural Organic Compounds I”, *Kagaku (Science)*, 1981, **51**, 82.
 30. T. Kametani and K. Fukumoto, “Progress in the Synthesis of Natural Organic Compounds II”, *Kagaku (Science)*, 1981, **51**, 178.
 31. T. Kametani and K. Fukumoto, “Total Synthesis of Natural Products by Retro Mass Spectral Synthesis — A Development of New Application Field in Mass Spectrometry”, *Mass Spectroscopy*, 1981, **29**, 39.
 32. T. Kametani, K. Fukumoto, and M. Ihara, “Synthesis of Carbapenem Antibiotics”, *Heterocycles*, 1982, **17**, 463.
 33. K. Fukumoto and M. Ihara, “Asymmetric Synthesis of Alkaloids”, *R & D Report*, 1982, **35**, 161.
 34. T. Kametani, T. Honda, and K. Fukumoto, “Recent Progress in Natural Products Synthesis”, *Science and Humanity*, 1985, 279.
 35. M. Ihara and K. Fukumoto, “Double Michael Reaction of Diels-Alder Type and Its Application”, *J. Synth. Org. Chem. Jpn.*, 1986, **44**, 96.

36. K. Shishido and K. Fukumoto, "Development of Novel Synthetic Reaction Using Pericyclic Reaction of *o*-Quinodimethane and Its Application", *J. Synth. Org. Chem. Jpn.*, 1988, **46**, 1179.
37. K. Fukumoto, M. Ihara, H. Nemoto, and M. Takahashi, "Stereoselective Synthesis of Steroids", *Research Papers of the Suzuken Memorial Foundation*, 1992, **11**, 180.
38. M. Ihara and K. Fukumoto, "Syntheses of Polycyclic Natural Products Employing the Intramolecular Double Michael Reaction", *Angew. Chem. Int. Ed. Engl.*, 1993, **32**, 1010.
39. M. Toyota and K. Fukumoto, "Synthetic Studies of Antitumor Natural Products with an Aim to Elucidate the Molecular Mechanism of Action", *BIOmedica*, 1993, **8**, 78.
40. K. Fukumoto, "Heterocycles —Kako, Genzai, Shourai (Past, Present, and Future)", *Farmacia*, 1993, **29**, 293.
41. K. Fukumoto, "Effective Ring Formations and Natural Product Syntheses", *J. Synth. Org. Chem. Japan*, 1994, **52**, 16.
42. M. Ihara and K. Fukumoto, "Recent Progress in the Chemistry of Non-monoterpenoid Indole Alkaloids", *Natural Product Reports*, 1995, 277.
43. M. Ihara and K. Fukumoto, "Recent Progress in the Chemistry of Non-monoterpenoid Indole Alkaloids", *Natural Product Reports*, 1996, 241.
44. K. Fukumoto, "Development of Highly Stereoselective Domino Reactions and Application to Medicinary Chemistry", *Yakugaku Zasshi*, 1996, **116**, 671.
45. H. Nemoto and K. Fukumoto, "A Novel Domino Route to Chiral Cyclobutanones and its Function as Cornerstone in the Synthesis of Versatile Natural Products", *Synlett*, 1997, 863.
46. M. Ihara and K. Fukumoto, "Recent Progress in the Chemistry of Non-monoterpenoid Indole Alkaloids", *Natural Product Reports*, 1997, 413.

ORIGINA PAPERS

1. T. Kametani, K. Fukumoto, and Y. Nomura, "Synthesis of the Methyl Derivatives of Heterocyclic Compounds by the Hydrogenolysis of Their Phenylurethanes from Primary Alcohol", *Chem. Pharm. Bull.*, 1958, **6**, 467.
2. T. Kametani and K. Fukumoto, "Hydrolytic Products of 2-Methyl- or 2-Phenyl-4-(2'-nitro-3'-methoxy-4'-acetoxybenzal)-5-oxazolone and Their Related Compounds", *Yakugaku Kenkyu*, 1958, **30**, 412.

3. T. Kametani, K. Fukumoto, and T. Katagi, "The Eschweiler-Clarke and Pictet-Spengler Reaction with β -Methoxysafrylamine", *Chem. Pharm. Bull.*, 1959, **7**, 567.
4. T. Kametani, K. Fukumoto, and Y. Nomura, "The Formation of Vanillide and Polyvanillide", *Chem. Pharm. Bull.*, 1959, **7**, 641.
5. T. Kametani, K. Fukumoto, and O. Umezawa, "Studies on Anticancer Agents. (I). Synthesis of Various Alkyl Thiosulfinates and Their Tumor Inhibiting Effects", *Yakugaku Kenkyu*, 1959, **31**, 60.
6. T. Kametani, K. Fukumoto, and O. Umezawa, "Studies on Anticancer Agents. (II). A Synthesis of 2-Thenyl- and 2-Furfuryl Thiolsulfinates", *Yakugaku Kenkyu*, 1959, **31**, 125.
7. T. Kametani, K. Fukumoto, and O. Umezawa, "Studies on Anticancer Agents. (III). A Synthesis of Heterocyclic Disulfides and Their Oxidation Products", *Yakugaku Kenkyu*, 1959, **31**, 132.
8. T. Kametani, Y. Nomura, and K. Fukumoto, "Studies on the Syntheses of Benzoquinolizine Derivatives. II. The Formation of 2-Quinolone and 1-Isoquinolone by Alkali Treatment of Their Corresponding Chloro Derivatives", *Yakugaku Kenkyu*, 1959, **31**, 673.
9. T. Kametani, K. Fukumoto, Y. Takayanagi, T. Teshigawara, and O. Umezawa, "Anti-cancer Agents. IV. Desulfurization by Hydrazine Hydrate. (I). The Reaction of *o*-, *m*-, and *p*-Nitrobenzyl Disulfide with Hydrazine Hydrate", *Chem. Pharm. Bull.*, 1960, **8**, 995.
10. T. Kametani, K. Fukumoto, Y. Satoh, T. Teshigawara, and O. Umezawa, "Studies on Anti-cancer Agents. V. Desulfurization by Hydrazine Hydrate. II. The Reaction of Benzyl and Piperonyl Disulfide with Hydrazine", *Bull. Chem. Soc. Japan*, 1960, **33**, 1678.
11. T. Kametani and K. Fukumoto, "Studies on the Polyester. (2). The Formation of Polymer from *p*-Hydroxy- or *p*-Benzyloxybenzoic Acid and the Character of Thionyl Chloride", *Yakugaku Zasshi*, 1960, **80**, 1188.
12. T. Kametani and K. Fukumoto, "1,2-Dihydroisoquinoline Derivatives", *Yakugaku Zasshi*, 1960, **80**, 1288.
13. T. Kametani and K. Fukumoto, "A Modified Synthesis of Tryptamine", *Yakugaku Kenkyu*, 1961, **33**, 83.
14. T. Kametani, S. Takano, K. Fukumoto, and Y. Takayanagi, "Studies on the Anti-cancer Agents VI. The Mechanism of Desulfurization Reaction of Bis(*p*-nitrobenzyl) Disulfide with Hydrazine Hydrate and the Reaction of Disulfide with Various Amines", *Yakugaku Zasshi*, 1961, **81**, 83.
15. T. Kametani, K. Fukumoto, and T. Nakano, "Studies on the Syntheses of Cularine Derivatives. I. A Synthesis of Diphenyl Ether by Ullmann Reaction and the Formation of Oxepine Nucleus",

- Yakugaku Zasshi*, 1962, **82**, 1308.
16. T. Kametani and K. Fukumoto, "Total Synthesis of (+)-Cularine", *Chem. and Ind.*, 1963, 291.
 17. T. Kametani, K. Fukumoto, S. Shibuya, and T. Nakano, "Cularine and Related Compounds. V. Investigation of the Ullmann Reaction Products of Methyl (2-Bromo-4,5-dimethoxyphenyl)acetate with Phenolic Compounds, and Approach to the Total Synthesis of Cularine", *Chem. Pharm. Bull.*, 1963, **11**, 1299.
 18. T. Kametani and K. Fukumoto, "Cularine and Related Compounds. IV. The Oximation and Reduction of 2,3,6-Trimethoxydibenzo[*b,f*]oxepin-10(11*H*)-one", *Chem. Pharm. Bull.*, 1963, **11**, 1322.
 19. T. Kametani and K. Fukumoto, "Cularine and Related Compounds. Part VI. A Total Synthesis of (±)-Cularine", *J. Chem. Soc. (C)*, 1963, 4289.
 20. T. Kametani, K. Fukumoto, and K. Ogasawara, "Synthesis of Cularine and Related Compounds. (2) The Products of *N*-[3-(2-Formyl-4,5-dimethoxyphenethyl)acetamide by Pictet-Spengler Reaction (A Synthesis of *C-nor*-Cularine)", *Yakugaku Zasshi*, 1963, **83**, 180.
 21. T. Kametani and K. Fukumoto, "Synthesis of Papaverine Derivatives. (12). Oxidation of Methylene Group of 1-(3,4-Dimethoxybenzyl)-6,7-dimethoxy-3,4-dihydro- (and 1,2,3,4-Tetrahydro)-isoquinoline by Alumina-Chromatography", *Yakugaku Zasshi*, 1963, **83**, 1031.
 22. T. Kametani, K. Fukumoto, and K. Masuko, "The Formation of Indole Derivatives", *Yakugaku Zasshi*, 1963, **83**, 1052.
 23. T. Kametani, S. Shibuya, S. Seino, and K. Fukumoto, "Cularine and Related Compounds. Part X. A Total Synthesis of (±)-Cularimine", *J. Chem. Soc. (C)*, 1964, 4146.
 24. T. Kametani and K. Fukumoto, "Bisbenzylisoquinoline Alkaloids and Related Compounds. Part IV. A Total Synthesis of (±)-Dauricine", *J. Chem. Soc. (C)*, 1964, 6141.
 25. T. Kametani, S. Shibuya, S. Seino, and K. Fukumoto, "A Total Synthesis of (±)-Cularimine", *Tetrahedron Lett.*, 1964, 25.
 26. T. Kametani and K. Fukumoto, "Total Synthesis of (±)-Dauricine", *Tetrahedron Lett.*, 1964, 2771.
 27. T. Kametani, K. Fukumoto, and M. Ro, "Syntheses of Bisbenzylisoquinoline Alkaloids 1. Synthesis of *dl*-3-Amino-3'-methoxy-4,4'-bis(2-methyl-6,7-dimethoxy-1,2,3,4-tetrahydro-1-isoquinolylmethyl)diphenyl Ether", *Yakugaku Zasshi*, 1964, **84**, 532.
 28. S. Masamune and K. Fukumoto, "Strained Systems. V. Phenyl-substituted 1-(2-Cyclopropenyl)-3-diazopropan-2-ones and the Tricyclo[2.2.0.0.^{2,6}]hexane System", *Tetrahedron Lett.*, 1965, 4647.

29. T. Kametani, K. Wakisaka, and K. Fukumoto, "Papaverine and Related Compounds. XV. A Synthesis of 1-Benzyl-2-methyl-6-methoxy-1,2,3,4-tetrahydroisoquinolin-7-ol", *Yakugaku Zasshi*, 1965, **85**, 956.
30. T. Kametani, M. Shio, and K. Fukumoto, "Papaverine and Related Compounds. XVI. A Synthesis of 1-Phenyl-2-methyl-6-methoxy-1,2,3,4-tetrahydroisoquinolin-7-ol", *Yakugaku Zasshi*, 1965, **85**, 960.
31. E. S. Hall, F. McCapra, T. Money, K. Fukumoto, J. R. Hanson, B. S. Mooto, G. T. Phillips, and A. I. Scott, "Concerning the Terpenoid Origin of Indole Alkaloids: Biosynthetic Mapping by Direct Mass Spectrometry", *Chem. Commun.*, 1966, 348.
32. S. Masamune, K. Fukumoto, Y. Yasunari, and D. Dariwish, "Strained Systems. VI. Some Reactions of 5,6-Diphenyltricyclo[2.1.1.0^{5,6}]hexan-2-one", *Tetrahedron Lett.*, 1966, 193.
33. T. Kametani, T. Kikuchi, and K. Fukumoto, "Biogenetic Synthesis of Cularine-type Compounds", *Chem. Commun.*, 1967, 546.
34. T. Kametani, K. Fukumoto, H. Yagi, and F. Satoh, "Syntheses of Homoaporphine-type Compounds by Phenolic Oxidative Coupling", *Chem. Commun.*, 1967, 878.
35. T. Kametani, F. Satoh, H. Yagi, and K. Fukumoto, "Novel Rearrangement of Homoproaporphine and the Configuration of Two Isomeric Homoproaporphies", *Chem. Commun.*, 1967, 1103.
36. T. Kametani, O. Kusama, and K. Fukumoto, "Total Synthesis of Stebisimine", *Chem. Commun.*, 1967, 1212.
37. T. Kametani, H. Iida, S. Kano, S. Tanaka, K. Fukumoto, S. Shibuya, and H. Yagi, "Studies on the Syntheses of Heterocyclic Compounds. CLXXIV. An Approach to the Synthesis of Oxyacanthine and Berbamine", *J. Heterocyclic Chem.*, 1967, **4**, 85.
38. T. Kametani and K. Fukumoto, "Synthesis of "Homoerythrinadienone" by Phenolic Oxidative Coupling", *Chem. Commun.*, 1968, 26.
39. T. Kametani, K. Fukumoto, F. Satoh, and H. Yagi, "One-step Synthesis of Morphinandienone-type Compound", *Chem. Commun.*, 1968, 1398.
40. T. Kametani, K. Fukumoto, F. Satoh, and H. Yagi, "One-step Synthesis of an Androcymbine-like Compound", *Chem. Commun.*, 1968, 1001.
41. T. Kametani, K. Fukumoto, M. Koizumi and A. Kozuka, "Biogenetic Synthesis of an Androcymbine-type Compound", *Chem. Commun.*, 1968, 1605.
42. T. Kametani, T. Kikuchi, and K. Fukumoto, "Synthesis of Cularine Type Compounds (Studies on

- the Syntheses of Heterocyclic Compounds. CCXXXVI)", *Chem. Pharm. Bull.*, 1968, **16**, 1003.
43. T. Kametani, H. Agui, and K. Fukumoto, "Phenolic Cyclization. III. One Step Synthesis of *cis*- and *trans*-16-Hydroxy-15-methoxyerythrinanone by Phenolic Cyclization (Studies on the Syntheses of Heterocyclic Compounds. CCXLIV)", *Chem. Pharm. Bull.*, 1968, **16**, 1285.
 44. T. Kametani, K. Ogasawara, T. Terui, K. Yamaki, and K. Fukumoto, "Benzyne Reaction. II. Syntheses of Benzyl Cyanide Derivatives by Benzyne Reaction (Studies on the Syntheses of Heterocyclic Compounds. CCXLVII)", *Chem. Pharm. Bull.*, 1968, **16**, 1584.
 45. T. Kametani, H. Yagi, K. Fukumoto, and F. Satoh, "The Acid Catalyzed Rearrangement of Homoproaporphine under Two Different Conditions", *Chem. Pharm. Bull.*, 1968, **16**, 2297.
 46. T. Kametani, K. Fukumoto, H. Agui, H. Yagi, K. Kigasawa, H. Sugahara, M. Hiiragi, T. Hayasaka, and H. Ishimaru, "Phenolic Cyclization. Part I. Novel Synthesis of 1-Substituted Isoquinoline and Spiro[cycloalkane-1,1'-isoquinoline] Derivatives and Its Application to the Total Syntheses of Isoquinoline Alkaloids", *J. Chem. Soc. (C)*, 1968, 112.
 47. T. Kametani, H. Yagi, F. Satoh, and K. Fukumoto, "The Synthesis of Homoproaporphine-type Compounds by Phenolic Oxidative Coupling", *J. Chem. Soc. (C)*, 1968, 271.
 48. T. Kametani, F. Satoh, H. Yagi, and K. Fukumoto, "Rearrangement and Novel Enol-Ether Addition in Homoproaporphines", *J. Chem. Soc. (C)*, 1968, 1003.
 49. T. Kametani, K. Fukumoto, H. Yagi, H. Iida, and T. Kikuchi, "The Structure of Capaurimine", *J. Chem. Soc. (C)*, 1968, 1178.
 50. T. Kametani, O. Kusama, and K. Fukumoto, "Total Synthesis of Stebisimine", *J. Chem. Soc. (C)*, 1968, 1798.
 51. T. Kametani and K. Fukumoto, "Synthesis of Homoerythrinadienone by Phenolic Oxidative Coupling", *J. Chem. Soc. (C)*, 1968, 2156.
 52. T. Kametani, K. Fukumoto, F. Satoh, and H. Yagi, "One-step Synthesis of an Androcymbine-type Compound", *J. Chem. Soc. (C)*, 1968, 3084.
 53. T. Kametani, T. Terui, H. Agui, and K. Fukumoto, "A Modified Synthesis of Codamine under Eschweiler-Clarke Conditions", *J. Heterocyclic Chem.*, 1968, **5**, 753.
 54. T. Kametani, F. Satoh, H. Yagi, and K. Fukumoto, "The Syntheses of Homoproaporphines by Phenolic Oxidative Coupling. II. Separation of Two Isomeric Dienones of Homoproaporphines", *J. Org. Chem.*, 1968, **33**, 690.
 55. T. Kametani, M. Ihara, K. Fukumoto, H. Yagi, H. Shimanouchi, and Y. Sasada, "Structural

- Determination of Capaurimine and Capaurine”, *Tetrahedron Lett.*, 1968, 4251.
56. T. Kametani, K. Fukumoto, and T. Sugahara, “Total Synthesis of Amurine”, *Tetrahedron Lett.*, 1968, 5459.
57. T. Kametani, T. Terui, and K. Fukumoto, “Syntheses of 1-(3- and 4-Chlorobenzyl)-1,2,3,4-tetrahydro-6,7-dimethoxyisoquinoline and Cyclized Compounds by Benzyne Reaction (Studies on the Syntheses of Heterocyclic Compounds. CCXLI)”, *Yakugaku Zasshi*, 1968, **88**, 915.
58. T. Kametani, T. Terui, and K. Fukumoto, “Studies on the Syntheses of Heterocyclic Compounds. CCLIX. Synthesis of 1-(*m*-Chlorophenethyl)-1,2,3,4-tetrahydro-6,7-dimethoxyisoquinoline and Cyclized Product by Benzyne Reaction”, *Yakugaku Zasshi*, 1968, **88**, 1388.
59. T. Kametani, K. Fukumoto, H. Iida, and T. Kikuchi, “Capaurimine and Related Compounds. IV. Syntheses of 1,10-Dihydroxy-2,3,11-trimethoxy- and 3,10-Dihydroxy-1,2,11-trimethoxy-5,6,13,13a-tetrahydro-8*H*-dibenzo[*a,g*]quinolizine (Studies on the Syntheses of Heterocyclic Compounds. CCLXII)”, *Yakugaku Zasshi*, 1968, **88**, 1482.
60. T. Kametani, Y. Yamaki, H. Yagi, and K. Fukumoto, “Modified Total Synthesis of (±)-Galanthamine through Phenol Oxidation”, *Chem. Commun.*, 1969, 425.
61. T. Kametani, T. Sugahara, and K. Fukumoto, “Formation of Morphinandienone-type Compound through Methyleneedioxy Cleavage by Pschorr Cyclisation”, *Chem. and Ind.*, 1969, 833.
62. T. Kametani, H. Iida, T. Kikuchi, M. Mizushima, and K. Fukumoto, “Dienone-Phenol Rearrangement of ‘Procularine-type Compound’ and Synthesis of Its Rearranged Cularine-type Compound. (Studies on the Syntheses of Heterocyclic Compounds. CCVI)”, *Chem. Pharm. Bull.*, 1969, **17**, 709.
63. T. Kametani, H. Iida, T. Kikuchi, K. Ohkubo, and K. Fukumoto, “Capaurimine and Related Compounds. II. Syntheses of Position Isomers of Capaurimine and Capauridine (Studies on the Syntheses of Heterocyclic Compounds. CCCXIII)”, *Chem. Pharm. Bull.*, 1969, **17**, 1051.
64. T. Kametani, M. Koizumi, and K. Fukumoto, “The Synthesis of C-nor-Androcymbine (Studies on the Syntheses of Heterocyclic Compounds. CCXXIV)”, *Chem. Pharm. Bull.*, 1969, **17**, 1809.
65. T. Kametani, M. Koizumi, and K. Fukumoto, “Modified Synthesis of Isosalutaridine (Studies on the Syntheses of Heterocyclic Compounds. CCXXIV)”, *Chem. Pharm. Bull.*, 1969, **17**, 2245
66. T. Kametani, K. Fukumoto, T. Hayasaka, F. Satoh, and K. Kigasawa, “*ortho*-Dienones. Synthesis by the Phenolic Oxidation of Dihydroxy-1-phenethyl-1,2,3,4-tetrahydroisoquinoline”, *J. Chem. Soc. (C)*, 1969, 4.

67. T. Kametani, K. Fukumoto, F. Satoh, and H. Yagi, "Total Synthesis of *O*-Methylflavinantine", *J. Chem. Soc. (C)*, 1969, 520.
68. T. Kametani, K. Fukumoto, and T. Sugahara, "Total Synthesis of (\pm)-Amurine", *J. Chem. Soc. (C)*, 1969, 801.
69. T. Kametani, T. Terui, T. Ogino, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. Part CCLXXXI. Synthesis of Homoprotoberberine-type Compounds by Phenolic Cyclization", *J. Chem. Soc. (C)*, 1969, 874.
70. T. Kametani, T. Sugahara, H. Yagi, and K. Fukumoto, "Total Synthesis of (\pm)-Flavinantine", *J. Chem. Soc. (C)*, 1969, 1063.
71. T. Kametani, K. Fukumoto, M. Koizumi, and A. Kozuka, "Biogenetic Synthesis of an Androcymbine-type Compound", *J. Chem. Soc. (C)*, 1969, 1295.
72. T. Kametani, M. Ihara, K. Fukumoto, and Y. Yagi, "Studies on the Syntheses of Heterocyclic Compounds. Part CCC. Syntheses of Salutaridine, Sinoacutine, and Thebaine. Formal Total Syntheses of Morphine and Sinomenine", *J. Chem. Soc. (C)*, 1969, 2030.
73. T. Kametani, K. Fukumoto, A. Kozuka, H. Yagi, and M. Koizumi, "Studies on the Syntheses of Heterocyclic Compounds. Part CCCI. Biogenetic Syntheses of the Morphinandienone-type Compounds, Isosalutaridine and *O*-Methylflavinantine", *J. Chem. Soc. (C)*, 1969, 2034.
74. T. Kametani, K. Yamaki, H. Yagi, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. Part CCCXV. Modified Total Synthesis of (\pm)-Galanthamine through Phenol Oxidation", *J. Chem. Soc. (C)*, 1969, 2602.
75. T. Kametani, H. Agui, K. Saito, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. Part CCCXV. Erythrinan and Related Compounds. II. An Alternative Synthesis of *cis*-16-Hydroxy-15-methoxyerythrinan-8-one and Its Mass Spectrum", *J. Heterocyclic Chem.*, 1969, **6**, 453.
76. T. Kametani, T. Sugahara, H. Yagi, and K. Fukumoto, "Biogenetic Type Syntheses of Aporphine Alkaloids, Isoboldine and Glaucine", *Tetrahedron*, 1969, **25**, 3667.
77. T. Kametani, T. Terui, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. CCCVIII. Synthesis of 1-(*m*-Chlorophenylpropyl)-1,2,3,4-tetrahydro-6,7-dimethoxyisoquinoline", *Yakugaku Zasshi*, 1969, **89**, 586.
78. T. Kametani, T. Sugahara, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. CCCX. Syntheses of 1,2,3,4-Tetrahydro-8-hydroxy-1-(3-hydroxy-4-methoxybenzyl)-

- 6,7-dimethoxyisoquinoline and Diphenolic 1-Phenethylisoquinoline Derivatives and Trial of Its Phenolic Oxidation”, *Yakugaku Zasshi*, 1969, **89**, 610.
79. T. Kametani, M. Koizumi, and K. Fukumoto, “Total Synthesis of *O*-Methylandrocybine by Photolysis of Diazotized Isoquinoline”, *Chem. Commun.*, 1970, 1157.
80. T. Kametani, K. Fukumoto, and K. Shishido, “Syntheses of Morphinandienone and Aporphine by Photolysis”, *Chem. and Ind.*, 1970, 1566.
81. T. Kametani, T. Yamanaka, K. Ogasawara, and K. Fukumoto, “Nitrene. Part VI. Reaction of 6'-Nitropapaverine and Its Analogue with Triethyl Phosphite”, *J. Chem. Soc. (C)*, 1970, 380.
82. T. Kametani, F. Satoh, H. Yagi, and K. Fukumoto, “Configuration and Rearrangements of Homoproaporphines”, *J. Chem. Soc. (C)*, 1970, 382.
83. T. Kametani, T. Sugahara, H. Yagi, K. Fukumoto, B. R. Pai, and R. Charubala, “An Approach to the Synthesis of Sinomenine”, *J. Chem. Soc. (C)*, 1970, 624.
84. T. Kametani, K. Fukumoto, M. Kawatsu, and M. Fujihara, “Studies on the Syntheses of Heterocyclic Compounds. Part CCCXIII. Phenolic Oxidative Coupling of Dihydroxy-1-phenethyl-1,2,3,4-tetrahydroisoquinoline”, *J. Chem. Soc. (C)*, 1970, 922.
85. T. Kametani, K. Fukumoto, M. Kawatsu, and M. Fujihara, “Abnormal Products of the Pschorr Reaction of 8-Amino-1,2,3,4-tetrahydro-1-phenethylisoquinoline”, *J. Chem. Soc. (C)*, 1970, 2209.
86. T. Kametani, H. Sugi, H. Yagi, K. Fukumoto, and S. Shibuya, “Synthesis of Stereochemistry of 1,2,3,4-Tetrahydro-6-methoxy-2-methyl-1-phenylisoquinoline and Related Compounds”, *J. Chem. Soc. (C)*, 1970, 2213.
87. T. Kametani, M. Koizumi, and K. Fukumoto, “Abnormal Products of 1-(2-Amino-3-benzyloxy-4-methoxyphenethyl)-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methylisoquinoline by Modified Pschorr Reaction (Studies on the Syntheses of Heterocyclic Compounds. CCCLXX)”, *Yakugaku Zasshi*, 1970, **90**, 1331.
88. T. Kametani, R. Charubara, M. Ihara, M. Koizumi, and K. Fukumoto, “The Synthesis of a Proerythrinadienone System by Phenol Oxidation”, *Chem. Commun.*, 1971, 289.
89. T. Kametani, T. Sugahara, H. Sugi, S. Shibuya, and K. Fukumoto, “Total Photolytic Synthesis of (±)-Pronuciferine, (±)-*O*-Methylorientalinone, and (±)-*O*-Methylkreysiginone”, *Chem. Commun.*, 1971, 724.
90. T. Kametani, H. Nemoto, T. Nakano, S. Shibuya, and K. Fukumoto, “Total Synthesis of Salutaridine by Photolysis”, *Chem. and Ind.*, 1971, 788.

91. T. Kametani, H. Sugi, S. Shibuya, and K. Fukumoto, "An Alternative Total Synthesis of Glaziovine by Photolysis", *Chem. and Ind.*, 1971, 818.
92. T. Kametani, K. Fukumoto, and M. Fujihara, "Biosynthesis of Cularine", *Chem. Commun.*, 1971, 352.
93. T. Kametani, T. Kohno, S. Shibuya, and K. Fukumoto, "Photochemical Synthesis of the Crinine Ring System: Formal Total Synthesis of (\pm)-Maritidine", *Chem. Commun.*, 1971, 774.
94. T. Kametani, K. Fukumoto, K. Kigasawa, and K. Wakisaka, "Chemical and Enzymic Phenol Oxidation of (*R*)-(-)-*N*-Methylcoclaurine and (*S*)-(+)-Reticuline (Studies on the Syntheses of Heterocyclic Compounds. CDII)", *Chem. Pharrn. Bull.*, 1971, **19**, 714.
95. T. Kametani, H. Sugi, S. Shibuya, and K. Fukumoto, "Total Synthesis of Flavinantine and Bracteoline by a Photo-Pschorr Reaction", *Chem. Pharrn. Bull.*, 1971, **19**, 1513.
96. T. Kametani, K. Yamaki, S. Shibuya, K. Fukumoto, K. Kigasawa, F. Satoh, M. Hiiragi, and T. Hayasaka, "Studies on the Syntheses of Heterocyclic Compounds. Part CCCLXXXI. A Novel Conversion of Galanthamine into Nivalidine under Non-acidic Conditions", *J. Chem. Soc. (C)*, 1971, 590.
97. T. Kametani, A. Kozuka, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. Part CCCLXXXII. Phenolic Oxidative Coupling of Reticuline by Use of Various Reagents", *J. Chem. Soc. (C)*, 1971, 1021.
98. T. Kametani, K. Takahashi, T. Sugahara, M. Koizumi, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. Part CCCLXXXVI. Pschorr Reaction of 1-(2-Aminobenzyl)- and 1-(2-Aminophenethyl)-1,2,3,4-tetrahydroisoquinolines (Total Synthesis of Thalicsimidine)", *J. Chem. Soc. (C)*, 1971, 1032.
99. T. Kametani, C. Seino, K. Yamaki, S. Shibuya, K. Fukumoto, K. Kigasawa, F. Satoh, M. Hiiragi, and T. Hayasaka, "Studies on the Syntheses of Heterocyclic Compounds. Part CCCLXXXVI. Alternative Total Syntheses of Galanthamine and *N*-Benzylgalanthamine Iodide", *J. Chem. Soc. (C)*, 1971, 1043.
100. T. Kametani, M. Koizumi, and K. Fukumoto, "Total Synthesis of *O*-Methylandrocymbine by a Photo-Pschorr Reaction and Synthesis of Thalifoline", *J. Chem. Soc. (C)*, 1971, 1792.
101. T. Kametani, T. Kobari, K. Fukumoto, and M. Fujihara, "Studies on the Syntheses of Heterocyclic Compounds. Part CCCXCII. An Alternative Total Synthesis of Petaline", *J. Chem. Soc. (C)*, 1971, 1796.

102. T. Kametani, K. Takahashi, S. Shibuya, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. Part CCCXCIII. Synthesis of Norerythrinadienone by Phenolic Oxidative Coupling", *J. Chem. Soc. (C)*, 1971, 1800.
103. T. Kametani, C. Seino, I. Noguchi, S. Shibuya, K. Fukumoto, T. Kohno, and S. Takano, "Formation of Indole Derivatives by Phenolic Oxidative Coupling", *J. Chem. Soc. (C)*, 1971, 1803.
104. T. Kametani, K. Fukumoto, K. Kigasawa, M. Hiiragi, H. Ishimaru, and K. Wakisaka, "Cyclized Products in the Synthesis of 6-Substituted Phenanthridines by Phenolic Cyclisation", *J. Chem. Soc. (C)*, 1971, 1805.
105. T. Kametani, M. Koizumi, K. Shishido, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. Part CD. Total Syntheses of *NO*-(10)-Dimethylhernovine and Kreysigine by Photolysis of Diazotised Isoquinolines", *J. Chem. Soc. (C)*, 1971, 1923.
106. T. Kametani, S. Hirata, S. Shibuya, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. Part CDI. Rearrangement of β -Hydroxylaudanosine", *J. Chem. Soc. (C)*, 1971, 1927.
107. T. Kametani, S. Shibuya, H. Sugi, O. Kusama, and K. Fukumoto, "Studies on Total Photolytic Syntheses of Alkaloids. Part V. Total Syntheses of Flavinantine, Amurine, Bracteoline, and Domesticine by Photolysis of the Appropriate 1-(2-Bromobenzyl)isoquinolines", *J. Chem. Soc. (C)*, 1971, 2446.
108. T. Kametani, K. Fukumoto, T. Terui, K. Yamaki, and E. Taguchi, "Studies on the Syntheses of Heterocyclic Compounds. Part CDXII. Total Synthesis of Canadine", *J. Chem. Soc. (C)*, 1971, 2709.
109. T. Kametani, R. Charubara, M. Ihara, M. Koizumi, T. Takahashi, and K. Fukumoto, "Syntheses of a Proerythrinadienone by Phenolic Oxidation and a Morphinandienone System by a Photo-Pschorr Reaction", *J. Chem. Soc. (C)*, 1971, 3315.
110. T. Kametani, T. Nakano, K. Shishido, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. Part CDXXI. General Synthesis of 7,8-Dioxygenated 1-Benzyl-1,2,3,4-tetrahydroisoquinolines and Elucidation of the Structure of Caseadine", *J. Chem. Soc. (C)*, 1971, 3350.
111. T. Kametani, T. Takahashi, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. Part CDXXXII. Synthesis of (\pm)-Thalicsmidine by a Possible Biosynthetic Route", *J. Chem. Soc. (C)*, 1971, 3617.
112. T. Kametani, S. Shibuya, T. Nakano, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic

- Compounds. Part CDXLIII. An Alternative Synthesis of (\pm)-Glaziovine by Photolysis and Phenolic Oxidation”, *J. Chem. Soc. (C)*, 1971, 3818.
113. T. Kametani, K. Fukumoto, and M. Fujihara, “Studies on the Syntheses of Heterocyclic Compounds. CCCXCV. The Synthesis of Homopetaline-Type Compounds”, *J. Org. Chem.*, 1971, **36**, 1293.
114. T. Kametani, K. Shishido, E. Hayashi, C. Seino, T. Kohno, S. Shibuya, and K. Fukumoto, “Studies on the Syntheses of Heterocyclic Compounds. CCCXCVI. An Alternative Total Synthesis of (\pm)-Galanthamine”, *J. Org. Chem.*, 1971, **36**, 1295.
115. T. Kametani, M. Koizumi, and K. Fukumoto, “Studies on the Syntheses of Heterocyclic Compounds. CDL. Total Synthesis of Androcymbine”, *J. Org. Chem.*, 1971, **36**, 3729.
116. T. Kametani, Y. Satoh, S. Shibuya, M. Koizumi, and K. Fukumoto, “Studies on the Syntheses of Heterocyclic Compounds. CDLI. Alternative Photolytic Total Syntheses of *O*-Methylandrocymbine and Kreysigine”, *J. Org. Chem.*, 1971, **36**, 3733.
117. T. Kametani, T. Sugahara, and K. Fukumoto, “Studies on the Total Photolytic Synthesis of Alkaloids. III. The Products of Photo-Pschorr Reaction — Total Synthesis of Isocorydine”, *Tetrahedron*, 1971, **27**, 5367.
118. T. Kametani, H. Sugi, S. Shibuya, and K. Fukumoto, “Studies on the Total Photolytic Synthesis of Alkaloids. IV. Modified Total Syntheses of Flavianantine, Bracteoline, Isoboldine, and Mecambrine by Photolysis”, *Tetrahedron*, 1971, **27**, 5375.
119. T. Kametani, T. Kohno, S. Shibuya, and K. Fukumoto, “Studies on the Syntheses of Heterocyclic Compounds. CDXXXVI. Photolytic Synthesis of the Crinine Ring System — Formal Synthesis (\pm)-Maritidine”, *Tetrahedron*, 1971, **27**, 5441.
120. T. Kametani, T. Sugahara, H. Sugi, S. Shibuya, and K. Fukumoto, “Total Syntheses of (\pm)-Pronuciferine, (\pm)-*O*-Methylorientalinone, and (\pm)-*O*-Methylkreysiginone”, *Tetrahedron*, 1971, **27**, 5993.
121. T. Kametani, K. Fukumoto, and M. Fujihara, “Biogenetic-type Synthesis of Cularine”, *Bioorg. Chem.*, 1971, **1**, 40.
122. T. Kametani, Y. Satoh, K. Fukumoto, and B. R. Pai, “On the Alkaloids from *Litsea xylanica*: Occurrence of (+)-Reticuline, (+)-Isoboldine and (+)-*N*-Norisoboldine”, *Indian J. Chem.*, 1971, **9**, 770.
123. T. Kametani, T. Honda, M. Ihara, and K. Fukumoto, “Photolytic Synthesis of Proerythrinadienones”,

Chem. and Ind., 1972, 119.

124. T. Kametani, H. Nemoto, T. Kobari, K. Shishido, and K. Fukumoto, "Total Synthesis of (\pm)-Cepharamine", *Chem. and Ind.*, 1972, 538.
125. T. Kametani, T. Kohno, R. Charubara, S. Shibuya, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. CDLXXXII. Total Photolytic Synthesis of (\pm)-Epicrinine", *Chem. Pharm Bull.*, 1972, **20**, 1488.
126. T. Kametani, T. Nakano, C. Seino, S. Shibuya, K. Fukumoto, T. R. Govindachari, K. Nagarajan, B. R. Pai, and P. S. Subramaniani, "Studies on the Syntheses of Heterocyclic Compounds. CDLXXXIII. Synthesis of Homoaporphine and Attempts to Synthesize C-Noraporphine by Pschorr Reaction", *Chem. Pharm Bull.*, 1972, **20**, 1507.
127. T. Kametani, T. Kohno, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. CDLXXXVI. Behavior of the Erythinadienone and Its Relatives in Acidic Medium", *Chem. Pharm Bull.*, 1972, **20**, 1678.
128. T. Kametani, K. Takahashi, T. Honda, M. Ihara, and K. Fukumoto, "Photolytic Synthesis and Rearrangement of Proerythrinadienones", *Chem. Pharm Bull.*, 1972, **20**, 1793.
129. T. Kametani, K. Fukumoto, and M. Fujihara, "Studies on the Syntheses of Heterocyclic Compounds. CDLXXXVII. An Alternative Synthesis of 'Isocularine' by an Intramolecular Ullmann Reaction", *Chem. Pharm Bull.*, 1972, **20**, 1800.
130. T. Kametani, S. Shibuya, S. Hirata, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. D. Novel Cleavage of Tetrahydroprotoberberines with Trifluoroacetic Anhydride", *Chem. Pharm Bull.*, 1972, **20**, 2570.
131. T. Kametani, T. Kobari, and K. Fukumoto, "Synthesis of Hasubanan Ring System from the Alkaloid Reticulin", *J. Chem. Soc., Chem. Commun.*, 1972, 288.
132. T. Kametani, K. Fukumoto, and M. Fujihara, "Studies on the Syntheses of Heterocyclic Compounds. Part CDLIV. Abnormal Dienone-Phenol Rearrangement of Procularine", *J. Chem. Soc., Perkin Trans. 1*, 1972, 394.
133. T. Kametani, K. Fukumoto, S. Shibuya, H. Nemoto, T. Nakano, T. Sugahara, T. Takahashi, Y. Aizawa, and M. Toriyama, "Studies on the Syntheses of Heterocyclic Compounds. Part CDLXII. Total Photolytic Syntheses of Aporphine [(\pm)-N-Methylaurotetanine, (\pm)-Cassythicine, and (\pm)-Pukateine], Proaporphine [(\pm)-Orientalinone], and Morphinandienone [(\pm)-Pallidine and (\pm)-Salutaridine] Alkaloids", *J. Chem. Soc., Perkin Trans. 1*, 1972, 1435.

134. T. Kametani, K. Yamaki, T. Terui, S. Shibuya, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. Part CDLXVI. Synthesis of Narwedine-type Enones by Photochemical Cyclisation", *J. Chem. Soc., Perkin Trans. 1*, 1972, 1513.
135. T. Kametani, Y. Satoh, and K. Fukumoto, "Total Syntheses of (-)-*O*-Methylandrocymbine, (-)-Kreysigine, and Alkaloid CC-10 Methyl Ether", *J. Chem. Soc., Perkin Trans. 1*, 1972, 2160.
136. K. Okui, I Ito, M. Koizumi, K. Fukumoto, and T. Kametani, "Studies on the Syntheses of Heterocyclic Compounds. CDXCI. Pyrimidine Derivatives V. Abnormal Condensation Products of 4-Amino-6-chloro-2-methoxypyrimidine with *p*-Nitrobenzenesulfonyl Chloride", *J. Heterocyclic Chem.*, 1972, **9**, 1283.
137. T. Kametani, K. Fukumoto, and T. Nakano, "Studies on the Syntheses of Heterocyclic Compounds. Part. CDXCVII. Total Synthesis of (\pm)-Cryptaustoline and (\pm)-Thaliporphine by the Benzyne Reaction", *J. Heterocyclic Chem.*, 1972, **9**, 1363.
138. T. Kametani, T. Kohno, R. Charubala, and K. Fukumoto, "Studies on the Synthesis of Heterocyclic Compounds. CDLXVII. Photolytic Synthesis of Kreysiginine-type Compounds", *Tetrahedron*, 1972, **28**, 3227.
139. T. Kametani, K. Fukumoto, and T. Nakano, "Studies on the Syntheses of Heterocyclic Compounds. CDLXXXIV. One-Step Synthesis of Dibenzoindolizinium Salt and Phenolic Aporphine by Benzyne Reaction", *Tetrahedron*, 1973, **28**, 4667.
140. T. Kametani, M. Kajiwara, and K. Fukumoto, "Syntheses of Hexadecahydro-17-methoxyyohimbane", *Chem. and Ind.*, 1973, 1165.
141. T. Kametani, K. Takahashi, K. Ogasawara, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. DX. A Novel Rearrangement of Proertythrinadienol with Methyl Fluorosulfonate", *Chem. Pharm. Bull.*, 1973, **21**, 662.
142. T. Kametani, A. Ujiie, K. Takahashi, T. Nakano, T. Suzuki, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. DXVI. Total Syntheses of the Aporphine, Morphinandienone and Tetrahydrodibenzopyrrocoline Alkaloids by Benzyne Reaction", *Chem. Pharm. Bull.*, 1973, **21**, 766.
143. T. Kametani, Y. Hirai, F. Satoh, K. Ogasawara, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. DXIX. A Total Synthesis of (\pm)-Discretine by Thermolysis", *Chem. Pharm. Bull.*, 1973, **21**, 907.
144. T. Kametani, S. Shibuya, H. Sugi, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic

- Compounds. Part DXXVII. The Absolute Configuration of 1,2,3,4-Tetrahydro-1-phenylisoquinolines”, *J. Heterocyclic Chem.*, 1973, **10**, 451.
145. T. Kametani, K. Takahashi, K. Ogasawara, and K. Fukumoto, “A Novel Formation of (±)-Glaziovine through Nitrenium Intermediate”, *Tetrahedron Lett.*, 1973, 4219.
146. T. Kametani, F. F. Ebetino, and K. Fukumoto, “Novel Conversion of Butyrolactones Containing the *ortho*-Nitrophenyl Moiety to Indoles with Triethyl Phosphite”, *Tetrahedron Lett.*, 1973, 5229.
147. T. Kametani, Y. Satoh, and K. Fukumoto, “Studies on the Syntheses of Heterocyclic Compounds. DXXII. Photolytic Synthesis of 1,12-Dihydroxy-2,10,11-trimethoxyhomoaporphine”, *Tetrahedron*, 1973, **29**, 2027.
148. T. Kametani, M. Mizushima, S. Takano, and K. Fukumoto, “Studies on the Syntheses of Heterocyclic Compounds. — DXXIII. Enzymic Oxidation of Homoorientaline with Homogenised Potato Peelings”, *Tetrahedron*, 1973, **29**, 2031.
149. T. Kametani, F. Satoh, K. Fukumoto, H. Sugi, and K. Kigasawa, “Catalytic Hydrogenation of (±)-Kreysiginone”, *Heterocycles*, 1973, **1**, 47.
150. T. Kametani, K. Fukumoto, Y. Kato, and M. Fujihara, “Studies on the Syntheses of Heterocyclic Compounds. DXXIX. Dehydrogenation of Cularine Type Compound”, *Yakugaku Zasshi*, 1973, **93**, 1094.
151. T. Kametani, T. Sugahara, and K. Fukumoto, “Formation of Morphinandienone-type Compound through Methylenedioxy Cleavage by Pschorr Cyclization”, *Chem. Pharm. Bull.*, 1974, **22**, 966.
152. T. Kametani, F. Satoh, K. Fukumoto, H. Sugi, and K. Kigasawa, “Studies on the Syntheses of Heterocyclic Compounds. CLXVIII. Catalytic Hydrogenation of (+)-Kreysiginone”, *Chem. Pharm. Bull.*, 1974, **22**, 1835.
153. T. Kametani, K. Takahashi, M. Kajiwara, Y. Hirai, C. Ohtsuki, F. Satoh, and K. Fukumoto, “Studies on the Syntheses of Tetracycline Derivatives. I. Thermolytic Cycloaddition of *o*-Quinodimethanes with Naphthoquinone”, *Chem. Pharm. Bull.*, 1974, **22**, 2159.
154. T. Kametani, F. F. Ebetino, and K. Fukumoto, “Nitrene. Part XIII. Novel Conversion of 2-Nitrophenyl-substituted Butyrolactones into Indoles with Triethyl Phosphite”, *J. Chem. Soc., Perkin Trans. I*, 1974, 861.
155. T. Kametani, Y. Katoh, and K. Fukumoto, “Regioselectivity in the Thermal 1,2-Cycloaddition of Benzocyclobutenes to 3,4-Dihydroisoquinolines”, *J. Chem. Soc., Perkin Trans. I*, 1974, 1712.
156. T. Kametani, A. Ujiie, and K. Fukumoto, “Total Synthesis of (±)-Mecambridine

- (1,10,11-Trimethoxy-2,3-methylenedioxyberbin-12-ylmethanol)", *J. Chem. Soc., Perkin Trans. 1*, 1974, 1954.
157. T. Kametani, H. Takeda, Y. Hirai, F. Satoh, and K. Fukumoto, "A Simple Route to Spiro[inden-2,1'-isoquinoline], a Spiro[indene-2,1'- β -carboline], and Hexadehydroyohimbane", *J. Chem. Soc., Perkin Trans. 1*, 1974, 2141.
158. T. Kametani, S. Hirata, F. Satoh, and K. Fukumoto, "Synthetic Approach to Rhoeadine-type Alkaloids", *J. Chem. Soc., Perkin Trans. 1*, 1974, 2509.
159. T. Kametani, M. Takemura, K. Fukumoto, T. Terui, and A. Kozuka, "Studies on the Syntheses of Heterocyclic Compounds. Part CLXXVII. An Abnormal Hofmann Degradation of Phenolic Berbinium Salts", *J. Chem. Soc., Perkin Trans. 1*, 1974, 2678.
160. T. Kametani, M. Takemura, K. Ogasawara, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. Part DLIV. A Total Synthesis of (\pm)-Coreximine by Thermolysis", *J. Heterocyclic Chem.*, 1974, **11**, 179.
161. T. Kametani, T. Takahashi, T. Honda, K. Ogasawara, and K. Fukumoto, "A Novel Regioselective Protoberberine Synthesis by Thermolysis", *J. Org. Chem.*, 1974, **39**, 447.
162. T. Kametani, T. Kato, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. DXLV. An Alternative Synthesis of the Protoberberine Ring System", *Tetrahedron*, 1974, **30**, 1043.
163. T. Kametani, T. Takahashi, K. Ogasawara, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. — DXLVI. Regiospecific Cycloaddition of a Benzocyclobutene Derivative with Schiff Bases by Thermolysis — A New Method for Isoquinoline Synthesis", *Tetrahedron*, 1974, **30**, 1047.
164. T. Kametani, M. Kajiwarra, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. — DXLVII. Syntheses of a Yohimbane Derivative by Thermolysis", *Tetrahedron*, 1974, **30**, 1053.
165. T. Kametani, T. Kobari, K. Shishido, and K. Fukumoto "Studies on the Syntheses of Heterocyclic Compounds. DXLVIII. Synthesis of a Hasubanan Ring System from the Benzyloisoquinoline Reticuline", *Tetrahedron*, 1974, **30**, 1059.
166. T. Kametani, T. Suzuki, K. Takahashi, and K. Fukumoto "Studies on the Syntheses of Heterocyclic Compounds. DLIX. A Synthesis of Benzocarbazole Derivatives by Thermolysis", *Tetrahedron*, 1974, **30**, 2207.

167. T. Kametani, F. F. Ebetino, and K. Fukumoto, "Nitrenes- XIV. Triethyl Phosphite Deoxygenation of α -(6-Nitroveratrylidene)- γ -butyrolactone", *Tetrahedron*, 1974, **30**, 2713.
168. T. Kametani, Y. Ichikawa, T. Suzuki, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. DLXIX. One-step Synthesis of Dihydropyridocarbazole Derivatives", *Tetrahedron*, 1974, **30**, 3713.
169. T. Kametani, T. Suzuki, K. Takahashi, and K. Fukumoto, "A Synthesis of Benzocarbazole Derivatives by Thermolysis", *Heterocycles*, 1974, **2**, 9.
170. T. Kametani, A. Ujiie, and K. Fukumoto, "Total Synthesis of (\pm)-Mecambrine", *Heterocycles*, 1974, **2**, 55.
171. T. Kametani, Y. Ichikawa, T. Suzuki, and K. Fukumoto, "One-Step Synthesis of Dihydropyridocarbazole Derivative", *Heterocycles*, 1974, **2**, 171.
172. F. F. Ebetino, K. Fukumoto, and T. Kametani, "Reductive Cyclization of α -(6-Nitroveratrylidene)- β -butyrolactone with Triethyl Phosphite", *Heterocycles*, 1974, **2**, 303.
173. T. Kametani, T. Hirai, H. Takda, M. Kajiwara, T. Takahashi, F. Satoh, and K. Fukumoto, "A Facile Synthesis of the Spirobenzylisoquinolines and the Spirobenzylcarbolines", *Heterocycles*, 1974, **2**, 339.
174. T. Kametani, M. Takemura, K. Fukumoto, T. Terui, and A. Kozuka, "Abnormal Hofmann Degradation of Tetrahydroprotoberberinium Salts", *Heterocycles*, 1974, **2**, 433.
175. T. Kametani, F. F. Ebetino, K. Fukumoto, and A. I. Meyers, "A Novel Formation of 1-Hydroxymethyl-4,5-dimethoxy-7H-azirino[1,2-a]indole-7a-carboxylic Acid γ -Lactone", *Heterocycles*, 1974, **2**, 559.
176. T. Kametani, H. Nemoto, and K. Fukumoto, "A New Synthetic Method for the Key Intermediate of Eudesmane Class of Sesquiterpenes through Furan Derivatives", *Heterocycles*, 1974, **2**, 639.
177. T. Kametani, M. Takemura, K. Takahashi, M. Takeshita, M. Ihara, and K. Fukumoto, "The Novel Formation of a Dibenzocyclohepta[d]pyridine by an Abnormal Hofmann Degradation of a Diphenolic Tetrahydroberberinium Salt", *Heterocycles*, 1974, **2**, 653.
178. T. Kametani, T. Takahashi, M. Kajiwara, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. Part DLXXVIII. The Synthesis of the Yohimbane Ring System by an Electrocyclic Reaction of *o*-Quinodimethane", *Anales de Quim.*, 1974, **70**, 1000.
179. T. Kametani, T. Suzuki, K. Takahashi, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. DXLIII. An Alternative and Simple Preparation of Tryptamine from

- L-Tryptophan by Catalytic Decarboxylation with Metal Ion”, *Synthesis*, 1974, 131.
180. T. Kametani, K. Takahashi, T. Suzuki, and K. Fukumoto, “The Direction of the Ring Closure of *N*-Furoyltryptophan (Studies on the Syntheses of Heterocyclic Compounds. DLXXXVI)”, *Yakugaku Zasshi*, 1974, **94**, 1520.
181. T. Kametani, S.-P. Huang, M. Ihara, and K. Fukumoto, “A Modified Synthesis of Pentazocine”, *Chem. Pharm. Bull.*, 1975, **23**, 2010.
182. T. Kametani, Y. Hirai, M. Kajiwara, T. Takahashi, and K. Fukumoto, “Studies on the Syntheses of Heterocyclic Compounds. DCXLI. A Convenient Synthesis of Hexadehydroyohimbine and a Total Synthesis of Yohimbine”, *Chem. Pharm. Bull.*, 1975, **23**, 2634.
183. T. Kametani, T. Suzuki, K. Takahashi, Y. Ichikawa, and K. Fukumoto, “Studies on the Syntheses of Heterocyclic Compounds. Part DLXXXIX. A Simple Route to Pyridocarbazoles”, *J. Chem. Soc., Perkin Trans. 1*, 1975, 413.
184. T. Kametani, M. Kajiwara, T. Takahashi, and K. Fukumoto, “Tetra- and Hexa-dehydroyohimbane Synthesis by an Intermolecular Cycloaddition of *o*-Quinodimethane”, *J. Chem. Soc., Perkin Trans. 1*, 1975, 737.
185. T. Kametani, M. Takemura, T. Takahashi, M. Takeshita, M. Ihara, and K. Fukumoto, “Novel Formation of Benzo[5,6]cyclohept[1,2,3-*ij*]isoquinolines from Berbenium Salts”, *J. Chem. Soc., Perkin Trans. 1*, 1975, 1012.
186. T. Kametani, A. Ujiie, M. Ihara, and K. Fukumoto, “Total Synthesis of (\pm)-Orientalidine and a Positional Isomer”, *J. Chem. Soc., Perkin Trans. 1*, 1975, 1822.
187. T. Kametani, H. Takeda, H. Nemoto, and K. Fukumoto, “Studies on the Syntheses of Heterocyclic Compounds. Part DCXXII. Total Synthesis of (\pm)-Mappicine [7-(1-Hydroxypropyl)-8-methylindolizino[1,2-*bl*]quinolin-9-(11*H*)-one]”, *J. Chem. Soc., Perkin Trans. 1*, 1975, 1825.
188. T. Kametani, Y. Kato, T. Honda, and K. Fukumoto, “Reaction of 1, 2-Dihydrobenzocyclobutene-1-carbonitriles with Methyl Acrylate as an Unsymmetric Dienophile”, *J. Chem. Soc., Perkin Trans. 1*, 1975, 2001.
189. T. Kametani, S. Hirai, H. Nemoto, M. Ihara, S. Hibino, and K. Fukumoto, “A Ready Synthesis of Indeno[2,1-*a*][3]benzazepines”, *J. Chem. Soc., Perkin Trans. 1*, 1975, 2028.
190. T. Kametani, T. Suzuki, Y. Ichikawa, and K. Fukumoto, “Studies on the Syntheses of Heterocyclic Compounds. Part CDXXXIV. A Novel Total Synthesis of Olivacine (1,5-Dimethyl-6*H*-pyrido-[4,3-*b*]carbazole)”, *J. Chem. Soc., Perkin Trans. 1*, 1975, 2102.

191. T. Kametani, S. Hirai, H. Nemoto, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. Part DLXXXVII. A Modified Synthesis of the Spirobenzylisoquinolines", *J. Heterocyclic Chem.*, 1975, **12**, 185.
192. T. Kametani, T. Higa, M. Ihara, K. Fukumoto, M. Kajiwara, Y. Fujimoto, and Y. Tanaka, "The Stereochemistry of Methyl *O*-(4-Hydroxy-3-methoxycinnamoyl)reserpate", *J. Heterocyclic Chem.*, 1975, **12**, 259.
193. T. Kametani, K. Fukumoto, M. Ihara, A. Ujiie, and H. Koizumi, "Conformational Analysis of the Dibenzo[*a,g*]quinolizidines by Spectroscopic Methods", *J. Org. Chem.*, 1975, **40**, 3280.
194. T. Kametani, M. Kajiwara, T. Takahashi, and K. Fukumoto, "Relationship between Activity and ¹³C Chemical Shifts of Benzocyclobutene", *Tetrahedron*, 1975, **31**, 949.
195. T. Kametani, F. F. Ebetino, and K. Fukumoto, "Nitrenes — XV. 1-Hydroxymethyl-4,5-dimethoxy-7*H*-azirino[1,2-*a*]indole-7*a*-carboxylic Acid γ -Lactone, and Nitrene Addition Compound", *Tetrahedron*, 1975, **31**, 1241.
196. T. Kametani, M. Takemura, M. Ihara, and K. Fukumoto, "Biotransformation of (\pm)-Reticuline into (\pm)-Coreximine with Rat Liver", *Heterocycles*, 1975, **3**, 139.
197. T. Kametani, A. Ujiie, M. Ihara, and K. Fukumoto, "Total Synthesis of (\pm)-Orientalidine", *Heterocycles*, 1975, **3**, 143.
198. T. Kametani, S. Hirata, S. Hibino, H. Nemoto, M. Ihara, and K. Fukumoto, "Transformation of the Spiroisoquinoline to the Benzindenoazepine", *Heterocycles*, 1975, **3**, 151.
199. T. Kametani, H. Takeda, H. Nemoto, and K. Fukumoto, "The Total Synthesis of (\pm)-Mappicine", *Heterocycles*, 1975, **3**, 167.
200. T. Kametani, M. Kajiwara, T. Takahashi, and K. Fukumoto, "A Total Synthesis of (\pm)-Yohimbine", *Heterocycles*, 1975, **3**, 179.
201. T. Kametani, A. Ujiie, M. Ihara, K. Fukumoto, and H. Koizumi, "Conformational Analysis of Tetrahydroprotoberberines by Carbon-13 NMR Spectroscopy", *Heterocycles*, 1975, **3**, 371.
202. T. Kametani, Y. Ichikawa, T. Suzuki, and K. Fukumoto, "A Fascinating Synthesis of Olivacine", *Heterocycles*, 1975, **3**, 401.
203. T. Kametani, S. Hirata, M. Ihara, and K. Fukumoto, "A Novel Phthalideisoquinoline Synthesis from the Benzo[*d*]indeno[1,2-*b*]azepine", *Heterocycles*, 1975, **3**, 405.
204. S.-T. Lu, T.-L. Su, T. Kametani, A. Ujiie, M. Ihara, and K. Fukumoto, "Structure Elucidation of Two New Tetrahydroprotoberberine Alkaloids, Corytenchine and Corytenchirine", *Heterocycles*,

- 1975, **3**, 459.
205. T. Kametani, M. Takeshita, M. Ihara, and K. Fukumoto, "A Total Synthesis of Angustine", *Heterocycles*, 1975, **3**, 627.
206. T. Kametani, K. Takahashi, M. Ihara, and K. Fukumoto, "A Facile Synthesis of 2,3-Dihydro-1*H*-pyrrolo[1,2-*a*]indoles", *Heterocycles*, 1975, **3**, 691.
207. T. Kametani, K. Fukumoto, M. Ihara, M. Takemura, H. Matsumoto, B. R. Pai, K. Nagarajan, M. S. Premila, and H. Suguna, "Formation of Protoberberines by Debenzylation and Photolysis of Tetrahydroisoquinolines", *Heterocycles*, 1975, **3**, 811.
208. T. Kametani, K. Fukumoto, F. Satoh, K. Kigasawa, and H. Sugi, "Synthesis of Homoproaporphine Related Compounds", *Heterocycles*, 1975, **3**, 921.
209. T. Kametani, T. Honda, H. Inoue, and K. Fukumoto, "A One Step Synthesis of the Phthalideisoquinoline Alkaloid Cordrastine", *Heterocycles*, 1975, **3**, 1091.
210. T. Kametani, T. Honda, S.-P. Huang, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. Part DCXXXVI. An Alternative Synthesis of Pentazocine," *Canad. J. Chem.*, 1975, **53**, 3820.
211. T. Kametani, M. S. Premila, S. Hirata, H. Sato, H. Nemoto, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. Part DCXXXVIII. Simplen Synthesis of Benz[*d*]indeno[1,2-*b*]apezine from 1-Benzoyl-3,4-dihydroisoquinoline," *Canad. J. Chem.*, 1975, **53**, 3824.
212. T. Kametani, T. Takahashi, K. Ogasawara, C. V. Loc, and K. Fukumoto, "Synthesis of (±)-Glaziovine, a Proaporphine Alkaloids, through Nitrenium Intermediate," *Coll. Czech. Chem. Comm.*, 1975, **40**, 712.
213. T. Kametani, T. Suzuki, C. Ohtsuka, K. Takahashi, and K. Fukumoto, "Decarboxylation of Tryptophan and a Synthesis of Harman (Studies on the Syntheses of Heterocyclic Compounds. DCVI)," *Yakugaku Zasshi*, 1975, **95**, 363.
214. T. Kametani, Y. Hirai, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. DCLXXI. An Alternative Total Synthesis of Yohimbine," *Chem. Pharm. Bull.*, 1976, **24**, 2500.
215. T. Kametani, H. Nemoto, M. Takeuchi, S. Hibino, and K. Fukumoto, "Synthetic Approach to the Synthesis of Eudesmane Type of Sesquiterpenes by Using Furan Derivatives as a Starting Material," *Chem. Pharm. Bull.*, 1976, **26**, 1354.

216. T. Kametani, Y. Kigawa, T. Takahashi, H. Nemoto, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. DCXIII. The Reaction of Pyridone Derivatives with Diazoalkane" *Chem. Pharm. Bull.*, 1976, **26**, 1870.
217. T. Kametani, C. Ohtsuka, H. Nemoto, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. DCXXII. A Synthesis of Coralydine and *O*-Methylcorytenchirine by Thermolysis of Benzocyclobutene", *Chem. Pharm. Bull.*, 1976, **26**, 2525.
218. S.-T. Lu, T.-L. Su, T. Kametani, A. Ujiie, M. Ihara, and K. Fukumoto, "Elucidation of the Structure of Two Spirobenzylisoquinoline Alkaloids, Yenhusomine and Yenhusomidine, and Two Berbine Alkaloids, Corytenchine and Corytenchirine from *Corydalis ochotensis* (Turez.)", *J. Chem. Soc., Perkin Trans. 1*, 1976, 63.
219. T. Kametani, T. Takahashi, M. Ihara, and K. Fukumoto, "Synthesis of 2,3-Dihydro-1*H*-pyrrolo[1,2-*a*]indoles by Intramolecular Nucleophilic Aromatic Substitution", *J. Chem. Soc., Perkin Trans. 1*, 1976, 389.
220. T. Kametani, H. Nemoto, and K. Fukumoto, "Novel Stereospecific Synthesis of a Potential Intermediate for Preparation of Tetracyclic Diterpenes from Dihydrobenzocyclobutene Derivatives", *J. Chem. Soc. Chem. Commun*, 1976, 400.
221. T. Kametani, A. Ujiie, M. Ihara, K. Fukumoto, and S.-T. Lu, "Total Synthesis of Corytenchirine", *J. Chem. Soc., Perkin Trans. 1*, 1976, 1218.
222. T. Kametani, T. Honda, H. Inoue, and K. Fukumoto, "A One-Step Synthesis of the Phthalidylisoquinoline Alkaloids, Cordrastine and Hydrastine", *J. Chem. Soc., Perkin Trans. 1*, 1976, 1221.
223. T. Kametani, K. Fukumoto, F. Satoh, K. Kigasawa, and H. Sugi, "Studies on the Syntheses of Heterocyclic Compounds. Part DCXLIV. Catalytic Reduction of Homoproaporphine Related Compounds", *J. Heterocyclic Chem.*, 1976, **13**, 29.
224. T. Kametani, S.-P. Huang, M. Ihara, and K. Fukumoto, "Two Stereoisomers of 1-Benzyl-5-hydroxy-6-(4-methoxybenzyl)-4,5-dimethylpiperidin-2-one", *J. Heterocyclic Chem.*, 1976, **13**, 779.
225. T. Kametani, M. Takeshita, M. Ihara, and K. Fukumoto, "Total Synthesis of Angustine, Nauclefine, and Gentianin", *J. Org. Chem.*, 1976, **41**, 2542.
226. T. Kametani, S.-P. Huang, M. Ihara, and K. Fukumoto, "A Novel Cleavage of Aryl Benzyl Ethers and Allyl Aryl Ethers by Sodium bis-(2-Methoxyethoxy)aluminum Hydride. An Alternative

- Synthesis of Pentazocine”, *J. Org. Chem.*, 1976, **41**, 2545.
227. T. Kametani, H. Nemoto, K. Suzuki, and K. Fukumoto, “A New Synthetic Approach to the 3-Benzazepine Skeleton through Pinacol-Pinacolone Rearrangement”, *J. Org. Chem.*, 1976, **41**, 2988.
228. T. Kametani, M. Takemura, M. Ihara, K. Takahashi, and K. Fukumoto, “Biotransformation of 1-Benzyl-1,2,3,4-tetrahydro-2-methylisoquinolines into Tetrahydroberberines with Rat Liver Enzymes,” *J. Am. Chem. Soc.*, 1976, **98**, 1956.
229. T. Kametani, H. Nemoto, H. Ichikawa, K. Shiroyama, and K. Fukumoto, “A Formal Regio- and Stereoselective Total Synthesis of Estrone. A Convenient Synthesis of D-Homoestrone,” *J. Am. Chem. Soc.*, 1976, **98**, 3378.
230. T. Kametani, T. Higa, C. V. Loc, M. Ihara, M. Koizumi, and K. Fukumoto, “Iminoketene Cycloaddition. 1. A Facile Synthesis of Quinazoline System by Condensation of Iminoketene with Imines — A Total Synthesis of Evodiamine and Rutecarpine by Retro Mass-Spectral Synthesis,” *J. Am. Chem. Soc.*, 1976, **98**, 6186.
231. T. Kametani, Y. Kato, T. Honda, and K. Fukumoto, “Studies on the Syntheses of Heterocyclic Compounds. 675. A Facile Regiospecific and Stereocontrolled Synthesis of a Diterpene Alkaloid Intermediate from Benzocyclobutens,” *J. Am. Chem. Soc.*, 1976, **98**, 8185.
232. T. Kametani, T. Higa, K. Fukumoto, and M. Koizumi, “A One-step Synthesis of Evodiamine and Rutecarpine,” *Heterocycles*, 1976, **4**, 23.
233. T. Kametani, Y. Hirai, and K. Fukumoto, “An Alternative Syntheses of (±)-Yohimbine,” *Heterocycles*, 1976, **4**, 29.
234. T. Kametani, Y. Kato, T. Honda, and K. Fukumoto, “A Simple and Stereospecific Synthesis of Diterpene Alkaloid Intermediate,” *Heterocycles*, 1976, **4**, 241.
235. T. Kametani, M. Takemura, M. Ihara, and K. Fukumoto, “Structure Elucidation of Six New Non-phenolic Alkaloids Isolated from *Corydalis ochotensis* var. *raddeana*,” *Heterocycles*, 1976, **4**, 723.
236. T. Kametani, H. Nemoto, M. Takeuchi, M. Takeshita, and K. Fukumoto, “A New Alkylating Method at the 4-Position of Isoquinoline Derivatives,” *Heterocycles*, 1976, **4**, 921.
237. T. Kametani, T. Honda, T. Sugai, and K. Fukumoto, “Alternative Synthesis of Protoberbine Alkaloid (±)-Xylopinine,” *Heterocycles*, 1976, **4**, 927.

238. T. Kametani, M. S. Premila, and K. Fukumoto, "The Optical Resolution of (\pm)-Galanthamine," *Heterocycles*, 1976, **4**, 1111.
239. T. Kametani, S.-P. Huang, A. Ujiie, M. Ihara, and K. Fukumoto, "Stevens Rearrangement of Berbine Methiodides by Sodium bis-(2-Methoxyethoxy)aluminium Hydride," *Heterocycles*, 1976, **4**, 1223.
240. T. Kametani, C. V. Loc, H. Higa, M. Koizumi, M. Ihara, and K. Fukumoto, "Simple Synthesis of Quinazolone Alkaloids Arborine and Rutecarpine through Iminoketene," *Heterocycles*, 1976, **4**, 1487.
241. T. Kametani, T. Ohsawa, K. Takahashi, M. Ihara, and K. Fukumoto, "Photooxygenation of 9-Keto-7-methoxy-6-methyl-9H-pyrrolo[1,2-a]indole as a Synthetic Approach to Mitomycins," *Heterocycles*, 1976, **4**, 1367.
242. T. Kametani, Y. Satoh, M. Takemura, Y. Ohta, M. Ihara, and K. Fukumoto, "Phenol Oxidation of Isoquinoline Alkaloids with Cuprous Chloride and Oxygen in Pyridine as an Enzymatic Model. Biomimetic Total Synthesis of Corytuberine, Isoboldine, Pallidine, Orientalinone, and Kreysiginone," *Heterocycles*, 1976, **5**, 175.
243. T. Kametani, T. Ohsawa, S. Hirata, M. S. Premila, M. Ihara, and K. Fukumoto, "A Novel Synthetic Route to Phthalideisoquinoline and Spirobenzylisoquinoline Type Alkaloids," *Chem. Pharm. Bull.*, 1977, **25**, 321.
244. T. Kametani, Y. Satoh, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. DCCIX. A Synthetic Approach to Kesselringine," *Chem. Pharm. Bull.*, 1977, **25**, 922.
245. T. Kametani, Y. Satoh, and K. Fukumoto, "An Abnormal Formation on Indane *N*-Phenethylphenylpropionamide under Bischler-Napieraiski Reaction Conditions," *Chem. Pharm. Bull.*, 1977, **25**, 1129.
246. T. Kametani, H. Higa, C. V. Loc, M. Ihara, and K. Fukumoto, "A Simple Synthesis of 1,3-Benzoxazin-4-ones from Salicylic Acid," *Chem. Pharm. Bull.*, 1977, **25**, 2735.
247. T. Kametani, Y. Hirai, F. Satoh, and K. Fukumoto, "Short and Stereoselective Construction of an Intermediate for Synthesis of Unsymmetrical Pentacyclic Triterpenes," *J. Chem. Soc. Chem. Commun.*, 1977, 16.
248. T. Kametani, K. Takahashi, Y. Kigawa, M. Ihara, and K. Fukumoto, "Synthesis of 1-Substituted 7-Methoxymitosenes," *J. Chem. Soc. Perkin Trans. 1*, 1977, 28.

249. T. Kametani, H. Inoue, T. Honda, T. Sugahara, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. Part 678. Photoracemisation and Photoepimerisation of the Phthalidylisoquinoline Alkaloids (-)- α -Narcotine and (-)- β -Hydrastine", *J. Chem. Soc. Perkin Trans. 1*, 1977, 374.
250. T. Kametani, H. Matsumoto, Y. Satoh, H. Nemoto, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. Part 679. A Stereoselective Total Synthesis of (\pm)-Ophiocarpine: a Simple Route to 13-Hydroxyberbines," *J. Chem. Soc. Perkin Trans. 1*, 1977, 376.
251. T. Kametani, T. Uryu, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. Part 680. Abnormal Formation of Aporphine Derivatives by Grewe Cyclization", *J. Chem. Soc. Perkin Trans. 1*, 1977, 383.
252. T. Kametani, H. Nemoto, M. Takeuchi, M. Takeshita, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. Part 681. A Novel Alkylation in the 4-Position of Isoquinoline Derivatives", *J. Chem. Soc. Perkin Trans. 1*, 1977, 386.
253. T. Kametani, M. Takemura, M. Ihara, and K. Fukumoto, "Six New Isoquinoline Alkaloids from *Corydalis ochotensis* var. *raddeana*," *J. Chem. Soc. Perkin Trans. 1*, 1977, 390
254. T. Kametani, A. Ujiie, S.-P. Huang, M. Ihara, and K. Fukumoto, "Stevens Rearrangement of Berbine Methiodides by Sodium bis-(2-Methoxyethoxy)aluminium Hydride", *J. Chem. Soc. Perkin Trans. 1*, 1977, 394.
255. T. Kametani, S. Sugai, Y. Shoji, T. Honda, F. Satoh, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. Part 698. An Alternative Protoberbine Synthesis. Total of (\pm)-Schefferine, (\pm)-Nandinine, (\pm)-Corydaline, and (\pm)-Thalictricavine", *J. Chem. Soc. Perkin Trans. 1*, 1977, 1151.
256. T. Kametani, C. V. Loc, H. Higa, M. Ihara, and K. Fukumoto, "Total Synthesis of Quinazolinone Alkaloids, Glycorine, Glomerine, Homoglomerine, Crysogine, and Euxylophoricines A and C," *J. Chem. Soc. Perkin Trans. 1*, 1977, 2347.
257. T. Kametani, Y. Kato, F. Satoh, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. Part 696. Stereochemistry of Four Isomeric 4a-Cyano-1,2,3,4,4a,9,10,10a-octahydro-7-methoxy-1-methoxycarbonyl-1-methylphenanthrenes," *J. Org. Chem.*, 1977, **42**, 1177.
258. T. Kametani, M. Tsubuki, Y. Shiratori, K. Kato, H. Nemoto, M. Ihara, K. Fukumoto, F. Satoh, and H. Inoue, "Competitive Reactions between Sigmatropic Reaction and Cycloaddition Affected by the Geometry of *o*-Quinodimethanes," *J. Org. Chem.*, 1977, **42**, 2672.

259. T. Kametani, S.-P. Huang, C. Koseki, M. Ihara, and K. Fukumoto, "Stevens Rearrangement of *cis*- and *trans*-Berberine Methiodides by Sodium Bis-(2-methoxyethoxy)aluminium Hydride," *J. Org. Chem.*, 1977, **42**, 3040.
260. T. Kametani, H. Seto, H. Nemoto, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. 726. Thermal Rearrangement of Aminomethyl Cyclopropyl Ketones and a Novel Synthesis of Pentazocine," *J. Org. Chem.*, 1977, **42**, 3605.
261. T. Kametani, C. V. Loc, H. Higa, M. Koizumi, M. Ihara, and K. Fukumoto, "Iminoketene Cycloaddition. 2. Total Syntheses of Arborine, Glycosminine, and Rutecarpine by Condensation of Iminoketene with Amides," *J. Am. Chem. Soc.*, 1977, **99**, 2306.
262. T. Kametani, H. Nemoto, H. Ishikawa, K. Shirayama, H. Matsumoto, and K. Fukumoto, "A Stereoselective Total Synthesis of Estrone by an Intramolecular Cycloaddition Reaction of Olefinic *o*-Quinodimethane," *J. Am. Chem. Soc.*, 1977, **99**, 3461.
263. T. Kametani, M. Ihara, M. Takemura, Y. Satoh, H. Terasawa, Y. Ohta, K. Fukumoto, and K. Takahashi, "Studies on the Syntheses of Heterocyclic Compounds. 700. Syntheses of Isoquinoline Alkaloids with Cuprous Chloride and Oxygen in Pyridine as an Enzymic Model", *J. Am. Chem. Soc.*, 1977, **99**, 3805.
264. T. Kametani, R. Nitadori, H. Terasawa, K. Takahashi, M. Ihara, and K. Fukumoto, "A Total Synthesis of Atheroline by Photolysis", *Tetrahedron*, 1977, **33**, 1069.
265. T. Kametani, H. Terasawa, M. Ihara, and K. Fukumoto, "A Facile Formation of Benzo[*a*]-quinolizin-4-ones", *Heterocycles*, 1977, **6**, 37.
266. T. Kametani, M. Takemura, M. Ihara, and K. Fukumoto, "A Biomimetic Approach to Benzophenanthridine Alkaloid from Protoberberine Alkaloid", *Heterocycles*, 1977, **6**, 99.
267. T. Kametani, T. Higa, C. V. Loc, M. Ihara, and K. Fukumoto, "A Novel and Simple Synthesis of 1,3-Benzoxazin-4-one Derivatives", *Heterocycles*, 1977, **6**, 255.
268. T. Kametani, Y. Ohta, M. Takemura, M. Ihara, and K. Fukumoto, "Biotransformation of Reticuline into Morphinandienone, Aporphine and Protoberberine Alkaloids with Rat Liver Enzyme", *Heterocycles*, 1977, **6**, 415.
269. T. Kametani, Y. Kigawa, K. Takahashi, H. Nemoto, and K. Fukumoto, "A Novel Method for Acetalization of Formyl Group at the C3-Position of 2,3-Dihydro-1*H*-pyrrolo[1,2-*a*]indole Skeleton", *Heterocycles*, 1977, **6**, 887.

270. T. Kametani, H. Nemoto, and K. Fukumoto, "A New Method for an Epoxidation of Olefins and Its Application to a Biomimetic Synthesis of Monoterpene, Linalyloxides", *Heterocycles*, 1977, **6**, 1365.
271. T. Kametani, K. Takahashi, M. Ihara, and K. Fukumoto, "Interconversion between Pyrrolo[1,2-*a*]indoles and 2,3-Benzazocin-5-ones —A Synthetic Approach to Mitomycins", *Heterocycles*, 1977, **6**, 1371.
272. M. Ihara, K. Takahashi, Y. Kigawa, T. Ohsawa, K. Fukumoto, and T. Kametani, "Synthetic Approaches to Mitomycins", *Heterocycles*, 1977, **6**, 1658.
273. T. Kametani, K. Fukumoto, M. Ihara, and C. V. Loc, "A New Synthesis of Quinazolone Alkaloids by an Intermolecular Cycloaddition of Iminoketens", *Heterocycles*, 1977, **6**, 1741.
274. F. Satoh, T. Kametani, Y. Kato, T. Honda, and K. Fukumoto, "Synthesis of a Diterpene Alkaloid Intermediate from Benzocyclobutene", *Heterocycles*, 1977, **6**, 1757.
275. T. Kametani, Y. Suzuki, H. Terasawa, M. Ihara, and K. Fukumoto, "A Stereoselective Formal Total Synthesis of Emetine", *Heterocycles*, 1977, **8**, 119.
276. T. Kametani, Y. Ohta, M. Takemura, M. Ihara, and K. Fukumoto, "Biotransformation of Reticuline into Coreximine, Scoulerine, Pallidine, and Isoboldine with Rat Liver Enzyme", *Bioorg. Chem.*, 1977, **6**, 249.
277. T. Kametani, M. Takemura, M. Ihara, and K. Fukumoto, "A Biomimetic Synthesis of Benzo[*c*]phenanthridine Alkaloid Nitidine", *Israel J. Chem.*, 1977, **16**, 4.
278. T. Kametani, K. Fukumoto, H. Nemoto, and H. Seto, "Studies on the Syntheses of Heterocyclic Compounds. DCCXII. Attempts to the Ring-Closure of Piperidone Derivatives by Grewe Cyclization", *Yakugaku Zasshi*, 1977, **97**, 615.
279. T. Kametani, H. Seto, H. Nemoto, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. DCCXVII. The Reaction of Methylenomycin A Methyl Ester with Several Amines as a Nucleophile", *Yakugaku Zasshi*, 1977, **97**, 944.
280. T. Kametani, M. Takeshita, H. Nemoto, and K. Fukumoto, "Studies on the Syntheses of Tetracycline Derivatives. II. Thermolytic Cycloaddition of *o*-Quinodimethanes with Tetrahydronaphthoquinone and Naphthoquinone", *Chem Pharm. Bull.*, 1978, **26**, 556.
281. T. Kametani, Y. Kigawa, H. Nemoto, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. DCCLIV. A Novel Method for Acetalisation of Formyl Group at the C3-Position of 2,3-Dihydro-1*H*-pyrrolo[1,2-*a*]indole Skeleton", *Chem Pharm. Bull.*, 1978, **26**, 1918.

282. T. Kametani, T. Ohsawa, M. Ihara, and K. Fukumoto, "Iminoketene Cycloaddition. (4). Alternative Synthesis of 5,6,7,8-Tetrahydro-2,3-dimethoxy-8-oxoisoquinolo[1,2-*b*]quinazoline and Rutecarpine", *Chem Pharm. Bull.*, 1978, **26**, 1922.
283. T. Kametani, K. Takahashi, M. Ihara, and K. Fukumoto, "Reaction of Pyrrolo[1,2-*a*]indole Derivatives with *N*-Bromosuccinimide in Protic Solvents", *Chem Pharm. Bull.*, 1978, **26**, 3815.
284. T. Kametani, M. Chihiro, M. Takeshita, K. Takahashi, K. Fukumoto, and S. Takano, "Studies on the Syntheses of Tetracycline Derivatives. III. Synthetic Approach to Adriamycin — Synthesis of the Linear Tetracyclic Skeleton Having the Same BC Ring System with Adriamycin", *Chem Pharm. Bull.*, 1978, **26**, 3820.
285. T. Kametani, T. Ohsawa, M. Ihara, and K. Fukumoto, "Photo-oxygenation of 9-Oxo-9*H*-pyrrolo[1,2-*a*]indoles", *J. Chem. Soc., Perkin Trans. 1*, 1978, 460.
286. T. Kametani, K. Takahashi, M. Ihara, and K. Fukumoto, "A Synthesis of 1-Benzazocin-5-ones from 2,3-Dihydro-1*H*-pyrrolo[1,2-*a*]indoles; a Synthetic Approach to the Mitomycins", *J. Chem. Soc., Perkin Trans. 1*, 1978, 662.
287. T. Kametani, Y. Shiratori, H. Inoue, M. Ihara, K. Fukumoto, and F. Satoh, "An Ene Reaction During Thermolysis of a Benzocyclobutene", *J. Indian Chem. Soc.*, 1978, **55**, 1219.
288. T. Kametani, Y. Hirai, Y. Shiratori, K. Fukumoto, and F. Satoh, "Convenient and Stereoselective Route to Basic Frameworks for Synthesis of Unsymmetrical Pentacyclic Triterpenes", *J. Am. Chem. Soc.*, 1978, **100**, 554.
289. T. Kametani, H. Matsumoto, H. Nemoto, and K. Fukumoto, "Asymmetric Total Synthesis of Estradiol by an Intramolecular Cycloaddition of Benzocyclobutene Derivative", *J. Am. Chem. Soc.*, 1978, **100**, 6218.
290. T. Kametani, H. Matsumoto, H. Nemoto, and K. Fukumoto, "The Asymmetric Total Synthesis of Estradiol by an Intramolecular Cycloaddition Reaction of *o*-Quinodimethane", *Tetrahedron Lett.*, 1978, 2425.
291. T. Kametani, K. Takahashi, M. Ihara, and K. Fukumoto, "Alternative Synthesis of 2,3-Benzazocin-5-one Derivatives via Pyrrolo[1,2-*a*]indoles", *Heterocycles*, 1978, **9**, 435.
292. T. Kametani, K. Takahashi, M. Ihara, and K. Fukumoto, "Reaction of Pyrrolo[1,2-*a*]indole-5,8-dione Derivatives with *N*-Bromosuccinimide in Protic Solvents", *Heterocycles*, 1978, **9**, 439.
293. T. Kametani, C. V. Loc, M. Ihara, and K. Fukumoto, "A Simple Synthesis of 1,3-Benzoxazin-4-one Derivatives", *Heterocycles*, 1978, **9**, 673.

294. R. J. Bass, M. Kinns, T. Kametani, C. V. Loc, M. Ihara, and K. Fukumoto, "NMR Spectral Assignment of 6,13-Dihydro-5-oxo-5*H*-isoquino[1,2-*b*]benzoxazine", *Heterocycles*, 1978, **9**, 863.
295. T. Kametani, C. V. Loc, M. Ihara, and K. Fukumoto, "Modified Total Synthesis of Arborine, Glycosamine, and Glomerine by Condensation of Sulfinamide Anhydride with Thioamides", *Heterocycles*, 1978, **9**, 1585.
296. T. Kametani, H. Nemoto, and K. Fukumoto, "A New Method for Selective Epoxidation and a Biogenetic-Type Synthesis of Linalyloxides", *Bioorg Chem.*, 1978, **7**, 215.
297. T. Kametani, M. Tsubuki, H. Nemoto, and K. Fukumoto "Synthetic Approach to the Grayanotoxins and Asebotoxins: A New Construction of A, B, and C Ring System of Grayanotoxan", *Chem Pharm. Bull.*, 1979, **27**, 152.
298. T. Kametani, K. Takahashi, M. Ihara, and K. Fukumoto, "A Synthetic Approach to *seco*-Mitosane Type of Compound Related to Mitomycins", *J. Chem. Soc., Perkin Trans. 1*, 1979, 1847.
299. T. Kametani, Y. Enomoto, K. Takahashi, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic Compounds. Part 796. A New Synthesis of Isochroman-3-ones from Benzocyclobutenes: An Application to a Total Synthesis of Sendaverine", *J. Chem. Soc., Perkin Trans. 1*, 1979, 2836.
300. T. Kametani, K. Suzuki, H. Nemoto, and K. Fukumoto "Stereoselective Total Synthesis of the Tetracyclic Diterpenes Hibaol and Dihydrohibaene", *J. Org. Chem.*, 1979, **44**, 1036.
301. T. Kametani, S. Yokohama, Y. Shiratori, S. Aihara, K. Fukumoto, and F. Satoh, "Studies on the Syntheses of Heterocyclic Compounds. 775. Synthesis of β -Lactams by Acid Chloride- and Phosphate Anhydride-Imine Methods", *Heterocycles*, 1979, **12**, 405.
302. T. Kametani, S. Hirata, H. Nemoto, M. Ihara, and K. Fukumoto, "Synthetic Studies on β -Lactam Antibiotics. II. Codensation of β -Lactams with Active Methylene Groups", *Heterocycles*, 1979, **12**, 523.
303. T. Kametani, S. Yokohama, Y. Shiratori, F. Satoh, M. Ihara, and K. Fukumoto, "Synthetic Studies on β -Lactam Antibiotics III. Synthesis of New Bicyclic β -Lactam Ring System, 12-Oxo-4,8-dithia-1-azabicyclo[3.2.0]dodec-2-enes", *Heterocycles*, 1979, **12**, 669.
304. T. Kametani, Y. Kigawa, H. Nemoto, M. Ihara, and K. Fukumoto, "The Synthesis of a Potential Intermediate to Apomitomycin", *Heterocycles*, 1979, **12**, 685.
305. T. Kametani, K. Fukumoto, K. Kigasawa, M. Hiiragi, K. Wakisaka, K. Tanigawa, and H. Sugi, "Synthetic Studies on β -Lactam Antibiotics.VI. Synthesis of 7*H*-Azeto[1,2-*a*]thieno[2,3-*c*]pyridine

- Derivatives”, *Heterocycles*, 1979, **12**, 744.
306. T. Kametani, K. Takahashi, M. Ihara, and K. Fukumoto, “Synthesis of *seco*-Mitosane Type Compounds as Key Intermediates to Mitomycins”, *Heterocycles*, 1979, **12**, 933.
307. T. Kametani, M. Chihiro, T. Honda, and K. Fukumoto, “Synthetic Approach to the Quassinoid Klaineanone — The Synthesis of a Potential Intermediate by Intramolecular Cycloaddition”, *Chem Pharm. Bull.*, 1980, **28**, 2468.
308. T. Kametani, Y. Kigawa, H. Nemoto, M. Ihara, and K. Fukumoto, “A Simple and Efficient Synthesis of Apomitomycin Derivatives; A Potential Intermediate for Mitomycin Synthesis”, *J. Chem. Soc., Perkin Trans. 1*, 1980, 1607.
309. T. Kametani, H. Nemoto, K. Suzuki, and K. Fukumoto, “A Stereoselective Synthesis of Androstanic Steroid Hormones”, *J. Org. Chem.*, 1980, **45**, 2204.
310. T. Kametani, T. Honda, Y. Shiratori, and K. Fukumoto, “Stereoselective Synthesis of Basic Skeleton of Aphidicolon Diterpene: Synthetic Approach to Aphidicoline”, *Tetrahedron Lett.*, 1980, **21**, 1665.
311. T. Kametani, H. Matsumoto, T. Honda, and K. Fukumoto, “An Efficient, Stereoselective Method for the Construction of *anti-trans*-4,5-(4'-Oxo-1',2',3',4'-tetrahydrobenzo)hydrindane — A Possible Intermediate to Estradiol and Cortisone”, *Tetrahedron Lett.*, 1980, **21**, 4847.
312. T. Kametani, S. A. Surgenor, and K. Fukumoto, “The Total Stereoselective Retro Mass Spectral Synthesis of (\pm)-Emetine”, *Heterocycles*, 1980, **14**, 303.
313. T. Kametani, T. Honda, and K. Fukumoto, “Facile Formation of the Basic Skeletons of Naturally Occurring Terpenoidal Lactones”, *Heterocycles*, 1980, **14**, 419.
314. T. Kametani, T. Honda, J. Sasaki, H. Terasawa, Y. Nakayama, and K. Fukumoto, “A New Carbon-Carbon Bond Formation Reaction at C-4 Position of a β -Lactam”, *Heterocycles*, 1980, **14**, 575.
315. T. Kametani, Y. Kigawa, H. Nemoto, M. Ihara, and K. Fukumoto, “Synthesis of a Potential Intermediate to Apomitomycins”, *Heterocycles*, 1980, **14**, 799.
316. T. Kametani, T. Honda, A. Nakayama, and K. Fukumoto, “Facile Synthesis of Carbapenem Antibiotics. The First and Simple Stereoselective Synthesis of Antibiotics PS-5 Benzyl Ester”, *Heterocycles*, 1980, **14**, 1967.
317. T. Kametani, S. A. Surgenor, and K. Fukumoto, “Studies on the Syntheses of Heterocyclic Compounds. Part 875. The Total Stereoselective Retro Mass Spectral Synthesis of (\pm)-Emetine”, *J.*

- Chem. Soc., Perkin Trans. 1*, 1981, 920.
318. T. Kametani, T. Honda, H. Matsumoto, and K. Fukumoto, "Facile Synthesis of Basic Skeletons of Naturally Occurring Lactonic Terpenes", *J. Chem. Soc., Perkin Trans. 1*, 1981, 1383.
319. T. Kametani, T. Honda, Y. Shiratori, H. Matsumoto, and K. Fukumoto, "Stereoselective Synthesis of the Basic Skeleton of Aphidicolan-type Diterpenes via Intramolecular Diels-Alder Cyclisation. Synthetic Approach to Aphidicolin", *J. Chem. Soc., Perkin Trans. 1*, 1981, 1386.
320. T. Kametani, T. Honda, J. Sasaki, H. Terasawa, and K. Fukumoto, "A Carbon-Carbon Bond Formation Reaction at the C-4 Position of a β -Lactam", *J. Chem. Soc., Perkin Trans. 1*, 1981, 1884.
321. T. Kametani, T. Honda, A. Nakayama, Y. Sakai, T. Mochizuki, and K. Fukumoto, "A Short and Stereoselective Synthesis of the Carbapenem Antibiotic PS-5", *J. Chem. Soc., Perkin Trans. 1*, 1981, 2228.
322. T. Kametani, N. Takagi, M. Toyota, T. Honda, and K. Fukumoto, "Total Synthesis of the Protoberberine Alkaloid (-)-Xylopinine by Photochemical 1,3-Asymmetric Induction", *J. Chem. Soc., Perkin Trans. 1*, 1981, 2830.
323. T. Kametani, H. Matsumoto, T. Honda, and K. Fukumoto, "Synthetic Approach to Grayanotoxins: A New Method for the Construction of the A-Homograyanotoxane Ring System", *Tetrahedron Lett.*, 1981, **22**, 2379.
324. T. Kametani, K. Fukumoto, H. Kurobe, and H. Nemoto, "Stereoselective Olefinic Cyclization Assisted by the Selenyl Group. Biogenetic-Type Synthesis of Caparrapi Oxide", *Tetrahedron Lett.*, 1981, **22**, 3653.
325. T. Kametani, H. Matsumoto, T. Honda, M. Nagai, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic and Natural Compounds. Part 939. An Efficient and Stereoselective Synthesis of des-A-Ring Steroids — Potential Intermediates to Estradiol, Cortisone and Progesterone", *Tetrahedron*, 1981, **37**, 2555.
326. T. Kametani, H. Matsumoto, T. Honda, and K. Fukumoto, "Synthetic Approach to Grayanotoxins and Asebotoxins: A New Construction of the A-Homograyanotoxane Ring System", *Tetrahedron*, 1981, **37**, 3813.
327. T. Kametani, A. Nakayama, Y. Nakayama, T. Ikuta, R. Kubo, E. Goto, T. Honda, and K. Fukumoto, "Some Aspects for 1,3-Dipolar Cycloaddition Reaction of Nitrile Oxide with Methyl Crotonate in the Synthesis of Carbapenam Antibiotics", *Heterocycles*, 1981, **16**, 53.

328. T. Kametani, N. Takagi, M. Toyota, T. Honda, and K. Fukumoto, "Total Synthesis of Optically Active Protoberberine Alkaloid, Xylopinine, by 1,3-Asymmetric Induction in Photolysis", *Heterocycles*, 1981, **16**, 591.
329. T. Kametani, T. Honda, K. Fukumoto, M. Toyota, and M. Ihara, "Synthetic Approach to Diterpene Alkaloids — A Simple and Novel Synthesis of the A, B, C and D Ring Part from 1-Benzyl-1,2,3,4-tetrahydroisoquinoline", *Heterocycles*, 1981, **16**, 1673.
330. T. Kametani, M. Aizawa, H. Kurobe, T. Matsumura, H. Nemoto, and K. Fukumoto, "Some Aspects of the Reaction of Phenylselenomagnesium Bromide with Carbonyl Compounds", *Chem Pharm. Bull.*, 1982, **30**, 1493.
331. H. Nemoto, M. Hashimoto, K. Fukumoto, and T. Kametani, "A Simple Synthesis of a Basic Skeleton of Isoatisirene", *J. Chem Soc. Chem. Commun.*, 1982, 699.
332. T. Kametani, H. Kurobe, H. Nemoto, and K. Fukumoto, "Stereoselective Olefin Cyclization Mediated by the Selenyl Group; Direct Formation of a Selenyl Caparrapi Oxide", *J. Chem. Soc., Perkin Trans. 1*, 1982, 1085.
333. T. Kametani, N. Takagi, N. Kanaya, T. Honda, and K. Fukumoto, "Studies on the Syntheses of Heterocyclic and Natural Compounds. Part 979. Attempted Asymmetric Synthesis of Yohimbol by Photocyclization of the Enamide", *J. Heterocyclic Chem.*, 1982, **19**, 1217.
334. K. Fukumoto, M. Chihiro, Y. Shiratori, M. Ihara, T. Kametani, and T. Honda, "An Intramolecular Diels-Alder Approach to Quassinoids — A Stereoselective Construction of A-Aromatic Klaineane", *Tetrahedron Lett.*, 1982, **23**, 2973.
335. M. Ihara, A. Nakayama, K. Fukumoto, and T. Kametani, "Synthesis of Oxapenem Derivatives by Novel Reductive Cyclization", *Tetrahedron*, 1982, **38**, 2489.
336. K. Fukumoto, K. Suzuki, H. Nemoto, T. Kametani, and H. Furuyama, "An Efficient Synthesis of Cholanic Acids from 20-Ketopregnanes", *Tetrahedron*, 1982, **38**, 3701.
337. M. Ihara, K. Fukumoto, and T. Kametani, "Novel Stereoselective Synthesis of β -Lactams via Episulfonium Ion Intermediate", *Heterocycles*, 1982, **19**, 1435.
338. T. Ohsawa, M. Ihara, K. Fukumoto, and T. Kametani, "A Novel and Stereoselective Synthesis of *cis*-1,8-*H*-1-Hydroxypyrrolizidine", *Heterocycles*, 1982, **19**, 1605.
339. M. Ihara, K. Noguchi, T. Ohsawa, K. Fukumoto, and T. Kametani, "Double Annulation of the Enamine-Imines, Isoquinoline and β -Carboline Derivatives, with 6-Methylpyran-2-one-3,5-dicarboxylates", *Heterocycles*, 1982, **19**, 1829.

340. M. Ihara, K. Noguchi, T. Ohsawa, K. Fukumoto, and T. Kametani, "An Alternative Biomimetic Synthesis of (\pm)-Camptothecin", *Heterocycles*, 1982, **19**, 1835.
341. T. Ohsawa, M. Ihara, K. Fukumoto, and T. Kametani, "Stereoselective Total Synthesis of Necine Bases, (\pm)-Retronecine and (\pm)-Turneforcidine", *Heterocycles*, 1982, **19**, 2075.
342. K. Shishido, T. Matsuura, K. Fukumoto, and T. Kametani, "Studies on the Syntheses of Heterocyclic Compounds and Natural Products. CMXCII. Synthesis of A-Homograyanotoxane and a Phyllocladane Ring System from a Common Precursor", *Chem Pharm. Bull.*, 1983, **31**, 57.
343. K. Shishido, T. Saitoh, K. Fukumoto, and T. Kametani, "Stereoselective Synthesis of the Pentacyclic System as a Model for Bruceantin", *J. Chem. Soc. Chem. Commun.*, 1983, 852.
344. K. Fukumoto, M. Chihiro, M. Ihara, T. Kametani, and T. Honda, "New Synthetic Approach to Quassinoids via an Intramolecular Diel-Alder Reaction: A Stereoselective Construction of the Klaineanone Ring System", *J. Chem. Soc., Perkin Trans. 1*, 1983, 2569.
345. T. Ohsawa, M. Ihara, K. Fukumoto, and T. Kametani, "Novel Synthesis of the pyrrolizidine Skeleton by Sulfenocycloamination. Total Synthesis of (\pm)-Retronecine and (\pm)-Turneforcidine", *J. Org. Chem.*, 1983, **48**, 3644.
346. M. Ihara, K. Noguchi, T. Ohsawa, K. Fukumoto, and T. Kametani, "Double Enamine Annulation of 3,4-Dihydro-1-methyl- β -carboline and Isoquinoline Derivatives with 6-Methyl-2-pyrone-3,5-dicarboxylates and Its Application for the Synthesis of (\pm)-Camptothecin", *J. Org. Chem.*, 1983, **48**, 3150.
347. M. Ihara, Y. Haga, M. Yonekura, T. Ohsawa, K. Fukumoto, and T. Kametani, "Synthesis of β -Lactam Antibiotics by the Sulfero-Cycloamination", *J. Am. Chem. Soc.*, 1983, **105**, 7345.
348. H. Nemoto, X.-M. Wu, H. Kurobe, M. Ihara, K. Fukumoto, and T. Kametani, "Synthetic Studies toward 1α -Hydroxyvitamin D₃ — Stereoselective Synthesis of (\pm)-(*Z*)-2-(3 β ,5 α -Dihydroxy-2-methylenecyclohexylidene)ethylidenecyclohexane", *Tetrahedron Lett.*, 1983, **24**, 4257.
349. K. Shishido, K. Tanaka, and K. Fukumoto, "An Efficient Total Synthesis of (\pm)-Decaline and (\pm)-Vertaline", *Tetrahedron Lett.*, 1983, **27**, 2783.
350. H. Nemoto, K. Suzuki, M. Tsubuki, K. Minemura, K. Fukumoto, and T. Kametani, "A Facile Ring-Opening Reaction of Cyclobutenes: Application to a Synthesis of Vitamin D₃", *Tetrahedron*, 1983, **39**, 1123.
351. M. Ihara, K. Noguchi, K. Fukumoto, and T. Kametani, "Photo-oxygenation of Indole-3-acetic Acids and Indole-3-acetaldehydes: Biomimetic Conversion of Indoles into Quinolines via N₁-C₂

- Fission”, *Heterocycles*, 1983, **20**, 421.
352. M. Ihara, F. Konno, K. Fukumoto, and T. Kametani, “A Formal Total Synthesis of (±)-Carpetimycin A (C-19393 H₂): Stereoselective Synthesis of (±)-*cis*-4-Carboxymethyl-3-(1-methyl-1-trimethylsilyloxyethyl)-2-azetidinone via an Isoxazoline Derivatives”, *Heterocycles*, 1983, **20**, 2181.
353. K. Shishido, K. Hiroya, Y. Ueno, K. Fukumoto, T. Kametani, and T. Honda, “A Stereoselective Synthesis of a Functionalized Tricyclo[6.3.1.0^{3,8}]dodec-4-ene by an Intramolecular Diels–Alder Reaction”, *Chem. Lett.*, 1984, 1653.
354. K. Shishido, M. Ito, S. Shimada, K. Fukumoto, and T. Kametani, “The Competition between Electrocyclic Reaction and [1,5] Sigmatropic Reaction in the Thermolysis of 1,1-Disubstituted Benzocyclobutenes”, *Chem. Lett.*, 1984, 1943.
355. K. Fukumoto, M. Chihiro, M. Ihara, and T. Kametani, “Stereoselective Aldol Reaction of a Lithium α -Vinyl Enolate to α -Alkoxy Aldehydes”, *Chem. Pharm. Bull.*, 1984, **32**, 373.
356. K. Shishido, S. Shimada, K. Fukumoto, and T. Kametani, “Stereoselective Construction of the *cis*-Hydrindan System by Intramolecular Diels-Alder Reaction”, *Chem. Pharm. Bull.*, 1984, **32**, 922.
357. M. Ihara, M. Toyota, K. Fukumoto, T. Kametani, and T. Honda, “Construction of the Bicyclo[2.2.2]octane Ring System by an Intramolecular Diels–Alder Reaction: A Synthetic Approach to Atisane”, *J. Chem. Res (S)*, 1984, 252.
358. K. Shishido, T. Saitoh, K. Fukumoto, and T. Kametani, “A New Synthetic Approach to Bruceantin via an Intramolecular Diels-Alder Reaction: Stereoselective Construction of the Pentacyclic Model System”, *J. Chem. Soc., Perkin Trans. 1*, 1984, 2139.
359. M. Ihara, M. Toyota, K. Fukumoto, and T. Kametani, “Stereocontrolled Construction of a Spiro Fused Bicyclo[2.2.2]octane Ring System by the Intramolecular Double Michael Reaction”, *Tetrahedron Lett.*, 1984, **25**, 2167.
360. H. Nemoto, X.-M. Wu, H. Kurobe, M. Ihara, K. Fukumoto, and T. Kametani, “Convergent and Stereoselective Synthesis of Vitamin D₃, via 3,5-Cyclovitamin D₃”, *Tetrahedron Lett.*, 1984, **25**, 3095.
361. M. Ihara, M. Toyota, K. Fukumoto, and T. Kametani, “Intramolecular Double Michael Reaction — II. Synthesis of Isoatisirene Type Compound”, *Tetrahedron Lett.*, 1984, **25**, 3235.

362. M. Ihara, T. Kirihara, A. Kawaguchi, K. Fukumoto, and T. Kametani, "A Novel Synthesis of Benzo- and Indolo[*a*]quinolizidines by Intramolecular Diels-Alder Reaction of 1-Azadienes", *Tetrahedron Lett.*, 1984, **25**, 4541.
363. H. Nemoto, H. Kurobe, K. Fukumoto, and T. Kametani, "A Novel Stereocontrolled Approach to Steroid Side Chain Construction: Asymmetric Synthesis of a Potential Synthone of the Vitamin D Series", *Tetrahedron Lett.*, 1984, **25**, 4669.
364. K. Shishido, K. Hiroya, K. Fukumoto, and T. Kametani, "Simple and Efficient Entries of the Basic Carbon Skeletons of Some Kinds of Terpenoids from a Functionalized Tricyclo[6.3.1.0^{3,8}]dodec-4-ene", *Chem. Lett.*, 1985, 87.
365. H. Nemoto, H. Kurobe, K. Fukumoto, and T. Kametani, "A General Method for the Stereoselective Construction of des-AB-Cholestanes. A First Total Synthesis of (-)-8 α -Phenylsulfonyl-des-AB-cholestane", *Chem. Lett.*, 1985, 259.
366. M. Ihara, Y. Ishida, M. Abe, M. Toyota, K. Fukumoto, and T. Kametani, "Stereocontrolled Synthesis of Tricyclo[6.2.1.0^{4,9}]undecane Ring System of *Aconitium* Alkaloids", *Chem. Lett.*, 1985, 1127.
367. H. Nemoto, T. Kimura, H. Kurobe, K. Fukumoto, and T. Kametani, "A Stereoselective Synthesis of 1 α -Hydroxy-vitamin D₃", *Chem. Lett.*, 1985, 1131.
368. K. Shishido, K. Tanaka, K. Fukumoto, and T. Kametani, "Synthetic Studies on Lythraceae Alkaloids via [3+2] Cycloaddition. II. Total Synthesis of (\pm)-Decaline and (\pm)-Vertaline", *Chem. Pharm Bull.*, 1985, **33**, 532.
369. M. Ihara, Y. Ishida, K. Fukumoto, and T. Kametani, "Reaction of Conjugated Enones with *tert*-Butyldimethylsilyl Triflate and Intramolecular Annelation", *Chem. Pharm Bull.*, 1985, **33**, 4102.
370. H. Nemoto, M. Hashimoto, H. Kurobe, K. Fukumoto, and T. Kametani, "A Novel Synthetic Approach to Isoatisirene-related Compounds via an Intramolecular Diels-Alder Reaction", *J. Chem. Soc., Perkin Trans. I*, 1985, 927.
371. M. Ihara, M. Tsuruta, K. Fukumoto, and T. Kametani, "A Versatile and Stereocontrolled Synthesis of Quinolizidines and Indolizidines Using Trialkylsilyl Trifluoromethanesulphonate: Total Synthesis of (\pm)-Tylophorine", *J. Chem. Soc., Chem. Commun.*, 1985, 1159.
372. H. Nemoto, X.-M. Wu, H. Kurobe, K. Minemura, M. Ihara, K. Fukumoto, and T. Kametani, "A General Method for the Synthesis of 3,5-Cyclovitamin D₃ and Derivatives. A Stereoselective

- Synthesis of Vitamin D₃”, *J. Chem. Soc., Perkin Trans. 1*, 1985, 1185.
373. H. Nemoto, M. Nagai, Y. Abe, K. Fukumoto, and T. Kametani, “A Simple and Stereoselective Synthesis of Des-A-B-Aromatic Corticoids via Intramolecular Cycloaddition: Potential Intermediates for the Synthesis of Corticoids”, *J. Chem. Soc., Chem. Commun.*, 1985, 1316.
374. M. Ihara, I. Sudow, K. Fukumoto, and T. Kametani, “Chiral Synthesis of Androsterone through Intramolecular Diels-Alder Reaction”, *J. Org. Chem.*, 1985, **50**, 144.
375. H. Nemoto, M. Nagai, K. Fukumoto, and T. Kametani, “Synthetic Approach to (+)-Aldosterone and Its Relatives. 1. Synthesis of (+)-*trans*-4,5-(4-Methoxybenzo)-1 β ,7 α β -[2 α -(methoxymethyl)-oxofuro]hydrindane”, *J. Org. Chem.*, 1985, **50**, 2764.
376. K. Shishido, E. Shitara, K. Fukumoto, and T. Kametani, “Tandem Electrocyclic-Sigmatropic Reaction of Benzocyclobutenes. An Expedient Route to 4,4-Disubstituted Isochromanones”, *J. Am. Chem. Soc.*, 1985, **107**, 5810.
377. M. Ihara, M. Toyota, K. Fukumoto, and T. Kametani, “Intramolecular Double Michael Reaction — III. Stereoselective Chiral Synthesis of Atisiran-15-one”, *Tetrahedron Lett.*, 1985, **26**, 1537.
378. H. Nemoto, M. Nagai, K. Fukumoto, and T. Kametani, “A Stereoselective Total Synthesis of Δ^9 -Progesterone via an Intramolecular Cycloaddition Reaction”, *Tetrahedron Lett.*, 1985, **26**, 4613.
379. M. Ihara, K. Noguchi, K. Fukumoto, and T. Kametani, “Conversion of Indoles Into Quinolines through the N₁-C₂ Fission by Singlet-Oxygen as a Model Experiment of Biomimetic Synthesis of Quinine Alkaloids”, *Tetrahedron*, 1985, **41**, 2109.
380. H. Nemoto, M. Nagai, K. Fukumoto, and T. Kametani, “A Synthetic Approach to (+)-Aldosterone and Its Relatives. 2. A Stereoselective Synthesis of (+)-*trans*-4,5-(4-Methoxybenzo)-1 β ,7 α β -(2 α -methoxymethyl-5-oxofuro)hydrindane”, *Tetrahedron*, 1985, **41**, 2361.
381. H. Nemoto, E. Shitara, K. Fukumoto, and T. Kametani, “An Aromatic Version of Claisen Rearrangements of Ester Silyl Enolates. A Facile Synthesis of 2,3-Disubstituted Furans”, *Heterocycles*, 1985, **23**, 549.
382. H. Nemoto, H. Kurobe, K. Fukumoto, and T. Kametani, “A Modified Synthesis of the (+)-8 α -Phenylsulfonyl-des-AB-cholestane via an Intramolecular Nucleophilic Attack to Epoxide — A Total Synthesis of Vitamine D₃”, *Heterocycles*, 1985, **23**, 567.
383. M. Ihara, T. Kirihara, K. Fukumoto, and T. Kametani, “Construction of Indolizidine and Quinolizidine Ring Systems by an Intramolecular 1-Aza-1,3-diene Diels-Alder Reaction. Synthesis of (\pm)-Epilupinine”, *Heterocycles*, 1985, **23**, 1097.

384. K. Shishido, Y. Sukegawa, K. Fukumoto, and T. Kametani, "A Chiral Route to Pyrrolizidine Alkaloids via Intramolecular Michael Reaction", *Heterocycles*, 1985, **23**, 1629.
385. H. Nemoto, E. Shitara, K. Fukumoto, and T. Kametani, "Aromatic Versions of Claisen Rearrangement of Lactonic Silyl Enolates — A Novel Approach to Furanosesquiterpene Framework", *Heterocycles*, 1985, **23**, 1911.
386. M. Ihara, I. Sudow, K. Fukumoto, and T. Kametani, "Stereoselective Total Synthesis of Testosterone and Androsterone via N/B-Ring Construction of the Steroidal Ring System by Intramolecular Diels-Alder Reaction", *J. Chem. Soc., Perkin Trans. I*, 1986, 117.
387. M. Ihara, N. Taniguchi, K. Noguchi, K. Fukumoto, and T. Kametani, "Total Synthesis of Hydrocinchonidine and Hydrocinchonine from an Indole Derivative via Oxidation with Singlet Oxygen", *J. Chem. Soc., Chem. Commun.*, 1986, 573.
388. M. Ihara, A. Kawaguchi, M. Chihiro, K. Fukumoto, and T. Kametani, "Highly Stereocontrolled Synthesis of (\pm)-3-Oxosilphinene via Intramolecular Diels-Alder Reaction", *J. Chem. Soc., Chem. Commun.*, 1986, 671.
389. K. Shishido, K. Hiroya, Y. Ueno, K. Fukumoto, and T. Kametani, "An Efficient Synthesis of Functionalized Tricyclo[6.3.1.0^{1,6}]dodec-4-enes by a Stereoselective Intramolecular Diels-Alder Reaction", *J. Chem. Soc., Perkin Trans. I*, 1986, 829.
390. K. Shishido, K. Hiroya, K. Fukumoto, and T. Kametani, "Facile and Efficient Constructions of the Carbocyclic Frameworks of Four Kinds of Terpenoids from a Common Precursor", *J. Chem. Soc., Perkin Trans. I*, 1986, 837.
391. K. Shishido, K. Hiroya, H. Komatsu, K. Fukumoto, and T. Kametani, "The Total Synthesis of (\pm)-Geneserine", *J. Chem. Soc., Chem. Commun.*, 1986, 904.
392. M. Ihara, T. Toyota, M. Abe, Y. Ishida, K. Fukumoto, and T. Kametani, "Highly Stereocontrolled Construction of Tricyclo[6.2.2.0^{1,6}]dodecanes by Intramolecular Double Michael Reaction", *J. Chem. Soc., Perkin Trans. I*, 1986, 1543.
393. H. Nemoto, M. Nagai, K. Fukumoto, and T. Kametani, "A Stereoselective Total Synthesis of 11-Oxoprogesterone, a Precursor to the Corticosteroids, via an Intramolecular Cycloaddition Reaction", *J. Chem. Soc., Perkin Trans. I*, 1986, 1621.
394. H. Nemoto, T. Kimura, H. Kurobe, K. Fukumoto, and T. Kametani, "A Stereoselective Synthesis of 1 α -Hydroxyvitamin D₃", *J. Chem. Soc., Perkin Trans. I*, 1986, 1777.

395. M. Ihara, T. Toyota, K. Fukumoto, and T. Kametani, "An Enantioselective Total Synthesis of (\pm)-Atisirene by Intramolecular Double Michael Reaction", *J. Chem. Soc., Perkin Trans. 1*, 1986, 2151.
396. K. Shishido, E. Shitara, H. Komatsu, K. Hiroya, K. Fukumoto, and T. Kametani, "Total Syntheses of (\pm)-Physovenine and (\pm)-Physostigmine. An Application of Tandem Electrocyclic-[3,3] Sigmatropic Reaction of Benzocyclobutenes", *J. Org. Chem.*, 1986, **51**, 1621.
397. H. Nemoto, H. Kurobe, K. Fukumoto, and T. Kametani, "A Novel Approach to the Stereocontrolled Synthesis of Steroid Side Chains Including the CD-Ring System: The First Total Synthesis of (+)-8 α -(Phenylsulfonyl)-des-AB-cholestane and Its Efficient Conversion into Grundmann's Ketone and Vitamin D₃", *J. Org. Chem.*, 1986, **51**, 5311.
398. K. Shishido, K. Hiroya, K. Fukumoto, and T. Kametani, "Tandem Electrocyclic-Sigmatropic Reaction of Benzocyclobutenes — II. A New Route to Isochroman-3-one-4-spiro-1'-cycloalk-3'-enes", *Tetrahedron Lett.*, 1986, **27**, 971.
399. K. Shishido, K. Hiroya, K. Fukumoto, and T. Kametani, "An Efficient and Highly Regioselective Intramolecular Mannich-Type Reaction: A Construction of the AEF Ring System of Aconitine-Type Diterpene Alkaloids", *Tetrahedron Lett.*, 1986, **27**, 1167.
400. K. Shishido, K. Takahashi, Y. Oshio, K. Fukumoto, T. Kametani, and T. Honda, "Synthetic Studies toward Antitumor Quassinoids — II. A Chiral Approach to Quassimarín via Intramolecular Diels-Alder Reaction", *Tetrahedron Lett.*, 1986, **27**, 1339.
401. K. Shishido, Y. Sukegawa, K. Fukumoto, and T. Kametani, "An Enantioselective Synthesis of (-)-6-Aza-6-carbethoxy-2-oxabicyclo[3.3.0]octan-3-one from *S*-(-)-Malic Acid", *Heterocycles*, 1986, **24**, 641.
402. K. Shishido, A. Yamashita, K. Hiroya, K. Fukumoto, and T. Kametani, "Preferential Electrocyclic Reaction of *o*-Quinodimethane. New Route to Dihydronaphthalenes and Naphthalenes", *Chem. Lett.*, 1987, 2113.
403. K. Shishido, H. Komatsu, K. Fukumoto, and T. Kametani, "Complementary Electrocyclic Reactions of *o*-Quinodimethanes. Highly Efficient Access to 4-Alkylideneisochroman-3-ones and 1-Carbomethoxy-3,4-dihydronaphthalenes", *Chem. Lett.*, 1987, 2117.
404. M. Ihara, M. Takahashi, N. Taniguchi, K. Fukumoto, and T. Kametani, "Enantioselective Synthesis of Useful Chiral Precursors, Unsymmetrical Propane-1,3-diol Derivatives, from Malonic Acid", *J. Chem. Soc., Chem. Commun.*, 1987, 619.

405. M. Ihara, M. Katogi, K. Fukumoto, and T. Kametani, "Total Synthesis of (\pm)-Pentalenic Acid via Intramolecular Double Michael Reaction", *J. Chem. Soc., Chem. Commun.*, 1987, 721.
406. K. Shishido, Y. Sukegawa, K. Fukumoto, and T. Kametani, "1,2-Asymmetric Induction in Intramolecular Michael Reaction. A Novel and Enantioselective Route to (+)-Geissman Lactone", *J. Chem. Soc., Perkin Trans 1*, 1987, 993.
407. M. Ihara, A. Kawaguchi, H. Ueda, M. Chihiro, K. Fukumoto, and T. Kametani, "Stereoselective Total Synthesis of (\pm)-3-Oxosilphinene through Intramolecular Diels–Alder Reaction", *J. Chem. Soc., Perkin Trans 1*, 1987, 1331.
408. K. Shishido, K. Hiroya, K. Fukumoto, and T. Kametani, "Novel Synthesis of a Key Intermediate for (\pm)-Atisine", *J. Chem. Soc., Chem. Commun.*, 1987, 1360.
409. M. Ihara, N. Taniguchi, K. Fukumoto, and T. Kametani, "A Stereoselective Total Synthesis of (\pm)-Dihydrocorynantheol via Radical Cyclisation", *J. Chem. Soc., Chem. Commun.*, 1987, 1438.
410. M. Ihara, T. Takahashi, N. Shimizu, K. Fukumoto, and T. Kametani, "A Novel Approach to Estranes by an Intramolecular Double Michael Reaction", *J. Chem. Soc., Chem. Commun.*, 1987, 1467.
411. M. Ihara, T. Kiriara, A. Kawaguchi, M. Tsuruta, K. Fukumoto, and T. Kametani, "Stereocontrolled Construction of Octahydroquinolizidines, Octahydroindolizidines, Hexahydrobenzo[*a*]quinolizines, and an Octahydro[2,3-*a*]quinolizine by an Intramolecular Double Michael Reaction: Synthesis of (\pm)-Epilupinine", *J. Chem. Soc., Perkin Trans 1*, 1987, 1719.
412. H. Nemoto, M. Nagai, Y. Abe, M. Moizumi, K. Fukumoto and T. Kametani "A Novel Stereoselective Access to des-A B-Aromatic Corticosteroids via Intramolecluar Cycloaddition Reaction — Potential Intermediates for the Synthesis of Corticosteroids", *J. Chem. Soc., Perkin Trans 1*, 1987, 1727.
413. K. Shishido, K. Hiroya, H. Komatsu, K. Fukumoto, and T. Kametani, "Application of a Tandem Electrocyclic [3,3]Sigmatropic Reaction of *o*-Quinodimethane to the Synthesis of Calabar Bean Alkaloids. Part 2. First Total Synthesis of (\pm)-Geneserine", *J. Chem. Soc., Perkin Trans 1*, 1987, 2491.
414. K. Shishido, K. Takahashi, K. Fukumoto, and T. Kametani, "A Synthetic Approach to (-)-Quassamarin Based on Intramolecular Diels-Alder Strategy", *J. Org. Chem.*, 1987, **52**, 5704.
415. H. Nemoto, E. Shitara, K. Fukumoto, and T. Kametani, "An Aromatic Version of Claisen Rearrangement of Lactonic Silyl Enolates — A New Access to Potential Intermediates for

- Eudesmane Type of Sesquiterpenes”, *Heterocycles*, 1987, **25**, 51.
416. K. Shishido, H. Komatsu, K. Fukumoto, and T. Kametani, “Competitive Electrocyclic Reaction of *o*-Quinodimethane: Sequential Electrocyclic-Double [3,3]Sigmatropic Reactions for the Construction of 4-Alkylideneisochroman-3-ones”, *Heterocycles*, 1987, **26**, 2361.
417. M. Ihara, K. Takahashi, K. Fukumoto, and T. Kametani, “Highly Stereocontrolled Synthesis of the Key Intermediate of 1 β -Methylcarbapenem Antibiotic *via* Intramolecular Nitron 1,3-Dipolar Cycloaddition”, *J. Chem. Soc., Chem. Commun.*, 1988, 9.
418. H. Nemoto, M. Moizumi, M. Nagai, K. Fukumoto, and T. Kametani, “A Novel Route to the Des-A Corticosteroids”, *J. Chem. Soc., Perkin Trans 1*, 1988, 885.
419. M. Ihara, Y. Ishida, M. Abe, M. Toyota, K. Fukumoto, and T. Kametani, “Stereocontrolled Synthesis of the CDF Part of *Aconitum* Alkaloids *via* Intramolecular Double Michael Reaction”, *J. Chem. Soc., Perkin Trans 1*, 1988, 1155.
420. M. Ihara, N. Taniguchi, K. Noguchi, K. Fukumoto, and T. Kametani, “Total Synthesis of Hydrocinchonidine and Hydrocinchonine *via* Photo-oxygenation of an Indole Derivative”, *J. Chem. Soc., Perkin Trans 1*, 1988, 1277.
421. H. Nemoto, M. Nagai, K. Kohzuki, K. Fukumoto, and T. Kametani, “Asymmetric Synthesis of *trans*-Benzoperhydroindan: Asymmetric Induction in Intramolecular Diels-Alder Reactions of *o*-Quinodimethanes”, *J. Chem. Soc., Perkin Trans 1*, 1988, 2835.
422. M. Ihara, M. Katogi, K. Fukumoto, and T. Kametani, “Total Synthesis of (\pm)-Pentalenene, (\pm)-Pentalenic Acid, and (\pm)-Deoxypentalenic Acid Through an Intramolecular Double Michael Reaction”, *J. Chem. Soc., Perkin Trans 1*, 1988, 2963.
423. M. Ihara, M. Suzuki, K. Fukumoto, and T. Kametani, “Stereoselective Total Synthesis of (\pm)-Atisine *via* Intramolecular Double Michael Reaction”, *J. Am. Chem. Soc.*, 1988, **110**, 1963.
424. H. Nemoto, S. Fujita, M. Nagai, K. Fukumoto, and T. Kametani, “A Novel Strategy for the Stereoselective Total Synthesis of C-17 Spiro Steroids. Total Synthesis of 19-Norcanrenone — A Formal Total Synthesis of 19-Norspironolactone”, *J. Am. Chem. Soc.*, 1988, **110**, 2931.
425. M. Ihara, Y. Takino, K. Fukumoto, and T. Kametani, “Asymmetric Total Synthesis of (-)-Tylophorine *via* the Highly Enantioselective Intramolecular Double Michael Reaction”, *Tetrahedron Lett.*, 1988, **29**, 4135.
426. H. Nemoto, M. Nagai, M. Moizumi, K. Kohzuki, K. Fukumoto, and T. Kametani, “A Highly Stereoselective Total Synthesis of (\pm)-Estrone and (\pm)-Adrenosterone”, *Tetrahedron Lett.*, 1988, **29**,

- 4959.
427. M. Ihara, K. Yasui, N. Taniguchi, K. Fukumoto, and T. Kametani, "Highly Enantiocontrolled Total Synthesis of (-)-Protoemetinol", *Tetrahedron Lett.*, 1988, **29**, 4963.
428. M. Ihara, M. Takahashi, K. Fukumoto, and T. Kametani, "A Chiral Synthesis of the Key Intermediate of 1 β -Methylcarbapenem Antibiotic", *Heterocycles*, 1988, **27**, 327.
429. K. Shishido, K. Takahashi, Y. Oshio, K. Fukumoto, and T. Kametani, "Synthetic Studies towards (-)-Quassamarin: An Intramolecular Diels-Alder Approach to the BCE Ring System", *Heterocycles*, 1988, **27**, 495.
430. K. Shishido, K. Hiroya, K. Fukumoto, and T. Kametani, "Highly Efficient Construction of the 7-Azabicyclo[3.3.1]non-2-ene System. An Application to the Synthesis of the AEF Ring System of Aconitine-type Diterpene Alkaloids", *J. Chem. Res. (S)*, 1989, 100.
431. M. Ihara, T. Takahashi, N. Shimizu, Y. Ishida, I. Sudow, K. Fukumoto, and T. Kametani, "Chiral Construction of the Estrane Ring System by an Intramolecular Double Michael Reaction", *J. Chem. Soc., Perkin Trans 1*, 1989, 529.
432. M. Ihara, M. Takahashi, N. Taniguchi, K. Yasui, K. Fukumoto, and T. Kametani, "Asymmetric Syntheses of Chiral Propane-1,3-dioles Starting from Malonic Acid", *J. Chem. Soc., Perkin Trans 1*, 1989, 897.
433. K. Shishido, Y. Tokunaga, N. Omachi, K. Hiroya, K. Fukumoto, and T. Kametani, "A Simple and Enantioselective Synthesis of (+)-Albicanol", *J. Chem. Soc., Chem. Commun.*, 1989, 1093.
434. K. Shishido, K. Hiroya, K. Fukumoto, and T. Kametani, "Use of an Electrocyclic Reaction of *o*-Quinodimethane and an Intramolecular Mannich-Type Cyclisation in Diterpene Alkaloid Synthesis: A Synthesis of Nagata's Intermediate for (\pm)-Atisine", *J. Chem. Soc., Perkin Trans 1*, 1989, 1443.
435. H. Nemoto, M. Nagai, M. Moizumi, K. Kohzuki, K. Fukumoto, and T. Kametani, "High Diastereoselection in the Intramolecular Diels-Alder Reaction of *o*-Quinodimethanes: An Expedient Entry to *trans*-Benzoperhydrindans. A Highly Stereoselective Total Synthesis of (\pm)-Estrone and (\pm)-Adrenosterone", *J. Chem. Soc., Perkin Trans 1*, 1989, 1639.
436. M. Ihara, M. Takahashi, K. Fukumoto, and T. Kametani, "Enantioselective Synthesis of the Key Intermediate of a 1 β -Methylcarbapenem Antibiotic by Way of Nitron 1,3-Dipolar Cycloaddition", *J. Chem. Soc., Perkin Trans 1*, 1989, 2215.

437. M. Ihara, M. Takahashi, N. Niitsuma, N. Taniguchi, K. Yasui, and K. Fukumoto, "Enantioselective Construction of a Quaternary Asymmetric Carbon Center: A Versatile Synthesis of α -Alkyl α -Amino Acids", *J. Org. Chem.*, 1989, **54**, 5413.
438. K. Shishido, A. Yamashita, K. Hiroya, and K. Fukumoto, "An Efficient Synthesis of the Naphthalene Moiety of Neocarzinostatin Chromophore", *Tetrahedron Lett.*, 1989, **30**, 111.
439. K. Shishido, A. Yamashita, K. Hiroya, and K. Fukumoto, "A New Synthetic Route to 2-Hydroxynaphthalene-1-carboxylic Acid Derivatives. An Efficient Access to the Naphthalene Moiety of Neocarzinostatin Chromophore", *Tetrahedron*, 1989, **45**, 5791.
440. K. Shishido, K. Hiroya, K. Fukumoto, and T. Kametani, "A Convenient Access to 3,4-Disubstituted Isoquinolines from Benzocyclobutenyl Ketoximes", *Heterocycles*, 1989, **28**, 39.
441. K. Shishido, H. Komatsu, K. Fukumoto, and T. Kametani, "A Synthetic Approach to (\pm)-Vindoline", *Heterocycles*, 1989, **28**, 43.
442. M. Ihara, Y. Takino, K. Fukumoto, and T. Kametani, "Enantioselective Synthesis of Naturally Occurring (-)-Tylophorine by Way of an Asymmetric Intramolecular Double Michael Reaction", *Heterocycles*, 1989, **28**, 63.
443. S. Hibino, E. Sugino, Y. Adachi, K. Nomi, K. Sato, and K. Fukumoto, "The Alternative Synthesis of Isoquinoline Nucleus Using the Thermal Electrocyclic Reaction of 1-Azahexa-1,3,5-triene System", *Heterocycles*, 1989, **28**, 275.
444. K. Shishido, A. Yamashita, K. Hiroya, K. Fukumoto, and T. Kametani, "An Efficient Synthesis of the Naphthalene Moiety of Neocarzinostatin Chromophore", *Heterocycles*, 1989, **30**, 111.
445. K. Shishido, A. Yamashita, K. Hiroya, and K. Fukumoto, "Synthesis of 2,6-Disubstituted Dihydronaphthalenes and Naphthalenes by Electrocyclic Reaction of *o*-Quinodimethane. A Synthesis of (\pm)-Naproxen", *J. Chem. Soc., Perkin Trans 1*, 1990, 469.
446. H. Nemoto, A. Satoh, M. Ando, and K. Fukumoto, "A Facile and Enantioselective Total Synthesis of (+)-19-Nordeoxycorticosterone", *J. Chem. Soc., Chem. Commun.*, 1990, 1001.
447. M. Ihara, K. Yasui, N. Taniguchi, and K. Fukumoto, "Asymmetric Total Synthesis of (-)-Protoemetinol, (-)-Protoemetine, (-)-Emetine, and (-)-Tubulosine by Highly Stereocontrolled Radical Cyclisations", *J. Chem. Soc., Perkin Trans 1*, 1990, 1469.
448. M. Ihara, Y. Takino, M. Tomotake (née Tsuruta), and K. Fukumoto, "Asymmetric Total Synthesis of Naturally Occurring (*R*)-(-)-Enantiomer of Tylophorine via Intramolecular Double Michael Reaction", *J. Chem. Soc., Perkin Trans 1*, 1990, 2287.

449. M. Ihara, T. Kai, N. Taniguchi, and K. Fukumoto, "Enantioselective Synthesis of Monofluorinated Chiral Building Blocks from Malonic Acid", *J. Chem. Soc., Perkin Trans 1*, 1990, 2357.
450. K. Shishido, Y. Tokunaga, N. Omachi, K. Hiroya, and K. Fukumoto, "Total Synthesis of (+)-Albicanol and (+)-Albicanyl Acetate via a Highly Diastereoselective Intramolecular [3+2] Cycloaddition", *J. Chem. Soc., Perkin Trans 1*, 1990, 2481.
451. M. Ihara, N. Taniguchi, K. Yasui, and K. Fukumoto, "Homochiral Syntheses of (-)-Dihydrocorynantheol", *J. Chem. Soc., Perkin Trans 1*, 1990, 2771.
452. H. Nemoto, H. Ishibashi, M. Mori, S. Fujita, and K. Fukumoto, "Ring Expansion of Cyclopropylmethanols to Cyclobutanes — An Enantioselective Total Synthesis of (R)-(+)-Dodecan-5-olide, and (S)-(+)- and (R)-(-)-5-[(Z)-Dec-1-enyl]dihydrofuran-2(3H)-one", *J. Chem. Soc., Perkin Trans 1*, 1990, 2835.
453. M. Ihara, Y. Tokunaga, and K. Fukumoto, "A Novel Synthetic Approach to Steroids via Intramolecular 1,3-Dipolar Cycloaddition. A Highly Stereocontrolled Synthesis of Testosterone", *J. Org. Chem.*, 1990, **55**, 4497.
454. H. Nemoto, N. Matsushashi, M. Imaizumi, M. Nagai, and K. Fukumoto, "First Enantioselective Total Synthesis of (+)-Cortisone", *J. Org. Chem.*, 1990, **55**, 5625.
455. M. Ihara, M. Suzuki, K. Fukumoto, and C. Kabuto, "Asymmetric Total Synthesis of Atisine via Intramolecular Double Michael Reaction", *J. Am. Chem. Soc.*, 1990, **112**, 1164.
456. H. Nemoto, M. Ando, and K. Fukumoto, "A Novel *o*-Quinodimethane Strategy for an Active Metabolite of Vitamin D₃. A Total Synthesis of 25-Hydroxy Windaus-Grundmann Ketone", *Tetrahedron Lett.*, 1990, **31**, 6025.
457. K. Shishido, K. Hiroya, A. Yamashita, Y. Tokunaga, and K. Fukumoto, "Alkoxide-mediated Oxidative Ring Expansion of Benzocyclobutenes. A New Route to 3,4-Dihydroisocoumarines", *Heterocycles*, 1990, **30**, 253.
458. M. Ihara, M. Suzuki, and K. Fukumoto, "Chiral Synthesis of the Intermediate of Atisine", *Heterocycles*, 1990, **30**, 381.
459. M. Ihara, K. Yasui, N. Taniguchi, and K. Fukumoto, "An Asymmetric Synthesis of a Quaternary Chiral Building Block from Ethylmalonic Acid: A Preparation of Key Synthetic Intermediates of *Huteria*- and *Aspidosperma*-Type Indole Alkaloids", *Heterocycles*, 1990, **31**, 1017.
460. H. Nemoto, H. Ishibashi, M. Mori, S. Fujita, and K. Fukumoto, "A Novel Approach to Chiral Cyclobutanes — An Enantioselective Total Synthesis of (+)-(*S,Z*)-5-(1-Decenyl)dihydro-2(3H)-

- furanone and (-)-(R,Z)-5-(1-Decenyl)dihydro-2(3H)-furanone”, *Heterocycles*, 1990, **31**, 1237.
461. M. Toyota and K. Fukumoto, “Tandem Michael Addition-[3,3] Sigmatropic Rearrangement Processes: A Concise Route to Functionalized 3-Alkoxy carbonylindoles”, *Heterocycles*, 1990, **31**, 1431.
462. M. Ihara, M. Takahashi, N. Taniguchi, K. Yasui, H. Niitsuma, and K. Fukumoto, “Stereoselective Alkylation of Dianions Derived from Chiral Half-esters of Monosubstituted Malonic Acids: Asymmetric Synthesis of α -Alkyl α -Amino Acids and Key Synthetic Intermediates for *Hunteria* and *Aspidosperma* Indole Alkaloids”, *J. Chem. Soc., Perkin Trans 1*, 1991, 525.
463. M. Ihara, T. Suzuki, M. Katogi, N. Taniguchi, and K. Fukumoto, “A Stereoselective Total Synthesis of (\pm)- $\Delta^{9(12)}$ -Cannabinene via the Intramolecular Diels-Alder Approach”, *J. Chem. Soc., Chem. Commun.*, 1991, 646.
464. H. Nemoto, N. Matsushashi, and K. Fukumoto, “A Novel Approach to Optically Active *trans*-Benzoperhydroindan (2,3,3a,3b,4,5-Hexahydro-1H-benz[e]indene)”, *J. Chem. Soc., Chem. Commun.*, 1991, 705.
465. M. Ihara, S. Suzuki, N. Taniguchi, K. Fukumoto, and C. Kabuto, “A Novel Construction of Polyfunctionalised *trans*-Hydroindanes via Sulphur-mediated Intramolecular Double Michael Reaction”, *J. Chem. Soc., Chem. Commun.*, 1991, 1168.
466. H. Nemoto, A. Satoh, M. Ando, and K. Fukumoto, “A Practical Route for Enantioselective Total Synthesis of (+)-11-Deoxy-19-norcorticosterone via Intramolecular Diels-Alder Addition to an *ortho*-Quinodimethane”, *J. Chem. Soc., Perkin Trans 1*, 1991, 1309.
467. H. Nemoto, T. Yamada, H. Ishibashi, and K. Fukumoto, “Asymmetric Construction of α,α -Disubstituted Cyclobutanones — Enantioselective Total Synthesis of (-)-Frontalin”, *J. Chem. Soc., Perkin Trans 1*, 1991, 3149.
468. M. Ihara, Y. Tokunaga, N. Taniguchi, and K. Fukumoto, “A Novel Approach to Angular Triquinanes via Intramolecular 1,3-Dipolar Cycloaddition of Nitrile Oxide”, *J. Org. Chem.*, 1991, **56**, 5281.
469. M. Ihara, Y. Tokunaga, N. Taniguchi, and K. Fukumoto, “Stereoselective Synthesis of (+)-Testosterone via Intramolecular 1,3-Dipolar Cycloaddition of Nitrile Oxide”, *Tetrahedron*, 1991, **47**, 6635.
470. H. Nemoto, T. Yamada, H. Ishibashi, J. Takazawa, and K. Fukumoto, “A Novel Approach to Quaternary Substituted Chiral Cyclobutanes. A Formal Enantioselective Total Synthesis of 1,3-Dioxole Pheromone, (-)-Frontalin”, *Heterocycles*, 1991, **32**, 863.

471. M. Ihara, N. Taniguchi, T. Kai, K. Satoh, and K. Fukumoto, "Enantioselective Construction of Quaternary Stereogenic Centres Possessing a Fluorine Atom", *J. Chem. Soc., Perkin Trans 1*, 1992, 221.
472. H. Nemoto, N. Matsushashi, A. Satoh, and K. Fukumoto, "A Novel Chiral Approach to *trans*-3a,4,5,9b-Tetrahydro-1*H*-benz[*e*]indene", *J. Chem. Soc., Perkin Trans 1*, 1992, 495.
473. M. Toyota and K. Fukumoto, "Tandem Michael Addition-[3,3]sigmatropic Rearrangement Processes. Part 2. Construction of Cyclopropa[3,4]pyrrolo[3,2-*e*]indol-4-one (CPI) Unit of Antitumour Antibiotic CC-1065", *J. Chem. Soc., Perkin Trans 1*, 1992, 547.
474. M. Ihara, T. Suzuki, M. Katogi, N. Taniguchi, and K. Fukumoto, "Stereoselective Construction of *cis-transoid-cis*-Tricyclo[7.3.0.0^{2,7}]dodecanes by an Intramolecular Diels–Alder Reaction: A Formal Total Synthesis of (±)- $\Delta^{9(12)}$ -Capnellene", *J. Chem. Soc., Perkin Trans 1*, 1992, 865.
475. M. Ihara, N. Taniguchi, S. Suzuki, and K. Fukumoto, "Enantioselective Construction of a Quaternary Stereogenic Centre *via* Tandem Acid Anhydride Formation — Intramolecular Michael Reaction", *J. Chem. Soc., Chem. Commun.*, 1992, 976.
476. H. Nemoto, M. Nagamochi, and K. Fukumoto, "The First Enantioselective Total Synthesis of (+)-Laurene", *J. Chem. Soc., Chem. Commun.*, 1992, 1695.
477. M. Ihara, S. Suzuki, N. Taniguchi, K. Fukumoto, and C. Kabuto, "Sulfur-mediated Intramolecular Double Michael-Type Reaction: Synthesis of *trans*-Hydroindanes and Mechanism", *J. Chem. Soc., Perkin Trans 1*, 1992, 2527.
478. H. Nemoto, H. Ishibashi, M. Nagamochi, and K. Fukumoto, "A Concise and Enantioselective Approach to Cyclobutanones by Tandem Asymmetric Epoxidation and Enantiospecific Ring Expansion of Cyclopropylidene Alcohols. An Enantiocontrolled Synthesis of (+)- and (-)- α -Cuparenones", *J. Org. Chem.*, 1992, **57**, 1707.
479. M. Ihara, M. Ohnishi, M. Takano, K. Makita, N. Taniguchi, and K. Fukumoto, "Novel Construction of Polycyclic Systems Fused to Cyclobutane by Tandem Intramolecular Michael–Aldol Reaction", *J. Am. Chem. Soc.*, 1992, **114**, 4408.
480. M. Toyota, T. Seishi, M. Yokoyama, K. Fukumoto, and C. Kabuto, "Synthetic Approach to Stemodin — A Novel Stereocontrolled Construction of the Stemodane System by the Successive Intramolecular Diels–Alder Reaction", *Tetrahedron Lett.*, 1992, **33**, 4581.
481. M. Ihara, A. Hirabayashi, N. Taniguchi, and K. Fukumoto, "Enantioselective Synthesis of 6-Oxygenated Atisine Derivative *via* Intramolecular Double Michael Reaction", *Tetrahedron*, 1992, **48**, 5089.
482. N. Taniguchi, M. Ihara, and K. Fukumoto, "Conversion of the Synthetic Precursor for *Ipecac* and *Corynanthe* Alkaloids into Synthetic Intermediates of Quinine Alkaloids and (±)-Dihydroantirhine", *Heterocycles*, 1992, **33**, 545.

483. H. Nemoto, H. Ishibashi, and K. Fukumoto, "An Enantioselective Synthesis of (*R*)- and (*S*)-4,5-Dimethyl-4-hexanolides — Key Intermediates for 2,3-Dihydro-2-isopropyl-2,5-dimethylfuran, a Sex Specific Compounds in Females of the Beetle *Hylecoetus dermestoides* L.", *Heterocycles*, 1992, **33**, 549.
484. M. Ihara, A. Hirabayashi, N. Taniguchi, and K. Fukumoto, "Novel One Step Transformation of Carbamates into Amides", *Heterocycles*, 1992, **33**, 851.
485. M. Ihara, S. Suzuki, N. Taniguchi, and K. Fukumoto, "Intramolecular Michael Reaction Using Trialkylsilyl Trifluoromethanesulfonates and Tertiary Amine Systems: Total Synthesis of (\pm)-Ricciocarpin A", *J. Chem. Soc., Chem. Commun.*, 1993, 755.
486. M. Ihara, T. Taniguchi, N. Taniguchi, and K. Fukumoto, "A Novel Rearrangement of Cyclobutanes to Cyclopropanes; Construction of Tricyclo[5.4.0.0^{1,3}]undecane and Bicyclo[4.1.0]heptane Systems", *J. Chem. Soc., Chem. Commun.*, 1993, 1477.
487. H. Nemoto, A. Satoh, and K. Fukumoto, "Rapid Enantioselective Access to des-*AB*-Trienic Corticosteroids via Intramolecular Cycloaddition", *J. Chem. Soc., Perkin Trans 1*, 1993, 2237.
488. M. Ihara, S. Suzuki, N. Taniguchi, and K. Fukumoto, "Deconjugation of α,β -Unsaturated Esters and an Intramolecular Michael Reaction of Bis- α,β -unsaturated Esters with Trialkylsilyl Trifluoromethanesulfonate in the Presence of Tertiary Amine: Synthesis of (\pm)-Ricciocarpin A", *J. Chem. Soc., Perkin Trans 1*, 1993, 2251.
489. H. Nemoto, M. Nagamochi, and K. Fukumoto, "Chiral Cyclobutanones as Versatile Synthons: The First Enantioselective Total Synthesis of (+)-Laurene", *J. Chem. Soc., Perkin Trans 1*, 1993, 2329.
490. M. Ihara, T. Taniguchi, K. Makita, M. Takano, M. Ohnishi, N. Taniguchi, K. Fukumoto, and C. Kabuto, "Synthesis of Polycyclic Cyclobutane Derivatives by Tandem Intramolecular Michael-Aldol Reaction under Two Complementary Conditions, TBDMSOTf-Et₃N and TMSI-(TMS)₂NH", *J. Am. Chem. Soc.*, 1993, **115**, 8107.
491. H. Nemoto, M. Shiraki, M. Nagamochi, and K. Fukumoto, "A Concise Enantiocontrolled Total Synthesis of (-)- α -Bisabolol and (+)-Epi- α -bisabolol", *Tetrahedron Lett.*, 1993, **34**, 4939.
492. M. Toyota, T. Seishi, and K. Fukumoto, "Pd²⁺-Promoted Cyclization in Tetracyclic Diterpene Synthesis. Highly Diastereoselective Formal Total Synthesis of (\pm)-Stemodin", *Tetrahedron Lett.*, 1993, **34**, 5947.
493. M. Toyota, Y. Nishikawa, K. Motoki, N. Yoshida, and K. Fukumoto, "Pd²⁺-Promoted Cyclization in Linear Triquinane Synthesis. Total Synthesis of (\pm)-Hirsutene", *Tetrahedron Lett.*, 1993, **34**, 6099.
494. M. Toyota, Y. Nishikawa, K. Motoki, N. Yoshida, and K. Fukumoto, "Total Synthesis of (\pm)-Hirsutene via Pd²⁺-Promoted Cycloalkenylation Reaction", *Tetrahedron*, 1993, **49**, 11189.
495. M. Toyota, Y. Wada, and K. Fukumoto, "Aspects of the Intramolecular Diels-Alder Reactions of

- Some 1,3,8-Trienic Esters”, *Heterocycles*, 1993, **35**, 111.
496. M. Ihara, K. Satoh, N. Taniguchi, K. Fukumoto, Y. Ishida, and M. Takemura, “Synthesis of Potentially Useful Intermediates for 1-Fluorocarbanenems”, *Heterocycles*, 1993, **35**, 139.
497. H. Nemoto, T. Tanabe, and K. Fukumoto, “An Enantiocontrolled Formal Total Synthesis of (+)-Ipomeamarone, (-)-Ngaione, and Their Epimers”, *Heterocycles*, 1993, **35**, 707.
498. M. Ihara, S. Suzuki, N. Taniguchi, and K. Fukumoto, “Facile Preparation of Conjugated Dienones from Conjugated Enones”, *Synlett*, 1993, 435.
499. H. Nemoto, A. Satoh, H. Fukui, S. Fujimori, and K. Fukumoto, “A Novel Approach to Optically Active Des-A C-13 Ethyl Steroids”, *Chem. Pharm. Bull.*, 1994, **42**, 1963.
500. H. Nemoto, A. Satoh, and K. Fukumoto, “Concise and Practical Approach to Chiral Des-A B-Trienic Corticosteroids”, *J. Chem. Soc., Perkin Trans 1*, 1994, 943.
501. H. Nemoto, M. Nagamochi, H. Ishibashi, and K. Fukumoto, “A Remarkable Substituent Effect on the Enantioselectivity of Tandem Asymmetric Epoxidation and Enantiospecific Ring Expansion of Cyclopropylidene Alcohols: A New Enantiocontrolled Synthesis of (-)-Debromoaplysin and (-)-Aplysin”, *J. Org. Chem.*, 1994, **59**, 74.
502. M. Ihara, F. Setsu, M. Shohda (nee Hosoda), N. Taniguchi, Y. Tokunaga, and K. Fukumoto, “Asymmetric Total Synthesis of Tacamonine (Pseudovincamone I) via Radical Cyclization”, *J. Org. Chem.*, 1994, **59**, 5317.
503. M. Ihara, K. Makita, Y. Tokunaga, and K. Fukumoto, “Stereoselective Formation of Three Carbon-Carbon Bonds by Cascade Reaction with Enolate Anion: Synthesis of Tricyclo[6.2.2.0^{1,6}]dodecane and Tricyclo[5.3.1.0^{3,8}]undecane Derivatives”, *J. Org. Chem.*, 1994, **59**, 6008.
504. M. Ihara, T. Taniguchi, Y. Tokunaga, and K. Fukumoto, “Ring Construction of Cyclobutanes and a Novel Cascade Reaction: Application to Synthesis of (±)-Anthoplalone and (±)-Lepidozene”, *J. Org. Chem.*, 1994, **59**, 8092.
505. M. Ihara, T. Taniguchi, and K. Fukumoto, “Construction of Polycyclic Ring Systems Fused to Cyclobutane by Sequential Three Reactions, Opening of Three Membered Ring-Michael-Aldol Sequence”, *Tetrahedron Lett.*, 1994, **35**, 1901.
506. M. Toyota, Y. Nishikawa, and K. Fukumoto, “An Expedient and Efficient Formal Synthesis of (±)-Aphidicolin”, *Tetrahedron Lett.*, 1994, **35**, 6495.
507. H. Nemoto, T. Tanabe, and K. Fukumoto, “An Asymmetric Synthesis of Benzylic Quaternary Carbon Centers. — A Formal Total Synthesis of (-)-Mesembrine”, *Tetrahedron Lett.*, 1994, **35**, 6499.
508. M. Toyota, T. Seishi, M. Yokoyama, K. Fukumoto, and C. Kabuto, “Synthetic Approach to Stemodin (I) — A Novel Stereocontrolled Construction of the Stemodane System by the

- Successive Intramolecular Diels-Alder Reactions”, *Tetrahedron*, 1994, **50**, 1093.
509. M. Toyota, Y. Seishi, and K. Fukumoto, “Stemodin Synthesis (II) — Highly Diastereoselective Formal Total Synthesis of (±)-Stemodin *via* Pd²⁺-Promoted Cycloalkenylation Reaction”, *Tetrahedron*, 1994, **50**, 3673.
510. M. Toyota, Y. Nishikawa, T. Seishi, and K. Fukumoto, “Aphidicolin Synthesis (I) — Formal Synthesis of (±)-Aphidicolin by the Successive Intramolecular Diels-Alder Reactions”, *Tetrahedron*, 1994, **50**, 10183.
511. H. Nemoto, M. Shiraki, and K. Fukumoto, “Tandem Ring Expansion and Insertion Reaction of Alkenic Cyclobutanols Mediated by Palladium — A Novel Approach to Bicyclo[4.3.0]nonane Systems”, *Tetrahedron*, 1994, **50**, 10391.
512. M. Toyota, Y. Nishikawa, and K. Fukumoto, “Aphidicolin Synthesis (II) — An Expedient and Efficient Formal Synthesis of (±)-Aphidicolin”, *Tetrahedron*, 1994, **50**, 11153.
513. M. Ihara, F. Setsu, M. Shohda (nee Hosoda), N. Taniguchi, and K. Fukumoto, “A Total Synthesis of (±)-Tacamonine (Pseudovincamone I) through Radical Cyclization”, *Heterocycles*, 1994, **37**, 289.
514. M. Toyota, Y. Wada, Y. Nishikawa, T. Wada, and K. Fukumoto, “Lewis Acid Promoted Tandem [4+2] Cycloaddition-Rearrangement Process — A Simple and Efficient Synthesis of Highly Functionalized Oxabicyclo[3.3.1]nonanes”, *Heterocycles*, 1994, **38**, 1491.
515. M. Toyota, Y. Nishikawa, and K. Fukumoto, “An Efficient Synthesis of 1,2,3,4-Tetrasubstituted Pyrroles *via* Intramolecular Azomethine Ylide [3+2] Dipolar Cycloaddition”, *Heterocycles*, 1994, **39**, 39.
516. H. Nemoto, H. Hakamata, M. Nagamochi, and K. Fukumoto, “An Efficient Route to Chiral Benzooxabicyclo[3.2.1]octane Ring System — The First Enantiocontrolled Total Synthesis of (-)-Filiformin”, *Heterocycles*, 1994, **39**, 467.
517. M. Toyota, T. Wada, Y. Nishikawa, K. Yanai, and K. Fukumoto, “Pd²⁺-Promoted Cyclization in Gibberellin Synthesis — A New Strategy for C²⁰ Gibberellin Synthesis”, *Synlett*, 1994, 597.
518. H. Nemoto, M. Shiraki, and K. Fukumoto, “A Novel Access to Hydrindan Derivatives by Palladium Mediated Tandem Ring Expansion and Insertion Reaction of Alkenic Cyclobutanols”, *Synlett*, 1994, 599.
519. M. Ihara, S. Suzuki, T. Taniguchi, Y. Tokunaga, and K. Fukumoto, “Modification of the Julia Alkenation Using SmI₂-HMPA”, *Synlett*, 1994, 859.
520. M. Ihara, T. Kawabuchi, Y. Tokunaga, and K. Fukumoto, “Eantiocontrolled Synthesis of Chiral Propane-1,3-diol Derivatives Possessing Fluorinated Quaternary Stereogenic Center”, *Tetrahedron:Asymmetry*, 1994, **5**, 1041.
521. M. Ihara, F. Setsu, Y. Tokunaga, K. Fukumoto, Y. Kawagishi, and T. Osa, “Indirect

- Electroreductive Cyclization for Syntheses of Key Intermediates of Several Indoles and Ipecac Alkaloids”, *Chem. Pharm. Bull.*, 1995, **43**, 362.
522. Y. Tokunaga, M. Yagihashi, M. Ihara, and K. Fukumoto, “A Simple Total Synthesis of (±)-Spirojatamol and (±)-Erythrodiene via Intramolecular 1,3-Dipolar Cycloaddition”, *J. Chem. Soc., Chem. Commun.*, 1995, 955.
523. M. Ihara, Y. Ishida, Y. Tokunaga, C. Kabuto, and K. Fukumoto, “Stereocontrolled Synthesis of Indolo[2,3-*a*]quinolizines by Intramolecular Double Michael Reaction: Proof for Stepwise Mechanism”, *J. Chem. Soc., Chem. Commun.*, 1995, 2085.
524. M. Ihara, S. Suzuki, Y. Tokunaga, and K. Fukumoto, “Assembly of Bicyclo[2.2.1]heptane Derivatives by Two Types of Domino Reaction”, *J. Chem. Soc., Perkin Trans 1*, 1995, 2811.
525. H. Nemoto, A. Satoh, K. Fukumoto, and C. Kabuto, “A Rapid Access to Both Enantiomers of 1,2,3,4-Tetranor B-Trienic 18,18,18-Trifluorosteroids. The First Enantiocontrolled Total Synthesis of 18,18,18-Trifluorosteroids”, *J. Org. Chem.*, 1995, **60**, 594.
526. M. Ihara, A. Katsumata, M. Egashira, S. Suzuki, Y. Tokunaga, and K. Fukumoto, “Stereoselective Construction of the Diterpene Part of Indole Alkaloids, Radarins, by Way of Intramolecular Diels-Alder Reaction”, *J. Org. Chem.*, 1995, **60**, 5560.
527. H. Nemoto, T. Tanabe, and K. Fukumoto, “A Highly Enantiocontrolled Strategy for the Synthesis of Benzylic Quaternary Carbon Centers. A Formal Total Synthesis of (-)-Mesembrine”, *J. Org. Chem.*, 1995, **60**, 6785.
528. H. Nemoto, J. Miyata, H. Hakamata, and K. Fukumoto, “The First Example of Asymmetric Dihydroxylation of Cyclopropylidene Derivatives — An Enantioenriched Formal Total Synthesis of (-)-Filiformin”, *Tetrahedron Lett.*, 1995, **36**, 1055.
529. M. Toyota, Y. Nishikawa, and K. Fukumoto, “Enantioselective Total Synthetic Route to (+)-Aphidicolin”, *Tetrahedron Lett.*, 1995, **36**, 5379.
530. M. Ihara, T. Taniguchi, M. Yamada, Y. Tokunaga, and K. Fukumoto, “Stereocontrolled Intramolecular Michael-Aldol Reaction Mediated with Bu₂BOTf and (TMS)₂NH”, *Tetrahedron Lett.*, 1995, **36**, 8071.
531. H. Nemoto, M. Shiraki, and K. Fukumoto, “Vinyl Cyclobutanol Strategy for Halogenated Cyclopentanoids”, *Tetrahedron Lett.*, 1995, **36**, 8799.
532. M. Ihara, M. Suzuki, A. Hirabayashi, Y. Tokunaga, and K. Fukumoto, “Preparation of Chiral Building Blocks for Synthesis of *Aconitium* Alkaloids”, *Tetrahedron: Asymmetry*, 1995, **6**, 2053.
533. H. Nemoto, J. Miyata, H. Hakamata, M. Nagamochi, and K. Fukumoto, “A Novel and Efficient Route to Chiral A-Ring Aromatic Trichothecanes—The First Enantiocontrolled Total Synthesis of (-)-Debromofiliformin and (-)-Filiformin”, *Tetrahedron*, 1995, **51**, 5511.
534. M. Toyota, T. Wada, Y. Nishikawa, K. Yanai, K. Fukumoto, and C. Kabuto, “Simple Design for

- the Construction of Complex Gibberellin Framework — Stereoselective Synthesis of a Possible Key Intermediate to GA₁₂ via Pd²⁺-Promoted Cycloalkenylation Reaction”, *Tetrahedron*, 1995, **51**, 6927.
535. M. Ihara, S. Suzuki, T. Taniguchi, Y. Tokunaga, and K. Fukumoto, “Preparation of Olefins and Acetylenes via Reductive Elimination with SmI₂-HMPA”, *Tetrahedron*, 1995, **51**, 9873.
536. H. Nemoto, A. Satoh, and K. Fukumoto, “Diels-Alder Reactions with *o*-Quinodimethanes: The Influence of Protective Groups and Substituents of Allyl Alcohols on the Stereochemical Course — A New Access to 18-Trifluoroestrans”, *Tetrahedron*, 1995, **51**, 10159.
537. M. Ihara, T. Kawabuchi, Y. Tokunaga, and K. Fukumoto, “Unprecedented Stereoselectivity of Intramolecular 1,3-Dipolar Cycloaddition Caused by the Presence of Fluorine Atom”, *Heterocycles*, 1995, **40**, 97.
538. M. Toyota, N. Yamamoto, Y. Nishikawa, and K. Fukumoto, “Silylmethyl Radical Cyclization in Theopederins Synthesis — A New Access to Pederic Acid”, *Heterocycles*, 1995, **40**, 115.
539. M. Toyota, M. Matsuura, and K. Fukumoto, “INOC Reaction in Alkaloid Synthesis — Preparation of Potential Intermediate for the Synthesis of (-)-Reserpine”, *Heterocycles*, 1995, **41**, 661.
540. M. Toyota, T. Wada, and K. Fukumoto, “INOC Reaction in Gibberellin Synthesis — A Practical Synthesis of the Key Intermediate for Gibberellin A₁₂”, *Heterocycles*, 1995, **41**, 1135.
541. M. Toyota, T. Wada, M. Matsuura, and K. Fukumoto, “Pd⁰- and/or Pd²⁺-Promoted Cyclization in *cis*-Hydrindane Synthesis — Building Blocks for Natural Product Synthesis”, *Synlett*, 1995, 761.
542. H. Nemoto, A. Satoh, and K. Fukumoto, “On the Stereochemistry of Intramolecular Diels-Alder Reaction of *o*-Quinodimethanes with Trifluoromethylallyl Alcohols — A Novel Approach to 18-Trifluoroestrans”, *Synlett*, 1995, **2**, 199.
543. M. Ihara, T. Taniguchi, Y. Tokunaga, and K. Fukumoto, “Construction of Ring Systems Fused to Cyclobutane by Cascade Reactions of Formyl α,β -Unsaturated Esters”, *Synthesis*, 1995, 1405.
544. M. Ihara, S. Suzuki, Y. Tokunaga, H. Takeshita, and K. Fukumoto, “Facile Construction of Bicyclo[6.4.0]dodecane System by Intramolecular Michael Addition of Sulfonyl Carbanion”, *Chem. Commun.*, 1996, 1801.
545. M. Ihara, A. Katsumata, F. Setsu, Y. Tokunaga, and K. Fukumoto, “Synthesis of Six-Membered Compounds by Environmentally Friendly Cyclization Using Indirect Electrolysis”, *J. Org. Chem.*, 1996, **61**, 677.
546. H. Nemoto, M. Shiraki, and K. Fukumoto, “Novel Access to Neopentyl-Type Halogenated Cyclopentanoids via Olefinic Cyclobutanols”, *J. Org. Chem.*, 1996, **61**, 1347.
547. M. Ihara, K. Makita, Y. Fujiwara, Y. Tokunaga, and K. Fukumoto, “Stereoselective Construction of Copaborneol and Longiborneol Frameworks by Intramolecular Double Michael Reaction”, *J. Org. Chem.*, 1996, **61**, 6416.

548. M. Toyota, T. Asoh, M. Matsuura, and K. Fukumoto, "Stereoselective Transformation of Enantiopure Cyclohexenol into *cis*-Hydrindane. An Enantioselective Formal Total Synthetic Route to (+)-Pumiliotoxin C", *J. Org. Chem.*, 1996, **61**, 8687.
549. M. Toyota, T. Asoh, and K. Fukumoto, "Palladium Catalyzed Reductive Cyclization Reaction in Alkaloid Synthesis — An Enantioselective Total Synthetic Route to (+)-Pumiliotoxin C", *Tetrahedron Lett.*, 1996, **37**, 4401.
550. Y. Tokunaga, M. Ihara, and K. Fukumoto, "1,3-Dipolar Cycloaddition of 1-Carboxynitrone: Different Stereoselectivity Caused by Salt Effect", *Tetrahedron Lett.*, 1996, **37**, 6157.
551. H. Nemoto, M. Shiraki, N. Yamada, N. Raku, and K. Fukumoto, "A New Stereocontrolled Access to Angularly Disubstituted *cis*-Decalins via Tandem Radical Ring Expansion and Cyclization", *Tetrahedron Lett.*, 1996, **37**, 6355.
552. M. Toyota, Y. Nishikawa, and K. Fukumoto, "Synthesis of a Cancer Growth — Inhibiting Diterpene — Stereoselective Formal Synthesis of (+)-Aphidicolin", *Tetrahedron*, 1996, **52**, 10347.
553. H. Nemoto, J. Miyata, and K. Fukumoto, "A Novel and General Route to Diverse A-Ring Aromatic Trichothecanes via Cyclobutanes", *Tetrahedron*, 1996, **52**, 10363.
554. H. Nemoto, M. Shiraki, N. Yamada, N. Raku, and K. Fukumoto, "A Sequenced Radical Reaction — A Novel Stereocontrolled Route to Angularly Disubstituted *cis*-Decalins", *Tetrahedron*, 1996, **52**, 13339.
555. H. Nemoto, J. Miyata, and K. Fukumoto, "Cyclobutane Strategy for the Synthesis of A-Ring Aromatic Trichothecanes", *Heterocycles*, 1996, **42**, 165.
556. M. Ihara, K. Satoh, Y. Ishida, N. Taniguchi, Y. Tokunaga, M. Takemura, and K. Fukumoto, "The Synthesis of 1 β -Fluorocarbapenem Derivative", *Heterocycles*, 1996, **42**, 437.
557. Y. Tokunaga, M. Ihara, and K. Fukumoto, "Silver(I) Salt Promoted Generation of Nitrile Oxides from Hydroximoyl Chlorides", *Heterocycles*, 1996, **43**, 1771.
558. Y. Tokunaga, M. Yagihashi, M. Ihara, and K. Fukumoto, "Facile Construction of Spirobicyclic Skeletons by Intramolecular Aldol Reaction: Simple Formal Syntheses of (\pm)-Spirojatamol and (\pm)-Erythrodiene", *J. Chem. Soc., Perkin Trans 1*, 1997, 189.
559. Y. Tokunaga, M. Ihara, and K. Fukumoto, "A Mild Oxidative Transformation of Nitro Compounds into Ketones by Tetrapropylammonium Perruthenate", *J. Chem. Soc., Perkin Trans 1*, 1997, 207.
560. M. Ihara, N. Taniguchi, and K. Fukumoto, "Synthesis of Chiral Intermediate of Quinine Alkaloids and (+)-Dihydroantirrhine", *J. Chem. Soc., Perkin Trans 1*, 1997, 365.
561. M. Ihara, A. Katsumata, and K. Fukumoto, "Radical Cyclisation with High Diastereofacial Selectivity: Asymmetric Synthesis of (+)-12b-Epidevinyllantirrhine", *J. Chem. Soc., Perkin Trans 1*, 1997, 991.

562. M. Ihara, Y. Tanaka, N. Takahashi, Y. Tokunaga, and K. Fukumoto, "Influence of a 2-Fluoro Substituent on Diastereoselectivity in the 1,3-Dipolar Cycloadditions of Nitrones", *J. Chem. Soc., Perkin Trans 1*, 1997, 3043.
563. H. Nemoto, M. Yoshida, and K. Fukumoto, "Allenylcyclobutanol, a Versatile Initiator for the Palladium-Catalyzed Cascade Reaction: A Novel Route to Bicyclo[5.3.0] and-[6.3.0] Frameworks", *J. Org. Chem.*, 1997, **62**, 6450.
564. H. Nemoto, J. Miyata, M. Yoshida, N. Raku, and K. Fukumoto, "A Novel Palladium-Mediated Cascade Reaction Triggered by Strain Release of the Cyclobutane System. A New General Route to Benzo- and Naphthohydrindans", *J. Org. Chem.*, 1997, **62**, 7850.
565. K. Makita, K. Fukumoto, and M. Ihara, "Stereoselective Synthesis of (\pm)-Cedranediol via Intramolecular Double Michael Reaction", *Tetrahedron Lett.*, 1997, **38**, 5197
566. H. Nemoto, J. Miyata, and K. Fukumoto, "A Novel Route to Diverse Fused Oxabicyclo[3.2.1]octanes — A Ring Modified Trichothecanes", *Heterocycles*, 1997, **44**, 125.
567. M. Ihara, M. Yamada, Y. Ishida, Y. Tokunaga, and K. Fukumoto, "Synthesis of Benzo[*a*]quinolizines by the Intramolecular Double Michael Reaction under Three Different Conditions", *Heterocycles*, 1997, **44**, 531.
568. M. Toyata, T. Asoh, and K. Fukumoto, "INOC Reaction in Alkaloid Synthesis — Stereocontrolled Formal Total Synthesis of (+)-Pumiliotoxin C", *Heterocycles*, 1997, **45**, 147.
569. A. Katsumata, T. Iwaki, K. Fukumoto, and M. Ihara, "Diastereofacial Selectivity of Radical Cyclization Using Chiral α,β -Unsaturated Ester and Amide: Investigation of a New Chiral Synthon Synthesis", *Heterocycles*, 1997, **46**, 605.
570. H. Nemoto, J. Miyata, K. Fukumoto, H. Ehara, N. Harada, H. Uekusa, and Y. Ohashi, "Lipase-catalyzed Kinetic Resolution of Cyclobutylmethanols and Determination of Absolute Stereochemistry by X-Ray Analysis", *Enantiomer*, 1997, **2**, 127.
571. M. Toyota, T. Wada, K. Fukumoto, and M. Ihara, "Total Synthesis of (\pm)-Methyl Atis-16-en-19-oate via Homoallyl-homoallyl Radical Rearrangement", *J. Am. Chem. Soc.*, 1998, **120**, 4916.
572. M. Toyota, Y. Nishikawa, and K. Fukumoto, "A Practical Synthesis of the Key Intermediate for Theopederins — An Enantioselective Total Synthesis of (+)-Methyl Pederate", *Heterocycles*, 1997, **47**, 675.