

INVITED LECTURES

1. "A Unique Synthesis Method of Transformerless Active RC Networks," Case Institute of Technology, Cleveland, Ohio, July 1963.
2. "Active Filters," Institute of Radio Physics and Electronics, University of Calcutta, Calcutta, India, July 1964.
3. "Active Networks," NEC Corp., Kawasaki City, Japan, September 1964.
4. "Inductorless Filters," Indian Institute of Technology, Kharagpur, India, August 1965.
5. "Network Function from Its Odd Part," Indian Institute of Technology, Kharagpur, India, August 1965.
6. "Active R-C Network Synthesis," Institute of Radio Physics and Electronics, University of Calcutta, India, August 1965.
7. "A New Method for the Determination of a Network Function from Its Odd (Even) Part," Princeton University, Princeton, New Jersey, November 1965.
8. Member of a Panel Discussion on Active Filters, IEEE Circuit Theory Group - San Francisco Chapter Meeting, June 1968.
9. "Recent Developments in Active Network Synthesis and Future Promises," 1968 Summer School on Circuit Theory, Prague, Czechoslovakia (Sponsored by the Czechoslovak Academy of Science and International Radio Scientific Union), June 1968.
10. "Research in Network Theory at U.C. Davis," University of Erlangen-Nürnberg, Erlangen, West Germany, July 1968.
11. "Active Networks," General Electric Co., London, U.K., July 1968.
12. "Resistive Digital-to-Analog Converters," IEEE Circuit Theory Group, San Francisco Chapter Meeting, November 1968.
13. "Active Filters," Department of Electrical Engineering, University of Santa Clara, Santa Clara, California, February 1969.
14. Member of a Panel Discussion on Optimization, Workshop on Computer-Aided Design, Cambridge, Massachusetts, sponsored by IEEE and NASA/ERC, March 1969.
15. "Recent Advances in Active Filters," Department of Electrical Engineering, University of Maryland, College Park, Maryland, March 1969.

16. "Design of Digital-to-Analog Conversion Ladders," Department of Electrical Engineering, Montana State University, Bozeman, Montana, April 1969.
17. "Active RC Filters," First Annual Houston Conference on Circuits, Systems, and Computers, Houston, Texas (Sponsored by the IEEE Houston Society), May 1969 .
18. "Filter Design Using Integrated Operational Amplifier," 1969 WESCON Convention, San Francisco, California, August 1969.
19. "Fundamental Limitations of Active Filters," Fourth Colloquium on Microwave Communication, Budapest, Hungary (Sponsored by the Hungarian Academy of Sciences and International Radio and Scientific Union), April 1970.
20. "Active Filters," Department of Electrical Engineering, U.S. Naval Postgraduate School, Monterey, California, July 1970.
21. "Low Sensitivity Active Filters," Department of Electrical Engineering, University of Santa Clara, Santa Clara, California, November 1970.
22. "Recent Advances in Active Filters," Department of Electrical Engineering, University of Arizona, Tucson, AZ, January 1971.
23. "A Step-by-Step Procedure for Designing Resistive D/A Conversion Ladders," Department of Electrical Engineering, University of Toronto, Toronto, Canada, April 1971.
24. "Design of Resistive Digital-to-Analog Converters," Department of Electrical Engineering, Sir George Williams University, Montreal, Canada, April 1971.
25. "Active RC Filters Using Non-Ideal Amplifiers Having Frequency Dependent Gain Characteristics," 1971 IEEE International Symposium on Electrical Network Theory, London, England, September 1971.
26. "Active RC Networks in Microelectronic Technologies," 1971 Summer School on Circuit Theory, Tale, Czechoslovakia (Sponsored by the Czechoslovak Academy of Science and International Radio Scientific Union), September 1971.
27. "Canonic Realizations of Digital Filters Using the Continued Fraction Expansion," Department of Electrical Engineering, University of Santa Clara, Santa Clara, California, March 1972.
28. "Current Status of Active RC Filter," International Filter Symposium, Santa Monica, California, April 1972.
29. "Canonic Realizations of Digital Filters," Department of Electrical Engineering, Indian Institute of Technology, New Delhi, India, October 1972.

30. "Digital Filter Realization Techniques," Annual Convention of the IEEE India Section, Bombay, India, January 1973.
31. "Digital Filter Realization Techniques," Department of Electrical Engineering and School of Automation, Indian Institute of Science, Bangalore, India, January 1973.
32. "Low Sensitivity Active RC Filters," Department of Electrical Engineering, Indian Institute of Technology, Madras, India, January 1973.
33. "Canonic Realization of Digital Filters - New Methods," Department of Electrical Engineering, Indian Institute of Technology, Madras, India, January 1973.
34. "Canonic Realization of Digital Filters," Defense Electronics Research Laboratories, Hyderabad, India, January 1973.
35. "Active RC Filters - Design Methods," Electronics Research Centre, Indian Navy, Cochin, India, January 1973.
36. "Introduction to Digital Filters," Electronics Research Centre, Indian Navy, Cochin, India, January 1973.
37. "Introduction to Digital Filters," Department of Electrical Engineering, Madras Institute of Technology, Madras, India, January 1973.
38. "Digital Filter Realization Techniques," Department of Electronics and Electrical Communication Engineering, Indian Institute of Technology, Kharagpur, India, March 1973.
39. "Low Sensitivity Active RC Filters," Department of Electronics and Electrical Communication Engineering, Indian Institute of Technology, Kharagpur, India, March 1973.
40. "Estimation of Pole-Zero Displacements of a Digital Filter Due to Coefficient Quantization", School of Radar Studies, Indian Institute of Technology, New Delhi, India, March 1973.
41. "Estimation of Pole-Zero Displacements of a Digital Filter Due to Coefficient Quantization," Department of Electronics and Communication Engineering, University of Roorkee, India, March 1973.
42. "Some Recent Work on Digital Filter Structures," 1973 IEEE International Symposium on Circuit Theory, Toronto, Canada, April 1973.
43. "Digital Filter Realization Techniques," Department of Electrical Engineering, University of Toronto, Toronto, Canada, April 1973.
44. "New Methods of Digital Filter Realization," Department of Electrical Engineering, Sir George Williams University, Montreal, Canada, April 1973.

45. "Digital Filter Realization Techniques," Nippon Electric Company, Kawasaki City, Japan, July 1973.
46. "Digital Filter Realization Techniques," Department of Electronics, Tokyo Institute of Technology, Tokyo, Japan, July 1973.
47. "Methods of Digital Filter Realization," Oki Electric Company, Tokyo, Japan, August 1973.
48. "New Methods of Recursive Digital Filter Realization," Matsushita Electric Company, Osaka, Japan, August 1973.
49. "Estimation of Pole-Zero Displacements of a Digital Filter Due to Coefficient Quantization," Tokyo Chapter of the IEEE Circuits and Systems Society, Tokyo, Japan, August 1973.
50. "New Methods of Digital Filter Realization," Department of Electrical Sciences and Engineering, University of California, Los Angeles, California, October 1973.
51. "Digital Filter Realization Methods," Colloquium, Department of Electrical Engineering and Computer Sciences, University of California, Berkeley, California, February 1975.
52. "Introduction to Digital Signal Processing," Applied Mathematics Seminar, Department of Mathematics, University of California, Davis, California, April 1975.
53. "Realization of Optimum Recursive Digital Filters," Workshop on Digital Filter Structures, IEEE Circuits and Systems Society, Boston, Massachusetts, April 1975.
54. "Two-Dimensional Digital Filtering," Department of Technical Physics, Helsinki University of Technology, Otaniemi, Finland, October 1975.
55. "Two-Dimensional Digital Filtering," Department of Telecommunication Theory and Techniques, Royal Institute of Technology, Stockholm, Sweden, October 1975.
56. "Introduction to Digital Signal Processing," Institut für Nachrichtensysteme, Universität Karlsruhe, Karlsruhe, Germany, November 1975.
57. "Two-Dimensional Digital Filtering," Department of Applied Physics, Swiss Federal Institute of Technology, Zurich, Switzerland, November 1975.
58. "Introduction to Digital Signal Processing," Department of Electrical Engineering, University of Kaiserslautern, Germany, December 1975.
59. "Active RC Realization of Two-Variable Transfer Functions," Institute for Circuit Theory and Techniques, Technical University of Munich, Germany, December 1975.

60. "Recursive Digital Filters with Low Roundoff Noise," IEEE Circuits and Systems Society Workshop on Digital Filter Structures, Munich, Germany, April 1976.
61. "Block Implementation of Two-Dimensional Digital Filters," Conference on Electronics in Space, Jadavpur University, Calcutta, India (Sponsored by the University Grants Commission), December 1976.
62. "Low Noise Digital Filters," Institute of Radio Physics and Electronics, University of Calcutta, Calcutta, India, December 1976.
63. "Low Noise Digital Filters," Department of Electrical Engineering, Indian Institute of Technology, Madras, India, December 1976.
64. "Realization of Recursive Digital Filters with Low Roundoff Noise," Department of Electrical Engineering, Indian Institute of Technology, Bombay, India, January 1977.
65. "Some New Results on the Realization of Recursive Digital Filters with Low Noise," Department of Electrical Engineering, University of Toronto, Toronto, Canada, January 1977.
66. "Block Implementation of Two-Dimensional Recursive Digital Filters," 20th Midwest Symposium on Circuits and Systems, Lubbock, Texas, September 1977.
67. "Block Implementation of Recursive Digital Filters," Department of Electrical Engineering, University of California, Los Angeles, California, March 1977.
68. "On the Implementation of a 2-D FIR Filter Using a Single Multiplier," 1977 Asilomar Conference on Circuits, Systems, and Computers, Pacific Grove, California, November 1977.
69. "An Introduction to Digital Signal Processing," IEEE Santa Barbara Section, April 1978.
70. "Two-Dimensional Digital Filtering - An Overview," 1978 European Conference on Circuit Theory and Design, Lausanne, Switzerland, September 1978.
71. "Block Implementation of Recursive Digital Filters," Colloquium of the Department of Electrical Engineering, University of Minnesota, Minneapolis, Minnesota, April 1979.
72. "Upper Bounds on the Variance of Roundoff Noise for the Cascade Realization of Digital Filters," IEEE International Symposium on Circuits and Systems, Tokyo, Japan, July 1979.
73. "Design and Implementation of Half-Plane Two-Dimensional Digital Filters," 1979 International Colloquium on Circuits and Systems, Taipei, Taiwan, July 1979.

74. "Block Implementation of Recursive Digital Filters," Department of Electrical Engineering, University of Hong Kong, Hong Kong, Seminar Series on Circuits and Systems, July 1979.
75. "Block Digital Filters," Department of Electrical Engineering, Korea Advanced Institute of Science, Seoul, Korea, July 1979.
76. "Block Digital Filters," IEEE Bangalore Section and Department of Electrical Engineering, Indian Institute of Science, Bangalore, India, August 1979.
77. "Block Processing of Digital Signals," Department of Electrical Engineering - Systems, University of Southern California, Los Angeles, California, November 1980.
78. "Parallel Processing of Serial Digital Signals," Department of Electrical and Computer Engineering, Lehigh University, Bethlehem, Pennsylvania, April 1981.
79. "Parallel Processing of Series Digital Signals," Department of Electrical Engineering, University of California, Irvine, California, May 1981.
80. "Block Processing of Digital Signals - An Approach of VLSI Implementation of Digital Filters," European Conference on Circuit Theory and Design, The Hague, The Netherlands, August 1981.
81. "Block Kalman Filtering," European Conference on Circuit Theory and Design, The Hague, The Netherlands, August 1981.
82. "Parallel Processing of Serial Digital Signals," Department of Electrical Engineering, Technical University, Linköping, Sweden, September 1981.
83. "New Digital Filter Structures with Low Sensitivity and Roundoff Noise," International Conference on Digital Signal Processing, Florence, Italy, September 1981.
84. "Application of Digital Signal Processing Techniques to Numerical Analysis," Asilomar Conference on Circuits, Systems, and Computers, Pacific Grove, California, November 1981.
85. "Two-Dimensional Digital Filter Identification and Synthesis," International Conference on Communication Circuits and Systems, Calcutta, India, December 1981.
86. "Linear Compensator Design Using Block Processing Constraints," IFAC Symposium on Theory and Applications of Digital Control, New Delhi, India, January 1982.

87. "A General Theory and Synthesis Procedure for Low Sensitivity Digital Filters," Department of Electrical Engineering, University of Melbourne, Melbourne, Victoria, Australia, September 1982.
88. "Block Processing of Digital Signals," Department of Electrical Engineering, University of Adelaide, Adelaide, South Australia, September 1982.
89. "A General Theory and Synthesis Procedure for Low Sensitivity Digital Filters," Department of Systems Engineering, Research School of Physical Sciences, Australian National University, Canberra, ACT, Australia, August 1982.
90. "N-Path Filters," Department of Systems Engineering, Research School of Physical Sciences, Australian National University, Canberra, ACT, Australia, September 1982.
91. "Discrete-Time Signals and Systems," Division of Radio Physics, Commonwealth Scientific and Industrial Research Organization (CSIRO), Epping, NSW, Australia, October 1982.
92. "Design of Recursive Digital Filters with Low Roundoff Noise," Division of Radio Physics, CSIRO, Epping, NSW, Australia, October 1982.
93. "Block Processing of Digital Signals," Division of Radio Physics, CSIRO, Epping, NSW, Australia, October 1982.
94. "New Algorithms and Structures for Efficient Implementation of Digital Filters," Division of Radio Physics, CSIRO, Epping, NSW, Australia, October 1982.
95. "Decimation and Interpolation in Digital Signal Processing," Division of Radio Physics, CSIRO, Epping, NSW, Australia, October 1982.
96. "A General Theory and Synthesis Procedure for Low Sensitivity Digital Filters," Joint Microelectronic Research Centre and Department of Electrical Engineering Seminar, University of New South Wales, Kensington, NSW, Australia, October 1982.
97. "Digital Filter Structures Suitable for VLSI Implementation," Joint Microelectronic Research Centre and Department of Electrical Engineering Seminar, University of New South Wales, Kensington, NSW, Australia, October 1982.
98. "Design of Recursive Digital Filters with Low Roundoff Noise," Department of Systems Engineering, Australian National University, Canberra, ACT, Australia, October 1982.
99. "Interpolation and Decimation in Digital Signal Processing," Department of Systems Engineering, Australian National University, Canberra, ACT, Australia, October 1982.

100. "Digital Filter Structures Suitable for VLSI Implementation," Department of Electrical Engineering, Monash University, Clayton, Victoria, Australia, November 1982.
101. "New Algorithms and Structures for Efficient Implementation of Digital Filters," Department of Systems Engineering, Australian National University, Canberra, ACT, Australia, November 1982.
102. "Digital Filter Structures Suitable for VLSI Implementation," Department of Electrical Engineering, University of Queensland, Brisbane, Queensland, Australia, December 1982.
103. "A General Theory and Synthesis Procedure for Low Sensitivity Digital Filters," Department of Electrical Engineering, University of Pittsburgh, Pittsburgh, Pennsylvania, February 1983.
104. "Introduction to Digital Signal Processing," Department of Electronics, National Institute for Astrophysics, Optics and Electronics, Puebla, Pue., Mexico, March 1983.
105. "A General Theory and Synthesis Procedure for Low Sensitivity Digital Filters," Department of Electronics, National Institute for Astrophysics, Optics and Electronics, Puebla, Pue., Mexico, March 1983.
106. "Efficient Structures and Algorithms for Digital Signal Processing," Department of Electrical Engineering, National Autonomous University of Mexico (U.N.A.M.), Mexico City, Mexico, March 1983.
107. "Efficient Implementation of Digital Filters," Department of Electronic Engineering, Fudan University, Shanghai, China, July 1983.
108. "Introduction to Digital Signal Processing," Department of Radio-Electronics, Beijing University, Beijing, China, July 1983.
109. "Recursive Digital Filter Design Methods," Department of Radio-Electronics, Beijing University, Beijing, China, July 1983.
110. "Non-recursive Digital Filter Design Methods," Department of Radio-Electronics, Beijing University, Beijing, China, July 1983.
111. "Digital Filter Structures," Department of Radio-Electronics, Beijing University, Beijing, China, July 1983.
112. "Analysis of Quantization Effects in Digital Filters," Department of Radio-Electronics, Beijing University, Beijing, China, July 1983.

113. "A General Theory and Synthesis Procedure for Low Sensitivity Digital Filters : Parts I and II," Department of Radio-Electronics, Beijing University, Beijing, China, July 1983.
114. "Block Implementation of Digital Filters," Department of Radio-Electronics, Beijing University, Beijing, China, July 1983.
115. "Interpolated Finite Impulse Response Digital Filters," Department of Radio-Electronics, Beijing University, Beijing, China, July 1983.
116. "All-Digital N-Path Filters," Department of Radio-Electronics, Beijing University, Beijing, China, July 1983.
117. "An Overview of Two-Dimensional Digital Signal Processing," Department of Radio-Electronics, Beijing University, Beijing, China, July 1983.
118. "A Survey of Recent Research Results in Digital Signal Processing," Department of Radio-Electronics, Beijing University, Beijing, China, July 1983.
119. "New Results on Low Sensitivity Digital Filters," Microelectronics Research Center, Rockwell International, Anaheim, California, August 1983.
120. "Generalized Mean Filters: A New Class of Nonlinear Filters for Image Processing Applications," 1983 European Conference on Circuit Theory and Design, Stuttgart, Germany, September 1983.
121. "A General Theory and Synthesis Procedure for Low Sensitivity Digital Filters," Division of Telecommunications, Norwegian Institute of Technology, Trondheim, Norway, September 1983.
122. "Interpolated Finite Impulse Response Digital Filters," Division of Telecommunications, Norwegian Institute of Technology, Trondheim, Norway, September 1983.
123. "Low Sensitivity Digital and Active Filters: New Results," Institute of Network Theory and Measurement Techniques, Technical University of Munich, Munich, Germany, September 1983.
124. "A General Theory and Synthesis Procedure for Low Sensitivity Digital Filters," Department of Electrical Engineering, University of Rhode Island, Kingston, Rhode Island, November 1983.
125. "Design of Computationally Efficient FIR Digital Filters," Department of Electrical Engineering, California Institute of Technology, Pasadena, California, November 1983.

126. "Interpolated Finite-Impulse Response Digital Filters," Electronics Research Division, Lawrence Livermore National Laboratory, Livermore, California, February 1984.
127. "An Approach to the Design of Computationally Efficient FIR Digital Filters," Department of Electrical Engineering and Computer Science, University of California, San Diego, California, March 1984.
128. "Design of Finite Impulse Response Digital Filters with Reduced Number of Multipliers," Irma Runyon Distinguished Lecture, Electrical Engineering Department, Texas A&M University, College Station, Texas, March 1984.
129. "A General Theory and Synthesis Procedure for Low Sensitivity Active RC Filters," Irma Runyon Distinguished Lecture, Electrical Engineering Department, Texas A&M University, College Station, Texas, March 1984.
130. "Recent Trends in Digital Signal Processing," Nordic Symposium on VLSI in Computers and Communications, Tampere, Finland, June 1984.
131. "A General Theory and Synthesis Procedure for Low Sensitivity Digital Filters," Department of Technical Physics, Helsinki University of Technology, Helsinki, Finland, June 1984.
132. "Interpolated Finite Impulse Response Digital Filters," Department of Electrical Engineering, University of Oulu, Oulu, Finland, June 1984.
133. "Introduction to Digital Signal Processing," Department of Electrical Engineering, COPPE, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil, August 1984.
134. "Digital Filter Design," Department of Electrical Engineering, COPPE, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil, August 1984.
135. "Digital Filter Structures," Department of Electrical Engineering, COPPE, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil, August 1984.
136. "Analysis of Quantization Effects in Digital Filtering," Department of Electrical Engineering, COPPE, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil, August 1984.
137. "Block Implementation of Digital Filters," Department of Electrical Engineering, COPPE, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil, August 1984.
138. "A General Theory of Low Sensitivity Digital Filters and Synthesis Procedures," Department of Electrical Engineering, COPPE, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil, August 1984.

139. "Interpolated Finite Impulse Response Digital Filters," Department of Electrical Engineering, COPPE, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil, August 1984.
140. "All-Digital N-Path Filters," Department of Electrical Engineering, COPPE, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil, August 1984.
141. "Interpolation and Decimation of Digital Filters," Department of Electrical Engineering, COPPE, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil, August 1984.
142. "An Overview of Two-Dimensional Digital Signal Processing," Instituto de Pesquisas Espaciais, San Jose dos Campos, SP, Brazil, August 1984.
143. "Recent Trends in Digital Signal Processing," Department of Electronics and Systems, Federal University of Pernambuco, Recife, PE, Brazil, August 1984.
144. "Network Interpretation of Stability Tests," First Latin-American Conference on Automatic Control/Fifth Brazilian Conference on Automatic Control, Campina Grande, Paraiba, Brazil, September 1984.
145. "A General Theory and Synthesis Procedure for Low Passband Sensitivity Digital Filters," Electronics Division, Lawrence Livermore National Laboratory, Livermore, California, September 1984.
146. "Interpolated Finite Impulse Response Digital Filters," Department of Electrical and Computer Engineering, University of New Mexico, Albuquerque, New Mexico, September 1984.
147. "A General Theory and Synthesis Procedure for Low Sensitivity Active RC Filters," Department of Electrical Engineering, University of Nevada, Reno, Nevada, November 1984.
148. "Computer Vision," 7th Nair Commemoration Lecture, Osmania University, Hyderabad, India, December 1984.
149. "Computer Vision," Department of Electrical Engineering, Northern Jiaotong University, Beijing, China, January 1985.
150. "Recent Trends in Digital Signal Processing," Department of Electrical Engineering, Northern Jiaotong University, Beijing, China, January 1985.
151. "A General Theory and Synthesis Procedure for Low Sensitivity Active RC Filters," Department of Electrical Engineering, Northern Jiaotong University, Beijing, China, January 1985.

152. "A General Theory and Synthesis Procedure for Low Sensitivity Active RC Filters," Department of Electrical Engineering, Beijing Institute of Post & Telecommunications, Beijing, China, June 1985.
153. "A New Approach to the Realization of Low Sensitivity Digital Filters," Department of Radio Engineering, Beijing University, China, June 1985.
154. "Recent Trends in Digital Signal Processing," Lansdowne Lecture Series, University of Victoria, Victoria, B.C. Canada, April 1985.
155. "Computer Vision," Lansdowne Lecture Series, University of Victoria, Victoria, B.C. Canada, April 1985.
156. "Recent Trends in Digital Signal Processing," Joint Seminar Series, IEEE Tokyo Section and IECE (Japan) Tokyo Section, Waseda University, Tokyo, Japan, June 1985.
157. "Design of Computationally Efficient FIR Filters Using Singular Value Decomposition," 1985 China International Conference on Circuits and Systems, Beijing, China, 1985.
158. "A New Approach to the Realization of Low Sensitivity IIR Digital Filters," Seminar, Microelectronics Research & Development Center, Rockwell International Corporation, Anaheim, California, August 1985.
159. "Design of Computationally Efficient FIR Digital Filters," Colloquium Series, Department of Electrical Engineering, Moore School of Electrical Engineering, University of Pennsylvania, Philadelphia, Pennsylvania, October 1985.
160. "A New Approach to the Realization of Low Sensitivity IIR Digital Filters," AT&T Bell Laboratories, Allentown, Pennsylvania, October 1985.
161. "Design of Computationally Efficient FIR Digital Filters," Department of Electrical Engineering, University of Miami, Coral Gables, Florida, November 1985.
162. "An Approach to the Design of Fault-Tolerant FIR Digital Filters," Workshop on Ultra Submicron System Architecture, Office of Naval Research, Pasadena, California, December 1985.
163. "Machine Vision," Department of Electronics and Computer Engineering, Ain Shams University, Cairo, Egypt, March 1986.
164. "Low Sensitivity IIR Digital Filter Realization Techniques," Department of Electronics and Computer Engineering, Ain Shams University, Cairo, Egypt, March 1986.

165. "Design of FIR Digital Filters with Reduced Number of Multipliers," Department of Electronics and Computer Engineering, Ain Shams University, Cairo, Egypt, March 1986.
166. "A General Theory and Synthesis Procedure for Low Sensitivity Active RC Filters," Department of Electronics and Computer Engineering, Ain Shams University, Cairo, Egypt, March 1986.
167. "Some Recent Research Results in Signal Processing," Department of Electronic Engineering, Menouf University, Menouf, Egypt, March 1986.
168. "Some Recent Research Results in Digital Signal Processing," Department of Electronics and Communication Engineering, Cairo University, Giza, Egypt, March 1986.
169. "Introduction to Digital Signal Processing," Electrotechnical Faculty, University of Zagreb, Zagreb, Croatia, August 1986.
170. "Design of Computationally Efficient FIR Digital Filters," Electrotechnical Faculty, University of Zagreb, Zagreb, Croatia, August 1986.
171. "Some Recent Research Results in Signal Processing," Mihalo Pupin Research Institute, Belgrade, Yugoslavia, August 1986.
172. "Design of Computationally Efficient FIR and IIR Digital Filters," IEEE Finland Section, Helsinki University of Technology, Espoo, Finland, May 1987.
173. "A New Approach to the Realization of Low Sensitivity IIR Digital Filters," School of Electrical Engineering and Computer Science, University of New South Wales, Kensington, NSW, Australia, August 1987.
174. "A New Approach to the Realization of Low Sensitivity IIR Digital Filters," Department of Systems Engineering, Research School of Physical Sciences, The Australian National University, Canberra, ACT, Australia, August 1987.
175. "Design of Computationally Efficient FIR Filter Banks," ISSPA'87 - International Symposium on Signal Processing and Its Applications, Brisbane, Queensland, Australia, August 1987.
176. "Design of Computationally Efficient IIR and FIR Digital Filters," Department of Electrical Engineering, James Cook University of North Queensland, Townsville, Queensland, Australia, September 1987.
177. "Design of Computationally Efficient Recursive Digital Filters," Department of Electrical & Computer Engineering, University of Notre Dame, Notre Dame, Indiana, September 1987.

178. "Design of Computationally Efficient IIR and FIR Digital Filters with Reduced Finite Word-length Effects," Rockwell Science Center, Thousand Oaks, CA, October 1987.
179. "Future Directions of Digital Signal Processing," Sixth Kobe International Symposium on Electronics and Information Sciences, Kobe, Japan, November 1987.
180. "Some Recent Results in Digital Signal Processing," ISELDECS'87 - International Symposium on Electronic Devices, Circuits & Systems, Indian Institute of Technology, Kharagpur, India, December 1987.
181. "A Computationally Efficient Image Zooming Method," Indo-U.S. Workshop on Signal Processing & Systems, Bangalore, India, January 1988.
182. "Future Trends in Digital Signal Processing," Signals and Systems Colloquium, Oregon Graduate Center, Beaverton, Oregon, March 1988.
183. "Future Trends in Digital Signal Processing," Communications, Control and Signal Processing Research Review, Department of Electrical Engineering, California Institute of Technology, Pasadena, CA, April 1988.
184. "Design of Computationally Efficient Digital Filters," Department of Electrical Engineering, California State University, Long Beach, CA, May 1988.
185. "Computationally Efficient Wideband FIR Filters with Very Narrow Transition Bands," IEEE International Symposium on Circuits & Systems, Helsinki, Finland, June 1988.
186. "Introduction to Digital Signal Processing," Department of Electrical & Electronic Engineering, Istanbul Technical University, Istanbul, Turkey, September 1988.
187. "The Digital Allpass Filter - A Versatile Signal Processing Building Block," Department of Electrical & Electronic Engineering, Istanbul Technical University, Istanbul, Turkey, September 1988.
188. "Signal Processing Research at the University of California, Santa Barbara," Department of Electrical Engineering, Bilkent University, Ankara, Turkey, October 1988.
189. "The Digital Allpass Filter - A Versatile Signal Processing Building Block," Department of Electrical Engineering, Bilkent University, Ankara, Turkey, October 1988.
190. "Design of Computationally Efficient FIR Digital Filters," Department of Electrical Engineering, Bilkent University, Ankara, Turkey, October 1988.
191. "Design of Computationally Efficient IIR Digital Filters," Department of Electrical Engineering, Bilkent University, Ankara, Turkey, October 1988.

192. "Multirate Digital Signal Processing," Department of Electrical Engineering, Bilkent University, Ankara, Turkey, October 1988.
193. "Design of Computationally Efficient FIR Digital Filters," Department of Electrical & Electronic Engineering, Istanbul Technical University, Istanbul, Turkey, September 1988.
194. "Design of Computationally Efficient IIR Digital Filters," Department of Electrical & Electronic Engineering, Istanbul Technical University, Istanbul, Turkey, September 1988.
195. "Multirate Digital Signal Processing," Department of Electrical & Electronic Engineering, Istanbul Technical University, Istanbul, Turkey, September 1988.
196. "The Digital Allpass Filter - A Versatile Signal Processing Building Block," Department of Electrical Engineering, Swiss Federal University of Technology, Lausanne, Switzerland, October 1988.
197. "Signal Processing Research at the University of California, Santa Barbara," Department of Electronic Engineering, Kobe University, Kobe, Japan, November 1988.
198. "Introduction to Digital Signal Processing," Department of Electronic Engineering, Kobe University, Kobe, Japan, November 1988.
199. "Design of Computationally Efficient FIR Digital Filters," Department of Electronic Engineering, Kobe University, Kobe, Japan, November 1988.
200. "Multirate Digital Signal Processing," Department of Electronic Engineering, Kobe University, Kobe, Japan, November 1988.
201. "The Digital Allpass Filter - A Versatile Signal Processing Building Block," Department of Electronic Engineering, Kobe University, Kobe, Japan, November 1988.
202. "Efficient FIR Filter Design and Implementation Using a Structural Subband Decomposition," 1990 Bilkent International Conference on New Trends in Communication, Control, and Signal Processing, Ankara, Turkey, July 1990.
203. "Some New Results in Signal and Image Processing," Department of Electronics Engineering, La Trobe University, Melbourne, Victoria, Australia, August 1990.
204. "Recent Advances in Signal and Image Processing," IEEE Communications Society Australia Chapter and the Department of Electrical and Computer Systems Engineering, Monash University, Clayton, Victoria, Australia, August 1990.

205. "Recent Advances and Trends in Signal Processing," (Keynote Lecture) 1990 Second International Symposium on Signal Processing and Its Applications - ISSPA'90, Gold Coast, Queensland, Australia, August 1990.
206. "Some Novel Digital Signal Processing Applications of Multirate Techniques," 1990 Second International Symposium on Signal Processing and Its Applications - ISSPA'90, Gold Coast, Queensland, Australia, August 1990.
207. "Magnitude-Preserving A/D Converter - A New Concept," 1990 Second International Symposium on Signal Processing and Its Applications - ISSPA'90, Gold Coast, Queensland, Australia, August 1990.
208. "Some Novel Digital Signal Processing Applications of Multirate Techniques," Division of Engineering Science, Simon Fraser University, Burnaby, B.C., Canada, October 1990.
209. "Some Novel Digital Signal Processing Applications of Multirate Techniques," Department of Electrical Engineering, University of Victoria, Victoria, B.C., Canada, October 1990.
210. "Recent Advances in Signal and Image Processing," Bell-Communications Research, Red Bank, NJ, November 1990.
211. "The Digital Allpass Filter - A Versatile Signal Processing Building Block," Department of Electrical Engineering, Polytechnic University, Brooklyn, NY, November 1990.
212. "Recent Advances in Signal and Image Processing," Department of Electrical Engineering, Columbia University, New York, NY, November 1990.
213. "Recent Advances in Signal and Image Processing," Hybrid Imaging Systems Division, Eastman Kodak Company, Rochester, NY, November 1990.
214. "Some Novel Applications of Multirate Digital Signal Processing," 3rd Annual Rockwell Advanced Control Systems/Neural Networks/Signal Processing, Anaheim, CA, January 1991.
215. "The Digital Allpass Filter - A Versatile Signal Processing Building Block," Department of Electrical Engineering, Stanford University, Stanford, CA, May 1991.
216. "Recent Advances in Signal and Image Processing," Department of Control and Instrumentation, Seoul National University, Seoul, Korea, June 1991.
217. "Some Unconventional Signal Processing Applications of Multirate Techniques," IEEE International Symposium on Circuits & Systems, Singapore, June 1991.
218. "Weighted Complementary IIR Digital Filters," IEEE International Symposium on Circuits & Systems, Singapore, June 1991.

219. "Recent Advances in Signal and Image Processing," Naval Ocean Systems Center, San Diego, CA, September 1991.
220. "Perfect Reconstruction Recursive QMF Banks for Subband Image Coding," 25th Asilomar Conference on Signals, Systems, and Computers, Pacific Grove, CA, November 1991.
221. "Simplification of Digital Filtering Algorithms Using Multirate Concepts," SPIE Symposium on Computer Vision System Integration, Boston, MA, November 1991.
222. "Recent Advances in Signal and Image Processing," The MITRE Corporation, Bedford, MA, November 1991.
223. "Nonuniform Discrete Fourier Transform and Its Signal Processing Applications," Fourth Annual Rockwell Technical Conference on Control and Signal Processing, Rockwell International Corporation, Anaheim, CA, January 1992.
224. "Recent Advances in Signal and Image Processing," The IST Conference on Microelectronics and Signal Processing, Instituto Superior Technico and IEEE Portugal Section, Lisbon, Portugal, June 1992.
225. "The Digital Allpass Filter - A Versatile Signal Processing Building Block," The IST Conference on Microelectronics and Signal Processing, Instituto Superior Technico and IEEE Portugal Section, Lisbon, Portugal, June 1992.
226. "Multirate Digital Signal Processing and Its Applications," The IST Conference on Microelectronics and Signal Processing, Instituto Superior Technico and IEEE Portugal Section, Lisbon, Portugal, June 1992.
227. "Perfect Transmultiplexers Using IIR Filter Banks," European Signal Processing Conference - EUSIPCO'92, Brussels, Belgium, August 1992.
228. "Recent Advances in Signal and Image Processing," Department of Computer Science, University of Groningen, Groningen, The Netherlands, August 1992.
229. "Some Unconventional Signal Processing Applications of Multirate Techniques," Arbeitsbereiches Nachrichtentechnik, Technical University of Hamburg-Harburg, Harburg, Germany, September 1992.
230. "Some Unconventional Signal Processing Applications of Multirate Techniques," Institut für Netzwerktheorie und Schaltungstechnik, Technical University of Munich, Munich, Germany, September 1992.
231. "General Structural Subband Decomposition of Adaptive Filters for System Identification Problems," 30th Annual Allerton Conference on Communication, Control and Computing, Monticello, IL, September 1992.

232. "The Digital Allpass Filter - A Versatile Signal Processing Building Block," Department of Electrical and Computer Engineering, University of Illinois, Urbana, Illinois, October 1992.
233. "Recent Advances in Signal and Image Processing," Distinguished Lecturer Series, IEEE Circuits & Systems Society, Lehigh Valley Chapter, Bethlehem, PA, November 1992.
234. "The Digital Allpass Filter - A Versatile Signal Processing Building Block," Department of Electrical and Computer Engineering, Tennessee Technological University, Cookeville, Tennessee, November 1992.
235. "Some Unconventional Applications of Multirate Signal Processing," Department of Electrical Engineering, California Institute of Technology, Pasadena, CA, February 1993.
236. "Recent Advances in Signal and Image Processing," Qualcomm Inc., San Diego, CA, March 1993.
237. "Recent Advances in Signal and Image Processing," Tektronix Inc., Beaverton, OR, May 1993.
238. "Fast FIR Filtering Using Overlapped Block Filtering," Fifth Annual Rockwell Technical Conference on Signal Processing, Rockwell Science Center, Thousand Oaks, CA, May 1993.
239. "Filter Banks and Subband Coding," 25th URSI General Assembly, Kyoto, Japan, August 1993.
240. "Recent Advances in Signal and Image Processing," Department of Electrical & Electronic Engineering, Kobe University, Kobe, Japan, August 1993
241. "Recent Advances in Signal and Image Processing," Distinguished Lecturer Series, IEEE Circuits & Systems Society, Tokyo Chapter and the Tokyo Institute of Technology, Tokyo, Japan, September 1993.
242. "Recent Advances in Signal and Image Processing," IEEE Systems, Man and Cybernetics Society Tokyo Chapter and the Tokyo Denki University, Tokyo, Japan, September 1993.
243. "The Digital Allpass Filter - A Versatile Signal Processing Building Block," Centro Nacional de Microelectronica, Universidad de Seville, Seville, Spain, October 1993.
244. "The Digital Allpass Filter - A Versatile Signal Processing Building Block," Distinguished Lecturer Series, IEEE Circuits & Systems Society, Dallas Chapter, Dallas, Texas, November 1993.

245. "Recent Advances in Signal and Image Processing," Distinguished Lecturer Series, IEEE Circuits & Systems Society, Central Iowa Chapter, and Distinguished Lecturer Seminar, Department of Electrical & Computer Engineering, Iowa State University, Ames, Iowa, February 1994.
246. "Some Unconventional Applications of Multirate Digital Signal Processing," Distinguished Lecturer Series, IEEE Circuits & Systems Society, Central Iowa Chapter, and Distinguished Lecturer Seminar, Department of Electrical & Computer Engineering, Iowa State University, Ames, Iowa, February 1994.
247. "Efficient Nonlinear Image Processing Algorithms," Sixth Annual Rockwell Technical Conference on Signal Processing, Anaheim, California, March 1994.
248. "Recent Advances in Signal and Image Processing," Seminar, Rockwell International Corporation, Digital Communications Division, Newport Beach, California, March 1994.
249. "Efficient Nonlinear Image Processing Algorithms," Seminar, Department of Psychology, University of California, Santa Barbara, California, March 1994.
250. "The Digital Allpass Filter - A Versatile Signal Processing Building Block," Fifth Annual Harry Lynde Bradley Distinguished Lecture in Electrical Engineering, Virginia Polytechnic Institute and State University, Blacksburg, Virginia, March 1994.
251. "Recent Advances in Signal and Image Processing," Distinguished Lecturer Series, IEEE Circuits & Systems Society, Hong Kong Chapter, City Polytechnic of Hong Kong, Kowloon, Hong Kong, April 1994.
252. "The Digital Allpass Filter - A Versatile Signal Processing Building Block," Department of Electrical & Electronic Engineering, Hong Kong University of Science & Technology, Clear Water Bay, Kowloon, Hong Kong, April 1994.
253. "Efficient Nonlinear Image Processing Algorithms," Department of Information Engineering and Shaw College, Chinese University of Hong Kong, Shatin - NT, Hong Kong, April 1994.
254. "Digital Image Processing," Institute of Theoretical Physics, University of California, Santa Barbara, California, May 1994.
255. "Efficient Nonlinear Image Processing Algorithms," Instituto de Engenharia de Sistemas e Computadores, Oporto, Portugal, September 1994.
256. "Digital Image Processing," Ecole d'Ingenieurs de Fribourg, Fribourg, Switzerland, October 1994.

257. "Recent Trends in Digital Signal and Image Processing," Seminar, Rockwell International Corporation, Digital Communications Division, Newport Beach, CA, March 1995.
258. "Recent Advances in Signal and Image Processing," Hughes Research Laboratories, Malibu, California, May 1995.
259. "Recent Advances in Signal and Image Processing," Department of Electrical & Computer Engineering, Oregon State University, Corvallis, Oregon, May 1995.
260. "Recent Advances in Signal and Image Processing," Intel Corporation, Hillsboro, Oregon, May 1995.
261. "The Wonderful World of Digital Allpass Filter," Colloquium, Department of Electrical & Computer Engineering, University of Minnesota, Minneapolis, Minnesota, June 1995.
262. "Some Unconventional Applications of Multirate Digital Signal Processing," Department of Informatics, University of Athens, Athens, Greece, June 1995.
263. "The Digital Allpass Filter - A Versatile Signal Processing Building Block," Electronics Laboratory, Department of Physics, University of Patras, Patras, Greece, June 1995.
264. "Two-Dimensional Teager Operators and their Image Processing Applications," 1995 IEEE Workshop on Nonlinear Signal & Image Processing, Halkidiki, Greece, June 1995.
265. "Designing Quadratic Volterra Filters for Nonlinear Edge Enhancement," 1995 International Conference on Digital Signal Processing, Limassol, Cyprus, June 1995.
266. "Electrical Engineering Curriculum for the 21st Century," Keynote Lecture, 38th Midwest Symposium on Circuits & Systems, Rio de Janeiro, Brazil, August 1995.
267. "Efficient 2D FIR Filtering Algorithms Based on Overlapped Block Structure," 38th Midwest Symposium on Circuits & Systems, Rio de Janeiro, Brazil, August 1995.
268. "Efficient Nonlinear Image Processing Algorithms," Departamento de Processamento de Imagens, Instituto de Pesquisas Espaciais, Sao Jose dos Campos, Brazil, August 1995.
269. "Recent Advances in Signal and Image Processing," Naval Air Warfare Center, China Lake, CA, September 1995.
260. "Digital Libraries and Image Processing," Corporate Engineering Center, Xerox Corp., Webster, NY, October 1995.

271. "Some Unconventional Applications of Multirate Signal Processing," Central Electronics Engineering Research Institute, Pilani, Rajasthan, India, December 1995.
272. "Efficient Nonlinear Image Processing Algorithms," Machine Intelligence Unit, Indian Statistical Institute, Calcutta, India, December 1995.
273. "Some Unconventional Applications of Multirate Signal Processing," Department of Electrical Engineering, National University of Singapore, Singapore, December 1995.
274. "The Wonderful World of Digital Allpass Filter," Signal Processing Research Laboratory, NEC Corporation, Kawasaki, Japan, April 1996.
275. "The Wonderful World of Digital Allpass Filter," Department of Electrical Engineering, Tokyo Denki University, Tokyo, Japan, April 1996.
276. "Some Unconventional Applications of Multirate Signal Processing," Faculty of Electrical Engineering, University of Erlangen-Nuremberg, Germany, July 1996.
277. "Some Unconventional Applications of Multirate Signal Processing," Institute of Electronics Fundamentals, Warsaw University of Technology, Warsaw, Poland, July 1996.
278. "Some Unconventional Applications of Multirate Signal Processing," Distinguished Lecturer Series, IEEE Circuits & Systems Society, Poland Chapter, Technical University of Poznan, Poznan, Poland, July 1996.
279. "The Digital Allpass Filter - A Versatile Signal Processing Building Block," Institute of Applied Physics, J. W. Goethe University, Frankfurt am Main, Germany, August 1996.
280. "Blotch and Scratch Detection in Image Sequences Based on Rank Ordered Differences," 5th International Workshop on Time-Varying Image Processing and Moving Object Recognition, Florence, Italy, September 1996.
281. "Mixed Analog-Digital Multirate Signal Processing," Keynote Lecture, 8th European Signal Processing Conference (EUSIPCO'96), Trieste, Italy, September 1996.
282. "The Wonderful World of Digital Allpass Filter," Eli and Joyce Jury Award Seminar, Department of Electrical & Computer Engineering, University of Miami, Coral Gables, Miami, December 1996.
283. "Some Unconventional Applications of Multirate Signal Processing," Colloquium, Faculty of Electrical Engineering, Technical University, Aachen, Germany, April 1997.

284. "Some Unconventional Applications of Multirate Signal Processing," Institute of System Theory, University of Kiel, Kiel, Germany, April 1997.
285. "Structural Subband Decomposition: A New Concept in Digital Signal Processing," 1997 IEEE International Conference on Acoustics, Speech & Signal Processing, Munich, Germany, April 1997.
286. "Re-Engineering of the Electrical Engineering Curriculum," 1997 IEEE International Conference on Acoustics, Speech & Signal Processing, Munich, Germany, April 1997.
287. "Some Unconventional Applications of Multirate Signal Processing," Conference on Signal Processing, Communication, and Networking, Indian Institute of Science, Bangalore, India, July 1997 (Keynote Lecture).
288. "The Digital Allpass Filter - A Versatile Signal Processing Building Block," Department of Electrical Communication Engineering, Indian Institute of Science, Bangalore, India, July 1997.
289. "Efficient Nonlinear Image Processing Algorithms," Department of Electrical Communication Engineering, Indian Institute of Science, Bangalore, India, July 1997.
290. "The Wonderful World of Digital Allpass Filter," Space Applications Centre, Indian Space Research Organization, Ahmedabad, Gujrat, India, July 1997.
291. "Recent Advances in Signal and Image Processing," Rockwell Semiconductor Systems, San Diego, CA, March 1998.
292. "Recent Advances in Signal and Image Processing," General Instruments, San Diego, California, March 1998.
293. "Recent Advances in Signal and Image Processing," Xerox Corporation, El Segundo, California, April 1998.
294. "Some Unconventional Applications of Multirate Signal Processing," Department of Electronics, National Institute for Astrophysics, Optics, and Electronics, Puebla, Mexico, June 1998.
295. "The Wonderful World of Digital Allpass Filter," Department of Engineering, Cambridge University, Cambridge, U.K., July 1998.
296. "The Wonderful World of Digital Allpass Filter," Department of Electrical Engineering, Imperial College, London, U.K., July 1998.
297. "Recent Advances in Signal and Image Processing," Alcatel-Telettra, Vimercate, Italy, September 1998.

298. "Recent Advances in Signal and Image Processing," Tektronix Corp., Beaverton, OR, December 1998.
298. "Recent Advances in Signal and Image Processing," Sun Microsystems., Palo Alto, CA, January 1999.
299. "Recent Advances in Image and Video Processing," Conexant Systems, Newport Beach, CA, March 1999.
300. "Recent Advances in Image Processing," Digital Imaging Technology Center, Xerox Corp., El Segundo, CA, April 1999.
301. "The Wonderful World of Digital Allpass Filter," School of Electrical & Computer Engineering, University of Oklahoma, Norman, Oklahoma, April 1999.
302. "The Wonderful World of Digital Allpass Filter," Department of Electrical & Computer Engineering, Oklahoma State University, Stillwater, Oklahoma, April 1999.
303. "Digital Signal Processing - Road to the Future," Nokia Mobile Phones Leading Science Program, Helsinki, Finland, April 1999.
304. "Research Management and Other Issues," Nokia Mobile Phones Leading Science Program, Helsinki, Finland, April 1999.
305. "Circuits and Signal Processing: Accomplishments and Future Trends," 1999 IEEE International Symposium on Circuits & Systems, Orlando, Florida, May-June 1999 (Plenary Lecture).
306. "Circuits and Signal Processing: Accomplishments and Future Trends," Department of Electrical Engineering, FAMU/FSU, Tallahassee, Florida, June 1999.
307. "Advances in Digital Signal Processing," Microcomputer Research Laboratory, Intel Corporation, Santa Clara, California, June 1999.
308. "The Wonderful World of Digital Allpass Filters," Signal Processing Division, Department of Electronic and Electrical Engineering, The University of Strathclyde, Glasgow, Scotland, U.K., June 1999.
309. "Nonlinear Image Processing," Keynote Lecture, 7th IEE International Conference on Image Processing and Its Applications, Manchester, U.K., July 1999.
310. "Structural Subband Decomposition: A New Concept in Digital Signal Processing," Department of Electrical Engineering, The University of Edinburgh, Edinburgh, Scotland, U.K., July 1999.
311. "Circuits and Signal Processing: Accomplishments and Future Promises," Colloquium, UniK, University of Oslo Center of Technology, Kjeller, Norway, September 1999.

312. "Digital Allpass Filter: A Versatile Signal Processing Building Block," Department of Telecommunications, Norwegian University of Science & Technology, Trondheim, Norway, September 1999.
313. "Structural Subband Decomposition: A New Concept in Digital Signal Processing," Telenor, Oslo, Norway, September 1999.
314. "Circuits and Signal Processing: Accomplishments and Future Promises," Department of Informatics, University of Oslo, Oslo, Norway, September 1999.
315. "Multirate Digital Signal Processing," Department of Computer Science, Indian Institute of Technology, Kharagpur, West Bengal, India, November 1999.
316. "Circuits and Signal Processing: Accomplishments and Future Promises," Department of Electronics and Telecommunication Engineering, Bengal Engineering College, Sibpur, West Bengal, India, November 1999.
317. "Recent Advances in Image and Video Processing," Imaging Technology Division, Hewlett-Packard Research Laboratories, Palo Alto, California, February 2000.
318. "Recent Advances in Image and Video Processing," Advanced Imaging & Technology Division, Xerox Corporation, El Segundo, California, March 2000.
319. "Re-Engineering of the Electrical Engineering Curriculum," Faculty of Engineering and Architecture, American University of Beirut, Beirut, Lebanon, May 2000.
320. "Digital Allpass Filter: A Versatile Signal Processing Building Block," Faculty of Engineering and Architecture, American University of Beirut, Beirut, Lebanon, May 2000.
321. "Circuits and Signal Processing: Accomplishments and Future Promises," Arab School of Science and Technology, Damascus, Syria, May 2000.
322. "Nonlinear Image Processing," Croatian Academy of Sciences and Arts, Zagreb, Croatia, June 2000.
322. "Digital Allpass Filter: A Versatile Signal Processing Building Block," Faculty of Electrical Engineering and Computing, University of Zagreb, Zagreb, Croatia, June 2000.
323. "The Wonderful World of Digital Allpass Filters," Department of Electrical Engineering & Computer Science, University of Cincinnati, Cincinnati, Ohio, December 2000.
324. "Digital Allpass Filter: A Versatile Signal Processing Building Block," Information Processing Systems Laboratory, Department of Electrical Engineering, Ohio State University, Columbus, Ohio, December 2000.

325. "Structural Subband Decomposition: A New Concept in Digital Signal Processing," Symbol Technologies Distinguished Lecture, Electrical and Computer Engineering Department, Polytechnic University, Brooklyn, NY, March 2001.
326. "Digital Signal Processing: Road to the Future," Department of Electrical & Computer Engineering, University of Hawai'i, Honolulu, Hawai'i, April 2001.
327. "Digital Allpass Filter: A Versatile Signal Processing Building Block," Department of Electrical & Computer Engineering, University of Hawai'i, Honolulu, Hawai'i April 2001.
328. "Circuits and Signal Processing: Accomplishments and Future Trends," Doctorate School in Electronics, Catania, Sicily, Italy, June 2001.
329. "Digital Signal Processing: Past, Present and Future," Annual Meeting of the Italian Electronics Society, Palermo, Italy, June 2001.
330. "Digital Signal Processing: Road to the Future," Area Science Park and Telit Corporation, Trieste, Italy, June 2001.
331. "Structural Subband Decomposition and Its Signal Processing Applications," 2nd International Conference on Image and Signal Processing and Applications (ISPA'01), Pula, Croatia, June 2001.
332. "Digital Signal Processing: Road to the Future," Forschungszentrum Telekommunikation Wien (FTW), Vienna, Austria, June 2001.
333. "Digital Signal Processing: Road to the Future," Department of Electrical & Computer Engineering, Syracuse, NY, August 2001.
334. "Digital Signal Processing: Road to the Future," IBM T.J. Watson Research Center, Hawthorne, NY, August 2001.
335. "Digital Signal Processing: Road to the Future," NERA, Oslo, Norway, August 2001.
336. "Digital Signal Processing: Road to the Future," 15th European Conference on Circuit Theory & Design (EECTD'01), Helsinki, Finland, August 2001.
337. "Circuits & Signal Processing: Accomplishments and Future Trends," 8th IEEE International Conference on Electronics, Circuits & Systems, Malta, September 2001.
338. "Efficient Nonlinear Image Processing," Departamento de Ingeniería de Sistemas Computacionales y Automatización (DISCA), IIMAS, National Autonomous University of Mexico, Mexico City, Mexico, November 2001.
339. "Digital Signal Processing: Road to the Future," Signal and Image Processing Institute, University of Southern California, Los Angeles, CA, January 2002.

340. "Digital Signal Processing: Road to the Future," Department of Electrical Engineering, Columbia University, New York, NY, March 2002.
341. "Structural Subband Decomposition and Its Signal Processing Applications," Department of Electronic Engineering, Queen Mary College, University of London, London, U.K., March 2002.
342. "Digital Signal Processing: Road to the Future," 2nd International Conference JTEA '02, Sousse North, Tunisia, March 2002.
343. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," Department of Electrical Engineering, Florida Atlantic University, Boca Raton, Florida and IEEE Signal Processing Society, Palm Beach County Chapter, May 2002.
344. "Efficient Nonlinear Image Processing," Workshop on Multimedia, Ryerson University, Toronto, Canada, September 2002.
345. "Structural Subband Decomposition and Its Signal Processing Applications," Department of Information Technology, Nanyang Technological University and Singapore Chapter of IEEE Signal Processing Society, Singapore, October 2002.
346. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," Department of Information Technology, Nanyang Technological University and Singapore Chapter of IEEE Signal Processing Society, Singapore, October 2002.
347. "Digital Signal Processing: Road to the Future," Laboratory for Information Technology, Singapore, October 2002.
348. "Efficient Nonlinear Image Processing," Department of Electrical Engineering, National University of Singapore and IEEE Circuits & Systems Society Singapore Chapter, October 2002.
349. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," Department of Electrical Engineering, University of Malay, Kuala Lumpur, Malaysia, October 2002.
350. "Digital Signal Processing: Road to the Future," Department of Electronics, Electrical & Systems Engineering, Universiti Kebangsaan Malaysia, Bangi, Malaysia, October 2002.
351. "Digital Signal Processing: Road to the Future," Department of Electrical Engineering, P.E.S. Institute of Technology, Bangalore, India, November 2002.
352. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," Department of Electrical Engineering, Indian Institute of Technology, New Delhi, India, November 2002.

353. "Circuits & Signal Processing: Accomplishments and Future Trends," Plenary Lecture, Silver Jubilee Symposium, IEEE Thailand Section, Bangkok, Thailand, November 2002.
354. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," Plenary Lecture, 5th International Conference and Exhibition on Digital Signal Processing and Its Applications, Moscow, Russia, March 2003.
355. "Digital Signal Processing: Road to the Future," Keynote Lecture, International Conference on Devices, Circuits and Systems, Vera Cruz, Mexico, June 2003.
356. "Digital Signal Processing: Road to the Future," Keynote Lecture, 6th International Symposium on Circuits and Systems, Iasi, Romania, July 2003.
357. "Design of Sparse One-Dimensional Antenna Arrays," Academy of Engineering, Mexico City, Mexico, November 2003.
358. "Circuits & Signal Processing: Accomplishments and Future Trends," 5th Ciclo de Conferencias "Arte, Ciencia y Tecnología, ITESM, Guadalajara, Mexico, November 2003.
359. "Structural Subband Decomposition: A New Concept in Digital Signal Processing," Distinguished Lecture Series, Department of Electrical Engineering, University of Southern California, Los Angeles, California, January 2004.
360. "Efficient Nonlinear Image Processing," Microsoft Corporation, Redmond, WA, January 2004.
361. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," IEEE Calcutta Section, Jadavpur University, Calcutta, India, February 2004.
362. "Circuits & Signal Processing: Accomplishments and Future Trends," Department of Radio Physics & Electronics, University of Calcutta, India, February 2004.
363. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," Louisiana Distinguished Lecture Series, Center for Advanced Computer Studies, University of Louisiana, Lafayette, Louisiana, April 2004.
364. "Structural Subband Decomposition: A New Concept in Digital Signal Processing," Electrical Engineering Department Colloquium, University of California, Los Angeles, California, April 2004.
365. "Efficient Nonlinear Image Processing," Department of Electrical & Computer Engineering, University of Laval, Quebec, Que., Canada, May 2004.
366. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," IEEE Circuits & Systems Society Montreal Chapter, Concordia University, Montreal, Canada, May 2004.

367. "Digital Signal Processing: Road to the Future," Keynote Lecture, 2004 International Conference on Communications, Circuits and Systems, Chengdu, China, June 2004.
368. "Structural Subband Decomposition: A New Concept in Digital Signal Processing," Department of Electronic Engineering, Chinese University of Hong Kong, Hong Kong, July 2004.
369. "Digital Signal Processing: Road to the Future," Keynote Lecture, 47th IEEE International Midwest Symposium on Circuits & Systems, Hiroshima, Japan, July 2004.
370. "Efficient Nonlinear Image Processing," Department of Information Electronics, Nagoya University, Nagoya, Japan, July 2004.
371. "Digital Signal Processing: Road to the Future," Graduate School of Information Sciences, Tohoku University, Sendai, Japan, August 2004.
372. "Re-engineering the Electrical Engineering Curriculum," School of Information Environment, Tokyo Denki University, Chiba, Japan, August 2004.
373. "Structural Subband Decomposition: A New Concept in Digital Signal Processing," Fest-kolloquium, Faculty of Engineering, Christian-Albrechts-University of Kiel, Kiel, Germany, August 2004.
374. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," Institute for Circuits and Systems Theory, Christian-Albrechts-University of Kiel, Kiel, Germany, August 2004.
375. "Structural Subband Decomposition: A New Concept in Digital Signal Processing," Institute for Communications and Data Engineering, RWTH Aachen, Germany, September 2004.
376. "Efficient Nonlinear Image Processing," Institute of Mathematics and Computing Science, University of Groningen, Groningen, The Netherlands, September 2004.
377. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," Faculty of Electronics, Telecommunications, and Information Technology, "Politehnica" University of Bucharest, Bucharest, Romania, October 2004.
378. "Design of One-Dimensional Sparse Arrays," Department of Information Engineering, Nanyang Technological University, Singapore, November 2004.
379. "Digital Signal Processing: Road to the Future," Ministry of Communications and Information Technology, Government of India, New Delhi, India, November 2004.
380. "Digital Signal Processing: Road to the Future," Seminar on Digital Signal Processing and Its Applications, Delhi College of Engineering, New Delhi, India, November 2004.

381. "Structural Subband Decomposition: A New Concept in Digital Signal Processing," Machine Intelligence Unit, Indian Statistical Institute, Calcutta, India, December 2004.
382. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," Center for Development of Advanced Computing, Calcutta, India, December 2004.
383. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," College of Engineering, Rice University, Houston, Texas, February 2005.
384. "Digital Signal Processing: Road to the Future," Electrical Engineering Department, California Polytechnic University, San Luis Obispo, California, March 2005.
385. "Digital Signal Processing: Road to the Future," Faculty of Electrical Engineering & Information Technology, Slovak University of Technology, Bratislava, Slovakia, March 2005.
386. "Digital Signal Processing: Road to the Future," Faculty of Electrical Engineering and Computer Science, Brno, Czech Republic, March 2005.
387. "Nonlinear Image Processing Using Teager Filters," 2005 IEEE/EURASIP Workshop on Nonlinear Signal and Image Processing, Sapporo, Japan, May 2005.
388. "Circuits and Signal Processing: Accomplishments and Future Promises," Faculty of Electronics and Telecommunications, Technical University of Cluj-Napoca, Cluj-Napoca, Romania, July 2005.
389. "Efficient Nonlinear Image Processing," Department of Electronics and Computers, Transilvania University of Brasov, Brasov, Romania, July 2005.
390. "Digital Signal Processing: Road to the Future," Plenary Lecture. IEEE EUROCON'2005, Belgrade, Serbia and Montenegro, November 2005.
391. "Efficient Nonlinear Image Processing," Institute for Infocomm Research, Singapore, December 2005.
392. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," Department of Electrical Engineering, Indian Institute of Technology, Bombay, India, December 2005.
393. "Digital Signal Processing: Road to the Future," International Institute of Information Technology, Hyderabad, India, December 2005.
394. "Digital Signal Processing: Road to the Future," IEEE Calcutta Section, Tata Consultancy Services, Kolkata, India, December 2005.
395. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," Department of Electrical & Electronic Engineering, Imperial College, London, U.K., March 2006.

396. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," Department of Computer Science, University of Cyprus, Nicosia, Cyprus, May 2006.
397. "Recent Research Results in Image and Video Processing," Distinguished Lecture Series, Xerox Corp., El Segundo, California, September 2006.
398. "Recent Research Results in Image and Video Processing," Department of Electrical & Computer Engineering, University of California, Riverside, California, October 2006.
399. "Recent Research Results in Image and Video Processing," IEEE Communications Society and Signal Processing Society Joint Chapter, Salt Lake City, Utah, November 2006.
400. "Recent Research Results in Image and Video Processing," Department of Electrical Engineering, Utah State University, Logan, Utah, November 2006.
401. "Recent Research Results in Image and Video Processing," Keynote Lecture, CASIS Workshop, Lawrence Livermore National Laboratory, Livermore, California, November 2006.
401. "Recent Research Results in Image and Video Processing," School of Electrical Engineering and Computer Science, National Taiwan University, Taipei, Taiwan, November 2006.
402. "Recent Research Results in Image and Video Processing," Department of Electrical Engineering, National Chengkung University, Tainan, Taiwan, November 2006.
403. "Recent Research Results in Image and Video Processing," Department of Information Engineering, Feng Chia University, Taichung, Taiwan, November 2006.
404. "Recent Research Results in Image and Video Processing," Institute for Infocomm Research, Singapore, December 2006.
405. "Recent Research Results in Image and Video Processing," IEEE Workshop on Recent Trends in Signal Processing, New Delhi, India, December 2006.
406. "Recent Research Results in Image and Video Processing," Microsoft Research India, Bangalore, India, December 2006.
407. "Recent Research Results in Image and Video Processing," Telecommunications Research Center (FTW), Vienna, Austria, May 2007.
408. "Efficient Nonlinear Image Processing Algorithms," Institute for Multimedia Communication and Signal Processing, University of Erlangen-Nuremberg, Germany, May 2007.

409. "Efficient Nonlinear Image Processing Algorithms," 8th International Symposium on Signals, Circuits, and Systems, Iasi, Romania, July 2007.
410. "Recent Research Results in Image and Video Processing," Computer Science and Engineering Distinguished Lecture Series, Arizona State University, Tempe, Arizona, October 2007.
411. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," Distinguished Speaker Series, Department of Electrical & Computer Engineering, Texas A&M University, College Station, Texas, November 2007.
412. "Efficient Nonlinear Image Processing," Department of Information and Communication Engineering, Huaqiao University, Quanzhou, Fujian, China, November 2007.
413. "Image Processing Using Quadratic Volterra Filters," Shun Hing Distinguished Lecture Series, The Chinese University of Hong Kong, Hong Kong, December 2007.
414. "Digital Signal Processing: Road to the Future," Department of Electronic Engineering, Hong Kong University of Science & Technology, Hong Kong, December 2007.
415. "Structural Subband Decomposition: A New Concept in Digital Signal Processing," Institute for Infocomm Research, Singapore, December 2007.
416. "Recent Research Results in Image and Video Processing," Plenary Lecture, 2nd International Conference on Pattern Recognition and Machine Intelligence, Indian Statistical Institute, Kolkata, India, December 2007.
417. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," Faculty of Electrical Engineering, University of Mannheim, Mannheim, Germany, March 2008.
418. "Digital Signal Processing: Road to the Future," IEEE Circuits & Systems Society Vancouver Chapter, Simon Fraser University, Burnaby, B.C., Canada, May 2008.
419. "Image Processing Using Quadratic Volterra Filters," IEEE Workshop on Recent Trends in Image and Video Processing, West Bengal University of Technology, Kolkata, India, December 2008.
420. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," Keynote Lecture, International Conference on Recent Advances in Communication Engineering, Osmania University, Hyderabad, India, December 2008.
423. "Recent Research Results in Image and Video Processing," Plenary Lecture, International Conference on Recent Advances in Communication Engineering, Osmania University, Hyderabad, India, December 2008.

424. "Structural Subband Decomposition: A New Concept in Digital Signal Processing," Keynote Lecture, Asia-Pacific Signal & Information Processing Association Conference, Sapporo, Japan, October 2009.
425. "Structural Subband Decomposition: A New Concept in Digital Signal Processing," IEEE Circuits & Systems Society Tokyo Chapter, Tokyo Institute of Technology, Tokyo, Japan, October 2009.
426. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," IEEE Signal Processing Society Tokyo Chapter, Tokyo Metropolitan University, Tokyo, Japan, October 2009.
427. "Structural Subband Decomposition: A New Concept in Digital Signal Processing," Keynote Lecture, 4th International Conference on Computers and Devices for Communication, Calcutta, India, December 2009.
428. "Recent Research Results in Image and Video Processing," Tata Consultancy Services, Calcutta, India, December 2009.
429. "Structural Subband Decomposition: A New Concept in Digital Signal Processing," Dept. of Information Technology Systems & Electrical Engineering, Technical University at Delft, The Netherlands, March 2010.
430. "Digital Signal Processing: Road to the Future," Bar Ilan University, Ramat Gan, Israel, June 2010.
431. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," Department of Electrical Engineering, Technion – Israel Institute of Technology, Haifa, Israel, June 2010.
432. "Recent Research Results in Image and Video Processing," Distinguished Lecture, Department of Computer Science, Louisiana State University, Baton Rouge, Louisiana, September 2010.
433. "Digital Signal Processing: Road to the Future," Booz Allen Hamilton Distinguished Colloquium Lecture, Department of Electrical and Computer Engineering, University of Maryland, College Park, Maryland, October 2010.
434. "Digital Signal Processing: Road to the Future," Texas A&M University at Qatar, Doha, Qatar, November 2010.
435. "Digital Signal Processing: Road to the Future," Department of Electrical Engineering, University of Qatar, Doha, Qatar, November 2010.
436. "Digital Signal Processing: Road to the Future," Department of Electrical Engineering, International University, Ho Chi Minh City, Vietnam, May 2011.

437. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," Department of Information and Communication Engineering, Xi'an Jiaotong University, Xi'an, China, May 2011.
438. "Structural Subband Decomposition: A New Concept in Digital Signal Processing," School of Information Science and Technology, Sun Yet-Sen University, Guangzhou, China, June 2011.
439. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," Distinguished Lecture on Microelectronics, Faculty of Science & Technology, University of Macau, Macau, June 2011.
440. "Structural Subband Decomposition: A New Concept in Digital Signal Processing," Commonwealth Scientific and Industrial Research Organization (CSIRO), and Engineers Australia, North Ryde, New South Wales, Australia, September 2011.
441. "Digital Signal Processing: Road to the Future," Swinburne University of Technology, and Engineers Australia, Hawthorn, Victoria, Australia, September 2011.
442. "Digital Signal Processing: Road to the Future," RMIT University, IEEE Signal Processing Melbourne Chapter, and Engineers Australia, Melbourne, Victoria, Australia, September 2011.
443. "Digital Signal Processing: Road to the Future," La Trobe University and Engineers Australia, Melbourne, Victoria, Australia, September 2011.
444. "Digital Signal Processing: Road to the Future," University of Melbourne and Engineers Australia, Melbourne, Victoria, Australia, September 2011.
445. "Recent Research Results in Image and Video Processing," The Defense Science and Technology Organization (DSTO), Edinburgh, South Australia, September 2011.
446. "Digital Signal Processing: Road to the Future," The Defense Science and Technology Organization (DSTO), Edinburgh, South Australia, September 2011.
447. "Digital Signal Processing: Road to the Future," Engineers Australia, Adelaide Division, Adelaide, South Australia, September 2011.
448. "Digital Signal Processing: Road to the Future," Engineers Australia Canberra Division, Canberra, ACT, Australia, September 2011.
449. "Digital Signal Processing: Road to the Future," Engineers Australia Brisbane Division and IEEE Communication Society Brisbane Chapter, Brisbane, Queensland, Australia, September 2011.
450. "Digital Signal Processing: Road to the Future," Engineers Australia Sydney Division, Sydney, New South Wales, Australia, September 2011.

451. "Structural Subband Decomposition: A New Concept in Digital Signal Processing," School of Electronics, Center for Development of Advanced Computing, Noida, U.P., December 2011.
452. "Structural Subband Decomposition: A New Concept in Digital Signal Processing," IEEE INDICON'2011, Hyderabad, December 2011.
453. "Image Processing Using Quadratic Volterra Filters," 6th International Conference on Computers and Devices for Communications (CODEC 2012), Kolkata, India, December 2012 (Invited Paper).
454. "Digital Signal Processing: Road to the Future," Keynote Lecture, 3rd International Symposium on Electronic Design of Systems (ISED 2012), Bengal Engineering & Science University, Shibpur, West Bengal, India, December 2012.
455. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," Telecommunications and Information Engineering Institute, Nanjing University of Post & Telecommunications, Nanjing, China, May 2013.
456. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," College of Electronic and Information Engineering, Nanjing University of Aeronautics & Astronautics, Nanjing, China, May 2013.
457. "Digital Signal Processing: Road to the Future," School of Computer Science, Fudan University, Shanghai, China, May 2013.
458. "Digital Signal Processing: Road to the Future," Institute for Multimedia Signal Processing, University of Erlangen-Nuremberg, Erlangen, Germany, July 2013.
459. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," Institute for Multimedia Signal Processing, University of Erlangen-Nuremberg, Erlangen, Germany, July 2013.
460. "Image Processing Using Quadratic Volterra Filters," Institute for Multimedia Signal Processing, University of Erlangen-Nuremberg, Erlangen, Germany, July 2013.
461. "Structural Subband Decomposition: A New Concept in Digital Signal Processing," Institute for Multimedia Signal Processing, University of Erlangen-Nuremberg, Erlangen, Germany, July 2013.
462. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," Graduate Seminar Series, Department of Electrical & Computer Engineering, Carnegie-Mellon University, Pittsburgh, PA, October 2013.
463. "The Digital Allpass Filter: A Versatile Signal Processing Building Block," Colloquium, Department of Electrical & Computer Engineering, The Pennsylvania State University, State College, PA, October 2013.