CURRICULUM VITA
Tsu-Wei Chou
Unidel Pierre S. du Pont Chair of Engineering

EXECUTIVE SUMMARY

Dr. Tsu-Wei Chou is the Unidel Pierre S. du Pont Chair of Engineering at the University of Delaware. Dr. Chou received the B.S. degree in civil engineering from the National Taiwan University (1963), the M.S. degree in materials science from Northwestern University (1966) and the Ph.D. degree in materials science from Stanford University. He joined the faculty of the University of Delaware in 1969. Dr. Chou also has served as a visiting professor in the following institutes: Argonne National Laboratory 1975-76, British Science Research Council 1976, the University of Witerwatersrand, South Africa 1977, National Commission for the Investigation of Space, Argentina 1981, Germany Aerospace Research Establishment 1982, London Branch Office, Office of Naval Research 1983, Tongji University, China 1990, Tokyo Science University, Japan 1990, Industrial Research Institute, Japan 1997, and Shinshu University, Japan 2019. Dr. Chou is an Honorary Professor of the Beijing University of Aeronautics and Astronautics, the Northwestern Polytechnical University, the Tongji University and the Southwest Jiaotong University of China, as well as an Honorary Advisor of the Innovation Center for Advanced Nanocomposites in Suzhou, China. He has performed composites technology assessments in Europe and Asia for ONR and ARO, respectively.

Dr. Chou's research interests are in materials science, applied mechanics, fiber composite materials, piezoelectric materials, and nanocomposites. He has authored over 390 archival journal papers and book chapters in these areas with a total Google Scholar Citation of over 40200. He has also published 189 refereed proceedings articles. Dr. Chou is the author of the book, *Microstructural Design of Fiber Composites*, Cambridge University Press, England (1992), the co-author of the book, *Composites Materials and Their Use in Structures*, Elsevier Applied Science, London (1975), and the editor of several books. Dr. Chou is a Fellow of ASME, ASM, ASC, ACerS, TMS and AIAA, and a recipient of the Charles Russ Richards Memorial Award, the Worcester Reed Warner Medal, and the Nadai Medal of ASME, the Albert Sauveur Achievement Award of ASM International, the Distinguished Research Award and the ASC/DEStech Award in Composites of the American Society for Composites, as well as the Francis Alison Medal and the Medal of Excellence in Composite Materials of the University of Delaware. Dr. Chou served as the North American Editor and then Editor-in-Chief (1985-2019) of the international journal *Composites Science and Technology*. He has been recognized by ISI as one of the "Highly Cited Researchers" in the world. Dr. Chou has been named among top 100 materials scientists (ranked 34th) of the past decade (2000-2010) by *Times Higher Education*. Dr. Chou has been honored as a World Fellow by the International Committee on Composite Materials.

ADDRESS

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EDUCATION

Ph.D., Stanford University, 1969 (Materials Science)
M.S., Northwestern University, 1966 (Materials Science)
B.S., National Taiwan University, 1963 (Civil Engineering)

APPOINTMENTS – UNIVERSITY OF DELAWARE

1969-	Faculty, Department of Mechanical Engineering
1976-78	Chairman, Materials and Metallurgy Faculty
1977-78	Associate Director, Center for Composite Materials
1985-90	Program Director, National Science Foundation–Engineering Research Center
1986-98	Co-PI, University Research Initiative Program/Army Research Office
1987-98	Board of Directors, Center for Composite Materials
1989-02	Jerzy L. Nowinski Professor of Mechanical Engineering
1998-	Advisory Board, Center for Composite Materials
1999-00	Acting Chair, Department of Mechanical Engineering
2000-04	Chair, Department of Mechanical Engineering
2003-	Unidel Pierre S. du Pont Chair of Engineering

EXPERIENCE

1969	Post Doctorate, Materials Research Center, Allied Chemical Corporation
1975-76	Visiting Scientist, Argonne National Laboratory
1976	Senior Visiting Research Fellow, British Science Research Council
1977	Visiting Professor, The University of the Witerwatersrand, Johannesburg, South Africa
1981	Visiting Professor, National Commission for the Investigation of Space, Buenos Aires, Argentina
1983	Visiting Professor, DFVLR-Germany Aerospace Research Establishment, Koln, Germany
1983	Liaison Scientist, London Branch Office, U. S. Office of Naval Research
1990	Visiting Professor, Tongji University, China
1990	Visiting Professor, Tokyo Science University, Japan
1997	Visiting Professor, Industrial Research Institute, Nagoya, Japan
2019	Distinguished Professor, Shinshu University, Nagano, Japan

FELLOWSHIPS, HONORS, AND AWARDS

1964-65	Walter P. Murphy Fellowship, Northwestern University
1966-67	Ford Foundation Fellowship, Stanford University
1970-71	Frederick Gardner Cottrell Fellowship, Research Corporation
1976	Senior Visiting Research Fellowship, British Science Research Council
1986-87	Fellow, Institute for Advanced Study, University of Delaware
1988	Special Faculty Award, College of Engineering, University of Delaware
1989-02	Named Professor, University of Delaware
1994	Honorary Professor, Beijing University of Aeronautics & Astronautics, China
1996	Charles Russ Richards Memorial Award, American Society of Mechanical Engineers
1997	Honorary Professor, Northwestern Polytechnical University, China

1998 Distinguished Research Award, American Society for Composites
1998 Fellow, American Society of Mechanical Engineers
1999 Fellow, ASM International
2001 Fellow, American Society for Composites
2001 Francis Alison Medal, University of Delaware
2002 Fellow, American Ceramic Society
2002 Highly Cited Researchers, ISI
2002 Worcester Reed Warner Medal, ASME
2003- Unidel Pierre S. du Pont Chair of Engineering
2005 Fellow, American Institute of Aeronautics and Astronautics
2008 Fellow, The Mineral, Metals and Materials Society (TMS)
2009 Medal of Excellence in Composite Materials, University of Delaware Center for Composite Materials
2011 Named among top 100 materials scientists of the decade (2000-2010) by *Times Higher Education* (ranked 34th)
2011 World Fellow, International Committee on Composite Materials
2013 Foreign Experts, Chinese Academy of Sciences, Xinjiang
2013 Honorary Professor, Tongji University, Shanghai, China
2013 Nadai Medal, ASME
2014 ASC/DEStech Award in Composites, American Society for Composites
2015 Honorary Professor, Southwest Jiaotong University, China
2017 Albert Sauveur Achievement Award, ASM International
2018 Honorary Advisor of the Innovation Center for Advanced Nanocomposites, SINANO, Suzhou, China
2019 Distinguished Visiting Professor, Shinshu University, Japan

LISTINGS IN DIRECTORIES

American Men and Women of Science
Who's Who in the East
Who's Who in Technology Today
Contemporary Authors
Who's Who Among Asian Americans
Who's Who in Science and Engineering
Who's Who in the Sciences

SCHOLARLY CONTRIBUTIONS

Books Authored

1. ***Composite Materials and Their Use in Structures***, Elsevier–Applied Science, London, with J. R. Vinson (1975).
2. ***Microstructural Design of Fiber Composites***, Cambridge University Press, Cambridge, UK (1992).

Books & Proceedings Edited

1. ***Textile Structural Composites***, Elsevier Science Publishers, B.V., Amsterdam, edited with F. Ko (1988). Russian Edition, Mockba, Moscow (1991).
2. ***Use of Composite Materials in Transportation Systems***, The American Society of Mechanical Engineers, New York (1991), edited with S. B. Biggers.
3. ***Structure and Properties of Composites***, Vol. 13 of MATERIALS SCIENCE AND TECHNOLOGY series, VCH, Germany, volume editor, (1993).
4. ***Proceedings of the American Society for Composites 9th Technical Conference***, Technomic Publishing Co., Inc., Lancaster, PA, edited with J. R. Vinson (1994).
5. ***Innovative Processing and Characterization of Composite Materials***, American Society of Mechanical Engineers, New York (1995), edited with R. F. Gibson.
6. ***Progress in Advanced Materials and Mechanics***, Peking University Press, Beijing, China, edited with Wang Tzuchiang (1996).
7. ***Fiber Reinforcements and General Theory of Composites***, Vol. 1 of COMPREHENSIVE COMPOSITE MATERIALS, Elsevier Science, Ltd., Oxford, UK, volume editor (2000).
8. ***Nanocomposites,*** Vol. 2 of American Society For Composites Series on Advances in Composite Materials, DEStech Publications, Inc (2012), edited with C. T. Sun.

Refereed Journal Articles

1. "Dislocation Pileups and Elastic Cracks at a Bi-Material Interface," **Met. Trans.** *1*, 1245 (1970).
2. "Number of Screw Dislocations in Double-Ended Pileups at a Phase-Boundary," **Scripta Metallurgica**, *1*, 441 (1970).
3. "Stress Distribution in a Bi-Material Plate Under Uniform Loadings," **J. Comp. Mater.**, *4*, 102 (1970), with J. P. Hirth.
4. "Dislocation Arrays and Elastic-Plastic Cracks in a Two-Phase System," **J. Comp. Mater.**, *4*, 222 (1970), with A. S. Tetelman.
5. "Screw Dislocation Pileups and Shear Cracks in a Lamellar Composite," **J. Appl. Phys.**, *41*, 4448 (1970), with Y. T. Chou and J. C. M. Li.
6. "Centers of Gravity of Dislocation Pileups," **Scripta Metallurgica**, *5*, 165 (1971).
7. "Twist Disclination Loops in Nonhomogeneous Media," **J. Appl. Phys.**, *42*, 4092 (1971).
8. "Elastic Behaviors of Disclinations in Nonhomogeneous Media," **J. Appl. Phys.**, *42*, 4931 (1971).
9. "An Elastic Crack Crossing a Bi-Material Interface," **Int. J. of Fracture Mechanics**, *7*, 331 (1971), with A. S. Tetelman.
10. "Cracks and Dislocation Arrays in Anisotropic Bi-Material Plates," **Met. Trans.** *3*, 2091 (1972), with D. Olsen.
11. "Elastic Behaviors of Twist Disclination Loops Near a Free Surface," **J. Appl. Phys.**, *43*, 2562 (1972).
12. "Theory of Disclinations," **J. Sci. Ind. Res.**, *32*, 505 (1973).

13. "Elastic Energies of Disclinations in Hexagonal Crystals," **J. Appl. Phys.**, *44*, 62 (1973), with Y. C. Pan.
14. "Elastic Energy of Wedge Disclination Loops in Hexagonal Crystals," **J. Appl. Phys.** *44*, 3889 (1973), with Y. C. Pan.
15. "Elastic Behaviors of Wedge Disclination Loops Near a Free Surface," **Mater. Sci. Engr.**, *12* 163 (1973), with T. L. Lu.
16. "An Estimation of Disclination Elastic Energy in Pseudopentagonal Twins," **Scripta Metallurgica**, *7*, 151 (1973).
17. "Spherulite Size Effects in Linear Polyethylene," **J. Polymer Sci.**, Part A2, 819 (January 1974), with J. M. Schultz.
18. "Elastic Interactions Between Disclination Loops and Dislocations," **J. Appl. Phys.**, *46*, 523 (1975).
19. "Elastic Interactions Between Disclination Loops and Inclusion Particles, **J. Appl. Phys.**, *46*, 528 (1975), with Y. C. Pan.
20. "Pileups of Circular Twist Disclinations," **J. Appl. Phys.**, *46*, 4641 (1975).
21. "Point Force Solution for an Infinite Transversely Isotropic Solid," **J. Appl. Mech.**, *43*, 608 (1976), with Y. C. Pan.
22. "What We Do Not Know About Fiber Composites," **Mater. Sci. and Engr.**, *25*, 35 (1976), with A. Kelly.
23. "On the Hygrothermal Response of Laminated Composite Systems," **J. Comp. Mater.**, *10*, 105 (1976), with R. B. Pipes and J. R. Vinson.
24. "Optimization of Composite Flywheel Design," **Int. J. Mech. Sci.**, *19*, 69 (1977), with E. L. Danfelt and S. A. Hewes.
25. "Author's Reply to the Discussion on Point Force Solution for an Infinite Transversely Isotropic Solid," **J. Appl. Mech.**, *44*, 515 (1977).
26. "Some Recent Developments in the Theory of Crystal Defects," **Chinese J. Mater. Sci.**, *10*, 1 (1978).
27. "Dislocation Interactions in Cylindrical Surface Crystals," **J. Appl. Phys.**, *19*, 4737 (1978), with M. Ichikawa.
28. "Elastic Interaction of Dislocations and Disclinations, and the Elastic Energy of Dispirations," **Mater. Sci. Engr.**, *36*, 125 (1978), with M. Ichikawa and W. F. Harris.
29. "Analysis of Deformation and Contraction in Cylindrical Crystals Due to Dispirations," **J. Theoretical Biology**, *78*, 129 (1978), with M. Ichikawa.
30. "Green's Function Solutions for Semi-Infinite Transversely Isotropic Solids," **Int. J. Engr. Sci.**, *17*, 545 (1979), with Y. C. Pan.
31. "A Crystal Defect Theory Approach to Micro-Biomechanics," **J. Biomech.**, *12*, 321 (1979), with M. Ichikawa.
32. "Green's Functions Solutions for a Two-Phase Transversely Isotropic Solid," **J. Appl. Mech.**, *46*, 551 (1979), with Y. C. Pan.

33. "A Crystal Defect Theory Approach to Faulting in Geological Structures," **J. Geophysical Research**, *84*, 6083 (1979).
34. "Mechanical Properties of Composites," **Ann. Rev. Mater. Sci.**, *10*, 229 (1980), with A. Kelly.
35. "The Effect of Transverse Shear on the Compressive Strength of Fiber Composites," **J. Mater. Sci.**, *15*, 327 (1980), with A. Kelly.
36. "A Self-Consistent Approach to the Elastic Stiffness of Short Fiber Composites," **J. Comp. Mater.**, *14*, 178 (1980), with S. Nomura and M. Taya.
37. "Bounds of Effective Thermal Conductivity of Short-Fiber Composites," **J. Comp. Mater.**, *14*, 120 (1980), with S. Nomura.
38. "Surface Layer Hardening of Polycrystalline Copper by Multiple Impact," **J. Mater. Sci.**, *15*, 2331 (1980), with E. Iturbe and I. G. Greenfield.
39. "Wear Mechanism in Copper by Repetitive Impacts," *Proceedings of the International Conference on Wear of Materials 1981*, with E. Iturbe and I. G. Greenfield, also in **Wear of Materials**, p. 685 (1981).
40. "Effective Thermoelastic Constants of Short-Fiber Composites," **Int. J. Engr. Sci.**, *19*, 1 (1981), with S. Nomura.
41. "Fiber Orientation Effects on the Thermoelastic Properties of Short-Fiber Composites," **Fibre Sci. Tech.**, *14*, 279 (1981).
42. "On Two Kinds of Ellipsoidal Inhomogeneities in an Infinite Elastic Body: An Application to Hybrid Composite," **Int. J. Solid Structures**, *17*, 553 (1981), with M. Taya.
43. "A Probabilistic Theory for the Strength of Short-Fiber Composites," **J. Mater. Sci.**, *16*, 1088 (1981), with H. Fukuda.
44. "An Advanced Shear-Lag Model Applicable to Discontinuous Fiber Composites," **J. Comp. Mater.**, *15*, 79 (1981), with H. Fukuda.
45. "Stiffness and Strength of Short Fiber Composites as Affected by Cracks and Plasticity," **Fibre Sci. Tech.**, *15*, 243 (1981), with H. Fukuda.
46. "Book Review on *Mechanics of Composite Materials*, by R. M. Christensen, Wiley- Interscience (1979), **Mater. Sci. Engr.**, p. 144, April 1981.
47. "Stress Field Due to Cylindrical Inclusion with Constant Axial Eigenstrain in an Infinite Body," **J. Appl. Mech.**, *48*, 853 (1981), with Y. Takao and M. Taya.
48. "A Dynamic Explanation of the Hybrid Effect," **J. Comp. Mater.**, *15*, 443 (1981), with X. Ji and G. Hsiao.
49. "Monte Carlo Simulation of the Strength of Hybrid Composites," **J. Comp. Mater.**, *16*, 371 (1981), with H. Fukuda.
50. "Stress Concentrations around a Discontinuous Fiber in a Hybrid Composite Sheet," **Trans. Japan Society for Composite Materials**, *7*, 37 (1981).
51. "Book Review on *Fibrous Composites in Structural Design*," by E. M. Lenoe, D. W. Oplinger and J. L. Burke, Plenum Press, New York, 1980," **Mat. Sci. Engr.**, *52*, 92 (1982).

52. "Monte Carlo Simulation of the Strength of Composite Fiber Bundles," **Fibre Sci. Tech.**, *17*, 183 (1982), with P. Manders and M. Bader.
53. "Stiffness and Strength Behavior of Woven Fabric Composites," **J. Mater. Sci.**, *17*, 3211 (1982), with T. Ishikawa.
54. "A Probabilistic Theory of the Strength of Short-Fiber Composites with Variable Fiber Length and Orientation," J. Mater. Sci., 17, 1003 (1982), with H. Fukuda.
55. "Effects of Fiber-End Cracks on the Stiffness of Aligned Short-Fiber Composites," Int. J. Solids and Structures, 8, 723 (1982), with Y. Takao and M. Taya.
56. "Prediction of Failure Modes in Unidirectional Short Fiber Composites," **J. Mat. Sci.**, *17*, 832 (1982), with H. Ishikawa and M. Taya.
57. "Elastic Behavior of Woven Hybrid Composites," **J. Comp. Mater.**, *16*, 2 (1982), with T. Ishikawa.
58. "Effective Longitudinal Young's Modulus of Misoriented Short Fiber Composites," **J. Appl. Mech.**, *49*, 536 (1982), with Y. Takao and M. Taya.
59. "Prediction of the Stress-Strain Curve of a Short Fiber Reinforced Thermoplastics," **J. Mat. Sci.**, *17*, 2801 (1982), with M. Taya.
60. "A Reusable Sandwich Beam for Composite Compression Test," **J. Comp. Mater.**, *16*, 162 (1982), with M. Gruber and J. Overbeeke.
61. "Enhancement of Strength in Composite Reinforced with Previously-Stressed Fibers," **J. Comp. Mat.**, *17*, 26 (1983), with P. Manders.
62. "In-plane Thermal Expansion and Thermal Bending Coefficients of Fabric Composites," **J. Comp. Mater.**, *17*, 92 (1983).
63. "Thermoelastic Analysis of Hybrid Fabric Composite," with T. Ishikawa, **J. Mat. Sci.**, *18*, 2260 (1983).
64. "Variability of Carbon and Glass Fibers, and the Strength of Aligned Composites," **J. Reinforced Plastics and Composites**, *2*, 43 (1983), with P. Manders.
65. "An Experimental Study of the Effect of Prestressed Loose Carbon Strands on Composite Strength," **J. Comp. Mater.**, *17*, 196 (1983), with Z. F. Chi.
66. "Statistical Analysis of Multiple Fracture in 0°/90°/0° Glass-Fiber/Epoxy-Resin Laminates," **J. Mater. Sci.**, *18*, 2876 (1983), with P. Manders.
67. "Stress Concentrations in a Hybrid Composite Sheet," **Journal of Applied Mechanics**, Paper No. 83-WA/APM-11 (1983), with H. Fukuda.
68. "Nonlinear Behavior of Woven Fabric Composites," **J. Comp. Mater.**, *17*, 399 (1983), with T. Ishikawa.
69. "Elastic Properties of Intermingled Hybrid Composites," **Polymer Composites**, *4*, 265 (1983), with M. Gruber.
70. "One-Dimensional Analysis of Woven Fabric Composites," **AIAA Journal**, *21*, 1714 (1983), with T. Ishikawa.
71. "Elastic-Plastic Analysis of Indentation Damages in Copper: Work-Hardening and

Residual Stress," **Met. Trans. Of AIME**, *14A*, 2415 (1983), with Y. Yokouchi and I. G. Greenfield.

72. "Bounds of Elastic Moduli of Multiphase Short-Fiber Composites," **J. Applied Mechanics**, *51*, 540 (1984), with S. Nomura.
73. "A Probabilistic Theory for the Strength of Discontinuous Fiber Composites," **J. Mater. Sci.**, *19*, 1805 (1984), with F. Hikami.
74. "Determination of Single Fiber Strength Distributions from Fiber Bundle Testings," **J. Mater. Sci.**, *19*, 3319 (1984), with Z. F. Chi and G. Y. Shen.
75. "Strength of Intermingled Hybrid Composites," **J. Reinf. Plast. And Comp.**, *3*, 145 (1984), with H. Fukunaga and H. Fukuda.
76. "Probabilistic Initial Failure Strength of Hybrid and Non-hybrid Laminates," **J. Mater. Sci.** *19*, 3546 (1984), with H. Fukunaga, K. Schulte and P. W. M. Peters.
77. "Probabilistic Failure Strength Analyses of Graphite/Epoxy Cross-Ply Laminates," **J. Comp. Mater.**, *18*, 339 (1984), with H. Fukunaga, P. W. M. Peters, and K. Schulte.
78. "Statistical Treatment of Transverse Crack Propagation in Aligned Composites," **AIAA Journal**, *22*, 1485 (1984), with F. Hikami.
79. "Fatigue Behavior of Aligned Short Carbon Fiber Reinforced Polyimide – the Polyethersulfone – Composites," **J. Mater. Sci.**, *20*, 3353 (1985), with K. Friedrich, K. Schulte, and G. Horstenkamp.
80. "Flexural Fatigue of Short Fiber Reinforced PEI, PES, and Peek Thermoplastics," **SAMPE Quarterly**, p. 18 (April 1985), with S. S. Yau.
81. "Mechanical Properties and Failure Characteristics of FP/Aluminum and W/Aluminum Composites," **Met. Trans. Of AIME**, *16A*, 853 (1985), with H. R. Shetty.
82. "The Viscoelastic Behavior of Short-Fiber Composite Materials," **I. J. Engr. Sci.**, *23*, 193 (1985), with S. Nomura.
83. "Dynamic Stress Concentration Factors in Unidirectional Composites," **J. Comp. Mater.**, *19*, 269 (1985), with X. Ji and X. R. Liu.
84. "Experimental Confirmation of the Theory of Elastic Moduli of Fabric Composites," **J. Comp. Mater.**, *19*, 443 (1985), with T. Ishikawa, M. Masamichi, Y. Hayashi.
85. "Transient Thermal Stress Analysis of a Rectangular Orthotropic Slab," **J. Comp. Mater.**, *19*, 424 (1985), with H. S. Wang.
86. "Fiber Reinforced Metal Matrix Composites," **Composites**, *16*, 177 (1985), with A. Kelly and A. Okura.
87. "Structure-Performance Maps of Polymer, Metal and Ceramic Matrix Composites," **Met. Trans. AIME**, *17A*, 1547 (1986), with J. M. Yang.
88. "Stress-Corrosion Cracking and Its Propagation in Aligned Short-Fiber Composites," **J. Mater. Sci.**, *21*, 3703 (1986), with P. L. Hsu and S. S. Yau.
89. "Fiber Inclination Model of Three-Dimensional Textile Structural Composites," **J. Comp. Mater.**, *20*, 472 (1986), with J. M. Yang and C. L. Ma.

90. "Transient Thermal Behavior of a Thermally and Elastically Orthotropic Medium," **AIAA Journal**, *24*, 664 (1986), with H. S. Wang.
91. "Thermal Transient Stresses Due to Rapid Cooling in a Thermally and Elastically Orthotropic Medium," **Met. Trans. Of AIME**, *17A*, 1051 (1986), with H. W. Wang and R. B. Pipes.
92. "Heat Conduction in Composites Materials Due to Oscillating Temperature Field," **Int. J. Engr. Sci.**, *24*, 643 (1986), with S. Nomura.
93. "Flexural and Axial Compressive Failures of Three-Dimensionally Braided Composite I-Beams," **Composites**, *17*, 227 (1986), with S. S. Yau and Frank Ko.
94. "Composites," **Scientific American**, *254*, 193 (1986), with R. L. McCullough and R. B. Pipes.
95. "On Cross-Ply Cracking in Glass – and Glass-Epoxy Laminates," **Composites**, *18*, 40 (1987), with P. W. M. Peters.
96. "Elastic-Plastic Analysis of Indentation Damages: Cyclic Loading of Copper," **J. Mater. Sci.**, *22*, 3087 (1987), with Y. Yokouchi, I. G. Greenfield and E. Iturbe.
97. "Notched Strength of Woven Fabric Composites with Molded-In Holes," **Composites**, *18*, 233 (1987), with L. W. Chang and S. S. Yau.
98. "Nonlinear Deformation and Failure Behavior of Carbon/Glass Hybrid Laminates," **J. Comp. Mater.**, *21*, 396 (1987), with K. Takahashi
99. "Nonlinear Elastic Behavior of Flexible Fiber Composites," **Composites**, *18*, 25 (1987), with K. Takahashi.
100. "Analytical Compliance Method for Mode I Interlaminar Fracture Toughness Test of Composites," **Composites**, *18*, 393 (1987), with K. Kageyama and T. Kobayashi.
101. "Effect of Fiber Waviness on Elastic Moduli of Fiber Composites," **Trans. Japan Fiber Soc.**, *43*, 376 (1987), with K. Takahashi, T. Yano and C. K. Kuo.
102. "Finite Deformation and Nonlinear Elastic Behavior of Flexible Composites," **J. Appl. Mech.**, *55*, 149 (1988), with S. Y. Luo.
103. "Transverse Elastic Moduli of Unidirectional Fiber Composites with Interfacial Debonding," **Met. Trans. Of AIME**, *19A*, 129 (1988), with K. Takahashi.
104. "On Laminate Configurations for Simultaneous Failure," **J. Comp. Mater.**, *22*, 271 (1988), with H. Fukunaga.
105. "Effects of Fiber Waviness on the Nonlinear Elastic Behavior of Flexible Composites," with C. M. Kuo and K. Takahashi, **J. Comp. Mater.**, *22*, 1004 (1988).
106. "Simplified Design Techniques for Laminated Cylindrical Pressure Vessels under Stiffness and Strength Constraints," with H. Fukunaga, **J. Comp. Mater.**, *22*, 1156-1169 (1988).
107. "Effect of Testing Conditions and Microstructure on the Sliding Wear of Graphite Fiber/PEEK Matrix Composites," with P. B. Mody and K. Friedrich, **J. Mater. Sci.**, *23*, 4319 (1988).
108. "Analytical Modeling of Chemical Vapor Infiltration (CVI) in Fabrication of Ceramic

Composites," **J. American Ceramic Society**, *72*, 414 (1989), with N. H. Tai.

109. "Three-Dimensional Transient Interlaminar Thermal Stresses in Angle-Ply Composites," **J. Appl. Mech.**, *56*, 601 (1989), with Y. R. Wang.
110. "Modeling of 3-D Angle-Interlock Textile Structural Composites," **J. Comp. Mater.**, *23*, 890 (1989), with T. J. Whitney.
111. "Simplified Green's Functions for Mode I and II Cracks," with S. W. Fowser, **Int. J. Fracture**, *39*, 301-321 (1989).
112. "Probabilistics Strength Analyses of Interlaminated Hybrid Composites," **Composites Science and Technology**, *35*, 331 (1989), with H. Fukunaga and H. Fukuda.
113. "Toughness Properties of a Three-Dimensional Carbon-Epoxy Composite," **J. Mater. Sci.**, *24*, 4168-4175 (1989), with V. Guenon and J. Gillespie.
114. "Analysis of Hybrid Effect in Unidirectional Composites under Longitudinal Compressions," **Composites Structures**, *12*, 27-37, (1989), with L. N. Yau.
115. "Flexible Composites," **J. Mater. Sci.**, *24*, 261 (1989).
116. "Stress Fields in a Composite Material by Means of a Non-classical Approach," **Int. J. Engr. Sci.**, *27*, 1397-1405 (1989), with E. S. Ardic and M. H. Santare.
117. "Creep Characterization of Short Fiber Reinforced Ceramics," **Ceramic Eng. Sci. Proc.**, *10*, 1154-1163 (1989), with Y. R. Wang, D. S. Liu and A. P. Majidi.
118. "Modeling and Characterization of Textile Structural Composites: A Review," **J. Strain Analysis**, *24*, 253 (1989), with J. H. Byun.
119. "Elastic Properties of Three-Dimensional Angle-Interlock Fabric Composites," **J. the Textile Institute**, *81*, 538-548 (1990), with J. H. Byun.
120. "Mechanical and Statistical Analyses of Toughening Mechanisms of Short Fiber Reinforced Ceramic Matrix Composites," **Int. J. Fracture**, *46*, 297 (1990), with K. Kageyama.
121. "Compression Behavior of Woven Carbon Fiber/Epoxy Composites with Molded – In and Drilled Holes," **Composites**, *21*, 33 (1990), with M. N. Ghasemi Nejhad.
122. "A Model for the Prediction of Strength Reduction of Composite Laminates with Molded – In Holes," **J. Comp. Mater.**, *24*, 236 (1990), with M. N. Ghasemi, Nejhad.
123. "Modeling of Creep of Aligned Short Fiber Reinforced Ceramic Composites," **Composites Science and Technology**, *37*, 329-346 (1990), with J. Pachalis and J. Kim.
124. "Finite Deformation of Flexible Composites," **Proceedings of the Royal Society, London**, *A429*, 569, (1990), with S. Y. Luo.
125. "Mode I Delamination of a Three-Dimensional Composite," **J. Comp. Mater.**, *24*, 497 (1990), with J. H. Byun and J. W. Gillespie.
126. "Modeling of an Improved CVI Process for Ceramic Composites Fabrication," **J. Am. Ceramic Society**, *73*, 1489 (1990), with N. H. Tai.
127. "On the Deposition Mechanism of Al_20_3 in the CVI Process for Forming Ceramic Composites," **J. Mater. Res.** *5*, 2255 (1990), with N. H. Tai.
128. "A Nonclassical Model for the Stresses in 3-D Continuous Fiber Reinforced Composite

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