

CURRICULUM VITAE

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Department of Chemical Engineering and Materials Science
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Current Position: Professor of Materials Science and Chemical Engineering
Professor of Mechanical and Aerospace Engineering
Professor of Civil and Environmental Engineering

Joint Appointment: Department of Mechanical and Aerospace Engineering
Department of Civil and Environmental Engineering

Date of Birth 9-25-43

Place of Birth: Egypt

Citizenship: U. S. A.

Education

<u>Degree</u>	<u>Year Conferred</u>	<u>Institution and Location</u>
B. S.	1965	Cairo University Cairo, Egypt
M. S.	1970	University of California Berkeley, California
Ph.D.	1972	University of California Berkeley, California

Professional Interests

Mechanical behavior of engineering materials (metals, alloys, composites, ceramics, nanocrystalline materials); correlation between behavior and microstructure; creep; superplasticity; and strengthening and fracture mechanisms.

Academic Appointment

1994- Professor; Department of Chemical Engineering and Materials Science, University of California, Irvine.

1984-1994 Professor; Department of Mechanical and Aerospace Engineering, University of California, Irvine.

1981-1984 Associate Professor; Department of Mechanical and Aerospace Engineering, University of California, Irvine.

1980-1981 Assistant Professor; School of Engineering, University of California, Irvine.

1976-1980	<u>Assistant Professor</u> ; Department of Materials Science and Mechanical Engineering, University of Southern California, Los Angeles.
1975-1976	<u>Adjunct Assistant Professor and Senior Research Associate</u> , Department of Materials Science and Mechanical Engineering, University of Southern California, Los Angeles.
1972-1975	<u>Research Associate</u> ; Department of Materials Science and Engineering, University of Southern California, Los Angeles.

Awards, Honors, and Biographical listings

- The School of Engineering University Service Award (1993)
- Cited in Science Watch Magazine for citations in Materials Science for the period 1990-1994 as number 20 in the world for citations per paper (see Attachment).
- Fellow of ASM International (for significant contributions to research and leadership in Materials Science education, 1996)
- Award of Excellence in Teaching at UCI (2002)
- Recognized by the of Institute for Scientific Research as one of the most highly cited, influential researcher in the field of Materials Science and Engineering (2003)
- UCI Engineering Faculty of the year (2003)
- Fariborz Maseek Best Faculty Teacher Award (2004)
- Chemical Engineering and Materials Science Faculty of the Year (2008)

Professional Association

Memberships: ASM International, TMS, Sigma X, The Scientific Society; The Materials Research Society (MRS), AAAS, ASEE

Professional Service and Activities

- Member of the Review Board of Metallurgical and Materials Transactions.
- Member of the Editorial Board of Materials Science and Engineering
- Reviewer (Journals): Metallurgical and Materials Transactions, Acta Materialia, Philosophical Magazine, Materials Science and Engineering A, Scripta Materialia; Materials and Manufacturing Processes, J. Materials Research, J. Materials Science.
- Reviewer (Funding-agencies): National Science Foundation, Department of Energy, The Air Force Office of Scientific Research, Research Council, Department of Energy The Institute of Geophysics and Planetary Physics (IGPP), Los Alamos National Laboratory.
- Member of panels for reviewing proposals (the National Science Foundation).
- Member of the ASM International Committee on Mechanical Behavior
- Member of the Executive Committee of the Orange Coast Chapter of ASM.

List of Graduate Students

<u>Name</u>	<u>Degree</u>	<u>Present Position</u>
1. A. Goel	MS (1983)	Research Engineer , Amada Engineering La Mirada, CA
2. M. Soliman	Ph.D. (1984)	Professor Saudi Arabia
3. Timothy Ginter	Ph.D. (1984)	Research Scientist Lockheed Corp., Marietta, GA
4. M. Mostafa	Ph.D. (1985)	Research Metallurgist San Onofre Nuclear Station San Clement, CA
5. T.H. Ho	MS (1987)	Member of technical staff

6. P. Chaudhury	Ph.D. (1988)	Western Digital Irvine, CA Research Scientist Intercontinental Manufacturing Garland, TX
7. H. Kim	MS (1989)	completed his Ph.D. with Earthman
8. R. Koenig	MS (1989)	Member of technical staff Rockwell International, CA
9. K.T. park	Ph.D. (1992)	Associate Professor, Korea
10. C. Tapas	MS 1990	Return to India
11. S. Yang	MS (1994)	Engineering Plastics, CA
12. S. Yan	Ph.D. (1996)	Member of technical staff Intel Corp. Santa Clara, CA
13. Y. Li	Ph.D. (1996)	Member of Staff Manufacturing Corp, Newport Beach, California
14. K. Duong	Ph.D. (1999)	Failure Analysis, Irvine, CA
15. A. Yousefiani	Ph. D (1999)	Senior Engineer. Boeing, Huntington Bch, CA
16. Tim Lin	Ph. D. (2000)	I J Research Corp, Irvine, CA
17. A. Verma	MS (2003)	General Electric, Los Angeles
18. Y. Xun	Ph. D. 2004	Reactive NanoTechnologies Hunt Valley, MD 21030
19. M. Chauhan	Ph. D. 2006	Nanotechnology Coatings Santa Ana, CA
20. Indril Roy	Ph.D. 2006	Schlumberger Garden Grove, CA
21. Yu-Ching Cheng	Ph. D. Student	
22. Heather Yang	Ph.D. Student	
23. Ana Torrents	M.S. Student	

In addition to the above students, I served as the American supervising professor for the following two Ph.D. students from Egypt who conducted the research of their dissertations in my laboratory and who were sponsored by the Scientific Channel System (SCS); SCS represents a joint program between the United States and Egypt.

1. M. El-Atrees	Superplastic Forming of Al-Li Alloys	Assistant Professor Egypt
2. A. Nasr	Fracture Behavior or Metal-Matrix Composites	Assistant Professor Egypt

Postdoctoral Associates: Dr. A. Gadalla, Dr. I.A. Ibrahim, Dr. K. T. Park (Korea), Dr. X. Jiang (THX Molding, WI), Dr. B. Han, and Dr. R. Rodriguez

Courses Taught

Undergraduate (required)

<u>Course #</u>	<u>Title</u>
ME 54	Principles of Mats Science
MAE 80	Dynamics
MAE 147	Vibration
MAE 151A	Mech. Design
MAE 151B	Mech. Design

ME 154	Principles of Materials Science
MSE/MAE 156	Mechanical Behavior
MSE/MAE150	Mechanics of Materials

Graduate (required)

<u>Course #</u>	<u>Title</u>
MSE251A	Dislocations
MSE 252A	Theory of Diffusion
MAE 254A	Mechanical Behavior
MAE 256	Plasticity and Metal Forming
MSE 200	Advances in Materials Science

University Service

- Department Advisor for Freshman and Sophomores (1983-1988).
- Member of the Committee on Academic Planning in the Department of Mechanical and Aerospace Engineering (MAE) (1981-1994).
- Vice Chair and Graduate Advisor (S and Su 1985).
- Section Head (Materials Group in MAE) (1984-1994).
- Chair and member of Search Committees (1983-1998).
- Chair of Preliminary Examinations for Graduate Students (1981 -present).
- Chair and member of Departmental Ad Hoc Committees for Merit and Promotion reviews (1984-present).
- Surrogate Chair of MAE (1990-1991) (preparation of an Academic Personnel Case)
- Director of the School of Engineering (SOE) Materials Science Concentration (1992-present).
- Chair of the Engineering Committee on Materials Science (1987-1992)
- Chair of the SOE Faculty (1989-90).
- Chair of the SOE Committee on Academic planning (1991).
- Member of the Committee on the Construction of a Standardized Departmental Letter for Merits and Promotion (1991).
- Member of the Task Force in the SOE for Instructional Laboratory Support (1989-1990).
- Chair and member of the School of Engineering Committee on Research and Travel (1985-89).
- Member of the Executive Committee of the School of Engineering (1995-1996).
- Graduate Advisor for the Materials Science and Engineering Concentration (1993-present).
- Member of qualifying examination committees for graduate students in the School of Engineering and Physical Sciences (1981-Present).
- Member of the University Committee on Teaching Quality (1988-1991).
- Member of the Campus wide Committee on Women in the Sciences and Mathematics (1989-1990).
- Member of the Representative Assembly of the Academic Senate, Irvine Division (Winter 1996).
- Member of Education Abroad Program (EAP) Faculty Selection Committee (1995 – 1997)
- Member of the School of Engineering Space and Budget Committee (1997-Present)
- Chair of the Graduate Committee in the School of Engineering (2000)
- Chair of the Committee of Faculty retreat (2000)
- Undergraduate Advisor for the new major in MSE (2001-2005) and (2006-present)
- Graduate Advisor for the Degree Program in MSE

- Member of the Graduate Committee of the School of Engineering
- Member of the Undergraduate Committee of the School of Engineering
- Member of the ABET Committee in the School of Engineering
- Chair of campus Ad Hoc Committees for promotion and merit increase
- Member of the Campus Committee on Courses (2000-2002)
- Acting Chair (Summer 2002)
- Member of the Divisional Senate Assembly (July 2002-June 2003)
- Chair of the Engineering Faculty (July 2002-June 2003).
- ABET Coordinator for the Materials Science Engineering Major (2001-present)
- Member of the HSSoE Honors Program Committee
- Member of the HSSoE New Majors Committee
- Member of Campus Committee on Committees (2003-2006)
- Chair of the School of Engineering Undergraduate Committee (2003-2004) and (2006-2007)
- Member of Council on Educational Policy

Publications

Refereed Journal

- 1 . F.A. Mohamed, K.L. Murty, and J.E. Dorn, "Effect of Vacancy Sinks and Sources on Serrated Yielding Due to Solute Locking," Scripta Metallurgica 5, 1087 (1971).
- 2 . F.A. Mohamed, K.L. Murty, and J.E. Dorn, "On Kinetics of Ordering in Cu₃Au," Materials Science & Engineering 9,.183 (1972).
- 3 . K.L. Murty, F.A. Mohamed, and J.E. Dorn, "Viscous Glide, Dislocation Climb and Newtonian Viscous Deformation Mechanisms During Creep in Al-3%Mg," Acta Metallurgica 20,.1009, (1972).
- 4 . F.A. Mohamed, K.L. Murty, and J.W. Morris, "Harper-Dorn Creep in Aluminum, Lead and Tin," Metallurgical Transactions 4, 935, (1973).
- 5 . T.G. Langdon, and F.A. Mohamed, "The Strain Dependence of Vacancy Creation and Dislocation Density During Serrated Yielding," Scripta Metallurgica 7, 1199 (1973).
- 6 . F.A. Mohamed, K.L. Murty, and T.G. Langdon, "The Portevin-Le Chatelier Effect in Cu₃Au," Acta Metallurgica 22, 325 (1974).
- 7 . F.A. Mohamed, T.G. Langdon, "The Transition from Dislocation Climb to Viscous Glide in Creep of Solid Solution Alloys," Acta Metallurgica 22, 779, (1974).
- 8 . F.A. Mohamed, and T.G. Langdon, "Method of Estimating Stacking-Fault Energies in Alkali Halide Crystals Using Creep Data," J. Applied Physics 45-1965, (1974).
- 9 . F.A. Mohamed, and T.G. Langdon, "Deformation Mechanism Maps Based on Grain Size," Metallurgical Transactions 5, 2339 (1974).
- 10 . F.A. Mohamed, and T.G. Langdon, "Deformation Mechanism Maps for Solid Solution Alloys," Scripta Metallurgica 9, 137 (1975).
- 11 . F.A. Mohamed, and T.G. Langdon, "Creep at Low Stresses Levels in the Superplastic An-22%Al Eutectoid," Acta Metallurgica 23, 117 (1975).
- 12 . F.A. Mohamed, and T.G. Langdon, "Creep Behavior of Ni-W Solid Solutions," Metallurgical Transactions 6A, 927 (1975).
- 13 . F.A. Mohamed, S.-A. Shei, and T.G. Langdon, "The Activation Energies Associated with Superplastic Flow," Acta Metallurgica 23, 1443 (1975).
- 14 . F.A. Mohamed, and T.G. Langdon, "Creep Behavior in the Superplastic Pb-62%Sn Eutectoid," Philosophical Magazine 32, 697 (1975).
- 15 . F.A. Mohamed, and T.G. Langdon, "Creep Behavior of Ceramic Solid-Solution Alloys," J. American Ceramic Society 58, 553 (1975).
- 16 . H. Ishikawa, F.A. Mohamed, and T.G. Langdon, "The Influence of Strain Rate on Ductility in the Superplastic Zn-22%Al Eutectoid," Philosophical Magazine 32, 1269

- (1975).
17. F.A. Mohamed, and T.G. Langdon, "Deformation Mechanism Maps: Their Use in Predicting Creep Behavior," J. Engineering Materials Technology 98, 125 (1976).
 18. T.G. Langdon, and F.A. Mohamed, "Deformation Mechanism Maps of Ceramics," J. Materials Science 11, 317 (1976).
 19. F.A. Mohamed, and T.G. Langdon, "The Determination of the Activation Energy for Superplastic Flow," Physica Status Solida 33, 375 (1976).
 20. F.A. Mohamed, and T.G. Langdon, "Deformation Mechanism Maps for Superplastic Materials," Scripta Metallurgica 10, 759 (1976).
 21. D.G. Bhat, H. Ishikawa, F.A. Mohamed, and T.G. Langdon, "Evidence for Cavitation in the Superplastic Zn22% Al Eutectoid," Metallurgical Transactions 8A, 523 (1977).
 22. F.A. Mohamed, M.I. Ahmed, and T.G. Langdon, "Factors Influencing Ductility in the Superplastic Zn-22% Al Eutectoid," Metallurgical Transactions 8A, 933 (1977).
 23. F.A. Mohamed, and T.G. Langdon, "The Activation Energies for Superplasticity," Scripta Metallurgica 11, 575 (1977).
 24. F.A. Mohamed, and Young Kyou Kim, "Creep Behavior of Au-Ni Solid Solutions," Scripta Metallurgica 11, 879 (1977).
 25. T.G. Langdon, and F.A. Mohamed, "The Incorporation of Ambipolar Diffusion in Deformation Mechanism Maps for Ceramics," J. Materials Science 13., 473, (1978).
 26. T.G. Langdon, and F.A. Mohamed, "New Type of Deformation Mechanism Map for High Temperature Creep," Materials Science Engineering 32, 103, (1978).
 27. T.G. Langdon, and F.A. Mohamed, "A Simple Method of Constructing an Ashby Type Deformation Mechanism Map," J. Materials Science 13, 1282 (1978).
 28. T.G. Langdon, and F.A. Mohamed, "The Characteristics of Independent and Sequential Creep Processes," J. Australian Institute of Metals 22, 189 (1978).
 29. F.A. Mohamed, "Analysis of Creep Data on Aluminum at Very Low Stresses," Materials Science Engineering 32, 37 (1978).
 30. F.A. Mohamed, "Creep Ductility in Large-Grained Solid Solution Alloys," Scripta Metallurgica 12, 99 (1978).
 31. F.A. Mohamed, "Strengthening Mechanisms in Cu3Au," Acta Metallurgica 26, 871, (1978).
 32. F.A. Mohamed, "Evidence of Subgrain Formation in an Al-Mg Alloy at Low Stresses," Metallurgical Transactions 9A, 1013 (1978).
 33. F.A. Mohamed, "Comment on Harper-Dorn Creep in Al Alloys," Metallurgical Transactions 9A, 1342 (1979).
 34. F.A. Mohamed, "Modification of the Burke-Nix Ductility Expression," Scripta Metallurgica 13,87 (1979).
 35. F.A. Mohamed, "Creep Behavior of Solid Solution Alloys," Materials Science & Engineering 38, 73 (1979).
 36. F.A. Mohamed, "Analysis of Creep Data on Copper at Very Low Stresses," Materials Science & Engineering 40, 101 (1979).
 37. D.A. Miller, F.A. Mohamed, and T.G. Langdon, "An Analysis of Cavitation Failure Incorporating Cavity Nucleation with Strain," Materials Science & Engineering 40, 159 (1979).
 38. Mohamed M. Ahmed, F.A Mohamed, and T G Langdon, "Neck Formation and Cavitation in the Superplastic Zn-22% Al Eutectoid," J. Materials Science 14, 2913 (1979).
 39. F.A. Mohamed, "Influence of Oxidation on Deformation Maps of Aluminum," Scripta Metallurgica 13, 1153 (1979).
 40. F.A. Mohamed, "Influence of Oxidation on Creep Behavior of Aluminum," Materials Science Engineering,43, 211 (1980).
 41. F.A. Mohamed, "On the Importance of the Threshold Stress for Deformation," J. Materials Science 15, 1061 (1980).

42. F.A. Mohamed, and T.G. Langdon, "Flow Localization and Neck Formation in a Superplastic Metal," Acta Metallurgica 29, 911 (1981).
43. P. Yavari, F.A. Mohamed, and T.G. Langdon, "Creep and Substructure Formation in an Al-5%M- Solid Solution Alloy," Acta Metallurgica 29, 1507 (1981).
44. F.A. Mohamed, "On the Work-Hardening Coefficient Of Cu₃Au," J. Materials Science 49, 289 (1981).
45. F.A. Mohamed, and T. Ginter, "On the Identification of Creep Processes at Low Stresses," J. Materials Science 16, 289 (1981).
46. F.A. Mohamed, and M. Soliman, "On the Creep Behavior of Uranium Dioxide," Materials Science Engineering 53, 1381 (1982).
47. F.A. Mohamed, "Effect of Threshold Stress Processes on Ductility," J. Materials Science 17, 1381 (1982).
48. F.A. Mohamed, and T.G. Langdon, "A Comparison of Constant Strain Rate and Creep Testing Procedures in Superplasticity," J. Materials Science 17, 1925 (1982).
49. T.J. Ginter, and F.A. Mohamed, "The Stress Dependence of Subgrain Size in Al," Materials Science 17, 2007 (1982).
50. M. Soliman, and F.A. Mohamed, "Correlation Between Creep Behavior and Substructure in Al-3%Mg Solid-Solution Alloy," Materials Science Engineering 55, III (1982).
51. F.A. Mohamed, and T. Ginter, "On The Nature and Origin of Harper-Dorn Creep," Acta Metallurgica 30, 1869 (1982).
52. F.A. Mohamed, "Interpretation of Superplastic Flow in Terms of a Threshold Stress," J. Materials Science 18, 582 (1983).
53. M. Soliman, and T. Ginter, F.A. Mohamed, "An Investigation of the Stress Exponent and Subgrain Size in Al After Stress Reduction," Philosophical Magazine 48, 63 (1983).
54. F.A. Mohamed, "Incorporation of Suzuki and Fisher Interaction in the Analysis of the Creep Behavior of Solid-Solution Alloys," Materials Science & Engineering 61, 149 (1983).
55. A. Goel, and T. Ginter, F.A. Mohamed, "Effect of Stress Reductions on the Stress Exponent and Subgrain Size in an Al-Zn Alloy," Metallurgical Transactions A. 14, 2309 (1983).
56. T. Ginter and M. Soliman, F.A. Mohamed, "Effect of Creep Substructure on the Stress Exponent of Al Following Stress Reductions," Philosophical Magazine 50, 9 (1984).
57. M. Soliman and F.A. Mohamed, "Creep Transition in an Al-Zn Alloy," Metallurgical Transaction A.5, 1893 (1984).
58. M. Soliman and F.A. Mohamed, "Creep Curves of Al-Mg Alloys at Very Low Stresses," Materials Science & Engineering 68, 23 (1985).
59. F.A. Mohamed, M. Soliman, and M. Mostafa, "Effect of Stress Reduction Ratio on the Creep Behavior of Al," Philosophical Magazine 51, 559 (1985).
60. P. Koenig and F.A. Mohamed, "Ductility in Zn-22% Al above the Eutectoid Temperature," Materials Science & Engineering 72, 9 (1985).
61. M.S. Mostafa and F.A. Mohamed, "Correlation Between Creep Behavior and Ductility in Al-10%Zn," Metallurgical Transactions A17, 365 (1986).
62. P. Chaudhury and F.A. Mohamed, "Creep and Ductility in an Al-Cu Solid Solution Alloy," Metallurgical Transactions 18A, 2105 (1987).
63. P. Chaudhury and F.A. Mohamed, "Effect of Impurity Content on Superplastic Flow in the Zn-22% Al Alloy," Acta Metallurgica 35, 1099 (1988).
64. F.A. Mohamed, "On the Threshold Stress for Superplastic Flow," J. Materials Science 7, 215, (1988).
65. P. Chaudhury and F.A. Mohamed, "Creep Characteristics of an Al-2% Cu Alloy in the Solid Solution Range," Materials Science & Engineering 101, 13 (1988).
66. P. Chaudhury and, F.A. Mohamed, "Superplastic Deformation Behavior in Commercial and High Purity Zn-22%Al," Metallurgical Transaction A (in press).
67. J. Marinkovich, E.J. Lavernia, J.R. Pickens and F.A. Mohamed, "Spray Atomization and

- Deposition Processing of Al-Cu-Li-Mg-Ag-Zr Alloys (Weldalite TM 049)," J. Metals 41, 37 (1989).
68. T. Srivatsan, E. Lavernia, and F.A. Mohamed, "Strength, Deformation, Fracture Behavior and Ductility of Aluminum-Lithium Alloy: A Review," J. Materials Science 25, 1137 (1990).
 69. I. Ibrahim, F.A. Mohamed and E.J. Lavernia, "Particle Reinforced Metal Matrix Composites," J. Materials Science 26, 1137 (1991).
 70. T.K. Park, E.J. Lavernia, and F.A. Mohamed, "Creep Behavior and Substructure in an Al-Li Alloy," Acta Metallurgica et Materialia 38, 1837 (1990).
 71. E.J. Lavernia, F.A. Mohamed and T.S. Srivatsan, "The Influence of Oxides on Powder Metallurgy of Aluminum-Lithium-Copper Alloys," International Journal of Powder metallurgy 16, 321 (1990).
 72. K.T. Park, E.J. Lavernia and F.A. Mohamed, "High Temperature Creep of Silicon Carbide Particulate Reinforced Aluminum," Acta Metallurgica et Materialia 38, 2149 (1990).
 73. K.T. Park and F.A. Mohamed, "Effect of Impurity Content on Cavitation in the Superplastic Zn-22% Al Alloy," Metallurgical Transactions 21A, 2605 (1990).
 74. M. Gupta, F.A. Mohamed and E.J. Lavernia, "Solidification Behavior of Al-Li-SiCp MMCs Processed Using Variable Co-Deposition of Multi-phase Materials," Materials and Manufacturing, Processes 5 (2), 165 (1990).
 75. H.K. Kim, F.A. Mohamed and J.C. Earthman, "A Novel Specimen Geometry for Double Shear Creep Experiments," J. Testing and Evaluation 19, 93 (1991).
 76. M. Gupta, E.J. Lavernia and F.A. Mohamed, "The Effects of Solidification Phenomena on the Distribution of SiC Particulates During Spray Atomization and Deposition," International Journal of Rapid Solidification, 25, 131 (1991).
 77. M. Gupta, I.A. Ibrahim, F.A. Mohamed and E.J. Lavernia, "Wetting and Interfacial Reactions in Al-Li-SiCp MMCs Processed by Spray Atomization and Deposition," J. Materials Science, 26, 6673 (1991).
 78. M. Gupta, F.A. Mohamed and E.J. Lavernia, "Heat Transfer Mechanisms and Their Effect on Microstructure During Spray Atomization and Co-Deposition of Metal Matrix Composites," Materials Science and Engineering, A144, 99 (1991).
 79. T.S. Srivatsan, I. Ibrahim, F.A. Mohamed and E.J. Lavernia, "Processing Techniques for Particulate Reinforced Metal Matrix Composites," J. Materials Science , 26, 5963 (1991).
 80. H.K. Kim, F.A. Mohamed and J.C. Earthman, "High Temperature Rupture of Microstructurally Unstable 304 Stainless Steel Under Uniaxial and Triaxial Stress States," Metallurgical Transactions, A22, 2629 (1991).
 81. H.K. Kim and F.A. Mohamed, "Effect of Stress Reduction Ratio on the Creep Behavior of an Al-5 wt% Ag Alloy," Materials Science and Engineering, A147, 145 (1991).
 82. F.A. Mohamed, K.T. Park and E.J. Lavernia, "Creep Behavior of Discontinuous SiC-Al Composites," Materials Science and Engineering, A150, 21 (1992).
 83. T.S. Srivatsan, M. Gupta, F.A. Mohamed and E.J. Lavernia, "The Influence of Spray Atomization and Deposition Processing on the Microstructure of an Aluminum-Copper-Lithium Alloy," Aluminum, An International Journal, A150,21 (1992)
 84. M. Gupta, F.A. Mohamed, and E.J. Lavernia, "The Effects of Ceramic Reinforcements During Spray Atomization and Co-Deposition of Metal Matrix Composites, Part 1: Heat Transfer," Metallurgical Transactions, 23A 831 (1992).
 85. M. Gupta, F.A. Mohamed, and E.J. Lavernia, "The Effect of Ceramic Reinforcements During Spray Atomization and Co-Deposition of Metal Matrix Composites, Part 11: Solid State Cooling Effects," Metallurgical Transactions, 23A, 845 (1992).
 86. M. Gupta, F.A. Mohamed and E.J. Lavernia, "Solidification Characteristics of Atomized Al-Ti Powders," Scripta Metallurgica et Materialia, 26, 697 (1992).
 87. M. Gupta, J. Juarez-Islas, W.E. Frazier, F.A. Mohamed, and E.J. Lavernia, "Microstructure, Excess Solid Solubility and Elevated Temperature Behavior of Spray

- Atomized and Co-Deposited Al-Ti-SiC," Metallurgical Transactions B, 23B, 719 (1992)
88. M. Gupta, T.S. Srivatsan, F.A. Mohamed and E.J. Lavernia, "Microstructural Evolution and Mechanical Properties of SiC/Al₂O₃ Particulate Reinforced Spray Deposited Metal Matrix Composites," Journal of Materials Science, 28, 2245 (1992).
89. K.T. Park and F.A. Mohamed, "Reply to Comment on Creep Behavior of Discontinuous SiC-Al Composites," Acta Metallurgica et Materialia, 30, 957 (1994).
90. K.T. Park, E.J. Lavernia and F.A. Mohamed, "High-Temperature Deformation of PM 6061 Al," Acta Metallurgica and Materialia, 42, 667 (1994).
91. S. Yan, J.C. Earthman, and F.A. Mohamed, "Effect of Cd on Superplastic Flow in the Pb-62% Sn Eutectic," Philosophical Magazine, A69, 1017 (1994).
92. K.T. Park, S. Yang, J.C. Earthman and F.A. Mohamed, "Effects of Impurities on Ductility and cavitation in Zn-22% Al," Materials Science and Engineering, A188, 59 (1994).
93. X. Jiang, J.C. Earthman and F.A. Mohamed, "Cavity Nucleation and Growth during Superplastic Deformation," Journal of Materials Science, 29, 5499 (1994).
94. K.T. Park, J.C. Earthman and F.A. Mohamed, "Effect of Post Solution Treatment on cavitation in Zn-22% Al," Philosophical Magazine, 70, 7 (1994).
95. P. Chaudhury, K.T. Park and F.A. Mohamed, "Effect of Fe on the Superplastic Deformation of Zn-22% Al," Metallurgical and Materials Transactions, A25, 2391 (1994).
96. S. Yan and F.A. Mohamed, "On the Characteristics of the Threshold Stress for Superplastic Flow in Zn-22% Al," Metallurgical and Materials Transactions, 26A, 493 (1995).
97. P. Chaudhury and F.A. Mohamed, "Discussion of Effect of Fe on the Superplastic Deformation of Zn-22% Al," Metallurgical and Materials Transactions, 26A, 1600 (1995).
98. W.D. Cai, Y. Li, R.J. Dowding, F.A. Mohamed and E.J. Lavernia, "A Review of Tungsten-Based Alloys as Kinetic Energy Penetrator Materials," Review in Particulate Materials, 3, 71 (1995).
99. S. Yan, T.S. Srivatsan, E.J. Lavernia and F.A. Mohamed, "Influence of Spray Atomization and Deposition Processes on Microstructure and Mechanical Behavior of and Aluminum Alloy Metal Matrix Composite," Journal of Materials Science, 30, 4726 (1995).
100. K.T. Park, S. Yan and F.A. Mohamed, "Boundary Sliding in High-Purity Pb-62% Sn," Philosophical Magazine A, 72, 891 (1995).
101. K.T. Park and F.A. Mohamed, "Creep Strengthening Mechanisms in a Discontinuous SiC-Al Composite," Metallurgical and Materials Transactions A, 26a, 3119 (1995)
102. X. Jiang, S. Yang, J. C. Earthman and F.A. Mohamed, "Effect of Fe on Ductility and Cavitation in Zn-22% Al," Metallurgical and Materials Transactions A, 27A, 863 (1996).
103. A.A. El-Nasr, F.A. Mohamed and J.C. Earthman, "High-Temperature of an SiC Particulate Reinforced Al Composite Under Multiaxial Stress States," Materials Science and Engineering, A214, 33 (1996).
104. Y. Li, S. R. Nutt and F. A. Mohamed, "An Investigation of Creep and Substructure Formation in 2124 Al," Acta Materialia, 45, 2607 (1997).
105. Y. Li and F. A. Mohamed, "An Investigation of Creep Behavior an Si-2124 Al Composite," Acta Materialia, 45, 4775 (1997).
106. F. A. Mohamed," On the Creep Strengthening of SiC Particulates in SiC-Al Composites," Metallurgical and Materials Transactions A, 28A, 2780 (1997).
107. F. A. Mohamed, "On Creep Behavior in Powder Metallurgy 6061 Al," Scripta Materialia, 38, 457 (1998).
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