CURRICULUM VITAE
DAN ELIEZER

Department of Materials Engineering
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Education

D.Sc. 1975 Department of Materials Engineering
Technion, Israel Institute of Technology, Haifa, Israel.

M.Sc. 1971 Department of Materials Engineering
Technion, Israel Institute of Technology, Haifa, Israel.

B.Sc. 1969 Department of Physics
Technion, Israel Institute of Technology, Haifa, Israel.

Selected Awards, Honors and Fellowships

- Wilhelm-Ostwald-Fellowship – Fellowship awarded to scientists who have distinguished themselves with an extraordinary scientific performance
- "Doctor Honoris Causa", University Politehnica of Bucharest
- "Doctor Honoris Causa", Technical University "Gh. Asachi" of Iasi
- ASM Fellow – In recognition of distinguished contributions to the field of materials science and engineering
- American Academy of Science Fellowship NASA-Ames Research Centre
- American Academy of Science Fellowship, National Research Council, Air Force Wright Aeronautical Laboratories, Wright-Patterson Air Force Base

- The Eric Samson Chair for Advanced Materials and Processing, Ben Gurion University of the Negev, Beer-Sheva, Israel
- DFG Mercator Professorship
- Outstanding Contribution to the field of hydrogen energy, Research Center for Hydrogen Industrial Use and Storage, Hydrogenius, Kyushu University, Japan
- Listed in Marquis' **"**Who's Who in Science and Engineering"
- Professor of National University of Seoul (Fellowship)
- Fellowship – University of Dayton
- Fellowship – Swedish Institute for Metals Research
- Honorary Professor, The Institute of Materials Science and Engineering, Clausthal University of Technology, Clausthal-Zellerfeld Germany.
- Top cited article in *Journal of Alloys and Compounds*
- Rothschild (Yad-Hanadiv) Fellowship for outstanding academic merit and potential to advance in their respective field
- Technical university of Istanbul, Turkey
- Fukuoka University, Japan

Academic Positions

Ben Gurion University of the Negev, Beer-Sheva, Israel

2000 - 2004	Head, Department of Materials Engineering
1993 – 2014	The Eric Samson Chair for Advanced Materials and Processing,
1988 – Present	Full Professor, Department of Materials Engineering
1986 – 1990	Head, Department of Materials Engineering
1984 – 1986	Associate Professor, Department of Materials Engineering
1981 - 1984	Senior Lecturer, Department of Materials Engineering
1981 - Present	Tenured at Materials Engineering Department
1978 - 1981	Lecturer, Materials Engineering Department

2005- 2006	Senior Visiting Scientist, Federal Institute for Materials Research & Testing (BAM), Berlin, Germany.

1984 - 1986 Senior Associate, National Research Council, Air Force Wright Aeronautical Laboratories, Materials Laboratory, Wright-Patterson Air Force Base, Dayton Ohio, USA.

1977 - 1978 Associate, National Research Council
NASA-AMES Research Center, Moffett Field, CA, USA.

1975 - 1977 Research Associate, Department of Metallurgy and Mining Engineering, University of Illinois, Urbana. Illinois, USA.

1971 - 1975 Instructor, Department of Materials Engineering
Technion, Haifa, Israel.

1969 - 1971 Assistant, Department of Materials Engineering
Technion, Haifa, Israel.

- Professional memberships:

ASM International Membership- The Materials Information Society
TMS Membership- The Minerals, Metals and Materials Society

1992 – Present **"Visiting Scientist" and "Invited Speaker" at Selected Universities and Research Institutes across Europe, Asia and USA (Partial List):**

- Technical Institute of Vienna, Vienna, Austria.
- Institute of Metal Research, the Chinese Academy of Sciences, Shenyang, China.
- Charles University, Prague, Czech Republic.
- Ecole Nationale Supérieure de Chimie de Paris, Paris, France.
- GKSS Max-Planck Institute, Geesthacht Germany.
- Dortmund University, Dortmund, Germany.
- Federal Institute for Materials Research & Testing (BAM), Berlin, Germany.
- Berlin Technical University (TU), Berlin, Germany.
- Hahn-Meitner Institute, Berlin, Germany.
- Clausthal Technical University (TU), Clausthal, Germany.
- Cottbus Technical University (BTU), Cottbus, Germany.
- Volkswagen AG, Wolfsburg, Germany.
- Audi AG, Ingolstadt, Germany.
- KFA-Julich Institute, Julich, Germany

- Central Research Institute for Chemistry of the Hungarian Academy of Sciences, Budapest, Hungary.
- Universita di Trento, Trento, Italy.
- Universita Degli Studi di Ancona, Ancona, Italy.
- Fiat Research Center, Torino, Italy.
- Nagaoka University of Technology, Nagaoka-shi Niigata, Japan.
- Research Center for Hydrogen Industrial Use and Storage (HYDROGENIUS), Japan
- Seoul National University, Seoul, Korea.
- Pohang University of Science and Technology – Center for Advanced Aerospace Materials (POSTECH), Pohang, Korea.
- Korea Institute of Machinery & Materials (KIMM), Changwon City, Korea.
- National Taiwan University, Taipei, Taiwan.
- National Tsing Hua University, Hsinchu, Taiwan.
- Foundation Research and Development Centre (FRD), Pretoria, South Africa.
- University of Kwazulu Natal, Durban, South Africa.
- Swedish Institute for Metals Research, Stockholm, Sweden.
- Queen Mary University of London, London, U.K.
- Los Alamos National Laboratory, Los Alamos, New Mexico, USA.
- Air Force Wright Aeronautical Laboratories, Wright-Patterson, Dayton, Ohio, USA
- NASA (National Aeronautics and Space Administration) Ames Research Center, National Research Council, USA
- University of Illinois, Department of Metallurgy and Mining, USA
- University of Dayton, Dayton, Ohio, USA.
- Ohio State University, Ohio, USA.
- Washington State University, Washington, USA.
- Pacific Northwest National Laboratory of Materials & Chemical Sciences, Washington, USA.
- Illinois Institute of Technology, Chicago, Illinois USA.
- Colorado School of Mines, Colorado, USA.
- General Electric Company, New-York, USA.
- University of California, Irvine, California, USA.
- Stanford Research Institute (SRI), Stanford, California, USA.

- Electric Power Research Institute (EPRI), California, USA.
- Massachusetts Institute of Technology, Cambridge, Massachusetts USA.
- Lehigh University, Bethlehem, Pennsylvania, USA.
- University of Idaho, USA.

Teaching Experience

Courses for Undergraduate Students

- Introduction to Materials Science (for Engineering Students)
- Materials Science 1, 2, 3 (for Materials Engineering Students)
- Metallurgical Processing
- Materials Selection
- Failure Analyses
- Corrosion
- Thermodynamics of Materials
- Structure and Properties of Materials
- Metals and Alloys
- Introduction to Light Alloys
- Chemical Properties of Materials

Courses for Graduate Students

- Environmental Degradation of Materials
- Advanced Course on Materials Selection
- Magnesium Science and Technology
- Hydrogen Embrittlement and Stress Corrosion Cracking of Materials
- Light Alloys
- Materials for Energy Systems
- Hydrogen Energy

Selected Invited International Workshops (taught by Prof. Eliezer)

- "Light Alloys" –University of Dayton, Ohio USA
- "Hydrogen Interaction with Materials" – ASM Workshop, California, USA
- "Introduction to Light Alloys" – Seoul University, South Korea

- "Environmental Degradation of Materials" – Istanbul Technical University, Turkey
- "Hydrogen Embrittlement" - Metal Industries Research & Development Center (MIRDC), Taiwan.
- "Metallurgy of Non-Ferrous Materials" – University of Trento, Italy.
- "Hydrogen Effects on Structural Materials" – Technical University of Clausthal, Germany.
- "Hydrogen Embrittlement" - Fukuoka University, Japan.

Selected Administrative Positions

1993 – 2014	Holder of the Eric Samson Chair of Advanced Materials
2000 – 2004	Head, Materials Engineering Department, Ben-Gurion University of the Negev
1986 – 1990	Head, Materials Engineering Department, Ben-Gurion University of the Negev
2001– 2004	Board of Directors, Ben-Gurion University of the Negev
2001	Chairman, The10th Israel Materials Engineering Conference
2000	Chairman, The 2nd Israeli International Conference on Magnesium Science and Technology
2000	Chairman, Magnesium Sessions, THERMEC 2000
1997	Chairman, The 1st Israeli International Conference on Magnesium Science and Technology
1997	Chairman, French/Israeli Workshop on Magnesium Science and Technology
1997	Chairman, The 8th Israel Materials Engineering Conference
1996	Chairman, The 2nd Israeli Corrosion Conference
1993	Chairman, The 6th Israel Materials Engineering Conference
1992 – 2000	Chairman, Graduate Studies Committee, Materials Engineering Department, Ben-Gurion University
1988	Chairman, The 4th Israel Materials Engineering Conference
1981 – 2006	Senate Member, Ben-Gurion University, Beer-Sheva

1981 – 1984 Chairman, Undergraduate studies Committee
Materials Engineering Department, Ben-Gurion University, Beer-Sheva

1981 – 1983 Chairman of the NACE Society

1981 – 1983 Chairman of the Israeli Corrosion Forum

Development Committee of the University

Student Committee

Committee for Deciding the Invitation of Foreign Scientists

Development of High-Tech Park Committee

Active member in a variety of academic, research and institutional committees, including:

- Senior Management Committee
- Israeli National Council for the Development of Scientific and Technological Infrastructures
- Faculty Promotion Committee, Ben-Gurion University
- Israel-Germany Research Fund, Ministry of Science
- India-Israel Bi-national Science Foundation Committee
- Japan-Israel Bi-national Science Foundation Committee
- Israeli National Council for the Development of Scientific and Technological Infrastructures
- Israeli Academia Industry Forum
- Advanced Graduate Studies (Ph.D.) Committee, Ben-Gurion University
- Students' Committee, Ben-Gurion University
- International Advisory Board on more than 50 international conferences

Major Memberships in Professional / Scientific Associations:

- The Metallurgical Society of AIME
- American Society for Metals

International Advisory Boards for Scientific Journals

- Metals and Materials International

- Journal of Technology
- Materials Testing

Selected Peer Review for Scientific Journals:

- Acta Materialia
- Metallurgical Transactions
- Materials Science and Engineering
- Journal of Materials Science
- Corrosion Science
- Electrochemical ACTA
- Journal of Alloys and Compounds
- International Journal of Hydrogen Energy
- Scripta Materialia

Consulting
Consultation services provided to research institutes, foreign universities, and companies in Israel, USA and Europe.

Present Research Activities

1. Hydrogen Effects on Advanced Materials (Intermetallics, Metal Matrix Composites, Amorphous, Nanocrystalline and Quasicrystalline Materials). Mechanisms of hydrogen-related fracture.
2. Magnesium Science and Technology:
   - Environmental behavior of magnesium alloys (Corrosion, Stress Corrosion Cracking, Hydrogen Embrittlement)
   - Alloy development and physical metallurgy of magnesium alloys
3. Physical Metallurgy and Environmental Behavior of Light Metals (Magnesium, Aluminum, Titanium).
6. Materials Selection and Failure Analyses.
7. High temperature materials.

Supervision of 73 Ph.D. and M.Sc Theses

Grant received

During tenure, awarded more than 10 million dollars in grants from European and USA funds.

Publications

- **7 Edited Books**
- **229 Scientific Publications: Refereed Articles in Scientific Journals and Chapters in Collective Volumes**
- **325 Scientific Publications: Conference Proceedings**
- **Over 100 Conferences Invited as Plenary and Keynote Speaker**

A. Google Scholar Citation:

Cited by		VIEW ALL
	All	Since 2020
Citations	10048	2916
h-index	48	29
i10-index	144	69

B. Research Gate (RG):

Dan Eliezer

Doctor of Science · Professor Emeritus at Ben-Gurion University of the Negev

Israel

4,694 Research Interest Score | **8,014** Citations | **44** h-index

Overall publications stats

4,694	91,088	8,014	172
Research Interest Score	Reads ⓘ	Citations	Recommendations
+5.0 last week	+115 last week	+7 last week	---

Research Interest Score: **4,694** +5.00

Score breakdown

- **74.50%** Citations
- **0.7510%** Recommendations
- **13.37%** Full-text reads
- **11.38%** Other reads

Compared to all ResearchGate members

Your Research Interest Score is higher than 98% of ResearchGate members.

Compared by date of first publication

Your Research Interest Score is higher than 90% of ResearchGate members who first published in 1971.

Article	Number of Citations (over 100)	
The role of the magnesium industry in protecting the environment E Aghion, B Bronfin, D Eliezer Journal of materials processing technology 117 (3), 381-385	632	2001
Synthesis, properties and applications of titanium aluminides FH Froes, C Suryanarayana, D Eliezer Journal of materials science 27 (19), 5113-5140	536	1992
The science, technology, and applications of magnesium FH Froes, D Eliezer, E Aghion Jom 50 (9), 30-34	492	1998
Magnesium alloys and their applications KU Kainer, BL Mordike Wiley-Vch	423	2000
Magnesium science, technology and applications D Eliezer, E Aghion, FH Froes Advanced Performance Materials 5 (3), 201-212	421	1998
The relation between severe plastic deformation microstructure and corrosion behavior of AZ31 magnesium alloy GB Hamu, D Eliezer, L Wagner Journal of alloys and compounds 468 (1-2), 222-229	395	2009
Characteristics of hydrogen embrittlement, stress corrosion cracking and tempered martensite embrittlement in high-strength steels N Eliaz, A Shachar, B Tal, D Eliezer Engineering failure analysis 9 (2), 167-184	306	2002
The influence of austenite stability on the hydrogen embrittlement and stress-corrosion cracking of stainless steel D Eliezer, DG Chakrapani, CJ Altstetter, EN Pugh Metallurgical Transactions A 10 (7), 935-941	226	1979
Positive effects of hydrogen in metals D Eliezer, N Eliaz, ON Senkov, FH Froes Materials Science and Engineering: A 280 (1), 220-224	210	2000
The relation between microstructure and corrosion behavior of Mg–Y–RE–Zr alloys G Ben-Hamu, D Eliezer, KS Shin, S Cohen Journal of Alloys and Compounds 431 (1-2), 269-276	167	2007
An increase of the spall strength in aluminum, copper, and Metglas at strain rates larger than $10^7 s^{-1}$ E Moshe, S Eliezer, E Dekel, A Ludmirsky, Z Henis, M Werdiger, ... Journal of Applied Physics 83 (8), 4004-4011	138	1998
Hydrogen-assisted processing of materials N Eliaz, D Eliezer, DL Olson Materials Science and Engineering: A 289 (1-2), 41-53	136	2000
The relation between microstructure and corrosion behavior of AZ80 Mg alloy following different extrusion temperatures M Ben-Haroush, G Ben-Hamu, D Eliezer, L Wagner Corrosion Science 50 (6), 1766-1778	133	2008
The role of Si and Ca on new wrought Mg–Zn–Mn based alloy G Ben-Hamu, D Eliezer, KS Shin Materials Science and Engineering: A 447 (1-2), 35-43	124	2007
The hydrogen embrittlement of titanium-based alloys E Tal-Gutelmacher, D Eliezer Jom 57 (9), 46-49	115	2005
The mechanochemical behavior of type 316L stainless steel EM Gutman, G Solovioff, D Eliezer Corrosion science 38 (7), 1141-1145	111	1996
Hydrogen-assisted degradation of titanium based alloys E Tal-Gutelmacher, D Eliezer Materials transactions 45 (5), 1594-1600	106	2004
An overview of hydrogen interaction with amorphous alloys N Eliaz, D Eliezer Advanced Performance Materials 6 (1), 5-31	101	1999

(A) Scientific Publications: Edited Books

1. J. Baram, D. Itzhak and D. Eliezer Eds., *Proceedings of the Fourth Israel Materials Engineering Conference (I & II),* Ben Gurion University, Israel (1988).

2. D. Itzhak, D. Eliezer and J. Haddad Eds, "*Proceedings of the Sixth Israel Materials Engineering Conference (I & II)"*, Ben Gurion University, Israel, (1993).

3. E. Aghion and D. Eliezer Eds., "*Magnesium 97: Proceedings of the First Israeli International Conference on Magnesium Science and Technology*", MRI Ltd., Israel, (1998).

4. F.H. Froes, C.M. Ward-Close, D. Eliezer and P. McCormick Eds., "*Synthesis of Lightweight Metals III: Proceedings of the 1999 TMS Annual Meeting*", TMS, U.S.A., (1999).

5. E. Aghion and D. Eliezer Eds., "*Magnesium 2000: Proceedings of the Second Israeli International Conference on Magnesium Science and Technology*", Magnesium Research Institute (MRI) Ltd., Israel, (2000).

6. F.H. Froes, E. Chen, R.R. Boyer, E.M. Taleff, L. Lu, D.L. Zhang, C.M. Ward-Close and D. Eliezer Eds. "*High-Performance Metallic Materials for Cost-Sensitive Applications: Proceedings of the TMS 2002 Annual Meeting"* The Minerals, Metals & Materials Society (TMS)U.S.A., (2002).

7. E. Aghion and D. Eliezer Eds., "*Magnesium 2004: Proceedings of the Third Israeli International Conference on Magnesium Science and Technology*", Magnesium Research Institute (MRI) Ltd., Israel, (2004).

(B) Scientific Publications: Refereed Articles in Scientific Journals and Chapters in Collective Volumes

1. D. G. Brandon and D. Eliezer, "The Mechanical Properties of Anodically Formed Aluminum Oxide Films", *Mater. Res. Bull.,* 6, 3,153 (1971).

2. D. Eliezer and D. G. Brandon, "The Mechanical Properties of Anodic Tantalum Oxide Films", *Thin Solids Films,* 12, 2, 319-23 (1972).

3. D. Eliezer, S. Nadiv and M. Ron, "Kinetics of Sintering in β-Fe-Ge", *J. of Physique,* 6, 480 (1974).

4. D. Eliezer, S. Nadiv and M. Ron, "Mossbauer Study of Eta Phase in Fe-Ge Binary System", *Appl. Phy. Lett.,* 26, 6, 340-1 (1975).

5. D. Eliezer, D. G. Chakrapani, C.J. Alstetter and E. N. Pugh, "The Influence of Austentic Stability on the Hydrogen Embrittlement and Stress Corrosion Cracking of Stainless Steel", *Metall. Trans,*10A, 7, 935, (1979).

6. D. Eliezer and H.G. Nelson, “Hydrogen Attack of 1020 Steel Influence of Hydrogen Sulfide”, *Corrosion,* 35, 1, 17 (1979).

7. D. Eliezer, S. F. Dirnfield and S. Nadiv, “Phase Transition Kinetics of Formation of β-Fe5Ge3 in Isothermal Sintering”, *Metall. Trans* 11A, 5, 679, (1980).

8. A. Arbel and D. Eliezer, “High Temperature Expansion of Pressure Vessels Containing Gas Producing Materials”, *High Temp. High Press,* 13, 413 (1981).

9. D. Eliezer, "High Temperature Hydrogen Attack Studies", in *Hydrogen Effects in Metals,* I. M. Bernstein and A. W. Thompson, Ed. The Metallurgical Society of AIME, U.S.A. 913, (1981).

10. D. Eliezer, "Hydrogen Assisted Cracking in Type 304L and 316L Stainless Steel," in *Hydrogen Effects in Metals,* I. M. Bernstein and A. W. Thompson, Eds. The Metallurgical Society of AIME, U.S.A., 565, (1981).

11. D. Eliezer, P. Pinkus and D. Itzhak, “Stress Corrosion of Type 304 Steel in H_2SO_4 Alkali Halide Environments”, *Envir. Degrad. of Eng. Materials,* 21, 193-9 (1981).

12. P. Pinkus, D. Eliezer and D. Itzhak, “The Influence of Alkali-Halide Additions on the Stress Corrosion Cracking of Austenitic Stainless Steel in $MgCl_2$ Solution”, *Corr. Sci.,* 21, 6, 417-23 (1981).

13. A. Arbel and D. Eliezer, “Some Aspects of Biaxial Creep Testing of Thin Walled Cylindrical and Spherical Pressure Vessels”, *ASTM J. Testing and Eval.,* 9, 2, 141-3, (1981).

14. D. Eliezer, “The Effect of the Methods of Preparation on the Mossbauer Spectrum of a FeGe Intermetallic Compound”, *J. Mater. Sci.,* 16,4, 1008-12 (1981).

15. E. Manor, M. Talianker and D. Eliezer, “TEM Investigation of Hydrogen Induced ε-HCP Martensite in 316L Type Stainless Steel”, *J. Mater. Science,* 16, 3506 (1981).

16. Y. Rosenthal, M. Markowitch, A. Stern and D. Eliezer, “The Influence of Hydrogen on the Plastic Flow and Fracture Behavior of 316L Stainless Steel”, *Scrip. Metall.,* 15, 8, 861-6 (1981).

17. E. Manor and D. Eliezer, “Hydrogen-Assisted Cracking of Sensitized 316L Stainless Steel”, *J. Mater. Sci.,* 16, 9, 2507-11(1981).

18. D. Eliezer, “High Temperature Hydrogen Attack of Carbon Steel”, *J. Mater. Sci.,* 16, 11, 2962-6 (1981).

19. Y. Rosenthal, M. Markowitch, A. Stern and D. Eliezer, “Flow and Strain-Hardening of Austentic Stainless Steels After Thermal Precharging with Low Pressure Hydrogen Gas”, in *Hydrogen Effects in Metals,* I. M. Bernstein and A. W. Thompson, Ed., The Metallurgical Society of AIME, U.S.A.,4, 725 (1982).

20. P. Rozenak, E. Manor and D. Eliezer, “Effect of Metallurgical Variables on Environmental Fracture of Stainless Steel”, in *Hydrogen Effects in Metals*, I. M. Bernstein and A. W. Thompson, Ed., The Metallurgical Society of AIME, U.S.A. 4, 893, (1982).

21. E. Manor and D. Eliezer, “The Role of Second Phases on the Hydrogen Embrittlement of Austentic Stainless Steels”, in *Hydrogen Effects in Metals*, I. M. Bernstein and A. W. Thompson, Ed., U.S.A., The Metallurgical Society of AIME, 4, 917, (1982).

22. E. Manor and D. Eliezer, “Phase Transitions at the Crack Tip in Type 316L Stainless Steel Cathodically Hydrogen Charged”, *Scrip. Metall.*, 16, 8, 981-4 (1982).

23. E. Minkovitz and D. Eliezer, “TEM Study on the Formation of Microcracks in Connection with α‘Martensite”, *J. Mater. Sci. Lett.*, 1, 5, 192-4 (1982).

24. E. Manor and D. Eliezer, “Grain Size and Heat Treatment Effects in Hydrogen Assisted Cracking of Austentic Stainless Steels”, *J. Mater. Science*, 17, 11, 3165-72, (1982).

25. D. Itzhak and D. Eliezer, “The Stress Corrosion Cracking of Welded Austentic Stainless Steel in $MgCl_2$ Solutions in the Presence of NaI Additions”, *Corr. Sci.*, 23, 12, 1285-91 (1983).

26. A. Arbel and D. Eliezer, “Optimizing Cylindrical and Spherical Pressure Vessels Containing Ideally Behaving Gas and Solid Inserts”, *Trans. ASME J. Press. Vess. Tech.*, 105, 1, 9-10, (1983).

27. Y. Rosenthal, M. Markowitch, A. Stern and D. Eliezer, “Plastic Flow of and Fracture of Ti Modified 316 Austentic Stainless Steel after High Temperature Aging”, *Hydrogen Fusion Technology*, 2, 789 (1983).

28. P. Rozenak, L. Zevin and D. Eliezer, “Internal Stresses in Austentic Stainless Steels Cathodically Charged with Hydrogen”, *J. Mater. Sci. Lett.*, 2, 63-6, (1983).

29. D. Eliezer, A. Arbel and P. Rozenak, “Hydrogen Induced Delay Failure of AISI 316L and 321 Types Stainless Steels”, *J. Mater. Sci. Lett.*, 2, 10, 602-4 (1983).

30. P. Rozenak and D. Eliezer, "Effects of Metallurgical Variables on Hydrogen Embrittlement in AISI Type 316, 321 and 347 Stainless Steels," *Mater. Sci. Eng.*, 61, 1, 31-41, (1983).

31. A. Raizman, J. Barak, D. Zamir and D. Eliezer, “NMR Study of Hydrogen in Cathodically Charged Inconel 718”, *J. Nucl. Mater.*, 119, 1, 73-77, (1983).

32. A. Raizman, J. Barak, D. Zamir and D. Eliezer, “Application of NMR to the Study of Hydrogen in Inconel”, *Bulletin on Magnetic Resonance* pp. 210, (1983).

33. D. Eliezer, “The Behavior of 316 Stainless Steel in Hydrogen”, *J. Mater. Sci.*, 19, 5, 1540-7 (1984).

34. L.S. Zevin, P. Rozenak and D. Eliezer, “Quantitative X-Ray Phase Analysis of Surface Layers”, *J. Appl. Crystal.*, 17, 1, 18-21 (1984).

35. P. Rozenak, L. Zevin and D. Eliezer, “Hydrogen Effects on Phase Formations in Austentic Stainless Steels”, *J. Mater. Sci.*, 19, 2, 567-73 (1984).

36. Y. Rosenthal, M. Markowitch, A. Stern and D. Eliezer, “Tensile Flow and Fracture Behavior of Austentic Stainless Steels after Thermal Aging in Hydrogen Atmosphere”, *Mater. Sci. Eng.*, 67, 1, 91-107 (1984).

37. P. Rozenak and D. Eliezer, “Quantitative X-Ray Phase Analysis of Sensitized Type 316 Stainless Steel after Cathodic Hydrogen Charging”, *Mater. Sci. Eng.*, 67,1, 1-4, (1984).

38. P. Rozenak and D. Eliezer, “Effects of Aging after Cathodic Charging in Austentic Stainless Steels”, *J. Mater. Sci.*, 19, 12, 3873-9, (1984).

39. S.J. Savage, F. H. Froes, and D. Eliezer, "Microstructural Characterization of As-Cast Rapidly Solidified Al-Sm, Al-Gd, and Al-Er Binary Alloys", in *Rapidly Solidified Materials*, P. W. Lee and R. Carbonara Ed., The American Society for Metals, U.S.A., 351-356, (1985).

40. P. Rozenak and D. Eliezer, “Environmental Hydrogen Embrittlement of Stainless Steels: Effect of Microstructure”, *Microstructural Science*, 14, 437-459, (1985).

41. P. Rozenak and D. Eliezer, “Precipitation Behaviour of Sensitized AISI Type 316 Stainless Steel in Hydrogen”, *J. Mater. Sci.*, 21, 9, 3065-70 (1986).

42. E. Minkovitz, M. Talianker and D. Eliezer, “Streaking Effects Rising From Hydrogen Induced ε-Martensite Phase in Stainless Steel”, *Mater. Sci. Eng.*, 83, 1, 269-79 (1986).

43. D. Eliezer, G. John and F.H. Froes, “Mossbaur Study of Rapidly Solidified Al-Rare Earth Alloys”, *J. of Materials Science Letters*, 5, 781-2 (1986).

44. S. J. Savage and D. Eliezer, “Microstructural Observations and Thermal Stability of a Rapidly Solidified Aluminum-Gadolinium Alloy”, *Metall. Trans A*, 18A, 1533 (1987).

45. P. Rozenak and D. Eliezer, “Phase Changes Related to Hydrogen Induced Cracking in Austentic Stainless Steel”, *Acta Metall.*, 35, 9, 2329-40 (1987).

46. M. Fass, D. Itzhak, F.H. Froes and D. Eliezer, “Corrosion Behaviour of Rapidly Solidified Al-Er Binary and Ternary Alloys in NaCl Solution at Room Temperature”, *J. Mater. Sci. Lett.*, 6, 10), 1227-8 (1987).

47. Ruder and D. Eliezer, “Microstructure and the Thermal Stability of Rapidly Solidified Aluminum—Rare Earth Alloys”, *Isr. J. Technology*, 24, 149 (1988).

48. E. Manor -Minkovitz and D. Eliezer, “Hydrogen Induced Phase Transitions of Sensitized Titanium-Modified type 316 Stainless Steel”, *Isr. J. Technology*, 24, 211 (1988).

49. E. Abramov and D. Eliezer, “Trapping of Hydrogen in Helium Implanted Metals”, *J. Mater. Sci. Lett.*, 7, 2, 108-12, (1988).

50. P. Rozenak and D. Eliezer. “Nature of the γ and γ* Phases in Austentic Stainless Steel Cathodically Charged with Hydrogen”, *Metall. Trans*, 19A, 3, 723-30 (1988).

51. E. Manor and D. Eliezer, “Hydrogen Induced Phase Transitions of Sensitized Titanium-Modified Type 316 Stainless Steel”, *Scr. Metall.* 22, 9, 1415 (1988).

52. E. Manor and D. Eliezer, “Phase Transitions at the Crack Tip in Type 310 Stainless Steel Cathodically Hydrogen Charged”, *Scripta Metall.*, 22,9, 1493-8 (1988).

53. M. Fass, D. Itzhak, F.H. Froes and D. Eliezer, “The Effects of Heat Treatment on the Corrosion Behaviour of Rapidly Solidified Al-Er Alloys in NaCl Solution”, *J. Mater. Sci. Lett.*, 7, 1, 76-8 (1988).

54. D. Bobrow, A. Arbel and D. Eliezer, “The Effect of Constant Load Creep on the Fracture Toughness and Tensile Behavior of Precipitation-Free-Zones Aluminium Alloy Type 2618”, *Scripta Metall.*, 22, 9, 1503-8 (1988).

55. E. Abramov and D. Eliezer, “A Theoretical Calculation of hydrogen Trapping in Helium Containing Metals”, *Isr. J. Technology*, 24, 197-209, (1988).

56. E. Manor and D. Eliezer, “Hydrogen Induced Phase Transitions of Sensitized Titanium-Modified Type 316 Stainless Steel*”, Isr. J. Technology*, 24, 211-6 (1988).

57. J. Haddad, L. Zevin and D. Eliezer, “Phase Relation in Titanium-Aluminide Alloy - An X-Ray Study”, *J. of Materials Science*, 27, 108 (1988).

58. M. Fass and D. Eliezer, “Oxidation Behaviour of Rapidly Solidified Aluminum Rare Earth Alloys”, *J. Mat. Sci. Lett.*, 8, 2, 178-82, (1989).

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