

15 December, 2021

## Curriculum Vitae and List of Publication

### Personal Details

Name: **Avi Levy**

Date and Place of Birth: February 19, 1962, Tel-Aviv, Israel

Marital status: Married

Children: Three daughters

Regular Military Service: October 1980-October 1986

Address & Telephone Number at Work:

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### Education

- |       |           |  |
|-------|-----------|--|
| B.Sc. | 1986-1990 | Mechanical Engineering Department, Ben-Gurion University of the Negev, Beer-Sheva, Israel.<br><b>Graduated Cum Laude</b>   |
| Ph.D. | 1990-1995 | Mechanical Engineering Department, Ben-Gurion University of the Negev, Beer-Sheva, Israel.<br>Name of advisors: Prof. Gabi Ben-Dor & Dr. Shaul Sorek<br>Title of Thesis: Wave Propagation in a Saturated Porous Medium<br><b>Graduated Summa Cum Laude</b> |

## Employment History

- 2017 - Present Faculty of Engineering Sciences, Dean  
Ben-Gurion University of the Negev, Beer-Sheva, Israel.
- 2012 - 2017 Department of Mechanical Engineering, Head  
Ben-Gurion University of the Negev, Beer-Sheva, Israel.
- 2009 - Present Professor  
Department of Mechanical Engineering,  
Ben-Gurion University of the Negev, Beer-Sheva, Israel.
- 2006 - 2012 Engineering 1st year Program, Head  
Ben-Gurion University of the Negev, Eilat, Israel.
- 2008 - 2010 Department of Mechanical Engineering, Deputy Head
- 2004 - 2009 Associate Professor  
Department of Mechanical Engineering,  
Ben-Gurion University of the Negev, Beer-Sheva, Israel.
- 2004 - 2005 Visiting Professor  
Canadian Hydraulics Centre, National Research Centre Canada,  
Ottawa, ON, Canada.
- 1998 - 2004 Senior Lecturer  
Department of Mechanical Engineering,  
Ben-Gurion University of the Negev, Beer-Sheva, Israel.
- 7 – 8 /1998 Visiting Researcher - Bulk Solids Handling  
Centre for Industrial Bulk Solids Handling,  
Department of Physical Sciences,  
Glasgow Caledonian University, Glasgow, United Kingdom.
- 1997 - 1998 Lecturer  
Department of Mechanical Engineering,  
Ben-Gurion University of the Negev, Beer-Sheva, Israel.
- 1995 - 1997 Research Fellow - Bulk Solids Handling  
Centre for Industrial Bulk Solids Handling,  
Department of Physical Sciences,  
Glasgow Caledonian University, Glasgow, United Kingdom.
- 7-9 / 1992 Visiting Researcher  
Shock Wave Interaction with Porous Media.  
School of Mechanical Engineering, University of  
Witwatersrand, Johannesburg, South Africa.
- 1990 - 1995 Teaching Assistant - Control Theory and Linear Systems  
Department of Mechanical Engineering,  
Ben-Gurion University of the Negev, Beer-Sheva, Israel.
- 1989 - 1990 Research Assistant - Two Phase Flow  
Institute of Applied Research - Energy Group,  
Ben-Gurion University of the Negev, Beer-Sheva, Israel.

## Professional Activities

### (a) Position in academic administration

- 1997 – 2004 – **Member**, Departmental computerizing committee, Dept. of Mech. Eng., BGU
- 1998 – 1999 – **Member**, Departmental seminars committee, Dept. of Mech. Eng., BGU
- 1999 – 2003 – **Member**, Departmental projects committee, Dept. of Mech. Eng., BGU
- 2001 – 2003 – **Member**, Departmental awards committee, Dept. of Mech. Eng., BGU
- 2002 – 2003 – **Member**, Departmental graduate studies committee, Dept. Mech. Eng., BGU
- 2002 – 2004 – **Member**, Departmental pedagogy committee, Dept. Mech. Eng., BGU
- 2003 – 2004 – **Member**, Departmental educational programs committee, Dept. Mech. Eng., BGU
- 2003 – 2004 – **Departmental Undergraduate Studies Coordinator**, Dept. Mech. Eng., BGU
- 2005 – 2007 – **Member**, Departmental educational programs committee, Dept. Mech. Eng., BGU
- 2005 – 2007 – **Departmental Undergraduate Studies Coordinator**, Dept. Mech. Eng., BGU
- 2005 – Present – **Member**, Departmental pedagogy committee, Dept. Mech. Eng., BGU
- 2005 – 2011 – **Chairman**, Pearlsone Centre for Aeronautical Engineering Studies, Dept. Mech. Eng., BGU
- 2007 – 2008 – **Member**, Natural Sciences educational programs for the Faculty of Engineering Sciences committee, Faculty of Engineering Sciences, BGU.
- 2007 – 2008 – **Member**, Faculty regulations committee, Faculty of Engineering Sciences, BGU.
- 2008 – 2012 – **Member**, Departmental research assistants committee, Dept. Mech. Eng., BGU
- 2008 – 2010 – **Chairman**, Departmental educational programs committee, Dept. Mech. Eng., BGU
- 2008 – 2011 – **Chairman**, Dean's committee, Faculty of Engineering Sciences, BGU
- 2008 – 2011 – **Chairman**, Faculty of Engineering Sciences awards committee, BGU
- 2012 – 2017 – **Head**, Dept. Mech. Eng., BGU
- 2017 – present – **Dean**, Faculty of Engineering Sciences, BGU
- 2021-present – Member of the **Executive Committee of BGU-NJIT institute**

(b) Professional functions outside the university

- 1997- **Session Chair** at the 2<sup>nd</sup> Israel Conference for Handling and Conveying of Particulate Solids, Jerusalem, Israel.
- 1998- **Member of the organizing committee** - 13<sup>th</sup> International Symposium on Mach Reflection, Ben-Gurion University of the Negev, Beer-Sheva, Israel.
- 1999- **Chair** of the 2<sup>nd</sup> EF Conference on Pneumatic and Hydraulic Conveying Systems, Davos, Switzerland.
- 2000- **Co-Chair of** the 3<sup>rd</sup> Israel Conference for Handling and Conveying of Particulate Solids, Dead Sea, Israel.
- 2001- **Member of the International Advisory Committee** of the 7<sup>th</sup> International Conference on Bulk Materials Storage, Handling and Transportation, Newcastle, Australia.
- 2003- **Session Chair** at the 4<sup>th</sup> International Conference for Conveying and Handling of Particulate Solids, Budapest, Hungary
- 2004- **Session Chair** at the ICBMH'04, Wollongong, Australia
- 2006- **Member of the International Advisory Committee** of the 5<sup>th</sup> International Conference for Conveying and Handling of Particulate Solids, Sorrento, Italy.
- 2007- **Member of the International Advisory Committee** of the 9<sup>th</sup> international conference on bulk materials storage, handling and transportation, Newcastle, Australia.
- 2007- **Session Chair** at the 9<sup>th</sup> ICBMH, Newcastle, Australia
- 2007/8- **Member of the Scientific Committee** of the 4<sup>th</sup> International Symposium on Reliable Flow of Particulate Solids (RELPOWFLO), Tromsø, Norway.
- 2007- 2012 - **Chair of the International Scientific Committee** of CHOPS (Conveying and Handling of Particulate Solids).
- 2008- Present, **Member of the Advisory Committee of HPC** (Heat Powered Cycles) Conference
- 2009 - **Session Chair** at the 6<sup>th</sup> International Conference for Conveying and Handling of Particulate Solids, Brisbane, Australia, 2009.
- 2010 - **Session Chair** at the 17<sup>th</sup> International Drying Symposium, MARITIM Hotel Magdeburg, Germany. October 3 – 6, 2010.
- 2012 - **Special session Chair** at the 32<sup>nd</sup> Israeli Conference on Mechanical Engineering - ICME2012, Tel Aviv, Israel
- 2012 - **Special session** at the 7<sup>th</sup> International Conference for Conveying and Handling of Particulate Solids, Friedrichshafen, Germany, 2012.
- 2012 - **Member of the Scientific Committee** of the 32<sup>nd</sup> Israeli Conference on Mechanical Engineering - ICME2012, Tel Aviv, Israel.
- 2012 - **Member of the International Advisory Committee** of the 18<sup>th</sup> International Drying Symposia Series (IDS), Xiamen, China
- 2013 - **Member of the International Advisory Committee** 11<sup>th</sup> International Conference on Bulk Materials Storage, Handling and Transportation, Newcastle, Australia

- 2013 - **Member of the Advisory Committee**, Powder, Granule and Bulk Solids: Innovations and Applications” at Thapar University, Patiala, India on 28-30th November 2013.
- 2014- **Member of the International Advisory Committee** of the 19<sup>th</sup> International Drying Symposia Series (IDS), Lyon, France
- 2014 - **Co-Chair of** the 8<sup>th</sup> International Conference for Handling and Conveying of Particulate Solids, CHoPS 2015, Tel Aviv, Israel.
- 2015 - **Special session** at the 8<sup>th</sup> International Conference for Conveying and Handling of Particulate Solids, , CHoPS 2015, Tel Aviv, Israel.
- 2015 - **Member of the International Scientific Committee** Reliable Flow of Particulate Solids V ( RELPOWFLO V ), to be held June 13-15, 2017 in Skien, Norway
- 2016 - **Member of the International Scientific Committee** of the 20<sup>th</sup> International Drying Symposia Series (IDS) Gifu, Japan.
- 2016 - **Member of the International Scientific Committee** of International Conference on Processing, Handling and Characterization of Particulate Materials (PARMAT2017).
- 2017 - **Session Chair** at Reliable Flow of Particulate Solids V ( RELPOWFLO V ), June 13-15, 2017 in Skien, Norway.
- 2018 - **Session Chair** at 8th World Congress on Particle Technology (WCPT8). Orlando, FL. April 2018.
- 2018 - **Session Chair** at 9th International Conference of Conveying and Handling of Particulate Solids (CHoPS), London, United Kingdom, September 10th-14th, 2018.
- 2018 - **Member of the International Scientific Committee** of the 21<sup>st</sup> International Drying Symposium (IDS), Valencia, Spain.
- 2018 - **Member of the International Scientific Committee** at 9th International Conference of Conveying and Handling of Particulate Solids (CHoPS), London, United Kingdom, September 10th-14th, 2018.
- 2019 - **Member of the International Scientific Committee** The 13<sup>th</sup> International Conference on Bulk Materials Storage, Handling & Transportation
- 2020 - **Member of the International Scientific Committee** of the 22<sup>nd</sup> International Drying Symposium (IDS), Worcester, Massachusetts, USA.
- 2020 - **Member of the conference board** of POWTECH India, Mumbai, India.

(c) Memberships in professional/scientific societies

- 1994 – Present, Member of the Israeli forum for handling and conveying of particulate solids
- 2001 – Present, Member of the International Scientific Council for the International Conference for Conveying and Handling of Particulate Solids
- 2006 – Present, Member of the Aero Club of Israel, in association with the FAI.
- 2006 – Present, Member of the International Freight Pipeline Society.
- 2010– Present, Member of the Working Party Drying of the European Federation of Chemical Engineering.

## **Honors, Citation Awards**

- 1987 - Jakobs' Prize for Excellency in Thermal Sciences
- 1988 - Mechanical Engineering Department Chairman's Award for best academic record during 3<sup>rd</sup> year of B.Sc. studies. Overall average 93.0.
- 1988 - Faculty of Engineering Dean's award for outstanding academic record during 3<sup>rd</sup> year of B.Sc. studies.
- 1988 - Knesset's Excellency Award for outstanding academic performance.
- 1989 - Mechanical Engineering Department Chairman's Award for best academic record during 4<sup>th</sup> year of B.Sc. studies. Overall average 95.3.
- 1989 - Ben-Gurion University Rector's award for outstanding academic record during 4<sup>th</sup> year of B.Sc. studies.
- 1990 - Knesset's Excellency Award for outstanding academic performance.
- 1990 - Jacob Ben Isaac Hachoen's Award.
- 1991 - Jacob Ben Isaac Hachoen's Award.
- 1992 - Ph.D. Scholarships Awards from the World Sephardi Federation Fund and from the Jewish Agency Fund.
- 1993 - Ph.D. Scholarships Awards from the World Sephardi Federation Fund and from the Jewish Agency Fund.
- 1993 - Faculty of Engineering Dean's award for outstanding academic record during 3<sup>rd</sup> year of Ph.D. studies.
- 1994 - Ph.D. Scholarships Awards from the World Sephardi Federation Fund and from the Jewish Agency Fund.
- 1995 - Ben-Amitai Award for Excellency in Graduate Studies.
- 1995 - Fulbright Israel Post-Doctoral Fellowships
- 2008 - Faculty Award for improving academic processes
- 2015 – Certificate of Appreciation from Powder & Bulk Solids India.

## **Refereed Articles and Letters in Scientific Journals (for the past 10 years)**

Google scholar: h-index: 40 citations: 6600

- 1) Mezhericher M., Brosh T. and Levy A., Modelling of Particle Pneumatic Conveying using DEM and DPM Methods, *Particulate Science & Technology*, Vol.29(2), 197-208, 2011.
- 2) Brosh T., Kalman H. and Levy A., Implementation of Comminution Functions in DEM Simulation of Dilute-Phase Pneumatic Conveying, *Granular Matter* 13(2): 447-453, 2011.
- 3) Mezhericher M., Levy A., Borde I., Modelling the Morphological Evolution of Nanosuspension Droplet in Constant-Rate Drying Stage, *Chemical Engineering Science* 66, 884–896, 2011.
- 4) Shimshi E., Ben-Dor G. and Levy A., Viscous simulation of shock reflection hysteresis in ideal and tapered over expanded planar nozzles, *Shock Waves: Volume* 21(3), 205-214, 2011.
- 5) Rozenblat Y., Portnikov D., Levy A., Kalman H., Aman S. and Tomas J., Strength Distribution of Particles under Compression, *Powder Technology*, 208, 215-224, 2011.
- 6) Jelinek M., Levy A. and Borde I., Performance of a triple-pressure level absorption/compression cycle, *Applied Thermal Engineering*, 42, 2-5, 2012.
- 7) Kapusta A., Levy A., Mikhailovich B., Phase-modulated currents in induction heating, *COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering*, 30(5), 1598-1605
- 8) Brosh T., Kalman H. and Levy A., Fragments spawning and interaction models for DEM breakage simulation, *Granular Matter*, 16(6), 765-776, 2011.
- 9) Rozenblat Y., Grant E., Levy A., Kalman H. and Tomas J., Selection and Breakage Functions of Particles under Impact Loads, *Chemical Engineering Science*, 71, 56-66, 2012.
- 10) Mezhericher M., Levy A., Borde I., Probabilistic Hard-Sphere Model of Binary Particle-Particle Interactions In Multiphase Flow of Spray Dryers, *International Journal of Multiphase Flow*, 43, 22-38, 2012.  
DOI: 10.1016/j.ijmultiphaseflow.2012.02.009
- 11) Mezhericher M., Levy A., Borde I., Three Dimensional Spray Drying Modelling Based on Advanced Droplet Drying Kinetics, *Drying Technology*, 30, 1256–1273, 2012.
- 12) Levy A., *Modern Drying Technology Vol 4: Energy Savings – Review*, *Drying Technology*, 32, 246, 2014.
- 13) Mezhericher M., Naumann M., Peglow M., Levy A., Tsotsas E. and Borde I., Continuous Species Transport and Population Balance Models for First Drying Stage of Nanosuspension Droplets, *Chemical Engineering Journal*, 210, 120–135, 2012.
- 14) Kapusta A., Levy A., Mikhailovich B., Convective Heat Transfer by Turbulent Melt Flow Excited by Travelling Magnetic Field at the Inductive Heating, *J. of Iron and Steel Research, International*, 19, 771-774, 2012.

- 15) Rozenblat Y., Levy A., Kalman H. and Tomas J., Impact Velocity and Compression Force Relationship - Equivalence Function, *Powder Technology*, 235, 756–763, 2013.
- 16) Rozenblat Y., Levy A., Kalman H., Peyron I., and Ricard F., A model for particle fatigue due to impact loads, *Powder Technology*, 239, 199–207, 2013.
- 17) Tsory T., Ben-Jacob N., Brosh T. and Levy A., Thermal DEM-CFD modeling and simulation, *Powder Technology*, 244, 52-60, 2013.
- 18) Rodnianski V., Krakauer N., Darwesh K., Levy A., Kalman H., Peyron I., and Ricard. F., Aerodynamic classification in a spiral jet mill, *Powder Technology* 243, 110–119, 2013.
- 19) Ben-David O., Levy A., Mikhailovich B., and Azulay A., 3D numerical and experimental study of gallium melting in a rectangular container, *International Journal of Heat and Mass Transfer*, 67, 260–271, 2013.
- 20) Maurice U., Mezhericher M., Levy A. and Borde I., Drying of Droplet Containing Insoluble Nanoscale Particles: Numerical Simulations and Parametric Study, *Drying Technology*, 31, 1790–1807, 2013.
- 21) Brosh T., Kalman H. and Levy A., Accelerating CFD-DEM simulation of processes with wide range particle size distribution, *Particuology*, 12, 113-121, 2014.
- 22) Brosh T., Kalman H. and Levy A., " DEM-CFD simulation of Particle Comminution in Jet-Mill, *Powder Technology*, 257, 104-112, 2014.
- 23) Ben-David O., Levy A., Mikhailovich B., and Azulay A., " Magnetohydrodynamic flow excited by rotating permanent magnets in an orthogonal container", *Physics of Fluids*, 26, 097104, 2014.
- 24) Ben-David O., Levy A., Mikhailovich B., and Azulay A., Impact of rotating permanent magnets on gallium melting in an orthogonal container, *International Journal of Heat and Mass Transfer*, 81, 373–382, 2015.
- 25) Gurevich B., Jelinek M., Levy A. and Borde I., "Performance of a set of parallel bubble pumps operating with a binary solution of R134a-DMAC", *Applied Thermal Engineering*, 75, 724–730, 2015.
- 26) Mezhericher M., Levy A., and Borde I., Multi-Scale Multiphase Modeling of Transport Phenomena in Spray-Drying Processes, *Drying Technology*, 33(1), 2-23, 2015.
- 27) Mikhailovich B., Ben-David O., Levy A., Liquid Metal Rotating Flow Under Permanent Magnetic System Impact, *Magnetohydrodynamics* 51(1), 171–176, 2015.
- 28) Uzi A., Ostrovski Y., Levy A., Modeling and Simulation of Mono-Layer Coating, *Drying Technology*, 33(15-16), 1798-1807, 2015.
- 29) Maurice U., Mezhericher M., Levy A. and Borde I., Drying of Droplets Containing Insoluble Nanoscale Particles: Second Drying Stage, *Drying Technology*, 33(15-16), 1837-1848, 2015.
- 30) Shimshi E., Ben-Dor G., Levy A. and Krothapalli A., "Asymmetric and unsteady flow separation in high Mach number planar nozzles", *International Journal of Aeronautical Science & Aerospace Research (IJASAR)*, 2(6), 55-70, 2015.

- 31) Uzi A., Ostrovski Y., Levy A., Modeling and Simulation of Particles in Gas-Liquid Interface, *Advanced Powder Technology*, 27, 112–123, 2016.
- 32) Jelinek M., Levy A. and Borde I., The influence of diffusion absorption refrigeration's operating conditions on its performance. *Applied Thermal Engineering*, 99, 979–987, 2016.
- 33) Hadad Y., Kochavi E. and Levy A., Inductive heating with a stepped diameter crucible, *Applied Thermal Engineering*, 102, 149-157, 2016.
- 34) Ben-David O., Levy A., Mikhailovich, B., Avnaim M. and Azulay A., Impact of Traveling Permanent Magnets on Low Temperature Metal Melting in a Cuboid, *International Journal of Heat and Mass Transfer*, 99, 882–894, 2016.
- 35) Avnaim M.H., Levy A., Mikhailovich, B., Ben-David O., Azulay A., Comparison of 3D Multi-Domain and Single-Domain Models for Describing the Horizontal Solidification of Gallium in a Rectangular Cavity', *Journal of Heat Transfer*, 138(11), 112301, 2016.
- 36) Ben-Ami Y., Uzi A., Levy A., Modelling the particles impingement angle to produce maximum erosion, *Powder Technology*, 301, 1032–1043, 2016.
- 37) Uzi A., Kalman H. and Levy A., A novel particle attrition model for conveying systems, *Powder Technology*, 298, 30–41, 2016.
- 38) Ben-Ami Y. and Levy A., Absorbed Shear Energy during Solid Particle Impact on Ductile Surface, *Wear*, 368-369, 162–172, 2016.
- 39) Maurice U., Mezhericher M., Levy A. and Borde I., Particle Formation from Droplet Containing Nanoparticles: Internal Bubble Growth. *Drying Technology*, 35(8), 969-984, 2017.
- 40) Uzi, A., Ben-Ami, Y., & Levy, A. Erosion Prediction of Industrial Conveying Pipelines. *Powder Technology*, 309, 49-60, 2017.
- 41) Eluk T., Levy A., Korytnyi E., Bar-Kohany T., Transition Mechanism Between Combustion Regions in Swirling Entrained Flow Downer Reactors, *Energy & Fuels*, 31 (2), 1927–1934, 2017
- 42) Uzi, A. & Levy, A. Particles' degradation and dynamics in conveying systems. *Powder Technology* 311, 247–256, 2017.
- 43) Avnaim M.H., Levy A., Mikhailovich B. & Azulay A. Numerical and Experimental Study of the Traveling Magnetic Field Effect on the Horizontal Solidification in a Rectangular Cavity Part 1: Liquid Metal Flow under the TMF Impact, *International Journal of Heat and Fluid Flow*, 69, 23-32, 2018.
- 44) Avnaim M.H., Levy A., Mikhailovich B. & Azulay A. Numerical and Experimental Study of the Traveling Magnetic Field Effect on the Horizontal Solidification in a Rectangular Cavity Part 2: Acting Forces Ratio and Solidification Parameters, *International Journal of Heat and Fluid Flow*, 69, 9-22, 2018.
- 45) Uzi, A. and Levy A., Flow characteristics of coarse particles in horizontal hydraulic conveying, *Powder Technology* 326, 302–321, 2018.
- 46) Tripathi, N., Levy, A. and Kalman, H., Acceleration Pressure Drop Analysis in Horizontal Dilute Phase Pneumatic Conveying System, *Powder Technology* 327, 43–56, 2018

- 47) Tripathi, N., Santo, N., Kalman, H. and Levy, A., Experimental Analysis of Particle Velocity and Acceleration in Vertical Dilute Phase Pneumatic Conveying Powder Technology, *Powder Technology*, 330, 239-251, 2018
- 48) Uzi, A. and Levy A., Energy absorption by the particle and the surface during impact, *Wear*, 404–405, 92-110, 2018.
- 49) Uzi, A. and Levy A., Collision characteristics for predicting particle attrition and pipe wear in conveying systems, *Chemical Engineering & Technology*, 41(8), 1511–1523, 2018.
- 50) Azulay, A., Mikhailovich, B., Levy, A. and Yakhot, A., Magnetic Field Advection in a Rotating Magnetic Field Driven Flow Induced by a Non-Ideal Inductor, *Physics of Fluids*, **30**, 075104, 2018. **Editor's Pick**
- 51) Uzi, A., Shen Y., Sibudjing, K., Levy, A. and Wang C.H., Permittivity and chemical characterization of woody biomass during pyrolysis and gasification, *Chemical Engineering Journal*, 355, 255-268, 2019
- 52) Rodnianski V., Kalman H. and Levy A., A new method for simulation of comminution process in jet mills, *Powder Technology*, 343, 867-879, 2019
- 53) L Barel, A. Eidelman, T Elperin, G Fleurov, N Kleeorin, A Levy, I Rogachevskii, Detection of standing internal gravity waves in experiments with convection over a wavy heated wall, arXiv preprint arXiv:1811.10388
- 54) Tripathi, N., Santo, N., Levy, A. and Kalman, H., Experimental analysis of velocity reduction in bends related to vertical pipes in dilute phase pneumatic conveying, *Powder Technology* 345, 190-202, 2019.
- 55) Solomon, L., Maurice U., Mezhericher M. and Levy A., Single-droplet drying processes at varying environmental conditions, *Drying Technology*, 38:1-2, 27-37, 2020.
- 56) Uzi, A. and Levy A., On the Relationship Between Erosion, Energy Dissipation and Particle Size, *Wear*, 428-429, 404-426, 2019.
- 57) Friman Peretz, M. and Levy A., Bends Pressure Drop in Hydraulic Conveying, *Advanced Powder Technology*, 30, 1484-1493, 2019
- 58) Friman Peretz, M., Geoola, F., Yehia, I., Ozer, S., Levia, A., Magadley, E., Brikman, R., Rosenfeld, L., Levy, A., Kacira, M., Teitel, M., Testing organic photovoltaic modules for application as greenhouse cover or shading element, *Biosystems Engineering*, 184, 24-36, 2019
- 59) Fominykh, A., Katra, I., Krasovitev, B., Levy, A., Adsorption of active trace gases by ensemble of ultrafine porous particles with impermeable cores, *Process Safety and Environmental Protection*, 131, 189-196, 2019.
- 60) Tripathi, N., Portnikov, D., Levy, A. and Kalman, H., Bend pressure drop in horizontal and vertical dilute phase pneumatic conveying systems, *Chemical Engineering Science*, 209, 115228, 2019.
- 61) Uzi, A., Beit Halevy, G. and Levy A., CFD-DEM Modeling of Soluble NaCl Particles Conveyed in Brine, *Powder Technology*, 360, 1278-1294, 2020
- 62) Pour, Y.D., Fominykh, A., Krasovitev, B. and Levy A., Effects of Gas Absorption with Chemical Dissociation Reaction on Single Slurry Droplet Drying, *Drying Technology*, 38, 664-675, 2020.

- 63) Friman-Peretz, M., Ozer, S., Geoola, F., Magadley, E., Yehia, I., Levi, A., Brikman, R., Gantz, S., Levy, A., Kacira, M. and Teitel, M., Microclimate and crop performance in a tunnel greenhouse shaded by organic photovoltaic modules – Comparison with conventional shaded and unshaded tunnels. *Biosystems Engineering*. 197, 12-31, 2020.
- 64) O Werner, A Azulay, B Mikhailovich, A Levy, Experimental Study of Sidewall Pressure Induced by Ferroparticles in Fluid under a Pulsating Magnetic Field, *Fluids* 5 (2), 98, 2020.
- 65) L. Barel, A. Eidelman, T. Elperin, G. Fleurov, N. Kleeorin, A. Levy, I. Rogachevskii, and O. Shildkrot, Detection of standing internal gravity waves in experiments with convection over a wavy heated wall, *Physics of Fluids*, 32, 095105, 2020.
- 66) Uzi, A. and Levy A., Energy absorption in particle breakage under impact load, *Powder Technology*, 377(2), 308-323, 2021.
- 67) Azulay, A., Mikhailovich, B., Levy, A. and Yakhot A., On turbulence measurement in rotating magnetic field-driven flow, *Phys. Fluids* 32, 105121, 2020. **Editor's Pick**
- 68) Yizhaq, H., Siminovich, A., Katra, I., Levy, A., Sullivan, R., Silverstro, S. and Yakhot, A., Turbulent Shear Flow Over Large Martian Ripples, *Journal of Geophysical Research: Planets*, 126 (2021).
- 69) Friman-Peretz, M., Ozer, S., Levi, A., Magadley, S., Yehia, I., Geoola, F., Gantz, S., Brikman, R., Levy, A., Kacira, M., Teitel, M., Energy partitioning and spatial variability of air temperature, VPD and radiation in a 1 greenhouse tunnel shaded by semitransparent organic PV modules, *Solar Energy* 220:578–589, (2021)
- 70) Tarodiya, R. and Levy, A., Surface erosion due to particle-surface interactions - A review, *Powder Technology*, 387, 527-559, 2021.
- 71) Krasovitev, B., Fominykh, A., Levy, A., Kleeorin, N., Katra, I., Dry deposition of dust particles during medium-and high-level dust storms to a forest canopy in a semi-arid region, *Atmospheric Pollution Research* 12 (5), 101058, 2021.
- 72) Tarodiya, R. and Levy, A., Erosion of polymers and polymer composites surfaces by particles, *Advanced Powder Technology*, 32(8), 3149-3159, 2021.
- 73) Ratzabi, A., Eluk, T., Levy, A. and Feldman Y., Nonsymmetric ionic transport in a nonbinary electrolyte at high voltage, *Phys. Rev. Fluids*, 6, 113701, 2021.
- 74) Pour, Y.D., Krasovitev, B., Fominykh, A., Hashemloo, Z., Kharaghani, A., Tsotsas, E. and Levy A., Intensification of spray drying granulation process by gas absorption accompanied by chemical dissociation reactions, *Chemical Engineering Journal*, 2021