

# Paper Reference List for ICES 2018 - Albuquerque

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24	101	A Dual Multilayer Insulation Blanket Concept to Radically Reduce Heat Loss From Thermally Controlled Spacecraft and Instruments	Pradeep Bhandari, Hared Ochoa, Tyler Schmidt and Mark Duran
25	101	Impact of Fluid Flow Pressure drop on Temperature of Components Controlled by Mechanically Pumped Fluid Loop Thermal Control System	Pradeep Bhandari, Jenny Hua, Razmig Kandilian and Arthur Mastropietro
77	101	Thermal design considerations for future high-power small satellites	Derek Hengeveld, Jacob Moulton, Mike Wilson, Brent Taft and Andrew Kwas
102	101	Europa Clipper Thermal Control Design	Hared Ochoa, Arthur J Mastropietro, Raymond Lee, Jenny Hua and Pradeep Bhandari
128	101	Multi-Angle Imager for Aerosols Thermal Control System	Douglas Bolton and Rogelio Rosas
197	101	JUICE (Jupiter Icy moons Explorer) Thermal Design and early Thermal Verification	Romain Peyrou-Lauga and Séverine Deschamps
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18	102	Thermal Design of a Mars Helicopter Technology Demonstration Concept	Tyler Schmidt, Stefano Cappucci, Jennifer Miller, Mark Wagner, Pradeep Bhandari and Michael Pauken
53	102	Detailed Surface Thermal Design of the Mars 2020 Rover	Jason Kempenaar, Keith Novak, Matthew Redmond, Edgardo Farias, Kaustabh Singh and Mark Wagner
105	102	Thermal design for an oxygen-generating electrolysis system on Mars	Asad Aboobaker, Colin Smith, Jenny Hua, Edgardo Farias and Pradeep Bhandari
209	102	Design Analysis and Performance testing of a Novel Passive Thermal Management System for Future Exploration Missions	Angel Alvarez, Stephania Ortega, Jeff Farmer, Shawn Breeding, Calin Tarau, Mohammed Ababneh and William Anderson
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98	103	Mitigation of Orion Ammonia Boiler Outlet Coolant Thermal Stratification	Eugene Ungar and Lauren Foley
147	103	Development status of active thermal control system for future crew vehicle	Yoko Sakai, Naoko Iwata, Kenji Kanoh, Yukako Kagami, Kana Kowatari and Sogo Nakanoya
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143	104	Development of a Passive Bypass Valve for one and two Phase Fluid Loops for Space Applications	Roel Benthem Van, Johannes Es Van, Nigel Kay, Douglas Rose-Innes, Vincent Garcia, Stéphane Lapensée, Henk Jan Gerner Van, Gerrit Donk Van and Adry Vliet Van
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296	104	Variable emissivity through multilayer patterned surfaces for passive thermal control: preliminary thermal design of a nano-satellite	Nikolaos Athanasopoulos and Nikolaos Siakavellas
301	104	Demonstration of Copper-Water Heat Pipes Embedded in High Conductivity (HiK™) Plates in the Advanced Passive Thermal eXperiment (APT <sub>x</sub> ) on the International Space Station	Mohammed Ababneh, Calin Tarau, William Anderson, Angel Alvarez-Hernandez, Stephania Ortega, Jeffery Farmer and Robert Hawkins
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177	402	EMU LiOH Life Extension Testing	Benjamin Peters, David Westheimer and Kathryn Hood
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192	402	Integrated Oxygen Flow Meter / Heat Exchanger for Portable Life Support Systems	Michael Izenson, Amelia Servi, Scott Phillips, Sheldon Stokes and Colin Campbell
256	402	Investigation of a Solid-State Cooling System for Analog EVA Life Support	Christopher Carlsen and David Akin
334	402	Sensor Integrated Pilot Mask for On-Board, Real-Time, Monitoring of Pilot Breathing Gas	Jesus Delgado, Cinda Chullen, David Berry, Narciso Guzman, Sarah Mottino, George Hellstern, Armando Soto Armando Soto and Lloyd Tripp
335	402	Low-Power, Chip-Scale, Carbon Dioxide Gas Sensors for Spacesuit Monitoring	Abhishek Motayed, Cinda Chullen, Asha Rani, Chen Shi, Brian Thomson, Ratan Debnath and Boamei Wen
336	402	Swing Bed Scrubber Design and Test Integration Results for Carbon Dioxide Removal in the Ventilation Test Loop 2.0	Cinda Chullen, Bruce Conger, Summer Mcmillin, Mike Swickrath, Bryan Kanne, John Fricker and Tatsuya Arai
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259	403	EVA Walk-Back Limit Calculation Using the Virtual Spacesuit	Claas Olthoff
264	403	Holo-SEXTANT: an Augmented Reality Planetary EVA Navigation Interface	Eswar Anandapadmanaban, Jesslyn Tannady, Johannes Norheim, Dava Newman and Jeff Hoffman
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37	404	The CDRA Snorkel: Developing a Flow diversion device to protect the Carbon Dioxide Removal Assembly from Liquid Water Ingestion	Steven Balistren, Gregory Mobley and Chang Son
44	404	The Role of System Compatibility and Cabin Environmental Impact Assessment in Environmental Control and Life Support System Design and Flight Operations	Jay Perry
87	404	Preventing Precipitation in the ISS Urine Processor	Donald Carter, Dean Muirhead and Jill Williamson
88	404	Status of ISS Water Management and Recovery	Donald Carter, Ryan Schaezler, Jill Williamson, Alfred Thomas, Daniel Gazda, Chris Brown and Jesse Bazley
89	404	Upgrades to the ISS Urine Processor Assembly	Donald Carter, Jill Williamson, Jimmy Hill, Rex Graves, David Long and Joshua Clifton
114	404	Lessons Learned for the International Space Station Potable Water Dispenser	Brandon Maryatt
123	404	Dimethylsilanediol (DMSD) source assessment and mitigation on ISS: Estimated contributions from personal hygiene products containing volatile methyl siloxanes (VMS)	Dean Muirhead and Donald Carter
163	404	Upgrades to the International Space Station Water Processor Assembly	Matthew Kayatin, Jill Williamson, Mononita Nur and Donald Carter
205	404	Analysis of Resin Samples From a Return-To-Ground Inlet Deionizing Bed for the ISS Oxygen Generation System	Elizabeth Bowman, Steve Vankeuren, Omoniyi Obashe, Danielle Bowman, Darren Dunlap, David Jackson and Natalee Weir
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238	500	Low Power Medical Oxygen Concentrators for Space Missions	Gökhan Ö. Alptekin, Douwe Bruinsma, Ambalavanan Jayaraman, Casey Bernal and Michael Bonnema
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