

Kennerly Digges Publications

Digges K, Dalmotas D, and Prasad P, "An NCAP Rating for Females", Proceedings of the 27th ESV Conference, Paper Number 23-0323, April 2023

Dalmotas D, and Digges H, "How Gender Preferences for Vehicle Size/Class Influence Fatality Outcome", Proceedings of the 27th ESV Conference, Paper Number 23-0337, April 2023

Digges K, Bahouth G, and Vahabaghaie, A, "Changes in Crash Protection with Vehicle Model Year", Proceedings of the 26th ESV Conference, Paper Number 19-0269, June 2019.

Digges K, Dalmotas D, and Prasad P; "Application of Multiple Rib Gages to Improve Chest Injury Measurements ", Proceedings of the 26th ESV Conference, Paper Number 19-0266, June 2019.

Mattos G, Friedman K, Digges K, Nash C, Jordan A, "Repeatability of the Carousel Dynamic Stability and Rollover Test Device ", Proceedings of the 26th ESV Conference, Paper Number 19-0330, June 2019.

Bahouth, J., Withum, K., Bahouth, J., Digges, K., Stratton, J., Spicer, R., Steinhauser, F., Baur, P., and Schulman, C., "Ten Year Review of BMW Accident Research Program Investigated Cases", Traffic Injury Prevention 2018, Vol 19, NO.S2, S145-146, 2018.

Digges K, Dalmotas D, Prasad P and Mueller B; "The Need to Control Belt Routing for Silver NCAP Ratings", Proceedings of the 25th ESV Conference, Paper Number 17-0403, June 2017.

Bahouth G, Murakhovskiy D, Digges K, Rist H, and Wiik R, "Opportunities for Reducing Far-side Casualties", Proceedings of the 24th ESV Conference, Paper Number 15-0444, 2015.

Eigen A, and Digges K, "Opportunities for Injury Reduction in Rollover Crashes" Paper Number 15-0284, Proceedings of the 24th ESV Conference, June 2015.

Digges, K., Eigen, A., Tahan, F., & Grezbeita, R., "Factors that Influence Chest Injuries in Rollovers" 58th Proceedings of the Association for the Advancement of Medicine, 2015.

Tahan, F., Digges, K., Kan, S., Grzebieta, R., Bambeck, M., "Evaluation of Real World Damage Reproduction in a Rollover Case", ICRASH 14-59, 2014.

Tahan, F., Digges, K., Kan, S., Grzebieta, R., Bambeck, M., "Potential Thoracic Injuries in a Crash Reproduction", ICRASH 14-60, 2014.

Saharei, E, Digges, K., Marzougui, D., and Roddis, K., "High Strength Steels, Stiffness of Vehicle Front-end Structure, and Risk of Injury to Rear Seat Occupants, Accident Analysis and Prevention, 66 (2014) 43-54, 2014.

Morgan R, Cui C, Digges K, Cao L, and Kan C, "Foot and Ankle Injuries to Drivers in Between-Rail Crashes," SAE Paper 2013-01-1243, 2013.

Grzebieta R, Bambach M, Mattos G, McIntosh A, Simmons K, Rechnitzer G, Digges K, "Replicating Real World Rollover Crash Injuries," Paper Number 13-0098, Proceedings of the 23rd ESV Conference, May 2013.

Tahan F, Cohen S, Digges K, Kan C, "Assessment of a Dynamic Test Device to Evaluate Vehicle Rollover Safety," Paper Number 13-0398, Proceedings of the 23rd ESV Conference, May 2013.

Kildare S, and Digges K, "Characteristics of Crashes with Multiple Frontal Impacts," Paper Number 13-0061, Proceedings of the 23rd ESV Conference, May 2013.

Eigen A, and Digges K, "Safety Changes in the US Vehicle Fleet by Vehicle Model Year," Paper Number 13-0062, Proceedings of the 23rd ESV Conference, May 2013.

Digges K, Tahan F, Grzebieta R, Bambach M, Mattos G, McIntosh A, "Crash Damage Patterns Associated with Chest Injuries in Far-Side Rollovers", Paper Number 13-0066, Proceedings of the 23rd ESV Conference, May 2013.

Digges K, Dalmotas D, and Prasad P, "An NCAP Star Rating System For Older Occupants," Paper Number 13-0064, Proceedings of the 23rd ESV Conference, May 2013.

Sahraei, E., Digges, K., and Marzougui, D., "Effects of Vehicle Front-End Stiffness on Rear Seat Dummies in NCAP and FMVSS208 Tests", Traffic Injury Prevention, Vol. 14, Issue 6, 2013.

Tahan F, Yan L, Digges, K, "Selective Sensitivity Study of the Jordon Rollover System - Comparison with Un-Constrained Model - Different Road Surface Mass and Yaw Angle," TRB Paper, January, 2012.

Tahan, F., & Digges, K., "An Effect of the Initial Roll Angle on Vehicle Rollovers for Similar Drop Height, ICrash 092, 2012.

Morgan R, Cui C, Digges K, Cao L, and Kan C., "Impact and Injury Patterns in Between-Rails Frontal Crashed of Vehicles with Good Ratings for Frontal Crash Protection", 56th Proceedings of the Association for the Advancement of Automotive Medicine", p255- 266, October 2012.

Eigen A, and Digges K, "Safety Changes in the Vehicle Fleet Since Model Year 1990, based on NASS Data," 56th Proceedings of the Association for the Advancement of Automotive Medicine", p241-254, October 2012.

Bahouth G, Digges K, Schulman C, "Influence of Injury Risk Thresholds on the Performance of an Algorithm to Predict Crashes with Serious Injuries," 56th Proceedings of the Association for the Advancement of Automotive Medicine, p223-230, October 2012.

Haight, S., & Digges, K., "Vehicle and Occupant Motion in Far-side Impacts", Collision Magazine, p 10-19, 2011.

Augenstein J, Digges K, Bahouth G, Cui X, Higuchi K, Hiromasa T, St. Lawrence S, "Occupant Injuries in Frontal Crashes by Age, Weight and BMI," Paper Number 11-0390, Proceedings of the 22nd ESV Conference, June 2011.

Scullion P, Morgan R, Digges K, and Kan C, "Frontal Crashes Between the Longitudinal Rails," Paper Number 11-0372, Proceedings of the 22nd ESV Conference, June 2011.

Digges K, Augenstein J, Hardy W, Cavanaugh J, Jermakian J, Echemendia C, and, Shah C, "Measurement of Aortic Injuries in Lower Severity Near-Side Impacts", Paper Number 11-0265 Proceedings of the 22nd ESV Conference, June 2011.

Prasad P, Mertz H, Dalmotas D, Augenstein J, Digges K, "Evaluation of the Field Relevance of Several Injury Risk Functions," Stapp Car Crash Journal, Vol. 54 November 2010.

Sahraie E, Digges K, and Marzougui D, "Reduced Protection for Belted Occupants in Rear Seats Relative to Front Seats of New Model Year Vehicles," 54th Proceedings of the Association for the Advancement of Automotive Medicine, October 2010.

Sahraie E, Digges K, Marzougui D, and Kan, C, "Evaluating Effect of Structural Changes in the Vehicle on the Safety of Rear Seat Occupants in Frontal Crashes", ICRASH Conference, September, 2010.

Tahan, F, Digges K, Mohan P, "Comparison Between the Jordon Rollover System and No Structure Constraints Rollover - Finite Element Model Based Analysis," ICRASH Conference, September, 2010.

Dalmotas D, Prasad P, Augenstein J, Digges K, "Assessing the Field Relevance of Testing Protocols and Injury Risk Functions Employed in New Car Assessment Programs," 4th International Expert Symposium on Accident Research, Hanover, Germany, September, 2010.

Digges, K., "Opportunities for Safety Innovations Based on Real World Crash Data", 4th International Expert Symposium on Accident Research, Hanover, Germany, September, 2010.

Raj P, and Digges K, "Characteristics of Frontal Crashes with Serious Injuries and Airbag Non-deployment" SAE Paper 2010-01-1048, 2010.

Samaha R, Digges K, Fesich T, Authaler M, "Frontal Crash Testing and Vehicle Safety Designs: A Historical Perspective Based on Crash Test Studies," SAE Paper 2010 01-1024, 2010.

Cuadrado J, Smyth B, Smith J, and Digges K, "Validation of Sled Tests for Far-Side Occupant Kinematics Using MADYMO," SAE Paper 2010-01-1160, 2010.

Scullion P, Morgan R, Digges K, and Kan C, "Frontal Crash Protection in Pre-1998 Vehicles versus 1998 and Later Vehicles," SAE Paper 2010-01-0142, 2010.

Sahraei, E, Soudbakhsh K, Digges K, "NCAP Star Rating and Safety of Rear Seat Occupants," Proceedings of the ASME 2009 Bioengineering Conference (SBC2009-206582), June, 2009.

Digges K, Sahraei E, and Samaha R, "Opportunities to Improve Rear Seat Child Safety," 7th International Conference, Protection of Children of Cars, Munich, Germany, December, 2009.

Sahraei E, Soudbakhsh K, Digges K, "Protection of Rear-seat Occupants in Frontal Crashes, Controlling for Occupant and Crash Characteristics," Stapp Car Crash Journal, Vol. 53, p.75-92, 2009.

Blum, J., Scullion, P., Morgan, R., Digges, K., and Kan, C. "Structural Attributes of the Striking Vehicle that Control Aggressivity toward the Struck-Vehicle in Frontal Collisions", Proceedings of IRCOBI Conference, 2009.

Scullion, P., Nix, L., Morgan, R., Nagabhushana, V., Digges, K., Kan, C., and Lamb, A., "Injury Mechanism of the Head and Face of Children in Side Impacts", SAE Paper 2009-01-1434, 2009.

Digges, K., "Crashes That Result in Fires", Paper Number 09-0214, Proceedings of the 21st ESV Conference, June 2009.

Digges, K., and Stephenson, R., "The Basis for a Fluid Integrity NCAP Rating", Paper Number 09-0215, Proceedings of the 21st ESV Conference, June 2009.

Digges, K. and Stephenson, R., "Fireworthiness: A Final Report on the Technology Base", Paper Number 09-0211, Proceedings of the 21st ESV Conference, June 2009.

Digges, K., Echemendia, C., Fildes, B., and Pintar, F., "A Safety Rating for Far-Side Crashes", Paper Number 09-0217, Proceedings of the 21st ESV Conference, June 2009.

Augenstein, J., Perdeck, E., Digges, K., and Bahouth, G., "Opportunities for Protecting the Right Front Passenger in Frontal Crashes", Paper Number: 09-0410, Proceedings of the 21st ESV Conference, June 2009.

Rauscher, S, Messner, G., Baur, P., Augenstein, J., Digges, K., Perdeck, E., Bahouth, B., and Pieske, O., "Enhanced Automatic Collision Notification System – Improved Rescue Care Due To Injury Prediction – First Field Experience", Paper Number: 09-0049, Proceedings of the 21st ESV Conference, June 2009.

Sahraie, E., and Digges, K. "Trend of Rear Occupant Protection in Frontal Crashes over Model Years of Vehicles", SAE 2009-01-0377, April 2009.

Digges, K., "Fire Occurrence in Side Crashes Based on NASS/CDS", SAE 2009-01-0008, SAE Publication SP-2227, Fire Safety, 2009, pp. 1-6, April 2009.

Zhao, A., Field, M., Digges, K., and Richens, D., "Blunt Trauma and Acute Aortic Syndrom: A Three-layer Finite-element Model of the Aortic Wall", Europlen Journal of Cardio-thoracis Surgery 34 (2008) p.623-629, June 2008.

Cuadrado, J. Nagabhushana, V., Digges, K., and Kan, C., "Far-side Corner Impact in Vehicles: Part 2, ICRAASH 2008-079, 2008.

Nagabhushana, V., Cuadrado, J., Digges, K., and Kan, C., "Far-side Corner Impact in Vehicles: Part 1, ICRASH 2008-078, 2008.

Digges, K., Fildes, B., "The Technology Base for Far-Side Occupant Protection", Paper 08-0131, Proceedings of the 2008 FISITA Conference, June, 2008.

Blum, J., Scullion, P., Morgan, R., Digges, K., Kan, C., Park, S., Bae, H., "Vehicle Related Factors that Influence Outcome in Head-on Collisions", 52nd AAAM Conference, October, 2008.

Scullion, P., Morgan, R., Nagabhushana, R., Digges, K., and Kan, C., "Side Impact for 7-13 YO Children, SAE 2008-01-0285, 2008.

Bostrom, O., Gabler, H., Digges, K., Fildes, B., Sunnevang, C., "Opportunities of Far side Impact Countermeasures", 52nd Proceedings of the Association for the Advancement of Automotive Medicine", October 2008.

Hardy, W., Chirag, S., Mason, M., Kopacz, J., Yang, K., King, A., VanFe, C., Bishop, J., Banglmaier, R., Bey, M., Morgan, R., and Digges, K., "Mechanisms of Thaumatic Rupture of the Aorta and Associated Peri-isthmic Motion and Deformation", Paper 08S-27, Stapp Car Crash Journal, Vol. 52, November, 2008.

Scallion, P., Morgan, R., Nagabhushana, V., Digges, K., Kan, S., Park, S., and Bae, H., "Side Impact Risk for 7-13 Year Old Children", SAE 2008-01-285, April 2008.

Mostafa, K., Digges, K., and Motevalli, V., "Evaluating Frontal Crash Test Force-Deformation Data for Vehicle to Vehicle Frontal Crash Compatibility", SAE 2008-01-0813, April 2008.

Galli, R., and Digges, K., "Severe Head and Neck Injuries in NASS Rear Impacts", SAE 2008- 01-0190, April 2008.

Digges, K., "Fire Occurrence in Frontal Crashes Based on NASS/CDS", SAE 2008-01-0256, SAE Publication SP-2166, Fire Safety, 2008, pp. 9-16, April 2008.

Pintar, F., Yoganandan , N., Stemper, B., Bostrom , O., Rouhana , S., Smith, S., Digges, K., Fildes, B., "Far Side Impact Response and Dummy Biofidelity", Proceedings of the 2007 Stapp Car Crash Conference, October, 2007.

Digges, K., Welsh, R, and Morris, A., "Low Severity Crashes that Cause Injury to Elderly Occupants", Proceedings of the 2007 IRCOB Conference, October 2007.

Augenstein, J., Perdeck, E., Digges, K. and Bahouth G., "Age Appropriate Restraints for the Right Front Passenger", 51th Proceedings of the Association for the Advancement of Automotive Medicine", October 2007.

Digges, K. and Dalmotas, D., "Benefits of a Low Severity Frontal Crash Test", 51th Proceedings of the Association for the Advancement of Automotive Medicine", October 2007.

Augenstein, J., Digges, K. Perdeck, E., Stratton, J., and Bahouth G., "Application of ACN Data to Improve Vehicle Safety and Occupant Care" Paper, 07-0512, 20th ESV Conference, June 2007.

Fildes, B., Fitzharris, M., Gabler, H., Digges, K., and Smith, S., "Chest and Abdominal Injuries in Far-side Crashes", Paper, 07-0384, 20th ESV Conference, June 2007.

Samaha, R., Kazuyoshi, K., and Digges, K., "Opportunities for Safety Improvements in Motorcycle Crashes in the United States", Paper, 07-0370, 20th ESV Conference, June 2007.

Digges, K., and Eigen, A., "Injuries in Rollovers by Crash Severity", Paper, 07-0236, 20th ESV Conference, June 2007.

Digges, K., "Technologies to Improve Impact Related Fire Safety", Paper, 07-0480, 20th ESV Conference, June 2007.

Alonso, B., Digges, K., and Morgan, R., "Far-side Vehicle Simulations with MADYMO", SAE 2007-01-0378, April 2007.

Alonso, B, Stratton, J., and Digges, K., "New Method for Vehicle Inspection for Incompatible Crashes", SAE 2007-01-1184, April 2007.

Digges, K., Stephenson, R, "Recent MVFRI Research in Crash-Induced Vehicle Fire Safety", SAE 2007-01-0880, April 2007.

Digges, K., and Kildare, S., "Fire Occurrence in Rollover Crashes Based on NASS/CDS", SAE 2007-01-0875, April 2007.

Hardy W., N., Shah, C., S., Kopacz, J. M., Yang, K., H., Van, C., A., Morgan, M., R., Digges, K. H., "Study of Potential Mechanisms of Traumatic Rupture of the Aorta Using In Situ Experiments", Fiftieth Stapp Car Crash Conference, April 2006.

Pintar, F., Yoganandan, Y., Stemper, B., Bostrum, O., Rouhana, S., Smith, S., Sparke, L., Fildes, B., Digges, K., "Worldsid Assessment of Far Side Impact Countermeasures", 50th Proceedings of the Association for the Advancement of Automotive Medicine", p199-220, October 2006.

Digges, K., and Eigen, A., "Classification of Rollover According to Crash Severity," 50th Proceedings of the Association for the Advancement of Automotive Medicine", p141-154, October 2006.

Augenstein, J, Digges, K., Bahouth, G, and Perdeck, E. "Residual Injuries after Recent Safety Improvements" 50th Proceedings of the Association for the Advancement of Automotive Medicine", p353-364, October 2006.

Digges, K., and Eigen, A., "The Injury Risk from Objects Impacted Before and During Rollovers", Proceedings of the 2006 IRCOBI Conference, October, 2006.

Augenstein, J, Digges, K., Bahouth, G, and Perdeck, E , "A More Effective Post-Crash Safety Feature to Improve the Medical Outcome of Injured Occupants", SAE 2006-01-0675, April 2006.

Digges, K., Stephenson, R, "Summary of Research in Crash-Induced Vehicle Fire Safety", SAE 2006-01-0551, April 2006.

Digges, K., Gabler, H., "Opportunities for Reducing Casualties in Far-side Crashes", SAE 2006-01-0450, April 2006.

Shah, C., Maddali, M., Mungikar, S., Beillas, P., Hardy, W., Bedewi, P., Digges, K., and Augenstein, A., "Analysis of a Real-World Crash Using Finite Element Modeling to Examine Traumatic Rupture of the Aorta", Reprint from: Occupant Safety, Safety-Critical Systems and Crashworthiness, SAE 2005-01-1293, April, 2005.

Mason, M., Shah, C., Maddali, M., Yang, K., Hardy, W., Van Ee, C., and Digges, K., "A New Device for High-Speed Biaxial Tissue Testing: Application to Traumatic Rupture of the Aorta", Reprint from: Safety Test Methodology and Strustural Crashworthiness, SAE 2005-01-0741, April, 2005.

Digges, K., Fournier, E., Keown, M., Shewchenko, N., and Kot, J., "Alternate Tanks for Pickups with Sidesaddle Tanks, SAE 2005-01-1427, 2005.

Mostafa, K., Digges, K., Bahouth, G., and Morgan, R., "Vehicle Frontal Stiffness in a Front to Front Crash", SAE 2005-010-1375, April, 2005.

Gabler, H., Digges, K., Fildes, B., and Sparke, L., "Side Impact Injury Risk for Belted Far Side Passenger Vehicle Occupants", SAE 2005-01-0287, April, 2005.

Digges, K., and Eigen, A., "Severity Measurements for Rollover Crashes," Proceedings of the International Research Council on Biomechanics of Impact, September 2005.

Augenstein, J., Digges, K., Bahouth, G, Perdeck, E, Dalmotas, D, and Stratton, J., "Investigation of the Performance of Safety Systems For Protection of The Elderly" 49th Proceedings of the Association for the Advancement of Automotive Medicine", p361-370, September 2005.

Digges, K., Gabler, H., Mohan, P., and Alonso, B., "Characteristics of the Injury Environment in Far-Side Crashes", 49th Proceedings of the Association for the Advancement of Automotive Medicine", p185-214, September 2005.

Gabler, C., Fitzharris, M., Scully, J., Fildes, B., Digges, K., Sparke, L., "Far-side Impact Risk for Belted Occupants in Australia and the United States", ESV Conference Paper 05-0420, June 2005.

Fildes, B. , Linder, A., Douglas, K., Digges, K, Morgan, R., Pintar, F., Yoganandan, Y., Gabler, C., Duma, S., Stitzel, J., Bostrum, O., Sparke, L., Smith, S., Newland, C., "Occupant Protection in Far-side Crashes", ESV Conference Paper 05-0299, June 2005.

Champion, H., Augenstein, Digges & Others, "New Tools to Reduce Deaths and Disabilities by Improving Emergency Care: URGENCY Software, Occult Injury Warnings, and Air Medical Services Database", Paper 05-0191, 19th ESV Conference, June 2005.

Augenstein, J, Bahouth, G, and Perdeck, E, Digges, K., "Injury Identification: Priorities For Data Transmitted", Paper 05-0355, 19th ESV Conference, June 2005.

Bahouth, J, and Digges, K., "Characteristics of Multiple Impact Crashes That Produce Serious Injuries", Paper 05-0419, 19th ESV Conference, June 2005.

Digges, K., Eigen, A., and Dahdah, S., "Injury Patterns In Rollovers By Crash Severity", Paper 05-0355, 19th ESV Conference, June 2005.

Digges, K., Stephenson, R, "A Research Program to Study Impact Related Fire Safety", Paper 05-0448, 19th ESV Conference, June 2005.

Digges, K., Stephenson, R, and Bedewi, P., "Research Programs in Crash-Induced Fire Safety", SAE 2005-01-1425, April 2005.

Gabler, H., Digges, K., Fildes, B., and Sparks, L., " Side Impact Injury Risk for Belted Far-side Passenger Vehicle Occupants", SAE 2005-01-0287, April, 2005.

Bahouth, G., Digges, K., Augenstein, A. and Perdeck, E., "Development of Urgency 2.1 for the Prediction of Crash Injury Severity", Proceedings of the Intelligent Transportation Systems Safety and Security Conference", Miami Fla., March 24-25 2004.

Augenstein, J, Digges, K., Bahouth, G., "Lifesaving Opportunities for Automatic Crash Notification Systems", Proceedings of the Intelligent Transportation Systems Safety and Security Conference", Miami Fla., March 24-25 2004.

Augenstein, J, Digges, K., and others, "Using CIREN Data to Assess the Performance of the Second Generation Air Bags", SAE 2004-01-0842, SAE World Congress, March 2004.

Digges, K., Bedewi, P., and others, "Crash Simulations to Understand Injury Mechanisms in Rollover Crashes", SAE 2004-01-0330, SAE World Congress, March 2004.

Digges, K., Stephenson, R., and Bedewi, P., "A Research Program in Crash Induced Fire Safety", SAE 2004-01-0475, SAE World Congress, March 2004.

Augenstein, J, and Digges, K. "The Potential Benefits of Automatic Crash Notification to the Medical Care of Patients", 2003 VDI Conference, November, 2003.

Augenstein, J, Perdeck, E., Stratton, J., Digges, K., and Bahouth, G., "Characteristics of Crashes that Increase the Risk of Injury", 47th Annual Proceedings of the Association for the Advancement of Automotive Medicine, p. 561-576, September, 2003.

Augenstein, J, and Digges, K. "Performance of Advanced Air Bags, Based on Data from William Lehman Injury Research Center and New NASS PSU's", 47th Annual Proceedings of the Association for the Advancement of Automotive Medicine, p. 99-101, September, 2003.

Digges, K. and Bahouth G., "Frequency of Injuries in Multiple Impact Crashes", 47th Annual Proceedings of the Association for the Advancement of Automotive Medicine, p. 417-424, September, 2003.

Champion, H., Augenstein, J, Digges, and others, "Reducing Highway Deaths and Disabilities with Automatic Wireless Transmission of Serious Injury Probability Ratings from Vehicles in Crashes to EMS", Paper 406, Proceedings of the ESV Conference, May, 2003.

Augenstein, J, Digges, K., Steps, J. and others, "Crash Attributes that Influence Aortic Injuries in Near-Side Crashes", Paper 232, Proceedings of the ESV Conference, May, 2003.

Augenstein, J, Perdeck, E., Stratton, J., Digges, K., and Bahouth, G., "Methodology for the Development and Validation of Injury Predicting Algorithms", Paper 467, Proceedings of the ESV Conference, May, 2003.

Bedewi, P., Godrick, D, Digges, K., and Bahouth, G., "An Investigation of Occupant Injury in Rollover: NASS-CDS Analysis of Injury Severity and Source by Rollover Attributes", Paper 491, Proceedings of the ESV Conference, May, 2003.

Digges, K., and Eigen, A., "Crash Attributes that Influence the Severity of Rollovers", Paper 231, Proceedings of the ESV Conference, May, 2003.

Digges, K., Bedewi, P, and Stephenson, R., "Fire Safety Performance of Vehicles in Crashes", Paper 422, Proceedings of the ESV Conference, May, 2003.

Digges, K., Fournier, E, and others, "Research To Evaluate Safety Technologies For Vulnerable Fuel Tanks", Paper 230, Proceedings of the ESV Conference, May, 2003.

Digges, K., and Bahouth, G., "Stiffness and Geometric Incompatibility in Collisions Between Cars and Light Trucks" SAE 2003 01-0907, March 2003.

Augenstein, J, Digges, K., Bahouth, G. and others, "Validation of the URGENCY Algorithm for Near Side Crashes, 46th Annual Proceedings of the Association for the Advancement of Automotive Medicine, p. 305-314, October, 2002.

Augenstein, J., Digges, K., and others, "Performance of Depowered Air Bags in Real World Crashes", SAE 2002 01-0188, March 2002.

Digges, K., Eigen, A, and Bahouth, G., "Stiffness and Geometric Compatibility in Front to Side Crashes" SAE 2002 02-130, March 2002.

Nouredine, A., Eskandarian, A., and Digges, K., "Computer Modeling and Validation of a Hybrid III Dummy for Crashworthiness Simulation", Mathematical and Computer Modeling, 35 p. 855-893, 2002.

Fildes, B., Digges, K., Kess, M., and Tingvall, C., "Benefits of a 64K Offset Test in Australia" Proceedings of the 2001 IRCOBI Conference, Isle of Man, October, 2001.

Digges, K., and Eigen, A., "Measurement of Vehicle Compatibility in Front to Side Crashes, Proceedings of the 2001 IRCOBI Conference, Isle of Man, October, 2001.

Digges, K., "The URGENCY Algorithm, a Thermometer for Trauma", Proceedings of the Annual VDI Conference, Berlin Germany, September 7, 2001.

Augenstein, J, Digges, K., and others, "Development and Validation of the Urgency Algorithm to Predict Compelling Injuries", Paper Number 350, ESV Conference, June 2001.

Digges, K., and Dalmotas, D., "Injuries To Restrained Occupants In Far-Side Crashes", Paper Number 351, ESV Conference, June 2001.

Digges, K., and Eigen., A., "Measurements of Stiffness and Geometric Compatibility In Front-To-Side Crashes" Paper Number 349, ESV Conference, June 2001.

Digges, K., and Eigen., A., "Examination of Car to Light Truck Compatibility in Frontal Crashes", SAE 2001-01-1165, March, 2001.

Digges K., and Eigen, A., "Measurements of Vehicle Compatibility in Front-to-Side Crashes", IRCOBI Conference, October, 2001.

Augenstein, J, Digges, K., and others, "Injuries to Restrained Occupants in Far-Side Collision", 44th Annual Proceedings of the Association for the Advancement of Automotive Medicine, October, 2000.

Augenstein, J, Digges, K., and others, "Dummy Measurements of Chest Injuries Induced by Two-Point Belt Systems", 44th Annual Proceedings of the Association for the Advancement of Automotive Medicine, October, 2000.

Digges, K., and Eigen, A., "Load Cell Barrier Measurements of Geometric Compatibility", Vehicle Safety 2000, I Mech E Conference Transactions, p.19-29, June 2000.

Augenstein, J, Digges, K., and others, "Injury Patterns in Near-side Collisions", SP-1518, SAE 2000-01-0634, March 2000.

Digges, K., and Eigen, A., "Analysis of Load Cell Barrier Data to Assess Vehicle Compatibility", Safety Test Methodologies, SP-1516, SAE 2000-01-0051, March 2000.

Bedewi, P, and Digges, K., Investigating Ankle Injury Mechanisms in Offset Frontal Collisions Utilizing Computer Modeling and Case-Study Data", Proceedings of the 43rd Stapp Car Crash Conference, Paper 99SC02, p. 217-242 October 1999.

Augenstein, J, Digges, K., and others, "Injuries in Near-side Collisions", 43rd Annual Proceedings of the Association for the Advancement of Automotive Medicine, p. 139-158, September 1999.

Bertocci, G., Szobota, S., Hobson, D., and Digges, K., "Computer Simulation and Sled Test Validation of a Powerbase Wheelchair and Occupant Subjected to Frontal Crash Conditions", IEEE Transactions on Rehabilitation Engineering, Vol7, No2, pp. 234-244, June, 1999.

Champion, H., Augenstein, A., Cushing, B., Digges, K., Hunt, R., Larkin, R. Malliaris, A., Sacco, W., and Siegel, J., "Reducing Highway Deaths and Disabilities with Automatic Wireless Transmission of Serious Injury Probability Ratings from Crash Recorders to Emergency Medical Service Providers" Proceedings of the International Symposium on Transportation Recorders, National Transportation Safety Board, pp. 67-84, May 3-5, 1999.

Champion, H., Augenstein, A., Cushing, B., Digges, K., Hunt, R., Larkin, R. Malliaris, A., Sacco, W., and Siegel, J., "URGENCY for a Safer America", AirMed, pp.18-23, March/April, 1999.

Augenstein, J, Digges, K., and others, "Injury Patterns Among Belted Drivers Protected by Air Bags in 30 to 35 mph Crashes", SAE, 1999-01-1062, March, 1999.

Malliaris, A., and Digges, K., "Crash Exposure and Crashworthiness of Sport Utility Vehicles", SAE, 1999-01-0063, March, 1999.

Digges, K., Eigen, A., and Harrison, J., "Application of Load Cell Barrier Data to Assess Vehicle Crash Performance and Compatibility", SAE, 1999-01-0720, March, 1999.

Horton, T., Cohn, S., Heid, M., Augenstein, J., Bowen, J., Digges, K., McKenny, M., Hoyt, D., and Duncan, R., "Identification of Trauma Patients at Risk of Thoracic Aortic Tear by Mechanism of Injury", WLIRC, 1999.

Bertocci, G., Digges, K., and Hobson, D., "Affects of Wheelchair Securement Point Location on Occupant Injury Risk", RESNA 1998.

Motevalli, V., Digges, K., Noureddine, A., and Eigen, A., "Development of a Seat Belt Mounted Airbag System", International Journal of Crashworthiness, September, 1998.

Bedewi, P., Miyamoto, N., Digges, K., and Bedewi, N., "Human Femur Impact and Injury Analysis Utilizing Finite Element Modeling and Real World Case Study Data", Proceedings of Pamcrash Users Conference, Tokyo Japan, November 9-10, 1998.

Digges, K., "Injury Measurements and Criteria", Paper and Keynote Address, Proceedings of 1998 AGARD Conference on Biomechanics, Dayton, October 1998.

Digges, K., and Bedewi, P., "The Use of Computer Finite Element Models of Humans and Crash Dummies for High Acceleration Biomechanics Studies", Proceedings of 1998 AGARD Conference on Biomechanics, Dayton, October 1998.

Digges, K, and Malliaris, A., "Crashworthiness Safety Features in Rollover Crashes", SAE982296, September, 1998.

Morris, A., Fildes, B., Digges, K., and others, "Injuries in Primary and Supplementary Air Bag Systems," 16th International ESV Conference, June, 1998.

Seyer, K., Fildes, B., Digges, K., and others, "Development and Benefits of a Harmonized Side Impact Standard", 16th International ESV Conference, June, 1998.

Kompass, K., Digges, K., and Malliaris, A., "Benefits of the Inflatable Tubular Structure," 16th International ESV Conference, June, 1998.

Augenstein, J., The CIREN Experience" 16th International ESV Conference, June, 1998.

Augenstein, J., Digges, K, and others, "Injury Patterns Among Air Bag Protected Occupants", 16th International ESV Conference, June, 1998.

Champion, H., Augenstein, A., Cushing, B., Digges, K., Hunt, R., Larkin, R. Malliaris, A., Sacco, W., and Siegel, J., "Automatic Crash Notification", AirMed, pp. 36-39, March/April, 1998.

Digges, K., Noureddine, A, Eskandarian, A., and Bedewi, N., "Effect of Occupant Position and Air Bag Inflation Parameters on Driver Injury Levels", SAE 980637, February, 1998.

Fildes, B., Digges, K., and Dyte, D., "The Benefits of the European Frontal Offset Regulation for Australia", Journal of Traffic Medicine, Vol. 25 Nr. 1-2, p. 3-6, 1997.

Digges, K., Bedewi, P., and Ishikawa, H., "Ankle Injury Mechanisms in Offset Crashes", 1997 International Conference on the Biomechanics of Impact", p.87-98, September 1997.

Digges, K., and Bedewi, N., "Automotive Safety Regulations and Associated Design Procedures in the United States", Proceedings of the 1st Arab International Automotive & Feeding Industries Conference, p. 329-341, November, 1997.

Werner, J., Roberson, S., Ferguson, S., and Digges, K., "Injury Risks in Cars with Different Air Bag Deployment Rates", SAE970491, February, 1997.

Malliaris, A., Digges, K., and DeBlois, H., "Relationships Between Crash Casualties and Crash Attributes", SAE970393, February, 1997.

Digges, K., Noureddine, A, and Bedewi, N., "Chest Injury Risks to Drivers for Alternative Air Bag Inflation Rates", SAE97129, February, 1997.

Augenstein, A, Digges, K., and others, "Air Bag Induced Injury Mechanisms to Infants in Rear Facing Child Restraints", SAE973296, February 1997.

Augenstein, A, Digges, K., and others, "Heart Injuries Among Restrained Occupants in Frontal Crashes", SAE970392, February 1997.

Digges, K, "Air Bag Safety Performance in the United States", Journal of the Japan Automotive Safety Research Institute, (In Japanese), Page 19-23, October, 1996.

Ishikawa, H., Digges, K., Ennis, J., "Impact Force Vector on Offset Frontal Collision", Transactions of Japanese Society of Automotive Engineers, October (in Japanese), 1996.

Fildes, B., Digges, K., et.al. "SAFECAR: A New Car Safety Features Rating System", 40th Annual Proceedings of the Association for the Advancement of Automotive Medicine, p 141-152, October, 1996.

Bertocci, G., Hobson, D., Digges, K., "Development of Transportable Wheelchair Design Criteria Using Computer Crash Simulation", IEEE Transactions on Rehabilitation Engineering, Vol. 4, No. 3, p. 1-11, September 1996.

Ishikawa, H., Digges, K., Ennis, J., "Vehicle Collision Force in Offset Barrier and Car to Car Offset Tests", 1996 International Conference on the Biomechanics of Impact", p. 189-200, September 1996.

Fildes, B., Digges, K., "The Benefits of the European Offset Regulation", 1996 International Conference on the Biomechanics of Impact, p. 241-248, September 1996.

Noureddine, A., Digges, K., and Bedewi, N., "An Evaluation of Deformation Based Chest Injury Criteria Using a Hybrid III Finite Element Model, International Journal of Crashworthiness, Vol. 1, No. 2, p. 181-190, 1996.

Bertocci, G., Digges, K., Hobson, D., "Shoulder Belt Anchor Location Influences on Wheelchair Occupant Crash Protection", Journal of Rehabilitation Research and Development, Vol. 33 No 3, p. 279-289, July 1996.

Rangarajan, N., Digges, K., et al, "Design and Evaluation of an Instrumented Abdomen for the NHTSA Advanced Dummy", Fifteenth International Technical Conference on the Enhanced Safety of Vehicles, Melbourne, Australia, May 1996.

Fildes, B., Digges, K., "Side Impact Regulation Benefits for Australia", Fifteenth International Technical Conference on the Enhanced Safety of Vehicles, Melbourne, Australia, May 1996.

Augenstein, J., Digges, K., et al, "Injuries Sustained by Drivers in Air Bag Crashes", Fifteenth International Technical Conference on the Enhanced Safety of Vehicles, Melbourne, Australia, May 1996.

Dalmotas, D., Digges, K., et al, "Air Bag Deployment Crashes in Canada", Fifteenth International Technical Conference on the Enhanced Safety of Vehicles, Melbourne, Australia, May 1996.

Digges, K., et al, "Challenges in Injury Measurement Technology for Testing of Driver Air Bag Systems", Fifteenth International Technical Conference on the Enhanced Safety of Vehicles, Melbourne, Australia, May 1996.

Malliaris, A., DeBlois, J., Digges, K., "Light Vehicle Occupant Ejections - A Comprehensive Investigation", Accident Analysis & Prevention, Vol. 28, No. 1, p 1-14, January 1996.

Augenstein, J., Digges, K., et al, "Injuries Sustained by Air Bag Protected Drivers", Occupant Protection Technologies for Frontal Impact, Current Needs and Expectations for the 21st Century, Paper 960660, SAE Publication SP-1144, p.49-72, February 1996.

Malliaris, A., DeBlois, J., Digges, K., "Air Bag Field Performance and Injury Patterns", Paper 960659, Occupant Protection Technologies for Frontal Impact, Current Needs and Expectations for the 21st Century, SAE Publication SP-1144, p.73-78, February 1996.

Werner, J., Roberson, S., Ferguson, S., Digges, K., "Air Bag Deployment Frequency and Injury Risks", SAE 960664, February 1996.

Fildes, B., & Digges., "Harm Reduction for Estimating Countermeasure Benefits", Injury Conference, University of W.A., Fremantle, February, 1996.

Augenstein, J., Digges, K., et.al., "Assessment of Mild Brain Injury: A Systematic Trauma Center Approach", Chapter 15 in TRAUMATIC BRAIN INJURY Bioscience and Mechanics, p. 125-137, Mary Ann Liebert, Inc., 1996.

Digges, K., and Others, "Determination and Modeling of Ankle Injury Causation", NHTSA International Conference on Pelvic and Lower Extremity Injuries, p. 317-326, December, 1995.

Fildes, B., Digges, K., et al, "Side Impact Regulation Benefits", Federal Office of Road Safety, Canberra, Australia, CR 154, 1995.

Digges, K., "Mathematical Models of Human Response to Acceleration", Chapter of The Biomedical Engineering Handbook, CRC Press, 1995.

Digges, K., "The Prevention of Head and Neck Injuries in Motor Vehicle Crashes" Chapter in SAE Publication Head and Neck Injuries, 1995.

Augenstein, J., Digges, K., et.al., "Occult Abdominal Injuries to Airbag-Protected Crash Victims: A Challenge to Trauma Systems", The Journal of Trauma, Infection, and Critical Care, Vol. 38, No. 4, p. 502-508, October 1995.

Ishikawa, H., Digges, K., "Restitution Coefficients and Delta-V in Offset Frontal Collisions", Transactions of Japanese Society of Automotive Engineers, 958368, September 1995.

Augenstein, J., Digges, K., et. al., "Liver Injuries Associated with 2-Point Belt Restraints in Frontal Crashes", 39th Annual Proceedings of the Association for the Advancement of Automotive Medicine, p.193-214, 1995.

Augenstein, J., Digges, K., et. al., "Chest and Abdominal Injuries Suffered by Restrained Occupants", Paper 950657, Advances in Occupant Protection Technologies for the Mid-nineties, SAE Publication SP-1077, p.45-52, February 1995.

Malliaris, A., Digges, K., and DeBolis, H., "Injury Patterns of Car Occupants Under Air Bag Deployment", SAE Paper 950867, Feb. 1995.

Malliaris, A., Digges, K., and DeBolis, H., "Evaluation of Air Bag Field Performance", SAE Paper 950866, Feb. 1995.

Augenstein, J., and Digges, K., et. al., "Occult Abdominal Injuries to Airbag-Protected Crash Victims: A Challenge to Trauma Systems", *The Journal of Trauma: Injury, Infection, and Critical Care*, Vol. 38, No. 4, p.502-508, 1995.

Augenstein, J., Digges, K., Perdeck, E., Stratton, J, and Malliaris, A., "Application of Biomechanics Research to Improve Triage Criteria for Crash Victims", *Fifth Injury Prevention Through Biomechanics Symposium*, Centers for Disease Control, p. 55-62, May 1995.

Fildes, B., Digges, K, et.al., "Airbag and Facebag Benefits and Costs", *Accident Analysis and Prevention*, Vol. 26, Number 3, p. 339-346, June 1994.

Augenstein, J., Digges, K., et.al., "Injuries Sustained by Air Bag Occupants in Frontal Crashes", *Proceedings of the Thirteenth International Conference on Experimental Vehicles*, p. 641-648, May 1994.

Digges, K., Malliaris, A, and DeBlois H., "Opportunities for Casualty Reduction in Rollover Crashes", *Proceedings of the Thirteenth International Conference on Experimental Vehicles*, p. 863-868, May 1994.

Augenstein, J., Digges, K., et.al., "Airbag Protected Crash Victims - The Challenge of Identifying Occult Injuries", SAE 940714, February, 1994.

Augenstein, A., Digges, K. & Others, "Injury Studies of Frontal Automobile Crashes with Restrained Occupants", *CDC Injury Prevention Symposium*, 1993.

Digges, K., Malliaris, A, and DeBlois H., "Rollover Causation and Reduction", *Proceedings of the ISATA Conference Safety Systems*, September 1993.

Digges, K., Morris, J., and Malliaris, A., "Safety Performance of Motor Vehicle Seats", Paper 930348, *Seating Systems Comfort and Safety*, SAE Publication CP-963, p. 183-192, March 1993.

Fildes, B., Cameron, M., Vulcan, A., Digges, K., and Taylor, D., "Airbag and Facebag Benefits and Costs", *1992 International Conference on the Biomechanics of Impact*, p. 323-336, 1992.

Fildes, B., Cameron, M., Vulcan, A., and Digges, K., "Injury Mitigation for a Range of Vehicle Safety Measures", *32nd Annual Proceedings of the Association for the Advancement of Automotive Medicine*, p 93-108, 1992.

Digges, K., "The Importance of Biomechanics in the Development of Vehicle Safety", *Crash Injury Biomechanics, Keynote Address for the International Conference on Biomechanics*, Adelaide, South Australia, p. 4-14, July, 1992.

Digges, K. Powell, M., Nolan, J., and Lestina, D., "Head Protection Offered by Automobile Sun Visors", *32nd Annual Proceedings of the Association for the Advancement of Automotive Medicine*, p 131-143, 1992.

Digges, K., and Dalrymple, G., "Applying the Intent of Federal Motor Vehicle Safety Standards to Vehicles Modified for the Use of Disabled Persons", SAE 920563, February, 1992.

Vulcan, A., Cameron, M., and Digges, K., "Estimates of Benefits of Airbags in Australia - A Country with High Seat Belt Wearing Rates", *Canadian Safety Conference*, September 1992.

Fildes, B., Cameron, M., Vulcan, A., and Digges, K., "Feasibility of Occupant Protection Countermeasures", Report CR100, from Monash University to the Federal Office of Road Safety, June 1991.

Digges, K., and Klisch, S. "Analysis of the Factors That Influence Rollover Crash Severity", *Proceedings of the Thirteenth International Conference on Experimental Vehicles*, p. 728-732, November, 1991

Digges, K., Mallaris, A., Ommaya, A., and McLean, A., "Characterization of Rollover Casualties", *Proceedings of 1991 International Conference on the Biomechanics of Impact*, September, 1991.

Digges, K., Mallaris, A., and Ommaya, A., "The Mechanics and Biomechanics of Rollover Casualties", *CDC 1st Injury Prevention Conference*, October, 1991.

Digges, K., "Applications of Human Models to Evaluate Improvements in Motor Vehicle Crash Safety", Proceedings of the Eighth International Conference on Mathematical and Computer Simulation, April, 1991.

Digges, K. and Morris, J., "Opportunities for Frontal Crash Protection at Speeds Greater than 35 MPH", Paper 910807, Frontal Crash Safety Technologies for the 90's, SAE Publication SP-852, p. 51-62, February, 1991.

Cohen, D., Digges K., and Nichols, R.H., "Rollover Crashworthiness Classification and Severity Indices", Proceedings of the Twelfth International Conference on Experimental Vehicles, p. 477-486, May 1989.

Digges, K., Morris, J., and Roberts, V., "Residual Injuries to Occupants Protected by Restraint Systems", SAE Paper 891975, SAE Transactions, Vol. 98. Section 6, 1989.

Digges, K., Haffner, M., Cohen, D., and Eppinger, R., "Crash Injury Analysis of Measurement Needs for an Improved Anthropomorphic Test Device", Proceedings of the 1988 International Conference on the Biomechanics of Impact, p.361-371, September 1988.

Digges, K., "Occupant Vehicle Models and Data Bases Maintained by NHTSA", Proceedings of the 1988 International Conference on the Biomechanics of Impact, p.149-158, September 1988.

Digges K., "Recent Improvements in Occupant Crash Simulation Capabilities of the CVS/ATB Model, SAE Paper 880665, March 1988.

Clark, C., Jettner, E., Digges, K., Morris, J., and Cohen, D., "Simulation of Road Crash Facial Lacerations by Broken Windshields". Paper 870320, Restraint Technologies: Front Seat Occupant Protection, SAE Publication SP-690; SAE Transactions, Vol. 96. Section 1, 1987.

Digges, K., "Technological Approaches to Injury Prevention", Public Health Reports, Journal of the U.S. Public Health Service, Public Health Reports, Vol. 102, No. 6, p. 630, November- December, 1987.

Digges, K., et. al., "Evaluation of Devices to Measure the Injury Mitigation Properties of Steering Systems", Proceedings of the 1987 International Conference on the Biomechanics of Impact, p. 91-103, September 1987.

Malliaris, A., and Digges, K., "Crash Protection Offered by Safety Belts", Proceedings of the Eleventh International Conference on Experimental Safety Vehicles, p.242-252, May 1987.

Digges, K., "Light Truck Safety Research in NHTSA", SAE Paper 871099, SAE Transactions, Vol. 96. Section 3, 1987.

Digges, K., "Improvements in the Simulation of Unrestrained Passengers in Frontal Crashes Using Vehicle Test Data", SAE Paper 860654, SAE Transactions, Vol. 95. Section 3, 1986.

Digges, K., Cohen, D., Stucki, L., "The Application of Crash Victim Simulation Models in Assessing Injury Reduction Priorities", Proceedings of the 1986 International Conference on the Biomechanics of Impact, p.1-16, 1986.

Ommaya, A., and Digges, K., "A Study of Head and Neck Injury Mechanisms by Reconstruction of Automobile Accidents", Proceedings of the 1985 International Conference on the Biomechanics of Impact 1985, p. 253-268, 1985.

Digges, K., Nicholson, R., and Rouse, E., "The Technical Basis for the Center High Mounted Stoplamp", SAE Paper 851240, SAE Transactions, Vol. 94. Section 5, 1985.

Digges, K., "Consequences of Biomechanical Data for Safety Regulation", Chapter in The Biomechanics of Impact Trauma, Elsevier Science Publishers, p.427-442, 1984.

Digges, K., "Reconstruction of Frontal Accidents Using the CVS 3D Model, SAE Paper 840869, 1984.

Digges, K., "Consequences of Biomedical Data for Safety Regulations" Amalfi Conference on Biomechanics, May 27, 1983.

Digges, K., "Tradeoff Parameters of Alternative Takeoff and Landing Systems", AGARD Conference on Takeoff and Landing, Edinburgh, Scotland, 1974.

Hildebrandt, L., and Digges, K., "Summary of the Air Cushion Landing System on the De Havilland Buffalo Aircraft", Canadian Aeronautics and Space Journal, p. 93-100, March, 1974.

Hildebrandt, L., and Digges, K., "Development of the Air Cushion Aircraft", Canadian Aeronautics and Space Journal, p. 91-92, April, 1973.

Digges, K., "Military Air Cushion Aircraft", The Military Engineer, Vol. 64, No. 421, p.304-308, September-October, 1972.

Digges, K., "Static Performance of Plenum and Peripheral Jet Air Cushions", University of Tennessee Space Institute, Conference on Air Cushion Landing Systems, December 12-14, 1972.

Hildebrandt, L., and Digges, K., "The Air Cushion Aircraft - It's Benefits to the Arctic", Canadian Aeronautics and Space Journal, April, 1971.

Digges, K., and Perez, D., "Air Cushion System for STOL Aircraft", V/Stol Technology and Planning Conference, September 25, 1969.

Digges, K., and Petersons, A., "There are Many Ways to Improve Ability of Aircraft to Land on Poorly Surfaced Fields", SAE Journal , p43-47, September 1968.

Digges, K., and Petersons, A., "Results of Studies to Improve the Ground Flotation of Military Aircraft", SAE 670560 June 1967.

Digges, K., "Design of High Temperature Aircraft Windows", USAF Conference, December, 1964.

Digges, K., "The Aerospace Challenge to Bearing Technology", USAF Aerospace Fluids and Lubricants Conference, San Antonio, April 16-19, 1963.

Digges, K., "Design of Transparent Vision Areas for Orbital Glide Vehicles", USAF/NASA Conference on Lifting Manned Hypervelocity Vehicles, April, 1960.