TEXTBOOK:

[B1] P. A. Ioannou and B. Fidan, Adaptive Control Tutorial, SIAM Society for Industrial & Applied Mathematics, TJ217.I628, ISBN 0-89871-615-2, 2006.

EDITED BOOK:

[B2] G. Mao and B. Fidan (editors), Localization Algorithms and Strategies for Wireless Sensor Networks, IGI Global – Information Science Publishing, ISBN 1-60566-396-4, 2009.

SOFTWARE:

- [S1] B. Fidan and P. A. Ioannou, Adaptive Control Toolbox for use with MATLAB & Simulink, under beta testing, 2007–2009.
- [S1a] B. Fidan and P. A. Ioannou, Adaptive Control Toolbox: User's Guide, manual of [S1], 2007.

JOURNAL ARTICLES:

- [J1] I.G. Rosen, T. Parent, B. Fidan, C. Wang, and A. Madhukar, "Design, development, and testing of real-time feedback controllers for semiconductor etching processes using in situ spectroscopic ellipsometry sensing," *IEEE Trans. on Control Systems Technology*, vol. 10, pp. 64–75, January 2002.
- [J2] Y. Zhang, B. Fidan, and P.A. Ioannou, "Backstepping control of linear time varying systems with known and unknown parameters," *IEEE Trans. on Automatic Control*, vol. 48, no. 11, pp. 1908–1925, November 2003.
- [J3] B. Fidan, Y. Zhang, and P.A. Ioannou, "Adaptive control of a class of slowly time-varying systems with modeling uncertainties," *IEEE Trans. on Automatic Control*, vol. 50, no. 6, pp. 915–920, June 2005.
- [J4] C. Yu, J. M. Hendrickx, B. Fidan, B. D. O. Anderson, and V. D. Blondel "Three and higher dimensional autonomous formations: Rigidity, persistence and structural persistence," *Automatica*, vol. 43, no. 3, pp. 387–402, March 2007.
- [J5] B. Fidan, C. Yu, and B.D.O. Anderson, "Acquiring and Maintaining Persistence of Autonomous Multi-Vehicle Formations," *IET Control Theory and Applications*, vol. 1, no. 2, pp. 452–460, March 2007.

- [J6] G. Mao, B.D.O. Anderson, and B. Fidan, "Path loss exponent estimation for wireless sensor network localization," *Computer Networks*, vol. 51, no. 10, pp. 2467–2483, July 2007.
- [J7] G. Mao, B. Fidan, and B.D.O. Anderson, "Wireless sensor network localization techniques," *Computer Networks*, vol. 51, no. 10, pp. 2529–2553, July 2007.
- [J8] V. Gazi, B. Fidan, Y.S. Hanay, and M.I. Köksal, "Aggregation, foraging, and formation control of swarms with non-holonomic agents using potential functions and sliding mode techniques," *Elektrik - Tr. J. of Electrical Eng. and Computer Sciences*, vol. 15, no. 2, pp. 149–168, July 2007.
- [J9] P.A. Ioannou, H. Xu, and B. Fidan, "Identification and high bandwidth control of hard disk drive servo systems based on sampled data measurements," *IEEE Trans. on Control* Systems Technology, vol. 15, no. 6, pp. 1089-1095, November 2007.
- [J10] J.M. Hendrickx, C. Yu, B. Fidan, and B.D.O. Anderson, "Rigidity and persistence for ensuring shape maintenance of multiagent meta formations," Asian Journal of Control, vol. 10, no. 2, pp. 131–143, March 2008.
- [J11] J.M. Hendrickx, B. Fidan, C. Yu, B.D.O. Anderson, and V. D. Blondel, "Formation reorganization by primitive operations on directed graphs," *IEEE Trans. on Automatic Control*, vol. 53, no. 4, pp. 968–979, May 2008.
- [J12] A.N. Bishop, B. Fidan, B.D.O. Anderson, K. Doğançay, and P.N. Pathirana, "Optimal range-difference based localization considering geometrical constraints," *IEEE Journal of Oceanic Engineering*, vol. 33, no. 3, pp. 289–301, July 2008.
- [J13] A.N. Bishop, B. Fidan, K. Doğançay, B.D.O. Anderson, and P.N. Pathirana, "Exploiting geometry for improved hybrid AOA/TDOA based localization," *Signal Processing*, vol. 88, no. 7, pp. 1775–1791, July 2008.
- [J14] B. Fidan, S. Dasgupta and B.D.O. Anderson, "Guaranteeing practical convergence in algorithms for sensor and source localization," *IEEE Trans. on Signal Processing*, vol. 56, no. 9, pp. 4458–4469, September 2008.
- [J15] B.D.O. Anderson, C. Yu, B. Fidan, and J.M. Hendrickx, "Rigid graph control architectures for autonomous formations," *IEEE Control Systems Magazine*, vol. 28, no. 6, pp. 48–63, December 2008.
- [J16] A.N. Bishop, B.D.O. Anderson, B. Fidan, P.N. Pathirana, and G. Mao, "Bearing-only localization using geometrically constrained optimization," *IEEE Trans. on Aerospace* and Electronic Systems, vol. 45, no. 1, pp. 308–320, January 2009.
- [J17] S.H. Dandach, B. Fidan, S. Dasgupta, and B.D.O. Anderson, "A continuous time linear adaptive source localization algorithm robust to persistent drift," Systems & Control Letters, vol. 58, no. 1, pp. 7–16, January 2009.
- [J18] C. Yu, B.D.O. Anderson, S. Dasgupta and B. Fidan, "Control of minimally persistent formations in the plane," SIAM Journal on Control and Optimization, vol. 48, no. 1, pp. 206–233, February 2009.
- [J19] I. Shames, B. Fidan, and B.D.O. Anderson, "Self-localization error reduction in multiagent autonomous systems," *Automatica*, vol. 45, no. 4, pp. 1058–1065, April 2009.
- [J20] C. Yu, B. Fidan, and B.D.O. Anderson, "Information architecture for merging of rigid formations," to appear in *IET Control Theory and Applications*.

- [Ch1] G. Mao, B. Fidan, and B. D. O. Anderson, "Sensor network localization," Chapter 13 in Sensor Network and Configuration, N.P. Mahalik (ed.), Springer-Verlag, pp. 281–315, 2006.
- [Ch2] V. Gazi and B. Fidan, "Coordination and control of multi-agent dynamic systems: Models and approaches," in *Swarm Robotics: SAB 2006*, E. Şahin, W.M. Spears, and A.F.T. Winfield (ed.), Lecture Notes in Computer Science 4433, Springer-Verlag, pp. 71–102, 2007.
- [Ch3] B. Fidan, B.D.O. Anderson, C. Yu, and J.M. Hendrickx, "Persistent autonomous formations and cohesive motion control," in *Modeling and Control of Complex Systems*, P. Ioannou and A. Pitsillides (ed.), Taylor & Francis, pp. 247–275, 2007.
- [Ch4] B.D.O. Anderson, B. Fidan, C. Yu, and D. van der Walle, "UAV formation control: Theory and application," in *Recent Advances in Learning and Control*, V.D. Blondel, S.P. Boyd, and H. Kimura (ed.), Lecture Notes in Control and Information Sciences 371, Springer-Verlag, pp. 15–34, 2008.
- [Ch5] B. Fidan, S. Dasgupta, and B.D.O. Anderson, "Realistic anchor positioning for sensor localization," in *Recent Advances in Learning and Control*, V.D. Blondel, S.P. Boyd, and H. Kimura (ed.), Lecture Notes in Control and Information Sciences 371, Springer-Verlag, pp. 79–94, 2008.
- [Ch6] G. Mao, B.D.O. Anderson, B. Fidan, J. Fang and A.S. Morse, "On the critical connectivity radii in WM²SNets," in *Wireless Mesh Networking*, George Aggelou (ed.), McGraw-Hill, pp. 50–59, 2008.

CONFERENCE PAPERS:

- [C1] I.G. Rosen, T. Parent, B. Fidan, and A. Madhukar, "In-situ spectroscopic ellipsometry for the real time process control of plasma etching of silicon nitride," in *Materials Research Society Symposia Proc.*, vol. 591, pp. 263–268, Boston, MA, USA, Nov.-Dec. 1999.
- [C2] B. Fidan, T. Parent, I.G. Rosen, and A. Madhukar, "Spectroscopic ellipsometry based real-time control of CF₄O₂ plasma etching of silicon nitride," in Proc. American Control Conference, pp. 4006–4010, Chicago, IL, USA, June 2000.
- [C3] B. Fidan, I.G. Rosen, T. Parent, and A. Madhukar, "Multi-variable adaptive control of CF₄/O₂ plasma etching of silicon nitride thin films," in Proc. American Control Conference, pp. 1280–1285, Arlington, VA, USA, June 2001.
- [C4] B. Fidan, Y. Zhang, and P.A. Ioannou, "A new robust adaptive control scheme for linear time varying plants," in *Proc. 41st IEEE Conference on Decision and Control*, vol. 3, pp. 3061–3066, Las Vegas, NV, USA, 2002.
- [C5] B. Fidan, E.B. Kosmatopoulos, and P.A. Ioannou, "A switching controller for multivariable LTI systems with known and unknown parameters," in *Proc. 41st IEEE Conference on Decision and Control*, vol. 4, pp. 4688–4693, Las Vegas, NV, USA, 2002.
- [C6] P.A. Ioannou, H. Xu, and B. Fidan, "Servo control design for a hard disk drive based on estimated head position at high sampling rates," in *Proc. American Control Conference*, pp. 731–736, Denver, CO, USA, June 2003.

- [C7] B. Fidan, E. Sezer, and M. Akar, "Multi-stage neural networks with application to motion planning of a mechanical snake," in *Proc. American Control Conference*, pp. 1278–1283, Denver, CO, USA, June 2003.
- [C8] B. Fidan, M. Mirmirani, and P.A. Ioannou, "Flight dynamics and control of air-breathing hypersonic vehicles: Review and new directions," in *Proc. 12th AIAA International Space Planes and Hypersonic Systems and Technologies Conference*, AIAA-2003-7081, Norfolk, VA, USA, December 2003.
- [C9] B. Fidan, M. Mirmirani, and P.A. Ioannou, "Air-breathing hypersonic flight control," in Proc 16th IFAC Symposium on Automatic Control in Aerospace, vol. 1, pp. 571–576, St.Petersburg, Russia, June 2004.
- [C10] J.M. Hendrickx, B. Fidan, C. Yu, B.D.O. Anderson, and V.D. Blondel "Rigidity and persistence of three and higher dimensional formations," in Proc. 2nd Int. Conf. on Informatics in Control, Automation & Robotics (ICINCO) - 1st Int. Workshop on Multi-Agent Robotic Systems (MARS), pp. 39–46, Barcelona, Spain, September 2005.
- [C11] C. Yu, J.M. Hendrickx, B. Fidan, and B.D.O. Anderson, "Structural persistence of three dimensional autonomous formations," in Proc. 2nd Int. Conf. on Informatics in Control, Automation & Robotics (ICINCO) - 1st Int. Workshop on Multi-Agent Robotic Systems (MARS), pp. 47–55, Barcelona, Spain, September 2005.
- [C12] C. Yu, B. Fidan, and B.D.O. Anderson, "Persistence acquisition and maintenance for autonomous formations," in Proc. 2nd Int. Conf. on Intelligent Sensors, Sensor Networks and Information Processing (ISSNIP), pp. 379–384, Melbourne, VIC, Australia, December 2005.
- [C13] C. Yu, B. Fidan, and B.D.O. Anderson, "Principles to control autonomous formation merging," in *Proc. American Control Conference*, pp. 762–768, Minneapolis, MN, USA, June 2006.
- [C14] S. Sandeep, B. Fidan, and C. Yu, "Decentralized cohesive motion control of multi-agent formations," in *Proc. 14th Mediterranean Conference on Control and Automation*, FM1-3 (6 pages), Ancona, Italy, June 2006.
- [C15] J.M. Hendrickx, B. Fidan, C. Yu, B.D.O. Anderson, and V.D. Blondel, "Elementary operations for the reorganization of minimally persistent formations," in *Proc. Mathematical Theory of Networks and Systems (MTNS) Conference*, pp. 859–873, Kyoto, Japan, July 2006.
- [C16] B.D.O. Anderson, C. Yu, B. Fidan, and J.M. Hendrickx, "Use of meta-formations for cooperative control," in *Proc. Mathematical Theory of Networks and Systems (MTNS) Conference*, pp. 2381–2387, Kyoto, Japan, July 2006.
- [C17] B.D.O. Anderson, C. Yu, B. Fidan, and J.M. Hendrickx, "Control and information architectures for formations," in *Proc. IEEE Conference on Control Applications (Joint CCA/CACSD/ISIC)*, pp. 1127–1138, Munich, Germany, October 2006.
- [C18] B. Fidan, M. Kuipers, P.A. Ioannou, and M. Mirmirani, "Longitudinal motion control of air-breathing hypersonic vehicles based on time-varying models," in *Proc. 14th AIAA Int. Space Planes and Hypersonic Systems and Technologies Conf.*, AIAA-2006-8074, Canberra, ACT, Australia, November 2006.
- [C19] G. Mao, B.D.O. Anderson, and B. Fidan, "Online calibration of path loss exponent in wireless sensor networks," in *Proc. IEEE Global Telecommunications Conference (Globecom)*, Paper No. WSN06-4 (6 pages), San Francisco, CA, USA, November 2006.

- [C20] S.H. Dandach, B. Fidan, S. Dasgupta, and B.D.O. Anderson, "Adaptive source localization by mobile agents," in *Proc. 45th IEEE Conference on Decision and Control*, pp. 2045– 2050, San Diego, CA, USA, December 2006.
- [C21] C. Yu, B. Fidan, J.M. Hendrickx, and B.D.O. Anderson, "Merging multiple formations: A meta-formation perspective," in *Proc. 45th IEEE Conference on Decision and Control*, pp. 4657–4663, San Diego, CA, USA, December 2006.
- [C22] J.M. Hendrickx, C. Yu, B. Fidan, and B.D.O. Anderson, "Rigidity and persistence of metaformations," in *Proc. 45th IEEE Conference on Decision and Control*, pp. 5980–5985, San Diego, CA, USA, December 2006.
- [C23] A.A. Kannan, B. Fidan, G. Mao, and B.D.O. Anderson, "Analysis of flip ambiguities in distributed network localization," in *Proc. Information, Decision and Control Conference* - *IDC 2007*, pp. 193–198, Adelaide, SA, Australia, February 2007.
- [C24] A.N. Bishop, P.N. Pathirana, B.Fidan, B.D.O. Anderson, and G. Mao, "Passive angle measurement based localization consistency via geometric constraints", in *Proc. Information, Decision and Control Conference - IDC 2007*, pp. 199–204, Adelaide, SA, Australia, February 2007.
- [C25] B. Fidan, S. Dasgupta, and B.D.O. Anderson, "Conditions for guaranteed convergence in sensor and source localization," in *Proc. 32nd International Conference on Acoustics*, *Speech, and Signal Processing (ICASSP-2007)*, vol.2, pp. 1081-1084, Honolulu, Hawaii, USA, April 2007.
- [C26] B. Fidan and B.D.O. Anderson, "Switching control for robust autonomous robot and vehicle platoon formation maintenance," in *Proc. 15th Mediterranean Conference on Control* and Automation, T33-002 (6 pages), Athens, Greece, June 2007.
- [C27] I. Shames, C. Yu, B. Fidan, and B.D.O. Anderson, "Externally excited coordination of autonomous formations," in *Proc. 15th Mediterranean Conference on Control and Automation*, T33-003 (6 pages), Athens, Greece, June 2007.
- [C28] C. Yu, B. Fidan, I. Shames, S. Sandeep, and B.D.O. Anderson, "Collision free coordination of autonomous multi-agent systems," in *Proc. European Control Conference*, pp. 900–907, Kos, Greece, July 2007.
- [C29] V. Gazi, M.I. Köksal, and B. Fidan, "Aggregation in a swarm of non-holonomic agents using artificial potentials and sliding mode control," in *Proc. European Control Conference*, pp. 1485–1491, Kos, Greece, July 2007.
- [C30] B.D.O. Anderson, C. Yu, and B. Fidan, "Information architecture and control design for rigid formations," in *Proc. 26th Chinese Control Conference (CCC-07)*, pp. 2–10, Zhangjiajie Hunan, China, July 2007.
- [C31] A.N. Bishop, B. Fidan, B.D.O. Anderson, K. Doğançay, and P.N. Pathirana, "Optimality analysis of sensor-target geometries in passive localization: Part 1 - Bearing-only localization," in Proc. 3rd Int. Conf. on Intelligent Sensors, Sensor Networks and Information Processing (ISSNIP), pp. 7–12, Melbourne, VIC, Australia, December 2007.
- [C32] A.N. Bishop, B. Fidan, B.D.O. Anderson, P.N. Pathirana, and K. Doğançay, "Optimality analysis of sensor-target geometries in passive localization: Part 2 - Time-of-arrival based localization," in *Proc. 3rd Int. Conf. on Intelligent Sensors, Sensor Networks and Information Processing (ISSNIP)*, pp. 13–18, Melbourne, VIC, Australia, December 2007.

- [C33] M.I. Köksal, V. Gazi, B. Fidan, and R. Ordoñez, "Tracking a maneuvering target with a swarm of non-holonomic agents using artificial potentials and sliding mode control," in Proc. IARP-EURON Workshop on Robotics for Risky Interventions and Environmental Surveillance, Benicassim, Spain, January 2008.
- [C34] I. Shames, B. Fidan, B.D.O. Anderson, and H. Hmam, "Self-localization of mobile agents in the plane," in *Proc. IEEE Int. Symposium on Wireless Pervasive Computing*, pp. 116– 120, Santorini, Greece, May 2008.
- [C35] D. van der Walle, B. Fidan, A. Sutton, C. Yu and B.D.O. Anderson, "Non-hierarchical UAV formation control for surveillance tasks," in *Proc. American Control Conference*, pp. 777–782, Seattle, WA, USA, June 2008.
- [C36] S. Zhai and B. Fidan, "Single view depth estimation based formation control of robotic swarms: Fundamental design and analysis," in *Proc. 16th Mediterranean Conference on Control and Automation*, pp. 1156–1161, Corsica, France, June 2008.
- [C37] S. Zhai, B. Fidan, Ş.Ç. Öztürk, and V. Gazi, "Single view depth estimation based formation control of robotic swarms: Obstacle avoidance, simulation, and practical issues," in *Proc. 16th Mediterranean Conference on Control and Automation*, pp. 1162–1167, Corsica, France, June 2008.
- [C38] M.I. Köksal, V. Gazi, B. Fidan, and R. Ordoñez "Tracking a maneuvering target with a non-holonomic agent using artificial potentials and sliding mode control," in *Proc. 16th Mediterranean Conference on Control and Automation*, pp. 1174–1179, Corsica, France, June 2008.
- [C39] I. Shames, B. Fidan, and B.D.O. Anderson, "Reduction of self-localization errors in multiagent autonomous formations," in *Proc. 17th World Congress of Int. Federation of Automatic Control (IFAC'08)*, pp. 6578–6583, Seoul, Korea, July 2008.
- [C40] A. Sutton, B. Fidan, and D. van der Walle, "Hierarchical UAV formation control for cooperative surveillance," in Proc. 17th World Congress of Int. Federation of Automatic Control (IFAC'08), pp. 12087–12092, Seoul, Korea, July 2008.
- [C41] M. Kuipers, P.A. Ioannou, B. Fidan, and M. Mirmirani, "Robust adaptive multiple model controller design for an airbreathing hypersonic vehicle model," in *Proc. AIAA Guidance*, *Navigation, and Control Conf. and Exhibit*, AIAA-2008-7142, Honolulu, Hawaii, USA, August 2008.
- [C42] V. Gazi, B. Fidan, and S. Zhai, "Single view depth estimation based formation control of robotic swarms: Implementation using realistic robot simulator," in Advances in Mobile Robotics: Proc. 11th Int. Conf. on Climbing and Walking Robots and the Support Technologies for Mobile Machines, pp. 1079-1089, Coimbra, Portugal, September 2008.
- [C43] A.A. Kannan, B. Fidan, and G. Mao, "Robust distributed sensor network localization based on analysis of flip ambiguities," in *Proc. IEEE Global Telecommunications Conference (Globecom)*, Paper No. AH01M1-2 (6 pages), New Orleans, LA, USA, Nov.–Dec. 2008.
- [C44] I. Shames, B. Fidan, and B.D.O. Anderson, "Close target reconnaissance using autonomous UAV formations," in *Proc. 47th IEEE Conference on Decision and Control*, pp. 1729–1734, Cancun, Mexico, December 2008.
- [C45] G. Piovan, I. Shames, B. Fidan, F. Bullo, and B.D.O. Anderson, "On frame and orientation localization for relative sensing networks," in *Proc.* 47th IEEE Conference on Decision and Control, pp. 2326–2331, Cancun, Mexico, December 2008.

- [C46] A.A. Kannan, B. Fidan, and G. Mao, "Derivation of flip ambiguity probabilities to facilitate robust sensor network localization," in *Proc. IEEE Wireless Communications and Networking Conference*, Budapest, Hungary, April 2009.
- [C47] M. Kuipers, P.A. Ioannou, B. Fidan, and M. Mirmirani, "Analysis of an adaptive mixing control scheme for an airbreathing hypersonic vehicle model," in *Proc. American Control Conf.*, pp. 3148–3153, St. Louis, Missouri, USA, June 2009.
- [C48] B. Fidan, J.M. Hendrickx and B.D.O. Anderson, "Edge contraction based maintenance of rigidity in multi-agent formations during agent loss," in *Proc. 17th Mediterranean Conference on Control and Automation*, pp. 422–427, Thessaloniki, Greece, June 2009.
- [C49] I. Shames, P.T. Bibalan, B. Fidan, and B.D.O. Anderson, "Polynomial methods in noisy network localization," in Proc. 17th Mediterranean Conference on Control and Automation, pp. 1307–1312, Thessaloniki, Greece, June 2009.
- [C50] I. Shames, B.D.O. Anderson, X.F. Wang, and B. Fidan, "Network synchronizability enhancement using convex optimization," to appear in *Proc. European Control Conference*, Budapest, Hungary, August 2009.
- [C51] I. Shames, S. Dasgupta, B. Fidan, and B.D.O. Anderson, "Circumnavigation using distance measurements," to appear in *Proc. European Control Conference*, Budapest, Hungary, August 2009.
- [C52] R. Soukieh, I. Shames, and B. Fidan, "Obstacle avoidance of non-holonomic unicycle robots based on fluid mechanical modeling," to appear in *Proc. European Control Conference*, Budapest, Hungary, August 2009.
- [C53] R. Soukieh, I. Shames, and B. Fidan, "Obstacle avoidance of robotic formations based on fluid mechanical modeling," to appear in *Proc. European Control Conference*, Budapest, Hungary, August 2009.
- [C54] I. Shames, B.D.O. Anderson, and B. Fidan, "On the use of convex optimization in sensor network localization and synchronization," to appear in Proc. IFAC Workshop on Estimation and Control of Networked Systems, Venice, Italy, September 2009.
- [C55] O. Rehman, B. Fidan, and I.R. Petersen, "Uncertainty modeling for robust multivariable control synthesis of hypersonic flight vehicles," to appear in 16th AIAA/DLR/DGLR International Space Planes and Hypersonic Systems and Technology Conference, Bremen, Germany, October 2009.
- [C56] O. Rehman, B. Fidan, and I.R. Petersen, "Minimax LQR control design of a hypersonic flight vehicle," to appear in 16th AIAA/DLR/DGLR International Space Planes and Hypersonic Systems and Technology Conference, Bremen, Germany, October 2009.
- [C57] O. Rehman, B. Fidan, and I.R. Petersen, "Robust minimax optimal control of nonlinear uncertain systems using feedback linearization with application to hypersonic flight vehicles," to appear in *Proc. 47th IEEE Conference on Decision and Control*, Shanghai, China, December 2009.

THESES:

[T1] B. Fidan, "Motion planning of a mechanical snake using neural networks," Master's thesis, Bilkent University, July 1998. [T2] B. Fidan, Nonlinear and Adaptive Control of Time Varying and Multivariable Systems: New Designs and Applications. PhD thesis, University of Southern California, December 2003.

TECHNICAL REPORTS:

- [R1] P.A. Ioannou, K. Li, A. Abdullah, R. Rhagavendra, and B. Fidan, "Decentralized and reconfiguration control for large scale systems with application to a segmented telescope testbed," Final Report to Califonia State University, Los Angeles, for Award No. UAS/USC-220438, March 2003.
- [R2] B. Fidan, Y. Zhang, and P.A. Ioannou, "Adaptive control of slowly time varying systems with modeling uncertainties," Tech. Rep. USC-CATT 11-20-04, Univ. Southern California, Los Angeles, November 2004.
- [R3] J.M. Hendrickx, B. Fidan, C. Yu, B.D.O. Anderson, V.D. Blondel, "Primitive operations for the construction and reorganization of persistent formations," Cesame Research Report 2006.62, arXiv:cs.MA/0609041, 8 September 2006.
- [R4] A.A. Kannan, B. Fidan, G. Mao, and B.D.O. Anderson, "Analysis of flip ambiguities in distributed network localization," Tech. Rep. NICTA PA006288, National ICT Australia, Canberra, ACT, Australia, November 2006.
- [R5] J.M. Hendrickx, C. Yu, B. Fidan, and B.D.O. Anderson, "Rigidity and persistence for ensuring shape maintenance of multiagent meta formations (ext'd version)," arXiv:cs.MA/0710.2659v1, 14 October 2007.

SELECTED TALKS (EXCLUDING CONFERENCE PRESENTATIONS):

- "Robust nonlinear adaptive control of multivariable LTI systems," in 2nd Southern California Nonlinear Control Workshop, University of California, San Diego, USA, May 2001.
- "Backstepping control of LTV systems with known and unknown parameters," in 4th Southern California Nonlinear Control Workshop, University of California, Santa Barbara, USA, June 2002.
- "A robust adaptive controller for LTV systems," in 5th Southern California Nonlinear Control Workshop, California Institute of Technology, USA, November 2002.
- "Adaptive Control Toolbox," in 8th Southern California Nonlinear Control Workshop, University of California, Santa Barbara, USA, May 2004.
- "Nonlinear and adaptive control of time varying systems with uncertainties," invited talk, Michigan State University University of Hawaii, USA; Queen's University, Canada; Australian National University, Australia; Anadolu University, Turkey; 2004–2005.
- "Persistent autonomous formations and cohesive motion control," invited talk, University of California, Santa Barbara, USA; TOBB University of Economics and Technology, Turkey; 2006.

- "Robust cooperative sensor localization," invited talk, TOBB University of Economics and Technology, Turkey, July 2006.
- "Switching control for multi-agent formation maintenance," invited talk, TOBB University of Economics and Technology / Turkey, Universite catholique de Louvain / Belgium, Delft University of Technology / Netherlands, June 2007.
- "Nonlinear and adaptive approaches in autonomous multi-vehicle localization and formation control," invited talk, Delft University of Technology / Netherlands, TOBB University of Economics and Technology / Turkey, June–July 2008.
- "Air-breathing hypersonic flight control : Review and new robust control approaches," in *Australian Hypersonics Capabilities and Future Directions Workshop*, Brisbane, Australia, August 2008.