

**SABRINA DE CAPITANI DI VIMERCATI**

Dipartimento di Informatica, Università degli Studi di Milano, Italy

<http://www.di.unimi.it/decapita>[sabrina.decapitani@unimi.it](mailto:sabrina.decapitani@unimi.it)

+39-0373898.057

**1 Education and employment history**

She received the Laurea and PhD degrees both in Computer Science from the Università degli Studi di Milano, Italy, in 1996 and 2001, respectively. She has subsequently acquired the following positions:

- *Full professor*, Computer Science Department (originally Information Technology Department), Università degli Studi di Milano, Italy. [March 2007-present].
- *Associate professor*, Information Technology Department, Università degli Studi di Milano, Italy. [January 2003-February 2007].
- *Assistant professor*, University of Brescia, Italy. [November 1999-December 2002].

She has spent several visits at SRI International and George Mason University. In particular:

- *International Fellow*, SRI International, CA, USA. [March 1998-September 1998, May 1999, July 1999-September 1999].
- *Visiting researcher*, Center for Secure Information Systems, George Mason University, VA (USA) [summers 2002-2017]

**2 Awards**

- *DBSec 2014 Best Paper Award* for the paper “Optimizing Integrity Checks for Join Queries in the Cloud,” by S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, P. Samarati.
- *IFIP Silver Core Award* for the services to IFIP TC11 [2013].
- *IEEE Senior Member* [2012].
- *DBSec 2013 Best Paper Runner-up Award* for the paper “Extending Loose Associations to Multiple Fragments,” by S. De Capitani di Vimercati, S. Foresti, S. Jajodia, G. Livraga, S. Paraboschi, P. Samarati.
- *ACM PODS’99 Best Newcomer Paper Award* for the paper “Minimal Data Upgrading to Prevent Inference and Association Attacks,” by S. Dawson, S. De Capitani di Vimercati, P. Lincoln, P. Samarati.

**3 Research Interests and Projects**

Sabrina De Capitani di Vimercati’s research interests are in the area of security and privacy, database, and information systems. In particular, she has investigated different security and privacy issues among which: protection of network infrastructure, P2P reputation, models and languages for privacy protection, access control policies composition, protection of information from inference attacks, protection of information in open environments, information flow control in object-oriented systems, protection of outsourced data, security and privacy in the cloud. Her work is reported in more than 200 refereed technical papers in international journals, conferences, workshops, and book chapters.

Principal investigator of the following project:

- Privacy-aware environmental data publishing, funded by Università degli Studi di Milano under the program “UNIMI per il Futuro – 5 per Mille” [March 2010 - February 2012].

She has participated/participates in several projects funded by the EU and by the Italian Research Ministry such as the following.

- “Enforceable Security in the Cloud to Uphold Data Ownership” (ESCUDO-CLOUD) project, funded by the European Union’s Horizon 2020 research and innovation programme [January 2015-December 2017].
- “Data-Centric Genomic Computing” project, a project funded by the Italian Ministry of Research (MIUR) [February 2013-January 2016].
- “Privacy and Protection of Personal Data” project, a project funded by the Italian Ministry of Research (MIUR) [March 2010-September 2012].
- PrimeLife (Privacy and Identity Management in Europe for Life) project, a large-scale Integrating Project funded by the European Union under the VII Framework Program targeted to the development of privacy-aware solutions [March 2008-June 2011].

- “Cryptographic Databases” project, a project funded by the Italian Ministry of Research (MIUR) [February 2007-February 2009].
- PRIME (Privacy and Identity Management for Europe) project, an Integrating Project funded by the European Union under the VI Framework Program targeted to the development of privacy-aware solutions for enforcing security [March 2004-February 2008].
- RAPID (Roadmap for Advanced Research in Privacy and Identity Management), a Roadmap funded by the European Union under the V Framework Program targeted to the identification of R&D challenges in privacy technology and identity management [July 2002-June 2003].
- FASTER (Flexible Access to Statistics, Tables, and Electronic Resources), a project funded by the European Union under the V Framework Program targeted to the secure publication of data on the Web [January 2000-March 2002].

#### 4 Educational Activities

During her career, she has been teaching courses in: information systems, databases, compilers, security and privacy, and algorithms and data structures at undergraduate level at the Università degli Studi di Milano and other universities in Italy.

She has been invited to lecture in an international summer school, where she taught a course on access control and database security:

- “On Access Control and Database Security,” course within the Summer School on Information Security, May 15-23, 2003, Florida (USA).

#### 5 Professional Activities

##### 5.1 Participation in editorial boards of international journals

- *Associate Editor*, IET Information Security journal [June 2015-present]
- *Editorial Board Member*, Journal of Computer Security [January 2014-present]
- *Associate Editor*, ACM Transactions on Database Systems [January 2012-present]
- *Editorial Board Member*, IET Information Security journal [January 2010-May 2015]
- *Editorial Board Member*, ICST Transactions on Security and Safety [March 2009-present]
- *Editorial Board Member*, Computers & Security Journal, Elsevier [October 2008-July 2010]

##### 5.2 Conference and Workshop Organization

*Chairing Roles in Steering Committees:*

- IFIP WG 11.3 Working Group on Data and Application Security and Privacy. [August 2013-present]

*Member of Steering Committees:*

- European Symposium on Research in Computer Security (ESORICS). [2007-present]
- ACM Workshop on Privacy in the Electronic Society. [2004-present]

*General Chair:*

- 3rd IEEE Conference on Communications and Network Security (CNS 2015), Florence, Italy, September 28-30, 2015 (co-chair with David Du).
- 5th International Conference on Network and System Security (NSS 2011), Milan, Italy, September 6-8, 2011.
- 23rd International Information Security Conference (SEC 2008), Milan, Italy, September 8-10, 2008 (co-chair with Giulio Occhini).

*Program Track/Area Chair:*

- 6th IEEE Conference on Communications and Network Security (CNS 2018), Beijing, China, May 30-June 1, 2018 [Area chair].
- 4th International Symposium on Ubiquitous Networking (UNET 2018), Hammamet, Tunisia, May 3-5, 2018.
- 10th International Conference on Mobile Web Information Systems (MobiWIS 2013), Cyprus, August 26-28, 2013 [Mobile Web security, Trust, and Privacy track].
- 15th International Conference on Computational Science and Engineering (CSE 2012), Paphos, Cyprus, December 5-7, 2012 [Security, Privacy, and Trust track].

*Program Chair:*

- 3rd Workshop on Security and Privacy in the Cloud (SPC 2017), Las Vegas, NV, USA, October 11, 2017.

- 32nd International Conference on ICT Systems Security and Privacy Protection (SEC 2017), Rome, Italy, May 29-31, 2017 (co-chair with Fabio Martinelli).
- 15th Workshop on Privacy in the Electronic Society (WPES 2016), Vienna, Austria, October 24, 2016.
- 9th European PKI Workshop: Research and Applications (EuroPKI 2012), Pisa, Italy, September 13-14, 2012 (co-chair with Chris Mitchell).
- 4th International Workshop on Autonomous and Spontaneous Security (SETOP 2011), Leuven, Belgium, September 15-16, 2011 (co-chair with Joaquin Garcia-Alfaro).
- 5th International Workshop on Security and Trust Management (STM 2009), Saint Malo, France, September 2009 (co-chair with Ralf Küsters).
- 14th ACM Conference on Computer and Communications Security, Alexandria, VA, USA, October 29-November 2, 2007 (co-chair with Paul Syverson).
- 13th ACM Conference on Computer and Communications Security, Alexandria, VA, USA, October 30-November 3, 2006 (co-chair with Rebecca Wright).
- 10th European Symposium on Research in Computer Security, Milan, Italy, September 12-14, 2005 (co-chair with Paul Syverson).
- 4th Workshop on Privacy in the Electronic Society Alexandria, VA, USA, November 7, 2005 (co-chair with Roger Dingledine).
- 3rd Workshop on Privacy in the Electronic Society Washington, DC, USA, October 28, 2004 (co-chair with Paul Syverson).
- 17th Annual IFIP WG 11.3 Working Conference on Data and Application Security, Estes Park, Colorado, USA, August 4-6, 2003 (co-chair with Indrakshi Ray).

*Workshop Chair:*

- 6th International Conference on Future Information Technology (FutureTech 2011), Crete, Greece, June 28-30, 2011.

*Publicity Chair:*

- Workshop on Privacy in the Electronic Society, Washington, DC, USA, October 30 2003.
- 8th European Symposium on Research in Computer Security, Gjøvik, Norvegia, October 13-15, 2003.
- Workshop on Privacy in the Electronic Society, Washington, DC, USA, November 21, 2002.

*Program Committee Member:*

- 33th International Conference on Information Security and Privacy Protection (IFIP SEC 2018), Poznan, Poland, September 18-20, 2018.
- 2018 IEEE International Conference on INnovations in Intelligent SysTems and Applications (INISTA 2018), Thessaloniki, Greece, July 3-5, 2018.
- 23rd International Conference on Database Systems for Advanced Applications (DASFAA 2018), Gold Coast, Australia, May 21-24, 2018.
- 21st International Conference on Extending Database Technology (EDBT 2018), Vienna, Austria, March 26-29, 2018.
- 8th International Conference on Cloud Computing and Services Science (CLOSER 2018), Funchal, Madeira, Portugal, March 19-21, 2018.
- 13th International Conference on Information Systems Security (ICISS 2017), Bombay, Mumbai, India, December 16-20, 2017.
- 7th International Conference on e-Democracy (eDemocracy 2017), Athens, Greece, December 14-15, 2017.
- 8th International Workshop on Trust, Security and Privacy for Big Data (TrustData 2017), Guangzhou, China, December 12-15, 2017.
- 13th International Conference on Information Security Practice and Experience (ISPEC 2017), Melbourne, Australia, November 29 - December 1, 2017.
- 16th Workshop on Privacy in the Electronic Society (WPES 2017), Dallas, TX, USA, October 30, 2017.
- 5th IEEE Conference on Communications and Network Security (CNS 2017), Las Vegas, NV, USA, October 9-11, 2017.
- 1st ESORICS Doctoral Consortium - COINS Nordic PhD Workshop, Oslo, Norway, September 14, 2017.
- 6th International Workshop on Quantitative Aspects of Security Assurance (QASA 2017), Oslo, Norway, September 14, 2017.
- 22nd European Symposium on Research in Computer Security (ESORICS 2017), Oslo, Norway, September 11-13, 2017.
- 12th International Workshop on Security (IWSEC 2017), Hiroshima, Japan, August 30-September 1, 2017.

- 14th International Conference on Trust, Privacy & Security in Digital Business (TrustBus 2017), Lyon, France, August 28-31, 2017.
- 16th IEEE International Conference on Trust, Security and Privacy in Computing and Communications (TrustCom 2017), Sydney, Australia, August 1-4, 2017.
- 14th International Conference on Security and Cryptography (SECRYPT 2017), Madrid, Spain, July 26-28, 2017.
- 2nd Annual IEEE International Workshop on Cyber Resilience Economics (CRE 2017), Prague, Czech Republic, July 25-29, 2017.
- 31st Annual IFIP WG 11.3 Conference on Data and Applications Security and Privacy (DBSec 2017), Philadelphia, PA, USA, July 17-19, 2017.
- 2017 IEEE International Conference on INnovations in Intelligent SysTems and Applications (INISTA 2017), Gdynia, Poland, July 3-5, 2017.
- 8th International Conference on Ambient Systems, Networks and Technologies (ANT 2017), Madeira, Portugal, May 16-19, 2017.
- 7th International Conference on Cloud Computing and Services Science (CLOSER 2017), Porto, Portugal, April 22-24, 2017.
- 22nd International Conference on Database Systems for Advanced Applications (DASFAA 2017), Suzhou, China, March 27-30, 2017.
- 8th International Symposium on Cyberspace Safety and Security (CSS 2016), Granada, Spain, December 14-16, 2016.
- 1st International Workshop on Trust, Security and Privacy for Big Data (BigTrust 2016), Granada, Spain, December 14-16, 2016.
- 9th International Conference on Security, Privacy and Anonymity in Computation, Communication and Storage (SpaCCS 2016), Zhangjiajie, China, November 18-20, 2016.
- 7th International Workshop on Trust, Security and Privacy for Big Data (TrustData 2016), Zhangjiajie, China, November 16-18, 2016.
- 8th Workshop on Testing and Evaluation for Active & Resilient Cyber Systems (SafeConfig 2016), Vienna, Austria, October 24, 2016.
- 2nd Workshop on Security and Privacy in the Cloud (SPC 2016), Philadelphia, PA, USA, October 19, 2016.
- 4th IEEE Conference on Communications and Network Security (CNS 2016), Philadelphia, PA, USA, October 17-19, 2016.
- 11th International Workshop on Data Privacy Management (DPM 2016), Heraklion, Crete, Greece, September 29-30, 2016.
- 4th International Symposium on Security in Computing and Communications (SSCC 2016), Jaipur, India, September 21-24, 2016.
- 11th International Workshop on Security (IWSEC 2016), Tokyo, Japan, September 12-14, 2016.
- 13th International Conference on Trust, Privacy and Security in Digital Business (TrustBus 2016), Porto, Portugal, September 5-8, 2016.
- 19th IEEE International Conference on Computational Science and Engineering (CSE 2016), Paris, France, August 24-26, 2016.
- 2016 International Symposium on INnovations in Intelligent SysTems and Applications (INISTA 2016), Sinaia, Romania, August 2-5, 2016.
- 13th International Conference on Security and Cryptography (SECRYPT 2016), Lisbon, Portugal, July 26-28, 2016.
- 30th Annual IFIP WG 11.3 Conference on Data and Applications Security and Privacy (DBSec 2016), Trento, Italy, July 18-21, 2016.
- 13th IEEE International Conference on Advanced and Trusted Computing (ATC 2016), Toulouse, France, July 18-21, 2016.
- 6th International Workshop on Information Systems Security Engineering (WISSE 2016) Ljubljana, Slovenia, June 13, 2016.
- 31th IFIP TC-11 SEC 2016 International Information Security and Privacy Conference (SEC 2016), Ghent, Belgium, May 30-June 1, 2016.
- 7th International Conference on Ambient Systems, Networks and Technologies (ANT 2016), Madrid, Spain, May 23-26, 2016.
- 6th International Conference on Cloud Computing and Services Science (CLOSER 2016), Rome, Italy, April 23-25, 2016.
- 4th International Workshop on Security and Forensics in Cyber Space (SFCS 2016), Singapore, January 4-7, 2016.

- 6th International Conference on e-Democracy (eDemocracy 2015), Athens, Greece, December 10-11, 2015.
- 7th International Conference on Management of computational and collective Intelligence in Digital EcoSystems (MEDES 2015), Caraguatatuba/Sao Paulo, Brazil, October 25-29, 2015.
- 1st Workshop on Security and Privacy in the Cloud (SPC 2015), Florence, Italy, September 30, 2015.
- 20th European Symposium on Research in Computer Security (ESORICS 2015), Vienna, Austria, September 21-25, 2015.
- 11th International Workshop on Security and Trust Management (STM 2015), Vienna, Austria, September 21-22, 2015.
- 2015 International Symposium on INnovations in Intelligent SysTems and Applications (INISTA 2015), Madrid, Spain, September 2-4, 2015.
- 12th International Conference on Trust, Privacy and Security in Digital Business (TrustBus 2015), Valencia, Spain, September 1-2, 2015.
- 10th International Workshop on Security (IWSEC 2015), Nara City, Japan, August 26-28, 2015.
- Workshop on Security and Privacy in Cloud-based Applications (AU2EU 2015), Toulouse, France, August 24-28, 2015.
- 7th International Symposium on Cyberspace Safety and Security (CSS 2015), New York, USA, August 24-26, 2015.
- 12th International Conference on Security and Cryptography (SECRYPT 2015), Colmar, France, July 20-22, 2015.
- 10th International Conference on Risks and Security of Internet and Systems (CRiSIS 2015), Lesvos Island, Greece, July 20-22, 2015.
- 29th Annual IFIP WG 11.3 Working Conference on Data and Applications Security and Privacy (DBSec 2015), Fairfax, VA, USA, July 13-15, 2015.
- 3rd Workshop on Security and Forensics in Communication Systems (SFCS 2015), Larnaca, Cyprus, July 6-9, 2015.
- 5th International Workshop on Information Systems Security Engineering (WISSE 2015), Stockholm, Sweden, June 8, 2015.
- 30th IFIP TC-11 SEC 2015 International Information Security and Privacy Conference (SEC 2015), Hamburg, Germany, May 26-28, 2015.
- 9th Workshop on Web 2.0 Security & Privacy (W2SP 2015), San Jose, CA, USA, May 21, 2015.
- 5th International Conference on Cloud Computing and Services Science (CLOSER 2015), Lisbon, Portugal, May 19-21, 2015.
- 3rd International Workshop on Security in Cloud Computing (AsiaCCS-SCC 2015), Singapore, April 14, 2015.
- 13th Workshop on Privacy in the Electronic Society (WPES 2014), Scottsdale, Arizona, USA, November 3, 2014.
- 13th International Conference on Cryptology and Network Security (CANS 2014), Crete, Greece, October 22-24, 2014.
- 2nd IEEE Conference on Communications and Network Security (CNS 2014), San Francisco, CA, USA, October 29-31, 2014.
- 15th Joint IFIP TC6 and TC11 Conference on Communications and Multimedia Security (CMS 2014), Aveiro, Portugal, September 25-26, 2014.
- 5th International Conference on Emerging Ubiquitous Systems and Pervasive Networks (EUSPN 2014), Halifax, Nova Scotia, Canada, September 22-25, 2014.
- 2st International Workshop on Security and Privacy in e-Societies (SeceS 2014), Buraidah Al Qassim, Saudi Arabia, September 15-17, 2014.
- 19th European Symposium on Research in Computer Security (ESORICS 2014), Wroclaw, Poland, September 7-11, 2014.
- 10th International Workshop on Security and Trust Management (STM 2014), Wroclaw, Poland, September 10-11, 2014.
- 11th International Conference on Trust, Privacy & Security in Digital Business (TrustBus 2014), Munich, Germany, September 1-5, 2014.
- 9th International Conference on Security and Cryptography (SECRYPT 2014), Vienna, Austria, August 28-30, 2014.
- 9th International Conference on Risks and Security of Internet and Systems (CRiSIS 2014), Trento, Italy, August 27-29, 2014.
- 9th International Workshop on Security (IWSEC 2014), Hirosaki, Japan, August 27-29, 2014.
- 1st Workshop on Social Network Security (SocialSec 2014), San Francisco, CA, USA, August 13-15, 2014.

- 28th IFIP WG 11.3 Conference on Data and Application Security and Privacy (DBSec 2014), Vienna, Austria, July 14-16, 2014.
- 2014 IEEE International Symposium on INnovations in Intelligent SysTems and Applications (INISTA 2014), Alberobello, Italy, June 23-25, 2014.
- 4th International Workshop on Information Systems Security Engineering (WISSE 2014), Thessaloniki, Greece, June 16-20, 2014.
- 2nd International Workshop on Security and Forensics in Communication Systems (SFCS 2014), Kyoto, Japan, June 4-6, 2014.
- 29th IFIP TC-11 International Information Security Conference (SEC 2014), Marrakech, Morocco, June 2-4, 2014.
- 8th Workshop on Web 2.0 Security & Privacy (W2SP 2014), San Jose, CA, USA, May 18, 2014.
- 11th International Workshop on Security in Information Systems (WOSIS 2014), Lisbon, Portugal, April, 27 2014.
- 4th International Conference on Cloud Computing and Services Science (CLOSER 2014), Barcelona, Spain, April 3-5, 2014.
- 8th International Workshop on Security (IWSEC 2013), Okinawa, Japan, November 18-20, 2013.
- 5th International Symposium on Cyberspace Safety and Security (CSS 2013), Zhangjiajie, China, November 13-15, 2013.
- 12th Workshop on Privacy in the Electronic Society (WPES 2013), Berlin, Germany, November 4, 2013.
- 8th International Conference on Risks and Security of Internet and Systems (CRISIS 2013), La Rochelle, France, October 23-25, 2013.
- 4th International Conference on Emerging Ubiquitous Systems and Pervasive Networks (EUSPN 2013), Niagara Falls, Canada, October 21-24, 2013.
- 1st IEEE Conference on Communications and Network Security (CNS 2013), Washington DC, USA, October 14-16, 2013.
- 14th Joint IFIP TC6 and TC11 Conference on Communications and Multimedia Security (CMS 2013), Magdeburg, Germany, September 25-26, 2013.
- 6th SETOP International Workshop on Autonomous and Spontaneous Security (SETOP 2013), London, UK, September 12-13, 2013.
- 18th Symposium on Research in Computer Security (ESORICS 2013), London, UK, September 9-11, 2013.
- 10th European PKI Workshop: Research and Applications (EuroPKI 2013), London, UK, September 2013.
- 10th International Conference on Trust, Privacy and Security in Digital Business (TrustBus 2013), Prague, Czech Republic, August 26-30, 2013.
- 10th International Conference on Security and Cryptography (SECRYPT 2013), Reykjavik, Iceland, July 29-31, 2013.
- 27th Annual IFIP WG 11.3 Working Conference on Data and Applications Security and Privacy (DBSec 2013), Newark, NJ, USA, July 15-17, 2013.
- 10th Workshop on Security in Information Systems (WOSIS 2013), Angers, France, July 2013.
- 3rd International Workshop on Information Systems Security Engineering (WISSE 2013), Valencia, Spain, June 2013.
- 3rd International Conference on Cloud Computing and Services Science (CLOSER 2013), Aachen, Germany, May 8-10, 2013.
- 29th International Conference on Data Engineering (ICDE 2013), Brisbane, Australia, April 8-12, 2013.
- 4th International Symposium on Cyberspace Safety and Security (CSS 2012), Melbourne, Australia, December 12-13, 2012.
- 7th International Workshop on Security (IWSEC 2012), Nishijin, Japan, November 7-9, 2012.
- 4th International Conference on Management of Emergent Digital EcoSystems (MEDES 2012), Addis Ababa, Ethiopia, October 28-31, 2012.
- 5th International Workshop on Autonomous and Spontaneous Security (SETOP 2012), Pisa, Italy, September 13-14, 2012.
- 9th International Conference on Trust, Privacy and Security in Digital Business (TrustBus 2012), Vienna, Austria, September 3-7, 2012.
- 13th Joint IFIP TC6 and TC11 Conference on Communications and Multimedia Security (CMS 2012), Canterbury, UK, September 2-5, 2012.
- 9th VLDB Workshop on Secure Data Management (SDM 2012), Istanbul, Turkey, August 27, 2012.
- 7th International Conference on Security and Cryptography (SECRYPT 2012), Rome, Italy, July 24-27, 2012.
- 26th Annual WG11.3 Conference on Data and Applications Security and Privacy (DBSec 2012), Paris,

- France, July 11-13, 2012.
- 12th Privacy Enhancing Technologies Symposium (PETS 2012), Vigo, Spain, July 11-13, 2012.
  - 9th Workshop on Security in Information Systems (WOSIS 2012), Wrocław, Poland, June 28, 2012.
  - 10th International Conference on Applied Cryptography and Network Security (ACNS 2012), Singapore, June 26-29, 2012.
  - 1st IEEE International Workshop on Security and Forensics in Communication Systems (SFCS 2012), Ottawa, Canada, June 10-15, 2012.
  - 27th IFIP International Information Security and Privacy Conference (SEC 2012), Heraklion, Crete, Greece, June 4-6, 2012.
  - 2nd International Conference on Cloud Computing and Services Science (CLOSER 2012), Porto, Portugal, April 18-21, 2012.
  - 5th European Workshop on Systems Security (EuroSec 2012), Bern, Switzerland, April 10, 2012.
  - 7th International Conference on Information Systems Security (ICISS 2011), Kolkata, India, December 15-18, 2011.
  - International Conference on Management of Emergent Digital EcoSystems (MEDES 2011), San Francisco, USA, November 21-23, 2011.
  - 6th International Workshop on Security (IWSEC 2011), Tokyo, Japan, November 8-10, 2011.
  - 12th Joint IFIP TC6 and TC11 Conference on Communications and Multimedia Security (CMS 2011), Ghent, Belgium, October 19-21, 2011.
  - 10th Workshop on Privacy in the Electronic Society (WPES 2011), Chicago, IL, USA, October 17, 2011.
  - 8th European Workshop on PKI, Services and Applications (EUROPKI 2011), Leuven, Belgium, September 15-16, 2011.
  - 16th European Symposium On Research In Computer Security (ESORICS 2011), Leuven, Belgium, September 12-14, 2011.
  - 8th VLDB Workshop on Secure Data Management (SDM 2011), Seattle, US, September 2, 2011.
  - 8th International Conference on Trust, Privacy and Security in Digital Business (TrustBus 2011), Toulouse, France, 29 August - 2 September, 2011.
  - 11th Privacy Enhancing Technologies Symposium (PETS 2011), Waterloo, ON, Canada, July 27-29, 2011.
  - International Workshop on Model-Based and Policy-Based Engineering in Information Security (MPEIS 2011), Seville, Spain, July 18-21, 2011.
  - 6th International Conference on Security and Cryptography (SECRYPT 2011), Seville, Spain, July 18-21, 2011
  - 25th Annual IFIP WG 11.3 Conference on Data and Applications Security and Privacy (DBSec 2011), Richmond, Virginia USA, July 11-13, 2011.
  - 8th IEEE/FTRA International Conference on Secure and Trust Computing, Data Management, and Applications (STA 2011), Crete, Greece, June 28-30, 2011.
  - 7th International Workshop on Security and Trust Management (STM 2011), Copenhagen, Denmark, June 27-28, 2011.
  - 1st International Workshop on Information Systems Security Engineering (WISSE 1011), London, UK, June 21, 2011.
  - International Workshop on Intelligent Transportation Systems and Applications (ITSA 2011), Crete, Greece, June 28-30, 2011.
  - 1st International Workshop on Security and Privacy in e-Societies (SecoS 2011), Lebanon, June 9-10, 2011.
  - 8th Workshop on Security in Information Systems (WOSIS 2011), Beijing, China, June 8-11, 2011.
  - 4th International Workshop on Information Security Theory and Practices (WISTP 2011), Heraklion, Greece, June 8-11, 2011.
  - 26th IFIP International Information Security Conference (SEC 2011), Lucerne, Switzerland, June 7-9, 2011.
  - 5th International Workshop on Security (IWSEC 2010), Kobe, Japan, November 22-24, 2010.
  - Workshop on Specification and Implementation of Dynamic Security Policies (DYSP 2010), Bangkok, Thailand, October 29, 2010.
  - 9th Workshop on Privacy in the Electronic Society (WPES 2010), Chicago, IL, USA, October 4, 2010.
  - 6th International Workshop on Security and Trust Management (STM 2010), Athens, Greece, September 23-24, 2010.
  - 7th European Workshop on Public Key Services, Applications and Infrastructures (EuroPKI 2010), Athens, Greece, September 23-24, 2010.
  - 25th International Information Security Conference (SEC 2010), Brisbane, Australia, September 20-23, 2010.
  - 15th European Symposium on Research in Computer Security (ESORICS 2010), Athens, Greece, September

- 20-22, 2010.
- 7th VLDB Workshop on Secure Data Management (SDM 2010), Singapore, September 17, 2010.
  - 6th International Conference on Security and Privacy in Communication Networks (SecureComm 2010), Singapore, September 7-10, 2010.
  - 4th International Conference on Network and System Security (NSS 2010), Melbourne, Australia, September 1-3, 2010.
  - 7th International Conference on Trust, Privacy and Security in Digital Business (TrustBus 2010), Bilbao, Spain, August 30 - September 3, 2010.
  - 2nd IEEE International Conference on Privacy, Security, Risk, Trust (PASSAT 2010), Minneapolis, USA, August 20-22, 2010.
  - 5th International Conference on Security and Cryptography (SECRYPT 2010), Athens, Greece, July 26-28, 2010.
  - 10th Privacy Enhancing Technologies Symposium (PETS 2010), Berlin, Germany, July 21-23, 2010.
  - 8th International Conference on Applied Cryptography and Network Security (ACNS 2010), Beijing, China, June 22-25, 2010.
  - 24th Annual IFIP WG 11.3 Working Conference on Data and Applications Security (DBSec 2010), Rome, Italy, June 21-23, 2010.
  - ACM International SIGMOD Conference on Management of Data (SIGMOD 2010), Indianapolis, Indiana, USA, June 6-11, 2010.
  - 11th Joint IFIP TC6 and TC11 Conference on Communications and Multimedia Security (CMS 2010), Linz, Austria, May 31 - June 2, 2010.
  - 19th International World Wide Web Conference (WWW 2010), Raleigh, NC, USA, April 26-30, 2010.
  - 4th Workshop on Information Security Theory and Practice (WISTP 2010), Passau, Germany, April 12-14, 2010.
  - 14th International Conference on Financial Cryptography and Data Security (FC 2010), Tenerife, Spain, January 25-28, 2010.
  - 8th Workshop on Privacy in the Electronic Society (WPES 2009), Chicago, IL, USA, November 9, 2009.
  - 12th Information Security Conference (ISC 2009), Pisa, Italy, September 7-9, 2009.
  - 6th International Conference on Trust, Privacy and Security in Digital Business (TrustBus 2009), Linz, Austria, August 31 - September 4, 2009.
  - 6th VLDB Workshop on Secure Data Management (SDM 2009), Lione, France, August 24, 2009.
  - 9th Privacy Enhancing Technologies Symposium (PET 2009), Seattle, WA, USA, August 5-7, 2009.
  - 23rd Annual IFIP WG 11.3 Working Conference on Data and Applications Security (DBSec 2009), Montreal, Canada, July 12-15, 2009.
  - 4th International Conference on Security and Cryptography (SECRYPT 2009), Milan, Italy, July 7-10, 2009.
  - 14th Australasian Conference on Information Security and Privacy (ACISP 2009), Brisbane, Australia, July 1-3, 2009.
  - 7th International Workshop on Security In Information Systems (WOSIS 2009), Milan, Italy, May 6-10, 2009.
  - 2nd International Conference on Future Generation Communication and Networking (FGCN 2008), Hainan Island, China, December 13-15, 2008,
  - The Third International Conference on Risks and Security of Internet and Systems, Tozeur, Tunisia, October 28-30, 2008.
  - 15th ACM Conference on Computer and Communication Security (CCS), Alexandria, VA, USA, October 27-October 31, 2008.
  - Workshop on Privacy in the Electronic Society, Alexandria, Virginia, USA, October 27, 2008.
  - 13th European Symposium on Research in Computer Security, Malaga, Spain, October 6-8, 2008.
  - 5th International Conference on Trust, Privacy and Security in Digital Business (TrustBus'08), Turin, Italy, September 1-5, 2008.
  - 4th workshop on Secure Data Management, Auckland, New Zealand, August 23-28, 2008.
  - 13th International Conference on Security and Cryptography, Porto, Portugal, July 26-29, 2008.
  - 13th Australasian Conference on Information Security and Privacy (ACISP 2008), Wollongong, Australia, July 14-16, 2008.
  - 22th Annual IFIP WG 11.3 Working Conference on Data and Applications Security, London, U.K., July 13-16, 2008.
  - 4th International Workshop on Security, Privacy and Trust in Pervasive and Ubiquitous Computing, Sorrento, Italy, July 11, 2008.



- Fifth European PKI Workshop, Trondheim, Norway, June 16-17, 2008.
- 4th Information Security Practice and Experience Conference (ISPEC 2008), Sydney, Australia, April 21-23, 2008.
- The 13th International Conference on Database Systems for Advanced Applications (DASFAA 2008), New Delhi, India, March 19-22, 2008.
- 23rd Annual Computer Security Applications Conference (ACSAC 2007), Miami Beach, Florida, USA, December 10-14, 2007.
- International Conference on Emerging Security Information, Systems and Technologies (SECURWARE 2007), Valencia, Spain, October 14-20, 2007,
- The 2007 International Conference on Intelligent Pervasive Computing (IPC 2007), Jeju Island, Korea, October 12-13, 2007.
- 12th European Symposium on Research in Computer Security (ESORICS 2007), Dresden, Germany, September 24-26, 2007,
- 4th VLDB Workshop on Secure Data Management (SDM 2007), Vienna, Austria, September 23-24, 2007.
- 4th International Conference on Trust, Privacy and Security in Digital Business (TrustBus 2007), Regensburg, Germany, September 3-7, 2007.
- International Workshop on P2P Data Management, Security and Trust (PDMST 2007), Regensburg, Germany, September 3-7, 2007.
- International Conference on Security and Cryptography, Barcelona, Spain, July 28-31, 2007.
- 3rd International Workshop on Security, Privacy and Trust in Pervasive and Ubiquitous Computing, Istanbul, Turkey, July 20, 2007.
- 21st Annual IFIP WG 11.3 Working Conference on Data and Applications Security, Redondo Beach, CA, USA, July 8-11, 2007.
- Conference on Risk and Security of Internet and Systems, Marrakech, Morocco, July 2-5, 2007.
- The 4th European PKI Workshop: Theory and Practice (EuroPKI 2007), Palma de Mallorca, Balearic Islands, Spain, June 28-30, 2007.
- 5th Workshop on Security in Information Systems, Madeira, Portugal, June 12-13, 2007.
- ACM Symposium on Information, Computer and Communications Security, 2007 (AsiaCCS 2007), Singapore, March 20-22, 2007.
- Eighth International Conference on Information and Communications Security (ICICS 2006), Raleigh, North Carolina, USA, December 4-7, 2006.
- 11th European Symposium On Research In Computer Security Hamburg, Hamburg, Germany, September 18-20, 2006.
- 2nd Workshop on Security and Trust Management (STM 2006), Hamburg, Germany, September 20, 2006.
- 3rd VLDB Workshop on Secure Data Management (SDM 2006), Seoul, Korea, September 10-11, 2006.
- 3rd International Workshop on "P2P Data Management, Security and Trust (PDMST 2006), Krakow, Poland, September 4-8, 2006.
- 9th Information Security Conference, Samos, Greece, August 30 - September 2, 2006.
- International Conference on Security and Cryptography, Setubal, Portugal, August 7-10, 2006.
- 20th Annual IFIP WG 11.3 Working Conference on Data and Applications Security, Sophia Antipolis, France, July 31 - August 2, 2006.
- Program Analysis for Security and Safety Workshop Discussion (PASSWORD 2006), Nantes, France, July 3-4, 2006.
- 2nd International Workshop on Security, Privacy and Trust in Pervasive and Ubiquitous Computing, Lione, France, June 29, 2006.
- The Fourth International Workshop on Security In Information Systems, Paphos, Cyprus, May 23-24, 2006.
- The Security, Privacy and Ethics track of the 15th World Wide Web Conference (WWW 2006), Edimburgh, Scotland, May 22-26, 2006.
- Security and Trust in Decentralized/Distributed Data Structures (STD3S), Atlanta, GA, USA, April 3-7, 2006.
- The 3rd International Workshop on Security in Information Systems (WOSIS 2005), Miami, USA, May 24-25, 2005.
- 2nd VLDB Workshop on Secure Data Management (SDM 2005), Trondheim, Norway, September 2-3, 2005.
- 2nd International Workshop on P2P Data Management, Security and Trust (PDMST 2005), Copenhagen, Denmark, August 23-26, 2005.
- 2nd International Conference on Distributed Computing & Internet Technology (ICDCIT 2005), Bhubaneswar, India, December 22-24, 2005.
- 19th Annual IFIP WG 11.3 Working Conference on Data and Applications Security, Storrs, CT, USA,

August 7-10, 2005.

- Foundations of Computer Security (FCS 2005), Chicago, IL, USA, June 30 - July 1, 2005.
- Web Technologies and Applications - Special Track of the 20th ACM Symposium on Applied Computing (SAC 2005), Santa Fe, New Mexico, March 13-17, 2005.
- 2005 Workshop on Security, Privacy and Trust in Pervasive and Ubiquitous Computing (SecPerU 2005), Santorini Island, Greece, July 14, 2005.
- 2nd European PKI Workshop, Canterbury, England, June 30 - July 1, 2005.
- VLDB 2004 Workshop on Secure Data Management in a Connected World, Toronto, Canada, August 30, 2004.
- Eighth IFIP TC-11 WG 11.5 Working Conference on Integrity and Internal Control in Information Systems, Fairfax, Virginia, USA, November 18-19, 2004.
- 11th ACM Conference on Computer and Communications Security, Washington, DC, USA, October 25-29, 2004.
- 9th European Symposium on Research in Computer Security, Sophia Antipolis, France, September 13-15, 2004.
- Workshop on Foundations of Computer Security, Turku, Finland, July 12-13, 2004.
- 1st European PKI Workshop: Research and Applications, Samos, Greece, June 25, 2004.
- 18th Annual IFIP WG 11.3 Working Conference on Data and Application Security, Sitges, Spain, July, 25-28, 2004.
- Workshop on Network and Distributed Systems Security (I-NetSec 2004), France, August 23-26, 2004.
- Second International Workshop on Security In Information Systems (WOSIS 2004), Porto, Portugal, April 13, 2004.
- Sixth IFIP TC-11 WG 11.5 Working Conference on Integrity and Internal Control in Information Systems, Losanna, Switzerland, November, 13-14, 2003.
- Workshop on Metadata for Security, Sicilia, Italy, November 3-7, 2003.
- 8th European Symposium on Research in Computer Security, Gjøvik, Norway, October 13-15, 2003.
- 10th ACM Conference on Computer and Communications Security, Washington, DC, USA, October 27-30, 2003.
- 18th IFIP TC-11 International Conference on Information Security (SEC 2003), Athens, Greece, May 26-28, 2003.
- Workshop on Network and Distributed Systems Security (I-NetSec 2003), Athens, Greece, May 26-28, 2003.
- 9th ACM Conference on Computer and Communications Security (CCS 2002), Washington, DC, USA, November 17-21, 2002.
- 8th ACM Conference on Computer and Communications Security (CCS 2001), Philadelphia, Pennsylvania, USA, November 5-8, 2001.
- Settimo Convegno Nazionale su Sistemi Evoluti per Basi di Dati (SEBD 1999), Como, Italy, June 23-25, 1999.

### 5.3 Participation in panels of conferences and workshops

- “New Research Directions of Security and Privacy in Cloud Computing,” in *Proc. of the 1st International Workshop on Security and Privacy in Cloud Computing (SPCC 2010)*, Genoa, Italy, June 25, 2010.
- “Information Hiding: State-of-the-Art and Emerging Trends,” in *5th International Workshop on Security Issues in Concurrency (SecCo 2007)*, Lisbona, Portugal, September 3, 2007.

### 5.4 Invited Talks

- “Protecting Data in the Cloud: Issues and Solutions,” in *8th International Conference on Security and Privacy in Communication Networks (SECURECOMM 2012)*, Padua, Italy, September 3-6, 2012.
- “Data Protection,” in *3rd International Workshop on Autonomous and Spontaneous Security (SETOP 2010)*, Athens, Greece, September 23, 2010.
- “Privacy of Data,” in *PrimeLife Summer School*, Nizza, France, September 7-11, 2009.
- “Data Privacy: Problems and Solutions,” in *7th International Workshop on Security In Information Systems (WOSIS 2009)*, Milan, Italy, May 6-10, 2009.
- “Data Privacy: Problems and Solutions,” in *3rd International Conference on Information Systems Security (ICISS 2007)*, New Delhi, India, December 16-20, 2007.
- “Towards Privacy-Enhanced Authorization Policies and Languages,” in *Advanced Research Workshop “Secure Telematic Applications in National Scale Projects*,” Minsk, November 22-25, 2006.
- “Protecting Privacy in the Global Infrastructure,” in *1st International Conference on Information Security and Computer Forensics (ISCF 2006)*, Chennai, India, December 6-8, 2006.

## 6 Publications

### 6.1 Patents

United States Patent 6922696 for “Lattice-based security classification system and method,” (S. Dawson, S. De Capitani di Vimercati, P. Lincoln, P. Samarati) [2005]

### 6.2 Books

B-1 S. Foresti, E. Pedrini, S. De Capitani di Vimercati, *Eserciziario di Basi di Dati*, Pitagora, Bologna, Italy, 2006 (in Italian).

### 6.3 Edited books and proceedings

E-1 S. De Capitani di Vimercati (ed.), *Proc. of the 15th Workshop on Privacy in the Electronic Society (WPES 2016)*, Vienna, Austria, October 24, 2016.

E-2 J. Garcia-Alfaro, G. Navarro-Arribas, N. Cuppens-Bouahia, S. De Capitani di Vimercati (eds.), *Proc. of the 6th International Workshop on Data Privacy Management and Autonomous Spontaneous*, Leuven, Belgium, September 15-16, 2011, Springer 2012.

E-3 S. De Capitani di Vimercati, P. Syverson, and D. Evans (eds.), *Proc. of the 14th ACM Conference on Computer and Communications Security*, Alexandria, VA, USA, October 29 - November 2, 2007.

E-4 R.N. Wright, S. De Capitani di Vimercati, V. Shmatikov (eds.), *Proc. of the 13th ACM Conference on Computer and Communications Security*, Alexandria, VA, USA, October 30 - November 3, 2006.

E-5 S. De Capitani di Vimercati, R. Dingedine (eds.), *Proc. of the ACM Workshop on Privacy in the Electronic Society*, Alexandria, VA, USA, November 7, 2005.

E-6 S. De Capitani di Vimercati, P. Syverson, D. Gollmann (eds.), *Computer Security - ESORICS 2005*, Springer, 2005.

E-7 S. De Capitani di Vimercati, P. Syverson (eds.), *Proc. of the ACM Workshop on Privacy in the Electronic Society*, Washington, DC, USA, October 28, 2004.

E-8 S. De Capitani di Vimercati, I. Ray, I. Ray (eds.), *Data and Applications Security XVII - Status and Prospects*, Kluwer Academic Publisher, 2004.

E-9 D. Gritzalis, S. De Capitani di Vimercati, P. Samarati, and S. Katsikas (eds.), *Security and Privacy in the Age of Uncertainty*, Kluwer, 2003.

E-10 S. De Capitani di Vimercati and P. Samarati (eds.) *Proc. of the First ACM Workshop on Privacy in the Electronic Society*, Washington, November 21, 2002.

### 6.4 Refereed International Journal Articles

IJ-1 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, G. Livraga, S. Paraboschi, P. Samarati, “An Authorization Model for Multi-Provider Queries,” in *Proc. of the VLDB Endowment*, vol. 11, no. 3, 2018.

IJ-2 S. De Capitani di Vimercati, S. Foresti, S. Paraboschi, G. Pelosi, P. Samarati, “Enforcing Authorizations while Protecting Access Confidentiality,” in *Journal of Computer Security (JCS)*, 2017 (to appear).

IJ-3 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, P. Samarati, “Efficient Integrity Checks for Join Queries in the Cloud,” in *Journal of Computer Security (JCS)*, vol. 24, n. 3, 2016, pp. 347-378.

IJ-4 S. De Capitani di Vimercati, S. Foresti, S. Paraboschi, G. Pelosi, P. Samarati, “Three-Server Swapping for Access Confidentiality,” in *IEEE Transactions on Cloud Computing (TCC)*, 2015 (to appear).

IJ-5 S. De Capitani di Vimercati, S. Foresti, S. Paraboschi, G. Pelosi, P. Samarati, “Shuffle Index: Efficient and Private Access to Outsourced Data,” in *ACM Transactions on Storage (TOS)*, vol. 11, n. 4, October 2015, pp. 1-55 (Article 19).

IJ-6 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, G. Livraga, S. Paraboschi, P. Samarati, “Loose Associations to Increase Utility in Data Publishing,” in *Journal of Computer Security (JCS)*, vol. 23, no. 1, 2015, pp. 59-88.

- IJ-7 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, G. Livraga, S. Paraboschi, P. Samarati, "Fragmentation in Presence of Data Dependencies," in *IEEE Transactions on Dependable and Secure Computing (TDSC)*, vol. 11, no. 6, November-December 2014, pp. 510-523.
- IJ-8 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, P. Samarati, "Integrity for Join Queries in the Cloud," in *IEEE Transactions on Cloud Computing (TCC)*, vol. 1, no. 2, July-December 2013, pp. 187-200.
- IJ-9 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, G. Livraga, S. Paraboschi, P. Samarati, "Enforcing Dynamic Write Privileges in Data Outsourcing," in *Computers & Security*, vol. 39, part A, November 2013, pp. 47-63.
- IJ-10 S. De Capitani di Vimercati, S. Foresti, S. Paraboschi, G. Pelosi, P. Samarati, "Supporting Concurrency and Multiple Indexes in Private Access to Outsourced Data," in *Journal of Computer Security (JCS)*, vol. 21, no. 3, 2013, pp. 425-461.
- IJ-11 S. De Capitani di Vimercati, S. Foresti, G. Livraga, P. Samarati, "Data Privacy: Definitions and Techniques," in *International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems*, vol. 20, no. 6, December 2012, pp. 793-817.
- IJ-12 V. Ciriani, S. De Capitani di Vimercati, S. Foresti, G. Livraga, P. Samarati, "An OBDD Approach to Enforce Confidentiality and Visibility Constraints in Data Publishing," in *Journal of Computer Security (JCS)*, vol. 20, no. 5, 2012, pp. 463-508.
- IJ-13 M. Bezzi, S. De Capitani di Vimercati, S. Foresti, G. Livraga, P. Samarati, R. Sassi, "Modeling and Preventing Inferences from Sensitive Value Distributions in Data Release," in *Journal of Computer Security (JCS)*, vol. 20, no. 4, 2012, pp. 393-436.
- IJ-14 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, G. Psaila, P. Samarati, "Integrating Trust Management and Access Control in Data-Intensive Web Applications," in *ACM Transactions on the Web*, vol. 6, no. 2, May 2012.
- IJ-15 C.A. Ardagna, S. De Capitani di Vimercati, S. Foresti, S. Paraboschi, P. Samarati, "Minimizing Disclosure of Client Information in Credential-Based Interactions," in *International Journal of Information Privacy, Security and Integrity*, vol. 1, no. 2/3, 2012, pp. 205-233.
- IJ-16 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, P. Samarati, "Authorization Enforcement in Distributed Query Evaluation," in *Journal of Computer Security*, vol. 19, no. 4, 2011, pp. 751-794.
- IJ-17 V. Ciriani, S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, P. Samarati, "Selective Data Outsourcing for Enforcing Privacy," in *Journal of Computer Security*, vol. 19, no. 3, 2011, pp. 531-566.
- IJ-18 S. De Capitani di Vimercati, S. Foresti, G. Livraga, P. Samarati, "Anonymization of Statistical Data," in *IT - Information Technology*, vol. 53, no. 1, January 2011, pp. 18-25.
- IJ-19 C.A. Ardagna, M. Cremonini, S. De Capitani di Vimercati, P. Samarati, "An Obfuscation-based Approach for Protecting Location Privacy," in *IEEE Transactions on Dependable and Secure Computing*, vol. 8, no. 1, January-February 2011, pp. 13-27.
- IJ-20 C.A. Ardagna, S. De Capitani di Vimercati, S. Paraboschi, E. Pedrini, P. Samarati, M. Verdicchio, "Expressive and Deployable Access Control in Open Web Service Applications," in *IEEE Transactions on Services Computing*, vol. 4, no. 2, April-June 2011, pp. 96-109.
- IJ-21 C.A. Ardagna, S. De Capitani di Vimercati, S. Foresti, T.W. Grandison, S. Jajodia, P. Samarati, "Access Control for Smarter Healthcare using Policy Spaces," in *Computers & Security*, vol. 29, no. 8, November 2010, pp. 848-858.
- IJ-22 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, P. Samarati, "Fragments and Loose Associations: Respecting Privacy in Data Publishing," in *Proc. of the VLDB Endowment*, vol. 3, no. 1, Singapore, September 13-17, 2010.
- IJ-23 V. Ciriani, S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, P. Samarati, "Combining Fragmentation and Encryption to Protect Privacy in Data Storage," in *ACM Transactions on Information and System Security*, vol. 13, no. 3, July 2010, pp. 22:1-22:33.

- IJ-24 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, P. Samarati, "Encryption Policies for Regulating Access to Outsourced Data," in *ACM Transactions on Database Systems*, vol. 35, no. 2, April 2010, pp. 12:1-12:46.
- IJ-25 C. Blundo, S. Cimato, S. De Capitani di Vimercati, A. De Santis, S. Foresti, S. Paraboschi, P. Samarati, "Managing Key Hierarchies for Access Control Enforcement: Heuristic Approaches," in *Computers & Security*, vol. 29, no. 5, July 2010, pp. 533-547.
- IJ-26 C.A. Ardagna, M. Cremonini, S. De Capitani di Vimercati, and P. Samarati, "A Privacy-Aware Access Control System," in *Journal of Computer Security*, vol. 16, no. 4, 2008, pp. 369-397.
- IJ-27 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, P. Samarati, "Access Control Policies and Languages," in *International Journal of Computational Science and Engineering*, vol. 3, no. 2, 2007, pp. 94-102.
- IJ-28 S. De Capitani di Vimercati, A. Ferrero, M. Lazzaroni, "Mobile Agent Technology for Remote Measurements," in *IEEE Transactions on Instrumentation and Measurement*, vol. 55, no. 5, October 2006, pp. 1559-1565.
- IJ-29 S. De Capitani di Vimercati, P. Samarati, "k-Anonymity for Protecting Privacy," in *Information Security*, October 2006.
- IJ-30 A. Ceselli, E. Damiani, S. De Capitani di Vimercati, S. Jajodia, S. Paraboschi, P. Samarati, "Modeling and Assessing Inference Exposure in Encrypted Databases," in *ACM Transactions on Information and System Security (TISSEC)*, vol. 8, no. 1, February 2005, pp. 119-152.
- IJ-31 R. Aringhieri, E. Damiani, S. De Capitani di Vimercati, S. Paraboschi, P. Samarati, "Fuzzy Techniques for Trust and Reputation Management in Anonymous Peer-to-Peer Systems," in *Journal of the American Society for Information Science and Technology*, vol. 57, no. 4, February 2006, pp. 528-537.
- IJ-32 C.A. Ardagna, E. Damiani, S. De Capitani di Vimercati, P. Samarati, "XML-based Access Control Languages," in *Information Security Technical Report*, Elsevier Science, 2004.
- IJ-33 C.A. Ardagna, S. De Capitani di Vimercati, "A Comparison of Modeling Strategies in Defining XML-Based Access Control Language," in *Computer Systems Science & Engineering Journal*, 2004.
- IJ-34 E. Damiani, S. De Capitani di Vimercati, P. Samarati, "Managing Multiple and Dependable Identities," *IEEE Internet Computing*, November-December 2003.
- IJ-35 E. Damiani, S. De Capitani di Vimercati, S. Paraboschi, P. Samarati, "Managing and Sharing Servents' Reputations in P2P Systems," *IEEE Transactions on Knowledge and Data Engineering*, vol. 15, no.4, July/August 2003, pp. 840-854.
- IJ-36 S. De Capitani di Vimercati, S. Paraboschi, P. Samarati, "Access control: principles and solutions," *Software: Practice and Experience*, vol. 33, no. 5, April 2003, pp. 397-421.
- IJ-37 E. Damiani, S. De Capitani di Vimercati, S. Paraboschi, P. Samarati, "Securing SOAP E-Services," in *International Journal of Information Security*, vol. 1, no. 2, February 2002, pp. 100-115.
- IJ-38 E. Damiani, S. De Capitani di Vimercati, S. Paraboschi, P. Samarati, "Controlling Access to XML Documents," in *IEEE Internet Computing*, vol. 5, no. 6, Nov-Dic. 2001.
- IJ-39 E. Damiani, S. De Capitani di Vimercati, S. Paraboschi, P. Samarati, "A Fine-Grained Access Control System for XML Documents," in *ACM Transactions on Information and System Security*, vol. 5, no. 2, May 2002, pp. 169-202.
- IJ-40 P. Bonatti, S. De Capitani di Vimercati, and P. Samarati, "An Algebra for Composing Access Control Policies," in *ACM Transactions on Information and System Security*, vol. 5, no. 1, February 2002, pp. 1-35.
- IJ-41 S. Dawson, S. De Capitani di Vimercati, P. Lincoln, P. Samarati, "Maximizing Sharing of Protected Information," in *Journal of Computer and System Science*, vol. 64, no. 3, May 2002, pp. 496-541.
- IJ-42 S. Castano, V. De Antonellis, S. De Capitani di Vimercati, M. Melchiori, "An XML-based Integration Scheme for Web Data Sources," in *Ingénierie des Systèmes d'Information, Hermes Science Publishing*, vol. 6, no. 1, 2001, pp. 99-122.

- IJ-43 S. De Capitani di Vimercati, P. Lincoln, L. Ricciulli, P. Samarati, "Global Infrastructure Protection System," in *Journal of Computer Security*, vol. 9, no. 4, 2001, pp. 251-283.
- IJ-44 E. Damiani, S. De Capitani di Vimercati, S. Paraboschi, P. Samarati, "Design and implementation of an access Control Processor for XML Documents," in *Computer Networks*, Elsevier, vol. 33, no. 1-6, June 2000, pp. 59-75; and *Proc. of the Ninth International World Wide Web Conference (WWW9)*, Amsterdam, May 15-19, 2000.
- IJ-45 S. Castano, V. De Antonellis, S. De Capitani di Vimercati, "Global Viewing of Heterogeneous Data Sources", in *IEEE Transactions on Knowledge and Data Engineering*, vol. 13, no. 2, March/April 2001, pp. 277-297.
- IJ-46 E. Bertino, S. De Capitani di Vimercati, E. Ferrari and P. Samarati, "Exception-Based Information Flow Control in Object-Oriented Systems," in *ACM Transactions on Information and System Security*, vol. 1, no. 1, November 1998, pp. 26-65.
- IJ-47 S. De Capitani di Vimercati, P. Samarati, "Authorization Specification and Enforcement in Federated Database Systems," in *Journal of Computer Security*, vol. 5, no. 2, 1997, pp. 155-188.
- IJ-48 S. Castano, S. De Capitani di Vimercati, M.G. Fugini, "Automated Derivation of Global Authorizations for Database Federations," in *Journal of Computer Security*, vol. 5, no. 4, 1997, pp. 271-301.

### 6.5 Refereed Papers in Proceedings of International Conferences and Workshops

- IC-1 E. Bacis, A. Barnett, A. Byrne, S. De Capitani di Vimercati, S. Foresti, S. Paraboschi, M. Rosa, P. Samarati, "Distributed Shuffle Index: Analysis and Implementation in an Industrial Testbed," in *Proc. of the 5th IEEE Conference on Communications and Network Security (CNS 2017)*, Las Vegas, NV, USA, October 9-11, 2017 (poster).
- IC-2 E. Bacis, S. De Capitani di Vimercati, S. Foresti, S. Paraboschi, M. Rosa, P. Samarati, "Distributed Shuffle Index in the Cloud: Implementation and Evaluation," in *Proc. of the 4th IEEE International Conference on Cyber Security and Cloud Computing (IEEE CSCloud 2017)*, New York, USA, June 26-28, 2017
- IC-3 S. De Capitani di Vimercati, S. Foresti, R. Moretti, S. Paraboschi, G. Pelosi, P. Samarati, "A Dynamic Tree-based Data Structure for Access Privacy in the Cloud," in *Proc. of the 8th IEEE International Conference on Cloud Computing Technology and Science (CloudCom 2016)*, Luxembourg, Luxembourg, December 12-15, 2016.
- IC-4 E. Bacis, S. De Capitani di Vimercati, S. Foresti, S. Paraboschi, M. Rosa, P. Samarati, "Mix&Slice: Efficient Access Revocation in the Cloud," in *Proc. of the 23rd ACM Conference on Computer and Communication Security (CCS 2016)*, Vienna, Austria, October 24-28, 2016.
- IC-5 E. Bacis, S. De Capitani di Vimercati, S. Foresti, D. Guttadoro, S. Paraboschi, M. Rosa, P. Samarati, A. Saullo, "Managing Data Sharing in OpenStack Swift with Over-Encryption," in *Proc. of the 3rd ACM Workshop on Information Sharing and Collaborative Security (WISCS 2016)*, Vienna, Austria, October 24, 2016.
- IC-6 E. Bacis, S. De Capitani di Vimercati, S. Foresti, S. Paraboschi, M. Rosa, P. Samarati, "Access Control Management for Secure Cloud Storage," in *Proc. of the 12th EAI International Conference on Security and Privacy in Communication Networks (SecureComm 2016)*, Guangzhou, China, October 10-12, 2016.
- IC-7 S. De Capitani di Vimercati, G. Livraga, V. Piuri, "Application Requirements with Preferences in Cloud-based Information Processing," in *Proc. of the 2nd International Forum on Research and Technologies for Society and Industry (RTSI 2016)*, Bologna, Italy, September 7-9, 2016.
- IC-8 S. De Capitani di Vimercati, S. Foresti, S. Paraboschi, G. Pelosi, P. Samarati, "Access Control for the Shuffle Index," in *Proc. of the 30th Annual IFIP WG 11.3 Working Conference on Data and Applications Security and Privacy (DBSec 2016)*, Trento, Italy, July 18-21, 2016.
- IC-9 S. De Capitani di Vimercati, G. Livraga, V. Piuri, P. Samarati, G.A. Soares, "Supporting Application Requirements in Cloud-based IoT Information Processing," in *Proc. of the International Conference on Internet of Things and Big Data (IoTBD 2016)*, Rome, Italy, April 23-25, 2016.

- IC-10 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, P. Samarati, "Integrity for Approximate Joins on Untrusted Computational Servers," in *Proc. of the 30th International Information Security and Privacy Conference (SEC 2015)*, Hamburg, Germany, May 26-28, 2015.
- IC-11 S. De Capitani di Vimercati, S. Foresti, S. Paraboschi, G. Pelosi, P. Samarati, "Protecting Access Confidentiality with Data Distribution and Swapping," in *Proc. of the 4th IEEE International Conference on Big Data and Cloud Computing (BDCloud 2014)*, Sydney, Australia, December 3-5, 2014.
- IC-12 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, G. Livraga, S. Paraboschi, P. Samarati, "Integrity for Distributed Queries," in *Proc. of the 2nd IEEE Conference on Communications and Network Security (CNS 2014)*, San Francisco, CA, USA, October 29-31, 2014.
- IC-13 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, P. Samarati, "Optimizing Integrity Checks for Join Queries in the Cloud," in *Proc. of the 28th Annual IFIP WG 11.3 Working Conference on Data and Applications Security and Privacy (DBSec 2014)*, Vienna, Austria, July 14-16, 2014.
- IC-14 S. De Capitani di Vimercati, S. Foresti, S. Paraboschi, G. Pelosi, P. Samarati, "Distributed Shuffling for Preserving Access Confidentiality," in *Proc. of the 18th European Symposium on Research in Computer Security (ESORICS 2013)*, Egham, U.K., September 9-11, 2013.
- IC-15 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, G. Livraga, S. Paraboschi, P. Samarati, "Extending Loose Associations to Multiple Fragments," in *Proc. of the 27th Annual IFIP WG 11.3 Working Conference on Data and Applications Security and Privacy (DBSec 2013)*, Newark, NJ, USA, July 15-17, 2013.
- IC-16 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, P. Samarati, "On Information Leakage by Indexes over Data Fragments," in *Proc. of the 1st International Workshop on Privacy-Preserving Data Publication Analysis (PrivDB 2013)*, Brisbane, Australia, April 8, 2013.
- IC-17 S. De Capitani di Vimercati, S. Foresti, P. Samarati, "Managing and Accessing Data in the Cloud: Privacy Risks and Approaches," in *Proc. of the 7th International Conference on Risks and Security of Internet and Systems (CRiSIS 2012)*, Cork, Ireland, October 10-12, 2012.
- IC-18 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, P. Samarati, "Support for Write Privileges on Outsourced Data," in *Proc. of the 27th IFIP TC-11 International Information Security and Privacy Conference (SEC 2012)*, Heraklion, Crete, Greece, June 4-6, 2012.
- IC-19 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, P. Samarati, "Private Data Indexes for Selective Access to Outsourced Data," in *Proc. of the 10th Workshop on Privacy in the Electronic Society (WPES 2011)*, Chicago, Illinois, USA, October 17, 2011.
- IC-20 S. De Capitani di Vimercati, S. Foresti, S. Paraboschi, G. Pelosi, P. Samarati, "Supporting Concurrency in Private Data Outsourcing," in *Proc. of the European Symposium on Research in Computer Security (ESORICS 2011)*, Leuven, Belgium, September 12-14, 2011.
- IC-21 V. Ciriani, S. De Capitani di Vimercati, S. Foresti, G. Livraga, P. Samarati, "Enforcing Confidentiality and Data Visibility Constraints: An OBDD Approach," in *Proc. of the 25th Annual IFIP WG 11.3 Conference on Data and Applications Security and Privacy (DBSec 2011)*, Richmond, VA, USA, July 11-13, 2011.
- IC-22 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, G. Pelosi, P. Samarati, "Efficient and Private Access to Outsourced Data," in *Proc. of the 31st International Conference on Distributed Computing Systems (ICDCS 2011)*, Minneapolis, Minnesota, USA, June 20-24, 2011.
- IC-23 S. De Capitani di Vimercati, S. Foresti, G. Livraga, "Privacy in Data Publishing," in *Data Privacy Management and Autonomous Spontaneous Security*, J. Garcia-Alfaro, G. Navarro-Arribas, A. Cavalli, and J. Leneutre (eds.), Springer, 2011 (invited).
- IC-24 C.A. Ardagna, S. De Capitani di Vimercati, S. Foresti, G. Neven, S. Paraboschi, F.-S. Preiss, P. Samarati, M. Verdichio, "Fine-Grained Disclosure of Access Policies," in *Proc. of the 12th International Conference on Information and Communications Security (ICICS 2010)*, Barcelona, Spain, December 15-17, 2010.

- IC-25 C.A. Ardagna, S. De Capitani di Vimercati, S. Foresti, S. Paraboschi, P. Samarati, "Supporting User Privacy Preferences on Information Release in Open Scenarios," in *Proc. of the W3C Workshop on Privacy and Data Usage Control*, Cambridge, MA, USA, October 4-5, 2010.
- IC-26 C.A. Ardagna, S. De Capitani di Vimercati, S. Foresti, S. Paraboschi, P. Samarati, "Supporting Privacy Preferences in Credential-Based Interactions," in *Proc. of the 9th Workshop on Privacy in the Electronic Society (WPES 2010)*, Chicago, Illinois, USA, October 4, 2010.
- IC-27 M. Bezzi, S. De Capitani di Vimercati, G. Livraga, P. Samarati, "Protecting Privacy of Sensitive Value Distributions in Data Release," in *Proc. of the 6th Workshop on Security and Trust Management (STM 2010)*, Athens, Greece, September 23-24, 2010.
- IC-28 C.A. Ardagna, S. De Capitani di Vimercati, S. Foresti, S. Paraboschi, P. Samarati, "Minimizing Disclosure of Private Information in Credential-Based Interactions: A Graph-Based Approach," in *Proc. of the 2nd IEEE International Conference on Information Privacy, Security, Risk and Trust (PASSAT 2010)*, Minneapolis, Minnesota, USA, August 20-22, 2010.
- IC-29 C.A. Ardagna, S. De Capitani di Vimercati, G. Neven, S. Paraboschi, F.-S. Preiss, P. Samarati, M. Verdicchio, "Enabling Privacy-Preserving Credential-Based Access Control with XACML and SAML," in *Proc. of the 3rd IEEE International Symposium on Trust, Security and Privacy for Emerging Applications (TSP 2010)*, Bradford, UK, June 29-July 1, 2010.
- IC-30 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, G. Pelosi, P. Samarati, "Encryption-based Policy Enforcement for Cloud Storage," in *Proc. of the 1st International Workshop on Security and Privacy in Cloud Computing (SPCC 2010)*, Genoa, Italy, June 25, 2010.
- IC-31 P. Samarati, S. De Capitani di Vimercati, "Data Protection in Outsourcing Scenarios: Issues and Directions," in *Proc. of the 5th ACM Symposium on Information, Computer and Communications Security (ASIACCS 2010)*, Beijing, China, April 13-16, 2010.
- IC-32 C.A. Ardagna, S. De Capitani di Vimercati, E. Pedrini, S. Paraboschi, P. Samarati, M. Verdicchio, "Extending XACML for Open Web-based Scenarios," in *Proc. of the W3C Workshop on Access Control Application Scenarios*, Luxembourg, November 17-18, 2009.
- IC-33 C.A. Ardagna, L. Bussard, S. De Capitani di Vimercati, G. Neven, E. Pedrini, S. Paraboschi, F. Preiss, D. Raggett, P. Samarati, S. Trabelsi, M. Verdicchio, "PrimeLife Policy Language," in *proc. of the W3C Workshop on Access Control Application Scenarios*, Luxembourg, November 17-18, 2009.
- IC-34 C.A. Ardagna, S. De Capitani di Vimercati, S. Paraboschi, E. Pedrini, P. Samarati, "A XACML-Based Privacy-Centered Access Control System," in *Proc. of the 1st ACM Workshop on Information Security Governance (WISG 2009)*, Chicago, IL, USA, November 13, 2009.
- IC-35 V. Ciriani, S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, P. Samarati, "Keep a Few: Outsourcing Data while Maintaining Confidentiality," in *Proc. of the 14th European Symposium on Research in Computer Security (ESORICS 2009)*, Saint Malo, France, September 21-25, 2009.
- IC-36 V. Ciriani, S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, P. Samarati, "Enforcing Confidentiality Constraints on Sensitive Databases with Lightweight Trusted Clients," in *Proc. of the 23rd Annual IFIP WG 11.3 Working Conference on Data and Applications Security (DBSec 2009)*, Montreal, Canada, July 12-15, 2009.
- IC-37 V. Ciriani, S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, P. Samarati, "Fragmentation Design for Efficient Query Execution over Sensitive Distributed Databases," in *Proc. of the 29th International Conference on Distributed Computing Systems (ICDCS 2009)*, Montreal, Quebec, Canada, June 22-26, 2009.
- IC-38 C. Blundo, S. Cimato, S. De Capitani di Vimercati, A. De Santis, S. Foresti, S. Paraboschi, P. Samarati, "Efficient Key Management for Enforcing Access Control in Outsourced Scenarios," in *Proc. of the International Security Conference (SEC 2009)*, Cyprus, May 18-20, 2009.
- IC-39 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, P. Samarati, "Assessing Query Privileges via Safe and Efficient Permission Composition," in *Proc. of the 15th ACM Conference on Computer and Communications Security (CCS 2008)*, Alexandria, VA, USA, October 27-31, 2008.



- IC-40 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, G. Pelosi, P. Samarati, "Preserving Confidentiality of Security Policies in Data Outsourcing Scenarios," in *Proc of the ACM Workshop on Privacy in the Electronic Society (WPES 2008)*, Alexandria, VA, USA, October 27, 2008.
- IC-41 C.A. Ardagna, S. De Capitani di Vimercati, T. Grandison, S. Jajodia, P. Samarati, "Regulating Exceptions in Healthcare using Policy Spaces," in *Proc. of the 22nd Annual IFIP WG 11.3 Working Conference on Data and Applications Security (DBSec 2008)*, London, U.K., July 13-16, 2008.
- IC-42 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, P. Samarati, "Controlled Information Sharing in Collaborative Distributed Query Processing," in *Proc. of the 28th International Conference on Distributed Computing Systems (ICDCS 2008)*, Beijing, China June 17-20, 2008.
- IC-43 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, P. Samarati, "A Data Outsourcing Architecture Combining Cryptography and Access Control", in *Proc. of the 1st Computer Security Architecture Workshop*, Fairfax, Virginia, USA, November 2, 2007.
- IC-44 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, P. Samarati, "Over-encryption: Management of Access Control Evolution on Outsourced Data", in *Proc. of the 33rd International Conference on Very Large Data Bases (VLDB 2007)*, Vienna, Austria, September 23-28 2007.
- IC-45 V. Ciriani, S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, P. Samarati, "Fragmentation and Encryption to Enforce Privacy in Data Storage", in *Proc. of the 12th European Symposium On Research In Computer Security (ESORICS 2007)*, Dresden, Germany, September 24-26, 2007.
- IC-46 C.A. Ardagna, M. Cremonini, E. Damiani, S. De Capitani di Vimercati, P. Samarati, "Location Privacy Protection Through Obfuscation-based Techniques," in *Proc. of the 21st Annual IFIP WG 11.3 Working Conference on Data and Applications Security (DBSec 2007)*, Redondo Beach, CA, USA, July 8-11, 2007.
- IC-47 C.A. Ardagna, M. Cremonini, E. Damiani, S. De Capitani di Vimercati, P. Samarati, "Managing Privacy in LBAC Systems," in *Proc. of the Second IEEE International Symposium on Pervasive Computing and Ad Hoc Communications (PCAC 2007)*, Niagara Falls, Canada, May 21-23, 2007.
- IC-48 E. Damiani, S. De Capitani di Vimercati, S. Jajodia, S. Paraboschi, P. Samarati, "An Experimental Evaluation of Multi-key Strategies for Data Outsourcing," in *Proc. of the 22nd IFIP TC-11 International Information Security Conference (SEC 2007)*, Sandton, South Africa, May 14-16, 2007.
- IC-49 C.A. Ardagna, M. Cremonini, E. Damiani, S. De Capitani di Vimercati, P. Samarati, "A Middleware Architecture for Integrating Privacy Preferences and Location Accuracy," in *Proc. of the 22nd IFIP TC-11 International Information Security Conference (SEC 2007)*, Sandton, South Africa, May 14-16, 2007.
- IC-50 S. De Capitani di Vimercati, S. Jajodia, S. Paraboschi, P. Samarati, "Trust Management Services in Relational Databases," in *Proc. of the ACM Symposium on InformAtion, Computer and Communications Security (ASIACCS 2007)*, Singapore, March 20-22, 2007.
- IC-51 C.A. Ardagna, M. Cremonini, E. Damiani, S. De Capitani di Vimercati, S. Samarati, "Negotiation Protocols for LBAC Systems," in *Proc. of 1st International Conference on Information Security and Computer Forensics (ISCF 2006)*, Chennai, India, December 6-8, 2006.
- IC-52 C.A. Ardagna, S. De Capitani di Vimercati, P. Samarati, "Enhancing User Privacy Through Data Handling Policies," in *Proc. of the 20th Annual IFIP WG 11.3 Working Conference on Data and Applications Security (DBSec 2006)*, Sophia Antipolis, France, July 31-August 2, 2006.
- IC-53 E. Damiani, S. De Capitani di Vimercati, C. Fugazza, P. Samarati, "Extending Context Descriptions in Semantics-Aware Access Control," in *Proc. of the Second International Conference on Information Systems Security (ICISS 2006)*, Kolkata, India, December 17-21, 2006.
- IC-54 E. Damiani, S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, P. Samarati, "Selective Data Encryption in Outsourced Dynamic Environments," in *Proc. of the Second International Workshop on Views On Designing Complex Architectures (VODCA 2006)*, Bertinoro, Italy, September 16-17, 2006.
- IC-55 E. Damiani, S. De Capitani di Vimercati, C. Fugazza, P. Samarati, "Modality Conflicts in Semantics-Aware Access Control," in *Proc. of the International Conference on Web Engineering, Menlo Park, California, USA, July 12-14, 2006.*

- IC-56 C.A. Ardagna, M. Cremonini, E. Damiani, S. De Capitani di Vimercati, P. Samarati, "Location-based Metadata and Negotiation Protocols for LBAC in a One-to-Many Scenario," in *Proc. of the Workshop On Security and Privacy in Mobile and Wireless Networking (SecPri MobiWi 2006)*, Coimbra, Portugal, May 19, 2006.
- IC-57 C.A. Ardagna, M. Cremonini, E. Damiani, S. De Capitani di Vimercati, P. Samarati, "Supporting Location-Based Conditions in Access Control Policies," in *Proc. of the ACM Symposium on Information, Computer and Communications Security (ASIACCS 2006)*, Taipei, Taiwan, March 21-24, 2006.
- IC-58 C.A. Ardagna, E. Damiani, S. De Capitani di Vimercati, F. Frati, P. Samarati, "CAS++: an Open Source Single Sign-On Solution for Secure e-Services," in *Proc. of the 21st IFIP TC-11 International Information Security Conference*, Karlstad, Sweden, May 22-24, 2006.
- IC-59 E. Damiani, S. De Capitani di Vimercati, P. Samarati, "New Paradigms for Access Control in Open Environments," in *Proc. of the 5th IEEE International Symposium on Signal Processing and Information*, Athens, Greece, December 18-21, 2005.
- IC-60 E. Damiani, S. De Capitani di Vimercati, S. Foresti, S. Jajodia, P. Samarati, "Key Management for Multiuser Encrypted Databases," in *Proc. of the International Workshop on Storage Security and Survivability*, Fairfax, Virginia, USA, November 11, 2005.
- IC-61 S. De Capitani di Vimercati, S. Marrara, P. Samarati, "An Access Control Model for Querying XML Data," in *Proc. of the ACM Workshop on Secure Web Services (SWS 2005)*, Fairfax, VA, USA, November 11, 2005.
- IC-62 C.A. Ardagna, E. Damiani, M. Cremonini, S. De Capitani di Vimercati, P. Samarati, "The Architecture of a Privacy-aware Access Control Decision Component," in *Proc. of the Construction and Analysis of Safe, Secure and Interoperable Smart devices (CASSIS 2005)*, Nice, France, March 8-11, 2005.
- IC-63 E. Damiani, S. De Capitani di Vimercati, P. Samarati, M. Viviani, "A WOWA-based Aggregation Technique on Trust Values Connected to Metadata," in *Proc. of the First International Workshop on Security and Trust Management (STM 2005)*, Milan, Italy, September 15, 2005.
- IC-64 E. Damiani, S. De Capitani di Vimercati, S. Foresti, P. Samarati, M. Viviani, "Measuring Inference Exposure in Outsourced Encrypted Databases," in *Proc. of the First Workshop on Quality of Protection*, Milan, Italy, September 15, 2005 (short paper).
- IC-65 E. Damiani, S. De Capitani di Vimercati, S. Foresti, S. Jajodia, S. Paraboschi, P. Samarati, "Metadata Management in Outsourced Encrypted Databases," in *Proc. of the 2nd VLDB Workshop on Secure Data Management (SDM'05)*, Trondheim, Norway, September 2-3, 2005.
- IC-66 C.A. Ardagna, E. Damiani, S. De Capitani di Vimercati, P. Samarati, "Towards Privacy-Enhanced Authorization Policies and Languages," in *Proc. of the 19th IFIP WG11.3 Working Conference on Data and Application Security*, Nathan Hale Inn, University of Connecticut, Storrs, USA, August 7-10, 2005.
- IC-67 C.A. Ardagna, E. Damiani, S. De Capitani di Vimercati, C. Fugazza, P. Samarati, "Offline Expansion of XACML Policies Based on P3P Metadata," in *Proc. of the 5th International Conference on Web Engineering*, Sydney, Australia, July 25-29, 2005.
- IC-68 R. Aringhieri, E. Damiani, S. De Capitani di Vimercati, P. Samarati, "Assessing Efficiency of Trust Management in Peer-to-Peer Systems," in *Proc. of the 1st International Workshop on Collaborative Peer-to-Peer Information Systems (COPS 2005)*, Linkoping University, Sweden, June 13-15, 2005.
- IC-69 S. De Capitani di Vimercati, A. Ferrero, M. Lazzaroni, "A Mobile Agent Platform for Remote Measurements," in *Proc. of the IEEE Instrumentation and Measurement Technology Conference*, Ottawa, Ontario, Canada, May 17-19, 2005.
- IC-70 P. Ceravolo, E. Damiani, S. De Capitani di Vimercati, C. Fugazza, P. Samarati, "Advanced Metadata for Privacy-Aware Representation of Credentials," in *Proc. of the International Workshop on Privacy Data Management*, Tokyo, Japan, April 8-9, 2005.
- IC-71 S. De Capitani di Vimercati, P. Samarati, S. Jajodia, "Policies, Models, and Languages for Access Control," in *Proc. of the Workshop on Databases in Networked Information Systems*, Aizu-Wakamatsu, Japan, March 28 - 30, 2005.

- IC-72 C.A. Ardagna, E. Damiani, S. De Capitani di Vimercati, M. Cremonini, P. Samarati, "Towards Identity Management for E-Services," in *Proc. of the TED Conference on e-Government Electronic democracy: The challenge ahead*, Bolzano, Italy, March 2005 (poster session).
- IC-73 C.A. Ardagna, E. Damiani, S. De Capitani di Vimercati, P. Samarati, "A Web Service Architecture for Enforcing Access Control Policies," in *Proc. of the First International Workshop on Views On Designing Complex Architectures (VODCA 2004)*, Bertinoro, Italy, September 11-12, 2004.
- IC-74 E. Damiani, S. De Capitani di Vimercati, S. Paraboschi, P. Samarati, "An Open Digest-based Technique for Spam Detection," in *Proc. of the 2004 International Workshop on Security in Parallel and Distributed Systems*, San Francisco, CA USA, September 15-17, 2004.
- IC-75 E. Damiani, S. De Capitani di Vimercati, S. Paraboschi, P. Samarati, "P2P-based Collaborative Spam Detection and Filtering," in *Proc. of the fourth IEEE International Conference on Peer-to-Peer Computing*, Zurich, Switzerland, August 25-27, 2004.
- IC-76 S. Chhabra, E. Damiani, S. De Capitani di Vimercati, S. Paraboschi, P. Samarati, "A Protocol for Reputation Management in Super-Peer Networks," in *Proc. of the 1st International Workshop on Peer2Peer Data Management, Security and Trust*, Zaragoza, Spain, 30 August - 3 September, 2004.
- IC-77 E. Damiani, S. De Capitani di Vimercati, C. Fugazza, P. Samarati, "Extending Policy Languages to the Semantic Web," in *Proc. of the International Conference on Web Engineering*, Munich, Germany, July 28-30, 2004.
- IC-78 E. Damiani, S. De Capitani di Vimercati, S. Paraboschi, P. Samarati, "Computing Range Queries on Obfuscated Data," in *Proc. of the Information Processing and Management of Uncertainty in Knowledge-Based Systems*, Perugia, Italy, July 4-9, 2004.
- IC-79 E. Damiani, S. De Capitani di Vimercati, S. Paraboschi, P. Samarati, A. Tironi, L. Zaniboni, "Spam Attacks: P2P to the Rescue," in *Poster Proceedings of the 13th World Wide Web Conference*, New York City, USA, May 17-22, 2004.
- IC-80 E. Damiani, S. De Capitani di Vimercati, S. Paraboschi, P. Samarati, M. Finetti, S. Jajodia, "Implementation of a Storage Mechanism for Untrusted DBMSs," *Proc. of the Second International IEEE Security in Storage Workshop*, Washington, DC, USA, October 31, 2003.
- IC-81 M. Cremonini, E. Damiani, S. De Capitani di Vimercati, P. Samarati, "An XML-based Approach to Combine Firewalls and Web Services Security Specifications," *Proc. of the ACM Workshop on XML Security*, Washington, DC, USA, October 31, 2003.
- IC-82 E. Damiani, S. De Capitani di Vimercati, S. Jajodia, S. Paraboschi, P. Samarati, "Balancing Confidentiality and Efficiency in Untrusted Relational DBMSs," *Proc. of the 10th ACM Conference on Computer and Communications Security*, Washington, DC, USA, October 27-31, 2003.
- IC-83 E. Fernández-Medina, G. Ruiz, S. De Capitani di Vimercati, "Implementing an Access Control System for SVG Documents," in *Proc. of the Workshop for Metadata Security*, Catania, Sicily, Italy, November 3-7, 2003.
- IC-84 E. Damiani, S. De Capitani di Vimercati, S. Paraboschi, M. Pesenti, P. Samarati, S. Zara, "Fuzzy logic techniques for reputation management in anonymous peer-to-peer systems," *Proc. of 3rd Conference of the European Society for Fuzzy Logic and Technology (EUSFLAT 2003)*, Zittau, Germany, September 10-12, 2003.
- IC-85 E. Damiani, S. De Capitani di Vimercati, "Securing XML-based Multimedia Content," in *Proc. of the 18th IFIP International Information Security Conference*, Athens, Greece, May 26-28, 2003.
- IC-86 P. Bonatti, S. De Capitani di Vimercati, P. Samarati, "Towards Flexible Credential Negotiation Protocols," *Proc. of the Eleventh Cambridge International Workshop on Security Protocols*, Cambridge, England, April 2-4, 2003.
- IC-87 E. Damiani, S. De Capitani di Vimercati, P. Samarati, "Towards Securing XML Web Services," *2002 ACM Workshop on XML Security*, Washington, DC, USA, November 22, 2002.

- IC-88 E. Damiani, S. De Capitani di Vimercati, S. Paraboschi, P. Samarati, F. Violante, "A Reputation-based Approach for Choosing Reliable Resources in Peer-to-Peer Networks," *Proc. of the 9th ACM Conference on Computer and Communications Security*, Washington, DC, USA, November 17-21, 2002.
- IC-89 E. Damiani, S. De Capitani di Vimercati, E. Fernández-Medina, P. Samarati, "An Access Control System for SVG Documents," *Proc. of the International IFIP WG11.3 Working Conference*, Cambridge, UK, July 2002.
- IC-90 F. Cornelli, E. Damiani, S. De Capitani di Vimercati, S. Paraboschi, P. Samarati, "Implementing a Reputation-Aware Gnutella Servent" *Proc. of the International Workshop on Peer-to-Peer Computing*, Pisa, May 2002.
- IC-91 F. Cornelli, E. Damiani, S. De Capitani di Vimercati, S. Paraboschi, P. Samarati, "Choosing Reputable Servents in a P2P Network," *Proc. of the Eleventh International World Wide Web Conference*, Honolulu, Hawaii, May 2002.
- IC-92 S. Castano, V. De Antonellis, S. De Capitani di Vimercati, M. Melchiori, "Semi-automated Extraction of Ontological Knowledge from XML Data Sources," in *Proc. of the Second International Workshop on Electronic Business Hubs: XML, Metadata, Ontologies, and Business Knowledge on the Web*, Aix En Provence, France, September 2-6, 2002.
- IC-93 S. De Capitani di Vimercati, "An Authorization Model for Temporal XML Documents," in *Proc. of the 17th ACM Symposium on Applied Computing*, Madrid, Spain, March 10-14, 2002.
- IC-94 P. Bonatti, E. Damiani, S. De Capitani di Vimercati, P. Samarati, "A Component-based Architecture for Secure Data Publication," in *Proc. of the 17th Annual Computer Security Applications Conference*, New Orleans, Louisiana, USA, December 10-14, 2001.
- IC-95 E. Damiani, S. De Capitani di Vimercati, S. Paraboschi, P. Samarati, "Fine-Grained Access Control for SOAP E-Services," in *Proc. of the Tenth International World Wide Web Conference (WWW10)*, Hong Kong, May 1-5, 2001.
- IC-96 P. Bonatti, E. Damiani, S. De Capitani di Vimercati, P. Samarati, "An Access Control System for Data Archives," in *Trusted Information, the new decade challenge* M. Dupuy and P. Paradinas (eds.) ISBN 0-7923-7389-8, June 2001.
- IC-97 S. Castano, V. De Antonellis, S. De Capitani di Vimercati, M. Melchiori, "Designing a Three-Layer Ontology in a Web-based Interconnection Scenario," in *Proc. of the First International Workshop on Electronic Business Hubs: XML, Metadata, Ontologies, and Business Knowledge on the Web (WEBH2001)*, Technical University of Munich, Germany, September 3-7, 2001.
- IC-98 S. Castano, V. De Antonellis, S. De Capitani di Vimercati, M. Melchiori, "Data Integration for Web-based Systems," in *Proc. of the 7th International Conference on Reverse Engineering for Information Systems (ReTIS 2001)*, Lyon, France, July 4-6, 2001.
- IC-99 P. Bonatti, S. De Capitani di Vimercati, P. Samarati, "A Modular Approach to Composing Access Control Policies," in *Proc. of the Seventh ACM Conference on Computer and Communications Security*, Athens, Greece, November 1-4, 2000.
- IC-100 S. Castano, V. De Antonellis, S. De Capitani di Vimercati, "An XML-based Interorganizational Knowledge Mediation Scheme to Support B2B Solutions," in *Proc. of the 9th IFIP 2.6 Working Conference on Database Semantics (DS-9)*, Hong Kong, China, April 25 - 28, 2001.
- IC-101 S. Castano, V. De Antonellis, S. De Capitani di Vimercati, M. Melchiori, "An XML-based Framework for Information Integration over the Web," in *Proc. of the Second International Workshop on Information Integration and Web-based Applications & Services (IIWAS'00)*, Yogyakarta, Indonesia, September 26-28, 2000.
- IC-102 E. Damiani, S. De Capitani di Vimercati, S. Paraboschi, P. Samarati, "XML Access Control Systems: A Component-Based Approach," in *Proc. of the Fourteenth Annual IFIP WG 11.3 Working Conference on Database Security*, Schoorl, The Netherlands, August 21-23, 2000.

- IC-103 S. Dawson, S. De Capitani di Vimercati, P. Lincoln, P. Samarati, "Classifying Information for External Release", in *Proc. of the IFIP-TC11 International Conference on Information Security*, Beijing, China, August 21-25, 2000.
- IC-104 E. Damiani, S. De Capitani di Vimercati, S. Paraboschi, P. Samarati, "Regulating Access to Semistructured Information on the Web", in *Proc. of the IFIP-TC11 International Conference on Information Security*, Beijing, China, August 21-25, 2000.
- IC-105 E. Damiani, S. De Capitani di Vimercati, S. Paraboschi, P. Samarati, "Securing XML Documents," in *Proc. of the 2000 International Conference on Extending Database Technology (EDBT 2000)*, Konstanz, Germania, March 27-31, 2000.
- IC-106 S. Dawson, P. Samarati, S. De Capitani di Vimercati, P. Lincoln, G. Wiederhold, M. Bilello, J. Akella, Y. Tan "Secure Access Wrapper: Mediating Security Between Heterogeneous Databases," in *DARPA Information Survivability Conference and Exposition (DISCEX)* Hilton Head, South Carolina, January 25-27, 2000.
- IC-107 S. Dawson, S. De Capitani di Vimercati, P. Lincoln, P. Samarati, "Minimal Data Upgrading to Prevent Inference and Association Attacks," in *Proc. of the 18th ACM SIGMOD-SIGACT-SIGART Symposium on Principles of Database Systems (PODS)*, Philadelphia, CA, May 31-June 3, 1999.
- IC-108 S. Dawson, S. De Capitani di Vimercati, P. Samarati, "Specification and Enforcement of Classification and Inference Constraints" in *Proc. of the 20th IEEE Symposium on Security and Privacy*, Oakland, CA, May 9-12, 1999.
- IC-109 S. De Capitani di Vimercati, P. Lincoln, L. Ricciulli, P. Samarati, "PGRIP: PNNI Global Routing Infrastructure Protection," in *Proc. of the Internet Society's 1999 Symposium on Network and Distributed System Security (NDSS'99)*, San Diego, CA, February 3-5, 1999.
- IC-110 L. Ricciulli, S. De Capitani di Vimercati, P. Samarati, "PNNI Global Routing Infrastructure Protection," in *Proc. of the Information Survivability Workshop (ISW'98)*, Orlando, FL, October 28-30, 1998. (position paper)
- IC-111 S. Bergamaschi, S. Castano, S. De Capitani di Vimercati, S. Montanari, M. Vincini, "An Intelligent Approach to Information Integration," in *Proc. of the International Conference on Formal Ontology in Information Systems (FOIS98)*, Trento, Italy, June 6-8, 1998.
- IC-112 S. De Capitani di Vimercati, P. Samarati, "An Authorization Model for Federated Systems," in *Proc. of the 1996 European Symposium on Research in Computer Security*, Rome, September 25-27, 1996.
- IC-113 S. De Capitani di Vimercati, P. Samarati, "Access Control in Federated Systems," in *Proc. of the 1996 ACM SIGSAC New Security Paradigms Workshop*, Lake Arrowhead, CA, September 16-19, 1996.

## 6.6 Refereed Papers in Proceedings of National Conferences

- NC-1 S. Castano, V. De Antonellis, S. De Capitani di Vimercati, "An Interorganizational Knowledge Mediation Scheme for Information Sources over the Web," in *Nono Convegno Nazionale su Sistemi Evoluti per Basi di Dati (SEBD 2001)*, Venezia, Italy, June 27-29, 2001. (Extended abstract)
- NC-2 S. Castano, V. De Antonellis, S. De Capitani di Vimercati, M. Melchiori, "A Uniform Framework for Web Data Integration," in *Ottavo Convegno Nazionale su Sistemi Evoluti per Basi di Dati (SEBD 2000)*, L'Aquila, Italy, June 26-28, 2000.
- NC-3 S. Bergamaschi, S. Castano, S. De Capitani di Vimercati, S. Montanari, M. Vincini, "A Semantic Approach to Information Integration: The MOMIS Project," in *Sesto Convegno della Associazione Italiana per l'Intelligenza Artificiale (AI\*IA98)*, Padova, September 23-25, 1998.
- NC-4 S. Castano, V. De Antonellis, S. De Capitani di Vimercati, M. Melchiori, "Information Integration on Multiple Heterogeneous Data Sources," in *Sesto Convegno Nazionale su Sistemi Evoluti per Basi di Dati (SEBD98)*, Ancona, June 23-25, 1998.
- NC-5 S. Bergamaschi, S. Castano, S. De Capitani di Vimercati, S. Montanari, M. Vincini, "Exploiting Schema Knowledge for the Integration of Heterogeneous Sources," in *Sesto Convegno Nazionale su Sistemi Evoluti per Basi di Dati (SEBD98)*, Ancona, June 23-25, 1998.

## 6.7 Chapters in Books

- BC-1 S. De Capitani di Vimercati, S. Foresti, G. Livraga, S. Paraboschi, P. Samarati, “Confidentiality Protection in Large Databases,” in *A Comprehensive Guide Through the Italian Database Research Over the Last 25 Years*, S. Flesca, S. Greco, E. Masciari, D. Saccà (eds.), Springer, 2017.
- BC-2 S. De Capitani di Vimercati, S. Foresti, G. Livraga, P. Samarati, “Supporting Users in Data Outsourcing and Protection in the Cloud,” in *Proc. of the 6th International Conference on Cloud Computing and Services Science (CLOSER 2016)*, Rome, Italy, April 23-25, 2016.
- BC-3 S. De Capitani di Vimercati, S. Foresti, P. Samarati, “Specification and Enforcement of Access Policies in Emerging Scenarios,” in *Cloud Computing Security: Foundations and Challenges*, J.R. Vacca (ed.), CRC Press, 2016.
- BC-4 S. De Capitani di Vimercati, S. Foresti, G. Livraga, P. Samarati, “Practical Techniques Building on Encryption for Protecting and Managing Data in the Cloud,” in *Festschrift for David Kahn*, P. Ryan, D. Naccache, J.-J. Quisquater (eds.), Springer, 2016.
- BC-5 P. Samarati, S. De Capitani di Vimercati, “Cloud Security: Issues and Concerns,” in *Encyclopedia on Cloud Computing*, S. Murugesan, I. Bojanova (eds.), Wiley, 2016.
- BC-6 S. De Capitani di Vimercati, S. Foresti, G. Livraga, S. Paraboschi, P. Samarati, “Privacy in Pervasive Systems: Social and Legal Aspects and Technical Solutions,” in *Data Management in Pervasive Systems*, F. Colace, M. De Santo, V. Moscato, A. Picariello, F. Schreiber, L. Tanca (eds.), Springer, 2015.
- BC-7 S. De Capitani di Vimercati, S. Foresti, G. Livraga, P. Samarati, “Selective and Private Access to Outsourced Data Centers,” in *Handbook on Data Centers*, S.U. Khan, A.Y. Zomaya (eds.), Springer, 2015.
- BC-8 S. De Capitani di Vimercati, R.F. Erbacher, S. Foresti, S. Jajodia, G. Livraga, P. Samarati, “Encryption and Fragmentation for Data Confidentiality in the Cloud,” in *Foundations of Security Analysis and Design VII*, A. Aldini, J. Lopez, F. Martinelli (eds.), Springer, 2014.
- BC-9 S. De Capitani di Vimercati, S. Foresti, P. Samarati, “Selective and Fine-Grained Access to Data in the Cloud,” in *Secure Cloud Computing*, S. Jajodia, K. Kant, P. Samarati, V. Swarup, C. Wang (eds.), Springer, 2014.
- BC-10 S. De Capitani di Vimercati, P. Samarati, R. Sandhu, “Access Control,” in *Computer Science Handbook (3rd edition) - Information Systems and Information Technology*, A. Tucker, and H. Topi (eds.), Taylor and Francis Group, 2014.
- BC-11 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, P. Samarati, “Database Security and Privacy,” in *Computer Science Handbook (3rd edition) - Information Systems and Information Technology*, A. Tucker, and H. Topi (eds.), Taylor and Francis Group, 2014.
- BC-12 S. De Capitani di Vimercati, S. Foresti, P. Samarati, “Protecting Data in Outsourcing Scenarios,” in *Handbook on Securing Cyber-Physical Critical Infrastructure*, S.K Das, K. Kant, and N. Zhang (eds.), Morgan Kaufmann, 2012.
- BC-13 S. De Capitani di Vimercati, S. Foresti, G. Livraga, P. Samarati, “Protecting Privacy in Data Release,” in *Foundations of Security Analysis and Design VI*, A. Aldini, and R. Gorrieri (eds.), Springer, 2011.
- BC-14 C.A. Ardagna, S. De Capitani di Vimercati, G. Neven, S. Paraboschi, E. Pedrini, F.-S. Preiss, P. Samarati, M. Verdicchio, “Advances in Access Control Policies,” in *Privacy and Identity Management for Life*, J. Camenisch, S. Fischer-Huebner, K. Rannenberg (eds.), Springer, 2011.
- BC-15 M. Bezzi, S. De Capitani di Vimercati, S. Foresti, G. Livraga, S. Paraboschi, P. Samarati, “Data Privacy,” in *Privacy and Identity Management for Life*, J. Camenisch, S. Fischer-Hubner, K. Rannenberg (eds.), Springer, 2011.
- BC-16 S. De Capitani di Vimercati, S. Foresti, S. Paraboschi, G. Pelosi, P. Samarati, “Selective Exchange of Confidential Data in the Outsourcing Scenario,” in *Privacy and Identity Management for Life*, J. Camenisch, S. Fischer-Hubner, K. Rannenberg (eds.), Springer, 2011.

- BC-17 C.A. Ardagna, S. De Capitani di Vimercati, E. Pedrini, P. Samarati, "Privacy-Aware Access Control System: Evaluation and Decision," in *Digital Privacy: PRIME - Privacy and Identity Management for Europe*, J. Camenisch, R. Leenes, D. Sommer (eds.), Springer, 2011.
- BC-18 C.A. Ardagna, S. De Capitani di Vimercati, P. Samarati, "Privacy Models and Languages: Access Control and Data Handling Policies," in *Digital Privacy: PRIME - Privacy and Identity Management for Europe*, J. Camenisch, R. Leenes, and D. Sommer (eds.), Springer, 2011.
- BC-19 C.A. Ardagna, S. De Capitani di Vimercati, P. Samarati, "Personal Privacy in Mobile Networks," in *Mobile Technologies for Conflict Management: Online Dispute Resolution, Governance, Participation*, M. Poblet (ed.), Springer Science+Business Media B.V., 2011.
- BC-20 S. De Capitani di Vimercati, S. Foresti, P. Samarati, "Protecting Information Privacy in the Electronic Society," in *e-Business and Telecommunications International Conference (ICETE 2009)*, J. Filipe and M.S. Obaidat (eds.), Springer-Verlag, 2010.
- BC-21 V. Ciriani, S. De Capitani di Vimercati, S. Foresti, P. Samarati, "Theory of Privacy and Anonymity," in *Algorithms and Theory of Computation Handbook*, second edition, M. Atallah and M. Blanton (eds.), CRC Press, 2009.
- BC-22 C.A. Ardagna, M. Cremonini, S. De Capitani di Vimercati, P. Samarati, "Access Control in Location-Based Services," in *Privacy in Location Based Applications*, C. Bettini, S. Jajodia, P. Samarati, and S. Wang (eds.), Springer, 2009.
- BC-23 C.A. Ardagna, M. Cremonini, S. De Capitani di Vimercati, P. Samarati, "Location Privacy in Pervasive Computing," in *Security and Privacy in Mobile and Wireless Networking*, S. Gritzalis, T. Karygiannis, and C. Skianis (eds.), Troubador Publishing, 2009.
- BC-24 C.A. Ardagna, M. Cremonini, S. De Capitani di Vimercati, P. Samarati, "Managing Privacy in Location-based Access Control Systems," in *Mobile Intelligence: Mobile Computing and Computational Intelligence*, L.T. Yang, A.B. Waluyo, J. Ma, L. Tan, and B. Srinivasan (eds.), John Wiley & Sons, Inc., 2008.
- BC-25 C.A. Ardagna, M. Cremonini, E. Damiani, S. De Capitani di Vimercati, P. Samarati, "Privacy in the Electronic Society: Emerging Problems and Solutions," in *Statistical Science and Interdisciplinary Research - Vol. 3: Algorithms, Architectures and Information Systems Security*, B.B. Bhattacharya, S. Sur-Kolay, S.C. Nandy, and A. Bagchi (eds.), World Scientific Press, 2008.
- BC-26 S. De Capitani di Vimercati, S. Foresti, P. Samarati, "Recent Advances in Access Control," in *The Handbook of Database Security: Applications and Trends*, M. Gertz and S. Jajodia (eds.), Springer-Verlag, 2008.
- BC-27 S. De Capitani di Vimercati, S. Foresti, S. Paraboschi, P. Samarati, "Access Control Models for XML," in *The Handbook of Database Security: Applications and Trends*, M. Gertz and S. Jajodia (eds.), Springer-Verlag, 2008.
- BC-28 C.A. Ardagna, M. Cremonini, S. De Capitani di Vimercati, P. Samarati, "Privacy-enhanced Location-based Access Control," in *The Handbook of Database Security: Applications and Trends*, M. Gertz and S. Jajodia (eds.), Springer-Verlag, 2008.
- BC-29 V. Ciriani, S. De Capitani di Vimercati, S. Foresti, P. Samarati, " $k$ -Anonymous Data Mining: A Survey," in *Privacy-Preserving Data Mining: Models and Algorithms*, C.C. Aggarwal and P.S. Yu (eds.), Springer-Verlag, 2008.
- BC-30 S. De Capitani di Vimercati, S. Foresti, S. Paraboschi, P. Samarati, "Access Control," in *Handbook of Computer Networks*, H. Bidgoli (ed.), Wiley, 2007.
- BC-31 S. De Capitani di Vimercati, S. Foresti, S. Paraboschi, P. Samarati, "Privacy of Outsourced Data," in *Digital Privacy: Theory, Technologies and Practices*, A. Acquisti, S. Gritzalis, C. Lambrinoudakis, and S. De Capitani di Vimercati, (eds.), Auerbach Publications (Taylor and Francis Group), 2007.
- BC-32 C.A. Ardagna, M. Cremonini, E. Damiani, S. De Capitani di Vimercati, P. Samarati, "Privacy-Enhanced Location Services Information," in *Digital Privacy: Theory, Technologies and Practices*, A. Acquisti, S. Gritzalis, C. Lambrinoudakis, and S. De Capitani di Vimercati, (eds.), Auerbach Publications (Taylor and Francis Group), 2007.

- BC-33 V. Ciriani, S. De Capitani di Vimercati, S. Foresti, P. Samarati, “ $k$ -Anonymity,” in *Secure Data Management in Decentralized Systems*, T. Yu and S. Jajodia (eds.), Springer-Verlag, 2007.
- BC-34 S. De Capitani di Vimercati, S. Foresti, S. Jajodia, P. Samarati, “Access Control Policies and Languages in Open Environments,” in *Secure Data Management in Decentralized Systems*, T. Yu and S. Jajodia (eds.), Springer-Verlag, 2007.
- BC-35 V. Ciriani, S. De Capitani di Vimercati, S. Foresti, P. Samarati, “Microdata Protection,” in *Secure Data Management in Decentralized Systems*, T. Yu and S. Jajodia (eds.), Springer-Verlag, 2007.
- BC-36 S. De Capitani di Vimercati, S. Foresti, P. Samarati, “Authorization and Access Control,” in *Security, Privacy and Trust in Modern Data Management*, M. Petkovic and W. Jonker (eds.), Springer-Verlag, 2007.
- BC-37 C.A. Ardagna, E. Damiani, S. De Capitani di Vimercati, S. Foresti, P. Samarati, “Trust Management,” in *Security, Privacy and Trust in Modern Data Management*, M. Petkovic and W. Jonker (eds.), Springer-Verlag, 2007.
- BC-38 C.A. Ardagna, E. Damiani, S. De Capitani di Vimercati, P. Samarati, “XML Security,” in *Security, Privacy and Trust in Modern Data Management*, M. Petkovic and W. Jonker (eds.), Springer-Verlag, 2007.
- BC-39 S. De Capitani di Vimercati, S. Paraboschi, P. Samarati, “Access Control: Principles and Solutions,” in *Handbook of Information Security*, H. Bidgoli (ed.), Wiley, 2006.
- BC-40 S. De Capitani di Vimercati, P. Samarati, “New Directions in Access Control,” in *Cyberspace Security and Defense: Research Issues*, Kluwer Academic Publisher, 2005.
- BC-41 S. De Capitani di Vimercati, P. Samarati, S. Jajodia, “Database Security,” in *Wiley Encyclopedia of Software Engineering*, J. Marciniak (ed.), John Wiley & Sons, 2002.
- BC-42 S. Castano, V. De Antonellis, S. De Capitani di Vimercati, M. Melchiori, “Data Schema Integration in Web-enabled Systems,” in *Web-enabled Systems Integration: practices and challenges*, 2002
- BC-43 P. Samarati and S. De Capitani di Vimercati, “Access Control: Policies, Models, and Mechanisms,” in *Lectures of the School on Foundations of Security Analysis and Design*, R. Focardi and R. Gorrieri (eds.), Lecture Notes of Computer Science 2171, Springer-Verlag, 2001.
- BC-44 S. De Capitani di Vimercati, P. Samarati and S. Jajodia, “Hardware and Software Data Security,” *EOLSS The Encyclopedia of Life Support Systems*, D. Kaeli and Z. Navabi (eds.), EOLSS Publishers, 2001.

## 6.8 Other Publications

- O-1 S. De Capitani di Vimercati, S. Foresti, G. Livraga, “Privacy in Data Publishing,” in *Data Privacy Management and Autonomous Spontaneous Security*, J. Garcia-Alfaro, G. Navarro-Arribas, A. Cavalli, and J. Leneutre (eds.), Springer, 2011.
- O-2 S. De Capitani di Vimercati, S. Foresti, “Quasi-identifier,” in *Encyclopedia of Cryptography and Security*, H.C.A. van Tilborg, and S. Jajodia (eds.), Springer, 2011.
- O-3 S. De Capitani di Vimercati, “Access Control Policies, Models,” and Mechanisms, in *Encyclopedia of Cryptography and Security*, H.C.A. van Tilborg, and S. Jajodia (eds.), Springer, 2011.
- O-4 S. De Capitani di Vimercati, “Access Matrix,” in *Encyclopedia of Cryptography and Security*, H.C.A. van Tilborg, and S. Jajodia (eds.), Springer, 2011.
- O-5 S. De Capitani di Vimercati, P. Samarati, “Administrative Policies,” in *Encyclopedia of Cryptography and Security*, H.C.A. van Tilborg, and S. Jajodia (eds.), Springer, 2011.
- O-6 S. De Capitani di Vimercati, “Authorizations,” in *Encyclopedia of Cryptography and Security*, H.C.A. van Tilborg, and S. Jajodia (eds.), Springer, 2011.
- O-7 S. De Capitani di Vimercati, “Discretionary Access Control Policies (DAC),” in *Encyclopedia of Cryptography and Security*, H.C.A. van Tilborg, and S. Jajodia (eds.), Springer, 2011.



- O-8 S. De Capitani di Vimercati, “Least Privilege,” in *Encyclopedia of Cryptography and Security*, H.C.A. van Tilborg, and S. Jajodia (eds.), Springer, 2011.
- O-9 S. De Capitani di Vimercati, “Privacy-Aware Access Control Policies,” in *Encyclopedia of Cryptography and Security*, H.C.A. van Tilborg, and S. Jajodia (eds.), Springer, 2011.
- O-10 S. De Capitani di Vimercati, “Policy Composition,” in *Encyclopedia of Cryptography and Security*, H.C.A. van Tilborg, and S. Jajodia (eds.), Springer, 2011.
- O-11 S. De Capitani di Vimercati, G. Livraga, “Grant Option,” in *Encyclopedia of Cryptography and Security*, H.C.A. van Tilborg, and S. Jajodia (eds.), Springer, 2011.
- O-12 S. De Capitani di Vimercati, G. Livraga, “Privileges in SQL,” in *Encyclopedia of Cryptography and Security*, H.C.A. van Tilborg, and S. Jajodia (eds.), Springer, 2011.
- O-13 S. De Capitani di Vimercati, G. Livraga, “SQL Access Control Model,” in *Encyclopedia of Cryptography and Security*, H.C.A. van Tilborg, and S. Jajodia (eds.), Springer, 2011.
- O-14 S. De Capitani di Vimercati, P. Samarati, “Clark and Wilson,” in *Encyclopedia of Cryptography and Security*, H.C.A. van Tilborg, and S. Jajodia (eds.), Springer, 2011.
- O-15 S. De Capitani di Vimercati, P. Samarati, “Chinese Wall,” in *Encyclopedia of Cryptography and Security*, H.C.A. van Tilborg, and S. Jajodia (eds.), Springer, 2011.
- O-16 S. De Capitani di Vimercati, P. Samarati, “Mandatory Access Control Policies (MAC),” in *Encyclopedia of Cryptography and Security*, H.C.A. van Tilborg, and S. Jajodia (eds.), Springer, 2011.
- O-17 S. De Capitani di Vimercati, P. Samarati, “Polyinstantiation,” in *Encyclopedia of Cryptography and Security*, H.C.A. van Tilborg, and S. Jajodia (eds.), Springer, 2011.
- O-18 S. De Capitani di Vimercati, P. Samarati, “Data Privacy: Problems and Solutions,” in *Third International Conference on Information Systems Security (ICISS 2007)*, Delhi, India, December 16-20, 2007 (invited talk).
- O-19 S. Foresti, E. Pedrini, S. De Capitani di Vimercati, “Eserciziario di Basi di Dati,” Pitagora, Bologna, Italy, 2006 (in Italian).
- O-20 S. De Capitani di Vimercati, P. Samarati, “Protecting Privacy in the Global Infrastructure,” in *Proc. of the International Conference on Information Security and Computer Forensics*, Chennai, India, December 6-8, 2006 (invited talk).
- O-21 S. De Capitani di Vimercati, P. Samarati, “Privacy in the Electronic Society,” in *Proc. of the International Conference on Information Systems Security (ICISS 2006)*, Kolkata, India, December 19-21, 2006 (invited talk).
- O-22 E. Damiani, S. David, S. De Capitani di Vimercati, C. Fugazza, P. Samarati, “Open World Reasoning in Semantics-Aware Access Control: a Preliminary Study,” in *2nd Italian Semantic Web Workshop (SWAP 2005)*, University of Trento, Trento, Italy, December 14-16, 2005.
- O-23 E. Damiani, S. De Capitani di Vimercati, P. Samarati “Towards Privacy-Aware Identity Management,” in *ERCIM News*, no. 63, October 2005.
- O-24 E. Damiani, S. De Capitani di Vimercati, C. Fugazza, and P.Samarati, “Semantics-aware Privacy and Access Control: Motivation and Preliminary Results,” in *1st Italian Semantic Web Workshop*, December 2004, Ancona, Italy.
- O-25 E. Damiani, S. De Capitani di Vimercati, “Towards Semantics-Aware Access Control,” in *Proc. of the 18th IFIP WG11.3 Working Conference on Data and Application Security*, Sitges, Spain, July 25-28, 2004 (invited talk)
- O-26 E. Damiani, S. De Capitani di Vimercati, S. Paraboschi, P. Samarati, “Reputation-based Pseudonymity: An Alternative or a Complement to Strong Identities?,” in *Workshop on Security and Dependability*, Brussels, May 10, 2004.

- O-27 S. De Capitani di Vimercati, "L'evoluzione delle tecniche crittografiche per la trasmissione sicura di informazioni," in *Sicurezza digitale*, no. 1, 2004.
- O-28 S. De Capitani di Vimercati, P. Samarati, "Privacy in the Electronic Society," in *TILT*, no. 15, March 2003.