Iadine Chadès

Senior research scientist and Team leader – CSIRO Land and Water
EcoSciences Precinct, 41 Boggo Road, Dutton Park Qld 4102, Australia
Research scientist – INRA Toulouse, France (on Leave)

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http://conservationdecisions.org/ (team website)
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Iadine Chadès provides guidance to managers on how to make decisions under uncertainty in the most efficient way. Originally trained in Artificial Intelligence, Iadine turned towards ecology to develop optimisation methods to manage and survey invasive and endangered species across time and space (2006). In particular, Iadine has pioneered the use of Partially Observable Markov Decision Processes (POMDP) to solve optimal management problems in ecology and artificial intelligence (AAAI Best paper award and two PNAS papers). Iadine Chadès is team leader of the Conservation Decisions Team (CSIRO Land and Water) and the recipient of a CSIRO Julius Career Award on the theory of adaptive management (2013-2016). Since 2016, Iadine is a contributing collaborator of the US National Science Foundation CompSustNet Expeditions (2016-2020) and a partner investigator with the Centre of Excellence for Environmental Decisions (CEED, 2016-1018).

Academic qualifications

2003	PhD Thesis in Artificial Intelligence, University of Nancy 1/INRIA, France.
1998	M.Sc. in Computer Science, DEA. "Informatique de Lyon", Ecole Normale Supérieure (ENS) de Lyon, France.

Professional experience

2010 – pres.	Indefinite research scientist – CSIRO Land and Water, Brisbane, Australia.
2009 – 2010	OCE Postdoctoral research fellow – CSIRO Sustainable Ecosystems with Prof. Y. Buckley
2008 – 2009	ACERA postdoctoral research fellow – The University of Queensland with Pr. Prof. Pollett and Prof. H. Possingham
2005 – 2006	1 year sabbatical – The University of Queensland with Prof. H. Possingham.
2003 – pres.	Indefinite research scientist - INRA (French National Institute of Agronomy, Toulouse), Department of Applied Mathematics and Computer Science. Leave w/o pay since 2008.
1998 – 2003	Assistant lecturer in computer science – Universities of Metz and Nancy (France).

Selected awards and honours

2017	**ON Prime selected application** Conservation Connect	AUD$5,000
2016	**CSIRO Award for Science Leadership**, recognising in particular the acceptance of two papers at the prestigious Thirsty-First AAAI Conference on Artificial Intelligence (2017).	AUD$200
2016 - 2018	**John Stocker SIEF** postdoctoral fellow (Dr Chris Baker) with Prof. H. Possingham (UQ)	AUD$300,000
2014	**2014 Women in Technology award finalist (ICT)**	
2013 - 2016	**CSIRO Julius Career Award**	AUD$ 150,000
2013 - 2016	**CSIRO OCE** postdoctoral fellow (PI) with T. Dietterich and A. Sheppard	AUD$276,000
2013	**Senior program committee member** at the 23rd International Joint Conference on Artificial Intelligence (IJCAI 2013). IJCAI is ranked A* by CORE and 2nd by Microsoft Academic research.	
2012	**Best paper award AAAI 2012.** AAAI is ranked A* by CORE, and ranked 1st by Microsoft Academic research. **Chadès, I.**, Carwardine, J., Martin, T.G., Nicol, S., Sabbadin, R. & Buffet, O. (2012) MOMDPs: a solution for modelling adaptive management	US $ 1,000

problems. The Twenty-Sixth AAAI Conference on Artificial Intelligence (AAAI-12), pp. 267-273. Toronto, Canada.

Major projects and grants

2013 – 2014	Pilbara priority threat management funded by **ATLAS IRON** (PI)	AUD$ 440,000
2013 – 2017	Prioritising Adaptation Actions for Managing Invasive Animals Under Climate Change funded by **Invasive animals CRC** (Co-PI)	AUD$ 571,000
2008 – 2009	Postdoctoral fellowship from The Australian Centre of Excellence for Risk Analysis (**ACERA**) (PI)	AUD$ 92,000
2008 – 2010	Endangered Species Recovery Fund from **WWF Canada** (Co-PI)	CAD$ 13,000

Selected presentations and contributions

1. Invited speaker, **Oregon State University**, Corvallis, USA (April, May, 2016).
2. Invited speaker, **Microsoft research**, Redmond, USA (March, 2016).
3. Invited speaker, **International Conference for Conservation Biology (ICCB)**, Montpellier (August, 2015).
4. Invited speaker, **World Park Congress**, Sydney (November, 2014).
5. Adaptive management **Symposium organizer, Ecological Society of Australia (ESA)**, Alice Springs (September, 2014)**.**
6. Invited speaker, **University of Tennessee, Knoxville,** (August, 2014).
7. Invited speaker, **Ecological Society of America (ESA),** Sacramento, (August, 2014).
8. Invited speaker, **Neural Information Processing Systems (NIPS) Foundation,** Lake Tahoe (Dec. 2013)
9. Invited speaker at the **Global Change Institute (GCI), University of Queensland,** Brisbane (Sept. 2013).
10. Invited speaker at the **International Conference for Conservation Biology (ICCB),** Baltimore (July 2013).
11. Invited speaker and contributor at the **Mathematical Biosciences Institute (MBI)** workshop on Sustainable Management of Living Natural Resources organised by **Paul Armsworth, Alan Hastings and Andrew Liebhold** (Nov 2013, partially supported).
12. Invited speaker and contributor to **National Institute for Mathematical and Biological Synthesis working group (NIMBioS)** "Pretty Darn Good' Control: extensions of optimal control for ecological systems" organised by **Alan Hastings, Megan Donahue, Carl Toews and Paul Armsworth** (April 2012 and Jan 2013, Jan 2015, fully supported).
13. Invited speaker, **2012 Winter School in Mathematical and Computational Biology (University of Queensland)**, Brisbane (2012)**.**
14. Invited contributor to working groups of the **Environmental Decisions Group (EDG)** on adaptive management, multi-species management, migratory species and multi-actors management (2012-2013, fully supported). EDG is funded through the **Australian Research Council Centre of Excellence** program and the Australian Governments National Environmental Research Program. http://www.edg.org.au/
15. Invited plenary speaker at the **French Conference for Conservation Biology**, Dijon, France (May 2012, fully supported).
16. Invited speaker and working group on adaptive management at the **National Institute for Research in Computer Science and Control (INRIA),** O. Buffet, Nancy, France (July 2011, May 2012, fully supported).
17. Invited speaker and working group on MDPToolbox at the **National Institute for Research in Agronomy (INRA)**, R. Sabbadin, F. Garcia, Toulouse, France (July 2011, May 2012, fully supported).
18. Invited speaker at the **International Conference for Conservation Biology,** Auckland New-Zealand (2011).
19. Invited speaker at the **Institute for Computational Sustainability (ICS),** Cornell, USA (2009, fully supported).
20. Invited speaker at the **Ecological Society of Australia**, Canberra (2010).
21. Invited speaker at **INTECOL,** Brisbane, Australia (2009).
22. Other invited seminars (fully supported only): Centre **for Applied Conservation Research** (CACR, UBC, Canada, 2007); **Fisheries and Oceans Canada** (DFO, Canada, 2008).

Supervisory roles:

Postdoctoral Fellow: **Yann Dujardin** (CSIRO, since 2014), **Chris Baker** (SIEF John Stocker Fellow, UQ/CSIRO, since 2016).
PhD Students: **Martin Peron** (PhD student, QUT/CSIRO, since 2014), **Jasmine Lee** (PhD student, UQ/AD/CSIRO, since 2014), **Hui Xiao** (PhD Student, UQ/CSIRO/INRA).

Completed: **Arthur Le Rhun** (Master student, ENSTA), **Sam Nicol** (Postdoc, CSIRO/NERP, 2013-2015), **Nick Murray** (PhD student, 2013), **Sam Nicol** (PhD, UQ, 2008-2011), **Chrystal Mantyka-Pringle** (Postdoc, CSIRO, 2013), **Isabelle Grechi** (Postdoc, INRA/CSIRO, 2009), **Alana Moore** (Postdoc, INRA /ACERA/AEDA, 2010), **M-A. Coindreau** (Master, ENSTA, France, 2012), **L. Jalladeau** (Master, ENSTA, France,2011)**, S. Orb** (Master, ENSTA, France,2013), **Martin Peron** (Honours, Ecole des ponts, France, 2013), **J-B. Pichancourt** (Postdoc, CSIRO, 2010-2013), **B. Rumeau** (ENSTA, 2014), **A. Le Rhun** (ENSTA, 2014).

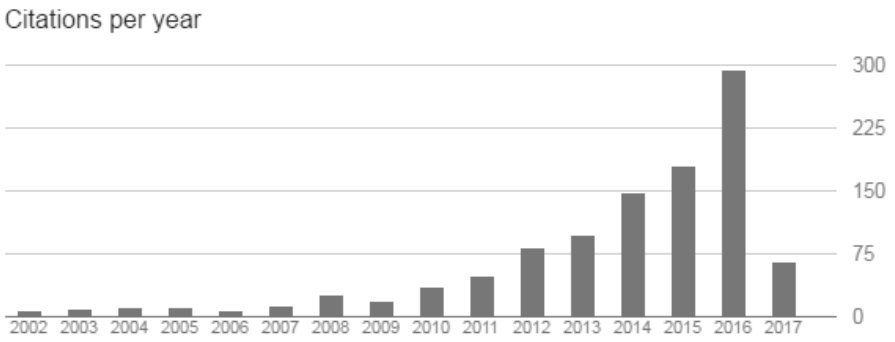
Referees

- **Pr. Yvonne M. Buckley**, Trinity College Dublin
  Email: buckleyy@tcd.ie
- **Pr. Hugh P. Possingham**, The University of Queensland
  Email: h.possingham@uq.edu.au
- **Distinguished Pr. Tom Dietterich**, Oregon State University, USA
  Email: tgd@oregonstate.edu

Peer reviewed publications

Table 1. Summary of publication statistics as of November 2016 from Google scholar. Iadine publishes in the fields of artificial intelligence (AI) and ecology. The preferred publication mode in AI is through selective peer-reviewed conference proceedings. Microsoft academic AI conference ranking and CORE ranking (Australia and NZ, with meaning of A*, A, B, C ranks).

Journal articles and refereed computer science conference papers	Other peer reviewed (book chap., report, ..)	Citations	i10-index	h-index
47	14	1058	24	17



	Journal articles and peer reviewed conference proceedings	Year	Citation
1	Péron, M., Jansen, C. C., Mantyka-Pringle, C., Nicol, S., Schellhorn, N. A., Becker, K. H. and **Chadès, I.** (2017), Selecting simultaneous actions of different durations to optimally manage an ecological network. Methods Ecol Evol. doi:10.1111/2041-210X.12744	2017	-
2	Nicol, S., Sabbadin, R., Peyrard, N. and **Chadès, I.** (2017), Finding the best management policy to eradicate invasive species from spatial ecological networks with simultaneous actions. J Appl Ecol. doi:10.1111/1365-2664.12884	2017	-
3	Martin Peron, Kai Helge Becker, Peter Bartlett and **Iadine Chadès** (2017) Fast-tracking Stationary MOMDPs for Adaptive Management Problems. *The Thirty-First AAAI Conference on Artificial Intelligence* (AAAI-17), San Francisco, USA. *AAAI is ranked A* (Exceptional) by CORE and 1st by Microsoft Academic research.*	2017	-
4	Yann Dujardin, Tom Dietterich and **Iadine Chadès** (2017) Three New Algorithms To Solve N-POMDPs. *The Thirty-First AAAI Conference on Artificial Intelligence* (AAAI-17), San Francisco, USA. *AAAI is ranked A* (Exceptional) by CORE and 1st by Microsoft Academic research.*	2017	-
5	**Iadine Chadès** and Sam Nicol (2016) Information: Small data call for big ideas. *Nature*, 539, 31-31.	2016	-
6	**Iadine Chadès**, Sam Nicol, Tracy M. Rout, Martin Peron, Yann Dujardin, Jean-Baptiste Pichancourt, Alan Hastings, Cindy E. Hauser. (2016) Optimization methods to solve adaptive management problems. *Theoretical Ecology*.	2016	-
7	Kiran L Dhanjal-Adams, Marcel Klaassen, Sam Nicol, Hugh P Possingham, **Iadine Chadès**, Richard A Fuller. (2016) Setting conservation priorities for migratory networks under uncertainty. *Conservation Biology.*	2016	-
8	Gwenllian Iacona, Richard F Maloney, **Iadine Chadès**, Joseph R Bennett, Philip J Seddon, Hugh P Possingham. (2016) Prioritising revived species: What are the conservation management implications of de-extinction? *Functional Ecology*	2016	1
9	Ayesha I.T. Tulloch, Jean-Baptiste Pichancourt, Carl R. Gosper, Angela Sanders, and **I. Chadès**. (2016) Fire management strategies to maintain species population processes in a fragmented landscape of fire-interval extremes. *Ecological Applications*: n/a-n/a	2016	1
10	Tara G. Martin*, Abbey E. Camaclang, Hugh P. Possingham, Lynn A. Maguire, and **I. Chadès***. (2016) Timing of protection of critical habitat matters. *Conservation Letters*: n/a-n/a. (**contributed equally*)	2016	1
11	Canessa, S., Guillera-Arroita, G., Lahoz-Monfort, J.J., Southwell, D.M., Armstrong, D.P., **Chadès, I.**, Lacy, R.C. and Converse, S.J. (2016). Adaptive management for improving species conservation across the captive-wild spectrum. *Biological Conservation*:199: 123-131.	2016	1

12	Tulloch, A. I. T., **I. Chadés**, Y. Dujardin, M. J. Westgate, P. W. Lane, and D. Lindenmayer. 2016. Dynamic species co-occurence networks require dynamic biodiversity surrogates. *Ecography*:n/a-n/a.	2016	4
13	McDonald-Madden E, Sabbadin R, Game ET, Baxter PWJ, **Chadès I,** Possingham HP (2016) Using food-web theory to conserve ecosystems *Nature Communications* 7 doi:10.1038/ncomms10245	2016	3
14	**I. Chadès**, T. Tarnopolskaya, S. Dunstall, J.Rhodes, and A.Tulloch (2015). A comparison of adaptive management and real options approaches for environmental decisions under uncertainty. In Weber, T., McPhee, M.J. and Anderssen, R.S. (eds) MODSIM2015, 21st International Congress on Modelling and Simulation. Modelling and Simulation Society of Australia and New Zealand, December 2015. ISBN: 978-0-9872143-5-5. (PDF)	2015	1
15	Martin, T.G., H. Murphy, A. Liedloff, C. Thomas, **I. Chades,** G. Cook, R. Fensham, J. McIvor, R. D. van Klinken. (2015) *Biological Invasions DOI 10.1007/s10530-015-0945-9*	2015	7
16	Firn, J., T. G. Martin, **I. Chadès**, B. Walters, J. Hayes, S. Nicol, and J. Carwardine. 2015. Priority threat management of non-native plants to maintain ecosystem integrity across heterogeneous landscapes. *Journal of Applied Ecology* 52:1135-1144.	2015	7
17	Dujardin Y., Dietterich T., and **I. Chadès** (2015) α-min: a compact approximate solver for finite-horizon POMDPs. Proceedings of the 24th International Joint Conference on Artificial Intelligence (IJCAI), Buenos Aires, Argentina. *IJCAI is ranked A* (Exceptional) by CORE and 2nd by Microsoft Academic research.*	2015	1
18	Firn, J., R. Maggini, **I. Chadès**, S. Nicol, B. Walters, A. Reeson, T. G. Martin, H. P. Possingham, J.-B. Pichancourt, R. Ponce-Reyes, and J. Carwardine. 2015. Priority threat management of invasive animals to protect biodiversity under climate change. *Global Change Biology* 21:3917-3930.	2015	3
19	Nicol, S., R.A. Fuller, T. Iwamura and **I. Chadès** (2015). Adapting environmental management to uncertain but inevitable change. *Proceedings of the Royal Society B*, 282(1808)	2015	7
20	Canessa, S., G. Guillera-Arroita, J. Lahoz-Monfort, D. Southwell, S.J. Converse, D.P. Armstrong, **I. Chadès**, R. Lacy, P. Miller and M.A. McCarthy (2015). When do we need further information? A primer on calculating the value of information for applied ecology. *Methods in Ecology and Evolution*	2015	16
21	Tulloch, V, Tulloch, A.I.T., Visconti, P., Halpern, B., Watson, J., Evans, M., Auerbach, N., Barnes, M., Beger, M., **Chadès, I.,** Giakoumi, S., MacDonald-Madden, E., Murray, N., Ringma, J., Possingham, H. (2015). Why do we map threats? Linking threat mapping with actions to make good decisions for biodiversity conservation. *Frontiers in Ecology and the Environment*.	2015	25
22	**Chadès, I.**, S. Nicol, S. van Leeuwen, B. Walters, J. Firn, A. Reeson, T. Martin, and J. Carwardine. (2015). Complementarity threat management priorities save more species. *Conservation Biology* 29 (2), 525-536.	2015	14
23	**Chadès, I.**, G. Chapron, M.-J. Cros, F. Garcia, and R. Sabbadin. (2014). MDPtoolbox: a multi-platform toolbox to solve stochastic dynamic programming problems. *Ecography* 37:doi 10.1111/ecog.00888	2014	14

24	Grechi, I., **Chadès, I.,** Buckley, Y., Friedel, M., Grice, A.C., Possingham, H.P., van Klinken, R.D. & Martin, T.G. (2014) A decision framework for management of conflicting production and biodiversity goals for a commercially valuable invasive species. Agricultural Systems, 125, 1-11.	2014	13
25	Pichancourt JB, Firn J, **Chadès I.,** Martin T.G. (2013) Growing Biodiverse Carbon-Rich Forests. Global Change Biology DOI: 10.1111/gcb.12345	2013	28
26	Marescot L., Chapron G., **Chadès I.**, Fackler P.L., Duchamp C., Marboutin E. & Gimenez, O. (2013) Complex decisions made simple: a primer on stochastic dynamic programming. *Methods in Ecology and Evolution.*	2013	16
27	Iwamura, T., Possingham, H.P., **Chadès, I.**, Minton, C., Murray, N., Rogers, D., Treml, E. & Fuller, R. (2013) Migration magnifies the impact of sea level rise on coastal shorebirds. *Proceedings of the Royal Society of London B Biological Sciences*.	2013	65
28	Nicol, S., Iwamura T., Buffet O., & **Chadès, I.** (2013) Adaptive management of migratory birds under sea level rise. *The 23rd International Joint Conference on Artificial Intelligence (IJCAI-13)*,Beijing China. *IJCAI is ranked top 2 of the artificial intelligence conferences by Microsoft Academic Research website[1]*	2013	8
29	Tulloch, A. I. T., **I. Chadès**, and H. P. Possingham. (2013). Accounting for complementarity to maximize monitoring power for species management. Conservation Biology 27:988-999.	2013	15
30	**Chadès, I.**, Curtis, J.M.R. & Martin, T.G. (2012) Setting realistic recovery targets for interacting endangered species. *Conservation Biology,* **26,** 1016-1025.	2012	23
31	Pichancourt, J.B., **Chadès, I.**, Firn, J., van Klinken, R.D. & Martin, T.G. (2012) Simple rules to contain an invasive species with a complex life cycle and high dispersal capacity. *Journal of Applied Ecology,* **49,** 52-62.	2012	15
32	**Chadès, I.**, Carwardine, J., Martin, T.G., Nicol, S., Sabbadin, R. & Buffet, O. (2012) MOMDPs: a solution for modelling adaptive management problems. *The Twenty-Sixth AAAI Conference on Artificial Intelligence (AAAI-12)*, pp. 267-273. Toronto, Canada. **AAAI best paper award**. *AAAI is ranked A* (Exceptional) by CORE and 1st by Microsoft Academic research.*	2012	25
33	Nicol, S. & **Chadès, I.** (2012) Which States Matter? An Application of an Intelligent Discretization Method to Solve a Continuous POMDP in Conservation Biology. *PLoS ONE,* **7,** e28993.	2012	16
34	Regan*, T.J., **Chadès*, I.** & Possingham, H.P. (2011) Optimal strategies for managing invasive plants in partially observable systems. *Journal of Applied Ecology,* **48,** 76-85. (*contributed equally)	2011	34
35	**Chadès, I.**, Martin, T.G., Nicol, S., Burgman, M.A., Possingham, H.P. & Buckley, Y.M. (2011) General rules for managing and surveying networks of pests, diseases, and endangered species. *Proceedings of the National Academy of Sciences of the United States of America,* **108,** 8323-8328.	2011	87
36	Nicol, S. & **Chadès, I.** (2011) Beyond stochastic dynamic programming: a heuristic sampling method for optimizing conservation decisions in very large state spaces. *Methods in Ecology and Evolution,* **2,** 221-228.	2011	14

37	McDonald-Madden, E., **Chadès, I.**, McCarthy, M.A., Linkie, M. & Possingham, H.P. (2011) Allocating conservation resources between areas where persistence of a species is uncertain. *Ecological Applications,* **21,** 844-858.	2011	26
38	Nicol, S., **Chadès, I.**, Linke, S. & Possingham, H.P. (2010) Conservation decision-making in large state spaces. *Ecological Modelling,* **221,** 2531-2536. Also submitted to MODSIM: Nicol, S., **Chadès I.**, Linke S. and H. P. Possingham. (2009). Conservation decision-making in large state spaces*. MODSIM 2009 International Congress on Modelling and Simulation***.** Cairns, Australia, 13–17th July 2009.	2010	8
39	**Chadès, I.**, McDonald-Madden, E., McCarthy, M.A., Wintle, B., Linkie, M. & Possingham, H.P. (2008) When to stop managing or surveying cryptic threatened species. *Proceedings of the National Academy of Sciences of the United States of America,* **105,** 13936. This paper has been ***featured in The Australian, ABC Science and TREE*** by MacKenzie, D. I. 2009. Getting the biggest bang for our conservation buck. **Trends in Ecology & Evolution** 24:175-177. (IF: 11.9)	2008	100
40	McDonald-Madden, E., **Chadès, I.,** McCarthy, M.A., Wintle, B., Possingham, H.P. (2007) In Oxley, L and D Kulasiri (eds) *MODSIM 2007 International Congress on Modelling and Simulation.* Modelling and Simulation Society of Australia and New Zealand, December 2007, pp. 2244-2249. ISBN:978-0-9758400-4-7.	2007	0
41	**Chadès, I.**, Martin, T.G., Curtis, J.M., and Barreto, C. (2007). Managing interacting threatened species: A reinforcement learning decision theoretic approach. In Oxley, L. and Kulasiri, D. (eds) *MODSIM 2007 International Congress on Modelling and Simulation.* Modelling and Simulation Society of Australia and New Zealand, December 2007, pp.74-80. ISBN:978-0-9758400-4-7	2007	3
42	Martin, T.G., **Chadès, I.**, Arcese, P., Marra, P.P., Possingham, H.P. & Norris, D.R. (2007) Optimal conservation of migratory species. *PLoS ONE,* **2**.	2007	184
43	Venner, S., **Chadès, I.**, Bel-Venner, M.C., Pasquet, A., Charpillet, F. & Leborgne, R. (2006) Dynamic optimization over infinite-time horizon: Web-building strategy in an orb-weaving spider as a case study. *Journal of Theoretical Biology,* **241,** 725-733.	2006	10
44	**Chadès I.**, Bouteiller B. (2005). Solving Multiagent Markov Decision Processes: A Forest Management Example. In Zerger, A. and Argent, R.M. (eds), *MODSIM 2005 International Congress on Modelling and Simulation*. Modelling and Simulation Society of Australia and New Zealand, December 2005.	2005	6
45	**Chadès I.**, Scherrer B., and Charpillet F. (2003) Planning Cooperative Homogeneous Multiagent System using Markov Decision Processes. *ICEIS 2003 5th International Conference on Enterprise Information Systems.* Angers, France. Avril, 2003.	2003	7
46	**Chadès I.**, Scherrer B., and Charpillet F. (2002) A Heurisitic Approach for Solving Decentralized-POMDP: Assessment on the Pursuit Problem, *Proc. of the 17th ACM Symposium on Applied Computing (SAC 2002)*, Madrid, 2002.	2002	69

47	Charpillet F., **Chadès I.**, and Gallone J.M.(1998) Stochastic and Distributed Anytime Task Scheduling, *10th IEEE Int. Conf. on Tools with Artificial Intelligence (ICTAI 98),*Taipei, Taiwan, 1998.	1998	3

	Other peer-reviewed publications (book chapters, report and software)	Year	Citation
1	Nicol, Sam; Stratford, Danial; Joehnk, Klaus; **Chades, Iadine**. Prioritising the value of information for the management of Moira grass at Barmah forest. Brisbane: CSIRO; 2017. csiro:EP17815.	2017	-
2	Yann Dujardin, Tom Dietterich, **Iadine Chadès** (2017) Trois Algorithmes pour Résoudre les N-POMDPs. ROADEF (PDF)	2017	-
3	**Iadine Chade**s, Sam Nicol (2016) Small data, big ideas. Zenodo http://doi.org/10.5281/zenodo.164443	2016	-
4	Ponce Reyes, R, Firn, J, Nicol, S, **Chadès, I,** Stratford, DS, Martin, TG, Whitten, S, Carwardine, J (2016) Priority Threat Management for Imperilled Species of the Queensland Brigalow Belt CSIRO, Brisbane. (PDF)	2016	-
5	Martin, T.G., Carwardine, J., Broadhurst, L.M., Ferrier, S., James, C., Sheppard, A., Whitten, S., **Chadès, I**. (2014). Tools for managing and restoring biodiversity, In Conserving Biodiversity. ed. S. Morton. CSIRO publishing, Canberra.	2014	7
6	Carwardine J, Nicol S, van Leeuwen S, Walters B, Firn J, Reeson A, Martin TG, **Chadès, I.** (2014) Priority threat management for Pilbara species of conservation significance, CSIRO Ecosystems Sciences, Brisbane. (PDF) (see The Conversation article, blog post, CSIRO website)	2014	6
7	Firn, J., Martin, T.G., Walters, B., Hayes, J., Nicol, S., **Chadès, I.,** and Carwardine, J. (2013) Priority Threat Management of invasive plants species in the Lake Eyre Basin. CSIRO and Queensland University of Technology, Australia (PDF) (blog post)	2013	4
8	**Chadès**, **I.**, G. Chapron, M.-J. Cros, F. Garcia and R. Sabbadin. (2006-2014) MDPtoolbox: a multi-platform toolbox to solve stochastic dynamic programming problems (v4.0). Freely available via http://www7.inra.fr/mia/T/MDPtoolbox . MDPtoolbox provides state-of-the-art MDP algorithms developed under MATLAB and the free platforms GNU Octave, Scilab and R.	2006 - 2014	19
9	**Chadès, I.** (2010) **Markov decision processes and Artificial Intelligence. Conservation of biodiversity.** Hermes Science Publishing, Londres, Royaume-Uni**.**	2010	
10	**Chadès I.** (2010). Strategies for managing invasive species in space: deciding whether to eradicate, contain or control. A report to the Australian Center for Risk Analysis (**ACERA**). (PDF)	2010	
11	**Chadès, I.** (2009) Walking with robots: What's the connection between mobile robots, endangered cryptic animals and invasive species? *Decision Point*, pp. 5. AEDA, Canberra, AUS. http://www.aeda.edu.au/docs/Newsletters/DPoint_29.pdf	2009	
12	**Chadès, I.** (2008) **Processus décisionnels de Markov en intelligence artificielle**, volume 1: principes généraux et applications, Chapter 7: Conservation de la biodiversité. Hermes Science Publishing, Londres, Royaume-Uni, 2008.	2008	

13	**Chadès I.** (2004) Multiple Equilibria Solution for the Multi-agent MDP coordination problem. Workshop of the 16th European Conference on Artificial Intelligence (ECAI 04), on **Multi-Agent Markov Decision Processes: Theories and Models**, 6 pages, Valencia, Aout 2004.	2004	
14	**Chadès, I.** (2003) Planification distribuée dans les systèmes multi-agents à l'aide de processus décisionnels de Markov. PhD dissertation, Henri Poincare Nancy.	2003	8