

Publication List (Complete)

Serge Demeyer

November 16, 2023

This document lists the publications (co-)authored by Serge Demeyer spanning his whole research career (1994—2023). The list includes those articles which have been accepted for publication on August 2022 (may be scheduled for publication in subsequent years). It also lists the PhDs finished under Serge Demeyer’s supervision. The list itself is divided into categories and within each category items are listed in reverse chronological order. Whenever possible a quality indicator is included: for journal papers the SCI impact factor as published in the JCR Science Edition, for conference papers the acceptance ratio.

As far as research impact concerns, an extract of the bibliometric indicators of the ACM and Google Scholar digital library are included. Moreover, the ***TOP*** publications are explicitly marked, where the TOP status can be achieved in two ways.

- *Conference Publications*: consulting the rankings of the Computing Research and Education Association of Australasia (CORE) available at <http://portal.core.edu.au/conf-ranks/> a conference is marked ***TOP*** when it is ranked A* (= top 4%) or A (=next 14%).
- *Journal Publications*: consulting the SCI impact factor as published in the JCR Science Edition a journal is marked ***TOP*** when it is ranked among the first 10 items in one of the subcategories of “Computer Science” sorted by the 5-Year Impact Factor. In principle, we consult the rankings that year before the article was accepted for publication.



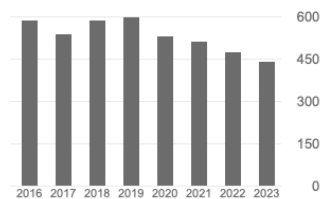
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Cited by	VIEW ALL	
	All	Since 2018
Citations	11058	3140
h-index	52	27
i10-index	127	76



h-index of 52 according to Google Scholar.

Figure 1: Bibliometric indicators — Google Scholar (Extract January 7th, 2021)

Classification

- Articles in journals with external refereeing. [1], [2], [3], [4] (2023), [5], [6], [7] (2022), [8] (2021), [9] (2020), [10] (2018), [11], [12], [13] (2017), [14] (2016), [15] (2014), [16] (2011), [17] (2010), [18] (2009), [19], [20] (2008), [21], [22] (2007), [23] (2005), [24] (2001), [25] (2000), [26] (1999), [27] (1997)
- Editorial.
[28] (2015), [29] (2009).
- Monography as an author or editor.
[30] (2014), [31] (2008), [32] (2007), [33] (2003), [34] (1999), [35] (1998)
- Articles in conference proceedings with external refereeing.
[36] (2023), [37], [38], [39], [40], [41] (2022), [42], [43] (2021), [44], [45], [46] (2020), [47], [48] (2019), [49], [50], [51], [52], [53] (2018), [54], [55] (2017), [56], [57], [58], [59], [60] (2016), [61], [62] (2015), [63] (2014), [64], [65], [66], [67], [68] (2013), [69], [70], [71] (2012), [72], [73], [74], [75] (2011), [76], [77] (2010), [78], [79], [80] (2009), [81], [82], [83] (2008), [84], [85], [86], [87], [88], [89] (2006), [90], [91], [92], [93], [94], [95], [96] (2005), [97], [98], [99], [100] (2004), [101], [102] (2003), [103], (2002), [104], [105], [106] (2000), [107], [108], [109] (1999), [110] (1997), [111] (1994)
- Invited articles in theme books.
[112], [113] (2023), [114] (2012), [115] (2011), [116] (2009), [117] (2008), [118] (2005), [119] (1996)
- Workshop proceedings as editor.
[120] (2022), [121] (2020), [122] (2019), [123] (2018), [124], [125] (2017), [126] (2006), [127] (2005), [128] (2004), [129] (2003), [130], [131] (1999), [132] (1997), [133] (1996)
- Workshop Papers, Posters and Reports without External Refereeing.
[134], [135] (2023), [136], [137] (2022), [138], [139], [140] (2020), [141], [142], [143], [144], [145], [146], [147] (2020), [148], [149], [150], [151], [152] (2019), [153], [154], [155], [156], [157], [158] (2018), [159], [160], [161], [162] (2017), [163], [164], [165], [166], [167], [168] (2016), [169], [170], [171] (2015), [172], [173] (2014), [174], [175], [176], [177] (2013), [178], [179] (2012), [180], [181], [182] (2011), [183], [184], [185], [186], [187], [188], [189], [190] (2010), [191], [192] (2009), [193] (2008), [194], [195], [196], [197] (2007), [198] (2006), [199] (2005), [200], [201], [202], [203], [204], [205] (2004), [206], [207], [208], [209], [210], [211], [212], [213], [214] (2003), [215], [216], [217] (2001), [218], [219], [220], [221], [222], [223], [224] (2000), [225], [226], [227], [228] (1999), [229], [230], [231], [232], [233] (1998), [234], [235] (1997), [236], [237], [238] (1996), [239] (1994)
- Technical Papers.
[240] (2001), [241] (1999), [242], [243] (1998), [244] (1997), [245] (1995), [246] (1994).
- Ph.D. Dissertations (Promotor & Author).
Promotor: [247], [248], (2023), [249], (2022), [250], [251], (2019), [252], (2018), [253], [254] (2016), [255] (2015), [256] (2014), [257], [258] (2013), [259] (2012), [260] (2010), [261] (2009), [262], [263] (2008), [264], (2007), [265], [266] (2006)
Author: [267] (1996)

Publication List

- [1] Sten Vercammen, Serge Demeyer, Markus Borg, Niklas Pettersson, and Görel Hedin. Mutation testing optimisations using the Clang front-end. *Software Testing, Verification and Reliability*, October 2023. DOI: 10.1002/stvr.1865.
- [2] Gustavo Carro, Olivier Schalm, Patrick Storme, Griet Blanckaert, and Serge Demeyer. Indoor air quality for heritage objects and human health: just a different interpretation of the same measurements? *Air Quality, Atmosphere and Health*, September 2023. DOI: 10.1007/s11869-023-01427-9.
- [3] Sten Vercammen, Serge Demeyer, and Markus Borg. F-ASTMut: mutation optimisations techniques using the Clang front-end. *Software Impacts*, 16:100500, March 2023. DOI: 10.1016/j.simpa.2023.100500.
- [4] Maxime Gobert, Csaba Nagy, Henrique Rocha, Serge Demeyer, and Anthony Cleve. Best practices of testing database manipulation code. *Information Systems*, 111:102105, January 2023. DOI: 10.1016/j.is.2022.102105.
- [5] Mehrdad Abdi, Henrique Rocha, Serge Demeyer, and Alexandre Bergel. Small-amp: Test amplification in a dynamically typed language. *Empirical Software Engineering*, 27(128), July 2022. DOI: 10.1007/s10664-022-10169-8.
- [6] Ebert Schoofs, Mehrdad Abdi, and Serge Demeyer. Ampyfier: Test amplification in python. *Journal of Software: Evolution and Process*, page e2490, July 2022. DOI: <https://doi.org/10.1002/smr.2490>.
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- [10] Alessandro Murgia, Marco Ortu, Parastou Tourani, Bram Adams, and Serge Demeyer. An exploratory qualitative and quantitative analysis of emotions in issue report comments of open source systems. *Empirical Software Engineering*, 23(1), February 2018. DOI: 10.1007/s10664-017-9526-0, SCI impact factor 1.393.
- [11] Andrea Marchetti, Sanaz Pilehvar, Lucy 't Hart, Diana Leyva Pernia, Olivier Voet, Willemien Anaf, Gert Nuyts, Elke Otten, Serge Demeyer, Olivier Schalm, and Karolien De Wael. Indoor environmental quality index for conservation environments: The importance of including particulate matter. *Building and Environment*, 126:132 — 146, 2017. DOI: 10.1016/j.buildenv.2017.09.022, 5 year impact factor 4.464.
- [12] ***TOP*** [2nd in SCI citation index]. Quinten David Soetens, Romain Robbes, and Serge Demeyer. Changes as first class citizens: A research perspective on modern software tooling. *ACM Computing Surveys*, 50(2), June 2017. DOI: 10.1145/3038926, SCI impact factor 5.243, ranked 2 / 105 in Computer Science, Theory & Methods — 2015.
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- [14] Quinten David Soetens, Serge Demeyer, Andy Zaidman, and Javier Pérez. Change-based test selection: an empirical evaluation. *Empirical Software Engineering*, 21(1):1 – 43, October 2016. DOI: 10.1007/s10664-015-9405-5, SCI impact factor 1.393, ranked 27 / 106 in Computer Science, Software Engineering — 2015.
- [15] Sylvain Degrandart, Serge Demeyer, Jan Van den Bergh, and Tom Mens. A transformation-based approach to context-aware modelling. *Software & Systems Modeling*, 13(1):191–208, March 2014. DOI: 10.1007/s10270-012-0239-y, SCI impact factor 0.820, ranked 62 / 105 in Computer Science, Software Engineering — 2013.
- [16] Andy Zaidman, Bart Van Rompaey, Arie van Deursen, and Serge Demeyer. Studying the co-evolution of production and test code in open source and industrial developer test processes through repository mining. *International Journal on Empirical Software Engineering*, 16(3):325 – 364, 2011.

- DOI: 10.1007/s10664-010-9143-7, SCI impact factor 1.796, ranked 15 / 99 in Computer Science, Software Engineering — 2010.
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- [27] ***TOP*** [9th in SCI citation index]. Serge Demeyer, Theo Dirk Meijler, Oscar Nierstrasz, and Patrick Steyaert. Design guidelines for tailorable frameworks. *Communications of the ACM*, 40(10):60–64, October 1997. SCI impact factor 1.797, ranked 9 / 79.
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- volume 1743 of *Lecture Notes in Computer Science*. Springer-Verlag, December 1999.
- [35] Serge Demeyer and Jan Bosch, editors. *Object-Oriented Technology (ECOOP'98 Workshop Reader)*, volume 1543 of *Lecture Notes in Computer Science*. Springer-Verlag, December 1998.
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- [43] ***TOP*** [A in CORE2020]. Maxime Gobert, Csaba Nagy, Henrique Rocha, Serge Demeyer, and Anthony Cleve. Challenges and perils of testing database manipulation code. In Marcello La Rosa, Shazia Sadiq, and Ernest Teniente, editors, *Proceedings CAiSE 2021 (33rd International Conference on Advanced Information Systems Engineering)*, pages 229–245. Springer International Publishing, 2021. DOI: 10.1007/978-3-030-79382-1_14, Acceptance ratio: 33 / 172 = 19%.
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- [45] Brent van Bladel and Serge Demeyer. Clone detection in test code: an empirical evaluation. In *Proceedings SANER 2020 (International Conference on Software Analysis, Evolution and Reengineering)*, pages 492–500. IEEE, 2020. DOI: 10.1109/SANER48275.2020.9054798, Acceptance ratio: 46 / 199 = 23%.
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- patterns. In Inmaculada Medina-Bulo, Mercedes G. Merayo, and Robert Hierons, editors, *Proceedings ICTSS 2018 (IFIP International Conference on Testing Software and Systems)*, pages 102–118, Cham, 2018. Springer International Publishing. DOI: 10.1007/978-3-319-99927-2_9, Acceptance ratio: $8 / 29 = 27\%$.
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- [51] Gulsher Laghari and Serge Demeyer. On the use of sequence mining within spectrum based fault localisation. In *Proceedings SAC-SVT 2018 (Software Verification and Testing at the 33rd ACM/SIGAPP Symposium on Applied Computing)*. ACM, 2018. DOI: 10.1145/3167132.3167337, Acceptance ratio: $11 / 43 = 25\%$.
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- [56] ***TOP*** [A in CORE2014]. Gulsher Laghari, Alessandro Murgia, and Serge Demeyer. Fine-tuning spectrum based fault localisation with frequent method item sets. In *Proceedings ASE2016 (31st IEEE/ACM International Conference on Automated Software Engineering)*, pages 274–285. ACM, 2016. DOI: 10.1145/2970276.2970308, Acceptance ratio: $57+14/298 = 23\%$.
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Acceptance ratio: $13/31 = 42\%$.

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- [66] Ahmed Lamkanfi, Javier Pérez, and Serge Demeyer. The eclipse and mozilla defect tracking dataset: a genuine dataset for mining bug information. In *Proceedings MSR'13 (10th IEEE Working Conference on Mining Software Repositories)*, MSR '13, pages 203 – 206, Piscataway, NJ, USA, 2013. IEEE Press. DOI: 10.1109/MSR.2013.6624028, Acceptance ratio (Data Track): $15/27 = 55.6\%$.
- [67] Quinten Soetens, Serge Demeyer, and Andy Zaidman. Change-based test selection in the presence of developer tests. In *Proceedings CSMR'2013 (17th European Conference on Software Maintenance and Reengineering)*, pages 101–110, 2013. DOI: 10.1109/CSMR.2013.20, Acceptance ratio: $31/81 = 38.3\%$.
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