Identifier	Author	Title	Abstract	Keywords	Accessible	English	Short/Full Paper	Peer-Reviewed	Secondary Literatu	Semantic Duplicate	R1	R2	R3	R4	Include	Comments	Year	DOI	Journal	Booktitle	Volume
Abbas2015a	Abbas, N.; Andersson, J.	Architectural reasoning support for product-lines of self-adaptive software systems - A case study	Software architecture serves as a foundation for the design and development of software systems. Desi	Computer software; Qualit	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2015	https://doi.org/10	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intel	[SOFTWARE ARCHITECTURE (ECSA 2015)]		
Abilio2015a	Abilio, Ramon; Padilha, Juliana; Figueiredo, Eduardo; Costa, Heitor	Detecting Code Smells in Software Product Lines - An Exploratory Study	{Code smells are symptoms that something is wrong in the source code. They have been catalogued i {Software Product Lines; (		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2015	https://doi.org/10	Proceedings - 12th International Conference on Information Technology: New Generati	2015 12TH INTERNATIONAL CONFERENCE ON INFORMATION TECHNOLOGY - N		
Acher2014a	Acher, M.; Lopez-Herrejon, R. E.; Rabiser, R.	A survey on teaching of software product lines	With around two decades of existence, the community of Software Product Line (SPL) researchers and i Industrial projects; Resea		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2014	https://doi.org/10	ACM International Conference Proceeding Series			
Afzal2016a	Afzal, U.; Mahmood, T.; Shaikh, Z.	Intelligent software product line configurations: A literature review	A software product line (SPL) is a set of industrial software-intensive systems for configuring similar soft Artificial intelligence; Com		☑	☑	☑	☑	☑	☐	Yes	Yes	Yes	Yes	Yes		2016	https://doi.org/10	Computer Standards and Interfaces			
Ahmed2008a	Ahmed, Faheem; Capretz, Luiz Fernando; Jaffar, Ahmad	The Business of Software Product Family: An Empirical Survey	[The software product family approach aims at curtailing the concept of ' 'reinventing the wheel('] in sc DP industry;software deve		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2008	https://doi.org/10	Proceedings of the International Conference on Computer Science and Information Tec	PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON COMPUTER SCIEN		
Ahmed2008c	Ahmed, Z.; Asghar, S.	A framework for mapping an ERP to a software product line	During the last two decades, software reuse has been the most widely researched area. Software Produ Enterprise resource plann		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2008		International Conference on Enterprise Information Systems and Web Technologies 2008, EISWT 2008			
Ahmed2009a	Ahmed, Faheem; Boutaif, Salah; Capretz, Luiz Fernando	Organizational Behavior \& Software Product Line Engineering: An Empirical Study	[Software product line engineering is an interdisciplinary concept. It spans over the dimensions of busi organisational aspects;prc		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2009	https://doi.org/10	2009 IEEE/ACS INTERNATIONAL CONFERENCE ON COMPUTER SYSTEMS AND	2009 IEEE/ACS INTERNATIONAL CONFERENCE ON COMPUTER SYSTEMS AND		
Ahri2013a	Ahri, Hwi; Kang, Sungwon; Lee, Jihyun	A Case Study Comparison of Variability Representation Mechanisms with the heRA Product Line	[Software product line engineering (SPLE) is a software development approach that attempts to maxim [software product line eng		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2013	https://doi.org/10	Proceedings - 16th IEEE International Conference on Computational Science and Eng	2013 IEEE 16TH INTERNATIONAL CONFERENCE ON COMPUTATIONAL SCIENCE		
Aielo2010a	Aielo, M.; Bulanov, P.; Groefsema, H.	A survey of variability management requirements	no abstract available	no keywords available	☑	☑	☑	☐	☐	☐	No	No	No	No	No		2010	https://www.win	CEUR Workshop Proceedings			
Aielo2012a	Aielo, F. A.; Freire, M.; Alencar, D.; Campos, E.; Kulesza, U.	A Comparative Study of Compositional and Annotative Modelling Approaches for Software Process Lines	This paper presents a comparative study of compositional and annotative modelling approaches for soft software process improve		☑	☑	☑	☑	☐	☑	No	uncertain	No	No	No		2012	https://doi.org/10	Proceedings - 2012 Brazilian Symposium on Software Engineering, SBES 2012	2012 26th Brazilian Symposium on Software Engineering		
Aielo2013a	Aielo, F. A.; Kulesza, U.; Oliveira, E. A.	Modeling variabilities from software process lines with compositional and annotative techniques: A quantitative study	A software process line (SPL) represents a set of software process that share a common base of roles, Common-base; Compared		☑	☑	☑	☑	☐	☐	No	No	Yes	No	No		2013	https://doi.org/10	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intel	PRODUCT-FOCUSED SOFTWARE PROCESS IMPROVEMENT}		
Aleksic2012a	Aleksić, D. S.; Jarkovič, D. S.; Stojmenov, L. V.	A case study on the object-based method for modeling product families with the dominant variation of the topology in the one-of-a-kind production	Traditional and object-based method for modeling product families with the dominant variation of the topology in the one-of-a-kind production; Mas o		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2012	https://doi.org/10	International Journal of Advanced Manufacturing Technology			
Alferez2011a	Alferez, G. H.; Pelechano, V.	Systematic Reuse of Web Services through Software Product Line Engineering	In SOA, reusability logic is divided into services to support reuse. However, SOA lacks support for syster service-oriented architect		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2011	https://doi.org/10	Proceedings - 9th IEEE European Conference on Web Services, ECOWS 2011	2011 IEEE Ninth European Conference on Web Services		
Ali2009a	Ali, Muhammad Samad; Babar, Muhammad Ali; Schmid, Klaus	A Comparative Survey of Economic Models for Software Product Lines	[Software product line engineering aims at achieving systematic reuse by exploiting commonalities am [software product lines; ec		☑	☑	☑	☑	☐	☐	No	No	Yes	No	No	No - not a literature study	2009	https://doi.org/10	Conference Proceedings of the EUROMICRO	[2009 35TH EUROMICRO CONFERENCE ON SOFTWARE ENGINEERING AND AD		
Ali2012a	Ali, Shaukat; Yue, Tao; Briand, Lionel; Walawege, Suneth	A Product Line Modeling and Configuration Methodology to Support Model-Based Testing: An Industrial Case Study	A Product Line Modeling and Configuration Methodology to Support Model-Based Testing: An Industrial Case Study		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2012	https://doi.org/10	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intel	Proceedings of the 15th International Conference on Model Driven Engineering Langu		
Alves2010a	Alves, V.; Niu, N.; Alves, C.; Valença, G.	Requirements engineering for software product lines: A systematic literature review	Context: Software product line engineering (SPLE) is a growing area showing promising results in reso Computer software; Requ		☑	☑	☑	☑	☑	☐	Yes	Yes	Yes	Yes	Yes		2010	https://doi.org/10	Information and Software Technology			
AlvessandmeleuterioSandmeleuterio2016a	Alves Sandim Eleuterio, Jane Dirce; Gaia, Felipe Nunes; Bondavalli, Andrea; Collini, Paolo; Rodrigues,	On the Dependability for Dynamic Software Product Lines A Comparative Systematic Mapping Study	Software Product Lines (SPLs) are techniques where several artefacts are reused (domain), and son [dynamic software produc		☑	☑	☑	☑	☐	☐	Yes	Yes	Yes	Yes	Yes		2016	https://doi.org/10	Proceedings - 42nd Euromicro Conference on Software Engineering and Advanced Ap	[2016 42ND EUROMICRO CONFERENCE ON SOFTWARE ENGINEERING AND AD		
Avila2009a	Avila, Bento; Da Silva, Sidnei; Bag, Ilaí K.; Mookus, Audris	Variability and Reproducibility in Software Engineering: A Study of Four Companies that Developed the Same System	[The scientific study of a phenomenon requires it to be reproducible. Mature engineering industries are [Software engineering life		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2009	https://doi.org/10	IEEE Transactions on Software Engineering			
Apel2011a	Apel, S.; Beyer, D.	Feature cohesion in software product lines: an exploratory study	Software product lines gain momentum in research and industry. Many product-line approaches use feature [software product lines; ar		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2011	https://doi.org/10	Proceedings - International Conference on Software Engineering	2011 33rd International Conference on Software Engineering (ICSE)		
Apel2013a	Apel, S.; von Rhein, A.; Wendler, P.; Größlinger, A.; Beyer, D.	Strategies for product-line verification: Case studies and experiments	Product-line technology is increasingly used in mission-critical and safety-critical applications. Hence, re C language;Java;product;		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2013	https://doi.org/10	Proceedings - International Conference on Software Engineering	2013 35th International Conference on Software (ICSE)		
Ardimento2020a	Ardimento, P.; Boffoli, N.; Superbo, G.	Multi software product lines: A systematic mapping study	Even if Software Product Line (SPL) is an established technique in software engineering, there are sev Mapping; Software design		☑	☑	☑	☑	☐	☐	No	Yes	Yes	Yes	Yes		2020	https://doi.org/10	ENASE 2020 - Proceedings of the 15th International Conference on Evaluation of Novel Approaches to Software Engineering			
Arifin2009a	Arifin, M.; Dailey, N.; Dailey, D.; Sly, H.; Weiss, D.	Software product lines: A case study	A software product line is a family of products that share common features to meet the needs of a partic Computer software; Objective; Cc		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2000	https://doi.org/10	Software - Practice and Experience			
Arkin2016a	Arkin, E.; Tekinerdogan, B.	Model-driven product line engineering for mapping parallel algorithms to parallel computing platforms	Mapping parallel algorithms to parallel computing platforms requires several activities such as the analyt parallel algorithms;prograr		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2016	https://doi.org/10	MODELSWARD 2016 - Proceedings of the 4th International Conference on Model-Driv	2016 4th International Conference on Model-Driven Engineering and Software Develo		
Asadi2012a	Asadi, Mohsen; Bagheri, Ebrahim; Mohabbati, Bardia; Gašević, Dragan	Requirements Engineering in Feature Oriented Software Product Lines: An Initial Analytical Study	Requirements engineering is recognized as a critical stage in software development lifecycle. Given the evaluation criteria, require		☑	☑	☑	☑	☐	☐	No	No	No	Yes	No		2012	https://doi.org/10	ACM International Conference Proceeding Series	Proceedings of the 16th International Software Product Line Conference - Volume 2		
Asuncion2014a	Asuncion2, Horacio; Sun, Kai	To Preserve or Not to Preserve Invalid Solutions in Search-Based Software Engineering: A Case Study in Software Product Lines	Developing software from scratch is a high-cost and error-prone activity. A possible solution to reduce (Multi-objective evolutionary algorithms (MOEAs) have been successfully applied to software product [search-based software e		☑	☑	☑	☑	☐	☑	Yes	Yes	Yes	No	Yes		2014	https://doi.org/10	ACM International Conference Proceeding Series	Proceedings of the 36th International Software Product Line Conference: Companion \		
Asuncao2017a	Asunção, W. K. G.; Lopez-Herrejon, R. E.; Linsbauer, L.; Vergilio, S. R.; Egyed, A.	Reengineering legacy applications into software product lines: a systematic mapping	Context: Software Product Lines (SPLs) are families of systems that share common assets allowing a disciplined Application programs; Cor		☑	☑	☑	☑	☐	☐	Yes	Yes	Yes	Yes	Yes		2017	https://doi.org/10	Empirical Software Engineering			
Avitabile2000a	Avitabile, Peter; Hunnell, J. M.; Frank, A.; DeVaminck, J.	Study of different analytical model configurations to account for manufacturing variability using model correlation tools	Dynamic analysis of commercial appliances using finite element models for noise and vibration issues is Correlation methods; Dor		☐	☐	☐	☐	☐	☐	No	No	No	No	No		2000		Proceedings of SPIE - The International Society for Optical Engineering	[IMAC-XVIII: A CONFERENCE ON STRUCTURAL DYNAMICS, VOLS 1 AND 2; PROC		
Axelsson2009a	Axelsson, Jakob	Evolutionary Architecting of Embedded Automotive Product Lines: An Industrial Case Study	[In the automotive industry, networked systems and software play an increasingly important role in del automotive industry;produ		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2009	https://doi.org/10	Proceedings - 35th Euromicro Conference on Software Architecture and European Cor	[2009 JOINT WORKING IEEE/IFIP CONFERENCE ON SOFTWARE ARCHITECTURE		
Ayora2015a	Ayora, C.; Torres, V.; Weber, B.; Reichert, M.; Pelechano, V.	VIVACE: A framework for the systematic evaluation of variability support in process-aware information systems	Context: The increasing adoption of process-aware information systems (PAISs) such as workflow mana Enterprise resource manag		☑	☑	☑	☑	☐	☐	Yes	Yes	Yes	Yes	Yes		2015	https://doi.org/10	Information and Software Technology			
Azzolini2015a	Azzolini, R. P.; Rubira, C. M. F.; Tizzei, L. P.; Gaia, F. N.; Montecchi, L.	Evolving a software products line for e-commerce systems: A case study	Software Product Lines engineering is a technique that ex-plores systematic reuse of software artifacts t Application programs; Cor		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2015	https://doi.org/10	ACM International Conference Proceeding Series			
Bakar2015a	Bakar, N. H.; Kasirun, Z. M.; Salleh, N.	Feature extraction approaches from natural language requirements for reuse in software product lines: A systematic literature review	Abstract Requirements specification is an important software system can be extracted and reused for a production of a new s Automation; Computation;		☑	☑	☑	☑	☐	☐	No	Yes	Yes	Yes	Yes		2015	https://doi.org/10	Journal of Systems and Software			
Bale2017b	Bale, S. J.; Campos, P. B.; Tretzer, M. A.; Walker, J. A.; Tyrrell, A. M.	An evolutionary approach to runtime variability mapping and mitigation on a multi-reconfigurable architecture	Intrinsic device variability has become a significant problem in deep sub-micron technology nodes. The t evolutionary computation;		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2017	https://doi.org/10	Proceedings of the 2017 Design, Automation and Test in Europe Conference Exhibition (DATE), 2017	Design, Automation Test in Europe Conference Exhibition (DATE), 2017		
Barros2013a	Barros, F. J.	On the representation of product lines using pluggable software units: Results from an exploratory study	The effective development of software product lines (SPLs) requires the ability to create a large variety c Basic building block; Expl		☑	☑	☐	☐	☐	☐	No	No	No	No	No		2013	http://ijoc.process	Simulation Series	[SYMPOSIUM ON THEORY OF MODELING \& SIMULATION - DEVS INTEGRATIVE		
Bastos2011a	Bastos, J. F.; da Mota Silveira Neto, P. A.; de Almeida, E. S.; de Lemos Meira, S. R.	Adopting software product lines: a systematic mapping study	Context: The benefits of taking a product line approach in order to achieve significant reductions in cost; Capability Maturity Model;		☑	☑	☑	☑	☐	☐	No	No	No	No	No - not accessable		2011	https://doi.org/10		15th Annual Conference on Evaluation Assessment in Software Engineering (EASE 20		
Batory2002a	Batory, D.; Johnson, C.; Macdonald, B.; Von Heeder, D.	Achieving extensibility through product-lines and domain-specific languages: A case study	This is a case study in the use of product-line architectures (PLAs) and domain-specific languages (DSL Aspects; Domain-specific;		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2002	https://doi.org/10	ACM Transactions on Software Engineering and Methodology			
Batory2008a	Batory, D.; Börger, E.	Modularizing theorems for software product lines: The Jbook case study	A gvoal of software product lines is the economical assembly of programs in a family of programs. In th [ASM; features; composit		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2008	https://doi.org/10	Journal of Universal Computer Science			
Baumgart2016a	Baumgart, Stephan; Froberg, Joakim	Functional Safety of Software Defined Radio: A Systematic Mapping Study	Software Defined Radio (SDR) is a widely used approach to dsp and manage reuse of software. V [Functional Safety; Produ		☑	☑	☑	☑	☐	☐	Yes	Yes	Yes	uncertain	Yes		2016	https://doi.org/10	Proceedings - 42nd Euromicro Conference on Software Engineering and Advanced Ap	[2016 42ND EUROMICRO CONFERENCE ON SOFTWARE ENGINEERING AND AD		
Becker2018a	Becker, Martin; Zhang, Bo	How Do Our Neighbours Do Product Line Engineering? A Comparison of Hardware and Software Product Line Engineering Approaches from an Industrial Perspective	Product line engineering (PLE) approaches have been followed in industry for hardware and software se SPLC; academia; industry		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2018	https://doi.org/10		Proceedings of the 22nd International Systems and Software Product Line Conference		
Beckmann2014a	Beckmann, G.; Gebhardt, N.; Krause, D.	Transfer of methods for developing modular product families into practice - An interview study	Many methods for developing modular product families exist in academia, but are rarely transferred into product families, method;		☑	☑	☑	☑	☐	☐	No	No	No	Yes	Yes		2014	https://www.dess	Proceedings of International Design Conference, DESIGN			
Bellorini2015a	Bellorini, Edmar; Cysneiros, Luiz Marcio S.; Hessel, Roberto A.; Giron, Alexandre A.; Gimenes, Itana M. S.	Case study of product line approach to provide embedded and desktop-based applications	[The development of embedded systems requires methodologies to enable the integration of different [Embedded systems; Proc		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2015	https://doi.org/10	Proceedings - 29th Brazilian Symposium on Computing Systems Engineering, SBESC	[2015 BRAZILIAN SYMPOSIUM ON COMPUTING SYSTEMS ENGINEERING (SBES		
Benduhn2015a	Benduhn, F.; Thüm, T.; Lochau, M.; Leich, T.; Saake, G.	A survey on modeling techniques for formal behavioral verification of software product lines	As software product lines are increasingly used for safety-critical systems, researchers have adapted for Computer software; Form		☑	☑	☑	☑	☐	☐	Yes	uncertain	No	Yes	No	No - not systematic; not explained how primary studies are found	2015	https://doi.org/10	ACM International Conference Proceeding Series			
Benlachgar2013a	Benlachgar, Anir; Beloualdha, Fatima-Zahra	Review of Software Product Line Models Used to Model Cloud applications	[The Cloud computing presents advantages of reutilization, multi usage and resources sharing, and e [cloud computing; SaaS; s		☑	☑	☑	☑	☐	☐	Yes	uncertain	No	Yes	Yes		2013	https://doi.org/10	Proceedings of IEEE/ACS International Conference on Computer Systems and Applica	2013 ACS INTERNATIONAL CONFERENCE ON COMPUTER SYSTEMS AND APPL		
Benn2012a	Benn, Benjamin; Mosser, Sl\'ejhastien; Casey, Jean-Philippe; Gu\'ej\'eh\'eneuc, Yann-Ga\'el\'e*	Can Microservice-Based Online-Retailers Be Used as an SPL? A Study of Six Reference Architectures	Microservices are deployable software artifacts that combine a set of business features and expose their microservice architecture;		☑	☑	☑	☑	☐	☐	No	uncertain	No	No	No		2020	https://doi.org/10		Proceedings of the 24th ACM Conference on Systems and Software Product Line: Volu		
Berger2010a	Berger, T.; She, S.; Lotufo, R.; Czarnecki, K.; Wąsowski, A.	Feature-to-code mapping in two large product lines	Large software product lines are challenging to maintain. Facilities for fine-grained feature-to-code map Fine-grained; Software Pr		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2010	https://doi.org/10	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intel	[SOFTWARE PRODUCT LINES: GOING BEYOND]		
Berger2013a	Berger, Thorsten; She, Steven; Lotufo, Rafael; Wasowski, Andrzej; Czarnecki, Krzysztof	A Study of Variability Models and Languages in the Systems Software Domain	Variability models represent the common and variable features of products in a product line. Since the [{Empirical software engine		☑	☑	☑	☑	☐	☐	No	No	No	Yes	No		2013	https://doi.org/10	[IEEE TRANSACTIONS ON SOFTWARE ENGINEERING]			
Berger2013b	Berger, T.; Rublack, R.; Nair, D.; Atlee, J. M.; Becker, M.; Czarnecki, K.; Wąsowski, A.	A survey of variability modeling in industrial practice	Over more than two decades, numerous variability modeling techniques have been introduced in acader Actual use; Application so		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2013	https://doi.org/10	ACM International Conference Proceeding Series			
Berger2015a	Berger, Sebastian and Lorenz, Daniela and Maier, Julia and Gr\"{u}nbacher, Paul and Silva, Adeline and What is a Feature? A Qualitative Study of Features in Industrial Software Product Lines	The notion of features is commonly used in literature and practice to describe the functional and non-functional characteristics of Computer software; Softw		☑	☑	☑	☑	☐	☐	☐	No	No	No	No	No		2015	https://doi.org/10	ACM International Conference Proceeding Series	[SPLC'15] PROCEEDINGS OF THE 19TH INTERNATIONAL CONFERENCE ON		
Berger2020a	Berger, T.; Steghöfer, J.-P.; Ziadi, T.; Robin, J.; Martinez, J.	The state of adoption and the challenges of systematic variability management in industry	Handling large-scale software variability is still a challenge for many organizations. After decades of res Industrial management; In		☑	☑	☑	☑	☐	☐	No	uncertain	No	Yes	Yes	Yes? - gives overview	2020	https://doi.org/10	Empirical Software Engineering			
Bhardwaj2021a	Bhardwaj, C.; Vyas, G.; Sharma, A.; Pareek, A.	Developing a Quality Model to Study the Impact of Variability Over the Reusability and Maintainability of Software Product Line Variability Models	Software Product Line (SPL) is focused on representing the variability and commonality of a software fa Maintainability; Reusabili		☑	☑	☑	☑	☐	☐	No	uncertain	No	No	No		2021	https://doi.org/10	Advances in Intelligent Systems and Computing			
Bhushan2020a	Bhushan, M.; Negi, A.; Samant, P.; Goel, S.; Kumar, A.	A classification and systematic review of product line feature model defects	Product line (PL)-based development is a thriving research area to develop software-intensive systems. Software engineering; Ag		☑	☑	☑	☑	☐	☐	No	uncertain	Yes	uncertain	Yes	Yes - because body of knowledge	2020	https://doi.org/10	Software Quality Journal			
Bilic2018a	Bilic, Damir; Sundmark, Daniel; Afzal, Wasif; Wallin, Peter; Causevic, Adnan; Amlinger, Christoffer	Model-Based Product Line Engineering in an Industrial Automotive Context: An Exploratory Case Study	Product Line Engineering is an approach to reuse assets of complex systems by taking advantage of co orthogonal variability mod		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2018	https://doi.org/10		Proceedings of the 22nd International Systems and Software Product Line Conference		
Bilic2020a	Bilic, Damir; Sundmark, Daniel; Afzal, Wasif; Wallin, Peter; Causevic, Adnan; Amlinger, Christoffer; Bark	Towards a Model-Driven Product Line Engineering Process - An Industrial Case Study	[Many organizations developing software-intensive systems face challenges with high product complex [Product Line Engineering		☑	☑	☑	☑	☐	☐	No	uncertain	No	No	No		2020	https://doi.org/10	ACM International Conference Proceeding Series	[SSOT: PROCEEDINGS OF THE 13TH INNOVATIONS IN SOFTWARE ENGINEERI		
Bindewald2019a	Bindewald, Jorge Junnosuke; Freire, Mário; William M., Amaral; Aline M. M. Miotto; Colanzi, Thelma Elita	Towards the Support of User Preferences in Search-Based Product Line Architecture Design: An Exploratory Study	Software Product Line (SPLs) is a reuse approach in which a family of products is generated in a cont [Content & Motivation] Despite numerous advancements in product family engineering over the past dec Automotive domains; Con		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2019	https://doi.org/10	ACM International Conference Proceeding Series	Proceedings of the XXXIII Brazilian Symposium on Software Engineering		
Bittner2010b	Bittner, M.; Reiser, M.-O.; Weber, M.	A case study on tool-supported multi-level requirements management in complex product families	Effective product platforms must strike an optimal balance between commonality and variety. Increasing Complementary sets; Con		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2010	https://doi.org/10	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intel	[REQUIREMENTS ENGINEERING: FOUNDATION FOR SOFTWARE QUALITY]		
Bobuk2010a	Bobuk, A.; Slingerland, L. A.; Simpson, T. W.; Ben, D.; Reichard, K.	Validating the generational variety index (GVI) through product family optimization: A preliminary study	Effective product platforms must strike an optimal balance between commonality and variety. Increasing Complementary sets; Con		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2010	https://doi.org/10	Proceedings of the ASME Design Engineering Technical Conference			
Borba2009a	Borba, C.; Silva, C.	A comparison of goal-oriented approaches to model software product lines variability	In the requirements of software product line (SPL), feature modeling is used to capture so Feature configuration; Fea		☑	☑	☑	☑	☐	☐	No	No	No	Yes	No		2009	https://doi.org/10	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intel	[ADVANCES IN CONCEPTUAL MODELING - CHALLENGES PERSPECTIVES]		
Bosch1999a	Bosch, Jan	Product-line architectures in industry: A case study	In this paper, a case study investigating the experiences from using product-line architectures is presen Computer architecture; Cc		☑	☑	☑	☐	☐	☐	No	No	No	No	No		1999	https://www.janb	Proceedings - International Conference on Software Engineering	Proceedings of the 21st International Conference on Software Engineering		
Bosch1999d	Bosch, J.	Evolution and composition of reusable assets in product-line architectures: A case study	In this paper, a case study investigating the experiences from evolution and modification of reusable a [reusable assets; product;		☑	☑	☑	☑	☐	☐	No	No	No	No	No		1999	https://link.spring		[SOFTWARE ARCHITECTURE]		
Bosch2001a	Bosch, J.; Högström, M.	Product instantiation in software product lines: A case study	Product instantiation is one of the less frequently studied activities in the domain of software product line software engineering. An		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2001	https://link.spring	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intel | Intelligence and Lecture Notes in Bioinformatics)		
Braganca2007a	Bragança, A.; Machado, R. J.	Automating mappings between use case diagrams and feature models for software product lines	Features have been widely used by the product line community to model variability. They represent the c Unified Modeling Language;		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2007	https://doi.org/10	Proceedings - 11th International Software Product Line Conference, SPLC 2007			
Breivold2008a	Breivold, H. P.; Larsson, S.; Land, R.	Migrating Industrial Systems towards Software Product Lines: Experiences and Observations through Case Studies	Software product line engineering has emerged as one of the dominant paradigms for developing variet product development;soft		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2008	https://doi.org/10	EUROMICRO 2008 - Proceedings of the 34th EUROMICRO Conference on Software Engineering and Advanced Applications	2008 34th Euromicro Conference Software Engineering and Advanced Applications		
Breivold2010a	Breivold, H.; Sallee, T.; Bottenbreck, G.; Ventresque, A.	Preliminary study of multi-objective features selection for evolving software product lines	When dealing with software-intensive systems, it is often beneficial to consider families of similar system Computer software; Gene		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2010	https://doi.org/10	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intel	[SEARCH-BASED SOFTWARE ENGINEERING, SSBSE 2010]		
Brink2016a	Brink, C.; Heisig, P.; Wackerfuß, F.	Change impact in product lines: A systematic mapping study	A product line (PL) supports and simplifies the development process of (software) systems by reusing ar Mapping; Change impact;		☑	☑	☑	☑	☐	☐	Yes	Yes	Yes	No	Yes		2016	https://doi.org/10	Communications in Computer and Information Science	[INFORMATION AND SOFTWARE TECHNOLOGIES, ICIST 2016]		
Burego2010a	Burégio, V. A.; Meira, S. L.; de Almeida, E. S.	Characterizing dynamic software product lines – A preliminary mapping study	Background: Dynamic Software Product Lines (DSPL) has gained significant attention in key conference Software design, Classific		☑	☑	☑	☑	☐	☐	No	No	Yes	No	No - not accessable		2010	https://www.acad	SPLC 2010 - Proceedings of the 14th International Software Product Line Conference			
Byron2005a	Byron, Bethany M.; Shooter, Steven B.	A review of software solutions for the management of new product development and product family planning	[The field of new product development has a number of difficult challenges with which it must contend: [new product development;		☐	☐	☐	☐	☐	☐	No	No	No	No	No		2005	https://doi.org/10		[PROCEEDINGS OF THE ASME INTERNATIONAL DESIGN ENGINEERING TECHNI		
Cafeo2012a	Cafeo, B. B. P.; Dantas, F.; Gurgel, A.; Guimarães, E.; Cirilo, E. R.; Garcia, A.; Lucena, C. J. P.	Analysing the Impact of Feature Dependencies on Product Line Stability: An Exploratory Study	The evolution of software product lines (SPLs) is particularly challenging. SPL functionalities, usually de Java; product development		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2012	https://doi.org/10	Proceedings - 2012 Brazilian Symposium on Software Engineering, SBES 2012	2012 26th Brazilian Symposium on Software Engineering		
Cafeo2016a	Cafeo, B. B. P.; Cirilo, E.; Garcia, A.; Dantas, F.; Lee, J.	Feature dependencies as change propagators: An exploratory study of software product lines	Context A Software Product Line (SPL) is a set of software systems that share common functionalities, s Computer software; Maint		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2016	https://doi.org/10	Information and Software Technology			
Carbonel2015a	Carbonel, J.; Huchard, M.; Gutierrez, A.	Variability representation in product lines using concept lattices: Feasibility study with descriptions from Wikipedia's product comparison matrices	Several formalisms can be used to express variability in a product line. Product comparison matrix is a c Information analysis; Wel		☑	☑	☑	☑	☐	☐	No	No	No	No	No		2015	https://hal-lirmm.	CEUR Workshop Proceedings			
Carvalho2014a	Carvalho, D. D.; Chagas, L. F.; Lima, A. M.; Reis, C. A. L.	Software Process Lines: A systematic literature review	Software Process Line (SPrL) has been claimed as a suitable paradigm for tailoring the reuse of softwar Computer science; Comp		☑	☑	☑	☑	☑	☐	Yes	Yes	Yes	Yes	Yes		2014	https://doi.org/10	Communications in Computer and Information Science			
Carvalho2018a	Carvalho, M. L. L.; da Silva, M. L. G.; Gomes, G. S. D. S.; Santos, A. R.; Machado, I. D. C.; Souza, M. I.	On the implementation of dynamic software product lines: An exploratory study	Dynamic Software Product Line (DSPL) engineering is a paradigm aimed at handling adaptations at runt Aspect oriented programm		☑	☑	☑	☑	☐	☐	No	uncertain	No	No	No		2018	https://doi.org/10	Journal of Systems and Software			
Carvalho2019a	Carvalho, Luiz; Garcia, Alessandro; Assunção[o] [a]o, Wesley K. G.; Bonif\'a[o]o, Rodrigo; Tizzei, Leonа	Extraction of Configurable and Reusable Microservices from Legacy Systems: An Exploratory Study	Microservices is an emerging industrial technique to promote better modularization and management of microservice architecture;		☐	☐	☐	☐	☐	☐	No	No	No	No	No		2019	https://doi.org/10		Proceedings of the 23rd International Systems and Software Product Line Conference		
Chacon-Luna2020a	Chacón-Luna, A. E.; Gutiérrez, A. M.; Galindo, J. A.; Benavides, D.	Empirical software product line engineering: A systematic literature review	Context: The adoption of Software Product Line Engineering (SPLE) is usually only based on its theoret Computer software; Applic		☑	☑	☑	☑	☑	☐	Yes	Yes	Yes	Yes	Yes		2020	https://doi.org/10	Information and Software Technology			
Chen2004a	Chen, Y.; Gannod, G. C.; Collofello, J. S.; Sarjoughian, H. S.	Using simulation to facilitate the study of software product line evolution	A product line approach is a disciplined methodology for strategic reuse of source code, requirement spe Codes (symbols); Comput		☐	☐	☐	☐	☐	☐	No	No	No	No	No		2004		International Workshop on Principles of Software Evolution (IWPSE)	Proceedings. 7th International Workshop on Principles of Software Evolution, 2004.		
Chen2009a	Chen, Lianping; Ali Babar, Muhammad; Ali, Nour	Variability Management in Software Product Lines: A Systematic Review	Variability Management (VM) in Software Product Line (SPL) is a key activity that usually affects the deg software

Identifier	Author	Title	Abstract	Keywords	Accessible	English	Short/Full Paper	Peer-Reviewed	Secondary Literatu	Semantic Duplicate	R1	R2	R3	R4	include	Comments	Year	DOI	Journal	Booktitle
Marew2007a	Marew, T.; Kim, J.; Bae, D. H.	Systematic functional decomposition in a product line using aspect-oriented software development: A case study	Systematic configuration management is important for successful software product lines. We can use as	Feature extraction; Functi	☐	☑	☑	☑	☐	☐	No	No	No	No	No		2007	https://doi.org/10	International Journal of Software Engineering and Knowledge Engineering	
Marimuthu2017a	Marimuthu, C.; Chandrasekaran, K.	Systematic Studies in Software Product Lines: A Tertiary Study	{Software product lines are widely used in the software industries to increase the re-usability and to de	{software product line; tert	☑	☑	☑	☑	☑	☐	Yes	uncertain	No	Yes	Yes	Yes - Body of knowledge	2017	https://doi.org/10	ACM International Conference Proceeding Series	{21ST INTERNATIONAL SYSTEMS \& SOFTWARE PRODUCT LINE CONFERENCE
Marques2019a	Marques, M.; Simmonds, J.; Rossel, P. O.; Bastarrica, M. C.	Software product line evolution: A systematic literature review	Context: Software Product Lines (SPL) evolve when there are changes in the requirements, product stru	Computer software reusat	☑	☑	☑	☑	☑	☐	Yes	Yes	Yes	uncertain	Yes		2019	https://doi.org/10	Information and Software Technology	
Martinez2018a	Martinez, Jabier and T\"{e}rnava, Xhevahire and Ziadi, Tewfik	Software Product Line Extraction from Variability-Rich Systems: The Robocode Case Study	The engineering of a Software Product Line (SPL), either by creating it from scratch or through the re-en	education, software produ	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2018	https://doi.org/10	ACM International Conference Proceeding Series	Proceedings of the 22nd International Systems and Software Product Line Conference
Martinezruiz2011a	Martínez-Ruiz, T.; García, F.; Piattini, M.; Münch, J.	Modelling software process variability: An empirical study	Variability in software process models justifies tailoring them to meet the specific goals and characteristic	Empirical studies; Empiric	☐	☑	☑	☑	☐	☐	No	No	No	No	No		2011	https://doi.org/10	IET Software	
Martinezruiz2013a	Martínez-Ruiz, T.; García, F.; Piattini, M.; De Lucas-Consuegra, F.	Process variability management in global software development: A case study	Global Software Development (GSD) is set to be the paradigm that will support software industries in the	Development process; Glo	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2013	https://doi.org/10	ACM International Conference Proceeding Series	
Martins2018a	Martins, L. A.; Freire, A. P.; Parreira, P.A., Jr.; Costa, H.	Exploratory study on the use of software product lines in the development of quality assistive technology software	The use of Software Product Line for the development of Assistive Technologies has not been widely ex	Computer software reusat	☑	☑	☑	☑	☑	☐	No	Yes	No	No	No		2018	https://doi.org/10	ACM International Conference Proceeding Series	{PROCEEDINGS OF THE 8TH INTERNATIONAL CONFERENCE ON SOFTWARE DE
Martins2019a	Martins, J.; Bezerra, C. I. M.; Uchôa, A.	Analyzing the impact of inter-smell relations on software maintainability [An empirical study with software product lines]	A Software Product Line (SPL) consists of a systematic reuse strategy to construct systems with less eff	Computer software reusat	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2019	https://doi.org/10	ACM International Conference Proceeding Series	
Matinlassi2004a	Matinlassi, M.	Comparison of software product line architecture design methods: COPA, FAST, FORM, KobrA and QADA	Product line architectures (PLAs) have been under continuous attention in the software research comm	Benchmarking; Computer	☑	☑	☑	☑	☐	☐	No	No	No	Yes	No		2004	http://doi.org/10.'	Proceedings - International Conference on Software Engineering	Proceedings. 26th International Conference on Software Engineering
Matinlassi2004b	Matinlassi, M.	Evaluating the portability and maintainability of software product family architecture: terminal software case study	This paper introduces a case study of a driver terminal product family. The terminals are used for fare co	software performance eva	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2004	http://www.neone		Proceedings. Fourth Working IEEE/IFIP Conference on Software Architecture (WICSA
Mellado2008a	Mellado, D.; Fernández-Medina, E.; Piattini, M.	Security Requirements Engineering Process for Software Product Lines: A Case Study	The majority of the current product line practices in requirements engineering do not adequately addres	formal specification;produ	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2008	https://doi.org/10	Proceedings - The 3rd International Conference on Software Engineering Advances, IC	2008 The Third International Conference on Software Engineering Advances
Mendezacuna2016a	Méndez-Acuña, D.; Galindo, J. A.; Degueule, T.; Combemale, B.; Baudry, B.	Leveraging Software Product Lines Engineering in the development of external DSLs: A systematic literature review	The use of domain-specific languages (DSLs) has become a successful technique in the development o	Computer software; Digita	☑	☑	☑	☑	☑	☐	Yes	Yes	Yes	Yes	Yes		2016	https://doi.org/10	Computer Languages, Systems and Structures	
Mendonca2019a	Mendon\c{c}a, Willian D. F.; Assun\c{c}\ {a}o, Wesley K. G.; Vergilio, Silvia R.	Reusing Test Cases on Graph Product Line Variants: Results from a State-of-the-Practice Test Data Generation Tool	Software testing is an essential activity for quality assurance, but, it is an error-prone and effort consumi	Software Reuse, Test Cov	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2019	https://doi.org/10		Proceedings of the IV Brazilian Symposium on Systematic and Automated Software Te
Michelon2019a	Michelon, Gabriela Karoline; Linsbauer, Lukas; Assun\c{c}\ {a}o, Wesley K. G.; Egyed, Alexander	Comparison-Based Feature Location in ArgoUML Variants	Identifying and extracting parts of a system's implementation for reuse is an important task for re-engine	variants, traceability, softw	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2019	https://doi.org/10		Proceedings of the 23rd International Systems and Software Product Line Conference
Midtgaard2014a	Midtgaard, J.; Brabrand, C.; Wąsowski, A.	Systematic derivation of static analyses for software product lines	A recent line of work lifts particular verification and analysis methods to Software Product Lines (SPL). Ir	Abstracting; Computer sof	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2014	https://doi.org/10	MODULARITY 2014 - Proceedings of the 13th International Conference on Modularity (Formerly AOSD)	
Midtgaard2015a	Midtgaard, J.; Dimovski, A. S.; Brabrand, C.; Wąsowski, A.	Systematic derivation of correct variability-aware program analyses	A recent line of work lifts particular verification and analysis methods to Software Product Lines(SPL). In	Abstracting; Computer sof	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2015	https://doi.org/10	Science of Computer Programming	
Mjeda2017a	Mjeda, A.; Wasala, A.; Botterweck, G.	Decision spaces in product lines, decision analysis, and design exploration: An interdisciplinary exploratory study	Context. From recent works on product properties resulting from configurations and the optimisation of tl	Decision making; Decisior	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2017	https://doi.org/10	ACM International Conference Proceeding Series	
Mohabbati2013a	Mohabbati, B.; Asadi, M.; Gašević, D.; Hatala, M.; Müller, H. A.	Combining service-orientation and software product line engineering: A systematic mapping study	Context Service-Orientation (SO) is a rapidly emerging paradigm for the design and development of ada	Computer software reusat	☑	☑	☑	☑	☑	☐	Yes	Yes	Yes	Yes	Yes		2013	https://doi.org/10	Information and Software Technology	
Montagud2012a	Montagud, S.; Abrahão, S.; Insfran, E.	A systematic review of quality attributes and measures for software product lines	It is widely accepted that software measures provide an appropriate mechanism for understanding, moni	Computer software reusat	☑	☑	☑	☑	☑	☐	Yes	Yes	Yes	uncertain	Yes		2012	https://doi.org/10	Software Quality Journal	
Montalvillo2016a	Montalvillo, L.; Díaz, O.	Requirement-driven evolution in software product lines: A systematic mapping study	CONTEXT. Software Product Lines (SPLs) aim to support the development of a whole family of software	Mapping, Evolution; Produ	☑	☑	☑	☑	☑	☐	Yes	Yes	Yes	uncertain	Yes		2016	https://doi.org/10	Journal of Systems and Software	
Moraga2011a	Moraga, C.; Moraga, M. A.; Genero, M.; Piattini, M.	A systematic literature review on software product line quality	This paper provides a summary of a systematic literature review (SLR) which was performed to find out	Evaluation and improveme	☑	☑	☑	☑	☑	☐	Yes	Yes	No	uncertain	No	No - out of scope	2011	http://doi.org/10.!	ICSOFT 2011 - Proceedings of the 6th International Conference on Software and Data	{ICSOFT 2011: PROCEEDINGS OF THE 6TH INTERNATIONAL CONFERENCE ON S
Morais2009a	Morais, Yuri; Burity, Thais; Elias, Gledson	A Systematic Review of Software Product Lines Applied to Mobile Middleware	{Mobile computing imposes several restrictions to software development due to diversities in network c	{customizable middleware	☑	☑	☑	☑	☐	☐	uncertain	No	No	uncertain	No	No - out of scope	2009	https://doi.org/10	ITNG 2009 - 6th International Conference on Information Technology: New Generation	{PROCEEDINGS OF THE 2009 SIXTH INTERNATIONAL CONFERENCE ON INFORM
Mordahl2019a	Mordahl, Austin	Toward Detection and Characterization of Variability Bugs in Configurable C Software: An Empirical Study	{Variability in C software is a useful tool, but critical bugs that only exist in certain configurations are ea	{static analysis; configurat	☑	☑	☐	☑	☐	☐	No	No	No	No	No		2019	https://doi.org/10	Proceedings - 2019 IEEE/ACM 41st International Conference on Software Engineering	{2019 IEEE/ACM 41ST INTERNATIONAL CONFERENCE ON SOFTWARE ENGINEE
Mordahl2019e	Mordahl, A.; Oh, J.; Koc, U.; Wei, S.; Gazzillo, P.	An empirical study of real-world variability bugs detected by variability-oblivious tools	Many critical software systems developed in C utilize compile-time configurability. The many possible co	C (programming language	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2019	https://doi.org/10	ESEC/FSE 2019 - Proceedings of the 2019 27th ACM Joint Meeting European Softwar	{ESEC/FSE'2019: PROCEEDINGS OF THE 2019 27TH ACM JOINT MEETING ON EU
Mortara2020a	Mortara, Johann and Collet, Philippe and T\"{e}rnava, Xhevahire	Identifying and Mapping Implemented Variabilities in Java and C++ Systems Using Symfinder	Variability is present in most modern object-oriented softwareintensive systems, despite that they comm	object-oriented variability-	☑	☑	☑	☑	☐	☐	No	uncertain	No	No	No		2020	https://doi.org/10	ACM International Conference Proceeding Series	Proceedings of the 24th ACM International Systems and Software Product Line Confer
Mortara2020b	Mortara, J.; Tërnava, X.; Collet, P.	Mapping features to automatically identified object-oriented variability implementations: The case of ArgoUML-SPL	In Software Product Line (SPL) engineering, mapping domain features to existing code assets is essenti	Automatic identification; C	☑	☑	☑	☑	☐	☐	No	uncertain	No	No	No		2020	https://doi.org/10	ACM International Conference Proceeding Series	
Murugesupillai2011a	Murugesupillai, Esan; Mohabbati, Bardia; Ga\v{s}evi\'{c}, Dragan	A Preliminary Mapping Study of Approaches Bridging Software Product Lines and Service-Oriented Architectures	Service Oriented Architectures (SOA) and Software Product Lines (SPL) have individually proven to be s	service-oriented architectu	☑	☑	☑	☑	☑	☐	Yes	Yes	uncertain	Yes	Yes		2011	https://doi.org/10	ACM International Conference Proceeding Series	Proceedings of the 15th International Software Product Line Conference, Volume 2
Musat2010a	Musat, D.; Rodríguez, P.	Value stream mapping integration in software product lines	In the intense competitive software development environment, the ability to quicker create and deliver sc	Software Product Lines (S	☑	☑	☐	☑	☐	☐	No	No	No	No	No		2010	https://doi.org/10	ACM International Conference Proceeding Series	
Myllaerniemi2006a	Myllärniemi, V.; Raatikainen, M.; Männistö, T.	Inter-organisational approach in rapid software product family development - A case study	Software product families provide an efficient means of reuse between a set of related products. Howev	Animation; Computer softw	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2006	https://doi.org/10	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intel	{REUSE OF OFF-THE-SHELF COMPONENTS, PROCEEDINGS}
Myllaerniemi2012a	Myll\"{a}rniemi, Varvana and Raatikainen, Mikko and M\"{a}nnist\"{o}, Tomi	A Systematically Conducted Literature Review: Quality Attribute Variability in Software Product Lines	Typically, products in a software product line differ by their functionality, and quality attributes are not inte	systematic literature revie	☑	☑	☑	☑	☑	☐	Yes	Yes	Yes	uncertain	Yes		2012	https://doi.org/10	ACM International Conference Proceeding Series	Proceedings of the 16th International Software Product Line Conference - Volume 1
Myllaerniemi2013a	Myll\"{a}rniemi, Varvana and Savolainen, Juha and M\"{a}nnist\"{o}, Tomi	Performance Variability in Software Product Lines: A Case Study in the Telecommunication Domain	In the research on software product lines, product variants typically differ by their functionality, and qualit	software product line, cas	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2013	https://doi.org/10	ACM International Conference Proceeding Series	Proceedings of the 17th International Software Product Line Conference
Myllaerniemi2016a	Myll\"{a}rniemi, Varvana and Raatikainen, Mikko and Savolainen, Juha and M\"{a}nnist\"{o}, Tomi	Purposeful Performance Variability in Software Product Lines: A Comparison of Two Case Studies	Within software product lines, customers may have different quality needs. To produce products with pur	Computer software; Sales	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2016	https://doi.org/10	ACM International Conference Proceeding Series	Proceedings of the 20th International Systems and Software Product Line Conference
Myllärniemi2016a	Myllärniemi, V.; Savolainen, J.; Raatikainen, M.; Männistö, T.	Performance variability in software product lines: proposing theories from a case study	In the software product line research, product variants typically differ by their functionality and quality att	Base stations; Commerce	☑	☑	☑	☑	☐	☐	No	No	Yes	No	No		2016	https://doi.org/10	Empirical Software Engineering	
Nadi2013a	Nadi, Sarah	A study of variability spaces in open source software	Configurable software systems allow users to customize them according to their needs. Supporting such	Linux;public domain softw	☑	☑	☑	☑	☐	☐	No	No	No	Yes	No		2013	https://doi.org/10	Proceedings - International Conference on Software Engineering	2013 35th International Conference on Software Engineering (ICSE)
Nadi2014a	Nadi, S.; Holt, R.	The Linux kernel: A case study of build system variability	Although build systems control what code gets compiled into the final built product, they are often overlo	Codes (symbols); Linux; C	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2014	https://doi.org/10	Journal of Software: Evolution and Process	
Nagamine2016a	Nagamine, Motoi; Nakajima, Tsuyoshi; Kuno, Noriyoshi	A Case Study of Applying Software Product Line Engineering to the Air Conditioner Domain	Software development for embedded products requires high quality, high productivity, and short delivery	SPL, embedded system, c	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2016	https://doi.org/10	ACM International Conference Proceeding Series	Proceedings of the 20th International Systems and Software Product Line Conference
Nair2020a	Nair, Suparna S.; Becker, Martin; Tenev, Vasil	A Comparative Study on Variability Code Analysis Technology	Product line engineering is often conducted in an incremental way, in which the variability artifacts evolve	software product line, Vari	☑	☑	☑	☑	☐	☐	No	uncertain	No	No	No		2020	https://doi.org/10	ACM International Conference Proceeding Series	Proceedings of the 24th ACM International Systems and Software Product Line Confer
Nascimento2008a	Nascimento, L. M.; de Almeida, E. S.; de Lemos Meira, S. R.	A Case Study in Software Product Lines - The Case of the Mobile Game Domain	Software product lines (SPL) processes are gradually being adopted by many companies in several dor	application program interfa	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2008	https://doi.org/10		2008 34th Euromicro Conference Software Engineering and Advanced Applications
Nepomuceno2018a	Nepomuceno, Thais S.; OliveiraJr, Edson	Configuring Software Product Line Specific Products with SMarty and PLUS An Experimental Study on Use Case Diagrams	{Software Product Line (SPL) represents a set of systems that share common and variable elements, t	{Experimental Study; Softw	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2018	https://doi.org/10	ACM International Conference Proceeding Series	{PROCEEDINGS OF THE 17TH BRAZILIAN SYMPOSIUM ON SOFTWARE QUALITY
Nepomuceno2020a	Nepomuceno, T.; OliveiraJr, E.; Geraldi, R.; Malucelli, A.; Reinehr, S.; Silva, M. A. G.	Software Product Line Configuration and Traceability: An Empirical Study on SMarty Class and Component Diagrams	A Software Product Line (SPL) represents a set of systems sharing common and variable features. The	formal specification;softwa	☑	☑	☑	☑	☐	☐	No	uncertain	No	No	No		2020	https://doi.org/10	Proceedings - 2020 IEEE 44th Annual Computers, Software, and Applications Conferer	2020 IEEE 44th Annual Computers, Software, and Applications Conference (COMPSA
Nepomuceno2020b	Nepomuceno, T.; Oliveira, E.; Penteado, R.; Graciotto Silva, M. A.; Zorzo, A. F.	Empirical Study on Product Configuration and Traceability in UML-based Product-Lines	Software Product Line (SPL) can be defined as a set of systems that share common and variable parts.	Class diagrams; Empirical	☑	☑	☑	☑	☐	☐	No	uncertain	No	No	No		2020	http://cibse2020.i	23rd Iberoamerican Conference on Software Engineering, CIbSE 2020	
Neto2017a	Neto, J. C.; Lopes, T. E. C.; Amaral, A. M. M. M.	Application of memetic algorithms in the search-based product line architecture design: An exploratory study	Basic design principles, feature modularization, and SPL extensibility of Product Line Architecture (PLA)	Evolutionary algorithms; G	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2017	https://doi.org/10	ICEIS 2017 - Proceedings of the 19th International Conference on Enterprise Information Systems	
Neto2019b	Neto, A. A.; Kalinowski, M.; Garcia, A.; Winkler, D.; Biffl, S.	A preliminary comparison of using variability modeling approaches to represent experiment families	Background: Replication is essential to build knowledge in empirical science. Experiment replications re	Computer applications; Co	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2019	https://doi.org/10	ACM International Conference Proceeding Series	{PROCEEDINGS OF EASE 2019 - EVALUATION AND ASSESSMENT IN SOFTWARE
Nidamarthi2003a	Nidamarthi, S.; Mechler, G.; Karandikar, H.	A systematic method for designing profitable product families	Every company has the business objectives of maximizing customer choice as well as its profitability. Ty	Algorithms; Computationa	☐	☑	☑	☑	☐	☐	No	No	No	No	No		2003	https://doi.org/10	Proceedings of the ASME Design Engineering Technical Conference	
Nie2013a	Nie, K.-M.; Zhang, L.; Fan, Z.-Q.	Systematic literature review of software product line variability modeling techniques	The software product line is one of the most effective strategies for reuse of large-scale software and ra	Application engineering; C	☑	☐	☑	☐	☐	☐	Yes	No	No	No	No		2013	https://doi.org/10	Ruan Jian Xue Bao/Journal of Software	
Njima2019a	Njima, M.; Demeyer, S.	An exploratory study on migrating single-products towards product lines in start-up contexts	A majority of technology start-ups fail; inadequate software engineering practices are known to be a cont	Computer applications; Co	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2019	https://doi.org/10	ACM International Conference Proceeding Series	{PROCEEDINGS OF THE 13TH INTERNATIONAL WORKSHOP ON VARIABILITY MC
Noebauer2018a	N\"{o}bauer, Markus and Groher, Iris and Seyff, Norbert	Feature-Based Reuse in the ERP Domain: An Industrial Case Study	Enterprise Resource Planning (ERP) system vendors need to customize their products according to the	ERP systems, variability, r	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2018	https://doi.org/10		Proceedings of the 22nd International Systems and Software Product Line Conference
Noehrer2012a	N\"{o}hrer, Alexander and Biere, Armin and Egyed, Alexander	A Comparison of Strategies for Tolerating Inconsistencies during Decision-Making	Tolerating inconsistencies is well accepted in design modeling because it is often neither obvious how to	user guidance, inconsister	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2012	https://doi.org/10		Proceedings of the 16th International Software Product Line Conference - Volume 1
Nogueirateixeira2019a	Nogueira Teixeira, E.; Aleixo, F. A.; Amâncio, F. D. D. S.; Oliveira Jr, E.; Kulesza, U.; Werner, C.	Software process line as an approach to support software process reuse: A systematic literature review	Context: Software Process Line (SPrL) aims at providing a systematic reuse technique to support reuse	Decision making, Decisior	☑	☑	☑	☑	☑	☐	Yes	Yes	Yes	Yes	Yes		2019	https://doi.org/10	Information and Software Technology	
Noor2007a	Noor, M. A.; Grünbacher, P.; Briggs, R. O.	A collaborative approach for product line scoping: A case study in collaboration engineering	Collaboration engineering facilitates the design of work practices for mission-critical tasks which are perf	Administrative data proces	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2007	https://citeseerx.i	Proceedings of the IASTED International Conference on Software Engineering, SE 20(	{PROCEEDINGS OF THE IASTED INTERNATIONAL CONFERENCE ON SOFTWARE
Noor2008a	Noor, M. A.; Rabiser, R.; Grünbacher, P.	Agile product line planning: A collaborative approach and a case study	Agile methods and product line engineering (PLE) have both proven successful in increasing customer s	Customer satisfaction; Ind	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2008	https://doi.org/10	Journal of Systems and Software	
Nunes2009a	Nunes, Ingrid; Nunes, Camila; Kulesza, Uir{\'a}; Lucena, Carlos	Developing and Evolving a Multi-agent System Product Line: An Exploratory Study	Software Product Line (SPL) approaches motivate the development and implementation of a flexible and	Software product lines, mu	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2009	https://doi.org/10		Agent-Oriented Software Engineering IX
Ochoa2017a	Ochoa, L.; Pereira, J. A.; González-Rojas, O.; Castro, H.; Saake, G.	A survey on scalability and performance concerns in extended product lines configuration	Product lines have been employed as a mass customisation method that reduces production costs and t	Computer programming; C	☑	☑	☑	☑	☑	☑	No	No	No	No	No		2017	https://doi.org/10	ACM International Conference Proceeding Series	
Ochoa2018a	Ochoa, L.; González-Rojas, O.; Juliana, A. P.; Castro, H.; Saake, G.	A systematic literature review on the semi-automatic configuration of extended product lines	Product line engineering has become essential in mass customisation given its ability to reduce producti	Cost engineering; Custom	☑	☑	☑	☑	☑	☐	No	Yes	Yes	Yes	Yes		2018	https://doi.org/10	Journal of Systems and Software	
Oizumi2012a	Oizumi, Willian N.; Contieri Junior, Antonio C.; Correia, Guilherme G.; Colanzi, Thelma E.; Ferrari, Sand	On the Proactive Design of Product-Line Architectures with Aspects: an Exploratory Study	{A product-line architecture (PLA) entails a design reused by a family of products sharing several featu	{Software Product Line Ar	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2012	https://doi.org/10	Proceedings - International Computer Software and Applications Conference	{2012 IEEE 36TH ANNUAL COMPUTER SOFTWARE AND APPLICATIONS CONFER
Ojeda2018a	Ojeda, M. C. C.; Alegría, J. A. H.; Rodriguez, F. J. L.	An exploratory study for scoping software product lines in a collaborative way	Software companies are looking for strategies that allow them to be competitive and stay in the market, t	Commerce; Marketing; Pr	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2018	https://doi.org/10	Proceedings - International Conference on Software Engineering	{2018 IEEE/ACM 11TH INTERNATIONAL WORKSHOP ON COOPERATIVE AND HUM
Okudan2013a	Okudan, G. E.; Chiu, M.-C.; Kim, T.-H.	Perceived feature utility-based product family design: A mobile phone case study	To assure profit maximization through mass customization and personalization, effectively eliciting consu	Conjoint analysis; Design	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2013	https://doi.org/10	Journal of Intelligent Manufacturing	
Olaechea2014a	Olaechea, Rafael; Rayside, Derek; Guo, Jianmei; Czarnecki, Krzysztof	Comparison of Exact and Approximate Multi-Objective Optimization for Software Product Lines	{Software product lines (SPLs) allow stakeholders to manage product variants in a systematical way a	{Software Product Lines; I	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2014	https://doi.org/10	ACM International Conference Proceeding Series	{18TH INTERNATIONAL SOFTWARE PRODUCT LINE CONFERENCE (SPLC 2014),
Oliinyk2017a	Oliinyk, O.; Petersen, K.; Schoelzke, M.; Becker, M.; Schneickert, S.	Structuring automotive product lines and feature models: an exploratory study at Opel	Automotive systems are highly complex and customized systems containing a vast amount of variability.	Requirements engineering	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2017	https://doi.org/10	Requirements Engineering	
Oliveira2014a	de Oliveira, R. P.; de Almeida, E. S.; da Silva Gomes, G. S.	Evaluating Lehman's laws of software evolution within software product lines: A preliminary empirical study	The evolution of a single system is a task where we deal with the modification of a single product. Lehmi	Regression analysis, Emp	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2014	https://doi.org/10	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)	
Oliveira2015a	de Oliveira, Raphael Pereira; de Almeida, Eduardo Santana	Requirements Evolution in Software Product Lines: An Empirical Study	{The evolution of the requirements specification is a key activity for maintaining the goals of any softw	{Software Product Lines (S	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2015	https://doi.org/10	Proceedings - 2015 9th Brazilian Symposium on Software Components, Architectures a	{PROCEEDINGS 2015 NINTH BRAZILIAN SYMPOSIUM ON SOFTWARE COMPONE
Oliveira2019a	Oliveira, P.; Vale, G.; Afonso, P.; Costa, H.	Extraction of a Software Product Line Using Conditional Compilation - An Exploratory Study	Software Product Lines (LPS) is a development approach whose aims is to create a family of software. I	feature extraction;geometr	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2019	https://doi.org/10	Proceedings - 2019 45th Latin American Computing Conference, CLEI 2019	2019 XLV Latin American Computing Conference (CLEI)
Oliveirajunior2010a	Oliveira Junior, Edson A.; Gimenes, Itana M. S.; Maldonado, Jose C.	Systematic Management of Variability in UML-based Software Product Lines	{This paper presents SMarty, a variability management approach for UML-based software product line	{Profile; Stereotypes; UML	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2010		{JOURNAL OF UNIVERSAL COMPUTER SCIENCE}	
Oliveirajunior2013a	Oliveira Junior, Edson A.; Gimenes, Itana M. S.; Maldonado, Jose C.; Masiero, Paulo C.; Barroca, Leon	Systematic Evaluation of Software Product Line Architectures	{The architecture of a software product line is one of its most important artifacts as it represents an abs	{Quality attributes; metrics	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2013		{JOURNAL OF UNIVERSAL COMPUTER SCIENCE}	
Oster2017a	Oster, S.; Wübbeke, A.; Engels, G.; Schürr, A.	A survey of model-based software product lines testing	Software product line (SPL) engineering is an approach to improve reusability of software within a range	Automotive industry; Com	☐	☑	☑	☑	☐	☐	No	No	No	No	No		2017	https://doi.org/10	Model-Based Testing for Embedded Systems	
Pasetti2000a	Pasetti, A.; Pree, W.	Two novel concepts for systematic product line development	{Framelets and implementation cases are new concepts to manage the complexity of product line deve	{product line; software fran	☐	☑	☑	☑	☐	☐	No	No	No	No	No		2000	https://doi.org/10		{SOFTWARE PRODUCT LINES: EXPERIENCE AND RESEARCH DIRECTIONS}
Passos2011a	Passos, Leonardo; Novakovic, Marko; Xiong, Yingfei; Berger, Thorsten; Czarnecki, Krzysztof; W\k{a}sov	A Study of Non-Boolean Constraints in Variability Models of an Embedded Operating System	Many variability modeling tasks can be supported by automated analyses of models. Unfortunately, mos	decision models, automat	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2011	https://doi.org/10	ACM International Conference Proceeding Series	Proceedings of the 15th International Software Product Line Conference, Volume 2
Passos2013a	Passos, Leonardo; Guo, Jianmei; Teixeira, Leopoldo; Czarnecki, Krzysztof; W\k{a}sowski, Andrzej; Bort	Coevolution of Variability Models and Related Artifacts: A Case Study from the Linux Kernel	Variability-aware systems are subject to the coevolution of variability models and related artifacts. Surpri	Linux, variability, patterns,	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2013	https://doi.org/10	ACM International Conference Proceeding Series	Proceedings of the 17th International Software Product Line Conference
Patzke2012a	Patzke, T.; Becker, M.; Steffens, M.; Sierszecki, K.; Savolainen, J. E.; Fogdal, T.	Identifying improvement potential in evolving product line infrastructures: 3 case studies	Successful software products evolve continuously to meet the changing stakeholder requirements. For s	Product Line Code Evoluti	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2012	https://doi.org/10	ACM International Conference Proceeding Series	
Pazin2018a	Pazin, M. G.; Allian, A. P.; Oliveira, E., Jr.	Empirical study on software process variability modelling with SMartySPEM and vSPEM	With the continuous improvement of software processes, it is possible to increase quality, to address diff	Efficiency; Graphic metho	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2018	https://doi.org/10	IET Software	
Pazin2018c	Pazin, M. G.; Geraldi, R. T.; Oliveira, E.	Comparing SmartySpem and VSpem for modeling variability in software processes: A qualitative study	Customizing and reusing software processes is a common practice for addressing the diversity of softwa	Computer software selecti	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2018	https://doi.org/10	ACM International Conference Proceeding Series	
Peake2015a	Peake, I. D.; Blech, J. O.; Fernando, L.; Sharma, D.; Ramaswamy, S.; Kande, M.	Analysis of software binaries for reengineering-driven product line architecture - An industrial case study	This paper describes a method for the recovering of software architectures from a set of similar (but unre	Bins; Cluster analysis; Co	☑	☑	☑	☐	☐	☐	No	No	No	No	No		2015	https://doi.org/10	Electronic Proceedings in Theoretical Computer Science, EPTCS	
Pech2009a	Pech, Daniel; Knodel, Jens; Carbon, Ralf; Schitter, Clemens; Hein, Dirk	Variability Management in Small Development Organizations: Experiences and Lessons Learned from a Case Study	Product line practices promise to reduce development and maintenance efforts, to improve the productiv	variability management, p	☑	☑	☑	☐	☐	☐	No	No	No	No	No		2009			Proceedings of the 13th International Software Product Line Conference
Pereira2013a	Pereira, Juliana Alves; Souza, Carlos; Figueiredo, Eduardo; Abilio, Ramon; Vale, Gustavo; Xavier Costa	Software Variability Management An Exploratory Study with Two Feature Modeling Tools	{Software Product Line (SPL) is becoming widely adopted in industry due to its capability of minimizing	{software product line; fea	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2013	https://doi.org/10	Proceedings - 7th Brazilian Symposium on Software Components, Architectures and R	{7TH BRAZILIAN SYMPOSIUM ON SOFTWARE COMPONENTS, ARCHITECTURES
Pereira2014a	Pereira, J. A.; Constantino, K.; Figueiredo, E.	A systematic literature review of software product line management tools	Software Product Line (SPL) management is a key activity for software product line engineering. The ide	Empowerment of personn	☑	☑	☑	☑	☑	☐	Yes	Yes	Yes	Yes	Yes		2014	https://doi.org/10	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)	
Perrouin2012a	Perrouin, G.; Oster, S.; Sen, S.; Klein, J.; Baudry, B.; le Traon, Y.	Pairwise testing for software product lines: Comparison of two approaches	Software Product Lines (SPL) are difficult to validate due to combinatorics induced by variability, which ir	Alloys; Cerium alloys, Cor	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2012	https://doi.org/10	Software Quality Journal	
Pesce2018a	Pesce, Fiorella; Caballero, Sofia; Buccella, Agustina; Cechich, Alejandra	Reusing a Geographic Software Product Line Platform: A Case Study in the Paleontological Sub-domain	{Developing Software Product Lines (SPLs) is a paradigm oriented to reusing software within particula	{Software Product Lines; I	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2018	https://doi.org/10	Communications in Computer and Information Science	{COMPUTER SCIENCE (CACIC 2017)}
Petry2020b	Petry, K. L.; OliveiraJr, E.; Zorzo, A. F.	Model-based testing of software product lines: Mapping study and research roadmap	Model-Based Testing (MBT) has been successfully applied to Software Product Lines (SPL). This paper	Automation; Mapping; Mo	☑	☑	☑	☑	☑	☐	Yes	Yes	Yes	No	Yes		2020	https://doi.org/10	Journal of Systems and Software	
Pirmoradi2011a	Pirmoradi, Z.; Wang, G. G.	Recent advancements in product family design and platform-based product development: A literature review	Increase of demand on product variety has pushed companies to think about offering more and more pr	Cost-increases; Design ar	☑	☑	☑	☑	☑	☐	Yes	Yes	No	Yes	Yes		2011	https://doi.org/10	Proceedings of the ASME Design Engineering Technical Conference	
Pleuss2012a	Pleuss, Andreas; Hauptmann, Benedikt; Keunecke, Markus; Botterweck, Goetz	A Case Study on Variability in User Interfaces	Software Product Lines (SPL) enable efficient derivation of products. SPL concepts have been applied s	user interface engineering	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2012	https://doi.org/10	ACM International Conference Proceeding Series	Proceedings of the 16th International Software Product Line Conference - Volume 1
Pol'la2020a	Pol'la, M.; Buccella, A.; Cechich, A.	Analysis of variability models: a systematic literature review	Dealing with variability, during Software Product Line Engineering (SPLE), means trying to allow softwar	Application programs; Cor	☑	☑	☑	☑	☑	☐	Yes	Yes	Yes	Yes	Yes		2020	https://doi.org/10	Software and Systems Modeling	
Qian2018a	Qian, Chen; Lau, Kung-Kiu	Feature-Oriented Component-Based Development of Software Product Families: A Case Study	{Feature-Oriented Software Development (FOSD) is widely used in Software Product Line Engineering	{SPLE; FOSD; CBD; Enur	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2018			{THIRTEENTH INTERNATIONAL CONFERENCE ON SOFTWARE ENGINEERING AD
Qin2009a	Qin, Y.; Wei, G.	On Mapping Approach of CN to FR in Product Family Improvement	Product family improvement is to improve or optimize the existing product family in enterprise. But the ke	customer satisfaction;data	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2009	http://doi.org/10.'		2009 International Conference on Measuring Technology and Mechatronics Automatior
Qin2012a	Qin, Y.; Ye, S.	On mapping method in product family improvement for extended customer need	To solve the mapping of customer need (CN) information to function requirement (FR) in product family i	Customer demands; Custo	☐	☑	☐	☐	☐	☐	No	No	No	No	No		2012	https://doi.org/10	Advances in Information Sciences and Service Sciences	
Raatikainen2004a	Raatikainen, M.; Soininen, T.; Männistö, T.; Mattila, A.	A case study of two configurable software product families	A configurable software product family allows the deployment of individual products without customer-sp	Application programs, Cor	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2004	https://doi.org/10	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intel	{SOFTWARE PRODUCT-FAMILY ENGINEERING}
Raatikainen2019a	Raatikainen, M.; Tiihonen, J.; Männistö, T.	Software product lines and variability modeling: A tertiary study	Context: A software product line is a means to develop a set of products in which variability is a central p	Computer software; Softw	☑	☑	☑	☑	☑	☐	Yes	uncertain	No	Yes	Yes	Yes - body of knowledge	2019	https://doi.org/10	Journal of Systems and Software	
Rabiser2018a	Rabiser, Rick; Schmid, Klaus; Becker, Martin; Botterweck, Goetz; Galster, Matthias; Groher, Iris; Weyns	A Study and Comparison of Industrial vs. Academic Software Product Line Research Published at SPLC	The study presented in this paper aims to provide evidence for the hypothesis that software product line	academia, SPLC, software	☑	☑	☑	☑	☑	☐	No	Yes	No	No	No		2018	https://doi.org/10	ACM International Conference Proceeding Series	Proceedings of the 22nd International Systems and Software Product Line Conference
Rabiser2019a	Rabiser, Rick	Feature Modeling vs. Decision Modeling: History, Comparison and Perspectives	Modeling variability, i.e., defining the commonalities and variability of reusable artifacts, is a central task	feature modeling, variabili	☑	☑	☑	☑	☐	☐	No	No	No	Yes	No		2019	https://doi.org/10		Proceedings of the 23rd International Systems and Software Product Line Conference
Raghavan2002a	Raghavan, G.	Improving software quality in product families through systematic reengineering	Software quality is a very subjective attribute and is a complex mixture of several factors. There is no un	Computer software selecti	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2002	https://doi.org/10	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intel	{SOFTWARE QUALITY - ECSQ 2002}
Rodriguez2019a	Rodriguez, Germania; Perez, Jennifer; Benavides, David	Accessibility Variability Model: The UTPL MOOC Case Study	{Several approaches to define Variability Models (VM) of non-functional requirements or quality attribu	{Software and its enginee	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2019	https://doi.org/10	ACM International Conference Proceeding Series	{23RD INTERNATIONAL SYSTEMS AND SOFTWARE PRODUCT LINE CONFERENC
Rosko2014a	Roško, Z.; Strahonja, V.	A case study of software product line for business applications changeability prediction	The changeability, a sub-characteristic of maintainability, refers to the level of effort which is required to c	no keywords available	☑	☑	☑	☐	☐	☐	No	No	No	No	No		2014		Journal of Information and Organizational Sciences	
Rossel2009a	Rossel, P. O.; Bastarrica, M. C.; Hitschfeld-Kahler, N.	A systematic process for defining meshing tool software product line domain model	Once an organization decides to develop a software product line (SPL), one of the first activities that nee	Complex software; Discre	☑	☑	☑	☐	☐	☐	No	No	No	No	No		2009		Proceedings of the 12th Workshop on Requirements Engineering, WER 2009	
Ruiz2018a	Ruiz, Pablo H.; Camacho, Cecilia; Hurtado, Julio A.	A Comparative Study for Scoping a Software Process Line	{Software process lines (SPrL) is an approach for facilitating the adaptation and evolution of a set of re	{Software Process Lines;	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2018	https://doi.org/10	2018 ICAI Workshops, ICAIW 2018 - Joint Proceedings of the Workshop on Data Engi	{2018 ICAI WORKSHOPS (ICAIW)}
Rummler2011a	Rummler, A.; Fiege, L.; Gomes, C.; Ribeiro, R.	Case studies for software product line engineering	All of the methodologies and tools introduced throughout this book rely on the evaluation of appropriate c	Application programs; Ent	☑	☑	☑	☐	☐	☐	No	No	No	No	No		2011	https://doi.org/10	Aspect-Oriented, Model-Driven Software Product Lines: The AMPLE Way	
Rurua2019b	Rurua, N.; Eshuis, R.; Razavian, M.	Representing Variability in Enterprise Architecture: A Case Study	Organizations that operate on an international scale have a high variation of business operations, cause	{Enterprise architecture; V	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2019	https://doi.org/10	Business and Information Systems Engineering	
Ryan2014a	Ryan, J.; Sarkani, S.; Mazzuchi, T.	Leveraging variability modeling techniques for architecture trade studies and analysis	Increasing complexity in modern systems, as well as cost and schedule constraints, require a new parac	Architecture configuration;	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2014	https://doi.org/10	Systems Engineering	
Sahid2016a	Sahid, M. Z.; Sultan, A. B. M.; Ghani, A. A. A.; Baharom, S.	Combinatorial interaction testing of software product lines: A mapping study	Software Product Line (SPL) is a software engineering paradigm that is inspired by the concept of reusa	Systematic Mapping Study	☑	☑	☑	☑	☑	☐	Yes	Yes	Yes	No	Yes		2016	https://doi.org/10	Journal of Computer Science	
Salinesi2009a	Salinesi, Camille; Rolland, Colette; Diaz, Daniel; Mazo, Raul	Looking for Product Line Feature Models Defects: Towards a Systematic Classification of Verification Criteria	{Product line models (PLM) are important artifacts in product line engineering. Due to their size and co	product development;prog	☑	☑	☐	☑	☐	☐	No	No	No	No	No		2009	https://doi.org/10	Proceedings of the IEEE International Conference on Requirements Engineering	{PROCEEDINGS OF THE 2009 17TH IEEE INTERNATIONAL REQUIREMENTS ENG
Sanchez2012a	Sánchez, P.; García-Saiz, D.; Zorrilla, M.	Software product line engineering for e-learning applications: A case study	As a consequence of the massive adoption of internet, different e-learning platforms, such as Moodle or	computer aided instructior	☑	☑	☑	☐	☐	☐	No	No	No	No	No		2012		2012 International Symposium on Computers in Education, SIIE 2012	2012 International Symposium on Computers in Education (SIIE)
Sanchez2014a	Sánchez, Ana B.; Segura, Sergio; Ruiz-Cortes, Antonio	A Comparison of Test Case Prioritization Criteria for Software Product Lines	{Software Product Line (SPL) testing is challenging due to the potentially huge number of derivable pro	fault diagnosis;program te	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2014	https://doi.org/10	Proceedings - IEEE 7th International Conference on Software Testing, Verification and	{2014 IEEE SEVENTH INTERNATIONAL CONFERENCE ON SOFTWARE TESTING,
Sanchez2014c	Sánchez, A. B.; Segura, S.; Ruiz-Cortés, A.	The Drupal framework: A case study to evaluate variability testing techniques	Variability testing techniques search for effective but manageable test suites that lead to the rapid detect	Automated testing; Featur	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2014	https://doi.org/10	ACM International Conference Proceeding Series	
Sanchez2017a	Sánchez, A. B.; Segura, S.; Parejo, J. A.; Ruiz-Cortés, A.	Variability testing in the wild: the Drupal case study	Variability testing techniques search for effective and manageable test suites that lead to the rapid detec	Chemical detection, Auton	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2017	https://doi.org/10	Software and Systems Modeling	
Sannier2013a	Sannier, N.; Acher, M.; Baudry, B.	From comparison matrix to Variability Model: The Wikipedia case study	Product comparison matrices (PCMs) provide a convenient way to document the discriminant features o	Internet;matrix algebra;We	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2013	https://doi.org/10	2013 28th IEEE/ACM International Conference on Automated Software Engineering, A	2013 28th IEEE/ACM International Conference on Automated Software Engineering (A
Santananeiva2009a	Santana Neiva, Danuza Ferreira; de Almeida, Eduardo Santana; de Lemos Meira, Silvio Romero	An Experimental Study on Requirements Engineering for Software Product Lines	{Requirements Engineering (RE) activities in Software Product Lines (SPL) are more complex, becaus	{software reusability;syster	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2009	https://doi.org/10	Conference Proceedings of the EUROMICRO	{2009 35TH EUROMICRO CONFERENCE ON SOFTWARE ENGINEERING AND ADV
Santos2014a	Santos, Ismayle S.; Andrade, Rossana M. C.; Neto, Pedro A. Santos	How to Describe SPL Variabilities in Textual Use Cases: A Systematic Mapping Study	{In the Software Product Line (SPL) paradigm, the variability description is an important issue for the re	{use case; systematic map	☑	☑	☑	☑	☑	☐	Yes	Yes	Yes	Yes	Yes		2014	https://doi.org/10	Proceedings - 2014 8th Brazilian Symposium on Software Components, Architectures a	{2014 EIGHTH BRAZILIAN SYMPOSIUM ON SOFTWARE COMPONENTS, ARCHITE
Santos2015a	Santos, A. R.; De Oliveira, R. P.; De Almeida, E. S.	Strategies for consistency checking on software product lines: A mapping study	Context. Software Product Lines (SPL) has become one of the most prominents way to promote the sys	Computer software; Mapp	☑	☑	☑	☑	☑	☐	Yes	Yes	Yes	uncertain	Yes		2015	https://doi.org/10	ACM International Conference Proceeding Series	
Santos2017a	Santos, Marcelo C. B.; Colanzi, Thelma E.; Amaral, Aline M. M. M.; Oliveira, Jr., Edson	Preliminary Study on the Correlation of Objective Functions to Optimize Product-Line Architectures	{The Product Line Architecture (PLA) is one of the most important artifacts of a Software Product Line	{Correlation Study; Produc	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2017	https://doi.org/10	ACM International Conference Proceeding Series	{XI BRAZILIAN SYMPOSIUM ON SOFTWARE COMPONENTS, ARCHITECTURES, A
Santosrocha2013a	Santos Rocha, R. D.; Fantinato, M.	The use of software product lines for business process management: A systematic literature review	Context: Business Process Management (BPM) is a potential domain in which Software Product Line (P	BPM; Business process m	☑	☑	☑	☑	☑	☐	Yes	Yes	Yes	Yes	Yes		2013	https://doi.org/10	Information and Software Technology	
Sarang2010a	Sarang, Nita; Sanglikar, Mukund A.	Using Decision Structures for Policy Analysis in Software Product-line Evolution - A Case Study	{Project management decisions are the primary basis for project success (or failure). Mostly, such deci	Intuitive understanding; Lo	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2010	https://doi.org/10	Advanced Techniques in Computing Sciences and Software Engineering	{ADVANCES TECHNIQUES IN COMPUTING SCIENCES AND SOFTWARE ENGINEE
Satyananda2007a	Satyananda, T. K.; Lee, D.; Kang, S.	A formal approach to verify mapping relation in a software product line	In software product line development, consistency among artifacts is important because commonalities a	Mathematical models; Pro	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2007	https://doi.org/10	CIT 2007: 7th IEEE International Conference on Computer and Information Technology	{2007 CIT: 7TH IEEE INTERNATIONAL CONFERENCE ON COMPUTER AND INFOR
Savolainen2012a	Savolainen, Juha; Mannion, Mike	Aligning Product Line Business and Technical Strategies (Mapping Product Line Requirements to a Product Line Architecture)	In the consumer product market space a commercial challenge is to offer personalization of products an	software product lines, rec	☑	☑	☐	☐	☐	☐	No	No	No	No	No		2012	https://doi.org/10		Proceedings of the 16th International Software Product Line Conference - Volume 2
Sayyad2013a	Sayyad, A. S.; Menzies, T.; Ammar, H.	On the value of user preferences in search-based software engineering: A case study in software product lines	Software design is a process of trading off competing objectives. If the user objective space is rich, then	evolutionary computation;	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2013	https://doi.org/10	Proceedings - International Conference on Software Engineering	2013 35th International Conference on Software Engineering (ICSE)
Schmid2002a	Schmid, K.	The product line mapping approach to defining and structuring product portfolios	{A key activity in product line development is to define and structure the product portfolio which shall be	software reusability;softwa	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2002	https://doi.org/10	Proceedings of the IEEE International Conference on Requirements Engineering	{IEEE JOINT INTERNATIONAL CONFERENCE ON REQUIREMENTS ENGINEERING
Schmid2004a	Schmid, K.; John, I.	Starting product lines (I) — Systematic product line planning and adoption	To successfully and effectively adopt a software product line approach, the transition must be well aligne	Product Line Product Anal	☑	☑	☐	☐	☐	☐	No	No	No	No	No		2004	https://doi.org/10	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intel	{SOFTWARE PRODUCT LINES, PROCEEDINGS}
Schmid2005a	Schmid, K.; Biffl, S.	Systematic management of software product lines	Software product lines can effectively facilitate large-scale reuse and can thus bring about order of magr	Computer simulation; Cos	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2005	https://doi.org/10	Software Process Improvement and Practice	
Schmid2010a	Schmid, Klaus	Variability Modeling for Distributed Development - A Comparison with Established Practice	{The variability model is a central artifact in product line engineering. Existing approaches typically tree	{Software product lines; va	☑	☑	☑	☑	☐	☐	No	No	No	Yes	No		2010	https://doi.org/10	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intel	{SOFTWARE PRODUCT LINES: GOING BEYOND}
Schmid2011a	Schmid, K.; Rabiser, R.; Grünbacher, P.	A comparison of decision modeling approaches in product lines	It has been shown that product line engineering can significantly improve the productivity, quality and tim	Comparative analysis; Co	☑	☑	☑	☑	☐	☐	No	Yes	No	Yes	Yes	Yes - Body of Knowledge	2011	https://doi.org/10	ACM International Conference Proceeding Series	
Schramm2015a	Schramm, J.; Dohrmann, P.; Kuhrmann, M.	Development of flexible software process lines with variability operations: A longitudinal case study	Context: Software processes evolve over time and several approaches were proposed to support the re	Software engineering, Lor	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2015	https://doi.org/10	ACM International Conference Proceeding Series	
Schroeder2015a	Schroeder, Jan; Holzner, Daniela; Berger, Christian; Hoel, Carl-Johan; Laine, Leo; Magnusson, Anders	Design and Evaluation of a Customizable Multi-Domain Reference Architecture on top of Product Lines of Self- Driving Heavy Vehicles - An Industrial Case Study	{Self-driving vehicles for commercial use cases like logistics or overcast mines increase their owners' c	control engineering compu	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2015	https://doi.org/10	Proceedings - International Conference on Software Engineering	{2015 IEEE/ACM 37TH IEEE INTERNATIONAL CONFERENCE ON SOFTWARE ENG
Schultheiss2020a	Schulthei\ss{}, Alexander and Bittner, Paul Maximilian and Kehrer, Timo and Th\"{u}m, Thomas	On the Use of Product-Line Variants as Experimental Subjects for Clone-and-Own Research: A Case Study	Software is often released in multiple variants to address the needs of different customers or application	clone-and-own, experimer	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2020	https://doi.org/10	ACM International Conference Proceeding Series	Proceedings of the 24th ACM Conference on Systems and Software Product Line: Volu
Sebbaq2018a	Sebbaq, Hanane; Retbi, Asmaa; Idrissi, Mohammed Khalidi; Bennani, Samir	Software Product Line to Overcome the Variability Issue in E-Learning: Systematic Literature Review	The disparity of educational technologies, pedagogies and learning styles implies a problem of variability	heterogeneity, variety, sca	☑	☑	☑	☑	☑	☐	Yes	Yes	Yes	uncertain	Yes		2018	https://doi.org/10	ACM International Conference Proceeding Series	Proceedings of the 12th International Conference on Intelligent Systems: Theories and
Seidl2012a	Seidl, Christoph; Heidenreich, Florian; A\ss{}mann, Uwe	Co-Evolution of Models and Feature Mapping in Software Product Lines	Software Product Lines (SPLs) are a successful approach to software reuse in the large. Even though to	feature modeling, model tr	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2012	https://doi.org/10	ACM International Conference Proceeding Series	Proceedings of the 16th International Software Product Line Conference - Volume 1
Sepulveda2016a	Sepúlveda, S.; Cravero, A.; Cachero, C.	Requirements modeling languages for software product lines: A systematic literature review	Context: Software product lines (SPLs) have reached a considerable level of adoption in the software in	Computational linguistics;	☑	☑	☑	☑	☑	☐	Yes	Yes	Yes	Yes	Yes		2016	https://doi.org/10	Information and Software Technology	
Shamsuzzoha2017a	Shamsuzzoha, A.; Helo, P.	Development of sustainable platform for modular product family: a case study	Defining product platform architecture is a critical issue to design and develop product variants. Different	Architecture, Component c	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2017	https://doi.org/10	Production Planning and Control	
Shantawi2019a	Shantawi, Anas; Ziadi, Tewfik; Mohamadi, Mohamed Yassin	Understanding Source Code Variability in Cloned Android Families: an Empirical Study on 75 Families	{Software developers rely on the clone-and-own approach to rapidly develop software product variants	{clone-and-own reuse; sou	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2019	https://doi.org/10	Proceedings - Asia-Pacific Software Engineering Conference, APSEC	{2019 26TH ASIA-PACIFIC SOFTWARE ENGINEERING CONFERENCE (APSEC)}
Sharif2011a	Sharif, S.; Djauhari, M. A.	An application of network topology to understand the signal in process variability: A case study in petrochemical industry	This paper deals with a network topology approach for identifying the root causes of an out-of-control sig	fertilisers;network theory (	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2011	https://doi.org/10		2011 IEEE International Conference on Industrial Engineering and Engineering Manag
Sharma2008a	Sharma, Devesh; Aurum, Aybueke; Paech, Barbara	Business Value through Product Line Engineering - A Case Study	{Software Product Line (PL) Engineering has been established in the last decade as a proven way to b	DP industry;investment;sc	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2008	https://doi.org/10	EUROMICRO 2008 - Proceedings of the 34th EUROMICRO Conference on Software E	{PROCEEDINGS OF THE 34TH EUROMICRO CONFERENCE ON SOFTWARE ENG
Shi2019b	Shi, K.; Yu, H.; Fan, G.; Guo, J.; Chen, L.; Yang, X.; Sun, H.	Mutation with Local Searching and Elite Inheritance Mechanism in Multi-Objective Optimization Algorithm: A Case Study in Software Product Line	An effective method for addressing the configuration optimization problem (COP) in Software Product Li	Computer software; Gene	☐	☑	☑	☑	☐	☐	No	No	No	No	No		2019	https://doi.org/10	International Journal of Software Engineering and Knowledge Engineering	
Shijialiu2009a	Shijia Liu; Yunkai Tang; Luo, S.	A study of product family design DNA based on product style	In order to solve the problem of product family appearance customization in the product family platform,	CAD;product design;produ	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2009	https://doi.org/10	Proceeding 2009 IEEE 10th International Conference on Computer-Aided Industrial De	2009 IEEE 10th International Conference on Computer-Aided Industrial Design Concep
Shinyoungpark2005a	Shin Young Park; Soo Dong Kim	A systematic method for scoping core assets in product line engineering	Product line engineering (PLE) is an effective reuse methodology where common features among applic	software reusability;softwa	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2005	https://doi.org/10		12th Asia-Pacific Software Engineering Conference (APSEC'05)
Sinkala2018a	Sinkala, Z. T.; Blom, M.; Herold, S.	A mapping study of software architecture recovery for software product lines	Migrating a family of software systems from ad-hoc development approaches such as 'clone-and-own' to	Computer software; Mapp	☑	☑	☑	☑	☑	☐	Yes	Yes	No	uncertain	No	No - out of scope	2018	https://doi.org/10	ACM International Conference Proceeding Series	{ECSA 2018: PROCEEDINGS OF THE 12TH EUROPEAN CONFERENCE ON SOFTV
Sion2016a	Sion, Laurens; Van Landuyt, Dimitri; Joosen, Wouter; de Jong, Gjalt	Systematic Quality Trade-off Support in the Software Product-Line Configuration Process	Software product line engineering is a compelling methodology that accomplishes systematic reuse in fa	Computer software; Econ	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2016	https://doi.org/10	ACM International Conference Proceeding Series	Proceedings of the 20th International Systems and Software Product Line Conference
Snook2008a	Snook, C.; Poppleton, M.; Johnson, I.	Rigorous engineering of product-line requirements: A case study in failure management	We consider the failure detection and management function for engine control systems as an applicatior	Computer system recover	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2008	https://doi.org/10	Information and Software Technology	
Soares2014a	Soares, Larissa Rocha; Potena, Pasqualina; Machado, Ivan do Carmo; Crnkovic, Ivica; de Almeida, Edu	Analysis of Non-Functional Properties in Software Product Lines: a Systematic Review	{Software Product Lines (SPL) approach has been widely developed in academia and successfully ap	{Systematic Literature Rev	☑	☑	☑	☑	☑	☐	Yes	Yes	Yes	uncertain	Yes		2014	https://doi.org/10	Proceedings - 40th Euromicro Conference Series on Software Engineering and Advanc	{2014 40TH EUROMICRO CONFERENCE SERIES ON SOFTWARE ENGINEERING .
Soares2018a	Soares, L. R.; Schobbens, P.-Y.; do Carmo Machado, I.; de Almeida, E. S.	Feature interaction in software product line engineering: A systematic mapping study	Context: Software product lines (SPL) engineering defines a set of systems that share common features	Commerce; Computer sof	☑	☑	☑	☑	☑	☐	Yes	Yes	Yes	uncertain	Yes		2018	https://doi.org/10	Information and Software Technology	
Soarescardoso2017a	Soares Cardoso, Mateus Passos; Lima, Crescencio; de Almeida, Eduardo Santana; Machado, Ivan do C	Investigating the Variability Impact on the Recovery of Software Product Line Architectures: An Exploratory Study	{The Product Line Architecture (PLA) of a Software Product Line (SPL) is the core architecture that rep	{Software Product Lines; F	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2017	https://doi.org/10	ACM International Conference Proceeding Series	{XI BRAZILIAN SYMPOSIUM ON SOFTWARE COMPONENTS, ARCHITECTURES, A
Sobernig2016a	Sobernig, S.; Apel, S.; Kolesnikov, S.; Siegmund, N.	Quantifying structural attributes of system decompositions in 28 feature-oriented software product lines: An exploratory study	A key idea of feature orientation is to decompose a software product line along the features it provides. F	Adhesion; Computer prog	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2016	https://doi.org/10	Empirical Software Engineering	
Sochos2004a	Sochos, P.; Philippow, I.; Riebisch, M.	Feature-oriented development of software product lines: Mapping feature models to the architecture	{Software product lines (PLs) present a solid approach in large scale reuse. Due to the PLs' inherit cor	{software product lines; pr	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2004	https://doi.org/10		{OBJECT-ORIENTED AND INTERNET-BASED TECHNOLOGIES, PROCEEDINGS}
Sochos2006a	Sochos, Periklis; Riebisch, Matthias; Philippow, Ilka	The Feature-Architecture Mapping (FArM) method for feature-oriented development of software product lines	{Software product lines (PLs) are large, complex systems, demanding high maintainability and enhanc	object-oriented programm	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2006	https://doi.org/10	Proceedings of the International Symposium and Workshop on Engineering of Comput	{13TH ANNUAL IEEE INTERNATIONAL SYMPOSIUM AND WORKSHOP ON ENGINE
Soodongkim2004a	Soo Dong Kim; Soo Ho Chang; Chee Won Chang	A systematic method to instantiate core assets in product line engineering	Product line engineering (PLE) is one of the recent and effective reuse approaches, and it consists of tw	software reusability;softwa	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2004	https://doi.org/10		11th Asia-Pacific Software Engineering Conference
Soujanya2015a	Soujanya, K. L. S.; Ananda Rao, A.	A systematic approach for configuration management in software product lines	Product lines achieve significant cost and effort reduction through large scale reuse of software product c	Computer software reusat	☑	☑	☑	☐	☐	☐	No	No	No	No	No		2015		Lecture Notes in Engineering and Computer Science	
Sousa2017a	de Sousa, J. A. G.; Machado, Á. R.; da Silva, R. B.; Guesser, W. L.	Study of the Variability of the Machinability along the Cross Section of Ductile Iron Produced by Continuous Casting	In industry, the increase in the search for new materials is related to the cost and to the strength of weigl	Nodular cast ironContinuo	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2017	https://doi.org/10	Procedia Manufacturing	
Sousaferreira2014a	Sousa Ferreira, G. C.; Gaia, F. N.; Figueiredo, E.; De Almeida Maia, M.	On the use of feature-oriented programming for evolving software product lines - A comparative study	Feature-oriented programming (FOP) is a programming technique based on composition mechanisms, c	Codes (symbols); Comput	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2014	https://doi.org/10	Science of Computer Programming	
Souza2012a	Souza, I. S.; d. Oliveira, R. P.; d. S. Gomes, G. S.; d. Almeida, E. S.	On the Relationship between Inspection and Evolution in Software Product Lines: An Exploratory Study	Manage the evolution in Software Product Lines (SPL) can bring some benefits such as keep the trace a	formal specification;medic	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2012	https://doi.org/10	Proceedings - 2012 Brazilian Symposium on Software Engineering, SBES 2012	2012 26th Brazilian Symposium on Software Engineering
Souza2013a	Souza, Iuri Santos; Fiaccone, Rosemeire; de Oliveira, Raphael Pereira; de Almeida, Eduardo Santana	On the Relationship between Features Granularity and Non-conformities in Software Product Lines: An Exploratory Study	{Within Software Product Lines (SPL) features are well-understood and facilitate the communication ar	{Software Product Lines; F	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2013	https://doi.org/10	Proceedings - 2013 27th Brazilian Symposium on Software Engineering, SBES 2013	{2013 27TH BRAZILIAN SYMPOSIUM ON SOFTWARE ENGINEERING (SBES 2013)}
Souza2019a	Souza, I. S.; Gomes, G.; Machado, I.; Chavez, C.; Masiero, P.; Seaman, C.; De Almeida, E. S.	Investigating Variability-aware Smells in SPLs: An exploratory study	Variability-aware smell is a concept referring to artifact shortcomings in the context of highly-configurable	Open systems, Co	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2019	https://doi.org/10	ACM International Conference Proceeding Series	
Sprovieri2016a	Sprovieri, D.	Dynamic re-configuration of software product lines towards an exploratory study on DSPLs	Adaptations need to be considered at design-time (adapting complex systems to new technologies, reen	large-scale systems;softw	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2016	https://doi.org/10	Proceedings - International Conference on Research Challenges in Information Scienc	2016 IEEE Tenth International Conference on Research Challenges in Information Scie
Svendsen2010a	Svendsen, A.; Zhang, X.; Lind-Tviberg, R.; Fleurey, F.; Haugen, Ø.; Møller-Pedersen, B.; Olsen, G. K.	Developing a software product line for train control: A case study of CVL	This paper presents a case study of creating a software product line for the train signaling domain. The T	Base models; Software Pr	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2010	https://doi.org/10	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intel	{SOFTWARE PRODUCT LINES: GOING BEYOND}
Tajali2011a	Tajali, Soheila Bashardoust; Radonjic, Vojislav D.; Corriveau, Jean-Pierre	Challenges of Variability in Model-Driven and Transformational Approaches: A Systematic Survey	{Variability in software architecture is a multi-facet problem, and domain-related variation is one of thes	{variability; model-driven (	☑	☑	☑	☑	☐	☐	uncertain	No	No	Yes	No	No - not systematic	2011	https://doi.org/10	Proceedings - 9th Working IEEE/IFIP Conference on Software Architecture, WICSA 20	{2011 9TH WORKING IEEE/IFIP CONFERENCE ON SOFTWARE ARCHITECTURE (V
Thantun2009a	Than Tun, Thein; Boucher, Quentin; Classen, Andreas; Hubaux, Arnaud; Heymans, Patrick	Relating Requirements and Feature Configurations: A Systematic Approach	A feature model captures various possible configurations of products within a product family. When confi	no keywords available	☑	☑	☑	☐	☐	☐	No	No	No	No	No		2009			Proceedings of the 13th International Software Product Line Conference
Thevenot2004a	Thevenot, H. J.; Simpson, T. W.	A comparison of commonality indices for product family design	Today's highly competitive and global marketplace is redefining the way companies do business: many c	Boundary value problems;	☐	☑	☐	☑	☐	☐	No	No	No	No	No		2004	https://doi.org/10	Proceedings of the ASME Design Engineering Technical Conference	
Thiel2002a	Thiel, S.; Hein, A.	Systematic integration of variability into product line architecture design	Product lines consider related products, their commonalities and their differences. The differences betwe	Computer software, Archit	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2002	https://doi.org/10	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)	
Thoern2010a	Thörn, C.	Current state and potential of variability management practices in software-intensive SMEs: Results from a regional industrial survey	Context: More and more, small and medium-sized enterprises (SMEs) are using software to augment the	Complex products; High v	☑	☑	☑	☑	☐	☐	No	No	No	uncertain	No		2010	https://doi.org/10	Information and Software Technology	
Thuem2014a	Thüm, T.; Apel, S.; Kästner, C.; Schaefer, I.; Saake, G.	A classification and survey of analysis strategies for software product lines	Software-product-line engineering has gained considerable momentum in recent years, both in industry a	Computer programming la	☑	☑	☑	☑	☑	☐	Yes	uncertain	No	No	No	No - not systematic / out of scope	2014	https://doi.org/10	ACM Computing Surveys	
Thurimella2007a	Thurimella, A. K.; Bruegge, B.	Empirical evaluation of issue based variability modeling using the experimental survey technique	Though surveys are effective in data collection, they are rarely used as a technique for empirical evaluat	Application programs; Cor	☐	☑	☐	☐	☐	☐	No	No	No	No	No		2007		Proceedings of the 11th IASTED International Conference on Software Engineering and Applications, SEA 2007	
Thurimella2010a	Thurimella, A.-K.; Padmaja, M. T.	Software product line engineering: A review of recent patents	Software product line engineering (SPLE) is an emerging paradigm for the development of a family of pr	Computer software reusat	☐	☑	☑	☑	☐	☐	No	No	No	No	No		2010	https://doi.org/10	Recent Patents on Computer Science	
Tian2017a	Tian, K.	Adding more agility to software product line methods: A feasibility study on its customization using agile practices	Software Product Line Methods (SPLMs) have been continuously gaining attention, especially in practice	no keywords available	☐	☑	☑	☑	☐	☐	No	No	No	No	No		2017	https://doi.org/10	Application Development and Design: Concepts, Methodologies, Tools, and Applications	
Tiley2002a	Tiley, Heather; van Zyl, Jay; Walker, Alistair J.	Empirical Study of Implementing Product Line Practices in a Software-Producing Organisation	Software delivery organisations are required to produce commercially viable innovative products in a sho	product line practices, pro	☑	☑	☐	☐	☐	☐	No	No	No	No	No		2002			Proceedings of the 2002 Annual Research Conference of the South African Institute of
Tizzei2011b	Tizzei, L. P.; Rubira, C. M. F.	Aspect-connectors to support the evolution of component-based product line architectures: A comparative study	Software Product Line architects are concerned not only with traditional software architecture issues, bu	Comparative studies; Com	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2011	https://doi.org/10	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intel	{SOFTWARE ARCHITECTURE}
Tizzei2015a	Tizzei, Leonardo P.; Azevedo, Leonardo G.; de Bayser, Maximilien; Cerqueira, Renato F. G.	Architecting Cloud Tools using Software Product Line Techniques: an Exploratory Study	{Multitenant cloud computing tools are usually complex and have to manage variabilities to support cu	Cloud computing, Explora	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2015	https://doi.org/10	Proceedings of the ACM Symposium on Applied Computing	{30TH ANNUAL ACM SYMPOSIUM ON APPLIED COMPUTING, VOLS I AND II}
Torres2010a	Torres, M.; Kulesza, U.; Sousa, M.; Batista, T.; Teixeira, L.; Borba, P.; Cirilo, E.; Lucena, C.; Braga, R.; M	Assessment of product derivation tools in the evolution of software product lines: An empirical study	Product derivation approaches automate the customization process of software product lines. Over the l	Empirical studies; Mobile	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2010	https://doi.org/10	Proceedings of the 2nd International Workshop on Feature-Oriented Software Development, FOSD'10	
Torres2013a	Torres, V.; Zugal, S.; Weber, B.; Reichert, M.; Ayora, C.; Pelechano, V.	A qualitative comparison of approaches supporting business process variability	The increasing adoption of Process-Aware Information Systems, together with the reuse of process knov	Data processing, Behavio	☑	☑	☑	☑	☐	☐	No	Yes	No	Yes	No	No - not a systematic literature review	2013	https://doi.org/10	Lecture Notes in Business Information Processing	{BUSINESS PROCESS MANAGEMENT WORKSHOPS (BPM)}
Trujillo2011a	Trujillo, Salvador; Alonso, I\ {n}aki; Hamid, Brahim; Gonzalez, David; Blanco, Manuel; Zhang, Huaxi (Yu	Towards Variability Support for Security and Dependability Patterns: A Case Study	Security and Dependability (S&D) have become mandatory requirements while engineering embed	variability, security, embec	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2011	https://doi.org/10	ACM International Conference Proceeding Series	Proceedings of the 15th International Software Product Line Conference, Volume 2
Turnes2011a	Turnes, L.; Bonif´cio, R.; Alves, V.; Lammel, R.	Techniques for Developing a Product Line of Product Line Tools: A Comparative Study	Tool support is essential for Application Engineering in Software Product Lines (SPL). Despite a myriad c	software tools;product line	☑	☑	☑	☑	☐	☐	No	No	No	Yes	No		2011	https://doi.org/10	Proceedings - 5th Brazilian Symposium on Software Components, Architectures and R	2011 Fifth Brazilian Symposium on Software Components, Architectures and Reuse
Urli2014a	Urli, Simon; Blay-Fornarino, Mireille; Collet, Philippe; Mosser, Sebastien; Riveill, Michel	Managing a Software Ecosystem Using a Multiple Software Product Line: a Case Study on Digital Signage Systems	{With the advent of Web 2.0, the growth of developer teams and user communities increases the numt	Internet;software developr	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2014	https://doi.org/10	Proceedings - 40th Euromicro Conference Series on Software Engineering and Advanc	{2014 40TH EUROMICRO CONFERENCE SERIES ON SOFTWARE ENGINEERING .
Vale2012a	Vale, Tassio; Figueiredo, Gustavo Bittencourt; de Almeida, Eduardo Santana; de Lemos Meira, Silvio Rc	A Study on Service Identification Methods for Software Product Lines	The combination of service-orientation and software product line engineering, called Service-Oriented P	software product lines, sei	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2012	https://doi.org/10	ACM International Conference Proceeding Series	Proceedings of the 16th International Software Product Line Conference - Volume 2
Vale2014a	Vale, Gustavo; Figueiredo, Eduardo; Abilio, Ramon; Costa, Heitor	Bad Smells in Software Product Lines: A Systematic Review	{Software product line (SPL) is a set of software systems that share a common, managed set of featur	{Bad Smells; Software Prc	☑	☑	☑	☑	☑	☐	Yes	Yes	Yes	uncertain	Yes	Yes - Body of Knowledge	2014	https://doi.org/10	Proceedings - 2014 8th Brazilian Symposium on Software Components, Architectures a	{2014 EIGHTH BRAZILIAN SYMPOSIUM ON SOFTWARE COMPONENTS, ARCHITE
Vale2015a	Vale, Gustavo; Albuquerque, Danyllo; Figueiredo, Eduardo; Garcia, Alessandro	Defining Metric Thresholds for Software Product Lines: A Comparative Study	A software product line (SPL) is a set of software systems that share a common and variable set of featu	metrics, thresholds, softw	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2015	https://doi.org/10	ACM International Conference Proceeding Series	Proceedings of the 19th International Conference on Software Product Line
Vale2017a	Vale, T.; de Almeida, E. S.; Alves, V.; Kulesza, U.; Niu, N.; de Lima, R.	Software product lines traceability: A systematic mapping study	Context: Traceability in Software Product Lines (SPL) is the ability to interrelate software engineering art	Computer software; Comp	☑	☑	☑	☑	☑	☐	Yes	Yes	Yes	Yes	Yes	Yes - Body of Knowledge	2017	https://doi.org/10	Information and Software Technology	
Valov2015a	Valov, Pavel; Guo, Jianmei; Czarnecki, Krzysztof	Empirical Comparison of Regression Methods for Variability-Aware Performance Prediction	Product line engineering derives product variants by selecting features. Understanding the correlation be	Computer software; Featu	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2015	https://doi.org/10	ACM International Conference Proceeding Series	Proceedings of the 19th International Conference on Software Product Line
Vazquezingelmo2019a	Vázquez-Ingelmo, A.; García-Peñalvo, F. J.; Therón, R.	Taking advantage of the software product line paradigm to generate customized user interfaces for decision-making processes: A case study on university employability	University employment and, specifically, employability has gained relevance since research in these fielc	Codes (symbols); Comput	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2019	https://doi.org/10	PeerJ Computer Science	
Vazquezingelmo2019c	Vázquez-Ingelmo, A.; García-Peñalvo, F. J.; Therón, R.	Addressing Fine-Grained Variability in User-Centered Software Product Lines: A Case Study on Dashboards	Software product lines provide a theoretical framework to generate and customize products by studying	Information systems; Infor	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2019	https://doi.org/10	Advances in Intelligent Systems and Computing	
Vehkomaeki2000a	Vehkomäki, T.; Känsälä, K.	A comparison of software product family process frameworks	A number of product family process frameworks has been published recently. These frameworks focus o	Computer science; Compu	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2000	https://doi.org/10	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)	
Verdecia2017a	Verdecia, Y. D.; Colanzi, T. E.	Correlation between similarity & variability metrics in search-based product line architecture: Experimental study & lessons learned	The Product Line Architecture (PLA) plays a central role at the products development from a Software P	Information systems; Mod	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2017	http://doi.org/10.!	ICEIS 2017 - Proceedings of the 19th International Conference on Enterprise Information Systems	
Villela2014a	Villela, Karina; Silva, Adeline; Vale, Tassio; de Almeida, Eduardo Santana	A Survey on Software Variability Management Approaches	{Variability Management (VM) is a key practice in the development of variant-rich systems. Over the ye	{Variability; Variability Mar	☑	☑	☑	☑	☐	☐	No	No	No	Yes	No		2014	https://doi.org/10	ACM International Conference Proceeding Series	{18TH INTERNATIONAL SOFTWARE PRODUCT LINE CONFERENCE (SPLC 2014),
Vogelheuser2015a	Vogel-Heuser, Birgit; Mund, Jakob; Kowal, Matthias; Legat, Christoph; Folmer, Jens; Teufl, Sabine; Sch	Towards Interdisciplinary Variability Modeling for Automated Production Systems Opportunities and Challenges when Applying Delta Modeling: A Case Study	{Automated production systems involve multiple engineering disciplines and often operate for several c	{Automated Production Sy	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2015	https://doi.org/10	Proceeding - 2015 IEEE International Conference on Industrial Informatics, INDIN 201!	{PROCEEDINGS 2015 IEEE INTERNATIONAL CONFERENCE ON INDUSTRIAL INF(
Vonrhein2018a	Von Rhein, A.; Liebig, J.; Janker, A.; Kästner, C.; Apel, S.	Variability-aware static analysis at scale: An empirical study	The advent of variability management and generator technology enables users to derive individual syste	Computer operating syste	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2018	https://doi.org/10	ACM Transactions on Software Engineering and Methodology	
Wang2013a	Wang, S.; Ali, S.; Yue, T.; Liaaen, M.	Using Feature Model to Support Model-Based Testing of Product Lines: An Industrial Case Study	In the context of Model-Based Testing (MBT) of product lines, effort required to develop models can be s	finite state machines;prod	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2013	https://doi.org/10		2013 13th International Conference on Quality Software
Wang2014a	Wang, Shuai; Buchmann, David; Ali, Shaukat; Gotlieb, Arnaud; Pradhan, Dipesh; Liaaen, Marius	Multi-Objective Test Prioritization in Software Product Line Testing: An Industrial Case Study	{Test prioritization is crucial for testing products in a product line considering limited budget in terms of	{Test Prioritization; Multi-o	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2014	https://doi.org/10	ACM International Conference Proceeding Series	{18TH INTERNATIONAL SOFTWARE PRODUCT LINE CONFERENCE (SPLC 2014),
Wang2016a	Wang, S.; Ali, S.; Gotlieb, A.; Liaaen, M.	A systematic test case selection methodology for product lines: results and insights from an industrial case study	In the context of product lines, test case selection aims at obtaining a set of relevant test cases for a pro	Cost effectiveness; Engine	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2016	https://doi.org/10	Empirical Software Engineering	
Wang2017a	Wang, S.; Ali, S.; Gotlieb, A.; Liaaen, M.	Automated product line test case selection: industrial case study and controlled experiment	Automated test case selection for a new product in a product line is challenging due to several reasons.	Automation; Cost effective	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2017	https://doi.org/10	Software and Systems Modeling	
Wendanwang2007a	Wendan Wang; Xiansheng Qin; Xiutian Yan; Shurong Tong; Quanyou Sha	Developing a Systematic Method for Constructing the Function Platform of Product Family	A systematic method to construct the function platform for a specific product family is proposed. Based c	product design;product de	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2007	https://doi.org/10		2007 IEEE International Conference on Industrial Engineering and Engineering Manag
Wu2012a	Wu, Y.; Zowghi, D.; Peng, X.; Zhao, W.	Towards understanding requirement evolution in a software product line an industrial case study	In most software development practices, software requirements and architecture are addressed simultar	DP industry;formal specifi	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2012	https://doi.org/10	2012 1st IEEE International Workshop on the Twin Peaks of Requirements and Archite	2012 First IEEE International Workshop on the Twin Peaks of Requirements and Archit
Ya'u2019a	Ya'u, B. I.; Nordin, A.; Salleh, N.	Validation of RP-SPF framework: A systematic method for requirements reuse in software product lines	Reuse of requirements is crucial activity in software development especially across software product line	Software Product Line Eng	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2019	https://doi.org/10	International Journal of Engineering and Advanced Technology	
Ye2009a	Ye, P.; Peng, X.; Xue, Y.; Jarzabek, S.	A case study of variation mechanism in an industrial product line	Fudan Wingsoft Ltd. developed a product Line of Wingsoft Financial Management Systems (WFMS-PL)	Configuration files; Financ	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2009	https://doi.org/10	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intel	{FORMAL FOUNDATIONS OF REUSE AND DOMAIN ENGINEERING, PROCEEDING
Ylihuumo2014a	Yli-Huumo, Jesse; Maglyas, Andrey; Smolander, Kari	The Sources and Approaches to Management of Technical Debt: A Case Study of Two Product Lines in a Middle-Size Finnish Software Company	{Fierce competition in the software market forces companies to release their product under tough time	{technical debt; software p	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2014	https://doi.org/10	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intel	{PRODUCT-FOCUSED SOFTWARE PROCESS IMPROVEMENT, PROFES 2014}
Yu2018a	Yu, H.; Shi, K.; Guo, J.; Fan, G.; Yang, X.; Chen, L.	Combining Constraint Solving with Different MOEAs for Configuring Large Software Product Lines: A Case Study	Multi-objective evolutionary algorithm (MOEA) with the constraint solving has been successfully applied	Boolean functions;comput	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2018	https://doi.org/10	Proceedings - International Computer Software and Applications Conference	2018 IEEE 42nd Annual Computer Software and Applications Conference (COMPSAC
Zhang2008b	Zhang, J.; Cai, X.; Liu, G.	Mapping Features to Architectural Components in Aspect-Oriented Software Product Lines	Software product lines (SPLs) based development aims at saving development cost as well as reducing	object-oriented programm	☑	☑	☑	☑	☐	☐	No	No	No	Yes	No		2008	https://doi.org/10	Proceedings - International Conference on Computer Science and Software Engineerir	2008 International Conference on Computer Science and Software Engineering
Zhang2011c	Zhang, X.; Haugen, Ø.; Moller-Pedersen, B.	Model Comparison to Synthesize a Model-Driven Software Product Line	Current model-driven software product line development is mostly based on feature/variability modeling	formal verification;softwar	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2011	https://doi.org/10	Proceedings - 15th International Software Product Line Conference, SPLC 2011	2011 15th International Software Product Line Conference
Zhang2011d	Zhang, G.; Shen, L.; Peng, X.; Xing, Z.; Zhao, W.	Incremental and iterative reengineering towards Software Product Line: An industrial case study	It is common in practice that a Software Product Line (SPL) is constructed by reengineering a set of exis	cost accounting;investmer	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2011	https://doi.org/10	IEEE International Conference on Software Maintenance, ICSM	2011 27th IEEE International Conference on Software Maintenance (ICSM)
Zhang2013a	Zhang, Bo; Becker, Martin; Patzke, Thomas; Sierszecki, Krzysztof; Savolainen, Juha Erik	Variability Evolution and Erosion in Industrial Product Lines: A Case Study	Successful software products evolve continuously to meet the changing stakeholder requirements. For s	variability erosion, industri	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2013	https://doi.org/10	ACM International Conference Proceeding Series	Proceedings of the 17th International Software Product Line Conference
Zheng2017a	Zheng, Yongjie; Cu, Cuong; Asuncion, Hazeline U.	Mapping Features to Source Code through Product Line Architecture: Traceability and Conformance	{Existing software product line approaches often develop and evolve product line features, architecture	{architecture-implementati	☑	☑	☑	☑	☐	☐	No	No	No	No	No		2017	https://doi.org/10	Proceedings - 2017 IEEE International Conference on Software Architecture, ICSA 201	{2017 IEEE INTERNATIONAL CONFERENCE ON SOFTWARE ARCHITECTURE (ICS