

ID	Title	Authors	Year
1	Making web applications more energy efficient for OLED smartphones	Li, Ding; Tran, Angelica Huyen; Halfond, William GJ	2014
2	Energy types	Cohen, Michael; Zhu, Haitao Steve; Senem, Emgin Ezgi; Liu, Yu David	2012
3	Share sens: An approach to optimizing energy consumption of continuous mobile sensing workloads	Moamen, Ahmed Abdel; Jamali, Nadeem	2015
4	Energy efficient data encryption techniques in smartphones	Mujtaba, Ghulam; Tahir, Muhammad; Soomro, Muhammad Hanif	2019
5	Detecting energy bugs and hotspots in mobile apps	Banerjee, Abhijeet; Chong, Lee Kee; Chattopadhyay, Sudipta; Roychoudhury, Abhik	2014
6	Investigating the correlation between performance scores and energy consumption of mobile web apps	Chan-Jong-Chu, Kwame; Islam, Tanjina; Exposito, Miguel Morales; Sheombar, Sanjay; Valladares, Christian; Philippot, Olivier; Grua, Eoin Martino; Malavolta, Ivano	2020
7	Jolinar: analysing the energy footprint of software applications	Noureddine, Adel; Islam, Syed; Bashroush, Rabih	2016
8	A preliminary study of the impact of software engineering on greenit	Noureddine, Adel; Bourdon, Aurelien; Rouvov, Romain; Seinturier, Lionel	2012
9	Object-oriented genetic improvement for improved energy consumption in Google Guava	Burles, Nathan; Bowles, Edward; Brownlee, Alexander El; Kocsis, Zoltan A.; Swan, Jerry; Veerapen, Nadarajen	2015
10	An Automated Code Optimizer of Design Patterns for Reducing Energy Usage in Green Computing	Din, Jamilah; Wei, Ooi Chiew; Jasser, Muhammed Basheer	2018
11	The power of system call traces: predicting the software energy consumption impact of changes.	Aggarwal, Karan; Zhang, Chenlei; Campbell, Joshua Charles; Hindle, Abram; Stroulia, Eleni	2014
12	Investigating the Impact of Code Refactoring Techniques on Energy Consumption in Different Object-Oriented Programming	Sanlialp, Ibrahim; Ozturk, Muhammed Maruf	2019
13	Refactoring android java code for on-demand computation offloading	Zhang, Ying; Huang, Gang; Liu, Xuanzhe; Zhang, Wei; Mei, Hong; Yang, Shunxiang	2012
14	Exploiting significance of computations for energy-constrained approximate computing	Vassiliadis, Vassilis; Chaliotis, Charalampos; Parasyris, Konstantinos; Antonopoulos, Christos D.; Lalis, Spyros; Bellas, Nikolaos; Vandierendonck, Hans; Nikolopoulos, Dimitrios S.	2016
15	Estimating software energy consumption with machine learning approach by software performance feature	Fu, Cuijiao; Qian, Depei; Luan, Zhongzhi	2018
16	Android app energy efficiency: The impact of language, runtime, compiler, and implementation	Chen, Xinbo; Zong, Ziliang	2016
17	Green software: Refactoring approach	Sehgal, Rajni; Mehrotra, Deepti; Nagpal, Renuka; Sharma, Ramanuj	2020
18	EnerJ: Approximate data types for safe and general low-power computation	Sampson, Adrian; Dietl, Werner; Fortuna, Emily; Gnanapragasam, Danushen; Ceze, Luis; Grossman, Dan	2011
19	How to measure energy-efficiency of software: Metrics and measurement results	Johann, Timo; Dick, Markus; Naumann, Stefan; Kern, Eva	2012
20	Calculating source line level energy information for android applications	Li, Ding; Hao, Shuai; Halfond, William GJ; Govindan, Ramesh	2013
21	Studying energy trade offs in offloading computation/compilation in java-enabled mobile devices	Chen, Guangyue; Kang, B.-T.; Kandemir, Mahmut; Vijaykrishnan, Narayanan; Irwin, Mary Jane; Chandramouli, Rajarathnam	2004
22	Energy efficient software development life cycle-An approach towards smart computing	Sharma, Sunil Kumar; Gupta, P. K.; Malekian, Reza	2015
23	Analysis of energy consumption and optimization techniques for writing energy-efficient code	Corral-Garcia, Javier; Lemus-Prieto, Felipe; González-Sánchez, José-Luis; Pérez-Toledano, Miguel-Ángel	2019
24	Green web services: Modeling and estimating power consumption of web services	Bartalos, Peter; Blake, M. Brian	2012
25	Energy-efficient multisite offloading policy using Markov decision process for mobile cloud computing	Terefe, Mati B.; Lee, Heezin; Heo, Nojung; Fox, Geoffrey C.; Oh, Sangyoon	2016
26	Towards a green ranking for programming languages	Couto, Marco; Pereira, Rui; Ribeiro, Francisco; Rua, Rui; Saraiva, João	2017
27	A programming environment with runtime energy characterization for energy-aware applications	Xian, Changjiu; Lu, Yung-Hsiang; Li, Zhiyuan	2007
28	Estimating mobile application energy consumption using program analysis	Hao, Shuai; Li, Ding; Halfond, William GJ; Govindan, Ramesh	2013
29	Unit testing of energy consumption of software libraries	Noureddine, Adel; Rouvov, Romain; Seinturier, Lionel	2014
30	Manageable granularity in mobile application code offloading for energy savings	Yang, Siwei	2012
31	Software-based energy profiling of android apps: Simple, efficient and reliable?	Di Nucci, Dario; Palomba, Fabio; Prota, Antonio; Panichella, Annibale; Zaidman, Andy; De Lucia, Andrea	2017
32	Evaluating the Impact of Java Virtual Machines on Energy Consumption	Ournani, Zakaria; Belgaid, Mohammed Chakib; Rouvov, Romain; Rust, Pierre; Penhoat, Joel	2021
33	Green configurations of functional quality attributes	Horcas, Jose-Miguel; Pinto, Mónica; Fuentes, Lidia	2017
34	Environmental Sustainability Coding Techniques for Cloud Computing	Ahmed, Shakeel	2020
35	A process for analysing the energy efficiency of software	Mancebo, Javier; García, Félix; Calero, Coral	2021
36	Code Smell Refactoring for Energy Optimization of Android Apps	Sehgal, Rajni; Mehrotra, Deepti; Nagpal, Renuka; Choudhury, Tanupriya	2021
37	Automated re-factoring of android apps to enhance energy-efficiency	Banerjee, Abhijeet; Roychoudhury, Abhik	2016
38	\$(AppScope)\$: Application Energy Metering Framework for Android Smartphone Using Kernel Activity Monitoring	Yoon, Channin; Kim, Dongwon; Jung, Wonwoo; Kang, Chulko; Cha, Hujung	2012
39	Early analysis of resource consumption patterns in mobile applications	Berrocq, Javier; Garcia-Alonso, Jose; Vicente-Chicote, Cristina; Hernández, Juan; Mikkonen, Tommi; Canal, Carlos; Murillo, Juan M.	2017
40	Removing Decorator to Improve Energy Efficiency	Bree, Déaglán Connolly; Cinnéide, Mel Ó	2022
41	Understanding green software development: A conceptual framework	Ardito, Luca; Procaccianti, Giuseppe; Torchiano, Marco; Vetro, Antonio	2015
42	Predicting data structures for energy efficient computing	Michanar, Junya; Dewri, Rinku; Rutherford, Matthew J.	2015
43	Automated energy optimization of http requests for mobile applications	Li, Ding; Lyu, Yingjun; Gui, Jiaping; Halfond, William GJ	2016
44	Green: A framework for supporting energy-conscious programming using controlled approximation	Baek, Woongki; Chilimbi, Trishul M.	2010
45	Towards power reduction through improved software design	Sahin, Cagri; Cayci, Furkan; Clause, James; Kiamilev, Fouad; Pollock, Lori; Winblad, Kristina	2012
46	A study of the energy consumption of databases and cloud patterns	Bani, Béchar; Khomh, Foutse; Guéhéneuc, Yann-Gaël	2016
47	Using the Greenup, Powerup, and Speedup metrics to evaluate software energy efficiency	Abdulsalam, Sarah; Zong, Ziliang; Gu, Qijun; Qiu, Meikang	2015
48	Performance events based full system estimation on application power consumption	Yang, Shu; Luan, Zhongzhi; Li, Binyang; Zhang, Ge; Huang, Tianming; Qian, Depei	2016
49	EARLY ANALYSIS OF SOFTWARE ARCHITECTURE TO ESTIMATE ENERGY CONSUMPTION IN ANDROID PLATFORM	AL NIDAWI, HASAN SAJID ATTA; WEI, KOH TIENG; KHALEEL, AMMAR; DAWOOD, KAREEM ABBAS	2018
50	Saving Energy on Mobile Devices by Refactoring.	Gottschalk, Marion; Jelschen, Jan; Winter, Andreas	2014
51	Deep parameter optimisation on android smartphones for energy minimisation: a tale of woe and a proof-of-concept	Bokhari, Mahmoud A.; Bruce, Bobby R.; Alexander, Brad; Wagner, Markus	2017
52	Catalog of energy patterns for mobile applications	Cruz, Luis; Abreu, Rui	2019
53	Exploring evolutionary search strategies to improve applications' energy efficiency	Manotas, Irene; Clause, James; Pollock, Lori	2018
54	Inheritance versus delegation: Which is more energy efficient?	Connolly Bree, Déaglán; Cinnéide, Mel Ó	2020
55	Greenadvisor: A tool for analyzing the impact of software evolution on energy consumption	Aggarwal, Karan; Hindle, Abram; Stroulia, Eleni	2015
56	Phone2Cloud: Exploiting computation offloading for energy saving on smartphones in mobile cloud computing	Xia, Feng; Ding, Fangwei; Li, Jie; Kong, Xiangjie; Yang, Laurence T.; Ma, Jianhua	2014
57	Automated Refactoring for Energy-Aware Software	Bree, Déaglán Connolly; Cinnéide, Mel Ó	2021
58	Choosing the "Best" Sorting Algorithm for Optimal Energy Consumption.	Bunse, Christian; Höpfner, Hagen; Roychoudhury, Suman; Mansour, Essam	2009
59	Energy efficient data sorting using standard sorting algorithms	Bunse, Christian; Höpfner, Hagen; Roychoudhury, Suman; Mansour, Essam	2009
60	Understanding the impact of object oriented programming and design patterns on energy efficiency	Maleki, Sepideh; Fu, Cuijiao; Banotra, Arun; Zong, Ziliang	2017
61	Toward using software metrics as indicator to measure power consumption of mobile application: A case study	Keong, Ching Kin; Wei, Koh Tieng; Ghani, Abdul Azim Abd; Sharif, Khaironi Yatim	2015
62	Optimizing energy consumption of guis in android apps: A multi-objective approach	Linares-Vásquez, Mario; Bavota, Gabriele; Cárdenas, Carlos Eduardo Bernal; Oliveto, Rocco; Di Penta, Massimiliano; Poshvanyk, Denys	2015
63	Energy efficiency across programming languages: how do energy, time, and memory relate?	Pereira, Rui; Couto, Marco; Ribeiro, Francisco; Rua, Rui; Cunha, Jácume; Fernandes, João Paulo; Saraiva, João	2017
64	A study of energy-aware implementation techniques: Redistribution of computational jobs in mobile apps	Corral, Luis; Georgiev, Anton B.; Sillitti, Alberto; Succì, Giancarlo	2015
65	Comparing REST, SOAP, Socket and gRPC in computation offloading of mobile applications: An energy cost analysis	Chamas, Carolina Luiza; Cordeiro, Daniel; Eler, Marcelo Medeiros	2017

66	Green software requirements and measurement: random decision forests-based software energy consumption profiling	Beghoura, Mohamed Amine; Boubetra, Abdelhak; Boukerram, Abdallah	2017
67	Extending software architecture views with an energy consumption perspective	Jagroep, Erik; van der Werf, Jan Martijn; Brinkkemper, Sjaak; Blom, Leen; van Vliet, Rob	2017
68	Mobile device power models for energy efficient dynamic offloading at runtime	Ali, Farhan Azmat; Simoens, Pieter; Verbelen, Tim; Demeester, Piet; Dhoedt, Bart	2016
69	Energy optimization in Android applications through wakelock placement	Alam, Faisal; Panda, Preeti Ranjan; Tripathi, Nikhil; Sharma, Namita; Narayan, Sanjiv	2014
70	Energy Efficiency Analysis of Code Refactoring Techniques for Green and Sustainable Software in Portable Devices	Şanlıalp, İbrahim; Öztürk, Muhammed Maruf; Yiğit, Tuncay	2022
71	Impacts of software and its engineering on the carbon footprint of ICT	Kern, Eva; Dick, Markus; Naumann, Stefan; Hiller, Tim	2015
72	Green Patterns of User Interface Design: A Guideline for Sustainable Design Practices	Nayak, Jitesh; Chandwadkar, Apurva	2021
73	Evaluation of Software Product Quality Attributes and Environmental Attributes using ANP Decision Framework.	Koçak, Sedat Akinci; Apteekin, Gülfem Isiklar; Bener, Ayse	2014
74	Self-adaptive battery and context aware mobile application development	Datta, Soumya Kanti; Bonnet, Christian; Nikaen, Navid	2014
75	Greenbundle: an empirical study on the energy impact of bundled processing	Chowdhury, Shaiful Alam; Hindle, Abram; Kazman, Rick; Shuto, Takumi; Matsui, Ken; Kamei, Yasutaka	2019
76	Reducing energy consumption using genetic improvement	Bruce, Bobby R.; Petke, Justyna; Harman, Mark	2015
77	Towards automatic significance analysis for approximate computing	Vassiliadis, Vassilis; Riehme, Jan; Deussen, Jens; Parasyris, Konstantinos; Antonopoulos, Christos D.; Bellas, Nikolaos; Lalis, Spyros; Naumann, Uwe	2016
78	Ape: An annotation language and middleware for energy-efficient mobile application development	Nikzad, Nima; Chipara, Octav; Griswold, William G.	2014
79	Investigating Energy and Security Trade-offs in the Classroom with the Atom \$(LEAP)\$ Testbed	Peterson, Peter AH; Singh, Digvijay; Kaiser, William J.; Reiher, Peter L.	2011
80	Differences of energetic consumption between Java and JNI Android apps	Ramírez, Ricardo Isidro; Rubio, Erika Hernández; Viveros, Amílcar Meneses; Hernández, Irene Monserrat Torres	2014
81	Self-adaptive energy-efficient applications: the hadas developing approach	Horcas, Jose Miguel; Pinto, Mónica; Fuentes, Lidia; Gámez, Nadia	2017
82	Fine-grained power management using process-level profiling	Chen, Hui; Li, Youhuizi; Shi, Weisong	2012
83	Green mining: a methodology of relating software change and configuration to power consumption	Hindle, Abram	2015
84	Greenminer: A hardware based mining software repositories software energy consumption framework	Hindle, Abram; Wilson, Alex; Rasmussen, Kent; Barlow, E. Jed; Campbell, Joshua Charles; Romansky, Stephen	2014
85	A comprehensive study on the energy efficiency of java's thread-safe collections	Pinto, Gustavo; Liu, Kenan; Castor, Fernando; Liu, Yu David	2016
86	Initial explorations on design pattern energy usage	Sahin, Cagrı; Cayci, Furkan; Gutierrez, Irene Lizeth Manotas; Clause, James; Kiamilev, Fouad; Pollock, Lori; Winbladh, Kristina	2012
87	GREEN MOBILE APPLICATION DEVELOPMENT THROUGH SOFTWARE LOCALIZATION	Kasakilev, Nikolay; Somova, Elena; Gocheva, Margarita	2019
88	Evaluating the impact of code smell refactoring on the energy consumption of android applications	Anwar, Hina; Pfahl, Dietmar; Srirama, Satish N.	2019
89	Is software "green"? Application development environments and energy efficiency in open source applications	Capra, Eugenio; Francelanci, Chiara; Slaughter, Sandra A.	2012
90	Exploring the energy consumption of data sorting algorithms in embedded and mobile environments	Bunse, Christian; Höpfner, Hagen; Mansour, Essam; Roychoudhury, Suman	2009
91	Program energy efficiency: The impact of language, compiler and implementation choices	Abdulsalam, Sarah; Lakomski, Donna; Gu, Qijun; Jin, Tongdan; Zong, Ziliang	2014
92	What is keeping my phone awake? Characterizing and detecting no-sleep energy bugs in smartphone apps	Pathak, Abhinav; Jindal, Abhilash; Hu, Y. Charlie; Midkiff, Samuel P.	2012
93	Haskell in green land: Analyzing the energy behavior of a purely functional language	Lima, Luis Gabriel; Soares-Neto, Francisco; Lieuthier, Paulo; Castor, Fernando; Melfe, Gilberto; Fernandes, João Paulo	2016
94	Process-level power estimation in vm-based systems	Colmant, Maxime; Kurpicz, Mascha; Felber, Pascal; Huertas, Loïc; Rouvoy, Romain; Sobe, Anita	2015
95	Monitoring energy hotspots in software	Nouredine, Adel; Rouvoy, Romain; Seinturier, Lionel	2015
96	Understanding the impact of cloud patterns on performance and energy consumption	Khomh, Foutse; Abtahizadeh, S. Amirhossein	2018
97	On the impact of code smells on the energy consumption of mobile applications	Palomba, Fabio; Di Nucci, Dario; Panichella, Annibale; Zaidman, Andy; De Lucia, Andrea	2019
98	An investigation into energy-saving programming practices for android smartphone app development	Li, Ding; Halfond, William GJ	2014
99	Greening an existing software system using the GPU	Scanniello, Giuseppe; Erra, Ugo; Caggianese, Giuseppe; Gravino, Carmine	2013
100	Understanding energy behaviors of thread management constructs	Pinto, Gustavo; Castor, Fernando; Liu, Yu David	2014
101	Assessment of rest and websocket in regards to their energy consumption for mobile applications	Herwig, Volker; Fischer, René; Braun, Peter	2015
102	Anole: a case for energy-aware mobile application design	Chen, Hui; Luo, Bing; Shi, Weisong	2012
103	Variability models for generating efficient configurations of functional quality attributes	Horcas, Jose-Miguel; Pinto, Mónica; Fuentes, Lidia	2018
104	Energy Efficient Software Development Techniques for Cloud based Applications	Alsayyah, Aeshah A.; Ahmed, Shakeel	2020
105	Melta: A method level energy estimation technique for android development	Farooq, Muhammad Umer; Khan, Saif Ur Rehman; Beg, Mirza Omer	2019
106	An empirical study of the energy consumption of android applications	Li, Ding; Hao, Shuai; Gui, Jiaping; Halfond, William GJ	2014
107	Characterizing the performance and energy efficiency of lock-free data structures	Hunt, Nicholas; Sandhu, Paramjit Singh; Ceze, Luis	2011
108	A source-level energy optimization framework for mobile applications	Li, Xueliang; Gallagher, John P.	2016
109	Time-and-energy-aware computation offloading in handheld devices to coprocessors and clouds	Lin, Ying-Dar; Chu, Edward T.-H.; Lai, Yuan-Cheng; Huang, Ting-Jun	2013
110	Tools supporting green computing in Erlang	Nagy, Gergely; Mészáros, Áron Attila; Bozó, István; Tóth, Melinda	2019
111	Green software architectures: A market-based approach	Rangaraj, Govindaraj; Bahsoon, Rami	2010
112	Accurate online power estimation and automatic battery behavior based power model generation for smartphones	Zhang, Lide; Twana, Birjodh; Qian, Zhiyun; Wang, Zhao Guang; Dick, Robert P.; Mao, Zhuoqing Morley; Yang, Lei	2010
113	A green software development life cycle for cloud computing	Chauhan, Nitin Singh; Saxena, Ashutosh	2013
114	Seeds: A software engineer's energy-optimization decision support framework	Manotas, Irene; Pollock, Lori; Clause, James	2014
115	Investigation for Software Power Consumption of Code Refactoring Techniques.	Park, Jae Jin; Hong, Jang-Eui; Lee, Sang-Ho	2014
116	ptop: A process-level power profiling tool	Do, Thanh; Rawshdeh, Suhib; Shi, Weisong	2009
117	Greenoracle: Estimating software energy consumption with energy measurement corpora	Chowdhury, Shaiful Alam; Hindle, Abram	2016
118	Energy profiles of java collections classes	Hasan, Samir; King, Zachary; Hafiz, Munawar; Sayagh, Mohammed; Adams, Bram; Hindle, Abram	2016
119	Empirical evaluation of two best practices for energy-efficient software development	Procaccianti, Giuseppe; Fernández, Héctor; Lago, Patricia	2016
120	Investigating the effect of design patterns on energy consumption	Feitosa, Daniel; Alders, Rutger; Ampatzoglou, Apostolos; Avgeriou, Paris; Nakagawa, Elisa Yumi	2017
121	Search-based energy optimization of some ubiquitous algorithms	Brownlee, Alexander Edward Ian; Buries, Nathan; Swan, Jerry	2017
122	Optimising energy consumption of design patterns	Nouredine, Adel; Rajan, Ajitha	2015
123	Mining energy-greedy api usage patterns in android apps: an empirical study	Linares-Vásquez, Mario; Bavota, Gabriele; Bernal-Cárdenas, Carlos; Oliveto, Rocco; Di Penta, Massimiliano; Poshvanyk, Denys	2014
124	An Aspect Oriented Model for Software Energy Efficiency in Decentralised Servers.	Chinenyeze, Samuel; Liu, Xiaodong; Al-Dubai, Ahmed Yassin	2014
125	Earmo: An energy-aware refactoring approach for mobile apps	Morales, Rodrigo; Saborido, Rubén; Khomh, Foutse; Chicano, Francisco; Antoniol, Giuliano	2017
126	Architectural Tactics to Optimize Software for Energy Efficiency in the Public Cloud	Vos, Sophie; Lago, Patricia; Verdecchia, Roberto; Heitlager, Ilya	2022
127	Energy consumption and efficiency in mobile applications: A user feedback study	Wilke, Claas; Richly, Sebastian; Götz, Sebastian; Piechnick, Christian; Aßmann, Uwe	2013
128	Data-oriented characterization of application-level energy optimization	Liu, Kenan; Pinto, Gustavo; Liu, Yu David	2015
129	Code-level Optimization for Program Energy Consumption	Fu, Cuijiao; Qian, Depei; Huang, Tianming; Luan, Zhongzhi	2019
130	SPELLing out energy leaks: Aiding developers locate energy inefficient code	Pereira, Rui; Carção, Tiago; Couto, Marco; Cunha, Jácome; Fernandes, João Paulo; Saraiva, João	2020
131	Model-based energy efficiency analysis of software architectures	Stier, Christian; Koziółek, Anne; Groenda, Henning; Reussner, Ralf	2015
132	Selflab: A lab for measuring software energy footprints	Ferreira, Miguel A.; Hoekstra, Eric; Merkus, Bo; Visser, Bram; Visser, Joost	2013

133	Impact of developer choices on energy consumption of software on servers	Singh, Jasmeet; Naik, Kshirasagar; Mahinthan, Velupillai	2015
134	The software perspective for energy-efficient mobile applications development	Siebra, Claurion; Costa, Paulo; Miranda, Regina; Silva, Fabio QB; Santos, Andre	2012
135	Comparing the Energy Consumption of Java I/O Libraries and Methods	Ournani, Zakaria; Rouvoy, Romain; Rust, Pierre; Penhoat, Joel	2021
136	Measuring application software energy efficiency	Capra, Eugenio; Francalanci, Chiara; Slaughter, Sandra A.	2012
137	How green are cloud patterns?	Abtahizadeh, S. Amirhossein; Khomh, Foutse; Guéhéneuc, Yann-Gaël	2015
138	Leafactor: Improving energy efficiency of android apps via automatic refactoring	Cruz, Luis; Abreu, Rui; Rouvignac, Jean-Noël	2017
139	Towards an Energy-Consumption Based Complexity Classification for Resource Substitution Strategies.	Höpfner, Hagen; Bunse, Christian	2010
140	Enforcing green code with Android lint	Goaër, Olivier Le	2020
141	Software optimization for performance, energy, and thermal distribution: Initial case studies	Khan, Md Ashfaquzzaman; Hankendi, Can; Coskun, Ayse Kivilcim; Herbordt, Martin C.	2011
142	Managing the energy-delay tradeoff in mobile applications with tempus	Nikzad, Nima; Radi, Marjan; Chipara, Octav; Griswold, William G.	2015