

## Publications/Patents Having 100 or More Citations on Google Scholar

Authored by faculty members in Systems and Computer Engineering, and Carleton School of Information Technology

Data compiled on October 29, 2015 and November 5, 2015. Papers listed more than once have multiple authors in selected group.

Faculty Member	Title	citations	year published	citations/year
Falconer, David	<a href="#">Frequency domain equalization for single-carrier broadband wireless systems</a>	2251	2002	160.8
Falconer, David	<a href="#">Relay-based deployment concepts for wireless and mobile broadband radio</a>	1779	2004	148.3
Yanikomeroglu, Halim	<a href="#">Relay-based deployment concepts for wireless and mobile broadband radio</a>	1777	2004	148.1
Falconer, David	<a href="#">Multihop diversity in wireless relaying channels</a>	653	2004	54.4
Yanikomeroglu, Halim	<a href="#">Multihop diversity in wireless relaying channels</a>	651	2004	54.3
Labiche, Yvan	<a href="#">Is mutation an appropriate tool for testing experiments?</a>	592	2005	53.8
Pagurek, Bernie	<a href="#">Mobile agents for network management</a>	513	1998	28.5
Girouard, Audrey	<a href="#">Reality-based interaction: a framework for post-WIMP interfaces</a>	486	2008	60.8
Kunz, Thomas	<a href="#">The influence of different workload descriptions on a heuristic load balancing scheme</a>	409	1991	16.4
Majumdar, Shikharesh	<a href="#">The stochastic rendezvous network model for performance of synchronous client-server-like distributed software</a>	346	1995	16.5
Petriu, Dorina	<a href="#">The stochastic rendezvous network model for performance of synchronous client-server-like distributed software</a>	346	1995	16.5
Woodside, Murray	<a href="#">The stochastic rendezvous network model for performance of synchronous client-server-like</a>	346	1995	16.5
Falconer, David	<a href="#">Tracking properties and steady-state performance of RLS adaptive filter algorithms</a>	331	1986	11.0
Chan, Adrian	<a href="#">A Gaussian mixture model based classification scheme for myoelectric control of powered upper limb prostheses</a>	315	2005	28.6
Lambadaris, Ioannis	<a href="#">An overview of pricing concepts for broadband IP networks</a>	293	2000	18.3
Labiche, Yvan	<a href="#">A UML-based approach to system testing</a>	277	2002	19.8
Yu, Richard	<a href="#">A new method to support UMTS/WLAN vertical handover using SCTP</a>	265	2004	22.1
Petriu, Dorina	<a href="#">The future of software performance engineering</a>	258	2007	28.7
Woodside, Murray	<a href="#">The future of software performance engineering</a>	258	2007	28.7
Franks, Greg	<a href="#">The future of software performance engineering</a>	257	2007	28.6
Labiche, Yvan	<a href="#">Using mutation analysis for assessing and comparing testing coverage criteria</a>	257	2006	25.7
Falconer, David	<a href="#">Relayer selection strategies in cellular networks with peer-to-peer relaying</a>	246	2003	18.9
Yanikomeroglu, Halim	<a href="#">Relayer selection strategies in cellular networks with peer-to-peer relaying</a>	246	2003	18.9
Goubran, Rafik	<a href="#">Robust voice activity detection using higher-order statistics in the LPC residual domain</a>	245	2001	16.3
Mahmoud, Samy	<a href="#">Robust voice activity detection using higher-order statistics in the LPC residual domain</a>	245	2001	16.3
Falconer, David	<a href="#">Application of fast Kalman estimation to adaptive equalization</a>	242	1978	6.4
Yanikomeroglu, Halim	<a href="#">Enhancing cell-edge performance: a downlink dynamic interference avoidance scheme with inter-cell coordination</a>	234	2010	39.0
Huang, Changcheng	<a href="#">Modeling and simulation of self-similar variable bit rate compressed video: a unified approach</a>	234	1995	11.1
Lambadaris, Ioannis	<a href="#">Modeling and simulation of self-similar variable bit rate compressed video: a unified approach</a>	234	1995	11.1
Wainer, Gabriel	<a href="#">CD++: a toolkit to develop DEVS models</a>	233	2002	16.6
Chan, Adrian	<a href="#">Continuous myoelectric control for powered prostheses using hidden Markov models</a>	230	2005	20.9
Banihashemi, Amir	<a href="#">On implementation of min-sum algorithm and its modifications for decoding low-density</a>	227	2005	20.6
Liu, Peter	<a href="#">Iterative solutions of the generalized Sylvester matrix equations by using the hierarchical identification principle</a>	226	2008	28.3
Labiche, Yvan	<a href="#">A UML-based approach to system testing</a>	224	2001	14.9
Yanikomeroglu, Halim	<a href="#">Cooperative relaying in multi-antenna fixed relay networks</a>	223	2007	24.8
Falconer, David	<a href="#">Fast calculation of gain matrices for recursive estimation schemes</a>	221	1978	5.8
Falconer, David	<a href="#">Single carrier modulation with nonlinear frequency domain equalization: an idea whose time</a>	219	2010	36.5
Adler, Andy	<a href="#">Uses and abuses of EIDORS: an extensible software base for EIT</a>	219	2006	21.9
Mahmoud, Samy	<a href="#">Efficient search and design procedures for robust multi-stage VQ of LPC parameters for 4 kb/</a>	219	1993	9.5
Liu, Peter	<a href="#">Identification methods for Hammerstein nonlinear systems</a>	215	2011	43.0
Huang, Changcheng	<a href="#">Efficient resource allocation for device-to-device communication underlying LTE network</a>	214	2010	35.7
Falconer, David	<a href="#">Range extension without capacity penalty in cellular networks with digital fixed relays</a>	211	2004	17.6

Yanikomeroglu, Halim	<a href="#">Range extension without capacity penalty in cellular networks with digital fixed relays</a>	<a href="#">211</a>	2004	17.6
Falconer, David	<a href="#">Least sum of squared errors (LSSE) channel estimation</a>	210	1991	8.4
Mahmoud, Samy	<a href="#">Least sum of squared errors (LSSE) channel estimation</a>	210	1991	8.4
Adler, Andy	<a href="#">A reevaluation of the validity of unrestrained plethysmography in mice</a>	<a href="#">207</a>	2002	14.8
Yu, Richard	<a href="#">Mobility-based predictive call admission control and bandwidth reservation in wireless cellular networks</a>	<a href="#">207</a>	2002	14.8
Woodside, Murray	<a href="#">Evaluating the scalability of distributed systems</a>	207	2000	12.9
Petriu, Dorina	<a href="#">Performance by unified model analysis (PUMA)</a>	<a href="#">196</a>	2005	17.8
Woodside, Murray	<a href="#">Performance by unified model analysis (PUMA)</a>	196	2005	17.8
Banihashemi, Amir	<a href="#">A heuristic search for good low-density parity-check codes at short block lengths</a>	<a href="#">196</a>	2001	13.1
Chinneck, John	<a href="#">Linear programming with interval coefficients</a>	<a href="#">195</a>	2000	12.2
Huang, Changcheng	<a href="#">Building reliable MPLS networks using a path protection mechanism</a>	<a href="#">193</a>	2002	13.8
Falconer, David	<a href="#">Decision feedback equalization for CDMA in indoor wireless communications</a>	193	1994	8.8
Chinneck, John	<a href="#">Locating minimal infeasible constraint sets in linear programs</a>	<a href="#">192</a>	1991	7.7
Adler, Andy	<a href="#">The late, but not early, asthmatic response is dependent on IL-5 and correlates with eosinophil infiltration</a>	<a href="#">191</a>	1999	11.2
Petriu, Dorina	<a href="#">Applying the UML performance profile: Graph grammar-based derivation of LQN models from UML specifications</a>	<a href="#">189</a>	2002	13.5
Wainer, Gabriel	<a href="#">Discrete-event modeling and simulation: a practitioner's approach</a>	<a href="#">188</a>	2009	26.9
Franks, Greg	<a href="#">Performance analysis of distributed server systems</a>	<a href="#">186</a>	2001	12.4
Falconer, David	<a href="#">Time division multiple access methods for wireless personal communications</a>	182	1995	8.7
Labiche, Yvan	<a href="#">Impact analysis and change management of UML models</a>	<a href="#">181</a>	2003	13.9
Ibnkahla, Mohamed	<a href="#">High-speed satellite mobile communications: technologies and challenges</a>	<a href="#">180</a>	2004	15.0
Chan, Adrian	<a href="#">Wavelet distance measure for person identification using electrocardiograms</a>	<a href="#">179</a>	2008	22.4
Adler, Andy	<a href="#">GREIT: a unified approach to 2D linear EIT reconstruction of lung images</a>	<a href="#">177</a>	2009	25.3
Petriu, Dorina	<a href="#">Sensor-based information appliances</a>	<a href="#">175</a>	2000	10.9
Liu, Peter	<a href="#">Auxiliary model based multi-innovation extended stochastic gradient parameter estimation with colored measurement noises</a>	<a href="#">174</a>	2009	24.9
Majumdar, Shikharesh	<a href="#">Scheduling in multiprogrammed parallel systems</a>	<a href="#">174</a>	1988	6.2
Banihashemi, Amir	<a href="#">On Construction of Rate-Compatible Low-Density Parity-Check Codes</a>	<a href="#">173</a>	2004	14.4
Kunz, Thomas	<a href="#">Quality of service routing in ad-hoc networks using OLSR</a>	173	2003	13.3
Labiche, Yvan	<a href="#">Toward the reverse engineering of UML sequence diagrams for distributed Java software</a>	<a href="#">167</a>	2006	16.7
Adler, Andy	<a href="#">Unrestrained plethysmography is an unreliable measure of airway responsiveness in BALB/c and C57BL/6 mice</a>	<a href="#">167</a>	2004	13.9
Banihashemi, Amir	<a href="#">Improved progressive-edge-growth(PEG) construction of irregular LDPC codes</a>	<a href="#">165</a>	2004	13.8
Banihashemi, Amir	<a href="#">On Construction of Rate-Compatible Low-Density Parity-Check Codes</a>	<a href="#">165</a>	2004	13.8
Liu, Peter	<a href="#">Gradient based and least-squares based iterative identification methods for OE and OEMA systems</a>	<a href="#">153</a>	2010	25.5
Liu, Peter	<a href="#">Partially coupled stochastic gradient identification methods for non-uniformly sampled systems</a>	<a href="#">152</a>	2010	25.3
Yu, Richard	<a href="#">A distributed consensus-based cooperative spectrum-sensing scheme in cognitive radios</a>	<a href="#">152</a>	2010	25.3
Yu, Richard	<a href="#">Optimal joint session admission control in integrated WLAN and CDMA cellular networks with vertical handoff</a>	<a href="#">151</a>	2007	16.8
Woodside, Murray	<a href="#">Performance modeling from software components</a>	151	2004	12.6
Pagurek, Bernie	<a href="#">Towards multi-swarm problem solving in networks</a>	151	1998	8.4
Yanikomeroglu, Halim	<a href="#">Coverage enhancement through two-hop relaying in cellular radio systems</a>	<a href="#">150</a>	2002	10.7
Adler, Andy	<a href="#">Electrical impedance tomography: regularized imaging and contrast detection</a>	<a href="#">150</a>	1996	7.5
Falconer, David	<a href="#">Jointly Adaptive Equalization and Carrier Recovery in Two-Dimensional Digital Communicatio</a>	150	1976	3.8
Liu, Peter	<a href="#">Multiinnovation least-squares identification for system modeling</a>	<a href="#">149</a>	2010	24.8
Adler, Andy	<a href="#">Vulnerabilities in biometric encryption systems</a>	<a href="#">147</a>	2005	13.4
Falconer, David	<a href="#">A multiple access scheme for the uplink of broadband wireless systems</a>	147	2004	12.3
Chinneck, John	<a href="#">Practical optimization: a gentle introduction</a>	<a href="#">142</a>	2006	14.2
Goubran, Rafik	<a href="#">Speech quality prediction in VoIP using the extended E-model</a>	141	2003	10.8
Falconer, David	<a href="#">Method and apparatus for providing high data rate traffic channels in a spread spectrum con</a>	141	1993	6.1
Liu, Peter	<a href="#">Parameter estimation with scarce measurements</a>	<a href="#">140</a>	2011	28.0
Falconer, David	<a href="#">An overview of radio resource management in relay-enhanced OFDMA-based networks</a>	137	2010	22.8

Liu, Peter	<a href="#">Parameter identification and intersample output estimation for dual-rate systems</a>	<a href="#">137</a>	2008	17.1
Yanikomeroglu, Halim	<a href="#">Fixed and mobile relaying technologies for cellular networks</a>	<a href="#">137</a>	2002	9.8
Yanikomeroglu, Halim	<a href="#">An overview of radio resource management in relay-enhanced OFDMA-based networks</a>	<a href="#">136</a>	2010	22.7
Marsland, Ian	<a href="#">Threshold selection for SNR-based selective digital relaying in cooperative wireless networks</a>	<a href="#">135</a>	2008	16.9
Yanikomeroglu, Halim	<a href="#">Threshold selection for SNR-based selective digital relaying in cooperative wireless networks</a>	<a href="#">135</a>	2008	16.9
Labiche, Yvan	<a href="#">The impact of UML documentation on software maintenance: An experimental evaluation</a>	<a href="#">133</a>	2006	13.3
Franks, Greg	<a href="#">A toolset for performance engineering and software design of client-server systems</a>	<a href="#">132</a>	1995	6.3
Majumdar, Shikharesh	<a href="#">A toolset for performance engineering and software design of client-server systems</a>	<a href="#">132</a>	1995	6.3
Petriu, Dorina	<a href="#">A toolset for performance engineering and software design of client-server systems</a>	<a href="#">132</a>	1995	6.3
Woodside, Murray	<a href="#">A toolset for performance engineering and software design of client-server systems</a>	<a href="#">132</a>	1995	6.3
Ibnkahla, Mohamed	<a href="#">Applications of neural networks to digital communications—a survey</a>	<a href="#">130</a>	2000	8.1
Adler, Andy	<a href="#">Monitoring changes in lung air and liquid volumes with electrical impedance tomography</a>	<a href="#">128</a>	1997	6.7
Adler, Andy	<a href="#">Sample images can be independently restored from face recognition templates</a>	<a href="#">125</a>	2003	9.6
Labiche, Yvan	<a href="#">An investigation of graph-based class integration test order strategies</a>	<a href="#">125</a>	2003	9.6
Woodside, Murray	<a href="#">Fast allocation of processes in distributed and parallel systems</a>	<a href="#">125</a>	1993	5.4
Yanikomeroglu, Halim	<a href="#">Access strategies for spectrum sharing in fading environment: overlay, underlay, and mixed</a>	<a href="#">124</a>	2010	20.7
Woodside, Murray	<a href="#">Throughput calculation for basic stochastic rendezvous networks</a>	<a href="#">124</a>	1989	4.6
Pagurek, Bernie	<a href="#">ASGA: Improving the ant system by integration with genetic algorithms</a>	<a href="#">122</a>	1998	6.8
El-tanany, Mohamed	<a href="#">Analytical modeling and simulation of phase noise interference in OFDM-based digital television terrestrial broadcasting systems</a>	<a href="#">118</a>	2001	7.9
Labiche, Yvan	<a href="#">Assessing and improving state-based class testing: A series of experiments</a>	<a href="#">116</a>	2004	9.7
Woodside, Murray	<a href="#">Enhanced modeling and solution of layered queueing networks</a>	<a href="#">115</a>	2009	16.4
Esfandiari, Babak	<a href="#">On how agents make friends: Mechanisms for trust acquisition</a>	<a href="#">115</a>	2001	7.7
Girouard, Audrey	<a href="#">PaperPhone: understanding the use of bend gestures in mobile devices with flexible electronic paper displays</a>	<a href="#">114</a>	2011	22.8
Franks, Greg	<a href="#">Enhanced modeling and solution of layered queueing networks</a>	<a href="#">114</a>	2009	16.3
Banihashemi, Amir	<a href="#">Iterative layered space-time receivers for single-carrier transmission over severe time-dispersive channels</a>	<a href="#">114</a>	2004	9.5
Falconer, David	<a href="#">Broadband wireless using single carrier and frequency domain equalization</a>	<a href="#">114</a>	2002	8.1
Banihashemi, Amir	<a href="#">A 0.18-<math>\mu\text{m}</math> CMOS Analog Min-Sum Iterative Decoder for a (32, 8) Low-Density Parity-Check (LDPC) Code</a>	<a href="#">113</a>	2006	11.3
Labiche, Yvan	<a href="#">An experimental investigation of formality in UML-based development</a>	<a href="#">113</a>	2005	10.3
Falconer, David	<a href="#">Fairness-aware radio resource management in downlink OFDMA cellular relay networks</a>	<a href="#">112</a>	2010	18.7
Yanikomeroglu, Halim	<a href="#">Fairness-aware radio resource management in downlink OFDMA cellular relay networks</a>	<a href="#">112</a>	2010	18.7
Huang, Changcheng	<a href="#">MPEG4 traffic modeling using the transform expand sample methodology</a>	<a href="#">112</a>	2002	8.0
Lambadaris, Ioannis	<a href="#">MPEG4 traffic modeling using the transform expand sample methodology</a>	<a href="#">112</a>	2002	8.0
Matrawy, Ashraf	<a href="#">MPEG4 traffic modeling using the transform expand sample methodology</a>	<a href="#">112</a>	2002	8.0
Labiche, Yvan	<a href="#">Automating impact analysis and regression test selection based on UML designs</a>	<a href="#">111</a>	2002	7.9
Petriu, Dorina	<a href="#">Architecture-based performance analysis applied to a telecommunication system</a>	<a href="#">110</a>	2000	6.9
Pagurek, Bernie	<a href="#">Connection management using adaptive mobile agents</a>	<a href="#">110</a>	1998	6.1
Yu, Richard	<a href="#">Energy-efficient resource allocation for heterogeneous cognitive radio networks with femtocells</a>	<a href="#">109</a>	2012	27.3
Liu, Peter	<a href="#">Hierarchical Least Squares Identification for Linear SISO Systems with Dual-Rate Sampled-Data</a>	<a href="#">109</a>	2011	21.8
Woodside, Murray	<a href="#">Software performance models from system scenarios in use case maps</a>	<a href="#">108</a>	2002	7.7
Falconer, David	<a href="#">Method and apparatus for using orthogonal coding in a communication system</a>	<a href="#">107</a>	1993	4.7
Petriu, Dorina	<a href="#">A dependability profile within MARTE</a>	<a href="#">106</a>	2011	21.2
Yu, Richard	<a href="#">Distributed optimal relay selection in wireless cooperative networks with finite-state markov channels</a>	<a href="#">106</a>	2010	17.7

Woodside, Murray	<a href="#">Performance model estimation and tracking using optimal filters</a>	<a href="#">106</a>	2008	13.3
Petriu, Dorina	<a href="#">XSLT transformation from UML models to LQN performance models</a>	<a href="#">106</a>	2002	7.6
Kunz, Thomas	<a href="#">Operating systems for wireless sensor networks: A survey</a>	<a href="#">103</a>	2011	20.6
Chinneck, John	<a href="#">Feasibility and Infeasibility in Optimization: Algorithms and Computational Methods</a>	<a href="#">103</a>	2008	12.9
Wainer, Gabriel	<a href="#">Application of the Cell-DEVS paradigm for cell spaces modelling and simulation</a>	<a href="#">103</a>	2001	6.9
Rajan, Sreeraman	<a href="#">Method and apparatus for adaptive line enhancement in Coriolis mass flow meter measurement</a>	<a href="#">102</a>	1996	5.1
Chinneck, John	<a href="#">A general examination scheduling system</a>	<a href="#">100</a>	1994	4.5