Most Cited Publications for **Ahmed Helmy**, *h-index*=36, *g-index*=80. Total *citations* > 7,000 (Google scholar, September 2011).

Rank	Citations	Authors	Title
1	921	D Estrin, D Farinacci, A Helmy, D Thaler…	Protocol independent multicast-sparse mode (PIM-SM): Protocol specification
2	768	…, K Fall, S Floyd, J Heidemann, A Helmy…	Advances in network simulation
3	511	…, N Sadagopan, A Helmy	IMPORTANT: A framework to systematically analyze the Impact of Mobility on Performance of RouTing protocols for Adhoc NeTworks
4	287	K Seada, M Zuniga, A Helmy…	Energy-efficient forwarding strategies for geographic routing in lossy wireless sensor networks
5	273	…, K Fall, S Floyd, P Haldar, M Handley, A Helmy…	Improving simulation for network research
6	231	…, N Sadagopan, A Helmy	The IMPORTANT framework for analyzing the Impact of Mobility on Performance Of RouTing protocols for Adhoc NeTworks
7	193	…, F Bai, B Krishnamachari, A Helmy	PATHS: analysis of PATH duration statistics and their impact on reactive MANET routing protocols
8	170	…, B Krishnamachari, A Helmy	The ACQUIRE mechanism for efficient querying in sensor networks
9	163	…, D Estrin, D Farinacci, V Jacobson, A Helmy…	Protocol independent multicast version 2, dense mode specification
10	143	K Seada, A Helmy…	On the effect of localization errors on geographic face routing in sensor networks
11	129	A Helmy	Small worlds in wireless networks
12	126	K Nahm, A Helmy…	TCP over multihop 802.11 networks: issues and performance enhancement
13	119	…, K Psounis, A Helmy	Modeling time-variant user mobility in wireless mobile networks
14	116	…, B Krishnamachari, A Helmy	Active query forwarding in sensor networks
15	99	…, D Farinacci, M Handley, LW Bt, A Helmy…	Protocol independent multicast-sparse mode (PIM-SM): motivation and architecture
16	96	…, H Shu, C Hsu, A Helmy	Weighted waypoint mobility model and its impact on ad hoc networks
17	95	…, A Helmy	A survey of mobility models in wireless adhoc networks
18	89	…, B Krishnamachari, A Helmy	Modeling path duration distributions in MANETs and their impact on reactive routing protocols
19	88	…, V Jacobson, C Liu, L Wei, P Sharma, A Helmy	Protocol independent multicast-sparse mode (PIM-SM): Protocol Specification
20	77	A Helmy	A multicast-based protocol for IP mobility support
21	75	D Son, A Helmy…	The effect of mobility-induced location errors on geographic routing in mobile ad hoc sensor networks: analysis and improvement using mobility prediction
22	70	D Estrin, D Farinacci, A Helmy, V Jacobson…	Protocol Independent Multicast (PIM), Dense Mode Protocol Specification
23	69	D Estrin, M Handley, A Helmy…	A dynamic bootstrap mechanism for rendezvous-based multicast routing

24	65	…, A Helmy	Rendezvous regions: A scalable architecture for service location and data-centric storage in large-scale wireless networks
25	63	…, P Dave, R Bhindwale, A Helmy	Location-centric isolation of misbehavior and trust routing in energy-constrained sensor networks
26	57	AAG Helmy, M Jaseemuddin…	Multicast-based mobility: a novel architecture for efficient micromobility
27	52	…, A Helmy	On nodal encounter patterns in wireless LAN traces
28	50	A Helmy, S Garg, P Pamu…	Contact-based architecture for resource discovery (CARD) in large scale MANets
29	50	D Estrin, D Farinacci, A Helmy, D Thaler…	Protocol independent multicast-sparse mode (PIM-SM)
30	47	…, A Helmy	Rugged: Routing on fingerprint gradients in sensor networks
31	46	…, A Helmy	Efficient geocasting with perfect delivery in wireless networks
32	46	…, P Dave, R Bhindwale, A Helmy	Poster abstract secure locations: routing on trust and isolating compromised sensors in location-aware sensor networks
33	40	A Helmy	Mobility-assisted resolution of queries in large-scale mobile sensor networks (MARQ)
34	40	A Helmy, D Estrin, S Gupta…	Fault-oriented test generation for multicast routing protocol design
35	39	…, A Helmy	Analysis of wired short cuts in wireless sensor networks
36	37	…, K Seada, B Krishnamachari, A Helmy	Efficient geographic routing over lossy links in wireless sensor networks
37	36	…, K Psounis, A Helmy	Modeling spatial and temporal dependencies of user mobility in wireless mobile networks
38	36	…, D Dutta, A Helmy	Mining behavioral groups in large wireless LANs
39	34	…, A Helmy	Impact: Investigation of mobile-user patterns across university campuses using wlan trace analysis
40	34	A Helmy, S Garg, N Nahata…	CARD: a contact-based architecture for resource discovery in wireless ad hoc networks
41	33	A Helmy	Architectural framework for large-scale multicast in mobile ad hoc networks
42	33	A Helmy	Small large-scale wireless networks: Mobility-assisted resource discovery
43	33	…, JJ Lee, A Helmy	Modeling and analyzing the impact of location inconsistencies on geographic routing in wireless networks
44	32	D Son, A Helmy…	The effect of mobility-induced location errors on geographic routing in ad hoc networks: Analysis and improvement using mobility prediction
45	31	A Helmy, M Jaseemuddin…	Efficient micro-mobility using intra-domain multicast-based mechanisms (M&M)
46	30	…, D Dutta, A Helmy	Profile-cast: Behavior-aware mobile networking
47	29	A Helmy…	Simulation-basedSTRESS'Testing Case Study: A Multicast Routing Protocol
48	29	…, A Helmy	On modeling user associations in wireless LAN traces on university campuses
49	29	…, K Psounis, A Helmy	Analysis of gradient-based routing protocols in sensor networks

50	28	S Ebrahimi-Taghizadeh, A Helmy…	TCP vs. TCP: a systematic study of adverse impact of short-lived TCP flows on long-lived TCP flows
51	27	…, N Sadagopan, A Helmy	Brics: A building-block approach for analyzing routing protocols in ad hoc networks-a case study of reactive routing protocols
52	27	…, C Shah, M Shah, A Helmy	Empirical modeling of campus-wide pedestrian mobility observations on the USC campus
53	27	…, W Hsu, B Krishnamachari, A Helmy	A local metric for geographic routing with power control in wireless networks
54	24	…, A Helmy	Efficient and robust geocasting protocols for sensor networks
55	23	…, A Helmy	Gradient-based routing in sensor networks
56	22	…, N Sadagopan, B Krishnamachari, A Helmy	Modeling path duration distributions in MANETs and their impact on routing performance
57	21	…, A Helmy	Correlation analysis for alleviating effects of inserted data in wireless sensor networks
58	19	…, A Helmy	Performance limits and analysis of contention-based IEEE802. 11 MAC
59	19	…, H Lin, Y Gu, A Helmy	Towards mobility-rich analysis in ad hoc networks: using contraction, expansion and hybrid models
60	18	…, A Helmy	VACCINE: War of the worms in wired and wireless networks
61	18	…, A Helmy	A survey of mobility models
62	17	…, A Helmy	SWAT: small world-based attacker traceback in Ad-hoc networks
63	17	…, JJ Lee, A Helmy	Impact of location inconsistencies on geographic routing in wireless networks
64	17	…, YM Chen, TH Lee, A Helmy	Performance evaluations for hybrid IEEE 802.11 b and 802.11 g wireless networks
65	16	…, A Helmy	Encounter-based worms: Analysis and defense
66	16	…, G Bhaskara, A Helmy	Building the blocks of protocol design and analysis: challenges and lessons learned from case studies on mobile ad hoc routing and micro-mobility protocols
67	15	…, A Helmy	Geographic protocols in sensor networks
68	15	…, A Helmy	Impact of mobility on mobility-assisted information diffusion (maid) protocols
69	15	K Nahm, A Helmy…	Cross-layer interaction of TCP and ad hoc routing protocols in multihop IEEE 802.11 networks
70	14	A Helmy, D Estrin…	Systematic testing of multicast routing protocols: Analysis of forward and backward search techniques
71	14	…, H Lin, Y Gu, A Helmy	Towards mobility-rich performance analysis of routing protocols in ad hoc networks: Using contraction, expansion and hybrid models
72	13	A Helmy	Protocol independent multicast-sparse mode (pim-sm): Implementation document
73	13	…, V Mehandru, A Helmy	Analysis of the effects of mobility on the grid location service in ad hoc networks
74	12	K Seada, A Helmy…	Modeling and analyzing the correctness of geographic face routing under realistic conditions
75	12	…, SC Wang, B Krishnamachari, A Helmy	Election: Energy-efficient and low-latency scheduling technique for wireless sensor networks

76	12	D Estrin, D Farinacci, A Helmy, D Thaler…	Protocol Independent Multicast-Sparse Mode (PIM-SM): Protocol Specification RFC 2362
77	11	A Helmy	TRANSFER: Transactions routing for ad-hoc networks with efficient energy
78	11	A Helmy	State Analysis and Aggregation Study for Multicast-based Micro Mobility
79	11	A Helmy	CAPTURE: location-free contact-assisted power-efficient query resolution for sensor networks
80	11	…, A Helmy	Rendezvous regions: A scalable architecture for service provisioning in large-scale mobile ad hoc networks

- The '***h-index***' (sometimes called the *research impact factor*) is *a* measure for research impact and quality, where '*h'* is the largest number such that there are *h* papers with at least *h* citations. The '*h-index*' should not be used as the only measure of research quality.
- The ***'g-index'*** is another measure of research impact and productivity, where '*g'* is the largest number such that the sum of highest *g* citations is greater than g^2.
- In the list above, the different versions of similar bodies of work (e.g., conference & journal versions of a study, or versions of an Internet standard) were kept as they appear originally in the output of Google scholar, and were not aggregated.
- Google scholar entries may vary over time to account for rise in citations and changes in the Internet (addition or removal of paper archives or servers). These entries are not necessarily very accurate, but Google scholar citations seem to be the most comprehensive and up-to-date as compared to others.