

IEMS News

Dr. Mitsuo Gen, Editor-in-Chief, Ranked as Top Productive Authors in POM

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Publishing research paper in academic and professional journals is very important to facilitate knowledge sharing among scientists and engineers, researchers and practitioners. Various measures and citation scores have been developed to evaluate and rank scientific publications in order to foster the progress of research and real world applications. Recently, Hsieh and Chang have reported “An assessment of world-wide research productivity in production and operations management” in *International Journal of Production Research* [1]. This report explores the global production and operations management (POM) research performance on papers published in 20 core POM journals in the past half century, which is based on the data of 1959-2008 from Thomson Reuters’ Web of Science/Knowledge databases.

According to Hsieh and Chang’s investigation, totally 63,776 papers are published in the area of POM during that period. Dr. Mitsuo Gen, the Editor-in-Chief of *Industrial Engineering & Managing Systems (IEMS)*, an International Journal by APIEMS & KIIE, has been ranked as the 1st among Top 10 Most Productive Authors in 1989~1998 and the 8th among Top 20 Most Productive Authors in 1959~2008. We, as visiting researchers, have worked at Dr. Gen’s Lab. at Ashikaga Institute of Technology from Oct. 1992 to Feb. 1997, and at Waseda University from Sept. 2003 to Feb. 2004, respectively. It is our great pleasure and distinct honor to introduce Dr. Gen on his academic achievement and assessment in News corner of *IEMS* Journal.

Dr. Gen is internationally well recognized expert in the area of Computational Intelligence. He has conducted many innovative researches and published various influential articles, most of his papers are published within the top twenty journals in the field of production and operations management (refers to Table1), including *IEEE*, *IEICE*, *IEEJ Transactions*, *Journals of ORSJ* and *JIMA*. According to the survey given by Hsieh and Chang, Dr. Gen has published 93 papers in Top 20 core POM Journals with 866 citations and ranked as the 8th among Top 20 Most Productive Authors for 1959-2008. Dr. Gen has also published 63 papers in Top 20 core POM Journals and ranked as the 1st among Top 10 Most Productive Authors in the decade from 1988 to 1998 (refers to Table 2 and Table 3 respectively in [1]).

According to Publish or Perish website for supporting Authors Analysis, Journal Impact Analysis and General Citation Search (<http://www.harzing.com/download/PoPSetup.exe>), the statistics showed that Dr. Gen has published 456 papers in International Journals and International Conference Proceedings. The total citation for Dr. Gen’s paper is 7313 and average citation per paper is 16.04. According to the statistics by ISI Web of Science, he has been ranked as top 1 author by publishing 70 papers in the field of Evolutionary Computation (i.e.: Genetic Algorithm, Genetic Programming, Evolutionary Program, Evolution Strategy, Evolutionary Algorithm, Evolutionary Multiobjective, Memetic Algorithm, Ant Colony, Particle Swarm, Artificial Immune, etc). Among Dr.Gen’s publications in *Computers & Industrial Engineering*, the following three papers, entitled as

“Hybrid genetic algorithm for multi-time period production / distribution planning”,

“A genetic algorithm approach for multi-objective optimization of supply chain networks” and

“A genetic algorithm with modified crossover operator and search area adaptation”,

have been ranked within Top 10 Cited Papers published within the last five years. Here is Website of *Computers and Industrial Engineering*: http://www.elsevier.com/wps/find/journaldescription.cws_home/399/description#description

Table 1. Top Twenty Journals of Production and Operations Management (POM) [1].

No.	Journal title	Impact factor			Mean	Articles per year				Mean	Issues/ year	Country	Papers/ percentage 1959–2008	h- index
		2005	2006	2007	1998–2007	2005	2006	2007	1998–2007					
1	Computers & Industrial Engineering	0.347	0.65	0.554	0.358	87	99	93	109	8	UK	3895/6.11%	36	
2	Computers & Operations Research	0.746	0.893	1.147	0.556	199	183	221	136	14	UK	2893/4.54%	47	
3	Decision Sciences	1.055	1.62	1.435	0.864	23	23	21	21	4	USA	1067/1.67%	56	
4	European Journal of Operational Research	0.824	0.918	1.096	0.668	447	651	838	471	24	NL	11445/ 17.95%	86	
5	IIE Transactions	0.476	0.637	0.797	0.502	86	86	85	89	12	USA	2004/3.14%	49	
6	Interfaces	0.524	0.338	0.575	0.501	36	44	42	56	6	USA	3595/5.64%	44	
7	International Journal of Operations & Production Management	0.597	0.612	1.054	0.545	61	61	59	53	12	UK	1169/1.83%	33	
8	International Journal of Production Economics	1.008	1.183	0.995	0.590	158	217	212	165	18	NL	3015/4.73%	37	
9	International Journal of Production Research	0.481	0.799	0.560	0.559	251	270	278	247	18	UK	5394/8.46%	65	
10	Journal of Operations Management	1.419	2.042	1.851	1.302	38	49	82	33	6	NL	418/0.66%	37	
11	Journal of Productivity Analysis	0.492	0.763	0.439	0.545	31	35	35	24	6	NL	445/0.70%	27	
12	Journal of the Operational Research Society	0.603	0.597	0.784	0.733	144	139	159	140	12	UK	6904/10.83%	52	
13	Management Science	1.669	1.687	1.931	1.470	136	141	133	122	12	USA	5124/8.03%	141	
14	Mathematics of Operations Research	0.906	0.785	0.875	0.969	54	36	55	45	4	USA	1504/2.36%	61	
15	Naval Research Logistics	0.373	0.362	0.548	0.379	65	59	73	55	7/8	USA	2204/3.46%	48	
16	Omega—International Journal of Management Science	0.648	0.663	1.327	0.566	49	52	62	50	6	UK	2351/3.69%	42	
17	Operations Research	1.219	1.234	1.467	0.942	70	82	82	95	6	USA	7127/11.18%	117	
18	Operations Research Letters	0.597	0.767	0.517	0.520	86	94	112	72	10	NL	1877/2.94%	42	
19	Production and Operations Management	0.831	2.516	2.123	0.698	24	39	51	17	4	USA	382/0.60%	26	
20	Transportation Science	0.714	1.27	1.427	0.792	37	38	35	32	4	USA	963/1.51%	49	

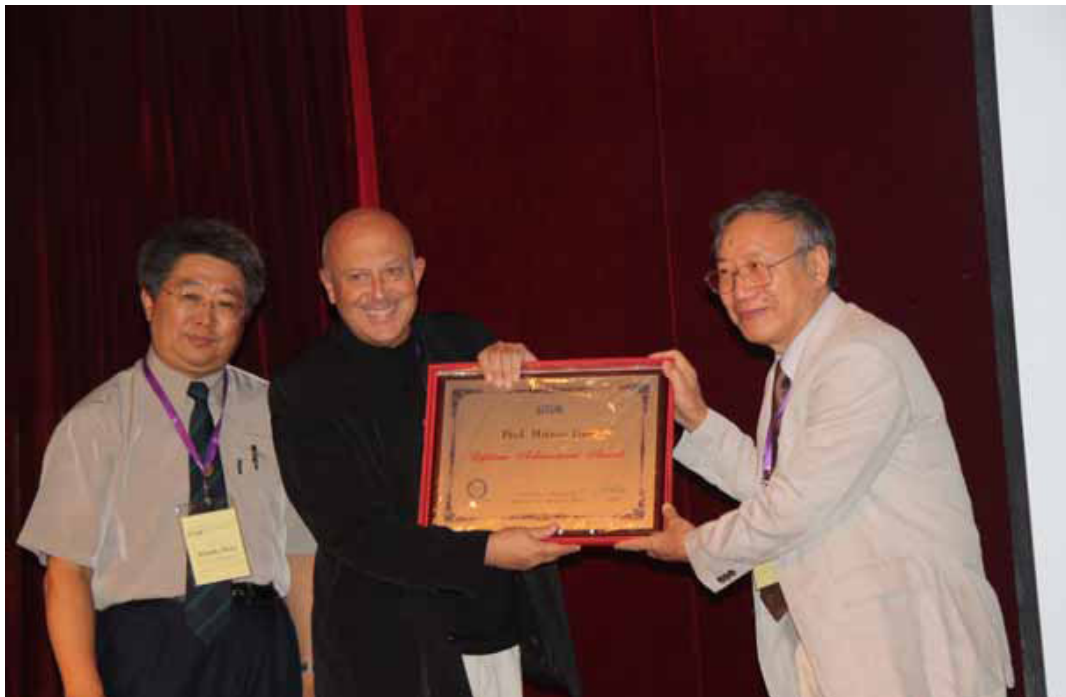
Table 2. Top 20 Most Productive Authors in POM (1959–2008) [1].

Rank	Author	Institution	Country	Papers	% of 63,776	Sum of the times Cited	Average citation per item	h- index
(a)								
1	Cheng, T.C. Edwin	The Hong Kong Polytechnic University	HK	182	0.29	1,865	10.25	20
2	Laporte, Gilbert	HEC Montreal	CA	159	0.25	3,104	19.52	30
3	Goyal, S.K.	Concordia University	CA	145	0.23	1,463	10.09	21
4	Heilon SH	University of London	UK	130	0.20	403	3.10	8
5	Berman, Oded	University of Toronto	CA	107	0.17	721	6.74	15
6	Drezner, Zvi	California State University, Fullerton	USA	106	0.17	1,349	12.73	17
7	Sherali, Hanif D.	Virginia Polytechnic Institute and State University	USA	102	0.16	827	8.11	15
8	Gen, Mitsuo	Waseda University	JP	93	0.15	866	9.31	16
9	Lee, Chung-Yee	Hong Kong University of Science & Technology	HK	93	0.15	379	4.08	24
10	HMehrez, AH.	Ben-Gurion University of the Negev	IL	93	0.15	1,932	20.77	24
	Miller, D.W.*	Columbia University	USA	92	0.14	0	0	0
11	Cooper, William W.	University of Texas, Austin	USA	91	0.14	5,638	61.96	21
12	Silver, Edward A.	University of Calgary	CA	88	0.14	1,030	11.7	17
13	Glover, Fred	University of Colorado	USA	87	0.14	3,072	35.31	28
14	Bard, Jonathan F.	University of Texas, Austin	USA	84	0.13	1,333	15.87	22
15	Gupta, Jatinder N.D.	University of Alabama	USA	83	0.13	1,275	15.36	20
16	Lau, Hon-Shiang	City University of Hong Kong	HK	83	0.13	714	8.6	14
17	Sarker, Bhaba R.	Louisiana State University	USA	83	0.13	935	11.27	18
18	Whitt, Ward	Columbia University	USA	82	0.13	1,748	21.32	24
19	Charnes, Abraham	University of Texas, Austin	USA	79	0.12	5,398	68.33	20
20	Murphy, Frederic H.	Temple University	USA	78	0.12	290	3.72	10
Rank	Author	Institution	Country	Papers	% of 30,594	Sum of the times Cited	Average citation per item	h- index

Dr. Gen has received numerous awards, including the *Best Book Awards* from the Japan Information Culturology Society in 1999, the 33rd International Conference on Computers & Industrial Engineering in 2004, the *Best Paper Awards* from the Japan Society for Fuzzy and Intelligent Informatics in 2001, the Japan Plant Engineering Society, and the ANNIE in 2008, the *Best Organizing Session Award* from the IEEJ Electronics, Information & Systems Society in 2004, the *Lifetime Achievement Award* from the IMS2010 in Urumchi, China and the *Special Recognition Award* from ANNIE 2010 in St Louis, USA.

Table 3. Top 10 Most Productive Authors in the Past Five Decades (1959~2008) [1].

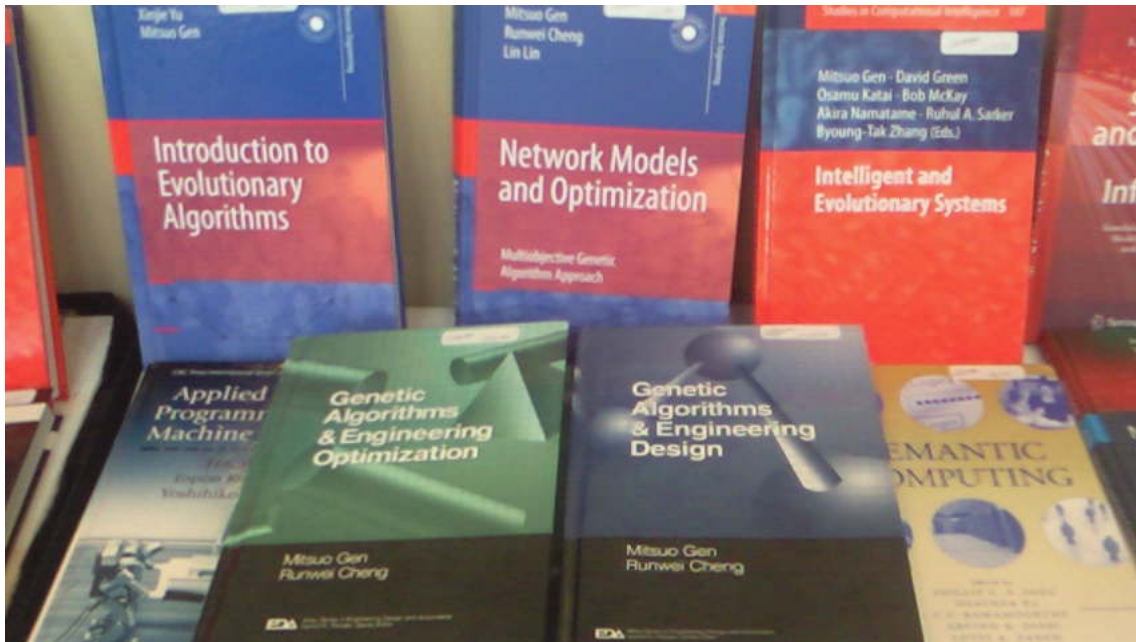
Rank	D1 (1959–1968)			D2 (1969–1978)			D3 (1979–1988)			D4 (1989–1998)			D5 (1999–2008)		
	Authors	Docs	%	Authors	Docs	%	Authors	Docs	%	Authors	Docs	%	Authors	Docs	%
1	Miller, DW	92	3.10	Eilon, S	39	0.86	Eilon, S	56	0.41	Gen, M	63	0.33	Cheng, TCE	111	0.48
2	Charnes, A	31	1.05	Glover, F	25	0.55	Goyal, SK	43	0.32	Cheng, TCE	60	0.31	Laporte, G	86	0.37
3	Jewell, WS	19	0.64	Woolsey, G	22	0.48	Mehrez, A	38	0.28	Laporte, G	59	0.30	Berman, O	55	0.24
4	Cooper, WW	18	0.61	Charnes, A	20	0.44	Shanthikumar, JG	38	0.28	Goyal, SK	46	0.24	Goyal, SK	47	0.20
5	Wagner, HM	18	0.61	Taylor, JG	20	0.44	Drezner, Z	35	0.26	Mehrez, A	46	0.24	Lee, CY	45	0.19
6	Ancker, CJ	17	0.57	Klingman, D	18	0.40	Sherali, HD	35	0.26	Lee, CY	45	0.23	Sarker, BR	43	0.18
7	Geisler, MA	16	0.54	Gray, P	17	0.37	Lee, HL	29	0.21	Thiriez, H	45	0.23	Gunasekaran, A	41	0.18
8	Herman, R	14	0.47	Shycon, HN	14	0.31	Chakravarty, AK	26	0.19	Wilson, JM	37	0.19	Gupta, JND	41	0.18
9	Dantzig, GB	13	0.44	Vazsonyi, A	14	0.31	Ignizio, JP	26	0.19	Murphy, FH	36	0.19	Tiwari, MK	41	0.18
10	Fishburn, PC	13	0.44	Machol, RE	13	0.29	Rosenblatt, MJ	26	0.19	Sarker, BR	35	0.18	Zhu, J	41	0.18
				Nahmias, S	13	0.29	Woolsey, G	26	0.19						
				Rao, MR	13	0.29									
				Soland, RM	13	0.29									
				Thompson, GL	13	0.29									
	Total	251	8.47		254	5.58		378	2.78		472	2.44		551	2.37%
No.	of Authors	2,326			4,150			10,201			16,805			23,409	
No.	of papers	2,964			4,553			13,609			19,351			23,299	



Dr. Gen received Lifetime Achievement Award at The Ninth International Conference on Information and Management Sciences (IMS2010)

Dr. Gen's major research interests include Genetic and Evolutionary Algorithms, Artificial Neural Networks, Fuzzy Logic and Systems and their applications to optimization problems in the field of Industrial Engineering. There are many challenging issues in solving real world problems such as nonlinearity, uncertainty, high dimension, complicated constraints, multiple objectives, and combinatorial property in nature. The challenges make these problems intractable for conventional approaches. Genetic algorithms as a global and stochastic search technique have attracted considerable attention as a novel approach to deal with such challenges. Since 1992, Dr. Gen has focused on how to tailor genetic algorithms in solving such kind of problems. His academic achievements are mainly reflected in his authored books: *Genetic Algorithms and Engineering Design* (1997, John Wiley), *Genetic Algorithms and Engineering Optimization* (2000, John Wiley) with Dr. R. Cheng, *Network Models and Optimization: Multiobjective Genetic Algorithm Approach* (2008, Springer) with Dr. R. Cheng and Dr. L. Lin. These books provide a comprehensive and state-of-the-art treatment on use of genetic algorithms in industrial engineering (IE). Especially, the book published in 1997 is regarded as the first book to cover the issues on how to adapt genetic algorithms to solve optimization problems in

IE fields. Many universities worldwide have used these books as textbooks or reference books. His recent book with Dr. X. Yu, *Introduction to Evolutionary Algorithms* (2010, Springer), gives an up-to-date treatment of Evolutionary Algorithms (EAs). Dr. Gen has also edited three books, *Intelligent Engineering System Through Artificial Neural Networks* (2008 and 2009) and *Intelligent and Evolutionary Systems* (2009) and more than 20 special issues on Genetic Algorithms and related areas as a Guest Editor for international and domestic journals such as, *Computers & Industrial Engineering*, *Journal of Intelligent Manufacturing* and *International Journal of Production Economics*.



Book exhibition at ANNIE2010 Conference in St Louis, USA, Nov. 1-3 and Many universities worldwide have used some of them written by Dr. Gen and his colleagues as textbooks or reference books

Dr. Gen is a very active professor in the academic world. He has been invited to give special tutorial lectures in many universities worldwide. He has chaired or co-chaired many international conferences. He has been served as editor or co-editor in many international academic journals. He has been conducting cooperative research with many famous professors worldwide. His contribution to the research and education in his fields has given a great influence to many young researchers and scholars.

Research and education are Dr. Gen's whole life. He has dedicated all of his time, his energy, and his heart to the students all of his life. Dr. Gen has advised more 23 Ph.D. theses at Waseda University and Ashikaga Institute of Technology, Japan. He has hosted, at the Waseda University and the Ashikaga Institute of Technology, more than 15 Post Doctors and Visiting Faculties from China, Korea, Turkey and others. In 2003, I, one of the author of this article, had a chance to study at Dr. Gen's Lab at the Waseda University on the project entitled "Design of Supply Chain Networks with Genetic Algorithms", supported by Matsumae International Foundation (MIF) grant. Dr. Gen is a humble, honest, and hard working researcher. I learned a lot from him. During the fellowship tenure, Dr. Gen and his students were always supportive and helpful to me, and made my stay in Japan unforgettable. Lastly we hope this journal, *IEMS*, will be one of SCI-Indexed journals in near future.

REFERENCES

Hsieh, P.-N. and Chang, P.-L. (2009), An assessment of world-wide research productivity in production and operations management, *International Journal of Production Research*, **120**, 540-551.