

Supplementary

Table S1. Search results (WOS)

Number	Search query	Result
#1	TS=("Artificial intelligence" OR "Machine intelligence" OR "artificial neural network*" OR "Machine learning" OR "Deep learn*" OR "Natural language process*" OR "Robotic*" OR "thinking computer system" OR "fuzzy expert system*" OR "evolutionary computation" OR "hybrid intelligent system*")	332,892
#2	TS=(disease* OR illness OR health-related OR medic* OR "medical diagnosis" OR treatment OR health* OR wellness OR well-being)	10,609,911
#3	#2 AND #1	44,519
#4	#2 AND #1 Refined by: [excluding] PUBLICATION YEARS: (2019)	43,768
#5	#2 AND #1 Refined by: [excluding] PUBLICATION YEARS: (2019) AND [excluding] DOCUMENT TYPES: (PROCEEDINGS PAPER OR BOOK CHAPTER OR MEETING ABSTRACT OR EDITORIAL MATERIAL OR LETTER OR NEWS ITEM OR BOOK OR BOOK REVIEW OR CORRECTION OR DATA PAPER OR EARLY ACCESS OR NOTE OR REPRINT OR BIOGRAPHICAL ITEM OR RETRACTED PUBLICATION OR DATABASE REVIEW)	28,344
#6	#2 AND #1 Refined by: [excluding] PUBLICATION YEARS: (2019) AND [excluding] DOCUMENT TYPES: (PROCEEDINGS PAPER OR BOOK CHAPTER OR MEETING ABSTRACT OR EDITORIAL MATERIAL OR LETTER OR NEWS ITEM OR BOOK OR BOOK REVIEW OR CORRECTION OR DATA PAPER OR	27,617

	EARLY ACCESS OR NOTE OR REPRINT OR BIOGRAPHICAL ITEM OR RETRACTED PUBLICATION OR DATABASE REVIEW) AND [excluding] LANGUAGES: (GERMAN OR SPANISH OR FRENCH OR CHINESE OR PORTUGUESE OR TURKISH OR RUSSIAN OR KOREAN OR ITALIAN OR POLISH OR CZECH OR HUNGARIAN OR CROATIAN OR JAPANESE OR SLOVENIAN OR CATALAN OR ROMANIAN OR UKRAINIAN OR MALAY OR SLOVAK)	
#7	AU=Anonymous	1,406,134
#8	#6 NOT #7	27,607
#9	#8 Refined by: [excluding] Undefined data	27,451

Table S2. Search results (Scopus)

	Search query	Result
1	TITLE-ABS-KEY ("Artificial intelligence" OR "Machine intelligence" OR "artificial neural network?" OR "Machine learning" OR "Deep learn?" OR "Natural language process?" OR "Robotic?" OR "thinking computer system" OR "fuzzy expert system?" OR "evolutionary computation" OR "hybrid intelligent system?")	574,772
2	TITLE-ABS-KEY (disease? OR illness OR health-related OR medic? OR "medical diagnosis" OR treatment OR health? OR wellness OR well-being)	11,022,297
3	(TITLE-ABS-KEY ("Artificial intelligence" OR "Machine intelligence" OR "artificial neural network?" OR "Machine learning" OR "Deep learn?" OR "Natural language process?" OR "Robotic?" OR "thinking computer system" OR "fuzzy expert system?" OR "evolutionary computation" OR "hybrid intelligent system?")) AND (TITLE-ABS-KEY (disease? OR illness OR	36,266

	health-related OR medic? OR "medical diagnosis" OR treatment OR health? OR wellness OR well-being)	
4	(TITLE-ABS-KEY ("Artificial intelligence" OR "Machine intelligence" OR "artificial neural network?" OR "Machine learning" OR "Deep learn?" OR "Natural language process?" OR "Robotic?" OR "thinking computer system" OR "fuzzy expert system?" OR "evolutionary computation" OR "hybrid intelligent system?")) AND (TITLE-ABS-KEY (disease? OR illness OR health-related OR medic? OR "medical diagnosis" OR treatment OR health? OR wellness OR well-being)) AND (EXCLUDE (PREFNAMEAUID , "Undefined#Undefined")) AND (EXCLUDE (PUBYEAR , 2019))	35,386
5	(TITLE-ABS-KEY ("Artificial intelligence" OR "Machine intelligence" OR "artificial neural network?" OR "Machine learning" OR "Deep learn?" OR "Natural language process?" OR "Robotic?" OR "thinking computer system" OR "fuzzy expert system?" OR "evolutionary computation" OR "hybrid intelligent system?")) AND (TITLE-ABS-KEY (disease? OR illness OR health-related OR medic? OR "medical diagnosis" OR treatment OR health? OR wellness OR well-being)) AND (EXCLUDE (PUBYEAR , 2019)) AND (EXCLUDE (PREFNAMEAUID , "Undefined#Undefined"))	35,386
6	(TITLE-ABS-KEY ("Artificial intelligence" OR "Machine intelligence" OR "artificial neural network?" OR "Machine learning" OR "Deep learn?" OR "Natural language process?" OR "Robotic?" OR "thinking computer system" OR "fuzzy expert system?" OR "evolutionary computation" OR "hybrid intelligent system?")) AND (TITLE-ABS-KEY (disease? OR illness OR health-related OR medic? OR "medical diagnosis" OR treatment OR health? OR wellness OR well-being)) AND (EXCLUDE (PUBYEAR , 2019)) AND (EXCLUDE (PREFNAMEAUID , "Undefined#Undefined")) AND (EXCLUDE (SUBJAREA , "Undefined"))	35,341

7	<p>(TITLE-ABS-KEY ("Artificial intelligence" OR "Machine intelligence" OR "artificial neural network?" OR "Machine learning" OR "Deep learn?" OR "Natural language process?" OR "Robotic?" OR "thinking computer system" OR "fuzzy expert system?" OR "evolutionary computation" OR "hybrid intelligent system?")) AND (TITLE-ABS-KEY (disease? OR illness OR health-related OR medic? OR "medical diagnosis" OR treatment OR health? OR wellness OR well-being)) AND (EXCLUDE (PUBYEAR , 2019)) AND (EXCLUDE (PREFNAMEAUID , "Undefined#Undefined")) AND (EXCLUDE (SUBJAREA , "Undefined")) AND (EXCLUDE (DOCTYPE , "cp") OR EXCLUDE (DOCTYPE , "ch") OR EXCLUDE (DOCTYPE , "no") OR EXCLUDE (DOCTYPE , "ed") OR EXCLUDE (DOCTYPE , "cr") OR EXCLUDE (DOCTYPE , "ip") OR EXCLUDE (DOCTYPE , "le") OR EXCLUDE (DOCTYPE , "sh") OR EXCLUDE (DOCTYPE , "bk") OR EXCLUDE (DOCTYPE , "er") OR EXCLUDE (DOCTYPE , "rp")))</p>	20,142
8	<p>(TITLE-ABS-KEY ("Artificial intelligence" OR "Machine intelligence" OR "artificial neural network?" OR "Machine learning" OR "Deep learn?" OR "Natural language process?" OR "Robotic?" OR "thinking computer system" OR "fuzzy expert system?" OR "evolutionary computation" OR "hybrid intelligent system?")) AND (TITLE-ABS-KEY (disease? OR illness OR health-related OR medic? OR "medical diagnosis" OR treatment OR health? OR wellness OR well-being)) AND (EXCLUDE (PUBYEAR , 2019)) AND (EXCLUDE (PREFNAMEAUID , "Undefined#Undefined")) AND (EXCLUDE (SUBJAREA , "Undefined")) AND (EXCLUDE (DOCTYPE , "cp") OR EXCLUDE (DOCTYPE , "ch") OR EXCLUDE (DOCTYPE , "no") OR EXCLUDE (DOCTYPE , "ed") OR EXCLUDE (DOCTYPE , "cr") OR EXCLUDE (DOCTYPE , "ip") OR EXCLUDE (DOCTYPE , "le") OR EXCLUDE (DOCTYPE , "sh") OR EXCLUDE (DOCTYPE , "bk") OR</p>	19,711

	EXCLUDE (DOCTYPE , "er") OR EXCLUDE (DOCTYPE , "rp")) AND (EXCLUDE (SRCTYPE , "k") OR EXCLUDE (SRCTYPE , "d") OR EXCLUDE (SRCTYPE , "p") OR EXCLUDE (SRCTYPE , "b") OR EXCLUDE (SRCTYPE , "Undefined"))	
9	(TITLE-ABS-KEY ("Artificial intelligence" OR "Machine intelligence" OR "artificial neural network?" OR "Machine learning" OR "Deep learn?" OR "Natural language process?" OR "Robotic?" OR "thinking computer system" OR "fuzzy expert system?" OR "evolutionary computation" OR "hybrid intelligent system?")) AND (TITLE-ABS-KEY (disease? OR illness OR health-related OR medic? OR "medical diagnosis" OR treatment OR health? OR wellness OR well-being)) AND (EXCLUDE (PUBYEAR , 2019)) AND (EXCLUDE (PREFNAMEAUID , "Undefined#Undefined")) AND (EXCLUDE (SUBJAREA , "Undefined")) AND (EXCLUDE (DOCTYPE , "cp") OR EXCLUDE (DOCTYPE , "ch") OR EXCLUDE (DOCTYPE , "no") OR EXCLUDE (DOCTYPE , "ed") OR EXCLUDE (DOCTYPE , "cr") OR EXCLUDE (DOCTYPE , "ip") OR EXCLUDE (DOCTYPE , "le") OR EXCLUDE (DOCTYPE , "sh") OR EXCLUDE (DOCTYPE , "bk") OR EXCLUDE (DOCTYPE , "er") OR EXCLUDE (DOCTYPE , "rp")) AND (EXCLUDE (SRCTYPE , "k") OR EXCLUDE (SRCTYPE , "d") OR EXCLUDE (SRCTYPE , "p") OR EXCLUDE (SRCTYPE , "b") OR EXCLUDE (SRCTYPE , "Undefined")) AND (EXCLUDE (LANGUAGE , "Chinese") OR EXCLUDE (LANGUAGE , "German") OR EXCLUDE (LANGUAGE , "French") OR EXCLUDE (LANGUAGE , "Spanish") OR EXCLUDE (LANGUAGE , "Japanese") OR EXCLUDE (LANGUAGE , "Russian") OR EXCLUDE (LANGUAGE , "Italian") OR EXCLUDE (LANGUAGE , "Korean") OR EXCLUDE (LANGUAGE , "Portuguese") OR EXCLUDE (LANGUAGE , "Turkish") OR EXCLUDE (LANGUAGE , "Czech") OR	18,688

	EXCLUDE (LANGUAGE , "Polish") OR EXCLUDE (LANGUAGE , "Dutch") OR EXCLUDE (LANGUAGE , "Hungarian") OR EXCLUDE (LANGUAGE , "Persian") OR EXCLUDE (LANGUAGE , "Romanian") OR EXCLUDE (LANGUAGE , "Danish") OR EXCLUDE (LANGUAGE , "Serbian") OR EXCLUDE (LANGUAGE , "Croatian") OR EXCLUDE (LANGUAGE , "Slovak") OR EXCLUDE (LANGUAGE , "Finnish") OR EXCLUDE (LANGUAGE , "Greek") OR EXCLUDE (LANGUAGE , "Norwegian") OR EXCLUDE (LANGUAGE , "Slovenian") OR EXCLUDE (LANGUAGE , "Arabic") OR EXCLUDE (LANGUAGE , "Hebrew") OR EXCLUDE (LANGUAGE , "Swedish") OR EXCLUDE (LANGUAGE , "Undefined"))	
--	---	--

Table S3. Journal subject category and the Journal included those subject categories.

Research area	Total papers	Journal name	Total papers	Journal name	Total papers
Engineering	5,037	Expert systems with applications	281	Computer methods and programs in biomedicine	186
		Artificial intelligence in medicine	202	IEEE transactions on biomedical engineering	131
		Computers in biology and medicine	187	IEEE access	128
Computer science	4,902	Expert systems with applications	281	Artificial intelligence in medicine	202
		Journal of biomedical informatics	270	Computers in biology and medicine	187
		Journal of the American medical informatics association	253	Computer methods and programs in biomedicine	186
Surgery	2,646	Journal of robotic surgery	260	Asian journal of surgery	85
		International journal of medical robotics and computer assisted surgery	213	JSLs journal of the society of laparoendoscopic surgeons	79
		Surgical endoscopy and other interventional techniques	190	Journal of laparoendoscopic advanced surgical techniques	76
Medical informatics	1,981	Journal of biomedical informatics	270	Computer methods and programs in biomedicine	186
		Journal of the American medical informatics association	253	Journal of medical systems	158

Research area	Total papers	Journal name	Total papers	Journal name	Total papers
		Artificial intelligence in medicine	202	International journal of medical informatics	103
Neurosciences neurology	1,759	Journal of neuroengineering and rehabilitation	116	Neuroimage clinical	48
		Neuroimage	106	Journal of neuroscience methods	43
		Frontiers in neuroscience	54	Frontiers in neurology	41
Urology nephrology	1,649	Journal of urology	175	Urology	134
		Journal of endourology	161	European urology	128
		Bju international	147	Current opinion in urology	82
Radiology nuclear medicine medical imaging	1,648	Medical physics	258	Physics in medicine and biology	85
		Neuroimage	106	International journal of computer assisted radiology and surgery	73
		IEEE transactions on medical imaging	92	Journal of digital imaging	66
Science technology other topics	1,385	Plos one	486	Jove journal of visualized experiments	34
		Scientific reports	228	Acs applied materials interfaces	31
		Proceedings of the national academy of sciences of the united states of america	42	Advanced materials	23
Oncology	1,306	Gynecologic oncology	63	Technology in cancer research treatment	53
		Annals of surgical oncology	61	Urologic oncology seminars and original investigations	53

Research area	Total papers	Journal name	Total papers	Journal name	Total papers
		International journal of radiation oncology biology physics	56	EJSO	36
Mathematical computational biology	1,228	Computers in biology and medicine	187	Bioinformatics	85
		BMC bioinformatics	161	Journal of medical imaging and health informatics	64
		IEEE journal of biomedical and health informatics	88	Medical biological engineering computing	59
Biochemistry molecular biology	1,210	BMC bioinformatics	161	Plos computational biology	43
		Bioinformatics	85	Journal of proteome research	30
		Journal of neuroscience methods	43	Journal of biomedical optics	28
Chemistry	1,181	Sensors	183	Chemometrics and intelligent laboratory systems	30
		Applied sciences Basel	44	Analytical chemistry	26
		Journal of chemical information and modeling	36	Combinatorial chemistry high throughput screening	26
Health care sciences services	1,176	Journal of the American medical informatics association	253	Methods of information in medicine	99
		Journal of medical systems	158	Journal of medical internet research	87
		International journal of medical informatics	103	Journal of healthcare engineering	31

Research area	Total papers	Journal name	Total papers	Journal name	Total papers
Environmental sciences ecology	762	International journal of environmental research and public health	28	Environmental science and pollution research	26
		Science of the total environment	28	Water research	26
		Environmental modelling software	27	Water science and technology	26

