



Production Scientifique Algerienne

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1-2 février 2020

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Classification des Branches Scientifiques

Classification des branches scientifiques selon les différentes strates

Grandes Thématiques

Grands Domaines

Domaines

Micro Domaines

- 📍 Australian and New Zealand Standard Research Classification (ANZSRC).
- 📍 European Research Council (ERC).
- 📍 Centre National de Recherche Scientifique français (CNRS).
- 📍 National Science Foundation (NSF).
- 📍 Observatoire des Sciences et Techniques (OST).

Classification des branches scientifiques

Deux grandes thématiques

1. Sciences et techniques,
2. Sciences sociales, humaines et arts.

Neuf grands domaines

1. Sciences de la nature et de la vie.
2. Sciences de la terre et de l'univers.
3. Sciences de la physique.
4. Chimie.
5. Sciences mathématiques et leurs interactions.
6. Sciences pour l'ingénieur.
7. Sciences sociales.
8. Sciences humaines et arts.
9. Multidisciplinaire.

Classification des branches scientifiques

Dix neuf domaines

1. Agriculture et sciences vétérinaires.
2. Biologie et biochimie.
3. Chimie.
4. Economie et finance.
5. Engineering.
6. Environnement et écologie.
7. Informatique et télécommunication.
8. Mathématiques.
9. Médecine.
10. Neurosciences.
11. Pharmacologie.
12. Physique.
13. Sciences de la terre.
14. Sciences de l'univers.
15. Sciences des matériaux.
16. Sciences humaines et arts.
17. Sciences sociales.
18. Psychologie et sciences cognitives.
19. Multidisciplinaire.

$$264 + 3 = (178 + 58 + 28) + 3 \text{ micro domaines.}$$

Web of Science (WoS) de Clarivate Analytics

- ✦ Eugene Garfield en 1960 a été à l'origine de la création de l'Institute for Scientific Information (ISI).
- ★ Récupéré par Thomson Scientific & Healthcare en 1992.
- ★ En 2016 elle devient propriété de Clarivate Analytics.

Web of Science (WoS) de Clarivate Analytics

- Indexation totale de revues écrites en plus de **42** langues différentes.
 - Plus de **9200** revues en sciences et techniques,
 - Plus de **3400** revues en sciences sociales,
 - Plus de **1800** revues en sciences humaines et arts.
- Le Web of Science est la source du Facteur d' Impact (JCR)
- Le WoS est constitué de cinq bases de données bibliographiques
 - Science Citation Index Expanded (IF)
 - Social Sciences Citation Index (IF)
 - Arts & Humanities Citation Index
 - Conf. Proceedings Citation Index- Science,
 - Conf. Proceedings Citation Index- Social Science & Humanitie.
 - Emerging Sources Citation Index (ESCI) --2015-present
 - Book Citation Index– Science
 - Book Citation Index– Social Sciences & Humanities

Actualisée 01 février 2020

Web of Science (WoS) de Clarivate Analytics

Institutions d'évaluation

- UNESCO science report.
- US : NSF : biennial Science & Engineering Indicators report (depuis 1974).
- UK : Office of Science & Technology ; Higher Education Funding Council.
- European Union : EC's DGXII(Research Directorate).
- Canada : NSERC, FRSQ (Quebec), Alberta Research Council.
- France : Min. de la Recherche, OST - Paris, CNRS.
- Germany : Max Planck Society, several gov't labs, DKFZ, MDC.
- Human Sciences Research Council (Afrique du Sud).
- People's Republic of China : Chinese Academy of Science.
- IMIST (Maroc) et CNUDST (Tunisie).

Web of Science (WoS) de Clarivate Analytics

Classements internationaux

- Shanghai.
- THES (Times Higher Education Supplement).
- CWTS (Leiden).

Autres classements importants

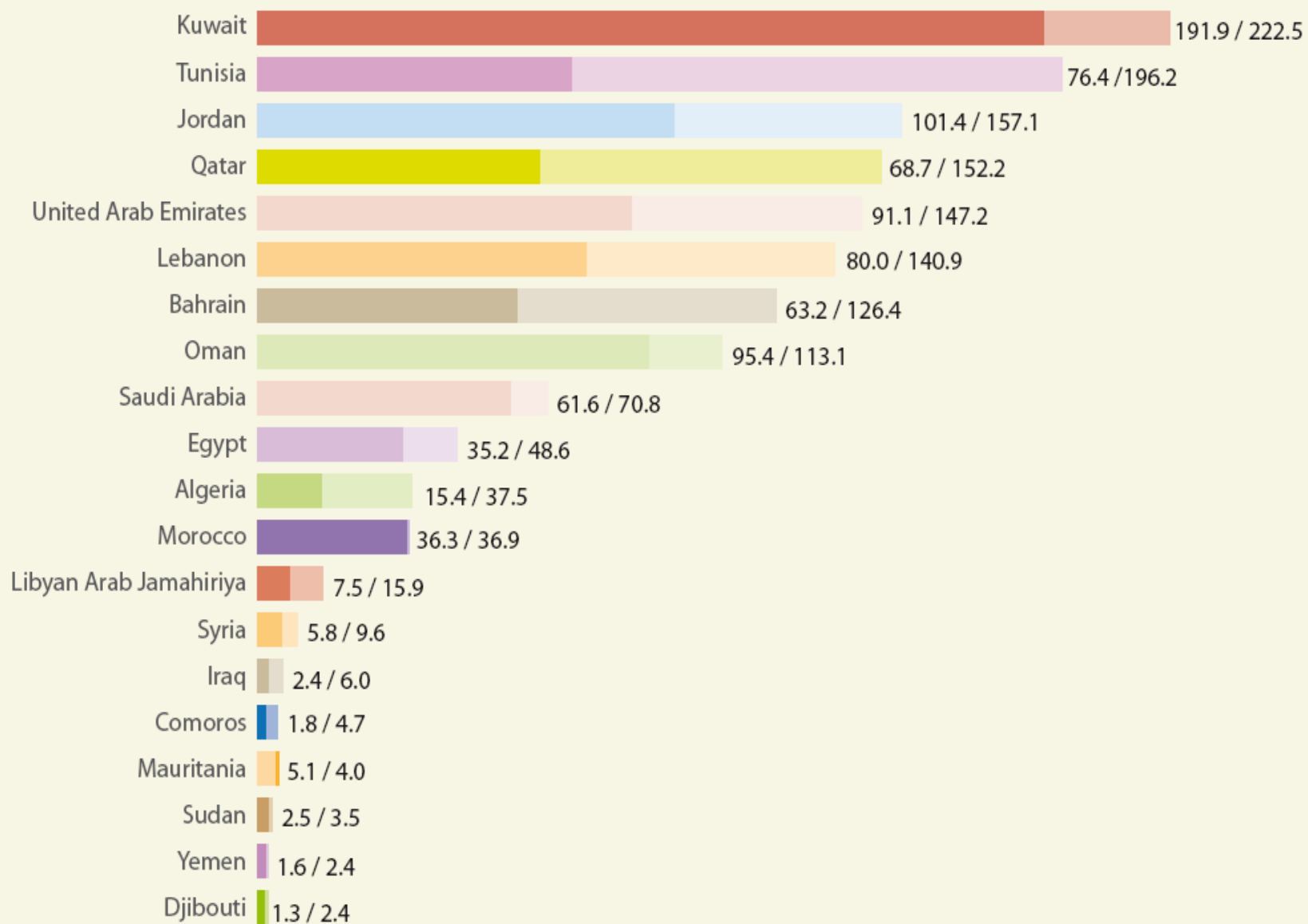
- SCImago Institutions Rankings (SIR).
- Webometrics (liens, pages, documents, Google Scholar).

Web of Science (WoS) de Clarivate Analytics

Distribution des revues par pays dans le WoS

	scix	ah	ssci	Total		scix	ah	ssci	Total		scix	ah	ssci	Total
ARGENTINA	15	2	5	22	ICELAND	3	1	0	4	PORTUGAL	7	4	1	12
ARMENIA	3	0	0	3	INDIA	98	6	7	111	REP OF GEORGIA	1	0	0	1
AUSTRALIA	100	23	76	199	IRAN	42	0	1	43	ROMANIA	43	7	8	58
AUTRIA	34	5	5	44	IRELAND	25	6	5	36	RUSSIA	149	8	3	160
AZERBAIJAN	1	0	0	1	ITALY	119	65	13	197	SAUDI ARABIA	12	0	0	12
BANGLADESH	4	0	0	4	JAMAICA	1	0	0	1	SCOTLAND	16	11	7	34
BELGIUM	16	29	8	53	JAPAN	233	6	13	252	SERBIA	19	2	3	24
BOSNIA & HERCEG	1	0	0	1	JORDAN	1	0	0	1	SINGAPORE	54	1	7	62
BRAZIL	111	14	18	143	KENYA	1	0	0	1	SLOVAKIA	20	5	3	28
BULGARIA	15	1	0	16	KUWAIT	4	0	0	4	SLOVENIA	12	6	7	25
BYELARUS	3	48	0	51	LATVIA	2	0	1	3	SOUTH AFRICA	34	15	21	70
CANADA	91	0	40	131	LITHUANIA	20	3	7	30	SOUTH KOREA	104	7	15	126
CHILE	22	18	16	56	MACEDONIA	2	0	0	2	SPAIN	75	60	49	184
COLOMBIA	11	3	5	19	MALAWI	1	0	0	1	SRI LANKA	1	0	0	1
COSTA RICA	1	0	0	1	MALAYSIA	11	1	2	14	SWEDEN	19	9	6	34
CROATIA	33	12	8	53	MALTA	0	1	0	1	SWITZERLAND	215	11	32	258
CZECH REPUBLIC	40	14	11	65	MEXICO	25	2	14	41	TAIWAN	34	5	3	42
DENMARK	68	5	2	75	NEPAL	1	0	0	1	THAILAND	8	0	0	8
EGYPT	4	0	1	5	NETHERLANDS	700	113	227	1040	TURKEY	51	6	10	67
ENGLAND	1843	416	1009	3268	NEW ZEALAND	37	4	12	53	U ARAB EMIRATES	39	0	0	39
ESTONIA	3	7	1	11	NIGERIA	2	0	2	4	UGANDA	1	0	0	1
ETHIOPIA	2	0	1	3	NORWAY	24	9	11	44	UKRAINE	15	0	0	15
FINLAND	14	3	1	18	PAKISTAN	12	0	0	12	UNITED STATES	2982	579	1368	4929
FRANCE	172	70	26	268	PEOPLES R CHINA	180	4	10	194	UZBEKISTAN	1	0	0	1
GERMANY	597	127	127	851	PERU	0	1	0	1	VENEZUELA	7	1	2	10
GREECE	18	2	0	20	PHILIPPINES	3	2	2	7	WALES	6	2	0	8
HONG KONG	8	1	1	10	POLAND	132	9	8	149					
HUNGARY	31	6	6	43						TOTAL	8878	1784	3249	13911

Figure 6: Scientific publications per million population in the Arab world, 2002 and 2008



Source: Thomson Reuters (Scientific) Inc. Web of Science. Science Citation Index Expanded, compiled for UNESCO by the Canadian Observatoire des sciences et des technologies; for population data: World Bank, World Development Indicators, June 2010

UNESCO Science Report Toward 2030



El Salvador	USA (108)	Mexico (45)	Spain (38)	Guatemala (34)
Guatemala	USA (388)	Mexico (116)	Brazil (74)	UK (63)
Honduras	USA (179)	Mexico (58)	Brazil (42)	Argentina (41)
Mexico	USA (12 873)	Spain (6 793)	France (3 818)	UK (3 525)
Nicaragua	USA (157)	Sweden (86)	Mexico (52)	Costa Rica (51)
Panama	USA (1 155)	Germany (311)	UK (241)	Canada (195)
Paraguay	USA (142)	Brazil (113)	Argentina (88)	Spain (62)
Peru	USA (2 035)	Brazil (719)	UK (646)	Spain (593)
Uruguay	USA (854)	Brazil (740)	Argentina (722)	Spain (630)
Venezuela	USA (1 417)	Spain (1 093)	France (525)	Mexico (519)

Note: Belize, Guyana and Suriname are covered in the Chapter 6 on the CARICOM countries. See also Figure 8.9 devoted solely to Brazil.

Source: Thomson Reuters' Web of Science, Science Citation Index Expanded; data treatment by Science-Metrix

RESEARCH REPORT: AFRICA

GLOBAL RESEARCH REPORT AFRICA

APRIL 2010

JONATHAN ADAMS
CHRISTOPHER KING
DANIEL HOOK

DATA SOURCES

Volume and subject area analyses used the 2008 editions of the Thomson Reuters *National Science Indicators*. Collaboration analyses were carried out using *Research Performance Profiles* data in *InCites™*, the new web-based platform for research evaluation from Thomson Reuters. Database years were used to delineate years, and only article, note and review document types were considered. To analyze performance at a category level the 21 main fields in Thomson Reuters *Essential Science IndicatorsSM* were used. *National Science Indicators*, *Essential Science Indicators* and *InCites* use publication and citation data derived from the citation data found in *Web of ScienceSM*, also from Thomson Reuters.

TABLE 1

The most prolific African nations during the five-year period 2004-2008 in the 21 main fields used in Thomson Reuters *Essential Science Indicators*SM database. The top five nations are highlighted below by color.

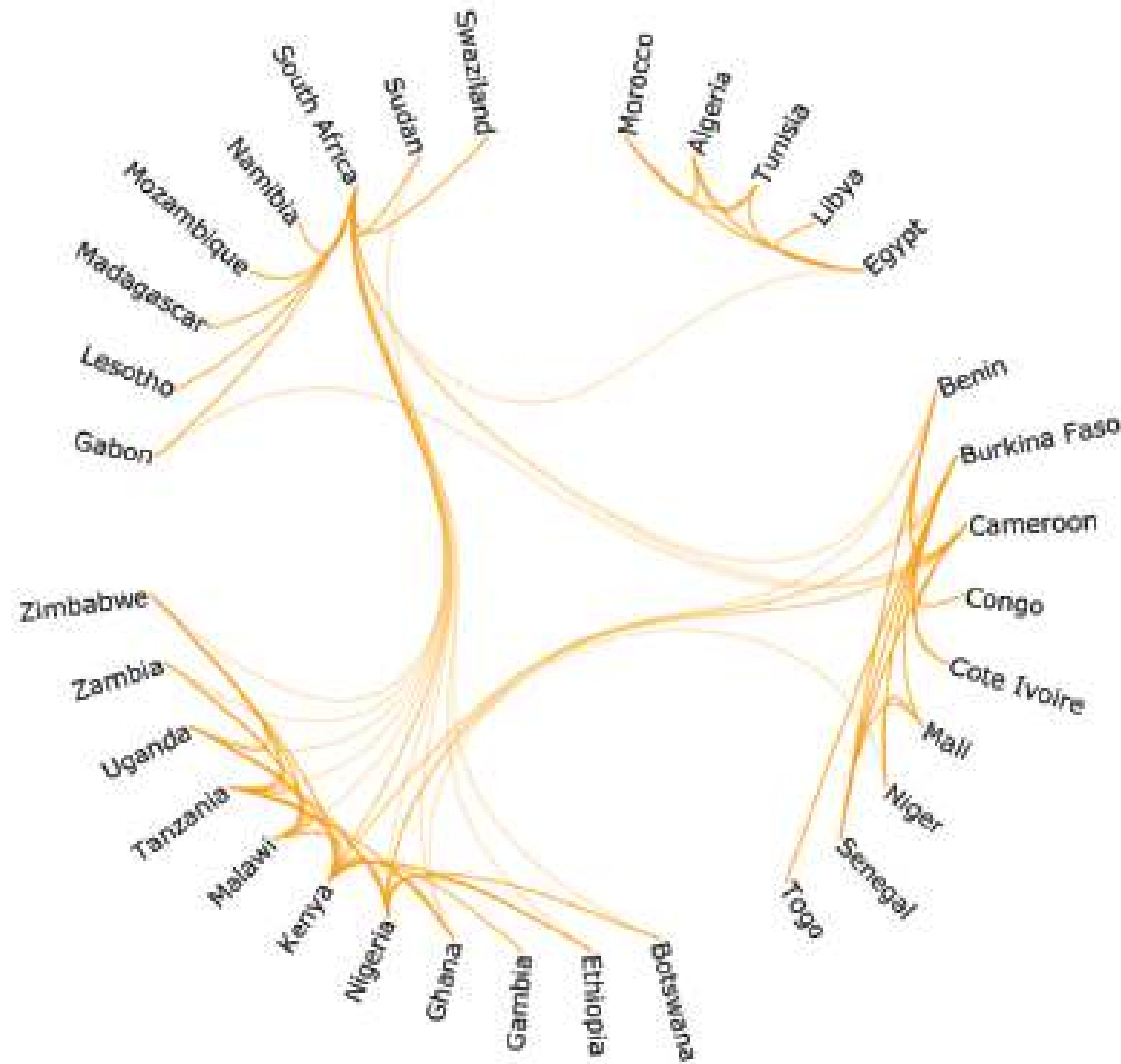
Most Prolific African Nations in 21 Main Fields, 2004-08					
Top five nations ranked by number of papers / percent of papers in field					
FIELD	1	2	3	4	5
Agricultural Sciences	Nigeria 952 / 0.95	South Africa 692 / 0.69	Egypt 461 / 0.46	Kenya 380 / 0.38	Tunisia 247 / 0.25
Biology & Biochemistry	South Africa 1,242 / 0.46	Nigeria 1,004 / 0.37	Egypt 521 / 0.19	Tunisia 505 / 0.19	Morocco 200 / 0.07
Chemistry	Egypt 3,634 / 0.62	South Africa 2,059 / 0.35	Algeria 1,065 / 0.18	Tunisia 980 / 0.17	Morocco 866 / 0.15
Clinical Medicine	South Africa 4,183 / 0.41	Egypt 2,584 / 0.26	Tunisia 1,587 / 0.16	Nigeria 1,392 / 0.14	Morocco 867 / 0.09
Computer Science	South Africa 359 / 0.24	Egypt 240 / 0.16	Algeria 170 / 0.11	Tunisia 163 / 0.11	Morocco 74 / 0.05
Economics & Business	South Africa 507 / 0.69	Kenya 54 / 0.07	Ethiopia 42 / 0.06	Nigeria 39 / 0.05	Tunisia 29 / 0.04
Engineering	Egypt 2,311 / 0.58	South Africa 1,385 / 0.35	Algeria 800 / 0.20	Tunisia 752 / 0.19	Morocco 459 / 0.12
Environment/Ecology	South Africa 1,707 / 1.29	Kenya 420 / 0.32	Egypt 367 / 0.28	Nigeria 351 / 0.27	Tanzania 206 / 0.16

Geosciences	South Africa 1,534 / 1.13	Egypt 434 / 0.32	Morocco 294 / 0.22	Algeria 148 / 0.11	Tunisia 141 / 0.10
Immunology	South Africa 518 / 0.86	Kenya 269 / 0.45	Uganda 207 / 0.34	Tanzania 110 / 0.18	Egypt 89 / 0.15
Materials Science	Egypt 1,421 / 0.61	Tunisia 575 / 0.23	Algeria 572 / 0.25	South Africa 524 / 0.23	Morocco 294 / 0.13
Mathematics	South Africa 652 / 0.52	Morocco 444 / 0.35	Tunisia 444 / 0.35	Egypt 368 / 0.29	Algeria 297 / 0.24
Microbiology	South Africa 534 / 0.66	Egypt 243 / 0.30	Tunisia 213 / 0.26	Kenya 147 / 0.18	Cameroon 76 / 0.09
Molecular Biology & Genetics	South Africa 276 / 0.20	Egypt 139 / 0.10	Tunisia 113 / 0.08	Kenya 58 / 0.04	Morocco 45 / 0.03
Neuroscience & Behaviour	South Africa 310 / 0.21	Egypt 75 / 0.05	Tunisia 58 / 0.04	Morocco 45 / 0.03	Nigeria 37 / 0.03
Pharmacology & Toxicology	Egypt 600 / 0.66	South Africa 375 / 0.41	Nigeria 235 / 0.26	Morocco 101 / 0.11	Tunisia 90 / 0.10
Physics	Egypt 1,880 / 0.40	South Africa 1,194 / 0.26	Algeria 933 / 0.20	Morocco 646 / 0.14	Tunisia 601 / 0.13
Plant & Animal Science	South Africa 4,179 / 1.55	Egypt 798 / 0.30	Kenya 784 / 0.29	Nigeria 602 / 0.22	Tunisia 527 / 0.19
Psychiatry/Psychology	South Africa 667 / 0.56	Nigeria 102 / 0.09	Egypt 43 / 0.04	Uganda 38 / 0.03	Kenya 30 / 0.03
Social Sciences, General	South Africa 2,107 / 1.06	Nigeria 331 / 0.17	Kenya 222 / 0.11	Tanzania 179 / 0.09	Ghana 140 / 0.07
Space Science	South Africa 556 / 0.93	Egypt 86 / 0.14	Namibia 51 / 0.09	Morocco 31 / 0.05	Algeria 24 / 0.04

Source: Web of ScienceSM

NETWORK OF COLLABORATION:

A new visual interpretation of collaboration, by paper not by number of researchers, reveals clusters of countries with the strongest partnerships.



Source: Web of ScienceSM; Analysis: Daniel Hook*

FIGURE 5: TOP COLLABORATING COUNTRIES FOR SIX KEY AFRICAN COUNTRIES

Algeria

USA	2.6%
UK	2.3%
France	42.0%
Italy	2.6%
Spain	2.6%

Tunisia

USA	2.8%
UK	2.1%
France	32.6%
Italy	2.7%
Spain	2.5%

Egypt

USA	9.6%
UK	4.0%
Saudi Arabia	6.0%
Germany	5.2%
Japan	3.7%

Kenya

USA	32.0%
UK	23.6%
Germany	6.8%
Netherlands	5.8%
Belgium	4.8%

Nigeria

USA	7.4%
UK	5.9%
Germany	2.9%
Italy	1.8%
China	1.5%

South Africa

USA	15.1%
UK	11.7%
Germany	5.7%
Australia	4.5%
France	3.9%



Source: Web of ScienceSM; Analysis: Wolfram Mathematica[®] 7

World Social Science Report
UNESCO / Institute of Development Studies/ International Social Science
Council

Table A7 - Number of social science publications per country, Scopus and Web of Science, 2008–13 (continued)

Number of papers (full and fractional counts), share of output in the database (based on fractional counts), ratio of output shares between Scopus and WOS (based on fractional counts)

Country	2008–2013				2008–2013	
	No. of publications (full counting)		No. of publications (fractional counting)		% of world total (fractional counting)	
	Scopus	WOS	Scopus	WOS	Scopus	WOS
Costa Rica	242	155	150	95	0.0%	0.0%
Trinidad and Tobago	238	103	188	74	0.0%	0.0%
Oman	232	74	180	54	0.0%	0.0%
Jamaica	221	63	172	43	0.0%	0.0%
Zimbabwe	213	106	155	67	0.0%	0.0%
Malta	205	103	152	69	0.0%	0.0%
Fiji	192	115	131	77	0.0%	0.0%
Algeria	190	47	141	29	0.0%	0.0%
Cameroon	178	84	132	53	0.0%	0.0%
Palestinian Territory	166	0	113	0	0.0%	0.0%
Malawi	155	97	99	57	0.0%	0.0%
Georgia	154	61	94	36	0.0%	0.0%

TOP h-index au monde

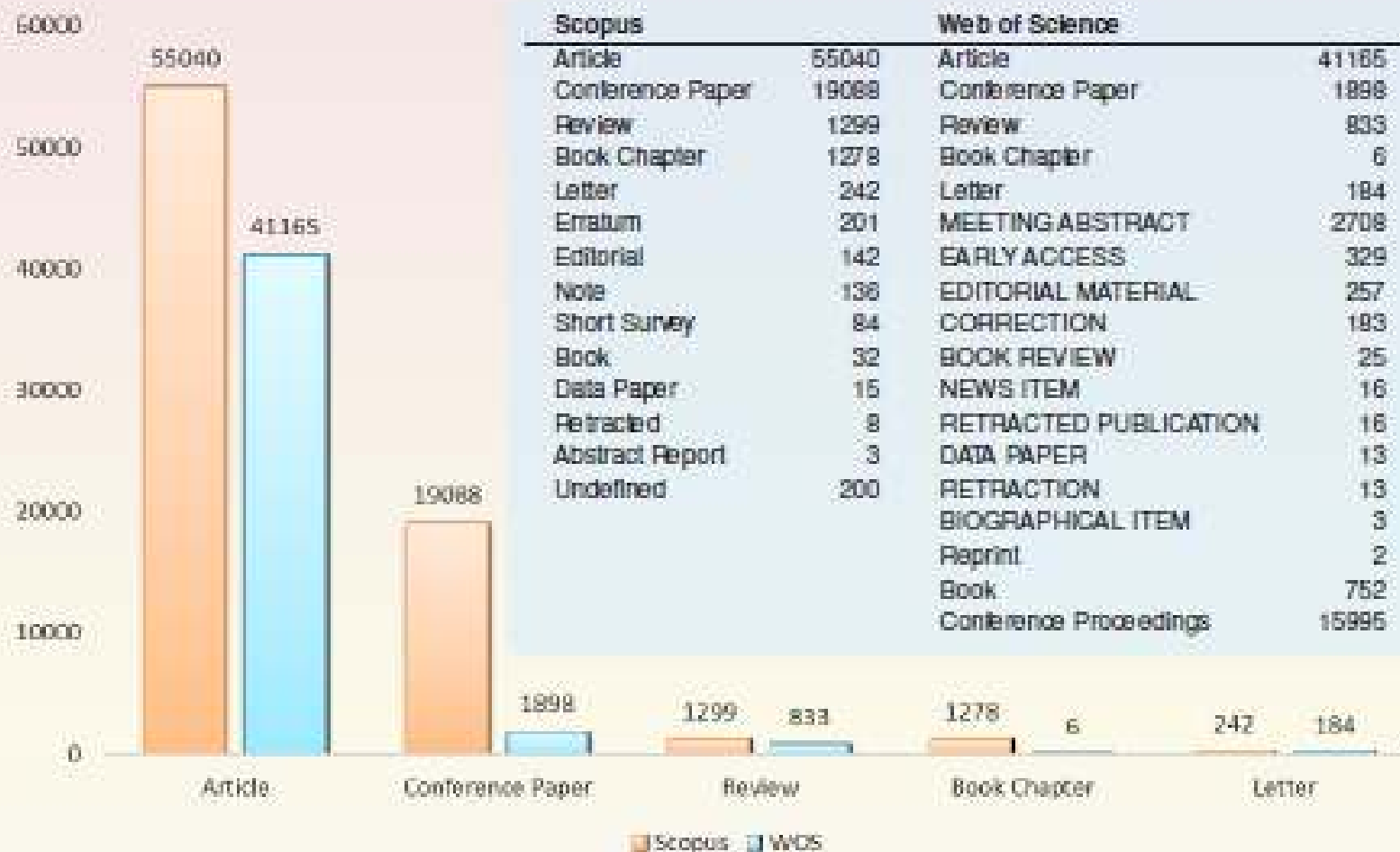
RANK	NAME	ORGANIZATION	H-INDEX	CITATIONS
1	Sigmund Freud	University of Vienna	269	488396
2	Graham Colditz	Washington University in St Louis	264	256415
3	Eugene Braunwald	Brigham and Women's Hospital; Harvard Medical School	246	290831
4	Ronald C Kessler	Harvard University	245	263006
5	Pierre Bourdieu	Centre de Sociologie Européenne; Collège de France	242	528228
7	Solomon H Snyder	Johns Hopkins University	240	216313
6	Michel Foucault	Collège de France	237	690001
8	Robert Langer	Massachusetts Institute of Technology MIT	232	216122
9	Bert Vogelstein	Johns Hopkins University	230	315600
10	Eric Lander	Broad Institute Harvard MIT	225	294683
11	Michael Karin	University of California San Diego	223	210430
12	Gordon Guyatt	McMaster University	217	187432
13	Michael Graetzel	Ecole Polytechnique Fédérale de Lausanne	216	235390
14	Salim Yusuf	McMaster University	214	248236
15	Richard A Flavell	Yale University; HHMI	214	171241
16	Frank B Hu	Harvard University	206	158298
17	T.W Robbins	University of Cambridge	206	130965
97	Edward Nelson	Institute for Advanced Study in Princeton	187	178793
101	Albert Einstein	Institute of Advanced Studies Princeton	116	100000

La production nationale dans le Web of Science et Scopus

Production Algérienne Globale

- **WoS** *45389 documents*
- **SCOPUS** *77768 documents*

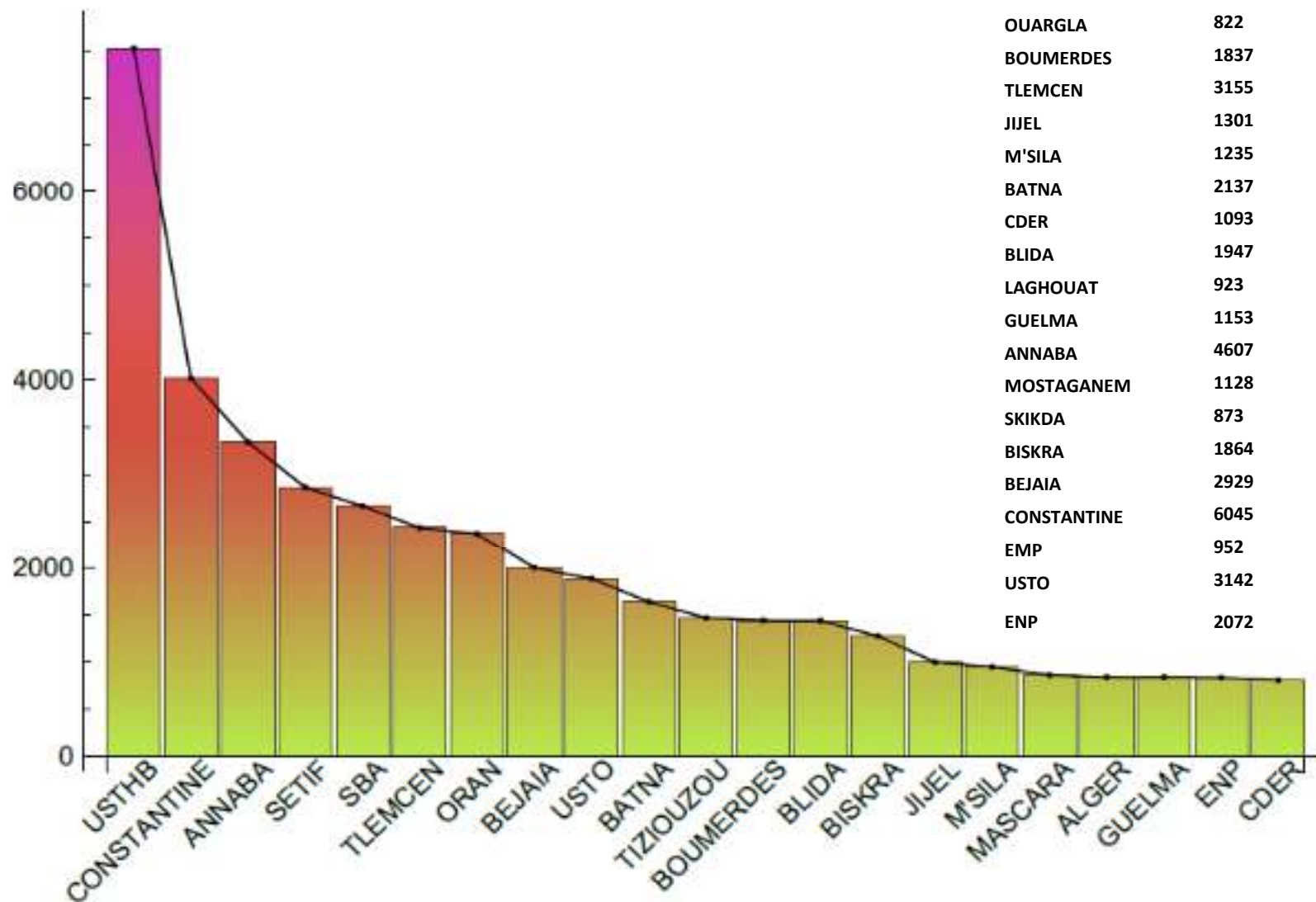
Production algérienne globale par type de documents



Production algérienne globale par année



Production algérienne globale par établissement



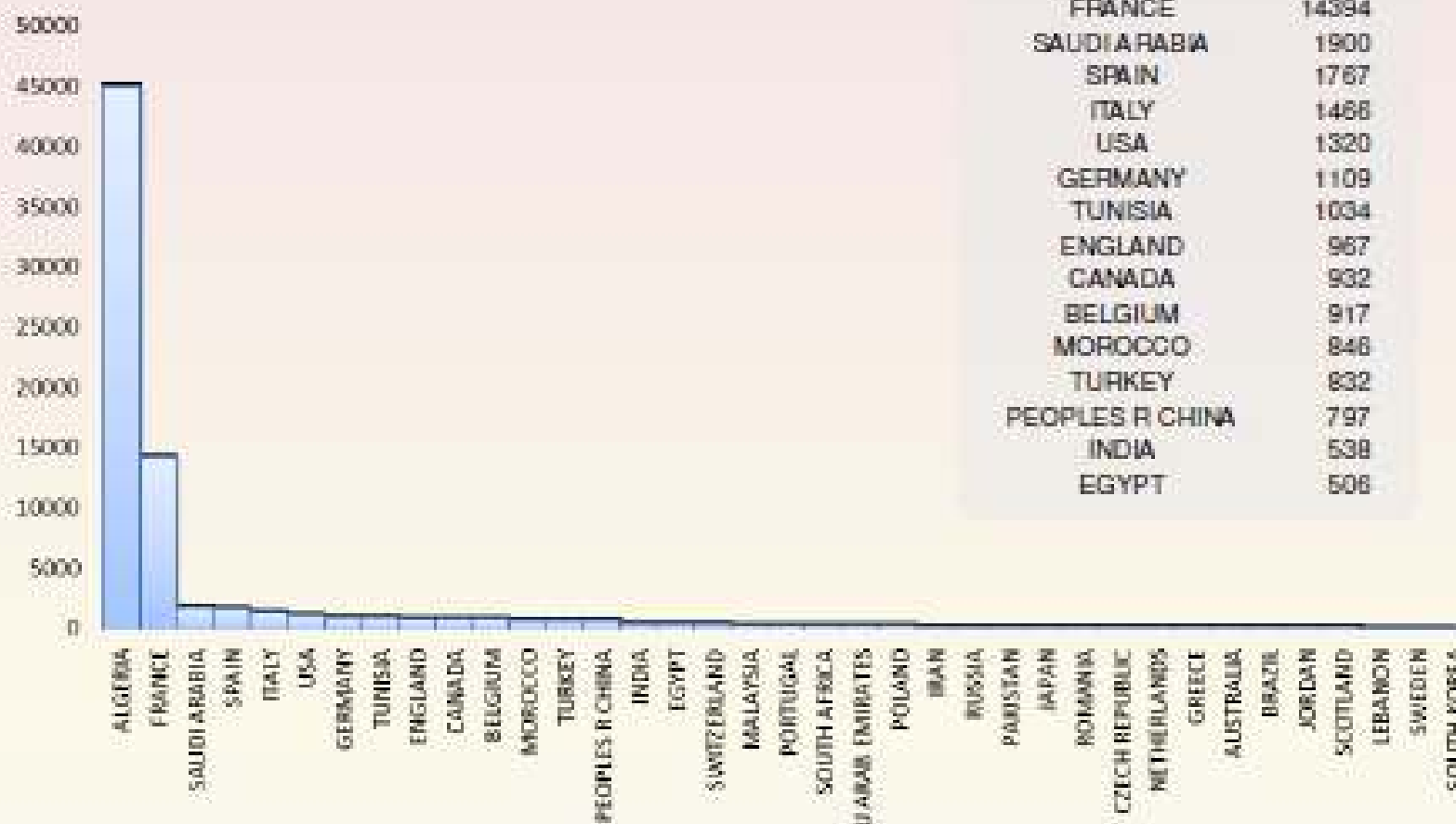
Etablissements	SCOPUS	WoS	QP
ORAN	2537	2374	0,936
MASCARA	1025	866	0,845
CHLEF	732	617	0,843
USTHB	8954	7522	0,840
SETIF	3481	2862	0,822
SBA	3296	2666	0,809
TIZIOUZOU	1861	1469	0,789
OUARGLA	822	646	0,786
BOUMERDES	1837	1441	0,784
TLEMCEN	3155	2439	0,773
JIJEL	1301	1003	0,771
M'SILA	1235	952	0,771
BATNA	2137	1639	0,767
CDER	1093	813	0,744
BLIDA	1947	1438	0,739
LAGHOUAT	923	681	0,738
GUELMA	1153	842	0,730
ANNABA	4607	3338	0,725
MOSTAGANEM	1128	806	0,715
SKIKDA	873	601	0,688
BISKRA	1864	1278	0,686
BEJAIA	2929	1998	0,682
CONSTANTINE	6045	4009	0,663
EMP	952	596	0,626
USTO	3142	1883	0,599
ENP	2072	838	0,404



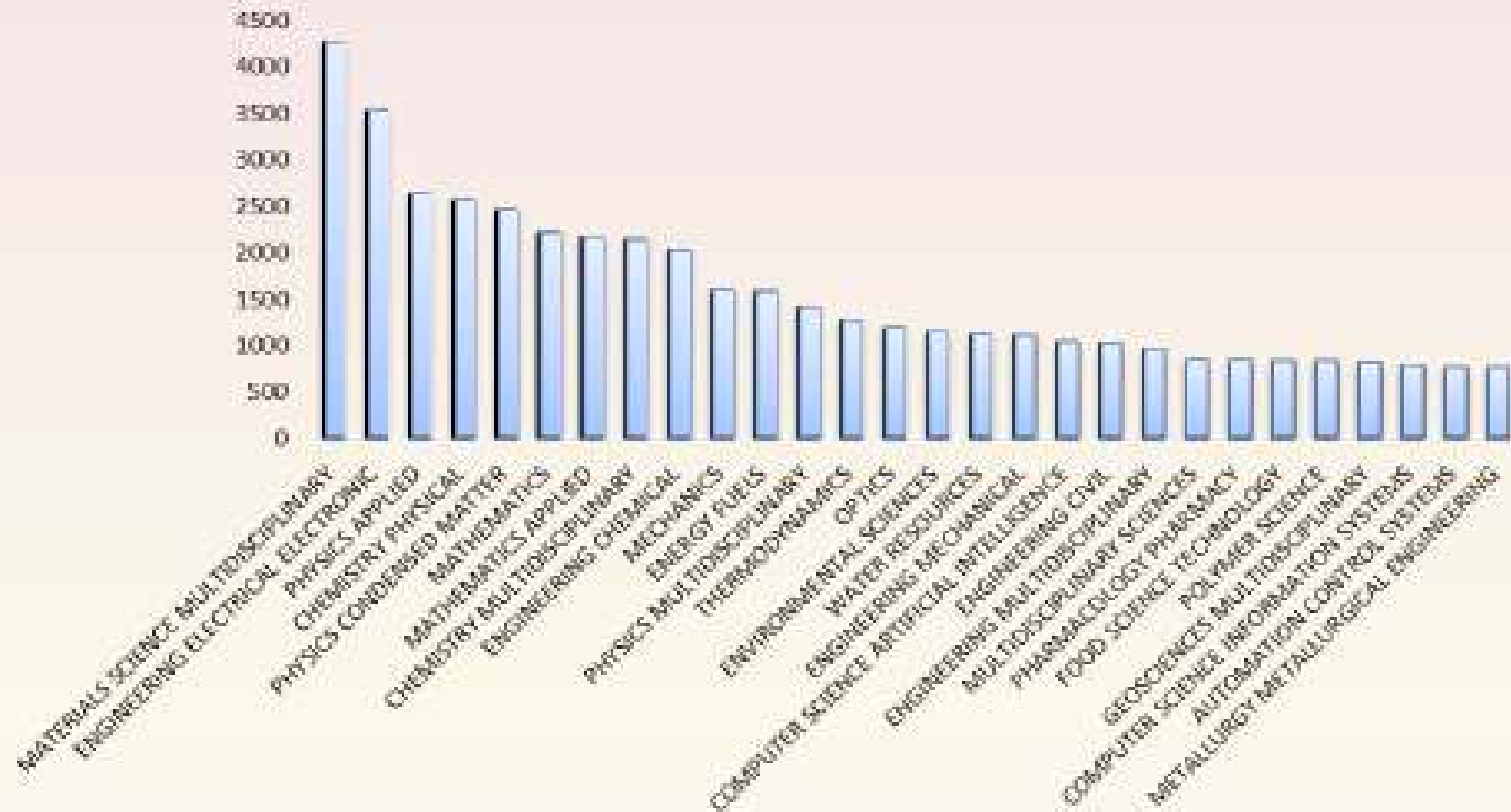
Production algérienne globale par langue



Production algérienne globale par co-affiliation



Production algérienne globale par micro-domaine



Micro domaine	Production	Micro domaine	Production
MATERIALS SCIENCE MULTIDISCIPLINARY	4278	Engineering	28812
ENGINEERING ELECTRICAL ELECTRONIC	3530	Physics and Astronomy	16759
PHYSICS APPLIED	2835	Computer Science	18566
CHEMISTRY PHYSICAL	2584	Materials Science	14045
PHYSICS CONDENSED MATTER	2482	Mathematics	11794
MATHEMATICS	2212	Chemistry	9084
MATHEMATICS APPLIED	2166	Agricultural and Biological Sciences	5770
CHEMISTRY MULTIDISCIPLINARY	2141	Energy	5727
ENGINEERING CHEMICAL	2023	Environmental Science	5308
MECHANICS	1594	Medicine	5282
ENERGY FUELS	1581	Chemical Engineering	4898
PHYSICS MULTIDISCIPLINARY	1408	Biochemistry Genetics and Molecular Biology	4149
THERMODYNAMICS	1266	Earth and Planetary Sciences	3807
OPTICS	1181	Social Sciences	2158
ENVIRONMENTAL SCIENCES	1152	Pharmacology Toxicology and Pharmaceutics	1956
WATER RESOURCES	1129	Decision Sciences	1395
ENGINEERING MECHANICAL	1104	Immunology and Microbiology	1322
COMPUTER SCIENCE ARTIFICIAL INTELLIGENCE	1039	Multidisciplinary	806
ENGINEERING CIVIL	1025	Business Management and Accounting	797
ENGINEERING MULTIDISCIPLINARY	983	Arts and Humanities	658
MULTIDISCIPLINARY SCIENCES	851	Veterinary	508
PHARMACOLOGY PHARMACY	841	Economics Econometrics and Finance	382
FOOD SCIENCE TECHNOLOGY	838	Neuroscience	290
POLYMER SCIENCE	834	Nursing	226
GEOSCIENCES MULTIDISCIPLINARY	824	Health Professions	196
COMPUTER SCIENCE INFORMATION SYSTEMS	786	Psychology	135
AUTOMATION CONTROL SYSTEMS	782	Dentistry	38
METALLURGY METALLURGICAL ENGINEERING	758	Undefined	18

La Production Nationale en Sciences Humaines et Sociales

WoS **852** dont 153 en Open Access
SCOPUS 589)

Production Algérienne en SHS par Micro-Domaines



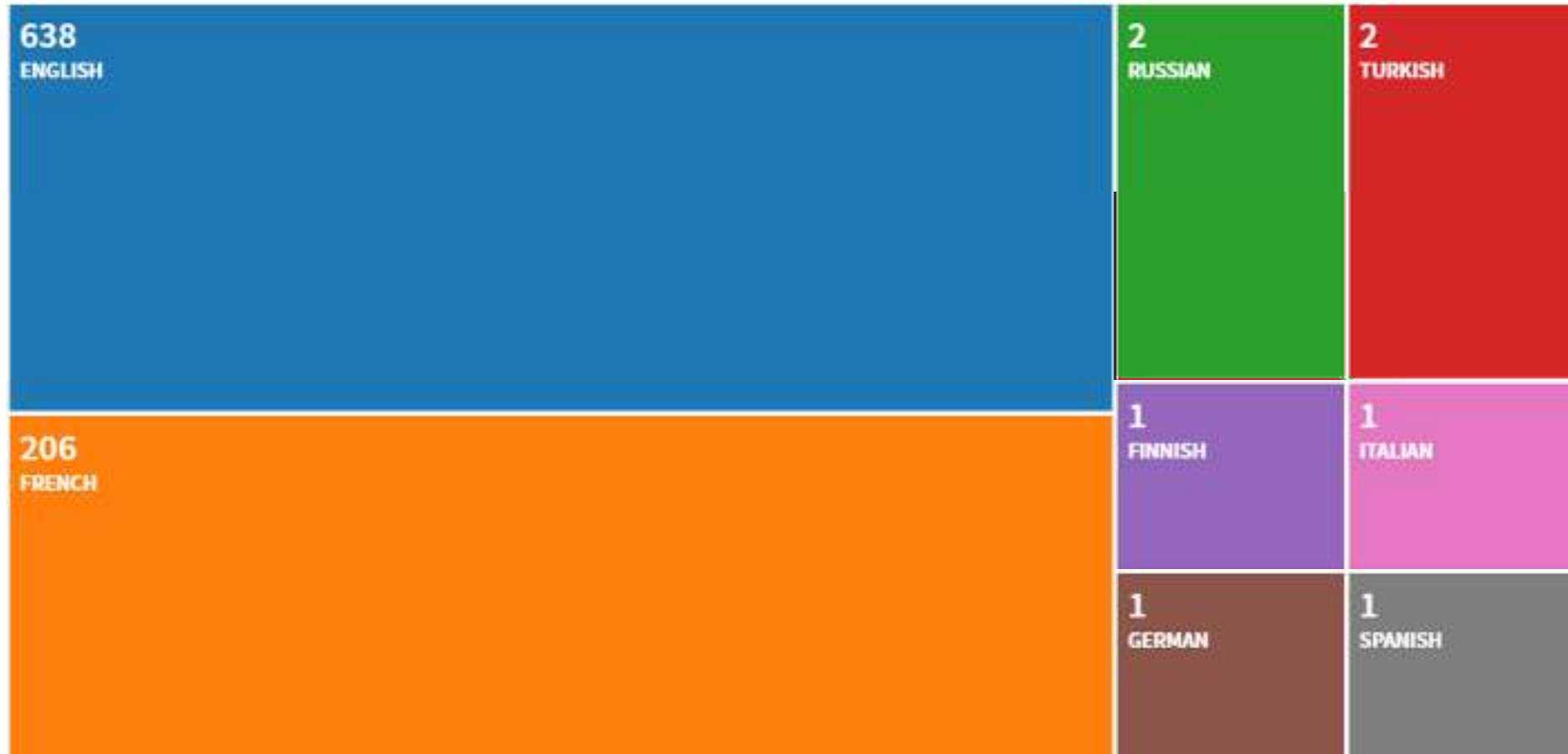
Production Algérienne en SHS par Domaines



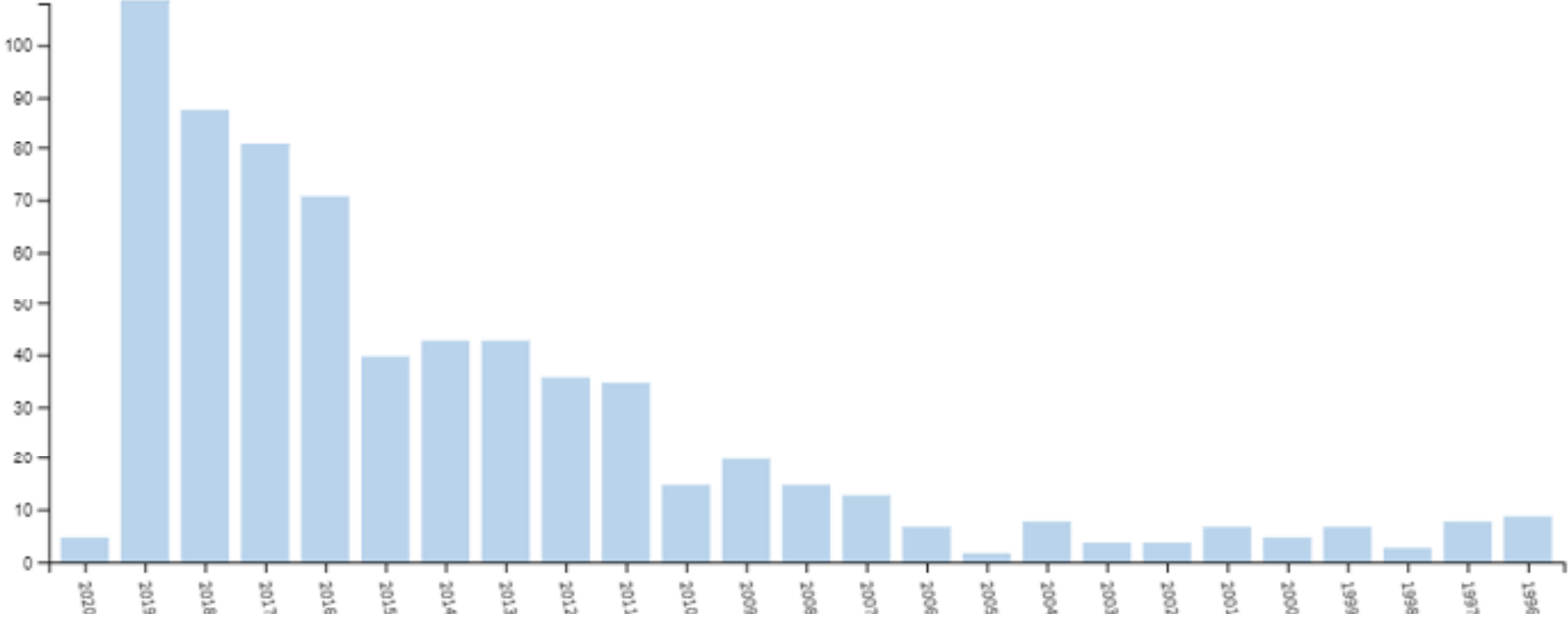
Production Algérienne en SHS par Types de Documents



Langue de production en SHS dans le WoS



La Production Algérienne en SHS par Année



Production Algérienne en SHS par Etablissement



Production Algérienne en SHS par Journaux

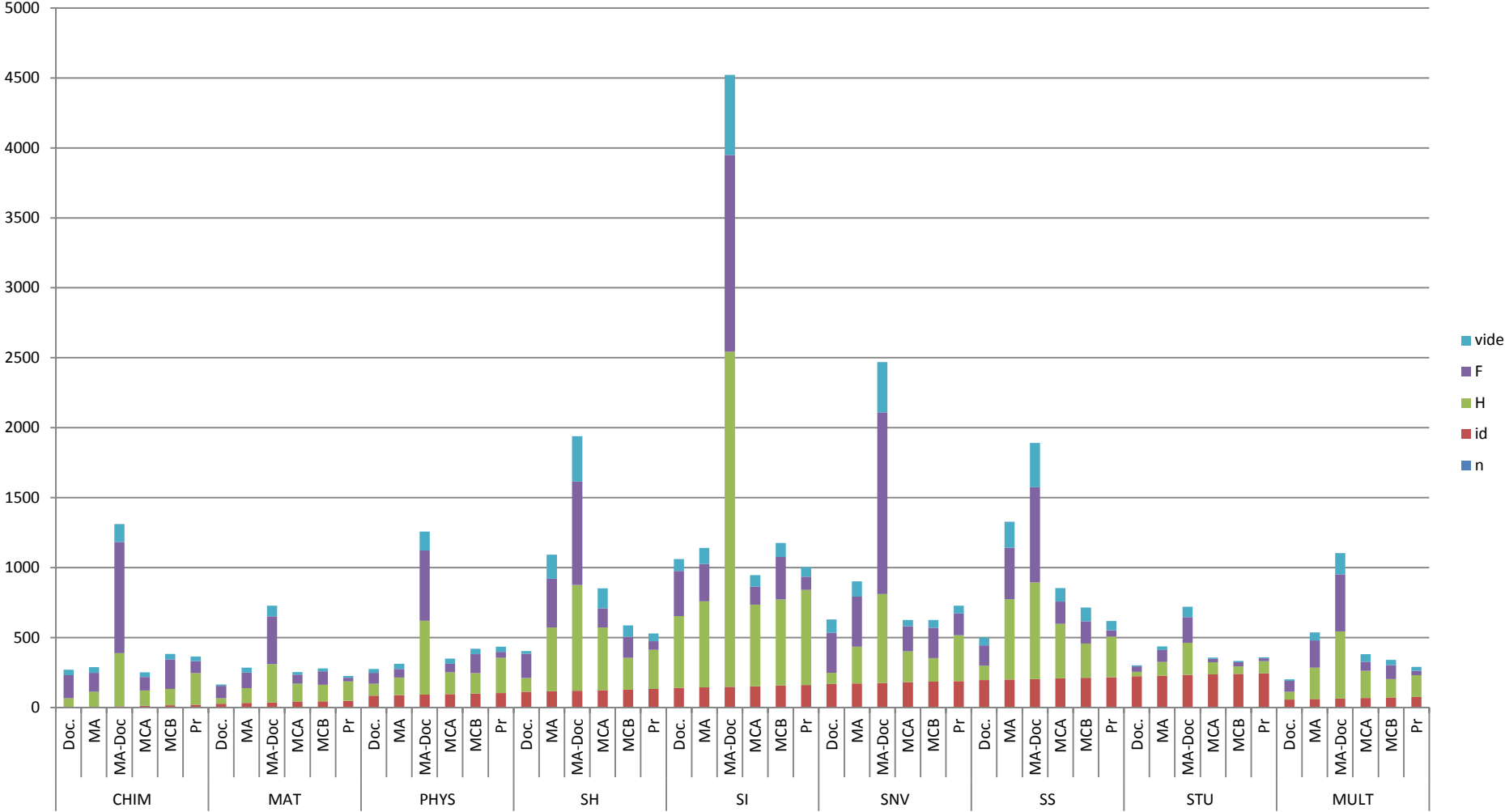


Co-Affiliation de la Production Algérienne en SHS

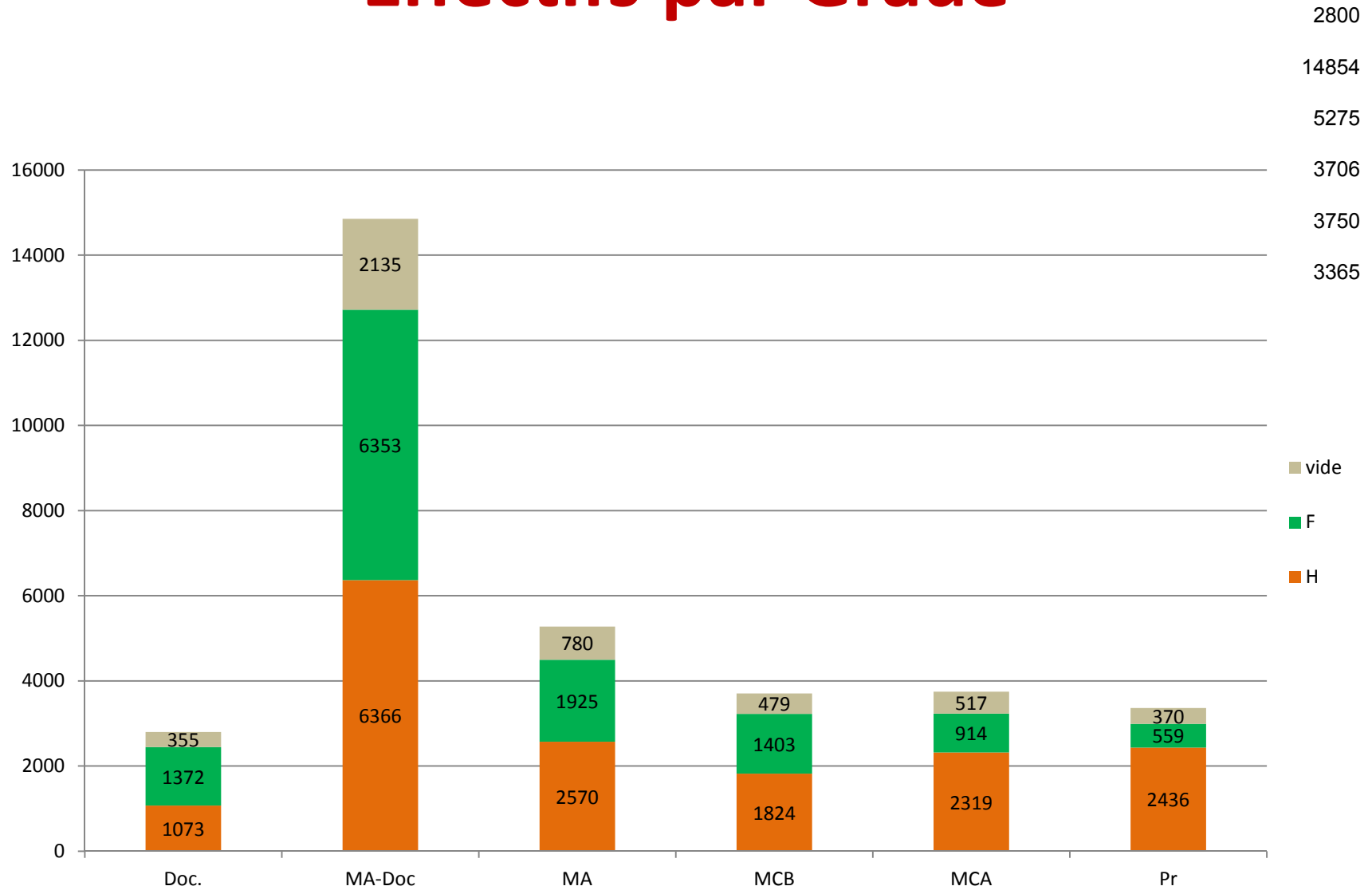


IV. Les Laboratoires en Quelques Chiffres (1379 laboratoires)

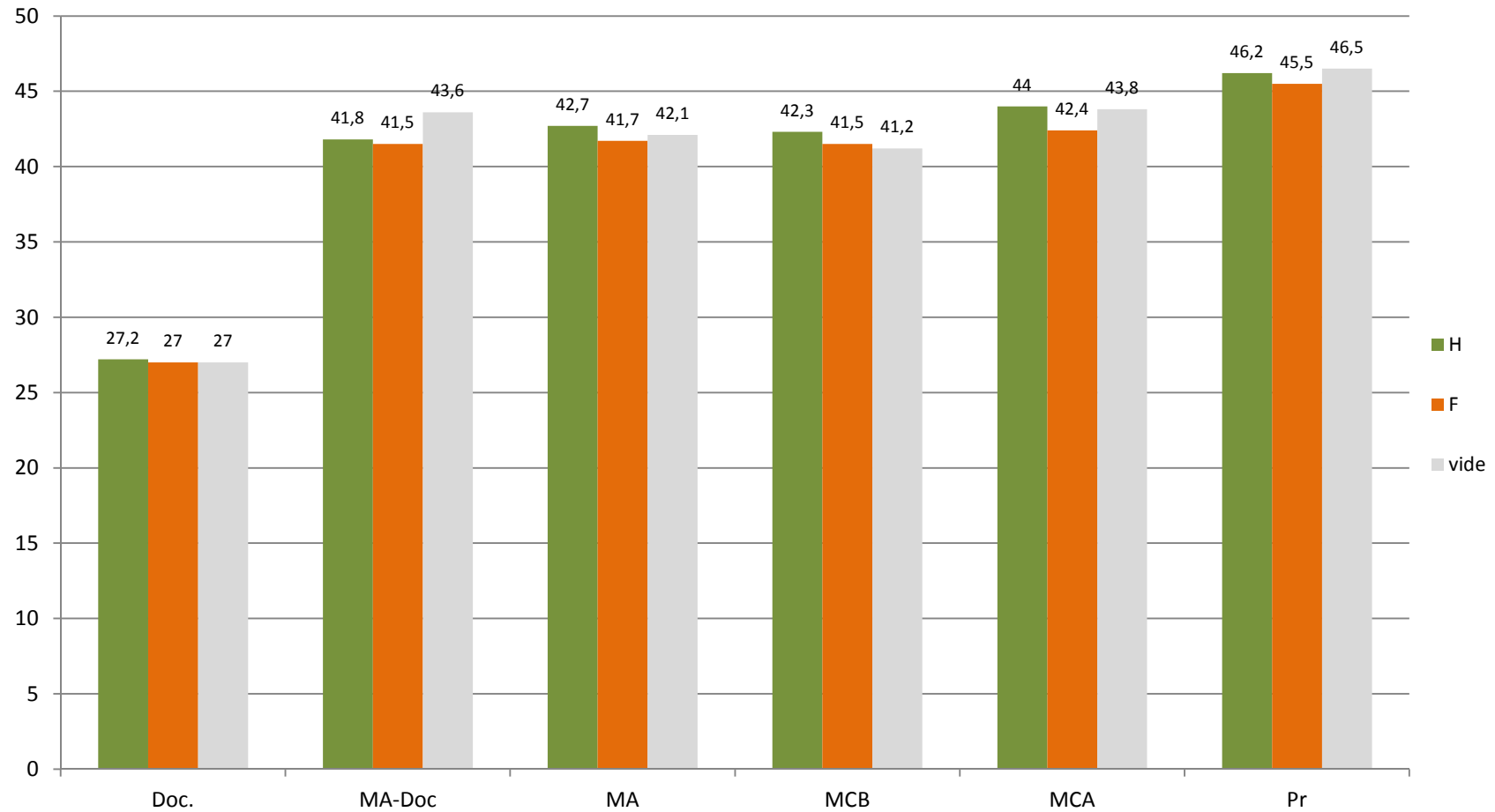
Effectifs par grands domaines suivant les grades



Effectifs par Grade



Moyenne d'âge par grade



THANMIRTH