(preliminary) Biblio Analysis

Database: Search expression: No. References retrieved: Web of Science (main collection) "controlled vocabulary" OR "thesaur*" AND "semant*" 827

Analysis:

- 1. Statistical analysis from WoS website;
- 2. Data mining, statistical analysis and visualization from VOSViewer

2014 (62)	2004 (38)	1999 (15)	1989 (2)
2015 (61)	2008 (35)	1994 (14)	1982 (2)
2012 (61)	2007 (34)	1997 (12)	1980 (2)
2013 (59)	2005 (30)	1996 (12)	1990 (1)
2016 (53)	2003 (23)	1991 (12)	1988 (1)
2011 (53)	1998 (20)	1992 (11)	1986 (1)
2010 (50)	2002 (19)	1995 (9)	1983 (1)
2009 (47)	2001 (19)	1993 (7)	1977 (1)
2006 (38)	2000 (18)	1987 (4)	

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SPAIN (37)	MEXICO (4)	PHILIPPINES (1)
SWITZERLAND (32)	ISRAEL (4)	PAKISTAN (1)
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BRAZIL (25)	CZECH REPUBLIC (4)	NORTH IRELAND (1)
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AUSTRALIA (20)	SOUTH AFRICA (3)	NEW ZEALAND (1)
NETHERLANDS (18)	POLAND (3)	LUXEMBOURG (1)
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WALES (10)	MAURITIUS (2)	COLOMBIA (1)
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JAPAN (9)	KENYA (2)	

ARTICLE (546)	MEETING ABSTRACT (8)	LETTER (3)	NEWS ITEM (1)
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REVIEW (79)			
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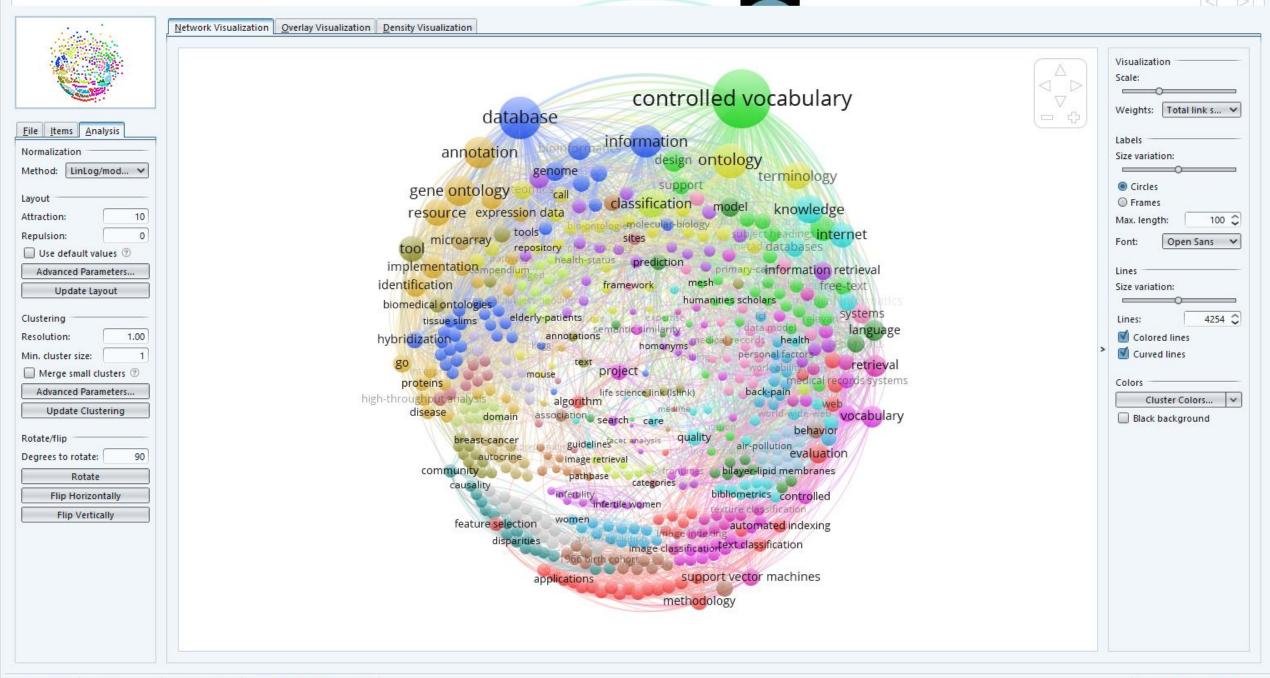
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MEDICAL INFORMATICS (114)	SURGERY (5)
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MATHEMATICAL COMPUTATIONAL BIOLOGY (83)	MEDICAL LABORATORY TECHNOLOGY (5)
BIOCHEMICAL RESEARCH METHODS (69)	LINGUISTICS (5)
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HEALTH CARE SCIENCES SERVICES (59)	ENGINEERING MANUFACTURING (5)
COMPUTER SCIENCE THEORY METHODS (58)	EMERGENCY MEDICINE (5)
COMPUTER SCIENCE ARTIFICIAL INTELLIGENCE (54)	EDUCATION SCIENTIFIC DISCIPLINES (5)
BIOCHEMISTRY MOLECULAR BIOLOGY (51)	DENTISTRY ORAL SURGERY MEDICINE (5)
GENETICS HEREDITY (27)	CHEMISTRY MULTIDISCIPLINARY (5)
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STATISTICS PROBABILITY (20)	PSYCHIATRY (4)
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PLANT SCIENCES (14)	MICROBIOLOGY (4)
ENGINEERING ELECTRICAL ELECTRONIC (14)	IMAGING SCIENCE PHOTOGRAPHIC TECHNOL (4)
MULTIDISCIPLINARY SCIENCES (13)	HEALTH POLICY SERVICES (4)
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MMUNOLOGY (11)	ENGINEERING CIVIL (4)
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PUBLIC ENVIRONMENTAL OCCUPATIONAL HEALTH (9)	UROLOGY NEPHROLOGY (3)
NURSING (9)	RESPIRATORY SYSTEM (3)
REHABILITATION (8)	REMOTE SENSING (3)
ENVIRONMENTAL SCIENCES (8)	PSYCHOLOGY CLINICAL (3)
BIOLOGY (8)	PERIPHERAL VASCULAR DISEASE (3)
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VETERINARY SCIENCES (6)	MATERIALS SCIENCE MULTIDISCIPLINARY (3)
TELECOMMUNICATIONS (6)	HISTORY (3)
ROBOTICS (6)	COMMUNICATION (3)
PHARMACOLOGY PHARMACY (6)	

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COMPUTER SCIENCE (345) TOXICOLOGY (5) BIOPHYSICS (2) INFORMATION SCIENCE LIBRARY SCIENCE (236) SURGERY (5) ART (2) BIOCHEMISTRY MOLECULAR BIOLOGY (115) OBSTETRICS GYNECOLOGY (5) ZOOLOGY (1) MEDICAL INFORMATICS (114) MEDICAL LABORATORY TECHNOLOGY (5) VIROLOGY (1) MATHEMATICAL COMPUTATIONAL BIOLOGY (83) EMERGENCY MEDICINE (5) SPORT SCIENCES (1) SPECTROSCOPY (1) BIOTECHNOLOGY APPLIED MICROBIOLOGY (62) DENTISTRY ORAL SURGERY MEDICINE (5) HEALTH CARE SCIENCES SERVICES (60) PSYCHIATRY (4) PHYSICS (1) ENGINEERING (41) PATHOLOGY (4) PHYSICAL GEOGRAPHY (1) GENETICS HEREDITY (27) MICROBIOLOGY (4) OPHTHALMOLOGY (1) GENERAL INTERNAL MEDICINE (23) IMAGING SCIENCE PHOTOGRAPHIC TECHNOLOGY OPERATIONS RESEARCH MANAGEMENT SCIENCE (4) (1) MATHEMATICS (20) WATER RESOURCES (3) ONCOLOGY (1) PLANT SCIENCES (14) UROLOGY NEPHROLOGY (3) OCEANOGRAPHY (1) SCIENCE TECHNOLOGY OTHER TOPICS (13) RESPIRATORY SYSTEM (3) MUSIC (1) RESEARCH EXPERIMENTAL MEDICINE (12) REMOTE SENSING (3) MINING MINERAL PROCESSING (1) EDUCATION EDUCATIONAL RESEARCH (12) METALLURGY METALLURGICAL ENGINEERING (1) OTORHINOLARYNGOLOGY (3) IMMUNOLOGY (11) NEUROSCIENCES NEUROLOGY (3) MEDICAL ETHICS (1) ENVIRONMENTAL SCIENCES ECOLOGY (11) MATERIALS SCIENCE (3) MARINE FRESHWATER BIOLOGY (1) RADIOLOGY NUCLEAR MEDICINE MEDICAL IMAGING HISTORY (3) LITERATURE (1) (10) GEOLOGY (10) COMMUNICATION (3) LEGAL MEDICINE (1) PUBLIC ENVIRONMENTAL OCCUPATIONAL HEALTH AUTOMATION CONTROL SYSTEMS (3) INFECTIOUS DISEASES (1) (9) NURSING (9) AGRICULTURE (3) GEOGRAPHY (1) CHEMISTRY (9) SOCIAL SCIENCES OTHER TOPICS (2) GASTROENTEROLOGY HEPATOLOGY (1) REHABILITATION (8) REPRODUCTIVE BIOLOGY (2) FOOD SCIENCE TECHNOLOGY (1) LIFE SCIENCES BIOMEDICINE OTHER TOPICS (8) ENDOCRINOLOGY METABOLISM (1) PHILOSOPHY (2) PHARMACOLOGY PHARMACY (7) ORTHOPEDICS (2) DEVELOPMENTAL BIOLOGY (1) VETERINARY SCIENCES (6) NUTRITION DIETETICS (2) CRIMINOLOGY PENOLOGY (1) TELECOMMUNICATIONS (6) INTEGRATIVE COMPLEMENTARY MEDICINE (2) BIOMEDICAL SOCIAL SCIENCES (1) ROBOTICS (6) INSTRUMENTS INSTRUMENTATION (2) AUDIOLOGY SPEECH LANGUAGE PATHOLOGY (1) PSYCHOLOGY (6) GOVERNMENT LAW (2) ARCHAEOLOGY (1) LINGUISTICS (6) GERIATRICS GERONTOLOGY (2) ANESTHESIOLOGY (1) ANATOMY MORPHOLOGY (1) ENTOMOLOGY (2) CELL BIOLOGY (6) CARDIOVASCULAR SYSTEM CARDIOLOGY (6) BUSINESS ECONOMICS (2) ALLERGY (1)

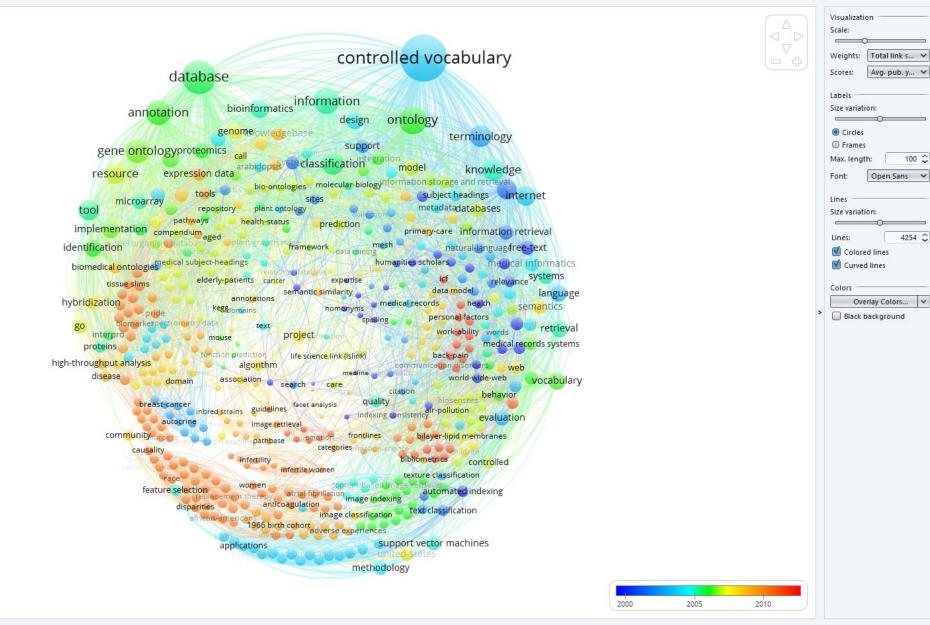
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WARE D (4)	BREANT C (4)	GARAVELLI JS (3)	BINDING C (3)
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Network Visualization Overlay Visualization Density Visualization



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Repulsion: 0	
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Advanced Parameters	
Update Layout	
Clustering	
Resolution: 1.00	
Min. cluster size: 1	
Merge small clusters ③	
Advanced Parameters	
Update Clustering	
Rotate/flip	
Degrees to rotate: 90	
Rotate	
Flip Horizontally	
Flip Vertically	
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Attraction:	10
Repulsion:	0
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Clustering	
Resolution:	1.00
Min. cluster size:	1
	1 usters ⑦
Merge small clu	neters
Merge small clu Advanced Parar Update Clust	neters
	neters ering
Merge small cli Advanced Parar Update Clust Rotate/flip	neters ering
Merge small cli Advanced Parar Update Clust Rotate/flip Degrees to rotate:	neters ering 90



annotation bioinformation genome design ontology gene ontologyteomics_{call} support terminology resource expression data tools bio-ontologiemolecular-biology bio atoms sites sites subject headings internet microarray repository plant ontology bio atoms of the section retrieved tool pathways health-status prediction sites sites retrieved

implementation primary-cainformation retrieval identification framework mesh natural-langufree-text biomedical ontologies eldesh estimate

icf relevan Systems data model language al records health semantics tissue slims elderly-patients:///cer expertise semantic similarity annotations homonyms me hybridization text project personal factors go biomerie. work-abilitywords retrieval medical records systems proteins life science link (Islink) algorithm medine web world-wide-web vocabulary behavior back-pain nroughput analysis domain association search care disease

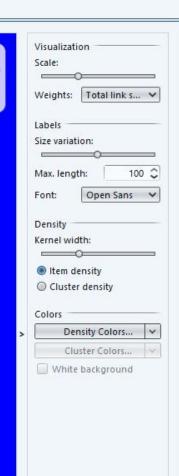
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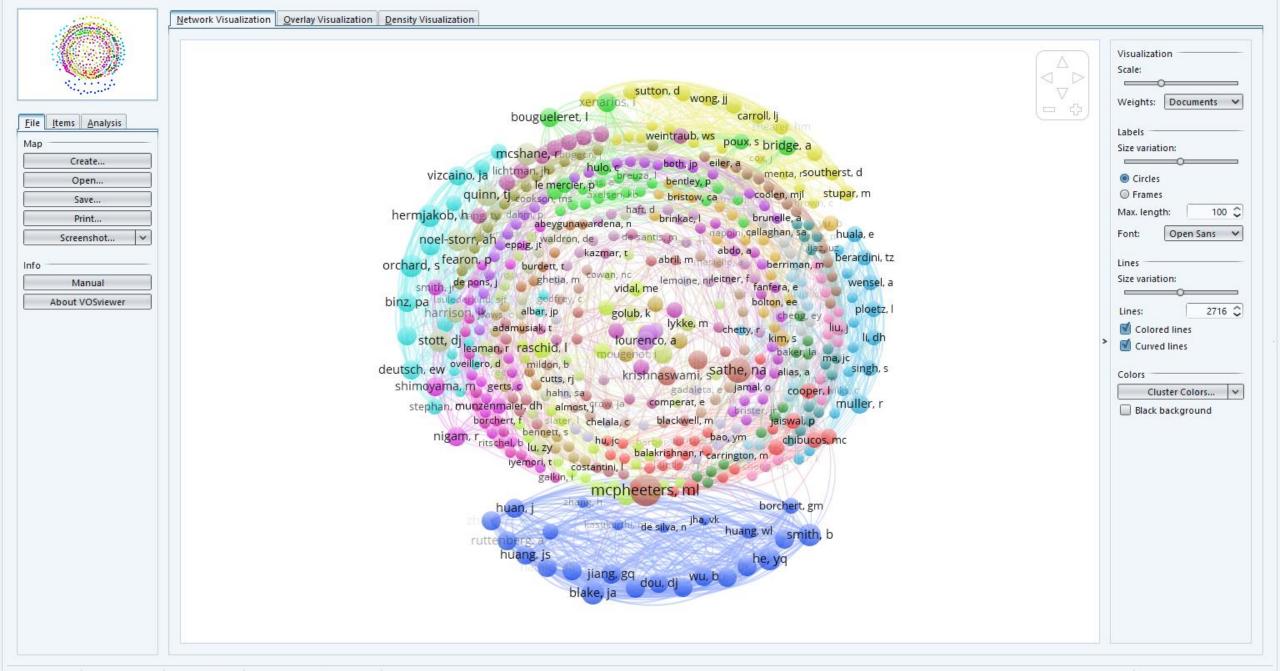
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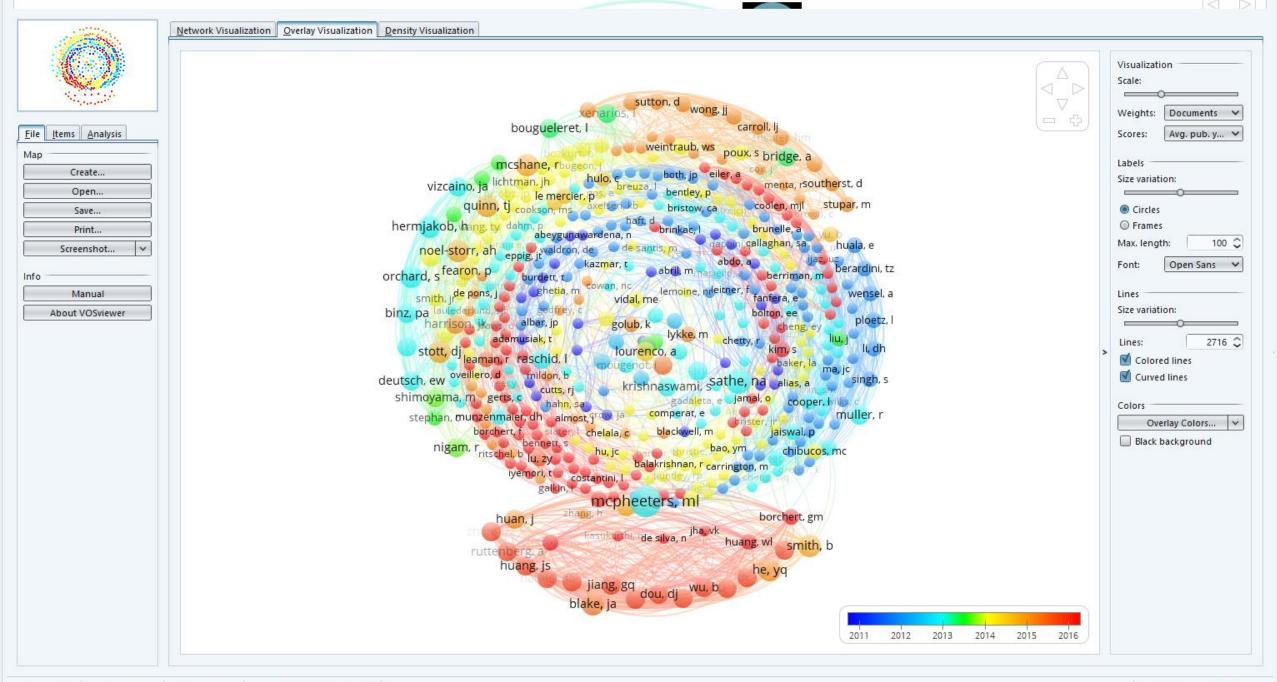
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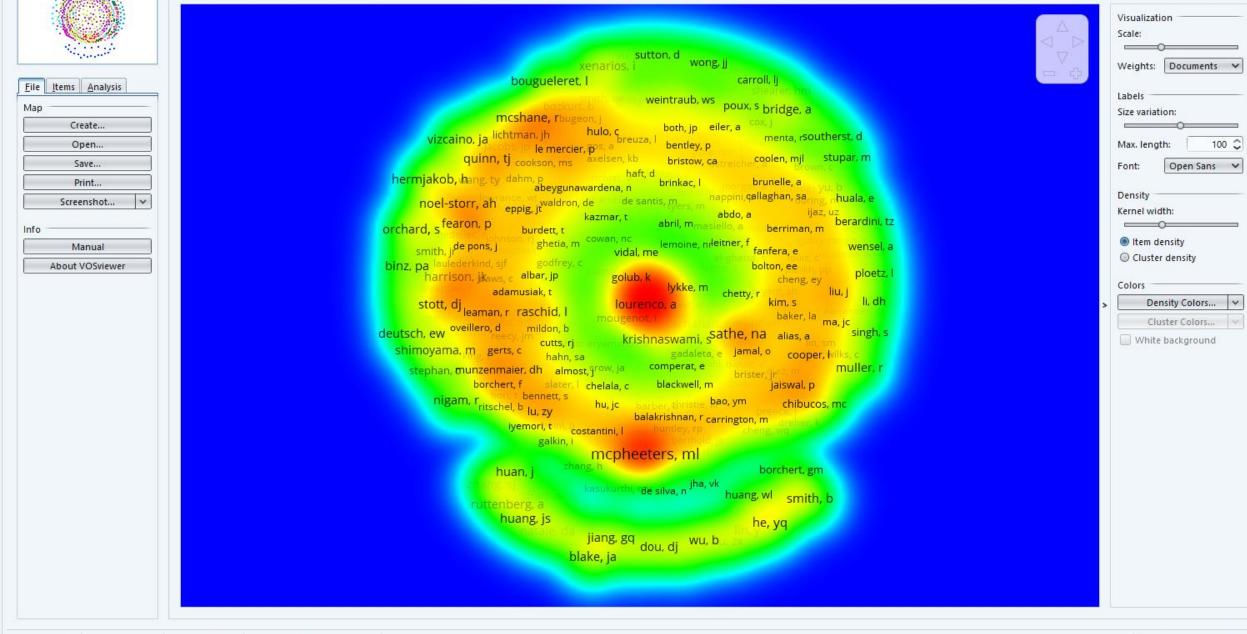
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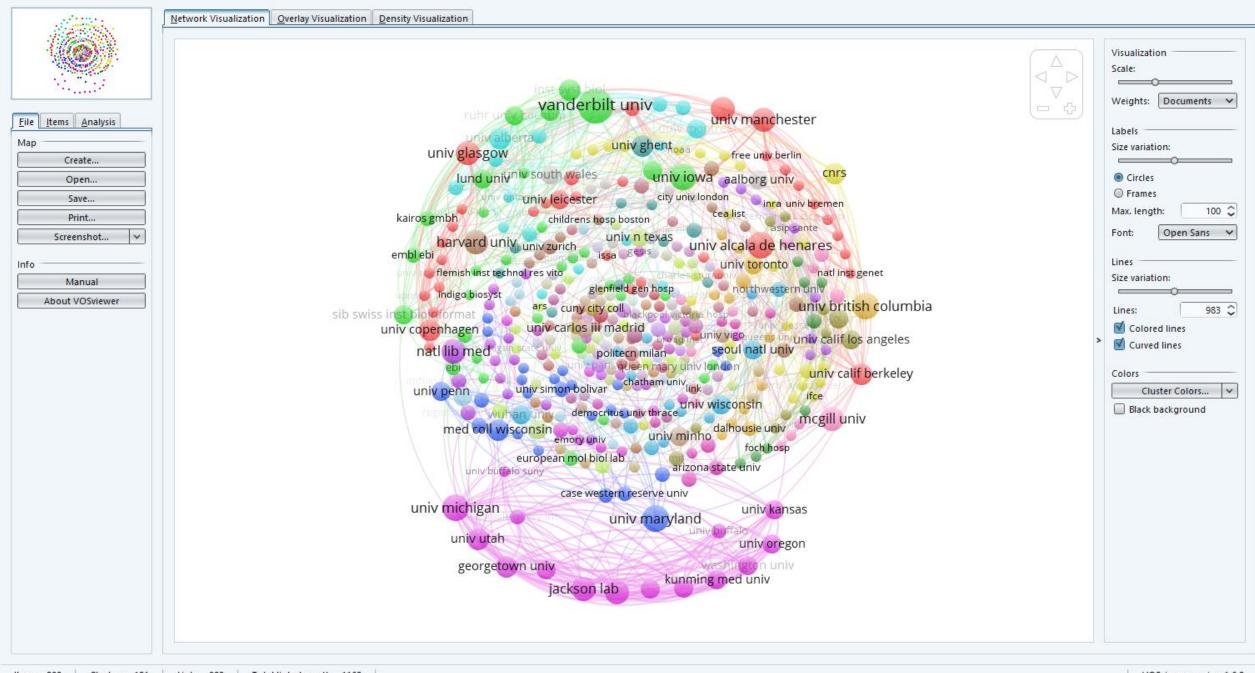
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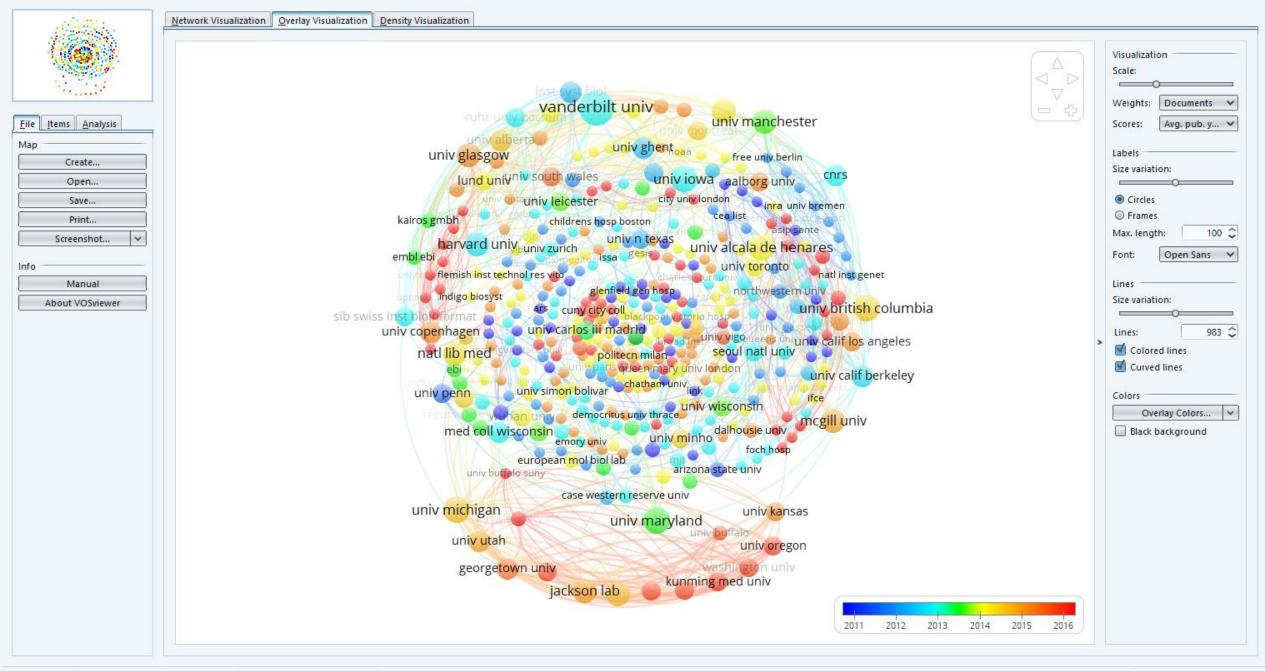


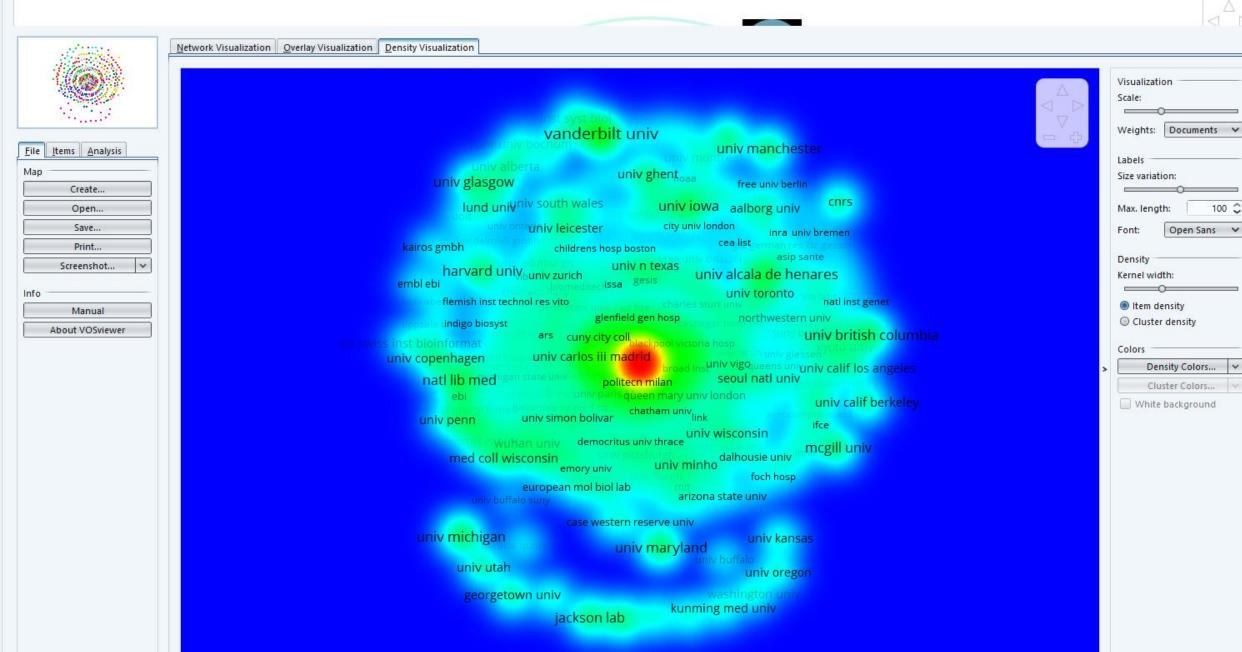




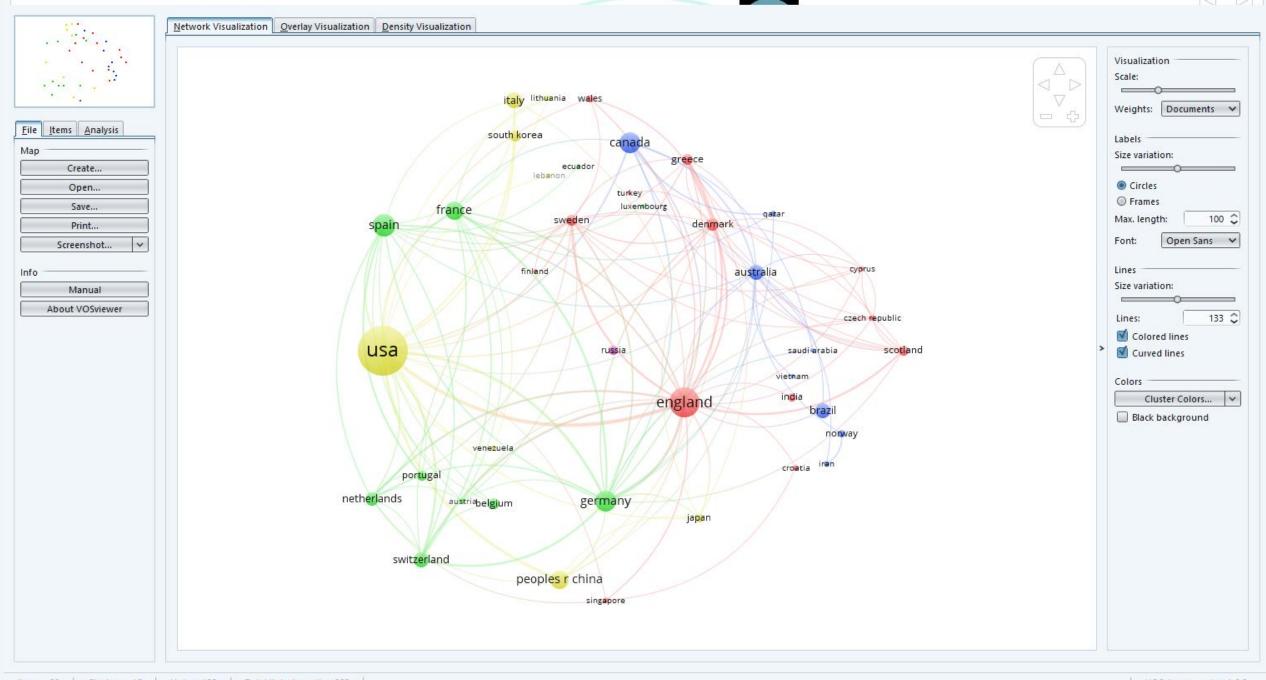


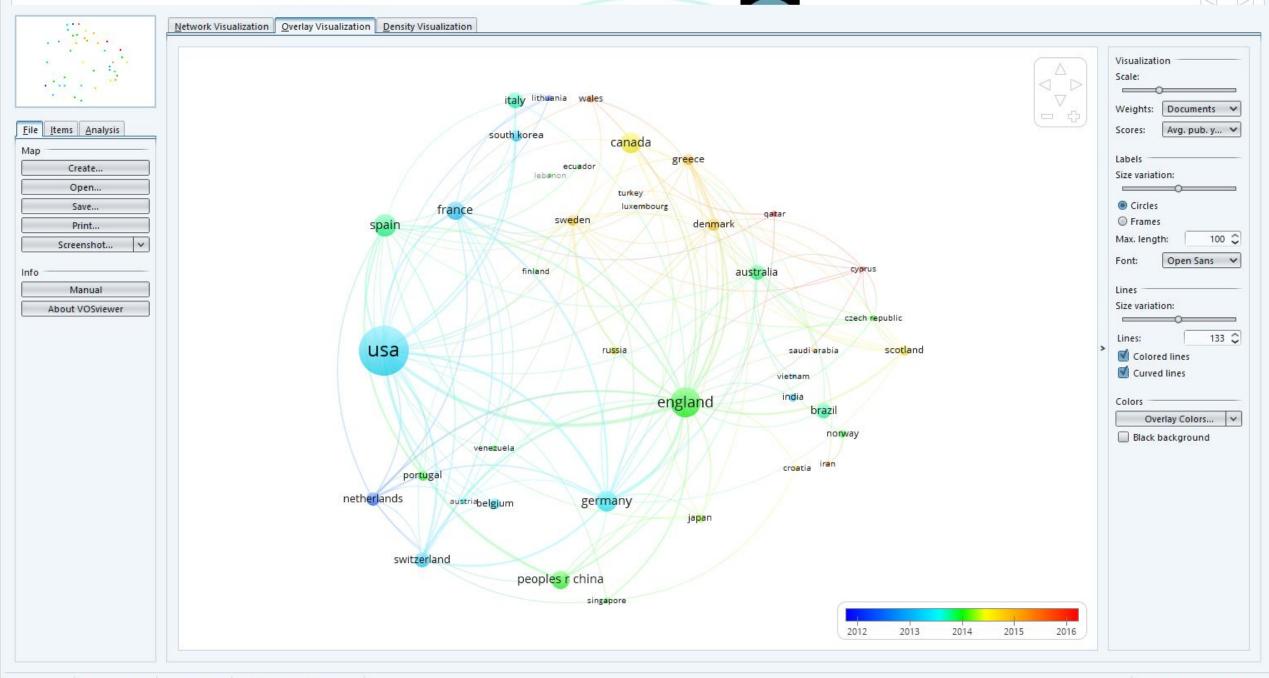
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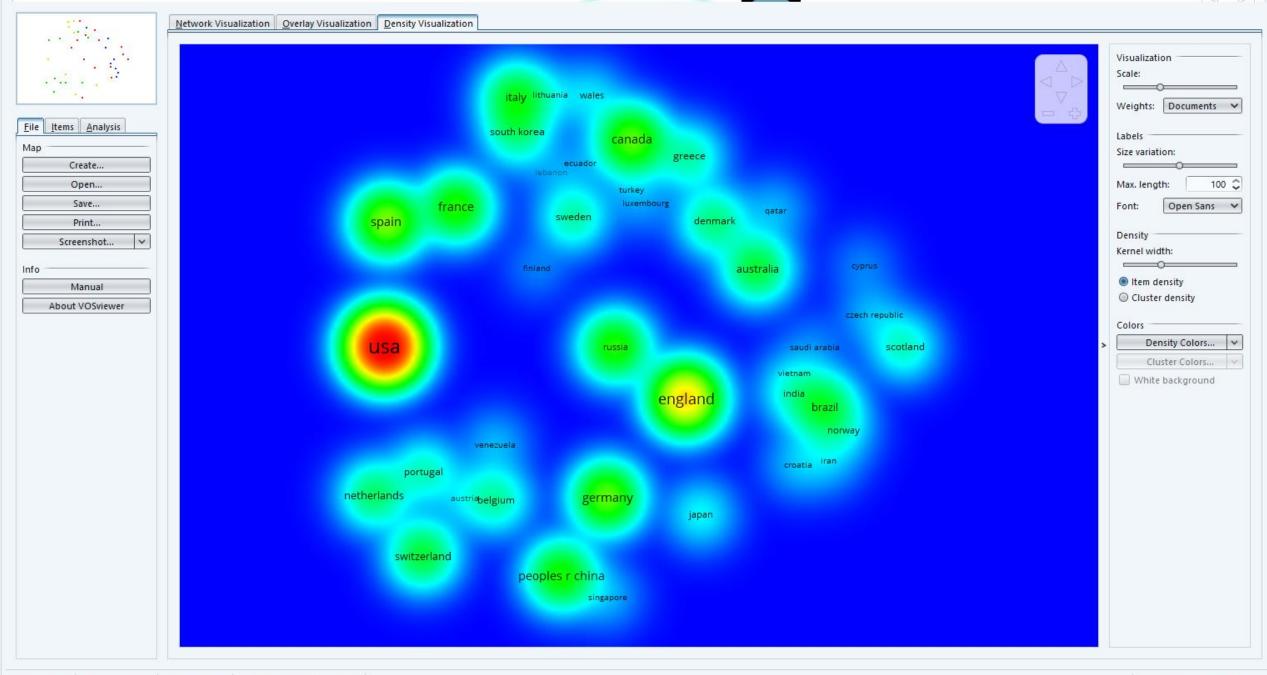




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