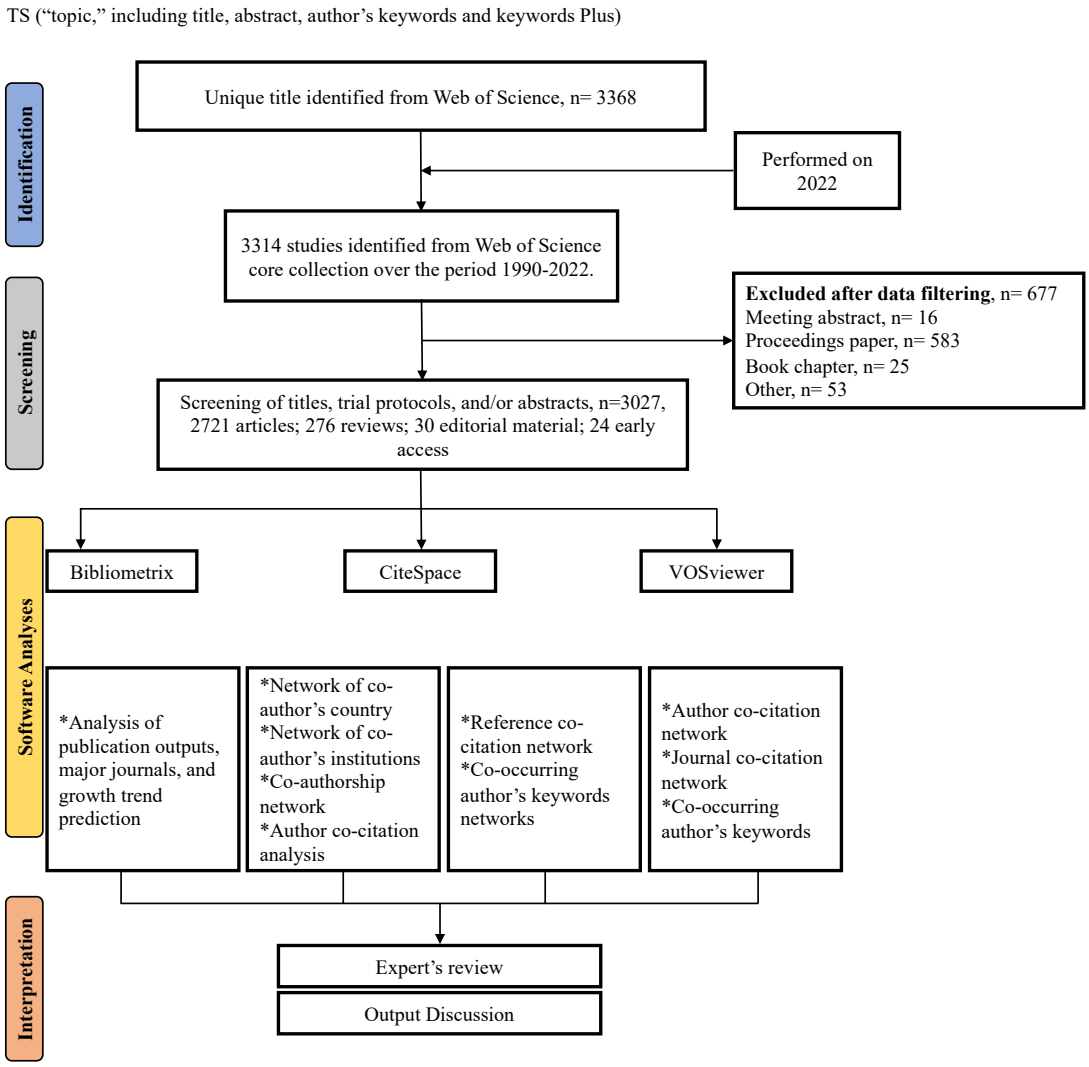
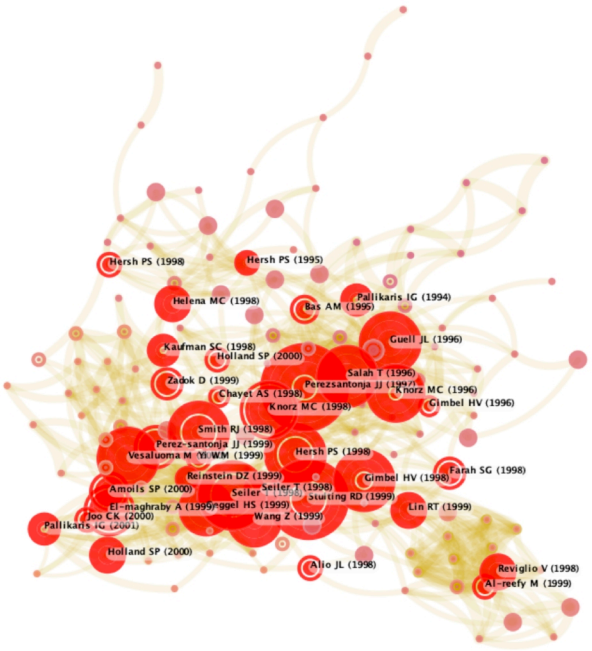
Supplementary Material

Supplementary Fig. 1. Flow chart of the scientometric study.

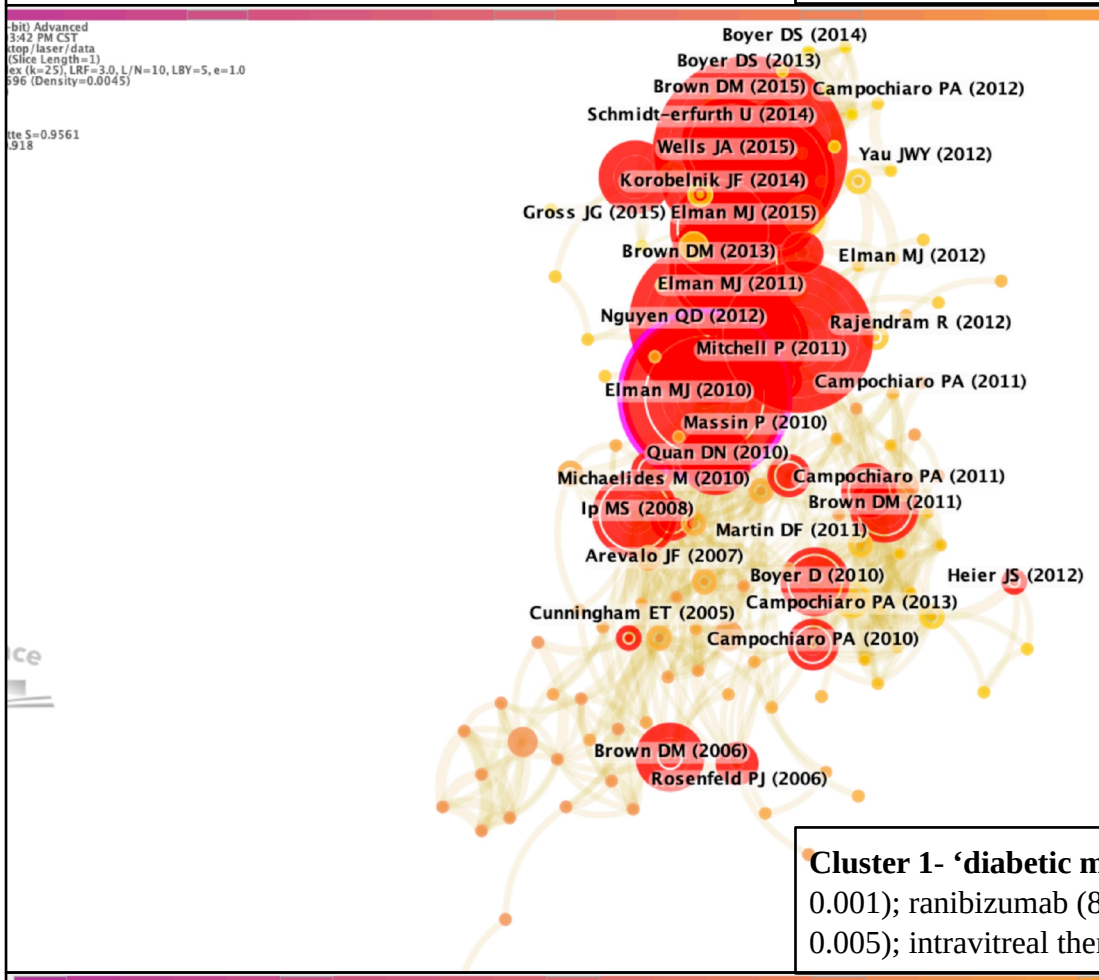


Supplementary Fig. 2. Detail focus on most important clusters of the co-citation reference networks ranked by burstness of citations (1990-2022)

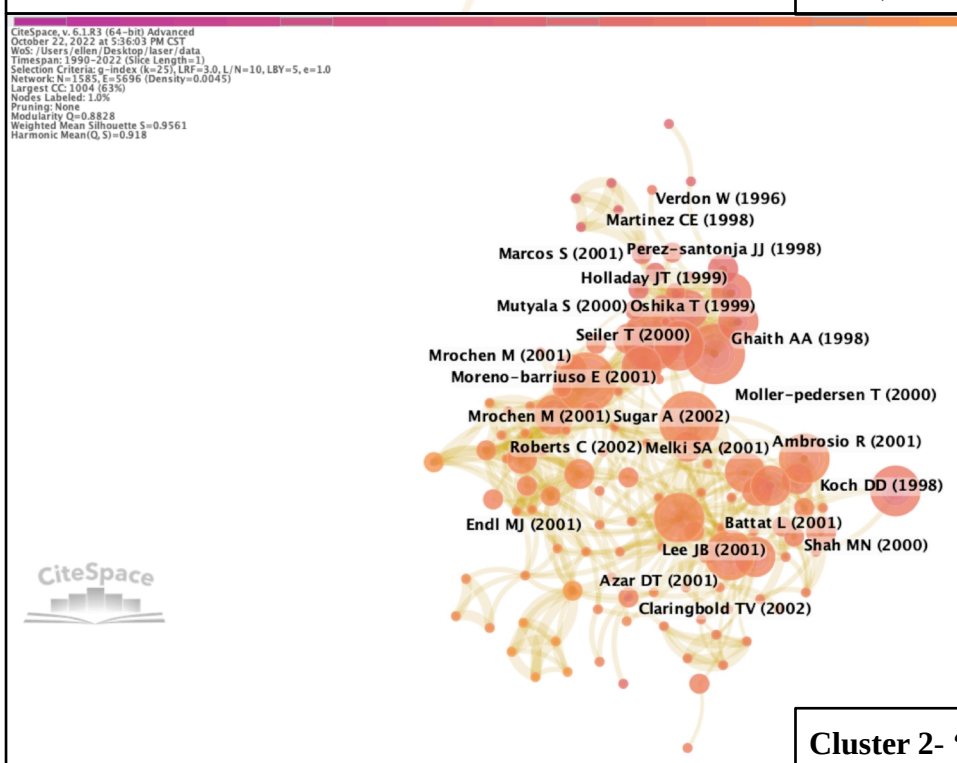
For each cluster, we report all five top keywords obtained, the selected label being the keywords that are the most cited (generated by the likelihood ratio of keywords). These keywords are highly susceptible to represent the overall topic of a cluster. Burstness is represented in each cluster with red tree-rings around nodes.



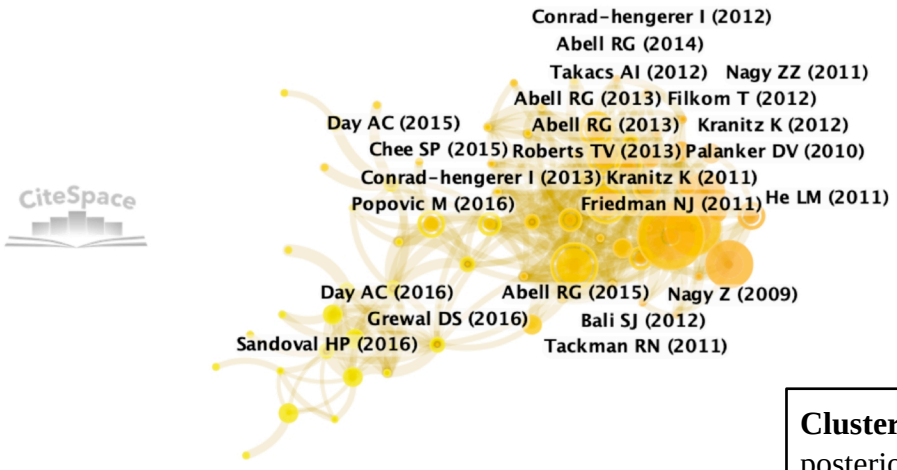
Cluster 0- ‘rk’: rk (8.02, 0.005); epikeratophakia (8.02, 0.005); nerves (8.02, 0.005); iscrs (8.02, 0.005); inflammation (5.28, 0.05)



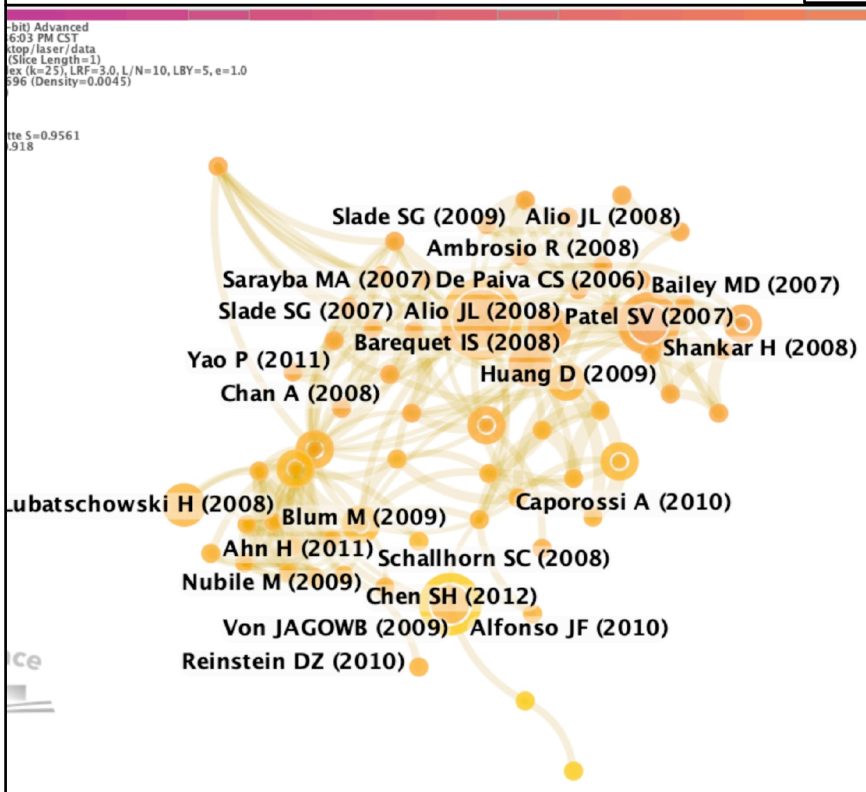
Cluster 1- ‘diabetic macular edema’: diabetic macular edema (13.76, 0.001); ranibizumab (8.75, 0.005); retinal laser photocogulation (8.64, 0.005); intravitreal therapy (8.64, 0.005); vitrectomy (8.64, 0.005)



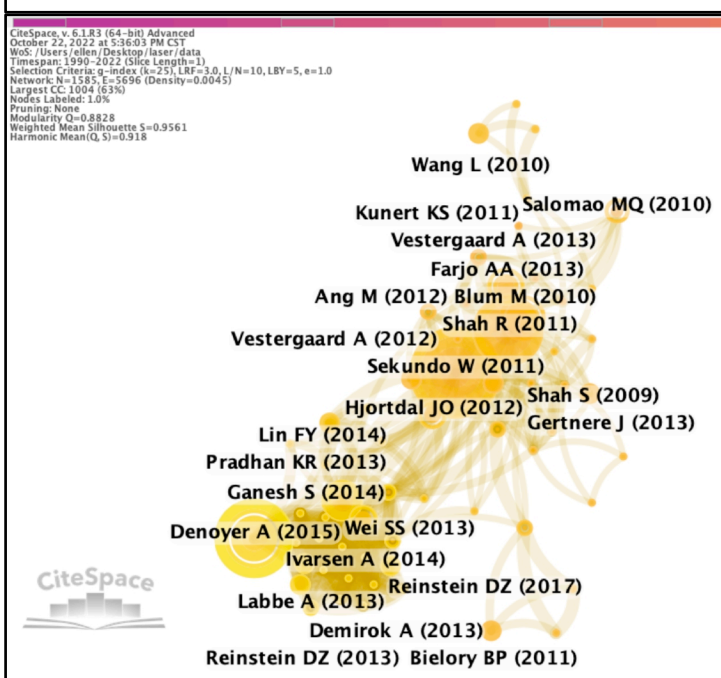
Cluster 2- ‘aberrometry’: aberrometry (15.39, 1.0E-4); refractive surgery (8.78, 0.005); contrast perception (7.6, 0.01); optical quality (7.6, 0.01); wavefront (7.6, 0.01)



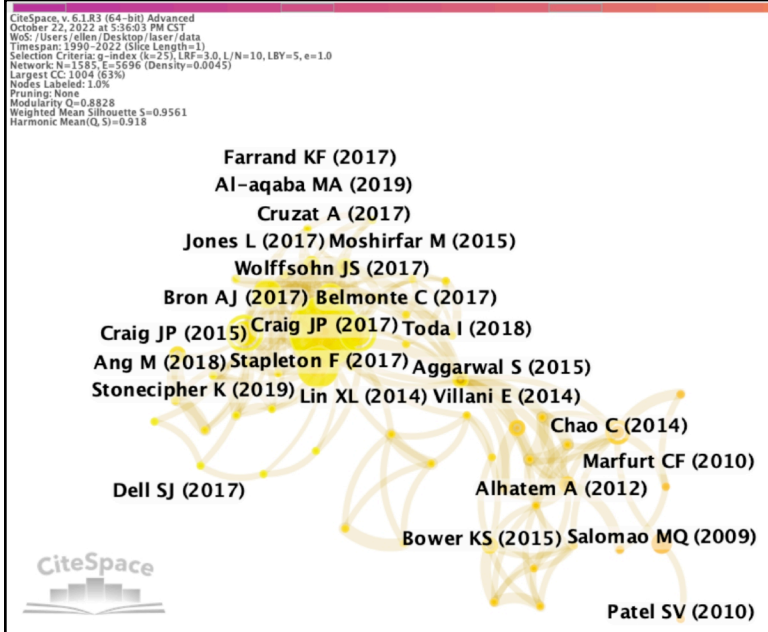
Cluster 3- ‘femtosecond laser’: femtosecond laser (6.87, 0.01); posterior capsule rupture (6.07, 0.05); femtosecond laser-assisted cataract surgery (6.07, 0.05); zonular dehiscence (6.07, 0.05); laser-induced breakdown (6.07, 0.05)



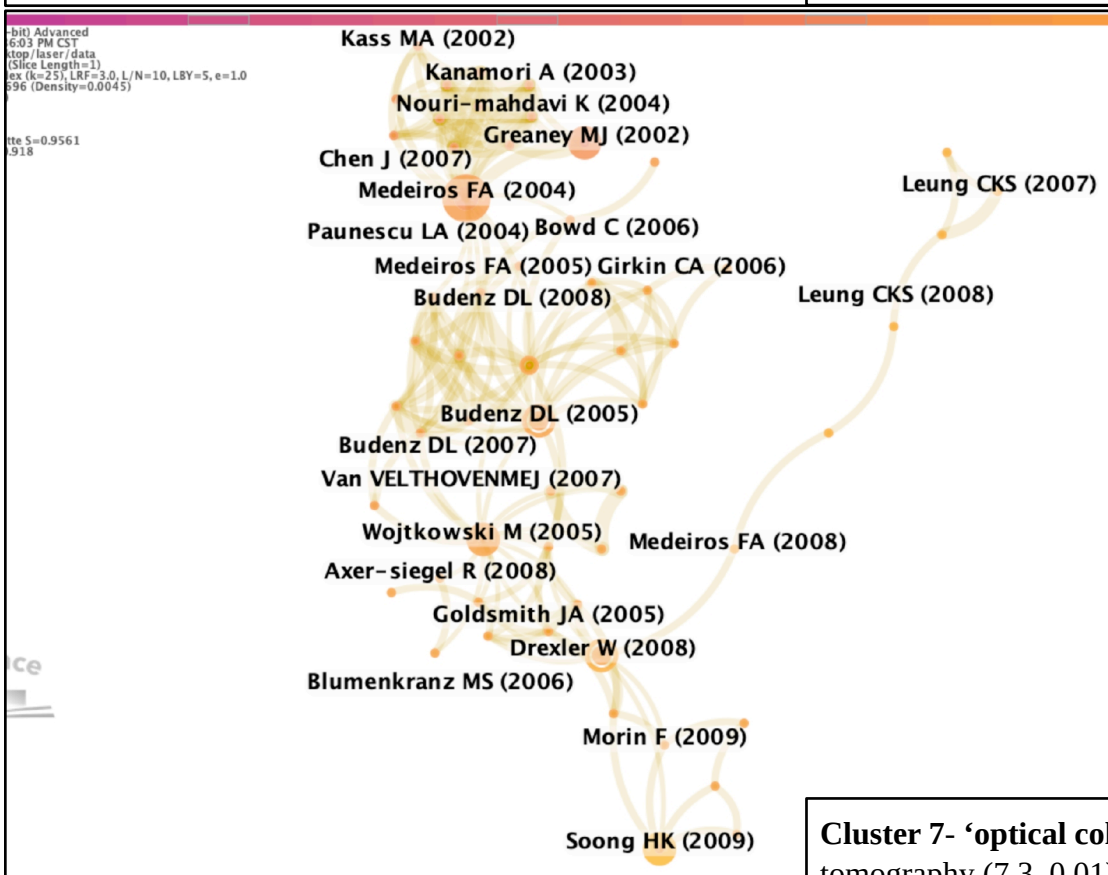
Cluster 4- ‘biomedical optics’: biomedical optics (5.05, 0.05); mmp-9 (5.05, 0.05); bioptics (5.05, 0.05); intracorneal ring (5.05, 0.05); diffuse lamellar keratitis (5.05, 0.05)



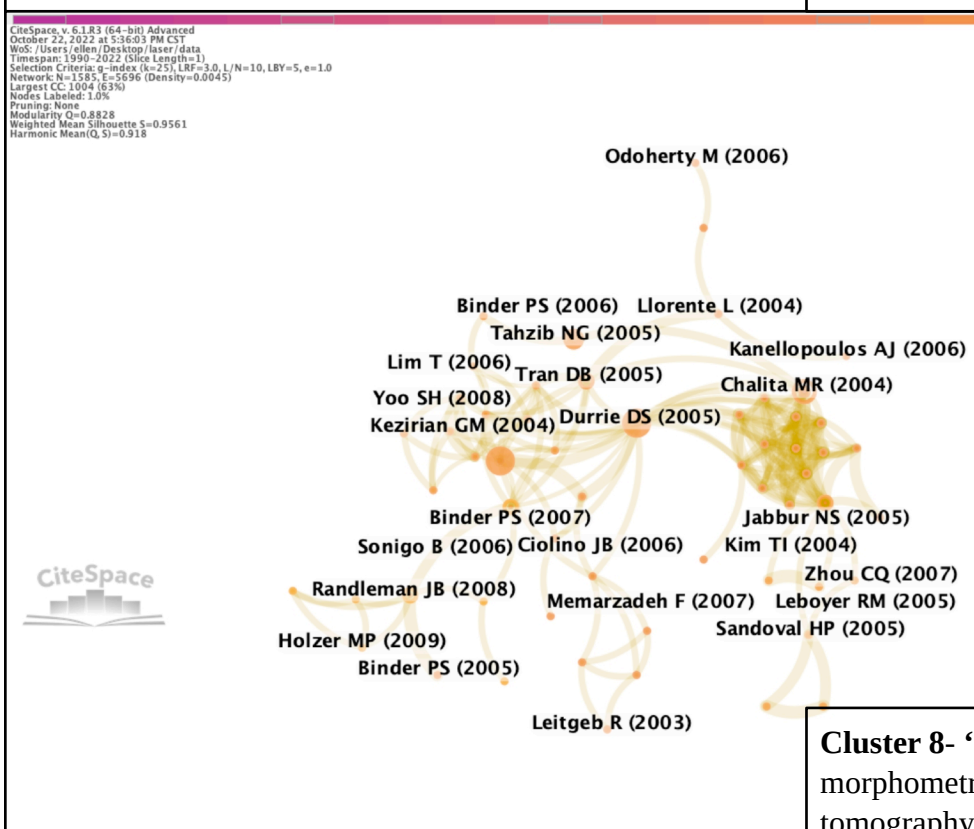
Cluster 5- ‘smile’: smile (18.21, 1.0E-4); myopia (12.05, 0.001); corneenne (5.98, 0.05); fs-lasik (5.98, 0.05); corneal biomechanics (5.98, 0.05)



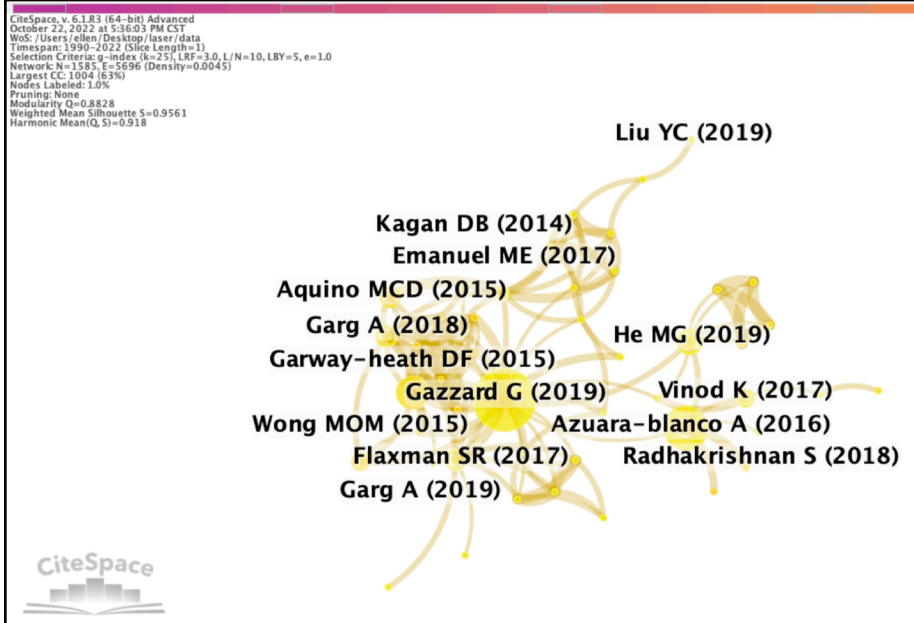
Cluster 6- ‘dry eye disease’: dry eye disease (18.69, 1.0E-4); meibomian gland dysfunction (10.61, 0.005); dry eye (8.49, 0.005); corneal nerves (7.94, 0.005); diabetic retinopathy (7.6, 0.01)



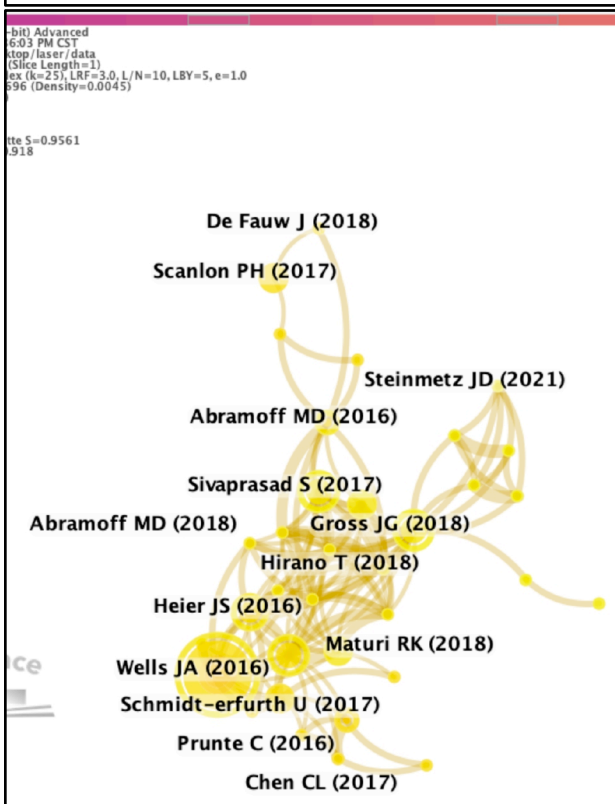
Cluster 7- ‘optical coherence tomography’: optical coherence tomography (7.3, 0.01); coherence (5.46, 0.05); adaptive optics (5.46, 0.05); ultrahigh resolution imaging (5.46, 0.05); fourier-domain optical coherence tomography (5.46, 0.05)



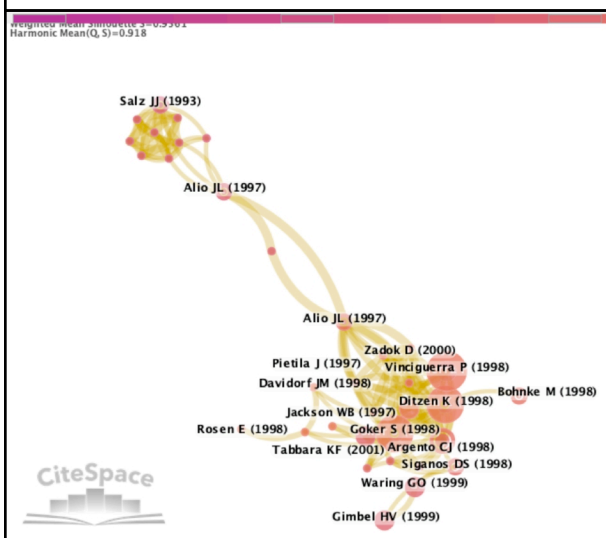
Cluster 8- ‘anterior chamber’: anterior chamber (8.89, 0.005); morphometry (8.89, 0.005); contact lens (6.14, 0.05); optical coherence tomography (5.12, 0.05); imaging (4.46, 0.05)



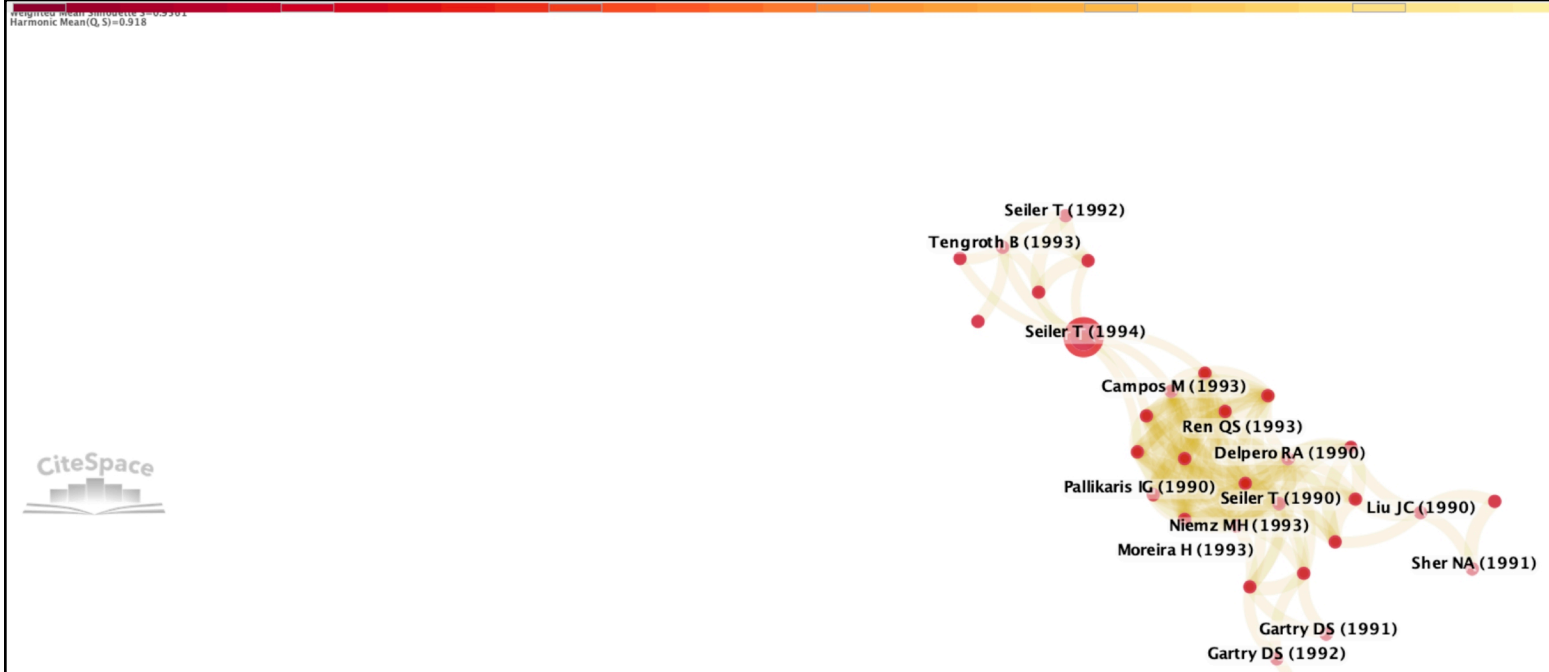
Cluster 9- 'glaucoma': glaucoma (16.52, 1.0E-4); trabeculectomy (8.21, 0.005); lasers (8.21, 0.005); micropulse laser (8.21, 0.005); ocular hypertension (8.21, 0.005)



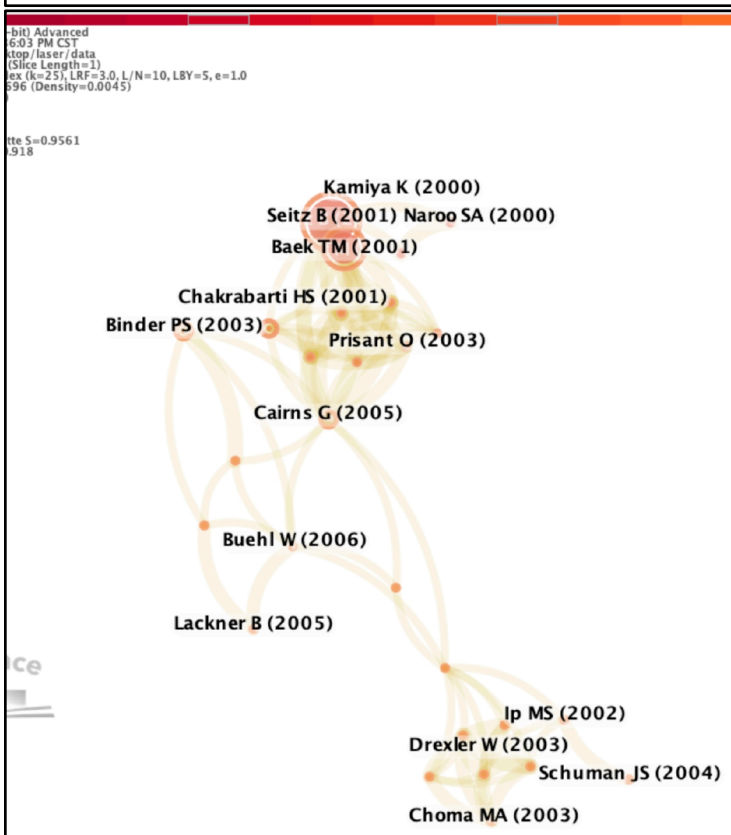
Cluster 10- 'diabetic retinopathy': diabetic retinopathy (12.34, 0.001); screening (9.11, 0.005); diabetic eye disease (9.11, 0.005); deep learning (9.11, 0.005); diabetic macular edema (6.14, 0.05)



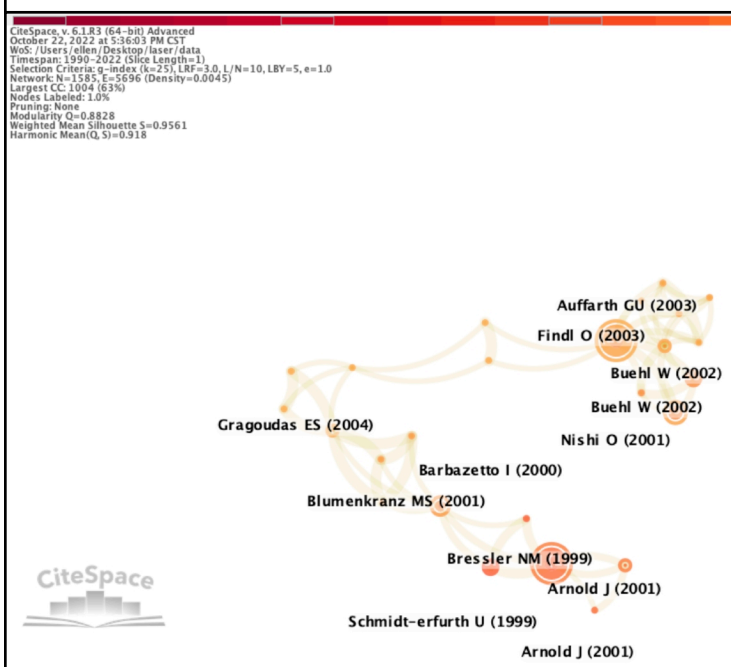
Cluster 11- ' light emitting diode': light emitting diode (NaN, 1.0); coherence (NaN, 1.0); regeneration (NaN, 1.0); sub-basal nerves (NaN, 1.0); microneuroma (NaN, 1.0)



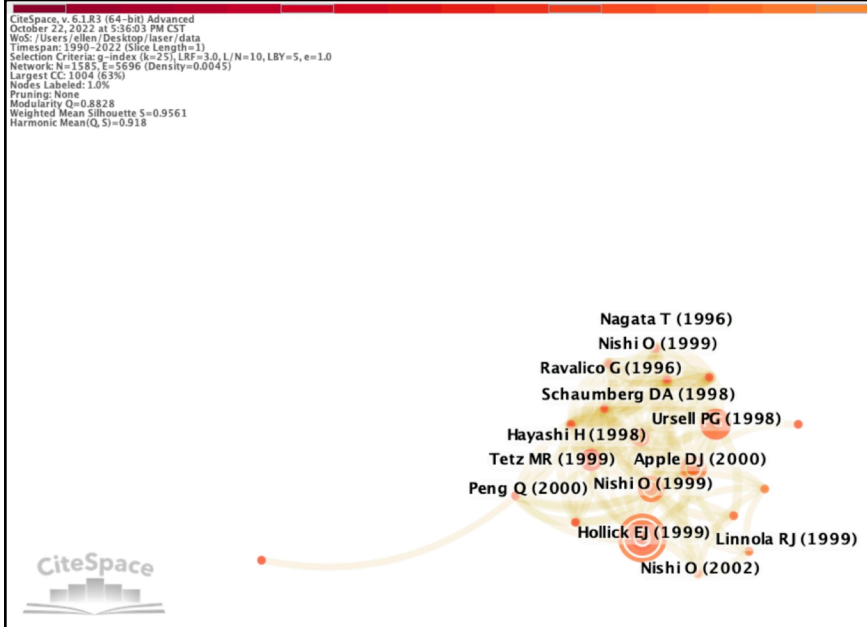
Cluster 12- ‘photorefractive keratectomy’: photorefractive keratectomy (19.07, 1.0E-4); eye (6.26, 0.05); corneal surgery (6.26, 0.05); photoablation (6.26, 0.05); photodisruption (6.26, 0.05)



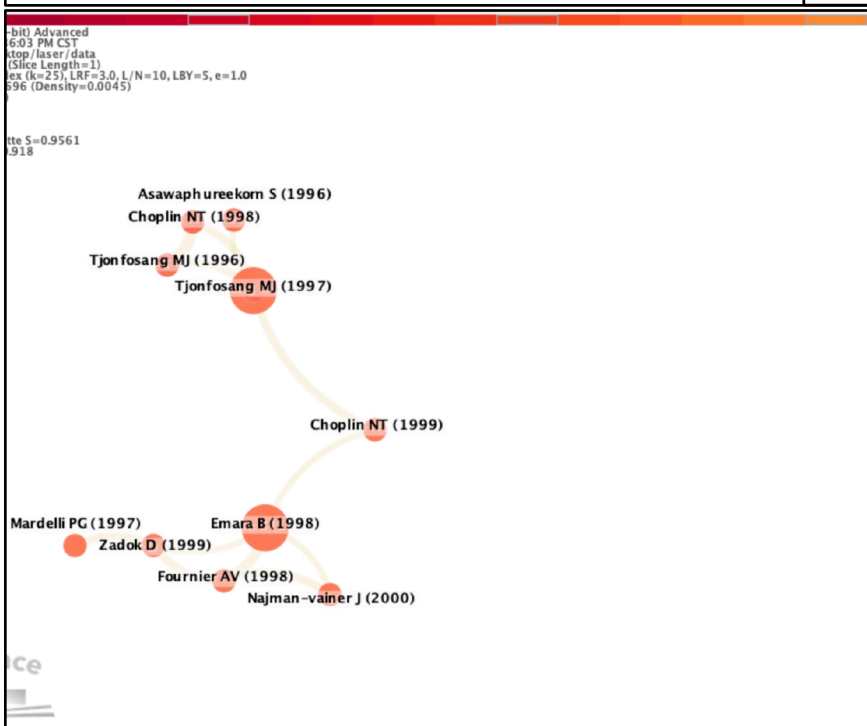
Cluster 13- ‘3d’: 3d (10.48, 0.005); uhr-oct (10.48, 0.005); retina (7.72, 0.01); diabetic retinopathy (0.16, 1.0); diabetic macular edema (0.13, 1.0)



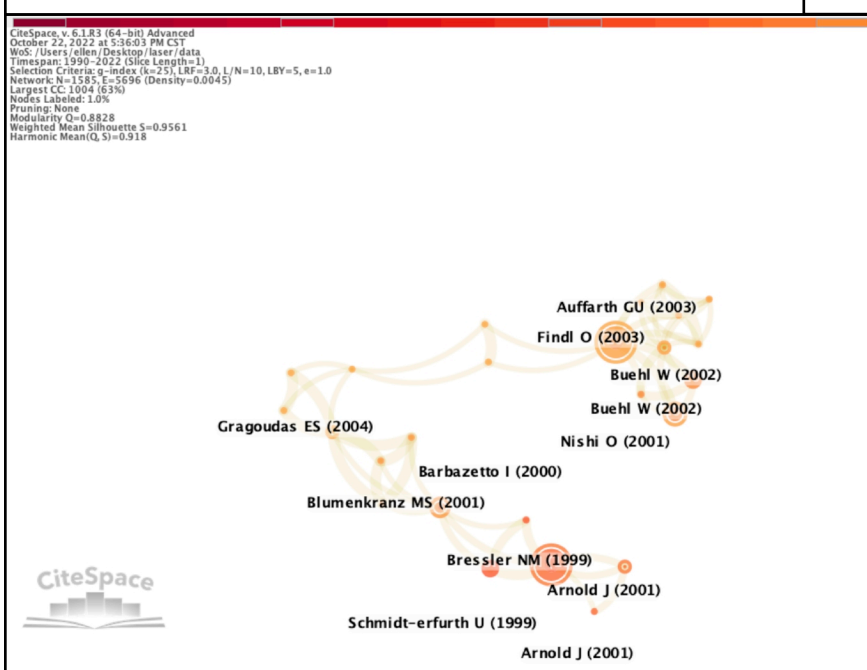
Cluster 15- ‘age-related macular degeneration (amd)’: age-related macular degeneration (amd) (7.41, 0.01); complement factor h (cfh) (7.41, 0.01); complement factor b (bf) (7.41, 0.01); basal laminar deposit (blamd) (7.41, 0.01); bruch's membrane (7.41, 0.01)



Cluster 20- ‘coherence’: light emitting diode (NaN, 1.0); coherence (NaN, 1.0); regeneration (NaN, 1.0); sub-basal nerves (NaN, 1.0); microneuroma (NaN, 1.0)

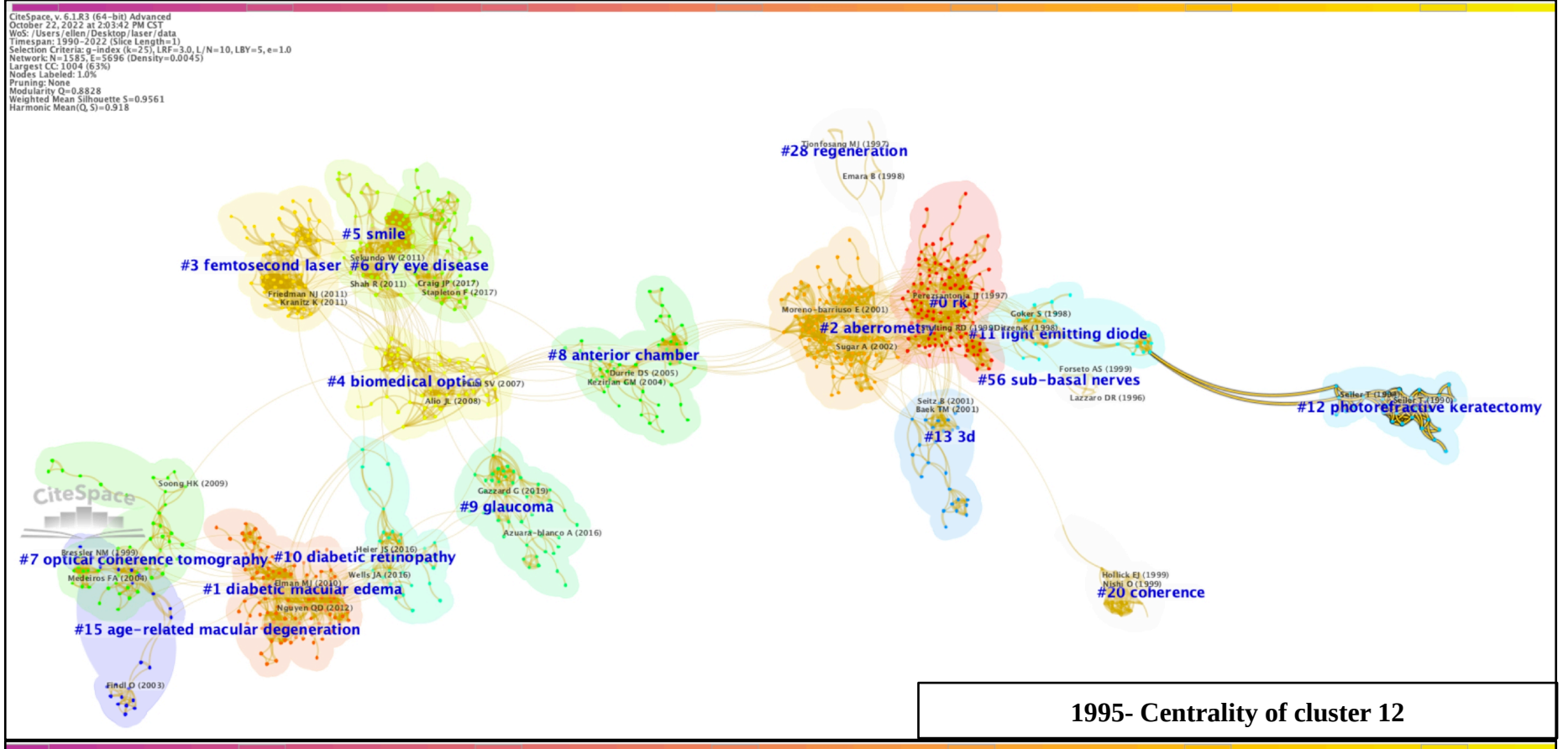


Cluster 28- ‘regeneration’: light emitting diode (NaN, 1.0); coherence (NaN, 1.0); regeneration (NaN, 1.0); sub-basal nerves (NaN, 1.0); microneuroma (NaN, 1.0)

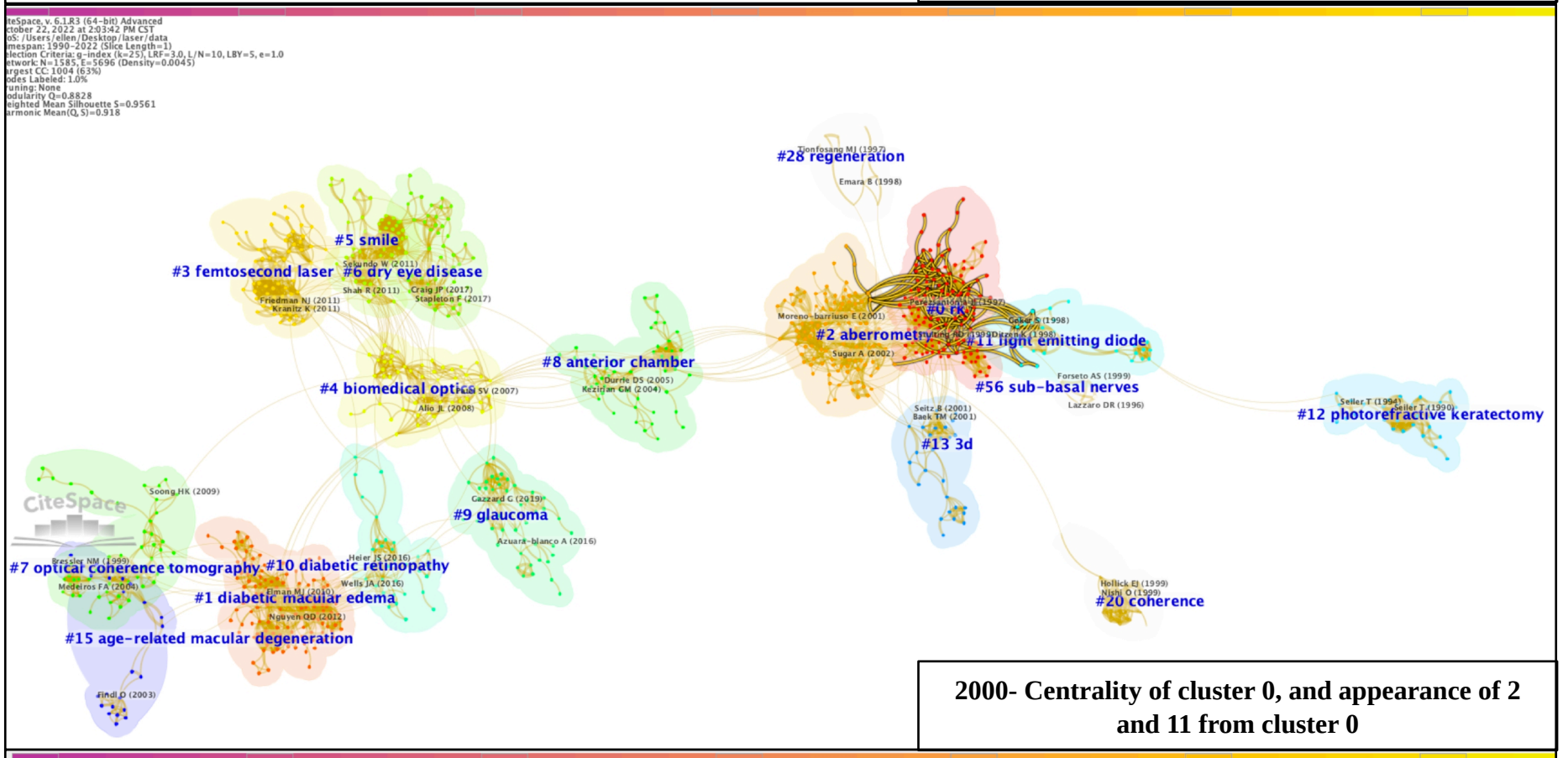


Cluster 56- ‘sub-basal nerves’: light emitting diode (NaN, 1.0); coherence (NaN, 1.0); regeneration (NaN, 1.0); sub-basal nerves (NaN, 1.0); microneuroma (NaN, 1.0)

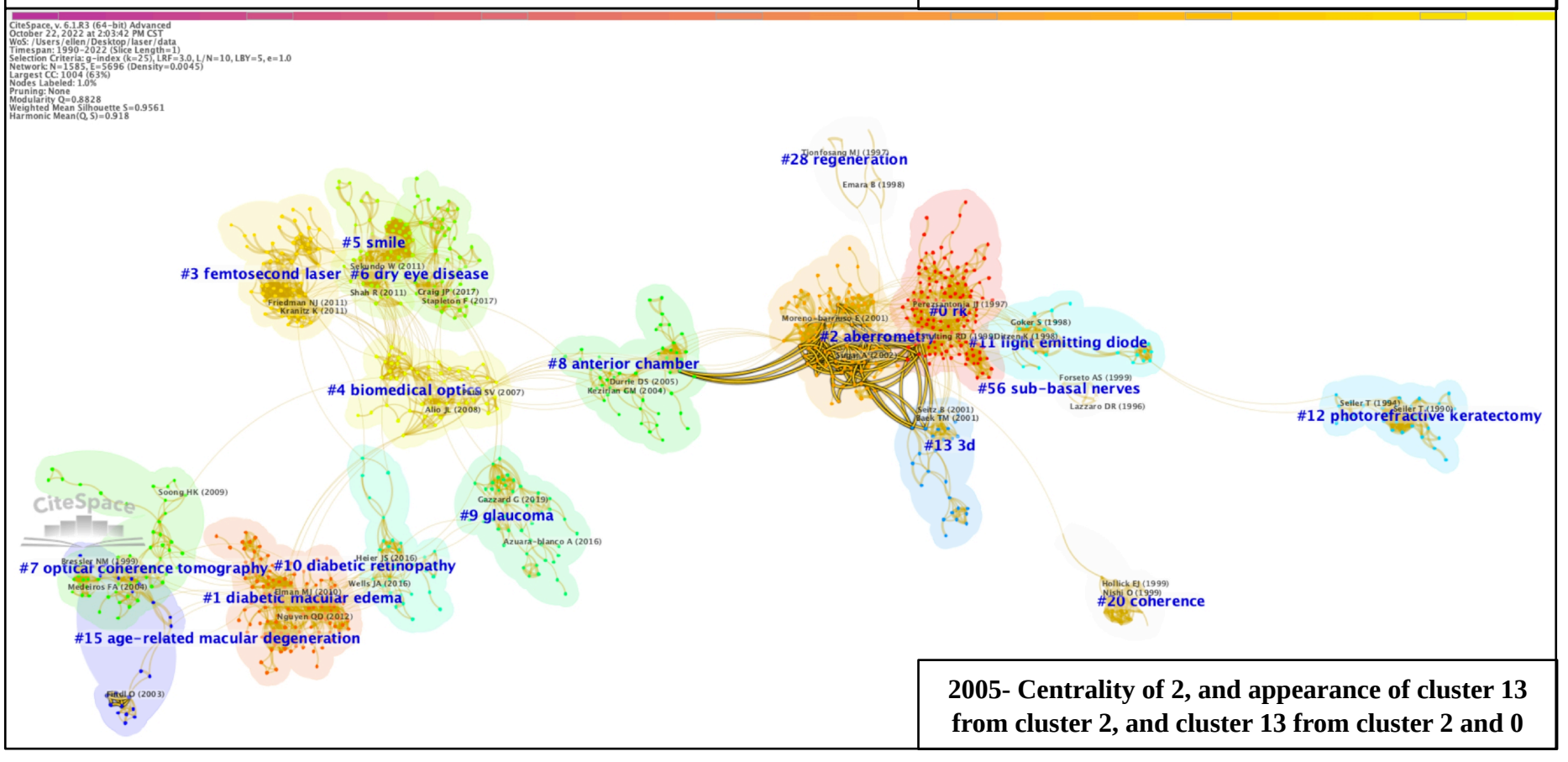
Supplementary Fig. 3. Link walkthrough between clusters based on burstness dynamic for co-cited reference network (1990-2022).



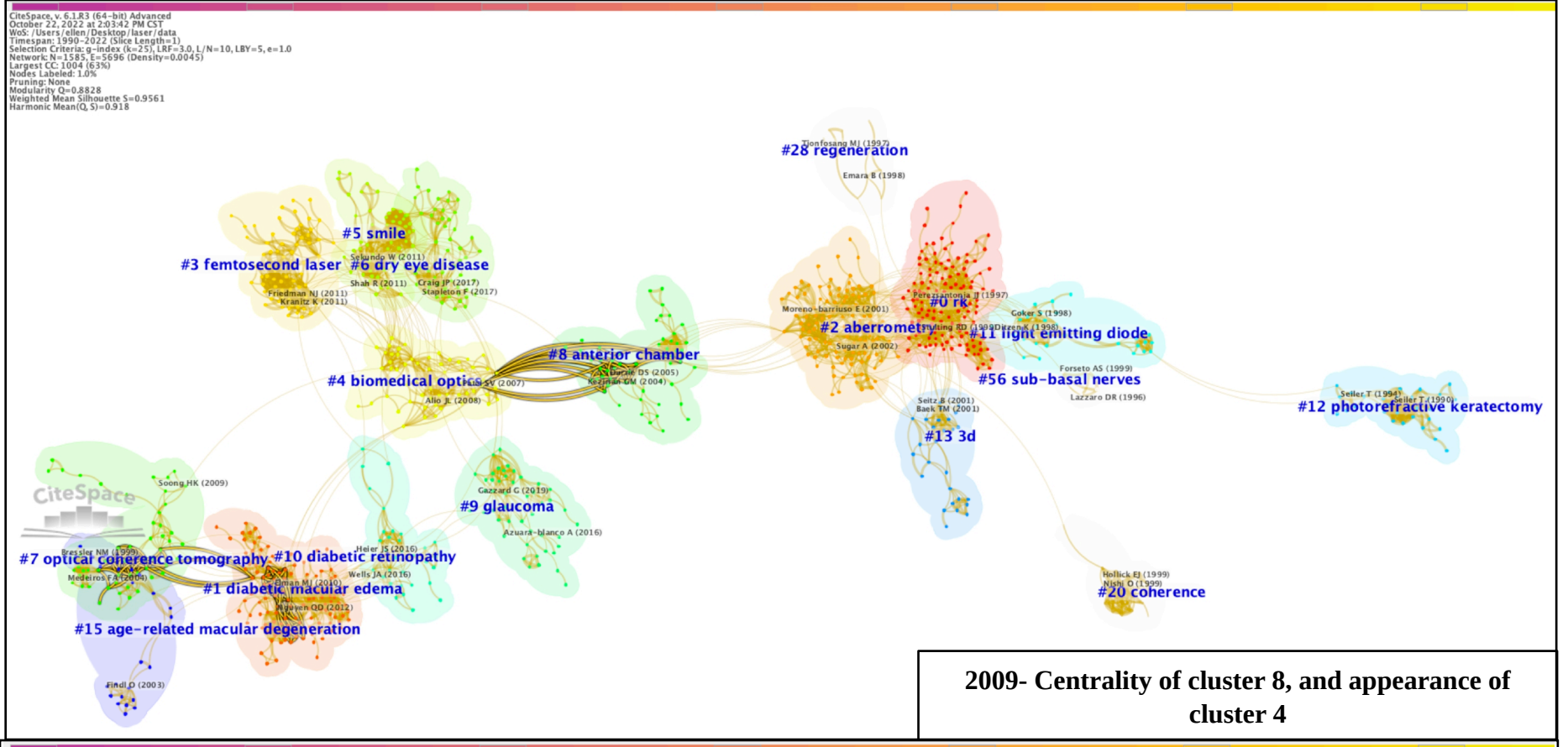
1995- Centrality of cluster 12



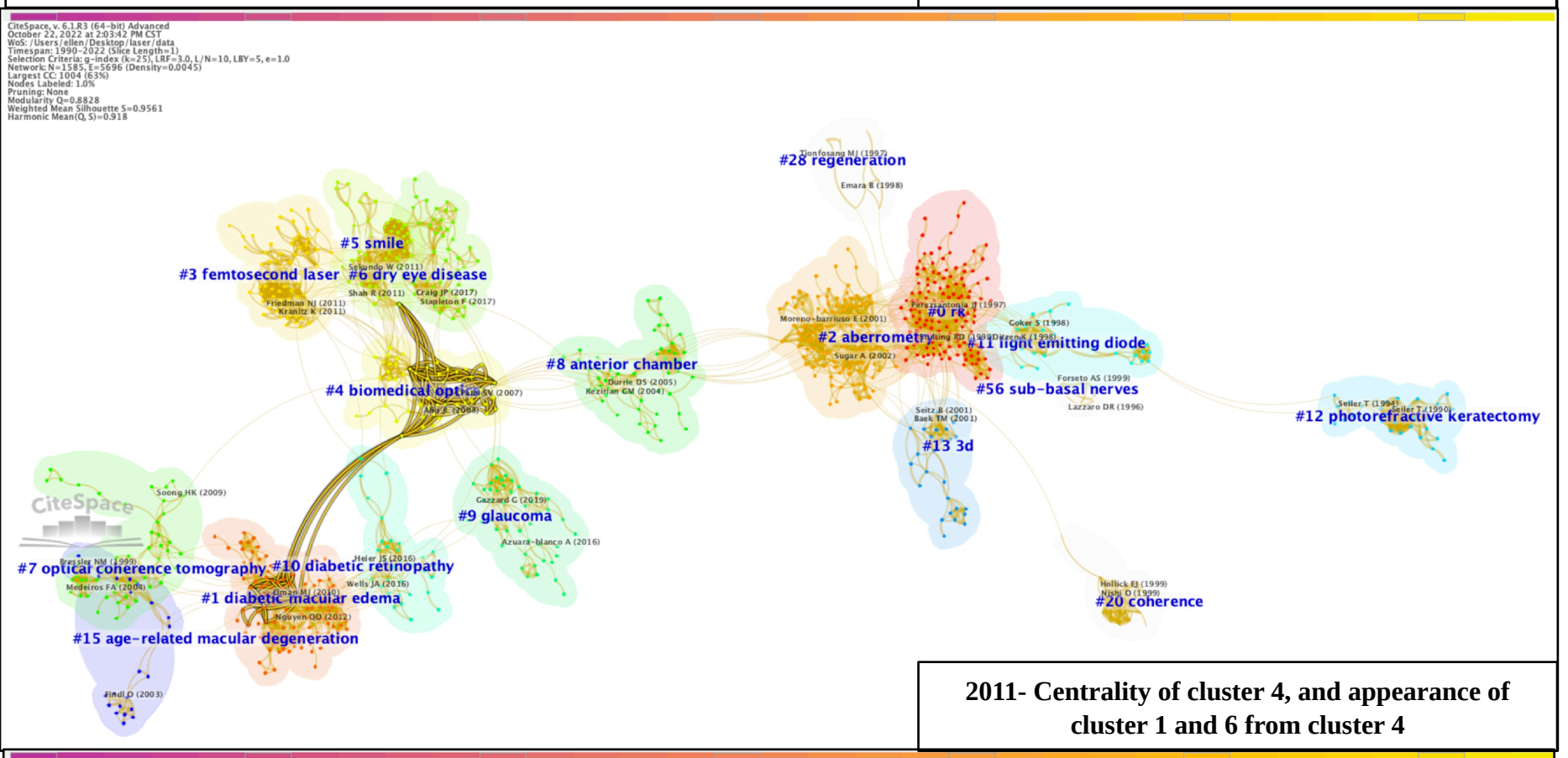
2000- Centrality of cluster 0, and appearance of 2 and 11 from cluster 0



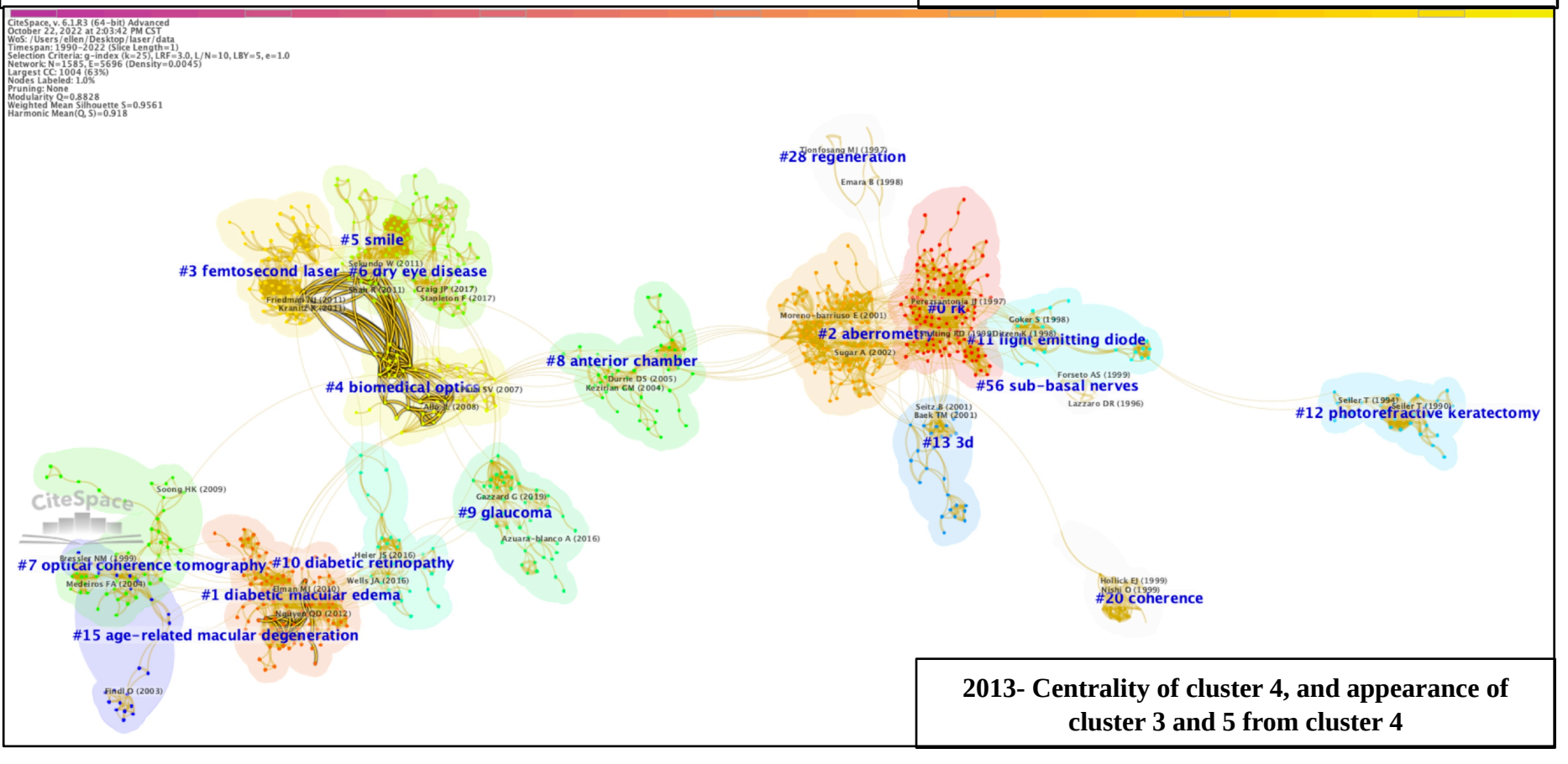
2005- Centrality of 2, and appearance of cluster 13 from cluster 2, and cluster 13 from cluster 2 and 0



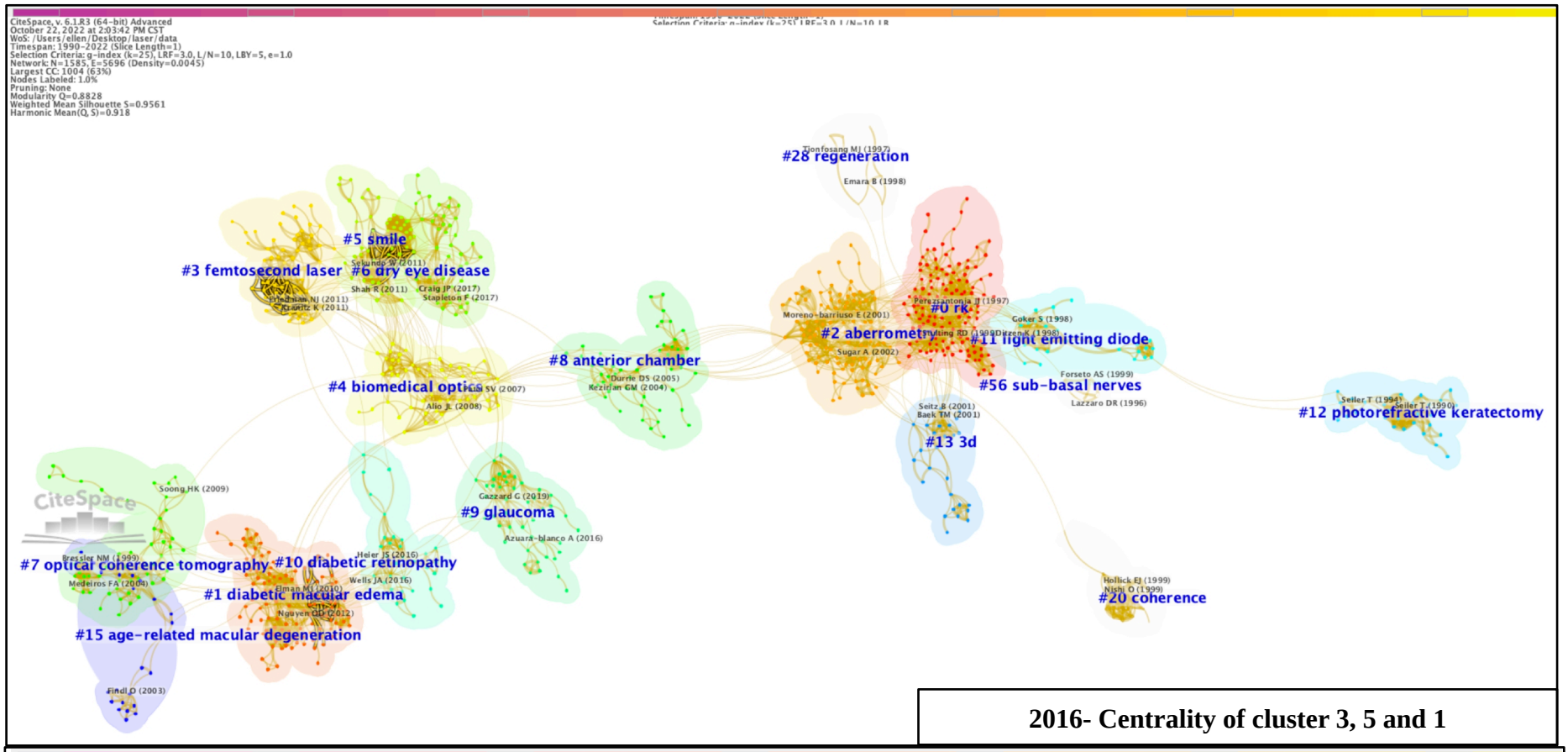
2009- Centrality of cluster 8, and appearance of cluster 4



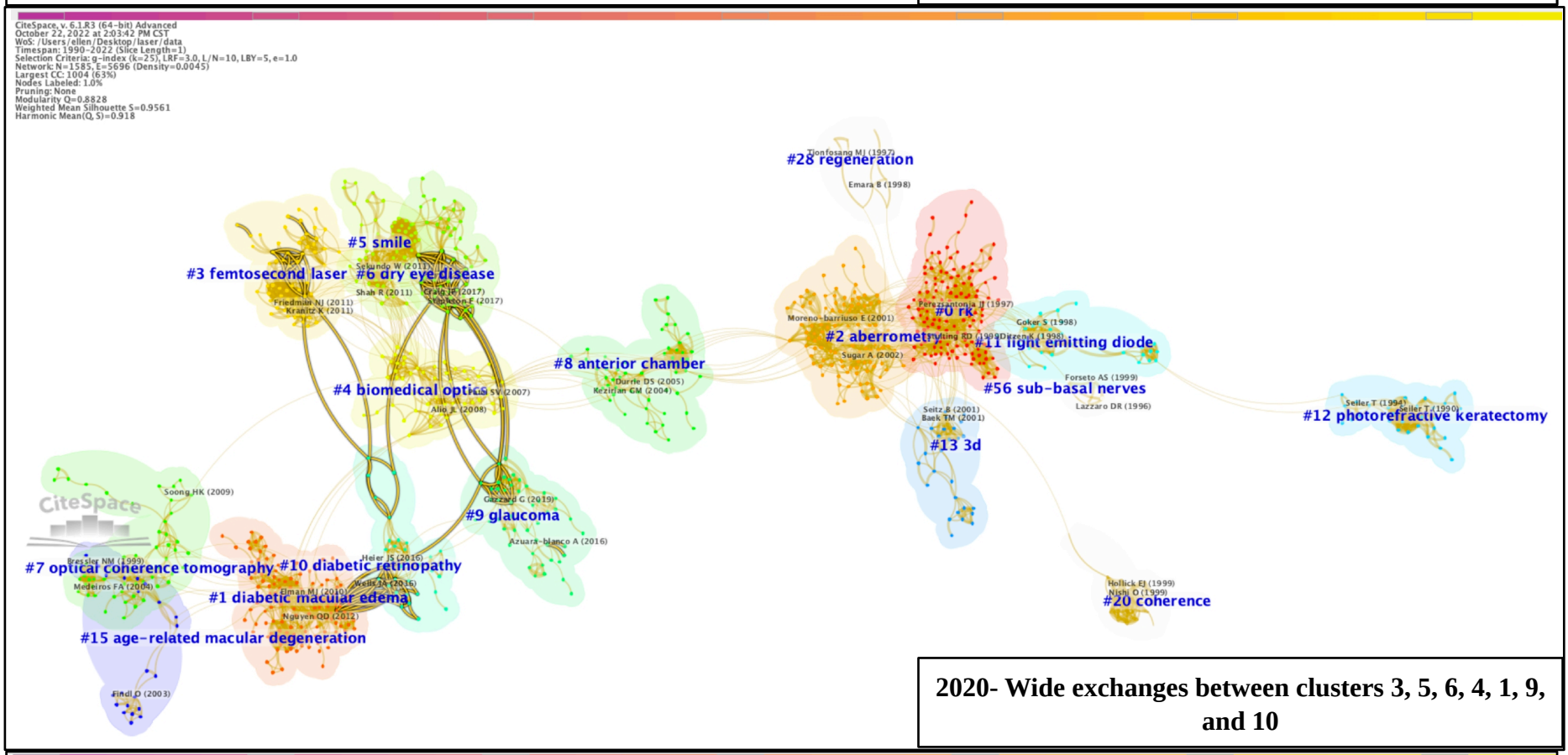
2011- Centrality of cluster 4, and appearance of cluster 1 and 6 from cluster 4



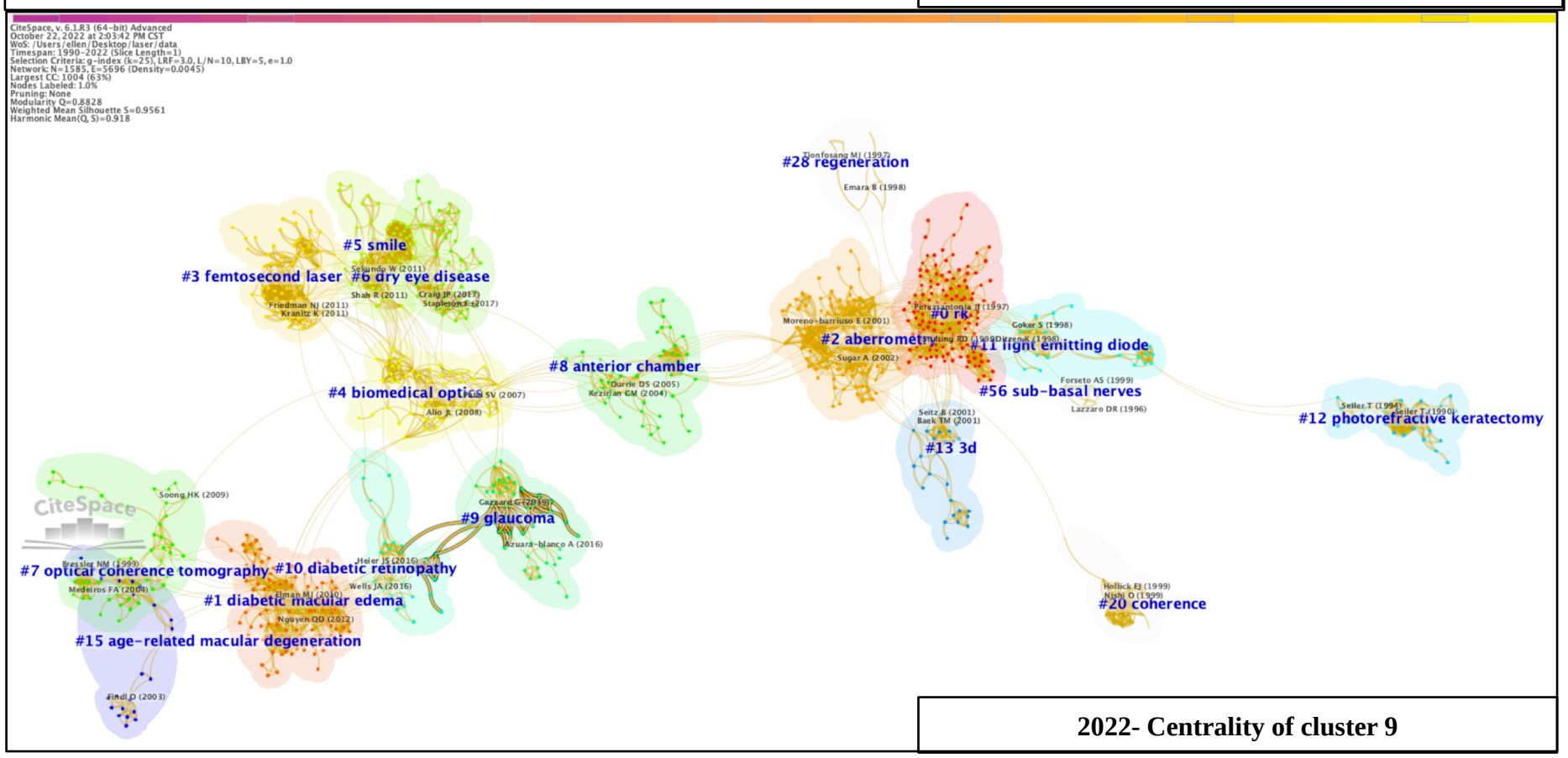
2013- Centrality of cluster 4, and appearance of cluster 3 and 5 from cluster 4



2016- Centrality of cluster 3, 5 and 1



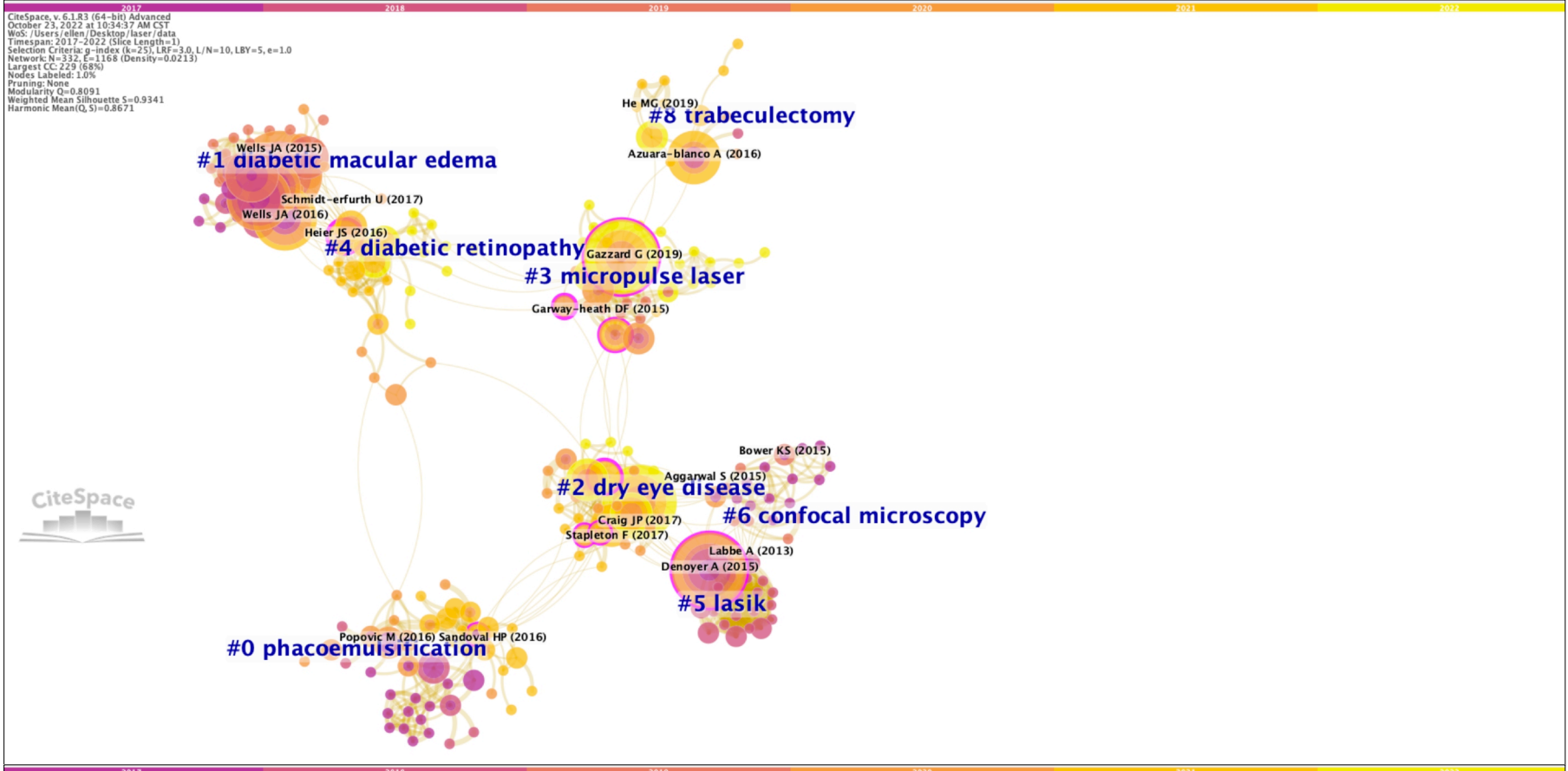
2020- Wide exchanges between clusters 3, 5, 6, 4, 1, 9, and 10



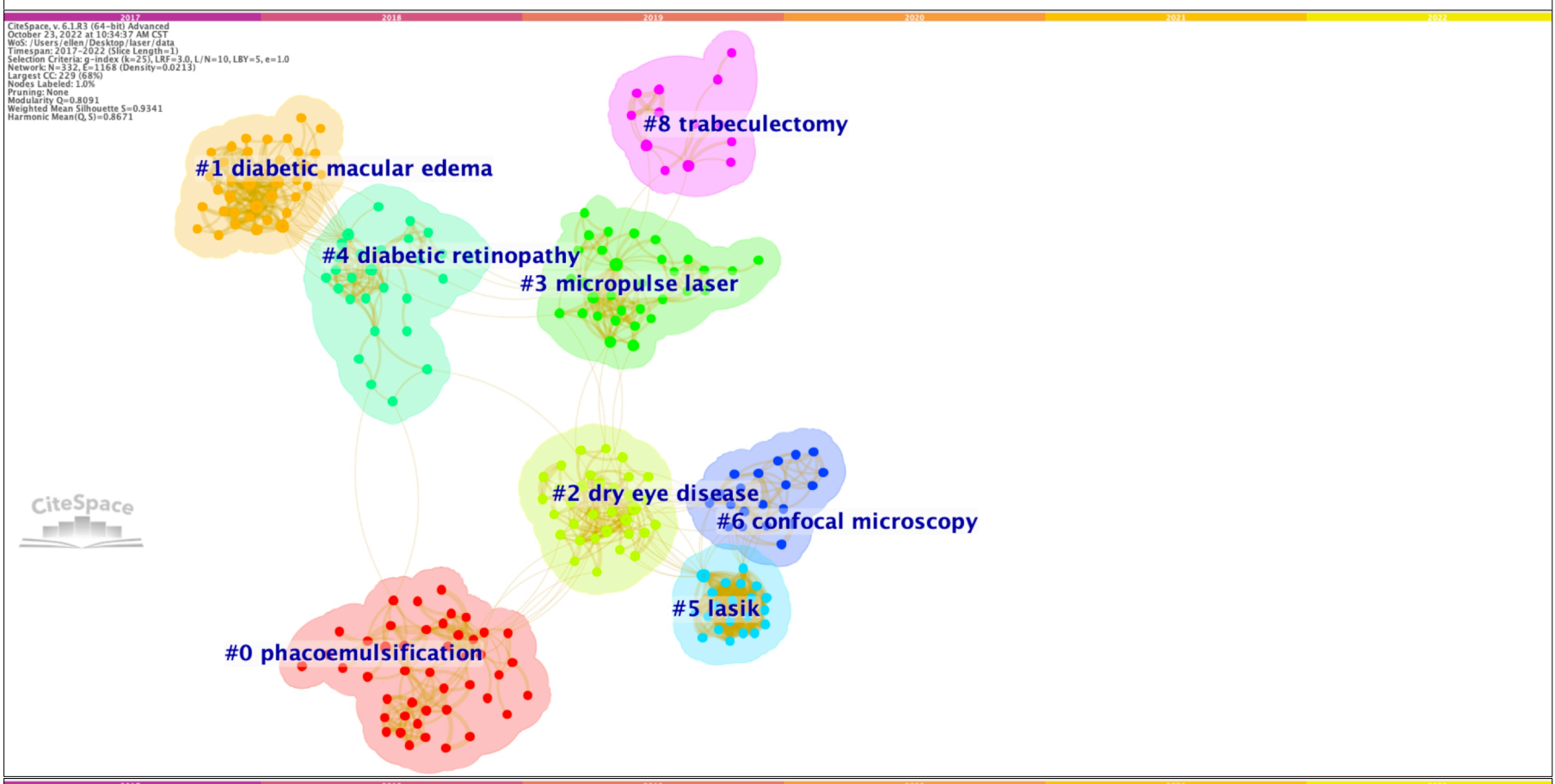
2022- Centrality of cluster 9

Supplementary Fig. 4. Network of co-cited reference (A) with corresponding clusters (B) and timeline view (C) for the 2017-2022 time period.

A


2017
2018
2019
2020
2021
2022
CiteSpace, v. 6.1.R3 (64-bit) Advanced
October 23, 2022 at 10:34:37 AM CST
WoS: /Users/ellen/Desktop/laser/data
Timespan: 2017-2022 (Slice Length=1)
Selection Criteria: g-index (k=25), LRF=3.0, L/N=10, LBY=5, e=1.0
Network: N=332, E=1168 (Density=0.0213)
Largest CC: 229 (68%)
Nodes Labeled: 1.0%
Pruning: None
Modularity Q=0.8091
Weighted Mean Silhouette S=0.9341
Harmonic Mean(Q, S)=0.8671
He MG (2019)
#8 trabeculectomy
Azuara-blanco A (2016)
Wells JA (2015)
#1 diabetic macular edema
Schmidt-erfurth U (2017)
Wells JA (2016)
Heier JS (2016)
#4 diabetic retinopathy
Gazzard G (2019)
#3 micropulse laser
Garway-heath DF (2015)
Bower KS (2015)
Aggarwal S (2015)
#2 dry eye disease
#6 confocal microscopy
Craig JP (2017)
Stapleton F (2017)
Labbe A (2013)
Denoyer A (2015)
#5 lasik
Popovic M (2016) Sandoval HP (2016)
#0 phacoemulsification
CiteSpace

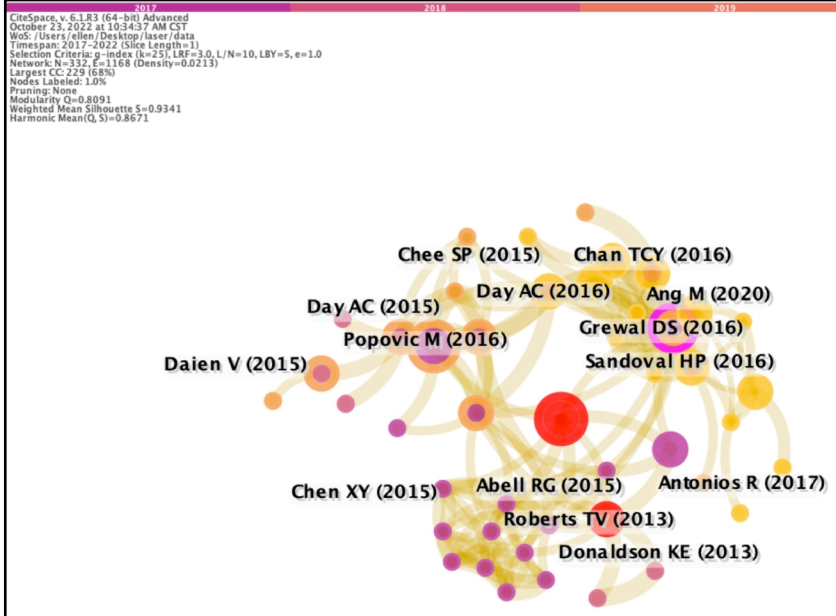
B


2017
2018
2019
2020
2021
2022
CiteSpace, v. 6.1.R3 (64-bit) Advanced
October 23, 2022 at 10:34:37 AM CST
WoS: /Users/ellen/Desktop/laser/data
Timespan: 2017-2022 (Slice Length=1)
Selection Criteria: g-index (k=25), LRF=3.0, L/N=10, LBY=5, e=1.0
Network: N=332, E=1168 (Density=0.0213)
Largest CC: 229 (68%)
Nodes Labeled: 1.0%
Pruning: None
Modularity Q=0.8091
Weighted Mean Silhouette S=0.9341
Harmonic Mean(Q, S)=0.8671
#8 trabeculectomy
#1 diabetic macular edema
#4 diabetic retinopathy
#3 micropulse laser
#2 dry eye disease
#6 confocal microscopy
#5 lasik
#0 phacoemulsification
CiteSpace

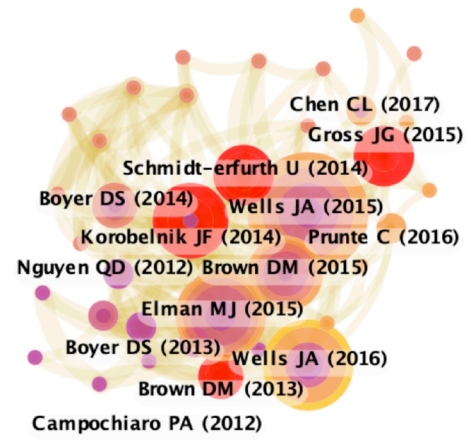
C

2017
2018
2019
2020
2021
2022
CiteSpace, v. 6.1.R3 (64-bit) Advanced
October 23, 2022 at 10:34:37 AM CST
WoS: /Users/ellen/Desktop/laser/data
Timespan: 2017-2022 (Slice Length=1)
Selection Criteria: g-index (k=25), LRF=3.0, L/N=10, LBY=5, e=1.0
Network: N=332, E=1168 (Density=0.0213)
Largest CC: 229 (68%)
Nodes Labeled: 1.0%
Pruning: None
Modularity Q=0.8091
Weighted Mean Silhouette S=0.9341
Harmonic Mean(Q, S)=0.8671
2012
2015
2020
2022
#0 phacoemulsification
#1 diabetic macular edema
#2 dry eye disease
#3 micropulse laser
#4 diabetic retinopathy
#5 lasik
#6 confocal microscopy
#8 trabeculectomy
CiteSpace

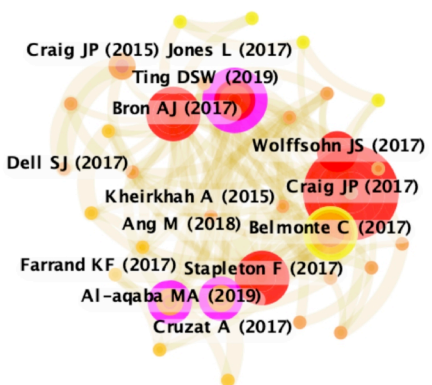
Supplementary Fig. 5. Detail focus on all 8 extracted clusters of the co-citation reference networks ranked by burstness of citations for the time period 2017- 2022.



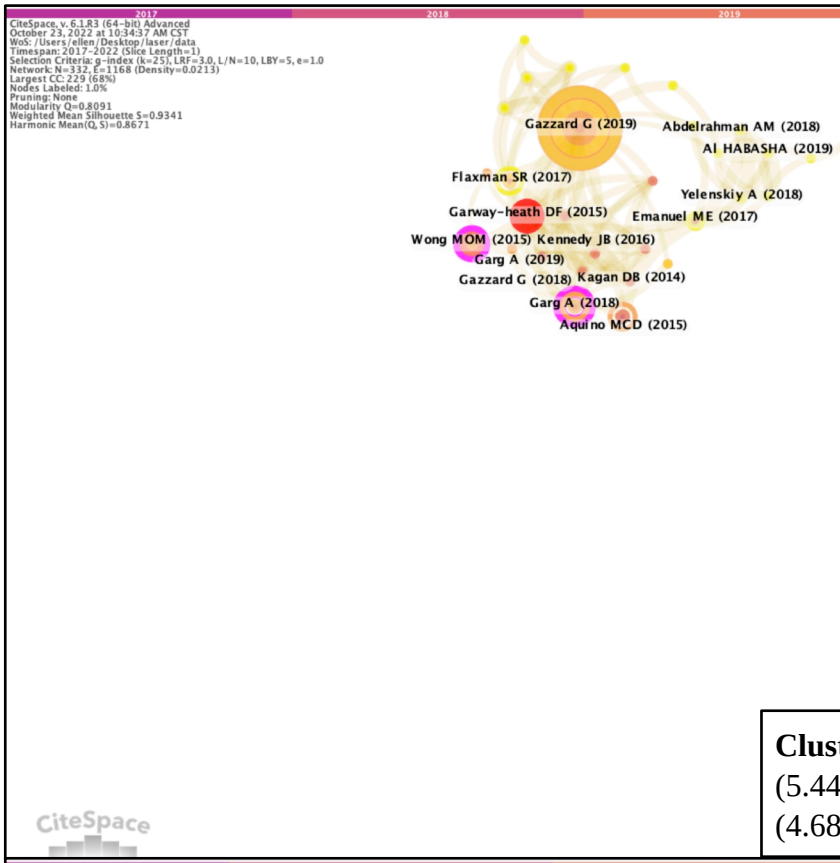
Cluster 0- ‘phacoemulsification’: phacoemulsification (13.24, 0.001); cataract surgery (8.77, 0.005); femtosecond laser-assisted cataract surgery (4.36, 0.05); posterior capsule rupture (4.36, 0.05); femtosecond laser-assisted cataract surgery (4.36, 0.05)



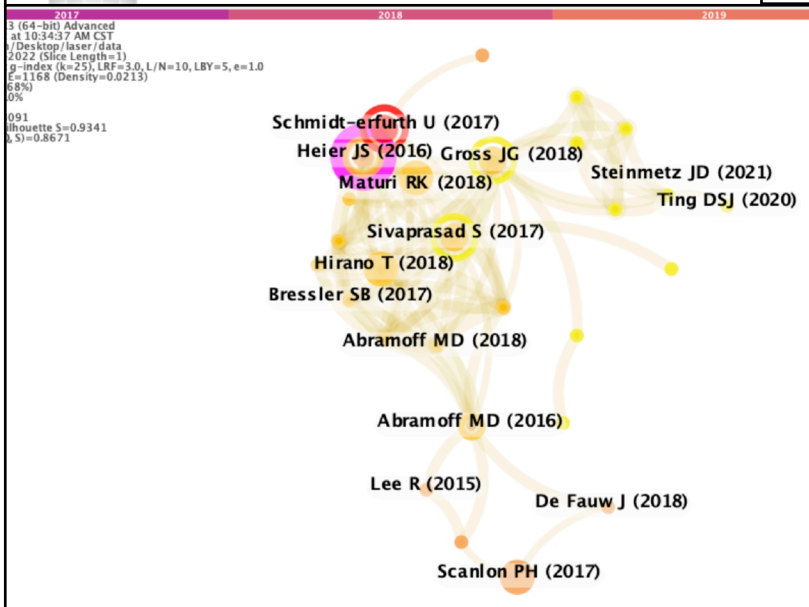
Cluster 1- ‘diabetic macular edema’: diabetic macular edema (13.01, 0.001); ranibizumab (8.15, 0.005); clinical trials (4.66, 0.05); anti-vegf (4.66, 0.05); vascular endothelial growth factor inhibitors (4.08, 0.05)



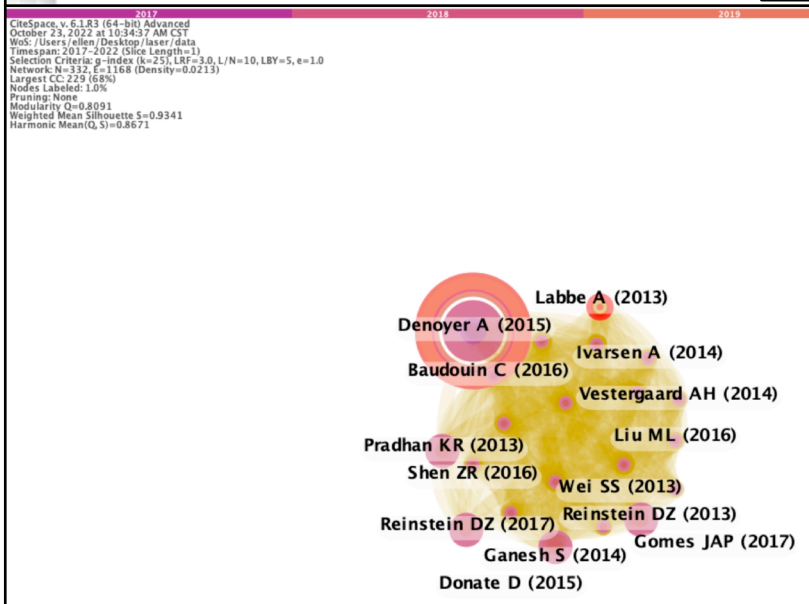
Cluster 2- ‘dry eye disease’: dry eye disease (12.54, 0.001); meibomian gland dysfunction (10.14, 0.005); diabetic retinopathy (5.47, 0.05); intense pulsed light (5.04, 0.05); ocular surface disease (5.04, 0.05)



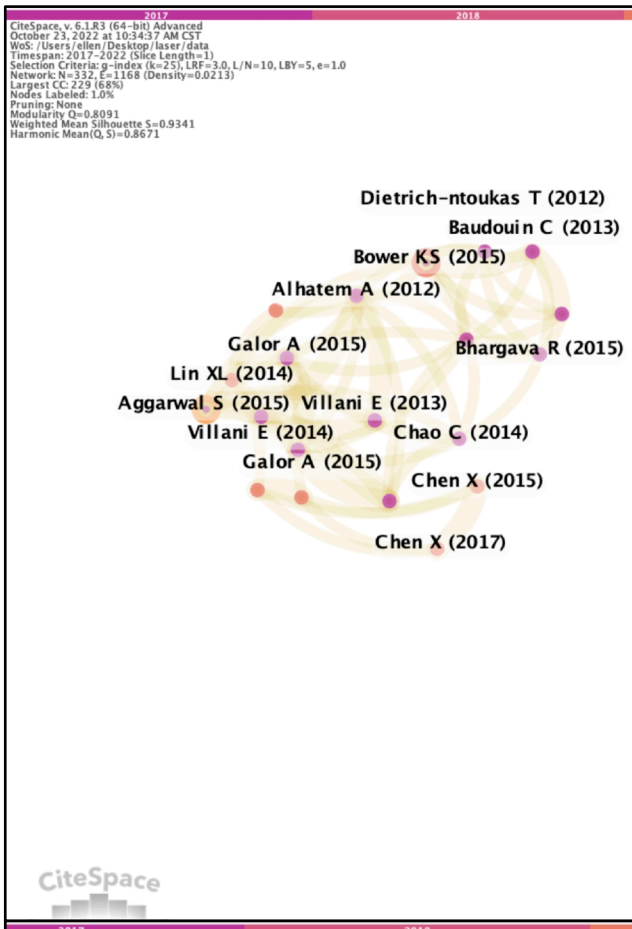
Cluster 3- ‘micropulse laser’: micropulse laser (9.43, 0.005); glaucoma (5.44, 0.05); inflammatory cascade (4.68, 0.05); antiangiogenic agents (4.68, 0.05); transscleral diode cyclophotocoagulation (4.68, 0.05)



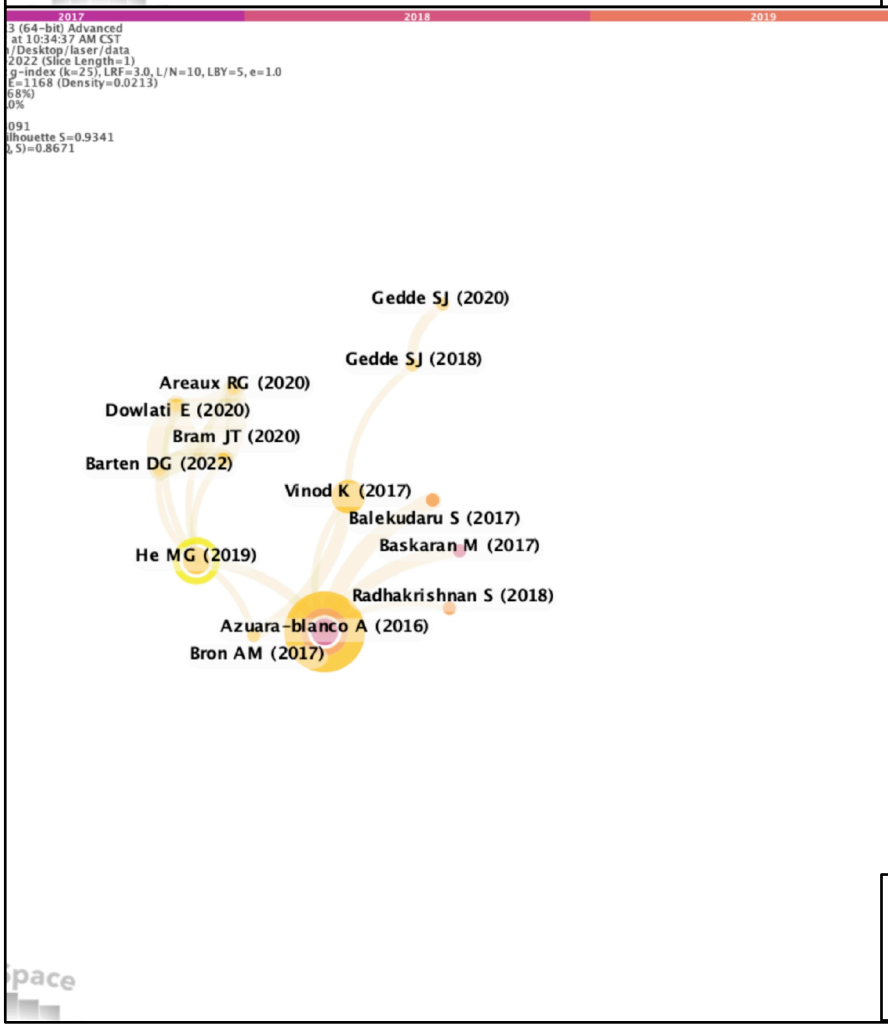
Cluster 4- ‘diabetic retinopathy’: diabetic retinopathy (12.12, 0.001); screening (8.65, 0.005); diabetic eye disease (8.65, 0.005); deep learning (8.65, 0.005); artificial intelligence (4.3, 0.05)



Cluster 5- ‘lasik’: lasik (11.2, 0.001); smile (11.2, 0.001); cornea (5.9, 0.05); corneenne (5.55, 0.05); corneal biomechanics (5.55, 0.05)



Cluster 6- **‘confocal microscopy’:** confocal microscopy (9.29, 0.005); sub-basal nerves (4.61, 0.05); drug related adverse reactions (4.61, 0.05); corneal surgery (4.61, 0.05); contact lens (4.61, 0.05)

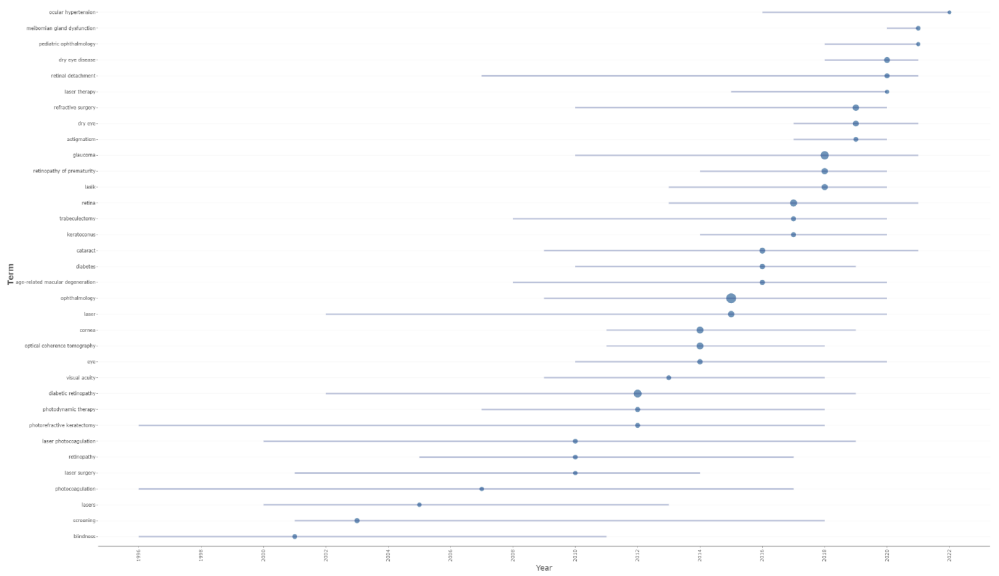


Cluster 8- **‘trabeculectomy’:** trabeculectomy (9.88, 0.005); glaucoma (6.04, 0.05); aqueous misdirection syndrome (4.9, 0.05); pandemic (4.9, 0.05); blepharoplasty (4.9, 0.05)

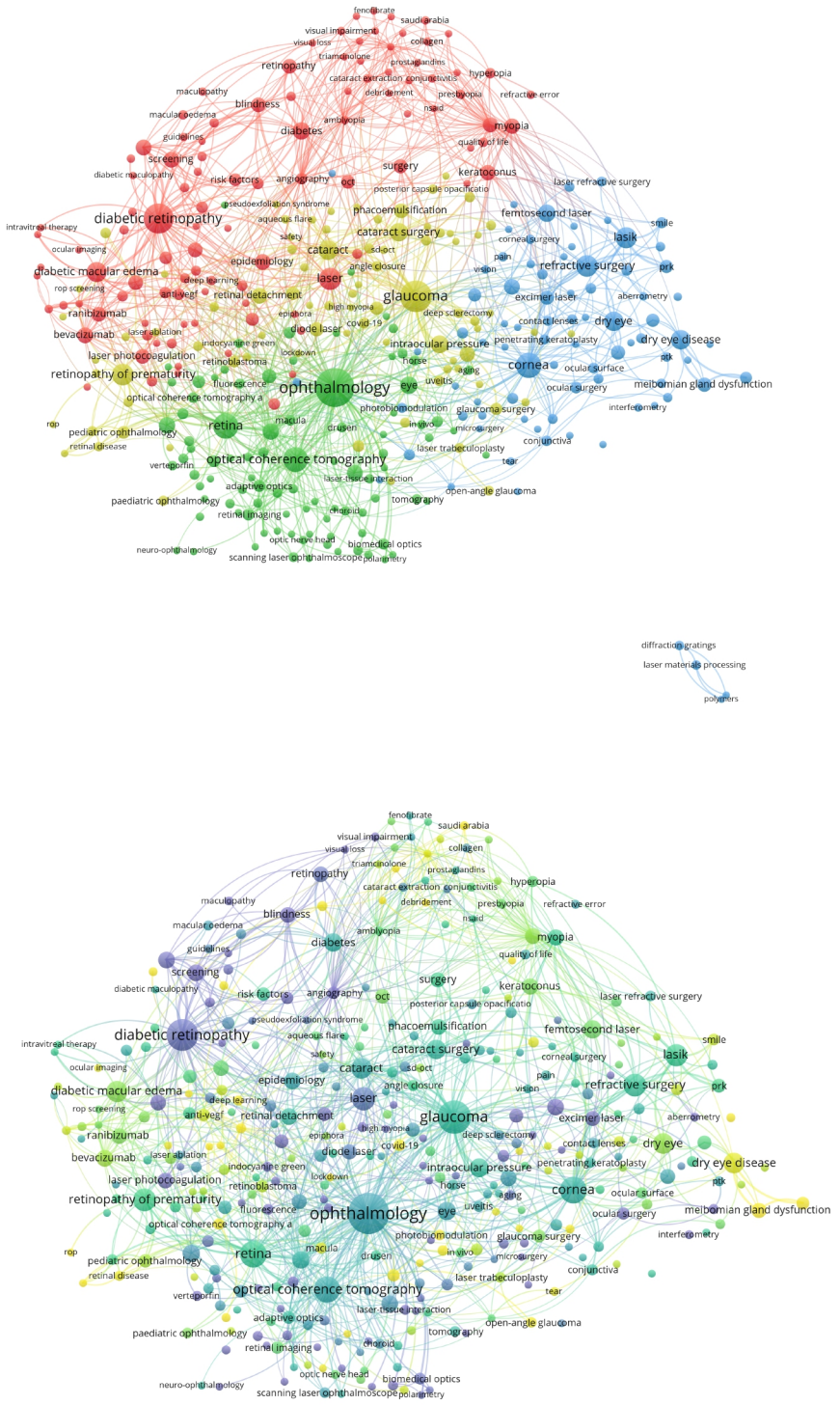
Supplementary Fig. 6. Trend analysis of top 34 co-occurring authors' keywords from 1990 to 2022 (A), overlay visualization of co-occurring authors' keywords (B), and scored on the average publication year (C).

Note:360 items are represented within 4 clusters. The nodes represent keywords and the colors show the average year of publication for each node. The size of a node is proportional to the frequency of keyword co-occurrence.
The co-occurrence network is weighted on total link strength across different keyword node, and scored on the average publication years from 1990 to 2022.

A


ocular hypertension
meibomian gland dysfunction
pediatric ophthalmology
dry eye disease
retinal detachment
laser therapy
refractive surgery
dry eye
astigmatism
glaucoma
retinopathy of prematurity
lasik
retina
trabeculectomy
keratoconus
cataract
diabetes
age-related macular degeneration
ophthalmology
laser
cornea
optical coherence tomography
eye
visual acuity
diabetic retinopathy
photodynamic therapy
photorefractive keratectomy
laser photocoagulation
retinopathy
laser surgery
photocoagulation
lasers
screening
blindness
Term
1994
1998
2002
2006
2010
2014
2018
2022
Year

B

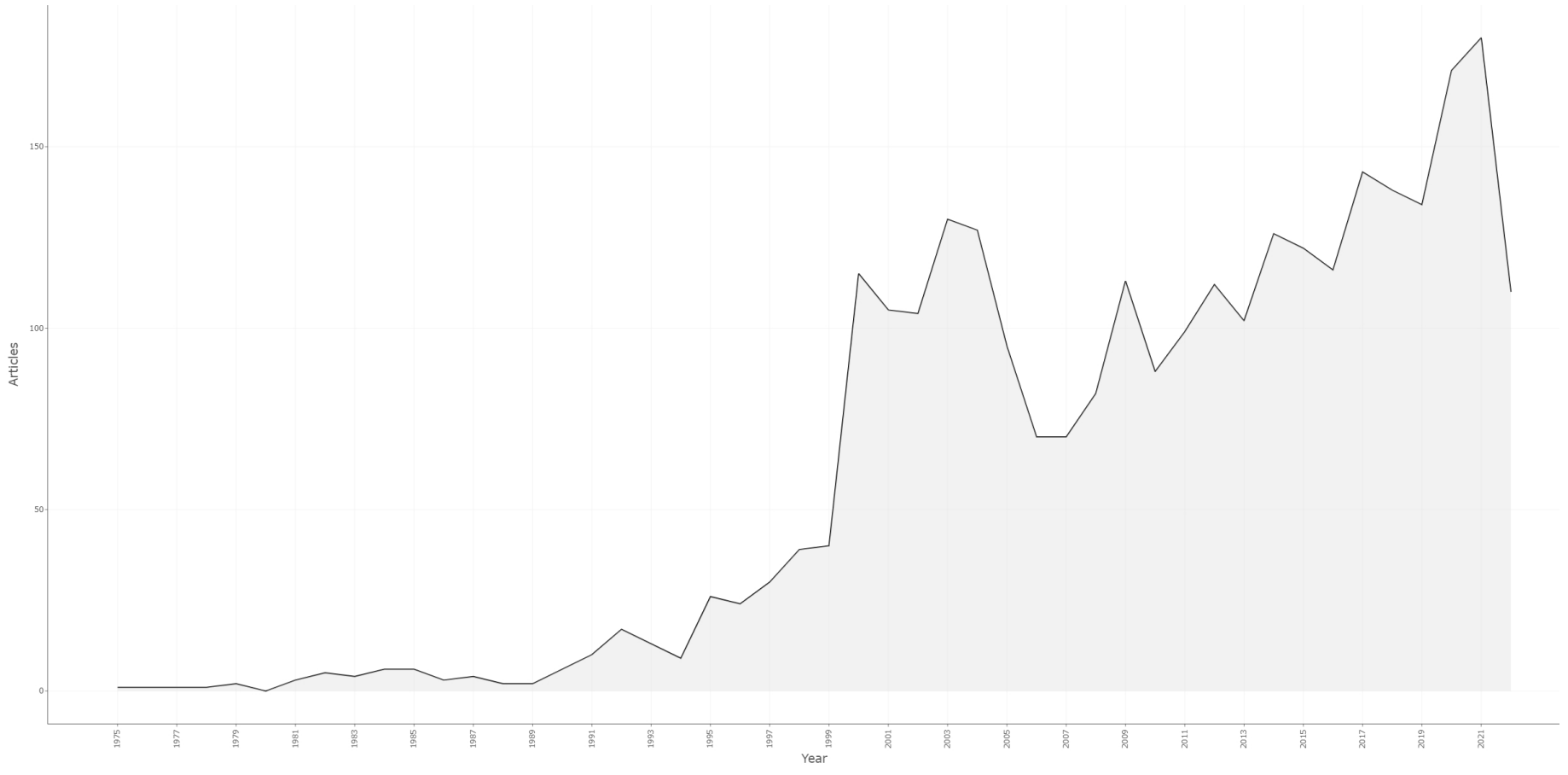

fenofibrate
saudi arabia
visual impairment
visual loss
collagen
triamcinolone
retinopathy
prostaglandins
cataract extraction
conjunctivitis
hyperopia
maculopathy
debridement
presbyopia
refractive error
blindness
nsaid
macular oedema
amblyopia
myopia
diabetes
guidelines
quality of life
screening
surgery
keratoconus
diabetic maculopathy
risk factors
angiography
oct
laser refractive surgery
posterior capsule opacification
pseudoexfoliation syndrome
phacoemulsification
femtosecond laser
intravitreal therapy
aqueous flare
smile
diabetic retinopathy
cataract surgery
lasik
safety
corneal surgery
ocular imaging
cataract
adjoct
pain
epidemiology
angle closure
refractive surgery
prk
diabetic macular edema
vision
laser
deep learning
glaucoma
excimer laser
rop screening
anti-vegf
retinal detachment
aberrometry
ranibizumab
epiphora
high myopia
deep sclerectomy
dry eye
bevacizumab
diode laser
covid-19
contact lenses
dry eye disease
laser ablation
intraocular pressure
penetrating keratoplasty
indocyanine green
lockdown
laser photocoagulation
retinoblastoma
horse
cornea
ocular surface
prk
retinopathy of prematurity
fluorescence
ophthalmology
eye
aging
uveitis
meibomian gland dysfunction
optical coherence tomography a
photobiomodulation
glaucoma surgery
ocular surgery
interferometry
rop
macula
in vivo
microsurgery
pediatric ophthalmology
retina
drusen
conjunctiva
retinal disease
laser trabeculoplasty
optical coherence tomography
verteporfin
tear
laser-tissue interaction
adaptive optics
open-angle glaucoma
paediatric ophthalmology
tomography
retinal imaging
choroid
optic nerve head
biomedical optics
neuro-ophthalmology
scanning laser ophthalmoscope
polarimetry
diffraction gratings
laser materials processing
polymers

C

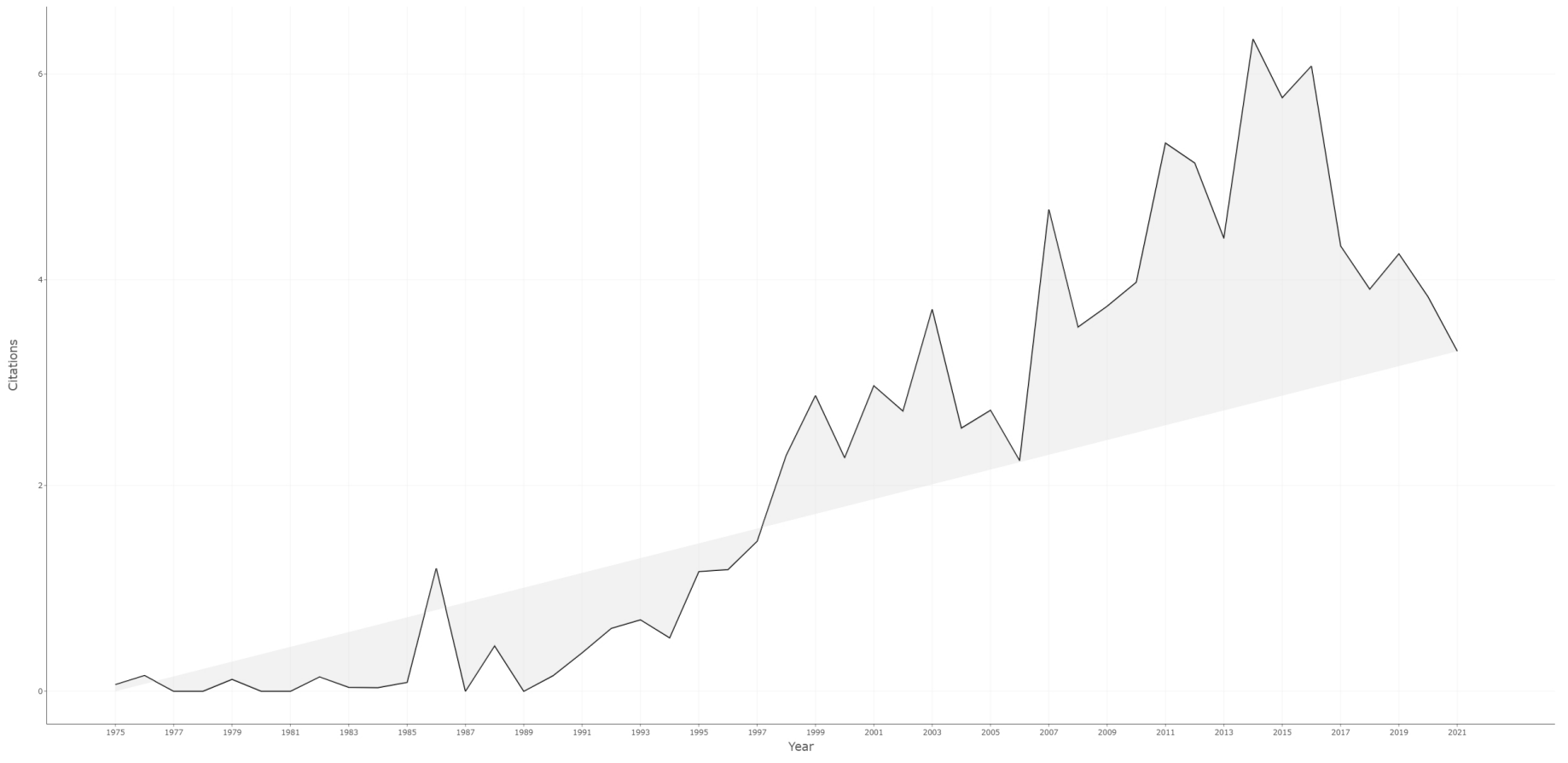
fenofibrate
saudi arabia
visual impairment
visual loss
collagen
triamcinolone
retinopathy
prostaglandins
cataract extraction
conjunctivitis
hyperopia
maculopathy
debridement
presbyopia
refractive error
blindness
nsaid
macular oedema
amblyopia
myopia
diabetes
guidelines
quality of life
screening
surgery
keratoconus
diabetic maculopathy
risk factors
angiography
oct
laser refractive surgery
posterior capsule opacification
pseudoexfoliation syndrome
phacoemulsification
femtosecond laser
intravitreal therapy
aqueous flare
smile
diabetic retinopathy
cataract surgery
lasik
safety
corneal surgery
ocular imaging
cataract
adjoct
pain
epidemiology
angle closure
refractive surgery
prk
diabetic macular edema
vision
laser
deep learning
glaucoma
excimer laser
rop screening
anti-vegf
retinal detachment
aberrometry
ranibizumab
epiphora
high myopia
deep sclerectomy
dry eye
bevacizumab
diode laser
covid-19
contact lenses
dry eye disease
laser ablation
intraocular pressure
penetrating keratoplasty
indocyanine green
lockdown
laser photocoagulation
retinoblastoma
horse
cornea
ocular surface
prk
retinopathy of prematurity
fluorescence
ophthalmology
eye
aging
uveitis
meibomian gland dysfunction
optical coherence tomography a
photobiomodulation
glaucoma surgery
ocular surgery
interferometry
rop
macula
in vivo
microsurgery
pediatric ophthalmology
retina
drusen
conjunctiva
retinal disease
laser trabeculoplasty
optical coherence tomography
verteporfin
tear
laser-tissue interaction
adaptive optics
open-angle glaucoma
paediatric ophthalmology
tomography
retinal imaging
choroid
optic nerve head
biomedical optics
neuro-ophthalmology
scanning laser ophthalmoscope
polarimetry
diffraction gratings
laser materials processing
polymers
2010
2012
2014
2016
2018
2020

Supplementary Fig. 7. Annual scientific production (A) and average citation per year for references (B) (1990-2022)

A

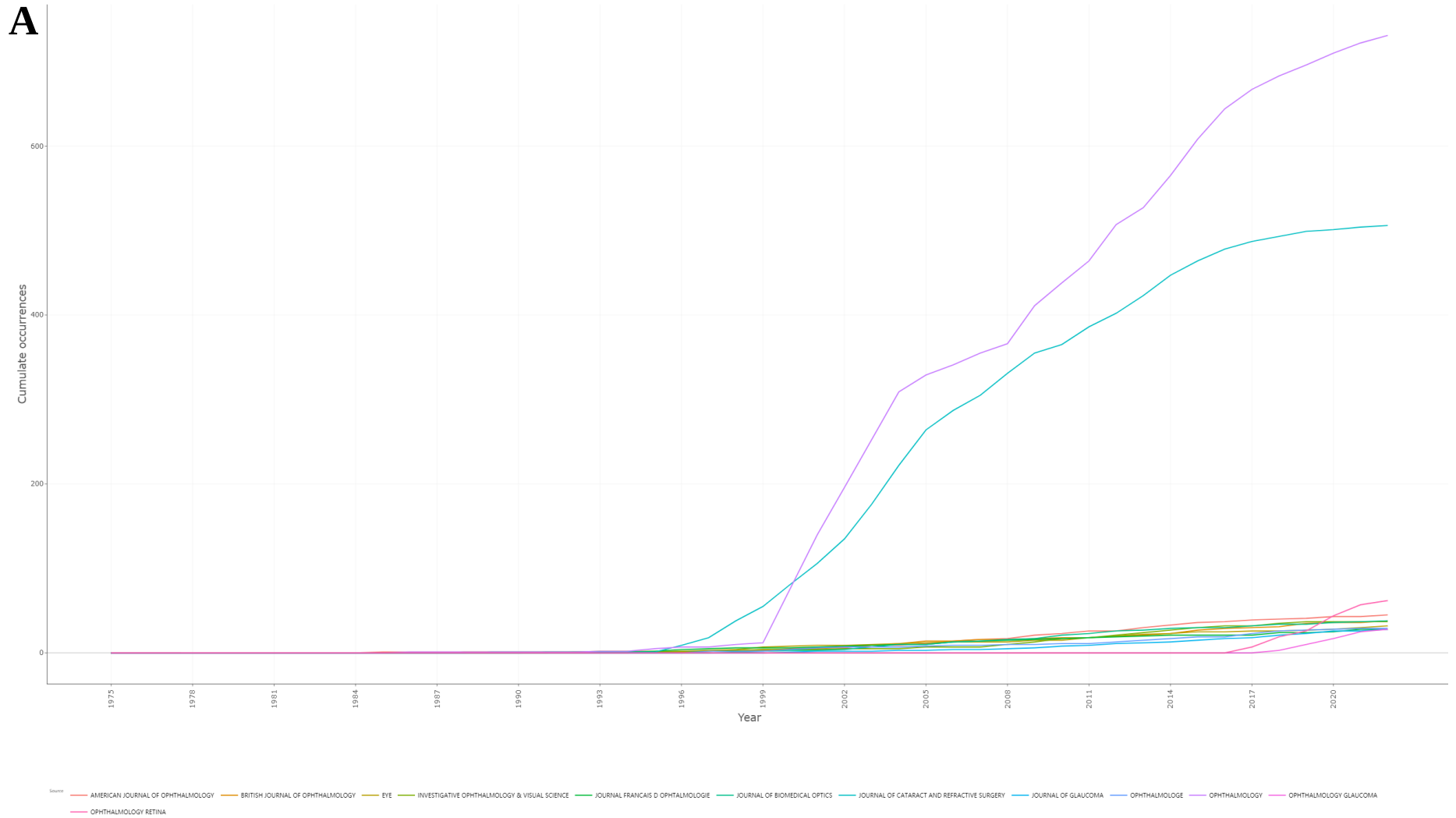

Articles
150
100
50
0
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011
2013
2015
2017
2019
2021
Year

B


Citations
6
4
2
0
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011
2013
2015
2017
2019
2021
Year

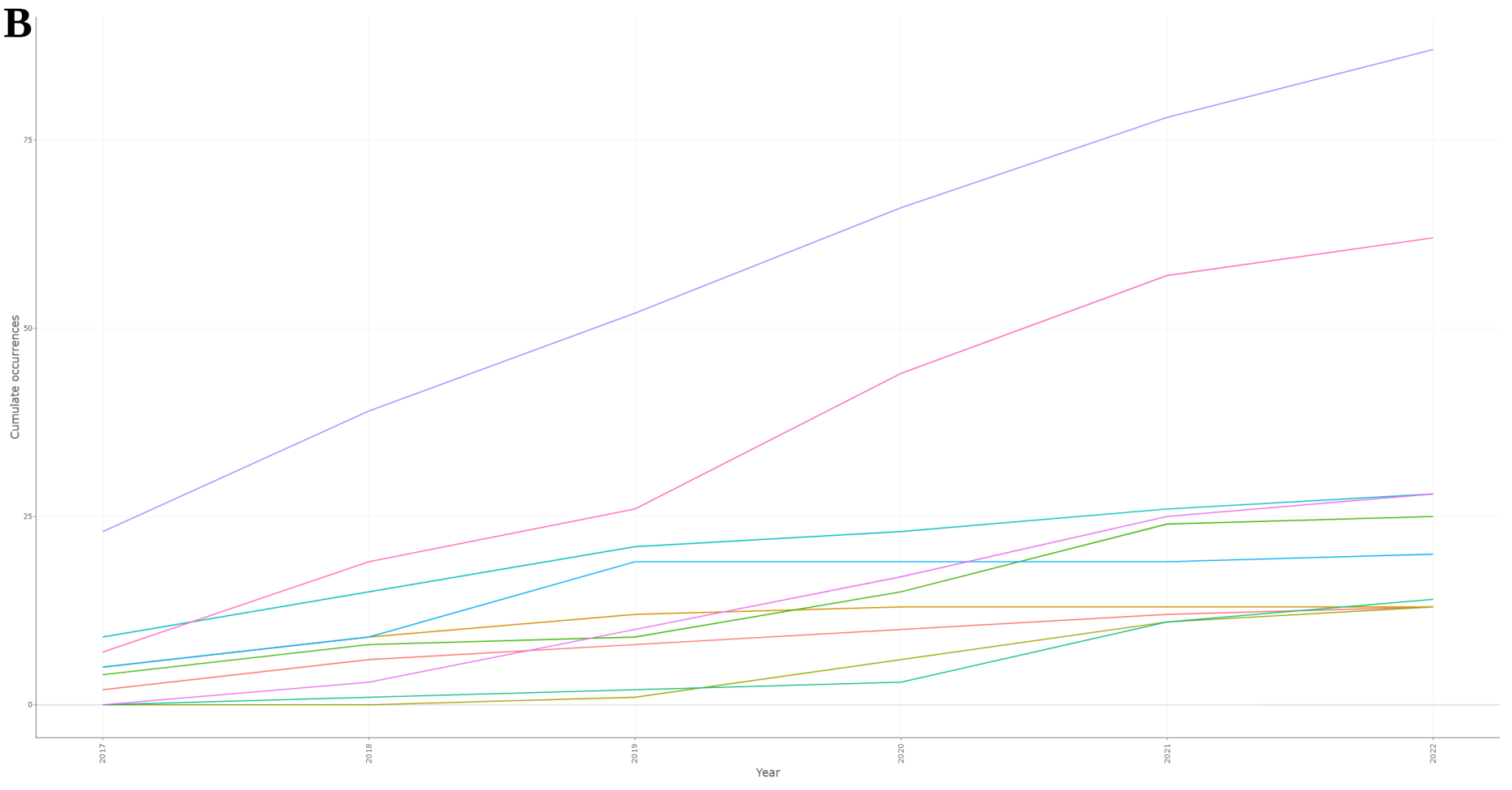
Supplementary Fig. 8. Top 10 growth source (1990-2022 and 2017-2022)

A


Cumulate occurrences
600
400
200
0
1975
1978
1981
1984
1987
1990
1993
1996
1999
2002
2005
2008
2011
2014
2017
2020
Year

Source
AMERICAN JOURNAL OF OPHTHALMOLOGY
BRITISH JOURNAL OF OPHTHALMOLOGY
EYE
INVESTIGATIVE OPHTHALMOLOGY & VISUAL SCIENCE
JOURNAL FRANCAIS D OPHTALMOLOGIE
JOURNAL OF BIOMEDICAL OPTICS
JOURNAL OF CATARACT AND REFRACTIVE SURGERY
JOURNAL OF GLAUCOMA
OPHTHALMOLOGE
OPHTHALMOLOGY
OPHTHALMOLOGY GLAUCOMA
OPHTHALMOLOGY RETINA

B

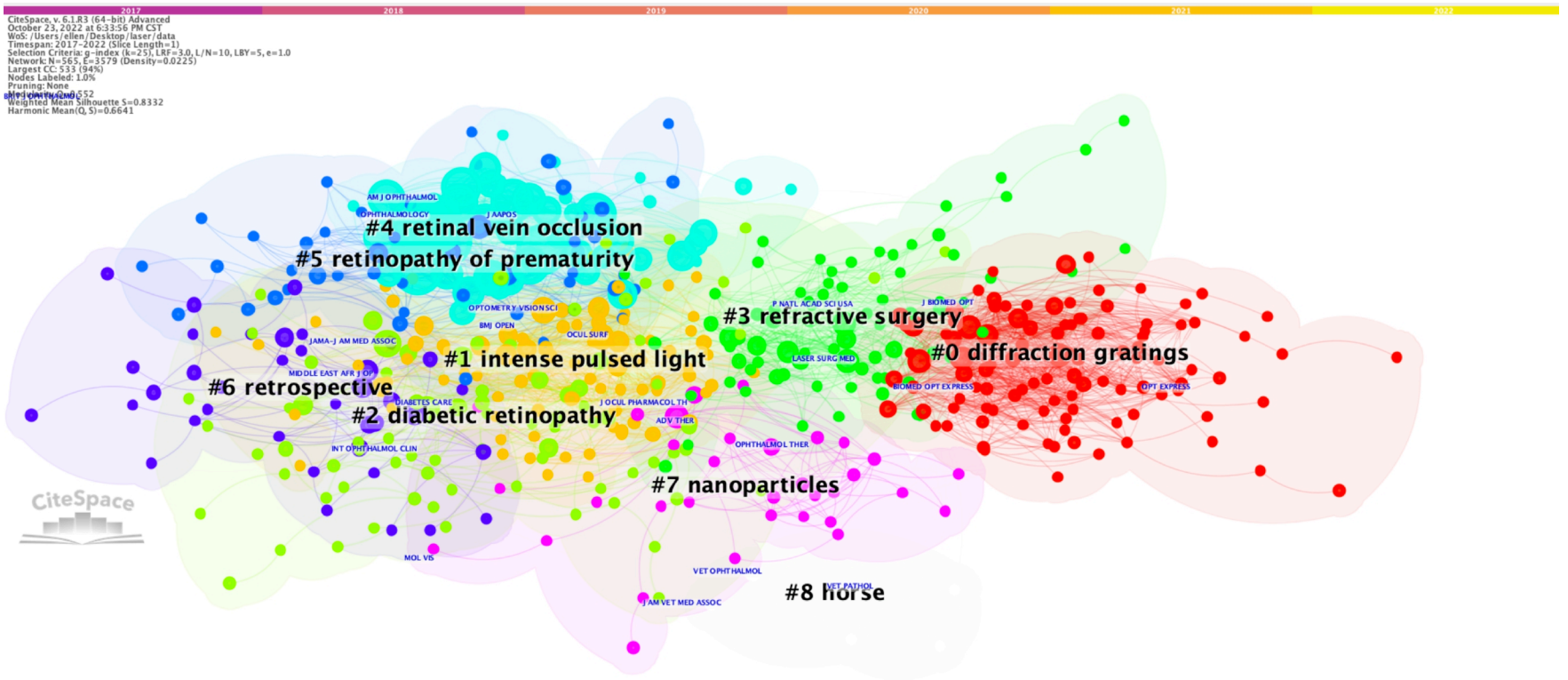

Cumulate occurrences
75
50
25
0
2017
2018
2019
2020
2021
2022
Year

Source
ACTA OPHTHALMOLOGICA
ADVANCES IN THERAPY
BMJ CASE REPORTS
CLINICAL OPHTHALMOLOGY
EUROPEAN JOURNAL OF OPHTHALMOLOGY
JOURNAL OF CATARACT AND REFRACTIVE SURGERY
JOURNAL OF CURRENT OPHTHALMOLOGY
OPHTHALMOLOGY
OPHTHALMOLOGY GLAUCOMA
OPHTHALMOLOGY RETINA

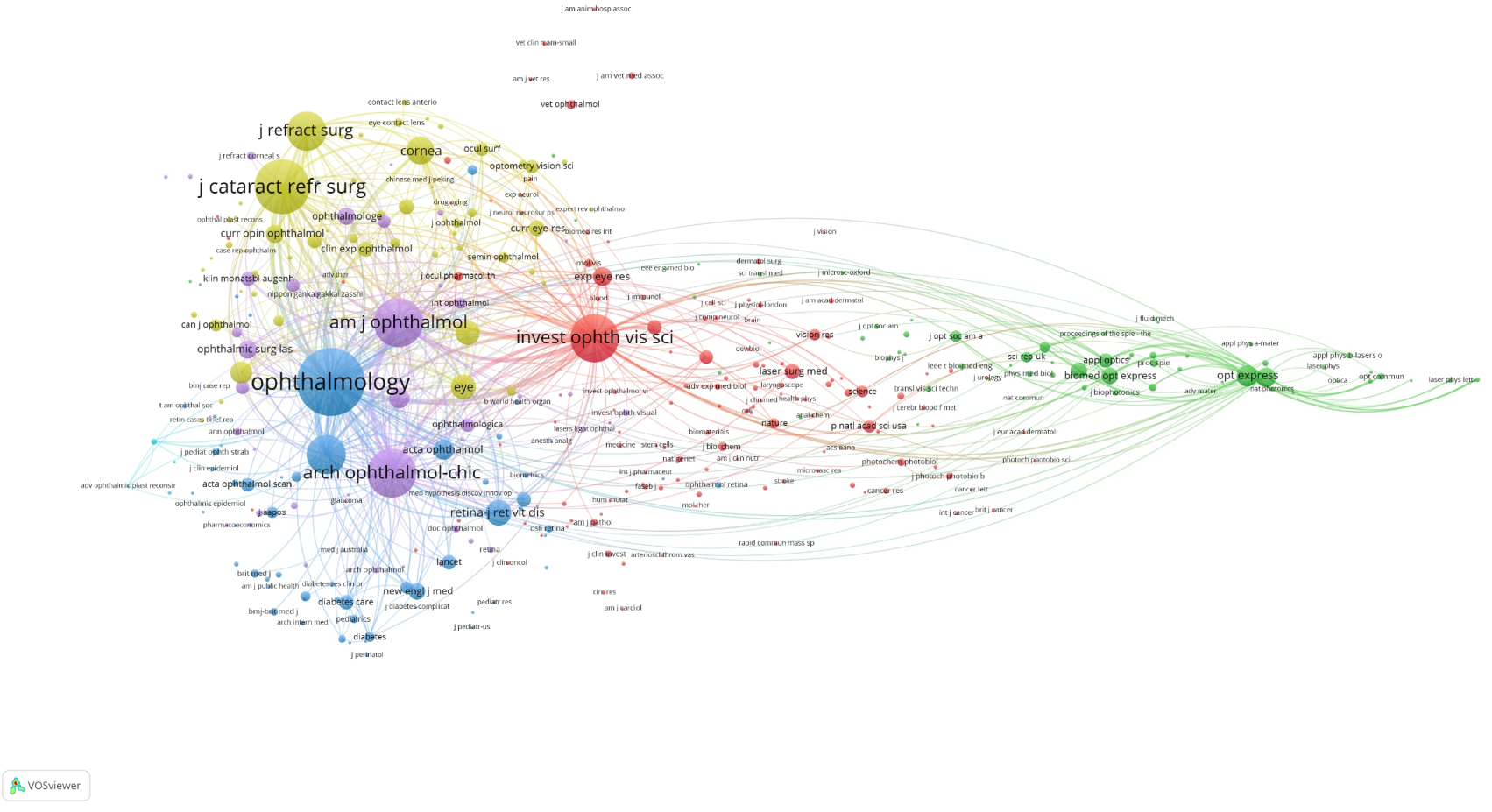
Supplementary Fig. 9. Overlay visualization of most cited journals for the last 5 years (A), and most co-cited journals which published the most articles in last 20 years (B).

Figure A is obtained with CiteSpace and Figure B with VOSviewer.
(A) 9 clusters are identified.
(B) Weighted on documents, 365 journals with 6 clusters are identified.

A

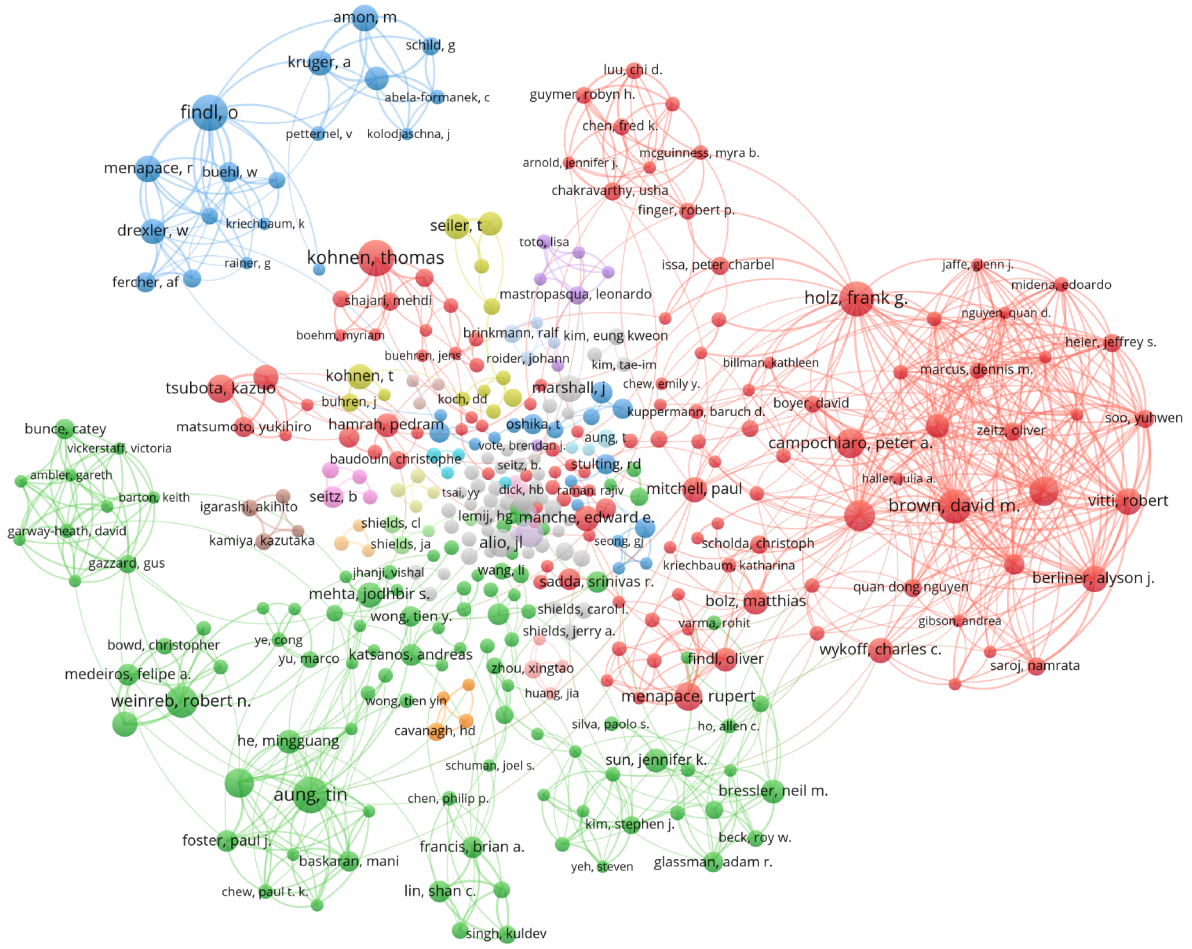

2017
2018
2019
2020
2021
2022
CiteSpace, v. 6.1.R3 (64-bit) Advanced
October 23, 2022 at 6:33:56 PM CST
WoS: /Users/ellen/Desktop/laser/data
Timespan: 2017-2022 (Slice Length=1)
Selection Criteria: g-index (k=25), LRF=3.0, L/N=10, LBY=5, e=1.0
Network: N=565, E=3579 (Density=0.0225)
Largest CC: 533 (94%)
Nodes Labeled: 1.0%
Pruning: None
Weighted Mean Silhouette S=0.8332
Harmonic Mean(Q, S)=0.6641
#4 retinal vein occlusion
#5 retinopathy of prematurity
#3 refractive surgery
#0 diffraction gratings
#1 intense pulsed light
#6 retrospective
#2 diabetic retinopathy
#7 nanoparticles
#8 horse
AM J OPHTHALMOL
OPHTHALMOLOGY
J AAPOS
OPTOMETRY VISION SCI
BMJ OPEN
OCUL SURF
JAMA-J AM MED ASSOC
MIDDLE EAST AFR J OPH
DIABETES CARE
INT OPHTHALMOL CLIN
P NATL ACAD SCI USA
J BIOMED OPT
LASER SURG MED
BIOMED OPT EXPRESS
OPT EXPRESS
J OCUL PHARMACOL TH
ADV THER
OPHTHALMOL THER
MOL VIS
VET OPHTHALMOL
J AM VET MED ASSOC
VET PATHOL
CiteSpace

B


j am anim hosp assoc
vet clin nam-small
am j vet res
j am vet med assoc
vet ophthalmol
contact lens anterio
eye contact lens
j refract surg
j refract corneal s
cornea
ocul surf
optometry vision sci
pain
chinese med j-peking
j cataract refr surg
exp neurol
drug eging
expert rev ophthalmo
ophthalmologe
j ophthalmol
curr eye res
biomed res int
curr opin ophthalmol
clin exp ophthalmol
case rep ophthalm
semin ophthalmol
klin monatsbl augenh
j ocul pharmacol th
exp eye res
nippon ganka gakkai zasshi
int ophthalmol
am j ophthalmol
can j ophthalmol
invest ophth vis sci
ophthalmic surg las
ophthalmology
eye
bmj case rep
t am ophthal soc
retin cases brief rep
ann ophthalmol
ophthalmologica
pediat ophth strab
acta ophthalmol
j clin epidemiol
arch ophthalmol-chic
acta ophthalmol scan
adv ophthalmic plast reconstr
ophthalmic epidemiol
glaucoma
j aapos
pharmacoeconomics
retina-j ret vit dis
doc ophthalmol
med j australia
retina
lancet
j clin oncol
brit med j
arch ophthalmol
am j public health
diabetes-res clin pr
new engl j med
diabetes care
j diabetes complicat
pediatr res
bmj-br med j
pediatrics
arch intern med
diabetes
j perinatol
j pediatr-us
j vision
dermatol surg
sci transl med
j microsc-oxford
ieee engmed bio
j immunol
j cell sci
j physiol-london
j am acad dermatol
j comp neurol
brain
vision res
j opt soc am
devbiol
j opt soc am a
laser surg med
sci rep-uk
appl optics
proc spie
biomed opt express
opt express
j biophotonics
nat photonics
adv mater
appl phys a-mater
proceedings of the spie - the
j fluid mech
appl phys b-lasers o
laser phys
opt commun
laser phys lett
ieee t biomed eng
j urology
phys med biol
nat commun
invest ophthalmol vi
adv exp med biol
laryngoscope
science
transl vis sci techn
j cereb blood f met
j chin med health phys
b world health organ
invest ophth visual
apal chem
nature
p natl acad sci usa
j eur acad dermatol
lasers light ophthal
biomaterials
anesth analg
medicine
stem cells
j biol chem
acs nano
nat genet
am j clin nutr
photochem photobiol
photoch photobio sci
j photoch photobio b
biometrics
int j pharmaceut
microvasc res
stroke
ophthalmol retina
faseb j
cancer res
cancer lett
int j cancer
brit j cancer
hum mutat
mol ther
am j pathol
osli retina *
rapid commun mass sp
j clin invest
arterioscl throm vas
j clin oncol
circ res
am j cardiol
VOSviewer

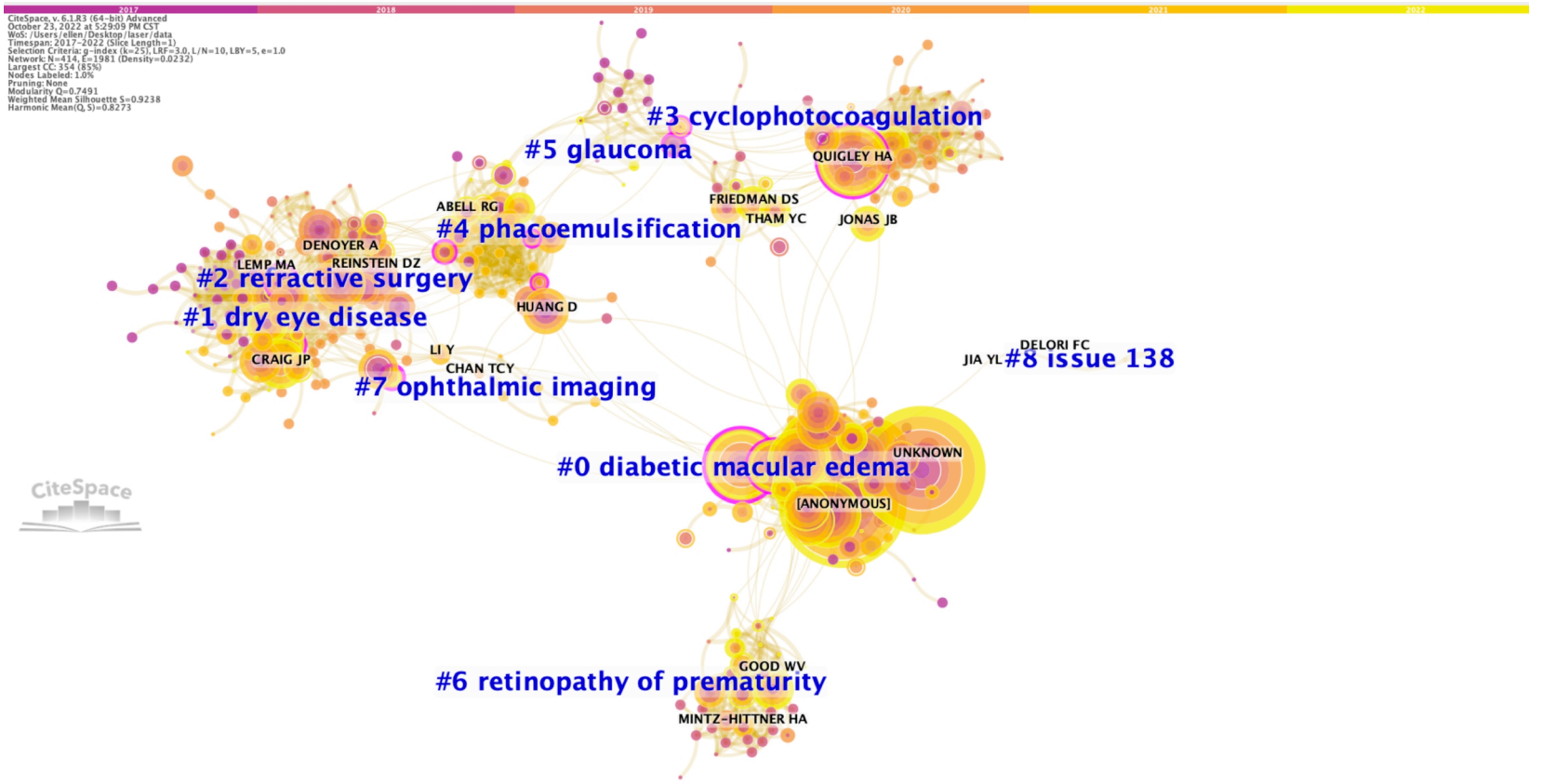
Supplementary Fig. 10. Co-authorship network obtained with VOSviewer.

69 clusters are identified comprising 396 different authors. Each cluster is identified with a different color.

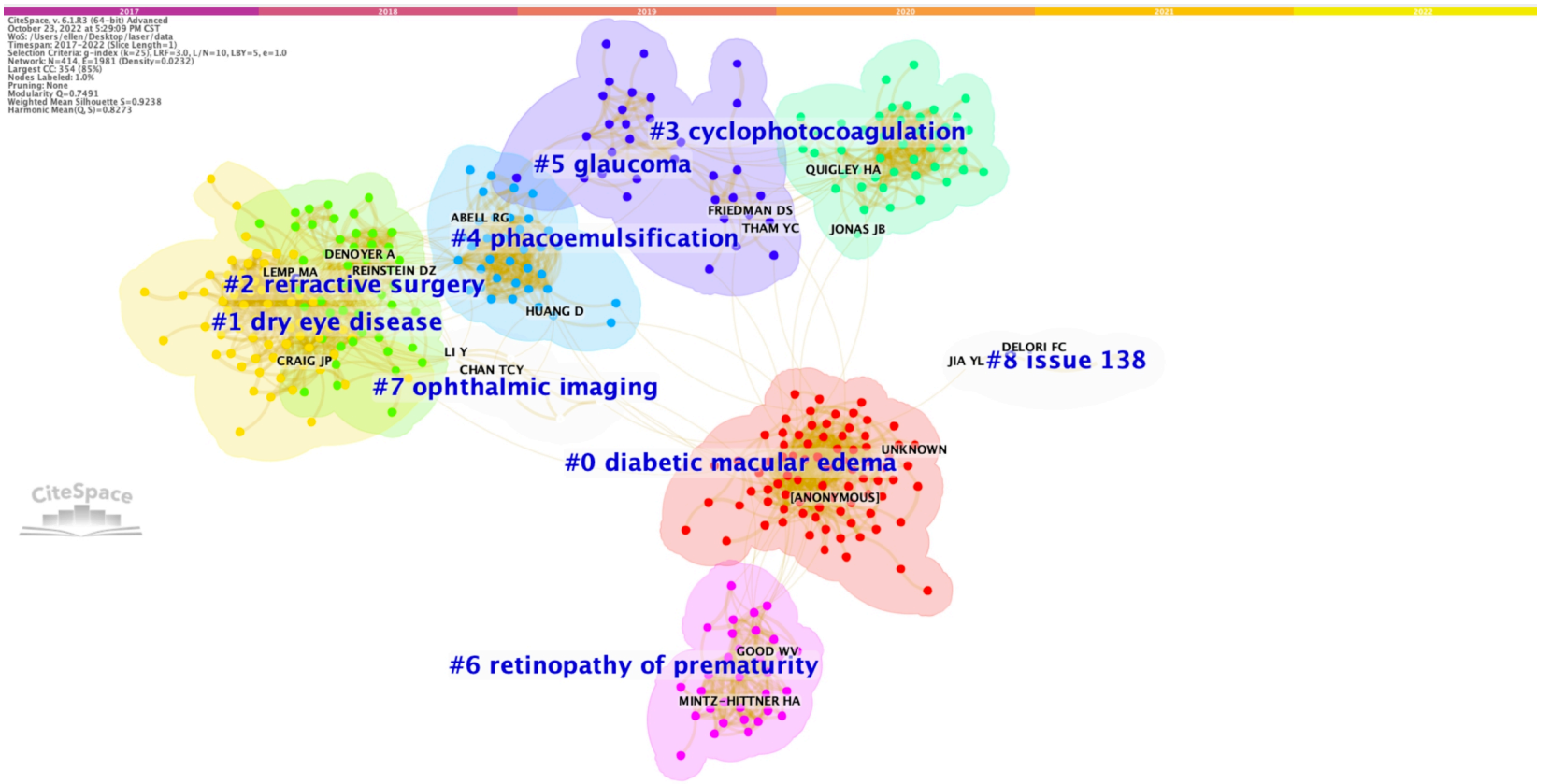

amon, m
schild, g
kruger, a
abela-formanek, c
findl, o
petternel, v
kolodjaschna, j
menapace, r
buehl, w
drexler, w
kriechbaum, k
rainer, g
ferchen, af
seiler, t
kohnen, thomas
shajari, mehdi
boehm, myriam
buehren, jens
kohnen, t
buhren, j
tsubota, kazuo
matsumoto, yukihiro
hamrah, pedram
baudouin, christophe
seitz, b
igarashi, akihito
kamiya, kazutaka
shields, cl
shields, ja
jhanji, vishal
mehta, jodhbir s.
wong, tien y.
ye, cong
yu, marco
katsanos, andreas
medeiros, felipe a.
weinreb, robert n.
bowd, christopher
he, mingguang
aung, tin
chen, philip p.
foster, paul j.
baskaran, mani
chew, paul t. k.
francis, brian a.
lin, shan c.
singh, kuldev
bunce, catey
vickerstaff, victoria
ambler, gareth
barton, keith
garway-heath, david
gazzard, gus
luu, chi d.
guymer, robyn h.
chen, fred k.
arnold, jennifer j.
mcguinness, myra b.
chakravarthy, usha
finger, robert p.
toto, lisa
issa, peter charbel
mastropasqua, leonardo
brinkmann, ralf
kim, eung kweon
roider, johann
kim, tae-im
marshall, j
chew, emily y.
koch, dd
oshika, t
vote, brendan j.
seitz, b.
tsai, yy
dick, hb
raman, rajiv
lemij, hg
manche, edward e.
alio, jl
wang, li
sadda, srinivas r.
shields, carol l.
shields, jerry a.
zhou, xingtao
huang, jia
wong, tien yin
cavanagh, hd
schuman, joel s.
silva, paolo s.
ho, allen c.
sun, jennifer k.
kim, stephen j.
yeh, steven
glassman, adam r.
bressler, neil m.
beck, roy w.
holz, frank g.
jaffe, glenn j.
midena, edoardo
nguyen, quan d.
heier, jeffrey s.
billman, kathleen
marcus, dennis m.
boyer, david
kuppermann, baruch d.
campochiaro, peter a.
zeitz, oliver
soo, yuhwen
aung, t
stulting, rd
haller, julia a.
mitchell, paul
brown, david m.
vitti, robert
scholda, christoph
kriechbaum, katharina
quan dong nguyen
berliner, alyson j.
bolz, matthias
varma, rohit
gibson, andrea
wykoff, charles c.
saroj, namrata
findl, oliver
menapace, rupert

Supplementary Fig. 11. Visualization of the author co-citation network (A), with corresponding clusters (B) and time map (C) (2017-2022)

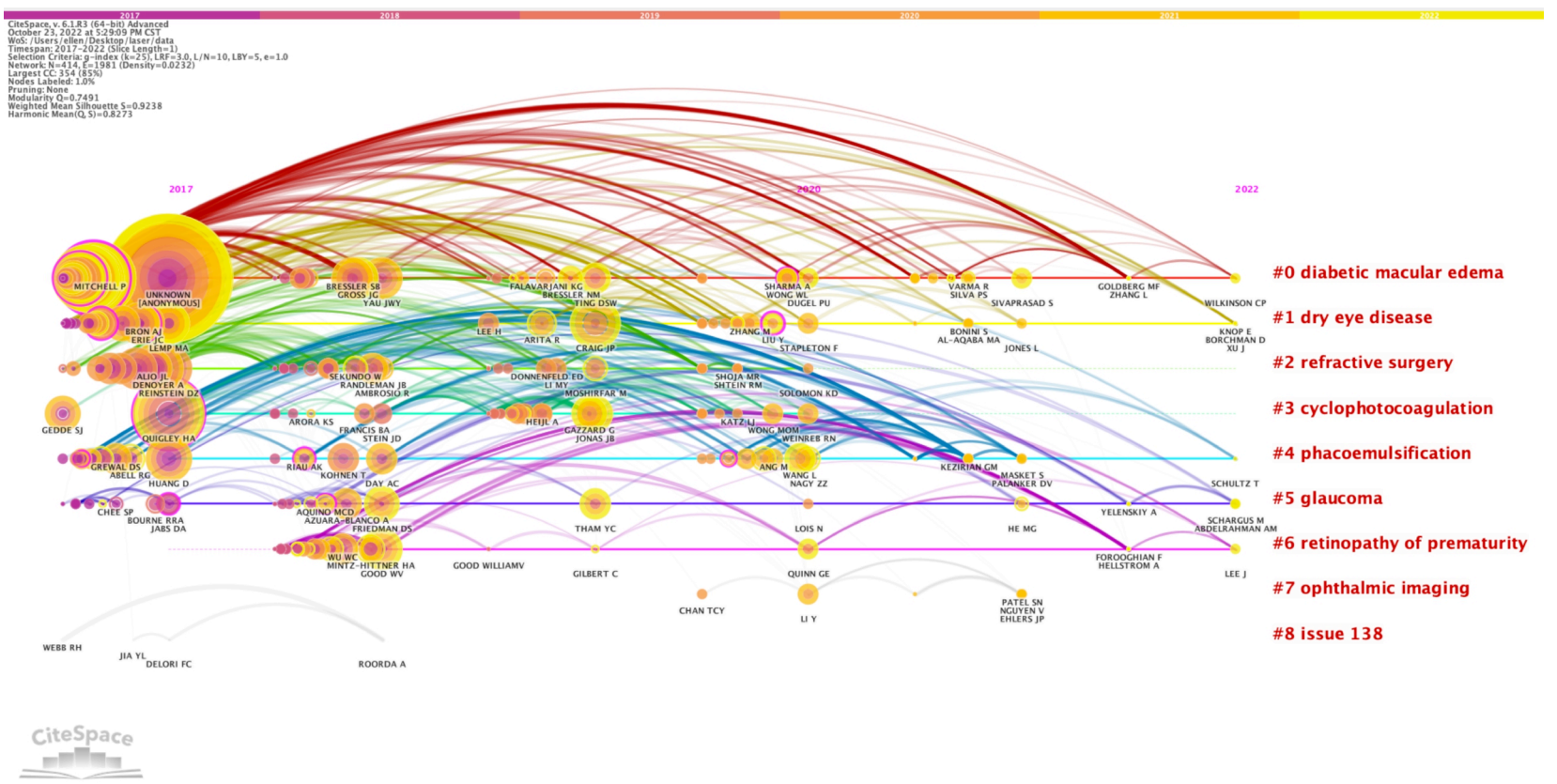
A


2017
2018
2019
2020
2021
2022
CiteSpace, v. 6.1.R3 (64-bit) Advanced
October 23, 2022 at 5:29:09 PM CST
WoS: /Users/ellen/Desktop/laser/data
Timespan: 2017-2022 (Slice Length=1)
Selection Criteria: g-index (k=25), LRF=3.0, L/N=10, LBY=5, e=1.0
Network: N=414, E=1981 (Density=0.0232)
Largest CC: 354 (85%)
Nodes Labeled: 1.0%
Pruning: None
Modularity Q=0.7491
Weighted Mean Silhouette S=0.9238
Harmonic Mean(Q, S)=0.8273
#3 cyclophotocoagulation
#5 glaucoma
QUIGLEY HA
FRIEDMAN DS
THAM YC
JONAS JB
ABELL RG
#4 phacoemulsification
DENOYER A
LEMP MA
REINSTEIN DZ
#2 refractive surgery
HUANG D
#1 dry eye disease
CRAIG JP
LI Y
CHAN TCY
#7 ophthalmic imaging
DELORI FC
JIA YL
#8 issue 138
UNKNOWN
#0 diabetic macular edema
[ANONYMOUS]
GOOD WV
#6 retinopathy of prematurity
MINTZ-HITTNER HA
CiteSpace

B


2017
2018
2019
2020
2021
2022
CiteSpace, v. 6.1.R3 (64-bit) Advanced
October 23, 2022 at 5:29:09 PM CST
WoS: /Users/ellen/Desktop/laser/data
Timespan: 2017-2022 (Slice Length=1)
Selection Criteria: g-index (k=25), LRF=3.0, L/N=10, LBY=5, e=1.0
Network: N=414, E=1981 (Density=0.0232)
Largest CC: 354 (85%)
Nodes Labeled: 1.0%
Pruning: None
Modularity Q=0.7491
Weighted Mean Silhouette S=0.9238
Harmonic Mean(Q, S)=0.8273
#3 cyclophotocoagulation
#5 glaucoma
QUIGLEY HA
FRIEDMAN DS
THAM YC
JONAS JB
ABELL RG
#4 phacoemulsification
DENOYER A
LEMP MA
REINSTEIN DZ
#2 refractive surgery
HUANG D
#1 dry eye disease
CRAIG JP
LI Y
CHAN TCY
#7 ophthalmic imaging
DELORI FC
JIA YL
#8 issue 138
UNKNOWN
#0 diabetic macular edema
[ANONYMOUS]
GOOD WV
#6 retinopathy of prematurity
MINTZ-HITTNER HA
CiteSpace

C


2017
2020
2022
CiteSpace, v. 6.1.R3 (64-bit) Advanced
October 23, 2022 at 5:29:09 PM CST
WoS: /Users/ellen/Desktop/laser/data
Timespan: 2017-2022 (Slice Length=1)
Selection Criteria: g-index (k=25), LRF=3.0, L/N=10, LBY=5, e=1.0
Network: N=414, E=1981 (Density=0.0232)
Largest CC: 354 (85%)
Nodes Labeled: 1.0%
Pruning: None
Modularity Q=0.7491
Weighted Mean Silhouette S=0.9238
Harmonic Mean(Q, S)=0.8273
#0 diabetic macular edema
#1 dry eye disease
#2 refractive surgery
#3 cyclophotocoagulation
#4 phacoemulsification
#5 glaucoma
#6 retinopathy of prematurity
#7 ophthalmic imaging
#8 issue 138
CiteSpace

Supplementary Table 1. Co-cited reference network detailed clusters (1990-2022)

Cluster ID	Size	Silhouette score	Mean (Year)	Top five extracted terms based on keywords (Log-likelihood ratio algorithm; p-level)	Representative reference
0	141	0.924	1997	rk (8.02, 0.005); epikeratophakia (8.02, 0.005); nerves (8.02, 0.005); iscrs (8.02, 0.005); inflammation (5.28, 0.05)	MJ, MALDONADO (2002.0) Undersurface ablation of the flap for laser in situ keratomileusis retreatment. OPHTHALMOLOGY, V109, P12 DOI 10.1016/S0161-6420(02)01096-5
1	134	0.967	2010	diabetic macular edema (13.76, 0.001); ranibizumab (8.75, 0.005); retinal laser photocogulation (8.64, 0.005); intravitreal therapy (8.64, 0.005); vitrectomy (8.64, 0.005)	WILLIAM, E SMIDDY (2012.0) Clinical applications of cost analysis of diabetic macular edema treatments. OPHTHALMOLOGY DOI 10.1016/j.ophtha.2012.09.015
2	121	0.931	2001	aberrometry (15.39, 1.0E-4); refractive surgery (8.78, 0.005); contrast perception (7.6, 0.01); optical quality (7.6, 0.01); wavefront (7.6, 0.01)	B, NEERACHER (2004.0) Glare sensitivity and optical side effects 1 year after photorefractive keratectomy and laser in situ keratomileusis. JOURNAL OF CATARACT AND REFRACTIVE SURGERY DOI 10.1016/j.jcrs.2003.12.058
3	75	0.984	2014	femtosecond laser (6.87, 0.01); posterior capsule rupture (6.07, 0.05); femtosecond laser-assisted cataract surgery (6.07, 0.05); zonular dehiscence (6.07, 0.05); laser-induced breakdown (6.07, 0.05)	MARKO, POPOVIC (2016.0) Efficacy and safety of femtosecond laser-assisted cataract surgery compared with manual cataract surgery a meta-analysis of 14 567 eyes. OPHTHALMOLOGY, V123, P14 DOI 10.1016/j.ophtha.2016.07.005
4	66	0.937	2008	biomedical optics (5.05, 0.05); mmp-9 (5.05, 0.05); bioptics (5.05, 0.05); intracorneal ring (5.05, 0.05); diffuse lamellar keratitis (5.05, 0.05)	AYAD, A FARJO (2013.0) Femtosecond lasers for lasik flap creation a report by the american academy of ophthalmology. OPHTHALMOLOGY, V120, P16 DOI 10.1016/j.ophtha.2012.08.013
5	63	0.973	2012	smile (18.21, 1.0E-4); myopia (12.05, 0.001); corneenne (5.98, 0.05); fs-lasik (5.98, 0.05); corneal biomechanics (5.98, 0.05)	A, CHICHE (2018.0) Smile (small incision lenticule extraction) among the corneal refractive surgeries in 2018 (french translation of the article). JOURNAL FRANCAIS D OPHTALMOLOGIE DOI 10.1016/j.jfo.2018.03.006
6	58	0.901	2015	dry eye disease (18.69, 1.0E-4); meibomian gland dysfunction (10.61, 0.005); dry eye (8.49, 0.005); corneal nerves (7.94, 0.005); diabetic retinopathy (7.6, 0.01)	DOREEN, SCHMIDL (2020.0) Novel approaches for imaging-based diagnosis of ocular surface disease. DIAGNOSTICS DOI 10.3390/diagnostics10080589
7	57	0.989	2006	optical coherence tomography (7.3, 0.01); coherence (5.46, 0.05); adaptive optics (5.46, 0.05); ultrahigh resolution imaging (5.46, 0.05); fourier-domain optical coherence tomography (5.46, 0.05)	SHAN, C LIN (2007.0) Optic nerve head and retinal nerve fiber layer analysis - a report by the american academy of ophthalmology. OPHTHALMOLOGY, V114, P13 DOI 10.1016/j.ophtha.2007.07.005
8	57	0.962	2005	anterior chamber (8.89, 0.005); morphometry (8.89, 0.005); contact lens (6.14, 0.05); optical coherence tomography (5.12, 0.05); imaging (4.46, 0.05)	STEVEN, C SCHALLHORN (2008.0) Wavefront-guided lasik for the correction of primary myopia and astigmatism - a report by the american academy of ophthalmology. OPHTHALMOLOGY, V115, P13 DOI 10.1016/j.ophtha.2008.04.010
9	47	0.943	2017	glaucoma (16.52, 1.0E-4); trabeculectomy (8.21, 0.005); lasers (8.21, 0.005); micropulse laser (8.21, 0.005); ocular hypertension (8.21, 0.005)	GUS, GAZZARD (2019.0) Selective laser trabeculoplasty versus drops for newly diagnosed ocular hypertension and glaucoma: the light rct. HEALTH TECHNOLOGY ASSESSMENT, V23, P103 DOI 10.3310/hta23310
10	34	0.975	2017	diabetic retinopathy (12.34, 0.001); screening (9.11, 0.005); diabetic eye disease (9.11, 0.005); deep learning (9.11, 0.005); diabetic macular edema (6.14, 0.05)	MICHAEL, J GALE (2021.0) Diabetic eye disease: a review of screening and management recommendations. CLINICAL AND EXPERIMENTAL OPHTHALMOLOGY, V49, P18 DOI 10.1111/ceo.13894
11	34	0.976	1997	light emitting diode (NaN, 1.0); coherence (NaN, 1.0); regeneration (NaN, 1.0); sub-basal nerves (NaN, 1.0); microneuroma (NaN, 1.0)	MB, MCDONALD (2002.0) Conductive keratoplasty for the correction of low to moderate hyperopia: us clinical trial 1-year results on 355 eyes. OPHTHALMOLOGY, V109, P12 DOI 10.1016/S0161-6420(02)01255-1
12	31	1	1991	photorefractive keratectomy (19.07, 1.0E-4); eye (6.26, 0.05); corneal surgery (6.26, 0.05); photoablation (6.26, 0.05); photodisruption (6.26, 0.05)	JM, KRAUSS (1995.0) Lasers in ophthalmology. LASERS IN SURGERY AND MEDICINE, V17, P58 DOI 10.1002/lsm.1900170203
13	27	0.989	2003	3d (10.48, 0.005); uhr-oct (10.48, 0.005); retina (7.72, 0.01); diabetic retinopathy (0.16, 1.0); diabetic macular edema (0.13, 1.0)	MIRJAM, E J VAN VELTHOVEN (2007.0) Recent developments in optical coherence tomography for imaging the retina. PROGRESS IN RETINAL AND EYE RESEARCH, V26, P21 DOI 10.1016/j.preteyeres.2006.10.002
15	25	0.999	2002	age-related macular degeneration (amd) (7.41, 0.01); complement factor h (cfh) (7.41, 0.01); complement factor b (bf) (7.41, 0.01); basal laminar deposit (blamd) (7.41, 0.01); bruch's membrane (7.41, 0.01)	GEORGIA, CLEARY (2007.0) Effect of square-edged intraocular lenses on neodymium: yag laser capsulotomy rates in the united states. JOURNAL OF CATARACT AND REFRACTIVE SURGERY DOI 10.1016/j.jcrs.2007.06.056
20	20	0.992	1998	light emitting diode (NaN, 1.0); coherence (NaN, 1.0); regeneration (NaN, 1.0); sub-basal nerves (NaN, 1.0); microneuroma (NaN, 1.0)	DJ, APPLE (2001.0) Eradication of posterior capsule opacification - documentation. of a marked decrease in nd : yag laser posterior capsulotomy rates noted in an analysis of 5416 pseudophakic human eyes obtained postmortem. OPHTHALMOLOGY, V108, P14 DOI 10.1016/S0161-6420(00)00589-3
28	10	0.998	1997	light emitting diode (NaN, 1.0); coherence (NaN, 1.0); regeneration (NaN, 1.0); sub-basal nerves (NaN, 1.0); microneuroma (NaN, 1.0)	MS, KOOK (2002.0) Effect of laser in situ keratomileusis on retinal nerve fiber layer thickness measurements by scanning laser polarimetry. JOURNAL OF CATARACT AND REFRACTIVE SURGERY DOI 10.1016/S0886-3350(01)01310-4
56	4	0.999	1997	light emitting diode (NaN, 1.0); coherence (NaN, 1.0); regeneration (NaN, 1.0); sub-basal nerves (NaN, 1.0); microneuroma (NaN, 1.0)	M, BUSIN (2001.0) Effect of hinged lamellar keratotomy on postkeratoplasty eyes. OPHTHALMOLOGY DOI 10.1016/S0161-6420(01)00702-3

Supplementary Table 2. Burstness analysis for countries, institutions, authors, references and keywords (1990-2022 and 2017-2022)

A. Top 12 countries with the strongest beginning year of citation bursts (1990-2022)

Countries	Year	Strength	Begin	End	1990 - 2022
SCOTLAND	1990	3.56	**1993**	1999	
SWEDEN	1990	3.71	**1998**	2002	
FINLAND	1990	4.64	**1999**	2005	
NETHERLANDS	1990	7.99	**2002**	2007	
AUSTRIA	1990	6.53	**2003**	2005	
ENGLAND	1990	3.66	**2005**	2006	
JAPAN	1990	5.76	**2008**	2009	
BRAZIL	1990	4.51	**2009**	2013	
INDIA	1990	11.64	**2017**	2022	
IRAN	1990	6.89	**2017**	2019	
SAUDI ARABIA	1990	4.71	**2018**	2020	
PAKISTAN	1990	4.08	**2018**	2022	

B. Top 12 countries with the strongest strength of citation bursts (1990-2022)

Countries	Year	Strength	Begin	End	1990 - 2022
INDIA	1990	**11.64**	2017	2022	
NETHERLANDS	1990	**7.99**	2002	2007	
IRAN	1990	**6.89**	2017	2019	
AUSTRIA	1990	**6.53**	2003	2005	
JAPAN	1990	**5.76**	2008	2009	
SAUDI ARABIA	1990	**4.71**	2018	2020	
FINLAND	1990	**4.64**	1999	2005	
BRAZIL	1990	**4.51**	2009	2013	
PAKISTAN	1990	**4.08**	2018	2022	
SWEDEN	1990	**3.71**	1998	2002	
ENGLAND	1990	**3.66**	2005	2006	
SCOTLAND	1990	**3.56**	1993	1999	

C. Top 25 institutions with the strongest beginning year of citation bursts (1990-2022)

Institutions	Year	Strength	Begin	End	1990 - 2022
Univ Vienna	1990	14.42	**1998**	2004	
Harvard Univ	1990	5.52	**1998**	2003	
Univ Texas	1990	8.92	**1999**	2007	
Univ Helsinki	1990	5.66	**2002**	2004	
Rotterdam Eye Hosp	1990	4.18	**2002**	2007	
St Thomas Hosp	1990	6.43	**2003**	2006	
Med Univ Vienna	1990	9.27	**2005**	2011	
Univ Munich	1990	5.16	**2005**	2014	
Univ Bonn	1990	5.1	**2008**	2016	
Univ Wisconsin	1990	5	**2009**	2014	
Johns Hopkins Univ	1990	7.22	**2010**	2016	
Univ So Calif	1990	6.85	**2010**	2015	
Retina Vitreous Associates Med Grp	1990	5.12	**2012**	2016	
Univ Michigan	1990	4.44	**2012**	2015	
Univ Milan	1990	4.27	**2012**	2018	
UCL	1990	4.64	**2014**	2020	
Genentech Inc	1990	4.61	**2014**	2016	
Harvard Med Sch	1990	9.48	**2016**	2022	
Aravind Eye Hosp	1990	5.13	**2016**	2022	
Univ Tehran Med Sci	1990	5.9	**2017**	2019	
Univ Toronto	1990	5.44	**2018**	2020	
Univ Washington	1990	4.62	**2018**	2022	
Moorfields Eye Hosp NHS Fdn Trust	1990	6.4	**2019**	2022	
LV Prasad Eye Inst	1990	4.92	**2020**	2022	
Duke NUS Med Sch	1990	4.2	**2020**	2022	

D. Top 25 institutions with the strongest strength of citation bursts (1990-2022)

Institutions	Year	Strength	Begin	End	1990 - 2022
Univ Vienna	1990	**14.42**	1998	2004	
Harvard Med Sch	1990	**9.48**	2016	2022	
Med Univ Vienna	1990	**9.27**	2005	2011	
Univ Texas	1990	**8.92**	1999	2007	
Johns Hopkins Univ	1990	**7.22**	2010	2016	
Univ So Calif	1990	**6.85**	2010	2015	
St Thomas Hosp	1990	**6.43**	2003	2006	
Moorfields Eye Hosp NHS Fdn Trust	1990	**6.4**	2019	2022	
Univ Tehran Med Sci	1990	**5.9**	2017	2019	
Univ Helsinki	1990	**5.66**	2002	2004	
Harvard Univ	1990	**5.52**	1998	2003	
Univ Toronto	1990	**5.44**	2018	2020	
Univ Munich	1990	**5.16**	2005	2014	
Aravind Eye Hosp	1990	**5.13**	2016	2022	
Retina Vitreous Associates Med Grp	1990	**5.12**	2012	2016	
Univ Bonn	1990	**5.1**	2008	2016	
Univ Wisconsin	1990	**5**	2009	2014	
LV Prasad Eye Inst	1990	**4.92**	2020	2022	
UCL	1990	**4.64**	2014	2020	
Univ Washington	1990	**4.62**	2018	2022	
Genentech Inc	1990	**4.61**	2014	2016	
Univ Michigan	1990	**4.44**	2012	2015	
Univ Milan	1990	**4.27**	2012	2018	
Duke NUS Med Sch	1990	**4.2**	2020	2022	
Rotterdam Eye Hosp	1990	**4.18**	2002	2007	

E. Top 25 journals with the strongest beginning year of citation bursts (1990-2022)

Cited Journals	Year	Strength	Begin	End	1990 - 2022
OPHTHALMIC SURG LAS	1990	58.65	**1992**	2004	
KLIN MONATSBL AUGENH	1990	14.55	**1992**	2005	
REFRACT CORNEAL SURG	1990	52.18	**1995**	2006	
J REFRACT CORNEAL S	1990	36.63	**1995**	2006	
GER J OPHTHALMOL	1990	17.53	**1995**	2006	
AUST NZ J OPHTHALMOL	1990	16.05	**1996**	2007	
J CATARACT REFR SURG	1990	46.37	**1998**	2006	
ARCH OPHTHALMOL-CHIC	1990	16.36	**1998**	2001	
J REFRACT SURG	1990	33.69	**1999**	2005	
OPHTHALMOLOGE	1990	16.16	**2003**	2007	
PLOS ONE	1990	43.58	**2015**	2022	
JAMA OPHTHALMOL	1990	56.1	**2016**	2022	
OSLI RETINA	1990	23.15	**2016**	2022	
COCHRANE DB SYST REV	1990	14.45	**2016**	2022	
CLIN OPHTHALMOL	1990	49.54	**2017**	2022	
SCI REP-UK	1990	39.93	**2017**	2022	
J OPHTHALMOL	1990	36.76	**2017**	2022	
ASIA-PAC J OPHTHALMO	1990	18.47	**2017**	2022	
INDIAN J OPHTHALMOL	1990	18.17	**2017**	2022	
TRANSL VIS SCI TECHN	1990	17.07	**2017**	2022	
INT J OPHTHALMOL-CHI	1990	29.47	**2018**	2022	
MEDICINE	1990	17.26	**2018**	2022	
EYE VISION	1990	15.45	**2018**	2022	
BMC OPHTHALMOL	1990	33.93	**2019**	2022	
OPHTHALMOL RETINA	1990	26.99	**2019**	2022	

F. Top 25 journals with the strongest strength of citation bursts (1990-2022)

Cited Journals	Year	Strength	Begin	End	1990 - 2022
OPHTHALMIC SURG LAS	1990	**58.65**	1992	2004	
JAMA OPHTHALMOL	1990	**56.1**	2016	2022	
REFRACT CORNEAL SURG	1990	**52.18**	1995	2006	
CLIN OPHTHALMOL	1990	**49.54**	2017	2022	
J CATARACT REFR SURG	1990	**46.37**	1998	2006	
PLOS ONE	1990	**43.58**	2015	2022	
SCI REP-UK	1990	**39.93**	2017	2022	
J OPHTHALMOL	1990	**36.76**	2017	2022	
J REFRACT CORNEAL S	1990	**36.63**	1995	2006	
BMC OPHTHALMOL	1990	**33.93**	2019	2022	
J REFRACT SURG	1990	**33.69**	1999	2005	
INT J OPHTHALMOL-CHI	1990	**29.47**	2018	2022	
OPHTHALMOL RETINA	1990	**26.99**	2019	2022	
OSLI RETINA	1990	**23.15**	2016	2022	
ASIA-PAC J OPHTHALMO	1990	**18.47**	2017	2022	
INDIAN J OPHTHALMOL	1990	**18.17**	2017	2022	
GER J OPHTHALMOL	1990	**17.53**	1995	2006	
MEDICINE	1990	**17.26**	2018	2022	
TRANSL VIS SCI TECHN	1990	**17.07**	2017	2022	
ARCH OPHTHALMOL-CHIC	1990	**16.36**	1998	2001	
OPHTHALMOLOGE	1990	**16.16**	2003	2007	
AUST NZ J OPHTHALMOL	1990	**16.05**	1996	2007	
EYE VISION	1990	**15.45**	2018	2022	
KLIN MONATSBL AUGENH	1990	**14.55**	1992	2005	
COCHRANE DB SYST REV	1990	**14.45**	2016	2022	

G. Top 25 journals with the strongest beginning year of citation bursts (2017-2022)

Cited Journals	Year	Strength	Begin	End	2017 - 2022
OPHTHALMIC SURG LAS	2017	4.64	**2017**	2019	
J CELL BIOL	2017	3.03	**2017**	2018	
NAT REV DRUG DISCOV	2017	2.65	**2017**	2018	
HUM MOL GENET	2017	2.27	**2017**	2018	
RETINA	2017	2.26	**2017**	2019	
INDIAN JOURNAL OF OPHTHALMOLOGY	2017	2.09	**2017**	2018	
DEVELOPMENT	2017	2.77	**2018**	2019	
T AM OPHTHAL SOC	2017	2.64	**2018**	2019	
PROG BRAIN RES	2017	2.64	**2018**	2019	
J COMP NEUROL	2017	2.64	**2018**	2019	
J HISTOCHEM CYTOCHEM	2017	2.27	**2018**	2019	
LARYNGOSCOPE	2017	2.27	**2018**	2019	
ZHONGHUA YAN KE ZA ZHI	2017	3.24	**2019**	2020	
ORBIT	2017	2.59	**2019**	2020	
MED IMAGE ANAL	2017	2.59	**2019**	2020	
J NEURO-OPHTHALMOL	2017	2.27	**2019**	2020	
RETIN CASES BRIEF REP	2017	3.23	**2020**	2022	
STAT MED	2017	2.36	**2020**	2022	
LIGHT-SCI APPL	2017	2.36	**2020**	2022	
JOVE-J VIS EXP	2017	2.36	**2020**	2022	
PHYS REV LETT	2017	2.36	**2020**	2022	
SENSORS-BASEL	2017	2.36	**2020**	2022	
APPL PHYS B-LASERS O	2017	2.15	**2020**	2022	
METHODS MOL BIOL	2017	2.06	**2020**	2022	
J OPT SOC AM B	2017	2.06	**2020**	2022	

H. Top 25 journals with the strongest strength of citation bursts (2017-2022)

Cited Journals	Year	Strength	Begin	End	2017 - 2022
OPHTHALMIC SURG LAS	2017	**4.64**	2017	2019	
ZHONGHUA YAN KE ZA ZHI	2017	**3.24**	2019	2020	
RETIN CASES BRIEF REP	2017	**3.23**	2020	2022	
J CELL BIOL	2017	**3.03**	2017	2018	
DEVELOPMENT	2017	**2.77**	2018	2019	
NAT REV DRUG DISCOV	2017	**2.65**	2017	2018	
T AM OPHTHAL SOC	2017	**2.64**	2018	2019	
PROG BRAIN RES	2017	**2.64**	2018	2019	
J COMP NEUROL	2017	**2.64**	2018	2019	
ORBIT	2017	**2.59**	2019	2020	
MED IMAGE ANAL	2017	**2.59**	2019	2020	
STAT MED	2017	**2.36**	2020	2022	
LIGHT-SCI APPL	2017	**2.36**	2020	2022	
JOVE-J VIS EXP	2017	**2.36**	2020	2022	
PHYS REV LETT	2017	**2.36**	2020	2022	
SENSORS-BASEL	2017	**2.36**	2020	2022	
HUM MOL GENET	2017	**2.27**	2017	2018	
J NEURO-OPHTHALMOL	2017	**2.27**	2019	2020	
J HISTOCHEM CYTOCHEM	2017	**2.27**	2018	2019	
LARYNGOSCOPE	2017	**2.27**	2018	2019	
RETINA	2017	**2.26**	2017	2019	
APPL PHYS B-LASERS O	2017	**2.15**	2020	2022	
INDIAN JOURNAL OF OPHTHALMOLOGY	2017	**2.09**	2017	2018	
METHODS MOL BIOL	2017	**2.06**	2020	2022	
J OPT SOC AM B	2017	**2.06**	2020	2022	

I. Top 20 co-authors with the strongest beginning of citation bursts (1990-2022)

Authors	Year	Strength	Begin	End	1990 - 2022
JL ALIO	1990	4.73	**1997**	2000	
O FINDL	1990	6.21	**1998**	2005	
A KRUGER	1990	4.24	**1998**	2002	
M MROCHEN	1990	4.19	**2001**	2002	
T SEILER	1990	4.19	**2001**	2002	
J MARSHALL	1990	4.42	**2003**	2005	
R MENAPACE	1990	3.59	**2003**	2005	
W BUEHL	1990	4.19	**2004**	2005	
RUPERT MENAPACE	1990	4.22	**2007**	2009	
FRANK G HOLZ	1990	6.03	**2008**	2016	
ROBERT N WEINREB	1990	4.76	**2009**	2016	
PETER A CAMPOCHIARO	1990	4.69	**2010**	2016	
URSULA SCHMIDT-ERFURTH	1990	4.58	**2010**	2014	
DAVID M BROWN	1990	6.06	**2011**	2018	
MINGGUANG HE	1990	4.68	**2012**	2014	
TIN AUNG	1990	4.01	**2012**	2022	
DAVID S BOYER	1990	5.31	**2014**	2018	
THOMAS KOHNEN	1990	4.13	**2014**	2020	
ROBERT VITTI	1990	4.25	**2015**	2018	
ALYSON J BERLINER	1990	3.72	**2015**	2018	

J. Top 20 co-authors with the strongest strength of citation bursts (1990-2022)

Authors	Year	Strength	Begin	End	1990 - 2022
O FINDL	1990	**6.21**	1998	2005	
DAVID M BROWN	1990	**6.06**	2011	2018	
FRANK G HOLZ	1990	**6.03**	2008	2016	
DAVID S BOYER	1990	**5.31**	2014	2018	
ROBERT N WEINREB	1990	**4.76**	2009	2016	
JL ALIO	1990	**4.73**	1997	2000	
PETER A CAMPOCHIARO	1990	**4.69**	2010	2016	
MINGGUANG HE	1990	**4.68**	2012	2014	
URSULA SCHMIDT-ERFURTH	1990	**4.58**	2010	2014	
J MARSHALL	1990	**4.42**	2003	2005	
ROBERT VITTI	1990	**4.25**	2015	2018	
A KRUGER	1990	**4.24**	1998	2002	
RUPERT MENAPACE	1990	**4.22**	2007	2009	
M MROCHEN	1990	**4.19**	2001	2002	
T SEILER	1990	**4.19**	2001	2002	
W BUEHL	1990	**4.19**	2004	2005	
THOMAS KOHNEN	1990	**4.13**	2014	2020	
TIN AUNG	1990	**4.01**	2012	2022	
ALYSON J BERLINER	1990	**3.72**	2015	2018	
R MENAPACE	1990	**3.59**	2003	2005	

K. Top 25 cited authors with the strongest beginning of citation bursts (1990-2022)

Cited Authors	Year	Strength	Begin	End	1990 - 2022
SEILER T	1990	30.72	**1993**	2006	
GARTRY DS	1990	13.71	**1995**	2005	
PALLIKARIS IG	1990	18.52	**1997**	2006	
KOCH DD	1990	16.52	**1998**	2005	
HOLLADAY JT	1990	15.92	**1998**	2008	
MCDONNELL PJ	1990	15.31	**1998**	2002	
HERSH PS	1990	28.8	**1999**	2006	
OSHIKA T	1990	23.01	**1999**	2006	
KNORZ MC	1990	21.39	**1999**	2005	
PEREZSANTONJA JJ	1990	20.88	**1999**	2004	
GIMBEL HV	1990	17.9	**1999**	2005	
WILSON SE	1990	16.11	**1999**	2007	
PEREZ-SANTONJA JJ	1990	22	**2000**	2006	
WANG Z	1990	13.34	**2001**	2006	
MEDEIROS FA	1990	14.48	**2007**	2012	
ROSENFELD PJ	1990	13	**2007**	2017	
ELMAN MJ	1990	17.94	**2011**	2022	
NGUYEN QD	1990	17.67	**2012**	2022	
MITCHELL P	1990	17.2	**2012**	2020	
SEKUNDO W	1990	13.26	**2012**	2019	
BROWN DM	1990	17.3	**2013**	2020	
SPAIDE RF	1990	16.29	**2013**	2022	
WELLS JA	1990	17.52	**2015**	2022	
KOROBELNIK JF	1990	13.65	**2015**	2022	
CRAIG JP	1990	15.12	**2019**	2022	

L. Top 25 cited authors with the strongest strength of citation bursts (1990-2022)

Cited Authors	Year	Strength	Begin	End	1990 - 2022
SEILER T	1990	**30.72**	1993	2006	
HERSH PS	1990	**28.8**	1999	2006	
OSHIKA T	1990	**23.01**	1999	2006	
PEREZ-SANTONJA JJ	1990	**22**	2000	2006	
KNORZ MC	1990	**21.39**	1999	2005	
PEREZSANTONJA JJ	1990	**20.88**	1999	2004	
PALLIKARIS IG	1990	**18.52**	1997	2006	
ELMAN MJ	1990	**17.94**	2011	2022	
GIMBEL HV	1990	**17.9**	1999	2005	
NGUYEN QD	1990	**17.67**	2012	2022	
WELLS JA	1990	**17.52**	2015	2022	
BROWN DM	1990	**17.3**	2013	2020	
MITCHELL P	1990	**17.2**	2012	2020	
KOCH DD	1990	**16.52**	1998	2005	
SPAIDE RF	1990	**16.29**	2013	2022	
WILSON SE	1990	**16.11**	1999	2007	
HOLLADAY JT	1990	**15.92**	1998	2008	
MCDONNELL PJ	1990	**15.31**	1998	2002	
CRAIG JP	1990	**15.12**	2019	2022	
MEDEIROS FA	1990	**14.48**	2007	2012	
GARTRY DS	1990	**13.71**	1995	2005	
KOROBELNIK JF	1990	**13.65**	2015	2022	
WANG Z	1990	**13.34**	2001	2006	
SEKUNDO W	1990	**13.26**	2012	2019	
ROSENFELD PJ	1990	**13**	2007	2017	

M. Top 25 cited authors with the strongest beginning of citation bursts (2017-2022)

Cited Authors	Year	Strength	Begin	End	2017 - 2022
JABS DA	2017	3.92	**2017**	2018	
FERRARA N	2017	3.56	**2017**	2018	
ALIO JL	2017	3.34	**2017**	2018	
JIA YL	2017	3.2	**2017**	2018	
VUJOSEVIC S	2017	2.85	**2017**	2018	
STEIN JD	2017	3.99	**2018**	2019	
CIULLA TA	2017	3.59	**2018**	2019	
MUQIT MMK	2017	3.59	**2018**	2019	
GANESH S	2017	2.79	**2018**	2019	
SEKUNDO W	2017	2.7	**2018**	2019	
NAGAR M	2017	4	**2019**	2020	
HEIJL A	2017	4	**2019**	2020	
LI MY	2017	3.33	**2019**	2020	
DONNENFELD ED	2017	3	**2019**	2020	
PRUM BRUCEJR	2017	3	**2019**	2020	
GARWAY-HEATH DF	2017	3	**2019**	2020	
LEE R	2017	2.66	**2019**	2020	
GARG A	2017	2.66	**2019**	2020	
LEE H	2017	2.66	**2019**	2020	
MOSHIRFAR M	2017	2.58	**2019**	2020	
STAPLETON F	2017	3.62	**2020**	2022	
ANG M	2017	3.34	**2020**	2022	
KIM SJ	2017	2.78	**2020**	2022	
WEINREB RN	2017	2.78	**2020**	2022	
NAGY ZZ	2017	2.68	**2020**	2022	

N. Top 25 cited authors with the strongest strength of citation bursts (2017-2022)

Cited Authors	Year	Strength	Begin	End	2017 - 2022
NAGAR M	2017	**4**	2019	2020	
HEIJL A	2017	**4**	2019	2020	
STEIN JD	2017	**3.99**	2018	2019	
JABS DA	2017	**3.92**	2017	2018	
STAPLETON F	2017	**3.62**	2020	2022	
CIULLA TA	2017	**3.59**	2018	2019	
MUQIT MMK	2017	**3.59**	2018	2019	
FERRARA N	2017	**3.56**	2017	2018	
ANG M	2017	**3.34**	2020	2022	
ALIO JL	2017	**3.34**	2017	2018	
LI MY	2017	**3.33**	2019	2020	
JIA YL	2017	**3.2**	2017	2018	
DONNENFELD ED	2017	**3**	2019	2020	
PRUM BRUCEJR	2017	**3**	2019	2020	
GARWAY-HEATH DF	2017	**3**	2019	2020	
VUJOSEVIC S	2017	**2.85**	2017	2018	
GANESH S	2017	**2.79**	2018	2019	
KIM SJ	2017	**2.78**	2020	2022	
WEINREB RN	2017	**2.78**	2020	2022	
SEKUNDO W	2017	**2.7**	2018	2019	
NAGY ZZ	2017	**2.68**	2020	2022	
LEE R	2017	**2.66**	2019	2020	
GARG A	2017	**2.66**	2019	2020	
LEE H	2017	**2.66**	2019	2020	
MOSHIRFAR M	2017	**2.58**	2019	2020	

O. Top 25 cited references with the strongest beginning year of citation bursts (1990-2022)

References	Year	Strength	Begin	End	1990 - 2022
Pererasantonja JJ, 1997, J CATARACT REFR SURG, V23, P372, DOI 10.1016/S0886-3350(97)80182-4, DOI	1997	12.68	**1998**	2002	
Salabi T, 1996, AM J OPHTHALMOL, V121, P143, DOI 10.1016/S0002-9394(14)70578-1, DOI	1996	10.49	**1998**	2001	
Knorz MC, 1996, J REFRACT SURG, V12, P575	1996	9.38	**1998**	2001	
Hersh PS, 1998, OPHTHALMOLOGY, V105, P1512, DOI 10.1016/S0161-6420(98)98038-1, DOI	1998	11.35	**2000**	2003	
Seiler T, 1998, J REFRACT SURG, V14, P312	1998	11.35	**2000**	2003	
Stulting RD, 1999, OPHTHALMOLOGY, V106, P13, DOI 10.1016/S0161-6420(99)90000-3, DOI	1999	10.48	**2000**	2004	
Smith RJ, 1998, OPHTHALMOLOGY, V105, P1721, DOI 10.1016/S0161-6420(98)99044-3, DOI	1998	9.93	**2000**	2003	
Knorz MC, 1998, OPHTHALMOLOGY, V105, P932, DOI 10.1016/S0161-6420(98)95040-0, DOI	1998	9.45	**2000**	2003	
Sugar A, 2002, OPHTHALMOLOGY, V109, P175, DOI 10.1016/S0161-6420(01)00966-6, DOI	2002	9.28	**2004**	2006	
Ip MS, 2008, OPHTHALMOLOGY, V115, P1447, DOI 10.1016/j.ophtha.2008.06.015, DOI	2008	9.15	**2009**	2012	
Elman MJ, 2010, OPHTHALMOLOGY, V117, P1064, DOI 10.1016/j.ophtha.2010.02.031, DOI	2010	19.81	**2011**	2015	
Nguyen QD, 2012, OPHTHALMOLOGY, V119, P789, DOI 10.1016/j.ophtha.2011.12.039, DOI	2012	16.22	**2012**	2017	
Mitchell P, 2011, OPHTHALMOLOGY, V118, P615, DOI 10.1016/j.ophtha.2011.01.031, DOI	2011	13.1	**2012**	2016	
Sekundo W, 2011, BRIT J OPHTHALMOL, V95, P335, DOI 10.1136/bjo.2009.174284, DOI	2011	11.63	**2012**	2016	
Elman MJ, 2011, OPHTHALMOLOGY, V118, P609, DOI 10.1016/j.ophtha.2010.12.033, DOI	2011	10.17	**2012**	2016	
Shah R, 2011, J CATARACT REFR SURG, V37, P127, DOI 10.1016/j.jcrs.2010.07.033, DOI	2011	9.49	**2012**	2015	
Friedman NJ, 2011, J CATARACT REFR SURG, V37, P1189, DOI 10.1016/j.jcrs.2011.04.022, DOI	2011	10.85	**2013**	2016	
Brown DM, 2013, OPHTHALMOLOGY, V120, P2013, DOI 10.1016/j.ophtha.2013.02.034, DOI	2013	9.14	**2014**	2018	
Wells JA, 2015, NEW ENGL J MED, V372, P1193, DOI 10.1056/NEJMoa1414264, DOI	2015	16.48	**2015**	2020	
Elman MJ, 2015, OPHTHALMOLOGY, V122, P375, DOI 10.1016/j.ophtha.2014.08.047, DOI	2015	10.32	**2015**	2020	
Schmidt-erfurth U, 2014, OPHTHALMOLOGY, V121, P1045, DOI 10.1016/j.ophtha.2013.11.041, DOI	2014	9.19	**2015**	2019	
Korobelnik JF, 2014, OPHTHALMOLOGY, V121, P2247, DOI 10.1016/j.ophtha.2014.05.006, DOI	2014	12.18	**2016**	2019	
Denoyer A, 2015, OPHTHALMOLOGY, V122, P669, DOI 10.1016/j.ophtha.2014.10.004, DOI	2015	9.2	**2016**	2020	
Craig JP, 2017, OCUL SURF, V15, P276, DOI 10.1016/j.jtos.2017.05.008, DOI	2017	11.3	**2019**	2022	
Gazzard G, 2019, LANCET, V393, P1505, DOI 10.1016/S0140-6736(18)32213-X, DOI	2019	10.16	**2019**	2022	

P. Top 25 cited references with the strongest strength of citation bursts (1990-2022)

References	Year	Strength	Begin	End	1990 - 2022
Elman MJ, 2010, OPHTHALMOLOGY, V117, P1064, DOI 10.1016/j.ophtha.2010.02.031, DOI	2010	**19.81**	2011	2015	
Wells JA, 2015, NEW ENGL J MED, V372, P1193, DOI 10.1056/NEJMoa1414264, DOI	2015	**16.48**	2015	2020	
Nguyen QD, 2012, OPHTHALMOLOGY, V119, P789, DOI 10.1016/j.ophtha.2011.12.039, DOI	2012	**16.22**	2012	2017	
Mitchell P, 2011, OPHTHALMOLOGY, V118, P615, DOI 10.1016/j.ophtha.2011.01.031, DOI	2011	**13.1**	2012	2016	
Pererasantonja JJ, 1997, J CATARACT REFR SURG, V23, P372, DOI 10.1016/S0886-3350(97)80182-4, DOI	1997	**12.68**	1998	2002	
Korobelnik JF, 2014, OPHTHALMOLOGY, V121, P2247, DOI 10.1016/j.ophtha.2014.05.006, DOI	2014	**12.18**	2016	2019	
Sekundo W, 2011, BRIT J OPHTHALMOL, V95, P335, DOI 10.1136/bjo.2009.174284, DOI	2011	**11.63**	2012	2016	
Hersh PS, 1998, OPHTHALMOLOGY, V105, P1512, DOI 10.1016/S0161-6420(98)98038-1, DOI	1998	**11.35**	2000	2003	
Seiler T, 1998, J REFRACT SURG, V14, P312	1998	**11.35**	2000	2003	
Craig JP, 2017, OCUL SURF, V15, P276, DOI 10.1016/j.jtos.2017.05.008, DOI	2017	**11.3**	2019	2022	
Friedman NJ, 2011, J CATARACT REFR SURG, V37, P1189, DOI 10.1016/j.jcrs.2011.04.022, DOI	2011	**10.85**	2013	2016	
Salabi T, 1996, AM J OPHTHALMOL, V121, P143, DOI 10.1016/S0002-9394(14)70578-1, DOI	1996	**10.49**	1998	2001	
Stulting RD, 1999, OPHTHALMOLOGY, V106, P13, DOI 10.1016/S0161-6420(99)90000-3, DOI	1999	**10.48**	2000	2004	
Elman MJ, 2015, OPHTHALMOLOGY, V122, P375, DOI 10.1016/j.ophtha.2014.08.047, DOI	2015	**10.32**	2015	2020	
Elman MJ, 2011, OPHTHALMOLOGY, V118, P609, DOI 10.1016/j.ophtha.2010.12.033, DOI	2011	**10.17**	2012	2016	
Gazzard G, 2019, LANCET, V393, P1505, DOI 10.1016/S0140-6736(18)32213-X, DOI	2019	**10.16**	2019	2022	
Smith RJ, 1998, OPHTHALMOLOGY, V105, P1721, DOI 10.1016/S0161-6420(98)99044-3, DOI	1998	**9.93**	2000	2003	
Shah R, 2011, J CATARACT REFR SURG, V37, P127, DOI 10.1016/j.jcrs.2010.07.033, DOI	2011	**9.49**	2012	2015	
Knorz MC, 1998, OPHTHALMOLOGY, V105, P932, DOI 10.1016/S0161-6420(98)95040-0, DOI	1998	**9.45**	2000	2003	
Knorz MC, 1996, J REFRACT SURG, V12, P575	1996	**9.38**	1998	2001	
Sugar A, 2002, OPHTHALMOLOGY, V109, P175, DOI 10.1016/S0161-6420(01)00966-6, DOI	2002	**9.28**	2004	2006	
Denoyer A, 2015, OPHTHALMOLOGY, V122, P669, DOI 10.1016/j.ophtha.2014.10.004, DOI	2015	**9.2**	2016	2020	
Schmidt-erfurth U, 2014, OPHTHALMOLOGY, V121, P1045, DOI 10.1016/j.ophtha.2013.11.041, DOI	2014	**9.19**	2015	2019	
Ip MS, 2008, OPHTHALMOLOGY, V115, P1447, DOI 10.1016/j.ophtha.2008.06.015, DOI	2008	**9.15**	2009	2012	
Brown DM, 2013, OPHTHALMOLOGY, V120, P2013, DOI 10.1016/j.ophtha.2013.02.034, DOI	2013	**9.14**	2014	2018	

Q. Top 17 cited references with the strongest beginning of citation bursts (2017-2022)

References	Year	Strength	Begin	End	2017 - 2022
Brown DM, 2013, OPHTHALMOLOGY, V120, P2013, DOI 10.1016/j.ophtha.2013.02.034, DOI	2013	2.38	**2017**	2018	
Schmidt-erfurth U, 2014, OPHTHALMOLOGY, V121, P1045, DOI 10.1016/j.ophtha.2013.11.041, DOI	2014	2.28	**2017**	2019	
Labbe A, 2013, INVEST OPHTH VIS SCI, V54, P5144, DOI 10.1167/iovs.13-12370, DOI	2013	2.04	**2017**	2018	
Roberts TV, 2013, OPHTHALMOLOGY, V120, P227, DOI 10.1016/j.ophtha.2012.10.026, DOI	2013	2.04	**2017**	2018	
Abell RG, 2015, J CATARACT REFR SURG, V41, P47, DOI 10.1016/j.jcrs.2014.06.025, DOI	2015	2.04	**2017**	2018	
Bourne RRA, 2013, LANCET GLOB HEALTH, V1, P0, DOI 10.1016/S2214-109X(13)70113-X, DOI	2013	2.04	**2017**	2018	
Korobelnik JF, 2014, OPHTHALMOLOGY, V121, P2247, DOI 10.1016/j.ophtha.2014.05.006, DOI	2014	3.26	**2018**	2019	
Gross JG, 2015, JAMA-J AM MED ASSOC, V314, P2137, DOI 10.1001/jama.2015.15217, DOI	2015	3.05	**2018**	2019	
Tham YC, 2014, OPHTHALMOLOGY, V121, P2081, DOI 10.1016/j.ophtha.2014.05.013, DOI	2014	3.05	**2018**	2019	
Gelonech MM, 2014, JAMA OPHTHALMOL, V132, P1327, DOI 10.1001/jamaophthalmol.2014.2772, DOI	2014	2.28	**2018**	2019	
Garway-heath DF, 2015, LANCET, V385, P2295, DOI 10.1016/S0140-6736(14)62111-5, DOI	2015	2.88	**2019**	2020	
Stapleton F, 2017, OCUL SURF, V15, P334, DOI 10.1016/j.jtos.2017.05.003, DOI	2017	4.02	**2020**	2022	
Wolffsohn JS, 2017, OCUL SURF, V15, P539, DOI 10.1016/j.jtos.2017.05.001, DOI	2017	2.77	**2020**	2022	
Jones L, 2017, OCUL SURF, V15, P575, DOI 10.1016/j.jtos.2017.05.006, DOI	2017	2.46	**2020**	2022	
Craig JP, 2017, OCUL SURF, V15, P276, DOI 10.1016/j.jtos.2017.05.008, DOI	2017	2.3	**2020**	2022	
Bron AJ, 2017, OCUL SURF, V15, P438, DOI 10.1016/j.jtos.2017.05.011, DOI	2017	2.21	**2020**	2022	
Schmidt-erfurth U, 2017, OPHTHALMOLOGICA, V237, P185, DOI 10.1159/000458539, DOI	2017	2.15	**2020**	2022	

R. Top 17 cited references with the strongest strength of citation bursts (2017-2022)

References	Year	Strength	Begin	End	2017 - 2022
Stapleton F, 2017, OCUL SURF, V15, P334, DOI 10.1016/j.jtos.2017.05.003, DOI	2017	**4.02**	2020	2022	
Korobelnik JF, 2014, OPHTHALMOLOGY, V121, P2247, DOI 10.1016/j.ophtha.2014.05.006, DOI	2014	**3.26**	2018	2019	
Gross JG, 2015, JAMA-J AM MED ASSOC, V314, P2137, DOI 10.1001/jama.2015.15217, DOI	2015	**3.05**	2018	2019	
Tham YC, 2014, OPHTHALMOLOGY, V121, P2081, DOI 10.1016/j.ophtha.2014.05.013, DOI	2014	**3.05**	2018	2019	
Garway-heath DF, 2015, LANCET, V385, P2295, DOI 10.1016/S0140-6736(14)62111-5, DOI	2015	**2.88**	2019	2020	
Wolffsohn JS, 2017, OCUL SURF, V15, P539, DOI 10.1016/j.jtos.2017.05.001, DOI	2017	**2.77**	2020	2022	
Jones L, 2017, OCUL SURF, V15, P575, DOI 10.1016/j.jtos.2017.05.006, DOI	2017	**2.46**	2020	2022	
Brown DM, 2013, OPHTHALMOLOGY, V120, P2013, DOI 10.1016/j.ophtha.2013.02.034, DOI	2013	**2.38**	2017	2018	
Craig JP, 2017, OCUL SURF, V15, P276, DOI 10.1016/j.jtos.2017.05.008, DOI	2017	**2.3**	2020	2022	
Gelonech MM, 2014, JAMA OPHTHALMOL, V132, P1327, DOI 10.1001/jamaophthalmol.2014.2772, DOI	2014	**2.28**	2018	2019	
Schmidt-erfurth U, 2014, OPHTHALMOLOGY, V121, P1045, DOI 10.1016/j.ophtha.2013.11.041, DOI	2014	**2.28**	2017	2019	
Bron AJ, 2017, OCUL SURF, V15, P438, DOI 10.1016/j.jtos.2017.05.011, DOI	2017	**2.21**	2020	2022	
Schmidt-erfurth U, 2017, OPHTHALMOLOGICA, V237, P185, DOI 10.1159/000458539, DOI	2017	**2.15**	2020	2022	
Labbe A, 2013, INVEST OPHTH VIS SCI, V54, P5144, DOI 10.1167/iovs.13-12370, DOI	2013	**2.04**	2017	2018	
Roberts TV, 2013, OPHTHALMOLOGY, V120, P227, DOI 10.1016/j.ophtha.2012.10.026, DOI	2013	**2.04**	2017	2018	
Abell RG, 2015, J CATARACT REFR SURG, V41, P47, DOI 10.1016/j.jcrs.2014.06.025, DOI	2015	**2.04**	2017	2018	
Bourne RRA, 2013, LANCET GLOB HEALTH, V1, P0, DOI 10.1016/S2214-109X(13)70113-X, DOI	2013	**2.04**	2017	2018	

S. Top 25 cited keywords with the strongest beginning of citation busts (1990–2022)

Keywords	Year	Strength	Begin	End	1990 - 2022
blood aqueous barrier	1990	8.4	**1991**	2003	
surgery	1990	7.1	**1993**	2004	
photorefractive keratectomy	1990	23.95	**1995**	2008	
excimer laser	1990	15.54	**1996**	2008	
complication	1990	8.61	**1996**	2006	
myopia	1990	24.69	**1998**	2005	
diopter	1990	13.6	**1999**	2005	
laser photorefractive keratectomy	1990	10.15	**1999**	2006	
high myopia	1990	7.93	**1999**	2003	
iatrogenic keratectasia	1990	6.65	**2001**	2005	
in situ keratomileusis	1990	8.99	**2003**	2006	
reproducibility	1990	7.7	**2003**	2013	
aberration	1990	6.57	**2003**	2012	
astigmatism	1990	6.29	**2003**	2005	
deferred laser	1990	8.23	**2012**	2019	
femtosecond laser	1990	7.49	**2013**	2015	
outcm	1990	10.14	**2014**	2020	
safety	1990	8.2	**2014**	2018	
diabetic macular edema	1990	7.27	**2015**	2022	
ranibizumab	1990	7.15	**2015**	2022	
dry eye disease	1990	14.44	**2016**	2022	
dry eye	1990	9.82	**2017**	2022	
efficacy	1990	8.53	**2017**	2022	
retinopathy of prematurity	1990	6.37	**2018**	2022	
symptom	1990	6.28	**2020**	2022	

T. Top 25 cited keywords with the strongest strength of citation bursts (1990–2022)

Keywords	Year	Strength	Begin	End	1990 - 2022
myopia	1990	**24.69**	1998	2005	
photorefractive keratectomy	1990	**23.95**	1995	2008	
excimer laser	1990	**15.54**	1996	2008	
dry eye disease	1990	**14.44**	2016	2022	
diopter	1990	**13.6**	1999	2005	
laser photorefractive keratectomy	1990	**10.15**	1999	2006	
outcm	1990	**10.14**	2014	2020	
dry eye	1990	**9.82**	2017	2022	
in situ keratomileusis	1990	**8.99**	2003	2006	
complication	1990	**8.61**	1996	2006	
efficacy	1990	**8.53**	2017	2022	
blood aqueous barrier	1990	**8.4**	1991	2003	
deferred laser	1990	**8.23**	2012	2019	
safety	1990	**8.2**	2014	2018	
high myopia	1990	**7.93**	1999	2003	
reproducibility	1990	**7.7**	2003	2013	
femtosecond laser	1990	**7.49**	2013	2015	
diabetic macular edema	1990	**7.27**	2015	2022	
ranibizumab	1990	**7.15**	2015	2022	
surgery	1990	**7.1**	1993	2004	
iatrogenic keratectasia	1990	**6.65**	2001	2005	
aberration	1990	**6.57**	2003	2012	
retinopathy of prematurity	1990	**6.37**	2018	2022	
astigmatism	1990	**6.29**	2003	2005	
symptom	1990	**6.28**	2020	2022	

U. Top 14 cited keywords with strongest beginning of citation busts (2017–2022)

Keywords	Year	Strength	Begin	End	2017 - 2022
ablation	2017	2.01	**2017**	2019	
morphology	2017	2.01	**2017**	2019	
endothelial growth factor	2017	3	**2018**	2019	
astigmatism	2017	2.38	**2018**	2019	
damage	2017	1.98	**2018**	2019	
pars plana vitrectomy	2017	2.05	**2019**	2020	
fluorescein angiography	2017	2.05	**2019**	2020	
association	2017	3.25	**2020**	2022	
bevacizumab	2017	3.04	**2020**	2022	
retinal detachment	2017	2.95	**2020**	2022	
laser therapy	2017	2.36	**2020**	2022	
selective laser trabeculoplasty	2017	2.36	**2020**	2022	
risk	2017	2.32	**2020**	2022	
symptom	2017	1.99	**2020**	2022	

V. Top 14 cited keywords with the strongest strength of citation bursts (2017–2022)

Keywords	Year	Strength	Begin	End	2017 - 2022
association	2017	**3.25**	2020	2022	
bevacizumab	2017	**3.04**	2020	2022	
endothelial growth factor	2017	**3**	2018	2019	
retinal detachment	2017	**2.95**	2020	2022	
astigmatism	2017	**2.38**	2018	2019	
laser therapy	2017	**2.36**	2020	2022	
selective laser trabeculoplasty	2017	**2.36**	2020	2022	
risk	2017	**2.32**	2020	2022	
pars plana vitrectomy	2017	**2.05**	2019	2020	
fluorescein angiography	2017	**2.05**	2019	2020	
ablation	2017	**2.01**	2017	2019	
morphology	2017	**2.01**	2017	2019	
symptom	2017	**1.99**	2020	2022	
damage	2017	**1.98**	2018	2019	

Note: The beginning of a blue line depicts when an article is published. The beginning of a red segment marks the beginning of a period of burst, whereas the end of the red segment marks the end of the burst period.

Supplementary Table 3. The top countries and institutions (1990-2022 and 2017-2022 period).

1990-2022 period

Countries ranked by centrality	Betweenness centrality	Countries ranked by citation counts	Total number of ciations	Institutions ranked by centrality	Betweenness centrality	Institutions ranked by citation counts	Total number of ciations
USA	0.6	USA	1039	Johns Hopkins Univ	0.09	Johns Hopkins Univ	83
GERMANY	0.19	GERMANY	335	Harvard Univ	0.05	Harvard Univ	56
ITALY	0.15	ENGLAND	242	Moorfields Eye Hosp	0.04	Med Univ Vienna	44
ENGLAND	0.14	PEOPLES R CHINA	163	Univ Melbourne	0.04	Singapore Natl Eye Ctr	44
FRANCE	0.12	JAPAN	144	Med Univ Vienna	0.03	Moorfields Eye Hosp	43
AUSTRALIA	0.09	ITALY	138	Harvard Med Sch	0.03	Stanford Univ	35
SPAIN	0.08	FRANCE	128	Singapore Natl Eye Ctr	0.03	Univ Miami	33
AUSTRIA	0.07	AUSTRIA	123	Univ Calif Los Angeles	0.03	Univ Calif Los Angeles	30
ISRAEL	0.07	AUSTRALIA	109	Stanford Univ	0.03	Univ Calif San Diego	30
SWITZERLAND	0.06	SPAIN	105	Univ Milan	0.02	Harvard Med Sch	29

2017-2022 period

Countries ranked by centrality	Betweenness centrality	Countries ranked by citation counts	Total number of ciations	Institutions ranked by centrality	Betweenness centrality	Institutions ranked by citation counts	Total number of ciations
USA	0.53	USA	299	Harvard Med Sch	0.21	Harvard Med Sch	27
ENGLAND	0.14	GERMANY	101	Moorfields Eye Hosp	0.13	Johns Hopkins Univ	24
ITALY	0.13	PEOPLES R CHINA	80	Univ Melbourne	0.11	Singapore Natl Eye Ctr	22
GERMANY	0.12	ENGLAND	79	Singapore Natl Eye Ctr	0.1	Moorfields Eye Hosp	15
AUSTRALIA	0.12	INDIA	60	Cleveland Clin	0.1	Moorfields Eye Hosp NHS Fdn Trust	14
FRANCE	0.12	AUSTRALIA	47	Univ Illinois	0.09	Stanford Univ	14
SWITZERLAND	0.11	ITALY	47	Univ Milan	0.09	UCL	14
SINGAPORE	0.1	FRANCE	43	Univ Sydney	0.07	Singapore Eye Res Inst	14
INDIA	0.09	SWITZERLAND	37	Univ Calif Los Angeles	0.07	Univ Illinois	13
BRAZIL	0.07	CANADA	31	Retina Consultants Houston	0.06	Univ Sydney	13

Supplementary Table 4. Summary of the largest clusters identified for the author co-citation network (2017-2022) obtained with CiteSpace.

Cluster ID	Size	Silhouette score	Mean (Year)	Top five extracted terms based on keywords (Log-likelihood ratio algorithm; p-level)
0	80	0.939	2018	diabetic macular edema (48.7, 1.0E-4); diabetic retinopathy (25.4, 1.0E-4); anti-vegf (14.98, 0.001); age-related macular degeneration (8.96, 0.005); intravitreal injection (8.96, 0.005)
1	67	0.877	2018	dry eye disease (25.32, 1.0E-4); meibomian gland dysfunction (22.61, 1.0E-4); in vivo confocal microscopy (11.14, 0.001); intense pulsed light (9.63, 0.005); diabetic retinopathy (7.27, 0.01)
2	46	0.877	2018	refractive surgery (18.19, 1.0E-4); smile (14.49, 0.001); prk (10.85, 0.001); lasik (10.46, 0.005); small incision lenticule extraction (7.22, 0.01)
3	44	0.965	2018	cyclophotocoagulation (15.62, 1.0E-4); refractory glaucoma (15.62, 1.0E-4); glaucoma (11.91, 0.001); laser trabeculoplasty (10.38, 0.005); selective laser trabeculoplasty (10.38, 0.005)
4	33	0.966	2019	phacoemulsification (21.27, 1.0E-4); femtosecond laser (8.18, 0.005); cataract surgery (6.49, 0.05); femtosecond laser-assisted cataract surgery (4.89, 0.05); capsulotomy (4.22, 0.05)
5	32	0.988	2018	retinopathy of prematurity (36.23, 1.0E-4); retina (8.11, 0.005); anterior segment (5.89, 0.05); hyperoxia/hypoxia (5.89, 0.05); eye refractive (5.89, 0.05)
6	31	0.919	2018	glaucoma (9.51, 0.005); angle closure (9.33, 0.005); gonioscopy (9.33, 0.005); uveitis (9.33, 0.005); laser peripheral iridotomy (9.33, 0.005)
7	9	0.932	2020	ophthalmic imaging (7.08, 0.01); optical coherence tomography (7.08, 0.01); screening (4.37, 0.05); non-linear optical microscopy (4.37, 0.05); functional oct (4.37, 0.05)
8	4	1	2017	issue 138 (7.16, 0.01); retinal neovascularization (7.16, 0.01); pam (7.16, 0.01); photoacoustic microscopy (7.16, 0.01); multimodal imaging (7.16, 0.01)

Supplementary Table 5. Average citations and total link strength of authors per cluster based on bibliographic coupling analysis（Countries）.

Countries	Cluster	Total Link Strength	Avg. citations
argentina	3	2335	37.2857
aruba	1	138	36
australia	1	45759	62.6126
austria	2	39919	80.2619
belarus	2	963	5.2857
belgium	2	6077	30.5
bosnia & herceg	2	177	39
brazil	1	23182	50.5763
bulgaria	3	288	13.25
burkina faso	1	10	15
cameroon	1	72	15
canada	1	20360	58.0814
chile	1	5936	131.5
colombia	3	144	17.6667
costa rica	1	144	5
cote ivoire	2	570	6
croatia	1	481	5.3333
cyprus	3	101	0
czech republic	3	2735	23.4
dem rep congo	2	58	1
denmark	1	9844	53.28
egypt	1	5288	20.6897
england	1	74318	43.7317
estonia	2	291	35
fiji	1	97	15
finland	3	5553	58.4783
france	2	41470	77.3692
germany	2	82113	47.8791
ghana	1	75	0
greece	3	12892	25.6842
guatemala	1	505	162
hungary	3	5312	38.381
iceland	1	2030	75
india	1	28480	30.3111
iran	1	6278	11.4
ireland	3	3614	40.6154
israel	1	9342	25.5476
italy	3	42979	53.9583
japan	1	40809	52.9931
kazakhstan	5	0	0
kenya	1	152	18
kuwait	3	48	2
latvia	4	60	0
lebanon	3	1274	12
lithuania	4	819	1.3333
malawi	1	1511	20.5
malaysia	1	1252	13.5
mexico	1	6555	45.6667
mongolia	1	144	5
morocco	2	30	2
nepal	1	1456	11.625
netherlands	2	17935	72
new zealand	1	3580	28.3846
nigeria	1	1829	12.3333
north ireland	2	10600	44.6429
norway	1	2178	55.875
oman	3	255	129
pakistan	1	4356	3.6061
peoples r china	1	36218	25.716
peru	1	56	11
philippines	1	512	28.4
poland	2	5024	8.6364
portugal	2	8795	30.4545
romania	3	259	12.2
russia	2	3980	8.48
rwanda	1	2073	128.5
saudi arabia	1	3673	19.8276
scotland	3	11623	67.2381
serbia	2	970	11.75
singapore	1	33861	58.2192
slovenia	2	234	12.6
south africa	3	1781	63.6667
south korea	1	16575	42
spain	3	29885	59.1869
sweden	1	7052	85.9231
switzerland	2	31217	81.6517
taiwan	1	12866	22.8837
tanzania	1	319	16.5
thailand	1	5134	38.1538
tunisia	2	92	0
turkey	3	10127	20
u arab emirates	1	3059	40.1111
ukraine	1	793	74
usa	1	196396	50.6796
ussr	2	3	5
venezuela	1	1397	59
vietnam	1	434	4
wales	1	5662	16.2308
yemen	1	221	3

Supplementary Table 5. Average citations and total link strength of authors per cluster based on bibliographic coupling analysis（Institutions）.

Institutions	Cluster	Total Link Strength	Avg. citations
aarhus univ hosp	2	5352	103.6
aberdeen royal infirm	7	1114	18
acad hosp maastricht	1	1112	36
ain shams univ	1	124	7.75
albany med coll	1	1232	39.8333
all india inst med sci	1	2641	10.7273
allergan pharmaceut inc	2	3315	222.5
amer acad ophthalmol	4	973	30.2
amer univ beirut	4	1201	10.25
aravind eye hosp	3	4433	12.2857
aristotle univ thessaloniki	4	9277	29.8333
armed forces inst ophthalmol	1	593	4.2
assoc innovat & biomed res light & image	2	4073	30.5
aston univ	6	11057	42.4
bascom palmer eye inst	1	4494	111.9
bausch & lomb inc	1	1898	50.1429
bayer healthcare	2	12491	170.625
baylor coll med	1	9794	41.1538
belfast hlth & social care trust	5	2107	23.8333
ben gurion univ negev	1	2338	28.8571
boston univ	1	2317	5.4
bristol eye hosp	2	4658	64.625
cairo univ	1	232	10.1667
calif retina consultants	2	5502	20
capital med univ	1	1971	27.6667
cardiff univ	3	5134	14.4444
case western reserve univ	3	3346	27.5714
catholic univ korea	2	5153	42
catholic univ louvain	1	495	19.5
chang gung mem hosp	3	6275	26.1111
chang gung univ	3	6142	23.25
charlotte eye ear nose & throat associates	2	1192	91.6
cheltenham gen hosp	5	3046	149.2
childrens hosp philadelphia	1	1355	19.8
chinese acad sci	3	1478	20.5
chinese univ hong kong	1	8851	53.0833
chu bordeaux	2	8233	153.7143
cincinnati eye inst	3	1045	123
cleveland clin	6	21215	29.8125
cleveland clin fdn	1	933	49.8571
cnr	4	47	14
columbia univ	1	5020	35.7059
cornea & laser eye inst	1	889	19.25
ctr sight	3	1679	15.5
dalhousie univ	1	2534	65.0909
doheny eye inst	5	6456	21.2
duke nus grad med sch	3	2493	40.5
duke nus med sch	3	9656	11.4
duke univ	6	21994	79.9643
emory univ	1	9109	56.8571
erasmus mc	2	2897	38.2
flinders med ctr	1	2553	71.4
flinders univ s australia	1	4129	52
fu jen catholic univ	2	4263	6.25
fudan univ	1	3131	24.8333
gazi univ	1	631	12.4
genentech inc	2	15866	119
gloucestershire hosp nhs fdn trust	2	3040	16
goethe univ	1	1800	10.5556
goethe univ frankfurt	1	3989	27.5556
hackensack univ	1	892	45.5
hadassah univ hosp	1	611	21.4
hanusch hosp	2	4871	15.75
harbin med univ	3	1255	25
harvard med sch	3	18373	32.6129
harvard univ	1	20552	83.1379
hebrew univ jerusalem	2	1532	17.8333
heidelberg univ	1	1816	49.5714
helsinki univ hosp	1	428	7.25
hong kong eye hosp	1	1425	29
houston methodist hosp	2	6878	18.4286
icahn sch med mt sinai	3	1543	11.5
indiana univ	4	1502	48.6667
indiana univ sch med	2	2438	32
inje univ	1	1299	65.6667
inserm	2	8347	82.1176
inst ophthalmol	3	1815	71.2857
iran univ med sci	1	1150	7.7143
irccs	4	880	58.4
istanbul univ	3	951	30
jaeb ctr hlth res	2	7653	147.5833
johannes gutenberg univ mainz	4	3053	56.1429
john radcliffe hosp	2	818	52.25
johns hopkins bloomberg sch publ hlth	3	3669	50.1429
johns hopkins sch med	2	4225	128.1429
johns hopkins univ	2	41268	81.7791
johns hopkins univ hosp	1	3003	38.5
joslin diabet ctr	2	9800	74.1111
jules stein eye inst	1	429	24
juntendo univ	3	1110	24.25
kanazawa univ	3	513	28.3333
kaohsiung med univ	2	2822	9.6
keio univ	6	12476	43.1905
king khalid eye specialist hosp	4	680	10.4444
king saud univ	1	1283	39.875
kings coll london	3	5031	35.6364
kitasato univ	1	1918	32.3333
kobe univ	1	565	45.5
korea univ	2	2644	13.8
kymenlaakso cent hosp	1	552	7.75
kyoto univ	1	1360	49.75
landeskrankenhaus feldkirch	2	7304	1.5
leiden univ	2	2782	43.25
lithuanian univ hlth sci	3	807	1.3333
london sch hyg & trop med	3	6195	46.2667
london vis clin	1	1037	14
louisiana state univ	1	1683	43.2727

ludwig maximilians univ munchen	4	2374	22.4
lv prasad eye inst	6	10970	40.5
mahidol univ	3	1028	36.4
manchester royal eye hosp	2	921	20
manhattan eye ear & throat hosp	5	724	30.4
marsden eye res	5	1928	33.75
masaryk univ hosp	1	1083	39.5
mashhad univ med sci	1	855	4
massachusetts eye & ear	1	443	0.5
massachusetts eye & ear infirm	1	469	32.6
massachusetts gen hosp	1	940	30.6
mayo clin	2	13407	49.8889
mcgill univ	4	1301	34.4286
mcmaster univ	4	2912	33.6667
med coll wisconsin	2	2927	40.375
med univ graz	6	15549	34.625
med univ innsbruck	2	7503	5
med univ lubeck	5	894	105.75
med univ s carolina	1	1359	118.8333
med univ vienna	2	22196	84.8776
med univ wien	2	6002	56.75
methodist hosp	2	4890	143.3333
michigan state univ	1	1136	7.8333
midwest eye inst	2	5642	219.5714
miguel hernandez univ	1	1029	44.6667
mit	1	3883	204.3846
miyata eye hosp	1	988	76.75
montefiore med ctr	1	519	3.8
moorfields eye hosp	3	26087	35
moorfields eye hosp nhs fdn trust	3	12555	48.6923
nagoya univ hosp	2	6956	258
nanyang technol univ	3	6394	17.4286
natl cheng kung univ hosp	1	1108	17.4
natl taiwan univ	2	3785	13.6667
natl taiwan univ hosp	1	4586	20
natl univ hlth syst	3	3782	92.8571
natl univ singapore	3	18546	62.4474
natl yang ming univ	2	4010	8.8333
nei	5	12139	145.2632
new york eye & ear infirm	1	4589	61.6429
new york med coll	1	1550	47.25
newcastle univ	2	2679	5.8
noor eye hosp	1	963	6
northwestern univ	2	4541	52.875
novartis pharma ag	2	7542	179.25
nyu	1	2594	30.8333
oakland univ	1	1227	27.4
odense univ hosp	1	2340	54.2857
ohio state univ	1	3210	85.2
ophthalm consultants boston	2	11215	154
oregon hlth & sci univ	1	10678	64.8
osaka univ	1	1810	118.75
palmetto retina ctr	2	3640	186.5
paracelsus med univ salzburg	4	503	36.8333
peking univ	2	3904	28.875
penn state coll med	1	1222	23.3333
pfizer inc	5	2968	157.5
postgrad inst med educ & res	2	2098	66.75
prince wales hosp	3	229	14.5
pusan natl univ	1	512	14.25
queens univ	4	3487	13.9091
queens univ belfast	5	9073	64.9
quinze vingts natl ophthalmol hosp	6	2959	71.75
rambam hlth care campus	1	1252	7.25
regeneron pharmaceut inc	2	17927	133.6923
res inst ophthalmol	1	711	49.4
retina associates new jersey	2	4232	410
retina consultants houston	2	16663	215.8462
retina consultants ltd	6	724	11.75
retina inst	4	283	6.5
retina vitreous associates med grp	2	22004	275.5
rhein westfal th aachen	3	2518	17.5
rotterdam eye hosp	1	2355	46.9231
royal liverpool univ hosp	2	6437	32.4
royal perth hosp	5	2992	30.625
royal victoria hosp	2	3763	16.2
royal victoria infirm	2	661	31
royal victorian eye & ear hosp	5	6951	73.4615
ruhr univ bochum	1	649	14.5
rush univ	1	908	20.5
russian acad sci	1	1091	10.7273
saarland univ	6	1191	4.6667
sahlgrens univ hosp	1	603	25.75
sankara nethralaya	3	3545	14.4444
sanno hosp	1	1216	34.4
schepens eye res inst	1	1000	63
semmelweis univ	4	4504	49.2667
seoul natl univ	2	2636	11.5714
shahid beheshti univ med sci	1	1085	6.1111
shanghai jiao tong univ	1	4342	44.2
singapore eye res inst	3	13050	42.8966
singapore natl eye ctr	3	32715	57.2917
sorbonne univ	1	368	6
southeast retina ctr	2	8651	388
st louis univ	2	2392	29.1429
st thomas hosp	1	4847	36.7619
stanford univ	1	15663	31.4565
sun yat sen univ	3	6362	23.5
sunderland eye infirm	2	2392	7.25
sungkyunkwan univ	2	2786	5.8333
taipei vet gen hosp	2	5760	24.8
tan tock seng hosp	3	4743	39.625
tasmanian eye inst	1	935	53.5
tech univ dresden	1	1139	39.8333
technion israel inst technol	1	800	10
tel aviv univ	2	5672	19.7727
texas retina associates	5	5622	102.25
texas tech univ	1	792	36.1667
thomas jefferson univ	2	9213	41.4375

thorlabs inc	1	1634	263
tianjin med univ	1	1086	48.6667
tilganga inst ophthalmol	1	916	14.5
tohoku univ	1	577	9.4286
tokyo dent coll	6	1026	41.3333
tokyo womens med univ	1	1153	58
topcon corp	1	938	48.5
tufts univ	3	15618	98.3077
tulane univ	1	735	42.2
ucl	3	14116	47.8
ucl inst ophthalmol	3	10802	28.1364
univ aberdeen	7	1537	35
univ alabama birmingham	5	5963	65.25
univ alberta	4	2735	21.4
univ alicante	1	2534	60.1
univ amsterdam	2	6260	181.2222
univ aquila	5	1960	24.5
univ arizona	1	2433	104.7
univ auckland	1	1208	39
univ autonoma barcelona	1	1378	124
univ bari	1	493	17
univ basel	3	3393	10.25
univ bern	5	5913	30.875
univ birmingham	1	462	29.75
univ bologna	1	575	8.5
univ bonn	2	17868	91.72
univ bordeaux	2	4837	48.8333
univ brescia	4	4427	20.5
univ british columbia	1	1197	55
univ calgary	4	1800	36
univ calif davis	1	4683	45.5385
univ calif irvine	2	8112	28.8696
univ calif los angeles	5	13103	43.325
univ calif san diego	1	9385	44.6579
univ calif san francisco	1	7590	44.3448
univ cambridge	3	1111	26.8
univ cattolica sacro cuore	1	1360	52.8
univ chicago	2	2255	76
univ cincinnati	3	2581	67.5556
univ coimbra	2	2544	12
univ cologne	3	6242	25.2857
univ colorado	4	4988	20.875
univ complutense	4	1846	29.75
univ copenhagen	2	5190	12.75
univ crete	1	2865	37
univ dundee	2	3445	22.375
univ erlangen nurnberg	1	4248	95.7143
univ essen gesamthsch	5	563	30.5
univ eye hosp	1	589	30.5
univ fed sao paulo	6	14230	81.6471
univ florida	1	3493	42.2857
univ frankfurt	1	1284	41.1667
univ freiburg	3	4076	15.2857
univ fukui	3	1325	39.25
univ g dannunzio	1	1418	18.4444
univ geneva	4	3191	49.1429
univ genoa	1	2084	64.5
univ ghent	5	260	14.75
univ heidelberg	1	1462	67.5
univ helsinki	1	4969	59.1905
univ hong kong	1	2360	23.1429
univ hosp	1	1804	34.4286
univ hosp cologne	3	4275	49.4
univ iceland	2	1919	75
univ illinois	6	16557	38.4167
univ ioannina	4	6017	15.5556
univ iowa	5	1539	141.5
univ iowa hosp & clin	2	201	14
univ kentucky	2	2624	151.6
univ lausanne	2	2965	48.1429
univ leipzig	2	2329	30
univ liverpool	2	3664	43.2857
univ ljubljana	1	96	12.6
univ lubeck	2	3258	7.6667
univ lyon	2	1590	21.4
univ mainz	1	605	36.25
univ manchester	2	2407	13.4
univ marburg	1	890	62.4
univ maryland	1	1620	72.3333
univ med & dent new jersey	1	1016	47.4
univ med ctr hamburg eppendorf	2	8582	149
univ med ctr schleswig holstein	2	1624	34
univ melbourne	5	18629	100.8065
univ messina	4	1401	25.25
univ miami	5	17296	45.6667
univ michigan	1	8738	40.3571
univ miguel hernandez	1	2617	26.2727
univ milan	4	16527	43.7273
univ minho	2	2032	5.25
univ minnesota	1	1503	35.4286
univ missouri	2	2212	28.6667
univ montreal	4	2707	22.5455
univ munich	1	2998	15.2
univ munster	2	1117	63.25
univ murcia	1	1270	18
univ nebraska med ctr	2	8595	67
univ new s wales	3	1074	13.6
univ new south wales	5	5583	30.4444
univ nottingham	3	3985	25.3333
univ nottingham hosp	2	1273	22.1667
univ oslo	1	1115	68
univ otago	2	1847	24.75
univ oviedo	4	1475	22.5
univ oxford	2	3569	24.0909
univ padua	2	7291	135.8
univ paris 06	3	2222	32.3
univ paris 07	5	3836	105.3333
univ paris est creteil	2	779	46.25
univ paris saclay	4	1407	19.5

univ penn	5	11645	53.3636
univ pittsburgh	1	3877	42.8235
univ porto	2	3841	3.8
univ regensburg	1	1597	37.5
univ rochester	1	3965	59.6667
univ rome	1	895	25.75
univ rostock	6	2552	61.4
univ saarland	1	200	7.75
univ sao paulo	1	4945	30.4
univ siena	1	547	14
univ so calif	1	9065	51.9655
univ southern calif	1	4278	15.6923
univ st andrews	3	1328	38.4
univ sydney	5	19231	125.4706
univ tehran med sci	1	3118	16.125
univ tennessee	1	608	6.5
univ texas	1	4267	31.88
univ texas hlth sci ctr houston	1	978	13
univ tokyo	1	3183	64.8571
univ toronto	4	9530	36.96
univ tsukuba	1	1900	51.8333
univ tubingen	3	4171	32.0909
univ udine	2	2131	71.25
univ ulsan	1	3839	84.8182
univ ulster	1	1488	64.5
univ utah	1	3305	31.8824
univ valencia	1	3637	27.5
univ versailles st quentin en yvelines	1	1867	6
univ vienna	1	4954	116.9032
univ vita salute	2	3618	401
univ vita salute san raffaele	2	372	35.25
univ warmia & mazury	5	1351	7
univ washington	1	5519	38
univ western australia	5	6719	87.3636
univ western ontario	4	2423	11.5
univ wisconsin	5	13722	72.9545
univ zaragoza	1	637	21.75
univ zurich	1	3026	108.9333
us fda	1	425	36.25
usn	1	1378	54.25
vanderbilt univ	1	8493	32
vissum inst oftalmol alicante	1	941	24.25
vitreous retina macula consultants new york	2	9135	160
vivantes klinikum neukolln	1	939	58.5
vrije univ amsterdam	2	2477	36.5
washington univ	6	10684	52.6429
wayne state univ	1	1035	38.4286
weill cornell med coll	2	5238	21.6667
wenzhou med univ	1	995	4.3333
william beaumont hosp	1	630	27.8
wills eye hosp & res inst	2	11569	83.5417
wilmer eye inst	3	2771	91.2
yale univ	2	3282	26.875
yamaguchi univ	1	487	40.8
yonsei univ	1	4732	47.15

Supplementary Table 5. Average citations and total link strength of authors per cluster based on bibliographic coupling analysis（Journals）.

Journals	Cluster	Total Link Strength	Avg. citations
acs applied bio materials	1	29	4
acs applied polymer materials	3	8	2
acs nano	2	52	16
acta clinica croatica	3	301	8
acta medica portuguesa	2	482	0
acta ophthalmologica	3	3092	15.6
acta ophthalmologica scandinavica	2	1853	35.5
acta paediatrica	2	45	13
acta physica polonica a	1	281	3
acta scientiae veterinariae	5	13	0
actas dermo-sifiliograficas	4	1	0
acupuncture in medicine	2	10	7
advanced healthcare materials	4	65	0
advanced materials	1	118	21.5
advanced optical technologies	1	886	0.3333
advances in anatomic pathology	1	16	30
advances in clinical and experimental medicine	2	267	3
advances in therapy	3	3090	17.7778
american family physician	3	554	37
american journal of health-system pharmacy	3	160	174
american journal of nephrology	2	201	17
american journal of occupational therapy	1	4	21
american journal of ophthalmology	3	5895	61.1111
american journal of perinatology	2	114	7
american journal of primatology	3	53	0
analyst	1	62	4
analytical methods	4	25	9
angiogenesis	2	134	53
annales chirurgiae et gynaecologiae	7	0	9
annales de dermatologie et de venereologie	8	0	3
annales de physique	1	31	0
annals academy of medicine singapore	2	66	24
annals of medicine	3	419	429
annals of medicine and surgery	3	33	0
annals of ophthalmology	9	0	7
annals of ophthalmology-glaucoma	1	20	0
annals of pharmacotherapy	2	194	6
annals of the new york academy of sciences	1	20	7
annual review of vision science, vol 2	1	712	6
applied optics	1	740	40.5
applied sciences-basel	4	223	1
applied surface science	1	237	10
archives of disease in childhood-fetal and neonatal edition	2	479	32.6667
archives of medical research	2	167	3
archives of ophthalmology	3	1623	199.7778
archivos argentinos de pediatria	10	0	2
arquivos brasileiros de oftalmologia	3	580	2.2222
artificial cells nanomedicine and biotechnology	4	3	35
asia-pacific journal of ophthalmology	3	397	12
augenheilkunde up2date	2	586	0
australian and new zealand journal of ophthalmology	2	68	21
australian and new zealand journal of public health	2	156	6
australian journal of primary health	2	65	2
aviation space and environmental medicine	1	25	2
berliner und munchener tierarztliche wochenschrift	1	51	0
bio-medical materials and engineering	1	25	28
biochemistry-moscow	4	83	7
biochimica et biophysica acta-molecular basis of disease	4	4	11
biomaterials	2	45	37
biomed research international	2	231	10.6667
biomedical engineering online	1	614	25
biomedical engineering-meditsinskaya teknika	1	1	0
biomedical microdevices	11	0	39
biomedical optics express	1	2243	37.3333
biomedizinische technik	1	18	11
biomolecules	4	32	0
biophysical journal	1	43	587
bmc medicine	2	455	33
bmc ophthalmology	4	1485	7.4286
bmj case reports	2	134	0.0769
bmj open	3	306	10.8
bmj open diabetes research & care	2	89	0
bmj open ophthalmology	2	421	0
bmj paediatrics open	2	78	2
british journal of hospital medicine	2	178	0
british journal of ophthalmology	3	3468	33.5
bulletin de l academie veterinaire de france	5	49	0
bulletin of experimental biology and medicine	2	13	1
bulletin of the world health organization	2	22	11
canadian family physician	12	0	0
canadian journal of diabetes	2	62	2
canadian journal of neurological sciences	13	0	0

canadian journal of ophthalmology-journal canadien d ophtalmologie	3	528	10.1579
case reports in infectious diseases	4	5	3
cataract	3	272	1
cataract surgery from routine to complex : a practical guide	3	481	0
cell death & disease	2	18	46
cell transplantation	2	44	56
chemicke listy	1	13	3
chinese journal of lasers-zhongguo jiguang	1	727	2.3333
chinese medical journal	1	4	0
chinese optics letters	1	1	3
clinica chimica acta	4	7	34
clinica terapeutica	2	102	8
clinica veterinaria de pequenos animales	5	22	0
clinical and experimental ophthalmology	2	2824	31.4706
clinical and experimental optometry	3	1064	13.6
clinical epidemiology	3	151	2
clinical interventions in aging	4	4	34
clinical ophthalmology	4	3216	3.32
clinical otolaryngology	3	39	23.5
clinical vision sciences	2	90	20
clinics in dermatology	3	12	42
clinics in geriatric medicine	2	301	0
cns & neurological disorders-drug targets	4	292	46
cochrane database of systematic reviews	3	267	8.2
collegium antropologicum	3	131	4
colloids and surfaces a-physicochemical and engineering aspects	4	80	2
colloids and surfaces b-biointerfaces	4	34	13
comparative medicine	1	108	3
compendium on continuing education for the practicing veterinarian	14	0	3
computers in biology and medicine	1	182	2
contact lens & anterior eye	4	1044	20.6667
cornea	4	2431	38
corneal regeneration: methods and protocols	4	8	1
cureus	4	246	1
cureus journal of medical science	3	47	0
current diabetes reports	2	302	1
current drug safety	2	925	0
current eye research	4	1465	26.6
current medical research and opinion	2	588	10
current molecular medicine	2	34	1
current neurovascular research	2	6	3
current ophthalmology reports	3	76	0
current opinion in allergy and clinical immunology	4	333	22
current opinion in neurology	3	14	7
current opinion in ophthalmology	4	2707	33.8889
current pharmaceutical biotechnology	2	224	42
dermatologic clinics	15	0	11
devices and methods of measurements	16	0	0
diabetes	2	408	41
diabetes & vascular disease research	2	87	23
diabetes care	2	424	56.3333
diabetes mellitus	2	500	0
diabetes research and clinical practice	2	99	42
diabetes retinopathy	2	104	0
diabetes-metabolism research and reviews	2	133	0
diabetic medicine	2	641	22.2857
diabetologia	2	242	26
diagnostics	4	275	13
dose-response	4	45	23
drug delivery	2	21	3
drug delivery and translational research	2	25	0
drugs	4	106	34
drugs & aging	3	65	50
early human development	2	290	9
endocrine	2	383	47
endocrinology and metabolism clinics of north america	2	468	20
endocrinology diabetes and metabolism case reports	17	0	0
engineering research express	1	21	1
equine veterinary journal	5	12	0
european archives of oto-rhino-laryngology	3	27	7
european journal of clinical microbiology & infectious diseases	2	12	5
european journal of medical research	3	259	7
european journal of ophthalmology	2	1596	9
european journal of pharmaceutical sciences	3	40	9
european journal of pharmaceutics and biopharmaceutics	2	162	6
experimental and molecular medicine	2	22	0
experimental and therapeutic medicine	2	28	1.5
experimental eye research	4	780	8.1429
expert opinion on drug safety	3	254	43
expert review of clinical pharmacology	2	80	39

expert review of medical devices	1	1015	8.3333
expert review of ophthalmology	2	785	1.3333
eye	2	4314	17.1143
eye & contact lens-science and clinical practice	4	1869	20
eye and vision	3	264	15.6
folia morphologica	3	6	3
free radical biology and medicine	4	30	136
fresenius environmental bulletin	18	0	2
frontiers in medicine	3	476	2.2
frontiers in pharmacology	2	170	1
frontiers in surgery	2	10	13
frontiers of optoelectronics	6	4	2
gazette medicale de france	19	0	0
geriatrics-us	2	206	3
gland surgery	1	19	68
glaucoma surgery	5	100	3
glaucoma surgery, 2nd revised and extended edition	5	107	3
gomal journal of medical sciences	1	9	0
graefes archive for clinical and experimental ophthalmology	4	1484	22.5789
hand clinics	1	1	4
handbook of solid-state lasers: materials, systems and applications	1	226	0
health informatics journal	2	2	0
health technology assessment	3	1035	9.3333
hematology-oncology clinics of north america	2	20	20
herald of the russian academy of sciences	20	0	0
high-power and femosecond lasers: properties, materials and applications	3	13	0
hormone and metabolic research	4	5	30
human molecular genetics	1	7	46
ieee engineering in medicine and biology magazine	1	119	4
ieee journal of biomedical and health informatics	1	42	36
ieee journal of quantum electronics	1	32	6
ieee journal of selected topics in quantum electronics	1	1058	37.4
ieee photonics journal	1	103	5
ieee transactions on biomedical engineering	1	254	9.5
ieee transactions on information technology in biomedicine	1	28	53
ieee transactions on medical imaging	1	330	84
ieee transactions on plasma science	1	72	29
iium medical journal malaysia	3	32	0
image modeling of the human eye	3	432	3
impact of science on society	1	17	0
in vivo	4	165	12
indian journal of ophthalmology	4	1812	8.5714
indian journal of pediatrics	2	150	5
infants and young children	1	30	12
infrared imaging: a casebook in clinical medicine	1	3	0
infrared physics	1	103	0
interactive cardiovascular and thoracic surgery	4	3	7
international archives of allergy and immunology	4	4	5
international journal for vitamin and nutrition research	2	49	2
international journal of clinical and experimental medicine	3	15	0
international journal of fertility and womens medicine	3	112	1
international journal of hyperthermia	3	183	33
international journal of medical sciences	4	260	7.5
international journal of molecular sciences	4	607	2
international journal of multiphase flow	1	21	12
international journal of ophthalmology	4	688	10.7
international journal of oral and maxillofacial surgery	21	0	6
international journal of pharmaceutics	22	0	284
international journal of retina and vitreous	2	72	9
international journal of thermal sciences	1	115	0
international medical case reports journal	4	65	3.5
international ophthalmology	3	847	6.6364
international ophthalmology clinics	23	0	7.5
investigative ophthalmology & visual science	4	3858	45.8649
iranian journal of ophthalmology	3	203	1
irbm	1	75	0.5
irish journal of medical science	2	7	0
iscience	1	33	27
izvestiya akademii nauk sssr seriya fizicheskaya	1	43	3.4
jama ophthalmology	2	1775	29.5556
jama-journal of the american medical association	2	928	143.25
japanese journal of applied physics	1	30	14
japanese journal of applied physics part 1-regular papers short notes &	24	0	1
japanese journal of ophthalmology	2	1026	10.8
jco global oncology	3	15	1
jcpsp-journal of the college of physicians and surgeons pakistan	2	876	6.4615

johns hopkins apl technical digest	25	0	2
journal francais d ophtalmologie	3	2658	4.2857
journal of aapos	3	141	17.8
journal of advanced research	4	99	8
journal of allergy and clinical immunology	4	21	29
journal of alternative and complementary medicine	4	99	1
journal of analytical atomic spectrometry	6	7	7
journal of applied polymer science	4	1	13
journal of biochemistry	2	153	6
journal of biomedical optics	1	4842	39.1316
journal of biophotonics	1	484	19.1667
journal of cataract and refractive surgery	3	38553	32.413
journal of clinical and diagnostic research	2	55	10
journal of clinical endocrinology & metabolism	2	28	0
journal of clinical investigation	4	18	167
journal of clinical medicine	4	774	0.875
journal of controlled release	2	55	29
journal of current ophthalmology	3	1511	6.8
journal of dental research	4	15	79
journal of drug delivery science and technology	1	47	7.5
journal of emergency medicine	2	1	0
journal of equine veterinary science	5	11	0
journal of evolution of medical and dental sciences-jemds	2	500	0
journal of family medicine and primary care	2	30	3
journal of glaucoma	3	2818	19.6786
journal of hospital infection	1	5	15
journal of imaging	1	100	13
journal of korean medical science	2	510	6
journal of laser applications	1	2	1
journal of laser micro nanoengineering	1	124	2
journal of lasers in medical sciences	1	29	23
journal of mechanics in medicine and biology	1	10	15
journal of medical biography	3	4	0
journal of medical case reports	3	43	0
journal of medical engineering & technology	3	29	36
journal of medical imaging	3	101	0
journal of medical imaging and health informatics	4	1	1
journal of medical screening	2	202	5
journal of medical systems	1	83	11
journal of medicinal chemistry	2	678	20
journal of modern optics	1	211	7.6667
journal of nanomaterials	4	2	0
journal of neuro-ophthalmology	3	168	14.6667
journal of neuroscience methods	4	12	17
journal of nutritional biochemistry	2	125	39
journal of ocular pharmacology and therapeutics	2	426	17.6667
journal of ophthalmology	4	2491	8.7273
journal of optical technology	1	291	1
journal of optics	1	25	0
journal of optoelectronics and advanced materials	26	0	0
journal of pediatric ophthalmology & strabismus	1	221	7.3333
journal of pharmaceutical research international	2	378	0
journal of photochemistry and photobiology a-chemistry	1	6	22
journal of physics d-applied physics	1	213	7
journal of postgraduate medicine	2	310	47
journal of refractive surgery	3	1331	29.7143
journal of research in medical sciences	3	371	3
journal of telemedicine and telecare	3	27	36
journal of the american academy of dermatology	4	8	3
journal of the american animal hospital association	5	22	7
journal of the franklin institute-engineering and applied mathematics	27	0	0
journal of the korean ophthalmological society	4	284	0
journal of the mechanical behavior of biomedical materials	3	55	29
journal of the national medical association	3	140	6.5
journal of the optical society of korea	1	318	6.5
journal of the pakistan medical association	2	111	1.6667
journal of the royal society interface	1	5	19
journal of thermal biology	1	24	14
journal of toxicology-cutaneous and ocular toxicology	3	123	8
jove-journal of visualized experiments	1	239	5.6667
kaohsiung journal of medical sciences	2	117	4
khyber medical university journal-kmuj	2	63	0
klinische monatsblatter fur augenheilkunde	3	1379	4.6522
kvantovaya elektronika	1	3	0
lab on a chip	2	147	0
lancet	2	958	280.2
lancet digital health	2	64	4
laser & optoelectronics progress	1	19	2
laser & photonics reviews	4	51	26
laser focus world	1	36	1
laser focus-electro-optics	28	0	4
laser physics	1	480	7.6
laser physics letters	1	83	10

laser treatment of vascular lesions	1	49	1
lasers for medical applications: diagnostics, therapy and surgery	1	250	2
lasers in engineering	3	2	0
lasers in medical science	1	393	8.7143
lasers in surgery and medicine	1	2063	21.5
life-basel	4	57	0
light-science & applications	1	59	16
liver international	1	10	28
m s-medecine sciences	1	212	7
macular edema: a practical approach	2	113	12
magyar allatorvosok lapja	5	3	0
major topics in type 1 diabetes	2	433	1
maternal and child health journal	2	74	10
matrix biology	4	9	46
medecine et armees	29	0	1
medical decision making	3	53	10
medical engineering & physics	2	23	5
medical journal of australia	2	232	8
medical science	2	194	1
medical science monitor	3	155	3.5
medicina clinica	1	108	0
medicina-lithuania	4	688	3.4286
medicine	2	455	7.6
medicine and health	4	1	0
medizinische klinik	2	140	3
medizinische welt	30	0	0
medycyna weterynaryjna-veterinary medicine-science and practice	5	11	0
micromachines	1	666	9
middle east african journal of ophthalmology	3	9	4
military medicine	3	88	1.3333
minerva biotecnologica	1	407	16
minimally invasive therapy & allied technologies	31	0	0
molecular genetics & genomic medicine	3	93	3
molecular vision	4	378	27.6667
munchener medizinische wochenschrift	32	0	0
nature photonics	1	107	150
neonatal network	33	0	0
nepalese journal of ophthalmology	2	143	4
nephron	3	1	6
neurology	4	1	25
neuroscience and biobehavioral reviews	1	54	29
new trends in basic and clinical research of glaucoma: a	3	85	27
new zealand medical journal	2	40	12
nigerian postgraduate medical journal	2	13	6
nobel medicus	3	25	0
nonlinear analysis-real world applications	3	12	6
nuclear technology & radiation protection	1	27	1
nursing clinics of north america	3	7	0
nutrients	4	108	7
occupational medicine-oxford	4	3	3
ocular fluid dynamics: anatomy, physiology, imaging techniques, and	1	84	3
ocular immunology and inflammation	4	381	1.5
ocular surface	4	4075	54.8182
oncology letters	1	3	50
open medicine	2	2	3
open ophthalmology journal	4	126	1.75
ophthalmic and physiological optics	2	185	11
ophthalmic epidemiology	2	552	5.5714
ophthalmic plastic and reconstructive surgery	4	5	32
ophthalmic research	4	603	8.4286
ophthalmic surgery and lasers	1	149	8
ophthalmic surgery lasers & imaging	3	248	10
ophthalmic surgery lasers & imaging retina	2	794	8.1667
ophthalmologe	3	2844	8.2667
ophthalmologica	2	1944	19.3529
ophthalmologie	3	304	0
ophthalmology	3	63781	72.9111
ophthalmology and therapy	2	675	8
ophthalmology glaucoma	3	2370	4.5714
ophthalmology retina	2	6885	7.4355
optica	1	26	20
optica acta	1	8	2
optical engineering	1	1354	40.0833
optical materials	4	49	2
optics and laser technology	1	118	15.6
optics and lasers in engineering	1	184	14
optics express	1	557	161.3333
optics letters	1	55	29.3333
optik	2	20	4
optometry and vision science	4	433	12.3333
oral oncology	1	10	1
orbit-an international journal on orbital disorders and facial	1	1	4
orvosi hetilap	3	77	5

otolaryngologic clinics of north america	3	9	5
otolaryngology-head and neck surgery	1	1	0
oxidative medicine and cellular longevity	2	313	66
pain physician	4	185	16
pakistan journal of medical & health sciences	1	28	0
pakistan journal of medical sciences	2	1013	2.3333
pathogens	34	0	2
patient preference and adherence	2	256	12
pattern recognition	1	5	36
pediatric neurology	3	4	11
periodicum biologorum	3	32	0
periostin	4	26	2
pferdeheilkunde	5	29	0.8
pharmacoeconomics	3	124	41
philosophical transactions of the royal society a-mathematical physical	1	16	38
photoacoustic probes for in vivo imaging	1	169	2
photoacoustics	1	102	0
photobiomodulation photomedicine and laser surgery	4	112	15.5
photochemical & photobiological sciences	1	181	118.5
photonics	1	458	1
photonics research	1	3	18
photonics spectra	35	0	0
physics in medicine and biology	1	391	36
physiological measurement	1	64	40
physiotherapy theory and practice	4	18	4
plos one	4	1696	17.6154
polymer international	36	0	0
polymers	1	163	2
postgraduate medicine	2	155	0
proceedings of the ieee	1	317	14
proceedings of the institution of mechanical engineers part h-journal of	3	35	3
proceedings of the national academy of sciences of the united states of	1	226	56.5
proceedings of the society of photo-optical instrumentation engineers	1	19	0
progress in quantum electronics	1	35	39
progress in retinal and eye research	1	4793	108.5556
pteridines	4	4	1
quantitative imaging in medicine and surgery	1	98	1
quantum electronics	1	148	7.5
radiation effects and defects in solids	3	49	0
regional anesthesia and pain medicine	2	64	9
reports on progress in physics	1	710	801.5
retina-the journal of retinal and vitreous diseases	3	1532	17.6471
review of scientific instruments	1	64	77
revista brasileira de oftalmologia	1	917	1.75
revista de la universidad del zulia	3	6	0
revista orl	2	5	0
revue de medecine	37	0	0
revue de medecine de toulouse	38	0	0
revue de medecine interne	1	273	1
rsc advances	4	15	27
sage open medical case reports	2	19	0
sage open medicine	2	56	1
salud i ciencia	2	7	6
saudi journal of medicine & medical sciences	2	35	2
saudi journal of ophthalmology	3	85	0.6667
saudi medical journal	3	146	3
scanning	39	0	22
science and engineering ethics	3	75	0
scientific reports	4	483	11.1667
seminars in ophthalmology	2	2929	16.2727
seminars in veterinary medicine and surgery-small animal	40	0	14
sensors	1	399	76
simulation	2	135	2
slas discovery	2	5	8
solid-state mid-infrared laser sources	1	64	83
south african journal of surgery	41	0	0
southern medical journal	2	227	6
spectroscopy and spectral analysis	6	7	0
spektrum der augenheilkunde	1	262	0.5
springer handbook of medical technology	3	6	0
stem cells - from hype to real hope	4	45	0
stroke	3	9	22
surgeon-journal of the royal colleges of surgeons of edinburgh and	3	91	36
surgical and radiologic anatomy	3	10	37
surgical clinics of north america	1	49	1
surgical neurology	1	22	23
survey of ophthalmology	3	2764	73.65
swiss medical weekly	3	4	15
taiwan journal of ophthalmology	3	448	2
talanta	2	23	12
technology and health care	1	14	6

telemedicine journal	42	0	23
telemedicine journal and e-health	2	4	34
texas medicine	43	0	0
therapeutic advances in endocrinology and metabolism	2	154	31
therapeutic advances in ophthalmology	1	746	1.5
therapeutische umschau	44	0	0
tieraerztliche praxis ausgabe grosstiere nutztiere	5	1	0
tieraerztliche praxis ausgabe kleintiere heimtiere	5	44	1
tierarztliche praxis	5	24	3
transactions of the ophthalmological societies of the united kingdom	1	12	16
translational vision science & technology	2	474	1.8333
transplantation proceedings	4	33	7
trauma monthly	2	6	0
trials	3	375	14
turk pediatri arsivi-turkish archives of pediatrics	2	104	0
turkiye klinikleri tip bilimleri dergisi	3	48	0
ultrasonics sonochemistry	1	31	20
ultrasound in medicine and biology	1	120	62
unveiling diabetes - historical milestones in diabetology	2	550	0
urologe	45	0	4
vestnik oftalmologii	1	2	1
veterinaria	5	17	0
veterinary clinics of north america-small animal practice	5	170	13.5
veterinary ophthalmology	5	468	14.2222
vision research	2	24	57
vlaams diergeneeskundig tijdschrift	5	11	0
vojnosanitetski pregled	2	27	3
western journal of medicine	1	118	7
wiener klinische wochenschrift	2	2089	1.75
world journal of clinical cases	2	18	0
world neurosurgery	3	16	1
wound repair and regeneration	3	4	18
wounds-a compendium of clinical research and practice	1	14	3
zeitschrift fur medizinische physik	1	861	162

Supplementary Table 5. Average citations and total link strength of authors per cluster based on bibliographic coupling analysis（References）.

References	Cluster	DOI	Total Link Strength	Avg. citations
ohba (2007)	4	https://doi.org/10.1001/archopht.125.7.952	292	75
moisseiev (1995)	4	https://doi.org/10.1001/archopht.1995.01100020069031	42	79
mohamed (2007a)	2	https://doi.org/10.1001/jama.298.8.902	236	572
bressler (2013)	2	https://doi.org/10.1001/jamaophthalmol.2013.4154	98	76
avery (2016)	2	https://doi.org/10.1001/jamaophthalmol.2015.4070	128	130
gliem (2016)	4	https://doi.org/10.1001/jamaophthalmol.2016.1475	64	78
krauss (1995)	3	https://doi.org/10.1002/lsm.1900170203	489	70
looker (2013)	2	https://doi.org/10.1007/s00125-013-2928-7	39	50
mierdel (1997)	1	https://doi.org/10.1007/s003470050140	10	62
lege (2004)	3	https://doi.org/10.1007/s00417-003-0672-2	30	58
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melancia (2016)	2	https://doi.org/10.1007/s00417-016-3360-8	18	75
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scholz (2017)	2	https://doi.org/10.1007/s12325-017-0559-y	103	74
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ho (1992)	2	https://doi.org/10.1016/0039-6257(92)90137-i	72	53
lee (2005b)	1	https://doi.org/10.1016/j.ajo.2004.08.049	25	80
manivannan (2005)	4	https://doi.org/10.1016/j.ajo.2005.02.055	1	115
tasman (2006)	9	https://doi.org/10.1016/j.ajo.2005.07.034	43	54
holekamp (2006)	2	https://doi.org/10.1016/j.ajo.2006.01.016	18	87
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schmitz-valckenberg (2008)	4	https://doi.org/10.1016/j.ajo.2008.04.006	51	56
soong (2009)	6	https://doi.org/10.1016/j.ajo.2008.08.026	61	178
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flores-moreno (2013)	3	https://doi.org/10.1016/j.ajo.2012.07.015	27	174
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tahzib (2005)	1	https://doi.org/10.1016/j.jcrs.2005.08.022	126	51
menapace (2005)	8	https://doi.org/10.1016/j.jcrs.2005.08.051	17	50
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wollensak (2010)	7	https://doi.org/10.1016/j.jcrs.2009.07.044	8	123
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chen (2011)	3	https://doi.org/10.1016/j.jcrs.2010.10.041	26	69
de vries (2011)	1	https://doi.org/10.1016/j.jcrs.2010.11.032	3	244
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savini (2011b)	6	https://doi.org/10.1016/j.jcrs.2011.03.055	25	65
savini (2011a)	6	https://doi.org/10.1016/j.jcrs.2011.04.033	39	112
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vestergaard (2014)	6	https://doi.org/10.1016/j.jcrs.2013.07.053	43	82
wu (2014b)	6	https://doi.org/10.1016/j.jcrs.2013.07.056	44	125
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chan (2004)	4	https://doi.org/10.1016/j.ophtha.2003.12.056	45	240
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martinez-castillo (2005)	16	https://doi.org/10.1016/j.ophtha.2004.12.046	0	71
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ferreras (2007)	3	https://doi.org/10.1016/j.ophtha.2007.01.015	107	53
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lin (2007)	3	https://doi.org/10.1016/j.ophtha.2007.07.005	129	107
minckler (2008)	5	https://doi.org/10.1016/j.ophtha.2008.03.031	12	203
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dawson (2008)	1	https://doi.org/10.1016/j.ophtha.2008.06.008	42	99
chen (2008)	2	https://doi.org/10.1016/j.ophtha.2008.08.026	12	104
boixadera (2009)	4	https://doi.org/10.1016/j.ophtha.2008.08.029	65	71
inoue (2009)	3	https://doi.org/10.1016/j.ophtha.2008.09.008	30	117
noma (2009)	2	https://doi.org/10.1016/j.ophtha.2008.09.034	28	157
scott (2009)	2	https://doi.org/10.1016/j.ophtha.2008.10.017	50	92
oshima (2009)	2	https://doi.org/10.1016/j.ophtha.2008.11.005	37	121
see (2009)	3	https://doi.org/10.1016/j.ophtha.2008.12.005	20	73
solomon (2009)	1	https://doi.org/10.1016/j.ophtha.2008.12.037	58	202
bolz (2009)	2	https://doi.org/10.1016/j.ophtha.2008.12.039	19	259
sung (2009a)	3	https://doi.org/10.1016/j.ophtha.2008.12.045	52	157
medeiros (2009)	3	https://doi.org/10.1016/j.ophtha.2008.12.062	86	64
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slade (2009)	6	https://doi.org/10.1016/j.ophtha.2009.01.001	64	64
sung (2009b)	3	https://doi.org/10.1016/j.ophtha.2009.01.004	91	151
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takamura (2009)	2	https://doi.org/10.1016/j.ophtha.2009.01.014	134	73
yilmaz (2009)	2	https://doi.org/10.1016/j.ophtha.2009.02.002	110	87
tugal-tutkun (2009b)	11	https://doi.org/10.1016/j.ophtha.2009.02.019	5	51
hillenkamp (2009)	5	https://doi.org/10.1016/j.ophtha.2009.03.029	9	93
nguyen (2009)	2	https://doi.org/10.1016/j.ophtha.2009.04.023	77	250
chauhan (2009)	3	https://doi.org/10.1016/j.ophtha.2009.04.031	88	72
gillies (2009)	2	https://doi.org/10.1016/j.ophtha.2009.04.049	37	62
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prasad (2010)	2	https://doi.org/10.1016/j.ophtha.2009.09.019	12	122
reus (2010)	3	https://doi.org/10.1016/j.ophtha.2009.09.026	89	100
campochiaro (2010)	2	https://doi.org/10.1016/j.ophtha.2009.11.024	120	108
ibrahim (2010)	7	https://doi.org/10.1016/j.ophtha.2009.12.029	21	76
stringham (2010)	1	https://doi.org/10.1016/j.ophtha.2009.12.032	1	51
blasi (2010)	4	https://doi.org/10.1016/j.ophtha.2009.12.033	47	56
midena (2010)	4	https://doi.org/10.1016/j.ophtha.2009.12.044	20	84
quan dong nguyen (2010)	2	https://doi.org/10.1016/j.ophtha.2010.08.016	45	401
ooto (2011)	4	https://doi.org/10.1016/j.ophtha.2010.08.032	22	103
mccarthy (2011)	10	https://doi.org/10.1016/j.ophtha.2010.08.048	36	94
kozak (2011)	2	https://doi.org/10.1016/j.ophtha.2010.10.007	103	80
kim (2011)	5	https://doi.org/10.1016/j.ophtha.2010.10.016	82	209
campochiaro (2011)	2	https://doi.org/10.1016/j.ophtha.2010.12.028	156	251
elman (2011)	2	https://doi.org/10.1016/j.ophtha.2010.12.033	32	408
mitchell (2011)	2	https://doi.org/10.1016/j.ophtha.2011.01.031	140	938
brown (2011)	2	https://doi.org/10.1016/j.ophtha.2011.02.022	75	371
shah (2011)	2	https://doi.org/10.1016/j.ophtha.2011.02.034	74	153
sultan (2011)	2	https://doi.org/10.1016/j.ophtha.2011.02.045	187	123
pearson (2011)	2	https://doi.org/10.1016/j.ophtha.2011.02.048	87	145
francis (2011)	5	https://doi.org/10.1016/j.ophtha.2011.03.028	3	144
samples (2011)	5	https://doi.org/10.1016/j.ophtha.2011.04.037	63	66
christakis (2011)	5	https://doi.org/10.1016/j.ophtha.2011.05.004	33	107
viola (2012)	4	https://doi.org/10.1016/j.ophtha.2011.07.046	9	84
leonardi (2012)	7	https://doi.org/10.1016/j.ophtha.2011.09.018	37	52
hirakata (2012)	4	https://doi.org/10.1016/j.ophtha.2011.09.026	2	76
jampel (2012)	5	https://doi.org/10.1016/j.ophtha.2011.09.049	28	101
aiello (2011)	2	https://doi.org/10.1016/j.ophtha.2011.09.058	71	80

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sawaguchi (2012)	5	https://doi.org/10.1016/j.ophtha.2011.12.038	38	71
quan dong nguyen (2012)	2	https://doi.org/10.1016/j.ophtha.2011.12.039	197	1061
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do (2012)	2	https://doi.org/10.1016/j.ophtha.2012.02.010	161	270
wu (2012)	3	https://doi.org/10.1016/j.ophtha.2012.02.040	30	108
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park (2012)	3	https://doi.org/10.1016/j.ophtha.2012.03.006	9	151
campochiaro (2012)	2	https://doi.org/10.1016/j.ophtha.2012.04.030	60	327
arbelaez (2012)	6	https://doi.org/10.1016/j.ophtha.2012.06.005	40	129
lisboa (2012)	3	https://doi.org/10.1016/j.ophtha.2012.06.009	66	77
murakami (2012)	7	https://doi.org/10.1016/j.ophtha.2012.06.013	11	57
husain (2012)	5	https://doi.org/10.1016/j.ophtha.2012.06.015	23	60
lin (2012)	13	https://doi.org/10.1016/j.ophtha.2012.06.046	0	67
ho (2012)	2	https://doi.org/10.1016/j.ophtha.2012.07.058	196	77
pan (2013)	4	https://doi.org/10.1016/j.ophtha.2012.07.065	34	96
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chauhan (2013)	3	https://doi.org/10.1016/j.ophtha.2012.09.055	46	251
rudolf (2013)	4	https://doi.org/10.1016/j.ophtha.2012.10.007	45	116
roberts (2013)	6	https://doi.org/10.1016/j.ophtha.2012.10.026	48	169
tan (2013)	4	https://doi.org/10.1016/j.ophtha.2012.12.002	68	64
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grulkowski (2013)	3	https://doi.org/10.1016/j.ophtha.2013.04.007	96	56
silva (2013)	2	https://doi.org/10.1016/j.ophtha.2013.05.004	111	158
smith (2013)	5	https://doi.org/10.1016/j.ophtha.2013.05.034	54	67
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abell (2014b)	6	https://doi.org/10.1016/j.ophtha.2013.08.013	59	95
campochiaro (2014b)	2	https://doi.org/10.1016/j.ophtha.2013.08.038	82	220
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alsulaiman (2014)	4	https://doi.org/10.1016/j.ophtha.2013.09.006	1	51
jordan (2014)	7	https://doi.org/10.1016/j.ophtha.2013.09.014	41	64
mrejen (2014)	4	https://doi.org/10.1016/j.ophtha.2013.09.026	50	62
stein (2014)	2	https://doi.org/10.1016/j.ophtha.2013.10.037	47	59
ivarsen (2014)	6	https://doi.org/10.1016/j.ophtha.2013.11.006	43	232
thach (2014)	2	https://doi.org/10.1016/j.ophtha.2013.11.022	46	62
bakri (2014)	2	https://doi.org/10.1016/j.ophtha.2013.11.029	32	70
schmidt-erfurth (2014)	2	https://doi.org/10.1016/j.ophtha.2013.11.041	121	228
miki (2014)	3	https://doi.org/10.1016/j.ophtha.2014.01.017	94	110
jia (2014a)	3	https://doi.org/10.1016/j.ophtha.2014.01.021	55	497
wu (2014a)	4	https://doi.org/10.1016/j.ophtha.2014.01.025	32	51
jia (2014b)	3	https://doi.org/10.1016/j.ophtha.2014.01.034	78	546
campochiaro (2014a)	2	https://doi.org/10.1016/j.ophtha.2014.03.021	205	123
jiang (2014)	5	https://doi.org/10.1016/j.ophtha.2014.03.039	43	57
cunha-vaz (2014)	2	https://doi.org/10.1016/j.ophtha.2014.04.019	135	96
boyer (2014)	2	https://doi.org/10.1016/j.ophtha.2014.04.024	147	632
korobelnik (2014)	2	https://doi.org/10.1016/j.ophtha.2014.05.006	125	483
chen (2014)	5	https://doi.org/10.1016/j.ophtha.2014.05.010	10	57
lepore (2014)	9	https://doi.org/10.1016/j.ophtha.2014.05.015	52	131
keane (2014)	4	https://doi.org/10.1016/j.ophtha.2014.07.054	33	83
duncker (2015)	4	https://doi.org/10.1016/j.ophtha.2014.08.017	41	51
campochiaro (2015b)	2	https://doi.org/10.1016/j.ophtha.2014.08.031	118	165
shields (2015)	8	https://doi.org/10.1016/j.ophtha.2014.08.046	23	68
elman (2015)	2	https://doi.org/10.1016/j.ophtha.2014.08.047	58	242
denoyer (2015)	7	https://doi.org/10.1016/j.ophtha.2014.10.004	110	148
hwang (2015)	9	https://doi.org/10.1016/j.ophtha.2014.12.017	64	133
silva (2015b)	2	https://doi.org/10.1016/j.ophtha.2015.01.008	91	157
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ebrahim (2005)	4	https://doi.org/10.1016/j.survophthal.2004.12.006	8	118
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fercher (2010)	3	https://doi.org/10.1016/j.zemedi.2009.11.002	378	162
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wiesinger-jendritza (1998)	1	https://doi.org/10.1016/s0886-3350(98)80196-x	40	55
perez-santonja (1998)	1	https://doi.org/10.1016/s0886-3350(98)80198-3	99	101

gunning (1998)	5	https://doi.org/10.1016/s0886-3350(98)80227-7	19	118
alio (1998)	1	https://doi.org/10.1016/s0886-3350(98)80256-3	90	98
kaufman (1998)	1	https://doi.org/10.1016/s0886-3350(98)80347-7	5	102
yi (1999)	1	https://doi.org/10.1016/s0886-3350(99)00139-x	90	71
tsai (2000)	1	https://doi.org/10.1016/s0886-3350(99)00328-4	24	63
schwiegerling (2000)	1	https://doi.org/10.1016/s0886-3350(99)00359-4	10	78
kim (1999)	1	https://doi.org/10.1016/s0886-3350(99)80085-6	51	60
berendschot (2003)	4	https://doi.org/10.1016/s1350-9462(02)00060-5	119	93
tervo (2003)	1	https://doi.org/10.1016/s1350-9462(02)00064-2	316	78
nettune (2010)	7	https://doi.org/10.1016/s1542-0124(12)70224-0	208	86
stefansson (2000)	2	https://doi.org/10.1034/j.1600-0420.2000.078004374.x	99	186
broadbent (1999)	2	https://doi.org/10.1038/eye.1999.43	60	50
jasvinder (2011)	3	https://doi.org/10.1038/eye.2011.28	40	54
robles (2011)	3	https://doi.org/10.1038/nphoton.2011.257	42	150
juzeniene (2007)	6	https://doi.org/10.1039/b705461k	14	207
edwards (2003)	6	https://doi.org/10.1063/1.1584078	16	77
raisler (2002)	4	https://doi.org/10.1073/pnas.122247299	12	106
gehrs (2006)	4	https://doi.org/10.1080/07853890600946724	152	429
fercher (2003)	3	https://doi.org/10.1088/0034-4885/66/2/204	242	1459
peng (2008)	6	https://doi.org/10.1088/0034-4885/71/5/056701	44	144
lee (2005a)	5	https://doi.org/10.1093/ajhp/62.7.691	53	174
scholte (2001)	5	https://doi.org/10.1097/00061198-200108000-00009	49	93
kobayashi (2005)	7	https://doi.org/10.1097/01.ico.0000160976.88824.2b	7	79
cillino (2004)	5	https://doi.org/10.1097/01.ijg.0000137869.18156.81	4	88
freeman (2010)	3	https://doi.org/10.1097/iae.0b013e3181bd2f94	77	50
zhang (2019)	7	https://doi.org/10.1097/icl.0000000000000544	50	53
gomes (2015)	6	https://doi.org/10.1097/ico.0000000000000408	30	433
vegunta (2016)	7	https://doi.org/10.1097/ico.0000000000000735	17	75
kaufman (2013)	7	https://doi.org/10.1097/ico.0b013e3182541e9a	12	54
zimmer-galler (2015)	2	https://doi.org/10.1097/icu.0000000000000142	22	61
adhi (2013)	3	https://doi.org/10.1097/icu.0b013e32835f8bf8	148	337
williams (2018)	5	https://doi.org/10.1097/ijg.0000000000000934	26	69
pinz (1998)	4	https://doi.org/10.1109/42.730405	18	172
shen (2001)	3	https://doi.org/10.1109/4233.908405	9	53
sorokin (2005)	3	https://doi.org/10.1109/jstqe.2003.850255	42	92
hoy (2014)	6	https://doi.org/10.1109/jstqe.2013.2287098	64	81
tanter (2009)	6	https://doi.org/10.1109/tmi.2009.2021471	18	161
sakata (2009)	3	https://doi.org/10.1111/j.1442-9071.2009.02015.x	145	162
guthoff (2009)	7	https://doi.org/10.1111/j.1442-9071.2009.02016.x	87	157
fenwick (2012)	2	https://doi.org/10.1111/j.1442-9071.2011.02599.x	15	71
mcalinden (2012)	1	https://doi.org/10.1111/j.1444-0938.2012.00761.x	150	51
hove (2004)	2	https://doi.org/10.1111/j.1600-0420.2004.00270.x	50	66
han (2004)	6	https://doi.org/10.1117/1.1756919	11	54
hammer (2006)	4	https://doi.org/10.1117/1.2335470	8	60
yamanari (2008)	3	https://doi.org/10.1117/1.2841024	133	89
boas (2010)	3	https://doi.org/10.1117/1.3285504	9	645
podoleanu (1998)	3	https://doi.org/10.1117/1.429859	94	152
molebny (2017)	3	https://doi.org/10.1117/1.oe.56.3.031220	9	74
drexler (1995)	3	https://doi.org/10.1117/12.191809	127	54
schmetterer (1995)	3	https://doi.org/10.1117/12.193292	18	127
konishi (1995)	3	https://doi.org/10.1117/12.195203	2	56
darlow (2013)	9	https://doi.org/10.1136/archdischild-2011-301148	71	77
nagar (2005)	5	https://doi.org/10.1136/bjo.2004.052795	25	176
reus (2007)	3	https://doi.org/10.1136/bjo.2006.096586	66	58
konstantopoulos (2007)	5	https://doi.org/10.1136/bjo.2006.103408	34	224
kristinsson (1997)	2	https://doi.org/10.1136/bjo.81.4.274	25	118
laurell (2002)	8	https://doi.org/10.1136/bjo.86.12.1380	11	80
abdel-meguid (2003)	4	https://doi.org/10.1136/bjo.87.5.615	44	61
chan (2016)	6	https://doi.org/10.1136/bjophthalmol-2015-307238	49	63
rodriguez (2019)	2	https://doi.org/10.1155/2019/4940825	78	66
schalnus (2003)	8	https://doi.org/10.1159/000068563	43	90
wong (2020)	2	https://doi.org/10.1159/000502387	25	77
vernon (2005)	3	https://doi.org/10.1167/iovs.05-0087	59	54
eter (2008)	4	https://doi.org/10.1167/iovs.07-1322	1	64
wolf-schnurrbusch (2008)	4	https://doi.org/10.1167/iovs.07-1460	68	102
wakamatsu (2010)	7	https://doi.org/10.1167/iovs.08-2722	35	67
lofqvist (2009)	4	https://doi.org/10.1167/iovs.08-2903	3	59
yanni (2009)	2	https://doi.org/10.1167/iovs.09-3652	11	54
schweitzer (2010)	6	https://doi.org/10.1167/iovs.09-3689	105	93
mcalinden (2010)	1	https://doi.org/10.1167/iovs.10-5341	31	190
barker (2011)	4	https://doi.org/10.1167/iovs.10-5898	34	120
ang (2012)	6	https://doi.org/10.1167/iovs.11-8808	43	76
mukherjee (2012)	7	https://doi.org/10.1167/iovs.12-9848	1	55
labbe (2013)	7	https://doi.org/10.1167/iovs.13-12370	67	128
kheirkhah (2015)	7	https://doi.org/10.1167/iovs.15-17433	46	89
kelly (2007)	4	https://doi.org/10.1172/jci32430	1	167
arany (2016)	6	https://doi.org/10.1177/0022034516648939	3	79
meinert (2000)	20	https://doi.org/10.1177/112067210001000301	0	92
lexer (1997)	3	https://doi.org/10.1364/ao.36.006548	131	141
braaf (2013)	3	https://doi.org/10.1364/boe.4.000051	92	99
scoles (2013)	4	https://doi.org/10.1364/boe.4.001710	27	94
lu (2014)	3	https://doi.org/10.1364/boe.5.000293	98	136
carrasco-zevallos (2017)	3	https://doi.org/10.1364/boe.8.001607	143	81
potsaid (2008)	3	https://doi.org/10.1364/oe.16.015149	161	314
suzuki (2015)	3	https://doi.org/10.1364/ol.40.000804	7	51
jiao (2005)	3	https://doi.org/10.1364/opex.13.000444	75	164
alvarez (2009)	2	https://doi.org/10.1371/journal.pone.0007867	14	58
rouland (2005)	5	https://doi.org/10.2165/00002512-200522040-00004	19	50
leese (2008)	2	https://doi.org/10.2337/dc08-1098	5	81
tur (1991)	22	https://doi.org/10.2337/diacare.14.11.958	0	63
villani (2014)	7	https://doi.org/10.3109/02713683.2013.842592	205	139
ooto (2015)	3	https://doi.org/10.3109/02713683.2014.952828	226	61

lombardo (2013)	4	https://doi.org/10.3390/s130100334	89	76
tampa (2019)	6	https://doi.org/10.3892/ol.2019.9939	1	50
zhang (2016)	7	https://doi.org/10.3928/1081597x-20151111-06	50	96
griffiths (2016)	4	https://doi.org/10.3978/j.issn.2227-684x.2016.02.01	7	68
alio (2012)	7	10.2174/138920112800624355	10	77
eydelman (2006)	1	10.3928/1081-597X-20060101-16	14	85
barbazetto (2003)	4	10.1001/archopht.121.9.1253	56	174
jean (2003)	6		15	83
arnold (2001a)	4	10.1016/s0002-9394(01)00967-9	40	731
arnold (2001b)	4	10.1016/s0161-6420(01)00544-9	30	378
koznarova (2000)	2	10.1177/096368970000900617	9	56
bressler (1999)	4		73	1365
maloney (1995)	1	10.1016/s0161-6420(95)30913-x	49	53
sturmer (1993)	5	10.1016/s0161-6420(93)31552-6	23	74
vogel (1986)	3	10.1016/s0161-6420(86)33576-0	10	129
gupta (2016)	5		66	65

Supplementary Table 5. Average citations and total link strength of authors per cluster based on bibliographic coupling analysis（Authors）.

Authors	Cluster	Total Link Strength	Avg. citations
abela-formanek, c	4	1626	37
abell, robin g.	1	1202	53.5
agnifili, luca	1	505	29.75
ahmed, iqbal ike k.	1	1354	60.8
aiello, lloyd paul	2	2090	159
alio, jl	1	1986	60.5385
alio, jorge l.	1	1749	40.6154
amano, s	1	892	73.6
ambler, gareth	6	3675	22
amon, m	4	2637	33.75
ang, marcus	1	791	42.25
apple, dj	4	940	84.25
apte, rajendra s.	2	483	56.5
araie, makoto	6	2251	57
archer, timothy j.	1	379	15.5
arnold, jennifer j.	8	1827	43.5
auffarth, gerd u.	4	908	28
auffarth, gu	4	790	74.8
aung, t	3	1268	77.2857
aung, tin	3	6069	25.8947
autrata, r	1	1304	42
azar, dt	1	910	79.5
azuara-blanco, augusto	3	2033	19.6667
bachernegg, alexander	4	812	33.25
bakri, sophie j.	2	2693	51
bandello, francesco	2	1801	393
barton, keith	6	3610	26.5
baskaran, mani	3	2749	32
baudouin, c.	1	664	3.25
baudouin, christophe	7	3513	95.2857
beck, roy w.	2	2378	208.1667
berliner, alyson j.	2	13975	142.1667
billman, kathleen	2	2844	195.5
boehm, myriam	1	802	12.5
bolz, matthias	2	5648	41.5455
bowd, c	3	914	70.75
bowd, christopher	3	2924	28.5
boyer, david	2	3916	254
boyer, david s.	2	15416	256.4286
bressler, neil m.	2	4742	155.1
bressler, nm	5	282	338.6
brinkmann, ralf	2	2148	6.2857
brown, david m.	2	15756	244.7647
brown, gary c.	2	2993	69.5
buehl, w	4	3302	48.5
buehl, wolf	4	1761	32.5
buehren, jens	1	850	19
buhren, j	1	1545	32.7143
bunce, catey	6	4788	24.375
buzney, sm	2	69	7
campochiaro, peter a.	2	8327	181.9286
cavanagh, hd	1	1572	57.1429
chakravarthy, usha	8	3085	88
chan, r. v. paul	5	1240	15.4
chauhan, balwantray c.	3	1599	76.8571
chen, fred k.	8	2190	26.6667
chen, philip p.	3	2461	47.6
chew, emily y.	8	1016	16.25
chew, paul t. k.	3	2187	22.2
chew, ptk	3	694	101.25
chiang, michael f.	5	1338	18.2857
chu, renyuan	1	846	19.25
ciulla, thomas a.	2	3561	130
congdon, nathan	3	1027	30.5
cox, ig	1	694	58.75
culbertson, ww	1	1704	95.6
curcio, christine a.	8	766	59.5
dana, reza	7	1708	38.5
desmettre, t	9	710	130.75
devoisselle, jm	9	789	109.2
dexl, alois k.	4	812	33.25
dick, h. burkhard	1	328	21.75
dick, hb	1	781	37.2
do, diana v.	2	10004	209.6
dogru, murat	7	3750	49.8182
drenser, kimberly a.	5	396	19
drexler, w	4	5497	209.6364
dua, harminder s.	1	1482	35.5
duker, jay s.	4	1427	123.5
ehlers, justis p.	2	3475	45.2
ehrlich, jason s.	2	4334	272.6
elman, michael j.	2	2214	239.5
fankhauser, f	9	121	7.5
farsiu, sina	4	873	40.6

fauser, sascha	7	2408	47.2
fercher, af	4	4443	266.5
findl, o	4	6741	46.3684
findl, oliver	4	2528	21.2
finger, robert p.	8	1587	35.5
flaxel, christina j.	2	3532	199.25
fleckenstein, monika	8	1319	52.75
fontana, luigi	3	224	20.5
foster, paul j.	3	2948	27.3333
francis, brian a.	3	3264	77.4444
freeman, william r.	2	845	33.5
friedman, david s.	3	4357	30.5714
fujimoto, james g.	4	2486	247.8571
garg, anurag	6	3929	23.75
garway-heath, david	6	4111	27
gazzard, g	3	1177	63.25
gazzard, gus	6	4533	24.4286
georgopoulos, michael	4	1081	22.5
gibson, andrea	2	5674	277.5
girkin, christopher a.	3	2564	73.6
glassman, adam r.	2	3559	183.875
grabner, g	1	341	19.75
grabner, guenther	4	812	33.25
grzybowski, andrzej	7	741	7
guell, jl	1	493	44.5
guthoff, rudolf f.	7	927	40.5
guymer, robyn h.	8	2359	31
haller, julia a.	2	2552	119.25
hamrah, pedram	7	5367	58.8
hangai, masanori	3	1311	82.5
hardten, dr	1	463	28.75
harper, colin a.	8	1614	30.5
hashemi, hassan	1	365	6.4
he, mingguang	3	3073	31.3
heier, jeffrey s.	2	6855	227.4286
hemkeppler, eva	1	656	11.5
hengerer, fritz h.	1	1100	53.8
hersh, ps	1	1204	45.3333
hitzenberger, christoph k.	4	2355	61.5
hitzenberger, ck	4	4384	286.4286
ho, allen c.	2	2681	103.2
holz, frank g.	2	11131	120.6111
htoon, hla m.	3	800	22.25
hu, fr	1	1029	32.5
huang, david	1	1659	249.8
huang, jia	1	970	12.5
ibrahim, osama m. a.	7	1356	52
igarashi, akihito	1	1385	32.8333
ishaq, mazhar	1	456	5.25
issa, peter charbel	8	1330	41.7143
iwase, aiko	3	997	65.25
izatt, joseph a.	4	1127	38
jaffe, glenn j.	2	4824	255.5
jampel, henry d.	3	2706	114.6667
jampol, lee m.	2	2526	138
jester, jv	1	1350	75.4
jhanji, vishal	1	839	26.8
joo, choun-ki	1	533	32.5
kaemmerer, m	1	973	101.2
kahook, malik y.	6	1608	9.2
kaiserman, igor	1	877	13.6
kamiya, kazutaka	1	1385	32.8333
kampik, anselm	1	260	10.25
kapik, barry	2	2844	195.5
katsanos, andreas	6	3691	15.6667
kheirkhah, ahmad	7	1416	37.6
kim, ek	1	1497	58.875
kim, eung kweon	1	1013	23.5
kim, jk	1	817	31.75
kim, stephen j.	2	4568	41.2857
kim, tae-im	1	893	22.2
kivela, t	5	384	39
klein, ronald	2	1904	108.75
koch, dd	1	1574	118.4
koch, douglas d.	4	1202	28.6667
kohnen, t	1	2337	35.5455
kohnen, thomas	1	4515	19.8947
kojima, takashi	7	2381	60
kolodjaschna, j	4	1084	26.5
komatsu, mari	1	945	28.25
konstantakopoulou, evgenia	6	3929	23.75
korobelnik, jean-francois	2	5132	170.8
kriechbaum, k	4	1921	61.75
kriechbaum, katharina	2	834	79.6
krieglstein, gk	4	274	21
kristinsson, jk	2	1450	69.5

krueger, rr	1	654	62.3333
kruger, a	4	2415	44.9091
kruse, friedrich e.	1	637	14.5
kuchle, m	1	575	99.8
kumar, rajesh s.	3	1819	22
kunikata, hiroshi	6	290	8.75
kuppermann, baruch d.	2	2290	59.6
kymionis, george d.	1	1153	42.6
la cour, morten	2	162	27
lam, dsc	1	560	89.5
langenbucher, a	1	1521	49.1667
langenbucher, a.	1	400	6.5
langenbucher, achim	1	508	5.25
lavanya, raghavan	3	1846	43.25
lee, aaron y.	6	119	5.75
lee, dh	1	604	27.75
lee, hk	1	817	31.75
lemij, hg	3	1064	45.75
leung, christopher k. s.	3	1085	57.5
leydolt, christina	4	1336	13.4
li, tianjing	3	791	46
li, xiaoxin	2	1256	44.75
liebmann, jeffrey m.	3	2224	44.6
lin, jm	1	426	19
lin, shan c.	3	3272	76.2222
liu, shu	3	1303	71.25
loewenstein, anat	2	2141	27.3333
lois, noemi	2	1326	13.6
lum, flora	3	259	6.75
luu, chi d.	8	2359	31
luyten, gpm	1	584	53.75
macrae, s	1	776	56.75
maguire, maureen g.	2	1629	16
maloney, rk	1	1632	49.625
manche, edward e.	1	1076	29
manche, ee	1	1583	35
marcus, dennis m.	2	6759	386
marshall, j	1	3370	45.8333
marshall, john	1	515	23
mashayekhi, arman	5	491	22.5
mastropasqua, alessandra	1	1225	24
mastropasqua, leonardo	1	1733	30
matsumoto, yukihiro	7	2180	46.625
mattei, peter a.	1	1225	24
mayer, wolfgang j.	1	2256	18.7143
mcculley, jp	1	879	29.25
mcdonald, mb	1	1141	44.6667
mcguinness, myra b.	8	1672	40.8
medeiros, felipe a.	3	4042	69.8889
mehta, jodhbir s.	1	2919	39.4545
melia, michele	2	3231	127.1429
menabuoni, luca	1	181	26.4
menapace, r	4	5635	62.8333
menapace, rupert	4	3522	17.9231
metzig, carola	2	10460	140.875
midena, edoardo	2	4853	231.6
mikropoulos, dimitrios g.	6	2317	19.25
mimouni, michael	1	757	6
mirshahi, a	1	857	41.75
mirshahi, alireza	1	1817	3.5
mitchell, paul	2	5817	168.2727
miura, yoko	2	1655	10
mohammadpour, mehrdad	1	488	8.8
mordon, s	9	710	130.75
moshirfar, majid	1	560	19.4286
mrochen, m	1	1854	69.1
mruthyunjaya, prithvi	2	2309	36.25
nakazawa, toru	6	336	8.6
nathwani, neil	6	3929	23.75
naumann, goh	1	456	101
neumayer, thomas	4	1674	28.25
nguyen, quan d.	2	5532	272
nicolela, marcelo t.	3	1343	86.1667
nishida, kohji	1	509	117.5
nishida, t	1	278	40.8
nongpiur, monisha e.	3	1822	19.5
nudleman, eric	5	415	11.75
o'brart, dps	1	1563	77.75
o'brien, terrence p.	1	841	40.5
ooto, sotaro	3	1090	41.2
oshika, t	1	1428	53.375
pablo, luis e.	3	948	31.5
pearce, ian	2	1665	43.25
perez-santonja, jj	1	851	52
pesudovs, konrad	1	434	75.25
petermann, kerstin	1	1891	12

petroll, wm	1	1276	83.25
petternel, v	4	774	21.2
pinero, david p.	1	873	27.75
pircher, michael	4	2355	61.5
polo, vicente	3	948	31.5
potsaid, benjamin	4	1558	263
priglinger, siegfried	1	1684	27.25
puliafito, ca	4	2063	140.375
qian, yishan	1	970	12.5
quan dong nguyen	2	6238	264.2857
quaranta, luciano	6	2616	20.5
querques, giuseppe	7	309	45.75
quinn, graham e.	5	420	64.8
rainer, g	4	1558	45.5
rajan, ms	1	1958	54.4
raman, rajiv	2	1083	16.5
ramasamy, kim	2	939	11.2
ramulu, pradeep y.	3	1535	38.8
randleman, j. bradley	1	427	38.2
rapuano, cj	1	2070	106.8
rathjen, christian	1	1912	2.5
regillo, cd	5	269	80.5
rehurek, j	1	1304	42
reinstein, dan z.	1	379	15.5
reus, nj	3	644	62
roider, johann	2	1201	26.6
rosman, mohamad	1	547	23.5
rubio, roman g.	2	3542	328.8
sacu, s	4	2493	49.6667
sacu, stefan	4	1824	31
sadda, srinivas	8	1083	25
sadda, srinivas r.	8	2338	24.5556
saroj, namrata	2	7045	67.7143
schallhorn, julie m.	1	690	10.8
schallhorn, steven c.	1	1606	35
schauersberger, j	4	2505	37.9
schild, g	4	2194	47.2857
schlenker, matthew b.	1	1154	73.5
schlingemann, reinier o.	2	3207	242.8
schmelter, thomas	2	5899	323
schmetterer, l	4	243	27.5
schmetterer, leopold	7	1252	10.25
schmidt-erfurth, um	5	319	64
schmidt-erfurth, ursula	2	10931	206.2667
schmitz-valckenberg, steffen	8	1588	51.2
schoenberger, scott d.	2	2951	46.75
scholda, christoph	2	4162	55.8571
scholl, hendrik p. n.	7	1574	36
schuman, joel s.	3	1590	78
schuman, js	3	729	88.25
schwarzenbacher, luca	4	868	2.25
scott, ingrid u.	2	2229	104.8333
seiler, t	1	1901	68.4545
seitz, b	1	1765	38.7778
seitz, b.	1	400	6
seitz, berthold	7	929	8.8889
seo, kyoung yul	1	952	26.4
seong, gj	1	889	49.25
shah, gaurav k.	2	55	6.5
shah, syed mahmood	2	2388	175.4
shajari, mehdi	1	2018	7.1429
sharp, pf	4	347	56.75
shcherbakov, i. a.	1	160	2
shields, carol l.	5	1116	26.3333
shields, cl	5	404	69.7143
shields, ja	5	404	69.7143
shields, jerry a.	5	1116	26.3333
shimizu, kimiya	1	1239	28.8
shtein, roni m.	1	529	23.75
silva, paolo s.	2	4701	98.8
simader, christian	2	5639	400.4
singh, kuldev	3	2945	92.5714
singh, rishi p.	2	4033	14
sivaprasad, sobha	2	4863	8.875
smith, scott d.	3	2873	107.3333
soo, yuhwen	2	9288	196
soubrane, g	5	78	78
stachs, oliver	7	950	34
stalmans, ingeborg	3	464	50.6
staurenghi, giovanni	2	3511	20.8333
stefansson, e	2	1030	82.4
steinert, rf	1	465	22.75
stifter, eva	4	1378	24
stulting, rd	1	1138	93.5
sugar, a	1	1999	130.5
sun, jennifer k.	2	6607	91.8

tanzer, david j.	1	1134	63
tasman, w	5	272	85.25
terasaki, hiroko	2	6061	258
teus, miguel a.	6	1590	13.75
theisen-kunde, dirk	2	1590	6.25
thompson, desmond	2	3677	16
thompson, kp	1	712	127.5
tommila, p	5	367	38
toth, jozsef	5	13	0.25
toto, lisa	1	1327	19.2
trese, michael t.	5	466	17.8
tsai, james c.	3	428	32.4
tsai, yy	1	426	19
tsubota, kazuo	7	2754	38.2308
tsujikawa, akitaka	3	381	31
tuuminen, raimo	4	235	7.75
varma, rohit	2	1925	27.8
vecchiarino, luca	1	1135	23
vernon, sa	3	922	22.4
vickerstaff, victoria	6	3675	22
villani, edoardo	7	1675	69.5
viola, francesco	8	304	42.75
vitti, robert	2	14874	144.8333
vote, brendan j.	1	1202	53.5
wachler, bsb	1	1465	50
wang, li	1	806	31.6667
wedrich, andreas	2	4652	1.5
weinreb, rn	3	1173	65.4
weinreb, robert n.	3	5445	68.0625
werner, john s.	4	1179	13.2
wirbelauer, c	1	943	25.6
wirtitsch, m	4	2717	48.8333
wollstein, g	3	747	77.25
wong, hon-tym	3	1819	22
wong, tien y.	3	3147	129
wong, tien yin	3	1126	80
wormald, richard	6	3598	57.5
wu, wei-chi	5	1191	37
wu, zhichao	8	1934	32.6
wykoff, charles c.	2	7683	27.7273
yamanaka, a	1	595	27.6
ye, cong	3	1628	69.6
yeh, steven	2	2951	46.75
ying, gui-shuang	3	692	14.2
yoo, sonia h.	1	763	26.3333
yoshimura, nagahisa	3	1437	70
yu, fei	3	192	33.25
yu, marco	3	1682	41.6667
zangwill, linda m.	3	4778	68.7273
zangwill, lm	3	1173	65.4
zawadzki, robert j.	4	1229	14
zebardast, nazlee	3	1392	10.2
zeitz, oliver	2	9771	191.8571
zhou, xingtao	1	1205	14.7143