

Attached Table 2 Appendix Table of Keywords

The research fields followed by A or B in the section “Integrated Science and Innovative Science” is carried out in two separate groups. Make sure to select A or B based on the keyword, when applying for the research fields in the list.

Category: Integrated Science and Innovative Science			(Informatics)		
Area: Comprehensive fields			Item Number	Research Field	Screening Sub-panel Number / Keyword
Discipline: Informatics					
1001	Fundamental theory of informatics	A Computational theory B Automata theory/Formal language theory C Theory of programs D Computational complexity theory E Algorithm theory F Cryptosystem G Information mathematics H Mathematical logic J Discrete structure K Computational learning theory L Quantum computation theory M Combinatorial optimization	1004	Media informatics/ Database	A Database, media, and information system A Database (DataBase Management System, DBMS) B Digital content C Multimedia D Information systems E Web services F Mobile systems G Information retrieval H Graphics J Visualization K Corpus L Structured document B User interface M Human interface N User model P Groupware Q Virtual reality R Wearable appliance S Universal design T Accessibility U Usability
1002	Software	A Algorithm engineering B Parallel processing/Distributed processing C Programming paradigm/Programming language theory D Implementation of programming systems E Operating system F Software engineering G Software agent H Specification/Verification of specification J Development environment K Development management L Embedded software	1005	Intelligent informatics	A Search, logic, and inference algorithms B Learning and knowledge acquisition C Knowledge bases and knowledge systems D Intelligent system architecture E Intelligent information processing F Natural language processing G Knowledge discovery and data mining H Intelligent agent J Ontology K Web intelligence
1003	Computer system/ Network	A Computer system A Computer architecture B Circuit and system C VLSI design technology D High performance computing E Reconfigurable system F Dependable computing G Embedded system B Information network H Network architecture J Network protocol K Network security technology L Mobile network technology M Transport technology N Overlay network P Traffic engineering Q Network management technology R Measurement of networks S Ubiquitous computing T Large scale network simulation U Interoperability V Network node operating system W Network information representation X Basic technology of providing services	1006	Perception information processing/ Intelligent robotics	A Perceptual information processing A Pattern recognition B Image processing C Speech processing D Computer vision E Information sensing F Sensor fusion G Sensing devices systems B Intelligent robotics H Intelligent robot J Behavior and environment recognition K Motion planning L Sensory behavior system M Autonomous system N Digital human model P Animation Q Real world information processing R Physical agents S Intelligent room

(Informatics)

Item Number	Research Field	Screening Sub-panel Number / Keyword		
1007	Sensitivity informatics/ Soft computing	A Sensitivity informatics		
		A Sensitivity design		
		B Sensitivity expression		
		C Sensitivity recognition		
		D Sensitivity cognition		
		E Sensitivity robotics		
		F Sensitivity measurement evaluation		
		G Ambiguity and sensitivity		
		H Sensitivity information processing		
		J Sensitivity database		
		K Sensitivity interface		
		L Sensitivity physiology		
		M Sensitivity material products		
		N Sensitivity industry		
		P Sensitivity environmental science		
		Q Sensitivity sociology		
		R Sensitivity philosophy		
		S Sensitivity pedagogy		
		T Sensitivity brain science		
		U Sensitivity management		
		B Soft computing		
		V Neural network		
		W Genetic algorithm		
		X Fuzzy theory		
		Y Chaos		
		Z Fractal		
		a Complex systems		
		b Probabilistic information processing		
		1008	Library and information science/ Humanistic social informatics	A Library and information science
				A Library science
				B Information services
				C Library information systems
D Digital archives				
E Information organization				
F Information retrieval				
G Information media				
H Bibliometrics and scientometrics				
J Construction and management of information resources				
B Humanistic social informatics				
K Literature information				
L History information				
M Information sociology				
N Law information				
P Information economics				
Q Management information				
R Educational information				
S Art information				
T Medical information				
U Science and technology information				
V Intellectual property information				
W Geographic information				
1009	Cognitive science			A Cognitive psychology
				B Evolution/Development
				C Learning/Thinking/Memorization
				D Reasoning/Problem solving
				E Sensation/Perception/Attention
				F Emotion/Feeling/Behavior
				G Comparative cognitive psychology
				H Cognitive philosophy
				J Brain cognitive science
		K Cognitive linguistics		
		L Comparative decision making theory		
		M Cognitive engineering		
		N Cognitive archaeology		
		P Cognitive model		
		Q Sociability		

(Informatics)

Item Number	Research Field	Screening Sub-panel Number / Keyword
1010	Statistical science	A Research survey and experimental design
		B Multivariate analysis
		C Time series analysis
		D Classification and pattern recognition
		E Statistical inference
		F Computational statistics and computer aided statistics
		G Statistical prediction and statistical control
		H Model selection
		J Optimization theory
		K Pharmaceutical statistical analysis genome biology
		L Behaviormetrics
		M Mathematical finance
		N Data mining
		P Spatial statistics and environmental statistics
		Q Statistics education
		R Statistical quality control
		S Statistical learning theory
		T Social research and analysis plan
		U Data science
		1011
A Bioinformatics		
B Genome information processing		
C Proteome information processing		
D Computer simulation		
E Biosystem information sciences		
B Vitae system informatics		
F Biological information		
G Neuroinformatics		
H Neural information processing		
J Artificial life system		
K Molecular computing		
L DNA computing		

Discipline: Neuroscience

Item Number	Research Field	Screening Sub-panel Number / Keyword
1101	Neuroscience in general	A Molecular and cellular neuroscience
		B Developmental and regenerative neuroscience
		C Neuroendocrinology
		D Clinical neuroscience
		E Neuroinformatics
		F Cognitive neuroscience
		G Behavioral neuroscience
		H Noninvasive neuroimaging
		J Computational neuroscience
		K Neuropsychology
		L Neuroscience of language
		1102
A Anatomy of neural tracts		
B Neural network		
C Neurohistology		
D Molecular neurobiology		
E Neural fine structure		
F Neurohistochemistry and neurocytochemistry		
G Neural development and its abnormality		
H Neural regeneration, remodeling and plasticity		
J Experimental morphology of the nervous system		
K Anatomical study of neuroimaging		
L Neurocytology		
B Neuropathology		
M Cellular neuropathology		
N Molecular neuropathology		
P Neurodegenerative diseases		
Q Developmental disorders		
R Senile dementia		
S Cerebrovascular disorders		
T Metabolic diseases		
U Toxic diseases		
V Brain tumors		
W Diseases of the spinal cord		
X Diseases of the muscle and peripheral nerve		

(Neuroscience)

Item Number	Research Field	Screening Sub-panel Number / Keyword		
1103	Neurochemistry/ Neuropharmacology	A Molecular and cellular neurobiology		
		B Development, differentiation, and aging		
		C Neurotransmitters and receptors		
		D Intracellular signal transduction		
		E Glial cells		
		F Pathophysiology and therapy of neuropsychiatric diseases		
		G Stem cell biology, regeneration, and repair		
		H Neural plasticity		
		J Neuropharmacology		
		K Drug development		
		L Genomic neuroscience		
		1104	Neurophysiology and muscle physiology	A Neurophysiology
				A Neuron, synapse, and neural circuit
B Glia				
C Vision, audition, equilibrium, gustation, and olfaction				
D Somatic and visceral sensation, and pain				
E Posture and motor control				
F Autonomic nervous regulation				
G System neuroscience and neuroinformatics				
H Cognition, language, memory, and emotion				
J Functional neuroimaging				
K Neurogenesis, development, regeneration, and repair				
L Neurological pathophysiology				
B Muscle physiology				
M Muscle contraction mechanism and energetics				
N Excitation-contraction coupling				
P Molecular neurophysiology and molecular motor				
Q Receptors and intracellular signal transduction				
R Neural control of muscle and skeletal, cardiac, and smooth muscles				
S Cardiac excitation and conduction abnormalities				
T Myocardial dysfunction and regeneration				
U Cardiac and smooth muscle remodeling				
V Smooth muscle physiology				
W Skeletal muscle physiology and pathophysiology				

(Biomedical engineering)

Item Number	Research Field	Screening Sub-panel Number / Keyword
1302	Medical systems	A Medical ultrasonics
		B Medical imaging system
		C Laboratory examination system
		D Minimally invasive treatment system
		E Remote diagnosis and treatment system
		F Organ preservation and treatment system
		G Medical information system
		H Computational surgery
		J Medical robotics
		1303
A Rehabilitation medicine		
B Disability science		
C Physical therapy		
D Occupational therapy science		
E Speech language and hearing therapy		
F Social welfare and health science		
G Artificial sensory organs		
H Gerontology		
J Clinical psychotherapy		
B Welfare engineering		
K Engineering for health and welfare		
L Technology for activities of daily living		
M Preventive care/Assistive technology		
N Normalization		
P Barrier-free system		
Q Universal design		
R Robotics for welfare and nursing care		
S Technology for substituting biological function		
T Technical aid		
U Human interface		

Discipline: Health/Sports science

Item Number	Research Field	Screening Sub-panel Number / Keyword
1401	Physical education	A Developmental mechanisms and the body works
		A Educational physiology
		B Physical systems science
		C Biological information analysis
		D Higher brain function science
		E Physical growth developmental science
		F Sensory and motor development studies
		B Mental and physical education and culture
		G Aesthetic education
		H Physical environment theory
		J Kinetic theory of leadership
		K Pedagogy of physical education
		L Fitness
		M Cultural theories of physical movement
		N Philosophy of the body
		P Life and death education
		Q Psychology of physical education
		R Affective science
		S Outdoor education
		T Dance education
		U Girls gymnastics
V Adult life stage elderly gymnastics		
W Martial arts theory		
X Motion adaptation life science		
1402	Sports science	A Sports science
		A Sports philosophy
		B Sports history
		C Sports psychology
		D Sports science management
		E Sports pedagogy
		F Training science
		G Sports biomechanics
		H Coaching
		J Sports talent
		K Sports for the disabled
		L Sports sociology
		M Sports environment
		N Cultural anthropology of sport
		B Medical and sport sciences
		P Sports physiology
		Q Sports biochemistry
		R Sports nutrition
		S Energy metabolism
		T Exercise and training
		U Sports disorders
V Doping		

Discipline: Laboratory animal science

Item Number	Research Field	Keyword
1201	Laboratory animal science	A Environmental facilities
		B Infectious diseases
		C Cryopreservation
		D Biosafety
		E Disease models
		F Breeding genetics
		G Developmental engineering
		H Laboratory animal welfare
		J Animal experiment technology
		K Bioresource research

Discipline: Biomedical engineering

Item Number	Research Field	Screening Sub-panel Number / Keyword
1301	Biomedical engineering/ Biological material science	A Biomedical engineering
		A Biomedical image
		B Physiome and biosystem
		C Bioinformation and instrumentation
		D Biomechanics
		E Artificial organs, regenerative medicine
		F Biological properties
		G Biomedical control and therapy
		H Biomedical optical engineering, thermal engineering
		J Medical micromachines, nanomachines
		K Nanobiology, nanomedicine
		L Bioimaging
		B Biomaterial science
		M Biomaterials
		N Biofunctional materials
		P Cell/Tissue engineering
		Q Biocompatible materials/Biosuitable materials
		R Intelligent materials
		S Bioconjugate materials
		T Materials for regenerative medicine and engineering
		U Drug delivery system
		V Nano-biomaterials

(Health/Sports science)

Item Number	Research Field	Screening Sub-panel Number / Keyword
1403	Applied health science	A Health education/Health promotion activities
		A Health education
		B Health promotion
		C Safety propulsion/Safety education
		D Pedagogy of health education
		E Stress management
		F Smoking/Drug abuse prevention education
		G School health
		H AIDS and sex education
		J Health management
		K Health information
		L Nutritional guidance
		M Physical and mental health
		N Leisure/Recreation
		B Applied medical health
		P Lifestyle diseases
		Q Exercise prescription and exercise therapy
		R Aging
		S Sports medicine
		T Sports immunology

Discipline: Science education/Educational technology

Item Number	Research Field	Screening Sub-panel Number / Keyword
1601	Science education	1 A Natural science education (mathematics, science, earth science physical chemical biological information)
		B Engineering education
		C Understanding nature
		D Social awareness of science
		E Science literacy
		F Experiment/Observation
		G Science education curriculum
		H Environmental education
		2 J Industrial technology education
		K Science higher education
1602	Educational technology	L History of science and technology education
		M Science and sociocultural
		N Science and technology policy
		P Teacher education/Science communicator training
		1 A Curriculum/Pedagogy development
		B Teaching-learning support systems
		C Distributed collaborative learning system
		D Human interface
		E Instructional materials information system
		F Utilization of media
1602	Educational technology	G Distance education
		H E-learning
		2 J Computer literacy
		K Media education
		L Learning environment
		M Teacher's education
		N Classroom instruction

Discipline: Human life science

Item Number	Research Field	Screening Sub-panel Number / Keyword
1501	General human life sciences	A Home economy
		A Family finance and home management
		B Family relations
		C Lifestyle
		D Consumer purchasing activities/Life information
		E Human life and culture
		F Life of the aged persons
		G Care for aged and disabled persons
		H Livelihood culture
		J Home economics education
		B Clothing and dwelling life
		K Clothing life
		L Clothing environment
		M Living and lifestyle
N Living environment		
P Life material		
Q Living design/Living goods		
1502	Eating habits, studies on eating habits	A Food and cooking
		A Cooking and processing
		B Food storage
		C Sensory evaluation
		D Food materials
		E Cooking and functional constituent
		F Food service
		G Food culture
		H Texture
		J Food item and mastication
		B Diet and health
		K Health and dietary life
		L Diet and nutrition
		M Dietary education
		N Dietary habits
		P Dietary behavior
		Q Dietary information
		R Special nutritious food
		S Food and environment
		T Diet plan
U Family and dietary life		
V Diet evaluation		
W Food management		

Discipline: Sociology/History of science and technology

Item Number	Research Field	Keyword
1701	Sociology/History of science and technology	A Sociology of science
		B Bioethics
		C History of science
		D History of technology
		E Medical history
		F Industrial archaeology
		G Philosophy of science/Theory of science
		H Science, technology and society

Discipline: Cultural property science

Item Number	Research Field	Keyword
1801	Cultural property science	A Dating methods
		B Material analysis
		C Production technique
		D Conservation science
		E Archaeological prospection
		F Plants and animal bodies/Human remains
		G Cultural property/Cultural heritage
		H Cultural resources
		J Cultural property policy

Discipline: Geography

Item Number	Research Field	Keyword
1901	Geography	A Geography in general
		B Land use/Landscape
		C Environmental system
		D Regional planning
		E Geography education
		F Regional geography
		G Geomorphology
		H Climatology
		J Hydrology
		K Cartography
		L Geographic information system
		M Remote sensing

Area: New multidisciplinary fields

Discipline: Environmental science

Item Number	Research Field	Screening Sub-panel Number / Keyword
2001	Environmental dynamic analysis	A Environmental metnal change
		B Biogeochemocal cycle
		C Environmental measurements
		D Environmental model
		E Environmental information
		F Global warming
		G Global change of water cycle
		H Environmental monitoring of the polar regions
		J Chemical oceanography
		K Biological oceanography
		2002
A Terrestrial, aquatic, and atmospheric impact assessment		
B Impact assessment on ecosystem		
C Impact assessment methods		
D Impact assessment on human health		
E Environmental impact assessment for the future generation		
F Human activities in polar regions		
B Environmental policy		
G Environmental philosophy		
H Environmental economics		
J Environmental management		
K Environmental activities		
L Environment and society		
M Consensus forming		
N Environmental safety and security		
2003	Risk sciences of radiation/ Chemicals	A Risk science of radiation
		A Environmental radiation
		B Protection
		C Basic process
		D Dosimetry assessment
		E Damage
		F Response
		G Repair
		H Sensitivity
		J Impact on life
		K Risk assessment
		B Risk science of chemicals
		L Toxicology
		M Toxic substance to human
N Estimation of trace chemicals pollution		
P Endocrine disrupting substances		
2004	Environmental technology/ Environmental materials	A Environmental technology
		A Environmental conservation technology
		B Environmental restoration technology
		C Resource conservation technology
		D Energy conservation technology
		E Recycling technology
		F Reduction technology of enviornmental impact
		B Environmental materials
		G Circular material design
		H Circulation and processing
		J Production system of circular materials
		K Human living environment
		L Green chemistry
		M Ecology and environment

Discipline: Nano/Micro science

Item Number	Research Field	Screening Sub-panel Number / Keyword
2101	Nanostructural science	A Chemical system
		A Nanostructural chemistry
		B Cluster/Fine particle
		C Nano/Microreaction field
		D Single molecule manipulation
		E Hierarchical structure/Superstructure
		F Surface/Interface nanostructure
		G Self-assembly
		B Physical system
		H Nanostructure properties
		J Mesoscopic physics
		K Nanoprobes
		L Quantum information
		M Nanotribology

(Nano/Micro science)

Item Number	Research Field	Screening Sub-panel Number / Keyword
2102	Nanomaterials/ Nanobioscience	A Nanomaterials
		A Creation of nanomaterials
		B Analysis and characterization of nanomaterials
		C Nanosurface/Nanointerface
		D Functional nanomaterials
		E Nanometrology
		F Formation/Control of nanostructure
		G Molecular devices
		H Nanoparticle/Nanotube
		J Single-molecule science
		B Nano bioscience
		K DNA devices
		L Nano synthesis
		M Molecular manipulation
N Biochip		
P Single-molecule biochemistry and physiology		
Q Single-molecule bioinformation science		
R Single-molecule science		
S Single-molecule imaging/Nanometrology		
2103	Microdevices/ Nanodevices	A Microdevices/Micromachines
		A Microelectromechanical systems/ Nanoelectromechanical systems (MEMS/NEMS)
		B Microfabrication
		C Micro-optical devices
		D Microchemical systems
		E Micro biosystems
		F Micromechanics
		G Microsensors
		B Nanodevices
		H Nanostructure fabrication
		J Self-assembly
		K Nanoparticle
		L Quantum dot
		M Carbon nanotube
N Control of nano-properties		
P Quantum effect		
Q Nanoelectronic devices		
R Nano-optical devices		
S Spin devices		
T Molecular devices		
U Single-quantum devices		
V Nanomachines		

Discipline: Social/Safety system science

Item Number	Research Field	Screening Sub-panel Number / Keyword
2201	Social systems engineering/ Safety system	A Social systems engineering
		A Social engineering
		B Social system
		C Policy science
		D Development planning
		E Management engineering
		F Management system
		G Operations research
		H Quality control
		J Industrial engineering
		K Modeling
		L Logistics
		M Marketing
		N Finance
		P Project management
		Q Environmental management
		B Safety system
		R Safety system
		S Safety engineering
		T Crisis management
		U Urban and social disaster prevention
V Fire/Accident		
W Safety information/Environmental preparation		
X Community resistance to disaster (evacuation, panic, communication, hazard map)		
Y Reliability engineering		

(Social/Safety system science)

Item Number	Research Field	Screening Sub-panel Number / Keyword
2202	Natural disaster science	A Earthquake and volcano disaster mitigation
		A Seismic motion
		B Liquefaction
		C Active fault
		D Tsunami
		E Volcanic eruption
		F Volcanic ejecta/Debris flow
		G Seismic hazard
		H Volcanic hazard
		J Damage prediction/Analysis/Mitigation measures
		K Disaster mitigation and buildings
		B Natural disasters
		L Meteorological disasters
		M Hydrological disasters
		N Geo-hazard
		P Landslide
		Q Drought
		R Snow and ice disasters
		S Natural disaster prediction/Analysis/Measures
		T Lifeline disaster prevention
		U Local disaster preparedness plan and policy
		V Rehabilitation and reconstruction engineering
		W Disaster risk assessment

Discipline: Genome science

Item Number	Research Field	Keyword
2301	Basic genome science	A Animal genome
		B Plant genome
		C Microbial genome
		D Organelle genome
		E Genome diversity
		F Genome structure
		G Genome expression
		H Evolution of genome/Reorganization of genome
		J Genomic function
		K Genomic systems
		L Genome network
		M Genomic regulation
		2302
B Industrial plant genome		
C Industrial microbial genome		
D Genome resources		
E Functional genomics		
F Genomic engineering		
G Chromosome engineering		
H Organelle engineering		
J Structural genomics		
K Proteome		
L Profiling		
2303	Genome informatics	M Posttranslational modification
		N Structural and functional proteomics
		A Genom database
		B Bioinformatics
		C Functional prediction
D Molecular design		
E Genom based drug design		

Discipline: Living organism molecular science

Item Number	Research Field	Keyword
2401	Living organism molecular science	A Natural product organic chemistry
		B Secondary metabolite
		C Bioactive substance
		D Biopolymer
		E Chemical modification
		F Biological function related substance
		G Molecular mechanism of activity expression
		H Structure activity relationship
		J Biosynthesis
		K Design and synthesis of bioactive molecule
		L Combinatorial chemistry
		M Instrumental analysis
		N Chemical ecology
		P Proteomics
		Q Chemical biology

Discipline: Resource conservation science

Item Number	Research Field	Keyword
2501	Resource conservation science	A Conservation biology
		B Biodiversity conservation
		C Conservation of biological strains
		D Conservation of genetic resources
		E Ecosystem conservation
		F Native species conservation
		G Seed conservation
		H Cell/Tissue preservation
		J Microbial culture collections

Discipline: Area studies

Item Number	Research Field	Keyword
2601	Area studies	A Europe
		B Russia/Slavic area
		C North America
		D Central and South America
		E East Asia
		F Southeast Asia
		G South Asia
		H West Asia/Central Asia
		J Africa/African history
		K Oceania/Oceanian history
		L Global studies
		M Cross-regional comparative studies
		N Aid/Regional cooperation

Discipline: Gender

Item Number	Research Field	Keyword
2701	Gender	A Gender differences/Gender roles
		B Sexuality
		C Social thought/Social movements/History
		D Law/Politics
		E Economy/Work
		F Social policy/Social welfare
		G Body/Expression/Media
		H Science and technology/Medicine/Life
		J Education/Human development
		K Development
		L Violence/Sex workers
		M Cross-cultural comparison
		N Women's studies/Men's studies/Queer studies

Category: Humanities and Social Sciences

Area: Humanities

Discipline: Philosophy

Item Number	Research Field	Keyword
2801	Philosophy/ Ethics	A Principles of philosophy/Specific theories of philosophy
		B Principles of ethics/Specific theories of ethics
		C Western philosophy
		D Western ethics
		E Japanese philosophy
		F Japanese ethics
		G Comparative philosophy
		H Philosophy of religion
2802	Chinese philosophy	A Chinese philosophy/Thought
		B Chinese Buddhism
		C Taoism
		D Confucianism
2803	Indian philosophy/ Buddhist studies	A Indian philosophy/Thought B Buddhist studies/History of Buddhism
2804	Religious studies	A Religious studies in general
		B History of religions
		C Sociology of religion
		D Philosophy of religion
		E Comparative study of religion
2805	History of thought	A History of Western thought
		B History of Eastern and Japanese thought
		C Comparative history of thought
		D History of religious thought
		E History of social thought
		F History of political thought
		G History of scientific thought
		H History of art theory
2806	Aesthetics/ Art history	A Aesthetics
		B Art history

Discipline: The arts

Item Number	Research Field	Keyword
2851	Study of the arts/History of the arts/Arts in general	A Musicology
		B Theory of arts
		C Various studies on arts
		D Culture and representation
		E Popular arts
		F Library science/Museum studies
		G Arts and cultural policy

Discipline: Literature

Item Number	Research Field	Keyword
2901	Japanese literature	A Japanese literature in general
		B Ancient literature (Nara and Heian periods)
		C Medieval literature (Kamakura and Muromachi periods)
		D Premodern literature (Edo period)
		E Modern and contemporary literature (after Meiji Restoration)
		F Kanbungaku (Chinese literature in Japan)
		G Bibliography/Philology
		H Literary criticism/Literary theory
2902	Literature in English	A English literature
		B American literature
		C Other literatures in English
		D Bibliography/Philology
		E Literary criticism/Literary theory
		F Comparative literature
2903	European literature (English literature excluded)	A French literature
		B German literature
		C Russian and East European literature
		D Other European literatures
		E Western classics
		F Bibliography/Philology
		G Literary criticism/Literary theory
		H Comparative literature
2904	Literatures/ Literary theories in other countries and areas	A Chinese literature
		B African literature
		C Southeast Asian literature
		D Other literatures
		E Bibliography/Philology
		F Literary criticism/Literary theory
		G Comparative literature

Discipline: Linguistics

Item Number	Research Field	Screening Sub-panel Number / Keyword
3001	Linguistics	A Phonetics
		B Phonology
		C Morphology
		D Syntax
		1 E Semantics
		F Pragmatics
		G Discourse analysis
		H Scripts and orthography
		J Lexicography
		K Sociolinguistics
		L Psycholinguistics
		M Biolinguistics
		N Historical linguistics
		2 P French linguistics
		Q German linguistics
		R Chinese linguistics
S Other languages		
T Endangered and minority languages		
3002	Japanese linguistics	A Phonetics/Phonology
		B Grammar
		C Morphology, Semantics
		D Writing systems
		E Stylistics
		F Dialect
		G Language in daily life
H History of the Japanese language		
J History of Japanese linguistics		
3003	English linguistics	A Phonetics/Phonology
		B Grammar
		C Morphology, Semantics
		D Stylistics
		E History of the English language
		F History of English linguistics
		G Diversity of the English language
3004	Japanese language education	A Systems of Japanese language education/ Language policy
		B Theories on qualified teachers/ Classroom research
		C Teaching methods/Curriculum planning
		D Theory of second language acquisition
		E Educational technology/Teaching materials/Educational media in general
		F Mother tongue retention/Bilingual education
		G Cross-cultural understanding and communication
		H Japanese affairs
		J History of Japanese language education
		K Educational testing and evaluation
		3005
B Theory of foreign language education/History of foreign language education		
C Teaching methods/Curriculum planning		
D Theory of second language acquisition		
1 E Educational technology/Teaching materials/Educational media in general		
F e-Learning/Computer-assisted language learning		
G Cross-cultural communication		
H Educational testing and evaluation		
J Training of foreign language teachers		
2 K English language education in general		
L Early English education		

Discipline: History

Item Number	Research Field	Keyword
3101	Historical studies in general	A World history
		B History of cultural exchange
		C Comparative history
		D Comparative study of civilizations
		E Study of historical materials
		F Globalization
3102	Japanese history	A Ancient history (Nara and Heian periods)
		B Medieval history (Kamakura and Muromachi periods)
		C Early modern history (Edo period)
		D Modern and contemporary history (after Meiji Restoration)
		E Local history
		F Cultural history
		G History of cultural and diplomatic exchange
		H Japanese history in general
		J Research in historical materials

(History)

Item Number	Research Field	Keyword
3103	Asian history	A Chinese history: Ancient, medieval, and early modern period
		B Modern and contemporary Chinese history
		C East Asian history
		D Southeast Asian history
		E South Asian history
		F West Asian/Islamic history
		G Central Eurasian history
		H Comparative history/History of cultural and diplomatic exchange
3104	History of Europe and America	A Ancient European history
		B Medieval European history
		C Modern and contemporary West European history
		D Modern and contemporary East European history
		E Modern and contemporary South European history
		F Modern and contemporary North European history
		G North and South American history
		H Research in historical materials
		J Comparative history/History of cultural and diplomatic exchange
		3105
B Prehistoric studies		
C Historical archaeology		
D Japanese archaeology		
E Asian archaeology		
F Study of ancient civilizations		
G Study of material culture		
H Experimental archaeology		
J Research in buried cultural assets		
K Archaeological informatics		

Discipline: Human geography

Item Number	Research Field	Keyword
3201	Human geography	A History of geography/Methodology
		B Economic geography/Transportation geography
		C Political geography/Social geography
		D Cultural geography
		E Urban geography
		F Rural geography
		G Historical geography
		H Regional environment/Natural hazards
		J Geography education
		K Regional planning/Regional policy
		L Regional geography
		M Geographic information system
		N History of cartography

Discipline: Cultural anthropology

Item Number	Research Field	Keyword
3301	Cultural anthropology/ Folklore	A Cultural anthropology
		B Folklore
		C Ethnography
		D Social anthropology
		E Comparative folklore
		F Material culture
		G Prehistoric period/Historic period
		H Arts/Performing arts
		J Religion/Rituals
		K Development/Aid
		L Gender
		M Health care
		N Population/Emigration
		P Minority
		Q Ecology/Natural environment
		R Media

Area: Social sciences

Discipline: Law

Item Number	Research Field	Keyword		
3401	Fundamental law	A Legal philosophy/Legal theory		
		B Roman law		
		C Legal history		
		D Sociology of law		
		E Comparative law		
		F Foreign law		
		G Law and policy		
		H Law and economics		
3402	Public law	A Constitutional law		
		B Administrative law		
		C Tax law		
		D Constitutional theory		
		E Legislative studies		
		F Constitutional litigation		
		G Comparative constitutional law		
		H Constitutional history		
		J Administrative organization law		
		K Administrative procedure		
		L Administrative remedies		
		M International tax law		
		N Judicial law		
		3403	International law	A Public international law
B Private international law				
C International human rights law				
D Law of international organizations				
E International economic law				
F Nationality law				
G International civil procedure				
H International trade law				
3404	Social law			A Labor law
				B Economic law
		C Social security law		
		D Education law		
3405	Criminal law	A Criminal law		
		B Criminal procedure		
		C Criminology		
		D Criminal justice policy		
		E Juvenile law		
3406	Civil law	A Civil law		
		B Commercial law		
		C Civil procedure		
		D Legal person		
		E Business corporate law		
		F Financial law		
		G Securities law		
		H Insurance law		
		J International trade law		
		K Insolvency law		
		L Alternative dispute resolution		
		M Civil execution law		
		3407	New fields of law	A Environmental law
B Medical law				
C Information law				
D Intellectual property law				
E EU law				
F Law and gender				
G Legal education/Legal theory				

Discipline: Politics

Item Number	Research Field	Keyword
3501	Politics	A Political theory
		B History of political thought
		C Political history
		D Japanese politics
		E Political process
		F Electoral studies
		G Public administration
		H Comparative politics
		J Public policy
		3502
B Diplomatic history/International history		
C Foreign policy		
D International security		
E International political economy		
F International cooperation (including theories of international regime and international integration)		
G Transnational issues		
H Global issues		

Discipline: Economics

Item Number	Research Field	Keyword
3601	Economic theory	A Microeconomics
		B Game theory
		C Macroeconomics
		D Economic theory
		E Political economy
3602	Economic doctrine/ Economic thought	A Economic doctrine
		B History of economics
		C Economic thought
		D History of economic thought
		E Social thought
		F History of social thought
3603	Economic statistics	A Statistical system
		B Statistical research
		C History of statistics
		D History of statistical theory
		E Population statistics
		F Income/Wealth distribution
		G National accounts
		H Econometrics
		3604
B Labor economics		
C Theory of industry		
D Industrial organization		
E Urban economics		
F Environmental economics		
G Health economics		
H Regional economics		
3605	Economic policy	A Economic policy
		B Economic affairs
		C Japanese economy
		D Social security
		E Economic system
		F Economic development
		G Policy simulation
3606	Public finance/ Monetary economics	A Public finance
		B Public economics
		C Monetary economics
		D Finance
		E International monetary theory
3607	Economic history	A Economic history
		B Business history
		C Industrial history

Discipline: Business administration

Item Number	Research Field	Screening Sub-panel Number / Keyword
3701	Business administration	1 A Corporate management
		B Administrative organization
		C Managerial finance
		D Management information
		E Business administration
		F Corporate strategy
		G International management
		2 H Human resource management
		J Management of technology
		K Corporate social responsibility
		L Business ventures
		3702
B Consumer behavior		
C Distribution		
D Commerce		
E Insurance		
3703	Accounting	A Financial accounting
		B Managerial accounting
		C Auditing
		D Bookkeeping
		E International accounting
		F Tax accounting
		G Governmental accounting
		H Environmental accounting

Discipline: Sociology

Item Number	Research Field	Screening Sub-panel Number / Keyword
3801	Sociology	1 A Social philosophy/Social thought
		B History of sociology
		C General theory
		D Sociological methodology
		E Social research
		F Mathematical sociology
		G Social interaction/Social relations
		H Social group/Social organization
		J Institutions/Structure/Social change
		K Knowledge/Science/Technology
		L Politics/Power/State
		M Body/Ego/Identity
		N Family/Kinship/Population
		P Community/Village/City
		Q Industry/Labor/Leisure
		R Class/Stratification/Social mobility
		S Culture/Religion/Social consciousness
		T Communication/Information/Media
		2 U Gender/Generation
		V Education/School
W Medical care/Welfare		
X Social problems/Social movements		
Y Discrimination/Social exclusion		
Z Environment/Pollution		
a International community/Ethnicity		
3802	Social welfare and social work studies	A Principles of social welfare/Social welfare theory
		B Social welfare ideology/Social welfare history
		C Social security/Social welfare policy
		D Social work
		E Poverty/Social exclusion/Discrimination
		F Child welfare/Family welfare/Women's welfare
		G Social welfare for disabled persons
		H Social welfare for aged persons
		J Community welfare/Community social work
		K Social work in health care/Care work
		L School social work/Forensic social work
		M Welfare management/Advocacy/Evaluation
		N International welfare/Welfare NGOs
P Volunteer/Nonprofit social welfare agencies		
Q Social welfare education/Field instruction		

Discipline: Psychology

Item Number	Research Field	Keyword
3901	Social psychology	A Self-process
		B Social cognition/Emotion
		C Attitude/Belief
		D Social interaction/Interpersonal relations
		E Interpersonal communication
		F Group/Leadership
		G Collective phenomena
		H Industry/Organization
		J Culture
		K Social issues
		L Environmental issues
		M Media/Electronic network
		N Personnel
		P Work
		Q Consumer affairs
		3902
B Parent-child relationship		
C Developmental disabilities		
D Personality		
E Learning process		
F Teaching method		
G Classroom group/Management		
H Educational evaluation		
J Educational counseling		
K Counseling		
L Student counseling		
3903	Clinical psychology	
		B Crime/Delinquency
		C Psychological assessment
		D Psychotherapy
		E Psychological intervention
		F Psychological tests
		G Self-control
		H Psychological interviewing process
		J Case study
		K Self-help group
		L Therapist's theory
		M Community support
		N Health development
		P Rehabilitation psychology
Q Health psychology		
3904	Experimental psychology	A Physiology
		B Sensation/Perception
		C Attention
		D Learning/Behavior analysis
		E Memory
		F Thinking
		G Language
		H Motivation
		J Emotion
		K Behavior
		L Data analysis method
		M Consciousness
		N Principle/History

Discipline: Educaion

Item Number	Research Field	Screening Sub-panel Number / Keyword
4001	Educaion	A Philosophy of education
		B Educational thought
		C History of education
		D Curriculum theory
		E Instructional theory
		F Academic achievement theory
		G Educational methods
		H Educational evaluation
		J Administration and finance of education
		K School management
		L School education
		M Early childhood education/Child-care
		N Lifelong learning
		P Adult and community education
		Q Education at home
		R Education policy
4002	Sociology of education	A Sociology of education
		B Economics of education
		C Anthropology of education
		D Education policy
		E Comparative education
		F Human resource development/Development education
		G School system/School culture
		H Teacher/Student culture
		J Youth problems
		K Academic achievement problem
		L Multicultural education
		M Gender and education
		N Education survey method
		P Educational information system
4003	Education on school subjects and activities	A Education of individual subjects (Japanese, mathematics, science, social studies, geography/History, civics, life environmental studies, music, art, home economics, technology, English, information)
		B Education of vocational/Professional subject (industry, bussiness, agriculture, fishery, nursing, welfare)
		C Curriculum composition/development
		D Materials development
		E Education excluding subject (global learning, moral, special activities)
		F Guidance
		G Career education
4004	Special needs education	A Education for children with disabilities
		B Special needs education
		C Nursing for infants with disabilities
		D Special needs nursing
		E Inclusion
		F Schools for special needs education
		G Classes for special needs education
		H Resource room education
		J Special educational needs
		K Learning difficulty
		L Intellectual disabilities
		M Developmental disabilities
		N Physical disorders
		P Mental disorder
		Q Disease/Illness
		R Behavioral disabilities
		S Severe multiple disabilities
		T Parenting difficulties/Abuse
		U School maladjustment
V Educational counseling		

Category: Science and Engineering

Area: Mathematical and physical sciences

Discipline: Mathematics

Item Number	Research Field	Screening Sub-panel Number / Keyword
4101	Algebra	A Number theory
		B Group theory
		C Arithmetic geometry
		1 D Representation theory of groups
		E Lie algebra theory
		F Algebraic combinatorics
		G Algebraic analysis
		H Algebraic geometry
		2 J Ring theory
K General algebra		
4102	Geometry	A Differential geometry
		B Complex manifold
		C Topology
		D Complex analytic geometry
		E Differential topology
4103	General mathematics (including Probability theory/ Statistical mathematics)	A Foundation of mathematics
		B Probability theory
		C Mathematical statistics
		D Applied mathematics
		E Combinatorics
		F Mathematics in information science
		G Discrete mathematics
		H Computational mathematics
		J Mathematical model
		K Self-assembly
		4104
B Real analysis		
C Functional equation		
D Functional analysis		
E Stochastic analysis		
F Algebraic analysis		
4105	Global analysis	A Global theory of functional equation
		B Calculus of variations
		C Nonlinear phenomena
		D Analysis on manifold
		E Dynamical system
		F Operator algebra
		G Integrable system

Discipline: Astronomy

Item Number	Research Field	Keyword
4201	Astronomy	A Optical/Infrared astronomy
		B Radio astronomy
		C Solar physics
		D Astrometry
		E Theoretical astronomy
		F X-ray/ γ -ray astronomy

Discipline: Physics

Item Number	Research Field	Screening Sub-panel Number / Keyword
4301	Particle/ Nuclear/ Cosmic ray/ Astro physics	A Particle physics (theory)
		B Nuclear physics (theory)
		1 C Cosmic ray (theory)
		D Astrophysics (theory)
		E Relativity/Gravitation (theory)
		F Particle physics (experiment)
		G Nuclear physics (experiment)
		H Cosmic ray (experiment)
		2 J Astrophysics (experiment)
		K Relativity/Gravitation (experiment)
		L Accelerator technology
		M Particle detectors
		4302
B Mesoscopic system/Localization		
C Optical properties		
D Surface/Interface		
E Crystal growth		
F Dielectrics		
G Lattice defects		
H X-ray/Particle beam		
J Phonon properties		

(Physics)

Item Number	Research Field	Screening Sub-panel Number / Keyword
4303	Condensed matter physics II	1 A Magnetism
		B Magnetic resonance
		C Strongly-correlated system
		D High temperature superconductivity
		E Metal
		2 F Ultralow temperature/Condensed quantum system
		G Superconductivity/Density wave system
		H Molecular solid/Organic conductor
4304	Mathematical physics/ Fundamental condensed matter physics	A Statistical physics
		B Fundamental condensed matter theory
		C Mathematical physics
		D Integrable system
		E Non-equilibrium/Nonlinear physics
		F Applied mathematics
		G Dynamics
H Fluid physics		
J Disordered system		
K Computational physics		
4305	Atomic/ Molecular/ Quantum electronics	A Atom/Molecule
		B Quantum electronics
		C Quantum information
		D Radiation
		E Beam physics
4306	Biophysics/ Chemical physics	A Polymer/Liquid crystal
		B Chemical physics
		C Biophysics
		D Soft matter physics

Discipline: Earth and planetary science

Item Number	Research Field	Keyword
4401	Solid earth and planetary physics	A Earthquake phenomena
		B Volcanic phenomena
		C Crustal movement/Sea floor crustal
		D Geomagnetism
		E Gravity
		F Observation methods
		G Tectonics
		H Internal structure
		J Internal variability/physical properties
		K Solid planets/Satellite/Asteroid
		L Planet formation and evolution
		M Exploration of solid planets
		N Earthquake disasters and prediction
		4402
B Physical oceanography		
C Land-area water cycle/Material circulation		
D Water balance		
E Global environmental system		
F Geophysical fluid dynamics		
G Climatology		
H Planetary atmospheres		
J Air-sea interaction		
4403	Space and upper atmospheric physics	
		B Solar wind/Interplanetary space
		C Terrestrial and planetary magnetospheres
		D Terrestrial and planetary ionospheres
		E Terrestrial and planetary upper atmospheres
		F Space plasma
		G Geomagnetic variation
		H Plasma waves
4404	Geology	A Stratum
		B The earth's crust
		C Environmental geology
		D Tectonics
		E Geologic era
		F Earth history
		G Applied geology
		H Planetary geology
		J Quaternary research
		K Geologic hazard

(Earth and planetary science)

Item Number	Research Field	Keyword
4405	Stratigraphy/ Paleontology	A Stratigraphic succession
		B Paleoenvironment
		C Fossil
		D Phylogeny/Evolution/Diversity
		E Paleocology
		F Paleobiogeography
		G Function/Morphology
		H Paleo-ocean
4406	Petrology/ Mineralogy/ Science of ore deposit	A Terrestrial and planetary material
		B Terrestrial and planetary evolution
		C Crust/Mantle/Core
		D Magma/Igneous rock
		E Metamorphic rock
		F Natural and artificial crystals
		G Element fractionation
		H Mineral resources
		J Ore deposit formation
		K Mineral physics
		L Biologic and environmental minerals
		4407
B Isotope/Radiometric age		
C Material recycling		
D Chemistry of the crust and mantle		
E Chemistry of the extraterrestrial material		
F Atmospheric and hydrospheric chemistry		
G Biosphere geochemistry		

Discipline: Plasma science

Item Number	Research Field	Keyword
4501	Plasma science	A Basic studies of plasma
		B Plasma applications
		C Plasma diagnostic techniques and instrumentation
		D Plasma physics
		E Electric discharges
		F Reactive plasmas
		G Space and astrophysical plasmas
		H Burning plasma
		J Plasma chemistry
		K Plasma control/Laser

Area: Chemistry

Discipline: Basic chemistry

Item Number	Research Field	Keyword
4601	Physical chemistry	A Molecular structure
		B Crystal structure
		C Electronic state
		D Molecular dynamics
		E Chemical reaction
		F Reaction dynamics
		G Cluster
		H Solution/Colloid
		J Molecular spectroscopy
		K Molecular excitation process elementary
		L Quantum beam
		M Electron/Energy transfer
		N Surface/Interface
		P Theoretical chemistry
		Q Electrochemistry
		R Spin chemistry
		S Biophysical chemistry
		4602
B Organic reaction chemistry		
C Synthetic organic chemistry		
D Organoelement chemistry		
E Organic photochemistry		
F Physical organic chemistry		
G Theoretical organic chemistry		
4603	Inorganic chemistry	A Metal complex chemistry
		B Organometallic chemistry
		C Inorganic solid-state chemistry
		D Solution chemistry
		E Bioinorganic chemistry
		F Nuclear/Radiochemistry
		G Cluster
		H Supramolecular complex
		J Polynuclear complex
		K Coordination polymer

Discipline: Applied Chemistry

Item Number	Research Field	Keyword		
4701	Analytical chemistry	A Sample preparation		
		B Chemical analysis		
		C Biological analysis		
		D Chemical analysis by nuclear methods		
		E Separation analysis		
		F Chemical sensors		
		G Chip analysis		
		H Chromatography		
		J Instrumental analysis		
		K Surface and interface analysis		
		L Chemical speciation		
		M Environmental analysis		
		N Bio-material analysis		
		P Biosensors		
4702	Synthetic chemistry	A Selective synthesis/reaction		
		B Complex/Organometallic catalysis		
		C Fine chemicals		
		D Asymmetric synthesis/reaction		
		E Catalyst design/reaction		
		F Environmentally friendly reaction		
		G Reaction field		
		H Automatic synthesis		
		J Biotic synthesis technique		
		K Combinatorial method		
		4703	Polymer chemistry	A Polymer synthesis
				B Polymer reaction/degradation
				C Asymmetric polymerization
				D Polymerization catalyst
E Non-covalent polymer				
F Self-assembled polymer				
G Polymer structure				
H Polymer properties				
J Functional polymer				
K Bio-related polymer				
L Polymer thin film/surface				
M Polymer complex				
N Environment-related polymer				
4704	Functional materials chemistry			A Optical properties
		B Electric/Magnetic function		
		C Molecular devices		
		D Sensors		
		E Molecular recognition		
		F Supramolecule		
		G Liquid crystal/Crystal		
		H Film/Assembly		
		J Surface/Interface		
		K Colloid/Ultrafine particle		
		L Electrochemistry		
		M Functional catalysts		
		4705	Environmental chemistry	A Green chemistry
				B Recycle chemistry
C Low environmental load substances				
D Biodegradable substances				
E High-functional catalysts				
F Trace environmental substance evaluation				
G Reaction media				
H Safety chemistry				
J Micro-chemical methods				
K Highly efficient reaction design				
4706	Chemistry related to living body			A Biofunctional chemistry
				B Biomacromolecule chemistry
				C Bioinorganic chemistry
				D Natural products chemistry
		E Bioorganic chemistry		
		F Biotechnology		
		G Nucleic acid/Protein/Sugar chemistry		
		H Enzyme chemistry		
		J Biological recognition/Biofunctional chemistry		
		K Post-genomic drug discovery		
		L Biofunctional materials		

Discipline: Materials chemistry

Item Number	Research Field	Keyword
4801	Functional materials/ Devices	A Liquid crystal materials/devices
		B Organic EL devices
		C Organic semiconductor devices
		D Optical materials/devices
		E Organic electronic materials/devices
		F Devices for electric conduction
		G Molecular devices
		H Electric/Magnetic devices
		J Battery
		K Condenser (Capacitor)
		L Biofunctional applied devices
4802	Organic industrial materials	A Functional organic materials
		B Hybrid materials
		C Surfactant
		D Dye/Pigment
		E Dye/Color materials
		F Printing/Ink
		G Resist
		H Glue
		J Selective reaction
		K New functional group
		4803
B Glass		
C Ceramics		
D Fine particles/Powder		
E Layered/Intercalation compound		
F Ion exchanger/conductor		
G Inorganic synthesis		
H Photocatalyst		
J Electrochemistry		
K Nanoparticle		
L Porous materials		
M Hybrid materials		
4804	Polymer/ Textile materials	A Polymeric material properties
		B Polymeric material synthesis
		C Textile materials
		D Rubber materials
		E Gel
		F Polymeric functional materials
		G Natural/Biopolymeric materials
		H Polymer alloy
		J Polymer composites
		K Polymer/Textile processing
		L Computational polymer science

Area: Engineering

Discipline: Applied physics

Item Number	Research Field	Keyword
4901	Applied materials science/ Crystal engineering	A Metal
		B Semiconductor
		C Magnetic material
		D Superconductor
		E Amorphous
		F Dielectric
		G Ceramics
		H Crystal growth
		J Epitaxial growth
		K Crystal characterization
		L Heterostructure
		M Optical properties
		N Particulate
		P Organic molecule
		Q Liquid crystal
		R New functional materials
		S Spintronics
		T Organic/Molecular electronics
		U Bioelectronics
		4902
B Surface		
C Interface		
D Plasma process		
E Vacuum		
F Beam application		
G Scanning probe microscopy		
H Electron microscopy		

(Applied physics)

Item Number	Research Field	Keyword
4903	Applied optics/ Quantum optical engineering	A Optics
		B Optical elements/Instrumentation/Materials
		C Imaging/Optical information processing
		D Vision
		E Quantum electronics
		F Laser
		G Nonlinear optics
		H Quantum optics
		J Photonic crystals
		K Opt-electronics
		L Micro-and nano-optics
		M Optical sensing
		N Optical recording
		P Light control
		Q Photo-processing
4904	Applied physics, general	A Force
		B Heats
		C Sounds
		D Waves
		E Electromagnetism
		F Physical measurements and control
		G Standards
		H Sensors
		J Micromachines
		K Energy conversion
		L Plasma physics
M Radiation		
N Accelerators		
4905	Engineering fundamentals	A Mathematical engineering (mathematical analysis/plan/design/optimization)
		B Physical mathematics
		C Computational mechanics
		D Simulation engineering

Discipline: Mechanical engineering

Item Number	Research Field	Keyword
5001	Materials/ Mechanics of materials	A Material design/Process/Mechanical properties/Evaluation
		B Continuum mechanics
		C Structural mechanics
		D Damage mechanics
		E Fracture
		F Fatigue
		G Environments
		H Reliability
		J Biomechanics
		K Micromechanics of materials
		5002
B Production Systems		
C Production management		
D Process design		
E Machine tools		
F Forming process		
G Cutting/Grinding process		
H Special processing		
J Ultraprecision machining		
K Nano/Micro machining		
L Precise positioning/Measurements		
5003	Design engineering/ Machine functional elements/ Tribology	A Design engineering
		B Shape modeling
		C Computer aided design (CAD)/Computer aided engineering (CAE)
		D Synectics
		E Dynamics of mechanisms
		F Machine elements
		G Functional components
		H Failure diagnostics
		J Safety design
		K Life cycle analysis and design
		L Tribology

(Mechanical engineering)

Item Number	Research Field	Keyword		
5004	Fluid engineering	A Computational fluid dynamics		
		B Flow measurements		
		C Compressible/Incompressible flow		
		D Turbulent flow		
		E Multi-phase flow		
		F Reacting flow		
		G Non-Newtonian flow		
		H Micro flow		
		J Molecular fluid dynamics		
		K Bio-fluid mechanics		
		L Environmental fluid mechanics		
		M Acoustics		
		N Fluid machinery		
		P Fluid power systems		
5005	Thermal engineering	A Thermophysical property		
		B Convection		
		C Heat conduction		
		D Thermal radiation		
		E Mass transfer		
		F Combustion		
		G Micro/Nanoscale heat transfer		
		H Thermal engine		
		J Refrigeration/Air conditioning		
		K Heat transfer equipment		
		L Energy use		
		M Bio-thermal engineering		
		5006	Dynamics/Control	A Dynamics
				B Dynamic design
C Vibration mechanics				
D Vibration analysis/tests				
E Control instrument				
F Motion control				
G Vibration control				
H Mechanical measurements				
J Aseismic/Seismic isolation design				
K Vehicle and transport system control				
L Acoustic information/Acoustical control				
M Acoustic energy				
5007	Intelligent mechanics/Mechanical systems			A Robotics
				B Mechatronics
		C Micro/Nano mechatronics		
		D Biomechanics		
		E Softmechanics		
		F Information equipment/Intelligent (smart) machine systems		
		G Precision mechanics and systems		
		H Human-machine systems		
		J Information systems		

(Electrical and electronic engineering)

Item Number	Research Field	Keyword
5104	Communication/Network engineering	A Electronic circuits and systems
		B Nonlinear theory/circuits
		C Information theory
		D Signal processing
		E Communication systems (wireless, wired, satellite, optical and mobile)
		F Modulation/Demodulation
		G Coding/Decoding
		H Protocol
		J Antennas
		K Routing/Switching
		L Networks/Local area networks (LAN)
		M Multimedia
		N Cryptography/Security
		5105
B Social engineering		
C Industrial engineering and management		
D Environmental engineering		
E Production system engineering		
F Biological engineering		
5106	Measurement engineering	A Measurement technology
		B Sensing devices
		C Measuring/Analyzing instruments
		D Measurement systems
		E Signal processing
		F Sensing information processing
5107	Control engineering	A Control theory
		B System theory
		C Knowledge-based control
		D Control technology
		E Control systems
		F Complex systems

Discipline: Civil engineering

Item Number	Research Field	Keyword
5201	Civil engineering materials/Construction/Construction management	A Concrete
		B Steel
		C Bituminous material
		D Composite material/New materials
		E Timber
		F Construction
		G Maintenance/Management
		H Construction business plan/Construction design
		J Construction management
		5202
B Structural engineering		
C Steel structure		
D Concrete structure		
E Hybrid structure		
F Wind engineering		
G Earthquake engineering		
H Earthquake resistant structure		
J Earthquake disaster prevention		
K Maintenance engineering		
5203	Geotechnical engineering	A Soil mechanics
		B Foundation engineering
		C Rock engineering
		D Engineering geology
		E Ground behavior
		F Ground and structure
		G Geotechnical disaster prevention
		H Geo-environmental engineering
5204	Hydraulic engineering	A Hydraulics
		B Environmental hydraulics
		C Hydrology
		D River engineering
		E Water resources engineering
		F Coastal engineering
		G Port engineering
		H Ocean engineering
5205	Civil engineering project/Traffic engineering	A Infrastructure planning
		B Regional/Urban planning
		C Nationwide spatial planning
		D Disaster prevention planning/Environmental planning
		E Transportation planning
		F Traffic engineering
		G Railway engineering
		H Surveying/Remote sensing
		J Landscape architecture/Design
		K Infrastructure history

Discipline: Electrical and electronic engineering

Item Number	Research Field	Keyword
5101	Power engineering/Power conversion/Electric machinery	A Electrical energy engineering (generation/conversion/storage, and energy conservation)
		B Power system engineering
		C Electric machinery
		D Power electronics
		E Effective utilization of electric energy
		F Electric/Electromagnetic compatibility
		G Illumination/Lighting
5102	Electronic materials/Electric materials	A Electrical and electronic materials (semiconductor, dielectric, magnetic, ferro-dielectric, organic, insulator, superconductor, etc.)
		B Thin film/Quantum structure
		C Thick film
		D Fabrication/Characterization method
5103	Electron device/Electronic equipment	A Electron device/Integrated circuits
		B Circuit design/Computer aided circuit design (CAD)
		C Optical devices and circuits
		D Quantum devices/Spintronic devices
		E Microwave/Millimeter wave
		F Wave technology and applications
		G Bio devices
		H Information storage/record
		J Display
		K Sensing
		L Micro fabrication process technology
M Interconnect, packaging and system integration		

(Civil engineering)

Item Number	Research Field	Keyword
5206	Civil and environmental engineering	A Environmental planning and management
		B Environmental systems
		C Environmental conservation
		D Water and wastewater systems
		E Domestic and industrial wastes
		F Soil and water environments
		G Atmospheric circulation/Noise and vibration
		H Ecological engineering

(Material engineering)

Item Number	Research Field	Keyword		
5402	Inorganic materials/ Physical properties	A Crystal structure/Microstructure control		
		B Mechanical/Electronic/Electromagnetic/Optical/Thermal properties		
		C Surface/Interface properties		
		D High-temperature properties		
		E Grain boundary characteristics		
		F Functional ceramics		
		G Functional glass		
		H Structural ceramics		
		J Carbon material		
		K Dielectric materials		
		L Inorganic polymer		
		5403	Composite materials/ Physical properties	A Organic/Inorganic fibers
				B Matrix materials
				C Composite effect
				D Dispersion strengthening
				E Continuous fiber reinforcement
F Fiber reinforced metals (FRM)				
G Fiber reinforced plastics (FRP)				
H Fiber reinforced ceramics (FRC)				
J Functionally gradient				
K Composite particle				
L Composite fracture				
M Composite deformation stress				
N Interface failure				
P Reaction sintering				
Q Complex polymer				
5404	Structural/ Functional materials			A Strength/Toughness/Fracture/Fatigue/Creep/Stress corrosion cracking/Superplasticity/Wear
		B Nanostructure		
		C Magnetic materials		
		D Electronic/Information materials		
		E Hydrogen storage materials		
		F Fuel cell materials		
		G Materials for heat and energy		
		H Sensor materials/Optical functional materials		
		J Cryogenic material		
		K Earthquake resistant/ Environmental resistant materials		
		L Biomaterials		
		M High-temperature materials		
		N Amorphous materials		
		P Intelligent/Safety/Relieved material		
		Q New functional materials		
		R Environment-conscious materials		
S Functional polymeric material				
5405	Material processing/ treatments	A Surface/Interface control		
		B Corrosion anticorrosion		
		C Plastic forming		
		D Powder metallurgy		
		E Heat treatment		
		F Joining/Welding		
		G Crystal/Microstructure control		
		H Nano process		
		J Microfabrication		
		K Plasma treatment/Laser processing		
		L Thermal spraying/Coating/Particle deposition process		
		M Plating process		
		N Non destructive inspection		
		P Thin film process		
		Q Nonequilibrium process		
		R Mechanical alloying		
S Precision molding process				
T Electrocatalysis				
U Repair/Life-prolonging treatment				
V Electrical connection/Wiring				

Discipline: Architecture and building engineering

Item Number	Research Field	Keyword
5301	Building structures/ materials	A Load theory
		B Structural analysis
		C Structural design
		D Concrete structure
		E Steel structure
		F Foundation
		G Structural material
		H Building construction method
		J Maintenance technology
		K Earthquake disaster prevention
		L Structure control
		M Earthquake resistant design
		N Wind resistant design
		5302
B Light environment		
C Heat environment		
D Air environment		
E Environmental equipment planning		
F Environmental psychology/physiology		
G Building equipment		
H Fire engineering		
J Global/Urban environment		
K Environment designing		
5303	Town planning/ Architectural planning	
		B Design theory
		C Housing theory
		D Building types/District facilities
		E Urban/Regional planning
		F Administration/System
		G Building/Urban economy
		H Production management
		J Disaster prevention planning
		K Landscape/Environmental planning
		5304
B Urban history		
C Architectural theory		
D Design		
E Style		
F Landscape/Environment		
G Preservation/Renovation		

Discipline: Material engineering

Item Number	Research Field	Keyword
5401	Physical properties of metals	A Electronic/Magnetic properties
		B Properties of semiconductors
		C Thermal properties
		D Optical properties
		E Mechanical properties
		F Superconductor
		G Properties of thin films
		H Properties of nano materials
		J Computational material properties
		K Surface/Interface/Grain boundary properties
		L Fine particulate/Cluster
		M Quasicrystals
		N Radiation damage
		P Atomic/Electronic structure
		Q Lattice defects
		R Diffusion/Phase transformation/Phase diagram

(Material engineering)

Item Number	Research Field	Keyword
5406	Metal making engineering	A Reaction/Separation
		B Materials refining
		C Melting/Solidification
		D Foundry
		E Crystal growth
		F Microstructure control
		G Purification
		H Various manufacturing process
		J Energy saving process
		K Extreme condition/Environmental conscious process
		L Ecological materials
		M Resource separation/Resource conservation
		N Waste management
		P Material recycling process
		Q Recycling
		R Materials engineering for safety

Discipline: Integrated engineering

Item Number	Research Field	Keyword
5601	Aerospace engineering	A Aerodynamics
		B Structure/Material
		C Vibration/Strength
		D Guidance/Navigation/Control
		E Propulsion/Engine
		F Flight dynamics
		G Aerospace system
		H Design/Instrumentation
		J Special aircraft
		K Space utilization/Exploration
L Aerospace environment		
5602	Naval and maritime engineering	A Propulsion/Vessel dynamics
		B Material/Structural mechanics
		C Marine hydrodynamics
		D Planning/Design/Production system
		E Shipbuilding/Equipment
		F Maritime transportation system
		G Marine engine/Fuel
		H Marine environment
		J Marine resources/Energy
		K Ocean exploration/Equipment
L Undersea and subsea engineering		
M Polar engineering		
5603	Earth system and resources engineering	A Applied geology
		B Geo-engineering
		C Remote sensing
		D Monitoring in Geo-engineering
		E Earth systems
		F Resource exploration
		G Natural resource development
		H Resource evaluation
		J Mineral processing
		K Underground disposal and storage
L Contaminated soil remediation		
M Development and utilization of deep underground		
N Material resources		
P Renewable source/Energy		
Q Economic resources		
5604	Recycling engineering	A Waste reduction
		B Reuse
		C Cascade recycling/Utilization
		D Recycling
		E Waste valuable recovery
		F Solid-solid separation
		G Purification of materials
		H Proper treatment and disposal of waste
		J Recycling and LCA
		K Environmentally conscious design
L Green productions		
M Zero emission		
5605	Nuclear fusion studies	A Core plasma
		B Peripheral plasma
		C Plasma measurement
		D Plasma-wall interaction
		E Theoretical simulation
		F Low activation material
		G Fuel/Blanket
		H Electromagnet
		J Inertial confinement fusion
		K Fusion systems engineering
L Safety/Biological influence		
5606	Nuclear engineering	A Radiation engineering/Beam science
		B Reactor physics/Nuclear data
		C Nuclear measurements/Radiation physics
		D Thermo-hydrodynamics/Structure
		E System design/Safety engineering
		F Nuclear material/Nuclear fuel
		G Isotope/Radiation chemistry
		H Fuel cycle
		J Backend
		K Advanced reactors
L Health physics/Environmental safety		
M Social environment of nuclear energy		
5607	Energy engineering	A Energy generation/conversion
		B Energy transport/storage
		C Energy saving/Efficient use of energy
		D Energy system
		E Environmental harmony
		F Natural energy use

Discipline: Process engineering

Item Number	Research Field	Keyword
5501	Properties in chemical engineering process/ Transfer operation/ Unit operation	A Equilibrium/Transport properties
		B Fluid/Heat transfer/Mass transfer operation
		C Distillation
		D Extraction
		E Absorption
		F Adsorption
		G Ion exchange
		H Membrane separation
		J Hetero-phase separation
		K Ultra high separation
		L Stirring/Blending operation
		M Granular and powdered materials operation
		N Crystallization procedure
P Thin film/Microparticle forming operation		
Q Polymer processing		
5502	Reaction engineering/ Process system	A Gas/Liquid/Solid/Supercritical fluid operation
		B Novel reaction field
		C Reaction rate
		D Reaction mechanism
		E Reaction apparatus
		F Materials synthesis process
		G Polymerization process
		H Measurement
		J Sensors
		K Process control
		L Processing system design
		M Process information processing
		N Process operation/Facilities management
5503	Catalyst/ Resource chemical process	A Catalysis reaction
		B Catalyst preparation chemistry
		C Catalyst performance analysis
		D Energy conversion process
		E Fossil fuel effective utilization technology
		F Resources/Energy effective utilization technology
		G Resources/Energy saving technology
		H Combustion technology
5504	Biofunction/ Bioprocess	A Biocatalyst engineering
		B Biofunction engineering
		C Food engineering
		D Medicochemical engineering
		E Applied bioelectrochemistry
		F Bioproduction process
		G Bioreactor
		H Biosensor
		J Bioseparation
		K Bioinformatics

Category: Biological Sciences

(Biological science)

Area: Biology

Discipline: Basic biology

Item Number	Research Field	Keyword
5701	Genetics/ Genome dynamics	A Molecular genetics
		B Cytogenetics
		C Population genetics
		D Evolutionary genetics
		E Human genetics
		F Genetic diversity
		G Genome architecture, reorganization, and maintenance
		H Genomic function and expression
		J Developmental genetics
		K Behavioral genetics
		L Mutagen
		M Chromosome
		N Model organism
		5702
B Society		
C Species interaction		
D Assemblage		
E Ecosystem		
F Evolutionary ecology		
G Behavioral ecology		
H Natural environment		
J Physiological ecology		
K Molecular ecology		
L Conservation ecology		
5703	Plant molecular biology/ Plant physiology	
		B Phytohormones/Growth and development/Totipotency
		C Organelles/Cell wall
		D Response to environmental factors
		E Plant-microbe interaction/Symbiosis
		F Metabolism
		G Plant molecular function
5704	Morphology/ Structure	A Animal morphology
		B Plant morphology
		C Microbial morphology
		D Comparative endocrinology
		E Molecular morphology
		F Morphogenesis
		G Tissue construction
H Microstructure		
J Microscopical technique		
5705	Animal physiology/ Animal behavior	A Metabolism
		B Neurobiology
		C Neuroethology
		D Behavioral physiology
		E Animal physiology and biochemistry
5706	Biodiversity/ Systematics	A Metabolism physiology
		B Classification system
		C Evolution
		D Genetic diversity
		E Population/Species diversity
		F Community/Ecosystem diversity
		G Taxonomic character
		H Phylogenetics
		J Speciation
		K Natural history
		L Museum

Discipline: Biological science

Item Number	Research Field	Keyword
5801	Structural biochemistry	A Carbohydrate
		B Lipid
		C Nucleic acid
		D Protein
		E Enzyme
		F Gene and chromosome
		G Biological membrane and receptor
		H Intercellular matrix
		J Organelles
		K Posttranslational modification
		L Molecular recognition and interaction
		M Denaturation and folding
		N Structural analysis and prediction
		P NMR
		Q Mass spectrometry
		R X-ray crystallography
		S High resolution electron microscopy

Item Number	Research Field	Keyword
5802	Functional biochemistry	A Catalytic mechanism of enzyme
		B Regulation of enzyme
		C Allosteric effect
		D Enzyme abnormality
		E Gene expression and replication
		F Biological energy transduction
		G Metalloprotein
		H Biological trace element
		J Hormone and bioactive substances
		K Cell signal transduction
		L Membrane transport and transporters
		M Proteolysis
		N Cytoskeleton
		P Immunobiochemistry
Q Glycobiology		
R Bioelectrochemistry		
5803	Biophysics	A Structure, dynamics and functions of proteins and nucleic acids
		B Motility/Transport
		C Biomembranes/Receptors/Channels
		D Photobiology
		E Cellular signaling and dynamics
		F Neural information processing
		G Theoretical biology/Bioinformatics
		H Structural biology
		J Folding
		K Prediction of structure and function
		L Single-molecule measurements and manipulation
		M Bioimaging
N Non-equilibrium/Complex systems		
5804	Molecular biology	A DNA replication
		B DNA damage and repair
		C Recombination
		D Transcription
		E RNA
		F Translation
		G Protein modification
H Intermolecular interaction		
J Chromosomal organization, function and segregation		
5805	Cell biology	A Cell structure and function
		B Biomembrane
		C Cytoskeleton/Cell motility
		D Intracellular signaling
		E Intercellular communication
		F Cell cycle
		G Cytokinesis
		H Nuclear structure
J Cell-cell interaction/Extracellular matrix		
K Protein degradation		
L Chromatin		
5806	Developmental biology	A Cell differentiation
		B Stem cells
		C Germ layer formation/Gastrulation/Somitogenesis
		D Organogenesis
		E Fertilization
		F Reproduction/Germ cells
		G Regulation of gene expression
		H Developmental genetics
		J Evolution and development
		A Origin of life
		B Origin of eukaryotic organisms
C Origin of organelles		
D Origin of multicellularity		
E Molecular evolution		
F Morphological evolution		
G Evolution of function		
H Evolution of genes		
J Evolutionary biology in general		
K Comparative genomics		
L Experimental evolutionary biology		
5807	Evolutionary biology	A Origin of life
		B Origin of eukaryotic organisms
		C Origin of organelles
		D Origin of multicellularity
		E Molecular evolution
		F Morphological evolution
		G Evolution of function
		H Evolution of genes
		J Evolutionary biology in general
		K Comparative genomics
		L Experimental evolutionary biology

Discipline: Anthropology

Item Number	Research Field	Keyword
5901	Physical anthropology	A Morphology
		B Prehistory/Chronology
		C Biomechanism
		D Molecular anthropology/Genetics
		E Ecology
		F Primates
		G Evolution
		H Growth/Aging
		J Society
		K Behavior/Cognition
		L Reproduction/Development
		M Bone archaeology
		N Geographic diversity
		5902
B Ergonomics		
C Physiological polymorphism		
D Environmental adaptive capacity		
E Systemic relationship		
F Functional potential		
G Techno-adaptability		
H Somatometry		
J Clothing		
K Somatology/Adaptation		
L Constitution/Health		
M Forensic anthropology		
N Medical anthropology		

Area: Agricultural sciences

Discipline: Agriculture

Item Number	Research Field	Keyword		
6001	Breeding science	A Plant breeding/Plant genetics		
		B Breeding theory		
		C Genetic resources/Phylogeny		
		D Plant molecular breeding		
		E Resistance/Tolerance		
		F Generation of genetic diversity/Analysis of genetic diversity		
		G Gene/Protein		
		H Chromosome engineering		
		J Plant genome information		
		K Quality/Composition		
		L Developmental physiology/Developmental genetics		
		6002	Crop science/Weed science	A Food crop
				B Industrial crop
				C Forage crop
D Cultivation system				
E Crop quality/Crop processing				
F Weed science				
G Weed control				
H Wild plant resources				
6003	Horticulture/Landscape architecture	A Fruit tree		
		B Vegetable		
		C Flower		
		D Use of horticultural plants		
		E Storage of horticultural plants/Processing of horticultural plants		
		F Protected horticulture		
		G Landscaping		
		H Landscape formation/Landscape conservation		
		J Open space planning		
		6004	Plant pathology	A Pathologic
B Pathological physiology				
C Plant-pathogen interactions				
D Pathogenicity factor/Virulence factor				
E Disease control				
F Disease resistance				
G Phylogenetic systematics				
H Infection/Proliferation				
6005	Applied entomology	A Animal pest		
		B Animal pest management		
		C Insect properties development and utilization		
		D Insect pathology		
		E Sericulture/Silk		
		F Insect ecology		
		G Insect physiology		
		H Insect classification		
		J Insect pest management/Biological control		
		K Insect molecular biology		
		L Insect behavior		

Discipline: Agricultural chemistry

Item Number	Research Field	Keyword		
6101	Plant nutrition/Soil science	A Plant physiology, growth and development		
		B Plant nutrition and metabolism		
		C Plant metabolic regulation		
		D Fertilizer		
		E Soil classification		
		F Soil physics		
		G Soil chemistry		
		H Soil organisms		
		J Soil environment		
		6102	Applied microbiology	A Microbiology
				B Fermentative production
C Microbial classification				
D Microbial genetics/breeding				
E Microbial enzyme				
F Microbial metabolism				
G Microbial function				
H Microbial application				
J Environmental microorganism				
K Antibiotic production				
L Microbial ecology				
M Control of microbe				
N Genetic resources				
P Gene expression				
6103	Applied biochemistry	A Animal biochemistry		
		B Plant biochemistry		
		C Enzyme application		
		D Genetic engineering		
		E Protein engineering		
		F Bioengineering		
		G Metabolic engineering		
		H Cell/Tissue culture		
		J Enzyme chemistry		
		K Metabolism and physiology		
		L Gene expression		
		M Production of useful material		
		N Cellular response		
		P Signal transduction		
		Q Trace element		
		6104	Bioproduction chemistry/Bioorganic chemistry	A Bioactive substance
				B Regulator of cell function
C Pesticide science				
D Plant growth substance				
E Signal molecule				
F Biosynthesis				
G Natural products chemistry				
H Bioinorganic chemistry				
J Physical chemistry				
K Analytical chemistry				
L Organic chemistry				
M Bioregulatory chemistry				
N Molecular recognition				
6105	Food science			A Food chemistry
		B Provisions chemistry		
		C Food biochemistry		
		D Food physics		
		E Food engineering		
		F Food function		
		G Food preservation		
		H Food manufacturing/processing		
		J Nutritional chemistry		
		K Nutritional biochemistry		
		L Food safety		
		M Food analysis		

Discipline: Forestry

Item Number	Research Field	Keyword
6201	Forest science	A Forest productivity/Tree breeding
		B Forest ecology/Forest protection/Forest conservation
		C Forest biology
		D Forest management/Forest policy
		E Forest landscape
		F Forest utilization
		G Revegetation/Environmental conservation forest
		H Erosion control/Erosion and torrent improvement
		J Landcollapse/Landslide/Mudflow
		K Water conservation/Water quality
6202	Wood science	A Wood anatomy/Wood formation
		B Materials/Physical properties
		C Cellulose
		D Lignin
		E Extractives/Minor extractives
		F Chemical processing
		G Preservation/Wood culture
		H Drying/Machining
		J Adhesion/Wood based material
		K Strength/Wooden construction
		L Habitability/Sensibility
		M Woody biomass
		N Pulp/Paper

Discipline: Fisheries science

Item Number	Research Field	Keyword
6301	General fisheries	A Taxonomy
		B Development
		C Morphology
		D Physiology
		E Ecology/Behavior
		F Fishery
		G Resources/Resource management
		H Aquaculture
		J Genetics/Hereditiy/Breeding
		K Fish disease
		L Aquatic environment/Conservation
		M Algae/Seaweeds
		N Plankton
		P Microorganisms
		Q Harmful algae
6302	Fisheries chemistry	A Biochemistry
		B Metabolism/Enzyme
		C Fish nutrition
		D Molecular biology
		E Bioengineering
		F Biopolymer
		G Natural products chemistry
		H Analytical chemistry
		J Food chemistry
		K Food processing/Preservation
		L Hygiene/Food sanitation
M Food microorganism		

Discipline: Agro-economics

Item Number	Research Field	Keyword
6401	Agronomy	A Farm management
		B Agricultural policy
		C Agricultural economy
		D Agricultural finance
		E Agricultural history
		F International agriculture
		G Regional planning
		H Rural society
		J Agriculture and environment
		K Food system
		L Marketing
M Food safety		
N Agricultural ethics		

Discipline: Agro-engineering

Item Number	Research Field	Keyword
6501	Irrigation, drainage and rural engineering/ Rural planning	A Hydraulics
		B Hydrology
		C Soil physics
		D Soil mechanics/Applied mechanics
		E Land improvement facilities
		F Material/Construction
		G Irrigation and drainage
		H Land improvement/Agricultural land use planning
		J Regional planning/Community development
		K Regional environment/Countryside landscape
		L Rural ecosystem
		M Water pollution/Water environment
		N Material circulation
		P Soil conservation/Disaster prevention
		6502
B Bioproduction machinery		
C Postharvest engineering		
D Bioproduction system		
E Farming technology management		
F Agricultural labour science		
G Supply chain management		
H Environment control in biology		
J Greenhouse horticulture/Plant factory		
K Bioprocessing		
L Natural energy use		
M Agricultural meteorology/Micrometeorology		
N Meteorological disasters		
P Global warming impacts		
Q Greening environment		
6503	Agricultural information engineering	A Image processing/Image recognition
		B Nondestructive measurement
		C Bioinstrumentation
		D Biosensing
		E Bioinformatics
		F Remote sensing
		G Geographic information system
		H Modeling/Simulation
		J Computer network
		K ICT/Knowledge processing
		L Agricultural robotics
		M Precision agriculture
		N Bioenvironmental information
		P Agricultural information
		Q Farming information

Discipline: Zootechnical science/Veterinary medical science

Item Number	Research Field	Keyword
6601	Zootechnical science/ Grassland science	A Grassland ecology
		B Grassland utilization
		C Grassland management/Conservation
		D Feed/Feedstuffs
		E Nutrition/Feeding
		F Livestock production system
		G Livestock management/Welfare
		H Wild animal management/utilization
		J Animal product utilization
		K Livestock biomass
		6602
B Reproduction		
C Metabolism/Endocrine control		
D Functional substance		
E Developmental biotechnology		
F Cloned livestock		
G Livestock genome		
H Wildlife protection/Proliferation		
6603	Basic veterinary science/ Basic zootechnical science	
		B Embryology/Fetal development
		C Physiology
		D Morphology
		E Pharmacology
		F Pathology
		G Pathological condition
		H Pathogenic microorganism
		J Parasitology
		K Immunology
		L Biological information
		M Behavior
		6604
B Veterinary public health		
C Toxicology		
D Disease prevention and control		
E Wildlife		
F Animal welfare		
G Zoonoses		
H Epidemiology		
6605	Clinical veterinary science	
		B Surgery
		C Clinical breeding/Obstetrics
		D Diagnostics
		E Laboratory examination
		F Therapy
		G Prognosis
		H Clinical pathology/Pathological condition
		J Regenerative medicine
		K Anesthesia/Analgetics
		L Radiology
		M Animal nursing

Area: Medicine, dentistry, and pharmacy

Discipline: Pharmacy

Item Number	Research Field	Screening Sub-panel Number / Keyword		
6801	Chemical pharmacy	A Organic chemistry		
		B Synthetic organic chemistry		
		C Biomolecules		
		D Herbal medicine/Natural products chemistry		
		E Mechanistic organic chemistry		
		F Heterocyclic chemistry		
		G Asymmetric synthesis		
6802	Physical pharmacy	A Physical chemistry		
		B Analytical chemistry		
		C Galenical pharmacy		
		D Biophysical chemistry		
		E Isotope pharmaceutical chemistry		
		F Biocomplex chemistry		
		G Molecular structure science		
		H Structural biology		
		J Imaging		
		K Drug delivery		
		L Information science		
6803	Biological pharmacy	A Biochemistry		
		B Molecular biology		
		C Immunology		
		D Cell biology		
		E Developmental biology		
		F Pharmacology		
		G Analytical pharmacology		
		H Neurobiology		
		6804	Drug development chemistry	A Medicinal chemistry
				B Medicinal molecular design
C Bioactive substance				
D Functional science of medicinal molecules				
E Genomic drug development				
F Regulatory science				
6805	Environmental pharmacy	A Environmental hygiene		
		B Environmental chemistry		
		C Environmental dynamics		
		D Food hygienics		
		E Chemical nutrition		
		F Microbiology and infectious diseases		
		G Medicinal resources		
		H Toxicology		
6806	Medical pharmacy	A Clinical pharmaceutical sciences		
		B Pharmacokinetics and drug metabolism		
		C Medical pharmaceuticals		
		D Drug information and clinical toxicology		
		E Clinical chemistry		
		F Drug economics		
		G Personalized medicine		
		H Social pharmacy		
		J Pharmacy management insurance		

Discipline: Boundary agriculture

Item Number	Research Field	Keyword
6701	Boundary agriculture	A Environmental analysis
		B Environmental pollution
		C Environmental reclamation
		D Environmental purification
		E Aquatic pollution
		F Resource recycling systems
		G Biomass
		H Genetic resources
		J Biological environment
		K Resource environment balance
		L Regional agriculture
		6702
B Protein/Glycosylation engineering		
C Metabolic engineering		
D Organelle engineering		
E Cellular engineering		
F Gene expression		
G Development/Differentiation control		
H Cell-cell interaction		
J Intermolecular interaction		
K Biosensor		
L Cellular function		
M Molecular information		
N Functional-molecule design		

Discipline: Basic medicine

(Basic medicine)

Item Number	Research Field	Screening Sub-panel Number / Keyword	Item Number	Research Field	Screening Sub-panel Number / Keyword		
6901	General anatomy (including histology/embryology)	A Gross anatomy	6906	Pathological medical chemistry	A Abnormal metabolism		
		B Functional anatomy			B Molecular pathogenesis		
		C Clinical anatomy			C Molecular and gene diagnosis		
		D Comparative anatomy			D Molecular oncology		
		E Radiological anatomy			E Molecular pathogenesis of nutrition		
		F Physical anthropology	6907	Human genetics	A Medical genome science		
		G Morphogenesis and embryogenesis			B Molecular genetics		
		H Teratology			C Cytogenetics		
		J Experimental morphology			D Pharmacogenetics		
		K Anatomical education			E Genetic biochemistry		
		L Cytology			F Genetic epidemiology		
		M Histology			G Genetic diagnostics		
		N Cell differentiation and tissue formation			H Gene therapy		
		P Cell function and morphology			J Genetic counseling		
Q Ultrastructural morphology	K Bioethics						
R Molecular morphology	L Epigenetics						
S Histochemistry	6908	Human pathology	A Brain and nervous system				
T Microscopic technology			B Digestive system and salivary gland				
6902			General physiology	A Molecular and cellular physiology	C Respiratory and mediastinal organs		
				B Biological membrane, channel, transporter and active transport	1 D Cardiovascular system		
				C Receptor and intracellular signal transduction	E Urogenital and endocrine organs		
				D Stimulation-secretion coupling	F Bone, joint, muscle, skin and sense organs		
				E Epithelial function	G Blood		
				F Heredity, fertilization, development and differentiation	H Molecular pathology		
				G Cellular proliferation and cell death	J Geographic pathology		
				H Cellular motility, morphogenesis and intercellular interaction	2 K Diagnostic pathology		
				J Microcirculation, peripheral circulation, circulation dynamics and regulation	L Telepathology		
				K Ventilation mechanics, blood gas function and respiratory control	M Environmental pathology		
				L Gastrointestinal motility, absorption and digestion	N Transplantation pathology		
				M Renal function, body fluids, and acid-base balance	6909	Experimental pathology	A Animal
	N Blood coagulation and rheology	1 B Cells					
	P Pathophysiology	C Molecules					
Q System physiology and physiome	D Ultrastructure						
R Comparative, developmental and genome physiology	E Tumors	6910	Parasitology (including sanitary zoology)	F Inflammation			
6903	Environmental physiology (including physical medicine and nutritional physiology)			A Environmental physiology	G Toxicological pathology		
				B Physical medicine	H Developmental pathology		
				C Nutritional physiology	J Animal models		
				D Adaptive and associative physiology	K Regenerative medicine		
				E Biorhythm	6911	Bacteriology (including mycology)	A Helminth
				F Growth, development, and aging			B Protozoa
		G Stress	C Arthropod vector				
		H Space medicine	D Pathogenic animals				
		J Behavioral physiology	E Molecule				
		K Biological clock	F Epidemiology				
		L Hyperthermia physiology	G Incidence				
		M Feeding regulation	H Genetics				
		N Social environment	J Immunity				
		P Sleep and arousal	K Tropical diseases and international health	6912	Virology	A Pathogenicity	
Q Reproductive physiology	B Infection immunity						
6904	General pharmacology	A Kidney	C Epidemiology				
		B Smooth muscle and skeletal muscle	D Genetics				
		C Gastrointestinal	E Classification				
		D Inflammation and immunity	F Diagnosis				
		E Bioactive substance	G Structure and physiology				
		F Central nervous system and peripheral nerve	6913			Immunology	A Molecules
		G Spinal cord and pain		B Cells			
		H Receptor, channel, transport system, and signal transduction system		C Whole body			
		J Cardiovascular system and hematology		D Epidemiology			
		K Drug discovery and pharmacogenomics		E Pathogenicity			
		L Drug therapy and toxicology		F Diagnosis and treatment			
		M Herbal medicine and pharmacology of natural products		G Protection/Vaccine			
		6905	General medical chemistry	A Biomolecular medicine	H Prions		
				B Cellular biochemistry (cellular medical chemistry)	A Cytokines		
C Genomic biochemistry (genomic medical chemistry)	B Antibodies						
D Developmental medicine	C Antigen recognition						
E Regenerative medicine	D Lymphocytes						
F Aging medicine	E Innate immunity						
G Higher order life sciences	F Acquired immunity						
H Intracellular signaling	G Mucosal immunity						
		H Immunological memory					
		J Immune tolerance/Autoimmunity					
		K Immune surveillance/Tumor immunology					
		L Immunodeficiency					
		M Allergy/Immune-related disorder					
		N Immunoregulation/Transplantation immunology					

Discipline: Boundary medicine

Item Number	Research Field	Keyword
7001	Medical sociology	A Hospital administration
		B Medical administration
		C Medical informatics
		D Bioethics
		E Medical history
		F Medical and pharmaceutical education
		G Health economics
		H Risk management
		J Quality of medical care
		K Community medicine
		L Health policy science
		M Social security science
		N Care and welfare
		P Health policy evaluation
		Q Infection control science
		7002
B Clinical trials and ethics		
C Pharmaceutical therapeutics		
D Adverse drug reaction and drug interaction		
E Drug transport mechanism		
F Pharmacogenomics		
G Clinical isotope pharmacy		
H Medical devices and pharmacy		
J Drug metabolic enzyme and transporter		
K Imaging		
L Research using human tissue		
M Drug dependence and drug sensitivity		
N Genetic diagnosis and gene therapy		
P Drug delivery		
Q Pharmacoepidemiology		
7003	Laboratory medicine	
		B Clinical pathology
		C Clinical chemistry
		D Immunology and serology
		E Clinical laboratory system
		F Genetic testing
		G Clinical microbiology
		H Laboratory oncology
		J Clinical hematology
		K Physiological laboratory testing

Discipline: Society medicine

Item Number	Research Field	Keyword
7101	Hygiene	A Environmental health
		B Preventive medicine
		C Industrial health
		D Environmental epidemiology
		E Molecular epidemiology
		F Medical statistics
		G Bioethics
		H Environmental toxicology
		J Industrial toxicology
		K Environmental physiology
		L Global environment
		M Disaster accident
		N Ergonomics
		P Traffic medicine
		Q Food sanitation
		7102
B Maternal and child health		
C School health		
D Adult health issues		
E Health/Nutrition		
F Health management		
G Health education		
H Behavioral healthcare		
J Population problem		
K International health		
L Health administration		
M Hospital management		
N Medical informatics		
P Care insurance		
Q Epidemiology		
R Medical examination		
S Mass-screening		

(Society medicine)

Item Number	Research Field	Keyword
7103	Legal medicine	A Forensics
		B Medical ethics
		C Criminal psychiatry
		D Correctional medicine
		E Compensation science
		F Medical record management
		G Forensic examination
		H Alcohol research
		J Forensic odontology
		K DNA polymorphism
		L Forensic pathology

Discipline: Clinical internal medicine

Item Number	Research Field	Screening Sub-panel Number / Keyword
7201	General internal medicine (including psychosomatic medicine)	A Psychosomatic internal medicine
		B Stress science
		C Oriental medicine
		D Alternative medicine
		E Palliative medicine
		F General medicine
		G Primary care
		H Geriatrics
7202	Gastroenterology	1 A Upper gastroenterology (esophagus, stomach, duodenum)
		2 B Lower gastroenterology (small intestine, colon)
		3 C Hepatology
		4 D Biliary-Pancreatology
		5 E Digestive endoscopy
7203	Circulatory organs internal medicine	1 A Clinical cardiology
		2 B Molecular cardiology
		3 C Molecular vascular biology
7204	Respiratory organ internal medicine	1 A Obstructive lung disease
		2 B Non-obstructive lung disease, pulmonary fibrosis, respiratory infection and other diseases
7205	Kidney internal medicine	1 A Nephrology
		B Hypertension
		2 C Water and electrolyte metabolism
		D Hemodialysis
7206	Neurology	1 A Molecular pathophysiology
		B Neuroimmunology
		C Clinical molecular neurogenetics
		D Clinical neurophysiology
		2 E Clinical neuromorphology
		F Clinical neuropsychology
		G Functional neuroimaging
7207	Metabolomics	1 A Disturbances of energy and carbohydrate metabolism
		B Metabolic syndrome
		C Abnormal lipid metabolism
		2 D Disorder of purine metabolism
		E Abnormal bone and calcium metabolism
		F Metabolic electrolyte abnormality
7208	Endocrinology	A Endocrinology
		B Reproductive endocrinology
7209	Hematology	1 A Hematology
		B Hematology/Oncology
		C Thrombosis/Hematostasis
		D Transfusion medicine
		2 E Hematopoietic stem cell transplantation
		F Hematology/Immunology
		G Immune regulation
7210	Collagenous pathology/ Allergology	1 A Connective tissue diseases
		B Rheumatology
		C Allergology
		2 D Clinical immunology
		E Inflammation
7211	Infectious disease medicine	A Infection diagnosis
		B Infection therapy
		C Infection prevention
		D International infection science
		E Infection epidemiology
		F Opportunistic infection

(Clinical internal medicine)

Discipline: Clinical surgery

Item Number	Research Field	Screening Sub-panel Number / Keyword	Item Number	Research Field	Screening Sub-panel Number / Keyword				
7212	Pediatrics	A Developmental pediatrics	7301	General surgery	A General surgery				
		B Growth and developmental medicine			1 B Transplant surgery				
		C Pediatric neurology			C Artificial organs science				
		D Pediatric endocrinology			D Vascular surgery				
		E Pediatric metabolism/Nutrition			E Experimental surgery				
		F Hereditary/Teratology			2 F Endocrine surgery				
		G Pediatric health			G Breast surgery				
		H Pediatric social medicine			H Surgical metabolism and nutrition				
		J Pediatric hematology			7302	Digestive surgery	1 A Esophageal surgery		
		K Pediatric oncology					B Gastroduodenal surgery		
		L Pediatric immunology/Allergy/Connective tissue diseases					2 C Colorectal surgery		
		M Pediatric cardiology					D Hepatic surgery		
		N Pediatric respiratory					E Surgery for spleen and portal vein		
		P Pediatric infectious disease					F Biliary surgery		
Q Pediatric nephrology/Urology	G Pancreatic surgery								
R Pediatric gastroenterology	7303	Thoracic surgery	1 A Cardiovascular surgery						
7213			Embryonic/ Neonatal medicine	A Prenatal diagnosis			B Chest surgery		
				B Fetal medicine			C Mediastinal surgery		
				C Teratology			D Pleural surgery		
				D Neonatal medicine			7304	Cerebral neurosurgery	A Head injury
				E Premature baby medicine					B Cerebrovascular disorder
				7214					Dermatology
					B Dermatopathology	D Experimental brain surgery			
					C Dermatologic oncology	E Diagnostic neuroimaging			
					D Laser therapeutics	F Brain tumor			
					E Skin physiology	G Functional cranial nerve surgery			
					F Pigment cell biology	H Pediatric neurological surgery			
					G Sexually transmitted diseases	J Spinal cord/Spine disease			
					H Infectious diseases	K Brain surgical instruments			
	J Inflammation and regeneration	L Radiation neurological surgery							
7215	Psychiatric science	A Psychopharmacology	7305		Orthopaedic surgery	A Spinal disorders			
		B Clinical molecular genetics				B Muscle/Nerve disorders			
		C Psychophysiology				C Physical therapy			
		D Psychopathology				D Musculoskeletal rehabilitation			
		E Social psychiatry				E Bone and soft tissue tumors			
		F Child and adolescence psychiatry		2 F Limb reconstruction surgery					
		G Geriatric psychiatry		G Pediatric orthopaedics					
		H Forensic psychiatry		H Musculoskeletal traumatology					
		J Neuropsychology		J Joint disorders					
		K Liaison psychiatry		K Rheumatic diseases					
		L Psychiatric rehabilitation		L Bone cartilage metabolism					
		7216		Radiation science		A Medical imaging (including diagnostic)	7306	Anesthesiology/ Resuscitation studies	1 A Anesthesiology
						B X-Ray/CT			B Resuscitation studies
						C Magnetic resonance imaging			C Perioperative management
D Nuclear medicine (including PET)	D Pain management								
E Radiopharmaceuticals/Contrast medium	7307		Urology		1 A Oncology				
F Radiation safety management					B Voiding function and dysfunction				
G Medical imaging technology					C Urolithiasis studies				
H Interventional radiology					D Infectious diseases				
J Angioplasty/Osteoplasty/Vascular embolization					E Regenerative medicine				
K Radiofrequency ablation (RFA)/Stent treatment/Reserver treatment					F Teratology				
L Therapeutic radiology					G Adrenal surgery				
M Radiation oncology					3 H Kidney transplantation				
N Radiotherapy physics					J Andrology				
P Radiotherapy biology					7308	Obstetrics and gynecology			1 A Obstetrics
Q Particle beam therapy		B Reproductive medicine							
7214		Dermatology		A Skin diagnostics			C Gynecology		
				B Dermatopathology			D Gynecologic oncology		
				C Dermatologic oncology			E Menopause medicine		
	D Laser therapeutics		7309	Otorhinolaryngology			1 A Otolaryngology		
	E Skin physiology						2 B Rhinology		
	F Pigment cell biology						C Head and neck surgery		
	G Sexually transmitted diseases						D Tracheal esophageal study		
	H Infectious diseases						E Laryngology		
	J Inflammation and regeneration						F Pharyngology		

(Clinical surgery)

Item Number	Research Field	Screening Sub-panel Number / Keyword		
7310	Ophthalmology	A Clinical research		
		B Epidemiology study		
		C Social medicine		
		1 D Ocular biochemistry and molecular biology		
		E Ocular cell biology		
		F Ophthalmic genetics		
		G Ocular histology		
		H Ocular pathology		
		J Ocular pharmacology		
		K Ocular physiology		
		L Ocular developmental and regenerative biology		
		2 M Ocular immunology		
		N Ocular microbiology/Infectious diseases		
		P Orthoptic science		
		Q Ophthalmological optics		
		R Ophthalmic medical engineering		
		7311	Pediatric surgery	A Gastroenterology of congenital diseases
				B Surgery of congenital cardiovascular diseases
C Fetal surgery				
D Pediatric urology				
E Pediatric chest surgery				
F Pediatric oncology				
7312	Plastic surgery	A Reconstructive surgery		
		B Wound healing science		
		C Microsurgery		
		D Tissue culture/Transplantation		
		E Regenerative medicine		
7313	Emergency medicine	A Intensive care medicine		
		B Trauma surgery		
		C Emergency resuscitation science		
		D Acute toxicology		
		E Disaster medicine		

(Dentistry)

Item Number	Research Field	Screening Sub-panel Number / Keyword
7407	Surgical dentistry	1 A Oral and maxillofacial surgery
		2 B Clinical oncology
		C Dental anesthesiology
		3 D Pathobiological examination
		E Oral maxillofacial reconstructive surgery
7408	Orthodontic/ Pediatric dentistry	A Orthodontics
		B Pediatric dentistry
		C Pediatric oral health science
		D Stomatognathic function and mechanics
7409	Periodontal dentistry	A Periodontal immunology
		B Surgical periodontology
		C Preventive periodontology
7410	Social dentistry	A Dental hygiene (including public hygiene/nutrition)
		B Preventive dentistry
		C Oral health administration and management
		D Forensic odontology
		E Gerodontology
		F Psychosomatic medicine dentistry

Discipline: Nursing

Item Number	Research Field	Screening Sub-panel Number / Keyword
7501	Fundamental nursing	A Nursing philosophy
		B Nursing ethics
		C Nursing art
		D Nursing education
		E Nursing management
		F Nursing policy/Administration
		G Disaster nursing
		H History of nursing
7502	Clinical nursing	A Critical care/Emergency nursing
		B Perioperative nursing
		C Adult nursing (chronic)
		D Rehabilitation nursing
		E Terminal care
		F Oncology nursing
7503	Lifelong developmental nursing	A Family health nursing
		B Maternal/Women's nursing
		C Midwifery
		D Child health nursing
7504	Community health/ Gerontological nursing	A Community health nursing
		B Public health nursing
		1 C School nursing
		D Occupational and environmental health nursing
		E Gerontological nursing
		F Psychiatric/Mental health nursing
		2 G Home nursing
		H Visiting nursing
		J Family health nursing
		K Rehabilitation nursing

Discipline: Dentistry

Item Number	Research Field	Keyword
7401	Morphological basic dentistry	A Oral anatomy (including histology/embryology)
		B Oral pathology
		C Oral bacteriology
7402	Functional basic dentistry	A Oral physiology
		B Oral biochemistry
		C Dental pharmacology
7403	Pathobiological dentistry/ Dental radiology	A Experimental oncology
		B Immunity/Infection/Inflammation
		C General dental radiology
		D Oral and maxillofacial radiology
7404	Conservative dentistry	A Operative dentistry
		B Endodontist
7405	Prosthetic dentistry	A General prosthodontics
		B Removable denture prosthodontics
		C Fixed partial denture prosthodontics
		D Oral and maxillofacial prosthetics
		E Stomatognathic function
7406	Dental engineering/ Regenerative dentistry	A Dental science and engineering
		B Dental materials science
		C Biomaterials science
		D Adhesion dentistry
		E Regenerative dentistry
		F Oral implantology