$N\!SFC$ Application Code Chinese - English Comparison Table

James Chen September 2021



${\bf Contents}$

A . M	athematical and Physical Sciences
	A01 Algebra and Geometry
	A02 Analytics
	A03 Differential equations and dynamic systems
	A04 Statistics and Operations Research
	A05 Computational Mathematics
	A06 The intersection of mathematics and other subjects
	A07 Dynamics and control
	A08 Solid mechanics
	A09 Fluid mechanics
	A10 Biomechanics
	A10 Physical mechanics
	A12 Explosion and shock dynamics
	A13 Environmental mechanics
	A14 Cosmology and galaxies
	A15 Stellar and Interstellar Medium
	A16 Solar physics
	A17 Planetary science
	A18 Basic astronomy
	A19 Astronomical techniques and methods
	A20 Condensed Matter Physics
	A21 Atomic and Molecular Physics
	A22 Optics
	A23 Acoustics
	A24 Quantum modulation
	A25 Fundamental Physics
	A26 Particle Physics
	A27 Nuclear Physics
	A28 Accelerators, Reactors and Detectors
	A29 Plasma Physics
	A30 Nuclear Technology and its Applications
	1100 Television 100 more and 100 mapping 100 more and 100
B. Cł	nemical Sciences
	B01 Synthetic Chemistry
	B02 Catalysis and Surface Interface Chemistry
	B03 Chemical Theory and Mechanism
	B04 Chemical Measurement
	B05 Material Chemistry
	B06 Environmental Chemistry
	B07 Chemical Biology
	B08 Chemical Engineering and Industrial Chemistry
	B09 Energy Chemistry
	Dog Energy Chemistry
C Li	fe Sciences
О. Ш	C01 Microbiology
	C02 Botany
	v
	C04 Z-alama
	C04 Zoology
	C05 Biophysics and Biochemistry
	C06 Genetics and Bioinformatics
	C07 Cell Biology
	C08 Immunology
	C09 Neuroscience and Psychology
	C10 Biomaterials, Imaging and Tissue Engineering



C11	Physiology and Integrative Biology
	Developmental Biology and Reproductive Biology
	Basic Agronomy and Crop Science
	Plant Protection
	Horticulture and Plant Nutrition
	Forestry and Herbology
	Animal Husbandry
	Veterinary Medicine
	Aquaculture
	Food Science
C21	Molecular Biology and Biotechnology
D. Earth S	ciences 67
D01	Geosciences
	Geochemistry
D03	Geophysics and Spatial Physics
D04	Atmospheric Science
D05	Geology
D06	Marine Science
D07	Environmental Geosciences
E Enginee	ring and Materials Science 68
_	Metal Materials
	Inorganic non-metallic materials
	Organic polymer materials
	Mining and Metallurgical Engineering
	Mechanical design and manufacturing
	Engineering Thermophysics and Energy Utilization
	Electrical Science and Engineering
	Construction and Civil Engineering
	Hydraulic Engineering
	Environmental Engineering
	Marine Engineering
	Traffic and Transportation Engineering
E13	New Concept Materials and Materials Common Science



A. Mathematical and Physical Sciences



${ m A01}$ Algebra and Geometry

Code	Chinese	English
A0101	数学史、数理逻辑与公理集合论	History of Mathematics, Mathematical Logic,
		and Axiom Set Theory
A0102	解析数论与组合数论	Analytic number theory and combinatorial
		number theory
A0103	代数数论	Algebraic Number Theory
A0104	群与代数的结构	The structure of groups and algebra
A0105	李理论及其推广	Lee theory and its extension
A0106	表示论与同调理论	Representation Theory and Coherence Theory
A0107	整体微分几何	Global differential geometry
A0108	几何分析	Geometric analysis
A0109	辛几何与数学物理	Symplectic Geometry and Mathematical
		Physics
A0110	代数拓扑与几何拓扑	Algebraic and geometric topology
A0112	一般拓扑学	General topology



A02 Analytics

Code	Chinese	English
A0201	单复变函数论	Function Theory of Simple and Complex Vari-
		able
A0202	多复变函数论	Theory of Multiple Complex Variables
A0203	复动力系统	Complex power system
A0204	几何测度论与分型	Geometric measurement theory and classifica-
		tion
A0205	调和分析与逼近论	Harmonic analysis and approximation theory
A0206	非线性泛函分析	Nonlinear functional analysis
A0207	算子理论	Operator theory
A0208	空间理论	Space theory
A0209	马氏过程与统计物理	Markov Process and Statistical Physics
A0210	随机分析与随机过程	Stochastic analysis and stochastic process
A0211	概率极限理论与随机化结构	Probability Limit Theory and Randomization
		Structure



A03 Differential equations and dynamic systems

Code	Chinese	English
A0301	常微分方程	Ordinary differential equation
A0302	差分方程	Difference equation
A0303	动力系统与遍历论	Dynamic system and ergodic theory
A0304	椭圆与抛物型方程	Elliptic and Parabolic Equations
A0305	双曲型方程	Hyperbolic equation
A0306	混合型、退化型偏微分方程	Mixed and degenerate partial differential equa-
		tions
A0307	无穷维动力系统与色散理论	Infinite dimensional dynamic system and disper-
		sion theory
A0308	可积系统及其应用	Integrable system and its application



${\bf A04}$ Statistics and Operations Research

Code	Chinese	English
A0401	数据采样理论与方法	Data sampling theory and method
A0402	统计推断与统计计算	Statistical inference and statistical calculation
A0403	贝叶斯统计与统计应用	Bayesian statistics and statistical applications
A0404	大数据统计学	Big data statistics
A0405	连续优化	Continuous optimization
A0406	离散优化	Discrete optimization
A0407	随机优化与统计优化	Random optimization and statistical optimiza-
		tion
A0408	组合数学	Combinatorial Mathematics
A0409	图论及其应用	Graph theory and its applications
A0410	算法复杂性与近似算法	Algorithm complexity and approximate algo-
		rithm



A05 Computational Mathematics

Code	Chinese	English
A0501	算法基础理论与构造方法	Algorithm basic theory and construction
		method
A0502	数值代数	Numerical algebra
A0503	数值逼近与计算几何	Numerical approximation and computational
		geometry
A0504	微分方程数值解	Numerical solution of differential equations
A0506	反问题建模与计算	Inverse problem modeling and calculation
A0506	复杂问题的可计算建模与数值模拟	Computational modeling and numerical simula-
		tion of complex problems
A0507	新型计算方法	New calculation method



${\bf A06}$ The intersection of mathematics and other subjects

Code	Chinese	English
A0601	控制中的数学方法	Mathematical methods in control
A0602	信息技术与不确定性的数学理论与方法	Information Technology and Mathematics The-
		ory and Method of Uncertainty
A0603	经济数学与金融数学	Economic Mathematics and Financial Mathe-
		matics
A0604	生物与生命科学中的数学	Mathematics in Biology and Life Sciences
A0605	符号计算与机器证明	Symbolic Computation and Machine Proof
A0606	人工智能中的数学理论与方法	Mathematical theories and methods in artificial
		intelligence
A0607	数据科学中的数学理论与方法	Mathematical theories and methods in data sci-
		ence
A0608	安全中的数学理论	Mathematical Theory in Security
A0609	与其他领域的交叉	Intersection with other fields



${ m A07~Dynamics}$ and control

Code	Chinese	English
A0701	分析力学	Analytical mechanics
A0702	非线性振动及其控制	Nonlinear vibration and its control
A0703	随机动力学及其控制	Stochastic dynamics and its control
A0704	多体与高维系统非线性动力学	Nonlinear dynamics of multi-body and high-
		dimensional systems
A0705	飞行器与载体系统动力学	Aircraft and carrier system dynamics
A0706	转子动力学	Rotor dynamics
A0707	神经与智能系统动力学	Neural and Intelligent System Dynamics
A0708	动力学设计与反问题	Dynamic design and inverse problem



A08 Solid mechanics

Code	Chinese	English
A0801	固体变形与本构理论	Solid Deformation and Constitutive Theory
A0802	固体强度、损伤、断裂与疲劳	Solid strength, damage, fracture and fatigue
A0803	波动、振动与噪声	Fluctuation, vibration and noise
A0804	接触、摩擦与表界面力学	Contact, friction and surface interface mechan-
		ics
A0805	微纳米力学与多尺度力学	Micro-nano mechanics and multi-scale mechan-
		ics
A0806	材料和结构的优化设计、制造与可靠性	Optimized design, manufacturing and reliability
		of materials and structures
A0807	复合材料与结构力学	Composite materials and structural mechanics
A0808	多场耦合与智能结构力学	Multi-field coupling and intelligent structural
		mechanics
A0809	软物质与柔性结构力学	Soft matter and flexible structural mechanics
A0810	流固耦合力学	Fluid-structure interaction mechanics
A0811	力化学耦合	Mechanochemical coupling
A0812	实验固体力学	Experimental solid mechanics
A0813	计算固体力学	Computational Solid Mechanics
A0814	极端条件下材料与结构力学	Material and structural mechanics under ex-
		treme conditions



A09 Fluid mechanics

Code	Chinese	English
A0901	湍流与流动稳定性	Turbulence and flow stability
A0902	漩涡与分离流动	Vortex and separation flow
A0903	空气动力学	aerodynamics
A0904	水动力学	Hydrodynamics
A0905	多相流、渗流与非牛顿流体力学	Multiphase flow, seepage flow and non-
		Newtonian fluid mechanics
A0906	流动噪声与气动声学	Flow noise and aeroacoustics
A0907	微纳尺度流动与界面流动	Micro-nano-scale flow and interfacial flow
A0908	多场多介质耦合与流动控制	Multi-field and multi-medium coupling and flow
		control
A0909	实验流体力学	Experimental fluid mechanics
A0910	计算流体力学	Computational Fluid Dynamics
A0911	飞行器与发动机中的关键流体力学问题	Key fluid mechanics issues in aircraft and en-
		gines



A10 Biomechanics

Code	Chinese	English
A1001	生物固体力学与生物流体力学	Biosolid Mechanics and Biofluid Mechanics
A1002	多尺度力学生物学	Multiscale Mechanobiology
A1003	天然生物材料、仿生与运动生物力学	Natural biomaterials, bionics and sports biome-
		chanics
A1004	医用材料与器材的力学原理与设计	Mechanics principle and design of medical ma-
		terials and equipment



A11 Physical mechanics

Code	Chinese	English
A1101	固体物理力学与流体物理力学	Solid physical mechanics and fluid physical mechanics
A1102	复杂与智能介质物理力学	Physical mechanics of complex and smart media



${ m A12}$ Explosion and shock dynamics

Code	Chinese	English
A1201	爆炸力学	Mechanics of explosion
A1202	冲击动力学	Impact dynamics



A13 Environmental mechanics

Code	Chinese	English
A1301	岩体力学与土力学	Rock mechanics and soil mechanics
A1302	环境流体力学与颗粒流	Environmental fluid mechanics and particle flow
A1303	极端环境与灾害力学	Extreme environment and disaster mechanics



A14 Cosmology and galaxies

Code	Chinese	English
A1401	暗物质、暗能量、早期宇宙、宇宙学模型	Dark matter, dark energy, early universe, cos-
		mological model
A1402	宇宙结构的形成和演化	The formation and evolution of the structure of
		the universe
A1403	星系的形成、结构和演化	The formation, structure and evolution of galax-
		ies
A1404	星系的相互作用和核活动	Interaction of galaxies and nuclear activity
A1405	银河系的形成、结构和演化	The formation, structure and evolution of the
		Milky Way



A15 Stellar and Interstellar Medium

Code	Chinese	English
A1501	星际介质、恒星形成	Interstellar medium, star formation
A1502	恒星结构演化和大气、变星双星和多星系统	The evolution of stellar structure and atmosphere, variable star binaries and multi-star sys-
		tems
A1503	恒星晚期演化及爆发、致密天体及其相关高能 过程	Late stellar evolution and explosion, compact celestial bodies and related high-energy processes



A16 Solar physics

Code	Chinese	English
A1601	太阳内部结构、活动周期、大气和磁场	The sun's internal structure, activity cycle, atmosphere and magnetic field
A1602	太阳爆发活动及其对行星际空间的影响	Solar burst activity and its impact on interplanetary space



A17 Planetary science

Code	Chinese	English
A1701	太阳系的起源和演化、太阳系小行星的探测与 性质	The origin and evolution of the solar system, the detection and properties of asteroids in the solar
A1702	太阳系类地行星与巨行星探测、内部结构与大	Solar system terrestrial planets and giant plan-
	气性质	ets exploration, internal structure and atmospheric properties
A1703	系外行星的探测与性质、行星系统的形成与演	The exploration and properties of exoplanets,
	化	the formation and evolution of planetary systems



A18 Basic astronomy

Code	Chinese	English
A1801	天体测量、天文参考系与天文地球动力学, 天文	Astrometry, Astronomical Reference System
	学史	and Astro-Geodynamics, History of Astronomy
A1802	时间与频率	Time and frequency
A1803	天体力学方法与理论、相对论基本天文学	Methods and theories of celestial mechanics, ba-
		sic astronomy of relativity
A1804	基本天文学在空间目标监测与导航定位等领域	The application of basic astronomy in the fields
	中的应用	of space target monitoring, navigation and po-
		sitioning



A19 Astronomical techniques and methods

Code	Chinese	English
A1901	光学、紫外和红外天文技术和方法	Optical, ultraviolet and infrared astronomy
		technology and methods
A1902	射电天文技术和方法	Radio astronomy technology and methods
A1903	空间天文和高能天体物理技术和方法	Space astronomy and high-energy astrophysics
		technology and methods
A1904	天文信息技术、海量数据处理及数值模拟方法	Astronomical information technology, massive
		data processing and numerical simulation meth-
		ods



A20 Condensed Matter Physics

Code	Chinese	English
A2001	凝聚态物质结构、相变和晶格动力学	Condensed matter structure, phase transition
		and lattice dynamics
A2002	凝聚态物质力热光电性质	Condensed matter mechanical, thermal, optical
		and electrical properties
A2003	凝聚态物质输运性质	Transport properties of condensed matter
A2004	凝聚态物质电子结构	Electronic structure of condensed matter
A2005	半导体基础物理	Basic Physics of Semiconductors
A2006	铁电与多铁体系	Ferroelectric and multi-iron systems
A2007	磁学及自旋电子学	Magnetism and Spintronics
A2008	超导与超流	Superconductivity and superfluid
A2009	强关联体系	Strong association system
A2010	拓扑凝聚态体系	Topological condensed matter system
A2011	表面界面与低维物理	Surface interface and low-dimensional physics
A2012	液态、准晶与非晶态物理	Liquid, quasicrystalline and amorphous physics
A2013	软凝聚态与生物物理	Soft Condensed Matter and Biophysics
A2014	凝聚态物理新兴与交叉领域	Emerging and Intersecting Fields of Condensed
-		Matter Physics



${\bf A21}$ Atomic and Molecular Physics

Code	Chinese	English
A2101	原子分子结构、碰撞与谱学	Atomic and molecular structure, collision and
		spectroscopy
A2102	原子分子与光子相互作用	Atomic molecules interact with photons
A2103	冷原子分子物理及应用	Cold Atom and Molecular Physics and Applica-
		tions
A2104	团簇物理	Cluster physics
A2105	极端环境下的原子分子物理	Atomic and molecular physics in extreme envi-
		ronments
A2106	外场中的原子分子性质及其调控	The properties of atoms and molecules in the
		external field and their control
A2107	原子分子物理与其他学科交叉	Intersection of atomic and molecular physics
		with other disciplines



A22 Optics

Code	Chinese	English
A2201	光的传播、探测与成像	Light propagation, detection and imaging
A2202	光与物质相互作用	Light interacts with matter
A2203	光场调控与非线性光学	Optical field control and nonlinear optics
A2204	超快超强光物理	Ultra-fast and ultra-strong light physics
A2205	光量子物理与量子光学	Photon Physics and Quantum Optics
A2206	微纳光学与光子学	Micro-Nano Optics and Photonics
A2207	光谱学与固体发光	Spectroscopy and Solid State Luminescence
A2208	光学材料与器件物理	Optical materials and device physics
A2209	新波段光学与新型光源	New waveband optics and new light sources
A2210	与光学有关的交叉领域	Cross-fields related to optics



A23 Acoustics

Code	Chinese	English
A2301	线性与非线性声学	Linear and nonlinear acoustics
A2302	水声与空气动力声音	Water and aerodynamic sound
A2303	超声物理与技术	Ultrasound Physics and Technology
A2304	环境声学	Environmental acoustics
A2305	生物声学与语音声学	Bioacoustics and Voice Acoustics
A2306	声材料、换能器和测量	Acoustic materials, transducers and measure-
		ments
A2307	与声学有关的交叉领域	Cross-fields related to acoustics



A24 Quantum modulation

Code	Chinese	English
A2401	量子材料与物性调控	Quantum Materials and Physical Properties
		Control
A2402	量子结构与量子效应	Quantum structure and quantum effects
A2403	精密测量物理	Precision measurement physics
A2404	量子计算与量子通信	Quantum computing and quantum communica-
		tion
A2405	量子模拟	Quantum Simulation
A2406	量子器件物理	Quantum Device Physics
A2407	新型量子技术与交叉领域	Novel Quantum Technologies and Intersections



${\bf A25} \ {\bf Fundamental} \ {\bf Physics}$

Code	Chinese	English
A2501	物理中的数学与计算方法	Mathematics and Computational Methods in
		Physics
A2502	量子物理与量子信息	Quantum Physics and Quantum Information
A2503	统计物理与复杂系统	Statistical Physics and Complex Systems
A2504	相对论、引力与宇宙学	Relativity, Gravity and Cosmology
A2505	交叉科学中的理论物理	Theoretical Physics at the Crossroads of Science



A26 Particle Physics

Code	Chinese	English
A2601	量子场论与弦论	Quantum field theory and string theory
A2602	强相互作用与强子物理	Strong Interactions and Hadron Physics
A2603	重味物理	Heavy-flavored physics
A2604	电弱相互作用与 Higgs 物理	Electroweak Interactions and Higgs Physics
A2605	标准模型精确检验与新物理	Standard model exact test with new physics
A2606	中微子与粒子天体物理	Neutrino and Particle Astrophysics



A27 Nuclear Physics

Code	Chinese	English
A2701	核结构与衰变	Nuclear structure and decay
A2702	核反应与重离子核物理	Nuclear Reactions and Heavy Ion Nuclear
		Physics
A2703	中高能核物理	Medium and High Energy Nuclear Physics
A2704	核的基本对称性	Basic symmetry of the nucleus
A2705	核天体物理	Nuclear Astrophysics
A2706	核参数测量与评价	Nuclear parameter measurement and evaluation



${\bf A28}$ Accelerators, Reactors and Detectors

Code	Chinese	English
A2801	加速器物理	Accelerator Physics
A2802	加速器技术与应用	Accelerator Technology and Applications
A2803	反应堆物理与应用	Reactor Physics and Applications
A2804	粒子探测技术	Particle Detection Technology
A2805	核电子学技术	Nuclear Electronics Technology
A2806	在线与离线数据处理	Online and offline data processing



A29 Plasma Physics

Code	Chinese	English
A2901	等离子体基本过程与特性	Basic plasma processes and properties
A2902	等离子体与物质相互作用	Plasma-matter interactions
A2903	等离子体诊断技术	Plasma Diagnostic Technology
A2904	磁约束等离子体	Magnetically confined plasma
A2905	惯性约束等离子体	Inertial confinement plasma
A2906	高能量密度物理	High energy density physics
A2907	低温等离子体	Low temperature plasma
A2908	空间与天体等离子体	Space and Astronomical Plasma



${\bf A30}$ Nuclear Technology and its Applications

Code	Chinese	English
A3001	粒子束与物质相互作用	Interaction of particle beams with matter
A3002	材料与器件辐照损伤	Material and device irradiation damage
A3003	离子注人及粒子束材料改性	Ion injection and particle beam material modi-
		fication
A3004	核分析技术及应用	Nuclear Analysis Techniques and Applications
A3005	中子技术及应用	Neutron Technology and Applications
A3006	辐射探照与成像	Radiation Probing and Imaging
A3007	辐射计量学与辐射防护	Radiometrics and Radiation Protection
A3008	同步辐射与自由电子激光原理与技术	Principles and Techniques of Synchrotron Radi-
		ation and Free Electron Lasers
A3009	光束线技术与实验方法	Beamline technology and experimental methods
A3010	核技术在其他领域中的应用	Applications of nuclear technology in other
		fields



B. Chemical Sciences



B01 Synthetic Chemistry

Code	Chinese	English
B0101	元素化学	Elemental Chemistry
B0102	配位化学	Ligand Chemistry
B0103	团簇与纳米化学	Clusters and Nanochemistry
B0104	无机合成	Inorganic synthesis
B0105	催化合成反应	Catalytic synthesis reactions
B0106	不对称合成	Asymmetric synthesis
B0107	天然产物全合成	Total Synthesis of Natural Products
B0108	新反应与新试剂	New reactions and new reagents
B0109	高分子合成	Polymer synthesis
B0110	超分子化学	Supramolecular Chemistry
B0111	仿生与绿色合成	Bionic and Green Synthesis
B0112	功能分子/材料的合成	Synthesis of functional molecules/materials
B0113	结构与反应机制	Structure and Reaction Mechanism



${\bf B02}$ Catalysis and Surface Interface Chemistry

Code	Chinese	English
B0201	基础理论与表征方法	Basic theory and characterization methods
B0202	催化化学	Catalytic Chemistry
B0203	表面化学	Surface Chemistry
B0204	胶体与界面化学	Colloid and Interface Chemistry
B0205	电化学	Electrochemistry



${\bf B03}$ Chemical Theory and Mechanism

Code	Chinese	English
B0301	化学与方法	Chemistry and Methodology
B0302	化学模拟与应用	Chemical Simulation and Applications
B0303	化学热力学	Chemical Thermodynamics
B0304	化学动力学	Chemical Kinetics
B0305	结构化学	Structural Chemistry
B0306	光化学与光谱学	Photochemistry and Spectroscopy
B0307	化学反应机制	Chemical reaction mechanism
B0308	分子电子学与分子磁学	Molecular Electronics and Molecular Magnetism
B0309	高分子物理与高分子物理化学	Polymer Physics and Physical Chemistry of
		Polymers
B0310	化学信息学与人工智能	Cheminformatics and Artificial Intelligence
B0311	化学测序与软件	Chemical Sequencing and Software



B04 Chemical Measurement

Code	Chinese	English
B0401	分离与分析	Separation and Analysis
B0402	电分析化学	Electroanalytical Chemistry
B0403	谱学方法与理论	Spectroscopic Methods and Theory
B0405	化学成像	Chemical imaging
B0406	生命与公共安全分析	Life and Public Safety Analysis
B0407	仪器创制与大科学装置应用	Instrument creation and application of large sci-
		entific devices



B05 Material Chemistry

Code	Chinese	English
B0501	先进表征与理论机制	Advanced Representation and Theoretical
		Mechanisms
B0502	无机功能材料化学	Inorganic Functional Materials Chemistry
B0503	有机功能材料化学	Organic Functional Materials Chemistry
B0504	高分子功能材料化学	Polymer functional materials chemistry
B0505	复合与杂化材料化学	Chemistry of Composite and Hybrid Materials
B0506	智能与仿生材料化学	Smart and Bionic Materials Chemistry
B0507	医用材料化学	Medical Materials Chemistry
B0508	信息材料化学	Information Material Chemistry
B0509	生态环境材料化学	Ecological and Environmental Materials Chem-
		istry
B0510	含能材料化学	Chemistry of energy-containing materials
B0511	特种功能材料化学	Special functional materials chemistry



${\bf B06} \ {\bf Environmental} \ {\bf Chemistry}$

Code	Chinese	English
B0601	理论环境化学	Theoretical Environmental Chemistry
B0602	环境分析化学	Environmental analytical chemistry
B0603	大气污染与控制化学	Atmospheric pollution and control chemistry
B0604	水污染与控制化学	Water pollution and control chemistry
B0605	土壤污染与修复化学	Soil Contamination and Remediation Chemistry
B0606	固废污染与处置化学	Solid Waste Pollution and Disposal Chemistry
B0607	环境毒理与健康	Environmental Toxicology and Health
B0608	放射化学与辐射化学	Radiochemistry and Radiation Chemistry
B0609	生物安全与防护化学	Biosafety and Protective Chemistry



B07 Chemical Biology

Code	Chinese	English
B0701	生物体系分子探针	Molecular probes for biological systems
B0702	生物分子的化学生物学	Chemical Biology of Biomolecules
B0703	天然产物化学生物学	Chemical Biology of Natural Products
B0704	化学遗传学	Chemical Genetics
B0705	生物合成化学	Biosynthetic Chemistry
B0706	药物化学生物学	Medicinal Chemical Biology
B0707	化学生物学理论、方法与技术	Chemical Biology Theory, Methods and Tech-
		niques



B08 Chemical Engineering and Industrial Chemistry

Code	Chinese	English
B0801	化工热力学	Chemical Engineering Thermodynamics
B0802	传递过程	Transmission process
B0803	反应工程	Reaction Engineering
B0804	分离工程	Separation Engineering
B0805	过程强化与化工装备	Process intensification and chemical equipment
B0806	介化学与智能化工	Interventional Chemistry and Smart Chemical
		Engineering
B0807	绿色化工与化工安全	Green Chemical Engineering and Chemical En-
		gineering Safety
B0808	医药化工	Pharmaceutical Chemical Engineering
B0809	光化学与电化学工程	Photochemical and Electrochemical Engineering
B0810	农业与食品化工	Agriculture and Food Chemical Engineering
B0811	生物质转化与轻工制造	Biomass conversion and light manufacturing
B0812	生物化工与合成生物工程	Biochemical and Synthetic Biological Engineer-
		ing
B0813	精细化工与专用化学品	Fine Chemical Engineering and Specialty
		Chemicals
B0814	产品工程与材料化工	Product Engineering and Materials Chemical
		Engineering
B0815	能源化工	Energy Chemical Engineering
B0816	资源、环境与生态化工	Resources, Environment and Ecological Chemi-
		cal Engineering



B09 Energy Chemistry

Code	Chinese	English
B0901	氢能源化学	Hydrogen Energy Chemistry
B0902	碳基能源化学	Carbon-based Energy Chemistry
B0903	热能源化学	Thermal Energy Chemistry
B0904	机械能源化学	Mechanical Energy Chemistry
B0905	电能源化学	Electro-energy Chemistry
B0906	光能源化学	Optical Energy Chemistry
B0907	极端环境能源化学	Extreme Environmental Energy Chemistry
B0908	能源材料化学	Energy Materials Chemistry



C. Life Sciences



C01 Microbiology

Code	Chinese	English
C0101	微生物多样性、分类与系统发育	Microbial diversity, taxonomy and phylogeny
C0102	微生物生理与生化	Microbial Physiology and Biochemistry
C0103	微生物组学与代谢	Microbiomics and Metabolism
C0104	微生物遗传与生物合成	Microbial Genetics and Biosynthesis
C0105	微生物学新技术与新方法	New Technologies and Methods in Microbiology
C0106	微生物学与环境互作	Microbiology and environmental interactions
C0107	病毒学	Virology
C0108	病原细菌学	Pathogenic Bacteriology
C0109	病原真菌学与其他微生物	Pathogenic mycology and other microorganisms



C02 Botany

Code	Chinese	English
C0201	植物分类学	Plant Taxonomy
C0202	植物系统发生与进化	Plant phylogeny and evolution
C0203	植物光合与固氮	Plant photosynthesis and nitrogen fixation
C0204	水分与营养物质的运输与代谢	Transport and metabolism of water and nutri-
		ents
C0205	植物与环境互作	Plant-environment interactions
C0206	植物激素与生长发育调节	Plant hormones and growth and development
		regulation
C0207	植物生殖与发育	Plant Reproduction and Development
C0208	植物资源保护与利用	Plant Resource Conservation and Utilization
C0209	植物化学	Phytochemistry
C0210	植物学研究的新技术、新方法	New techniques and methods for botanical re-
		search



C03 Ecology

Code	Chinese	English
C0301	生态学理论与方法	Ecological Theory and Methods
C0302	行为生态学	Behavioral Ecology
C0303	生理生态学	Physiological Ecology
C0304	种群生态学	Population Ecology
C0305	群落生态学	Community Ecology
C0306	生态系统生态学	Ecosystem Ecology
C0307	景观与区域生态学	Landscape and Regional Ecology
C0308	全球变化生态学	Global Change Ecology
C0309	环境与生物演化	Environment and biological evolution
C0310	污染生态学与恢复生态学	Pollution Ecology and Restoration Ecology
C0311	土壤生态学	Soil Ecology
C0312	保护生物学	Conservation Biology
C0313	可持续生态学	Sustainable Ecology



C04 Zoology

Code	Chinese	English
C0401	动物进化与发育	Animal Evolution and Development
C0402	动物系统与分类	Animal Systems and Classification
C0403	动物生理与行为	Animal Physiology and Behavior
C0404	动物繁育与种群动态	Animal breeding and population dynamics
C0405	动物资源与保护	Animal Resources and Conservation
C0406	海洋动物学	Marine Zoology
C0407	野生动物疫病与传播	Wildlife Diseases and Transmission
C0408	实验动物学	Experimental Zoology



${ m C05}$ Biophysics and Biochemistry

Code	Chinese	English
C0501	结构生物学	Structural Biology
C0502	分子生物物理	Molecular Biophysics
C0503	细胞感应与环境生物物理	Cell sensing and environmental biophysics
C0504	物理生物学	Physical Biology
C0505	蛋白质、多肽与酶生物化学	Protein, Peptide and Enzyme Biochemistry
C0506	糖、脂生物化学	Glycan and lipid biochemistry
C0507	核糖生物化学	Nucleic acid biochemistry
C0508	无机生物化学与环境测控	Inorganic Biochemistry and Environmental
		Measurement and Control
C0509	生物学过程与代谢	Biological processes and metabolism



C06 Genetics and Bioinformatics

Code	Chinese	English
C0601	遗传物质结构与功能	Structure and function of genetic material
C0602	基因表达与非编码序列调控	Gene expression and non-coding sequence regu-
		lation
C0603	表观遗传调控	Epigenetic regulation
C0604	表型、行为与疾病的遗传学基础	Genetic basis of phenotype, behavior and dis-
		ease
C0605	遗传与进化	Genetics and Evolution
C0606	群体遗传与数量遗传	Population and quantitative inheritance
C0607	基因组学	Genomics
C0608	生物数据资源与分析方法	Biological Data Resources and Analytical Meth-
		ods
C0609	生物大数据解析	Biological Big Data Analysis



C07 Cell Biology

Code	Chinese	English
C0701	细胞器及亚细胞结构、互作与功能	Organelle and subcellular structure, interactions
		and function
C0702	细胞信号传导	Cell signaling
C0703	细胞增值与细胞周期	Cell proliferation and cell cycle
C0704	细胞命运与重编程	Cell Fate and Reprogramming
C0705	细胞衰老、死亡及自噬	Cellular senescence, death and autophagy
C0706	细胞极性与细胞运动	Cell polarity and cell motility
C0707	细胞变异与功能异常	Cellular mutations and functional abnormalities
C0708	细胞代谢、应激及稳态调节	Cellular metabolism, stress and homeostatic
		regulation
C0709	细胞外微环境与细胞间通讯	Extracellular microenvironment and intercellu-
		lar communication



C08 Immunology

Code	Chinese	English
C0801	固有免疫	Inherent immunity
C0802	适应性免疫	Adaptive immunity
C0803	粘膜免疫与区域免疫	Mucosal and regional immunity
C0804	自身免疫与免疫耐受	Autoimmunity and Immune Tolerance
C0805	肿瘤免疫微环境	Tumor immune microenvironment
C0806	感染与非感染性炎症	Infectious and non-infectious inflammatory dis-
		eases
C0807	生殖免疫与移植免疫	Reproductive and transplantation immunity
C0808	疫苗、抗体与免疫干预	Vaccines, Antibodies and Immunization Inter-
		ventions



${ m C09}$ Neuroscience and Psychology

Code	Chinese	English
C0901	分子与细胞神经科学	Molecular and Cellular Neuroscience
C0902	发育与衰老神经科学	Developmental and Aging Neuroscience
C0903	神经系统结构与功能及异常	Nervous system structure and function and ab-
		normalities
C0904	感觉与运动系统神经科学	Sensory and Motor System Neuroscience
C0905	行为与情感神经科学	Behavioral and Emotional Neuroscience
C0906	认知神经科学	Cognitive Neuroscience
C0907	认知心理学	Cognitive Psychology
C0908	发展与教育心理学	Developmental and Educational Psychology
C0909	行为、决策与社会心理学	Behavior, Decision Making and Social Psychol-
		ogy
C0910	应用心理学及其他	Applied Psychology and others
C0911	生理与医学心理学	Physiology and Medical Psychology
C0912	心理疾患与认知障碍及干预	Psychological disorders and cognitive impair-
		ment and intervention
C0913	神经科学与心理学研究的新技术和新范式	New techniques and paradigms in neuroscience
		and psychology research
C0914	认知模拟、计算与人工智能	Cognitive Simulation, Computation and Artifi-
		cial Intelligence



${\rm C}10$ Biomaterials, Imaging and Tissue Engineering

Code	Chinese	English
C1001	生物力学与生物流变学	Biomechanics and Biofluidics
C1002	生物材料与生物效应	Biomaterials and Biological Effects
C1003	组织工程学	Organizational Engineering
C1004	组织再生与人工器官	Tissue regeneration and artificial organs
C1005	生物成像、电子与探针	Bioimaging, Electronics Probes
C1006	生物仿生与人工智能	Biomimicry and Artificial Intelligence
C1007	纳米生物学	Nanobiology
C1008	生物与医学工程新技术新方法	New Technologies and Methods in Biological
		and Medical Engineering



C11 Physiology and Integrative Biology

Code	Chinese	English
C1101	循环与血液生理	Circulation and Blood Physiology
C1102	内分泌、泌尿与生殖生理	Endocrine, Urinary and Reproductive Physiol-
		ogy
C1103	呼吸与消化生理	Respiratory and digestive physiology
C1104	感觉器官与运动生理	Sensory organs and motor physiology
C1105	整合生理学与整合生物学	Integrative Physiology and Integrative Biology
C1106	衰老与生物节律学	Aging and biorhythmics
C1107	营养与代谢生理学	Nutrition and Metabolic Physiology
C1108	特殊环境生理与比较生理学	Special Environmental Physiology and Compar-
		ative Physiology
C1109	病理生理学	Pathophysiology



${ m C12}$ Developmental Biology and Reproductive Biology

Code	Chinese	English
C1201	干细胞基础研究	Basic Stem Cell Research
C1202	干细胞应用	Stem Cell Applications
C1203	早期胚胎发育及细胞谱系建立	Early embryonic development and cell lineage
		establishment
C1204	组织器官发育及体外构建	Tissue and organ development and in vitro con-
		struction
C1205	组织器官稳态维持与再生修复	Maintenance of tissue and organ homeostasis
		and regenerative repair
C1206	生殖细胞及性别决定	Germ cells and sex determination
C1207	受精、着床及母胎互作	Fertilization, implantation and maternal-fetal
		interactions
C1208	生殖异常及辅助生殖	Reproductive Abnormalities and Assisted Re-
		production



C13 Basic Agronomy and Crop Science

Code	Chinese	English
C1301	农学信息学	Agronomy Informatics
C1302	农艺农机学	Agronomy Agronomics
C1303	农业生物系统工程学	Agricultural Biosystems Engineering
C1304	作物生理学	Crop physiology
C1305	作物逆境生物学	Crop adversity biology
C1306	作物种类资源学	Crop species resource science
C1307	作物基因组及遗传学	Crop Genome and Genetics
C1308	作物育种学	Crop breeding
C1309	稻类作物栽培学	Cultivation of rice crops
C1310	麦类作物与玉米栽培学	Cultivation of wheat crops and corn
C1311	其他作物栽培学	Other Crop Cultivation
C1312	耕作学	Agronomy



C14 Plant Protection

Code	Chinese	English
C1401	植物病理学	Phytopathology
C1402	农业昆虫学	Agricultural Entomology
C1403	作物免疫与抗性	Crop immunity and resistance
C1404	农田草害、鼠害及其他有害生物	Farmland grass, rodent and other pests
C1405	植物化学保护	Phytochemical protection
C1406	生物防治	Biological control
C1407	植物保护新技术	New Technology for Plant Protection
C1408	作物、生长因子互作与生态调控	Crop and growth factor interactions and ecolog-
		ical regulation



C15 Horticulture and Plant Nutrition

Code	Chinese	English
C1501	果树生理与栽培学	Fruit Tree Physiology and Cultivation
C1502	果树种质资源与遗传育种学	Fruit tree germplasm resources and genetic
		breeding
C1503	果树生长发育	Fruit tree growth and development
C1504	蔬菜、瓜果生理与栽培学	Physiology and Cultivation of Vegetables, Mel-
		ons and Fruits
C1505	蔬菜、瓜果种质资源与遗传育种学	Vegetable, Melon and Fruit Germplasm Re-
		sources and Genetic Breeding
C1506	蔬菜与瓜果生长发育	Vegetables and fruits growth and development
C1507	观赏园艺学	Ornamental Horticulture
C1508	茶学	Tea Studies
C1509	园艺作物采后生物学	Postharvest biology of horticultural crops
C1510	食用真菌学	Edible Mycology
C1511	设施园艺学	Facility Horticulture
C1512	植物营养基础	Fundamentals of Plant Nutrition
C1513	肥料与养分管理	Fertilizer and Nutrient Management



${ m C16}$ Forestry and Herbology

Code	Chinese	English
C1601	草种质资源与遗传育种	Grass germplasm resources and genetic breeding
C1602	草培育、保护与利用	Grass Cultivation, Conservation and Utilization
C1603	木材物理学	Wood physics
C1604	林产化学	Forestry Chemistry
C1605	树木生物学	Tree Biology
C1606	森林土壤学	Forest Soil Science
C1607	森林培育学	Forestry Cultivation
C1608	森林信息学与森林经理学	Forest Informatics and Forest Manager
C1609	森林保护学	Forest conservation science
C1610	树木遗传育种	Tree Genetic Breeding
C1611	林木经济育种	Economic breeding of forest trees
C1612	园林学	Landscape Architecture
C1613	竹学	Bamboo Studies



C17 Animal Husbandry

Code	Chinese	English
C1701	畜牧学基础	Fundamentals of Animal Husbandry
C1702	家畜种质资源与遗传育种学	Germplasm Resources and Genetic Breeding of
		Domestic Animals
C1703	家禽及其他经济动物种质资源与遗传育种学	Poultry and other economic animals germplasm
		resources and genetic breeding
C1704	畜禽繁殖学	Livestock Reproduction
C1705	动物营养学	Animal Nutrition
C1706	饲料学	Feed science
C1707	畜禽行为学与智慧养殖	Livestock Behavior and Smart Farming
C1708	养蜂学	Apiculture
C1709	养蚕学	Sericulture



C18 Veterinary Medicine

Code	Chinese	English
C1801	基础兽医学	Basic Veterinary Medicine
C1802	兽医病毒学	Veterinary Virology
C1803	兽医细菌及其他微生物学	Veterinary Bacteria and Other Microbiology
C1804	兽医免疫学	Veterinary Immunology
C1805	兽医寄生虫学	Veterinary Parasitology
C1806	兽医传染病学	Veterinary Epidemiology
C1807	中兽医学	Chinese Veterinary Medicine
C1808	兽医药物学与毒理学	Veterinary Pharmacology and Toxicology
C1809	临床兽医学	Clinical Veterinary Medicine
C1810	人兽共患病	zoonosis
C1811	动物与病原微生物传播	Animal and pathogenic microbial transmission



C19 Aquaculture

Code	Chinese	English
C1901	水产学基础	Fundamentals of Aquaculture
C1902	水产生物遗传育种学	Genetic breeding of aquatic animals
C1903	水产生物繁育与发育	Aquatic Biological Breeding and Development
C1904	渔业资源与保护生物学	Fisheries Resources and Conservation Biology
C1905	水产动物营养与饲料学	Aquatic animal nutrition and feed science
C1906	水产养殖学	Aquaculture
C1907	水产生物免疫学	Aquatic Bioimmunology
C1908	水产生物病原学与病害控制	Aquatic Biopathogenesis and Disease Control
C1909	养殖与渔业工程学	Aquaculture and Fisheries Engineering



C20 Food Science

Code	Chinese	English
C2001	食品原料学	Food ingredients science
C2002	食品生物化学	Food Biochemistry
C2003	食品微生物学	Food Microbiology
C2004	食品组分与营养	Food Components and Nutrition
C2005	食品与肠道菌群	Food and intestinal flora
C2006	食品加工与制造	Food processing and manufacturing
C2008	食品质量与安全监测	Food Quality and Safety Monitoring
C2009	食品安全风险评估	Food Safety Risk Assessment
C2010	食品安全与品质控制	Food Safety and Quality Control
C2011	食品风味化学与感官评价	Food flavor chemistry and sensory evaluation
C2012	食品科学研究的新方法	A New Approach to Food Science Research



${\bf C21}$ Molecular Biology and Biotechnology

Code	Chinese	English
C2101	前沿技术基础理论	Basic theory of frontier technology
C2102	合成生物学与生物改造技术	Synthetic Biology and Biomodification Technol-
		ogy
C2103	生命组学技术	Life-omics Technologies
C2104	共性生物技术	Common Biotechnology
C2105	交叉融合生物技术	Cross-fertilization biotechnology
C2106	应用生物技术	Applied Biotechnology
C2107	颠覆性生物技术	Disruptive Biotechnology



D. Earth Sciences

Detailed translation will be determined case by case.

- **D01** Geosciences
- D02 Geochemistry
- D03 Geophysics and Spatial Physics
- D04 Atmospheric Science
- D05 Geology
- D06 Marine Science
- D07 Environmental Geosciences



E. Engineering and Materials Science

Detailed translation will be determined case by case.

- **E01** Metal Materials
- E02 Inorganic non-metallic materials
- E03 Organic polymer materials
- E04 Mining and Metallurgical Engineering
- E05 Mechanical design and manufacturing
- E06 Engineering Thermophysics and Energy Utilization
- E07 Electrical Science and Engineering
- E08 Construction and Civil Engineering
- E09 Hydraulic Engineering
- E10 Environmental Engineering
- E11 Marine Engineering
- E12 Traffic and Transportation Engineering
- E13 New Concept Materials and Materials Common Science