长安大学 ESI 月报

（2020 年 5 月 14 日更新数据）

数据统计分析：图书馆参考咨询部 尹莉

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自 2018 年 5 月起，根据 ESI 数据库的更新时间，长安大学图书馆信息部每单数月份会出具一份《长安大学 ESI 月报》，对我校 ESI 高被引论文、ESI 全球前 1%学科以及我校优势潜力学科的表现力进行分析，以供学校相关职能部门参考和教职工查阅。

数据源简介：

Essential Science Indicators（基本科学指标，简称 ESI）是一个基于 Web of Science 核心合集数据库的深度分析型研究工具，它可以确定出在某个研究领域有影响力的国家、机构、论文、出版物以及研究前沿。这种独特而全面的、基于论文产出和引文影响力深入分析的数据是政府机构、大学、企业、出版公司和基金会的决策者、管理者、情报分析人员和信息专家理想的分析资源，用户可以通过它对科研绩效和发展趋势进行长期的定量分析。基于期刊论文发表数量和引文数据，ESI 能够提供 22 个学科研究领域中的国家、机构和期刊的科研绩效统计和科研实力排名。

ESI 高被引论文（Highly Cited Paper）是指将最近十年发表的论文按照同一年、同一 ESI 学科论文的被引频次由高到低进行排序，排在世界前 1%的论文。从理论上讲，如果一篇论文被引频次达到前 1%则表明该论文达到学科较高水平，具有较高的影响力。ESI 热点论文（Hot Paper）是指最近 2 年内发表的论文且该论文在最近 2 个月内被引次数排在全球相应学科领域的前 1‰以内。

本次数据统计分析时间：2020.5.14

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2020 年 5 月 14 日，最新一期的 ESI 数据发表，其统计数据覆盖的时间范围为 2010 年 1 月 1 日至 2020 年 2 月 29 日（跨度为十年两个月）。数据显示：本次上榜机构总数为 6455 所，相对于 2020 年 3 月公布的数据减少了 126 所；中国上榜机构总数为 566 所（其中大陆 466，台湾 85，香港 13，澳门 2），比 2020 年 3 月公布的数据（大陆 459，台湾 86，香港 13，澳门 2）增加了 6 所。

中国上榜的高校数为 361 所（其中大陆 296，台湾 56，香港 7，澳门 2），比 2020 年 3 月公布的 356 所（大陆 290，台湾 57，香港 7，澳门 2）增加了 5 所。中国内地共 296 所高校有学科进入全球前 1%，相对于上次公布的数据新增 7 所，退出 1 所。新增高校为：湖北工业大学、南阳师范学院、大连工业大学、武汉轻工大学、中央财经大学、西华大学、东北电力大学，退出高校为山西农业大学。

下面将对长安大学在本次统计数据覆盖时间范围内的表现进行分析。

一．长安大学 ESI 高被引论文情况

本次 ESI 统计数据显示，全球位列 ESI 高水平研究机构总数为 6455 所，我校位列 2519 位（上期为 2691 位），共有四个 ESI 学科进入全球排名前 1%，分别为工程学、地球科学、材料科学和环境/生态科学。本次数据统计覆盖范围内，我校发表的 WOS 论文总数为 5,995，总被引频次为 38,250 次，其中 ESI 高被引论文有 96 篇（见表 1，其发表的年代分布见图 1），比上期（91 篇）增加了 5 篇。将这些 ESI 高被引论文按照学科领域进行统计，发现工程学领域有 31 篇，地球科学领域有 12 篇，材料科学领域有 3 篇，环境/生态科学领域有 30 篇。另外，我校作为合作单位发表的 ESI 高被引论文数为 21 篇（见表 2）。本期我校 ESI 热点论文有 7 篇，均来自环境/生态科学领域（见表 3）。

图 1　长安大学 96 篇 ESI 高被引论文发表的年代分布

表 1　长安大学 ESI 高被引论文简况（按 ESI 被引次数排序）

序号	论文名称	WOS 号	作者	来源期刊	ESI 学科	ESI 被引次数
1	EXPERIMENTAL STUDIES ON THE COMBUSTION CHARACTERISTICS AND PERFORMANCE OF A DIRECT INJECTION ENGINE FUELED WITH BIODIESEL/DIESEL BLENDS	000281339700070	QI, DH;CHEN, H;GENG, LM;BIAN, YZ	ENERGY CONVERSION AND MANAGEMENT 51 (12): 2985-2992 DEC 2010	ENGINEERING	176
2	EVALUATION OF SHALLOW GROUNDWATER CONTAMINATION AND ASSOCIATED HUMAN HEALTH RISK IN AN ALLUVIAL PLAIN IMPACTED BY AGRICULTURAL AND INDUSTRIAL ACTIVITIES, MID-WEST CHINA	000381997600002	WU, JH;SUN, ZC	EXPOSURE AND HEALTH 8 (3): 311-329 SEP 2016	ENVIRONMENT/ECOLOGY	174
3	BUILDING A NEW AND SUSTAINABLE SILK ROAD ECONOMIC BELT	000362903400023	LI, PY;QIAN, H;HOWARD, KWF;WU, JH	ENVIRONMENTAL EARTH SCIENCES 74 (10): 7267-7270 NOV 2015	ENVIRONMENT/ECOLOGY	148
4	MICROWAVE-ASSISTED IN SITU SYNTHESIS OF REDUCED GRAPHENE OXIDE-BIVO4 COMPOSITE PHOTOCATALYSTS AND THEIR ENHANCED PHOTOCATALYTIC PERFORMANCE FOR THE DEGRADATION OF CIPROFLOXACIN	000317878400014	YAN, Y;SUN, SF;SONG, Y;YAN, X;GUAN, WS;LIU, XL;SHI, WD	JOURNAL OF HAZARDOUS MATERIALS 250: 106-114 APR 15 2013	ENGINEERING	129
5	APPRAISING GROUNDWATER QUALITY AND HEALTH RISKS FROM CONTAMINATION IN A SEMIARID REGION OF NORTHWEST CHINA	000381997600005	LI, PY;LI, XY;MENG, XY;LI, MN;ZHANG, YT	EXPOSURE AND HEALTH 8 (3): 361-379 SEP 2016	ENVIRONMENT/ECOLOGY	121
6	MICROWAVE SYNTHESIS OF A NOVEL MAGNETIC	000337554100003	LU, ZY;CHEN, F;HE,	CHEMICAL	ENGINEERING	118

	IMPRINTED TIO2 PHOTOCATALYST WITH EXCELLENT TRANSPARENCY FOR SELECTIVE PHOTODEGRADATION OF ENROFLOXACIN HYDROCHLORIDE RESIDUES SOLUTION		M;SONG, MS;MA, ZF;SHI, WD;YAN, YS;LAN, JZ;LI, F;XIAO, P	ENGINEERING JOURNAL 249: 15-26 AUG 1 2014		
7	HYDROGEOCHEMICAL CHARACTERIZATION OF GROUNDWATER IN AND AROUND A WASTEWATER IRRIGATED FOREST IN THE SOUTHEASTERN EDGE OF THE TENGGER DESERT, NORTHWEST CHINA	000381997600003	LI, PY;WU, JH;QIAN, H;ZHANG, YT;YANG, NA;JING, LJ;YU, PY	EXPOSURE AND HEALTH 8 (3): 331-348 SEP 2016	ENVIRONMENT/ECOLOGY	111
8	URANIUM AND MOLYBDENUM ISOTOPE EVIDENCE FOR AN EPISODE OF WIDESPREAD OCEAN OXYGENATION DURING THE LATE EDIACARAN PERIOD	000352192100010	KENDALL, B;KOMIYA, T;LYONS, TW;BATES, SM;GORDON, GW;ROMANIELLO, SJ;JIANG, GQ;CREASER, RA;XIAO, SH;MCFADDEN, K;SAWAKI, Y;TAHATA, M;SHU, DG;HAN, J;LI, Y;CHU, XL;ANBAR, AD	GEOCHIMICA ET COSMOCHIMICA ACTA 156: 173-193 MAY 1 2015	GEOSCIENCES	104
9	PROGRESS, OPPORTUNITIES, AND KEY FIELDS FOR GROUNDWATER QUALITY RESEARCH UNDER THE IMPACTS OF HUMAN ACTIVITIES IN CHINA WITH A SPECIAL FOCUS ON WESTERN CHINA	000401566600006	LI, PY;TIAN, R;XUE, CY;WU, JH	ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH 24 (15): 13224-13234 MAY 2017	ENVIRONMENT/ECOLOGY	101
10	HYDROCHEMICAL APPRAISAL OF GROUNDWATER	000369322200015	LI, PY;WU, JH;QIAN, H	ARABIAN JOURNAL	GEOSCIENCES	96

	QUALITY FOR DRINKING AND IRRIGATION PURPOSES AND THE MAJOR INFLUENCING FACTORS: A CASE STUDY IN AND AROUND HUA COUNTY, CHINA			OF GEOSCIENCES 9 (1): - JAN 2016		
11	IN SITU SYNTHESIS OF Z-SCHEME AG3PO4/CUBI2O4 PHOTOCATALYSTS AND ENHANCED PHOTOCATALYTIC PERFORMANCE FOR THE DEGRADATION OF TETRACYCLINE UNDER VISIBLE LIGHT IRRADIATION	000400584900073	SHI, WL;GUO, F;YUAN, SL	APPLIED CATALYSIS B-ENVIRONMENTAL 209: 720-728 JUL 15 2017	CHEMISTRY	84
12	FOUR STAGES SYMMETRIC TWO-STEP P-STABLE METHOD WITH VANISHED PHASE-LAG AND ITS FIRST, SECOND, THIRD AND FOURTH DERIVATIVES	000378971700008	HUI, F;SIMOS, TE	APPLIED AND COMPUTATIONAL MATHEMATICS 15 (2): 220-238 2016	MATHEMATICS	80
13	MOF-DERIVED POROUS N-CO3O4@N-C NANODODECAHEDRA WRAPPED WITH REDUCED GRAPHENE OXIDE AS A HIGH CAPACITY CATHODE FOR LITHIUM-SULFUR BATTERIES	000424466300041	XU, J;ZHANG, WX;CHEN, Y;FAN, HB;SU, DW;WANG, GX	JOURNAL OF MATERIALS CHEMISTRY A 6 (6): 2797-2807 FEB 14 2018	MATERIALS SCIENCE	78
14	A HIGH-ORDER TWO-STEP PHASE-FITTED METHOD FOR THE NUMERICAL SOLUTION OF THE SCHRODINGER EQUATION	000387090000085	ZHANG, W;SIMOS, TE	MEDITERRANEAN JOURNAL OF MATHEMATICS 13 (6): 5177-5194 DEC 2016	MATHEMATICS	77
15	OCCURRENCE AND HEALTH IMPLICATION OF FLUORIDE IN GROUNDWATER OF LOESS AQUIFER	000469217300003	LI, PY;HE, XD;LI, Y;XIANG, G	EXPOSURE AND HEALTH 11 (2):	ENVIRONMENT/ECOLOGY	71

	IN THE CHINESE LOESS PLATEAU: A CASE STUDY OF TONGCHUAN, NORTHWEST CHINA			95-107 SP. ISS. SI JUN 2019		
16	VIBRATION RESPONSE CHARACTERISTICS OF THE CROSS TUNNEL STRUCTURE	000379610300001	LAI, JX;WANG, KY;QIU, JL;NIU, FY;WANG, JB;CHEN, JX	SHOCK AND VIBRATION : - 2016	ENGINEERING	70
17	LANDSLIDE SUSCEPTIBILITY MODELLING USING GIS-BASED MACHINE LEARNING TECHNIQUES FOR CHONGREN COUNTY, JIANGXI PROVINCE, CHINA	000428194000110	CHEN, W;PENG, JB;HONG, HY;SHAHABI, H;PRADHAN, B;LIU, JZ;ZHU, AX;PEI, XJ;DUAN, Z	SCIENCE OF THE TOTAL ENVIRONMENT 626: 1121-1135 JUN 1 2018	ENVIRONMENT/ECOLOGY	66
18	FIBER BRAGG GRATING SENSORS-BASED IN SITU MONITORING AND SAFETY ASSESSMENT OF LOESS TUNNEL	000385100600001	LAI, JX;QIU, JL;FAN, HB;ZHANG, Q;HU, ZN;WANG, JB;CHEN, JX	JOURNAL OF SENSORS : - 2016	ENGINEERING	66
19	FINDING HARMONY BETWEEN THE ENVIRONMENT AND HUMANITY: AN INTRODUCTION TO THE THEMATIC ISSUE OF THE SILK ROAD	000393021800008	LI, PY;QIAN, H;ZHOU, WF	ENVIRONMENTAL EARTH SCIENCES 76 (3): - FEB 2017	ENVIRONMENT/ECOLOGY	64
20	PROMOTING LITHIUM POLYSULFIDE/SULFIDE REDOX KINETICS BY THE CATALYZING OF ZINC SULFIDE FOR HIGH PERFORMANCE LITHIUM-SULFUR BATTERY	000440682100009	XU, J;ZHANG, WX;FAN, HB;CHENG, FL;SU, DW;WANG, GX	NANO ENERGY 51: 73-82 SEP 2018	MATERIALS SCIENCE	62
21	CHARACTERISTICS OF SEISMIC DISASTERS AND ASEISMIC MEASURES OF TUNNELS IN WENCHUAN EARTHQUAKE	000393021400036	LAI, JX;HE, SY;QIU, JL;CHEN, JX;WANG, LX;WANG, K;WANG, JB	ENVIRONMENTAL EARTH SCIENCES 76 (2): - JAN 2017	ENVIRONMENT/ECOLOGY	61
22	GEOCHEMISTRY, HYDRAULIC CONNECTIVITY AND QUALITY APPRAISAL OF MULTILAYERED	000431882400002	LI, PY;WU, JH;TIAN, R;HE, S;HE, XD;XUE, CY;ZHANG,	MINE WATER AND THE	ENVIRONMENT/ECOLOGY	61

	GROUNDWATER IN THE HONGDUNZI COAL MINE, NORTHWEST CHINA		K	ENVIRONMENT 37 (2): 222-237 SP. ISS. SI JUN 2018		
23	GIS-BASED LANDSLIDE SUSCEPTIBILITY MODELLING: A COMPARATIVE ASSESSMENT OF KERNEL LOGISTIC REGRESSION, NAIVE-BAYES TREE, AND ALTERNATING DECISION TREE MODELS	000418899200046	CHEN, W;XIE, XS;PENG, JB;WANG, JL;DUAN, Z;HONG, HY	GEOMATICS NATURAL HAZARDS & RISK 8 (2): 950-973 2017	GEOSCIENCES	61
24	SINGLE IMAGE SUPER-RESOLUTION VIA LOCALLY REGULARIZED ANCHORED NEIGHBORHOOD REGRESSION AND NONLOCAL MEANS	000391475200002	JIANG, JJ;MA, X;CHEN, C;LU, T;WANG, ZY;MA, JY	IEEE TRANSACTIONS ON MULTIMEDIA 19 (1): 15-26 JAN 2017	COMPUTER SCIENCE	59
25	HUMAN HEALTH RISK ASSESSMENT OF GROUNDWATER NITROGEN POLLUTION IN JINGHUI CANAL IRRIGATION AREA OF THE LOESS REGION, NORTHWEST CHINA	000429985900018	ZHANG, YT;WU, JH;XU, B	ENVIRONMENTAL EARTH SCIENCES 77 (7): - APR 2018	ENVIRONMENT/ECOLOGY	57
26	CONJUNCTIVE USE OF GROUNDWATER AND SURFACE WATER TO REDUCE SOIL SALINIZATION IN THE YINCHUAN PLAIN, NORTH-WEST CHINA	000430045800002	LI, PY;QIAN, H;WU, JH	INTERNATIONAL JOURNAL OF WATER RESOURCES DEVELOPMENT 34 (3): 337-353 SP. ISS. SI 2018	ENVIRONMENT/ECOLOGY	55
27	INVESTIGATING THE LONG-TERM SETTLEMENT OF A TUNNEL BUILT OVER IMPROVED LOESSIAL	000441684700001	QIU, JL;LIU, HQ;LAI, JX;LAI, HP;CHEN, JX;WANG, K	JOURNAL OF PERFORMANCE OF	ENGINEERING	53

	FOUNDATION SOIL USING JET GROUTING TECHNIQUE			CONSTRUCTED FACILITIES 32 (5): - OCT 2018		
28	RELATIVE VELOCITY DIFFERENCE MODEL FOR THE CAR-FOLLOWING THEORY	000424037200001	YU, SW;TANG, JJ;XIN, Q	NONLINEAR DYNAMICS 91 (3): 1415-1428 FEB 2018	ENGINEERING	51
29	ON VIBRATIONS OF NONLOCAL RODS: BOUNDARY CONDITIONS, EXACT SOLUTIONS AND THEIR ASYMPTOTICS	000408286000016	XU, XJ;ZHENG, ML;WANG, XC	INTERNATIONAL JOURNAL OF ENGINEERING SCIENCE 119: 217-231 OCT 2017	ENGINEERING	51
30	A NEW HIGH ALGEBRAIC ORDER EFFICIENT FINITE DIFFERENCE METHOD FOR THE SOLUTION OF THE SCHRODINGER EQUATION	000416115500029	DONG, M;SIMOS, TE	FILOMAT 31 (15): 4999-5012 2017	MATHEMATICS	50
31	THE CATASTROPHIC LANDSIDE IN MAOXIAN COUNTY, SICHUAN, SW CHINA, ON JUNE 24, 2017	000415325500026	QIU, JL;WANG, XL;HE, SY;LIU, HQ;LAI, JX;WANG, LX	NATURAL HAZARDS 89 (3): 1485-1493 DEC 2017	GEOSCIENCES	49
32	GIS-BASED LANDSLIDE SUSCEPTIBILITY EVALUATION USING A NOVEL HYBRID INTEGRATION APPROACH OF BIVARIATE STATISTICAL BASED RANDOM FOREST METHOD	000430031800015	CHEN, W;XIE, XS;PENG, JB;SHAHABI, H;HONG, HY;BUI, DT;DUAN, Z;LI, SJ;ZHU, AX	CATENA 164: 135-149 MAY 2018	AGRICULTURAL SCIENCES	48
33	A STATE-OF-THE-ART REVIEW OF SUSTAINABLE ENERGY BASED FREEZE PROOF TECHNOLOGY FOR COLD-REGION TUNNELS IN CHINA	000418574800110	LAI, JX;WANG, XL;QIU, JL;ZHANG, GZ;CHEN, JX;XIE, YL;LUO, YB	RENEWABLE & SUSTAINABLE ENERGY REVIEWS 82: 3554-3569 PART 3	ENGINEERING	47

				FEB 2018		
34	HYDROGEOCHEMICAL CHARACTERISTICS, GROUNDWATER QUALITY, AND HEALTH RISKS FROM HEXAVALENT CHROMIUM AND NITRATE IN GROUNDWATER OF HUANHE FORMATION IN WUQI COUNTY, NORTHWEST CHINA	000469217300005	HE, S;WU, JH	EXPOSURE AND HEALTH 11 (2): 125-137 SP. ISS. SI JUN 2019	ENVIRONMENT/ECOLOGY	46
35	COO AND G-C3N4 COMPLEMENT EACH OTHER FOR HIGHLY EFFICIENT OVERALL WATER SPLITTING UNDER VISIBLE LIGHT	000425476800043	GUO, F;SHI, WL;ZHU, C;LI, H;KANG, ZH	APPLIED CATALYSIS B-ENVIRONMENTAL 226: 412-420 JUN 15 2018	CHEMISTRY	45
36	EXTREME DEFORMATION CHARACTERISTICS AND COUNTERMEASURES FOR A TUNNEL IN DIFFICULT GROUNDS IN SOUTHERN SHAANXI, CHINA	000446842900001	LAI, JX;WANG, XL;QIU, JL;CHEN, JX;HU, ZN;WANG, H	ENVIRONMENTAL EARTH SCIENCES 77 (19): - OCT 2018	ENVIRONMENT/ECOLOGY	43
37	RESPONSE CHARACTERISTICS AND PREVENTIONS FOR SEISMIC SUBSIDENCE OF LOESS IN NORTHWEST CHINA	000433913500032	QIU, JL;WANG, XL;LAI, JX;ZHANG, Q;WANG, JB	NATURAL HAZARDS 92 (3): 1909-1935 JUL 2018	GEOSCIENCES	42
38	IMPACTS ANALYSIS OF CAR FOLLOWING MODELS CONSIDERING VARIABLE VEHICULAR GAP POLICIES	000430027500031	XIN, Q;YANG, N;FU, R;YU, SW;SHI, ZK	PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS 501: 338-355 JUL 1 2018	PHYSICS	42
39	LANDSLIDE SUSCEPTIBILITY MODELING BASED ON GIS AND NOVEL BAGGING-BASED KERNEL	000455145000208	CHEN, W;SHAHABI, H;ZHANG, S;KHOSRAVI,	APPLIED SCIENCES-BASEL 8	ENGINEERING	42

	LOGISTIC REGRESSION		K;SHIRZADI, A;CHAPI, K;PHAM, BT;ZHANG, TY;ZHANG, LY;CHAI, HC;MA, JQ;CHEN, YT;WANG, XJ;LI, RW;BIN AHMAD, B	(12): - DEC 2018		
40	SIMPLE METHOD TO PREDICT GROUND DISPLACEMENTS CAUSED BY INSTALLING HORIZONTAL JET-GROUTING COLUMNS	000424800500001	WANG, ZF;SHEN, JS;CHENG, WC	MATHEMATICAL PROBLEMS IN ENGINEERING : - 2018	ENGINEERING	40
41	SEASONAL HYDROCHEMICAL CHARACTERIZATION AND GROUNDWATER QUALITY DELINEATION BASED ON MATTER ELEMENT EXTENSION ANALYSIS IN A PAPER WASTEWATER IRRIGATION AREA, NORTHWEST CHINA	000449851900003	LI, PY;HE, S;HE, XD;TIAN, R	EXPOSURE AND HEALTH 10 (4): 241-258 DEC 2018	ENVIRONMENT/ECOLOGY	40
42	HYDROCHEMICAL CHARACTERISTICS AND QUALITY EVALUATION OF GROUNDWATER IN TERMS OF HEALTH RISKS IN LUOHE AQUIFER IN WUQI COUNTY OF THE CHINESE LOESS PLATEAU, NORTHWEST CHINA	000473500400003	HE, XD;WU, JH;HE, S	HUMAN AND ECOLOGICAL RISK ASSESSMENT 25 (1-2): 32-51 SP. ISS. SI FEB 17 2019	ENVIRONMENT/ECOLOGY	39
43	SOLUTE GEOCHEMISTRY AND MULTIVARIATE ANALYSIS OF WATER QUALITY IN THE GUOHUA PHOSPHORITE MINE, GUIZHOU PROVINCE, CHINA	000469217300002	LI, PY;TIAN, R;LIU, R	EXPOSURE AND HEALTH 11 (2): 81-94 SP. ISS. SI JUN 2019	ENVIRONMENT/ECOLOGY	39

44	INVESTIGATION INTO GEOHAZARDS DURING URBANIZATION PROCESS OF XIAN, CHINA	000433913500033	WANG, ZF;CHENG, WC;WANG, YQ	NATURAL HAZARDS 92 (3): 1937-1953 JUL 2018	GEOSCIENCES	39
45	DISTRIBUTION AND CHARACTERISTICS OF LANDSLIDE IN LOESS PLATEAU: A CASE STUDY IN SHAANXI PROVINCE	000430028000010	ZHUANG, JQ;PENG, JB;WANG, GH;JAVED, I;WANG, Y;LI, W	ENGINEERING GEOLOGY 236: 89-96 SP. ISS. SI MAR 26 2018	GEOSCIENCES	37
46	NOX EMISSION OF BIODIESEL COMPARED TO DIESEL: HIGHER OR LOWER?	000434491500058	CHEN, H;XIE, B;MA, JQ;CHEN, YS	APPLIED THERMAL ENGINEERING 137: 584-593 JUN 5 2018	ENGINEERING	36
47	STUDY ON HIGHLY ENHANCED PHOTOCATALYTIC TETRACYCLINE DEGRADATION OF TYPE II AGI/CUBI2O4 AND Z-SCHEME AGBR/CUBI2O4 HETEROJUNCTION PHOTOCATALYSTS	000428101400013	GUO, F;SHI, WL;WANG, HB;HAN, MM;GUAN, WS;HUANG, H;LIU, Y;KANG, ZH	JOURNAL OF HAZARDOUS MATERIALS 349: 111-118 MAY 5 2018	ENGINEERING	35
48	GLOBAL ASYMPTOTIC STABILITY OF CNNS WITH IMPULSES AND MULTI-PROPORTIONAL DELAYS	000370234600010	SONG, XL;ZHAO, P;XING, ZW;PENG, JG	MATHEMATICAL METHODS IN THE APPLIED SCIENCES 39 (4): 722-733 MAR 2016	MATHEMATICS	34
49	A FLUIDIZED LANDSLIDE OCCURRED IN THE LOESS PLATEAU: A STUDY ON LOESS LANDSLIDE IN SOUTH JINGYANG TABLELAND	000430028000014	LENG, YQ;PENG, JB;WANG, QY;MENG, ZJ;HUANG, WL	ENGINEERING GEOLOGY 236: 129-136 SP. ISS. SI MAR 26 2018	GEOSCIENCES	32
50	SPATIAL GROUNDWATER QUALITY AND POTENTIAL HEALTH RISKS DUE TO NITRATE	000473500400002	LI, PY;HE, XD;GUO, WY	HUMAN AND ECOLOGICAL RISK	ENVIRONMENT/ECOLOGY	29

	INGESTION THROUGH DRINKING WATER: A CASE STUDY IN YANAN CITY ON THE LOESS PLATEAU OF NORTHWEST CHINA			ASSESSMENT 25 (1-2): 11-31 SP. ISS. SI FEB 17 2019		
51	STRUCTURAL RESPONSE OF THE METRO TUNNEL UNDER LOCAL DYNAMIC WATER ENVIRONMENT IN LOESS STRATA	000459674700001	QIU, JL;QIN, YW;LAI, JX;WANG, K;NIU, FY;WANG, H;ZHANG, GL	GEOFLUIDS : - 2019	GEOSCIENCES	27
52	EVALUATION OF GROUNDWATER CONTAMINATION FOR FLUORIDE AND NITRATE IN SEMI-ARID REGION OF NIRMAL PROVINCE, SOUTH INDIA: A SPECIAL EMPHASIS ON HUMAN HEALTH RISK ASSESSMENT (HHRA)	000474494500003	ADIMALLA, N;LI, PY;QIAN, H	HUMAN AND ECOLOGICAL RISK ASSESSMENT 25 (5): 1107-1124 JUL 4 2019	ENVIRONMENT/ECOLOGY	26
53	OCCURRENCE, HEALTH RISKS, AND GEOCHEMICAL MECHANISMS OF FLUORIDE AND NITRATE IN GROUNDWATER OF THE ROCK-DOMINANT SEMI-ARID REGION, TELANGANA STATE, INDIA	000473500400005	ADIMALLA, N;LI, PY	HUMAN AND ECOLOGICAL RISK ASSESSMENT 25 (1-2): 81-103 SP. ISS. SI FEB 17 2019	ENVIRONMENT/ECOLOGY	25
54	PONTRYAGINS MINIMUM PRINCIPLE BASED MODEL PREDICTIVE CONTROL OF ENERGY MANAGEMENT FOR A PLUG-IN HYBRID ELECTRIC BUS	000458712500069	XIE, SB;HU, XS;XIN, ZK;BRIGHTON, J	APPLIED ENERGY 236: 893-905 FEB 15 2019	ENGINEERING	21
55	GROUNDWATER SPRING POTENTIAL MAPPING USING POPULATION-BASED EVOLUTIONARY ALGORITHMS AND DATA MINING METHODS	000472024300004	CHEN, W;TSANGARATOS, P;ILIA, I;DUAN, Z;CHEN, XJ	SCIENCE OF THE TOTAL ENVIRONMENT 684: 31-49 SEP 20 2019	ENVIRONMENT/ECOLOGY	20
56	GROUNDWATER QUALITY FOR DRINKING AND	000469217300004	ADIMALLA, N	EXPOSURE AND	ENVIRONMENT/EC	18

	IRRIGATION PURPOSES AND POTENTIAL HEALTH RISKS ASSESSMENT: A CASE STUDY FROM SEMI-ARID REGION OF SOUTH INDIA			HEALTH 11 (2): 109-123 SP. ISS. SI JUN 2019	OLOGY	
57	EFFECTS OF THE PREVISION RELATIVE VELOCITY ON TRAFFIC DYNAMICS IN THE ACC STRATEGY	000452941100019	WU, X;ZHAO, XM;SONG, HS;XIN, Q;YU, SW	PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS 515: 192-198 FEB 1 2019	PHYSICS	18
58	INVESTIGATION ON COMBUSTION AND EMISSION CHARACTERISTICS OF A COMMON RAIL DIESEL ENGINE FUELED WITH DIESEL/N-PENTANOL/METHANOL BLENDS	000456351800026	CHEN, H;SU, X;HE, JJ;XIE, B	ENERGY 167: 297-311 JAN 15 2019	ENGINEERING	18
59	PARTICLE SIZE DISTRIBUTION EFFECTS ON DEFORMATION PROPERTIES OF GRADED AGGREGATE BASE UNDER CYCLIC LOADING	000466179000001	LIN, H;WANG, H;FAN, X;CAO, P;ZHOU, KF	EUROPEAN JOURNAL OF ENVIRONMENTAL AND CIVIL ENGINEERING 23 (3): 269-286 MAR 4 2019	ENGINEERING	18
60	A NOVEL POROUS C4N4 MONOLAYER AS A POTENTIAL ANCHORING MATERIAL FOR LITHIUM-SULFUR BATTERY DESIGN	000459331600069	LI, TT;HE, C;ZHANG, WX	JOURNAL OF MATERIALS CHEMISTRY A 7 (8): 4134-4144 FEB 28 2019	MATERIALS SCIENCE	18

61	IN-SITU INCORPORATION OF COPPER(II) PORPHYRIN FUNCTIONALIZED ZIRCONIUM MOF AND TIO2 FOR EFFICIENT PHOTOCATALYTIC CO2 REDUCTION	000483302000011	WANG, L;JIN, PX;DUAN, SH;SHE, HD;HUANG, JW;WANG, QZ	SCIENCE BULLETIN 64 (13): 926-933 JUL 15 2019	CHEMISTRY	18
62	A REVIEW ON LAND SUBSIDENCE CAUSED BY GROUNDWATER WITHDRAWAL IN XIAN, CHINA	000468075000045	WANG, YQ;WANG, ZF;CHENG, WC	BULLETIN OF ENGINEERING GEOLOGY AND THE ENVIRONMENT 78 (4): 2851-2863 JUN 2019	GEOSCIENCES	17
63	INTEGRATED MULTI-OBJECTIVE STOCHASTIC FUZZY PROGRAMMING AND AHP METHOD FOR AGRICULTURAL WATER AND LAND OPTIMIZATION ALLOCATION UNDER MULTIPLE UNCERTAINTIES	000456762600002	REN, CF;LI, ZH;ZHANG, HB	JOURNAL OF CLEANER PRODUCTION 210: 12-24 FEB 10 2019	ENGINEERING	17
64	COMPREHENSIVE UNDERSTANDING OF GROUNDWATER QUALITY FOR DOMESTIC AND AGRICULTURAL PURPOSES IN TERMS OF HEALTH RISKS IN A COAL MINE AREA OF THE ORDOS BASIN, NORTH OF THE CHINESE LOESS PLATEAU	000476489300015	WU, JH;ZHOU, H;HE, S;ZHANG, YX	ENVIRONMENTAL EARTH SCIENCES 78 (15): - AUG 2019	ENVIRONMENT/ECOLOGY	17
65	SETTLEMENT CHARACTERISTICS OF JACKED BOX TUNNELING UNDERNEATH A HIGHWAY EMBANKMENT	000482851400010	WANG, ZC;HU, Z;LAI, JX;WANG, H;WANG, K;ZAN, WB	JOURNAL OF PERFORMANCE OF CONSTRUCTED FACILITIES 33 (2): - APR 2019	ENGINEERING	17

66	ENHANCING DISCHARGE OF SPOIL TO MITIGATE DISTURBANCE INDUCED BY HORIZONTAL JET GROUTING IN CLAYEY SOIL: THEORETICAL MODEL AND APPLICATION	000469160500020	WANG, ZF;SHEN, SL;MODONI, G	COMPUTERS AND GEOTECHNICS 111: 222-228 JUL 2019	COMPUTER SCIENCE	17
67	STATISTICAL ANALYSIS OF FIRE ACCIDENTS IN CHINESE HIGHWAY TUNNELS 2000-2016	000454963800039	REN, R;ZHOU, H;HU, Z;HE, SY;WANG, XL	TUNNELLING AND UNDERGROUND SPACE TECHNOLOGY 83: 452-460 JAN 2019	ENGINEERING	16
68	NUMERICAL ANALYSIS OF THE COMPRESSIVE AND SHEAR FAILURE BEHAVIOR OF ROCK CONTAINING MULTI-INTERMITTENT JOINTS	000455001900003	FAN, X;LIN, H;LAI, HP;CAO, RH;LIU, J	COMPTES RENDUS MECANIQUE 347 (1): 33-48 JAN 2019	ENGINEERING	16
69	EFFECTS OF MATERIAL CHARACTERISTICS ON ASPHALT AND FILLER INTERACTION ABILITY	000468989700007	ZHANG, JP;LI, XQ;LIU, GQ;PEI, JZ	INTERNATIONAL JOURNAL OF PAVEMENT ENGINEERING 20 (8): 928-937 AUG 3 2019	ENGINEERING	16
70	DEFINING A DIGITAL TWIN-BASED CYBER-PHYSICAL PRODUCTION SYSTEM FOR AUTONOMOUS MANUFACTURING IN SMART SHOP FLOORS	000487303600005	DING, K;CHAN, FTS;ZHANG, XD;ZHOU, GH;ZHANG, FQ	INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH 57 (20): 6315-6334 OCT 18 2019	ENGINEERING	16
71	A NEW SOIL-WATER CHARACTERISTIC CURVE	000466352700001	ZHANG, YW;SONG,	GEOFLUIDS : - 2019	GEOSCIENCES	15

	MODEL FOR UNSATURATED LOESS BASED ON WETTING-INDUCED PORE DEFORMATION		ZP;WENG, XL;XIE, YL			
72	PREDICTIVE VEHICLE-FOLLOWING POWER MANAGEMENT FOR PLUG-IN HYBRID ELECTRIC VEHICLES	000455694300058	XIE, SB;HU, XS;LIU, T;QI, SW;LANG, K;LI, HL	ENERGY 166: 701-714 JAN 1 2019	ENGINEERING	15
73	SUSTAINABLE LIVING WITH RISKS: MEETING THE CHALLENGES	000469548000001	LI, PY;WU, JH	HUMAN AND ECOLOGICAL RISK ASSESSMENT 25 (1-2): 1-10 SP. ISS. SI FEB 17 2019	ENVIRONMENT/ECOLOGY	15
74	DRINKING WATER QUALITY AND PUBLIC HEALTH	000469217300001	LI, PY;WU, JH	EXPOSURE AND HEALTH 11 (2): 73-79 SP. ISS. SI JUN 2019	ENVIRONMENT/ECOLOGY	15
75	STATISTICAL AND MULTIVARIATE STATISTICAL TECHNIQUES TO TRACE THE SOURCES AND AFFECTING FACTORS OF GROUNDWATER POLLUTION IN A RAPIDLY GROWING CITY ON THE CHINESE LOESS PLATEAU	000470507400001	WU, JH;LI, PY;WANG, D;REN, XF;WEI, MJ	HUMAN AND ECOLOGICAL RISK ASSESSMENT : - MAY 13 2019	ENVIRONMENT/ECOLOGY	15
76	THE RELATION BETWEEN WORKING CONDITIONS, ABERRANT DRIVING BEHAVIOUR AND CRASH PROPENSITY AMONG TAXI DRIVERS IN CHINA	000466830500004	WANG, YG;LI, LC;PRATO, CG	ACCIDENT ANALYSIS AND PREVENTION 126: 17-24 SP. ISS. SI MAY 2019	SOCIAL SCIENCES, GENERAL	14
77	RELATIONSHIPS OF GROUNDWATER QUALITY	000473500400019	HE, S;WU, JH	HUMAN AND	ENVIRONMENT/EC	14

	AND ASSOCIATED HEALTH RISKS WITH LAND USE/LAND COVER PATTERNS: A CASE STUDY IN A LOESS AREA, NORTHWEST CHINA			ECOLOGICAL RISK ASSESSMENT 25 (1-2): 354-373 SP. ISS. SI FEB 17 2019	OLOGY	
78	MODELING OF LOESS SOAKING INDUCED IMPACTS ON A METRO TUNNEL USING A WATER SOAKING SYSTEM IN CENTRIFUGE	000468457700001	ZHANG, YW;WENG, XL;SONG, ZP;SUN, YF	GEOFLUIDS : - 2019	GEOSCIENCES	14
79	DYNAMIC FAILURE MODE AND DYNAMIC RESPONSE OF HIGH SLOPE USING SHAKING TABLE TEST	000464817300001	ZHOU, ZJ;REN, CN;XU, GJ;ZHAN, HC;LIU, T	SHOCK AND VIBRATION 2019: - 2019	ENGINEERING	13
80	EFFECTS OF GASOLINE AND POLYOXYMETHYLENE DIMETHYL ETHERS BLENDING IN DIESEL ON THE COMBUSTION AND EMISSION OF A COMMON RAIL DIESEL ENGINE	000461534400077	CHEN, H;SU, X;LI, JH;ZHONG, XL	ENERGY 171: 981-999 MAR 15 2019	ENGINEERING	13
81	PUBLIC ACCEPTANCE OF FULLY AUTOMATED DRIVING: EFFECTS OF SOCIAL TRUST AND RISK/BENEFIT PERCEPTIONS	000458171100005	LIU, P;YANG, R;XU, ZG	RISK ANALYSIS 39 (2): 326-341 SP. ISS. SI FEB 2019	SOCIAL SCIENCES, GENERAL	13
82	MICROWAVE DEICING FOR ASPHALT MIXTURE CONTAINING STEEL WOOL FIBERS	000449449100092	GAO, J;GUO, HY;WANG, XF;WANG, P;WEI, YF;WANG, ZJ;HUANG, Y;YANG, B	JOURNAL OF CLEANER PRODUCTION 206: 1110-1122 JAN 1 2019	ENGINEERING	13
83	TRAFFIC FLOW PREDICTION DURING THE HOLIDAYS BASED ON DFT AND SVR	000469291700001	LUO, XL;LI, DY;ZHANG, SR	JOURNAL OF SENSORS : - 2019	ENGINEERING	13
84	GROUNDWATER QUALITY APPRAISAL BY IMPROVED SET PAIR ANALYSIS WITH GAME	000473500400008	TIAN, R;WU, JH	HUMAN AND ECOLOGICAL RISK	ENVIRONMENT/ECOLOGY	12

	THEORY WEIGHTAGE AND HEALTH RISK ESTIMATION OF CONTAMINANTS FOR XUECHA DRINKING WATER SOURCE IN A LOESS AREA IN NORTHWEST CHINA			ASSESSMENT 25 (1-2): 132-157 SP. ISS. SI FEB 17 2019		
85	MULTI-CRITERIA USER EQUILIBRIUM MODEL CONSIDERING TRAVEL TIME, TRAVEL TIME RELIABILITY AND DISTANCE	000459368100002	SUN, C;CHENG, L;ZHU, SL;HAN, F;CHU, ZM	TRANSPORTATION RESEARCH PART D-TRANSPORT AND ENVIRONMENT 66: 3-12 SP. ISS. SI JAN 2019	SOCIAL SCIENCES, GENERAL	12
86	REVEGETATION HAS INCREASED ECOSYSTEM WATER-USE EFFICIENCY DURING 2000-2014 IN THE CHINESE LOESS PLATEAU: EVIDENCE FROM SATELLITE DATA	000470964500050	ZHENG, H;LIN, H;ZHOU, WJ;BAO, H;ZHU, XJ;JIN, Z;SONG, Y;WANG, YQ;LIU, WZ;TANG, YK	ECOLOGICAL INDICATORS 102: 507-518 JUL 2019	ENVIRONMENT/ECOLOGY	11
87	HOW SAFE IS SAFE ENOUGH FOR SELF-DRIVING VEHICLES?	000458171100004	LIU, P;YANG, R;XU, ZG	RISK ANALYSIS 39 (2): 315-325 SP. ISS. SI FEB 2019	SOCIAL SCIENCES, GENERAL	10
88	SPREADING SPEEDS AND TRAVELING WAVES FOR SPACE-TIME PERIODIC NONLOCAL DISPERSAL COOPERATIVE SYSTEMS	000446348800019	BAO, XX;SHEN, WX;SHEN, ZW	COMMUNICATIONS ON PURE AND APPLIED ANALYSIS 18 (1): 361-396 JAN 2019	MATHEMATICS	10
89	URBAN TRANSPORT CARBON DIOXIDE (CO2) EMISSIONS BY COMMUTERS IN RAPIDLY DEVELOPING CITIES: THE COMPARATIVE STUDY	000466455900007	YANG, L;WANG, YQ;HAN, SS;LIU, YY	TRANSPORTATION RESEARCH PART D-TRANSPORT AND	SOCIAL SCIENCES, GENERAL	8

	OF BEIJING AND XIAN IN CHINA			ENVIRONMENT 68: 65-83 SP. ISS. SI MAR 2019		
90	A NEW TRANSIT NETWORK DESIGN STUDY IN CONSIDERATION OF TRANSFER TIME COMPOSITION	000459368100009	FENG, XS;ZHU, XJ;QIAN, XP;JIE, YP;MA, F;NIU, XJ	TRANSPORTATION RESEARCH PART D-TRANSPORT AND ENVIRONMENT 66: 85-94 SP. ISS. SI JAN 2019	SOCIAL SCIENCES, GENERAL	7
91	HEAVY METALS CONTAMINATION IN URBAN SURFACE SOILS OF MEDAK PROVINCE, INDIA, AND ITS RISK ASSESSMENT AND SPATIAL DISTRIBUTION	000512034200005	ADIMALLA, N	ENVIRONMENTAL GEOCHEMISTRY AND HEALTH 42 (1): 59-75 SP. ISS. SI JAN 2020	ENVIRONMENT/ECOLOGY	7
92	A COMPARATIVE STUDY OF PROTECTIVE SCHEMES FOR SHIELD TUNNELING ADJACENT TO PILE GROUPS	000510884200002	LI, PL;LU, YQ;LAI, JX;LIU, HQ;WANG, K	ADVANCES IN CIVIL ENGINEERING 2020: - JAN 21 2020	ENGINEERING	5
93	APPLICATION OF NUMERICAL SIMULATION METHOD TO IMPROVE SHEAR STRENGTH AND RUTTING RESISTANCE OF ASPHALT MIXTURE	000495795100011	JI, XP;JIANG, YJ;ZOU, HW;CAO, F;HOU, YQ	INTERNATIONAL JOURNAL OF PAVEMENT ENGINEERING 21 (1): 112-121 JAN 2 2020	ENGINEERING	5
94	APPLICATION OF THE TWIN-TUBE	000505689600004	WANG, YQ;XU, SS;REN,	INTERNATIONAL	ENGINEERING	4

	COMPLEMENTARY VENTILATION SYSTEM IN LARGE-SLOPPING ROAD TUNNELS IN CHINA		R;ZHANG, SZ;REN, ZD	JOURNAL OF VENTILATION 19 (1): 63-82 2020		
95	PROPAGATION PHENOMENA FOR PARTIALLY DEGENERATE NONLOCAL DISPERSAL MODELS IN TIME AND SPACE PERIODIC HABITATS	000488994500012	BAO, XX;LI, WT	NONLINEAR ANALYSIS-REAL WORLD APPLICATIONS 51: - FEB 2020	MATHEMATICS	3
96	HIDDEN MARKOV MODEL-BASED AUTONOMOUS MANUFACTURING TASK ORCHESTRATION IN SMART SHOP FLOORS	000496834800034	DING, K;LEI, JY;FELIX, TSC;HUI, JZ;ZHANG, FQ;WANG, Y	ROBOTICS AND COMPUTER-INTEGRATED MANUFACTURING 61: - FEB 2020	ENGINEERING	3

表 2　长安大学作为合作单位发表的 ESI 高被引论文（按 ESI 被引次数排序）

序号	论文名称	WOS 号	作者	来源期刊	ESI 学科	ESI 被引次数
1	MICROWAVE-ASSISTED IN SITU SYNTHESIS OF REDUCED GRAPHENE OXIDE-BIVO4 COMPOSITE PHOTOCATALYSTS AND THEIR ENHANCED PHOTOCATALYTIC PERFORMANCE FOR THE DEGRADATION OF CIPROFLOXACIN	000317878400014	YAN, Y;SUN, SF（Sun, Shaofang，我校）;SONG, Y;YAN, X;GUAN, WS**（Guan, Weisheng，我校）**;LIU, XL;SHI, WD	JOURNAL OF HAZARDOUS MATERIALS 250: 106-114 APR 15 2013	ENGINEERING	129
2	MICROWAVE SYNTHESIS OF A NOVEL MAGNETIC IMPRINTED TIO2 PHOTOCATALYST WITH EXCELLENT TRANSPARENCY FOR SELECTIVE PHOTODEGRADATION OF ENROFLOXACIN HYDROCHLORIDE RESIDUES SOLUTION	000337554100003	LU, ZY;**CHEN, F（Chen, Fei，我校）**;HE, M;SONG, MS;MA, ZF;SHI, WD;YAN, YS;LAN, JZ;LI, F;XIAO, P	CHEMICAL ENGINEERING JOURNAL 249: 15-26 AUG 1 2014	ENGINEERING	118

3	URANIUM AND MOLYBDENUM ISOTOPE EVIDENCE FOR AN EPISODE OF WIDESPREAD OCEAN OXYGENATION DURING THE LATE EDIACARAN PERIOD	000352192100010	KENDALL, B;KOMIYA, T;LYONS, TW;BATES, SM;GORDON, GW;ROMANIELLO, SJ;JIANG, GQ;CREASER, RA;XIAO, SH;MCFADDEN, K;SAWAKI, Y;TAHATA, M;SHU, DG;HAN, J;**LI, Y（Li, Yong，我校）**;CHU, XL;ANBAR, AD	GEOCHIMICA ET COSMOCHIMICA ACTA 156: 173-193 MAY 1 2015	GEOSCIENCES	104
4	IN SITU SYNTHESIS OF Z-SCHEME AG3PO4/CUBI2O4 PHOTOCATALYSTS AND ENHANCED PHOTOCATALYTIC PERFORMANCE FOR THE DEGRADATION OF TETRACYCLINE UNDER VISIBLE LIGHT IRRADIATION	000400584900073	SHI, WL;**GUO, F（Guo, Feng，我校）**;YUAN, SL	APPLIED CATALYSIS B-ENVIRONMENTAL 209: 720-728 JUL 15 2017	CHEMISTRY	84
5	MOF-DERIVED POROUS N-CO3O4@N-C NANODODECAHEDRA WRAPPED WITH REDUCED GRAPHENE OXIDE AS A HIGH CAPACITY CATHODE FOR LITHIUM-SULFUR BATTERIES	000424466300041	XU, J;**ZHANG, WX（Zhang, Wenxue，我校）**;CHEN, Y;FAN, HB;SU, DW;WANG, GX	JOURNAL OF MATERIALS CHEMISTRY A 6 (6): 2797-2807 FEB 14 2018	MATERIALS SCIENCE	78
6	LANDSLIDE SUSCEPTIBILITY MODELLING USING GIS-BASED MACHINE LEARNING TECHNIQUES FOR CHONGREN COUNTY, JIANGXI PROVINCE, CHINA	000428194000110	CHEN, W;**PENG, JB（Peng, Jianbing，我校）**;HONG, HY;SHAHABI, H;PRADHAN, B;LIU, JZ;ZHU, AX;PEI, XJ;DUAN, Z	SCIENCE OF THE TOTAL ENVIRONMENT 626: 1121-1135 JUN 1 2018	ENVIRONMENT/ECOLOGY	66

7	PROMOTING LITHIUM POLYSULFIDE/SULFIDE REDOX KINETICS BY THE CATALYZING OF ZINC SULFIDE FOR HIGH PERFORMANCE LITHIUM-SULFUR BATTERY	000440682100009	XU, J;**ZHANG, WX（Zhang, Wenxue，我校）**;FAN, HB;CHENG, FL;SU, DW;WANG, GX	NANO ENERGY 51: 73-82 SEP 2018	MATERIALS SCIENCE	62
8	GIS-BASED LANDSLIDE SUSCEPTIBILITY MODELLING: A COMPARATIVE ASSESSMENT OF KERNEL LOGISTIC REGRESSION, NAIVE-BAYES TREE, AND ALTERNATING DECISION TREE MODELS	000418899200046	CHEN, W;XIE, XS;**PENG, JB（Peng, Jianbing，我校）**;WANG, JL;DUAN, Z;HONG, HY	GEOMATICS NATURAL HAZARDS & RISK 8 (2): 950-973 2017	GEOSCIENCES	61
9	SINGLE IMAGE SUPER-RESOLUTION VIA LOCALLY REGULARIZED ANCHORED NEIGHBORHOOD REGRESSION AND NONLOCAL MEANS	000391475200002	JIANG, JJ;**MA, X（Ma, Xiang，我校）**;CHEN, C;LU, T;WANG, ZY;MA, JY	IEEE TRANSACTIONS ON MULTIMEDIA 19 (1): 15-26 JAN 2017	COMPUTER SCIENCE	59
10	GIS-BASED LANDSLIDE SUSCEPTIBILITY EVALUATION USING A NOVEL HYBRID INTEGRATION APPROACH OF BIVARIATE STATISTICAL BASED RANDOM FOREST METHOD	000430031800015	CHEN, W;XIE, XS;**PENG, JB（Peng, Jianbing，我校）**;SHAHABI, H;HONG, HY;BUI, DT;DUAN, Z;LI, SJ;ZHU, AX	CATENA 164: 135-149 MAY 2018	AGRICULTURAL SCIENCES	48
11	LANDSLIDE SUSCEPTIBILITY MODELING BASED ON GIS AND NOVEL BAGGING-BASED KERNEL LOGISTIC REGRESSION	000455145000208	CHEN, W;SHAHABI, H;ZHANG, S;KHOSRAVI, K;SHIRZADI, A;CHAPI, K;PHAM, BT;**ZHANG, TY（Zhang, Tingyu，我校）**;ZHANG, LY;CHAI, HC;MA, JQ;CHEN,	APPLIED SCIENCES-BASEL 8 (12): - DEC 2018	ENGINEERING	42

			YT;WANG, XJ;LI, RW;BIN AHMAD, B			
12	GROUNDWATER SPRING POTENTIAL MAPPING USING POPULATION-BASED EVOLUTIONARY ALGORITHMS AND DATA MINING METHODS	000472024300004	CHEN, W;TSANGARATOS, P;ILIA, I;DUAN, Z;**CHEN, XJ（Chen, Xinjian，我校）**	SCIENCE OF THE TOTAL ENVIRONMENT 684: 31-49 SEP 20 2019	ENVIRONMENT/ECOLOGY	20
13	PARTICLE SIZE DISTRIBUTION EFFECTS ON DEFORMATION PROPERTIES OF GRADED AGGREGATE BASE UNDER CYCLIC LOADING	000466179000001	LIN, H;WANG, H;**FAN, X（Fan, Xiang，我校）**;CAO, P;ZHOU, KF	EUROPEAN JOURNAL OF ENVIRONMENTAL AND CIVIL ENGINEERING 23 (3): 269-286 MAR 4 2019	ENGINEERING	18
14	A NOVEL POROUS C4N4 MONOLAYER AS A POTENTIAL ANCHORING MATERIAL FOR LITHIUM-SULFUR BATTERY DESIGN	000459331600069	LI, TT;HE, C;**ZHANG, WX（Zhang, Wenxue，我校）**	JOURNAL OF MATERIALS CHEMISTRY A 7 (8): 4134-4144 FEB 28 2019	MATERIALS SCIENCE	18
15	IN-SITU INCORPORATION OF COPPER(II) PORPHYRIN FUNCTIONALIZED ZIRCONIUM MOF AND TIO2 FOR EFFICIENT PHOTOCATALYTIC CO2 REDUCTION	000483302000011	WANG, L;JIN, PX;DUAN, SH;SHE, HD;HUANG, JW;**WANG, QZ（Wang, Qizhao，我校）**	SCIENCE BULLETIN 64 (13): 926-933 JUL 15 2019	CHEMISTRY	18
16	A NEW SOIL-WATER CHARACTERISTIC CURVE MODEL FOR UNSATURATED LOESS BASED ON WETTING-INDUCED PORE DEFORMATION	000466352700001	ZHANG, YW;SONG, ZP;**WENG, XL（Weng, Xiaolin，我校）;XIE, YL（ Xie,**	GEOFLUIDS : - 2019	GEOSCIENCES	15

			Yongli，我校）			
17	MODELING OF LOESS SOAKING INDUCED IMPACTS ON A METRO TUNNEL USING A WATER SOAKING SYSTEM IN CENTRIFUGE	000468457700001	ZHANG, YW;**WENG, XL（Weng, Xiaolin，我校）**;SONG, ZP;**SUN, YF（;Sun, Yufeng，我校）**	GEOFLUIDS : - 2019	GEOSCIENCES	14
18	PUBLIC ACCEPTANCE OF FULLY AUTOMATED DRIVING: EFFECTS OF SOCIAL TRUST AND RISK/BENEFIT PERCEPTIONS	000458171100005	LIU, P;YANG, R;**XU, ZG（Xu, Zhigang，我校）**	RISK ANALYSIS 39 (2): 326-341 SP. ISS. SI FEB 2019	SOCIAL SCIENCES, GENERAL	13
19	MULTI-CRITERIA USER EQUILIBRIUM MODEL CONSIDERING TRAVEL TIME, TRAVEL TIME RELIABILITY AND DISTANCE	000459368100002	SUN, C;CHENG, L;ZHU, SL;**HAN, F（Han, Fei，我校）**;CHU, ZM	TRANSPORTATION RESEARCH PART D-TRANSPORT AND ENVIRONMENT 66: 3-12 SP. ISS. SI JAN 2019	SOCIAL SCIENCES, GENERAL	12
20	HOW SAFE IS SAFE ENOUGH FOR SELF-DRIVING VEHICLES?	000458171100004	LIU, P;YANG, R;**XU, ZG（Xu, Zhigang，我校）**	RISK ANALYSIS 39 (2): 315-325 SP. ISS. SI FEB 2019	SOCIAL SCIENCES, GENERAL	10
21	A NEW TRANSIT NETWORK DESIGN STUDY IN CONSIDERATION OF TRANSFER TIME COMPOSITION	000459368100009	FENG, XS;ZHU, XJ;QIAN, XP;JIE, YP;**MA, F（Ma, Fei，我校）**;NIU, XJ	TRANSPORTATION RESEARCH PART D-TRANSPORT AND ENVIRONMENT 66: 85-94 SP. ISS. SI JAN 2019	SOCIAL SCIENCES, GENERAL	7

表 3　长安大学 ESI 热点论文（按 ESI 被引频次排序）

序号	论文名称	WOS 号	作者	来源期刊	ESI 学科	ESI 被引次数
1	OCCURRENCE AND HEALTH IMPLICATION OF FLUORIDE IN GROUNDWATER OF LOESS AQUIFER IN THE CHINESE LOESS PLATEAU: A CASE STUDY OF TONGCHUAN, NORTHWEST CHINA	000469217300003	LI, PY;HE, XD;LI, Y;XIANG, G	EXPOSURE AND HEALTH 11 (2): 95-107 SP. ISS. SI JUN 2019	ENVIRONMENT/ECOLOGY	71
2	HUMAN HEALTH RISK ASSESSMENT OF GROUNDWATER NITROGEN POLLUTION IN JINGHUI CANAL IRRIGATION AREA OF THE LOESS REGION, NORTHWEST CHINA	000429985900018	ZHANG, YT;WU, JH;XU, B	ENVIRONMENTAL EARTH SCIENCES 77 (7): - APR 2018	ENVIRONMENT/ECOLOGY	57
3	HYDROGEOCHEMICAL CHARACTERISTICS, GROUNDWATER QUALITY, AND HEALTH RISKS FROM HEXAVALENT CHROMIUM AND NITRATE IN GROUNDWATER OF HUANHE FORMATION IN WUQI COUNTY, NORTHWEST CHINA	000469217300005	HE, S;WU, JH	EXPOSURE AND HEALTH 11 (2): 125-137 SP. ISS. SI JUN 2019	ENVIRONMENT/ECOLOGY	46
4	HYDROCHEMICAL	000473500400003	HE, XD;WU, JH;HE,	HUMAN AND	ENVIRONMENT/ECOLOGY	39

	CHARACTERISTICS AND QUALITY EVALUATION OF GROUNDWATER IN TERMS OF HEALTH RISKS IN LUOHE AQUIFER IN WUQI COUNTY OF THE CHINESE LOESS PLATEAU, NORTHWEST CHINA		S	ECOLOGICAL RISK ASSESSMENT 25 (1-2): 32-51 SP. ISS. SI FEB 17 2019		
5	SPATIAL GROUNDWATER QUALITY AND POTENTIAL HEALTH RISKS DUE TO NITRATE INGESTION THROUGH DRINKING WATER: A CASE STUDY IN YANAN CITY ON THE LOESS PLATEAU OF NORTHWEST CHINA	000473500400002	LI, PY;HE, XD;GUO, WY	HUMAN AND ECOLOGICAL RISK ASSESSMENT 25 (1-2): 11-31 SP. ISS. SI FEB 17 2019	ENVIRONMENT/ECOLOGY	29
6	GROUNDWATER SPRING POTENTIAL MAPPING USING POPULATION-BASED EVOLUTIONARY ALGORITHMS AND DATA MINING METHODS	000472024300004	CHEN, W;TSANGARATOS, P;ILIA, I;DUAN, Z;CHEN, XJ	SCIENCE OF THE TOTAL ENVIRONMENT 684: 31-49 SEP 20 2019	ENVIRONMENT/ECOLOGY	20
7	COMPREHENSIVE UNDERSTANDING OF GROUNDWATER QUALITY FOR DOMESTIC AND AGRICULTURAL PURPOSES IN TERMS OF HEALTH RISKS IN A COAL MINE AREA OF	000476489300015	WU, JH;ZHOU, H;HE, S;ZHANG, YX	ENVIRONMENTAL EARTH SCIENCES 78 (15): - AUG 2019	ENVIRONMENT/ECOLOGY	17

	THE ORDOS BASIN, NORTH OF THE CHINESE LOESS PLATEAU					

我校发表的 96 篇 ESI 高被引论文的院系分布为：水利与环境学院 35 篇，比上期增加 10 篇，位居首位；公路学院 28 篇，比上期减少 28 篇；信息工程学院 8 篇，与上期持平；汽车学院 8 篇，比上期减少 1 篇；地质工程与测绘学院 6 篇，与上期持平；材料学院 3 篇，比上期增加 1 篇；理学院 3 篇，比上期增加 1 篇；地球科学与资源学院 2 篇，与上期持平；工程机械学院 2 篇；经济与管理学院 1 篇。表 4 和表 5 分别显示了我校近 9 期 ESI 高被引论文和 ESI 热点论文的院系分布变化情况。

表 4　近 9 期长安大学 ESI 高被引论文院系分布情况

ESI 更新时间	公路学院	水利与环境学院	汽车学院	信息工程学院	地质工程与测绘学院	材料科学与工程学院	地球科学与资源学院	理学院	工程机械学院	经济管理学院
2019.1.19	19	10	6	4	3	3	2	1		
2019.3.14	15	11	6	4	4	3	1	1		
2019.5.9	23	11	6	4	4	3	1	1		
2019.7.11	26	10	5	9	6	2	1	1		
2019.9.11	37	18	7	7	6	3	1	2		
2019.11.15	41	29	8	8	5	1	2	2		
2020.1.9	39	28	12	6	6	2	2	2	1	
2020.3.12	36	25	9	8	6	2	2	2	1	
2020.5.14	28	35	8	8	6	3	2	3	2	1

表 5　近 9 期长安大学 ESI 热点论文院系分布情况

ESI 更新时间	公路学院	信息工程学院	汽车学院	地质工程与测绘学院	水利与环境学院
2019.1.19	2	2	1	1	

2019.3.14		1		1	
2019.5.9	6			2	
2019.7.11	本期我校无 ESI 热点论文				
2019.9.11					4
2019.11.15	1	1			
2020.1.9				1	
2020.3.12					1
2020.5.14					7

从本期 ESI 数据可以看出，水利与环境学院 ESI 高被引论文的增幅较大，经济与管理学院近 9 期以来首次出现 ESI 高被引论文，剩余学院与上期相比变化不大。从 ESI 高被引论文的作者分布来看，我校已经涌现出一批发文量、被引频次较高的作者，我们他们的分布（仅限第一作者署名单位为长安大学）进行了统计分析，详见表 6。

表 6　长安大学 ESI 高被引论文、热点论文的作者分布情况（仅统计第一作者署名单位为长安大学的作者）

作者	ESI 高被引论文数	所属院系
LI, PY（Li, Peiyue）	14	水利与环境学院
LAI, JX（Lai, Jinxing）	5	公路学院
ADIMALLA, N	4	水利与环境学院
QIU, JL（Qiu, Junling）	4	公路学院
CHEN, H（Chen, Hao）	3	汽车学院
WANG, ZF（Wang, Zhi-Feng）	3	公路学院
WU, JH（Wu,Jianhua）	3	水利与环境学院
BAO, XX（Bao,Xiongxiong）	2	理学院
GUO, F（Guo,Feng）	2	水利与环境学院

HE, S（He, Song）	2	水利与环境学院
WANG, YQ（Wang,Yaqiong）	2	公路学院
XIE, SB（Xie, Shaobo）	2	汽车学院
DING, K（Ding,Kai）	1	工程机械学院
DONG, M（Dong, Ming）	1	汽车学院
FAN, X（Fan,Xiang）	1	公路学院
GAO, J（Gao,Jie）	1	材料学院
HE, XD（He, Xiaodong）	1	水利与环境学院
HUI, F（Hui,Fei）	1	信息工程学院
JI, XP（Ji,Xiaoping）	1	公路学院
LENG, YQ（Leng, Yanqiu）	1	地质工程与测绘学院
LI, PL（Li, Penglin）	1	公路学院
LUO, XL（Luo, Xianglong）	1	公路学院
QI, DH（Qi,Donghui）	1	汽车学院
REN, CF（Ren,Chongfeng）	1	水利与环境学院
REN, R（Ren,Rui）	1	公路学院
SONG, XL（Song,Xueli）	1	理学院
TIAN, R（Tian,Rui）	1	水利与环境学院

我们对 96 篇 ESI 高被引论文的来源期刊进行分析后，统计了 56 种来源期刊的名称、发文数量和影响因子（表 7）。其中，*EXPOSURE AND HEALTH* 是我校 ESI 高被引论文发文量最高的期刊，影响因子为 4.532，发表高被引论文 9 篇；影响因子最高的期刊为 *NANO ENERGY*，影响因子高达 15.548，发表的高被引论文为《Promoting lithium polysulfide/sulfide redox kinetics by the catalyzing of zinc

sulfide for high performance lithium-sulfur battery》，是我校参与合作发表的论文。通过期刊规范化的引文影响力（Journal Normalized Citation Impact，JNCI）数值可以发现，我校 ESI 高被引论文来源期刊的 JNCI 值都大于 1，表明我校高被引论文的影响力均高于这些期刊的平均影响力。基于此，我们建议相关研究人员可以向更高影响力的期刊投稿。图 2 展示了我校 96 篇 ESI 高被引论文的 56 种来源期刊的分区占比情况，其中 Q1 区的占比最高，Q2 区其次，两个区的占比达 83%以上，表明我校本期 ESI 高被引论文来源期刊的质量相对较高，这种良好态势应该继续保持下去。

表 7　长安大学 ESI 高被引论文的 56 种来源期刊列表

期刊名称	排名	Web of Science 论文数	被引频次	分区	期刊影响因子	期刊规范化的引文影响力
EXPOSURE AND HEALTH	1	9	652	Q1	4.532	5.913
ENVIRONMENTAL EARTH SCIENCES	2	6	403	Q3	1.871	18.383
ENERGY CONVERSION AND MANAGEMENT	3	1	193	Q1	7.181	5.05
HUMAN AND ECOLOGICAL RISK ASSESSMENT	4	8	181	Q3	2.012	8.645
JOURNAL OF HAZARDOUS MATERIALS	5	2	174	Q1	7.65	3.585
APPLIED CATALYSIS B-ENVIRONMENTAL	6	2	139	Q1	14.229	2.14
NATURAL HAZARDS	7	3	131	Q2	2.319	6.59
CHEMICAL ENGINEERING JOURNAL	8	1	122	Q1	8.355	3.47
GEOCHIMICA ET COSMOCHIMICA ACTA	9	1	111	Q1	4.258	4.48
JOURNAL OF MATERIALS CHEMISTRY A	10	2	106	Q1	10.733	5.4
ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH	11	1	103	Q2	2.914	16.66
ARABIAN JOURNAL OF GEOSCIENCES	12	1	97	Q4	1.141	27.88
APPLIED AND COMPUTATIONAL MATHEMATICS	13	1	94	Q1	3.16	10.72
SCIENCE OF THE TOTAL ENVIRONMENT	14	2	93	Q1	5.589	7.38
MEDITERRANEAN JOURNAL OF MATHEMATICS	15	1	89	Q1	1.181	22.39
SHOCK AND VIBRATION	16	2	83	Q3	1.628	27.72
JOURNAL OF SENSORS	17	2	81	Q2	2.024	25.455
JOURNAL OF PERFORMANCE OF CONSTRUCTED FACILITIES	18	2	71	Q3	1.542	20.43
ENGINEERING GEOLOGY	19	2	70	Q1	3.909	5.635
IEEE TRANSACTIONS ON MULTIMEDIA	20	1	66	Q1	5.452	4.65
NANO ENERGY	21	1	64	Q1	15.548	2.95

GEOMATICS NATURAL HAZARDS & RISK	22	1	63	Q2	2.332	8.7
MINE WATER AND THE ENVIRONMENT	23	1	62	Q2	2.145	14.59
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS	24	2	60	Q2	2.5	11.835
GEOFLUIDS	25	3	59	Q2	1.437	23.323
ENERGY	26	3	57	Q1	5.537	7.89
INTERNATIONAL JOURNAL OF WATER RESOURCES DEVELOPMENT	27	1	55	Q2	2.081	8.91
FILOMAT	28	1	54	Q2	0.789	29.61
NONLINEAR DYNAMICS	29	1	51	Q1	4.604	8.35
CATENA	29	1	51	Q1	3.851	9.47
INTERNATIONAL JOURNAL OF ENGINEERING SCIENCE	29	1	51	Q1	9.052	2.87
RENEWABLE & SUSTAINABLE ENERGY REVIEWS	32	1	49	Q1	10.556	2.87
APPLIED SCIENCES-BASEL	33	1	44	Q2	2.217	15.84
APPLIED THERMAL ENGINEERING	34	1	42	Q1	4.026	6.67
MATHEMATICAL PROBLEMS IN ENGINEERING	35	1	41	Q3	1.179	50.48
MATHEMATICAL METHODS IN THE APPLIED SCIENCES	36	1	34	Q2	1.533	7.19
JOURNAL OF CLEANER PRODUCTION	37	2	31	Q1	6.395	5.2
TRANSPORTATION RESEARCH PART D-TRANSPORT AND ENVIRONMENT	38	3	28	Q1	4.051	6.757
RISK ANALYSIS	39	2	24	Q1	2.564	10.93
APPLIED ENERGY	40	1	23	Q1	8.426	7.29
INTERNATIONAL JOURNAL OF PAVEMENT ENGINEERING	40	2	23	Q1	2.298	7.02
INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH	42	1	20	Q1	3.199	9.26
SCIENCE BULLETIN	42	1	20	Q1	6.277	7.12
BULLETIN OF ENGINEERING GEOLOGY AND THE ENVIRONMENT	44	1	19	Q2	2.138	7
EUROPEAN JOURNAL OF ENVIRONMENTAL AND CIVIL ENGINEERING	45	1	18	Q2	1.873	20.75
COMPUTERS AND GEOTECHNICS	45	1	18	Q1	3.345	8.35
TUNNELLING AND UNDERGROUND SPACE TECHNOLOGY	47	1	16	Q1	3.942	6.89
COMPTES RENDUS MECANIQUE	47	1	16	Q4	0.966	13.97
ACCIDENT ANALYSIS AND PREVENTION	49	1	14	Q1	3.058	7.56
ECOLOGICAL INDICATORS	50	1	11	Q1	4.49	6.42
COMMUNICATIONS ON PURE AND APPLIED ANALYSIS	51	1	10	Q2	0.925	7.96

ENVIRONMENTAL GEOCHEMISTRY AND HEALTH	52	1	8	Q1	3.252	15.58
ROBOTICS AND COMPUTER-INTEGRATED MANUFACTURING	53	1	5	Q1	4.392	10.91
ADVANCES IN CIVIL ENGINEERING	53	1	5	Q3	1.104	78.57
INTERNATIONAL JOURNAL OF VENTILATION	55	1	4	Q4	0.86	8
NONLINEAR ANALYSIS-REAL WORLD APPLICATIONS	55	1	4	Q1	2.085	19.43

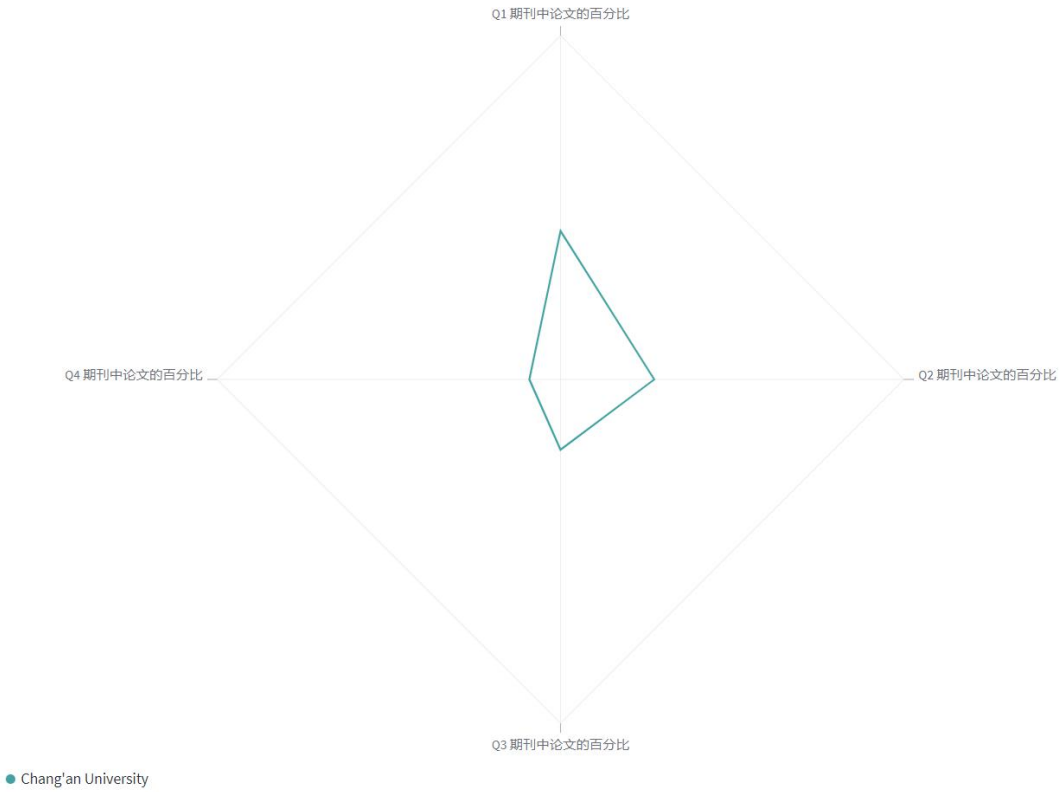

图 2　长安大学 96 篇 ESI 高被引论文来源期刊的分区占比图

二．我校 ESI 前 1%学科概况与预测

本期我校有四个学科进入 ESI 全球前 1%（工程学、地球科学、材料科学和环境/生态科学）。其中，我校在工程学领域共发表 ESI 论文 1,772 篇（ESI 高被引论文 31 篇），被引次数为 9,127 次。本期全球有 1,541 所机构（大陆机构 230 所）的工程学学科进入 ESI 全球排名前 1%行列，我校位列 635 位（在大陆机构中位列 99 位，进入前 50%）。表 8 为近 10 期我校工程学 Web of Science 发文量、被引频次以及 ESI 排名情况。

表 8　长安大学工程学发文量、被引频次以及 ESI 排名情况（近 10 期数据比较）

学科（更新时间）	中国大陆机构排名	ESI 全球排名	论文数	被引频次
工程学（2018.11.16）	92	904	998	4，434
工程学（2019.1.19）	92	879	1，080	4，880
工程学（2019.3.14）	93	863	1，140	5，283
工程学（2019.5.9）	101	790	1，190	5，578
工程学（2019.7.11）	101	769	1，276	6，153
工程学（2019.9.11）	98	747	1，386	6，686
工程学（2019.11.15）	99	723	1，489	7，338
工程学（2020.1.9）	99	714	1，576	8，011
工程学（2020.3.12）	98	701	1，680	8，799
工程学（2020.5.14）	94	635	1，772	9，127

本期我校在地球科学领域共发表 ESI 论文 1,035 篇（ESI 高被引论文 12 篇），被引次数为 7,830 次。本期全球有 729 所机构（大陆机构 56 所）的地球科学进入 ESI 全球排名前 1%行列，我校位列 617 位（大陆机构中位列 50 位）。表 9 为近 4 期我校地球科学 Web of Science 发文量、被引频次以及 ESI 排名情况。

表 9　长安大学地球科学发文量、被引频次以及 ESI 排名情况（近 4 期数据比较）

学科（更新时间）	中国大陆机构排名	ESI 全球排名	论文数	被引频次
地球科学（2019.11.15）	81	717	897	6,813
地球科学（2020.1.9）	52	722	950	7,295
地球科学（2020.3.12）	52	665	1,003	7,802
地球科学（2020.5.14）	56	617	1,035	7,830

本期我校在材料科学领域共发表 ESI 论文 1,107 篇（ESI 高被引论文 3 篇），被引次数为 7,117 次。。本期全球有 921 所机构（大陆机 172 所）的材料科学进入 ESI 全球排名前 1%行列，我校位列 876 位（大陆机构中位列 168 位）。表 10 为近 2 期我校材料科学 Web of Science 发文量、被引频次以及 ESI 排名情况。

表 10　长安大学材料科学发文量、被引频次以及 ESI 排名情况（近 2 期数据比较）

学科（更新时间）	中国大陆机构排名	ESI 全球排名	论文数	被引频次

材料科学（2020.3.12）	167	921	1,081	7,103
材料科学（2020.5.14）	168	876	1,107	7,117

本期我校在环境/生态科学领域共发表 ESI 论文 971 篇（ESI 高被引论文 30 篇），被引用 5,085 次。本期全球有 1,080 所机构（大陆机构 95 所）的环境/生态科学进入 ESI 全球排名前 1%行列，我校位列 971 位（大陆机构中位列 82 位）。表 11 为本期我校环境/生态科学 Web of Science 发文量、被引频次以及 ESI 排名情况。

表 11　长安大学环境/生态科学发文量、被引频次以及 ESI 排名情况

学科（更新时间）	中国大陆机构排名	ESI 全球排名	论文数	被引频次
环境/生态科学（2020.5.14）	82	971	632	5,085

表 12 展示了 2010-2020 年（数据统计时间截止至 2020.5.19）我校 ESI 各学科的发文情况，可以发现工程学、材料科学、地球科学和环境/生态科学为我校的优势学科，其在发文数量、被引频次和学科规范化的引文影响力（Category Normalized Citation Impact，CNCI）值上均具有一定的影响力；化学学科为我校的潜力发展学科，要实现突破仍需要一定的努力。

表 12　长安大学 2010-2020 年 ESI 各学科发文概况

学科名称	排名	Web of Science 论文数	学科规范化的引文影响力	被引频次	论文被引百分比
Engineering	1	1826	1.11	10098	66.32
Materials Science	2	1130	0.72	7587	73.72
Geosciences	3	1086	0.99	8179	75.32
Environment/Ecology	4	651	1.71	5435	66.36
Chemistry	5	583	0.94	4574	76.84
Physics	6	272	0.76	1846	76.10
Computer Science	7	185	0.80	907	60.54
Mathematics	8	122	2.04	516	59.02
Social Sciences, general	9	105	2.08	529	70.48
Agricultural Sciences	10	45	1.03	229	48.89
Space Science	11	36	0.67	199	72.22
Biology & Biochemistry	12	32	1.00	228	78.13
Plant & Animal Science	13	25	1.19	165	72.00
Clinical Medicine	14	22	0.36	66	50.00
Pharmacology & Toxicology	15	19	0.44	104	31.58
Psychiatry/Psychology	16	14	0.34	26	50.00
Economics & Business	17	11	4.22	193	90.91

Neuroscience & Behavior	18	10	0.30	63	50.00
Multidisciplinary	19	6	0.49	24	66.67
Microbiology	20	5	0.99	40	80.00
Immunology	21	4	0.76	19	75.00
Molecular Biology & Genetics	22	3	0.37	31	100.00

我们还对发文量前 5 的 ESI 学科进行了分析，发现工程学的发文量、被引频次均为最高；材料科学发文量位居第二位，略高于地球科学，但是其被引频次却低于地球科学。

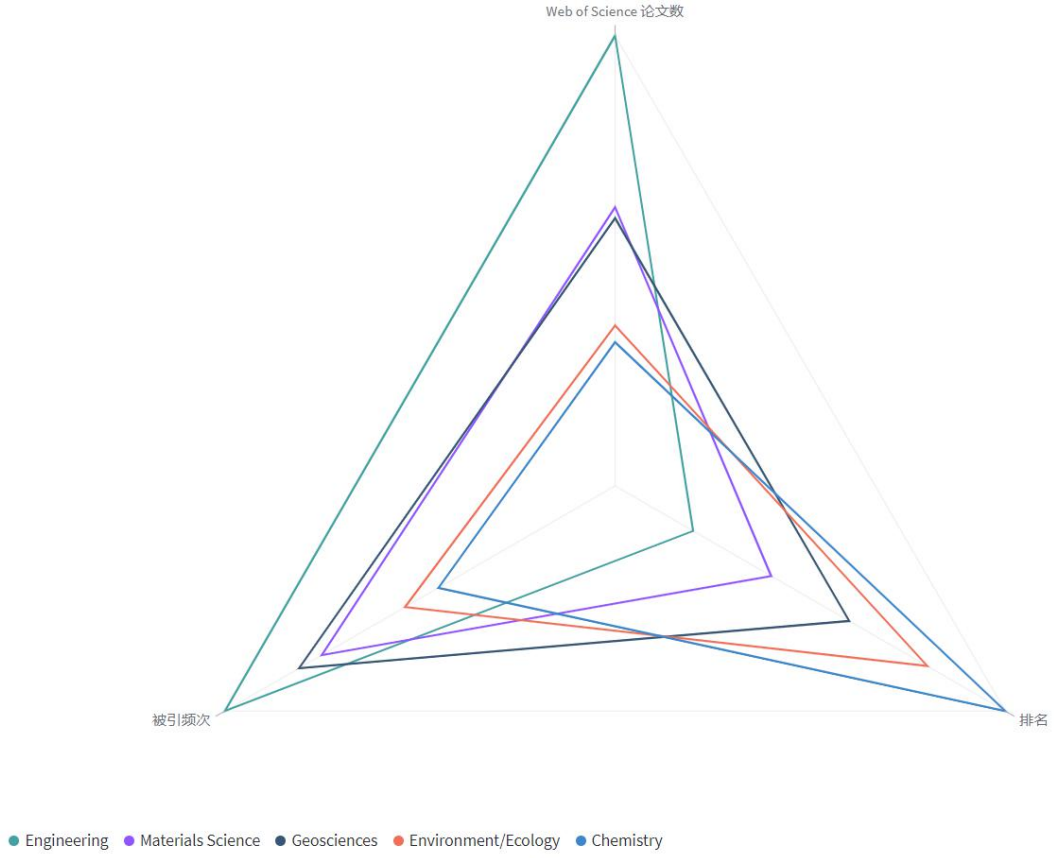

图 3　长安大学发文量前 5 的 ESI 学科发文量、被引频次雷达图

从图 4 可以看到，工程学、地球科学、材料科学、环境/生态科学为我校优势学科，其中工程学和环境/生态科学的 CNCI 值大于 1，地球科学的 CNCI 值接近 1，表明我校在这三个学科领域的研究已经达到或超过了国际水平，其中**特别值得关注的是我校环境/生态科学的 CNCI 值为最高，达到了 1.71，说明该学科的研究水平相对比较高**；同时，我们还注意到我校材料科学的发文量比较高，但其 CNCI 值却低于世界平均水平，这还有待进一步的努力来提升其研究水平；另外，化学学科的发文量、CNCI 值均比较低，要想实现突破仍需一定的努力。

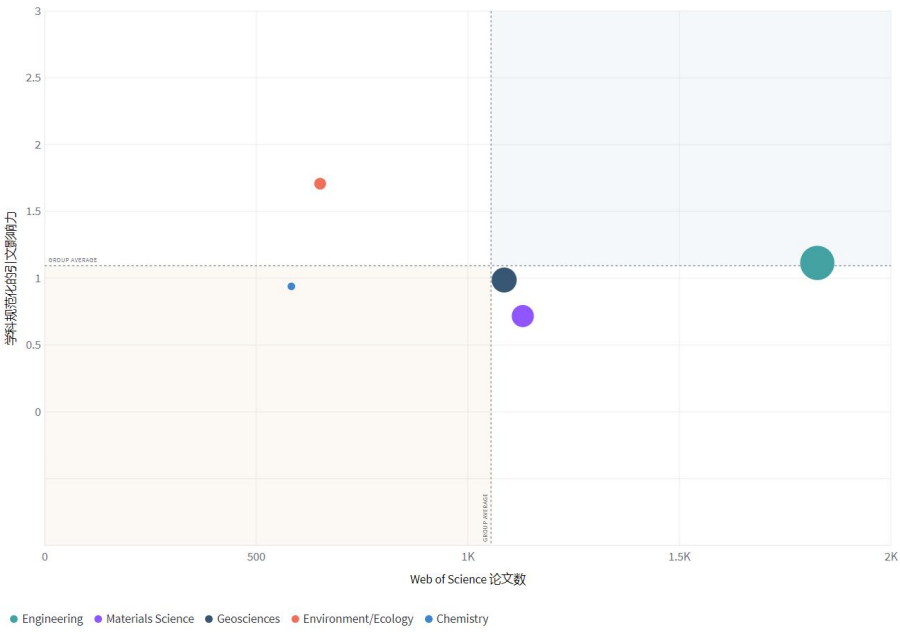

图 4　2010-2020 年长安大学发文量 TOP5 的 ESI 学科的 CNCI 值表现情况

在对 22 个 ESI 学科的阈值与我校各学科的被引频次进行比较后，我们进一步对具有进入全球前 1%潜力的学科进行了预测（图 5），发现化学是我校下一个有望突破 ESI 全球前 1%的学科，不过其接近度还存在一定的差距，需要全校相关研究领域的科研人员继续努力，以提高发文数量和被引频次。

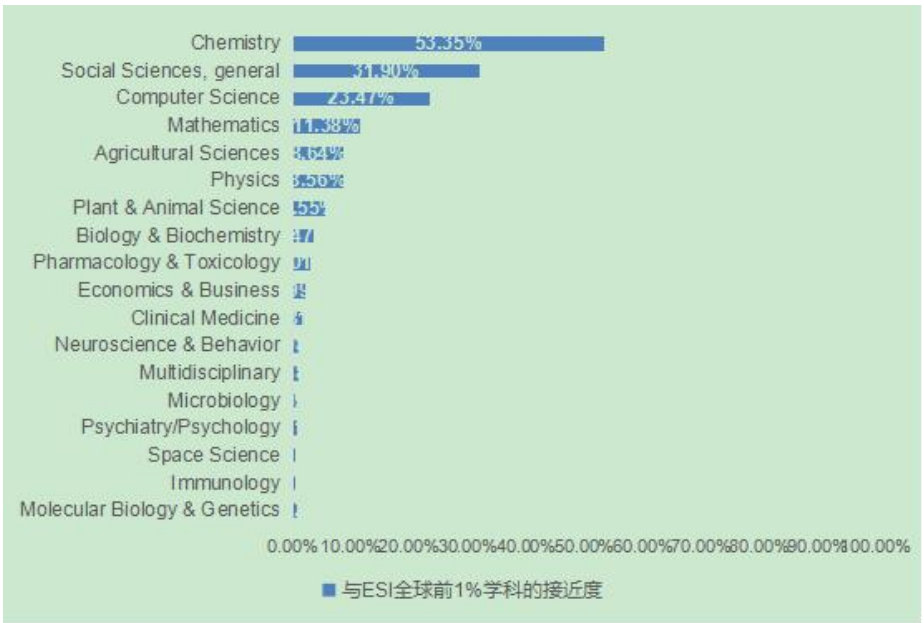

图 5　长安大学具有潜力进入 ESI 全球前 1%的学科预测情况

本期全球有 1299 所机构的化学学科进入 ESI 全球排名前 1%，其中中国大陆的机构数为 214 所。在对我校和 NATIONAL DONG HWA UNIVERSITY（该机构的化学学科位列 ESI 前 1%排位的末位）的 WOS 发文量、被引频次和参考本

期 ESI 化学学科机构被引阈值进行对比后发现，我校的化学学科发文量与末位机构的发文量很接近，但被引频次却相差较多（表 13）。

表 13　长安大学化学学科论文情况（2010-2020.5.19）

机构名称	Web of Science 论文数	总被引次数	ESI 材料科学 本期机构被引阈值
长安大学	583	4,574	8,188
NATIONAL DONG HWA UNIVERSITY	599	8,188	

三．陕西省内高校 ESI 全球前 1%学科对比分析

对陕西省内有学科进入 ESI 全球前 1%的高校进行了对比分析，并统计了进入 ESI 全球前 1%的学科名称、个数、WOS 发文量和被引频次，发现全省有 13 所高校拥有 ESI 排名前 1%的学科，其中学科数最多的高校为西安交通大学，为 15 个。我校目前有 4 个学科进入 ESI 全球排名前 1%，仍然需要全校师生的共同努力，以实现更多优势学科的突破发展。图 6 为 13 所高校 2010-2020 年的发文量情况，图 7 为 13 所高校 2010-2020 年发文被引频次情况，图 8 为 13 所高校 2009-2019 年论文发文量、被引频次、论文被引百分比的雷达图，从这些图中可以看出我校在发文数量、被引频次等方面与排名前列的高校还存在一定的差距，还需要继续努力。

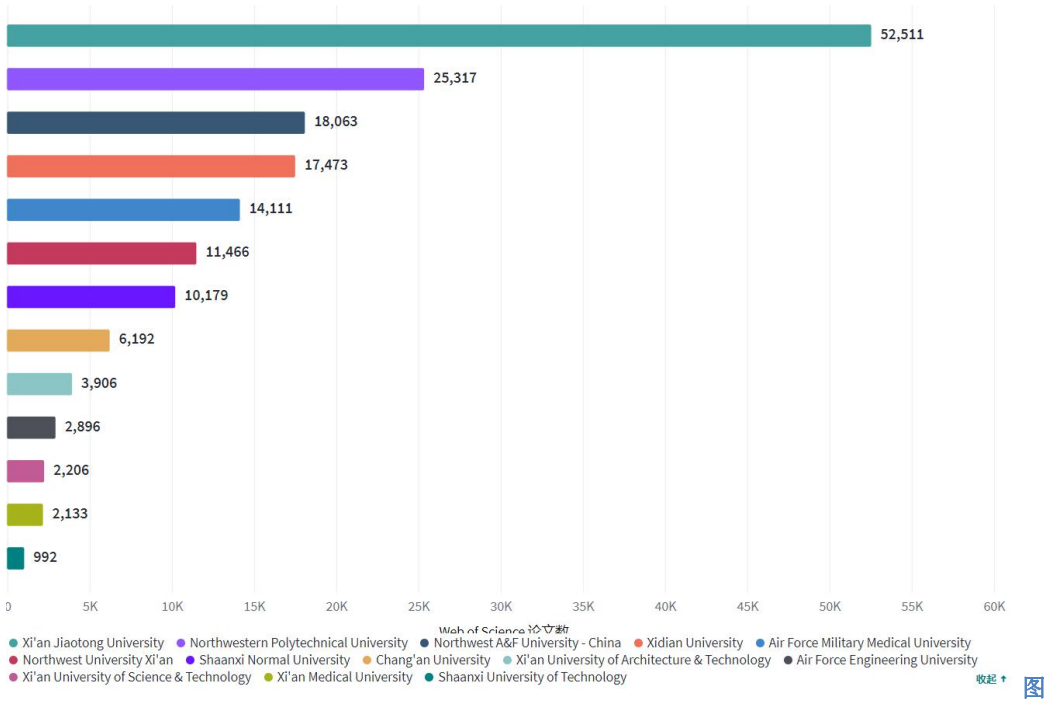

图 6　陕西省 13 所高校的发文量情况（2010-2020）

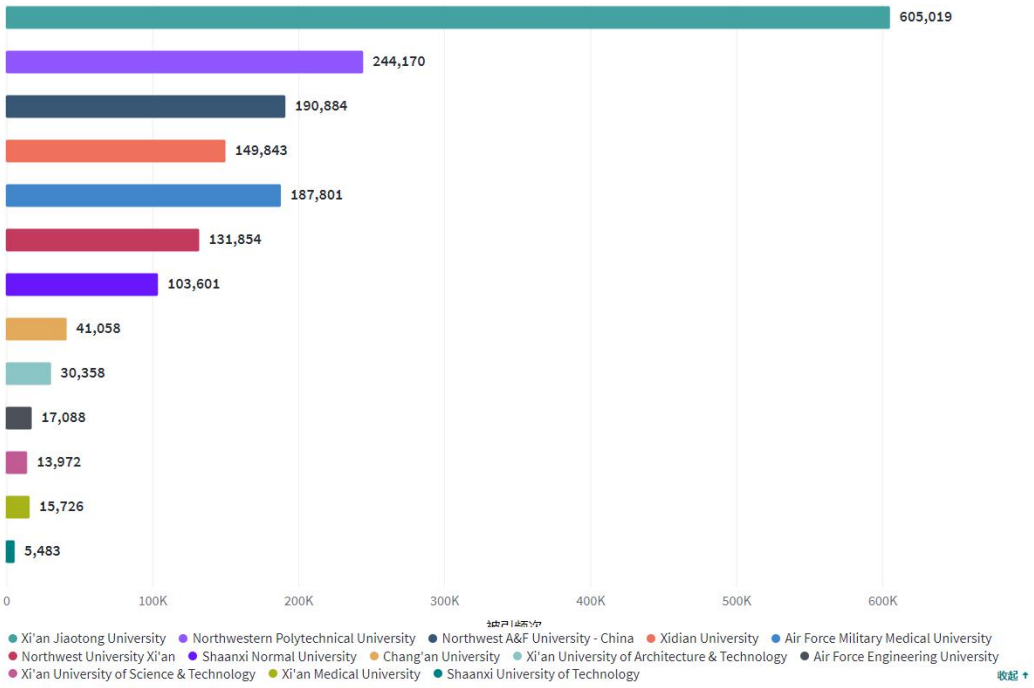

图 7　陕西省 13 所高校的发文被引频次情况（2010-2020）

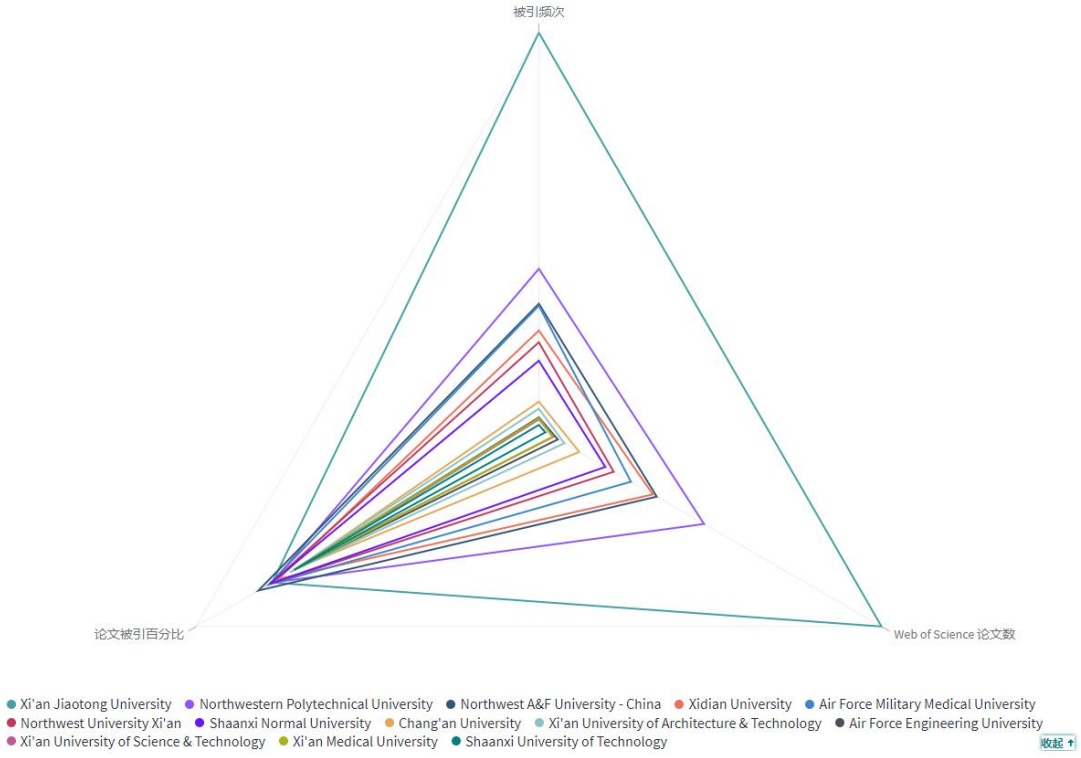

图 8　陕西省 13 所高校的论文发文量、被引频次、论文被引百分比雷达图（2010-2020）

图 9 为这 13 所高校的 CNCI 情况，可以看出，我校的 CNCI 刚刚达到全球平均水平，要实现更高水平的突破还需要更大的努力。

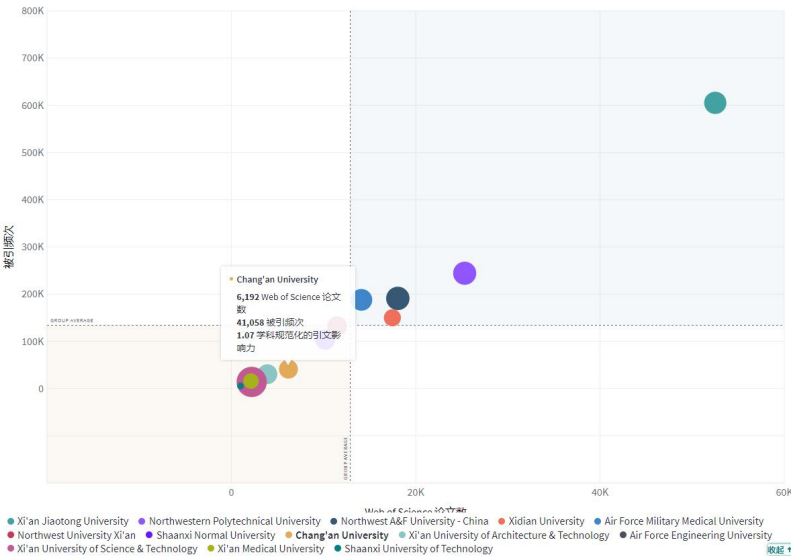

图 9　陕西省 13 所高校学科规范化的引文影响力情况

表 14　陕西省内高校 ESI 全球前 1%学科概况（按被引频次排序）

序号	高校名称	论文篇数	总被引频次	进入前 1%的学科数	学科名称	全球 ESI 排位
1	西安交通大学	49,586	557,375	15	工程学	279
					材料科学	
					经济与商学	
					计算机科学	
					物理学	
					地球科学	
					一般社会科学	
					药理学与毒物学	
					神经科学与行为	
					临床医学	
					分子生物与遗传学	
					数学	
					化学	

					生物与生化	
					环境/生态科学	
2	西北工业大学	24,634	223,211	5	材料科学	684
					工程学	
					计算机科学	
					物理学	
					化学	
3	空军军医大学	12,225	180,396	6	神经科学与行为	808
					临床医学	
					分子生物与遗传学	
					药理学与毒物学	
					生物与生化	
					材料科学	
4	西北农林科技大学	17,541	181,536	8	农业科学	801
					植物与动物科学	
					环境/生态学	

					生物与生化	
					分子生物与遗传学	
					药理学与毒物学	
					工程学	
					化学	
5	西北大学	11,122	126,069	6	地球科学	1090
					化学	
					药理学与毒物学	
					材料科学	
					临床医学	
					工程学	
6	西安电子科技大学	864	7,945	3	计算机科学	1093
					工程学	
					地球科学	
7	陕西师范大学	9,823	98,611	4	农业科学	1294

					化学	
					材料科学	
					工程学	
8	长安大学	5,995	38,250	4	工程学	2519
					地球科学	
					材料科学	
					环境/生态学	
9	西安理工大学	5,247	31,695	2	工程学	2830
					材料科学	
10	陕西科技大学	3,842	31,583	2	材料科学	2833
					化学	
11	西安建筑科技大学	3,782	28,246	2	环境/生态学	3036
					工程学	
12	空军工程大学	2,859	15,323	1	工程学	4119
13	西安医学院	1,965	15,288	1	临床医学	4128