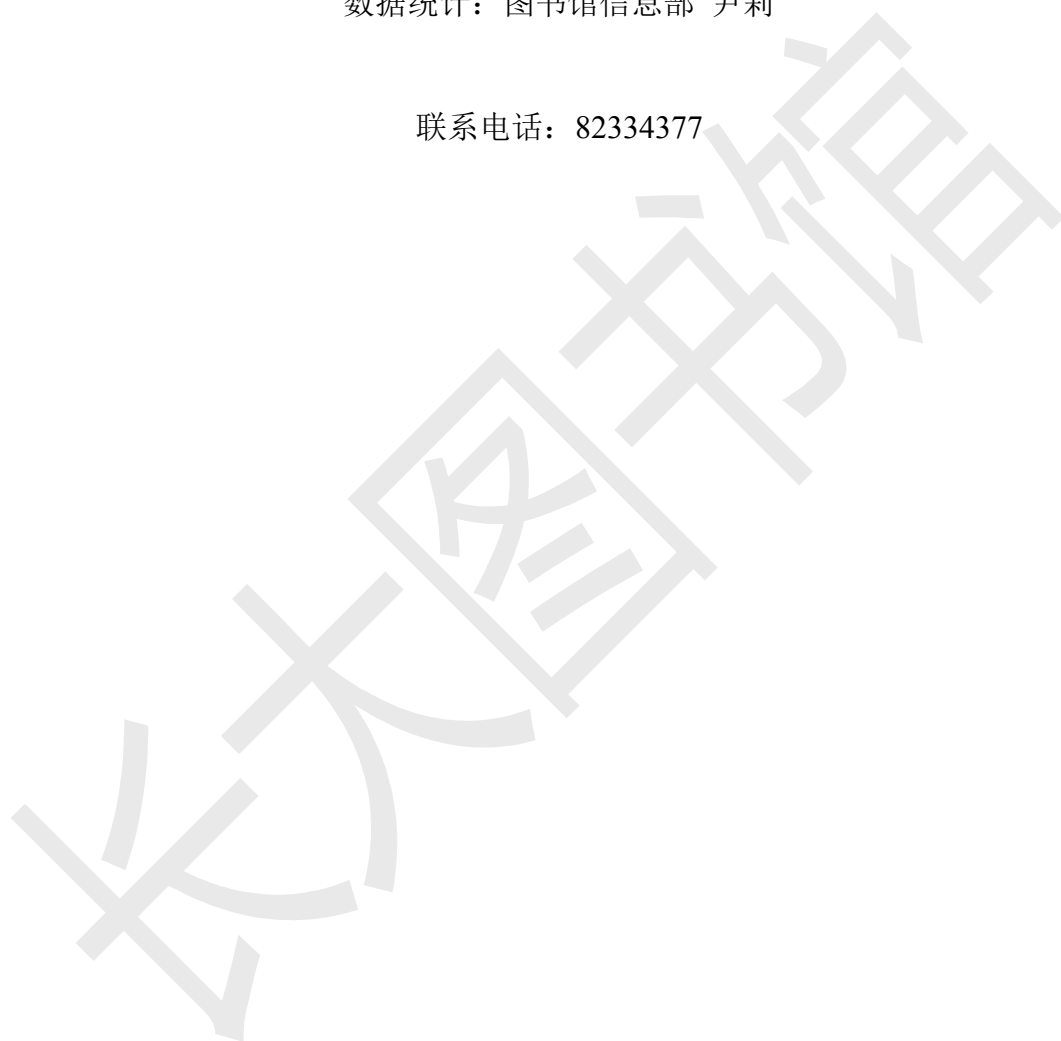


# 长安大学 ESI 月报

(2019 年 1 月 19 日更新数据)

数据统计：图书馆信息部 尹莉

联系电话：82334377



2019 年 1 月 19 日，最新一期 ESI 数据更新发表，统计数据覆盖时间范围为 10 年 10 个月（2008.1.1-2018.10.31），长安大学在本次统计数据覆盖时间范围内的表现如下：

#### 一. 长安大学 ESI 高被引论文情况

在本次 ESI 统计数据覆盖时间范围内，全球位列 ESI 高水平研究机构总数 5870 所，比上期（2018 年 11 月公布）增加 13 所（上期 5757 所），我校 ESI 排名 3138 位（上期 3180 位）。高被引论文 48 篇（见表 1），比上期（2018 年 11 月更新数据为 39 篇）增加 9 篇；热点论文 6 篇（见表 2），与上期相比增加 2 篇。



表 1 长安大学 ESI 高被引论文简况 (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	COMBUSTION AND PERFORMANCE EVALUATION OF A DIESEL ENGINE FUELED WITH BIODIESEL PRODUCED FROM SOYBEAN CRUDE OIL	WOS:000269711300022	QI, DH;GENG, LM;CHEN, H;BIAN, YZ;LIU, J;REN, XC	RENEWABLE ENERGY 34 (12): 2706-2713 DEC 2009	ENGINEERING	159
2	EXPERIMENTAL STUDIES ON THE COMBUSTION CHARACTERISTICS AND PERFORMANCE OF A DIRECT INJECTION ENGINE FUELED WITH BIODIESEL/DIESEL BLENDS	WOS:000281339700070	QI, DH;CHEN, H;GENG, LM;BIAN, YZ	ENERG CONV MANAGE 51 (12): 2985-2992 DEC 2010	ENGINEERING	145
3	PERFORMANCE AND COMBUSTION CHARACTERISTICS OF BIODIESEL-DIESEL-METHANOL BLEND FUELLED ENGINE	WOS:000274943400022	QI, DH;CHEN, H;GENG, LM;BIAN, YZ;REN, XC	APPL ENERG 87 (5): 1679-1686 MAY 2010	ENGINEERING	116
4	MICROWAVE-ASSISTED IN SITU SYNTHESIS OF REDUCED GRAPHENE OXIDE-BIVO4 COMPOSITE PHOTOCATALYSTS AND THEIR ENHANCED PHOTOCATALYTIC PERFORMANCE FOR THE DEGRADATION OF CIPROFLOXACIN	WOS:000317878400014	YAN, Y;SUN, SF;SONG, Y;YAN, X;GUAN, WS;LIU, XL;SHI, WD	J HAZARD MATER 250: 106-114 APR 15 2013	ENGINEERING	92
5	BUILDING A NEW AND SUSTAINABLE SILK ROAD ECONOMIC BELT	WOS:000362903400023	LI, PY;QIAN, H;HOWARD, KWF;WU, JH	ENVIRON EARTH SCI 74 (10): 7267-7270 NOV 2015	ENVIRONMENT/EC OLOGY	86

6	MICROWAVE SYNTHESIS OF A NOVEL MAGNETIC IMPRINTED TIO2 PHOTOCATALYST WITH EXCELLENT TRANSPARENCY FOR SELECTIVE PHOTODEGRADATION OF ENROFLOXACIN HYDROCHLORIDE RESIDUES SOLUTION	WOS:000337554100003	LU, ZY;CHEN, F;HE, M;SONG, MS;MA, ZF;SHI, WD;YAN, YS;LAN, JZ;LI, F;XIAO, P	CHEM ENG J 249: 15-26 AUG 1 2014	ENGINEERING	80
7	EVALUATION OF SHALLOW GROUNDWATER CONTAMINATION AND ASSOCIATED HUMAN HEALTH RISK IN AN ALLUVIAL PLAIN IMPACTED BY AGRICULTURAL AND INDUSTRIAL ACTIVITIES, MID-WEST CHINA	WOS:000381997600002	WU, JH;SUN, ZC	EXPO HEALTH 8 (3): 311-329 SEP 2016	ENVIRONMENT/EC OLOGY	79
8	URANIUM AND MOLYBDENUM ISOTOPE EVIDENCE FOR AN EPISODE OF WIDESPREAD OCEAN OXYGENATION DURING THE LATE EDIACARAN PERIOD	WOS:000352192100010	KENDALL, B;KOMIYA, T;LYONS, TW;BATES, SM;GORDON, GW;ROMANIELL O, SJ;JIANG, GQ;CREASER, RA;XIAO, SH;MCFADDEN, K;SAWAKI, Y;TAHATA, M;SHU, DG;HAN, J;LI, Y;CHU,	GEOCHIM COSMOCHIM ACTA 156: 173-193 MAY 1 2015	GEOSCIENCES	73

			XL;ANBAR, AD			
9	ADSORPTION OF CADMIUM BY BIOCHAR DERIVED FROM MUNICIPAL SEWAGE SLUDGE: IMPACT FACTORS AND ADSORPTION MECHANISM	WOS:000356549500039	CHEN, T;ZHOU, ZY;HAN, R;MENG, RH;WANG, HT;LU, WJ	CHEMOSPHERE 134: 286-293 SEP 2015	ENVIRONMENT/EC OLOGY	64
10	HYDROGEOCHEMICAL CHARACTERIZATION OF GROUNDWATER IN AND AROUND A WASTEWATER IRRIGATED FOREST IN THE SOUTHEASTERN EDGE OF THE TENGER DESERT, NORTHWEST CHINA	WOS:000381997600003	LI, PY;WU, JH;QIAN, H;ZHANG, YT;YANG, NA;JING, LJ;YU, PY	EXPO HEALTH 8 (3): 331-348 SEP 2016	ENVIRONMENT/EC OLOGY	58
11	APPRAISING GROUNDWATER QUALITY AND HEALTH RISKS FROM CONTAMINATION IN A SEMIARID REGION OF NORTHWEST CHINA	WOS:000381997600005	LI, PY;LI, XY;MENG, XY;LI, MN;ZHANG, YT	EXPO HEALTH 8 (3): 361-379 SEP 2016	ENVIRONMENT/EC OLOGY	49
12	HYDROCHEMICAL APPRAISAL OF GROUNDWATER QUALITY FOR DRINKING AND IRRIGATION PURPOSES AND THE MAJOR INFLUENCING FACTORS: A CASE STUDY IN AND AROUND HUA COUNTY, CHINA	WOS:000369322200015	LI, PY;WU, JH;QIAN, H	ARAB J GEOSCI 9 (1): - JAN 2016	GEOSCIENCES	48
13	NUTRIENT AND ORGANICS REMOVAL FROM SWINE SLURRY WITH SIMULTANEOUS ELECTRICITY	WOS:000350931600009	DOHERTY, L;ZHAO, YQ;ZHAO,	CHEM ENG J 266: 74-81 APR 15 2015	ENGINEERING	46

	GENERATION IN AN ALUM SLUDGE-BASED CONSTRUCTED WETLAND INCORPORATING MICROBIAL FUEL CELL TECHNOLOGY		XH;WANG, WK			
14	INVESTIGATION PROGRESSES AND APPLICATIONS OF FRACTIONAL DERIVATIVE MODEL IN GEOTECHNICAL ENGINEERING	WOS:000376141900001	LAI, JX;MAO, S;QIU, JL;FAN, HB;ZHANG, Q;HU, ZN;CHEN, JX	MATH PROBL ENG : - 2016	ENGINEERING	43
15	FOUR STAGES SYMMETRIC TWO-STEP P-STABLE METHOD WITH VANISHED PHASE-LAG AND ITS FIRST, SECOND, THIRD AND FOURTH DERIVATIVES	WOS:000378971700008	HUI, F;SIMOS, TE	APPL COMPUT MATH 15 (2): 220-238 2016	MATHEMATICS	42
16	A HIGH-ORDER TWO-STEP PHASE-FITTED METHOD FOR THE NUMERICAL SOLUTION OF THE SCHRODINGER EQUATION	WOS:000387090000085	ZHANG, W;SIMOS, TE	MEDITERR J MATH 13 (6): 5177-5194 DEC 2016	MATHEMATICS	41
17	PREDICATION OF NONLINEAR HEAT TRANSFER IN A CONVECTIVE-RADIATIVE FIN WITH TEMPERATURE-DEPENDENT PROPERTIES BY THE COLLOCATION SPECTRAL METHOD	WOS:000367347200004	SUN, YS;MA, J;LI, BW;GUO, ZX	NUMER HEAT TRANSFER PT B-FUND 69 (1): 68-83 JAN 2 2016	ENGINEERING	36
18	BENDING AND BUCKLING OF NONLOCAL STRAIN GRADIENT ELASTIC BEAMS	WOS:000390470300032	XU, XJ;WANG, XC;ZHENG, ML;MA, Z	COMPOS STRUCT 160: 366-377 JAN 15	MATERIALS SCIENCE	35

				2017		
19	SINGLE IMAGE SUPER-RESOLUTION VIA LOCALLY REGULARIZED ANCHORED NEIGHBORHOOD REGRESSION AND NONLOCAL MEANS	WOS:000391475200002	JIANG, JJ;MA, X;CHEN, C;LU, T;WANG, ZY;MA, JY	IEEE TRANS MULTIMEDIA 19 (1): 15-26 JAN 2017	COMPUTER SCIENCE	31
20	PROGRESS, OPPORTUNITIES, AND KEY FIELDS FOR GROUNDWATER QUALITY RESEARCH UNDER THE IMPACTS OF HUMAN ACTIVITIES IN CHINA WITH A SPECIAL FOCUS ON WESTERN CHINA	WOS:000401566600006	LI, PY;TIAN, R;XUE, CY;WU, JH	ENVIRON SCI POLLUT RES 24 (15): 13224-13234 MAY 2017	ENVIRONMENT/ECOLOGY	30
21	THE CATASTROPHIC LANDSIDE IN MAOXIAN COUNTY, SICHUAN, SW CHINA, ON JUNE 24, 2017	WOS:000415325500026	QIU, JL;WANG, XL;HE, SY;LIU, HQ;LAI, JX;WANG, LX	NATURAL HAZARDS 89 (3): 1485-1493 DEC 2017	GEOSCIENCES	27
22	CHARACTERISTICS OF SEISMIC DISASTERS AND ASEISMIC MEASURES OF TUNNELS IN WENCHUAN EARTHQUAKE	WOS:000393021400036	LAI, JX;HE, SY;QIU, JL;CHEN, JX;WANG, LX;WANG, K;WANG, JB	ENVIRON EARTH SCI 76 (2): - JAN 2017	ENVIRONMENT/ECOLOGY	26
23	GLOBAL ASYMPTOTIC STABILITY OF CNNs WITH IMPULSES AND MULTI-PROPORTIONAL DELAYS	WOS:000370234600010	SONG, XL;ZHAO, P;XING, ZW;PENG, JG	MATH METH APPL SCI 39 (4): 722-733 MAR 2016	MATHEMATICS	21
24	INVESTIGATING THE LONG-TERM SETTLEMENT OF A TUNNEL BUILT OVER IMPROVED LOESSIAL FOUNDATION SOIL	WOS:000441684700001	QIU, JL;LIU, HQ;LAI, JX;LAI, HP;CHEN,	J PERFORM CONSTR FACIL 32 (5): - OCT 2018	ENGINEERING	21

	USING JET GROUTING TECHNIQUE		JX;WANG, K			
25	A STATE-OF-THE-ART REVIEW OF SUSTAINABLE ENERGY BASED FREEZE PROOF TECHNOLOGY FOR COLD-REGION TUNNELS IN CHINA	WOS:000418574800110	LAI, JX;WANG, XL;QIU, JL;ZHANG, GZ;CHEN, JX;XIE, YL;LUO, YB	RENEW SUSTAIN ENERGY REV 82: 3554-3569 PART 3 FEB 2018	ENGINEERING	20
26	MESOPOROUS MANGANESE OXIDE WITH LARGE SPECIFIC SURFACE AREA FOR HIGH-PERFORMANCE ASYMMETRIC SUPERCAPACITOR WITH ENHANCED CYCLING STABILITY	WOS:000406138400005	GU, JM;FAN, XY;LIU, X;LI, SH;WANG, Z;TANG, SF;YUAN, DL	CHEM ENG J 324: 35-43 SEP 15 2017	ENGINEERING	20
27	DEFORMATION AND MECHANICAL MODEL OF TEMPORARY SUPPORT SIDEWALL IN TUNNEL CUTTING PARTIAL SECTION	WOS:000390498600004	LUO, YB;CHEN, JX;HUANG, P;TANG, MQ;QIAO, X;LIU, Q	TUNN UNDERGR SPACE TECHNOL 61: 40-49 JAN 2017	ENGINEERING	19
28	CENTRIFUGE MODELLING OF TWIN-TUNNELLING INDUCED GROUND MOVEMENTS IN LOESS STRATA	WOS:000415964600004	QIU, JL;XIE, YL;FAN, HB;WANG, ZC;ZHANG, YW	ARAB J GEOSCI 10 (22): - NOV 17 2017	GEOSCIENCES	18
29	A NEW HIGH ALGEBRAIC ORDER EFFICIENT FINITE DIFFERENCE METHOD FOR THE SOLUTION OF THE SCHRODINGER EQUATION	WOS:000416115500029	DONG, M;SIMOS, TE	FILOMAT 31 (15): 4999-5012 2017	MATHEMATICS	14
30	MOF-DERIVED POROUS N-CO <sub>3</sub> O <sub>4</sub> @N-C	WOS:000424466300041	XU, J;ZHANG,	J MATER CHEM	MATERIALS	13



	NANODODECAHEDRA WRAPPED WITH REDUCED GRAPHENE OXIDE AS A HIGH CAPACITY CATHODE FOR LITHIUM-SULFUR BATTERIES		WX;CHEN, Y;FAN, HB;SU, DW;WANG, GX	A 6 (6): 2797-2807 FEB 14 2018	SCIENCE	
31	RESPONSE CHARACTERISTICS AND PREVENTIONS FOR SEISMIC SUBSIDENCE OF LOESS IN NORTHWEST CHINA	WOS:000433913500032	QIU, JL;WANG, XL;LAI, JX;ZHANG, Q;WANG, JB	NATURAL HAZARDS 92 (3): 1909-1935 JUL 2018	GEOSCIENCES	13
32	SIMPLE METHOD TO PREDICT GROUND DISPLACEMENTS CAUSED BY INSTALLING HORIZONTAL JET-GROUTING COLUMNS	WOS:000424800500001	WANG, ZF;SHEN, JS;CHENG, WC	MATH PROBL ENG : - 2018	ENGINEERING	12
33	RELATIVE VELOCITY DIFFERENCE MODEL FOR THE CAR-FOLLOWING THEORY	WOS:000424037200001	YU, SW;TANG, JJ;XIN, Q	NONLINEAR DYNAMICS 91 (3): 1415-1428 FEB 2018	ENGINEERING	12
34	EXTREME DEFORMATION CHARACTERISTICS AND COUNTERMEASURES FOR A TUNNEL IN DIFFICULT GROUNDS IN SOUTHERN SHAANXI, CHINA	WOS:000446842900001	LAI, JX;WANG, XL;QIU, JL;CHEN, JX;HU, ZN;WANG, H	ENVIRON EARTH SCI 77 (19): - OCT 2018	ENVIRONMENT/EC OLOGY	10
35	ASSESSMENT OF LIVELIHOOD VULNERABILITY OF LAND-LOST FARMERS IN URBAN FRINGES: A CASE STUDY OF XIAN, CHINA	WOS:000393009000001	HUANG, XJ;HUANG, X;HE, YB;YANG, XJ	HABITAT INT 59: 1-9 JAN 2017	SOCIAL SCIENCES, GENERAL	10
36	PRINCIPAL STRESS ROTATION UNDER	WOS:000431052600013	LI, Y;YANG,	KSCE J CIV ENG	ENGINEERING	10

	BIDIRECTIONAL SIMPLE SHEAR LOADINGS		YM;YU, HS;ROBERTS, G	22 (5): 1651-1660 MAY 2018		
37	GIS-BASED LANDSLIDE SUSCEPTIBILITY EVALUATION USING A NOVEL HYBRID INTEGRATION APPROACH OF BIVARIATE STATISTICAL BASED RANDOM FOREST METHOD	WOS: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	10
38	INVESTIGATION INTO GEOHAZARDS DURING URBANIZATION PROCESS OF XIAN, CHINA	WOS:000433913500033	WANG, ZF;CHENG, WC;WANG, YQ	NATURAL HAZARDS 92 (3): 1937-1953 JUL 2018	GEOSCIENCES	9
39	CHALLENGES AND PROSPECTS OF SUSTAINABLE GROUNDWATER MANAGEMENT IN AN AGRICULTURAL PLAIN ALONG THE SILK ROAD ECONOMIC BELT, NORTH-WEST CHINA	WOS:000430045800003	CHEN, J;WU, H;QIAN, H;LI, XY	INT J WATER RESOUR DEV 34 (3): 354-368 SP. ISS. SI 2018	ENVIRONMENT/EC OLOGY	8
40	IMPROVING CRACKING RESISTANCE OF CEMENT MORTAR BY THERMO-SENSITIVE POLY N-ISOPROPYL ACRYLAMIDE (PNIPAM) GELS	WOS:000423648000113	WANG, ZJ;WU, JY;ZHAO, P;DAI, N;ZHAI, ZW;AI, T	J CLEAN PROD 176: 1292-1303 MAR 1 2018	ENGINEERING	8
41	DISTRIBUTION AND CHARACTERISTICS OF LANDSLIDE IN LOESS PLATEAU: A CASE STUDY IN SHAANXI PROVINCE	WOS:000430028000010	ZHUANG, JQ;PENG, JB;WANG, GH;JAVED,	ENG GEOL 236: 89-96 SP. ISS. SI MAR 26 2018	GEOSCIENCES	8

			I;WANG, Y;LI, W			
42	NUMERICAL INVESTIGATION OF PARTICLE CONCENTRATION DISTRIBUTION CHARACTERISTICS IN TWIN-TUNNEL COMPLEMENTARY VENTILATION SYSTEM	WOS:000439718300001	REN, R;XU, SS;REN, ZD;ZHANG, SZ;WANG, H;WANG, XL;HE, SY	MATH PROBL ENG : - 2018	ENGINEERING	8
43	LANDSLIDE SUSCEPTIBILITY MODELLING USING GIS-BASED MACHINE LEARNING TECHNIQUES FOR CHONGREN COUNTY, JIANGXI PROVINCE, CHINA	WOS:000428194000110	CHEN, W;PENG, JB;HONG, HY;SHAHABI, H;PRADHAN, B;LIU, JZ;ZHU, AX;PEI, XJ;DUAN, Z	SCI TOTAL ENVIR 626: 1121-1135 JUN 1 2018	ENVIRONMENT/EC OLOGY	8
44	EVALUATION OF ASPHALT-AGGREGATE INTERACTION BASED ON THE RHEOLOGICAL PROPERTIES	WOS:000432547900003	ZHANG, JP;FAN, ZP;HU, DL;HU, Z;PEI, JZ;KONG, WC	INT J PAVEMENT ENG 19 (7): 586-592 2018	ENGINEERING	8
45	IMPACTS ANALYSIS OF CAR FOLLOWING MODELS CONSIDERING VARIABLE VEHICULAR GAP POLICIES	WOS:000430027500031	XIN, Q;YANG, N;FU, R;YU, SW;SHI, ZK	PHYSICA A 501: 338-355 JUL 1 2018	PHYSICS	7
46	LONGITUDINAL DEFORMATION PROFILE OF A TUNNEL IN WEAK ROCK MASS BY USING THE BACK ANALYSIS METHOD	WOS:000418212600041	LUO, YB;CHEN, JX;CHEN, Y;DIAO, PS;QIAO, X	TUNN UNDERGR SPACE TECHNOL 71: 478-493 JAN 2018	ENGINEERING	7

47	CRACKING AND FAILURE IN ROCK SPECIMEN CONTAINING COMBINED FLAW AND HOLE UNDER UNIAXIAL COMPRESSION	WOS:000432056100001	FAN, X;CHEN, R;LIN, H;LAI, HP;ZHANG, CY;ZHAO, QH	ADV CIV ENG : - 2018	ENGINEERING	7
48	A STUDY ON THE MECHANICAL BEHAVIOR AND STATISTICAL DAMAGE CONSTITUTIVE MODEL OF SANDSTONE	WOS:000443205500012	WANG, JB;SONG, ZP;ZHAO, BY;LIU, XR;LIU, J;LAI, JX	ARAB J SCI ENG 43 (10): 5179-5192 OCT 2018	ENGINEERING	7

表 2 长安大学 ESI 热点引论文简况 (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	A HIGH-ORDER TWO-STEP PHASE-FITTED METHOD FOR THE NUMERICAL SOLUTION OF THE SCHRODINGER EQUATION	WOS:000387090000085	ZHANG, W;SIMOS, TE	MEDITERR J MATH 13 (6): 5177-5194 DEC 2016	MATHEMATICS	41
2	A NEW HIGH ALGEBRAIC ORDER EFFICIENT FINITE DIFFERENCE METHOD FOR THE SOLUTION OF THE SCHRODINGER EQUATION	WOS:000416115500029	DONG, M;SIMOS, TE	FILOMAT 31 (15): 4999-5012 2017	MATHEMATICS	14
3	RESPONSE CHARACTERISTICS AND PREVENTIONS FOR SEISMIC SUBSIDENCE OF LOESS IN NORTHWEST CHINA	WOS:000433913500032	QIU, JL;WANG, XL;LAI, JX;ZHANG, Q;WANG, JB	NATURAL HAZARDS 92 (3): 1909-1935 JUL 2018	GEOSCIENCES	13
4	RELATIVE VELOCITY DIFFERENCE MODEL FOR THE CAR-FOLLOWING THEORY	WOS:000424037200001	YU, SW;TANG, JJ;XIN, Q	NONLINEAR DYNAMICS 91 (3): 1415-1428 FEB 2018	ENGINEERING	12
5	INVESTIGATION INTO GEOHAZARDS DURING	WOS:000433913500033	WANG, ZF;CHENG,	NATURAL HAZARDS 92 (3): 1937-1953 JUL	GEOSCIENCES	9

	URBANIZATION PROCESS OF XIAN, CHINA		WC;WANG, YQ	2018		
6	LANDSLIDE SUSCEPTIBILITY MODELLING USING GIS-BASED MACHINE LEARNING TECHNIQUES FOR CHONGREN COUNTY, JIANGXI PROVINCE, CHINA	WOS:000428194000110	CHEN, W;PENG, JB;HONG, HY;SHAHABI, H;PRADHAN, B;LIU, JZ;ZHU, AX;PEI, XJ;DUAN, Z	SCI TOTAL ENVIR 626: 1121-1135 JUN 1 2018	ENVIRONMENT/ECOLOGY	8

48 篇高被引论文的分布院系为：公路学院 19 篇，位居首位，比上期增加 10 篇，有显著增加；环境科学与工程学院 10 篇；汽车学院 6 篇；信息学院 4 篇；材料学院 3 篇；地质工程与测绘学院 3 篇；地球科学与资源学院 2 篇；理学院 1 篇。

6 篇热点论文的分布院系为：公路学院 2 篇；信息学院 2 篇；地质工程与测绘学院 1 篇；汽车学院 1 篇。

## 二. 我校 ESI 前 1%学科概况与预测

本期我校工程学学科依然保持全球排名前 1%，在工程学领域共发表 ESI 论文 1080 篇，被引用 4, 880 次，其中高被引论文 21 篇。本期全球有 1430 所机构（大陆机构 153 所）的工程学学科进入 ESI 全球排名前 1%行列，我校位列 879 位。

表 3 我校 ESI 工程学排名

学科（更新时间）	中国大陆机构排名	ESI 排名	论文数	被引频次
工程学 (2019.1.19)	92	879	1080	4, 880
工程学 (2018.11.16)	92	904	998	4, 434

长安大学一级学科与 ESI 学科的对照：

ESI 是按照 SCI/SSCI 的期刊属性来对学科进行分类，该分类体系和我校的学科设置不能完全匹配，正因为这样，我校如果要在相关学科进入全球前 1%，全校师生都需要在该学科领域做出贡献。

表 4 ESI 学科与我校的学科对照表

ESI 学科	对应的我校一级学科	对应的学院
工程学	交通运输工程	公路学院
	材料科学与工程	材料科学与工程学院
	测绘科学与技术	地质工程与测绘学院
	环境科学与工程	环境科学与工程学院
	水利工程	环境科学与工程学院

	土木工程	建筑工程学院
	机械工程	汽车学院
地球科学	地质学	地质工程与测绘学院
		地球科学与资源学院
材料科学	材料科学与工程	材料科学与工程学院
		电子与控制工程学院
社会科学	管理科学与工程	经济与管理学院
	地理学	地质工程与测绘工程学院
经济与商业	经济学	经济与管理学院

下表为陕西省内高校进入全球前 1%的学科概况。

表 5 陕西省内高校 ESI 排名

省内排名	高校名称	论文篇数	总被引频次	进入前 1%的学科数	全球 ESI 排位
1	西安交通大学	41, 188	395, 381	14	359/5870
2	第四军医大学	11, 645	152, 375	7	841/5870
3	西北工业大学	19, 567	140, 357	4	890/5870
4	西北农林科技大学	14, 121	122, 801	6	1003/5870
5	西北大学	8, 565	99, 061	4	1165/5870
6	西安电子科技大学	14, 173	87, 542	2	1272/5870
7	陕西师范大学	8, 292	70, 793	4	1463/5870
8	长安大学	3, 970	21, 501	1	3138/5870
9	陕西科技大学	2, 798	17, 898	1	3436/5870
10	西安理工大学	3, 670	17, 673	2	3465/5870
11	西安建筑科技大学	2, 719	17, 479	1	3486/5870
12	西安医学院	1, 385	8, 674	1	4558/5870
13	空军工程大学	2, 209	9, 004	1	4497/5870

注：排名按照全球 ESI 排名先后顺序。



从本期 ESI 数据可以看出，我校目前最有潜力进入全球前 1%的学科是地球科学，已经非常接近了，其次是环境/生态学，也有很大潜力（见图 1）。但是其他学科要有所突破进入全球前 1%，还具有相当大的难度，还需要全校科研人员共同努力。

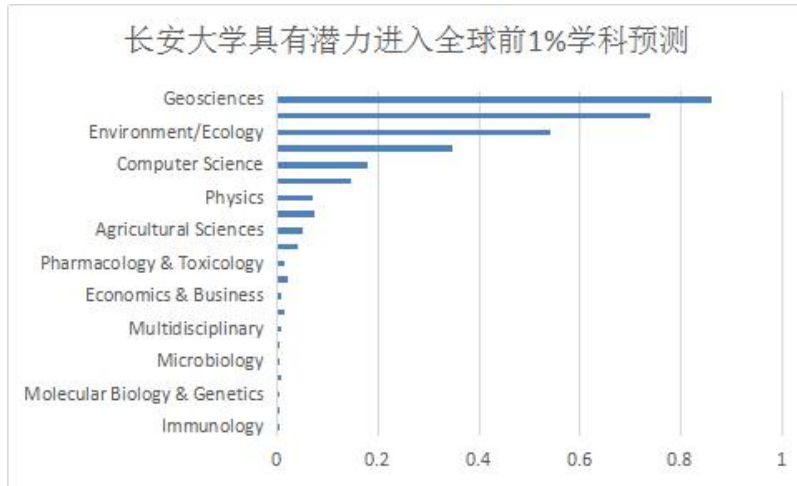


图 1 长安大学具有潜力进入全球前 1%学科预测

下表 6 是地球科学目前已经进入全球前 1%的 32 所大陆高校的论文情况，以便参考。

表 6 地球科学学科进入全球前 1%的大陆 32 所高校的论文情况

序号	机构名称	Web of Science 近十年收录论文数	总被引次数	篇均被引次数	顶尖论文数
1	中国科学院	31124	390911	12.56	389
2	中国地质大学	8890	110389	12.42	129
3	北京大学	4092	70132	17.14	100
4	中国地质科学院	3759	59200	15.75	64
5	南京大学	3606	45639	12.66	41
6	中国气象局	2639	34774	13.18	42
7	北京师范大学	2739	33463	12.22	55
8	清华大学	1734	26313	15.17	53
9	武汉大学	3108	26299	8.46	45
10	西北大学	1071	26173	24.44	33
11	中国地震管理局	2717	25860	9.52	12
12	兰州大学	1690	24393	14.43	31
13	中国海洋大学	2451	22953	9.36	30
14	南京信息工程大学	3005	21792	7.25	32
15	中国石油大学	3599	19450	5.40	44
16	吉林大学	1768	16241	9.19	11
17	中国石油总公司	2730	16170	5.92	13

18	中国矿业大学	1907	15954	8.37	33
19	西安交通大学	764	14955	19.57	18
20	同济大学	1560	13662	8.76	12
21	中山大学	1467	12604	8.59	13
22	国家海洋局	2046	12547	6.13	6
23	浙江大学	1295	11246	8.68	10
24	中南大学	1182	8933	7.56	18
25	华东师范大学	745	8488	11.39	14
26	成都理工大学	1139	8305	7.29	6
27	中国石化	1440	7765	5.39	5
28	中国地质调查局	943	6965	7.39	6
29	河海大学	1021	6708	6.57	10
30	复旦大学	516	6593	12.78	8
31	南京师范大学	464	6583	14.19	12
32	厦门大学	669	6357	9.50	10

#### 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。ESI 可以确定在某个研究领域有影响力的国家、机构、论文和出版物，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、实验室、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。通过 ESI，用户可以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 提供对 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）是指在近十多年的论文中按照同一年、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% 则说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）：是指近 2 年内发表的论文且在近 2 个月内被引次数排在相应学科领域全球前 1% 以内。

## 附录 1: 长安大学 ESI 高被引论文 (2019 年 1 月更新)

第 1 条, 共 48 条

标题: Extreme deformation characteristics and countermeasures for a tunnel in difficult grounds in southern Shaanxi, China

作者: Lai, JX (Lai, Jinxing); Wang, XL (Wang, Xiuling); Qiu, JL (Qiu, Junling); Chen, JX (Chen, Jianxun); Hu, ZN (Hu, Zhinan); Wang, H (Wang, Hao)

来源出版物: ENVIRONMENTAL EARTH SCIENCES 卷: 77 期: 19 文献号: 706 DOI: 10.1007/s12665-018-7888-2 出版年: OCT 2018

Web of Science 核心合集中的 "被引频次": 16

被引频次合计: 16

使用次数 (最近 180 天): 35

使用次数 (2013 年至今): 35

引用的参考文献数: 72

摘要: The Qingling-Bashan (QB) mountain region in southern Shaanxi mainly consists of strongly compressive zones from east to west, with tight folds and compressive fractures. There is a wide distribution of soft rocks of various types, such as phyllite and slate, accompanied by complex geological structures. Ironically, tunnel construction in these difficult grounds with complicated geological conditions embraces a high risk of extreme deformation due to various unpredictable reasons, which can frequently cause collapse and result in budget overruns during the construction period. Therefore, it is crucial to conduct effective countermeasures to eliminate or avoid such adverse impacts. This paper provides a case study on the Yingfeng tunnel (a tunnel constructed in soft rock consisting of a slate ground) based on a geological survey, indoor experiments and in situ monitoring. A successive rock mass deformation resulted in the tunnel lining seriously intruding into construction clearance and some other sections, even collapsing during the construction. The maximum displacement amount was 62.5cm, while the maximum deformation speed reached as high as 34.18mm/day. Additionally, to evaluate the construction impacts of tunnelling-induced geo-hazards, an investigation on extreme deformation was conducted. Considering the time-dependent features of the rock mass deformation, the constraint-convergence method was used to put forward applicable countermeasures in this paper. Finally, from the feedbacks of monitoring results, extreme deformation of the Yingfeng tunnel was effectively controlled.

入藏号: WOS:000446842900001

语言: English

文献类型: Article

作者关键词: Extreme deformation; Tunnelling in difficult grounds; Constraint-convergence method; Countermeasures; Monitoring

KeyWords Plus: REACTION CURVES; DEEP TUNNELS; NUMERICAL-ANALYSIS; SUPPORT-SYSTEM; ROCK; CONSTRUCTION; PREDICTION; MOUNTAIN; FAILURE; SHALLOW

地址: [Lai, Jinxing; Wang, Xiuling; Qiu, Junling; Chen, Jianxun] Changan Univ, Sch Highway, Xian 710064, Shaanxi, Peoples R China.

[Hu, Zhinan] Shijiazhuang Tiedao Univ, Sch Civil Engn, Shijiazhuang 050043, Hebei, Peoples R China.

[Wang, Hao] Oregon State Univ, Sch Civil & Construct Engn, 101 Kearney Hall, Corvallis, OR 97331 USA.

长安大学 ESI 简况

通讯作者地址: Qiu, JL (通讯作者), Changan Univ, Sch Highway, Xian 710064, Shaanxi, Peoples R China.

电子邮件地址: junlingqiu@chd.edu.cn

出版商: SPRINGER

出版商地址: 233 SPRING ST, NEW YORK, NY 10013 USA

Web of Science 类别: Environmental Sciences; Geosciences, Multidisciplinary; Water Resources

研究方向: Environmental Sciences & Ecology; Geology; Water Resources

IDS 号: GW3XM

ISSN: 1866-6280

eISSN: 1866-6299

29 字符的来源出版物名称缩写: ENVIRON EARTH SCI

ISO 来源出版物缩写: Environ. Earth Sci.

来源出版物页码计数: 14

ESI 高被引论文: Y

ESI 热点论文: N

第 2 条, 共 48 条

标题: A Study on the Mechanical Behavior and Statistical Damage Constitutive Model of Sandstone

作者: Wang, JB (Wang, Junbao); Song, ZP (Song, Zhanping); Zhao, BY (Zhao, Baoyun); Liu, XR (Liu, Xinrong); Liu, J (Liu, Jun); Lai, JX (Lai, Jinxing)

来源出版物: ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING 卷: 43 期: 10  
页: 5179-5192 DOI: 10.1007/s13369-017-3016-y 出版年: OCT 2018

Web of Science 核心合集中的 "被引频次": 14

被引频次合计: 14

使用次数 (最近 180 天): 39

使用次数 (2013 年至今): 39

引用的参考文献数: 39

摘要: Triaxial compression test results of sandstone indicate that the peak point strain, elastic modulus, peak deviatoric stress and residual deviatoric stress of the tested sandstone increase with increasing confining pressure, and the variations in them with the confining pressure can be described with a linear function, a logistic function, the generalized Hoek-Brown criterion and the linear Mohr-Coulomb criterion, respectively. Supposing that the rock material can be divided into an elastic part and a damaged part in the rock failure process, the deviatoric stress-strain relationship of the elastic part satisfies Hooke's law, while the damaged part provides residual deviatoric stress. On this basis, it was assumed the rock meso-element strength follows a composite power function distribution. Then, the damage evolution equation was deduced using a statistical method, and a new damage model, which can reflect the rock residual deviatoric stress, was proposed. The reasonability of the new model was verified using the test results of the sandstone. A comparison of the predicted and test results shows that this damage model can well simulate the deviatoric stress-strain response in the failure process of the tested sandstone. In particular, it can reflect the residual deviatoric stress after rock failure.

入藏号: WOS:000443205500012

语言: English

文献类型: Article

作者关键词: Sandstone; Mechanical behavior; Statistical damage constitutive model; Composite power function distribution; Residual deviatoric stress

KeyWords Plus: TRIAXIAL COMPRESSION; UNIAXIAL COMPRESSION; ROCK; STRENGTH; FAILURE; CRITERION; INTACT; SALT

地址: [Wang, Junbao; Song, Zhanping; Liu, Xinrong] Xian Univ Architecture & Technol, Sch Civil Engn, Xian 710055, Shaanxi, Peoples R China.

[Zhao, Baoyun] Chongqing Univ Sci & Technol, Dept Civil Engn & Architecture, Chongqing 401331, Peoples R China.

[Liu, Xinrong; Liu, Jun] Chongqing Univ, Sch Civil Engn, Chongqing 400045, Peoples R China.

[Lai, Jinxing] Changan Univ, Sch Highway, Xian 710064, Shaanxi, Peoples R China.

通讯作者地址: Wang, JB; Song, ZP (通讯作者), Xian Univ Architecture & Technol, Sch Civil Engn, Xian 710055, Shaanxi, Peoples R China.

Zhao, BY (通讯作者), Chongqing Univ Sci & Technol, Dept Civil Engn & Architecture, Chongqing 401331, Peoples R China.

电子邮件地址: xajdwangjunbao@163.com; songzhpyt@xauat.edu.cn; baoyun666@163.com

出版商: SPRINGER HEIDELBERG

出版商地址: TIERGARTENSTRASSE 17, D-69121 HEIDELBERG, GERMANY

Web of Science 类别: Multidisciplinary Sciences

研究方向: Science & Technology - Other Topics

IDS 号: GS0PF

ISSN: 2193-567X

eISSN: 2191-4281

29 字符的来源出版物名称缩写: ARAB J SCI ENG

ISO 来源出版物缩写: Arab. J. Sci. Eng.

来源出版物页码计数: 14

ESI 高被引论文: Y

ESI 热点论文: N

第 3 条, 共 48 条

标题: Investigating the Long-Term Settlement of a Tunnel Built over Improved Loessial Foundation Soil Using Jet Grouting Technique

作者: Qiu, JL (Qiu, Junling); Liu, HQ (Liu, Houquan); Lai, JX (Lai, Jinxing); Lai, HP (Lai, Hongpeng); Chen, JX (Chen, Jianxun); Wang, K (Wang, Ke)

来源出版物: JOURNAL OF PERFORMANCE OF CONSTRUCTED FACILITIES 卷: 32 期:

5 文献号: 04018066 DOI: 10.1061/(ASCE)CF.1943-5509.0001155 出版年: OCT 2018

Web of Science 核心合集中的 "被引频次": 30

被引频次合计: 30

使用次数 (最近 180 天): 89

使用次数 (2013 年至今): 91

引用的参考文献数: 58

摘要: Postconstruction settlement that occurs before a tunnel is in operation may significantly influence the tunnel's long-term stability. The current study investigates such a tunnel, a three-lane superlarge section tunnel in Gansu Province, China, to assess the long-term settlement

performance of a loess tunnel using reinforcement from vertical jet grouting piles. A three-dimensional finite-element model, validated through field observations, is employed to simulate soil consolidation behavior. Results indicate that the long-term settlement, as determined by the finite-element method (FEM), corresponds with field investigation results. Specifically, most of the Fujiayao tunnel's long-term settlement (nearly 90%) occurred within the first 60 days after tunneling. Settlement occurred at a relatively rapid consolidation rate and then gradually stabilized within 120 days with a maximum consolidation settlement magnitude of 14.99 mm according to FEM versus 12.89 mm from field observations. Compared to a case without reinforcement, consolidation settlement in the reinforced case was found to decrease significantly over a shorter consolidation period. Furthermore, the relatively large consolidation settlement surrounding the tunnel, as well as consolidation settlement overall, gradually and uniformly declined in an outward direction from the tunnel. The vertical jet grouting technique exhibited a strong reinforcement effect on the loess tunnel's foundation and can be applied to similar soft foundation tunnel reinforcement projects to greatly improve the stability and safety of tunnels in operation.

入藏号: WOS:000441684700001

语言: English

文献类型: Article

作者关键词: Loess tunnel; Vertical jet grouting pile; Finite-element model; Field observations; Long-term settlement

KeyWords Plus: SHALLOW TUNNELS; CONSOLIDATION; DEFORMATION; BEHAVIOR; REGION; CHINA; MODEL

地址: [Qiu, Junling; Liu, Houquan; Lai, Jinxing; Lai, Hongpeng; Chen, Jianxun] Changan Univ, Sch Highway, Xian 710064, Shaanxi, Peoples R China.

[Liu, Houquan] China Railway SiYuan Survey & Design Grp Co Ltd, Wuhan 430063, Hubei, Peoples R China.

[Wang, Ke] China Railway First Survey & Design Inst Grp Co L, State Key Lab Rail Transit Engn Informatizat, Xian 710043, Shaanxi, Peoples R China.

[Wang, Ke] Southwest Jiaotong Univ, Sch Civil Engn, Chengdu 610031, Sichuan, Peoples R China.

通讯作者地址: Lai, JX (通讯作者), Changan Univ, Sch Highway, Xian 710064, Shaanxi, Peoples R China.

电子邮件地址: QJling@chd.edu.cn; 1021567379@qq.com; laijinxing@chd.edu.cn; laihp168@chd.edu.cn; chenjx1969@163.com; 372836091@qq.com

出版商: ASCE-AMER SOC CIVIL ENGINEERS

出版商地址: 1801 ALEXANDER BELL DR, RESTON, VA 20191-4400 USA

Web of Science 类别: Construction & Building Technology; Engineering, Civil

研究方向: Construction & Building Technology; Engineering

IDS 号: GQ4ZI

ISSN: 0887-3828

eISSN: 1943-5509

29 字符的来源出版物名称缩写: J PERFORM CONSTR FAC

ISO 来源出版物缩写: J. Perform. Constr. Facil.

来源出版物页码计数: 15

ESI 高被引论文: Y

ESI 热点论文: N

第 4 条, 共 48 条

标题: Response characteristics and preventions for seismic subsidence of loess in Northwest China

作者: Qiu, JL (Qiu, Junling); Wang, XL (Wang, Xiuling); Lai, JX (Lai, Jinxing); Zhang, Q (Zhang, Qian); Wang, JB (Wang, Junbao)

来源出版物: NATURAL HAZARDS 卷: 92 期: 3 页: 1909-1935 DOI: 10.1007/s11069-018-3272-5 出版年: JUL 2018

Web of Science 核心合集中的 "被引频次": 23

被引频次合计: 23

使用次数 (最近 180 天): 57

使用次数 (2013 年至今): 81

引用的参考文献数: 119

摘要: Seismic subsidence of loess had been verified by microstructure characteristic, dynamic triaxial test and in situ simulation test using blasting vibration. It has gradually become a significant subject in the field of geotechnical earthquake engineering. Loess is widely distributed in China, which typically has a loose honeycomb-type meta-stable structure that is susceptible to a large reduction in total volume or subsidence upon ground motion. Seismic subsidence contributes to various problems to infrastructures that are constructed on loess. This paper provides a review of state-of-the-art work on mechanism, microstructure characteristic and physical mechanics mechanism of the seismic subsidence. Furthermore, the comprehensive explanation, basics and earlier research performed on subsidence amount estimation, seismic subsidence assessment and corresponding preventions of disasters have been presented briefly. The literature review shows that some significant problems, for example, appropriate theoretical basis, multi-variable coupling in assessment, physical processes, mechanical mechanism in estimation, and so on require constant research and development work to overcome the aforementioned factors. Specifically, research on quantitative relation between macro-mechanics and microstructure cannot proceed only from experimental parameters but should establish theoretical connection between them. Further study on seismic subsidence must be developed under the theory of unsaturated soil mechanics. In addition, research on chronological and spatial development law of large-scale seismic subsidence, prediction of subsidence value and anti-seismic analysis of underground structures can be conducted in future.

入藏号: WOS:000433913500032

语言: English

文献类型: Review

作者关键词: Loess; Seismic subsidence; Mechanism; Microstructure; Probability assessment of loess seismic subsidence; Estimation of subsidence amount; Disasters and preventions

KeyWords Plus: GEOTECHNICAL PROPERTIES; MERCURY INTRUSION; MICROSTRUCTURE; COLLAPSE; TUNNEL; DEFORMATION; LANDSLIDES; DEPOSITS; SOILS; ROCK

地址: [Qiu, Junling; Wang, Xiuling; Lai, Jinxing] Changan Univ, Sch Highway, Middle South 2nd Ring Rd, Xian 710064, Shaanxi, Peoples R China.

[Zhang, Qian] Shijiazhuang Tiedao Univ, Sch Civil Engn, Shijiazhuang 050043, Hebei, Peoples R China.

[Wang, Junbao] Xian Univ Architecture & Technol, Sch Civil Engn, Xian 710055, Shaanxi, Peoples R China.

通讯作者地址: Lai, JX (通讯作者), Changan Univ, Sch Highway, Middle South 2rd Ring Rd, Xian 710064, Shaanxi, Peoples R China.

电子邮件地址: laijinxiang@chd.edu.cn

出版商: SPRINGER

出版商地址: 233 SPRING ST, NEW YORK, NY 10013 USA

Web of Science 类别: Geosciences, Multidisciplinary; Meteorology & Atmospheric Sciences; Water Resources

研究方向: Geology; Meteorology & Atmospheric Sciences; Water Resources

IDS 号: GH8JD

ISSN: 0921-030X

eISSN: 1573-0840

29 字符的来源出版物名称缩写: NAT HAZARDS

ISO 来源出版物缩写: Nat. Hazards

来源出版物页码计数: 27

ESI 高被引论文: Y

ESI 热点论文: Y

第 5 条, 共 48 条

标题: Investigation into geohazards during urbanization process of Xi'an, China

作者: Wang, ZF (Wang, Zhi-Feng); Cheng, WC (Cheng, Wen-Chieh); Wang, YQ (Wang, Ya-Qiong)

来源出版物: NATURAL HAZARDS 卷: 92 期: 3 页: 1937-1953 DOI: 10.1007/s11069-018-3280-5 出版年: JUL 2018

Web of Science 核心合集中的 "被引频次": 17

被引频次合计: 17

使用次数 (最近 180 天): 12

使用次数 (2013 年至今): 32

引用的参考文献数: 75

摘要: Xi'an is the political, cultural and economic center in Northwestern China, and the demands for urbanization are growing dramatically in the past decades. During the rapid urbanization in Xi'an, ground fissure and land subsidence have been regarded as the two striking geohazards. At present, a total of fourteen ground fissures have been detected in Xi'an, among which eight ground fissures have a high level of activity, while the other six ground fissures are of lowly active. Several land subsidence funnels appear in different regions of Xi'an, and the annual land subsidence shows a decreasing tendency after 1991, which is estimated to be around 40 mm/year in recent years. The reasons triggering geohazards can be divided as: (1) natural factors and (2) anthropogenic factors. Analysis of the countermeasures against the prevention and mitigation of geohazards indicates that public awareness is an important issue to a success of the geoenvironment protection. In addition, the existing monitoring technologies (GPS, InSAR, and GIS) together with the technical improvement in other fields are deemed to be necessary for an



effective monitoring and mitigation of the geohazards.

入藏号: WOS:000433913500033

语言: English

文献类型: Review

作者关键词: Geohazards; Urbanization; Ground fissure; Land subsidence

KeyWords Plus: JET GROUT COLUMN; LAND SUBSIDENCE; PARTIAL PENETRATION; PUMPING TESTS; ACID-RAIN; GROUNDWATER; SHANGHAI; FISSURES; SOILS; SIMULATION

地址: [Wang, Zhi-Feng; Wang, Ya-Qiong] Changan Univ, Sch Highway, Dept Geotech & Tunnelling Engn, Xian 710064, Shaanxi, Peoples R China.

[Cheng, Wen-Chieh] Xian Univ Architecture & Technol, Inst Tunnel & Underground Struct Engn, Sch Civil Engn, Xian 710055, Shaanxi, Peoples R China.

通讯作者地址: Wang, ZF (通讯作者), Changan Univ, Sch Highway, Dept Geotech & Tunnelling Engn, Xian 710064, Shaanxi, Peoples R China.

Cheng, WC (通讯作者), Xian Univ Architecture & Technol, Inst Tunnel & Underground Struct Engn, Sch Civil Engn, Xian 710055, Shaanxi, Peoples R China.

电子邮件地址: zhifeng.wang@chd.edu.cn; s2428030@gmail.com; ys08@gl.chd.edu.cn

出版商: SPRINGER

出版商地址: 233 SPRING ST, NEW YORK, NY 10013 USA

Web of Science 类别: Geosciences, Multidisciplinary; Meteorology & Atmospheric Sciences; Water Resources

研究方向: Geology; Meteorology & Atmospheric Sciences; Water Resources

IDS 号: GH8JD

ISSN: 0921-030X

eISSN: 1573-0840

29 字符的来源出版物名称缩写: NAT HAZARDS

ISO 来源出版物缩写: Nat. Hazards

来源出版物页码计数: 17

ESI 高被引论文: Y

ESI 热点论文: Y

第 6 条, 共 48 条

标题: Impacts analysis of car following models considering variable vehicular gap policies

作者: Xin, Q (Xin, Qi); Yang, N (Yang, Nan); Fu, R (Fu, Rui); Yu, SW (Yu, Shaowei); Shi, ZK (Shi, Zhongke)

来源出版物: PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS 卷: 501

页: 338-355 DOI: 10.1016/j.physa.2018.02.155 出版年: JUL 1 2018

Web of Science 核心合集中的 "被引频次": 20

被引频次合计: 20

使用次数 (最近 180 天): 11

使用次数 (2013 年至今): 30

引用的参考文献数: 39

摘要: Due to the important roles playing in the vehicles' adaptive cruise control system, variable vehicular gap polices were employed to full velocity difference model (FVDM) to investigate the

traffic flow properties. In this paper, two new car following models were put forward by taking constant time headway(CTH) policy and variable time headway(VTH) policy into optimal velocity function, separately. By steady state analysis of the new models, an equivalent optimal velocity function was defined. To determine the linear stable conditions of the new models, we introduce equivalent expressions of safe vehicular gap, and then apply small amplitude perturbation analysis and long terms of wave expansion techniques to obtain the new models' linear stable conditions. Additionally, the first order approximate solutions of the new models were drawn at the stable region, by transforming the models into typical Burger's partial differential equations with reductive perturbation method. The FVDM based numerical simulations indicate that the variable vehicular gap polices with proper parameters directly contribute to the improvement of the traffic flows' stability and the avoidance of the unstable traffic phenomena. (C) 2018 Elsevier B.V. All rights reserved.

入藏号: WOS:000430027500031

语言: English

文献类型: Article

作者关键词: Car following model; Adaptive cruise control; Variable vehicular gap; Linear stability analysis; Reductive perturbation method

KeyWords Plus: TRAFFIC OSCILLATION PROPAGATION; FULL VELOCITY DIFFERENCE; ADAPTIVE CRUISE CONTROL; NONLINEAR-ANALYSIS; DENSITY WAVES; FLOW MODEL; VEHICLES

地址: [Xin, Qi; Fu, Rui] Changan Univ, Sch Automobile, Xian 710064, Shaanxi, Peoples R China.

[Yang, Nan; Yu, Shaowei] Changan Univ, Joint Lab Internet Vehicles, Minist Educ, China Mobile Commun Corp, Xian 710064, Shaanxi, Peoples R China.

[Shi, Zhongke] Northwestern Polytech Univ, Sch Automat, Xian 710072, Shaanxi, Peoples R China.

通讯作者地址: Yu, SW (通讯作者), Changan Univ, Joint Lab Internet Vehicles, Minist Educ, China Mobile Commun Corp, Xian 710064, Shaanxi, Peoples R China.

电子邮件地址: swyu2016@chd.edu.cn

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Physics, Multidisciplinary

研究方向: Physics

IDS 号: GC8FC

ISSN: 0378-4371

eISSN: 1873-2119

29 字符的来源出版物名称缩写: PHYSICA A

ISO 来源出版物缩写: Physica A

来源出版物页码计数: 18

ESI 高被引论文: Y

ESI 热点论文: N

第 7 条, 共 48 条

标题: Landslide susceptibility modelling using GIS-based machine learning techniques for Chongren County, Jiangxi Province, China

作者: Chen, W (Chen, Wei); Peng, JB (Peng, Jianbing); Hong, HY (Hong, Haoyuan); Shahabi, H (Shahabi, Himan); Pradhan, B (Pradhan, Biswajeet); Liu, JZ (Liu, Junzhi); Zhu, AX (Zhu, A-Xing); Pei, XJ (Pei, Xiangjun); Duan, Z (Duan, Zhao)

来源出版物: SCIENCE OF THE TOTAL ENVIRONMENT 卷: 626 页: 1121-1135 DOI: 10.1016/j.scitotenv.2018.01.124 出版年: JUN 1 2018

Web of Science 核心合集中的 "被引频次": 24

被引频次合计: 24

使用次数 (最近 180 天): 35

使用次数 (2013 年至今): 97

引用的参考文献数: 62

摘要: The preparation of a landslide susceptibility map is considered to be the first step for landslide hazard mitigation and risk assessment. However, these maps are accepted as end products that can be used for land use planning. The main goal of this study is to assess and compare four advanced machine learning techniques, namely the Bayes' net (BN), radical basis function (RBF) classifier, logistic model tree (LMT), and random forest (RF) models, for landslide susceptibility modelling in Chongren County, China. A total of 222 landslide locations were identified in the study area using historical reports, interpretation of aerial photographs, and extensive field surveys. The landslide inventory data was randomly split into two groups with a ratio of 70/30 for training and validation purposes. Fifteen landslide conditioning factors were prepared for landslide susceptibility modelling. The spatial correlation between landslides and conditioning factors was analyzed using the information gain (IG) method. The BN, RBF classifier, LMT, and RF models were constructed using the training dataset. Finally, the receiver operating characteristic (ROC) and statistical measures, including sensitivity, specificity, and accuracy, were employed to validate and compare the predictive capabilities of the models. Out of the tested models, the RF model had the highest sensitivity, specificity, and accuracy values of 0.787, 0.716, and 0.752, respectively, for the training dataset. Overall, the RF model produced an optimized balance for the training and validation datasets in terms of AUC values and statistical measures. The results of this study also demonstrate the benefit of selecting optimal machine learning techniques with proper conditioning selection methods for landslide susceptibility modelling. (C) 2018 Elsevier B.V. All rights reserved.

入藏号: WOS:000428194000110

PubMed ID: 29898519

语言: English

文献类型: Article

作者关键词: Landslide susceptibility; Bayes' net; Radical basis function classifier; Logistic model tree; Random forest; China

KeyWords Plus: PARTICLE SWARM OPTIMIZATION; ARTIFICIAL NEURAL-NETWORK; INFERENCE SYSTEM ANFIS; DATA MINING TECHNIQUES; LOGISTIC-REGRESSION; SPATIAL PREDICTION; FREQUENCY RATIO; RANDOM FORESTS; FUZZY; MULTIVARIATE

地址: [Chen, Wei; Duan, Zhao] Xian Univ Sci & Technol, Coll Geol & Environm, Xian 710054, Shaanxi, Peoples R China.

[Peng, Jianbing] Changan Univ, Dept Geol Engn, Xian 710054, Shaanxi, Peoples R China.

[Hong, Haoyuan; Liu, Junzhi; Zhu, A-Xing] Nanjing Normal Univ, Key Lab Virtual Geog

Environm, Nanjing 210023, Jiangsu, Peoples R China.

[Hong, Haoyuan; Liu, Junzhi; Zhu, A-Xing] State Key Lab Cultivat Base Geog Environm Evolut, Nanjing 210023, Jiangsu, Peoples R China.

[Hong, Haoyuan; Liu, Junzhi; Zhu, A-Xing] Jiangsu Ctr Collaborat Innovat Geog Informat Reso, Nanjing 210023, Jiangsu, Peoples R China.

[Shahabi, Himan] Univ Kurdistan, Fac Nat Resources, Dept Geomorphol, Sanandaj, Iran.

[Pradhan, Biswajeet] Univ Technol Sydney, Sch Syst Management & Leadership, Fac Engr & IT, CB11-06-217,Bldg 11,81 Broadway,POB 123, Ultimo, NSW 2007, Australia.

[Pradhan, Biswajeet] Sejong Univ, Dept Energy & Mineral Resources Engr, 209 Neungdong Ro, Seoul 05006, South Korea.

[Pei, Xiangjun] Chengdu Univ Technol, State Key Lab Geohazard Prevent & Geoenvironm Pro, Chengdu 610059, Sichuan, Peoples R China.

通讯作者地址: Hong, HY; Zhu, AX (通讯作者), Nanjing Normal Univ, Key Lab Virtual Geog Environm, Nanjing 210023, Jiangsu, Peoples R China.

Pei, XJ (通讯作者), Chengdu Univ Technol, State Key Lab Geohazard Prevent & Geoenvironm Pro, Chengdu 610059, Sichuan, Peoples R China.

电子邮件地址: hong\_haoyuan@outlook.com; azhu@wisc.edu; peixj0119@tom.com

作者识别号:

作者 ResearcherID 号 ORCID 号

Hong, haoyuan C-8455-2014 0000-0001-6224-069X

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Environmental Sciences

研究方向: Environmental Sciences & Ecology

IDS 号: GA2YS

ISSN: 0048-9697

eISSN: 1879-1026

29 字符的来源出版物名称缩写: SCI TOTAL ENVIRON

ISO 来源出版物缩写: Sci. Total Environ.

来源出版物页码计数: 15

ESI 高被引论文: Y

ESI 热点论文: Y

第 8 条, 共 48 条

标题: Principal Stress Rotation under Bidirectional Simple Shear Loadings

作者: Li, Y (Li, Yao); Yang, YM (Yang, Yunming); Yu, HS (Yu, Hai-Sui); Roberts, G (Roberts, Gethin)

来源出版物: KSCE JOURNAL OF CIVIL ENGINEERING 卷: 22 期: 5 页: 1651-1660

DOI: 10.1007/s12205-017-0822-4 出版年: MAY 2018

Web of Science 核心合集中的 "被引频次": 15

被引频次合计: 15

使用次数 (最近 180 天): 7

使用次数 (2013 年至今): 10

引用的参考文献数: 38

摘要: Previous researches have indicated the non-coaxiality of sand in unidirectional simple shear tests, in which the direction of the principal axes of stresses does not coincide with the corresponding principal axes of strain rate tensors. Due to the limitation of apparatus that most of testing facilities can only add shear stress in one direction, the influence of stress history on the noncoaxiality of sand is not fully considered in previous tests. In this study, the effect of stress history on the non-coaxiality of sand is systematically studied by using the first commercially available Variable Direction Dynamic Cyclic Simple Shear system (VDDCSS). Samples of Leighton Buzzard sand (Fraction B) are first consolidated under a vertical confining stress and consolidation shear stress, and then sheared by a drained monotonic shear stress. Angle ( $\theta$ ) between the consolidation shear stress and the drained monotonic shear stress is varied from 0 degrees to 180 degrees, with an interval of 30 degrees. The change of principal axes of stresses is predicted by well-established equations, and the principal axis of strain rate is calculated using recorded data. Results show that the level of non-coaxiality is increased by the increasing  $\theta$ , especially at the initial stage of drained shearing.

入藏号: WOS:000431052600013

语言: English

文献类型: Article

作者关键词: Principal stress rotation; noncoaxial behavior; simple shear; sand; orientation of principal stress

KeyWords Plus: SAND; SOIL; LIQUEFACTION; MODEL; FLOW

地址: [Li, Yao] Changan Univ, Sch Highway, Xian, Shaanxi, Peoples R China.

[Li, Yao] Middle Sect, Nan Er Huan Rd, Xian, Shaanxi, Peoples R China.

[Yang, Yunming] Univ Nottingham Ningbo China, Ningbo Nottingham New Mat Inst, Dept Civil Engr, 199 Taikang East Rd, Ningbo, Zhejiang, Peoples R China.

[Yu, Hai-Sui] Univ Leeds, Sch Civil Engr, Leeds LS2 9JT, W Yorkshire, England.

[Roberts, Gethin] Univ Nottingham Ningbo China, Dept Civil Engr, 199 Taikang East Rd, Ningbo, Zhejiang, Peoples R China.

通讯作者地址: Yang, YM (通讯作者), Univ Nottingham Ningbo China, Ningbo Nottingham New Mat Inst, Dept Civil Engr, 199 Taikang East Rd, Ningbo, Zhejiang, Peoples R China.

电子邮件地址: Yao.Li@chd.edu.cn; Ming.yang@nottingham.edu.cn; h.yu@leeds.ac.uk; Gethin.roberts@nottingham.edu.cn

作者识别号:

作者 ResearchID 号 ORCID 号

Roberts, Gethin 0000-0002-3703-981X

出版商: KOREAN SOCIETY OF CIVIL ENGINEERS-KSCE

出版商地址: 50-7 OGUM-DONG, SONGPA-KU, SEOUL, 138-857, SOUTH KOREA

Web of Science 类别: Engineering, Civil

研究方向: Engineering

IDS 号: GE2NT

ISSN: 1226-7988

eISSN: 1976-3808

29 字符的来源出版物名称缩写: KSCE J CIV ENG

ISO 来源出版物缩写: KSCE J. Civ. Eng.

来源出版物页码计数: 10

ESI 高被引论文: Y

ESI 热点论文: N

第 9 条, 共 48 条

标题: GIS-based landslide susceptibility evaluation using a novel hybrid integration approach of bivariate statistical based random forest method

作者: Chen, W (Chen, Wei); Xie, XS (Xie, Xiaoshen); Peng, JB (Peng, Jianbing); Shahabi, H (Shahabi, Himan); Hong, HY (Hong, Haoyuan); Bui, DT (Dieu Tien Bui); Duan, Z (Duan, Zhao); Li, SJ (Li, Shaojun); Zhu, AX (Zhu, A-Xing)

来源出版物: CATENA 卷: 164 页: 135-149 DOI: 10.1016/j.catena.2018.01.012 出版年: MAY 2018

Web of Science 核心合集中的 "被引频次": 22

被引频次合计: 22

使用次数 (最近 180 天): 24

使用次数 (2013 年至今): 46

引用的参考文献数: 91

摘要: Taibai County is a mountainous area in China, where rainfall-induced landslides occur frequently. The purpose of this study is to assess landslide susceptibility using the integrated Random Forest (RF) with bivariate Statistical Index (SI), the Certainty Factor (CF), and Index of Entropy (IDE). For this purpose, a total of 212 landslides for the study area were identified and collected. Of these landslides, 70% (148) were selected randomly for building the models and the other landslides (64) were used for validating the models. Accordingly, 12 landslide conditioning factors were considered that involve altitude, slope angle, plan curvature, profile curvature, slope aspect, distance to roads, distance to faults, distance to rivers, rainfall, NDVI, land use, and lithology. Then, the spatial correlation between conditioning factors and landslides was analysed using the RF method to quantify the predictive ability of these factors. In the next step, three landslide models, the RF-SI, RF-CF and RF-IOE, were constructed using the training dataset. Finally, the receiver operating characteristic (ROC) and statistical measures such as the kappa index, positive predictive rates, negative predictive rates, sensitivity, specificity, and accuracy were employed to validate and compare the predictive capability of the three models. Of the models, the RF-CF model has the highest positive predictive rate, specificity, accuracy, kappa index and AUC values of 0.838, 0.824, 0.865, 0.730 and 0.925 for the training data, and the highest positive predictive rate, negative predictive rate, sensitivity, specificity, accuracy, kappa index and AUC values of 0.896, 0.934, 0.938, 0.891, 0.914, 0.828, and 0.946 for the validation data, respectively. In general, the RF-CF model produced an optimized balance in terms of AUC values and statistical measures.

入藏号: WOS:000430031800015

语言: English

文献类型: Article

作者关键词: Landslide; Statistical Index; Certainty Factor; Index of Entropy; Random Forest

KeyWords Plus: LOGISTIC-REGRESSION MODEL; SUPPORT VECTOR MACHINES; INFERENCE SYSTEM ANFIS; DATA MINING TECHNIQUES; HOA BINH PROVINCE; SPATIAL PREDICTION; FREQUENCY RATIO; CERTAINTY FACTOR; ENTROPY MODELS; DIFFERENTIAL EVOLUTION

地址: [Chen, Wei; Xie, Xiaoshen; Duan, Zhao] Xian Univ Sci & Technol, Coll Geol & Environm, Xian 710054, Shaanxi, Peoples R China.

[Peng, Jianbing] Changan Univ, Dept Geol Engn, Xian 710054, Shaanxi, Peoples R China.

[Shahabi, Himan] Univ Kurdistan, Fac Nat Resources, Dept Geomorphol, Sanandaj, Iran.

[Hong, Haoyuan; Zhu, A-Xing] Nanjing Normal Univ, Key Lab Virtual Geog Environm, Nanjing 210023, Jiangsu, Peoples R China.

[Hong, Haoyuan; Zhu, A-Xing] State Key Lab Cultivat Base Geog Environm Evolut, Nanjing 210023, Jiangsu, Peoples R China.

[Hong, Haoyuan; Zhu, A-Xing] Jiangsu Ctr Collaborat Innovat Geog Informat Reso, Nanjing 210023, Jiangsu, Peoples R China.

[Dieu Tien Bui] Univ Coll Southeast Norway, Dept Business & IT, Geog Informat Syst Grp, Gullringvegen 36, N-3800 Bo I Telemark, Norway.

[Duan, Zhao] Chengdu Univ Technol, State Key Lab Geohazard Prevent & Geoenvironm Pro, Chengdu, Sichuan, Peoples R China.

[Li, Shaojun] Chinese Acad Sci, Inst Rock & Soil Mech, State Key Lab Geomech & Geotech Engn, Wuhan 430071, Hubei, Peoples R China.

通讯作者地址: Chen, W (通讯作者), Xian Univ Sci & Technol, Coll Geol & Environm, Xian 710054, Shaanxi, Peoples R China.

Hong, HY (通讯作者), Nanjing Normal Univ, Key Lab Virtual Geog Environm, Nanjing 210023, Jiangsu, Peoples R China.

电子邮件地址: chenwei0930@xust.edu.cn; hong\_haoyuan@outlook.com

作者识别号:

作者 ResearcherID 号 ORCID 号

Tien Bui, Dieu K-2125-2012 0000-0001-5161-6479

Hong, haoyuan C-8455-2014 0000-0001-6224-069X

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary; Soil Science; Water Resources

研究方向: Geology; Agriculture; Water Resources

IDS 号: GC8GM

ISSN: 0341-8162

eISSN: 1872-6887

29 字符的来源出版物名称缩写: CATENA

ISO 来源出版物缩写: Catena

来源出版物页码计数: 15

ESI 高被引论文: Y

ESI 热点论文: N

第 10 条, 共 48 条

标题: Distribution and characteristics of landslide in Loess Plateau: A case study in Shaanxi province

作者: Zhuang, JQ (Zhuang, Jianqi); Peng, JB (Peng, Jianbing); Wang, GH (Wang, Gonghui); Javed, I (Javed, Iqbal); Wang, Y (Wang, Ying); Li, W (Li, Wei)

来源出版物: ENGINEERING GEOLOGY 卷: 236 特刊: SI 页: 89-96 DOI:

10.1016/j.enggeo.2017.03.001 出版年: MAR 26 2018

Web of Science 核心合集集中的 "被引频次": 12

被引频次合计: 12

使用次数 (最近 180 天): 42

使用次数 (2013 年至今): 55

引用的参考文献数: 49

摘要: Every year about one third of the geohazards in China occur in the Loess Plateau causing human loss, damaging gas and oil pipelines, destroying highways, railways and degrading farmland. Field investigation and monitoring, in-situ tests and laboratory experiments were performed to improve our understanding of the factors effecting the distribution, characteristics and causes of loess landslides. First, we find that 79% of the landslides are shallower than 10m, 85% have a volume of less than 100,000 m<sup>3</sup>. Second, landslides on the Loess Plateau occur primarily on concave slope profiles that have slope angles of 20-35 degrees and that face south-east. Third, the equivalent coefficient of friction of loess landslides is very low resulting in long run-out with a low angle sliding surface. Loess landslides generally transform into mud-flows resulting in an increase in volume in transit and forming a geohazard chain. Antecedent rainfall plays an important role in triggering loess landslides. Finally, clusters of landslides in the Loess Plateau occur because the loess easily disintegrates under high pressure due to its loose and highly porous structure. There is a sharp decrease in cohesive strength with increase in deformation and water content and thus landslides tend to undergo static liquefaction during sliding. (C) 2017 Elsevier B.V. All rights reserved.

入藏号: WOS:000430028000010

语言: English

文献类型: Article

作者关键词: Loess landslide; Distribution; Characteristics; Landslide mechanics; Loess Plateau

KeyWords Plus: RING-SHEAR APPARATUS; DEBRIS FLOWS; RAINFALL; CHINA; SUSCEPTIBILITY; AVALANCHES; DYNAMICS; MODEL

地址: [Zhuang, Jianqi; Peng, Jianbing; Wang, Ying; Li, Wei] Changan Univ, Coll Geol Engn & Surveying, Key Lab Western China Mineral Resources & Geol En, Xian 710054, Shaanxi, Peoples R China.

[Zhuang, Jianqi] Collaborat Innovat Ctr Geol Prevent, State Key Lab Geohazard Prevent & Geoenvironm Pro, Chengdu 610041, Sichuan, Peoples R China.

[Wang, Gonghui] Kyoto Univ, Res Ctr Landslides, Disaster Prevent Res Inst, Uji, Kyoto 6110011, Japan.

[Javed, Iqbal] Abbottabad Univ Sci & Technol, Dept Earth Sci, Abbottabad, Pakistan.

通讯作者地址: Peng, JB (通讯作者), Changan Univ, Coll Geol Engn & Surveying, Key Lab Western China Mineral Resources & Geol En, Xian 710054, Shaanxi, Peoples R China.

电子邮件地址: dicexy\_1@126.com

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Engineering, Geological; Geosciences, Multidisciplinary

研究方向: Engineering; Geology

IDS 号: GC8FH

ISSN: 0013-7952



eISSN: 1872-6917

29 字符的来源出版物名称缩写: ENG GEOL

ISO 来源出版物缩写: Eng. Geol.

来源出版物页码计数: 8

ESI 高被引论文: Y

ESI 热点论文: N

第 11 条, 共 48 条

标题: Improving cracking resistance of cement mortar by thermo-sensitive poly N-isopropyl acrylamide (PNIPAM) gels

作者: Wang, ZJ (Wang, Zhenjun); Wu, JY (Wu, Jiayu); Zhao, P (Zhao, Peng); Dai, N (Dai, Nan); Zhai, ZW (Zhai, Zhiwei); Ai, T (Ai, Tao)

来源出版物: JOURNAL OF CLEANER PRODUCTION 卷: 176 页: 1292-1303 DOI: 10.1016/j.jclepro.2017.11.242 出版年: MAR 1 2018

Web of Science 核心合集中的 "被引频次": 12

被引频次合计: 12

使用次数 (最近 180 天): 35

使用次数 (2013 年至今): 59

引用的参考文献数: 27

摘要: Cracking problems are threats to durability and sustainability of high performance cement-based composites. Due to the complex behaviors of cement materials under various environmental conditions, accurate prediction of the cracks is very difficult. In this work, effects of novel thermo-sensitive polymer N-isopropylacrylamide (PNIPAM) on the cracking resistance of cement mortar were investigated. The micro structures of cement mortar and PNIPAM were characterized by environmental scanning electron microscopy (ESEM) and Fourier Transform Infrared Spectroscopy (FT-IR). The pulse velocity, water absorption and water content of cement mortar were tested to observe the inner structure changes of cement mortar with PNIPAM. Artificial neural network (ANN) technology was used to predict the cracking resistance of cement mortar with PNIPAM. The results show that PNIPAM is cross-linked macromolecule polymer with special thermo-sensitive characters of shrinkage at high temperature and expansion at low temperature. When the mixing temperature is lower than LCST of PNIPAM, it can expand and is soluble in water. However, PNIPAM can shrink and release water to cure the hardened mortar when temperature is higher than LCST due to the cement hydration heat accumulation. The proposed model built by ANN can be used to predict the cracking resistance of cement mortar. The model was further applied to evaluate the effects of different PNIPAM contents on the cracking performance of cement mortar. PNIPAM with suitable contents can decrease the internal defects of cement mortar. The content of PNIPAM can be used below 1.2% of cement mass for the consideration of cracking resistance improvement of cement mortar. (C) 2017 Elsevier Ltd. All rights reserved.

入藏号: WOS:000423648000113

语言: English

文献类型: Article

作者关键词: Thermo-sensitive gels; Poly N-Isopropyl acrylamide (PNIPAM); Artificial neural network (ANN); Cement mortar; Cracking resistance

KeyWords Plus: SUPER ABSORBENT POLYMERS; MICROMECHANICAL MODEL; AUTOGENOUS SHRINKAGE; RELATIVE-HUMIDITY; THERMAL-EXPANSION; NEURAL-NETWORKS; EARLY-AGE; IN-SITU; CONCRETE; COEFFICIENT

地址: [Wang, Zhenjun; Wu, Jiayu; Zhao, Peng; Dai, Nan; Zhai, Zhiwei; Ai, Tao] Changan Univ, Sch Mat Sci & Engn, Xian 710061, Shaanxi, Peoples R China.

[Wang, Zhenjun; Zhao, Peng; Ai, Tao] Changan Univ, Minist Educ PR China, Engn Res Cent Pavement Mat, Xian 710061, Peoples R China.

通讯作者地址: Wang, ZJ; Zhao, P (通讯作者), Changan Univ, Sch Mat Sci & Engn, Xian 710061, Shaanxi, Peoples R China.

Wang, ZJ; Zhao, P (通讯作者), Changan Univ, Minist Educ PR China, Engn Res Cent Pavement Mat, Xian 710061, Peoples R China.

电子邮件地址: zjwang@chd.edu.cn; zyzaop@chd.edu.cn

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Green & Sustainable Science & Technology; Engineering, Environmental; Environmental Sciences

研究方向: Science & Technology - Other Topics; Engineering; Environmental Sciences & Ecology

IDS 号: FU1ZM

ISSN: 0959-6526

eISSN: 1879-1786

29 字符的来源出版物名称缩写: J CLEAN PROD

ISO 来源出版物缩写: J. Clean Prod.

来源出版物页码计数: 12

ESI 高被引论文: Y

ESI 热点论文: N

第 12 条, 共 48 条

标题: MOF-derived porous N-Co<sub>3</sub>O<sub>4</sub>@N-C nanododecahedra wrapped with reduced graphene oxide as a high capacity cathode for lithium-sulfur batteries

作者: Xu, J (Xu, Jing); Zhang, WX (Zhang, Wenxue); Chen, Y (Chen, Yi); Fan, HB (Fan, Hongbo); Su, DW (Su, Dawei); Wang, GX (Wang, Guoxiu)

来源出版物: JOURNAL OF MATERIALS CHEMISTRY A 卷: 6 期: 6 页: 2797-2807

DOI: 10.1039/c7ta10272k 出版年: FEB 14 2018

Web of Science 核心合集中的 "被引频次": 32

被引频次合计: 32

使用次数 (最近 180 天): 237

使用次数 (2013 年至今): 468

引用的参考文献数: 66

摘要: The lithium-sulfur (Li-S) battery has been regarded as a highly promising rechargeable energy-storage system due to its high energy density of 2567 W h kg<sup>-1</sup>. However, moderating the dissolution of lithium polysulfides (LiPSs) and enhancing the conductivity of the sulfur cathode are the main limitations for its successful application. Herein, we demonstrate an approach to

simultaneously tackle these two barriers by designing a porous N-Co<sub>3</sub>O<sub>4</sub>@N-C nanododecahedral composite. This composite was derived from ZIF-67 via a facile pyrolysis method, which realizes the effective doping of nitrogen into both Co<sub>3</sub>O<sub>4</sub> and the carbon framework, simultaneously achieving a well-defined porous structure. After wrapping with reduced graphene oxide (rGO), this porous N-Co<sub>3</sub>O<sub>4</sub>@N-C/rGO cathode supported a high sulfur loading (5.89 mg cm<sup>-2</sup>) and exhibited excellent stability (611 mA h g<sup>-1</sup>) at 2C after 1000 cycles). Furthermore, ex situ Raman spectroscopy, ex situ X-ray photoelectron spectroscopy, UV-vis absorption spectroscopy and first-principles calculations confirm that the N-Co<sub>3</sub>O<sub>4</sub>@N-C/rGO nanododecahedra effectively bind LiPSs in the electrode over multiple cycles. This proved that the cobalt oxides in the porous N-Co<sub>3</sub>O<sub>4</sub>@N-C nanododecahedra have strong affinity for binding LiPSs. The simultaneous doping of nitrogen both into the cobalt oxides and carbon framework not only strengthened the binding energy for LiPSs absorption, but also improved the overall conductivity of the nanododecahedra. Moreover, the interconnected porous structure contributes to the electron transfer and alleviates the volume changes of active materials during cycling.

入藏号: WOS:000424466300041

语言: English

文献类型: Article

KeyWords Plus: OXYGEN REDUCTION REACTION; METAL-ORGANIC FRAMEWORK; LI-S BATTERIES; CARBON POLYHEDRA; PERFORMANCE; NITROGEN; POLYSULFIDES; SHELL; IDENTIFICATION; NANOSHEETS

地址: [Xu, Jing; Chen, Yi; Su, Dawei; Wang, Guoxiu] Univ Technol Sydney, Ctr Clean Energy Technol, Sch Math & Phys Sci, Fac Sci, Sydney, NSW 2007, Australia.

[Zhang, Wenxue] Changan Univ, Sch Mat Sci & Engn, Xian 710064, Shaanxi, Peoples R China.

[Fan, Hongbo] Dongguan Univ Technol, Sch Environm & Civil Engn, Dongguan, Peoples R China.

通讯作者地址: Su, DW; Wang, GX (通讯作者), Univ Technol Sydney, Ctr Clean Energy Technol, Sch Math & Phys Sci, Fac Sci, Sydney, NSW 2007, Australia.

电子邮件地址: Dawei.Su@uts.edu.au; Guoxiu.Wang@uts.edu.au

作者识别号:

作者 ResearcherID 号 ORCID 号

Su, Dawei B-9186-2017 0000-0002-3972-8205

Wang, Guoxiu B-8422-2017 0000-0003-4295-8578

出版商: ROYAL SOC CHEMISTRY

出版商地址: THOMAS GRAHAM HOUSE, SCIENCE PARK, MILTON RD, CAMBRIDGE CB4 0WF, CAMBS, ENGLAND

Web of Science 类别: Chemistry, Physical; Energy & Fuels; Materials Science, Multidisciplinary

研究方向: Chemistry; Energy & Fuels; Materials Science

IDS 号: FV3KG

ISSN: 2050-7488

eISSN: 2050-7496

29 字符的来源出版物名称缩写: J MATER CHEM A

ISO 来源出版物缩写: J. Mater. Chem. A

来源出版物页码计数: 11

ESI 高被引论文: Y

ESI 热点论文: N

第 13 条, 共 48 条

标题: Relative velocity difference model for the car-following theory

作者: Yu, SW (Yu, Shaowei); Tang, JJ (Tang, Jinjun); Xin, Q (Xin, Qi)

来源出版物: NONLINEAR DYNAMICS 卷: 91 期: 3 页: 1415-1428 DOI: 10.1007/s11071-017-3953-8 出版年: FEB 2018

Web of Science 核心合集中的 "被引频次": 29

被引频次合计: 29

使用次数 (最近 180 天): 13

使用次数 (2013 年至今): 38

引用的参考文献数: 66

摘要: To explore and evaluate the impacts of relative velocity difference (RVD) with memory on the dynamic characteristics and fuel economy of traffic flow in the intelligent transportation environment, we first analyze the linkage between RVD with different-step memory and the following car's behaviors with the measured car-following (CF) data in cities by using the gray correlation analysis method and then present a RVD model based on the previous CF models in the literatures and calibrate it. Finally, we conduct several numerical simulations in the adaptive cruise control (ACC) strategy to explore how RVD with memory affects car's velocity fluctuation and fuel consumptions, and find that the RVD model can describe the phase transition of traffic flow and estimate the evolution of traffic congestion, and that considering RVD with memory in modeling CF behaviors and designing the advanced ACC strategy can improve the stability and fuel economy of traffic flow.

入藏号: WOS:000424037200001

语言: English

文献类型: Article

作者关键词: Car-following model; Relative velocity difference with memory; Traffic flow stability; Fuel economy; The ACC system

KeyWords Plus: CRUISE CONTROL VEHICLES; NON-LANE-DISCIPLINE; TRAFFIC FLOW; STABILITY ANALYSIS; CONTROL-SYSTEMS; NEIGHBOR INTERACTION; ENERGY-CONSUMPTION; FUEL CONSUMPTION; DRIVER MEMORY; FULL VELOCITY

地址: [Yu, Shaowei] Changan Univ, China Mobile Commun Corp, Minist Educ, Joint Lab Internet Vehicles, Xian 710064, Shaanxi, Peoples R China.

[Tang, Jinjun] Cent S Univ, Sch Traff & Transportat Engr, Changsha 410075, Hunan, Peoples R China.

[Xin, Qi] Changan Univ, Sch Automobile, Xian 710064, Shaanxi, Peoples R China.

通讯作者地址: Yu, SW (通讯作者), Changan Univ, China Mobile Commun Corp, Minist Educ, Joint Lab Internet Vehicles, Xian 710064, Shaanxi, Peoples R China.

电子邮件地址: swyu2016@chd.edu.cn; jinjuntang@csu.edu.cn

出版商: SPRINGER

出版商地址: VAN GODEWIJCKSTRAAT 30, 3311 GZ DORDRECHT, NETHERLANDS

Web of Science 类别: Engineering, Mechanical; Mechanics

研究方向: Engineering; Mechanics

IDS 号: FU7MW

ISSN: 0924-090X

eISSN: 1573-269X

29 字符的来源出版物名称缩写: NONLINEAR DYNAM

ISO 来源出版物缩写: Nonlinear Dyn.

来源出版物页码计数: 14

ESI 高被引论文: Y

ESI 热点论文: Y

第 14 条, 共 48 条

标题: A state-of-the-art review of sustainable energy based freeze proof technology for cold-region tunnels in China

作者: Lai, JX (Lai, Jinxing); Wang, XL (Wang, Xiuling); Qiu, JL (Qiu, Junling); Zhang, GZ (Zhang, Guozhu); Chen, JX (Chen, Jianxun); Xie, YL (Xie, Yongli); Luo, YB (Luo, Yanbin)

来源出版物: RENEWABLE & SUSTAINABLE ENERGY REVIEWS 卷: 82 页: 3554-3569

DOI: 10.1016/j.rser.2017.10.104 子辑: 3 出版年: FEB 2018

Web of Science 核心合集中的 "被引频次": 27

被引频次合计: 28

使用次数 (最近 180 天): 30

使用次数 (2013 年至今): 110

引用的参考文献数: 100

摘要: To cope with tunnel frost damage, studies on prevention methods are routinely conducted to improve environmental protection and energy saving. Based on field investigations, the main available thermal insulation methods and their application are discussed and analysed in this paper. The results show that passive measures, such as a thermal insulation layer or door, cannot completely avoid frost damage. Construction investment of the electric heat tracing (EHT) system is lower at the early stage, but a large investment in operation and pollution problems are needed in the later period. As renewable, clean and environmentally friendly primary energy, geothermal energy can realize energy-saving and emission-reduction. Furthermore, our research team proposed the optimization design method for tunnel heat insulation and anti-freezing by using geothermal energy and presented the challenges for future applications of the ground-source heat pump (GSHP) system in tunnels. The results regarding energy conservation from this review can provide useful technical support in design, operation and management of tunnels in cold regions.

入藏号: WOS:000418574800110

语言: English

文献类型: Review

作者关键词: Cold-region tunnel; Freeze proof; Geothermal energy; In-situ observation; Design optimization; Energy-saving

KeyWords Plus: GROUND HEAT-EXCHANGERS; OPTIMUM INSULATION THICKNESS; THERMAL PERFORMANCE; PUMP SYSTEM; LINING GHES; MODEL; PILE; TEMPERATURE; CONDUCTION; WALLS

地址: [Lai, Jinxing; Wang, Xiuling; Qiu, Junling; Chen, Jianxun; Xie, Yongli; Luo, Yanbin] Changan Univ, Sch Highway, Middle South 2rd Ring Rd, Xian 710064, Shaanxi, Peoples R China.

[Zhang, Guozhu] Southeast Univ, Inst Geotech Engn, Nanjing 210096, Jiangsu, Peoples R China.

通讯作者地址: Qiu, JL (通讯作者), Changan Univ, Sch Highway, Middle South 2rd Ring Rd, Xian 710064, Shaanxi, Peoples R China.

Zhang, GZ (通讯作者), Southeast Univ, Inst Geotech Engn, Nanjing 210096, Jiangsu, Peoples R China.

电子邮件地址: 870133597@qq.com; zhanggz@seu.edu.cn

作者识别号:

作者 ResearcherID 号 ORCID 号

Qiu, Junling 0000-0002-7628-5431

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Green & Sustainable Science & Technology; Energy & Fuels

研究方向: Science & Technology - Other Topics; Energy & Fuels

IDS 号: FQ7WS

ISSN: 1364-0321

29 字符的来源出版物名称缩写: RENEW SUST ENERG REV

ISO 来源出版物缩写: Renew. Sust. Energ. Rev.

来源出版物页码计数: 16

ESI 高被引论文: Y

ESI 热点论文: N

第 15 条, 共 48 条

标题: Numerical Investigation of Particle Concentration Distribution Characteristics in Twin-Tunnel Complementary Ventilation System

作者: Ren, R (Ren, Rui); Xu, SS (Xu, Shuoshuo); Ren, ZD (Ren, Zhaodan); Zhang, SZ (Zhang, Shuangzhuo); Wang, H (Wang, Hao); Wang, XL (Wang, Xiuling); He, SY (He, Siyue)

来源出版物: MATHEMATICAL PROBLEMS IN ENGINEERING 文献号: 1329187 DOI: 10.1155/2018/1329187 出版年: 2018

Web of Science 核心合集中的 "被引频次": 13

被引频次合计: 13

使用次数 (最近 180 天): 21

使用次数 (2013 年至今): 31

引用的参考文献数: 72

摘要: Longitudinal ventilation systems are commonly installed in new tunnels. In this paper, based on the similarity law, the scale model with a view to different conditions is carried out to study the effectiveness of twin-tunnel complementary ventilation system. The system can offer enough amount of fresh air to meet requirement of driving safety by using longitudinal ventilation without ventilation shaft. Field measurements were also performed to validate the numerical model. Results reveal that particle concentration distribution is influenced by the distance from air interchange cross-passages to uphill tunnel inlet (L-ex) and the flow volume of air interchange cross (Q(ex)) passage and jet fan thrust (P-jet) in tunnel. And L-ex is the most important factor about influencing the ventilation efficiency.

入藏号: WOS:000439718300001

语言: English

文献类型: Article

KeyWords Plus: ROAD TUNNEL; NATURAL VENTILATION; TRANSVERSE VENTILATION; MAXIMUM TEMPERATURE; CONSTITUTIVE MODEL; SMOKE EXTRACTION; THERMAL COMFORT; FIRE; FLOW; REGION

地址: [Ren, Rui; Xu, Shuoshuo; Wang, Xiuling; He, Siyue] Changan Univ, Sch Highway, Xian 710064, Shaanxi, Peoples R China.

[Ren, Zhaodan; Zhang, Shuangzhuo] China Railway Siyuan Survey & Design Grp Co Ltd, Wuhan 430063, Hubei, Peoples R China.

[Wang, Hao] Oregon State Univ, Sch Civil & Construct Engn, 101 Kearney Hall, Corvallis, OR 97331 USA.

通讯作者地址: Wang, XL (通讯作者), Changan Univ, Sch Highway, Xian 710064, Shaanxi, Peoples R China.

电子邮件地址: wangxiuling@chd.edu.cn

出版商: HINDAWI LTD

出版商地址: ADAM HOUSE, 3RD FLR, 1 FITZROY SQ, LONDON, W1T 5HF, ENGLAND

Web of Science 类别: Engineering, Multidisciplinary; Mathematics, Interdisciplinary Applications

研究方向: Engineering; Mathematics

IDS 号: GO1ND

ISSN: 1024-123X

eISSN: 1563-5147

29 字符的来源出版物名称缩写: MATH PROBL ENG

ISO 来源出版物缩写: Math. Probl. Eng.

来源出版物页码计数: 13

ESI 高被引论文: Y

ESI 热点论文: N

第 16 条, 共 48 条

标题: Evaluation of asphalt-aggregate interaction based on the rheological properties

作者: Zhang, JP (Zhang, Jiupeng); Fan, ZP (Fan, Zepeng); Hu, DL (Hu, Dongliang); Hu, Z (Hu, Zhuang); Pei, JZ (Pei, Jianzhong); Kong, WC (Kong, Weichuan)

来源出版物: INTERNATIONAL JOURNAL OF PAVEMENT ENGINEERING 卷: 19 期: 7  
页: 586-592 DOI: 10.1080/10298436.2016.1199868 出版年: 2018

Web of Science 核心合集中的 "被引频次": 24

被引频次合计: 30

使用次数 (最近 180 天): 34

使用次数 (2013 年至今): 46

引用的参考文献数: 28

摘要: The silicon dioxide (SiO<sub>2</sub>) and calcium oxide (CaO) analytical reagents are selected to prepare asphalt mastics and the effects of aggregate chemical composition on asphalt-aggregate interactions (AAI) are evaluated based on the complex modulus and phase angle. It is found that the oxide analytical reagents significantly affect the rheological properties such as complex shear modulus and phase angle, and the effects of CaO are greater than SiO<sub>2</sub> due to the stronger interaction between asphalt binder and CaO analytical reagents. Both the modulus stiffening ratio

and the phase angle-based K. Ziegel-B coefficient could be used to evaluate the AAI, and the latter is the better index. Results show that the indexes increase with the test temperature, but decrease with the loading frequency, and tend to be constant. The higher adhesive strength between asphalt binder and limestone than basalt is likely attributed to the higher content of CaO in limestone aggregate and the stronger asphalt-CaO interaction.

入藏号: WOS:000432547900003

语言: English

文献类型: Article

作者关键词: Asphalt-aggregate interaction; chemical composition; oxide analytical reagent; DSR test; complex shear modulus; phase angle

KeyWords Plus: COMPOSITES; FILLERS

地址: [Zhang, Jiupeng; Fan, Zepeng; Hu, Dongliang; Hu, Zhuang; Pei, Jianzhong] Changan Univ, Sch Highway, Xian, Shaanxi, Peoples R China.

[Zhang, Jiupeng] Univ Illinois, Dept Civil & Environm Engn, Urbana, IL USA.

[Kong, Weichuan] Highway Bur Zhangzhou, Zhangzhou, Peoples R China.

通讯作者地址: Pei, JZ (通讯作者), Changan Univ, Sch Highway, Xian, Shaanxi, Peoples R China.

电子邮件地址: peijianzhong@126.com

作者识别号:

作者 ResearcherID 号 ORCID 号

Luna-Reyes, Luis G-5548-2012 0000-0002-0852-404X

Li, Jianping 0000-0003-3650-5281

出版商: TAYLOR & FRANCIS LTD

出版商地址: 2-4 PARK SQUARE, MILTON PARK, ABINGDON OX14 4RN, OXON, ENGLAND

Web of Science 类别: Construction & Building Technology; Engineering, Civil; Materials Science, Characterization & Testing

研究方向: Construction & Building Technology; Engineering; Materials Science

IDS 号: GG2UH

ISSN: 1029-8436

eISSN: 1477-268X

29 字符的来源出版物名称缩写: INT J PAVEMENT ENG

ISO 来源出版物缩写: Int. J. Pavement Eng.

来源出版物页码计数: 7

ESI 高被引论文: Y

ESI 热点论文: N

第 17 条, 共 48 条

标题: Cracking and Failure in Rock Specimen Containing Combined Flaw and Hole under Uniaxial Compression

作者: Fan, X (Fan, Xiang); Chen, R (Chen, Rui); Lin, H (Lin, Hang); Lai, HP (Lai, Hongpeng); Zhang, CY (Zhang, Chunyang); Zhao, QH (Zhao, Qihua)

来源出版物: ADVANCES IN CIVIL ENGINEERING 文献号: 9818250 DOI: 10.1155/2018/9818250 出版年: 2018



Web of Science 核心合集中的 "被引频次": 9

被引频次合计: 9

使用次数 (最近 180 天): 16

使用次数 (2013 年至今): 30

引用的参考文献数: 50

摘要: Flaw is a key factor influencing failure behavior of a fractured specimen. In the present study, rectangular-flawed specimens were prepared using sandstone to investigate the effect of flaw on failure behavior of rock. Open flaw and cylindrical hole were simultaneously pre-cut within rock specimens using high-pressure water jet cutting technology. Five series of specimens including intact, single-hole-alone, two-hole-alone, single-hole and two-flaw, and two-hole and single-flaw blocks were prepared. Uniaxial compressive tests using a rigid servo control instrument were carried out to investigate the fracture processes of these flawed specimens. It is observed that during loading, internal stress always intensively distributed at both sidewalls of open hole, especially at midpoint of sidewalls, so rock crumb flaking was firstly observed among all sandstone specimens containing single hole or two holes. Cracking around open hole is associated with the flaw inclination angle which was observed in Series III and V. Crack easily initiated at the tips of flaw with inclination angles of 0 degrees, 30 degrees, and 60 degrees but hard for 90 degrees in Series III and V. Rock burst was the major failure mode among most tested specimens, which generally induced new cracks and finally created crater shape. Additionally, due to extrusion between blocks, new shear or tensile cracks were generated and the rock specimen surface spalled. Eventually, four typical failure processes including rock crumb flaking, crack initiation and propagation, rock burst, and second rupture, were summarized.

入藏号: WOS:000432056100001

语言: English

文献类型: Article

KeyWords Plus: EXCAVATION DAMAGED ZONE; BIAXIAL COMPRESSION; BRITTLE-FRACTURE; NONPERSISTENT JOINTS; CYLINDRICAL OPENINGS; MECHANICAL-BEHAVIOR; MASS MODELS; COALESCENCE; PROPAGATION; GROWTH

地址: [Fan, Xiang; Chen, Rui; Lai, Hongpeng] Changan Univ, Sch Highway, Xian 710064, Shaanxi, Peoples R China.

[Fan, Xiang; Zhao, Qihua] Chengdu Univ Technol, State Key Lab Geohazard Prevent & Geoenvironm Pro, Chengdu 610059, Sichuan, Peoples R China.

[Fan, Xiang] Changsha Univ Sci & Technol, Dept Educ, Key Lab Bridge Engr Safety Control Hunan Prov, Changsha 410114, Hunan, Peoples R China.

[Fan, Xiang] Changsha Univ Sci & Technol, Engr Res Ctr Catastroph Prophylaxis & Treatment R, Minist Educ, Changsha 410004, Hunan, Peoples R China.

[Lin, Hang] Cent S Univ, Sch Resources & Safety Engr, Changsha 410083, Hunan, Peoples R China.

[Zhang, Chunyang] Wuhan Univ Technol, Sch Resources & Environm Engr, Wuhan 430070, Hubei, Peoples R China.

通讯作者地址: Zhao, QH (通讯作者), Chengdu Univ Technol, State Key Lab Geohazard Prevent & Geoenvironm Pro, Chengdu 610059, Sichuan, Peoples R China.

Lin, H (通讯作者), Cent S Univ, Sch Resources & Safety Engr, Changsha 410083, Hunan,

Peoples R China.

电子邮件地址: linhangabc@126.com; zhqh@163.com

作者识别号:

作者 ResearcherID 号 ORCID 号

Lin, Hang E-3318-2013 0000-0002-5924-5163

Zhang, Chunyang 0000-0001-8590-7063

Chen, Renpeng 0000-0001-6968-4955

出版商: HINDAWI LTD

出版商地址: ADAM HOUSE, 3RD FLR, 1 FITZROY SQ, LONDON, W1T 5HF, ENGLAND

Web of Science 类别: Construction & Building Technology; Engineering, Civil

研究方向: Construction & Building Technology; Engineering

IDS 号: GF6DC

ISSN: 1687-8086

eISSN: 1687-8094

29 字符的来源出版物名称缩写: ADV CIV ENG

ISO 来源出版物缩写: Adv. Civ. Eng.

来源出版物页码计数: 15

ESI 高被引论文: Y

ESI 热点论文: N

第 18 条, 共 48 条

标题: Challenges and prospects of sustainable groundwater management in an agricultural plain along the Silk Road Economic Belt, north-west China

作者: Chen, J (Chen, Jie); Wu, H (Wu, Hao); Qian, H (Qian, Hui); Li, XY (Li, Xinyan)

来源出版物: INTERNATIONAL JOURNAL OF WATER RESOURCES DEVELOPMENT 卷:

34 期: 3 特刊: SI 页: 354-368 DOI: 10.1080/07900627.2016.1238348 出版年: 2018

Web of Science 核心合集中的 "被引频次": 11

被引频次合计: 11

使用次数 (最近 180 天): 32

使用次数 (2013 年至今): 46

引用的参考文献数: 49

摘要: As a major challenge in building a new and sustainable Silk Road Economic Belt, threats induced by poor groundwater management have raised stress on the groundwater resources in the Yinchuan Plain, north-west China. In the present article, an overview of groundwater development in the plain, along with the associated negative effects, is provided. A fragmented management framework is found responsible for the poor groundwater management. Efficient and effective groundwater management will require proper attention of the local authorities to the inherent interaction among various water systems. Only with enhanced cooperation, an integrated monitoring network, strengthened scientific support and active public participation can the sustainability of groundwater management of the plain be achieved.

入藏号: WOS:000430045800003

语言: English

文献类型: Article

作者关键词: Groundwater; deterioration; sustainability; Yinchuan Plain; arid area; Silk Road

KeyWords Plus: SOIL SALINIZATION; YINCHUAN PLAIN; HEALTH-RISK; AREA; AQUIFER; QUALITY; NINGXIA

地址: [Chen, Jie; Wu, Hao; Qian, Hui; Li, Xinyan] Changan Univ, Key Lab Subsurface Hydrol & Ecol Effect Arid Reg, Minist Educ, Xian, Shaanxi, Peoples R China.

[Chen, Jie; Wu, Hao; Qian, Hui; Li, Xinyan] Changan Univ, Sch Environm Sci & Engn, Xian, Shaanxi, Peoples R China.

通讯作者地址: Qian, H (通讯作者), Changan Univ, Key Lab Subsurface Hydrol & Ecol Effect Arid Reg, Minist Educ, Xian, Shaanxi, Peoples R China.

Qian, H (通讯作者), Changan Univ, Sch Environm Sci & Engn, Xian, Shaanxi, Peoples R China.

电子邮件地址: qianhui@chd.edu.cn

作者识别号:

作者 ResearcherID 号 ORCID 号

qian, hui B-9558-2019 0000-0002-9354-4060

出版商: ROUTLEDGE JOURNALS, TAYLOR & FRANCIS LTD

出版商地址: 2-4 PARK SQUARE, MILTON PARK, ABINGDON OX14 4RN, OXON, ENGLAND

Web of Science 类别: Water Resources

研究方向: Water Resources

IDS 号: GC8LL

ISSN: 0790-0627

eISSN: 1360-0648

29 字符的来源出版物名称缩写: INT J WATER RESOUR D

ISO 来源出版物缩写: Int. J. Water Resour. Dev.

来源出版物页码计数: 15

ESI 高被引论文: Y

ESI 热点论文: N

第 19 条, 共 48 条

标题: Simple Method to Predict Ground Displacements Caused by Installing Horizontal Jet-Grouting Columns

作者: Wang, ZF (Wang, Zhi-Feng); Shen, JS (Shen, Jack S.); Cheng, WC (Cheng, Wen-Chieh)

来源出版物: MATHEMATICAL PROBLEMS IN ENGINEERING 文献号: 1897394 DOI: 10.1155/2018/1897394 出版年: 2018

Web of Science 核心合集中的 "被引频次": 18

被引频次合计: 18

使用次数 (最近 180 天): 6

使用次数 (2013 年至今): 15

引用的参考文献数: 57

摘要: During the horizontal jet grouting in soft ground, injection of large volumes of water and grout into the soil can lead to significant ground displacements. A simple method is proposed in this paper to predict the ground displacements caused by installing horizontal jet-grouting columns. The process of installing a horizontal column is simplified as the expansion of a cylindrical cavity with a uniform radial stress applied at plastic-elastic interface in a half plane. In this study, the analytical solution is adopted to calculate the deformation induced by the expansion of a

cylindrical cavity. Considering the main jetting parameters (jetting pressure of the fluid, flow rate of the fluid, and withdrawal rate of the rod) and the soil properties (stiffness of the surrounding soil), an empirical equation to estimate the radius of plastic zone is developed. Two field tests are carried out in Shanghai, China, to verify the correctness and applicability of the proposed method. Comparisons between the predicted and measured values indicate that the proposed method can provide a reasonable prediction. The proposed simple method can be recommended as a useful tool for the design of ground improvement by means of horizontal jet grouting.

入藏号: WOS:000424800500001

语言: English

文献类型: Article

KeyWords Plus: LATERAL DISPLACEMENT; PUMPING TESTS; SOFT DEPOSITS; CASE-HISTORY; FIELD TRIAL; SHANGHAI; INSTALLATION; TUNNELS; TECHNOLOGY; EXCAVATION

地址: [Wang, Zhi-Feng] Changan Univ, Sch Highway, Xian 710064, Shaanxi, Peoples R China.

[Shen, Jack S.] Swinburne Univ Technol, Dept Civil & Construct Engn, Hawthorn, Vic 3122, Australia.

[Cheng, Wen-Chieh] Xian Univ Architecture & Technol, Inst Tunnel & Underground Struct Engn, Xian 710055, Shaanxi, Peoples R China.

通讯作者地址: Wang, ZF (通讯作者), Changan Univ, Sch Highway, Xian 710064, Shaanxi, Peoples R China.

电子邮件地址: zhifeng.wang@chd.edu.cn

作者识别号:

作者 ResearcherID 号 ORCID 号

Shen, Shui-Long 0000-0002-5610-7988

出版商: HINDAWI LTD

出版商地址: ADAM HOUSE, 3RD FLR, 1 FITZROY SQ, LONDON, W1T 5HF, ENGLAND

Web of Science 类别: Engineering, Multidisciplinary; Mathematics, Interdisciplinary Applications

研究方向: Engineering; Mathematics

IDS 号: FV7XY

ISSN: 1024-123X

eISSN: 1563-5147

29 字符的来源出版物名称缩写: MATH PROBL ENG

ISO 来源出版物缩写: Math. Probl. Eng.

来源出版物页码计数: 11

ESI 高被引论文: Y

ESI 热点论文: N

第 20 条, 共 48 条

标题: Longitudinal deformation profile of a tunnel in weak rock mass by using the back analysis method

作者: Luo, YB (Luo, Yanbin); Chen, JX (Chen, Jianxun); Chen, Y (Chen, Yi); Diao, PS (Diao, Pengsheng); Qiao, X (Qiao, Xiong)

来源出版物: TUNNELLING AND UNDERGROUND SPACE TECHNOLOGY 卷: 71 页:

478-493 DOI: 10.1016/j.tust.2017.10.003 出版年: JAN 2018

Web of Science 核心合集集中的 "被引频次": 11

被引频次合计: 11

使用次数 (最近 180 天): 17

使用次数 (2013 年至今): 45

引用的参考文献数: 48

摘要: Analysis, of the rock mass deformation behavior is a very important aspect of the safety assessment for tunnel construction in weak rock mass. In this paper, the deformation characteristics of a soft rock mass tunnel using three beaches construction method were investigated, which include the crown settlement and horizontal displacement and have 9 sections with 3 different construction schemes. The optimized construction schemes by decreasing the beaches length and changing the geologist of primary support were proposed. Then, applying the displacement back analysis method to calculate the rock mass parameters, double parameters were analyzed by using the golden section method. Results show that the tunnel deformations were affected by the elastic modulus  $E$  and the lateral pressure coefficient  $\lambda$  of rock mass, and the change of  $E$  has greater influence than  $\lambda$ . on the tunnel deformation. The change of  $\lambda$  has greater influence on the crown settlement than that on the horizontal displacement. Furthermore, the regularity and characteristics of longitudinal deformation profile (LDP) in a weak rock mass tunnel was studied by utilizing the Fast Lagrangian Analysis of Continua (FLAC), and the LDP of the three long-beach construction scheme and the three short-beach construction scheme were compared. The results show that the complete displacements of tunnel under the three short-beach construction scheme condition by decreasing the lengths of the middle and lower benches are smaller than that under the three short beach construction scheme condition, however the pre-deformation of the tunnel deformation under this two construction scheme conditions is nearly the same. The extrusion deformation at the tunnel face of the three short-beach construction scheme is larger than that of the three long-beach construction scheme. Therefore, increasing the area of the core soil is a feasible measure to control the extrusion deformation on the tunnel face. Finally, the tunnel optimized construction scheme was verified benefit the tunnel stability. The measures of decreasing the length of middle and lower bench and closing the invert early and immediately will benefit the tunnel stability.

入藏号: WOS:000418212600041

语言: English

文献类型: Article

作者关键词: Weak rock mass tunnel; Longitudinal deformation profile (LDP); Complete deformation; Displacement back analysis; Numerical simulation

KeyWords Plus: PARAMETER-ESTIMATION; EXCAVATION METHOD; DESIGN; IDENTIFICATION; OPTIMIZATION; MODEL; CONSTRUCTION; STATION

地址: [Luo, Yanbin; Chen, Jianxun; Diao, Pengsheng] Changan Univ, Sch Highway, Xian 710064, Shaanxi, Peoples R China.

[Chen, Yi] China Guangzhou Metro Design & Res Inst Co Ltd, Changsha 410000, Hunan, Peoples R China.

[Qiao, Xiong] Lanzhou Univ Technol, Sch Civil Engn, Lanzhou 730050, Gansu, Peoples R China.

通讯作者地址: Luo, YB; Chen, JX (通讯作者), Changan Univ, Sch Highway, Xian 710064, Shaanxi, Peoples R China.

长安大学 ESI 简况

电子邮件地址: lyb@chd.edu.cn; chenjx1969@163.com

作者识别号:

作者 ResearcherID 号 ORCID 号

Luo, Yanbin 0000-0002-0541-4208

qiao, xiong 0000-0003-2259-9096

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Construction & Building Technology; Engineering, Civil

研究方向: Construction & Building Technology; Engineering

IDS 号: FQ2UD

ISSN: 0886-7798

29 字符的来源出版物名称缩写: TUNN UNDERGR SP TECH

ISO 来源出版物缩写: Tunn. Undergr. Space Technol.

来源出版物页码计数: 16

ESI 高被引论文: Y

ESI 热点论文: N

第 21 条, 共 48 条

标题: The catastrophic landside in Maoxian County, Sichuan, SW China, on June 24, 2017

作者: Qiu, JL (Qiu, Junling); Wang, XL (Wang, Xiuling); He, SY (He, Siyue); Liu, HQ (Liu, Houquan); Lai, JX (Lai, Jinxing); Wang, LX (Wang, Lixin)

来源出版物: NATURAL HAZARDS 卷: 89 期: 3 页: 1485-1493 DOI: 10.1007/s11069-017-3026-9 出版年: DEC 2017

Web of Science 核心合集中的 "被引频次": 37

被引频次合计: 38

使用次数 (最近 180 天): 31

使用次数 (2013 年至今): 99

引用的参考文献数: 23

摘要: This short communication gives a brief investigation of the catastrophic natural landslides in the Diexi town, Maoxian County, Sichuan province, SW China, which occurred on June 24, 2017. According to the preliminary statistics of Sichuan government, about 73 people lost contact, and 62 houses and more than 1600 m roads were buried. The collapse volume of landslide is approximately 8 million m<sup>3</sup>. The maximum drop is about 1600 m, and plane sliding distance is 2500-3000 m. Unfortunately, the secondary collapse incident occurred repeatedly on June 25 and 27, respectively. In this communication, the accident background, accident scene, and related emergency response are presented. In virtue of the in situ reconnaissance conducted by geological experts, the main reason for the collapse is the high-level and long-distance debris flow in earthquake fracture zone induced by continuous rainfall.

入藏号: WOS:000415325500026

语言: English

文献类型: Article

作者关键词: Landslide; Natural disaster; High-level and long-distance debris flow; Earthquake fracture zone; Rainfall

KeyWords Plus: EARTHQUAKE; MODEL

地址: [Qiu, Junling; Wang, Xiuling; He, Siyue; Liu, Houquan; Lai, Jinxing] Changan Univ, Sch Highway, Xian 710064, Shaanxi, Peoples R China.

[Wang, Lixin] Inst Grp Co Ltd, China Railway First Survey & Design, Xian 710043, Shaanxi, Peoples R China.

通讯作者地址: Lai, JX (通讯作者), Changan Univ, Sch Highway, Xian 710064, Shaanxi, Peoples R China.

Wang, LX (通讯作者), Inst Grp Co Ltd, China Railway First Survey & Design, Xian 710043, Shaanxi, Peoples R China.

电子邮件地址: laijinxing@chd.edu.cn; 458601714@qq.com

作者识别号:

作者 ResearcherID 号 ORCID 号

Qiu, Junling 0000-0002-7628-5431

lai, Jinxing B-2253-2016 0000-0002-1558-9482

出版商: SPRINGER

出版商地址: 233 SPRING ST, NEW YORK, NY 10013 USA

Web of Science 类别: Geosciences, Multidisciplinary; Meteorology & Atmospheric Sciences; Water Resources

研究方向: Geology; Meteorology & Atmospheric Sciences; Water Resources

IDS 号: FM8GY

ISSN: 0921-030X

eISSN: 1573-0840

29 字符的来源出版物名称缩写: NAT HAZARDS

ISO 来源出版物缩写: Nat. Hazards

来源出版物页码计数: 9

ESI 高被引论文: Y

ESI 热点论文: N

第 22 条, 共 48 条

标题: Centrifuge modelling of twin-tunnelling induced ground movements in loess strata

作者: Qiu, JL (Qiu, Junling); Xie, YL (Xie, Yongli); Fan, HB (Fan, Haobo); Wang, ZC (Wang, Zhichao); Zhang, YW (Zhang, Yuwei)

来源出版物: ARABIAN JOURNAL OF GEOSCIENCES 卷: 10 期: 22 文献号: UNSP 493

DOI: 10.1007/s12517-017-3297-1 出版年: NOV 17 2017

Web of Science 核心合集中的 "被引频次": 20

被引频次合计: 21

使用次数 (最近 180 天): 13

使用次数 (2013 年至今): 55

引用的参考文献数: 53

摘要: A great concern for the safety of large cross-section tunnels, which are being or to be built in the loess strata of China, is attracted. Generally, loess is a multi-phase porous medium and develops complex stress and strain variation while executing a tunnel project. Another problem is that the soil surrounding both tunnel arches is subjected to a complex loading due to the double excavation. To obtain an in-depth knowledge of the mechanism of tunnel deformation induced by

the twin-tunnelling, we conducted comprehensive centrifuge tests, which can simulate and reproduce strictly the action process of twin-tunnelling. Through the model tests, the response of twin-tunnelling on loess stratum deformation was obtained. The investigations showed that with the increase of tunnel spacing, the stratum deformation distribution near the vault changes from a single-peak V shape to a double-peak W shape. Additionally, the height of the stratum pressure arch effect increases significantly. The settlement of the preceding tunnel is slightly larger than that of the latter tunnel, and the twin-tunnelling effect gradually decreases with the increase of tunnel spacing. Through comparative analysis of the different combinations of tunnel spacing and tunnel interval, the interaction between two tunnels with different spacing and interval during tunnelling was investigated, further optimizing the reasonable tunnel spacing and construction steps, as well as providing reference for tunnel route selection in the loess strata.

入藏号: WOS:000415964600004

语言: English

文献类型: Article

作者关键词: Loess tunnel; Centrifugal modeling technique; Twin-tunneling effect; Stratum deformation; Optimal construction scheme

KeyWords Plus: ROCK MASS; DISPLACEMENT; TESTS; DEFORMATION; EXCAVATION; VIBRATION; PLATEAU; SYSTEM; REGION; CHINA

地址: [Qiu, Junling; Xie, Yongli; Fan, Haobo; Wang, Zhichao; Zhang, Yuwei] Changan Univ, Sch Highway, Xian, Shaanxi, Peoples R China.

[Fan, Haobo] China Railway Eryuan Engn Grp Co Ltd, Chengdu 610031, Sichuan, Peoples R China.

通讯作者地址: Wang, ZC (通讯作者), Changan Univ, Sch Highway, Xian, Shaanxi, Peoples R China.

电子邮件地址: wangzc@chd.edu.cn

作者识别号:

作者 ResearcherID 号 ORCID 号

Qiu, Junling 0000-0002-7628-5431

出版商: SPRINGER HEIDELBERG

出版商地址: TIERGARTENSTRASSE 17, D-69121 HEIDELBERG, GERMANY

Web of Science 类别: Geosciences, Multidisciplinary

研究方向: Geology

IDS 号: FN4HC

ISSN: 1866-7511

eISSN: 1866-7538

29 字符的来源出版物名称缩写: ARAB J GEOSCI

ISO 来源出版物缩写: Arab. J. Geosci.

来源出版物页码计数: 14

ESI 高被引论文: Y

ESI 热点论文: N

第 23 条, 共 48 条

标题: Mesoporous manganese oxide with large specific surface area for high-performance asymmetric supercapacitor with enhanced cycling stability



作者: Gu, JM (Gu, Jianmin); Fan, XY (Fan, Xiaoyong); Liu, X (Liu, Xin); Li, SH (Li, Siheng); Wang, Z (Wang, Zhuang); Tang, SF (Tang, Shoufeng); Yuan, DL (Yuan, Deling)

来源出版物: CHEMICAL ENGINEERING JOURNAL 卷: 324 页: 35-43 DOI: 10.1016/j.cej.2017.05.014 出版年: SEP 15 2017

Web of Science 核心合集中的 "被引频次": 27

被引频次合计: 27

使用次数 (最近 180 天): 50

使用次数 (2013 年至今): 161

引用的参考文献数: 49

摘要: Boosting the energy density of supercapacitors without sacrificing their power capability and cyclability is highly desired. Herein, we reported high-performance asymmetric supercapacitor device with high cycling stability using mesoporous manganese oxide nanococoons (MONCs) as positive electrode, and activated carbon (AC) as negative electrode. The mesoporous manganese oxide nanococoons exhibit excellent electrochemical performances because of their large surface area. The optimized asymmetric supercapacitor could be cycled reversibly in the high voltage range of 0-1.7 V in aqueous electrolyte, which exhibits a maximum energy density of 32 Wh kg<sup>-1</sup> at a power density of 185Wkg<sup>-1</sup> and still remains 21 Wh kg<sup>-1</sup> at a power density of 1630Wkg<sup>-1</sup>. Importantly, such asymmetric supercapacitor exhibits superior long cycle life with similar to 100% specific capacitance retained after similar to 2700 cycles and similar to 98% after 5000 cycles. (C) 2017 Elsevier B.V. All rights reserved.

入藏号: WOS:000406138400005

语言: English

文献类型: Article

作者关键词: Asymmetric supercapacitor; Enhanced cycling stability; High energy density; Large specific surface area; Mesoporous manganese oxide

KeyWords Plus: ELECTROCHEMICAL ENERGY-STORAGE; NEUTRAL AQUEOUS-ELECTROLYTES; ACTIVATED CARBON; CAPACITORS; MNO2; ELECTRODES; DIOXIDE; PROGRESS; FILM; CONVERSION

地址: [Gu, Jianmin; Liu, Xin; Wang, Zhuang; Tang, Shoufeng; Yuan, Deling] Yanshan Univ, Sch Environm & Chem Engn, Hebei Key Lab Appl Chem, Qinhuangdao 066004, Peoples R China.

[Li, Siheng] SIAGAT, Shenzhen 518106, Peoples R China.

[Fan, Xiaoyong] Changan Univ, Sch Mat Sci & Engn, Xian 710061, Shaanxi, Peoples R China.

通讯作者地址: Li, SH (通讯作者), SIAGAT, Shenzhen 518106, Peoples R China.

电子邮件地址: lish051@163.com

出版商: ELSEVIER SCIENCE SA

出版商地址: PO BOX 564, 1001 LAUSANNE, SWITZERLAND

Web of Science 类别: Engineering, Environmental; Engineering, Chemical

研究方向: Engineering

IDS 号: FB4UX

ISSN: 1385-8947

eISSN: 1873-3212

29 字符的来源出版物名称缩写: CHEM ENG J

ISO 来源出版物缩写: Chem. Eng. J.

来源出版物页码计数: 9

ESI 高被引论文: Y

ESI 热点论文: N

第 24 条, 共 48 条

标题: Progress, opportunities, and key fields for groundwater quality research under the impacts of human activities in China with a special focus on western China

作者: Li, PY (Li, Peiyue); Tian, R (Tian, Rui); Xue, CY (Xue, Chenyang); Wu, JH (Wu, Jianhua)

来源出版物: ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH 卷: 24 期: 15  
页: 13224-13234 DOI: 10.1007/s11356-017-8753-7 出版年: MAY 2017

Web of Science 核心合集中的 "被引频次": 50

被引频次合计: 51

使用次数 (最近 180 天): 25

使用次数 (2013 年至今): 120

引用的参考文献数: 72

摘要: Groundwater quality research is extremely important for supporting the safety of the water supply and human health in arid and semi-arid areas of China. This review article was constructed to report the latest research progress of groundwater quality in western China where groundwater quality is undergoing fast deterioration because of fast economic development and extensive anthropogenic activities. The opportunities brought by increasing public awareness of groundwater quality protection were also highlighted and discussed. To guide and promote further development of groundwater quality research in China, especially in western China, ten key groundwater quality research fields were proposed. The review shows that the intensification of human activities and the associated impacts on groundwater quality in China, especially in western China, has made groundwater quality research increasingly important, and has caught the attention of local, national, and international agencies and scholars. China has achieved some progress in groundwater quality research in terms of national and regional laws, regulations, and financial supports. The future of groundwater quality research in China, especially in western China, is promising reflected by the opportunities highlighted. The key research fields proposed in this article may also inform groundwater quality protection and management at the national and international level.

入藏号: WOS:000401566600006

PubMed ID: 28281079

语言: English

文献类型: Article

作者关键词: Groundwater pollution; Groundwater quality; Health risk; Hydrochemistry; Water quality assessment; Western China

KeyWords Plus: HEALTH-RISK ASSESSMENT; CITIZEN-SCIENCE; SHALLOW GROUNDWATER; DRINKING-WATER; CONTAMINATION; NITRATE; BASIN; ISOTOPE; PLAIN; DELTA-O-18

地址: [Li, Peiyue; Tian, Rui; Xue, Chenyang; Wu, Jianhua] Changan Univ, Sch Environm Sci & Engn, 126 Yanta Rd, Xian 710054, Shaanxi, Peoples R China.

[Li, Peiyue; Tian, Rui; Xue, Chenyang; Wu, Jianhua] Changan Univ, Key Lab Subsurface Hydrol & Ecol Effects Arid Reg, Minist Educ, 126 Yanta Rd, Xian 710054, Shaanxi, Peoples R China.

[Li, Peiyue] Minist Land & Resources, Key Lab Groundwater Sci & Engn, 268 Zhonghua St,

Shijiazhuang 050061, Hebei, Peoples R China.

通讯作者地址: Li, PY (通讯作者), Changan Univ, Sch Environm Sci & Engn, 126 Yanta Rd, Xian 710054, Shaanxi, Peoples R China.

Li, PY (通讯作者), Changan Univ, Key Lab Subsurface Hydrol & Ecol Effects Arid Reg, Minist Educ, 126 Yanta Rd, Xian 710054, Shaanxi, Peoples R China.

Li, PY (通讯作者), Minist Land & Resources, Key Lab Groundwater Sci & Engn, 268 Zhonghua St, Shijiazhuang 050061, Hebei, Peoples R China.

电子邮件地址: lipy2@163.com

作者识别号:

作者 ResearcherID 号 ORCID 号

Li, Peiyue F-3831-2011 0000-0001-8771-3369

Wu, Jianhua G-4389-2017 0000-0001-6423-1762

出版商: SPRINGER HEIDELBERG

出版商地址: TIERGARTENSTRASSE 17, D-69121 HEIDELBERG, GERMANY

Web of Science 类别: Environmental Sciences

研究方向: Environmental Sciences & Ecology

IDS 号: EV2EC

ISSN: 0944-1344

eISSN: 1614-7499

29 字符的来源出版物名称缩写: ENVIRON SCI POLLUT R

ISO 来源出版物缩写: Environ. Sci. Pollut. Res.

来源出版物页码计数: 11

ESI 高被引论文: Y

ESI 热点论文: N

第 25 条, 共 48 条

标题: Bending and buckling of nonlocal strain gradient elastic beams

作者: Xu, XJ (Xu, Xiao-Jian); Wang, XC (Wang, Xuan-Cang); Zheng, ML (Zheng, Mu-Lian); Ma, Z (Ma, Zheng)

来源出版物: COMPOSITE STRUCTURES 卷: 160 页: 366-377 DOI: 10.1016/j.compstruct.2016.10.038 出版年: JAN 15 2017

Web of Science 核心合集中的 "被引频次": 47

被引频次合计: 47

使用次数 (最近 180 天): 11

使用次数 (2013 年至今): 83

引用的参考文献数: 98

摘要: Featured by the two material length parameters in the nonlocal strain gradient theory, it is still unknown that what are the boundary conditions of nonlocal strain gradient beams, since the equations of motion and boundary conditions of these beam models appear in the same form as those of the classical ones. Based on the weighted residual approaches, this paper provides the boundary value problems of Euler-Bernoulli beams within the framework of the nonlocal strain gradient theory in conjunction with the von Karman nonlinear geometric relation. The closed-form solutions for bending and buckling loads of nonlocal strain gradient beams are obtained. Numerical results show that the higher-order boundary conditions have no effect on the static

bending deflection of beams for the cases studied. However, the higher-order boundary conditions and the material length parameters have a significant effect on the buckling loads. Finally, when the two material length parameters are the same, the buckling loads can not always reduce to the classical solutions, the findings of which violate our expectations. The results provided in this work are expected to be helpful for the applications of this theory to the analysis of engineering structures. (C) 2016 Elsevier Ltd. All rights reserved.

入藏号: WOS:000390470300032

语言: English

文献类型: Article

作者关键词: Bending; Buckling; Nonlocal strain gradient theory; Boundary condition; Weighted residual approach

KeyWords Plus: FREE-VIBRATION ANALYSIS; COUPLE STRESS THEORY; WALLED CARBON NANOTUBES; WAVE-PROPAGATION; EULER-BERNOULLI; SHELL-MODEL; VARIATIONAL-PRINCIPLES; RESONANCE BEHAVIOR; STABILITY ANALYSIS; CANTILEVER BEAMS

地址: [Xu, Xiao-Jian; Wang, Xuan-Cang; Zheng, Mu-Lian; Ma, Zheng] Changan Univ, Sch Highway, Minist Educ, Key Lab Special Area Highway Engr, Xian 710064, Peoples R China.

[Xu, Xiao-Jian] Northwestern Polytech Univ, Dept Engr Mech, Xian 710072, Peoples R China.

通讯作者地址: Zheng, ML (通讯作者), Changan Univ, Sch Highway, Minist Educ, Key Lab Special Area Highway Engr, Xian 710064, Peoples R China.

电子邮件地址: zhengml@chd.edu.cn

作者识别号:

作者 ResearcherID 号 ORCID 号

Xu, Xiao-Jian K-3602-2015 0000-0002-2215-4364

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Materials Science, Composites

研究方向: Materials Science

IDS 号: EF6VX

ISSN: 0263-8223

eISSN: 1879-1085

29 字符的来源出版物名称缩写: COMPOS STRUCT

ISO 来源出版物缩写: Compos. Struct.

来源出版物页码计数: 12

ESI 高被引论文: Y

ESI 热点论文: N

第 26 条, 共 48 条

标题: A New High Algebraic Order Efficient Finite Difference Method for the Solution of the Schrodinger Equation

作者: Dong, M (Dong, Ming); Simos, TE (Simos, Theodore E.)

来源出版物: FILOMAT 卷: 31 期: 15 页: 4999-5012 DOI: 10.2298/FIL1715999D 出版年: 2017

Web of Science 核心合集中的 "被引频次": 25

被引频次合计: 25

使用次数 (最近 180 天): 0

使用次数 (2013 年至今): 1

引用的参考文献数: 61

摘要: The development of a new five-stages symmetric two-step method of fourteenth algebraic order with vanished phase-lag and its first, second, third and fourth derivatives is analyzed in this paper. More specifically: (1) we will present the development of the new method, (2) we will determine the local truncation error (LTE) of the new proposed method, (3) we will analyze the local truncation error based on the radial time independent Schrodinger equation, (4) we will study the stability and the interval of periodicity of the new proposed method based on a scalar test equation with frequency different than the frequency of the scalar test equation used for the phase-lag analysis, (5) we will test the efficiency of the new obtained method based on its application on the coupled differential equations arising from the Schrodinger equation.

入藏号: WOS:000416115500029

语言: English

文献类型: Article

作者关键词: Schrodinger equation; multistep methods; Multistage methods; interval of periodicity; phase-lag; phase-fitted; derivatives of the phase-lag

KeyWords Plus: VANISHED PHASE-LAG; INITIAL-VALUE-PROBLEMS; SYMMETRIC 2-STEP METHOD; P-STABLE METHOD; TRIGONOMETRICALLY-FITTED METHODS; PREDICTOR-CORRECTOR METHOD; KUTTA-NYSTROM METHODS; NUMERICAL-SOLUTION; MULTISTEP METHODS; ORBITAL PROBLEMS

地址: [Dong, Ming] Changan Univ, Sch Informat Engn, Xian 710064, Shaanxi, Peoples R China.

[Simos, Theodore E.] Univ Peloponnese, Fac Econ Management & Informat, Dept Informat & Telecommun, Lab Computat Sci, GR-22100 Tripolis, Greece.

通讯作者地址: Simos, TE (通讯作者), Univ Peloponnese, Fac Econ Management & Informat, Dept Informat & Telecommun, Lab Computat Sci, GR-22100 Tripolis, Greece.

电子邮件地址: tsimos.conf@gmail.com

出版商: UNIV NIS, FAC SCI MATH

出版商地址: PO BOX 224, VISEGRADSKA 33, NIS, 18000, SERBIA MONTENEG

Web of Science 类别: Mathematics, Applied; Mathematics

研究方向: Mathematics

IDS 号: FN6HS

ISSN: 0354-5180

29 字符的来源出版物名称缩写: FILOMAT

ISO 来源出版物缩写: Filomat

来源出版物页码计数: 14

ESI 高被引论文: Y

ESI 热点论文: Y

第 27 条, 共 48 条

标题: Assessment of livelihood vulnerability of land-lost farmers in urban fringes: A case study of Xi'an, China

作者: Huang, XJ (Huang, Xiaojun); Huang, X (Huang, Xin); He, YB (He, Yanbing); Yang, XJ (Yang, Xinjun)

来源出版物: HABITAT INTERNATIONAL 卷: 59 页: 1-9 DOI: 10.1016/j.habitatint.2016.11.001 出版年: JAN 2017

Web of Science 核心合集中的 "被引频次": 10

被引频次合计: 10

使用次数 (最近 180 天): 13

使用次数 (2013 年至今): 58

引用的参考文献数: 46

摘要: Research on rural household livelihood vulnerability to climate change and extreme weather events (e.g., drought, flood and typhoons) has received broad attention; however, relatively few attempts have been made to assess the effects of social, economic, or spatial variation on livelihood vulnerability. With China's rapid urban expansion, many farmers in urban fringe areas are suffering great risks to their livelihoods because of land requisition. Thus, the livelihood of these land-lost farmers has become an important social issue in China. This article applies the livelihood vulnerability analytical framework to the case of land-lost farmers in the urban fringe of Xi'an who have been exposed to rapid urbanization. We developed indicators to assess the impact of exposure/sensitivity and response capacity on the livelihood vulnerability of land-lost farmers. Using a mix of qualitative and quantitative analyses, we combined data from in person interviews and household surveys in 2015. Four types of livelihood vulnerability for land-lost households were classified: high sensitivity and high response capacity, low sensitivity and high response capacity, low sensitivity and low response capacity, and high sensitivity and low response capacity. The type of crop farmed before losing land had the greatest impact on the sensitivity of land-lost farmers, but no significant impact on response capacity. Having a commercially viable house, income diversity, educational level, land compensation, and social capital are major factors that influence the response capability of land-lost farmers. Our findings highlight the need for land-lost farmers to improve their educational level and occupational skills, and thus enhance their capacity for sustainable and diversified livelihoods. Simultaneously, local government Must provide livelihood assistance in the form of employment training, improved social welfare, and limited disorderly urbanization. (C) 2016 Elsevier Ltd. All rights reserved.

入藏号: WOS:000393009000001

语言: English

文献类型: Article

作者关键词: Livelihood vulnerability; Sensitivity; Response capacity; Urbanization; Land-lost farmers; Land requisition; Urban fringe

KeyWords Plus: HIERARCHY PROCESS AHP; ADAPTIVE CAPACITY; CLIMATE-CHANGE; ADAPTATION; COMMUNITIES; FRAMEWORK; RESILIENCE

地址: [Huang, Xiaojun; He, Yanbing; Yang, Xinjun] Northwest Univ Xian, Coll Urban & Environm Sci, Xian 710127, Peoples R China.

[Huang, Xin] Changan Univ, Sch Earth Sci & Resources, Xian 710064, Peoples R China.

[He, Yanbing] Henan Polytech Univ, Sch Architectural & Artist Design, Jiaozuo 454000, Peoples R China.

通讯作者地址: Huang, XJ (通讯作者), Northwest Univ Xian, Coll Urban & Environm Sci, Xian 710127, Peoples R China.

长安大学 ESI 简况

电子邮件地址: huangxj@nwu.edu.cn; huangxin@chd.edu.cn; heyanning2008@hpu.edu.cn; yangxj@nwu.edu.cn

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Development Studies; Environmental Studies; Regional & Urban Planning; Urban Studies

研究方向: Development Studies; Environmental Sciences & Ecology; Public Administration; Urban Studies

IDS 号: EJ1ZJ

ISSN: 0197-3975

eISSN: 1873-5428

29 字符的来源出版物名称缩写: HABITAT INT

ISO 来源出版物缩写: Habitat Int.

来源出版物页码计数: 9

ESI 高被引论文: Y

ESI 热点论文: N

第 28 条, 共 48 条

标题: Characteristics of seismic disasters and aseismic measures of tunnels in Wenchuan earthquake

作者: Lai, JX (Lai, Jinxing); He, SY (He, Siyue); Qiu, JL (Qiu, Junling); Chen, JX (Chen, Jianxun); Wang, LX (Wang, Lixin); Wang, K (Wang, Ke); Wang, JB (Wang, Junbao)

来源出版物: ENVIRONMENTAL EARTH SCIENCES 卷: 76 期: 2 文献号: UNSP 94

DOI: 10.1007/s12665-017-6405-3 出版年: JAN 2017

Web of Science 核心合集中的 "被引频次": 34

被引频次合计: 34

使用次数 (最近 180 天): 30

使用次数 (2013 年至今): 132

引用的参考文献数: 61

摘要: Over the past few years, accompanied by big and frequent earthquakes, more attention was paid to the tunnel earthquake resistance. To reduce tunnel seismic damage and explore the reasonable aseismic measures, the tunnel earthquake disaster investigation was employed to analyze and summarize the tunnel seismic damage on the basis of Wenchuan earthquake. Fifty-two tunnels near the epicenter of Sichuan Province were investigated: Only 7 tunnels did not show structure damage, 6 tunnels suffered the most serious damage, and the rest appeared damage to various extents. It indicates that most serious seismic damage happens to fault fracture zone, followed by entrance and common section of the tunnel. Additionally, the results display that the typical seismic damage of tunnels is lining cracking, collapsing, dislocation, construction joints cracking, and uplifting of invert, and usually lining cracking and collapsing account for a larger proportion. Therefore, the tunnel aseismic design should emphasize the fault fracture zone and tunnel entrance. Tunnel design should adopt the composite lining structure with shock absorber and whole chain alternative grouting to prevent the lining cracking and collapsing in the seismic fortification zone.

入藏号: WOS:000393021400036

语言: English

文献类型: Article

作者关键词: Tunnel; Earthquake resistance; Seismic damage; Disaster investigation; Wenchuan earthquake

KeyWords Plus: MOUNTAIN TUNNELS; UNDERGROUND STRUCTURES; DAMAGE; SHAKING; DESIGN; PORTALS

地址: [Lai, Jinxing; He, Siyue; Qiu, Junling; Chen, Jianxun; Wang, Lixin] Changan Univ, Sch Highway, Xian 710064, Peoples R China.

[Wang, Lixin; Wang, Ke] China Railway First Survey & Design Inst Grp Co L, Xian 710043, Peoples R China.

[Wang, Junbao] Xian Univ Architecture & Technol, Sch Civil Engn, Xian 710055, Peoples R China.

通讯作者地址: Qiu, JL; Wang, LX (通讯作者), Changan Univ, Sch Highway, Xian 710064, Peoples R China.

Wang, LX (通讯作者), China Railway First Survey & Design Inst Grp Co L, Xian 710043, Peoples R China.

电子邮件地址: 870133597@qq.com; 458601714@qq.com

作者识别号:

作者 ResearcherID 号 ORCID 号

Qiu, Junling 0000-0002-7628-5431

出版商: SPRINGER

出版商地址: 233 SPRING ST, NEW YORK, NY 10013 USA

Web of Science 类别: Environmental Sciences; Geosciences, Multidisciplinary; Water Resources

研究方向: Environmental Sciences & Ecology; Geology; Water Resources

IDS 号: EJ2DZ

ISSN: 1866-6280

eISSN: 1866-6299

29 字符的来源出版物名称缩写: ENVIRON EARTH SCI

ISO 来源出版物缩写: Environ. Earth Sci.

来源出版物页码计数: 19

ESI 高被引论文: Y

ESI 热点论文: N

第 29 条, 共 48 条

标题: Single Image Super-Resolution via Locally Regularized Anchored Neighborhood Regression and Nonlocal Means

作者: Jiang, JJ (Jiang, Junjun); Ma, X (Ma, Xiang); Chen, C (Chen, Chen); Lu, T (Lu, Tao); Wang, ZY (Wang, Zhongyuan); Ma, JY (Ma, Jiayi)

来源出版物: IEEE TRANSACTIONS ON MULTIMEDIA 卷: 19 期: 1 页: 15-26 DOI: 10.1109/TMM.2016.2599145 出版年: JAN 2017

Web of Science 核心合集中的 "被引频次": 40

被引频次合计: 42

使用次数 (最近 180 天): 16



使用次数 (2013 年至今): 57

引用的参考文献数: 62

摘要: The goal of learning-based image super resolution (SR) is to generate a plausible and visually pleasing high-resolution (HR) image from a given low-resolution (LR) input. The SR problem is severely underconstrained, and it has to rely on examples or some strong image priors to reconstruct the missing HR image details. This paper addresses the problem of learning the mapping functions (i.e., projection matrices) between the LR and HR images based on a dictionary of LR and HR examples. Encouraged by recent developments in image prior modeling, where the state-of-the-art algorithms are formed with nonlocal self-similarity and local geometry priors, we seek an SR algorithm of similar nature that will incorporate these two priors into the learning from LR space to HR space. The nonlocal self-similarity prior takes advantage of the redundancy of similar patches in natural images, while the local geometry prior of the data space can be used to regularize the modeling of the nonlinear relationship between LR and HR spaces. Based on the above two considerations, we first apply the local geometry prior to regularize the patch representation, and then utilize the nonlocal means filter to improve the super-resolved outcome. Experimental results verify the effectiveness of the proposed algorithm compared with the state-of-the-art SR methods.

入藏号: WOS:000391475200002

语言: English

文献类型: Article

作者关键词: Anchored neighborhood regression; locality geometry; neighbor embedding; nonlocal means; super-resolution (SR)

KeyWords Plus: SPARSE REPRESENTATION; FACE SUPERRESOLUTION; NOISE REMOVAL; INTERPOLATION; RECONSTRUCTION; REGISTRATION; HALLUCINATION; ALGORITHMS; RESOLUTION; DECISION

地址: [Jiang, Junjun] China Univ Geosci, Sch Comp Sci, Wuhan 430074, Peoples R China.

[Jiang, Junjun] China Univ Geosci, Hubei Key Lab Intelligent Geoinformat Proc, Wuhan 430074, Peoples R China.

[Ma, Xiang] Changan Univ, Sch Informat Engn, Xian 710048, Peoples R China.

[Chen, Chen] Univ Cent Florida, Ctr Comp Vis Res, Orlando, FL 32816 USA.

[Lu, Tao] Wuhan Inst Technol, Sch Comp Sci & Engn, Wuhan 430073, Peoples R China.

[Wang, Zhongyuan] Wuhan Univ, Sch Comp, Natl Engn Res Ctr Multimedia Software, Wuhan 430072, Peoples R China.

[Ma, Jiayi] Wuhan Univ, Elect Informat Sch, Wuhan 430072, Peoples R China.

通讯作者地址: Ma, X (通讯作者), Changan Univ, Sch Informat Engn, Xian 710048, Peoples R China.

电子邮件地址: junjun0595@163.com; maxiangmail@163.com; chenchen870713@gmail.com; lutxyl@gmail.com; wzyhope@163.com; jyama2010@gmail.com

作者识别号:

作者 ResearcherID 号 ORCID 号

Chen, Chen A-8825-2015 0000-0003-3957-7061

Ma, Jiayi 0000-0003-3264-3265

Jiang, Junjun 0000-0002-5694-505X

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Computer Science, Information Systems; Computer Science, Software Engineering; Telecommunications

研究方向: Computer Science; Telecommunications

IDS 号: EH0SX

ISSN: 1520-9210

eISSN: 1941-0077

29 字符的来源出版物名称缩写: IEEE T MULTIMEDIA

ISO 来源出版物缩写: IEEE Trans. Multimedia

来源出版物页码计数: 12

ESI 高被引论文: Y

ESI 热点论文: N

第 30 条, 共 48 条

标题: Deformation and mechanical model of temporary support sidewall in tunnel cutting partial section

作者: Luo, YB (Luo, Yanbin); Chen, JX (Chen, Jianxun); Huang, P (Huang, Pei); Tang, MQ (Tang, Mingqing); Qiao, X (Qiao, Xiong); Liu, Q (Liu, Qin)

来源出版物: TUNNELLING AND UNDERGROUND SPACE TECHNOLOGY 卷: 61 页: 40-49 DOI: 10.1016/j.tust.2016.09.007 出版年: JAN 2017

Web of Science 核心合集中的 "被引频次": 21

被引频次合计: 22

使用次数 (最近 180 天): 9

使用次数 (2013 年至今): 65

引用的参考文献数: 17

摘要: A large cross-section shallow tunnel excavated by center cross diagram method (CRD) was constructed on a site with weak surrounding rock. Crown settlement and horizontal convergence were extensively monitored to investigate the performance of a temporary support wall. Based on field observations, effects of zone excavation on the temporary support sidewall were analysed extensively. Influenced by earth pressure applied by a subsequently zone excavated, the deformation of the temporary support sidewall at upper bench successively undergoes convergence, expansion, convergence, expansion and stabilisation five stages; and the deformation at lower bench undergoes convergence, expansion and stabilisation three stages. Based on the deformation and restriction condition of the temporary support sidewall during tunnel excavation, a small curvature beam was used to simulate the stress and deformation change of the temporary support sidewall. Then, mechanical model of the temporary support sidewall under the surrounding rock horizontal pressure and the upper structure loads were suggested, respectively. The total deformation of the temporary support sidewall induced by zoned excavation can be determined by superposition the deformation caused by different loads. (C) 2016 Published by Elsevier Ltd.

入藏号: WOS:000390498600004

语言: English

文献类型: Article

作者关键词: Lager cross-section tunnel; Temporary support wall; Deformation; Mechanical

model

KeyWords Plus: EXCAVATION METHOD; CONSTRUCTION; STABILITY; DESIGN; ROCK  
地址: [Luo, Yanbin; Chen, Jianxun; Qiao, Xiong] Changan Univ, Sch Highway, Xian 710064, Peoples R China.

[Huang, Pei; Liu, Qin] Changan Univ, Sch Civil Engn, Xian 710064, Peoples R China.

[Tang, Mingqing] CCCC First Highway Consultants CO Ltd, Xian 710075, Peoples R China.

通讯作者地址: Chen, JX (通讯作者), Changan Univ, Sch Highway, Xian 710064, Peoples R China.

电子邮件地址: lyb@chd.edu.cn; chenjx1969@163.com; cwjzxwzj@163.com; 825327041@163.com; qiaoxionglut@163.com; chinlau@chd.edu.cn

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Construction & Building Technology; Engineering, Civil

研究方向: Construction & Building Technology; Engineering

IDS 号: EF7GR

ISSN: 0886-7798

29 字符的来源出版物名称缩写: TUNN UNDERGR SP TECH

ISO 来源出版物缩写: Tunn. Undergr. Space Technol.

来源出版物页码计数: 10

ESI 高被引论文: Y

ESI 热点论文: N

第 31 条, 共 48 条

标题: A High-Order Two-Step Phase-Fitted Method for the Numerical Solution of the Schrodinger Equation

作者: Zhang, W (Zhang, Wei); Simos, TE (Simos, T. E.)

来源出版物: MEDITERRANEAN JOURNAL OF MATHEMATICS 卷: 13 期: 6 页: 5177-5194 DOI: 10.1007/s00009-016-0800-y 出版年: DEC 2016

Web of Science 核心合集中的 "被引频次": 60

被引频次合计: 60

使用次数 (最近 180 天): 1

使用次数 (2013 年至今): 8

引用的参考文献数: 27

摘要: In this paper, we will develop a four-stage high algebraic order symmetric two-step method with vanished phase-lag and its first up to the fourth derivative. For the proposed method, we will study the following: the phase-lag analysis of the new method; the development of the new method; the local truncation error analysis which is based on the radial Schrodinger equation; the stability and the interval of periodicity analysis which is based on a scalar test equation with frequency different than the frequency of the scalar test equation used for the phase-lag analysis; the error estimation procedure which is based on the algebraic order; and the numerical results from our numerical tests for the examination of the efficiency of the new obtained method. The numerical tests are based on the numerical solution of the Schrodinger equation.

入藏号: WOS:000387090000085

语言: English

文献类型: Article

作者关键词: Phase-lag; derivative of the phase-lag; initial value problems; oscillating solution; symmetric; multistep; hybrid; Schrodinger equation

KeyWords Plus: INITIAL-VALUE-PROBLEMS; MULTISTEP METHODS; ORBITAL PROBLEMS; INTEGRATION; LAG; SCATTERING

地址: [Zhang, Wei] Changan Univ, Sch Informat Engn, Xian 710064, Peoples R China.

[Zhang, Wei] China Highway Engn Consulting Grp Co LTD, Beijing 100097, Peoples R China.

[Simos, T. E.] King Saud Univ, Dept Math, Coll Sci, POB 2455, Riyadh 11451, Saudi Arabia.

[Simos, T. E.] Univ Peloponnese, Fac Econ Management & Informat, Sci Computat Lab, Dept Informat & Telecommun, GR-22100 Tripolis, Greece.

[Simos, T. E.] 10 Konitsis St, Athens 17564, Greece.

通讯作者地址: Simos, TE (通讯作者), King Saud Univ, Dept Math, Coll Sci, POB 2455, Riyadh 11451, Saudi Arabia.

Simos, TE (通讯作者), Univ Peloponnese, Fac Econ Management & Informat, Sci Computat Lab, Dept Informat & Telecommun, GR-22100 Tripolis, Greece.

Simos, TE (通讯作者), 10 Konitsis St, Athens 17564, Greece.

电子邮件地址: tsimos.conf@gmail.com

作者识别号:

作者 ResearcherID 号 ORCID 号

Simos, Theodore H-6033-2011

出版商: SPRINGER BASEL AG

出版商地址: PICASSOPLATZ 4, BASEL, 4052, SWITZERLAND

Web of Science 类别: Mathematics, Applied; Mathematics

研究方向: Mathematics

IDS 号: EB1DX

ISSN: 1660-5446

eISSN: 1660-5454

29 字符的来源出版物名称缩写: MEDITERR J MATH

ISO 来源出版物缩写: Mediterr. J. Math.

来源出版物页码计数: 18

ESI 高被引论文: Y

ESI 热点论文: Y

第 32 条, 共 48 条

标题: Evaluation of Shallow Groundwater Contamination and Associated Human Health Risk in an Alluvial Plain Impacted by Agricultural and Industrial Activities, Mid-west China

作者: Wu, JH (Wu, Jianhua); Sun, ZC (Sun, Zhanchao)

来源出版物: EXPOSURE AND HEALTH 卷: 8 期: 3 页: 311-329 DOI:

10.1007/s12403-015-0170-x 出版年: SEP 2016

Web of Science 核心合集中的 "被引频次": 98

被引频次合计: 99

使用次数 (最近 180 天): 23

使用次数 (2013 年至今): 119

引用的参考文献数: 79

摘要: Intensive human activities have caused contamination to groundwater quality which consequently affects human health. In this study, an evaluation of groundwater quality was carried out for better understanding of the status of groundwater contamination and potential risks to local residents in an alluvial plain (China) where agricultural and industrial activities are intensive. Comprehensive water quality index was used for drinking water-quality assessment and sodium adsorption ratio, Na%, and residual sodium carbonate were applied for irrigation water-quality assessment. The human health risks caused by intake of the contaminated groundwater through the oral and dermal pathways were also assessed. The assessment results reveal that most of the water samples are generally suitable for irrigation purpose, but over 60 % of them are not fit for drinking, and the total hardness, NO<sub>3</sub><sup>-</sup>, NO<sub>2</sub><sup>-</sup>, TDS, SO<sub>4</sub><sup>2-</sup>, and F<sup>-</sup> are the main contaminants affecting its suitability for drinking purpose. Residents in the study area are at high health risk, and NO<sub>3</sub><sup>-</sup> originating mainly from industrial and agricultural pollution is the greatest contributory cause of the health risks. Furthermore, children in this area are at higher health risk than adults, and oral ingestion is the dominate exposure pathway of health risk. Therefore, urgent and efficient measures must be taken to combat groundwater pollution and reduce health risk in the area.

入藏号: WOS:000381997600002

语言: English

文献类型: Article

作者关键词: Groundwater quality; Water-quality assessment; Human health risk; Human activity; Groundwater pollution

KeyWords Plus: WATER-QUALITY INDEX; NORTHWEST CHINA; DRINKING-WATER; RIVER-BASIN; PENGYANG COUNTY; WEIHE RIVER; POLLUTION; INDIA; AQUIFER; NITRATE

地址: [Wu, Jianhua; Sun, Zhanchao] Changan Univ, Sch Environm Sci & Engn, 126 Yanta Rd, Xian 710054, Peoples R China.

[Wu, Jianhua; Sun, Zhanchao] Changan Univ, Key Lab Subsurface Hydrol & Ecol Effects Arid Reg, Minist Educ, 126 Yanta Rd, Xian 710054, Peoples R China.

通讯作者地址: Wu, JH (通讯作者), Changan Univ, Sch Environm Sci & Engn, 126 Yanta Rd, Xian 710054, Peoples R China.

Wu, JH (通讯作者), Changan Univ, Key Lab Subsurface Hydrol & Ecol Effects Arid Reg, Minist Educ, 126 Yanta Rd, Xian 710054, Peoples R China.

电子邮件地址: wjh2005xy@126.com

作者识别号:

作者 ResearchID 号 ORCID 号

Wu, Jianhua G-4389-2017 0000-0001-6423-1762

出版商: SPRINGER

出版商地址: VAN GODEWIJCKSTRAAT 30, 3311 GZ DORDRECHT, NETHERLANDS

Web of Science 类别: Water Resources

研究方向: Water Resources

IDS 号: DU1VH

ISSN: 2451-9766

eISSN: 2451-9685

29 字符的来源出版物名称缩写: EXPOS HEALTH

ISO 来源出版物缩写: Expo. Health

来源出版物页码计数: 19

ESI 高被引论文: Y

ESI 热点论文: N

第 33 条, 共 48 条

标题: Hydrogeochemical Characterization of Groundwater in and Around a Wastewater Irrigated Forest in the Southeastern Edge of the Tengger Desert, Northwest China

作者: Li, PY (Li, Peiyue); Wu, JH (Wu, Jianhua); Qian, H (Qian, Hui); Zhang, YT (Zhang, Yuting); Yang, NA (Yang, Nuan); Jing, LJ (Jing, Lijun); Yu, PY (Yu, Peiyuan)

来源出版物: EXPOSURE AND HEALTH 卷: 8 期: 3 页: 331-348 DOI: 10.1007/s12403-016-0193-y 出版年: SEP 2016

Web of Science 核心合集中的 "被引频次": 69

被引频次合计: 69

使用次数 (最近 180 天): 10

使用次数 (2013 年至今): 98

引用的参考文献数: 74

摘要: Groundwater is an essential part of water resources for human survival and economic development in arid regions over the world. Human activities and environmental change have imposed significant impacts on groundwater environment. To investigate the hydrogeochemical characteristics and evolution of groundwater in and around a desert region impacted by wastewater irrigation, 84 groundwater samples were collected and analyzed for 18 indices. Statistical and graphical approaches were applied to delineate the general hydrochemical characteristics of groundwater and the major factors influencing its evolution. Stable isotopes of H-2 and O-18 were applied to identify groundwater evaporation process. Hydrogeochemical modeling was also adopted to quantify the major reactions occurring in the groundwater system. The results reveal that the abundance of cations is  $\text{Na}^+ > \text{Ca}^{2+} > \text{Mg}^{2+} > \text{K}^+$  for groundwater in the entire study area, while the abundance of anions for groundwater in the desert region is  $\text{HCO}_3^- > \text{Cl}^- > \text{SO}_4^{2-}$ , and that for groundwater in the alluvial plain is  $\text{HCO}_3^- > \text{SO}_4^{2-} > \text{Cl}^-$ . Groundwater chemistry in the study area is mainly of rock dominance, and dissolution/precipitation of minerals and cation exchange are major natural factors governing the formation of groundwater chemistry. However, stable isotopes and the occurrence of nitrate show that shallow groundwater evaporation and human activities also have some impacts on groundwater quality. Hydrochemical type transits from Ca-Cl to  $\text{HCO}_3$  center dot  $\text{SO}_4$ -Ca type, and then to  $\text{HCO}_3$  center dot  $\text{SO}_4$ -Ca center dot Mg type along the flow path. The transition is influenced by multiple factors with water-rock interactions the predominant one. The water-rock interactions for the upper and lower sections of the flow path, indicated by hydrogeochemical modeling, are different due to different geologic and hydrogeologic conditions.

入藏号: WOS:000381997600003

语言: English

文献类型: Article

作者关键词: Groundwater pollution; Water quality; Paper wastewater; Hydrogeochemical modeling; Tengger Desert

KeyWords Plus: SHALLOW GROUNDWATER; HYDROCHEMICAL CHARACTERISTICS;

QUALITY ASSESSMENT; YELLOW-RIVER; SOUTHERN PART; COASTAL AREA; PLAIN;  
MECHANISMS; CHEMISTRY; POLLUTION

地址: [Li, Peiyue; Wu, Jianhua; Qian, Hui; Zhang, Yuting; Yang, Nuan; Jing, Lijun; Yu, Peiyuan]  
Changan Univ, Key Lab Subsurface Hydrol & Ecol Effects Arid Reg, Minist Educ, 126 Yanta Rd,  
Xian 710054, Peoples R China.

[Li, Peiyue; Wu, Jianhua; Qian, Hui; Zhang, Yuting; Yang, Nuan; Jing, Lijun; Yu, Peiyuan]  
Changan Univ, Sch Environm Sci & Engn, 126 Yanta Rd, Xian 710054, Peoples R China.

通讯作者地址: Li, PY (通讯作者), Changan Univ, Key Lab Subsurface Hydrol & Ecol Effects  
Arid Reg, Minist Educ, 126 Yanta Rd, Xian 710054, Peoples R China.

Li, PY (通讯作者), Changan Univ, Sch Environm Sci & Engn, 126 Yanta Rd, Xian 710054,  
Peoples R China.

电子邮件地址: lipy2@163.com

作者识别号:

作者 ResearcherID 号 ORCID 号

Li, Peiyue F-3831-2011 0000-0001-8771-3369

qian, hui B-9558-2019 0000-0002-9354-4060

Wu, Jianhua G-4389-2017 0000-0001-6423-1762

出版商: SPRINGER

出版商地址: VAN GODEWIJCKSTRAAT 30, 3311 GZ DORDRECHT, NETHERLANDS

Web of Science 类别: Water Resources

研究方向: Water Resources

IDS 号: DU1VH

ISSN: 2451-9766

eISSN: 2451-9685

29 字符的来源出版物名称缩写: EXPOS HEALTH

ISO 来源出版物缩写: Expo. Health

来源出版物页码计数: 18

ESI 高被引论文: Y

ESI 热点论文: N

第 34 条, 共 48 条

标题: Appraising Groundwater Quality and Health Risks from Contamination in a Semiarid  
Region of Northwest China

作者: Li, PY (Li, Peiyue); Li, XY (Li, Xinyan); Meng, XY (Meng, Xiangyi); Li, MN (Li,  
Mengna); Zhang, YT (Zhang, Yuting)

来源出版物: EXPOSURE AND HEALTH 卷: 8 期: 3 页: 361-379 DOI:  
10.1007/s12403-016-0205-y 出版年: SEP 2016

Web of Science 核心合集中的 "被引频次": 62

被引频次合计: 64

使用次数 (最近 180 天): 34

使用次数 (2013 年至今): 139

引用的参考文献数: 62

摘要: This study assessed groundwater quality in a semiarid region of northwest China impacted  
by industrial and agricultural activities. The goal was to assess the quality of the water for

drinking and irrigation, and the groundwater's effect on human health. Thirty-one groundwater samples were collected from monitoring and hand pumping wells. These wells were distributed over 54 km<sup>2</sup>, with an average of 5.7 wells per 10 square kilometers. The samples were analyzed for pH, total dissolved solids (TDS), total hardness (TH), fluoride (F<sup>-</sup>), nitrate (NO<sub>3</sub>-N), nitrite (NO<sub>2</sub>-N), ammonia nitrogen (NH<sub>4</sub>-N), major ions (Na<sup>+</sup>, K<sup>+</sup>, Ca<sup>2+</sup>, Mg<sup>2+</sup>, HCO<sub>3</sub><sup>-</sup>, SO<sub>4</sub><sup>2-</sup>, Cl<sup>-</sup>), and heavy metals (Cu, Mn, Zn, As and Cr<sup>6+</sup>). Groundwater chemistry was described using statistical analysis, and Piper and Gibbs diagrams. An entropy-based matter element extension analysis was performed to quantify the overall groundwater quality. The sodium adsorption ratio, residual sodium carbonate, and soluble sodium percentage were used to assess irrigation water quality. Considering resident age, sex, and exposure pathways, the non-carcinogenic and carcinogenic health risks were estimated using the models recommended by the Ministry of Environmental Protection of China. Study area groundwater was found to be slightly alkaline. For cations, Na<sup>+</sup> was most abundant followed by Ca<sup>2+</sup>, then Mg<sup>2+</sup>, and then K<sup>+</sup>. For anions, HCO<sub>3</sub><sup>-</sup> were more abundant than SO<sub>4</sub><sup>2-</sup> and Cl<sup>-</sup>. Gibbs diagrams indicate that groundwater evaporation influences the development of sulfate-type groundwater, compared to the other groundwater types (bicarbonate and non-dominant types). The groundwater in most parts of the study area is of fair quality, and is marginally acceptable for multiple uses. TDS, TH, NH<sub>4</sub>-N, NO<sub>3</sub>-N, and Mn are common contaminants in the alluvial plain. These contaminants originate mainly from industrial and agricultural activities, as well as natural processes. Land irrigated with the groundwater is not exposed to a sodium hazard. However, measures are needed to manage the salinity hazard. The health risk assessment suggests that females and children face higher non-carcinogenic risk than males. The contribution of the contaminants to non-carcinogenic risk is in the following order: NO<sub>3</sub><sup>-</sup> > F<sup>-</sup> > As > Mn > NO<sub>2</sub><sup>-</sup> > Cr > NH<sub>4</sub><sup>+</sup> > Cu > Zn. Cr contributes more than As to the carcinogenic risk.

入藏号: WOS:000381997600005

语言: English

文献类型: Article

作者关键词: Groundwater pollution; Water quality assessment; Health risk; Entropy weight; Matter element analysis; Human activity

KeyWords Plus: SET PAIR ANALYSIS; MATTER-ELEMENT MODEL; SHALLOW GROUNDWATER; EXTENSION THEORY; DRINKING-WATER; RIVER; FLUORIDE; AREA; SUITABILITY; POLLUTION

地址: [Li, Peiyue; Li, Xinyan; Meng, Xiangyi; Li, Mengna; Zhang, Yuting] Changan Univ, Sch Environm Sci & Engn, 126 Yanta Rd, Xian 710054, Shaanxi, Peoples R China.

[Li, Peiyue; Li, Xinyan; Meng, Xiangyi; Li, Mengna; Zhang, Yuting] Changan Univ, Key Lab Subsurface Hydrol & Ecol Effects Arid Reg, Minist Educ, 126 Yanta Rd, Xian 710054, Shaanxi, Peoples R China.

通讯作者地址: Li, PY (通讯作者), Changan Univ, Sch Environm Sci & Engn, 126 Yanta Rd, Xian 710054, Shaanxi, Peoples R China.

Li, PY (通讯作者), Changan Univ, Key Lab Subsurface Hydrol & Ecol Effects Arid Reg, Minist Educ, 126 Yanta Rd, Xian 710054, Shaanxi, Peoples R China.

电子邮件地址: lipy2@163.com

作者识别号:

作者 ResearcherID 号 ORCID 号



Li, Peiyue F-3831-2011 0000-0001-8771-3369

出版商: SPRINGER

出版商地址: VAN GODEWIJCKSTRAAT 30, 3311 GZ DORDRECHT, NETHERLANDS

Web of Science 类别: Water Resources

研究方向: Water Resources

IDS 号: DU1VH

ISSN: 2451-9766

eISSN: 2451-9685

29 字符的来源出版物名称缩写: EXPOS HEALTH

ISO 来源出版物缩写: Expo. Health

来源出版物页码计数: 19

ESI 高被引论文: Y

ESI 热点论文: N

第 35 条, 共 48 条

标题: Global asymptotic stability of CNNs with impulses and multi-proportional delays

作者: Song, XL (Song Xueli); Zhao, P (Zhao Pan); Xing, ZW (Xing Zhiwei); Peng, JG (Peng Jigen)

来源出版物: MATHEMATICAL METHODS IN THE APPLIED SCIENCES 卷: 39 期: 4  
页: 722-733 DOI: 10.1002/mma.3515 出版年: MAR 2016

Web of Science 核心合集中的 "被引频次": 24

被引频次合计: 25

使用次数 (最近 180 天): 7

使用次数 (2013 年至今): 27

引用的参考文献数: 35

摘要: This paper is devoted to global asymptotic stability of cellular neural networks with impulses and multi-proportional delays. First, by means of the transformation  $v(i)(t) = u(i)(e(t))$ , the impulsive cellular neural networks with proportional delays are transformed into impulsive cellular neural networks with the variable coefficients and constant delays. Second, we prove the global exponential stability of the latter by nonlinear measure, and that the exponential stability of the latter implies the asymptotic stability of the former. We furthermore provide a sufficient condition to the existence, uniqueness, and the global asymptotic stability of the equilibrium point of the former. Our results are generalizations of some existing ones. Finally, an example and its simulation are presented to illustrate effectiveness of our method. Copyright (c) 2015 John Wiley & Sons, Ltd.

入藏号: WOS:000370234600010

语言: English

文献类型: Article

作者关键词: global asymptotic stability; cellular neural networks; proportional delays; nonlinear measure

KeyWords Plus: CELLULAR NEURAL-NETWORKS; TIME-VARYING DELAYS; EXPONENTIAL STABILITY; DIFFERENTIAL-EQUATIONS

地址: [Song Xueli; Zhao Pan] Changan Univ, Dept Math & Informat Sci, 126 Middle, Erhuannan Rd, Xian 710064, Peoples R China.

[Xing Zhiwei] Xian Polytech Univ, Coll Sci, 19 Jinhua South Rd, Xian 710048, Peoples R China.

[Peng Jigen] Xi An Jiao Tong Univ, Sch Math & Stat, 28 Xianning W Rd, Xian 710049, Peoples R China.

通讯作者地址: Song, XL (通讯作者), Changan Univ, Dept Math & Informat Sci, 126 Middle, Erhuannan Rd, Xian 710064, Peoples R China.

电子邮件地址: xlsung@chd.edu.cn

出版商: WILEY-BLACKWELL

出版商地址: 111 RIVER ST, HOBOKEN 07030-5774, NJ USA

Web of Science 类别: Mathematics, Applied

研究方向: Mathematics

IDS 号: DD9GV

ISSN: 0170-4214

eISSN: 1099-1476

29 字符的来源出版物名称缩写: MATH METHOD APPL SCI

ISO 来源出版物缩写: Math. Meth. Appl. Sci.

来源出版物页码计数: 12

ESI 高被引论文: Y

ESI 热点论文: N

第 36 条, 共 48 条

标题: Predication of nonlinear heat transfer in a convective-radiative fin with temperature-dependent properties by the collocation spectral method

作者: Sun, YS (Sun, Yasong); Ma, J (Ma, Jing); Li, BW (Li, Benwen); Guo, ZX (Guo, Zhixiong)

来源出版物: NUMERICAL HEAT TRANSFER PART B-FUNDAMENTALS 卷: 69 期: 1

页: 68-83 DOI: 10.1080/10407782.2015.1081043 出版年: JAN 2 2016

Web of Science 核心合集中的 "被引频次": 39

被引频次合计: 39

使用次数 (最近 180 天): 9

使用次数 (2013 年至今): 23

引用的参考文献数: 29

摘要: The applicability of the collocation spectral method (CSM) for solving nonlinear heat transfer problems is demonstrated in a convective-radiative fin with temperature-dependent properties. In this method, the fin temperature distribution is approximated by Lagrange interpolation polynomials at spectral collocation points. The differential form of the energy equation is transformed to a matrix form of algebraic equations. The computational convergence of the CSM approximately follows an exponential decaying law; and thus, it is a very simple and effective approach for a rapid assessment of nonlinear physical problems. The effects of temperature-dependent properties such as thermal conductivity, surface emissivity, heat transfer coefficient, convection-conduction parameter, and radiation-conduction parameter on the fin temperature distribution and efficiency are discussed.

入藏号: WOS:000367347200004

语言: English

文献类型: Article

KeyWords Plus: THERMAL-CONDUCTIVITY; MULTIPLE NONLINEARITIES; TRANSFER

COEFFICIENT; GENERATION; EFFICIENCY; PLATES; FLOW

地址: [Sun, Yasong] North China Elect Power Univ, Beijing Key Lab Multiphase Flow & Heat Transfer L, Beijing, Peoples R China.

[Sun, Yasong; Guo, Zhixiong] Rutgers State Univ, Dept Mech & Aerosp Engr, Piscataway, NJ 08854 USA.

[Ma, Jing] Changan Univ, Sch Automobile, Key Lab Shaanxi Prov Dev & Applicat New Transport, Xian, Peoples R China.

[Li, Benwen] Dalian Univ Technol, Inst Thermal Engr, Sch Energy & Power Engr, Dalian, Peoples R China.

通讯作者地址: Guo, ZX (通讯作者), Rutgers State Univ, Dept Mech & Aerosp Engr, 98 Brett Rd, Piscataway, NJ 08854 USA.

电子邮件地址: guo@jove.rutgers.edu

作者识别号:

作者 ResearcherID 号 ORCID 号

Guo, Zhixiong B-9303-2009 0000-0003-0481-2738

出版商: TAYLOR & FRANCIS INC

出版商地址: 530 WALNUT STREET, STE 850, PHILADELPHIA, PA 19106 USA

Web of Science 类别: Thermodynamics; Mechanics

研究方向: Thermodynamics; Mechanics

IDS 号: CZ8JY

ISSN: 1040-7790

eISSN: 1521-0626

29 字符的来源出版物名称缩写: NUMER HEAT TR B-FUND

ISO 来源出版物缩写: Numer Heat Tranf. B-Fundam.

来源出版物页码计数: 16

ESI 高被引论文: Y

ESI 热点论文: N

第 37 条, 共 48 条

标题: FOUR STAGES SYMMETRIC TWO-STEP P-STABLE METHOD WITH VANISHED PHASE-LAG AND ITS FIRST, SECOND, THIRD AND FOURTH DERIVATIVES

作者: Hui, F (Hui, Fei); Simos, TE (Simos, Theodore E.)

来源出版物: APPLIED AND COMPUTATIONAL MATHEMATICS 卷: 15 期: 2 页: 220-238 出版年: 2016

Web of Science 核心合集中的 "被引频次": 62

被引频次合计: 62

使用次数 (最近 180 天): 2

使用次数 (2013 年至今): 8

引用的参考文献数: 37

摘要: In this paper we develop a new four-stages symmetric two-step P-Stable tenth algebraic order method with vanished phase-lag and its first, second, third and fourth derivatives. For this new two-step method we will investigate the following:

the construction of the new family of methods,

the local truncation error (LTE) of the new developed method and the error analysis,

the stability (interval of periodicity) of the new obtained method using a scalar test equation with frequency different than the frequency of the scalar test equation used for phase-lag analysis (stability analysis),

the effectiveness of the new method with application on the coupled differential equations arising from the Schrodinger equation.

入藏号: WOS:000378971700008

语言: English

文献类型: Article

作者关键词: Error Analysis; Stability Analysis; Coupled Differential Equations; Schrodinger equation

KeyWords Plus: INITIAL-VALUE-PROBLEMS; SCHRODINGER-EQUATION; NUMERICAL-SOLUTION; MULTISTEP METHODS; 4-STEP METHODS; HIGH-ORDER; INTEGRATION; SCATTERING

地址: [Hui, Fei] Changan Univ, Sch Informat Engn, Xian, Peoples R China.

[Simos, Theodore E.] King Saud Univ, Dept Math, Coll Sci, Riyadh 11451, Saudi Arabia.

[Simos, Theodore E.] Univ Peloponnese, Fac Econ Management & Informat, Dept Informat & Telecommun, Lab Computat Sci, GR-22100 Tripolis, Greece.

通讯作者地址: Simos, TE (通讯作者), King Saud Univ, Dept Math, Coll Sci, Riyadh 11451, Saudi Arabia.

Simos, TE (通讯作者), Univ Peloponnese, Fac Econ Management & Informat, Dept Informat & Telecommun, Lab Computat Sci, GR-22100 Tripolis, Greece.

电子邮件地址: tsimos.conf@gmail.com

作者识别号:

作者 ResearcherID 号 ORCID 号

Simos, Theodore H-6033-2011

出版商: MINISTRY COMMUNICATIONS & HIGH TECHNOLOGIES REPUBLIC AZERBAIJAN

出版商地址: BAKU STATE UNIV, INST APPLIED MATHEMATICS, Z KHALILOV STR 23, BAKU, AZ 1148, AZERBAIJAN

Web of Science 类别: Mathematics, Applied

研究方向: Mathematics

IDS 号: DQ1PA

ISSN: 1683-3511

eISSN: 1683-6154

29 字符的来源出版物名称缩写: APPL COMPUT MATH-BAK

ISO 来源出版物缩写: Appl. Comput. Math.

来源出版物页码计数: 19

ESI 高被引论文: Y

ESI 热点论文: N

第 38 条, 共 48 条

标题: Investigation Progresses and Applications of Fractional Derivative Model in Geotechnical Engineering

作者: Lai, JX (Lai, Jinxing); Mao, S (Mao, Sheng); Qiu, JL (Qiu, Junling); Fan, HB (Fan, Haobo);

Zhang, Q (Zhang, Qian); Hu, ZN (Hu, Zhinan); Chen, JX (Chen, Jianxun)

来源出版物: MATHEMATICAL PROBLEMS IN ENGINEERING 文献号: 9183296 DOI: 10.1155/2016/9183296 出版年: 2016

Web of Science 核心合集中的 "被引频次": 54

被引频次合计: 54

使用次数 (最近 180 天): 15

使用次数 (2013 年至今): 103

引用的参考文献数: 81

摘要: Over the past couple of decades, as a new mathematical tool for addressing a number of tough problems, fractional calculus has been gaining a continually increasing interest in diverse scientific fields, including geotechnical engineering due primarily to geotechnical rheology phenomenon. Unlike the classical constitutive models in which simulation analysis gradually fails to meet the reasonable accuracy of requirement, the fractional derivative models have shown the merits of hereditary phenomena with long memory. Additionally, it is traced that the fractional derivative model is one of the most effective and accurate approaches to describe the rheology phenomenon. In relation to this, an overview aimed first at model structure and parameter determination in combination with application cases based on fractional calculus was provided. Furthermore, this review paper shed light on the practical application aspects of deformation analysis of circular tunnel, rheological settlement of subgrade, and relevant loess researches subjected to the achievements acquired in geotechnical engineering. Finally, concluding remarks and important future investigation directions were pointed out.

入藏号: WOS:000376141900001

语言: English

文献类型: Review

KeyWords Plus: EXPERIMENTAL VALIDATION; CONSTITUTIVE MODEL; POISSONS RATIO; CREEP; CALCULUS; ROCK; VISCOELASTICITY; PARAMETERS; BEHAVIOR; ASPHALT

地址: [Lai, Jinxing; Mao, Sheng; Qiu, Junling; Fan, Haobo; Chen, Jianxun] Changan Univ, Sch Highway, Xian 710064, Peoples R China.

[Zhang, Qian; Hu, Zhinan] Shijiazhuang Tiedao Univ, Sch Civil Engr, Shijiazhuang 050043, Peoples R China.

通讯作者地址: Qiu, JL; Chen, JX (通讯作者), Changan Univ, Sch Highway, Xian 710064, Peoples R China.

电子邮件地址: 870133597@qq.com; chenjx1969@chd.edu.cn

作者识别号:

作者 ResearcherID 号 ORCID 号

Qiu, Junling 0000-0002-7628-5431

lai, Jinxing B-2253-2016 0000-0002-1558-9482

出版商: HINDAWI LTD

出版商地址: ADAM HOUSE, 3RD FLR, 1 FITZROY SQ, LONDON, WIT 5HE, ENGLAND

Web of Science 类别: Engineering, Multidisciplinary; Mathematics, Interdisciplinary Applications

研究方向: Engineering; Mathematics

IDS 号: DM1YD

ISSN: 1024-123X

eISSN: 1563-5147

29 字符的来源出版物名称缩写: MATH PROBL ENG

ISO 来源出版物缩写: Math. Probl. Eng.

来源出版物页码计数: 15

ESI 高被引论文: Y

ESI 热点论文: N

第 39 条, 共 48 条

标题: Hydrochemical appraisal of groundwater quality for drinking and irrigation purposes and the major influencing factors: a case study in and around Hua County, China

作者: Li, PY (Li, Peiyue); Wu, JH (Wu, Jianhua); Qian, H (Qian, Hui)

来源出版物: ARABIAN JOURNAL OF GEOSCIENCES 卷: 9 期: 1 文献号: UNSP 15

DOI: 10.1007/s12517-015-2059-1 出版年: JAN 2016

Web of Science 核心合集中的 "被引频次": 60

被引频次合计: 62

使用次数 (最近 180 天): 13

使用次数 (2013 年至今): 61

引用的参考文献数: 55

摘要: Groundwater is the major source of water for drinking and irrigation purposes in and around Hua County, China. However, long-term industrial effluents in the upstream of the area have produced contamination to groundwater. To provide a clear and better understanding of the status and extent of groundwater pollution to local decision makers, groundwater quality was assessed for drinking and irrigation purposes in this study using sodium adsorption ratio (SAR), residual sodium carbonate (RSC), soluble sodium percentage (%Na), permeability index (PI), an entropy weighted water quality index (EWQI), and some graphical approaches such as Wilcox and US Salinity Laboratory (USSL) diagrams. Factors that have significant influences on the hydrochemistry and quality of groundwater were also discussed in detail. Finally, some measures for the protection and management of groundwater in the study area were provided to local decision makers. The results show that shallow groundwater in and around the Hua County is mainly slightly alkaline freshwater with the majority of the samples falling in the category of HCO<sub>3</sub>-Ca and mixed HCO<sub>3</sub> center dot SO<sub>4</sub>-Ca center dot Mg. Medium quality water is prevalent in the study area for drinking purpose, and the main contaminants in groundwater are total dissolved solid (TDS), total hardness (TH), SO<sub>4</sub><sup>2-</sup>, Cl<sup>-</sup>, NO<sub>3</sub><sup>-</sup>, NO<sub>2</sub><sup>-</sup>, and oil. Groundwater in the study area is suitable for agricultural irrigation with regard to sodium hazard, but mixing of low and high salinity water is recommended before irrigation to reduce the salinity hazard in local areas. Natural processes such as weathering of parent rocks, cation exchange, and groundwater evaporation are the dominant factors influencing groundwater chemistry in the study area. However, river water leakage and human interference are becoming increasingly important in altering natural groundwater chemistry. The recommendations suggest in this study may help to prevent further groundwater pollution in the study area, and the results and recommendations reported here will also be useful for many other regions facing similar problems.

入藏号: WOS:000369322200015

语言: English

文献类型: Article

作者关键词: Groundwater; Groundwater quality assessment; Hydrochemistry; Influencing factors; Human activity; Groundwater pollution

KeyWords Plus: NORTHWEST CHINA; PLAIN BURDUR/TURKEY; ALLUVIAL AQUIFER; PENGYANG COUNTY; SAUDI-ARABIA; INDIA; FLUORIDE; HYDROGEOCHEMISTRY; SUITABILITY; MECHANISMS

地址: [Li, Peiyue; Wu, Jianhua; Qian, Hui] Changan Univ, Sch Environm Sci & Engn, 126 Yanta Rd, Xian 710054, Shaanxi, Peoples R China.

[Li, Peiyue; Wu, Jianhua; Qian, Hui] Changan Univ, Key Lab Subsurface Hydrol & Ecol Effects Arid Reg, Minist Educ, 126 Yanta Rd, Xian 710054, Shaanxi, Peoples R China.

通讯作者地址: Li, PY (通讯作者), Changan Univ, Sch Environm Sci & Engn, 126 Yanta Rd, Xian 710054, Shaanxi, Peoples R China.

Li, PY (通讯作者), Changan Univ, Key Lab Subsurface Hydrol & Ecol Effects Arid Reg, Minist Educ, 126 Yanta Rd, Xian 710054, Shaanxi, Peoples R China.

电子邮件地址: lipy2@163.com

作者识别号:

作者 ResearcherID 号 ORCID 号

Wu, Jianhua G-4389-2017 0000-0001-6423-1762

Li, Peiyue F-3831-2011 0000-0001-8771-3369

qian, hui B-9558-2019 0000-0002-9354-4060

出版商: SPRINGER HEIDELBERG

出版商地址: TIERGARTENSTRASSE 17, D-69121 HEIDELBERG, GERMANY

Web of Science 类别: Geosciences, Multidisciplinary

研究方向: Geology

IDS 号: DC6IB

ISSN: 1866-7511

eISSN: 1866-7538

29 字符的来源出版物名称缩写: ARAB J GEOSCI

ISO 来源出版物缩写: Arab. J. Geosci.

来源出版物页码计数: 17

ESI 高被引论文: Y

ESI 热点论文: N

第 40 条, 共 48 条

标题: Building a new and sustainable "Silk Road economic belt"

作者: Li, PY (Li, Peiyue); Qian, H (Qian, Hui); Howard, KWF (Howard, Ken W. F.); Wu, JH (Wu, Jianhua)

来源出版物: ENVIRONMENTAL EARTH SCIENCES 卷: 74 期: 10 页: 7267-7270 DOI: 10.1007/s12665-015-4739-2 出版年: NOV 2015

Web of Science 核心合集中的 "被引频次": 103

被引频次合计: 109

使用次数 (最近 180 天): 30

使用次数 (2013 年至今): 163

引用的参考文献数: 10

摘要: The building of the Silk Road economic belt is an exciting prospect that may bring immense economic benefits to Eurasian countries. However, intensive human activities to be induced by it may double the water crisis in central Asia, deteriorate the vulnerable environment, and accelerate energy consumption in this area. To build a new and sustainable Silk Road economic belt, advancing scientific research, reinforcing international collaboration and enhancing education are necessary steps. With careful planning, sound research, good data and the support from governments and the people, the Silk Road economic belt can be developed in an environmentally sustainable manner that is a credit to all involved.

入藏号: WOS:000362903400023

语言: English

文献类型: Article

作者关键词: Silk Road; Water resources; Environmental protection; Energy saving; Human activity

KeyWords Plus: CHINA

地址: [Li, Peiyue; Qian, Hui; Wu, Jianhua] Changan Univ, Sch Environm Sci & Engn, Xian 710054, Peoples R China.

[Li, Peiyue; Qian, Hui; Wu, Jianhua] Changan Univ, Key Lab Subsurface Hydrol & Ecol Effects Arid Reg, Minist Educ, Xian 710054, Peoples R China.

[Howard, Ken W. F.] Univ Toronto Scarborough, Dept Phys & Environm Sci, Toronto, ON M1C 1A4, Canada.

通讯作者地址: Li, PY (通讯作者), Changan Univ, Sch Environm Sci & Engn, 126 Yanta Rd, Xian 710054, Peoples R China.

电子邮件地址: peiyueli@chd.edu.cn

作者识别号:

作者 ResearchID 号 ORCID 号

Li, Peiyue F-3831-2011 0000-0001-8771-3369

qian, hui B-9558-2019 0000-0002-9354-4060

Wu, Jianhua G-4389-2017 0000-0001-6423-1762

出版商: SPRINGER

出版商地址: 233 SPRING ST, NEW YORK, NY 10013 USA

Web of Science 类别: Environmental Sciences; Geosciences, Multidisciplinary; Water Resources

研究方向: Environmental Sciences & Ecology; Geology; Water Resources

IDS 号: CT6EA

ISSN: 1866-6280

eISSN: 1866-6299

29 字符的来源出版物名称缩写: ENVIRON EARTH SCI

ISO 来源出版物缩写: Environ. Earth Sci.

来源出版物页码计数: 4

ESI 高被引论文: Y

ESI 热点论文: N

第 41 条, 共 48 条

标题: Adsorption of cadmium by biochar derived from municipal sewage sludge: Impact factors and adsorption mechanism



作者: Chen, T (Chen Tan); Zhou, ZY (Zhou Zeyu); Han, R (Han Rong); Meng, RH (Meng Ruihong); Wang, HT (Wang Hongtao); Lu, WJ (Lu Wenjing)

来源出版物: CHEMOSPHERE 卷: 134 页: 286-293 DOI: 10.1016/j.chemosphere.2015.04.052 出版年: SEP 2015

Web of Science 核心合集中的 "被引频次": 74

被引频次合计: 81

使用次数 (最近 180 天): 25

使用次数 (2013 年至今): 248

引用的参考文献数: 40

摘要: Static equilibrium experiments were carried out to investigate the impact factors and the mechanism of cadmium adsorption on biochar derived from municipal sewage sludge. An appropriate dosage of biochar is sufficient; in the experiment, 0.2% is the optimal dosage for the largest removal capacity, while the removal capacity of biochar reduces with the increasing dosage. pH is another dominant factor of the adsorption process. The removal capacity of biochar is lower than 20 mg.g(-1) when the solution initial pH is lower than 2 pH units, comparatively retaining more than 40 mg.g(-1) at the solution initial pH higher than 3 pH units. Temperature has weak influence on the adsorptive performance. The main mechanism of the adsorption process of biochar for cadmium mainly involves (1) surface precipitation by forming insoluble cadmium compounds in alkaline condition, and (2) ion exchange for cadmium with exchangeable cations in the biochar, such as calcium ions. (C) 2015 Elsevier Ltd. All rights reserved.

入藏号: WOS:000356549500039

PubMed ID: 25966459

语言: English

文献类型: Article

作者关键词: Adsorption; Heavy metal; Biochar; Impact factor; Mechanism

KeyWords Plus: HEAVY-METAL IONS; AQUEOUS-SOLUTIONS; FAST PYROLYSIS; FLY-ASH; REMOVAL; WASTE; ADSORBENTS; WATER; GROUNDWATER; PERFORMANCE

地址: [Chen Tan; Zhou Zeyu; Meng Ruihong; Wang Hongtao; Lu Wenjing] Tsinghua Univ, Sch Environm, Beijing 100084, Peoples R China.

[Han Rong] Changan Univ, Sch Environm Sci & Engn, Xian 710064, Peoples R China.

通讯作者地址: Wang, HT (通讯作者), Tsinghua Univ, Sch Environm, Beijing 100084, Peoples R China.

电子邮件地址: htwang@tsinghua.edu.cn; luwenjing@tsinghua.edu.cn

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Environmental Sciences

研究方向: Environmental Sciences & Ecology

IDS 号: CK9GV

ISSN: 0045-6535

eISSN: 1879-1298

29 字符的来源出版物名称缩写: CHEMOSPHERE

ISO 来源出版物缩写: Chemosphere

来源出版物页码计数: 8

ESI 高被引论文: Y

ESI 热点论文: N

第 42 条, 共 48 条

标题: Uranium and molybdenum isotope evidence for an episode of widespread ocean oxygenation during the late Ediacaran Period

作者: Kendall, B (Kendall, Brian); Komiya, T (Komiya, Tsuyoshi); Lyons, TW (Lyons, Timothy W.); Bates, SM (Bates, Steve M.); Gordon, GW (Gordon, Gwyneth W.); Romaniello, SJ (Romaniello, Stephen J.); Jiang, GQ (Jiang, Ganqing); Creaser, RA (Creaser, Robert A.); Xiao, SH (Xiao, Shuhai); McFadden, K (McFadden, Kathleen); Sawaki, Y (Sawaki, Yusuke); Tahata, M (Tahata, Miyuki); Shu, DG (Shu, Degan); Han, J (Han, Jian); Li, Y (Li, Yong); Chu, XL (Chu, Xuelei); Anbar, AD (Anbar, Ariel D.)

来源出版物: GEOCHIMICA ET COSMOCHIMICA ACTA 卷: 156 页: 173-193 DOI: 10.1016/j.gca.2015.02.025 出版年: MAY 1 2015

Web of Science 核心合集中的 "被引频次": 87

被引频次合计: 95

使用次数 (最近 180 天): 11

使用次数 (2013 年至今): 136

引用的参考文献数: 168

摘要: To improve estimates of the extent of ocean oxygenation during the late Ediacaran Period, we measured the U and Mo isotope compositions of euxinic (anoxic and sulfidic) organic-rich mudrocks (ORM) of Member IV, upper Doushantuo Formation, South China. The average  $\delta U-238$  of most samples is  $0.24 \pm 0.16$  parts per thousand (2SD; relative to standard CRM145), which is slightly higher than the average  $\delta U-238$  of  $0.02 \pm 0.12$  parts per thousand for restricted Black Sea (deep-water Unit I) euxinic sediments and is similar to a modeled  $\delta U-238$  value of 0.2 parts per thousand for open ocean euxinic sediments in the modern well-oxygenated oceans. Because U-238 is preferentially removed to euxinic sediments compared to U-235, expanded ocean anoxia will deplete seawater of U-238 relative to U-235, ultimately leading to deposition of ORM with low  $\delta U-238$ . Hence, the high  $\delta U-238$  of Member IV ORM points to a common occurrence of extensive ocean oxygenation ca. 560 to 551 Myr ago.

The Mo isotope composition of sediments deposited from strongly euxinic bottom waters ( $[H_2S](aq) > 11 \mu M$ ) either directly records the global seawater Mo isotope composition (if Mo removal from deep waters is quantitative) or represents a minimum value for seawater (if Mo removal is not quantitative). Near the top of Member IV,  $\delta Mo-98$  approaches the modern seawater value of  $2.34 \pm 0.10$  parts per thousand. High  $\delta Mo-98$  points to widespread ocean oxygenation because the preferential removal of isotopically light Mo to sediments occurs to a greater extent in O<sub>2</sub>-rich compared to O<sub>2</sub>-deficient marine environments. However, the  $\delta Mo-98$  value for most Member IV ORM is near 0 parts per thousand (relative to standard NIST SRM 3134 = 0.25 parts per thousand), suggesting extensive anoxia. The low  $\delta Mo-98$  is at odds with the high Mo concentrations of Member IV ORM, which suggest a large seawater Mo inventory in well-oxygenated oceans, and the high  $\delta U-238$ . Hence, we propose that the low  $\delta Mo-98$  of most Member IV ORM was fractionated from contemporaneous seawater. Possible mechanisms driving this isotope fractionation include: (1) inadequate dissolved sulfide for

quantitative thiomolybdate formation and capture of a seawater-like delta Mo-98 signature in sediments or (2) delivery of isotopically light Mo to sediments via a particulate Fe-Mn oxyhydroxide shuttle.

A compilation of Mo isotope data from euxinic ORM suggests that there were transient episodes of extensive ocean oxygenation that break up intervals of less oxygenated oceans during late Neoproterozoic and early Paleozoic time. Hence, Member IV does not capture irreversible deep ocean oxygenation. Instead, complex ocean redox variations likely marked the transition from O<sub>2</sub>-deficient Proterozoic oceans to widely oxygenated later Phanerozoic oceans. (C) 2015 Elsevier Ltd. All rights reserved.

入藏号: WOS:000352192100010

语言: English

文献类型: Article

KeyWords Plus: EARLY ANIMAL EVOLUTION; ANOXIC EVENT 2; SOUTH CHINA; BLACK-SEA; DOUSHANTUO FORMATION; METAZOAN EVOLUTION; EUXINIC SEDIMENTS; MARINE-SEDIMENTS; YANGTZE PLATFORM; MASS EXTINCTION

地址: [Kendall, Brian] Univ Waterloo, Dept Earth & Environm Sci, Waterloo, ON N2L 3G1, Canada.

[Kendall, Brian; Komiya, Tsuyoshi; Gordon, Gwyneth W.; Romaniello, Stephen J.; Anbar, Ariel D.] Arizona State Univ, Sch Earth & Space Explorat, Tempe, AZ 85287 USA.

[Komiya, Tsuyoshi] Univ Tokyo, Dept Earth Sci & Astron, Meguro Ku, Tokyo 1538902, Japan.

[Komiya, Tsuyoshi] Tokyo Inst Technol, Res Ctr Evolving Earth & Planets, Meguro Ku, Tokyo 1528551, Japan.

[Lyons, Timothy W.; Bates, Steve M.] Univ Calif Riverside, Dept Earth Sci, Riverside, CA 92521 USA.

[Jiang, Ganqing] Univ Nevada, Dept Geosci, Las Vegas, NV 89154 USA.

[Creaser, Robert A.] Univ Alberta, Dept Earth & Atmospher Sci, Edmonton, AB T6G 2E3, Canada.

[Xiao, Shuhai] Virginia Polytech Inst & State Univ, Dept Geosci, Blacksburg, VA 24061 USA.

[McFadden, Kathleen] Conoco Phillips, Houston, TX 77079 USA.

[Sawaki, Yusuke] Japan Agcy Marine Earth Sci & Technol, Inst Res Earth Evolut, Yokosuka, Kanagawa 2370061, Japan.

[Tahata, Miyuki] Tokyo Inst Technol, Dept Earth & Planetary Sci, Meguro Ku, Tokyo 1528551, Japan.

[Shu, Degan; Han, Jian] NW Univ Xian, Dept Geol, Xian 710069, Peoples R China.

[Shu, Degan; Han, Jian] NW Univ Xian, Key Lab Continental Dynam, Xian 710069, Peoples R China.

[Li, Yong] Changan Univ, Sch Earth Sci & Resources Management, Xian 710054, Peoples R China.

[Chu, Xuelei] Chinese Acad Sci, Inst Geol & Geophys, Beijing 100029, Peoples R China.

[Anbar, Ariel D.] Arizona State Univ, Dept Chem & Biochem, Tempe, AZ 85287 USA.

通讯作者地址: Kendall, B (通讯作者), Univ Waterloo, Dept Earth & Environm Sci, 200 Univ Ave West, Waterloo, ON N2L 3G1, Canada.

电子邮件地址: bkendall@uwaterloo.ca

作者识别号:

作者 ResearcherID 号 ORCID 号

Jiang, Ganqing A-9557-2011 0000-0002-6627-2848

Sawaki, Yusuke C-5746-2015 0000-0003-3761-8915

Xiao, Shuhai A-2190-2009 0000-0003-4655-2663

Komiya, Tsuyoshi A-3704-2009 0000-0002-4000-0617

Kendall, Brian 0000-0002-8914-2309

Creaser, Robert 0000-0002-7672-035X

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Geochemistry & Geophysics

研究方向: Geochemistry & Geophysics

IDS 号: CE9VS

ISSN: 0016-7037

eISSN: 1872-9533

29 字符的来源出版物名称缩写: GEOCHIM COSMOCHIM AC

ISO 来源出版物缩写: Geochim. Cosmochim. Acta

来源出版物页码计数: 21

ESI 高被引论文: Y

ESI 热点论文: N

第 43 条, 共 48 条

标题: Nutrient and organics removal from swine slurry with simultaneous electricity generation in an alum sludge-based constructed wetland Incorporating microbial fuel cell technology

作者: Doherty, L (Doherty, Liam); Zhao, YQ (Zhao, Yaqian); Zhao, XH (Zhao, Xiaohong); Wang, WK (Wang, Wenke)

来源出版物: CHEMICAL ENGINEERING JOURNAL 卷: 266 页: 74-81 DOI: 10.1016/j.cej.2014.12.063 出版年: APR 15 2015

Web of Science 核心合集中的 "被引频次": 55

被引频次合计: 63

使用次数 (最近 180 天): 17

使用次数 (2013 年至今): 205

引用的参考文献数: 51

摘要: This study investigates the ability of four alum sludge-based constructed wetlands, incorporating microbial fuel cell technology, to achieve high organic and nutrient removal from swine slurry while simultaneously producing electricity. As a cross-comparison the effects of electrode spacing and flow pattern are investigated. By providing a simultaneous upflow-downflow regime the maximum power density is boosted by 70% to 0.268 W/m<sup>3</sup> and an ammonium removal efficiency of 75% is achieved. However, the COD removal efficiency falls to 64% compared with 80%, 79% and 81% achieved by operating with a continuous upflow regime in the other three systems of the study. The alum sludge wetland medium showed an enhanced capacity to immobilise phosphorous with total phosphorous and reactive phosphorous removal rates of 85-86% and 89-90%, respectively. Accordingly, multi-stage hybrid CW-MFC systems and alternative operational strategies are discussed and recommended for full nutrient and organic

removal. (C) 2014 Elsevier B.V. All rights reserved.

入藏号: WOS:000350931600009

语言: English

文献类型: Article

作者关键词: Microbial fuel cell; Constructed wetland; Electricity; Wastewater treatment; Nutrient removal

KeyWords Plus: LIVESTOCK WASTE-WATER; NITROGEN REMOVAL; PERFORMANCE; IRELAND; CATHODE; SYSTEM; SCALE; MFC; CONFIGURATION; SUBSTRATE

地址: [Doherty, Liam; Zhao, Yaqian] Univ Coll Dublin, UCD Dooge Ctr Water Resources Res, Sch Civil Struct & Environm Engn, Dublin 4, Ireland.

[Zhao, Yaqian; Zhao, Xiaohong; Wang, Wenke] Changan Univ, Minist Educ, Key Lab Subsurface Hydrol & Ecol Arid Areas, Xian 710054, Peoples R China.

通讯作者地址: Zhao, YQ (通讯作者), Univ Coll Dublin, UCD Dooge Ctr Water Resources Res, Sch Civil Struct & Environm Engn, Dublin 4, Ireland.

电子邮件地址: yaqian.zhao@ucd.ie

出版商: ELSEVIER SCIENCE SA

出版商地址: PO BOX 564, 1001 LAUSANNE, SWITZERLAND

Web of Science 类别: Engineering, Environmental; Engineering, Chemical

研究方向: Engineering

IDS 号: CD2TJ

ISSN: 1385-8947

eISSN: 1873-3212

29 字符的来源出版物名称缩写: CHEM ENG J

ISO 来源出版物缩写: Chem. Eng. J.

来源出版物页码计数: 8

ESI 高被引论文: Y

ESI 热点论文: N

第 44 条, 共 48 条

标题: Microwave synthesis of a novel magnetic imprinted TiO<sub>2</sub> photocatalyst with excellent transparency for selective photodegradation of enrofloxacin hydrochloride residues solution

作者: Lu, ZY (Lu, Ziyang); Chen, F (Chen, Fei); He, M (He, Ming); Song, MS (Song, Minshan); Ma, ZF (Ma, Zhongfei); Shi, WD (Shi, Weidong); Yan, YS (Yan, Yongsheng); Lan, JZ (Lan, Jinze); Li, F (Li, Fang); Xiao, P (Xiao, Peng)

来源出版物: CHEMICAL ENGINEERING JOURNAL 卷: 249 页: 15-26 DOI: 10.1016/j.cej.2014.03.077 出版年: AUG 1 2014

Web of Science 核心合集中的 "被引频次": 89

被引频次合计: 93

使用次数 (最近 180 天): 32

使用次数 (2013 年至今): 249

引用的参考文献数: 49

摘要: Magnetic imprinted TiO<sub>2</sub> photocatalyst (MITP) with excellent transparency was prepared via a microwave heating method based on enrofloxacin hydrochloride (ENRH) as the template molecule, methyl methacrylate (MMA) as the functional monomer, and TiO<sub>2</sub>@SiO<sub>2</sub>@Fe<sub>3</sub>O<sub>4</sub>

(TSF) as the matrix material. TSF was synthesized by a mild sol-gel method. The results indicated that MITP possessed hierarchical spherical structure, good monodispersity, superior magnetic properties ( $M_s = 11.59 \text{ emu/g}$ ), the average diameter was approximately 410 nm, and the surface-imprinted layer was composed of the imprinted polymer and poly (methyl methacrylate). Moreover, MITP was proved to exhibit an excellent photochemical stability and a higher photocatalytic efficiency than other photocatalysts, the apparent rate constant ( $k$ ) for degradation of ENRH with MITP in 90 min under the visible light irradiation was  $1.08 \text{ min}^{-1}$ . The coefficient of selectivity ( $k(\text{selectivity})$ ) of MITP relative to TSF and magnetic non-imprinted  $\text{TiO}_2$  photocatalyst (MNITP) was 2.14 and 2.08, respectively, indicating that MITP also possessed the strong ability to selective recognition and photodegradation of ENRH in the binary antibiotic residues solution containing ENRH and tetracycline (TC). In addition, the mechanism and intermediate products of selective photodegradation of the binary antibiotic residues solution with MITP were further discussed. (C) 2014 Elsevier B.V. All rights reserved.

入藏号: WOS:000337554100003

语言: English

文献类型: Article

作者关键词: Enrofloxacin hydrochloride; Magnetic imprinted photocatalyst; Microwave heating method; Poly (methyl methacrylate); Selective photodegradation; Surface imprinting technology

KeyWords Plus: SOLAR LIGHT IRRADIATION; TITANIUM-DIOXIDE; WATER-TREATMENT; WASTE-WATER; REMOVAL; DEGRADATION; ANTIBIOTICS; PERFORMANCE; MICROSPHERES; POLYMER

地址: [Lu, Ziyang; Ma, Zhongfei] Jiangsu Univ, Sch Environm & Safety Engr, Zhenjiang 212013, Jiangsu, Peoples R China.

[Lu, Ziyang; He, Ming; Shi, Weidong; Yan, Yongsheng; Lan, Jinze; Li, Fang; Xiao, Peng] Jiangsu Univ, Sch Chem & Chem Engr, Zhenjiang 212013, Jiangsu, Peoples R China.

[Chen, Fei] Changan Univ, Sch Environm Sci & Engr, Xian 710054, Shanxi, Peoples R China.

[Song, Minshan] Jiangsu Univ Sci & Technol, Sch Math & Phys, Zhenjiang 212003, Peoples R China.

通讯作者地址: Yan, YS (通讯作者), Jiangsu Univ, Sch Chem & Chem Engr, Zhenjiang 212013, Jiangsu, Peoples R China.

电子邮件地址: luziyang126@126.com

作者识别号:

作者 ResearchID 号 ORCID 号

李, 娣 T-9818-2017

出版商: ELSEVIER SCIENCE SA

出版商地址: PO BOX 564, 1001 LAUSANNE, SWITZERLAND

Web of Science 类别: Engineering, Environmental; Engineering, Chemical

研究方向: Engineering

IDS 号: AJ3GI

ISSN: 1385-8947

eISSN: 1873-3212

29 字符的来源出版物名称缩写: CHEM ENG J

ISO 来源出版物缩写: Chem. Eng. J.

来源出版物页码计数: 12

ESI 高被引论文: Y

ESI 热点论文: N

第 45 条, 共 48 条

标题: Microwave-assisted in situ synthesis of reduced graphene oxide-BiVO<sub>4</sub> composite photocatalysts and their enhanced photocatalytic performance for the degradation of ciprofloxacin

作者: Yan, Y (Yan, Yan); Sun, SF (Sun, Shaofang); Song, Y (Song, Yang); Yan, X (Yan, Xu); Guan, WS (Guan, Weisheng); Liu, XL (Liu, Xinlin); Shi, WD (Shi, Weidong)

来源出版物: JOURNAL OF HAZARDOUS MATERIALS 卷: 250 页: 106-114 DOI: 10.1016/j.jhazmat.2013.01.051 出版年: APR 15 2013

Web of Science 核心合集中的 "被引频次": 103

被引频次合计: 112

使用次数 (最近 180 天): 15

使用次数 (2013 年至今): 425

引用的参考文献数: 52

摘要: To improve the photodegradation efficiency for ciprofloxacin (CIP), a new-type microwave-assisted in situ growth method is developed for the preparation of reduced graphene oxide (RGO) -BiVO<sub>4</sub> composite photocatalysts. The as-produced RGO-BiVO<sub>4</sub> composite photocatalysts show extremely high enhancement of CIP degradation ratio over the pure BiVO<sub>4</sub> photocatalyst under visible light. Specially, the 2 wt% RGO-BiVO<sub>4</sub> composite photocatalyst exhibits the highest CIP degradation ratio (68.2%) in 60 min, which is over 3 times than that (22.7%) of the pure BiVO<sub>4</sub> particles. The enhancement of photocatalytic activities of RGO-BiVO<sub>4</sub> photocatalysts can be attributed to the effective separation of electron-hole pairs rather than the improvement of light absorption. (C) 2013 Elsevier B.V. All rights reserved.

入藏号: WOS:000317878400014

PubMed ID: 23434486

语言: English

文献类型: Article

作者关键词: Microwave-assisted method; Photocatalyst; BiVO<sub>4</sub>; Reduced graphene oxide; Ciprofloxacin

KeyWords Plus: VISIBLE-LIGHT IRRADIATION; MONOCLINIC BISMUTH VANADATE; EXFOLIATED GRAPHITE OXIDE; NANO-SIZED BIVO<sub>4</sub>; PHOTOELECTROCHEMICAL DECOMPOSITION; SEMICONDUCTOR COLLOIDS; HYDROGEN-PRODUCTION; FILM ELECTRODES; WATER OXIDATION; NANOSHEETS

地址: [Yan, Yan; Sun, Shaofang; Song, Yang; Yan, Xu; Shi, Weidong] Jiangsu Univ, Sch Chem & Chem Engr, Zhenjiang 212013, Peoples R China.

[Sun, Shaofang; Guan, Weisheng] Changan Univ, Sch Environm Sci & Engr, Xian 710054, Peoples R China.

[Liu, Xinlin] Jiangsu Univ, Sch Mat Sci & Engr, Zhenjiang 212013, Peoples R China.

通讯作者地址: Shi, WD (通讯作者), Jiangsu Univ, Sch Chem & Chem Engr, Xuefu Rd 301, Zhenjiang 212013, Peoples R China.

电子邮件地址: swd1978@ujjs.edu.cn

作者识别号:

作者 ResearcherID 号 ORCID 号

李, 娣 T-9818-2017

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Engineering, Environmental; Environmental Sciences

研究方向: Engineering; Environmental Sciences & Ecology

IDS 号: 129XX

ISSN: 0304-3894

29 字符的来源出版物名称缩写: J HAZARD MATER

ISO 来源出版物缩写: J. Hazard. Mater.

来源出版物页码计数: 9

ESI 高被引论文: Y

ESI 热点论文: N

第 46 条, 共 48 条

标题: Experimental studies on the combustion characteristics and performance of a direct injection engine fueled with biodiesel/diesel blends

作者: Qi, DH (Qi, D. H.); Chen, H (Chen, H.); Geng, LM (Geng, L. M.); Bian, YZ (Bian, Y. Zh.)

来源出版物: ENERGY CONVERSION AND MANAGEMENT 卷: 51 期: 12 页: 2985-2992 DOI: 10.1016/j.enconman.2010.06.042 出版年: DEC 2010

Web of Science 核心合集中的 "被引频次": 185

被引频次合计: 190

使用次数 (最近 180 天): 2

使用次数 (2013 年至今): 39

引用的参考文献数: 30

摘要: Biodiesel is an alternative diesel fuel that can be produced from different kinds of vegetable oils. It is an oxygenated, non-toxic, sulphur-free, biodegradable, and renewable fuel and can be used in diesel engines without significant modification. However, the performance, emissions and combustion characteristics will be different for the same biodiesel used in different types of engine.

In this study, the biodiesel produced from soybean crude oil was prepared by a method of alkaline-catalyzed transesterification. The effects of biodiesel addition to diesel fuel on the performance, emissions and combustion characteristics of a naturally aspirated DI compression ignition engine were examined. Biodiesel has different properties from diesel fuel. A minor increase in brake specific fuel consumption (BSFC) and decrease in brake thermal efficiency (BTE) for biodiesel and its blends were observed compared with diesel fuel. The significant improvement in reduction of carbon monoxide (CO) and smoke were found for biodiesel and its blends at high engine loads. Hydrocarbon (HC) had no evident variation for all tested fuels. Nitrogen oxides (NO(x)) were slightly higher for biodiesel and its blends. Biodiesel and its blends exhibited similar combustion stages to diesel fuel. The use of transesterified soybean crude oil can be partially substituted for the diesel fuel at most operating conditions in terms of the performance parameters and emissions without any engine modification. (C) 2010 Elsevier Ltd. All rights reserved.

入藏号: WOS:000281339700070

语言: English



文献类型: Article

作者关键词: Biodiesel; Soybean crude oil; Combustion characteristics; Exhaust emissions; Performance

KeyWords Plus: DIESEL-ENGINE; METHYL-ESTER; COOKING OIL; EMISSIONS; SUNFLOWER; JATROPHA; KARANJA

地址: [Qi, D. H.; Chen, H.; Geng, L. M.; Bian, Y. Zh.] Changan Univ, Sch Automobile, Xian 710064, Shaanxi Prov, Peoples R China.

通讯作者地址: Qi, DH (通讯作者), Changan Univ, Sch Automobile, Xian 710064, Shaanxi Prov, Peoples R China.

电子邮件地址: donghuiqi@gmail.com

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Thermodynamics; Energy & Fuels; Mechanics

研究方向: Thermodynamics; Energy & Fuels; Mechanics

IDS 号: 643ZH

ISSN: 0196-8904

29 字符的来源出版物名称缩写: ENERGMANAGE

ISO 来源出版物缩写: Energy Conv. Manag.

来源出版物页码计数: 8

ESI 高被引论文: Y

ESI 热点论文: N

第 47 条, 共 48 条

标题: Performance and combustion characteristics of biodiesel-diesel-methanol blend fuelled engine

作者: Qi, DH (Qi, D. H.); Chen, H (Chen, H.); Geng, LM (Geng, L. M.); Bian, YZ (Bian, Y. Zh); Ren, XC (Ren, X. Ch)

来源出版物: APPLIED ENERGY 卷: 87 期: 5 页: 1679-1686 DOI: 10.1016/j.apenergy.2009.10.016 出版年: MAY 2010

Web of Science 核心合集中的 "被引频次": 140

被引频次合计: 146

使用次数 (最近 180 天): 2

使用次数 (2013 年至今): 32

引用的参考文献数: 21

摘要: An experimental investigation was conducted to evaluate the effects of using methanol as additive to biodiesel-diesel blends on the engine performance, emissions and combustion characteristics of a direct injection diesel engine under variable operating conditions. BD50 (50% biodiesel and 50% diesel in vol.) was prepared as the baseline fuel. Methanol was added to BD50 as an additive by volume percent of 5% and 10% (denoted as BDM5 and BDM10). The results indicate that the combustion starts later for BDM5 and BDM10 than for BD50 at low engine load, but is almost identical at high engine load. At low engine load of 1500 r/min, BDM5 and BDM10 show the similar peak cylinder pressure and peak of pressure rise rate to BD50, and higher peak of heat release rate than that of BD50. At low engine load of 1800 r/min, the peak cylinder pressure

and the peak of pressure rise rate of BDM5 and BDM10 are lower than those of BD50, and the peak of heat release rate is similar to that of BD50. The crank angles at which the peak values occur are later for BDM5 and BDM10 than for BD50. At high engine load, the peak cylinder pressure, the peak of pressure rise rate and peak of heat release rate of BDM5 and BDM10 are higher than those of BD50, and the crank angle of peak values for all tested fuels are almost same. The power and torque outputs of BDM5 and BDM10 are slightly lower than those of BD50. BDM5 and BDM10 show dramatic reduction of smoke emissions. CO emissions are slightly lower, and NO<sub>x</sub> and HC emissions are almost similar to those of BD50 at speed characteristic of full engine load. (C) 2009 Elsevier Ltd. All rights reserved.

入藏号: WOS:000274943400022

语言: English

文献类型: Article

作者关键词: Biodiesel; Methanol; Combustion characteristics; Emissions; Performance

KeyWords Plus: COMPRESSION IGNITION ENGINE; ETHANOL BLEND; EMISSIONS; OIL; REDUCTION; BIOFUELS; TALLOW

地址: [Qi, D. H.; Chen, H.; Geng, L. M.; Bian, Y. Zh; Ren, X. Ch] Changan Univ, Sch Automobile, Xian 710064, Peoples R China.

通讯作者地址: Qi, DH (通讯作者), Changan Univ, Sch Automobile, Xian 710064, Peoples R China.

电子邮件地址: donghuiqi@gmail.com

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Energy & Fuels; Engineering, Chemical

研究方向: Energy & Fuels; Engineering

IDS 号: 560ZC

ISSN: 0306-2619

29 字符的来源出版物名称缩写: APPL ENERG

ISO 来源出版物缩写: Appl. Energy

来源出版物页码计数: 8

ESI 高被引论文: Y

ESI 热点论文: N

第 48 条, 共 48 条

标题: Combustion and performance evaluation of a diesel engine fueled with biodiesel produced from soybean crude oil

作者: Qi, DH (Qi, D. H.); Geng, LM (Geng, L. M.); Chen, H (Chen, H.); Bian, YZ (Bian, Y. Zh.); Liu, J (Liu, J.); Ren, XC (Ren, X. Ch.)

来源出版物: RENEWABLE ENERGY 卷: 34 期: 12 页: 2706-2713 DOI: 10.1016/j.renene.2009.05.004 出版年: DEC 2009

Web of Science 核心合集中的 "被引频次": 202

被引频次合计: 205

使用次数 (最近 180 天): 1

使用次数 (2013 年至今): 31

引用的参考文献数: 14

摘要: In this study, the biodiesel produced from soybean crude oil was prepared by a method of alkaline-catalyzed transesterification. The important properties of biodiesel were compared with those of diesel. Diesel and biodiesel were used as fuels in the compression ignition engine, and its performance, emissions and combustion characteristics of the engine were analyzed. The results showed that biodiesel exhibited the similar combustion stages to that of diesel, however, biodiesel showed an earlier start of combustion. At lower engine loads, the peak cylinder pressure, the peak rate of pressure rise and the peak of heat release rate during premixed combustion phase were higher for biodiesel than for diesel. At the peak cylinder pressure of biodiesel was almost similar to that of diesel, but the her engine loads, the peak rate of pressure rise and the peak of heat release rate were lower for biodiesel. The power output of biodiesel was almost identical with that of diesel. The brake specific fuel consumption was higher for biodiesel due to its lower heating value. Biodiesel provided significant reduction in CO, HC, NOx and smoke under speed characteristic at full engine load. Based on this study, biodiesel can be used as a substitute for diesel in diesel engine. (C) 2009 Elsevier Ltd. All rights reserved.

入藏号: WOS:000269711300022

语言: English

文献类型: Article

作者关键词: Biodiesel; Soybean crude oil; Combustion; Emissions; Performance

KeyWords Plus: EMISSION; ESTERS

地址: [Qi, D. H.; Geng, L. M.; Chen, H.; Bian, Y. Zh.; Liu, J.; Ren, X. Ch.] Changan Univ, Sch Automobile, Xian 710064, Shaanxi Prov, Peoples R China.

通讯作者地址: Qi, DH (通讯作者), Changan Univ, Sch Automobile, Xian 710064, Shaanxi Prov, Peoples R China.

电子邮件地址: qidh@chd.edu.cn

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Green & Sustainable Science & Technology; Energy & Fuels

研究方向: Science & Technology - Other Topics; Energy & Fuels

IDS 号: 493CQ

ISSN: 0960-1481

29 字符的来源出版物名称缩写: RENEW ENERG

ISO 来源出版物缩写: Renew. Energy

来源出版物页码计数: 8

ESI 高被引论文: Y

ESI 热点论文: N

## 附录 2: 长安大学 ESI 热点论文 (2019 年 1 月更新)

第 1 条, 共 6 条

标题: Response characteristics and preventions for seismic subsidence of loess in Northwest China

作者: Qiu, JL (Qiu, Junling); Wang, XL (Wang, Xiuling); Lai, JX (Lai, Jinxing); Zhang, Q (Zhang, Qian); Wang, JB (Wang, Junbao)

来源出版物: NATURAL HAZARDS 卷: 92 期: 3 页: 1909-1935 DOI:  
10.1007/s11069-018-3272-5 出版年: JUL 2018

Web of Science 核心合集中的 "被引频次": 23

被引频次合计: 23

使用次数 (最近 180 天): 57

使用次数 (2013 年至今): 81

引用的参考文献数: 119

摘要: Seismic subsidence of loess had been verified by microstructure characteristic, dynamic triaxial test and in situ simulation test using blasting vibration. It has gradually become a significant subject in the field of geotechnical earthquake engineering. Loess is widely distributed in China, which typically has a loose honeycomb-type meta-stable structure that is susceptible to a large reduction in total volume or subsidence upon ground motion. Seismic subsidence contributes to various problems to infrastructures that are constructed on loess. This paper provides a review of state-of-the-art work on mechanism, microstructure characteristic and physical mechanics mechanism of the seismic subsidence. Furthermore, the comprehensive explanation, basics and earlier research performed on subsidence amount estimation, seismic subsidence assessment and corresponding preventions of disasters have been presented briefly. The literature review shows that some significant problems, for example, appropriate theoretical basis, multi-variable coupling in assessment, physical processes, mechanical mechanism in estimation, and so on require constant research and development work to overcome the aforementioned factors. Specifically, research on quantitative relation between macro-mechanics and microstructure cannot proceed only from experimental parameters but should establish theoretical connection between them. Further study on seismic subsidence must be developed under the theory of unsaturated soil mechanics. In addition, research on chronological and spatial development law of large-scale seismic subsidence, prediction of subsidence value and anti-seismic analysis of underground structures can be conducted in future.

入藏号: WOS:000433913500032

语言: English

文献类型: Review

作者关键词: Loess; Seismic subsidence; Mechanism; Microstructure; Probability assessment of loess seismic subsidence; Estimation of subsidence amount; Disasters and preventions

KeyWords Plus: GEOTECHNICAL PROPERTIES; MERCURY INTRUSION; MICROSTRUCTURE; COLLAPSE; TUNNEL; DEFORMATION; LANDSLIDES; DEPOSITS; SOILS; ROCK

地址: [Qiu, Junling; Wang, Xiuling; Lai, Jinxing] Changan Univ, Sch Highway, Middle South 2rd Ring Rd, Xian 710064, Shaanxi, Peoples R China.

[Zhang, Qian] Shijiazhuang Tiedao Univ, Sch Civil Engn, Shijiazhuang 050043, Hebei, Peoples R China.

[Wang, Junbao] Xian Univ Architecture & Technol, Sch Civil Engn, Xian 710055, Shaanxi, Peoples R China.

通讯作者地址: Lai, JX (通讯作者), Changan Univ, Sch Highway, Middle South 2rd Ring Rd, Xian 710064, Shaanxi, Peoples R China.

电子邮件地址: laijinxing@chd.edu.cn

作者识别号:

作者 ResearcherID 号 ORCID 号

lai, Jinxing B-2253-2016 0000-0002-1558-9482

Qiu, Junling 0000-0002-7628-5431

出版商: SPRINGER

出版商地址: 233 SPRING ST, NEW YORK, NY 10013 USA

Web of Science 类别: Geosciences, Multidisciplinary; Meteorology & Atmospheric Sciences; Water Resources

研究方向: Geology; Meteorology & Atmospheric Sciences; Water Resources

IDS 号: GH8JD

ISSN: 0921-030X

eISSN: 1573-0840

29 字符的来源出版物名称缩写: NAT HAZARDS

ISO 来源出版物缩写: Nat. Hazards

来源出版物页码计数: 27

ESI 高被引论文: Y

ESI 热点论文: Y

第 2 条, 共 6 条

标题: Investigation into geohazards during urbanization process of Xi'an, China

作者: Wang, ZF (Wang, Zhi-Feng); Cheng, WC (Cheng, Wen-Chieh); Wang, YQ (Wang, Ya-Qiong)

来源出版物: NATURAL HAZARDS 卷: 92 期: 3 页: 1937-1953 DOI: 10.1007/s11069-018-3280-5 出版年: JUL 2018

Web of Science 核心合集中的 "被引频次": 17

被引频次合计: 17

使用次数 (最近 180 天): 12

使用次数 (2013 年至今): 32

引用的参考文献数: 75

摘要: Xi'an is the political, cultural and economic center in Northwestern China, and the demands for urbanization are growing dramatically in the past decades. During the rapid urbanization in Xi'an, ground fissure and land subsidence have been regarded as the two striking geohazards. At present, a total of fourteen ground fissures have been detected in Xi'an, among which eight ground fissures have a high level of activity, while the other six ground fissures are of lowly active. Several land subsidence funnels appear in different regions of Xi'an, and the annual land subsidence shows a decreasing tendency after 1991, which is estimated to be around 40 mm/year in recent years. The reasons triggering geohazards can be divided as: (1) natural factors and (2) anthropogenic factors. Analysis of the countermeasures against the prevention and mitigation of geohazards indicates that public awareness is an important issue to a success of the geoenvironment protection. In addition, the existing monitoring technologies (GPS, InSAR, and GIS) together with the technical improvement in other fields are deemed to be necessary for an effective monitoring and mitigation of the geohazards.

入藏号: WOS:000433913500033

语言: English

文献类型: Review

作者关键词: Geohazards; Urbanization; Ground fissure; Land subsidence

KeyWords Plus: JET GROUT COLUMN; LAND SUBSIDENCE; PARTIAL PENETRATION; PUMPING TESTS; ACID-RAIN; GROUNDWATER; SHANGHAI; FISSURES; SOILS; SIMULATION

地址: [Wang, Zhi-Feng; Wang, Ya-Qiong] Changan Univ, Sch Highway, Dept Geotech & Tunnelling Engn, Xian 710064, Shaanxi, Peoples R China.

[Cheng, Wen-Chieh] Xian Univ Architecture & Technol, Inst Tunnel & Underground Struct Engn, Sch Civil Engn, Xian 710055, Shaanxi, Peoples R China.

通讯作者地址: Wang, ZF (通讯作者), Changan Univ, Sch Highway, Dept Geotech & Tunnelling Engn, Xian 710064, Shaanxi, Peoples R China.

Cheng, WC (通讯作者), Xian Univ Architecture & Technol, Inst Tunnel & Underground Struct Engn, Sch Civil Engn, Xian 710055, Shaanxi, Peoples R China.

电子邮件地址: zhifeng.wang@chd.edu.cn; s2428030@gmail.com; ys08@gl.chd.edu.cn

出版商: SPRINGER

出版商地址: 233 SPRING ST, NEW YORK, NY 10013 USA

Web of Science 类别: Geosciences, Multidisciplinary; Meteorology & Atmospheric Sciences; Water Resources

研究方向: Geology; Meteorology & Atmospheric Sciences; Water Resources

IDS 号: GH8JD

ISSN: 0921-030X

eISSN: 1573-0840

29 字符的来源出版物名称缩写: NAT HAZARDS

ISO 来源出版物缩写: Nat. Hazards

来源出版物页码计数: 17

ESI 高被引论文: Y

ESI 热点论文: Y

第 3 条, 共 6 条

标题: Landslide susceptibility modelling using GIS-based machine learning techniques for Chongren County, Jiangxi Province, China

作者: Chen, W (Chen, Wei); Peng, JB (Peng, Jianbing); Hong, HY (Hong, Haoyuan); Shahabi, H (Shahabi, Himan); Pradhan, B (Pradhan, Biswajeet); Liu, JZ (Liu, Junzhi); Zhu, AX (Zhu, A-Xing); Pei, XJ (Pei, Xiangjun); Duan, Z (Duan, Zhao)

来源出版物: SCIENCE OF THE TOTAL ENVIRONMENT 卷: 626 页: 1121-1135 DOI: 10.1016/j.scitotenv.2018.01.124 出版年: JUN 1 2018

Web of Science 核心合集中的 "被引频次": 24

被引频次合计: 24

使用次数 (最近 180 天): 35

使用次数 (2013 年至今): 97

引用的参考文献数: 62

摘要: The preparation of a landslide susceptibility map is considered to be the first step for landslide hazard mitigation and risk assessment. However, these maps are accepted as end products that can be used for land use planning. The main goal of this study is to assess and compare four advanced machine learning techniques, namely the Bayes' net (BN), radical basis

function (RBF) classifier, logistic model tree (LMT), and random forest (RF) models, for landslide susceptibility modelling in Chongren County, China. A total of 222 landslide locations were identified in the study area using historical reports, interpretation of aerial photographs, and extensive field surveys. The landslide inventory data was randomly split into two groups with a ratio of 70/30 for training and validation purposes. Fifteen landslide conditioning factors were prepared for landslide susceptibility modelling. The spatial correlation between landslides and conditioning factors was analyzed using the information gain (IG) method. The BN, RBF classifier, LMT, and RF models were constructed using the training dataset. Finally, the receiver operating characteristic (ROC) and statistical measures, including sensitivity, specificity, and accuracy, were employed to validate and compare the predictive capabilities of the models. Out of the tested models, the RF model had the highest sensitivity, specificity, and accuracy values of 0.787, 0.716, and 0.752, respectively, for the training dataset. Overall, the RF model produced an optimized balance for the training and validation datasets in terms of AUC values and statistical measures. The results of this study also demonstrate the benefit of selecting optimal machine learning techniques with proper conditioning selection methods for landslide susceptibility modelling. (C) 2018 Elsevier B.V. All rights reserved.

入藏号: WOS:000428194000110

PubMed ID: 29898519

语言: English

文献类型: Article

作者关键词: Landslide susceptibility; Bayes' net; Radical basis function classifier; Logistic model tree; Random forest; China

KeyWords Plus: PARTICLE SWARM OPTIMIZATION; ARTIFICIAL NEURAL-NETWORK; INFERENCE SYSTEM ANFIS; DATA MINING TECHNIQUES; LOGISTIC-REGRESSION; SPATIAL PREDICTION; FREQUENCY RATIO; RANDOM FORESTS; FUZZY; MULTIVARIATE

地址: [Chen, Wei; Duan, Zhao] Xian Univ Sci & Technol, Coll Geol & Environm, Xian 710054, Shaanxi, Peoples R China.

[Peng, Jianbing] Changan Univ, Dept Geol Engn, Xian 710054, Shaanxi, Peoples R China.

[Hong, Haoyuan; Liu, Junzhi; Zhu, A-Xing] Nanjing Normal Univ, Key Lab Virtual Geog Environm, Nanjing 210023, Jiangsu, Peoples R China.

[Hong, Haoyuan; Liu, Junzhi; Zhu, A-Xing] State Key Lab Cultivat Base Geog Environm Evolut, Nanjing 210023, Jiangsu, Peoples R China.

[Hong, Haoyuan; Liu, Junzhi; Zhu, A-Xing] Jiangsu Ctr Collaborat Innovat Geog Informat Reso, Nanjing 210023, Jiangsu, Peoples R China.

[Shahabi, Himan] Univ Kurdistan, Fac Nat Resources, Dept Geomorphol, Sanandaj, Iran.

[Pradhan, Biswajeet] Univ Technol Sydney, Sch Syst Management & Leadership, Fac Engn & IT, CB11-06-217, Bldg 11, 81 Broadway, POB 123, Ultimo, NSW 2007, Australia.

[Pradhan, Biswajeet] Sejong Univ, Dept Energy & Mineral Resources Engn, 209 Neungdong Ro, Seoul 05006, South Korea.

[Pei, Xiangjun] Chengdu Univ Technol, State Key Lab Geohazard Prevent & Geoenvironm Pro, Chengdu 610059, Sichuan, Peoples R China.

通讯作者地址: Hong, HY; Zhu, AX (通讯作者), Nanjing Normal Univ, Key Lab Virtual Geog Environm, Nanjing 210023, Jiangsu, Peoples R China.

Pei, XJ (通讯作者), Chengdu Univ Technol, State Key Lab Geohazard Prevent & Geoenvironm Pro, Chengdu 610059, Sichuan, Peoples R China.

电子邮件地址: hong\_haoyuan@outlook.com; azhu@wisc.edu; peixj0119@tom.com

作者识别号:

作者 ResearcherID 号 ORCID 号

Hong, haoyuan C-8455-2014 0000-0001-6224-069X

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Environmental Sciences

研究方向: Environmental Sciences & Ecology

IDS 号: GA2YS

ISSN: 0048-9697

eISSN: 1879-1026

29 字符的来源出版物名称缩写: SCI TOTAL ENVIRON

ISO 来源出版物缩写: Sci. Total Environ.

来源出版物页码计数: 15

ESI 高被引论文: Y

ESI 热点论文: Y

第 4 条, 共 6 条

标题: Relative velocity difference model for the car-following theory

作者: Yu, SW (Yu, Shaowei); Tang, JJ (Tang, Jinjun); Xin, Q (Xin, Qi)

来源出版物: NONLINEAR DYNAMICS 卷: 91 期: 3 页: 1415-1428 DOI:

10.1007/s11071-017-3953-8 出版年: FEB 2018

Web of Science 核心合集中的 "被引频次": 29

被引频次合计: 29

使用次数 (最近 180 天): 13

使用次数 (2013 年至今): 38

引用的参考文献数: 66

摘要: To explore and evaluate the impacts of relative velocity difference (RVD) with memory on the dynamic characteristics and fuel economy of traffic flow in the intelligent transportation environment, we first analyze the linkage between RVD with different-step memory and the following car's behaviors with the measured car-following (CF) data in cities by using the gray correlation analysis method and then present a RVD model based on the previous CF models in the literatures and calibrate it. Finally, we conduct several numerical simulations in the adaptive cruise control (ACC) strategy to explore how RVD with memory affects car's velocity fluctuation and fuel consumptions, and find that the RVD model can describe the phase transition of traffic flow and estimate the evolution of traffic congestion, and that considering RVD with memory in modeling CF behaviors and designing the advanced ACC strategy can improve the stability and fuel economy of traffic flow.

入藏号: WOS:000424037200001

语言: English

文献类型: Article

作者关键词: Car-following model; Relative velocity difference with memory; Traffic flow



stability; Fuel economy; The ACC system

KeyWords Plus: CRUISE CONTROL VEHICLES; NON-LANE-DISCIPLINE; TRAFFIC FLOW; STABILITY ANALYSIS; CONTROL-SYSTEMS; NEIGHBOR INTERACTION; ENERGY-CONSUMPTION; FUEL CONSUMPTION; DRIVER MEMORY; FULL VELOCITY

地址: [Yu, Shaowei] Changan Univ, China Mobile Commun Corp, Minist Educ, Joint Lab Internet Vehicles, Xian 710064, Shaanxi, Peoples R China.

[Tang, Jinjun] Cent S Univ, Sch Traff & Transportat Engn, Changsha 410075, Hunan, Peoples R China.

[Xin, Qi] Changan Univ, Sch Automobile, Xian 710064, Shaanxi, Peoples R China.

通讯作者地址: Yu, SW (通讯作者), Changan Univ, China Mobile Commun Corp, Minist Educ, Joint Lab Internet Vehicles, Xian 710064, Shaanxi, Peoples R China.

电子邮件地址: swyu2016@chd.edu.cn; jinjuntang@csu.edu.cn

出版商: SPRINGER

出版商地址: VAN GODEWIJCKSTRAAT 30, 3311 GZ DORDRECHT, NETHERLANDS

Web of Science 类别: Engineering, Mechanical; Mechanics

研究方向: Engineering; Mechanics

IDS 号: FU7MW

ISSN: 0924-090X

eISSN: 1573-269X

29 字符的来源出版物名称缩写: NONLINEAR DYNAM

ISO 来源出版物缩写: Nonlinear Dyn.

来源出版物页码计数: 14

ESI 高被引论文: Y

ESI 热点论文: Y

第 5 条, 共 6 条

标题: A New High Algebraic Order Efficient Finite Difference Method for the Solution of the Schrodinger Equation

作者: Dong, M (Dong, Ming); Simos, TE (Simos, Theodore E.)

来源出版物: FILOMAT 卷: 31 期: 15 页: 4999-5012 DOI: 10.2298/FIL1715999D 出版年: 2017

Web of Science 核心合集中的 "被引频次": 25

被引频次合计: 25

使用次数 (最近 180 天): 0

使用次数 (2013 年至今): 1

引用的参考文献数: 61

摘要: The development of a new five-stages symmetric two-step method of fourteenth algebraic order with vanished phase-lag and its first, second, third and fourth derivatives is analyzed in this paper. More specifically: (1) we will present the development of the new method, (2) we will determine the local truncation error (LTE) of the new proposed method, (3) we will analyze the local truncation error based on the radial time independent Schrodinger equation, (4) we will study the stability and the interval of periodicity of the new proposed method based on a scalar test equation with frequency different than the frequency of the scalar test equation used for the phase-lag analysis, (5) we will test the efficiency of the new obtained method based on its

application on the coupled differential equations arising from the Schrodinger equation.

入藏号: WOS:000416115500029

语言: English

文献类型: Article

作者关键词: Schrodinger equation; multistep methods; Multistage methods; interval of periodicity; phase-lag; phase-fitted; derivatives of the phase-lag

KeyWords Plus: VANISHED PHASE-LAG; INITIAL-VALUE-PROBLEMS; SYMMETRIC 2-STEP METHOD; P-STABLE METHOD; TRIGONOMETRICALLY-FITTED METHODS; PREDICTOR-CORRECTOR METHOD; KUTTA-NYSTROM METHODS; NUMERICAL-SOLUTION; MULTISTEP METHODS; ORBITAL PROBLEMS

地址: [Dong, Ming] Changan Univ, Sch Informat Engn, Xian 710064, Shaanxi, Peoples R China.

[Simos, Theodore E.] Univ Peloponnese, Fac Econ Management & Informat, Dept Informat & Telecommun, Lab Computat Sci, GR-22100 Tripolis, Greece.

通讯作者地址: Simos, TE (通讯作者), Univ Peloponnese, Fac Econ Management & Informat, Dept Informat & Telecommun, Lab Computat Sci, GR-22100 Tripolis, Greece.

电子邮件地址: tsimos.conf@gmail.com

出版商: UNIV NIS, FAC SCI MATH

出版商地址: PO BOX 224, VISEGRADSKA 33, NIS, 18000, SERBIA MONTENEG

Web of Science 类别: Mathematics, Applied; Mathematics

研究方向: Mathematics

IDS 号: FN6HS

ISSN: 0354-5180

29 字符的来源出版物名称缩写: FILOMAT

ISO 来源出版物缩写: Filomat

来源出版物页码计数: 14

ESI 高被引论文: Y

ESI 热点论文: Y

第 6 条, 共 6 条

标题: A High-Order Two-Step Phase-Fitted Method for the Numerical Solution of the Schrodinger Equation

作者: Zhang, W (Zhang, Wei); Simos, TE (Simos, T. E.)

来源出版物: MEDITERRANEAN JOURNAL OF MATHEMATICS 卷: 13 期: 6 页: 5177-5194 DOI: 10.1007/s00009-016-0800-y 出版年: DEC 2016

Web of Science 核心合集中的 "被引频次": 60

被引频次合计: 60

使用次数 (最近 180 天): 1

使用次数 (2013 年至今): 8

引用的参考文献数: 27

摘要: In this paper, we will develop a four-stage high algebraic order symmetric two-step method with vanished phase-lag and its first up to the fourth derivative. For the proposed method, we will study the following: the phase-lag analysis of the new method; the development of the new method; the local truncation error analysis which is based on the radial Schrodinger equation; the stability and the interval of periodicity analysis which is based on a scalar test equation with

frequency different than the frequency of the scalar test equation used for the phase-lag analysis; the error estimation procedure which is based on the algebraic order; and the numerical results from our numerical tests for the examination of the efficiency of the new obtained method. The numerical tests are based on the numerical solution of the Schrodinger equation.

入藏号: WOS:000387090000085

语言: English

文献类型: Article

作者关键词: Phase-lag; derivative of the phase-lag; initial value problems; oscillating solution; symmetric; multistep; hybrid; Schrodinger equation

KeyWords Plus: INITIAL-VALUE-PROBLEMS; MULTISTEP METHODS; ORBITAL PROBLEMS; INTEGRATION; LAG; SCATTERING

地址: [Zhang, Wei] Changan Univ, Sch Informat Engn, Xian 710064, Peoples R China.

[Zhang, Wei] China Highway Engn Consulting Grp Co LTD, Beijing 100097, Peoples R China.

[Simos, T. E.] King Saud Univ, Dept Math, Coll Sci, POB 2455, Riyadh 11451, Saudi Arabia.

[Simos, T. E.] Univ Peloponnese, Fac Econ Management & Informat, Sci Computat Lab, Dept Informat & Telecommun, GR-22100 Tripolis, Greece.

[Simos, T. E.] 10 Konitsis St, Athens 17564, Greece.

通讯作者地址: Simos, TE (通讯作者), King Saud Univ, Dept Math, Coll Sci, POB 2455, Riyadh 11451, Saudi Arabia.

Simos, TE (通讯作者), Univ Peloponnese, Fac Econ Management & Informat, Sci Computat Lab, Dept Informat & Telecommun, GR-22100 Tripolis, Greece.

Simos, TE (通讯作者), 10 Konitsis St, Athens 17564, Greece.

电子邮件地址: tsimos.conf@gmail.com

作者识别号:

作者 ResearcherID 号 ORCID 号

Simos, Theodore H-6033-2011

出版商: SPRINGER BASEL AG

出版商地址: PICASSOPLATZ 4, BASEL, 4052, SWITZERLAND

Web of Science 类别: Mathematics, Applied; Mathematics

研究方向: Mathematics

IDS 号: EB1DX

ISSN: 1660-5446

eISSN: 1660-5454

29 字符的来源出版物名称缩写: MEDITERR J MATH

ISO 来源出版物缩写: Mediterr. J. Math.

来源出版物页码计数: 18

ESI 高被引论文: Y

ESI 热点论文: Y