

Professor Zhaoyin WANG

Department of Environmental Science and Engineering
Faculty of Innovation Engineering
Macau University of Science and Technology

PhD. Supervisor

Tel. 17801036740

E-mail zywang@tainghua.edu.cn

Academic Qualification:

Ph. D. of Hydraulics and river dynamics, China Institute of Water Resources and Hydro-power Research.

Master Degree, Hydraulics and river dynamics, China Institute of Water Resources and Hydro-power Research.

Prof. ZY Wang has been invited and presented more than 20 keynote and invited lectures at international conferences:

- 2019 V V JVT V 7 V VZ V RZ UZ " th International Symposium on River Sedimentation, Chengdu, China, Sep. 2019.
- 2018 : ZUJVT V 6 VX UZ ZRZ WU T V ' ! th Anniversary of IWHR, Beijing, 2018.
- 2016 : ZUJVT V Eco-hydraulics and Eco- VZ V RZ 2 DA C6 7 @CF ! " " Developing Sustainable Urban Environment and Low Carbon Economy
- 2015 Keynote lectu V AY] Y W Z V ' Y : 2 9 C H] U 4 XV □ 5 V 9 RX V □ YV Netherlands, June 28-July 3, 2015.
- 2014 V V JVT V 7] U UW V R U VZ V R RXV V W YV J V] CZ V ' th International Symposium of Large Asian Rivers, Yangling, May 9-11, 2014.
- 2012 V V JVT V 6 T - VZ V RZ UZ Z 4 YZ R : 2 9 C CZ V W ! " □ DR ; V 4 R Rica, Sep. 03-06, 2012.
- 2011 V V JVT V 6 WT WU T V SW] RU Z R U W Z R] TV (th IAHR Symposium on River, Costal and Estuary Morphodynamics, Beijing, Sep. 06-08, 2011.
- 2010 V V JVT V V TYR] V XV Z VZ V RZ R U V Z V R TY " " th International Symposium on River Sedimentation, Stellenbosch, South Africa, Sep. 2010.
- 2010 : ZUJVT V 9 SZR UZ V Z R U Z V R Z Z YSZ UZ V Z) th IAHR International Symposium on Eco-hydraulics, Seoul, South Korea, Sep. 12-17, 2010.
- 2010 V V JVT V 8 RZ V Z R U R RXV V R V Z - : V RZ R] 4 W V TV Sediment Dynamics for a Changing Future, Warsaw, Poland, June 2010.
- 2010 V V JVT V 6 VX UZ ZRZ T V WR Z R] V -pool system to mitigate debris W YR R U ! " ! : V RZ R] 5 S Z 7] H Y □ 4 YV XU □ 4 YZ R □ □ ! " !
- 2010 : ZUJVT V 2 U X RZ V Z : V RZ R] D Z DUZ V 5 ZR V River Environment in Mountainous Area, KYOTO, JAPAN, Aug24-27,2010
- 2009 V V JVT V R XV V R V Z WCVV Z DUZ V RZ □ International Workshop on Sediment Management Options for Regulated Rivers, Roquetes-Tortosa, -Catalonia, Spain, May, 2009.
- 2009 : ZUJVT V 8 V UV W V] R R UARR Z Z X CZ V □ V RZ R] D Z - CVTV Development in Nearshore Coastal Water Quality Research, Hong Kong, China, Dec. 2009
- 2009 InvZUJVT V CZ V RZ ZXR UVT] X R] V RZ □ H Y CZ V Y] X and Ecology, Auckland, New Zealand, Jan. 2009.
- 2008 V V JVT V 2 R] R TYV R U] R U] Z V Z U TV S YV H V TY R 6 R Y - R V R U R RXV V W R V] R V □ 16th IAHR-APD Congress, Nanking, China, Oct. 2008.
- 2008 : ZUJVT V D R V W : V R V U J V] CZ V E RZ Z X : V RZ R] D Z River Training and Development, Tianjin, China, Oct. 2008
- 2008 V V JVT V CZ V 6 T] X R] CV RZ F 6 D 4 @ : V RZ R] DUZ V : Z R Z V Workshop, Beijing, China, Dec. 2008.

- 2007 V VJVT V 5 S Z W UZ Z 4 YZ R (th Conference of the Science Council of Asia, Okinawa, Japan, June 2007.
- 2007 V VJVT V DV -pool System for ChR V: TZZ 4] R U6T] XZ R CV RZ □ Fourth International Conference on Debris-Flow Hazards Mitigation: Mechanics, Prediction, and Assessment, Chengdu, China, Sep. 2007
- 2007 V VJVT V GVXRZ -V Z U R Z □ V RZ R] itum on Sedimentation and Erosion in Arid Areas, Charlooz, Iran, June, 2007
- 2006 V VJVT V GVXRZ V Z U R Z U] R U Z R] Z R Z □: V RZ R] Sediment Initiative Conference (ISIC), Khartoum, Sudan, Nov. 2006
- 2006 Knowledge lectu V Sediment transportation in the Yangtze River and impacts of the Three Gorges Project: 29 C: V RZ R] 4 WVT V 7] Z R] 9 UR] Z T - River Flow 2006, Lisbon, Portugal, Sep. 2006.
- 2001 V VJVT V DMUZ V RZ UZ Z 4 YZ R * YIAHR World Congress, Beijing, China, Sep. 2001.
- 1998 : V VJVT V 6 Z V R] R U VT] XZ R] Z RT WYVEYW8 XV A [VT □ (Y International symposium on river sedimentation, Hongkong, 16-18 Dec. 1998.

River dynamics and Integrated river management;
 Professional English for hydraulic engineering;
 Philosophy of rivers
 Stream ecology and restoration

Sediment transportation and river dynamics;
 Stream ecology and restoration;
 Integrated river management;
 Energy conservation and geo-hazard mitigation;
 Hyperconcentrated flows and debris flows;
 Watershed vegetation-erosion dynamics;

Mar. 1969-Aug.1975

Worker and Technician, The Yellow River Farm, Kenli County, Shandong Province, China

Aug.1975-Sep.1976

Driller, Shandong No.3 Geological Survey, Yantai City, China

Oct. 1976 - Sep. 1979

Student, Department of Geology, Central South University, Changsha, Hunan Province, China

Sep. 1979 - May 1985

Ottolows

Feb. 1991 - Dec. 31, 1994

Research Fellow of the Alexander von Humboldt Foundation, Institute for Wasserbau und Kulturtechnik, Universität Karlsruhe, Germany and Guest Senior Researcher, Institut für Hydrologie und Wasserwirtschaft, Universität Karlsruhe, Germany

Jan 1, 1995 -Jan.2007

Professor and Deputy Secretary General of International Research and Training Center on Erosion and Sedimentation, Chief Editor of the International Journal of Sediment Research

Nov. 1999-April 2017

Professor, Dept. of Hydraulic Engineering, Tsinghua University, China.

2017 -today

Emeritus Professor, Tsinghua University, China

2001-2007

Guest Professor, the University of Hong Kong, 3 months per year.

2004 -today

Chairman, Advisory Council of International Research and Training Center on Erosion and Sedimentation.

2004 - 2010

Secretary-General, World Association for Sedimentation and Erosion Research.

2005 - 2009

Council member of International Association for Hydraulic Engineering and Research (IAHR)

2010-2016

Vice president, World Association of Sedimentation and Erosion Research (WASER)

2011 -2015

Vice president of International Association for Hydraulic and Environmental Engineering Research (IAHR)

2016-2022

President, World Association of Sedimentation and Erosion Research (WASER)

2022- today

Guest professor, Macau University of Science and Technology (MUST)

Research Grants

June 1986 - Feb. 1991

Second Principal Investigator: "Physical Model Study on Sedimentation and Navigation in the Upstream Reach of the Yangtze River Three Gorges Reservoir" Ministry of Water Resources of China

June 1986 - June 1987

Principal Investigator (PI) "Scale model study of emptying and scouring of cohesive deposits from the Zhuwo Reservoir" Beijing Water Resources Bureau.

Jan. 1988 - Dec. 1990

PI: Research project "One-phase and solid-liquid two-phase flows of non-Newtonian fluids" National Natural Science Foundation of China.

May 1990 - Feb. 1991

Second PI "Physical model study on the prevention of sedimentation in the Yellow River Xiaolangdi Reservoir". Ministry of Water Resources of China

July 1990 - Feb. 1991

PI of the research project "Effects of suspended sediment on dispersion of contaminants in open channel flow"

March 1995 - Oct. 1997

Executive Expert for the UNDP Project "Support for the Sustainable Development of the Yellow River Delta", UNDP No.CPR 91/144.

Jan. 1995 - March 1998

PI of the research project "Unsteady sediment transport and Hyperconcentrated flow". National Natural Science Foundation of China

1994 - 1998

Organizer of the Sino-German cooperative studies on unsteady sediment transport. The

- cooperation was supported by the Volkswagen Stiftung (VW Foundation of Germany) and NSFC.
- 1998-2002
 PI, Key Research Project "Mechanism of River Sedimentation Disasters and Control and Mitigation Strategies" National Natural Science Foundation of China (NSFC) and the Ministry of Water Resources of China.
- 2000-2002 -
 PI, ; Z CVRTYA [VT HRV□DMUZ V R UA]] R Z VRTZ Z YVV RZV RV - ZY R ZT]R WWVTV YV5 W 3 R R U3 YRZ3 R Hong Kong Research Grant Council and National Natural Science Foundation of China
- 2002-2003
 Second PI, ResVRTY [VT : RT WE XX R 6]VRZ YV7] Z]A TV R U7] U 5 WW V WYV V H VZVCZ V Ministry of Water Resources of China
- 2003-2004
 PI, CVRTY [VT 7] Z]A TV R d Risk Analysis on the Training projects in the Lower J V]] CZV- The Yellow River Commission --
- 2003-2006
 PI, CVRTY [VT GVXRZ -V Z U R ZT R UZ R]ZIRZ National Natural Science Foundation of China
- 2004-2007
 A□; Z VRTY [VT : VXRWAY ZIR] R U6T] XZIR] R RXV V WCZV ZY AR ZT]R CVWVTV YV6R CZV 9 X XCVRTY8 R 4 T] R U RZ R] R R] DIZ/ TV7 URZ WYZR - -
- 2004-2008
 PI, CVRTY [VT 6T] XZIR] U R U Z ZRZ W VRZ TYV V WY U -projects YVJ R X VCZV □*(XR WYV ZZ WDIZ/ TVR UEVY] X of China
- 2004-2008
 PI, CVRTY [VT□ DMUZ V ER RZ RUCZV R RXV V RZ R] R R] Science Foundation of China. -
- 2005-2007 -
 PI, Sino-5 TY [Z VRTY [VT Predictive modelling of sediment transport and Y] X Z YV V J V]] CZV ZZ WHRV CV TV WYZRR U5 TY Ministry of Construction.
- 2008-2010
 PI, Research Project, Management and mitigation of chain disasters of mass movements and debris flows induced by the Wenchuan Earthquake , 973 program of the Ministry of Science and Technology of China
- 2009-2012
 PI, Research Project, Control strategy of golden mussel (*Limnoperna fortunei*) invasion into water transfer tunnels , National Commonweal Research Program. Ministry of Water Resources of China
- 2010-2012
 PI, National Research Project, Stream networks and ecological management of the Sanjiangyuan Region , Ministry of Science and Technology. National Natural Science Foundation of China
- 2010-2012
 PI, Research Project Knickpoints on the Yalutsangpo River and Ecology , National Natural Science Foundation of China
- 2014-2015
 PI, Research Project Study on biofouling caused by *Limnoperna fortunei* and control strategies in the Langyashan pumped-storage power plant . Xinyuan Hydro-power Company
- 2015- 2018
 PI, Research Project Fluvial process of barrier lakes in the Nujiang River and their impact on stream ecology , National Natural Science Foundation of China

Representative publications

- 1 Wang Zhaoyin and Qian Ning (Ning Chien), 1984, Experimental study of two-phase turbulent flow with hyperconcentration of coarse particles, *Scientia Sinica (English Version)*, Ser. A, Vol. 27, No. 12, pp. 1317-1327
- 2 Wang Zhaoyin and Qian Ning, 1985, Experimental study of motion of laminated load, *Scientia Sinica, (English Version) Ser. A*, Vol. 28, No.1, pp. 102-112.
- 3 Wang Zhaoyin and Qian Ning, 1985, A preliminary investigation on the mechanism of hyperconcentrated flow, *Proceedings of International Workshop on Flow at Hyperconcentration of Sediment*, IRTCES (International Research and Training Center on Erosion and Sedimentation), Beijing, China, P. II-4, pp.1-20.
- 4 Wang Zhaoyin and Qian Ning, 1987, Laminated load: Its development and mechanism of motion, *International Journal of Sediment Research*, No. 2, pp. 102-124.
- 5 Wang Zhaoyin, 1987, Buoyancy force in solid-liquid mixture, *Proceedings, 22-nd Congress of the International Association for Hydraulic Research, Fluvial Hydraulics, IAHR, Lausanne, Switzerland*, Sept. pp. 86-91.
- 6 Wang Zhaoyin and Qian Ning, 1989, Characteristics and mechanism of debris flow, *Proceedings, Fourth International Symposium on River Sedimentation*, IRTCES and Ocean Press, Beijing, China, pp.722-729.
- 7 Lu Xiuzheng, Zeng Qinghua and Wang Zhaoyin, 1989, Physical model study of sedimentation and influence on navigation in fluctuating backwater region of a reservoir, *Proceedings, Fourth International Symposium on River Sedimentation*, IRTCES and Ocean Press, Beijing China, pp. 1023-1030.
- 8 Wang Zhaoyin, 1990, Limit concentration of suspended sediment, *Proceedings, Hydraulics and Hydrology of Arid Land*, American Society of Civil Engineers, New York, pp. 651-656.
- 9 Wang Zhaoyin and Zhang Xinyu, 1990, Initiation and laws of motion of debris flow, *Proceedings of Hydraulics and Hydrology of Arid Land*, American Society of Civil Engineers, pp. 596-601.
- 10 Wang Zhaoyin and Kron Wolfgang, 1991, Time distortion in large scale sediment model test, *Journal of Hydraulic Research, IAHR*, Vol. 29, No. 2, pp. 161-178 .
- 11 Wang Zhaoyin and Zeng Qinghua, 1991, Laboratory studies on mechanisms of various phenomena in debris flow, *Proceedings, International Symposium on Debris Flow and Flood Disaster Protection*, China, pp. 21-31.
- 12 Wang Zhaoyin, 1992, Model experiment on non-Newtonian fluid flow, *Proceedings, 5th International Symposium on River Sedimentation*, Vol. 1, Karlsruhe, Germany, April, Edited by P. Larsen and N. Eisenhauer, pp. 409 - 416.
- 13 Wang Zhaoyin and Dittrich Andreas, 1992, A study on problems in suspended sediment transportation, *Proceedings, 2nd International Conference on Hydraulics and Environmental Modelling of Coastal, Estuarine and River Waters*, Ashgate, England, pp. 467-478.
- 14 Chen Janguo, Zeng Qinghua and Wang Zhaoyin, 1992, Characteristics and sediment transport in ice covered flow, *Proceedings, 5th International Symposium on River Sedimentation*, Vol. 1, Karlsruhe, Germany, April, Edited by P. Larsen and N. Eisenhauer, pp. 423-430.
- 15 Wang Z., Kron W., Lu X., and Xu M., 1993, Uncertainty of sediment discharge, siltation and erosion in rivers and implications on hydraulic works, *Publication Series, Inst. for Hydrology and Water Resources Planning (IHW), Karlsruhe University*, No. 46, pp. D1-D38.
- 16 Wang Zhaoyin, Lin Bingnan and Zhang Xinyu, 1993, Instability of non-Newtonian fluid flow, *Publication Series, No. 42, Inst. foer Hydrologie u. Wasserwirtschaft, Universitaet Karlsruhe, Germany*, pp. E1-E23.
- 17 Wang Zhaoyin, 1993, A study on debris flow surges, *Hydraulic Engineering '93*, vol. 2, American Society of Civil Engineers, New York, pp. 1616-1621.
- 18 Wang Zhaoyin, Kron Wolfgang, Lu Xiuzheng, and Plate Erich J., 1993, Flume experiments on sediment transport, erosion and siltation of a channel bed in unsteady and non-uniform flow conditions, *Publication Series, Inst. for Hydrology and Water Resources Planning (IHW), Karlsruhe University*, No. 46, pp. B1-B82.
- 19 Wang Zhaoyin, 1994, An experimental study of motion and deposition of gold particles in a mountain river, *Journal of Hydraulic Research, IAHR*, Vol. 32, No. 5, pp. 643-648 .

- 20 Wang Zhaoyin and Larsen Peter, 1994, Turbulent structure of flows of water and clay suspensions with bed load, *Journal of Hydraulic Engineering*, ASCE, Vol. 120, No. 5, pp. 577-600.
- 21 Wang Zhaoyin, Larsen Peter and Xiang Wei, 1994, Rheological properties of sediment suspensions and their implications, *Journal of Hydraulic Research*, IAHR, Vol. 32, No.4, pp. 495-516 .
- 22 Klein P., Rau M., Wang Z. and Plate E.J., 1994, Ermittlung des Stroemungs- und Konzentrationsfeldes im Nahfeld typischer Gebuedekonfigurationen (Experimente), Research Report, Inst. foer Hydrologie und Wasserwirtschaft, Universitaet Karlsruhe, Germany.
- 23 Wang Zhaoyin, Kron Wolfgang and Plate E.J., 1994, An experimental study of bed deformation in unsteady and non-uniform flows, *International Journal of Sediment Research*, Vol. 9, No. 3, pp. 206-215.
- 24 Wang Zhaoyin, Nestmann F., and Dittrich A., 1995, Fall velocity of sediment in clay suspensions, *Proceedings, 6th International Symposium on River Sedimentation*, New Delhi, India, pp. 377-385.
- 25 Wang Zhaoyin, Ren Yumin and Wang Xinkui, 1995, Total pressure velocimeter for the measurement of turbulence in sediment-laden flows, *Proceedings, 2nd International Conference on Hydro-Science and Engineering*, CHES and IRTCES, March, Beijing, China, pp. 1875-1882.
- 26 Wang Zhaoyin and Plate Erich J., 1996, A Preliminary study on turbulence structure of flow of non-Newtonian fluid, *Journal of Hydraulic Research*, IAHR, Vol. 34, No. 3, pp. 345-362.
- 27 Wang Zhaoyin, Plate E.J., Rau M., and Kaiser P., 1996, Scale effects in wind tunnel modelling, *International Journal of Wind Engineering and Industrial Aerodynamics*, Vol. 61, pp.113-130.
- 28 Wang Zhaoyin and Plate Erich J. 1996, Power spectrum of flows of hyperconcentrated clay suspensions, *Stochastic Hydraulics'96*, A.A. Balkema Publishers, Rotterdam, The Netherlands, pp. 645-652.
- 29 Wang Zhaoyin and Pang Bingdong, 1996, Discussion on "Researches on environmental changes and water and sediment transport of the Yellow River Basin", *International Journal of Sediment Research*, Vol. 11, No. 2, pp. 69-74.
- 30 Wang Zhaoyin, 1996, UNDP project support for the sustainable development of the Yellow River Delta, *International Journal of Sediment Research*, Vol. 11, No. 3, pp. 40-48.
- 31 Wang Zhaoyin, Lin Bingnan, and Nestmann Franz, 1997, Prospect of sediment research, *International Journal of Sediment Research*, Vol. 12, No. 1, pp. 1-15.
- 32 Wang Zhaoyin, Huang Jinchi, and Su Dehui, 1997, Scour rate formula, *International Journal of Sediment Research*, Vol. 12, No. 3, pp. 11-20.
- 33 Zhu Hugen, Wang Zhaoyin, and Prinz D. 1997, The adverse impact of human activities of flood control in the Huaihe Basin, *International Journal of Sediment Research*, Vol. 12, No. 3, pp. 317-324.
- 34 Wang Zhaoyin, 1998, Problems of water and soil resources and management strategies in China, Invited Lecture, *Proceedings , 3rd International Conference on Hydrosience and Engineering*, Cottbus, Germany.
- 35 Wang Zhaoyin, 1998, The Yellow River sedimentation-New problems and new strategies, Invited Lecture, *7th International Symposium on River Sedimentation*, Hong Kong, in *River Sedimentation-Theory and Applications*, A.A.Balkema Publishers, pp. 797-806.
- 36 Wang Zhaoyin, Larsen P., Nestmann F., and Dittrich A., 1998, Resistance and drag reduction of hyperconcentrated flows over rough boundaries, *Journal of Hydraulic Engineering*, ASCE, Vol. 124, No. 1, pp. 1-9.
- 37 Wang Zhaoyin, 1998, Stabilization of the Yellow River channel and development of the delta, *International Journal of Sediment Research*, Vol. 13, No. 2., pp. 1-15.
- 38 Wang Zhaoyin, 1999, Experimental study on scour rate and channel bed inertia, *Journal of Hydraulic Research*, IAHR, Vol. 37, No. 1, pp. 17-38.
- 39 Winzen K., Wang Zhaoyin, and Dittrich A., 1999, Intermittent and continuous behavior of debris flow, *International Journal of Sediment Research*, Vol. 14, No. 1, pp. 62-69.
- 40 Wang Zhaoyin

- 67 Z 4 □HR-XKJ □R U4YV X5 D□!! □ Z XV R U Y Y]] Z WYV Z V Y
R U YV3 YRZ3R A TWUZ X□ Z Y: V RZ R] D Z CZV DMZ V RZ □
J ZYR X□ *
- 68 Z 4YV X□9 4Y Y XR UHR XKYR Z□!! □HRV R U VZ V]] Z R-Ū YVZ
TYR XV R YVJ]] CZV Y 2UR TV Z 9 U -DIZ/TVR U 6 XZ WZ X□G] G:□
A TWUZ X□ Y: V RZ R]4 WVTV 9 U DIZ/TVR U 6 XZ WZ X3 ZSR V□ "
- 69 HR XKYR Z□I ;R X R U Z4YR XKYZ□!! □5 V V] V W V] V V TVR U Z
VWT Z VZ R TVR U VR SVU R SZ Z □ V RZ R]; R] WDMZ V CVR TY G] "*"□
- □ "' "' ("
- 70 HR XKYR Z R U 9 4Y Y X□!! □ VRTZ SV W W] R] V R U]R XV TR] VY U
[VT V V] VT V A TWUZ X□ Z YZ V RZ R] D Z - CZV DMZ V RZ □
J ZYR X4 YZR□ ' '
- 71 HR XKYR Z R U W; 9 H !! □6 Z V R] R U V T] XZ R] Z RT WYVEY W8 XV
A [VT YVJR X VCZ V□ ZVU] VT V A TWUZ X□" Y4 XV W2 9 C 2 A5 □3 R] V R
A S]ZYV
- 72 H □3 D□HR X8 B □R UHR X□KJ □!! □6 WWT WYR XV Z W W YV V] V RZ W
E XX R -Z DR V R CVV Z F4 YZ V V DIZ/TV3]] VZ □G] *□ "&□ "' &□ "'
--
- 73 H 3 D□HR XKJ □R U Z4-K□!! □J V] CZV SRZ R RXV V R U T V Z V□; R]
W8 V XR YZ R] DIZ/TV□" □D]V V □ * (
- 74 HR XKYR Z R U W; VY9 H □!! □: VXR WUCZV R RXV V EV S W AY5
UV □E ZXY RF ZV Z
- 75 HR X8 B □H 3 D□R UHR XKJ □!! & DMZ V RZ SJV R U R RXV V R V XZ W
DR V R CVV Z F V] CZV □4 YZR □HRV CV TV CVR TY □G] "□ - *□
H! * "(5 Z"! "' * !! HC!! *"*
- 76 HR XKYR Z□ W; VY9 H □R U 4YV X5 XYV X□!! & R] RT WYVE8 A [VT YV
JR X V CZV VT] X R U R RXV V- R V XZ □: V RZ R]; R] WCZV 3 RZ
R-RXV V □2 9 C □G] □ □ (' --
- 77 HR XKJ □HR X8 B □R U Z4 K□!! & 2 VZ ZR U VXRZ V Z U R Z T R U
Z R]Z R Z □DIZ/TVZ 4 YZ R DVZ/ 5 6 R YDIZ/TV□G])□ --&□ ')* (!!)
- 78 HR XKYR Z□HR X8 R X B R □R U Z 4YV X□!! & GZT R U YR VUS Z W Z
YV 4 YZR J R A] R V R □HRV: V RZ R] □G] !□ "□ "
- 79 4YV X5 XYV X HR XKYR Z□I ; Z X Z □R U Z 4YV X□!! & C V R Z YZ SV W Z Z T
T TV RZ R U RV R U VZ V Z YV] V H V V C Z V □6 Z V R] 9- UR]Z T R U
D RZ R] V H R V R RXV V □ER]- R U 7 R T Z 8 □ U □ ! " !'
- 80 Z 4YV X□9 VJ □HR XKYR Z□H V Z 9 V Z X□!! & D U YV VR V V V V V V
VZ V RZ Z YV] R X V Z V W Z Y W R V R X V V □6 Z V R] 9 UR]Z T R U
D RZ R] V H R V R RXV V □ER] R U 7 R T Z 8 □ U □ *
- 81 Z4YR X YZ HR XKYR Z□R UH 3 R YV X□!! & R] RT WE XXR V] V RZ YV W U
UW VZ YV] V

8 □ U □ "(* ")(

- 88 Wang Wenlong, Wang Zhaoyin, Lei Alin, and Tang Keli 2006 Space-time distribution of runoff in vertical belts of soil erosion chain in loess region U: V RZ R] D Z D 46 Z R U5 R U7R- ZX J R X]Z X]DYRR Z4 YZ R
- 89 HR X KYR Z □ Z] ZR R U9 VJ Z Z X □ !! (□ DMUZ V S UXV WYVJ R X VCZ V □ HRV CV TV CV VRY □] □ " "
- 90 5 R- I W R □ HR X KYR Z □ R U 4 YV X 5 XYV X □ !! (□ 3 V YZ RT Z V VS RV T ZZ/ R U YVSZ UZ V Z Z RZ VR S RR □ A TWUZ X WYV: V RZ R] D Z 6 T Y UR] Z □ 4 YZ TY TY □ V KV R U
- 91 W; 9 H □ HR X KJ □ EY VH R U 4 YV X 5 D !! (: VXRWU Y ZR] R U V T] XZ R] R RXV V WYV 6 R CZ V HRV DIZ/ TV EYIY] X HR V D] □] (□ - □)" * " _
- 92 HR X KYR J Z □ H 3 R YV XR- UHR X8 R X ZR □ !! (□ 7] ZR] TV V R U Y] XZ R] V V Z YV J V] R U H V Z V CZ V T] V R U VRZ WDR V ZR 5 R 8 V Y] X □ G] * " □ " □ ' & (*
- 93 HR X 7 V Z Z □ R UHR X KYR J Z □ !! (□ 2 TT V VRZ W V VRZ TTV Z V U U] R US V W V RZ Z R S ZR] V 6 T] XZ R] 6 XZ W Z X G] " □ □ "
- 94 HR X KYR J Z □ R U J 8- 2 □ !! (□ DV] V W V Z T] R U V T] XZ R] V RZ □: V RZ R] 4 W V TV 6 Z R U E V T] R R 7 RT Z D RZ RS] V CZ V 3 RZ R RXV V □ " "(
- 95 Wang ZhaoYin, Tian Shimin, Yi Yujun, and Yu Guoan, 2007, Principles of river training and management, International Journal of Sediment Research, Vol. 22, No. 4, pp. 247-262.
- 96 Yu Guo-an, Wang Zhao-yin, Duan Xue-hua, Zhang Kang. 2007, Artificial step-pool system for ecological restoration of a debris-flow ravine. 32nd IAHR Congress, July 1-6, 2007, Venice, Italy, 1-10.
- 97 Liu H X, Wang Z Y, Cheng D S, 2007. Modeling of flooding risk in the East River basin in south china. Proceedings of the 10th International Symposium on River Sedimentation. Moscow, Vol VI, pp.198-203.
- 98 Liu C., He Y. and Wang Z.Y., 2007, Three-dimensional numerical calculation for cylindrical SOD measurement chamber selection, Proceedings of the 10th International Symposium on River Sedimentation., Moscow, Russia. Volume V, pp. 200-208
- 99 Ma Xiaobo, Wang ZhaoYin, Yin Zegao, and Albert Koenig, 2008, Nitrogen flow analysis in Huizhou, south china, Environmental Management, **41** 378-388 DOI: 10.1007/s00267-007 - 9053-7.
- 100 Wang Zhaoyin, 2008, Laws of river training projects, Proceedings of the Eighth International Conference on Hydro-Science and Engineering, Nagoya, Japan.
- 101 Wang Zhao-Yin, Lee Joseph H.W., Cheng Dongsheng and Duan Xuehua, 2008 Benthic invertebrates investigation in the East River and habitat restoration strategies, Journal of Hydro-environment Research, No. 2, pp. 19-27, doi:10.1016/j.jher.2008.05.005.
- 102 Van Maren D. S. , Winterwerp J. C., Wang Z. Y. and Qi Pu 2008 Suspended sediment dynamics and morphodynamics in the Yellow River, Sedimentology doi: 10.1111/j.1365-3091.2008.00997.
- 103 Wang Zhaoyin, Wang Guangqian and Huang Guohe 2008 Modeling of state of vegetation and soil erosion over large areas, International Journal of Sediment Research, Vol. 23, No.3, pp.181-196.
- 104 Liu C, Sui J. and Wang Z.Y., 2008, Changes in Runoff and Sediment Yield along the Yellow River during the Period from 1950 to 2006, Journal of Environmental Informatics, ISEIS 12 (2) pp. 129-139.
- 105 Yi Y., Wang Z.Y., Zhang K., Yu G. and Duan X., 2008, Sediment pollution and its effect on fish through food chain in the Yangtze River, International Journal of Sediment Research, WASER, Vol. 23, No. 4, pp. 338 347. (
- 106 He X. and Wang Z.Y., 2008, Temporal and spatial distribution of dam failure events in China, International Journal of Sediment Research, Vol. 23, No. 4, 2008, pp. 398 405.
- 107 Tian Shimin and Wang Zhaoyin. 2008 Bimodal sediment distribution and its relation with the

- river ecology in the Dadu river basin. Proceedings of 16th Congress of IAHR-APD. Nanjing, China.
- 108 Duan X H, Wang Z.Y. 2008, Experimental study on the effect of habitat isolation on river ecology. Proceedings of the 16th Congress of IAHR-APD, Nanjing, China.
 - 109 Wang Z.B, Wang Z.Y, de Vriend H.J. 2008. Impact of water diversion on the morphological development of the lower Yellow River. *International Journal of Sediment Research* 23(1): 13-27.
 - 110 Zhang K, Xu M Z, Wang Z Y., Duan X H and Bi C F. 2008, Ecological Impacts of Seabuckthorn in the Pisha Sandstone Area. In: Proceedings of the 16th Congress of IAHR-APD, Nanjing, China. 1102-1107.
 - 111 Liu H. and Wang Z.Y. 2008, River network patterns and their evolutionary preconditions, Proceedings of the 8th International Conference on HydroScience and Engineering, Nagoya, 57-60.
 - 112 Wang Zhaoyin, 2008, Laws of river training projects, *ADVANCES IN HYDRO-SCIENCE AND ENGINEERING* 8th International Conference on HydroScience and Engineering, Volume VIII, Nagoya, Japan. 2227-2245.
 - 113 Duan Xue-hua, Wang Zhao-yin, Tian Shi-min. 2008, Effect of streambed substrate on macroinvertebrate biodiversity. *Frontiers of Environmental Science and Engineering in China*, Vol. 2, No.1, pp 122-128.
 - 114 Wang Zhaoyin, Pu Qi and Melching, Charles Steven, 2009, Fluvial process of hyperconcentrated floods in Chinese rivers, *Earth Surface Process and Landforms*, Vol.34, pp.981-993, DOI: 10.1002/esp.1789.
 - 115 Wang Zhao-Yin, Melching Charles Steven, Duan Xuehua Duan, and Yu Guo-an Yu, 2009. Ecological and hydraulic studies of step-pool systems, *ASCE Journal of Hydraulic Engineering*, Vol. 134 , No.9, pp.705-717.
 - 116 Wang Zhaoyin, Cui Peng and Wang Ruiyu, 2009, Mass movements triggered by the Wenchuan Earthquake and management strategies of quake lakes, *International Journal of River Basin Management*, IAHR, Vol. 7, No. 4, pp. 391 402.
 - 117 Xie Xiaoping, Wang Zhaoyin and Melching C. S., 2009, Formation and Evolution of the Jiuduansha Shoal over the Past 50 Years *ASCE Journal of Hydraulic Engineering*, Vol. 134 , No.9, pp. 741-754.
 - 118 Yu Guoan, Wang Zhaoyin, Zhang Kang, Chang Tung-chiung and Liu Huaixiang. 2009. Effect of incoming sediment on the transport rate of bed load in mountain streams. *International Journal of Sediment Research* Vol.24, No.3 pp.250-263.
 - 119 Duan Xuehua, Wang Zhaoyin, Xu Menzhen and Zhang Kang, 2009, Effect of streambed sediment on benthic ecology, *International Journal of Sediment Research*, Vol. 134 , No.9, pp. 314-327.
 - 120 Wang Zhaoyin. 2009. Avalanches and landslides induced by the Wenchuan Earthquake. *HydroLink*, IAHR No.6, 2009.
 - 121 Lu Yongjun and Wang Zhaoyin and Melching C. S., 2009, 3D Numerical Simulation for Water Flows and Sediment Deposition in Dam Areas of the Three Gorges Project, *ASCE Journal of Hydraulic Engineering*, Vol. 134 , No.9, pp. 755-769.
 - 122 Xu Mengzhen, Wang Zhaoyin, Duan Xuehua, Zhuang Meiqi, de Souza F.T., 2009, Ecological measures of controlling invasion of golden mussel (*Limnoperna fortunei*) in water transfer systems. Proceedings of the 33rd IAHR Congress Vanconver Canada. pp.1609-1616.
 - 123 Zhang Kang; Xu Mengzhen; Wang Zhaoyin, 2009, Study on reforestation with seabuckthorn in the Pisha Sandstone area, *International Journal of Hydro-Environment Research*, APD-IAHR, Vol. 3, No.2, 77-84
 - 124 Wang Zhaoyin and Hu Chunhong, 2009, Strategies for managing reservoir sedimentation, *International Journal of Sediment Research*, Vol.24, No.4, pp. 369-384.
 - 125 Yi Yujun, Wang Zhaoyin and Yang Zhifeng, 2009, Two dimensional habitat modeling of Chinese sturgeon spawning sites, *Ecological Modeling*, Vol. 221, No.5, pp.864-875.. [doi:10.1016/j.ecolmodel.2009.11.018](https://doi.org/10.1016/j.ecolmodel.2009.11.018)
 - 126 Yu, Guo-an , Wang, Zhao-Yin , Zhang, Kang , Duan Xuehua, Tung-chiung Chang, 2010, Restoration of an incised mountain stream using artificial step-pool system, *IAHR Journal of Hydraulic Research*, Vol.48, No.2, pp.178-187.

- 127 Wang Zhaoyin, Cui Peng, Yu Guoan and Zhang Kang, 2010, Stability of landslide dams and development of knickpoints, Environmental Earth Sciences, DOI: 10.1007/s12665-010-0863-1.
- 128 Li Yanfu Wang Zhaoyin Shi Wenjing and Wang Xuzhao, 2010, Slope debris flow in the Wenchuan Earthquake Area, Journal of Mountain Science, 7: 226-233. Doi: 10.1007/s11629-010-2014-2.
- 129 Yi, Y., Wang Zhaoyin and Yang Zhifeng, 2010. Impact of the Gezhouba and Three Gorges Dams on habitat suitability of carps in the Yangtze River. Journal of Hydrology 387 (2010) 283–291, J. doi:10.1016/j.jhydrol.2010.04.018
- 130 Wang Zhaoyin, 2010, New researches in erosion and fluvial processes, Keynote lecture, Proceedings of 11th International Symposium on River Sedimentation, Stellenbosch, South Africa. Sep. 2010

- 146 Xu Mengzhen, Wang Zhaoyin, Zhao Na, 2011, Experimental study of colonization of *Limnoperna fortunei* (Dunker 1857) in the Xizhijiang River. Blueprint for sustainable watersheds workshop Beijing, China.
- 147 Liu Huaixiang, Wang Zhaoyin, Lu Yongjun, Yu Guo-an, 2011, Study on the formation of landslide dam knickpoints in mountain river geomorphology Proceedings of The 7th IAHR Symposium on River, Coastal and Estuarine Morphodynamics, Tsinghua University in Beijing, China.
- 148 Yu Guo-an, Wang Zhaoyin, Huang Heqing, 2011, Bed load movement in a mountain stream a field experimental study, Proceedings of The 7th IAHR Symposium on River, Coastal and Estuarine Morphodynamics, Tsinghua University in Beijing, China.
- 149 Qi Lijian, Wang Zhaoyin, Wang Xuzhao, 2011, Earthquake erosion and sediment budget of the rivers: a case study of Mianyuan River, Sichuan ,Proceedings of The 7th IAHR Symposium on River, Coastal and Estuarine Morphodynamics, Tsinghua University in Beijing, China.
- 150 Wang Feixin, Wang Zhaoyin, 2011, Zoning and management strategies for the Loess Plateau based on vegetation-erosion dynamics . Proceedings of The 7th IAHR Symposium on River, Coastal and Estuarine Morphodynamics, Tsinghua University in Beijing, China.
- 151 Yi Yujun, Zhang Shanghong, **Wang Zhaoyin**, 2011, Bedform morphology of Chinese sturgeon spawning sites in the Yangtze river, Proceedings of The 7th IAHR Symposium on River, Coastal and Estuarine Morphodynamics, Tsinghua University in Beijing, China.
- 152 Liu Huaixiang, Lu Yongjun, **Wang Zhaoyin**, Ji Rongyao, 2011, Evolution process of an islands-covered female estuary and effects of human activities, Proceedings of The 7th IAHR Symposium on River, Coastal and Estuarine Morphodynamics, Tsinghua University in Beijing, China.
- 153 Duan Xuehua, **Wang Zhaoyin**, Xu Mengzhen, 2011, Assessment of effects of fluvial processes and human activities on river ecology using macroinvertebrates as indicator Proceedings of The 7th IAHR Symposium on River, Coastal and Estuarine Morphodynamics, Tsinghua University in Beijing, China
- 154 **Wang Zhao-Yin** and Xu Mengzhen, 2012. Problems and researches on eco-hydraulics and eco-sedimentation, Keynote lecture, River flow 2012, Proceedings of the International Conference on Fluvial Hydraulics, San Jose, Costa Rica CRC Press/Balkema, London, (2012), Volume 1, 27-38.
- 155 **Wang Zhao-Yin**, Yu Guo-an, Huang He-Qing, Wang Rui-Yu, 2012. Gender of large river deltas and parasitizing rivers, International Journal of Sediment Research, 27(1), pp.18-36.
- 156 Pan Baozhu, **Wang Zhaoyin**, Xu Mengzhen, 2012, Macroinvertebrates in the abandoned channels: assemblage characteristics and their indicative suggestions to channel management, River Research and Applications, 28 1149-1160. DOI: 10.1002/rra.1515.
- 157 Xu Mengzhen, **Wang Zhaoyin**, Qi Lijian, Liu Le. 2012. Disaster chains initiated by the Wenchuan Earthquake. Environment Earth Sciences, 65(4): 975-985.
- 158 Xu Mengzhen, **Wang Zhaoyin**, Pan Baozhu. 2012. Distribution and species composition of macroinvertebrates in the hyporheic zone of bed sediment. International Journal of Sediment Research. 27(2):129-141.
- 159 **Wang Zhaoyin** and Zhang Kang, 2012, Principle of equivalency of bed structures and bed load motion, Submitted to Water Resources Research, International Journal of Sediment Research, 27(3), 288-308.
- 160 Yu Guo-an, **Wang Zhao-yin**, Huang He-ing, Liu Huai-xiang, Blue Brendon, and Zhang Kang, 2012. Bed load transport under different streambed conditions a field experimental study in a mountain stream, International Journal of Sediment Research, 27(4), 426 438.
- 161 Pan Baozhu, Wang Haijun, Wang Hongzhu, Wang Zhaoyin, 2012. Macrozoobenthic assemblages in relation to environments of the Yangtze-isolated lakes, Front. Environ. Sci. Engin, 6(2): 246 254. DOI 10.1007/s11783-011-0381-8.
- 162 Jia Yan-hong, Wang Zhaoyin, Zheng Xiangmin, and Han Lu-jie, 2012. Estimation of soil erosion in the Xihanshui River Basin by using ¹³⁷Cs technique, International Journal of Sediment Research, 27(4), 486 497.
- 163 Zhiwei Li Zhaoyin Wang Le Liu. Characteristics of meanders and oxbow lakes in Qinghai-Tibet Plateau [C]//Proceedings of the International Conference on Fluvial Hydraulics. Costa Rica: CRC Press Taylor & Francis Group 2012: 727-734.
- 164 [Pan B. Z., Wang Z. Y. & Xu M. Z. 2012. Relation between stream habitat conditions and macroinvertebrate assemblages in three Chinese rivers. Quaternary International 282: 178-183 \(DOI: 10.1016/j.quaint 2011.06.008\)](#)

- 165 [Pan B. Z., Wang Z. Y., Ying C. Xu M. Z.](#) Li Zhiwei, and Huang Guobing, 2013. [Meiofaunal assemblages in relation to properties of fluid mud in river estuaries. Fresenius Environmental Bulletin](#) 22 1 67-73.
- 166 Xu Mengzhen, **Wang Zhaoyin**, Duan Xuehua, Pan Baozhu. 2013. Effects of Pollution on Aquatic Ecology and Water Quality Bio-assessment. *Hydrobiologia*.
- 167 Yu Guoan, Liu Le, Li Zhiwei, Li Yanfu, Huang Heqing, Brierley Blue, Wang Zhaoyin, Pan Baozhu. 2013, Fluvial diversity in relation to valley setting in the source region of the Yangtze and Yellow Rivers. *Journal of Geographical Science*, 25(3): 817-832.
- 168 Pan Baozhu, **Wang Zhaoyin**, Li Zhiwei, Yu Guoan, Xu Mengzhen, Zhao Na, Brierley Gary. An exploratory analysis of benthic macroinvertebrates as indicators of the ecological status of the Upper Yellow and Yangtze Rivers. *Journal of Geographical Science*, 2013, 25(3): 871-882
- 169 Pan Baozhu, **Wang Zhaoyin**, Li Zhiwei, Lu Yongjun, Liu Huaixiang, Xu Mengzhen. 2013. Macroinvertebrate assemblages in relation to environments in the West River, with implications for management of rivers affected by channel regulation projects. *Quaternary International*, 2013. <http://dx.doi.org/10.1016/j.quaint.2013.08.012>.
- 170 Li Wenzhe, **Wang Zhaoyin**, Li Zhiwei. 2013. Experimental study on the energy dissipation ratio of step-pool system. The 35th IAHR World Congress, September 8-13, 2013, Chengdu, China.
- 171 Shi Wenjing, **Wang Zhaoyin**, Li Zhiwei. 2013, Long term and short term vegetation restoration of landslides on the YigongTsangpo River. The 35th IAHR World Congress, September 8-13, Chengdu, China.
- 172 **Wang Zhaoyin**, Lee Joseph H W, Xu Mengzhen. Eco-hydraulics and eco-sedimentation studies in China. *Journal of Hydraulic Research*, 2013, 51(1): 19-32.
- 173 Yi Yujun, Zhang Shanghong, **Wang Zhaoyin**. The bedform morphology of Chinese sturgeon spawning sites in the Yangtze river. *International Journal of Sediment Research*, 2013, 29(3): 421-429.
- 174 Li Zhiwei, **Wang Zhaoyin**, Pan Baozhu, Du Jun, Gary Brierley, Yu Guoan, Brendon Blue. Analysis of controls upon channel planform at the First Great Bend of the Upper Yellow River, Qinghai-Tibet Plateau. *Journal of Geographical Science*, 2013, 23(5): 833-848.
- 175 Li Zhiwei, **Wang Zhaoyin**, Li Wenzhe. 2013. A preliminary study on mechanism of meander cutoffs. The 35th IAHR World Congress, September 8-13, 2013, Chengdu, China, 1-10.
- 176 Li Zhiwei, **Wang Zhaoyin**, Yu Guoan. Development Mechanism of Sand Bars in Anabranching Rivers. The 12th International Symposium on River Sedimentation, September 2-5, 2013, Kyoto, Japan.
- 177 Yu G. A., **Wang Z. Y.**, Yang J. S., Huang H. Q. Loess step-pools in an ephemeral Gully in Loess Plateau, Northwest China Morphologic features and possible development mechanism. In: Fukuoka S., Nakagawa H., Sumi T., and Zhang H. (eds) *Advances in River Sediment Research*. Taylor & Francis Group, CRC Press, London. Proceedings of the 12th International Symposium on River Sedimentation (ISRS 2013), Kyoto, Japan, Sep. 2-5, 2013.
- 178 Yu G. A., Huang H. Q., **Wang Z. Y.** Fluvial morphology in the source region of the Yangtze and Yellow Rivers features and difference. In: Wang Z. Y., Lee J. H., Gao J. Z., Cao S. Y. (eds). *Proceedings of the 35th IAHR World Congress (IAHR 2013)*, Chengdu, China, Sep. 8-13, 2013.
- 179 Li Yanfu, **Wang Zhaoyin**, Han Lujie, Liu Le. A study on vegetation-eolian sand erosion dynamics and its applications. The 35th IAHR World Congress, September 8-13, 2013, Chengdu, China.

- 180 Xu Mengzhen, **Wang Zhaoyin**, Bogen J, Pan Baozhu. Effect of sediment settling on controlling golden mussel invasion in water transfer project. EGU General Assembly 2013, April 8-13, 2013, Vienna, Austria.
- 181 Zhao Na, **Wang Zhaoyin**, Xu Mengzhen, Pan Baozhu. Investigation of aquatic ecology in the middle and lower reaches of the Yalu Tsangpo River. The 35th IAHR World Congress, September 8-13, 2013, Chengdu, China.
- 182 Shi Wenjing, **Wang Zhaoyin**, Li Zhiwei. Long term and short term vegetation resotation of landslides on the YigongTsangpo River. The 35th IAHR World Congress, September 8-13, 2013, Chengdu, China.
- 183 **Wang Z. Y.**, Lee J. H., Gao J. Z., Cao S. Y. (eds). 2013. Proceedings of the 35th IAHR World Congress (IAHR 2013), Chengdu, China, Sep. 8-13, 2013 (900 pages)
- 184 **Wang Zhaoyin**, Yu Guoan, Wang Xuzhao, Charles S. Melching and Liu Le, 2015. Sediment storage and morphology of the YaluTsangpo valley due to uneven uplift of the Himalaya. *Science China Earth Science*, 58(8) 1440-1446.
- 185 Li Zhiwei, **Wang Zhaoyin**, Pan Baozhu, Gary Brierley, Tami Nicol, Li Yanfu. Accelerated shrinkage of Ruoergai Swamp, western China as a result of fluvial headcut erosion and construction of artificial ditches. *Catena*, 2015, 126:155-163.
- 186 Li Zhiwei, **Wang Zhaoyin**, Pan Baozhu, Zhu Haili, Li Wenzhe. The development mechanism of gravel bars in mountain rivers. *Quaternary International*, 2014,336:73-79.
- 187 Zhao Na, **Wang Zhaoyin**, Pan Baozhu, Xu Mengzhen, Li Zhiwei. Study of macroinvertebrate communities in rivers with different bed stability in dry-hot valley Take the Xiaojiang River basin as an example. *River Research and Application*, 2014.
- 188 Xu Mengzhen, **Wang Zhaoyin**

- 199 Jia Yanhong and **Wang Zhaoyin**, 2015. A study on limit velocity and its mechanism and implications for alluvial rivers. *International Journal of Sediment Research*. DOI: 10.1016/j.ijsrc.2015.01.002
- 200 Gao Peng, **Wang Zhaoyin**, and Siegel D., 2015. Spatial and temporal changes of sedimentation in Three Gorges Reservoir of China. *Lakes and Reservoirs: Research and Management* 20, 1-10.
- 201 Zhao Na, **Wang Zhaoyin**, Pan Baozhu, Xu Mengzhen, Li Zhiwei. 2015. Macroinvertebrate Assemblages in Mountain Streams with Different Streambed Stability. *RIVER RES APPL* 31:825-33
- 202 **Wang Zhaoyin** and Liu Cheng. 2016. The Yellow River training and 2000 years debates on the training strategies. Report to the United Nations Educational, Scientific and Cultural Organization (UNESCO), 2016, 1-61.
- 203 **Wang Zhaoyin**, Li Zhiwei, Xu Mengzhen and Yu Guoan. 2016. River Morphodynamics and Stream Ecology of the Qinghai-Tibet Plateau. *Taylor and Francis Group*. 2016:1-300.
- 204 Jia Yanhong, **Wang Zhaoyin**, Zheng X.M. And Li Yanfu. 2016. A study on limit velocity and its mechanism and implications for alluvial rivers, *International Journal of Sediment Research*, 31(3):205-211.
- 205 Lyu, Liqun, **Zhaoyin Wang**, and Cui Peng. 2016. Mechanism of the intermittent motion of two-phase debris flows. *Environmental Fluid Mechanics*, 2016, 1-20.
- 206 Li Zhiwei, Yu Guoan*, Brierley Gary, **Wang Zhaoyin**. 2016. Vegetative impacts upon bedload transport capacity and channel stability for differing alluvial planforms in the Yellow River Source Zone, *Hydrology and Earth System Sciences*, 2016, 20, 3013-3025.
- 207 Li Wenzhe, **Wang Zhaoyin**, Li Zhiwei*, Zhang Chendi, Lv Liqun. 2016. Experimental Study on the Hydraulic Characteristics and Energy dissipation of step-pool system. *Journal of Environmental Informatics*, 2016.
- 208 Xu Mengzhen* Zhao Na, **Wang Zhaoyin**, Zhou Xiongdong, Li Zhiwei, 2016. Impact of marsh degradation on aquatic ecosystem in the zoige marsh, Qinghai-Tibetan Plateau, The 11th International Symposium on Ecohydraulics, Melbourne, Australia, 2016.02.07-02.12
- 209 Yao Guoyou, Xu Mengzhen, An Xuehui, **Wang Zhaoyin**, 2016. Experimental study of controlling *Limnoperna fortunei* attachment with coating materials, The 11th International Symposium on Ecohydraulics, Melbourne, Australia, 2016.02.07-02.12
- 210 Pan Baozhu, Yuan Jianping*, Zhang Xinhua, **Wang Zhaoyin**, Lu Jinyou, Yang Wenjun, Chen Jiao, Li Zhiwei, Zhao Na, Xu Mengzhen. 2016. A review of ecological restoration techniques in fluvial rivers. *International Journal of Sediment Research*, 31(2):110-119.
- 211 Li Zhiwei, Yu Guoan, **Wang Zhaoyin**. 2016. Migration and cutoff formation of meanders in a hyper-arid environment: A case study from the Tarim River, Northwestern China [C], *Proceedings of the 8th International Conference on Fluvial Hydraulics*, Saint Louis: CRC Press, Taylor & Francis Group.
- 212 Li Yanfu, Li Zhiwei*, **Wang Zhaoyin**, Wang Wenlong, Tian Shiming, Jia Yanhong, 2017. Impact of artificially planted vegetation on the ecological restoration of movable sand dunes in the Mugetan Desert, northeastern Qinghai-Tibet plateau. *International Journal of Sediment Research*, 32(2), 277-287.

213 ZHAO

- 216 Lyu Liqun, **Wang Zhaoyin**, Cui Peng, Xu Mengzhen. 2017. The role of bank erosion on the initiation and motion of gully debris flows. *Geomorphology* 285: 137-151.
- 217 Zhang Chendi, Xu Mengzhen, **Wang Zhaoyin**, Liu Wei, Yu Dandan. 2017. Experimental Study on the Effect of Turbulence in Pipelines on the Mortality of *Limnoperna fortunei* Veligers. *Ecological Engineering*, 2017, 109: 101-118.
- 218 Zhang Chendi, Xu Mengzhen, **Wang Zhaoyin**. 2017. Experimental Study of Turbulence on Killing *Limnoperna Fortunei* Larvae in Pipelines. Proceedings of the 37th IAHR World Congress. August 13-18, Kuala Lumpur, Malaysia.
- 219 Jia Yanhong, Yujun Yi, Zhiwei Li, **Zhaoyin Wang**, Xiangmin Zheng, 2017. Integrating hydraulic equivalent sections into a hydraulic geometry study. *Journal of Hydrology* 552, 407-420.
- 220 Xu Mengzhen, Zhao Na, Zhou Xiongdong, Pan Baozhu, Liu Wei, Tian Shimin, **Wang Zhaoyin**. 2018. Macroinvertebrate Biodiversity Trends and Habitat Relationships within Headwater Rivers of the Qinghai-Tibet Plateau. *Water* 10(1214) doi:10.3390/w10091214.
- 221 Zhang Chendi, Xu Mengzhen, Hassan Marwan A., Chartrand Shawn M., **Wang Zhaoyin**. 2018. Experimental Study on the Stability and Failure of Individual Step-pool. *Geomorphology*. 2018, 311: 51-62
- 222 **Wang Zhaoyin** and Liu Cheng, 2019. Controlling the Yellow River: 2000 years of debate on control strategies. UNESCO, Paries, France, pp.1-103.
- 223 Zhang Chendi, Liu Yingjun, Xu Mengzhen, **Wang Zhaoyin**. 2019. The 3D Numerical Study on Flow Properties of individual step-pool. Proceedings of the 14th International Symposium on River Sedimentation. September 16-19, Chengdu, China
- 224 Zhou, X., Xu, M., **Wang, Z.**, Yu, B., & Shao, X. (2019). Responses of macroinvertebrate assemblages to environmental variations in the river-oxbow lake system of the Zoige wetland (Bai River, Qinghai-Tibet Plateau). *Science of The Total Environment*, 659, 150-160.
- 225 Zhou, X., Xu, M., **Wang, Z.**, Yu, B., Fu, X., Liu, W., ... & Shao, X. (2019). Debris-flow deposits on a major river influence aquatic habitats and benthic macroinvertebrate assemblages. *Freshwater Science*, 38(4), 713-724.
- 226 Zhou, X., Bisset, M., Xu, M., & **Wang, Z.** (2019). A new species of *Behningia* Lestage, 1929 (Ephemeroptera: Behningiidae) from China. *Zootaxa*, 4671(3), 420-426.
- 227 Yu G.A., Lu J.Y., Lv L.Q., Han L.J., **Wang Z.Y.** 2020. Mass flows and river response in rapid uplifting regions A case of lower Yarlung Tsangpo basin, southeast Tibet, China. *International Journal of Sediment Research*, 2020, 35: 609-620. doi: 10.1016/j.ijsrc.2020.05.006.
- 228 Lyv Liqun, Xu Mengzhen, **Wang Zhaoyin**, Qi Lijian, Li Xin. 2020. Impact of densely distributed debris flow dams on river morphology of the Grand Canyon of the Nu River (upper Salween River) at the east margin of the Tibetan Plateau. *Landslides* 2021, 18: 979-991.
- 229 Zhang Chendi, Xu Mengzhen, Hassan Marwan, Chartrand Shawn M., **Wang Zhaoyin**, Ma Zewei. 2020. Experiment on hydraulic and morphological adjustments of step-pool to flow changes. *Earth Surface Processes and Landforms*. 45(2): 280-294 DOI: 10.1002/esp.4722 (
- 230 Shimin Tian, Zhiwei Li*, **Zhaoyin Wang**, Enhui Jiang, Wenlong Wang, Meng Sun. 2021, Mineral composition and particle size distribution of river sediment and loess in the middle and lower Yellow River. *International Journal of Sediment Research*, 36(3),392-400
- 231 Huang Kehan, Xu Mengzhen, **Wang Zhaoyin**. 2021. Experimental Study on Landslides of Loose Sediment Slope Induced by Stream Bed Incision. *Frontiers in Earth Science* 2021, 9:687358. doi: 10.3389/feart.2021.687358
- 232 **Wang Zhaoyin**, Chen Zuyu, Yu Shu, Zhang Qiang, Wang Yu and Hao Jianwei, 2021. Erosion-control mechanism of sediment check dams on the Loess Plateau, *International Journal of Sediment Research*. 36(6), 668-677

Monographs and books

61 □ □ !! □(*

62 □ □ □ !! □

□ " (&)&

63 □ □ !! ' "

" ")

64 □ □ !! * ")

65 □ !! □"!) &&

66 , , , , .2004. GIS , 18 (4) 177-181.

67 , , , , .2004. , 24 (4) 23-26.

68 , , , , .2004. .

,(14) " ' " " ' &

69 , , , .2004. .

,(8) 54-58.

70 , , , .2005. .

20 2 :149-157

71 , , .2005. . 23 4

566-573.

72 , , .2005. . 21 (3):58-61.

73 , , .2005. , ,

36 2 :147-154

74 , , .2005. .

2 :46-53

75 , , .2005. . , 2 :54-60

76, , , , .2005. .

.(11 :72

77 , ,Huib J.de Vriend..2005.

89 , , , .2006. .
,(1):45-50.

90 , , .2006. . ,(1):9-16.

91 □ !!' . ,
15 6 :1366-1371

92 ') && & & !!'
&& & &

93 .2007. . ,
1 :66-68.

94 , .2007. . 38
1 :74-78.

95 , . , 2007, 38(11):1354-1357. (EI ,
:20080811111034)

96 , , .2007. . ,(2 :1-10.

97 , , .2007. . , 27
4 :1664-1672.

98 2007. .

115 2008
28 2 326-331

116 2008 5
54-59

117 2008
48 9 1408-1412

118 2008
28 3 1-7

119 2008 13 1-3.

120 2008
6 1 37-42.

121 2008 -
27 1 87-89

122 , , , . 2008, . , 4: 14-20.

123 2008 1 26-34

124 2008 -
39 2 162-167

125 2008 Vol. 41 No.9 pp.
1130-1135.

126 . 2008 DEM -
vol.54, P1-8

127 2008 23 2
1-4.

128 . 2009, .
. 18(3): 229-235.

129 . 2009, . 20(1):
86-91.

130 . 2009 () vol.49,
No.3, 356-359.

131 , , . 2009 (*Limnoperna fortunei*),
, 35 (5), 205-208.

132 2009 40
1 29-33

133 2009
Vol. 4 No. 4 22-32

134 2009
7 6 1-8

135 . 2009.
Vol.41, No.7, pp.1-7.

136 . 2009,
[J] Vol. 29 No. 4 1921-1930.

137 . 2010. 137Cs
[J]. 50 9 1342-1345,1349.(EI

138 , 2010, [J]. ,
26: 150-155. () (EI)

139 2010
41 7 1-7

140 2010
32 11 19-20

- 141 50 9 1338-1341
- 142 2010
25 9 934-940
- 143 , 2011,
, 26(11): 84-92.
- 144 , 2011,
. 9(1), 45-49.
- 145 , 2011,
(1): 1-7.
- 146 , 2011,
29(4): 474-482.
- 147 , 2011,
, 26(12): 10-16.
- 148 , , , 2011,
851-856. 35(5):
- 149 , , , . - . , 2011,
30(1): 42-48.
- 150 , 2011 . , 29(11)
142-144.
- 151 2011
vol.30 No.3,114-118.
- 152 , , , . [A].
IEEE (RSETE 2012) .(EI)
- 153 , , 2012,
43(6): 631-638 EI .
- 154 2012. -
43 3 253-263.
- 155 , 2011,
, 2012 (52)(2): 170-176. (EI)
- 156 , , , , 2012,
32(8):2351-2360.
- 157 , , . , 2012,(4):
- 158 , , 2012,
43(6): 631-638 EI .
- 159 _____, , , . 2012.
. , 2012, 23(2): 163-169.
- 160 . 2013. [J].
53(5): 61-65. EI , : 20131716238834
- 161 , 2012, . . 1 68-73.

162 . 2012 [J]. 5
17-26.

163 . 2012 [J].
4 11-17.

164 , 2012,
.44 11 82-87. EI

165 2012.
52 6 725-729.

166 , 2012,
, 21(4),501-505

167 , 2012,
45 3 202-208. EI

168 , , . 2013.
53 1 18-23.

169 2012.
21 3 369-374.

170 , , .
,2017,44(7):856-862.

171 , , . , , 2013,
21(3): 489-500. EI , : 20132716471676

172 , , 71 . , ,
2013, 24(2): 161-168. EI , : 20131716238834

173 , , , . , 2013,
(3): 51-58.

174 , , . , 2013,
35(4): 41-44.

175 , , . - (),
2013, 45(): 161-168. 2013

176 , . . 2013

185 , , . , 2013,
35(4):41-45.

186 , , , . [J]. :
, 2014 (5): 584-589.

187 , , , , . ,
2014, 25(6): 797-805.

188 , , , , . ,2014,25
2 172-180.

189 , , , , . - [J/OL]. , 12
<http://www.cnki.net/kcms/detail/11.1882.TV.20141016.1644.003.html>

190
2014

191 , , , , . - , 2014,
25(3): 374-382.

192 , , , , . - ,
2014, 45(5): 537-546.

193 , , , , .
, 2014, 02:1-7.

194 , , , . , 2014,33(3): 126-131.

195 , , , , . ,
2014,3 28-35.

196 , , , , . [J].
2014 28 2 129-135.

197 , , , .
, 2014.

198 , , , , . 2014.

199 , , , , . - , 2014,
34(3): 75-80.

200 , , , , . 2014. :8-14

201 , , , , . 2014. -
:24-9

202 , , , , , . 2014.
:336-44

203 2014 12 25

204 2014 3 13-18

205 , , , , . 2015. .
() :964-70

206 , , , , . 2015.
:65-73

207 , , , , , . 2015.
:292-9

208 , , , , . 2015. . :14-
8

209 , , , , , . 2015.
:331-8

210 , , , , . 2015. .
() :957-63

211 , , , , . 2015. . ()
):67-72

- 212 , , , .2015.
():61-80
- 213 2016.
4 1-10.
- 214 [J]. , 2016,
47(8): 1035-1044.
- 215 [J]. ,
2016, 47(10): 1245-1252.
- 216 * .2016.
.2016, 27(5):1-11.
- 217 .
.2016 27(1) 1-10.
- 218 ,
(), 2016, 56(12): 1-8.
- 219 * *Limnoperna fortunei*
2017, 37(8).
- 220 *
, 2016, 35(6): 74-79.
- 221 . 2016.
2016 5 79-85
- 222 , , , .2016. [J]. ,2016,:1-7.
- 223 , , , , . : [J].
,2016,11:1405-1417
- 224 , , , . [J]. 2016. ()
, No.4:38-44
- 225 , , , , . 2019.
, 50(10): 1165-1176.
- 226 , . 2019. , 50(1):124-134,
154.
- 227 , , , . [J]. ,2021,46(01):1-9.
- 228 , , , . [J]. ,2020,45(06):67-73.

Monographs in Chinese(中文专著)

1. 2021. pp1-300.
2. 700 2014.
3. 2014.
4. 2008
pp.1-514. ISBN:9787030230379
5. 2010
pp.1-180. ISBN 978-7-302-21860-9. 2010 8
6. 2011
pp.1-680. ISBN: 978-7-03-30703-3. 2011 11
7. , 2008, , , 1-681.
8. 1988, , , 311
9. 1998
227

Professional Certification and Awards

- 1988 Z X4YZ A ZVR RUMS YV:CE46D Z Z WHRV CV TV
- 1989 EZJV W DIZ Z Y YR RUVXR T S Z VZ V UZ W YVEYW8 XV
A [VT 2 RUMS YV Z Z WHRV CV TV W4YZR
- 1990 EZJV W5 T Y YR RUVXR T S Z W YVT R RUMS YV Z Z W
6U TRZ W4YZR
- *** 7Z @ R UZ XJ XDIZ Z CVRTY7 UR RUMS YV4YZVVX V V
- ***& Z Z WHRV CV TV W4YZR 7Z DIZ TVR UEVY] X A XV AZV AY ZR]
U] U VZ V RZ Z YVWT RZ XSRT RV WZ WYVEYW8 XV A [VT
- ***' Z Z WHRV CV TV W4YZR EYZU DIZ TVR UEVY] X A XV AZV : RSZ]
W V R WZUW]
- 1996 Z Z WHRV CV TV W4YZR DVT UDIZ TVR UEVY] X A XV AZV ERZZX
RU RV V -TV R RXV V WYV V] CZV U] R
- 1997 Z Z WHRV CV TV W4YZR EYZU DIZ TVR UEVY] X A XV AZV 5 RX
- WUTZ WY VT TV RWUW XYS URZ]
- 2004 Ministry of Education of China: First Science AZV UV EYV WDMZ V
E R RZ]
- 2006 Ministry of Education of China: Second Science P ZV 9 VT TV RWUW ,
- 2007 National Science Prize of China: Second Science and Technology Progress Prize Complex
responses of the fluvial process in the Yellow River to the water and sediment changes
- 2009 Title of Outstanding scientist in field scientific researches awarded by the ministry of science
and technology
- 2011 **2011 Hans Albert Einstein Award, awarded by the American Society of Civil Engineers.**
- 2011 Vice president of International Association of Hydraulic and Environmental Engineering
Research, Chairman of Environmental Hydraulics Division
- 2012 First prize of the ministry of transportation No.3

Journal Editorship

- 1996-1997 Executive chief editor, International Journal of Sediment Research,
- 1998-2013 Chief editor, International Journal of Sediment Research
- 2003 - Associate Editor, International Journal of River Basin Management. International Association for
Hydraulic Engineering and Research (IAHR)
- 2006- Associate editor of Journal of Environmental Informatics (JFI)

Personal Website (no personal webpage)