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Study areas

Countries **China**

Region **Africa, Asia, Global**

Topics of last three projects

- China's water scarcity : evolution and driving forces
- Water footprint and virtual water in China
- China's ecosystem services and management

Envisioned activities in Commission

attend/ organise meetings **X**

contribute to publications **X**

read newsletter **X**

joint research, collaboration **X**

Other (please specify)

Research interests in water (select maximum 10)

Climate & Water	Hydrological extreme events	Water flow	Surface water	Ground water	Marine Environment	Aquatic habitats/ Ecosystems	Water availability
Water in arid areas ☒	Floods ☒	Catchment processes ☒	Limnology ☐	Soil water ☒	Coastal waters ☒	Wetlands ☒	Water utility ☐
Arctic water ☐	Droughts ☒	Run-off generation ☒	Fluvial dynamics ☐	Karst water ☐	Estuarian waters ☐	Lakes ☒	Water storage ☒
Water cycle ☒	Ice phenomena ☐	Groundwater-Surface water interactions ☒	Continental scale processes ☐	Hydrogeology ☐	☐	Peatlands ☒	Dams / Reservoirs ☐
Atmospheric water ☐	☐	Hyporheic processes ☐	Dams / Reservoirs ☒	Recharge ☒	☐	Rivers ☒	Water scarcity ☒
Glaciers & Cryosphere ☐	☐	Interstitial water ☐	Sediments ☐	☐	☐	☐	Supply & Distribution ☐
☐	☐	Porwater ☐	Rivers ☒	☐	☐	☐	Water allocation ☒
☐	☐	Alluvial water ☐	Floodplains ☒	☐	☐	☐	Water restrictions ☐

Modelling and GIS	Water quality	Water & Health	Water & Energy	Water management/ policy	Water use	Water Law & Economics	Socio-political aspects
Hydro GIS ☒	Pollution ☒	Water & Sanitation ☐	Water-Energy nexus ☒	Integrated Catchment management ☒	Urban ☒	Water trade ☒	Water history ☐
Groundwater modelling ☒	Purification ☐	Water & Food ☒	Water for energy ☒	Integrated water resource management ☒	Agricultural ☒	Virtual water ☒	Water wars ☐
Surface water modelling ☒	Hydrochemistry ☐	Waterborne diseases ☒	Energy for water ☒	Water loss ☒	Mine water ☐	Privatisation ☐	Water & Poverty ☒
Remote sensing ☒	Treatment ☐	Drinking water ☐	Water, Food & Energy ☒	Reticulation & Supply ☐	Industrial ☒	Water as public good ☐	Access to water ☒
☐	Desalination ☐	Water purification ☐	☐	Transboundary water ☐	Grey water ☒	Right to water ☐	☐
☐	Waste water ☐	☐	☐	☐	Green water ☒	Bills & Laws ☐	☐
☐	Sewage ☐	☐	☐	☐	Blue water ☒	Affordability ☐	☐
☐	☐	☐	☐	☐	Return water ☒	☐	☐
☐	☐	☐	☐	☐	Water sustainability ☒	☐	☐
☐	☐	☐	☐	☐	Competing water use ☒	☐	☐

Other (please specify)

other areas of interest

Research interests in water
(supply 5 keywords)

Hydrology and water
resources management

Water scarcity

Hydrological extremes

Virtual water

Water-Energy-Food nexus

Topics of last 10 publications	Publication links
1 Manage water in a green way [Science]	http://science.sciencemag.org/content/349/6248/584.2
2 Reduced carbon emission estimates from fossil fuel combustion and cement production in China [Nature]	http://www.nature.com/nature/journal/v524/n7565/abs/nature14677.html
3 A high-resolution assessment on global nitrogen flows in cropland [PNAS]	http://www.pnas.org/content/107/17/8035.short
4 Physical and virtual water transfers for regional water stress alleviation in China [PNAS]	http://www.pnas.org/content/112/4/1031.short
5 China's rising hydropower demand challenges water sector [Scientific Report]	http://www.nature.com/articles/srep11446?message=global%20remove&WT.ec_id=5REP-704-20150714&spMailingID=49093431&spUserID=ODkwMTM2NjQzMw52&spJobID=7217410508&spReportId=NzixNzQxMDUw50
6 Assessing the land resource–food price nexus of the Sustainable Development Goals [Science Advances]	http://advances.sciencemag.org/content/2/9/e1501499
7 Ten-year variability in ecosystem water use efficiency in an oak-dominated temperate forest under a warming climate. [Agricultural and Forest Meteorology]	http://www.sciencedirect.com/science/article/pii/S0168192315300204
8 Burden shifting of water quantity and quality stress from megacity Shanghai [Water Resources Research]	http://onlinelibrary.wiley.com/doi/10.1002/2016WR018595.full
9 A comparison of changes in river runoff from multiple global and catchment-scale hydrological models under global warming scenarios of 1°C, 2°C and 3°C. [Climate Change]	http://link.springer.com/article/10.1007/s10584-016-1773-3
10 Food Losses and Waste in China and Their Implication for Water and Land [EST]	http://pubs.acs.org/doi/abs/10.1021/acs.est.01426q

Selected latest publications

- Manage water in a green way [Science, 2015]
- Land-food nexus of Sustainable Development Goals [Science Advances, 2016]
- Reduced CO₂ emission estimates for China [Nature, 2015]
- Physical and virtual water transfers in China [PNAS, 2015]