Rapid Transition of the Arctic Ocean

CONTENTS

Articles

*Physical Oceanography, Marine Meteorology and Marine Physics*

1................ Arctic sea ice in CMIP5 climate model projections and their seasonal variability
   *HUANG Fei, ZHOU Xiao, WANG Hong*

9................ Variation of sea ice extent in different regions of the Arctic Ocean
   *CHEN Ping, ZHAO Jinping*

20............. Slowdown of sea surface height rises in the Nordic seas and related mechanisms
   *SHI Wenqi, ZHAO Jinping, LIAN Xiha, WANG Xiaoyu, CHEN Weibin*

34.............. The role of diminishing Arctic sea ice in increased winter snowfall over northern high-latitude continents in a warming environment
   *SONG Mirong, LIU Jiping*

42.............. Spatio-temporal variations of Arctic amplification and their linkage with the Arctic oscillation
   *WANG Yanshuo, HUANG Fei, PAN Tingting*

52.............. Sensitivity and nonlinearity of Eurasian winter temperature response to recent Arctic sea ice loss
   *SUJ Cuijuan, ZHANG Zhanhai, YU Lejiang, LI Yi, SONG Mirong*

59.............. Effect of increasing Arctic river runoff on the Atlantic meridional overturning circulation: a model study
   *SHU Qi, QIAO Fangli, SONG Zhenya, XIAO Bin*

66.............. Observed and modelled snow and ice thickness in the Arctic Ocean with CHINARE buoy data
   *TIAN Zhongxiang, CHENG Bin, ZHAO Jiechen, VIHMA Timo, ZHANG Wenliang, LI Zhijun, ZHANG Zhanhai*

76.............. Sea ice extent retrieval with HY-2A scatterometer data and its assessment
   *SHI Lijian, LI Mingning, ZHAO Chaofang, WANG Zhiyong, SHI Yingni, ZOU Juhong, ZENG Tao*

84.............. Thermodynamic model of melt pond and its application during summer of 2010 in the central Arctic Ocean
   *ZHANG Shugang, BIAN Lingen, ZHAO Jinping, LI Min, CHEN Shizhe, JIAO Yutian, CHEN Ping*

*Marine Chemistry*

94................ Evaluation of the net CO₂ uptake in the Canada Basin in the summer of 2008
   *SUN Heng, GAO Zhongyang, LU Peng, XIU Peng, CHEN Liqi*
Accumulation of freshwater in the permanent ice zone of the Canada Basin during summer 2008

TONG Jinlu, CHEN Min, YANG Weifeng, ZHANG Run, PAN Hong, ZHENG Minfang, QIU Yusheng, HU Wangqiang, ZENG Jian

Response of phytoplankton community to different water types in the western Arctic Ocean surface water based on pigment analysis in summer 2008

JIN Haiyan, ZHUANG Yanpei, LI Hongliang, CHEN Jianfang, GAO Shengquan, JI Zhongqiang, ZHANG Yang

Composition of algal pigments in surface freshwater layer after ice melt in the central Arctic

ZHUANG Yanpei, JIN Haiyan, GU Fan, ZHANG Yang, BAI Youcheng, JI Zhongqiang, LU Yong, CHEN Jianfang

Marine Geology

Variations in organic carbon loading of surface sediments from the shelf to the slope of the Chukchi Sea, Arctic Ocean

LI Zhongqiao, WANG Xinyi, JIN Haiyan, JI Zhongqiang, BAI Youcheng, CHEN Jianfang

Paleoenvironmental implications of Holocene long-chain n-alkanes on the northern Bering Sea Slope

ZHANG Haifeng, WANG Rujian, XIAO Wenshen

Marine Biology

Bacterial and archaeal community structure of pan-Arctic Ocean sediments revealed by pyrosequencing

LIN Xuezhang, ZHANG Liang, LIU Yanguang, LI Yang

Factors dominating bacterioplankton abundance and production in the Nordic seas and the Chukchi Sea in summer 2012

GAO Yuan, HE Jianfeng, CHEN Min, LIN Ling, ZHANG Fang