

西北地震学报

第四卷 总目录

第一期

- 地震前地电阻率短临异常的初步研究·····薛顺章 于谋明 孙景芳 郭惠敏 (1)
- 像力及其在震源过程中的作用·····荣代璐 (7)
- 孕震介质中地震波振幅特性的某些理论与实际研究·····李清河 冯德益 (24)
- 地电阻率法中勘探深度和探测范围的理论讨论和计算·····赵和云 钱家栋 (40)
- 地震前动物异常的序列特征及其分析·····马京生 蒋锦昌 (57)
- 地球自转速度变化在地震预报中的地位初探·····高建国 吕大炯 (63)
- 对“异常应力场”两种模式的分析讨论·····黄荣璋 (72)
- 唐山地震序列特征及类型的讨论·····胡长和 陈非比 张嘉延 杨国宝 (88)
- 陕甘宁青主要构造体系特征及活动性构造体系探讨·····崔中元 (97)
- 云南省通海—石屏地区地震构造·····朱成男 (107)
- 不同应力途径下岩石的体积变化·····耿乃光 (115)

短文

- 固镇地震前波速比异常特征·····戴维乐 王 炜 (125)
- 郯庐断裂带中南段和茅山断裂带中段土层原应变主轴方位测量·····孙寿成 (130)
- 从层间滑动探讨长江峡东地区小震成因·····古成志 (133)
- 对五原地震前地倾斜趋势性异常和短临突变的认识·····马桂芳 (138)

研究报导

- 河西走廊东部地区地壳下部异常低阻层的发现·····林长估 张云琳 (141)
- 利用模糊方法识别地震前兆的讨论·····王增甲 赵建民 (143)
- 利用模糊数学的方法探索地震的综合预报问题·····蔡经球 (145)

第二期

- 震源顶部条件——前兆优显层的讨论·····郭增建 秦保燕 (1)
- 从溧阳六级地震的前兆特征讨论中强震的预报问题·····江苏省地震局分析预报研究室 (7)
- 松潘地震地下水异常动态特征讨论·····朱皆佐 (16)
- 广西陆川小震群特征的初步研究·····李家发 吴时平 莫敬业 (21)
- 地震前地电阻率的异常变化·····赵玉林 钱复业 (31)

- 甘肃地区地震活动特征.....张 诚 (39)
- 甘肃地区地震活动的正常背景.....王周元 (47)
- 通海地震前的地震活动特征.....刘祖萌 (53)
- 地幔快速隆起对构造地震的触发作用.....丁文镜 (58)
- 唐山地震高烈度区场地条件对震害的影响.....刘朔宽 查小刚 (67)
- 湿陷性黄土的强夯震动观测.....林学文 (75)
- 兰州—天水地区现今区域构造应力场光弹模拟实验研究.....
.....张淑节 李同祺 贺玉亭 (83)
- 利用P波到时确定近震震源参数的循环优化迭代法的误差分析.....钟廷姣 (89)
- 陕西省及邻近区域台网的测震精度.....谢家树 (94)
- PZ40型数字地电仪.....陈才军 赵家骝 杨禾生 黄 弘 (103)
- 地球物理问题中电磁感应的实验室模型模拟研究.....郭守年 朱佐全 (111)
- 短文**
- 负二项式极值模式在地震活动中、长期趋势分析中的初步应用.....张德齐 (123)
- 兰州地磁垂直分量绝对值与相对量的分析.....朱忠杰 马桃源 (128)

第 三 期

- 论地震孕育的层间解缚模式与我国某些大震的余震机制.....秦保燕 (1)
- 唐山余震活动的分期分区特征.....吕培苓 付征祥 薛 峰 陈章立 (12)
- 1978年5月18日海城6.0级地震前兆及区域地震活动特征.....
.....强祖基 付征祥 李梦聪 韩大宇 杨玉荣 (19)
- 震前地下水中硫化氢气体的短临前兆特征.....蔡仲琼 高德媛 紫丽曼 (25)
- 甘肃地区震势场的综合分析.....李海华 张文冕 吴德珍 吴建华 (32)
- 试论我国大陆板内强震活动与地球动力学过程的关系.....向光中 (39)
- 唐山地震震源应力场的数值模拟研究——三维有限单元法在计算震源应力场中的应
用.....宋惠珍 高维安 孙君秀 蒋 伟 (49)
- 华北强震孕育的地震活动性.....卫鹏飞 (57)
- 西藏阿隆岗日——喜马拉雅地震带中段的地震活动性.....李介成 唐荣昌 (66)
- 阿尔金山北缘断裂带(东北段)基本特征及其与地震的关系.....
.....侯珍清 王多杰 (71)
- 1927年古浪大震地质构造背景及其成因的初步探讨.....贾云鸿 (78)
- 地震专用设备与计算机的联接.....刘凤祥 (83)
- 任邱油田注水地震的初步研究.....刁桂苓 张德元 (89)
- 天水市建筑场地地面脉动特征.....郑铁生 (96)
- 短文**
- 用地形变资料预报地震的初次尝试.....张远孚 (105)
- 简论垂直形变流动测量.....王书成 金瑞泉 牟国良 (107)
- 大灰厂跨断层短水准的研究.....曹利德 (110)

甘肃玉门油田现代隆起·····	杨运来 贾文山 (115)
研究报导	
1920年12月16日海原8.5级地震补遗·····	冯学才 刘庆民 (119)
九星联珠对华北地区地震活动的影响·····	安振声 (122)

第 四 期

昌马大震五十年·····	(1)
金咏深先生早期学术活动简介·····	唐兆华 方家福 (3)
我国八级大震前的地震活动图象·····	李孟奎 董卫国 (5)
地震的对称迁移及其预测方法与结果·····	何正檀 (11)
震源孕育的数学物理模式与波速异常的理论解释·····	冯德益 林命周 顾瑾平 (19)
宁夏及其邻区虚波速度与震源深度分布·····	赵知军 (35)
华北强地震余震震群应力场“窗口”效应·····	姜秀娥等 (41)
大地震的前兆性地震系列·····	蒋明先 (47)
渭河盆地地震活动的一些特点·····	李 博 (51)
利用PS反射波研究西藏雅鲁藏布江北侧局部地区深部地壳结构·····	姚 虹等 (57)
北京地区地壳Q值随深度的分布特征·····	付昌洪 朱传镇 (63)
地震孕育过程中应力场的一个力学模型·····	赵永安 (69)
不同弹塑性介质中均匀膨胀球的有限元分析及其应用·····	汤 泉等 (81)
岩性对地电阻率前兆的影响·····	陈有发等 (89)
陕甘宁川的温泉分布与强震活动·····	林思诚等 (97)
从长江三峡东段地震与构造关系探讨弱震区的地质构造标志·····	李安然 (104)
甘肃地区电导率异常的研究·····	赵志新 马桃源 (110)
陕西及其邻近地区地磁短周期异常和上地幔高导层初步研究·····	杜兴信 (115)
短文	
应用图象识别法预测强震危险区存在的问题及讨论·····	毛卫民 (120)
中国陆地区域7级以上地震发生后的序列特征·····	姚国干 高建国 (125)
遥测电平中断快速自动控制电路的设计·····	豆耀华 (96)



NORTHWESTERN SEISMOLOGICAL JOURNAL

CONTENTS

No.1

A Preliminary Study on the Short-term and Imminent-term Anomalies in Geoelectric Resistivity Before Earthquakes	<i>Xue Shun zhang et al.</i> (6)
The Image Force and Its Application to Earthquake Source Procoss	<i>Rong Dailu</i> (23)
A Theoretical and Practical Study on the Amplitude Characteristics of Seismic Waves in the Developing Earthquake Media	<i>Li Qinghe Feng Deyi</i> (38)
Theoretical Discussion and Calculation About Detective Depth and Detective Range in Earth Resistivity Method	<i>Zhao Heyun Qian Jiadong</i> (56)
Ordinal Characteristics of Animal Unusual Behavior Prior to Earthquakes and Its Analysis	<i>Ma Jingsheng Jiang Jinchang</i> (62)
Preimilnary Exploration on Positions of Velocity Variation of Earth Rotation in Earthquake Prediction	<i>Gao Jianguo Lu Dajiong</i> (71)
A Discussion on the Two Models of "The Anomalous Stress Field"	<i>Huang Rongzhang</i> (87)
A Discussion of Type and Characteristics of Sequences on Tangshan Earthquake	<i>Hu Changhe et al</i> (96)
Characteristics of Major Structural Systems and Research on Active Structural Systems in Northwestern Region in China	<i>Cui Zhongyuan</i> (106)
Seismotectonics in Tonghai—Shiping Area, Yunnan Province, China	<i>Zhu Cheng ... nan</i> (114)
Volume Changes of Rocks in Various Stress Paths	<i>Geng Naiguang</i> (124)
Research Reports in Brief	
Anomalous Characteristics of Wave Velocity Ratio Before Guzhen Earthquake	<i>Dai Weile Wang Wei</i> (129)
The Determination of the Prineipal Strain Axial (bistretion) In, situ	

About Soil Layer Along the Middle—Southern Segment of
the Tanlu Fracture Zone and the Middle Segment of the
Maoshan Fracture Zone and its Preliminary Study.....
.....Sun Shou cheng (132)

A Study of Geneses of Small Earthquake in Changjiang Xiadong
Area on the Slip Between Strata.....Gu Chengzhi (137)

Comprehension of Short—Term Sudden Change and Tendencious
Abnormal of Earth Tilt Before Earthquake in Wuyuan.....
.....Ma Gui fang (140)

Research Accouuts and News

Anomalous Low Resistance Layers Under Crust Have Been Found
in the Eastern Area of Gansu Corridor.....
.....Lin Changyou Zhang Yunlin (142)

Discussion of the Discrimination of Earthquake Precursors by Fuzzy
Means.....Wang Zengjia Zhao Janmin (144)

Exploration of Earthquake Prediction by Means of Fuzzy Mathe-
matics Cai Jingqiu (148)

No.2

On The Condition of the Earthquake Source Top—the Precursor
Advantageous Layer.....Guo Zeng-jian Qin Baoyan (6)

Forerunners of the Liyang Earthquake of July 9, 1979 (Ms=6.0)
and its Implicationson Prediction of Moderate Earthquakes
.....He Chu ru (15)

On the Dynamical Characteristics of Underground water Anomaly
During the Songpan Earthquake.....Zhu Jiezu (20)

Preliminary Study of Characteristics of the Small Earthquake
Swarms in the Luchuan of Guangxi.....Li Jiafa etc. (30)

Earth-resistivity Anomalies Before Earthquakes.....Zhao Yulin etc. (38)

The Charaeteristics of Seismic Activity in Gansu Region.....
.....Zhang Cheng (46)

The Normal Background of Seismic Activities in Gansu Region.....
.....Wang Zhouyuan (52)

Characteristics of Seismic Activityies Before Earthquake in Tongh-
ai..... Liu Zuyin (57)

The Trigger Action of the Quickly Uplifted Mantle for the Shellow
Tectonic Earthpuake.....Ding Wenjing (66)

The Damage Anomaly of 1976 Tangshan earthquake in High Inten-
sity Region Liu Shuokuan Cha Xiaogang (74)

Observation ou vibration from powerful Rammer in Soaking Settling

- Loess..... *Lin xuewen* (82)
- Studying the Field of the Tectonic Stress in Lanzhou-Tianshui Region by Means of Photoelastic Simulation.....
..... *Zhang Shu-jie et al* (88)
- Error Analysis for the Periodic Optimum Iteration Method for Determination of the Hypocenter parameters of Near Earthquakes by Using the P-Wave Travel Times
..... *Zhong Ting jiao* (93)
- Accuracy of the Determination of Earthquake Epicenter and Origin Time in the Network of Shanxi and Adjacent provinces.....
..... *Xie Jiashu* (102)
- Model PZ40 Digital Earth-resistivity Equipment..... *Chen Caijun et al.* (110)
- Laboratory Analogue Model Studies of Electromagnetic Induction in Geophysical Problems..... *Zhu Zuo-quan Guo Shounian* (122)
- Research Reports in Brief**
- The Initial Application of the Negative Binomial Model of Extreme Value in Analysis of Medium-term and Long-term Seismicity Tendency *Zhang Deqi* (127)
- Analysis of Absolute and Relative values of Geomagnetic Vertical Component in Lanzhou..... *Zhu Zhong-jie Ma Taoyuan* (130)

No.3

- On The Interlayer Decouple Model and the Aftershock Mechanism of Some Great Earthquakes in China
..... *Qin Baoyan* (11)
- Characteristics of Aftershock Activities in Tangshan
..... *Lu Peiling et al.* (18)
- Precursors and Regional Seismicity Before the Haicheng Earthquake of Magnitude 6.0 (May.18,1978) *QiangZuji et al.* (24)
- Precursory Characteristics of Hydrogen Sulfide in Ground Water Immediately Before Earthquakes..... *Cai Zhong-qiong et al.* (31)
- Synthetic Analysis for "Seismic Situation Field" of Gansu.
..... *Li Haihua et al.* (38)
- A Study of the Relation Between Activities of Strong Earthquakes and Geodynamic Processes in the Continent of China
..... *Xiang Guangzhong* (48)
- Numerical Analysis of Stress Field of Tangshan Area--Applying Three Dimensional Finite Element Method to Compute Focal Stress Field..... *Song Huizhen et al.* (56)

- Seismic Activity Brewing Process in the Strong Earthquake Development in North China.....*Wei Pengfei* (65)
- Preliminary Study of Seismic Activity of the Alonggangri--Himalaya Earthquake Zone in Tibet *Li Jiecheng et al.* (70)
- The Basic Features of the Fault Zone Along the North Fringe of Aejinshan in China and its Relation to Earthquakes
..... *Hou Zhenqing et al.* (77)
- Preliminary Discussion of Geotectonical Background and Genesis of Gulang Strong Earthquake in 1927 *Jia Yunhong* (82)
- On the Interfacing of the Special Equipment of Seismology and the Computer *Liu Fengxiang* (88)
- Preliminary Study on Water Injection Earthquake of Renqiu Oilfield *Diao Guiling et al.* (95)
- Characteristics of Ground Microtremors of the Constructive Sites of Tianshui City..... *Zheng Tiesheng* (104)
- Research Reports in Brief**
- The First Attempt of Earthquake Prediction by Means of Earth-Deformation..... *Zhang Yuanfu* (106)
- Brief Discussion of the Mobile Measurement of Vertical Deformation *Wang Shucheng et al.* (109)
- A Study of Dahuichang Sgort Levelling Line Across the Babaoshan Fault.....*Cao Lide* (114)
- Upheaval of Yumen Oilfield in Gansu Province.....
.....*Yang Yunlai Jia Wenshan* (118)
- Research Accounts and News**
- Addendum of Haiyuan Earthquake ($M=8.5$), Dec. 16, 1920
.....*Feng Xuecai Liu Qingmin* (121)
- Influence of Nine Planets Which Came Together on the Same Side of the Sun on Earthquake Activities of Huapei Area in China
..... *An Zhensheng* (125)

No.4

- The 50th Anniversary of the Changma Great Earthquake.....
..... *The Editorial Staff* (3)
- Mr. Jin Yongshen's Early Scientific Pursuits on Seismometry.....
..... *Tang Zhaohua Fang Jiafu* (4)
- Seismicity pattern Before Magnitude 8 Earthquake of China.....
.....*Li Mengluan et al.* (10)
- Symmetrical Migration of Earthquake and the Method of Its Prediction and Results..... *He zhengtian* (18)

A Physical-Mathematical Model for the Earthquake Preparatory Process and the Theoretical Explanation of premonitory Seismic Velocity Anomaly.....	<i>Feng Deyi et al.</i> (34)
Distribution of the Velocity of Dashed Waves and the Souree in Ningxia and Its Adjacent Area.....	<i>Zhao Zhijun</i> (40)
The "Window Effect" of Stress Field for Reflecting Aftershocks of the Strong Earthquake in North China.....	<i>Jiang Xiue</i> (46)
The Precursory Earthquake Sequence of Strong Shock.....	<i>Jiang Mingxian</i> (50)
Some Characteristics of Seismicity in the Wei River Graben.....	— <i>Li Bo</i> (56)
Study of Lower Crustal Strcture of the Looal Region in the North Side of Tarlung Zangbo in Xizang (Tibet) by Using PS Reflections.....	<i>Yao Hong at el.</i> (62)
Distribution Characteristics of Value With Depth in the Crust in Beijing Area.....	<i>Fu Changhong Zhu Chuanzhen</i> (68)
A Mechanical Model of the Stress Field in the Developmental Process of an Earthquake.....	<i>Zhao Yongan</i> (80)
Finite Element Analysis of Homogeneous Expansive Sphere in Many Layer Medium	<i>Tang Quan</i> (88)
Influences of Rock Mechanical Properties on Precusor of Apparent Electrical Resistivity.....	<i>Chen Youfa at el.</i> (95)
Distribution of Hot Springs and the Dreat Earthquakes in the South -north Seismic Zone	<i>Lin sicheng at el.</i> (103)
Discussion on the Geological Structure Signs of the Weak Earthquake form the Seismotectonic Relayionship in the Eastern Gorge of the Yangtze River.....	<i>Li Anran</i> (109)
Research on Electrical Conductivity Anomaly in Gansu Region.....	<i>Zhao Zhixing Ma Taoyuan</i> (114)
Preliminary Study of the Short-period Geomagnetic Variation and a Belt High Electrical Conductivity in the Upper Mantle in and Around Shanxi.....	<i>Du Xingxin</i> (119)
Brief Reports	
Problems and Discussions on the Application of Pattern Recognition in Zoning Strong Motion Area.....	<i>Mao Weimin</i> (124)
The Alignment Feature After Eart quakes ($M_s \geq 7$) at Dry Land of China.....	<i>Yao Guogan Gao Jianguo</i> (128)
The Design of Telemetry Level Stop Short Circuit of Automatic Rapidly Control.....	<i>Do Yaohua</i> (96)