

# Chapter 79.24 Germany

## German National Report

### Part D. Prof. Dr. Beno Gutenberg – The Bibliography

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## 1 Introduction

The following bibliography was mostly compiled during the preparation of the Beno-Gutenberg-Symposium in Stuttgart in 1989, undertaken by the Deutsche Geophysikalische Gesellschaft (DGG) on the occasion of the 100th birthday of Beno Gutenberg. At that time, I worked at the Institute of Meteorology and Geophysics in Frankfurt am Main, Germany and distributed preliminary preprints of this bibliography. During the next decade, several titles and some corrections were added. Because of the numerous, widely spread contributions of Beno Gutenberg, I am not certain that this is a complete list; in particular, the list of popular scientific contributions, abstracts, and reports to scientific agencies, which funded specific studies, may have some gaps. Most of the listed publications could be checked by looking in the originals, but some had to be added as they were cited or listed elsewhere. However, it would not have been possible to compile this bibliography without the help and support of the following people: Paula Agranat-Hurwitz, Hans Berckhemer, Ed Garnero, George Purcaru, Goetz Schneider, and Lew Vinnik. A crosscheck with the bibliography of Beno Gutenberg published by Charles F. Richter (1962) was very helpful. I could also use the archives of the California Institute of Technology, the Institute of Meteorology and Geophysics in Frankfurt am Main, and the Johann Wolfgang Goethe-Universität in Frankfurt am Main. Last but not least, the Stadt- und Universitäts Bibliothek Frankfurt helped to solve many bibliographical riddles.

The bibliography is divided in two major parts: monographs and lecture books in the first part and all other contributions in the second. The latter part was subdivided in a list of contributions for which Beno Gutenberg was the only author and a list to which other people also contributed. I tried to follow as far as possible the original written languages of the contributions and, if it was necessary, I added some remarks. Cyrillic characters in Russian publications were transliterated using the German scheme.

### Literature:

Knopoff, Leon (1998). Beno Gutenberg 1889 – 1960. Biographical Memoirs 76, National Academy of Sciences. National Academy Press, Washington D.C. 1998, 35 pp.

Richter, Charles Francis (1962). Memorial to Beno Gutenberg (1889-1960). Proceedings Volume Geological Society America, Annual Report for 1960, 92-104.

## 2 Monographs and Lecture Books

### Die seismische Bodenunruhe

40 S. + curriculum vitae, Inaugural – Dissertation (Ph.D. thesis), Philosophische Fakultät, Georg-Augusts-Universität zu Göttingen, Göttingen 1911 (Verlag Stürtz, Würzburg)

### Die mitteleuropäischen Beben vom 16. 11. 1911 und vom 20. 7. 1913

#### I. Bearbeitung der instrumentellen Aufzeichnungen

VI + 82 S. , Beiheft: 3 S. + 32 Tafeln, Veröffentlichungen des Zentralbureaus der Internationalen Seismologischen Assoziation, Strassburg 1915

### Untersuchungen über die Bodenunruhe mit Perioden von 4S - 10S in Europa

106 S. , Veröffentlichungen des Zentralbureaus der Internationalen Seismologischen Assoziation, Strassburg 1921

Die seismische Bodenunruhe

X + 69 S. , *Habilitation (thesis to become recognized as an academic lecturer (professor) at the Johann-Wolfgang-Goethe Universität in Frankfurt a. Main), Sammlung geophysikalischer Schriften 3, herausgegeben von Carl Mainka, Verlag Bornträger, Berlin 1924*

Der Aufbau der Erde

VII + 168 S. , *Verlag Bornträger, Berlin 1925*  
edition in Russian:

Stroenie zemli

Perevod s nemeckogo i s dopolenijami A. N. Zilbermana

169 s. , *Redakcija M. I. Polikarpova. Oformlemie O. N. Persjaninovoj. Korrektura E. V. Smirnovoj. Vypuskajusčaja T. S. Malyševa. Ob'edinennoe Naučno - Techničesko Izdatel'stvo, Moskva 1934, ONTI - 1935*

Lehrbuch der Geophysik

VI + 1017 S. , *Verlag Bornträger, Berlin 1926 – 1929*

This textbook was published in several parts (Lieferungen) between 1926 and 1929.

In the Russian issue of 'Der Aufbau der Erde' an edition in Russia is announced but yet not verified:

Učebnik geofisiki

perevod nemeckogo M. I. Polikarpova 1936 (?)

Beno Gutenberg was the editor of this lecture book with following own contributions:

Einleitung, 1 - 3; Die physikalischen Vorgänge bei Erdbeben, 220 - 307; Wasserwellen und Gezeiten, 308 - 353; Bewegungen der Erdachse, 354 - 377; Der physikalische Aufbau des Erdkörpers, 434 - 499; Die Verwendung von elastischen Wellen zur Erforschung der obersten Erdschichten, 582 - 611; Weitere physikalische Aufschlußmethoden und gemeinsame Verwertung der Ergebnisse, 612 - 617; Geophysik und Lebewesen, 966 - 993

Grundlagen der Erdbebenkunde

189 S. , *Sammlung Bornträger 12, herausgegeben von W. R. Eckhardt + J. Würschmidt, Verlag Bornträger, Berlin 1927*  
edition in Russian:

Osnovy sejsmologii

Perevod s nemeckogo pod redakcijej i s dopolenijami G. A. Gamburceva

149 s. , *Glav. redakcijej obščetechničeskich. literatury i nomografii, Moskva i Leningrad 1935*

Handbuch der Geophysik

Beno Gutenberg was editor for all planned 10 volumes between 1929 and 1936 and he was the author of numerous contributions (as specified in detail) of this monumental description of geophysics. All volumes were published in several parts (Lieferungen) over several years. Due to the Nazi regime in Germany Beno Gutenberg was fired as editor and due to World War II not all parts of the 'Handbuch der Geophysik' were finished. Without the driving force of Beno Gutenberg, the 'Handbuch der Geophysik' remains unfinished.

Band I (volume 1): Die Erde als Planet (finished)

XV + 970 S. , *Verlag Bornträger, Berlin 1931 – 1936*  
Facsimile reprint of the old edition: Kraus Reprint, Nendeln/Lichtenstein 1974

## Chapter 79.24 Germany, Part D

Containing by Beno Gutenberg:

Einleitung: Allgemeines über Geophysik, 1 - 7 (1931)

Band II (volume 2): Der Aufbau der Erde (finished)

XV + 1119 S. , Verlag Bornträger, Berlin 1931 – 1933

*Facsimile reprint of the old edition: Kraus Reprint, Nendeln/Lichtenstein 1974*

Containing by Beno Gutenberg:

Abkühlung und Temperatur der Erde, 1 - 38 (1931); Der physikalische Aufbau der Erde, 440 - 564 (1931)

Band III (volume 3): Veränderungen der Erdkruste (finished)

XII + 686 S. , Verlag Bornträger, Berlin 1930 – 1940

*Facsimile reprint of the old edition: Kraus Reprint, Nendeln/Lichtenstein 1974*

Containing by Beno Gutenberg:

Kräfte in der Erdkruste, 1 - 31 (1930); Geotektonische Hypothesen, 442 - 547 (1930)

Band IV (volume 4): Erdbeben (finished)

XII + 1202 S. , Verlag Bornträger, Berlin 1929 – 1932

*Facsimile reprint of the old edition: Kraus Reprint, Nendeln/Lichtenstein 1974*

Containing by Beno Gutenberg:

Theorie der Erdbebenwellen, 1 - 150 (1929); Beobachtungen von Erdbebenwellen, 151 - 263 (1929); Die seismische Bodenruhe, 264 - 298 (1929); Berichtigungen und Ergänzungen zu Band 4, 1186 - 1190 (1932)

Band V (volume 5): (never published)

Band VI (volume 6): Geophysikalische Aufschlußmethoden (only 1st part)

V + 312 S. , Verlag Bornträger, Berlin 1931

*Facsimile reprint of the old edition: Kraus Reprint, Nendeln/Lichtenstein 1974*

Band VII (volume 7): Physik der Hydrosphäre (only 1st part)

V + 252 S. , Verlag Bornträger, Berlin 1933

*Facsimile reprint of the old edition: Kraus Reprint, Nendeln/Lichtenstein 1974*

Band VIII (volume 8): Physik der Atmosphäre 1 (finished)

XVI + 1102 S. , Verlag Bornträger, Berlin 1942 – 1961

*Facsimile reprint of the old edition: Kraus Reprint, Nendeln/Lichtenstein 1974*

Band IX (volume 9): Physik der Atmosphäre 2 (only 1st, 2nd, and 3rd part)

VIII + 698 S. , Verlag Bornträger, Berlin 1932 – 1938

*Facsimile reprint of the old edition: Kraus Reprint, Nendeln/Lichtenstein 1974*

Containing by Beno Gutenberg:

Der Aufbau der Atmosphäre, 1 - 88 (1932); Die Schallausbreitung in der Atmosphäre, 89 - 145 (1932)

Band X (volume 10): Allgemeines (only 1st part)

IV + 117 S. , Verlag Bornträger, Berlin 1940

*Facsimile reprint of the old edition: Kraus Reprint, Nendeln/Lichtenstein 1974*

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N. H. Heck + P. D. Byerly + Beno Gutenberg + H. E. McComb + R. S. McLean + W. W. Moore + H. S. Rappleye + W. F. Reynolds + F. P. Ulrich  
Earthquake investigations in California, 1934 – 35

231 pp. , U. S. Coast and Geodetic Survey, Special Publication 201, 1936

Containing by Beno Gutenberg:

Periods of the ground motions in Southern California earthquakes, 163 - 225

T. S. Lovering + K. T. Bainbridge + E. S. Bastin + A. F. Birch + I. S. Bowen + W. H. Bucher + R. T. Chamberlin + R. A. Daly + H. N. Eaton + R. D. Evans + C. N. Fenner + R. W. Goranson + D. T. Griggs + N. C. Grover + Beno Gutenberg + N. H. Heck + W. D. Lambert + F. W. Lee + L. D. Leet + W. C. Lowdermilk + G. W. Morey + C. C. Murdock + A. Nadai + W. W. Rubey + G. T. Rude + L. B. Slichter + W. T. Thom jr. + H. H. Willard

Report of the interdivisional committee on borderland fields between geology, physics, and chemistry, 1937

73 pp. , National Research Council, Division Geology and Geography, 1938

### Internal constitution of the Earth

X + 413 pp. , Physic of the Earth Volume 7, 1st edition, McGraw - Hill, New York + London 1939  
edition in Russian:

Vnutrennee stroenie Zemli

pod redakcijej Beno Guttenberga, perevod s angl. E. A. Macievskoj, pod redakcijej B. N. Dostovalova, S. S. Kovnera, P. N. Kropotkina i E. F. Savarenskogo

401 s. , Izdatel'stvo inostrannoj literatury, Moskva 1949

Beno Gutenberg was the editor of this book with following own contributions:

Chap. I: Introduction, 3 - 10; chap. VII: The cooling of the Earth and the temperature in its interior, 153 - 164; chap. VIII: Forces in the Earth's crust, 165 - 175; chap. IX: Hypotheses on the development of the Earth's crust and their implications, 177 - 217; with Charles Francis Richter chap. XI: Evidence from deep - focus earthquakes, 291 - 299; with Charles Francis Richter chap. XII: Structure of the crust, 301 - 327; chap. XIV: The elastic constants in the interior of the Earth, 345 - 360; chap. XV: Viscosity, strength, and internal friction in the interior of the Earth, 361 - 384; chap. XVI: Summary, 385 - 389

edition in Russian:

Vvedenie, 11 - 18; Gl. V: Ostyvanie Zemli i ee vnutrennaja temperatura, 147 - 160; Gl. VI: Sily, dejstvujušcie v zemnoj kore, 161 - 172; Gl. VII: Gipotezy o razvitiu zemnoj kory, 173 - 216; ( i K. Richter) Gl. IX: Dannye, osnovannye na izuče nii glubokich zemletrjasenij, 304 - 341; ( i K. Richter) Gl. X: Stroenie zemnoj kory. Kontinenty i okeany, 314 - 341; Gl. XII: Konstanty uprugosti v nedrach Zemli, 358 - 372; Gl. XIII: Vjazkost', pročnost' i vnutrennee trenie v nedrach Zemli, 373 - 396; Zaključenie, 397 - 401

Beno Gutenberg + Charles Francis Richter

### Seismicity of the Earth

VII + 131 pp. , Geological Society America, Special Paper 34, New York 1941  
edition in Russian:

Sejsmicnõst' Zemli

Perevod s angl. E. N. Ljusticha. Pod redakcijej E. F. Savarenskogo

160 s. , Gos. Izdatel'stvo inostrannoj literatury, Moskva 1948

Beno Gutenberg + Charles Francis Richter

### Seismicity of the Earth and associated phenomena

VII + 273 pp. , 1st edition Princeton University Press, Princeton 1949

(F. Andrews + Beno Gutenberg ?)  
Bibliography of microseisms

Beno Gutenberg was the principal investigator for this project. The official authorship of this first version of the bibliography of microseisms is not clear. However, both authors published the later version of this bibliography.

*Division of Earthsciences, Seismological Laboratory, Contract W28-099 ac-426, California Institute of Technology  
63 pp. , Pasadena 1949*

Internal constitution of the Earth

*439 pp. , Physic of the Earth Volume 7, 2nd edition, Dover Publ. , New York 1951*

Beno Gutenberg was the editor with following own contributions:

Preface; Chap. I: Introduction, 1 - 7; chap. VII: The cooling of the Earth and the temperature in its interior, 150 - 166; chap. VIII: Forces in the Earth, 167 - 177; chap. IX: Hypotheses on the development of the Earth, 178 - 226; with Charles Francis Richter chap. XI: Evidence from deep - focus earthquakes, 305 - 313; with Charles Francis Richter chap. XII: Structure of the crust, 314 - 339; chap. XIV: The elastic constants in the interior of the Earth, 364 - 381; with Hugo Benioff chap. XV: Strain characteristics of the Earth's interior, 382 - 407; chap. XVI: Summary, 408 - 416

Beno Gutenberg + F. Andrews

Bibliography of microseisms

*Division of Earthsciences, Seismological Laboratory, Contract AF 19(122)436, California Institute of Technology*

*2nd edition, revised and enlarged, published in 2 parts as (Versiac 110):*

*pp. 1 - 94, Scientific Report No. 1, Pasadena 1952*

*pp. 95 - 134, Scientific Report No. 2, Pasadena 1956*

Beno Gutenberg + Charles Francis Richter

Seismicity of the Earth and associated phenomena

*9 + 310 pp. , 2nd edition, revised, Princeton University Press, Princeton 1954*

*9 + 310 pp. , 2nd edition, revised, (facsimile reprint), Hafner Publ. Co. , New York + London 1965*

Physics of the Earth's interior

*12 + 240 pp. , 1st edition Academic Press, New York 1959*

*12 + 240 pp. , 2nd edition Academic Press, New York 1963*

*12 + 240 pp. , 3rd edition Academic Press, New York 1968*

*edition in Russian:*

Fizika zemnykh nedr

Perevod s angl. O. I. Silaevoj i O. G. Šaminoj, pod redakcijej Ju. V. Rizničenko

*263 s. , Izdatel'stvo inostrannoj literatury, Moskva 1963*

### 3 Publications in Scientific Journals Contributions to Special Volumes and Encyclopaedias Abstracts

#### 3.1 Beno Gutenberg as single author

1910

Über seismische Bodenunruhe  
*Physikalische Zeitschrift 11, 1184 - 1185, 1910*

1912

Die seismische Bodenunruhe  
*The text is identical with his Ph.D. thesis.*  
*Gerlands Beiträge zur Geophysik 11, 314 - 353, 1912*

1913

Über die Konstitution des Erdinnern, erschlossen aus Erdbebenbeobachtungen  
*Physikalische Zeitschrift 14, 1217 - 1218, 1913*

1914

Beobachtungen über die Perioden der Erdbebenvorläufer  
*Gerlands Beiträge zur Geophysik 13, Kleine Mitteilungen, 184 - 196, 1914*

Zur Besprechung von M. P. Rudzki „Über Erdbebenwellen V und VI“:  
Lassen sich aus den Beobachtungen der Amplituden der Erdbebenwellen Schlüsse auf das  
Erdinnere ziehen?  
*Gerlands Beiträge zur Geophysik 13, Kleine Mitteilungen, 198 - 203, 1914*

Über Erdbebenwellen  
VII A. Beobachtungen an Registrierungen von Fernbeben in Göttingen und Folgerungen über die  
Konstitution des Erdkörpers  
*Nachrichten von der Königlichen Gesellschaft der Wissenschaften zu Göttingen, mathematisch-  
physikalische Klasse, 125 - 176, 1914*

Über mikroseismische Bodenunruhe  
*Physikalische Zeitschrift 15, 591 - 593, 1914*

1915

Über mikroseismische Bodenunruhe  
*Physikalische Zeitschrift 16, 285 - 287, 1915*

**1920**

Brandung und Bodenunruhe

*Annalen der Hydrographie 48, 402 - 404, 1920*

**1923**

Der Aufbau der Erde auf Grund von Erdbebenbeobachtungen

*Geologisches Archiv, Zeitschrift für die gesamte Geologie und deren Nachbargebiete 1, 3 - 13, 1923*

Bericht über die am vierten und fünften Oktober 1923 in Jena abgehaltene Tagung der Deutschen Seismologischen Gesellschaft

*Geologisches Archiv, Zeitschrift für die gesamte Geologie und deren Nachbargebiete 2, 45 – 48, 1923.*

Neue Methoden zur Bestimmung der Herdtiefe von Erdbeben

*Zeitschrift für angewandte Geophysik 1, 65 - 75, 1923*

Über den Erdkern in 2900 km Tiefe und die an ihm stattfindenden Reflexionen und Brechungen von Erdbebenwellen

*Zeitschrift für angewandte Geophysik 1, 105 - 115, 1923*

Theorie der Erdbebenwellen und verwandter Erscheinungen sowie deren Bedeutung für die Erkenntnis des Erdinnern

*In: August Sieberg, Erdbebenkunde,  
Verlag Gustav Fischer, 283 - 372, Jena 1923*

Theoretisches über Seismometer

*In: August Sieberg, Erdbebenkunde,  
Verlag Gustav Fischer, 450 - 459, Jena 1923*

Theoretisches über Registriervorrichtungen

*In: August Sieberg, Erdbebenkunde,  
Verlag Gustav Fischer, 459 - 466, Jena 1923*

Bestimmung von Konstanten von Seismometern

*In: August Sieberg, Erdbebenkunde,  
Verlag Gustav Fischer, 466 - 477, Jena 1923*

Brandung und Bodenunruhe II

*Annalen der Hydrographie 51, 287 - 290, 1923*

Die elastischen Konstanten im Erdinnern

*Physikalische Zeitschrift 24, 296 - 299, 1923*

Absorption und Fortpflanzungsgeschwindigkeit von seismischen Oberflächenwellen

*Physikalische Zeitschrift 24, 458 - 459, 1923*

**1924**

Dispersion und Extinktion von seismischen Oberflächenwellen und der Aufbau der obersten Erdschichten

*Physikalische Zeitschrift 25, 377 - 381, 1924*

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Das Erdbeben in der chilenischen Provinz Atacama am 10. November 1922

II. Die Bearbeitung der instrumentellen Aufzeichnungen

*Veröffentlichungen der Reichsanstalt für Erdbebenforschung in Jena 3, 29 - 48 + 18 S. Tafeln,*

*Verlag Gustav Fischer, Jena 1924*

*Nachtrag (addition), Verlag Gustav Fischer, Jena 1925*

Die seismische Bodenunruhe in Zi-ka-wei (Bemerkungen zu Untersuchungen von E. Gherzi)

*Zeitschrift für Geophysik 1, 69 - 70, 1924*

Der Aufbau der Erdkruste auf Grund geophysikalischer Beobachtungen

*Zeitschrift für Geophysik 1, 94 - 108, 1924*

### 1925

Zu den Untersuchungen von P. E. Gherzi über die Bodenunruhe

*Zeitschrift für Geophysik 1, 165 - 166, 1925*

Neuere Untersuchungen über Gezeiten und ähnliche Meeresbewegungen

*Zeitschrift für Geophysik 1, 260 - 262, 1925*

Neue Auswertung der Aufzeichnungen der Erdbebenwellen infolge der Explosion von Oppau

*Physikalische Zeitschrift 26, 258 - 260, 1925*

Die Geschwindigkeit der Erdbebenwellen und die elastischen Konstanten in den obersten Erdschichten

*Die Naturwissenschaften 13, 360 - 362, 1925*

Bearbeitung von Aufzeichnungen einiger Weltbeben

*Abhandlungen der Senckenbergischen Naturforschenden Gesellschaft 40, 57 - 88, 1925*

Neuere Veröffentlichungen über geophysikalische Aufschließungsmethoden

*Internationale Bergwirtschaft 1, 52 - 53, 1925*

### 1926

Das Innere der Erde

*Natur und Museum, Bericht der Senckenbergischen Naturforschenden Gesellschaft in Frankfurt am Main 56, 33 - 41, 1926*

Die Geschwindigkeit des Schalls in der Atmosphäre

*Physikalische Zeitschrift 27, 84 - 86, 1926*

Über Gruppengeschwindigkeit bei Erdbebenwellen

*Physikalische Zeitschrift 27, 111 - 114, 1926*

Untersuchungen zur Frage bis zu welcher Tiefe die Erde kristallin ist

*Zeitschrift für Geophysik 2, 24 - 29, 1926*

Die Schallgeschwindigkeit in den untersten Schichten der Atmosphäre

*Zeitschrift für Geophysik 2, 101 - 106, 1926*

Die Entstehung der anomalen Schallzonen bei Explosionen

*Zeitschrift für Geophysik 2, 260 - 266, 1926*

Zur Frage der Laufzeitkurven

*Zeitschrift für Geophysik 2, 305 - 309, 1926*

Über die Ausbreitung des Schalls in der Atmosphäre

*Die Naturwissenschaften 14, 338 - 342, 1926*

Der Aufbau der Atmosphäre

*Meteorologische Zeitschrift 43, 427 - 430, 1926*

Die Geschwindigkeit der Erdbebenwellen in den obersten Schichten der Erde und ihr Einfluß auf die Ergebnisse einiger Probleme der Seismometrie

*Gerlands Beiträge zur Geophysik 15, 51 - 63, 1926*

Die Schichtung der Erde

*Die Umschau 30, 265 - 268, 1926*

## 1927

Erdbeben und Erdbebenwellen

*In: Handbuch der physikalischen und technischen Mechanik herausgegeben von F. Auerbach und W. Hort, Band III, 387 - 420, Verlag J. A. Barth, Leipzig 1927*

Ebbe und Flut

*In: Handbuch der physikalischen und technischen Mechanik herausgegeben von F. Auerbach und W. Hort, Band V, 366 - 391, Verlag J. A. Barth, Leipzig 1927 - 1931*

Die Veränderung der Erdkruste durch Fließbewegungen der Kontinentscholle

*Geologische Rundschau 18, 148 - 149, 1927*

Die Veränderung der Erdkruste durch Fließbewegungen der Kontinentscholle

*Gerlands Beiträge zur Geophysik 16, 239 - 247, 1927*

Die Bedeutung der Isostasie

*Gerlands Beiträge zur Geophysik 16, 396 - 403, 1927*

Die Geschwindigkeit der Longitudinalwellen im Erdinnern

*Gerlands Beiträge zur Geophysik 17, 356 - 365, 1927*

W. Milch †

*Gerlands Beiträge zur Geophysik 17, 443, 1927*

Die Bodenunruhe durch Brandung

*Zeitschrift für Geophysik 3, 328 - 329, 1927*

Der Aufbau der Erdkruste

*Zeitschrift für Geophysik 3, 371 - 377, 1927*

Die Veränderung der Erdkruste durch Fließbewegungen II

*Gerlands Beiträge zur Geophysik 18, 281 - 291, 1927*

Die Herdtiefe der Süddeutschen Beben 1911 und 1913

*Gerlands Beiträge zur Geophysik 18, 379 - 382, 1927*

**1928**

Das Aufsuchen von Bodenschätzten, insbesondere von Erzen, mit Hilfe der geophysikalischen Aufschlußmethoden

*Metallwirtschaft 7, 628 - 634, 1928*

Geh. Reg.-Rat Prof. Dr. E. Wiechert †

*Meteorologische Zeitschrift 45, Kleine Mitteilungen 183 - 185, 1928*

Frankfurter Laufzeitkurven 1928

A chart with travel-time curves was distributed by Beno Gutenberg and cited in the literature as 'Frankfurter Laufzeitkurven 1928'.

*Institut für Meteorologie und Geophysik, Frankfurt 1928*

Bodenunruhe durch Brandung und durch Frost

*Forschungen und Fortschritte 4, 357 - 358, 1928*

Bodenunruhe durch Brandung und durch Frost

*Zeitschrift für Geophysik 4, 246 - 250, 1928*

Mechanik und Thermodynamik des Erdkörpers

With the following single chapters: I. Die Entwicklung der Erde, 662 - 681; III. Beobachtungen über Schweren und Isostasie, 697 - 709; IV. Bewegungen der Erdachse und Polwanderungen, 709 - 719; V. Gezeiten des Erdkörpers, 719 - 725; VI. Die Erdbeben, 725 - 736; VII. Seismometrie, 737 - 790; IX. Die Gestalt der Erde, 799 - 803; X. Die Dichte der Erde und der Druck im Erdinnern, 803 - 808; XI. Die elastischen Konstanten im Erdinnern, 808 - 818; XII. Der Aufbau der Erde (Zusammenfassung), 818 - 827

*in: Müller - Pouillet's Lehrbuch der Physik 11. Auflage, Fünfter Band – Erste Hälfte, Physik der Erde,*

*herausgegeben von Alfred Wegener, Vieweg Verlag, Braunschweig 1928*

Der Aufbau der Erdkruste in Europa

*Geologische Rundschau 19, 433 - 439, 1928*

**1929**

Bodenunruhe durch Brandung und durch Frost

*Verhandlungen der Gesellschaft deutscher Naturforscher und Ärzte. 90. Versammlung zu Hamburg vom 16. – 22. September 1928, 996, 929*

Die Erdbeben im Lichte der physikalischen Erdgeschichte

*Scientia (Milano) 23, 375 - 384, 1929*

*edition in French:*

Les tremblements de terre d'après l'histoire physique de la terre

*Scientia (Milano) 23, Supplément, 139 - 148, 1929*

Über Fortpflanzung von elastischen Wellen in viskosen Medien

*Physikalische Zeitschrift 30, 230 - 231, 1929*

Sind Galitzinpendel für Nahbebenaufzeichnungen verwendbar?

*Gerlands Beiträge zur Geophysik 22, 100 - 102, 1929*

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Das Rheinlandbeben vom 13. Dezember 1928

*Gerlands Beiträge zur Geophysik 23, 22 - 34, 1929*

Veränderungen der Erdkruste

*Natur und Museum, Bericht der Senckenbergischen Naturforschenden Gesellschaft in Frankfurt am Main 59, 477 - 487, 1929*

Bemerkung über die Temperatur der Stratosphäre

*Gerlands Beiträge zur Geophysik 24, 76, 1929/30*

**1930**

Hypothesen über die Entwicklung der Erde

*Forschungen und Fortschritte 6, 66 - 67, 1930*

Zur Frage der Erdbebenursachen

*Forschungen und Fortschritte 6, 133 - 135, 1930*

Bau und Bildung der Erdkruste

*Neue Jahrbücher für Wissenschaft und Jugendlbildung 6, 393 - 408, 1930*

Nochmals: Zur Frage der Laufzeitkurven

*Zeitschrift für Geophysik 6, 57 - 59, 1930*

Bemerkungen zu der vorstehenden Erwiderung von Herrn G. Krumbach

*Zeitschrift für Geophysik 6, 62 - 64, 1930*

Registrierungen mit zwei Galitzinpendeln verschiedener Periode

*Gerlands Beiträge zur Geophysik 25, 74 - 80, 1930*

Die dynamische Vergrößerung von Schallregistrierungen für andauernde Sinuswellen

*Gerlands Beiträge zur Geophysik 26, 34 - 36, 1930*

Schwere und Druck im Erdinnern

*Gerlands Beiträge zur Geophysik 26, 37 - 41, 1930*

Der Aufbau des Untergrundes im Pazifischen Ozean

*Gerlands Beiträge zur Geophysik 26, 156 - 157, 1930*

Die Verteilung der Massen an der Erdoberfläche - Bemerkungen zu dem Aufsatz von L. Kober

*Gerlands Beiträge zur Geophysik 26, 158 - 160, 1930*

Schallgeschwindigkeit und Temperatur in der Stratosphäre

*Gerlands Beiträge zur Geophysik 27, 217 - 225, 1930*

Hypotheses on the development of the Earth

*Journal Washington Academy Sciences 20, 17 - 25, 1930*

The process of formation of seismic surface waves

*Bulletin Seismological Society America 20, 11 - 14, 1930*

**1931**

Aufbau und Temperatur der Stratosphäre  
*Gerlands Beiträge zur Geophysik 32*, 87 - 94, 1931

Microseisms in North-America  
*Bulletin Seismological Society America 21*, 1 - 24, 1931

Structure and temperature of the stratosphere  
*Bulletin American Meteorological Society 12*, 207, 1931

Structure of the Earth's crust as derived from seismograms  
*Pan American Geologist 55*, 373 - 374, 1931

**1932**

Travel time curves at small distances and wave velocities in Southern California  
*Gerlands Beiträge zur Geophysik 35*, 6 - 45, 1932

Mit welcher Genauigkeit lässt sich die Schallgeschwindigkeit in der Stratosphäre finden?  
*Gerlands Beiträge zur Geophysik 35*, 46 - 50, 1932

Structure of the Earth's crust derived from seismograms  
*Bulletin Geological Society America 43*, 236 - 237, 1932

Is present tilting in North America due to glacial melting?  
*Pan American Geologist 58*, 67 - 68, 1932

**1933**

Erde (physikalische Beschaffenheit)  
*In: Handwörterbuch der Naturwissenschaften Band 3*,  
2. Auflage, Verlag Gustav Fischer, 762 - 774, Jena 1933

Über Erdbeben mit Herdtiefen von mehreren hundert Kilometern  
*Geologische Rundschau 24*, 229 - 239, 1933

Tilting due to glacial melting  
*Journal of Geology 41*, 449 - 467, 1933

Is present tilting in North America due to glacial melting?  
*Bulletin Geological Society America 44*, 152 - 153, 1933

**1934**

Das „Seismological Laboratory“ in Pasadena  
*Ergebnisse der kosmischen Physik 2*, 213 - 237, 1934

Crustal deformations of gradual type  
*Proceedings of the 5th Pacific Science Congress, Victoria and Vancouver, B.C. , Canada 1933*,  
Volume 2, 1297 - 1304, Toronto University Press, Toronto 1934

## Chapter 79.24 Germany, Part D

The structure of the Earth's crust as indicated by seismological data

*Proceedings of the 5th Pacific Science Congress, Victoria and Vancouver, B.C., Canada 1933,  
Volume 3, 2511 – 2522, Toronto University Press, Toronto 1934*

The propagation of the longitudinal waves produced by the Long Beach earthquake

*Gelands Beiträge zur Geophysik 41, 114 - 120, 1934*

### 1935

Velocities of elastic waves in rocks of various age and at various depth

*Bulletin American Association Petroleum Geologists 19, 1842, 1935*

The age of the Earth from the changes in its temperature and elastic properties

*Science 82, 52, 1935*

### 1936

The amplitudes of waves to be expected in seismic prospecting

*Geophysics 1, 252 - 256, 1936*

On microseisms

*Bulletin Seismological Society America 26, 111 - 117, 1936*

On some problems concerning the seismic field methods

*Beiträge zur angewandten Geophysik 6, 125 - 140, 1936*

Structure of the Earth's crust and the spreading of the continents

*Bulletin Geological Society America 47, 1587 - 1610, 1936*

Structure of the Earth's crust and the spreading of the continents

*Geological Society America Proceedings, 306 - 307, 1936*

### 1937

Geophysics as a science

*Geophysics 2, 185 - 187, 1937*

Geophysics as a science

*Petroleum Engineer 8, Number 6, 78, 1937*

On supposed regional variations in travel times

*Bulletin Seismological Society America 27, 337 - 348, 1937*

The structure of the ocean basin as indicated by seismological data and earthquake epicenters

*In: International aspects of oceanography  
edited by T. W. Vaughn et al., National Academy of Science, 41 - 50, Washington D. C. 1937*

More about earthquakes

*The Sky 2, 12 - 13, 1937*

Progress in geophysical prospecting

*Petroleum World 34, Annual Review, 1937*

**1938**

On focal points of SKS

*Bulletin Seismological Society America* **28**, 197 - 200, 1938

Velocity of soundwaves from gun-fire in Southern California

*Transactions American Geophysical Union* **19**, 156, 1938

**1939**

Zur Entwicklung der seismographischen Aufschlußmethoden

*Ergebnisse der kosmischen Physik* **4**, 169 - 218, 1939

Tsunamis and earthquakes

*Bulletin Seismological Society America* **29**, 517 - 526, 1939

The velocity of sound waves and the temperature in the stratosphere in Southern California

*Bulletin American Meteorological Society* **20**, 192 - 201, 1939

The structure of the Pacific basin as indicated by earthquakes

*Science* **90**, 456 - 458, 1939

Correspondence and discussion on Chile earthquake of November 10, 1922

*Earthquake Notes* **10**, Number 4, 9 - 10, 1939

**1941**

Mechanism of faulting in Southern California indicated by seismograms

*Bulletin Seismological Society America* **31**, 263 - 302, 1941

Changes in sea-level, postglacial uplift, and mobility of the Earth's interior

*Bulletin Geological Society America* **52**, 721 - 772, 1941

Mechanism of faulting in Southern California indicated by seismograms

*Bulletin Geological Society America* **52**, 1950, 1941

Tectonic processes now in action

*Transactions American Geophysical Union* **22**, 556 - 558, 1941

Seismology

*In: Geology 1888 - 1938, 50th Anniversary Volume,*  
*Geological Society of America, 437 - 470, New York 1941*

Notes of interest (roots of mountains)

*Earthquake Notes* **13**, Number 3, 4, 1941

**1942**

Propagation of sound waves in the atmosphere

*Journal Acoustical Society America* **14**, 151 - 155, 1942

Discussion: Is the land around Hudson Bay at present rising?

*American Journal Science* **240**, 147 - 149, 1942

## Chapter 79.24 Germany, Part D

Earthquakes and structure in Southern California  
*Bulletin Geological Society America 53, 1818 - 1819, 1942*

### 1943

Seismological evidence for roots of mountains  
*Bulletin Geological Society America 54, 473 - 498, 1943*

Earthquakes and structure in Southern California  
*Bulletin Geological Society America 54, 499 - 526, 1943*

Variations in physical properties within the Earth's crustal layers  
*Transactions American Geophysical Union 24, 281 - 282, 1943*

### 1944

Travel times of principal P and S phases over small distances in Southern California  
*Bulletin Seismological Society America 34, 13 - 32, 1944*

Energy ratio of reflected and refracted seismic waves  
*Bulletin Seismological Society America 34, 85 - 102, 1944*

Reflected and minor phases in records of near-by earthquakes in Southern California  
*Bulletin Seismological Society America 34, 137 - 160, 1944*

Larger shocks of 1941 (deep focus excluded)  
*California Institute of Technology Pasadena, Seismological Laboratory Bulletin 1941, 98, 1944*

Larger shocks of 1942 (deep focus excluded)  
*California Institute of Technology Pasadena, Seismological Laboratory Bulletin 1942, 115, 1944*

Larger shocks of 1943  
*California Institute of Technology Pasadena, Seismological Laboratory Bulletin 1943, 140, 1944*

### 1945

Variations in physical properties within the Earth's crustal layers  
*American Journal Science 243(A), 285 - 312, 1945*

Amplitudes of surface waves and magnitudes of shallow earthquakes  
*Bulletin Seismological Society America 35, 3 - 12, 1945*

Amplitudes of P, PP, and S and magnitude of shallow earthquakes  
*Bulletin Seismological Society America 35, 57 - 69, 1945*

Magnitude determination for deep-focus earthquakes  
*Bulletin Seismological Society America 35, 117 - 130, 1945*

Larger shocks of 1944  
*California Institute of Technology Pasadena, Seismological Laboratory Bulletin 1944, 138, 1945*

Microseisms  
*Report to the U.S. Navy Departement, California Institute of Technology Pasadena, 1944*

## Chapter 79.24 Germany, Part D

### 1946

The use of microseisms in hurricane detection (progress-report based on a report of the Navy Department released November 15, 1945)

*Transactions American Geophysical Union 27, 111 - 117, 1946*

Interpretation of records obtained from the New Mexico atomic bomb test, July 16, 1945

*Bulletin Seismological Society America 36, 327 - 330, 1946*

Physical properties of the atmosphere up to 100 km

*Journal of Meteorology 3, 27 - 30, 1946*

Larger shocks of 1945

*California Institute of Technology Pasadena, Seismological Laboratory Bulletin 1945, 130, 1946*

### 1947

Microseisms and weather forecasting

*Journal of Meteorology 4, 21 - 28, 1947*

Larger shocks of 1946

*California Institute of Technology Pasadena, Seismological Laboratory Bulletin 1946, 120, 1947*

### 1948

On the layer of relatively low velocity at a depth of about 80 kilometers

*Bulletin Seismological Society America 38, 121 - 148, 1948*

A geophysicist X-rays mother Earth

*Engineering and Science Monthly 11, 19 - 20, Pasadena 1948*

Geophysics in war and peace

*Transactions American Geophysical Union 29, 155 - 156, 1948*

On a layer of relatively low velocity at a depth of about 80 kilometers

*Bulletin Geological Society America 59, 1393 - 1394, 1948*

Larger shocks of 1947

*California Institute of Technology Pasadena, Seismological Laboratory Bulletin 1947, 126, 1948*

Seismological Notes - „Penesimultaneous“ earthquakes

*Earthquake Notes 19, Number 4, 37, 1948*

### 1949

The structure of the Earth

*Scientia (Milano) 43, 82 - 86, 1949*

edition in French:

La structure de la terre

*Scientia (Milano) 43, Supplément, 42 - 46, 1949*

Isostasy and its meaning

*Tellus 1, Number 3, 1 - 5, 1949*

## Chapter 79.24 Germany, Part D

Unexplained phases in seismograms

*Bulletin Seismological Society America* **39**, 79 - 92, 1949

New data on the lower stratosphere

*Bulletin American Meteorological Society* **30**, 62 - 64, 1949

Earth physics

*Physics Today* **2**, Number 2, 14 - 18, 1949

Microseisms and meteorology

*Transactions American Geophysical Union* **30**, 169, 1949

Approximations in geophysics

*In: Publication dedicated to Imari Bonsdorff on the occasion of his 70th anniversary  
Veröffentlichungen des Finnischen Geodätischen Institutes* **36**, 41 - 44, 1949

In case of earthquake

*Disaster, published by the American Red Cross*, 2 p., July/August 1949

Properties of the Earth's crust beneath the oceans

*Bulletin Geological Society America* **60**, 1892, 1949

Approximations in geophysics

*Bulletin Geological Society America* **60**, 1954, 1949

Larger shocks of 1948

*California Institute of Technology Pasadena, Seismological Laboratory Bulletin* 1948, 129, 1949

## 1950

Das Tibet-Beben vom 15. August 1950

*Geologische Rundschau* **38**, 164, 1950

Structure of the Earth's crust in the continents

*Science* **111**, 29 - 30, 1950

Earthquakes in North America

*Science* **111**, 319 - 324, 1950

Revised travel time curves for Southern California

*Bulletin Geological Society America* **61**, 1546, 1950

Wave velocities in the Earth's crustal layers

*Geophysics* **15**, 156, 1950

Larger shocks of 1949

*California Institute of Technology Pasadena, Seismological Laboratory Bulletin* 1949, 72, 1950

## 1951

Sound propagation in the atmosphere

*In: Compendium of Meteorology  
published by American Meteorological Society*, 366 - 375, 1951

## Chapter 79.24 Germany, Part D

Observations and theory of microseisms

*In: Compendium of Meteorology  
published by American Meteorological Society, 1303 - 1311, 1951*

Travel times from blasts in Southern California

*Bulletin Seismological Society America 41, 5 - 12, 1951*

Revised travel times in Southern California

*Bulletin Seismological Society America 41, 143 - 164, 1951*

Earthquakes in North America

*Smithsonian Institute Annual Report 1950, 303 - 316, 1951*

Crustal layers of the continents and oceans

*Bulletin Geological Society America 62, 427 - 440, 1951*

Surface waves recorded by a Benioff vectorial seismograph

*Bulletin Geological Society America 62, 1527, 1951*

Travel times of waves from artificial explosions

*Bulletin Geological Society America 62, 1528, 1951*

PKKP, P'P', and the Earth's core

*Transactions American Geophysical Union 32, 373 - 390, 1951*

Earthquakes

*Istanbul Teknik Universitesi Bülteni 4, 66 - 70, 1951*

Larger shocks of 1950

*California Institute of Technology Pasadena, Seismological Laboratory Bulletin 1950, 102 - 103, 1951*

## 1952

Seismische Bodenunruhe und Wetter

*Umschau 52, 646 - 648, 1952*

Elastische Eigenschaften von Gesteinen und Mineralien

*In: Landolt Börnstein (6th edition)*

*III. Band: Astronomie und Geophysik, edited by Julius Bartels + P. ten Bruggencate, 326 - 330, Springer Verlag, Berlin + Göttingen + Heidelberg 1952*

Seismizität der Erde

*In: Landolt Börnstein (6th edition)*

*III. Band: Astronomie und Geophysik, edited by Julius Bartels + P. ten Bruggencate, 369 - 375, Springer Verlag, Berlin + Göttingen + Heidelberg 1952*

Erdbebenwellen

*In: Landolt Börnstein (6th edition)*

*III. Band: Astronomie und Geophysik, edited by Julius Bartels + P. ten Bruggencate, 375 - 384, Springer Verlag, Berlin + Göttingen + Heidelberg 1952*

## Chapter 79.24 Germany, Part D

Waves from blasts recorded in Southern California

*Transactions American Geophysical Union* **33**, 427 - 431, 1952

SV and SH

*Transactions American Geophysical Union* **33**, 573 - 584, 1952

Wave velocities in the outer part of the Earth's mantle

*Nature* **170**, 289 - 290, 1952

Earthquakes: past and future

*Engineers and Architects Sphere* **1**, 9 - 11, 1952

Earthquakes in California

*Looking Forward, Bulletin of The Humanists, Los Angeles California*, 1 p., September 1952

Microseisms with periods of 5 - 8 seconds in the Pacific coastal area, November 25 to December 6, 1951

*Bulletin Geological Society America* **63**, 1353, 1952

Surface motion in SV and SH

*Bulletin Geological Society America* **63**, 1353, 1952

## 1953

Travel times of longitudinal waves from surface foci

*National Academy Sciences Washington Proceedings* **39**, 849 - 853, 1953

Wave velocities at depths between 50 and 600 kilometers

*Bulletin Seismological Society America* **43**, 223 - 232, 1953

Microseisms, microbaroms, storms and waves in western North America

*Transactions American Geophysical Union* **34**, 161 - 173, 1953

Geophysical and geological observations in the Pacific area and tectonic hypotheses

*Pacific Science Association, 7th Congress Proceedings New Zealand (1949)* **2**, 7 - 9, Wellington 1953

Results from teleseismic records of the 1952 Kern County California, shocks

*Bulletin Geological Society America* **64**, 1525, 1953

Some general features of low-velocity layers

*Bulletin Geological Society America* **64**, 1525, 1953

Larger shocks of 1951

*California Institute of Technology Pasadena, Seismological Laboratory Bulletin* 1951, 95, 1953

Larger shocks of 1952

*California Institute of Technology Pasadena, Seismological Laboratory Bulletin* 1952, 104, 1953

## Chapter 79.24 Germany, Part D

Fifteenth award of the William Bowie Medal, Response and Acceptance *Transactions American Geophysical Union* **34**, 354-355, 1953

### 1954

Effects of low-velocity layers

*Geofisica Pura e Applicata* **28**, 1 - 10, 1954

and:

*Presidential address IASPEI Rome 1954*

Low-velocity layers in the Earth's mantle

*Bulletin Geological Society America* **65**, 337 - 347, 1954

Slip direction in earthquakes calculated from observed ratios SH/SV

*Bulletin Geological Society America* **65**, 1342, 1954

Postglacial uplift in the Great Lake region

*Archiv für Meteorologie, Geophysik und Bioklimatologie* **7(A)**, 243 - 251, 1954

Larger shocks of 1953

*California Institute of Technology Pasadena, Seismological Laboratory Bulletin* 1953, 98, 1954

### 1955

Untersuchungen zur Bodenunruhe in Süd-Kalifornien

*Zeitschrift für Geophysik* **21**, 177 - 189, 1955

Channel waves in the Earth's crust

*Geophysics* **20**, 283 - 294, 1955

Wave velocities in the Earth's crust

In: *The Earth's crust – a symposium*

edited by A. Poldervaart, *Geological Society America, Special Paper* **62**, 19 - 34, 1955  
edition in Russian:

Skorost' rasprostranenija sejsmičeskich voln v semnoj kore

V sb. : *Zemnaja kora*

Pod redakcijej A. Poldervarta. Perevod s angl. V. Ja. „Arlasa i dr., pod redakcijej i s predisd. V. E. Chaina, Izdatel'stvo inostrannoj literatury. s. 32 - 49. , Moskva 1957

Seismograph stations in California

In: *Earthquakes in Kern County, California during 1952*

edited by G. B. Oakeshott, *Bulletin California Division of Mines San Francisco* **171**, 153 - 156, 1955

Epicenter and origin time of the main shock on July 21 and travel times of major phases

In: *Earthquakes in Kern County, California during 1952*

edited by G. B. Oakeshott, *Bulletin California Division of Mines San Francisco* **171**, 157 - 163, 1955

The first motion in longitudinal and transverse waves of the main shock and the direction of slip

In: *Earthquakes in Kern County, California during 1952*

edited by G. B. Oakeshott, *Bulletin California Division of Mines San Francisco* **171**, 165 - 170, 1955

## Chapter 79.24 Germany, Part D

Magnitude determination for larger Kern County shocks, 1952; effects of station azimuth and calculation methods

*In: Earthquakes in Kern County, California during 1952  
edited by G. B. Oakeshott, Bulletin California Division of Mines San Francisco 171, 171 - 175, 1955*

Geophysical data implied in isostatic calculations

*In: Publication dedicated to Weikko A. Heiskanen on the occasion of his 60th anniversary  
Veröffentlichungen des Finnischen Geodätischen Institutes 46, 43 - 50, 1955*

Low-velocity lithosphere channel

*Bulletin Geological Society America 66, 1203 - 1204, 1955*

Channel waves in the Earth's crust

*Bulletin Geological Society America 66, 1651, 1955*

Energy of earthquakes

*Science 122, 876, 1955*

The energy of earthquakes

*Geological Society London, Proceedings 1530, 2, 1955*

Larger shocks of 1954

*California Institute of Technology Pasadena, Seismological Laboratory Bulletin 1954, 112, 1955*

## 1956

Neue Ergebnisse über den Aufbau der Erde

*Geologische Rundschau 45, 342 - 353 + 466 + 469, 1956*

Verschiebung der Kontinente, eine kritische Betrachtung

*In: Geotektonisches Symposium zu Ehren von Hans Stille  
herausgegeben von F. Lotze, 411 - 421, Ferdinand Enke Verlag, Stuttgart 1956  
edition in Russian:*

Kritiče skij obéor voprosa o peremeščenii kontinentov

*V kn. : Voprosy sovremennoj zarubežnoj tektoniki,  
pod redakcijej V. E. Chaina, 452 - 464, Izdatel'stvo inostrannoj literatury, Moskva 1960*

Earthquakes in the Arctic area

*In: The dynamic north, Volume 1  
published by US-Office of Chief Naval Operations for Polar Projects (OP-O3A4), 8 pp.,  
Washington D. C. 1956*

Damping of the Earth's free nutation

*Nature 177, 887 - 888, 1956*

The energy of earthquakes

*Quarterly Journal Geological Society London 112, 1 - 14, 1956*

Great earthquakes 1896 – 1903

*Transactions American Geophysical Union 37, 608 - 614, 1956*

Effects on ground on shaking in earthquakes

*Transactions American Geophysical Union 37, 757 - 760, 1956*

## Chapter 79.24 Germany, Part D

Comparison of seismograms recorded on Mount Wilson and at the Seismological Laboratory, Pasadena

*Annales Géophysique* **12**, 202 - 208, 1956

Structure of the Earth's interior

*Journal Geophysical Research* **61**, 379, 1956

Discussion of changes in climate

*Journal Geophysical Research* **61**, 410, 1956

Uses of International Geophysical Year world-wide data in the solution of geophysical problems

*Journal Geophysical Research* **61**, 410 - 413, 1956

Revised determinations for 1955

*California Institute of Technology Pasadena, Seismological Laboratory Bulletin* 1955, 140 - 141, 1956

## 1957

Zur Frage der Gebirgswurzeln

*Geologische Rundschau* **46**, 30 - 38 + 250 + 256, 1957

Effects of ground on earthquake motion

*Bulletin Seismological Society America* **47**, 221 - 250, 1957

Spectrum of P and S in records of distant earthquakes

*Zeitschrift für Geophysik* **23**, 316 - 319, 1957

Citation – Nineteenth award of the William Bowie Medal to William Maurice Ewing

*Transactions American Geophysical Union* **38**, 289 - 290, 1957

Discrepancies between thickness of the crust calculated from seismic and from gravity data

*Transactions American Geophysical Union* **38**, 392 - 393, 1957

Microseisms with periods of about two seconds in Southern California

*Transactions American Geophysical Union* **38**, 393, 1957

The „boundary“ of the Earth's inner core

*Transactions American Geophysical Union* **38**, 750 - 753, 1957

Earthquake energy released at various depths

In: *Gedenkboek F. A. Vening Meinesz*

*Verhandelingen Koninklijk Nederlandsch Geologisch-Mijnbouwkundig Genootschap, Geologische Serie* **18**, 165 - 175, 1957

Effects of ground on shaking in earthquakes recorded near Pasadena, California

*Bulletin Geological Society America* **68**, 1828, 1957

Effects of ground on shaking in earthquakes

*Science* **125**, 747 - 748, 1957

Seismological and related data

*In: American Institute of Physics Handbook*  
*1st edition, McGraw - Hill, 2/101 - 2/114, New York 1957*  
*2nd edition, McGraw - Hill, 2/101 - 2/114, New York 1963*

In memoriam Joseph Geszti

*Acta Technica Academiae Scientiarum Hungariae 19, 449 - 454, 1957*  
*edition in Hungarian:*

Megemlékezés Geszti Józsefről

*Műszaki Tudományok Ostályanak Közleményei a Magyar Tudományos Akadémia 23, 217 - 221,*  
*1957*

Revised determinations for 1956

*California Institute of Technology Pasadena, Seismological Laboratory Bulletin 1956, 152, 1957*

**1958**

Velocity of seismic waves in the Earth's mantle

*Transactions American Geophysical Union 39, 486 - 489, 1958*  
*edition in Russian:*

Skorosti sejsmičeskich voln v mantii Zemli

*V sb. : Verchnjaja Mantija Zemli*  
*Perevod pod redakcijej Ju. V. Rizničenko, 41 - 49, Izdatel'stvo „Mir“, Moskva 1964*

Caustics produced by waves through the Earth's core

*Geophysical Journal Royal astron. Society 1, 238 - 248, 1958*

Attenuation of seismic waves in the Earth's mantle

*Bulletin Seismological Society America 48, 269 - 282, 1958*  
*edition in Russian:*

Pogloščenie sejsmičeskich voln v mantii Zemli

*V sb. : Verchnjaja Mantija Zemli*  
*Perevod pod redakcijej Ju. V. Rizničenko, 50 - 67, Izdatel'stvo „Mir“, Moskva 1964*

Wave velocities in the Earth's core

*Bulletin Seismological Society America 48, 301 - 314, 1958*

Microseisms

*Advances in Geophysics 5, 53 - 92, Academic Press, New York 1958*

Two types of microseisms

*Journal Geophysical Research 63, 595 - 597, 1958*

Rheological problems of the Earth's interior

*In: Rheology: Theory and Applications Volume 2*  
*edited by F. R. Eirich, Academic Press, 401 - 431, New York 1958*

The structure of the Earth as viewed 1957

*Scientia (Milano) 93 (= 52, Seria 6), 1 - 5, 1958*  
*edition in French:*

La structure de la terre selon l'état de nos connaissances en 1957

*Scientia (Milano) 93 (= 52, Seria 6), Supplément 1 - 6, 1958*

## Chapter 79.24 Germany, Part D

Attenuation of seismic waves in the Earth's mantle

*Bulletin Geological Society America* **69**, 1686, 1958

Spectrum of P and S in records of distance earthquakes

*Bulletin Geological Society America* **69**, 1686, 1958

Velocity of seismic waves in the Earth's mantle

*Bulletin Geological Society America* **69**, 1686, 1958

**1959**

The asthenosphere low-velocity layer

*Annali di Geofisica (Rome)* **12**, 439 - 460, 1959

edition in Russian:

Astenosfernij sloj ponižennoj skorosti

*V sb. : Verchnjaja Mantija Zemli*

*Perevod pod redakcijey Ju. V. Rizničenko, 68 - 93, Izdatel'stvo „Mir“, Moskva 1964*

Earthquake waves reflected at the inside of the core boundary

*Journal Geophysical Research* **64**, 1503 - 1508, 1959

Wave velocities below the Mohorovičić discontinuity

*Geophysical Journal Royal Astronomical Society* **2**, 348 - 352, 1959

Major earthquakes of 1957

*Bulletin Seismological Society America* **49**, 422, 1959

**1960**

Waves reflected at the „surface“ of the Earth - P'P'P'P'

*Bulletin Seismological Society America* **50**, 71 - 80, 1960

Major and great earthquakes of 1958

*Bulletin Seismological Society America* **50**, 323, 1960

PKIKP and pseudo-PKIKP phases at distances of less than 140°

*Geophysical Journal Royal Astronomical Society* **3**, 250 - 257, 1960

The shadow of the Earth's core

*Journal Geophysical Research* **65**, 1013 - 1020, 1960

Polar wandering, displacements of continents, and subcrustal currents

In: *Festschrift zum 70. Geburtstag von Ernst Kraus*

herausgegeben von E. Rammle und E. C. Kraus, *Abhandlungen der deutschen Akademie der Wissenschaften Berlin* **1**, Klasse III für Bergbau, Hüttenwesen und Montangeologie, 306 - 310, 1960

Low-velocity layers in the Earth, ocean, and atmosphere

*Science* **131**, 959 - 965, 1960

edition in Russian:

Sloj ponižennoj skorosti v zemle, okeane i atmosfere

*V sb. : Verchnjaja Mantija Zemli*

*Perevod pod redakcijey Ju. V. Rizničenko, 20 - 40, Izdatel'stvo „Mir“, Moskva 1964*

Chapter 79.24 Germany, Part D

Magnitude and energy of earthquakes

*Transactions American Geophysical Union 41, 148 - 149, 1960*

Earthquakes in North America

*In: Smithsonian treasure of science 2, 379 - 397,  
revised edition by W. P. True, Simon and Schuster, New York 1960*

**1961**

Earthquakes, distribution, magnitude, and field studies of

*In: Encyclopaedic dictionary of physics 2, 588 - 591,  
edited by J. Thewlis et al., Pergamon Press, Oxford - London - New York - Paris 1961*

### 3.2 Publications with colleagues

**1911**

Ludwig Geiger + Beno Gutenberg  
Konstitution des Erdinnern, erschlossen aus dem Bodenverrückungsverhältnis der einmal reflektierten zu den direkten Longitudinalwellen  
*Physikalische Zeitschrift 12, 814 - 818, 1911*

**1912**

Ludwig Geiger + Beno Gutenberg  
Konstitution des Erdinnern, erschlossen aus der Intensität longitudinaler und transversaler Erdbebenwellen, und einige Beobachtungen an den Vorläufern  
*Physikalische Zeitschrift 13, 115 - 118, 1912*

Ludwig Geiger + Beno Gutenberg  
Göttinger Laufzeitfunktionen 1911  
*Supplement to: Geophysikalisches Institut-Göttingen No. 3/5 1912 (weekly seismological reports), 2 pp.*

Karl Zoeppritz † + Ludwig Geiger + Beno Gutenberg  
Ueber Erdbebenwellen  
V: Konstitution des Erdinnern, erschlossen aus dem Bodenverrückungsverhältnis der einmal reflektierten zu den direkten longitudinalen Erdbebenwellen, und einige andere Beobachtungen über Erdbebenwellen  
*Nachrichten von der Königlichen Gesellschaft der Wissenschaften zu Göttingen, mathematisch-physikalische Klasse, 121 - 206, 1912*

Ludwig Geiger + Beno Gutenberg  
Ueber Erdbebenwellen  
VI: Konstitution des Erdinnern, erschlossen aus der Intensität longitudinaler und transversaler Erdbebenwellen, und einige Beobachtungen an den Vorläufern  
*Nachrichten von der Königlichen Gesellschaft der Wissenschaften zu Göttingen, mathematisch-physikalische Klasse, 623 - 675, 1912*

**1930**

Beno Gutenberg + Helmut Schlechtweg:  
Viskosität und innere Reibung fester Körper  
*Physikalische Zeitschrift 31, 745 - 752, 1930*

Beno Gutenberg + Helmut Landsberg  
Das Taunusbeben vom 22. Januar 1930  
*Gerlands Beiträge zur Geophysik 26, 141 - 155, 1930*

Beno Gutenberg + Helmut Landsberg  
Das Taunusbeben vom 22. Januar 1930  
*Natur und Museum, Bericht der Senckenbergischen Naturforschenden Gesellschaft in Frankfurt am Main 60, 147 - 151, 1930*

**1931**

Beno Gutenberg + Charles Francis Richter  
Pseudoseisms caused by abnormal audibility of gunfire in California  
*Gerlands Beiträge zur Geophysik 31*, 155 - 157, 1931

Beno Gutenberg + Charles Francis Richter  
On supposed discontinuities in the mantle of the Earth  
*Bulletin Seismological Society America 21*, 216 - 223, 1931

**1932**

Beno Gutenberg + Charles Francis Richter + Harry O. Wood  
The earthquake in Santa Monica Bay, California, on August 30, 1930  
*Bulletin Seismological Society America 22*, 138 - 154, 1932

Beno Gutenberg + Harry O. Wood + John Peter Buwalda  
Experiments testing seismographic methods for determining crustal structure  
*Bulletin Seismological Society America 22*, 185 - 246, 1932

Arthur L. Day + Beno Gutenberg + Charles Francis Richter + Harry O. Wood  
Experiences of a seismologist with "Seismic Methods"  
*National Research Council, Transactions American Geophysical Union, 13th annual meeting April 28 and 29, 1932, Washington, D.C.*, 42-44, 1932

Beno Gutenberg + Harry O. Wood + John Peter Buwalda  
Experiments testing seismographic methods for determining crustal structure  
*Pan American Geologist 58*, 65 - 66, 1932

**1933**

Beno Gutenberg + Harry O. Wood + Charles Francis Richter  
Re suggestion by Dr. Harold Jeffreys regarding  $\bar{P}$  and Pg  
*Gerlands Beiträge zur Geophysik 40*, 97 - 98, 1933

Beno Gutenberg + Charles Francis Richter  
Advantages of using geocentric latitude in calculating distances  
*Gerlands Beiträge zur Geophysik 40*, 380 - 389, 1933

Beno Gutenberg + Harry O. Wood + John Peter Buwalda  
Experiments testing seismographic methods for determining crustal structure  
*Bulletin Geological Society America 44*, 170 - 171, 1933

**1934**

Beno Gutenberg + Charles Francis Richter  
On P'P' and related waves  
*Gerlands Beiträge zur Geophysik 41*, 149 - 159, 1934

Beno Gutenberg + Charles Francis Richter  
Contribution to the study of deep-focus earthquakes  
*Gerlands Beiträge zur Geophysik 41*, 160 - 169, 1934

## Chapter 79.24 Germany, Part D

Beno Gutenberg + Charles Francis Richter  
On seismic waves (first paper)  
*Gerlands Beiträge zur Geophysik 43, 56 - 133, 1934*

John Peter Buwalda + Beno Gutenberg  
Investigation of Beartooth overthrust by seismic methods  
*Geological Society America Proceedings, 69, 1934*

John Peter Buwalda + Beno Gutenberg  
Seismic methods applied to the Bighorn Basin  
*Geological Society America Proceedings, 79 - 80, 1934*

### 1935

Beno Gutenberg + Charles Francis Richter  
On seismic waves (second paper)  
*Gerlands Beiträge zur Geophysik 45, 280 - 360, 1935*

John Peter Buwalda + Beno Gutenberg  
Investigation of overthrust faults by seismic methods  
*Science 81, 384 - 386, 1935*

Harry O. Wood + Beno Gutenberg  
Earthquake prediction  
*Science 82, 219 - 220, 1935*

Beno Gutenberg + John Peter Buwalda  
Seismic reflection profile across Los Angeles Basin  
*Geological Society America Proceedings, 327 - 328, 1935*

Beno Gutenberg + John Peter Buwalda  
Seismic reflection profile across Los Angeles Basin  
*Pan American Geologist 63, 303, 1935*

### 1936

Beno Gutenberg + Charles Francis Richter  
Revised and additional geocentric coordinates of seismological stations  
*Gerlands Beiträge zur Geophysik 46, 198 - 201, 1936*

Beno Gutenberg + Charles Francis Richter  
On seismic waves (third paper)  
*Gerlands Beiträge zur Geophysik 47, 73 - 131, 1936*

Beno Gutenberg + Charles Francis Richter  
Materials for the study of deep-focus earthquakes  
*Bulletin Seismological Society America 26, 341 - 390, 1936*  
edition in French:

Données relatives a l'étude des tremblements de terre a foyer profond  
*Publications du Bureau Central Séismologique International, Série A, Travaux Scientifiques 15, 1 - 70, 1937*

## Chapter 79.24 Germany, Part D

Beno Gutenberg + Charles Francis Richter  
Magnitude and energy of earthquakes  
*Science 83, 183 - 185, 1936*

Beno Gutenberg + Charles Francis Richter  
Depth and geographical distribution of deep-focus earthquakes  
*Geological Society America Proceedings, 341, 1936*

### 1937

Beno Gutenberg + Charles Francis Richter  
Materials for the study of deep-focus earthquakes (second paper)  
*Bulletin Seismological Society America 27, 157 - 184, 1937*  
partly edited in French:  
Données relatives a l'étude des tremblements de terre a foyer profond  
*Publications du Bureau Central Séismologique International, Série A, Travaux Scientifiques 15, 1 - 70, 1937*

Beno Gutenberg + John Peter Buwalda  
Geophysical investigation of Yosemite Valley  
*Geological Society America Proceedings, 240, 1937*

### 1938

Beno Gutenberg + Charles Francis Richter  
Observed times of the Montana earthquake, 1935  
*Bulletin Seismological Society America 28, 85 - 88, 1938*

Beno Gutenberg + Charles Francis Richter  
Seismic waves in the core of the Earth  
*Nature 141, 371, 1938*

Beno Gutenberg + Charles Francis Richter  
P' and the Earth's core  
*Monthly Notices Royal Astronomical Society, Geophysical Supplement 4, 363 - 372, 1938*

Beno Gutenberg + Charles Francis Richter  
Depth and geographical distribution of deep-focus earthquakes  
*Bulletin Geological Society America 49, 249 - 288, 1938*

### 1939

Beno Gutenberg + Charles Francis Richter  
Depth and geographical distribution of deep-focus earthquakes II  
*Bulletin Geological Society America 50, 1511 - 1528, 1939*

Beno Gutenberg + Charles Francis Richter  
New evidence for a change in physical conditions at depths near 100 kilometers  
*Bulletin Geological Society America 50, 1950, 1939*

Beno Gutenberg + Charles Francis Richter  
On seismic waves (fourth paper)  
*Gerlands Beiträge zur Geophysik 54, 94 - 136, 1939*

## Chapter 79.24 Germany, Part D

Hugo Benioff + Beno Gutenberg  
The Mammoth „Earthquake Fault“ and the related features in Mono County, California  
*Bulletin Seismological Society America* **29**, 333 - 340, 1939

Beno Gutenberg + Charles Francis Richter  
New evidence for a change in physical conditions at depths near 100 kilometers  
*Bulletin Seismological Society America* **29**, 531 - 538, 1939

Hugo Benioff + Beno Gutenberg  
Observations with electromagnetic microbarographs  
*Nature* **144**, 478 - 479, 1939

Hugo Benioff + Beno Gutenberg  
Waves and currents recorded by electromagnetic barographs  
*Bulletin American Meteorological Society* **20**, 421 - 426, 1939

### 1940

Beno Gutenberg + Charles Francis Richter  
Seismicity of the Earth  
*Bulletin Geological Society America* **51**, 1958, 1940

Beno Gutenberg + Charles Francis Richter  
Deep focus earthquakes in America  
*Pacific Science Association, 6th Congress, Proceedings* **1**, 149 - 150, University of California Press  
1940

### 1941

Beno Gutenberg + Hugo Benioff  
Atmospheric-pressure waves near Pasadena  
*Transactions American Geophysical Union* **22**, 424 - 426, 1941

### 1942

Beno Gutenberg + Charles Francis Richter  
Earthquake magnitude, intensity, energy, and acceleration  
*Bulletin Seismological Society America* **32**, 163 - 192, 1942  
edition in Russian:

Magnituda, intensivnost', énergija i uskorenje kak parametru zemletrjasenij. Čast' I  
*V kn. : Slabye zemletrjasenija*  
*Perevod pod redakciej Ju. V. Riznicenko, Izdatel'stvo inostrannoj literatury*, 45 - 71, Moskva  
1961

Beno Gutenberg + Charles Francis Richter  
Seismicity of Central and South America  
*8th American Science Congress Washington 1940, Proceedings* **4**, 455, 1942

**1943**

Beno Gutenberg + Charles Francis Richter  
Apparent origin time of  $\bar{S}^*$   
*Bulletin Seismological Society America 33, 269 - 280, 1943*

Beno Gutenberg + Charles Francis Richter  
Recent results of earthquake study in Southern California  
*Transactions American Geophysical Union 24, 95 - 96, 1943*

**1944**

Beno Gutenberg + Charles Francis Richter  
Frequency of earthquakes in California  
*Bulletin Seismological Society America 34, 185 - 188, 1944*

**1945**

Beno Gutenberg + Charles Francis Richter  
Seismicity of the Earth (supplementary paper)  
*Bulletin Geological Society America 56, 603 - 667, 1945*

Beno Gutenberg + Charles Francis Richter  
Earthquake study in Southern California 1944  
*Transactions American Geophysical Union 26, 313 - 314, 1945*

**1946**

Beno Gutenberg + Charles Francis Richter  
Earthquake study in Southern California 1945  
*Transactions American Geophysical Union 27, 559 - 560, 1946*

Beno Gutenberg + Charles Francis Richter  
Seismic waves from atomic bomb tests  
*Transactions American Geophysical Union 27, 776, 1946*

Beno Gutenberg + Charles Francis Richter  
Earthquakes and associated phenomena in the Alpine belt  
*Bulletin Geological Society America 57, 1253, 1946*

**1947**

Beno Gutenberg + Charles Francis Richter  
Earthquake study in Southern California 1946  
*Transactions American Geophysical Union 28, 633 - 634, 1947*

Beno Gutenberg + Charles Francis Richter  
Seismicity of the Earth  
*Bulletin Geological Society America 58, 1252, 1947*

Beno Gutenberg + Charles Francis Richter  
Energy release in earthquakes  
*Bulletin Geological Society America 58, 1266, 1947*

**1948**

Beno Gutenberg + Charles Francis Richter  
Erdbebengeographie und Dynamik der Erdkruste  
*Die Naturwissenschaften 35, 196 - 202, 1948*  
*edition in French:*  
Géographie des tremblements de terre et dynamique de la croûte terrestre  
*Annales de l'Institut de Physique du Globe, Université de Strasbourg, nouvelle série 5, partie 3 Géophysique, 3 - 11, 1950*

Beno Gutenberg + Ch'eng - Yi Fu  
Remarks on multiple reflections  
*Geophysics 13, 45 - 48, 1948*

Beno Gutenberg + Charles Francis Richter  
Earthquake study in Southern California 1947  
*Transactions American Geophysical Union 29, 406 - 407, 1948*

Beno Gutenberg + Charles Francis Richter  
Deep-focus earthquakes in the mediterranean region  
*Geofisica Pura e Applicata 12, 130 - 134, 1948*

**1949**

Beno Gutenberg + Charles Francis Richter + Hugo Benioff  
Earthquake study in Southern California 1948  
*Transactions American Geophysical Union 30, 595 - 597, 1949*

**1950**

Hugo Benioff + Beno Gutenberg + Charles Francis Richter  
Progress report, Seismological Laboratory, California Institute of Technology, 1949  
*Transactions American Geophysical Union 31, 463 - 467, 1950*

**1951**

Beno Gutenberg (chairman) + Hugo Benioff + J. M. Burgers + David Griggs (special editorial committee)  
Colloquium on plastic flow and deformation within the Earth (Hershey, Pennsylvania, September 12 - 14, 1950)  
*Transactions American Geophysical Union 32, 497 - 543, 1951*

Hugo Benioff + Beno Gutenberg + Charles Francis Richter  
Progress report, Seismological Laboratory, California Institute of Technology, 1950  
*Transactions American Geophysical Union 32, 749 - 753, 1951*

Beno Gutenberg + Hugo Benioff  
An investigation of microseisms with meteorological phenomena  
*Reports 1 - 3 under contract AF 19(122)436, Seismological Laboratory, California Institute of Technology, Pasadena 1951*

## Chapter 79.24 Germany, Part D

### 1952

Hugo Benioff + Beno Gutenberg  
The response of strain and pendulum seismographs to surface waves  
*Bulletin Seismological Society America* **42**, 229 - 237, 1952

Beno Gutenberg + Hugo Benioff  
Progress report, Seismological Laboratory, California Institute of Technology, 1951  
*Transactions American Geophysical Union* **33**, 759 - 762, 1952

Gordon B. Oakeskott + Hugo Benioff + John Peter Buwalda + Beno Gutenberg + Charles Francis Richter  
Arvin-Tehachapi earthquake, July 21, 1952  
*California Division of Mines San Francisco, Mineral Information Service* **5**, Number 9, 1 - 8, 1952

Beno Gutenberg + Hugo Benioff  
An investigation of microseisms with meteorological phenomena  
*Reports 4 - 7 under contract AF 19(122)436, Seismological Laboratory, California Institute of Technology, Pasadena* 1952

### 1953

Hugo Benioff + Beno Gutenberg + Charles Francis Richter  
Progress report, Seismological Laboratory, California Institute of Technology, 1952  
*Transactions American Geophysical Union* **34**, 785 - 791, 1953

Beno Gutenberg + Hugo Benioff  
An investigation of microseisms with meteorological phenomena  
*Reports 8 - 11 under contract AF 19(122)436, Seismological Laboratory, California Institute of Technology, Pasadena* 1953

### 1954

Hugo Benioff + Beno Gutenberg + Charles Francis Richter  
Progress report, Seismological Laboratory, California Institute of Technology, 1953  
*Transactions American Geophysical Union* **35**, 979 - 987, 1954

Charles Francis Richter + Beno Gutenberg  
Seismicity of Southern California  
*In: Geology of Southern California*  
edited by R. H. Jahns, *Bulletin California Division of Mines San Francisco* **170**, 19 - 25, 1954

Beno Gutenberg + Hugo Benioff  
An investigation of microseisms with meteorological phenomena  
*Reports 12 - 15 under contract AF 19(122)436, Seismological Laboratory, California Institute of Technology, Pasadena* 1954

### 1955

Hugo Benioff + Beno Gutenberg + Charles Francis Richter  
Progress report, Seismological Laboratory, California Institute of Technology, 1954  
*Transactions American Geophysical Union* **36**, 713 - 718, 1955

## Chapter 79.24 Germany, Part D

Beno Gutenberg + Charles Francis Richter  
Magnitude and energy of earthquakes  
*Nature* **176**, 795, 1955

Hugo Benioff + Beno Gutenberg  
General introduction to seismology  
*In: Earthquakes in Kern County, California during 1952*  
edited by G. B. Oakeshott, *Bulletin California Division of Mines San Francisco* **171**, 131 - 135, 1955

Beno Gutenberg + Charles Francis Richter  
Magnitude and energy: progress report  
*Bulletin Geological Society America* **66**, 1651, 1955

Beno Gutenberg + Hugo Benioff  
An investigation of microseisms with meteorological phenomena  
*Reports 16 - 19 under contract AF 19(122)436, Seismological Laboratory, California Institute of Technology, Pasadena* 1955

### 1956

Hugo Benioff + Beno Gutenberg + Charles Francis Richter  
Progress report, Seismological Laboratory, California Institute of Technology, 1955  
*Transactions American Geophysical Union* **37**, 232 - 238, 1956

Frank Press + Beno Gutenberg  
Channel P waves  $\Pi_g$  in the Earth's crust  
*Transactions American Geophysical Union* **37**, 754 - 756, 1956

Beno Gutenberg + Hugo Benioff  
An investigation of microseisms  
*Final report under contract No. AF 19(122)436, AFCRC-TR56-257, Seismological Laboratory, California Institute of Technology, 39 pp.*, Pasadena 1956

Beno Gutenberg + John Peter Buwalda + Robert Philip Sharp  
Seismic explorations on the floor of Yosemite Valley, California  
*Bulletin Geological Society America* **67**, 1051 - 1078, 1956

Beno Gutenberg + Charles Francis Richter  
Magnitude and energy of earthquakes  
*Bulletin Geological Society America* **67**, 1769, 1956

Beno Gutenberg + Charles Francis Richter  
Earthquake magnitude, intensity, energy, and acceleration (second paper)  
*Bulletin Seismological Society America* **46**, 105 - 146, 1956  
edition in Russian:  
Magnituda, intensivnost', énergija i uskorenje kak parametru zemletrjasenij. Čast' II  
V kn. : Slabye zemletrjasenija  
Perevod pod redakcijej Ju. V. Rizničenko, Izdatel'stvo inostrannoj literatury, 72 - 119, Moskva 1961

Beno Gutenberg + Charles Francis Richter  
Magnitude and energy of earthquakes  
*Annali di Geofisica (Rome)* **9**, 1 - 15, 1956

**1957**

Hugo Benioff + Beno Gutenberg + Frank Press + Charles Francis Richter  
Progress report, Seismological Laboratory, California Institute of Technology, 1956  
*Transactions American Geophysical Union 38, 248 - 254, 1957*

**1958**

Hugo Benioff + Beno Gutenberg + Frank Press + Charles Francis Richter  
Progress report, Seismological Laboratory, California Institute of Technology, 1957  
*Transactions American Geophysical Union 39, 721 - 725*