

MATEMATISK-FYSISKE MEDDELELSER

UDGIVET AF

DET KGL. DANSKE VIDENSKABERNES SELSKAB

BIND 31

DET KONGELIGE
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I KOMMISSION HOS EJNAR MUNKSGAARD

1956—59



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6. MAGNUSSON, M.: Further Properties of the Energy-Momentum Complex in General Relativity. 1960	1-21
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8. ALDER, KURT, and WINTHER, AAGE: On the Theory of Multiple Coulomb Excitation with Heavy Ions. 1960	1-72
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12. BELL, R. E., BJØRNHOLM, S., and SEVERIENS, J. C.: Half Lives of First Excited States of Even Nuclei of Em, Ra, Th, U, and Pu. 1960	1-48
13. GOTTFRIED, K., and PIČMAN, L.: Sound Propagation in a Dilute Fermi Gas at Zero Temperature. 1960	1-30
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16. NILSSON, S.G., and PRIOR, O.: The Effect of Pair Correlation on the Moment of Inertia and the Collective Gyromagnetic Ratio of Deformed Nuclei. 1961	1-61

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7. BAK, THOR A., and ANDERSEN, KNUD: Dissociation of Diatomic Molecules Considered as Diffusion in Phase Space. 1961	1-22
8. BRYDE, LISE, LASSEN, N. O., and POULSEN, N. O. ROY: Ranges of Recoil Ions from α -Reactions. 1962	1-28
9. KRISTENSEN, P.: On the Formulation of the Dynamical Laws in the Quantum Theory of Fields. 1962	1-32
10. LINDHARD, J., NIELSEN, V., SCHARFF, M., and THOMSEN, P. V.: Integral Equations Governing Radiation Effects (Notes on Atomic Collisions, III). 1963	1-42
11. LEVI, HILDE, and ROGERS, A. W.: On the Quantitative Evaluation of Autoradiograms. In Collaboration with M. WEIS BENTZON and ARNE NIELSEN. 1963	1-51
12. ANDERSEN, FLEMMING ALLAN: The Infrared Spectrum of CH_3D . 1963.	1-35
13. LASSEN, N. O., and OLSEN, JANUS STAUN: The Reaction $\text{Ne}^{20}(\alpha, \text{C}^{12})\text{C}^{12}$. 1963	1-20
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15. PAL, YASH, and PETERS, B.: Meson Production at High Energies and the Propagation of Cosmic Rays through the Atmosphere. 1964.	1-55

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3. MØLLER, C.: Momentum and Energy in General Relativity and Gravitational Radiation. 1964	1-67
4. LINDHARD, JENS, and WINTHER, AAGE: Stopping Power of Electron Gas and Equipartition Rule. 1964	1-22
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7. MAASS, H.: Die Fourierkoeffizienten der Eisensteinreihen zweiten Grades. 1964	1-25
8. ELBEK, B., GOVE, H. E., and HERSKIND, B.: Coulomb Excitation of Levels in Cu^{63} and Cu^{65} . 1964	1-45
9. BORGGREEN, J., ELBEK, B., and LEACHMAN, R. B.: $\text{C}^{12}(\text{C}^{12}, \alpha)\text{Ne}^{20}$ Cross Section Measurements. 1964	1-20
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13. SCHÄFFER, CLAUS ERIK, and JØRGENSEN, CHR. KLIXBÜLL: Energy Levels of Orthoaxial Chromophores and the Interrelation between Cubic Parent Configurations. 1965	1-20
14. LINDHARD, JENS: Influence of Crystal Lattice on Motion of Energetic Charged Particles. 1965	1-64
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14. MAASS, HANS: Über die Fourierkoeffizienten der Eisensteinreihen zweiten Grades. 1972	1-13
15. JØRGENSEN, C. KLIXBÜLL, and BERTHOU, HERVÉ: Photo-Electron Spectra Induced by X-Rays of Above 600 Non-Metallic Compounds Containing 77 Elements. 1972	1-93

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Indhold

1. LINDHARD, J.: On the Theory of Measurement and its Consequences in Statistical Dynamics. 1974. 40 pages.
2. KLEIN, OSKAR: Le principe d'équivalence d'Einstein utilisé pour une alternative de la cosmologie relativiste en regardant le système des galaxies comme limité et non comme l'univers. 1974. 18 pages.
3. ANDERSEN, NILS, and SIGMUND, PETER: Energy Dissipation by Heavy Ions in Compound Targets. 1974. 45 pages incl. 7 figs.
4. SIDIENUS, G.: Systematic Stopping Cross Section Measurements with Low Energy Ions in Gases. 1974. 32 pages incl. 16 figs.
5. PEDERSEN, GERT KJÆRGÅRD: Borel Structure in Operator Algebras. 1974. 13 pages.
6. KALCKAR, JØRGEN, and ULFBECK, OLE: On the Problem of Gravitational Radiation. 1974. 16 pages incl. 3 figs.
7. MØLLER, C.: A Study in Gravitational Collapse. 1975. 31 pages.
8. HYNNE, F.: A Class of Molecular Correlation Functions Related to Ursell Functions. 1975. 19 pages incl. 3 figs.
9. KALCKAR, JØRGEN, and ULFBECK, OLE: Studies in Classical Electron Theory. I: Radiation Damping and Differential Conservation Laws. 1976. 44 pages incl. 6 figs.
10. ANDERSEN, J. U., ANDERSEN, S. KJÆR, and AUGUSTYNIAK, W. M.: Channeling of Electrons and Positrons. Correspondence between Classical and Quantal Descriptions. 1977. 58 pages incl. 28 figs.
11. SIGMUND, PETER: Classical Scattering of Charged Particles by Molecules: Single and Multiple Collisions at Small Angles. 1977. 32 pages incl. 6 figs.
12. DAHL, JENS PEDER: The Spinning Electron. 1977. 33 pages.
13. MØLLER, C.: On the Crisis in the Theory of Gravitation and a Possible Solution. 1978. 31 pages.

For technical reasons, the following paper, formerly announced as No. 14, will be included in a later volume:

CRAWFORD, D. L., OLSEN, E. H., and STRÖMGREN, BENGT: Analysis Based on Determinations of Colour Excesses, Distances, Ages and Masses for Early Group B and A Stars Brighter than $B = 6.5$.

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Indhold

1. JENSEN, K. A., and HOLM, ARNE: Investigations of Formaldehyde Oxime, its Polymers and Coordination Compounds. I: On the Nature of the So-called "Triformoxime" and Isolation of the Authentic Trimer, 1,3,5-Trihydroxyhexahydro-1,3,5-triazine. 1978. 23 pages incl. 1 fig.
2. ANDERSEN, FLEMMING A., and JENSEN, K. A.: Investigations of Formaldehyde Oxime, its Polymers and Coordination Compounds. II: The Infrared Spectrum of Poly(formaldehyde oxime). 1978. 24 pages incl. 11 figs.
3. BESENBACHER, F., ANDERSEN, H. H., HVELPLUND, P., and KNUDSEN, H.: Stopping Power of Swift Hydrogen and Helium Ions in Gases. 1979. 39 pages incl. 23 figs.
4. RASMUSEN, HANS QVADE: Three Revolutions of the Comets Halley and Olbers 1759-2024. 1979. 54 pages.
5. SIGMUND, PETER: Statistics of Particle Penetration. 1978. 36 pages incl. 1 fig.
6. AABOE, ASGER, and HAMILTON, N. T.: Contributions to the Study of Babylonian Lunar Theory. 1979. 36 pages incl. 3 figs. and 12 tables.
7. ANDERSEN, J. U., JENSEN, A. S., JØRGENSEN, K., LÆGSGAARD, E., NIELSEN, K. O., FORSTER, J. S., MITCHELL, I. V., WARD, D., GIBSON, W. M., and CUOMO, J. J.: Lifetime Measurements for Heavy-Ion-Induced Fission by the Crystal-Blocking Technique. 1980. 56 pages incl. 22 figs.
8. BRICE, DAVID K., and SIGMUND, PETER: Secondary Electron Spectra from Dielectric Theory. 1980. 34 pages incl. 15 figs.
9. BESENBACHER, F., ANDERSEN, H. H., HVELPLUND, P., and KNUDSEN, H.: Straggling in Energy Loss of Swift Hydrogen and Helium Ions in Gases. 1981. 42 pages incl. 24 figs.
10. NEUGEBAUER, OTTO: The 'Astronomical' Chapters of the Ethiopic Book of Enoch' (72-82). Translation and Commentary. With Additional Notes on the Aramaic Fragments by MATTHEW BLACK. 1981. 42 pages incl. figs.
11. KALCKAR, J., LINDHARD, J., and ULFBECK, O.: Self-Mass and Equivalence in Special Relativity. 1982. 42 pages incl. 4 figs.
12. CHERLY, JØRGEN: Additive Theory for $F_q[x]$ by Probability Methods. 1983. 16 pages.
13. KOUL, L., CHADDERTON, LEWIS T., and BROOKS, C. KENT: East Greenland and the Faeroe Islands: A Fission Track Study. 1983. 34 pages incl. 18 figs.
14. GANSSER, AUGUSTO: The Wider Himalaya, a Model for Scientific Research. 1983. 30 pages incl. 24 figs.



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1. PAULY, HANS: Cryolithionite and Li in the Cryolite Deposit Ivigtut, South Greenland. 1986. 24 pages incl. 7 figs. and 3 tables.
2. WIIN NIELSEN, A.: A Heuristic Theory of the Zonally-Averaged State of the Atmosphere. 1988. 47 pages incl. 15 figs.
3. The Harald Bohr Centenary. Proceedings of a Symposium held in Copenhagen April 24-25, 1987. Ed. by C. BERG and B. FUGLEDE. 1989. 142 pages.
4. Astrophysics. Recent Progress and Future Possibilities. Invited reviews at a Symposium in honour of Bengt Strömgren (1908-1987) held in Copenhagen May 25-26, 1988. Ed. by B. GUSTAFSSON and P. E. NISSEN. 1990. 220 pages.
5. KITAIGORODSKII, S. A.: The dissipation subrange in wind wave spectra. 1992. 24 pages.



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Fundamental Processes in Sputtering of Atoms and Molecules (*SPUT92*). Symposium on the Occasion of the 250th Anniversary of the Royal Danish Academy of Sciences and Letters. Copenhagen, 30 August-4 September, 1992. Invited Reviews. Ed. by PETER SIGMUND. 1993. 675 pages.

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Kommissionær: C. A. Reitzel
København 1995-1997



Indhold

- 44:1. BENT FUGLEDE: Lower Estimates of the Isoperimetric Deficit of Nearly Spherical Domains in $\mathbf{R}^n$ in Terms of Asymmetry. 1995.
65 sider.
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