

## Publications R. Thauer

### Publications of R. K. Thauer (42 pages) (03.01.2022)

Web of Science: h = 87 (over 31,000 citations)

Google Scholar: h = 104 (over 46,000 citations)

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### Theses (3)

**Thauer, R.K.** (1966) Protein-Biosynthese in Ehrlichs-Ascites-Tumor-Zellen unter der Einwirkung von Natulan. Diplomarbeit, Universität Tübingen.

**Thauer, R.K.** (1968) Der Energiestoffwechsel von *Clostridium kluyveri*. Dissertation, Universität Freiburg.

**Thauer, R.K.** (1971) Biochemie und Physiologie von vier neuen Ferredoxin-abhängigen Reaktionen. Habilitationsschrift, Universität Freiburg

### Original Publications (349)

#### Tübingen

**Thauer, R.K., Stöffler, G. und Uehleke, H.** (1965) N-Hydroxylierung von Sulfanilamid zu p-Hydroxylamiobenzolsulfonamid durch Lebermikrosomen. Naunyn-Schmiedebergs Arch. exp. Path. u. Pharmak. 252, 32-42.

**Thauer, R.K., Meiforth, A. und Uehleke, H.** (1965) Methämoglobinbildung durch Sulfonamide im System Leberhomogenat, Erythrocyten, NADPH und Sauerstoff. Naunyn-Schmiedebergs Arch. exp. Path. u. Pharmak. 252, 291-296.

**Stöffler, G., Thauer, R.K. und Uehleke, H.** (1966) Methämoglobinbildung durch p-Hydroxylamino- und p-Nitrosobenzolsulfonamid in Nabelschnur und Erwachsenen-Erythrocyten. Naunyn-Schmiedebergs Arch. exp. Path. u. Pharmak. 252, 359-367.

**Weitzel, G., Schneider, F., Hirschmann, W.D., Durst, J., Thauer, R.K., Ochs, H. und Kummer, D.** (1967) Untersuchungen zum cytostatischen Wirkungsmechanismus der Methylhydrazine, III. Hoppe Seyler's Z. Physiol. Chem. 348, 443-454

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- Decker, K., Thauer, R.K. und Jungermann, K.** (1966) Die Kohlenhydratsynthese in *Clostridium kluyveri*. I. Isotopenversuche zur Biosynthese der Ribose. *Biochem. Z.* 345, 461-471.
- Decker, K., Jungermann, K., Thauer, R.K. and Hunt, S.V.** (1967) Net CO<sub>2</sub> fixation into the S-methyl group of methionine and into the positions 2 and 8 of the purines in *Clostridium kluyveri*. *Biochem. Biophys. Acta* 141, 202-204.
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- Jungermann, K., Thauer, R.K., Wenning, J. and Decker, K.** (1968) Confirmation of unusual stereochemistry of glutamate biosynthesis in *Clostridium kluyveri*. *FEBS Lett.* 1, 74-76.
- Thauer, R.K., Jungermann, K., Wenning, J. and Decker, K.** (1968) Characterization of crotonate grown *Clostridium kluyveri* by its assimilatory metabolism. *Arch. Mikrobiol.* 64, 125-129.
- Thauer, R.K., Jungermann, K., Henninger, H., Wenning, J. and Decker, K.** (1968) The energy metabolism of *Clostridium kluyveri*. *Eur. J. Biochem.* 4, 173-180.
- Jungermann, K., Thauer, R.K., Rupprecht, E., Ohrloff, C. and Decker, K.** (1969) Ferredoxin mediated hydrogen formation from NADPH in a cell-free system of *Clostridium kluyveri*. *FEBS Lett.* 3, 144-146.
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- Thauer, R.K., Rupprecht, E. and Jungermann, K.** (1970) The synthesis of one-carbon units from CO<sub>2</sub> via a new ferredoxin dependent monocarboxylic acid cycle. *FEBS Lett.* 8, 304-307.
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- Thauer, R. K., Rupprecht, E. and Jungermann, K.** (1970) Glyoxylate inhibition of clostridial pyruvate synthase. *FEBS Lett.* 9, 271-273.
- Jungermann, K., Kirchniawy, H. and Thauer, R. K.** (1970) Ferredoxin dependent CO<sub>2</sub> reduction to formate in *Clostridium pasteurianum*. *Biochem. Biophys. Res. Commun.* 41, 682-689.

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**Thauer, R. K., Rupprecht, E., Ohrloff, C., Jungermann, K. and Decker, K.** (1971) Regulation of the reduced nicotinamide adenine dinucleotide phosphate-ferredoxin reductase system in *Clostridium kluuyveri*. J. Biol. Chem. 246, 954-959.

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**Thauer, R. K., Fuchs, G., Schnitker, U. and Jungermann, K.** (1973) CO<sub>2</sub> reductase from *Clostridium pasteurianum*: Molybdenum dependence of synthesis and inactivation by cyanide. FEBS Lett. 38, 45-48.

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**Thauer, R. K.** (1972) CO<sub>2</sub>-reduction to formate by NADPH. The initial step in the total synthesis of acetate from CO<sub>2</sub> in *Clostridium thermoaceticum*. FEBS Lett. 27, 111-115.

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**Thauer, R. K., Käufer, B., Zähringer, M. and Jungermann, K.** (1974) The reaction of the iron-sulfur protein hydrogenase with carbon monoxide. Eur. J. Biochem. 42, 447-452.

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**Jungermann, K., Kirchniawy, H., Katz, N. and Thauer, R. K.** (1974) NADH, a physiological electron donor in clostridial nitrogen fixation. FEBS Lett. 43, 203-206.

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**Thauer, R. K., Fuchs, G. and Käufer, B.** (1975) Reduced ferredoxin: CO<sub>2</sub> oxidoreductase from *Clostridium pasteurianum* effect of ligands to transition metals on the activity and the stability of the enzyme. Hoppe Seyler's Z. f. Physiol. Chem. 356, 653-662.

**Riebeling, V., Thauer, R. K. and Jungermann, K.** (1975) The internal-alkaline pH gradient, sensitive to uncoupler and ATPase inhibitor, in growing *Clostridium pasteurianum*. Eur. J. Biochem. 55, 445-453.

**Thauer, R. K., Käufer, B. and Scherer, P.** (1975) The active species of "CO<sub>2</sub>" utilized in ferredoxin-linked carboxylation reactions. Arch. Microbiol. 104, 237-240.

**Hoffmann, D., Thauer, R. K. and Trebst, A.** (1977) Photosynthetic hydrogen evolution by spinach chloroplasts coupled to a *Clostridium* hydrogenase. Z. Naturforsch. 32c, 257-262.

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**Daniels, L., Fuchs, G., Thauer, R. K. and Zeikus, J. G.** (1977) Carbon monoxide oxidation by methanogenic bacteria. J. Bacteriol. 132, 118-126. \*

**Zeikus, J. G., Fuchs, G., Kenealy, W. and Thauer, R. K.** (1977) Oxidoreductases involved in cell carbon synthesis of *Methanobacterium thermoautotrophicum*. J. Bacteriol. 132, 604-613. \*

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**Badziong, W. and Thauer, R. K.** (1978) Growth yields and growth rates of *Desulfovibrio vulgaris* (Marburg) growing on hydrogen plus sulfate and hydrogen plus thiosulfate as the sole energy sources. Arch. Microbiol. 117, 209-214.\*

**Scherer, P.A. and Thauer, R. K.** (1978) Purification and properties of reduced ferredoxin: CO<sub>2</sub> oxidoreductase from *Clostridium pasteurianum*, a molybdenum iron-sulfur-protein. Eur. J. Biochem. 85, 125-135.

**Schönheit, P., Wäscher, C. and Thauer, R. K.** (1978) A rapid procedure for the purification of ferredoxin from *Clostridia* using polyethyleneimine. FEBS Lett. 89, 219-222.

**Thauer, R. K., Schirmacher, H., Schymanski, W. and Schönheit, P.** (1978) A rapid procedure for the purification of ferredoxin from spinach using polyethyleneimine. Z. Naturforsch. 33c, 495-497.

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**Schönheit, P., Brandis, A. and Thauer, R. K.** (1979) Ferredoxin degradation in growing *Clostridium pasteurianum* during periods of iron deprivation. Arch. Microbiol. 120, 73-76.

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**Badziong, W., Ditter, B. and Thauer, R. K.** (1979) Acetate and carbon dioxide assimilation by *Desulfovibrio vulgaris* (Marburg), growing on hydrogen and sulfate as sole energy source. Arch. Microbiol. 123, 301-305.

**Schönheit, P., Moll, J. and Thauer, R. K.** (1979) Nickel, cobalt, and molybdenum requirement for growth of *Methanobacterium thermoautotrophicum*. Arch. Microbiol. 123, 105-107. \*

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**Diekert, G., Weber, B. and Thauer, R. K.** (1980) Nickel dependence of factor F<sub>430</sub> content in *Methanobacterium thermoautotrophicum*. Arch. Microbiol. 127, 273-278.

**Oberlies, G., Fuchs, G., and Thauer, R. K.** (1980) Acetate thiokinase and the assimilation of acetate in *Methanobacterium thermoautotrophicum*. Arch. Microbiol. 128, 248-252.

**Diekert, G., Gilles, H.-H., Jaenchen, R. and Thauer, R. K.** (1980) Incorporation of 8 succinate per mol nickel into factors F<sub>430</sub> by *Methanobacterium thermoautotrophicum*. Arch. Microbiol. 128, 256-262.

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**Brandis, A., Thauer, R. K. and Stetter, K. O.** (1981) Relatedness of strains ΔH and Marburg of *Methanobacterium thermoautotrophicum*. Zbl. Bakt. Hyg., I Abt. Orig. C 2, 311-317.\*

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**Jaenchen, R., Diekert, G. and Thauer, R. K.** (1981) Incorporation of methionine-derived methyl groups into factor F<sub>430</sub> by *Methanobacterium thermoautotrophicum*. FEBS Lett. 130, 133-136.

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**Schönheit, P., Keweloh, H. and Thauer, R. K.** (1981) Factor F<sub>420</sub> degradation in *Methanobacterium thermoautotrophicum* during exposure to oxygen. FEMS Microbiol. Lett. 12, 347-349.

**Perski, H.-J., Moll, J. and Thauer, R. K.** (1981) Sodium dependence of growth and methane formation in *Methanobacterium thermoautotrophicum*. Arch. Microbiol. 130, 319-321.

**Graf, E. G. and Thauer, R. K.** (1981) Hydrogenase from *Methanobacterium thermoautotrophicum*, a nickel-containing enzyme. FEBS Lett. 136, 165-169.\*

**Kristjansson, J. K., Schönheit, P. and Thauer, R. K.** (1982) Different K<sub>s</sub> values for hydrogen of methanogenic bacteria and sulfate reducing bacteria: An explanation for the apparent inhibition of methanogenesis by sulfate. Arch. Microbiol. 131, 278-282.\*

**Albracht, S. P.J., Graf, E.-G. and Thauer, R. K.** (1982) The EPR properties of nickel in hydrogenase from *Methanobacterium thermoautotrophicum*. FEBS Lett. 140, 311-313.\*

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**Livingston, D. A., Pfaltz, A., Schreiber, J., Eschenmoser, A., Ankel-Fuchs, D., Moll, J., Jaenchen, R. and Thauer, R. K.** (1984) Zur Kenntnis des Faktors F<sub>430</sub> aus methanogenen Bakterien: Struktur des proteinfreien Faktors. *Helv. Chim. Acta* **67**, 334-351.\*

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