Bibliography on Exergy
1800-2004

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Legenda:

A= applications, industrial
AR= air conditioning & refrigeration
BI= biology
CH= chemical engineering
CS= computer simulations
D= distillation & desalination
DI= diagnostics
ES= environmental & solar
F= fundamentals
FD= fluid dynamics
HT= heat transfer
NU= nuclear
PP= powerplants
R= review
RS= reference states
S= sustainability
SS= system synthesis
ST= system theory & societal applications
TD= tutorial & divulgatory
TE= thermoeconomics, exergoeconomics

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Frangopoulos C. A	An Introduction to Environomic Analysis and Optimization of Energy-Intensive Systems	Proc. ECOS '92 (A. Valero and G. Tsatsaronis, eds.), Zaragoza, Spain, June 15 18, pp. 231-239	1992		**ES,TE**
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Fratzscher W.	Die grundsatzliche Bedeutung der Exergie für die technische Termodynamik	Wiss. Zeitsch. der Techn. Hochs. Dresden, vol. 10, no. 1, pp. 159- 181. In German.	1961	a	**F**
Fratzscher W.	Einführung des Exergiebegriffs in die Technische Thermodynamik	In. Wukalowitsch, M. P., Nowikowa, I. I., Technische Thermodynamik, Leipzig, 1962, pp. 483-642. In German.	1961	b	**F**
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Fratzscher W.	Tendenzen des Energieeinsatzes bei der Entwicklung und dem Betrieb verfahrenstechnischer Systeme	Chem. Techn., vol. 27, pp. 205-209. In German.	1975	b	**A**
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Fratzscher W.	Zur Gleichgewichtsberechnung Und Bewertung Gasfoermiger Energietraeger Bei Hochtemperaturprozessen	Hung. J. Of Ind. Chem. 6, 355 - 366.	1978	c	**A**
Fratzscher W.	Energetische Transportverluste fuer Gasfoermige Hochtemperaturtraeger	Chem. Techn. 31, 10, 521 – 524.	1979		**A**
Fratzscher W.	Eine neue Darstellungmöglichkeit komplexer Energieumwandlungsprozesse	Energietechn., vol. 32, no. 3, p. 73. In German.	1982		**ST**
Fratzscher W.	Die Energie in der Stoffwirtschaft und der 2.Hauptsatz der Thermodynamik	Wiss. Z. Th Merseburg 25, 1, 57 – 73.	1983		**A,TD**
Fratzscher W.	The basic significance of exergy for technical thermodynamics	Wiss. Z. Tech. Univ. Dresden, Vol. 10, No. 1, pp. 160-181 (in German)	1961		**F**
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Fratzscher W.	Exergy investigations of technical combustion reactions	Energietechnik, Vol. 12, No. 4, pp. 153.161 (in German)	1961		**CH**
Fratzscher W.	Introduction of exergy notion into the technical thermodynamics	supplement to: Technical Thermo-dynamics ed. Vukalovich M.P., Novikov I.I., Fachbuchverlag, Leipzig, pp. 483-648 (in German)	1962		**F**

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Fratzscher W., Michalek K.	Comparison Between Different Reference Systems for the Calculation of Chemical Exergy	In Proc. Thermodynamic Analysis and Improvement of Energy Systems. Conf., Ruixian, C. et al. {eds}, 5-8 Jun. Pergamon Books	1989		**CH,RS**
Fratzscher W., Beyer J.	Stand und Tendenzen bei der Anwendung und Weiterentwicklung des Exergiebegriffs	Chem. Techn., vol. 33, pp. 1-10. In German.	1981		**TD**
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Fratzscher W., Bock, J.	Bestimmung Der Wirtschaftlichen Groesse Eines Volumenkompensators Fuer Druckwasserreaktoranlagen	Kernenergie 9, 9, 285 - 289.	1966		**NU**
Fratzscher W., Brodjanskij V. M., Michalek K.	Exergie, Theorie und Anwendung	VEB Deutscher Verlag für Grundstoffindustrie, Leipzig. - 348 s. In German.	1986		**A,F,TD**
Fratzscher W., Eckert F.	Exergetische Bewertung der Gebrauchsenergieträger zur innerbetrieblichen Verrechnung in einem Chemiekombinat	Chem. Techn., vol. 25, pp. 264-267. In German.	1973		**A,CH**
Fratzscher W., Eckert F.	Experience gained by the introduction of the exergy concept for standardized evaluation of power and technological processes in an industria chemical complex	Proc. 9th World Energy Conference, Trans., pap. and discuss., Detroit, Mich., sept. 23-27, 1974, vol. 7, pp. 85-102. Publ. by US Natl Comm of the World Energy Conf, New York, NY.	1974		**A,CH**

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Fratzscher W., Emmerich G.	Zeile und Möglichkeiten energetischen Prozeßkopplungen	Energieanw., vol. 26, pp. 206-208. In German.	1977		**ST**
Fratzscher W., Emmerich G., Eisfeldt W.	Grundsaetzliche Ueberlegung zur Waermeversorgung von grossen Industriekomplexen	Energietechnik 28, 6, 212 - 217.	1978		**A**
Fratzscher W., et al.	Probleme der Modellierung des technischen Carbidprozesses. Teil VII: Energie-wirtschaftliche Aspekte	Chem. Techn., vol. 29, pp. 187-190. In German.	1977		**A,CH**
Fratzscher W., et al.	Grundsätzliche Überlegungen zur Wärmeversorgung von großen Industriekomplexen	Energietechn., vol. 28, pp. 212-217. In German.	1978		**A**
Fratzscher W., et al.	Energetische Transportverluste für gasförmige Hochtemperaturenergieträger	Chem. Techn., vol. 31, pp. 521-524. In German.	1979		**A**
Fratzscher W., Felke H.	Einführung in der Kernenergetik	VEB Deutscher Verlag für Grundstoffindustrie, Leipzig. In German.	1971		**NU**
Fratzscher W., Franko O.	Zur thermodynamischen und energiewirtschaftlichen Bewertung des Wärmeaustauschers	Wiss. Zeitsch. der Techn. Hochs. f. Chemie Leuna- Merseburg, vol. 7, no. 2, pp. 88-89. In German.	1965		**HT,TE**
Fratzscher W., Gruhn G.	Die Bedeutung und Bestimmung des Umgebungszustands fuer exergetische Untersuchungen	BWK, v. 17, n.7, pp. 337-341. In German	1965		**RS**

Fratzscher W., Hebecker D.	Zustandsaenderungen Von Gasen Im Dissoziationsbereich	Wiss. Z. Th Merseburg 21, 2, 258 – 269.	1979		**CH**
Fratzscher W., Köhler H.	Ermittlung von Festkostenansätzen für nahtlose Stahlrohre	Chem. Techn., vol. 27, pp. 755-759. In German.	1975		**A**
Fratzscher W., Michalek K.	Comparison Between Different Reference Systems for the Calculation of Chemical Exergy.	Ruixian, C. et al. {eds} Thermodynamic Analysis and Improvement of Energy Systems. Conf. 5 - 8 Jun. Pergamon Books Elmsford, NY, USA.	1989		**RS**
Fratzscher W., Michalek K.	Energy and exergy analysis of a tubular distillation installation	Hung. J. Ind. Chem. Veszprem, Vol. 6, pp. 163-174 (in German)	1978		**A**
Fratzscher W., Michalek K.	Evaluation of the waste energy balances of a large chemical plant	Energieanwendung, Vol. 31, No. 6, pp. 202-207 (in German)	1982		**CH**
Fratzscher W., Michalek K., Domhardt K. H.	Erfassung des Sekundärenergieanfalls und seine Bewertung – Erfahrungen –	Energieanwendung, vol. 37, no. 1, Jan-Feb, pp. 10-14. In German.	1988		**F**
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Sun C-X, Xie J-M.	The Exergy Analysis of a Glass Tank Furnace	Glass Technology v 32, n 6 Dec., p 217-218.	1991		**A**
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Szargut J.	The Losses of Mechanical Work in Energetical Industrial Plants	Gospodarka Cieplna, vol. 2, no. 1, pp. 20-23. In Polish.	1954		**A**
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Szargut J.	The Potential Balance of Chemical Processes	Arch. Budowy Maszyn, vol. 4, no. 4, pp. 87 117. In Polish.	1957	a	**CH**
Szargut J.	Towards a Rational Evaluation of Steam Prices	Gospodarka Cieptaa, v. 5, n. 3, pp. 104-106. In Polish	1957	b	**TE**
Szargut J.	Exergy Balance of Metallurgical Processes	Arch. Hutnictwa, vol. 6, no. 1, pp. 23-60. In Polish.	1961	a	**A**
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Szargut J.	Generalized method of costs distribution in complex processes	Gospodarka Paliwami, Energia, v. 17, n. 34, pp. 4-6 In Polish	1969		**TE**
Szargut J.	Application of exergy for the determination of generalized techno-economical relations	Arch. Budowy Maszyn, vol. 17, no. 1, pp. 105-116. In Polish.	1970	a	**TE**
Szargut J.	Engineering Thermodynamics	NTW, Warzaw. In Polish.	1970	b	**F,TD**
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Szargut J.	Thermal engineering in steel engineering	Wys. “Shlask”, Katowice. In Polish.	1971	c	**A**
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Szargut J.	Analysis of Cumulative Exergy Losses in the Chains of Technological Processes.	Ruixian, C. et al. Eds.: Proc. TAIES 89, Beijing, 5 - 8 Jun. Pergamon Books, Elmsford, NY, USA.	1989	b	**ST**
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Szargut J.	The potential balance resulting from the second law of thermodynamics for physical processes	Arch. Budowy Masz., Vol. 3, No. 3, pp. 231 276 (in Polish)	1956		**F**
Szargut J.	The potential balance of chemical processes	Arch. Budowy Masz., Vol. 4, No. 4, pp. 87-117 (in Polish)	1957		**CH**
Szargut J.	Towards a rational evaluating of steam prices	Gospod. Cieplna, Vol. 5, No. 3, pp. 104-106 (in Polish)	1957		**TE**
Szargut J.	Exergy balance of metallurgical processes	Arch. Hutn., Vol. 6, No. 1, pp. 23-60 (in Polish)	1961		**ST**
Szargut J.	Exergy of typical raw materials and products in metallurgy	Neue Hutte, Vol. 10, No. 5, pp. 266-275 (in German)	1965		**A,RS**
Szargut J.	Minimization of the consumption of natural resources	Bull. Acad. Pol. Sci. Ser.Tech., Vol. 26, No. 6, pp. 41-45 (in Polish)	1978		**ST**
Szargut J.	International problem in second law analysis	Energy, Vol. 5, No. 8/9, pp. 709-718	1980		**ST**
Szargut J., Blaszkiewicz E., Kolenda Z., Tobola J.	Exergy Balance of the Blast Furnace Plant	Problemy Projektowa Hutnictwa, vol. 9, no. 9, pp. 274-281. In Polish.	1961		**A**
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Szargut J., Petela R.	Determination of optimal parameters of steam produced in heat and power plants for heat exchangers	Problemy Projektowe Hutnictwa, vol. 11, no. 8, 233-240. In Polish.	1963		**PP,HT**
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Tabi R., Mesko J. E.	Helium-Topping-Organic Bottoming - Advanced Power Generation System - Exergetic-Energetic Analysis	Proc. 15th IECEC, Energy to the 21st Century, vol. 1, Seattle, WA, Aug 18-22, Publ. by American Institute of Aeronatics and Austronautics (AIAA), New York, NY 1980, Article no. 809127, pp. 660-666	1980		**PP**
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Wall G.	The Use of Natural Resources – a Physical Approach	Report, SMR51-24, International Centre for Theoretical Physics (ICTP), Trieste, Italy, 42 p.	1978	c	**A,ST**
Wall G.	Exergy - A Useful Concept	Ph. D. Thesis, Physical Resource Theory Group, Chalmers University of Technology, S-412 96 Göteborg, Sweden.	1986	a	**F,ST**
Wall G.	Thermoeconomic Optimization of a Heat Pump System	Energy, vol. 11., no. 10, pp. 957-967	1986	b	**AR**
Wall G.	1. Exergy - a useful concept, 2. The Swedish Exergy System, 3. An Example of a Resource Efficient House and Society	Energimagasinet, no. 3, 4 and 5 In Swedish	1987	a	**ST,ES**
Wall G.	Exergy Conversion in the Swedish Society	Resources and Energy, Vol. 9, pp. 55-73.	1987	b	**ST**
Wall G.	Exergy Flows in a Pulp and Paper Mill, in a Steel Plant and Rolling Mill	Proc. IV International Symposium on Second Law Analysis of Thermal Systems, Rome, 25-29 May, pp. 131-140	1987	c	**A**
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