

Curriculum Vitae: Joachim Görres

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Educational Record

Abitur:	Ratsgymnasium Münster, 1972
Vordiplom (B.S. Degree) in Physics:	Universität Münster, 1974
Diplom (M.S. Degree) in Physics:	Universität Münster, 1979
Ph.D. in Nuclear Physics:	Universität Münster, 1983

Positions

08/99 - present	Research Professor, University of Notre Dame
08/95 - 07/99	Research Associate Professor, University of Notre Dame
10/97 - 03/98	Visiting Scientist, Institut für Kernphysik III, Forschungszentrum Karlsruhe
08/94 - 07/95	Associate Faculty Fellow, University of Notre Dame
09/89 - 07/94	Assistant Faculty Fellow, University of Notre Dame
06/86 - 08/89	Research Associate, University of Notre Dame
11/84 - 06/86	Research Investigator, University of Pennsylvania
08/83 - 11/84	Research Associate, Universität Münster

Activities

Member of 2 international conference organizing committees
 Referee for Physical Review, Physical Review Letters, and Nuclear Physics
 Co-working group leader, Deep Underground Science and Engineering Laboratory (DUSEL)

List of Publications: Joachim Görres

PUBLICATIONS IN REFEREED JOURNALS

“A Differentially Pumped and Recirculating Gas Target,” C. Rolfs, J. Görres, H. Lorenz-Wirzba, P. Schmalbrock, H.P. Trautvetter and W. Verhoeven, Nucl. Instr. and Meth. 157, 19 (1978).

“Search for Low Energy Resonances in $^{25}\text{Mg}(p,\gamma)^{26}\text{Al}$,” K. Elix, H.W. Becker, L. Buchmann, J. Görres, K.U. Kettner, M. Wiescher and C. Rolfs, Z. Phys. A293, 261 (1979).

“The Influence of Intense Ion Beams on Gas Target Densities,” J. Görres, K.U. Kettner, H. Kräwinkel and C. Rolfs, Nucl. Instr. and Meth. 177, 261 (1980).

“Nuclear and Astrophysical Aspects of $^{18}\text{O}(p,\gamma)^{19}\text{F}$,” M. Wiescher, H.W. Becker, J. Görres, K.U. Kettner, H.P. Trautvetter, W.E. Kieser, C. Rolfs, R.E. Azuma, K.P. Jackson and J.W. Hammer, Nucl. Phys. A349, 165 (1980).

“The $^3\text{He}(\alpha,\gamma)^7\text{Be}$ Reaction and the Solar Neutrino Problem,” H. Kräwinkel, H.W. Becker, J. Görres, K.U. Kettner, W.E. Kieser, R. Santo, P. Schmalbrock, H.P. Trautvetter, A. Vlioks, C. Rolfs, J.W. Hammer and W.S. Rodney, Z. Phys. A304, 307 (1982).

“Search for Low-Energy Resonances in $^{21}\text{Ne}(p,\gamma)^{22}\text{Na}$,” J. Görres, C. Rolfs, P. Schmalbrock, H.P. Trautvetter and J. Keinonen, Nucl. Phys. A385, 57 (1982).

“A Supersonic Jet Gas Target for γ -Ray Spectroscopy,” H.W. Becker, L. Buchmann, J. Görres, K.U. Kettner, H. Kräwinkel, C. Rolfs, P. Schmalbrock, H.P. Trautvetter and A. Vlioks, Nucl. Instr. and Meth. 198, 277 (1982).

“The $^4\text{He}(^{12}\text{C},\gamma)^{16}\text{O}$ Reaction at Stellar Energies,” K.U. Kettner, H.W. Becker, L. Buchmann, J. Görres, H. Kräwinkel, C. Rolfs, P. Schmalbrock, H.P. Trautvetter and A. Vlioks, Z. Phys. A308, 73 (1982).

“Stellar Reaction Rate of $^{20}\text{Ne}(\alpha,\gamma)^{24}\text{Mg}$,” P. Schmalbrock, H.W. Becker, L. Buchmann, J. Görres, K.U. Kettner, W.E. Kieser, H. Kräwinkel, C. Rolfs, H.P. Trautvetter, J.W. Hammer, R.E. Azuma, Nucl. Phys. A398, 279 (1983).

“Search for γ -Ray Transitions within the ^5Li Groundstate,” P. Schmalbrock, H.W. Becker, L. Buchmann, J. Görres, C. Rolfs, H.P. Trautvetter and W.S. Rodney, Z. Phys. A310, 243 (1983).

“Study of ^{11}C via the $^{10}\text{B}(p,\gamma)$ Reaction,” M. Wiescher, R.N. Boyd, S.L. Blatt, L.J. Rybarcyk, J.A. Spizuoco, R.E. Azuma, T.H. Clifford, J.D. King, J. Görres, C. Rolfs and A. Vlioks, Phys. Rev. C28, 1431 (1983).

“Proton Induced Direct Capture on ^{21}Ne and ^{22}Ne ,” J. Görres, H.W. Becker, L. Buchmann, C. Rolfs, P. Schmalbrock, H.P. Trautvetter, A. Vlioks, J.W. Hammer and T.R. Donoghue, Nucl. Phys. A408, 372 (1983).

“Ion Beams With Very High Energy Resolution,” J. Görres and C. Rolfs, Nucl. Instr. and Meth. A236, 203 (1985).

- “Capture Amplitudes in the $^{12}\text{C}(\alpha,\gamma)^{16}\text{O}$ Reaction,” A. Redder, H.W. Becker, J. Görres, M. Hilgemeier, A. Kraus, C. Rolfs, U. Schröder, H.P. Trautvetter, K. Wolke, T.R. Donoghue, T.C. Rinckel and J.W. Hammer, *Phys. Rev. Lett.* 55, 1262 (1985).
- “The Influence of Intense Ion Beams on the Density of Supersonic Jet Gas Targets,” J. Görres, H.W. Becker, A. Kraus, A. Redder, C. Rolfs and H.P. Trautvetter, *Nucl. Instr. and Meth.* A241, 334 (1985).
- “A New Estimate of the $^{19}\text{Ne}(p,\gamma)^{20}\text{Na}$ and $^{15}\text{O}(\alpha,\gamma)^{19}\text{Ne}$ Reaction Rates at Stellar Energies,” K. Langanke, M. Wiescher, W.A. Fowler and J. Görres, *Ap. J.* 301, 629 (1986).
- “Explosive Hydrogen Burning in Novae,” M. Wiescher, J. Görres, F.-K. Thielemann and H. Ritter, *Astron. Astrophys.* 160, 56 (1986).
- “Alpha-Burning of ^{14}O ,” M. Wiescher, V. Harms, J. Görres and F.-K. Thielemann, *Ap. J.* 316, 162 (1987).
- “Structure of the Very Neutron-Deficient Ge Region: ^{64}Ge and ^{65}Ge ,” J. Görres, T. Chapuran, D.P. Falmouth and J.W. Arrison, *Phys. Rev. Lett.* 58, 662 (1987).
- “Level Structure of ^{20}Na near the Proton Threshold,” L.O. Lamm, C.P. Browne, J. Görres, M. Wiescher and A.A. Rollefson, *Z. Phys.* A327, 239 (1987).
- “Stellar Reaction Rate of $^{14}\text{N}(p,\gamma)^{15}\text{O}$ and Hydrogen Burning in Massive Stars,” U. Schröder, H.W. Becker, G. Bogaert, J. Görres, C. Rolfs, H.P. Trautvetter, R.E. Azuma, C. Campbell, J.D. King and J. Vise, *Nucl. Phys.* A467, 240 (1987).
- “ $^{17}\text{F}(p,\gamma)^{18}\text{Ne}$ in Explosive Hydrogen Burning,” M. Wiescher, J. Görres and F.-K. Thielemann, *Ap. J.* 326, 384 (1988).
- “ $^{29}\text{P}(p,\gamma)^{30}\text{S}$ in Explosive Hydrogen Burning,” M. Wiescher and J. Görres, *Z. Phys.* A329, 121 (1988).
- “The Fabrication and Properties of a ^{22}Na Target,” M. Wiescher, J. Görres, K.L. Kratz, B. Leist, K.H. Chang, B.W. Filippone, L.W. Mitchell, M.J. Savage and R.B. Vogelaar, *Nucl. Instr. and Meth.* A267, 242 (1988).
- “The First Excited State of ^{23}Al and Its Influence on $^{22}\text{Mg}(p,\gamma)^{23}\text{Al}$,” M. Wiescher, J. Görres, B. Sherrill, M. Mohar, J.S. Winfield and B.A. Brown, *Nucl. Phys.* A484, 90 (1988).
- “Channel Selection for In-Beam γ -Ray Spectroscopy Using a 4π Phoswich Array,” T. Chapuran, D.P. Balamuth, J.W. Arrison and J. Görres, *Nucl. Instr. and Meth.* A272, 767 (1988).
- “The $^{70}\text{Zn}(p,t)^{68}\text{Zn}$ Reaction at $E_p=35$ MeV,” M. Carchidi, M. Burlein, H.T. Fortune, G.P. Gilfoyle, R. Gilman, J. Görres, P. Kutt, S. Saini, J.W. Sweet, R.T. Kouzes and R. Sherr, *Phys. Rev.* C38, 2550 (1988).
- “Search for Resonances in the $^{22}\text{Na}(p,\gamma)^{23}\text{Mg}$ Reaction,” J. Görres, M. Wiescher, S. Graff, R.B. Vogelaar, B.W. Filippone, C.A. Barnes, S.E. Kellogg, T.R. Wang and B.A. Brown, *Phys. Rev.* C38, 8 (1989).

“The Hot pp-Chain in Low Metallicity Objects,” M. Wiescher, J. Görres, S. Graff, L. Buchmann and F.-K. Thielemann, *Ap. J.* 343, 352 (1989).

“Hydrogen Burning of ^{23}Na in the NeNa Cycle,” J. Görres, M. Wiescher and C. Rolfs, *Ap. J.* 343, 365 (1989).

“rp-Process Reactions in the Calcium Region,” M. Wiescher and J. Görres, *Ap. J.* 346, 1041 (1989).

“A Modified Position Sensitive Proportional Counter with Improved Particle Identification Capability,” L.O. Lamm, S.M. Graff, M. Wiescher, J. Görres, C.P. Browne and U. Giesen, *Nucl. Instr. and Meth.* A281, 143 (1989).

“Structure of the $N = Z + 1$ Nucleus ^{69}Se ,” J.W. Arrison, D.P. Balamuth, T. Chapuran, D.G. Popescu, J. Görres and U.J. Hüttmeier, *Phys. Rev.* C40, 2010 (1989).

“Proton Capture on ^{28}Si and its Astrophysical Implications,” S. Graff, J. Görres, M. Wiescher, R.E. Azuma, J. King, J. Vise, G.H. Hardie and T.R. Wang, *Nucl. Phys.* A510, 346 (1990).

“The Level Structure of ^{20}Na and the Impact Upon the Stellar Reaction Rate for $^{19}\text{Ne}(p,\gamma)^{20}\text{Na}$,” L.O. Lamm, C.P. Browne, J. Görres, S.M. Graff, M. Wiescher, A.A. Rollefson and B.A. Brown, *Nucl. Phys.* A510, 503 (1990).

“Capture Reactions on ^{14}C in Nonstandard Big Bang Nucleosynthesis,” M. Wiescher, J. Görres and F.-K. Thielemann, *Ap. J.* 363, 340 (1990).

“Proton Capture on ^{14}C and its Astrophysical Implications,” J. Görres, S. Graff, M. Wiescher, R.E. Azuma, C.A. Barnes, H.W. Becker and T.R. Wang, *Nucl. Phys.* A517, 329 (1990).

“Kernastrophysik II,” M. Wiescher, J. Görres and H.J. Haubold, *Die Sterne* 66, 343 (1990).

“Radioactive Ion Beams and Explosive Nucleosynthesis,” J. Görres and M. Wiescher, *Nucl. Instr. and Meth.* B56/57, 536 (1991).

“The Reaction Branching $^{31}\text{P}(p,\gamma)^{31}\text{P}(p,\alpha)$ in the rp-Process,” C. Iliadis, U. Giesen, J. Görres, S. Graff, M. Wiescher, R.E. Azuma, M. Buckby, J. King, C.A. Barnes and T.R. Wang, *Nucl. Phys.* A533, 153 (1991).

“A Measurement of the $^{14}\text{C}(n,\gamma)^{15}\text{C}$ Cross Section at a Stellar Temperature of $kT=23.3$ keV,” H. Beer, M. Wiescher, F. Käppeler, J. Görres and P.E. Koehler, *Ap. J.* 387, 258 (1992).

“Direct Proton Capture on ^{32}S ,” C. Iliadis, U. Giesen, J. Görres, M. Wiescher, M. Graff, R.E. Azuma and C.A. Barnes, *Nucl. Phys.* A539, 97 (1992).

“The Reaction $^{36}\text{Ar}(p,\gamma)^{37}\text{K}$ in Explosive Hydrogen Burning,” C. Iliadis, J.G. Ross, J. Görres, M. Wiescher, S.M. Graff and R.E. Azuma, *Phys. Rev.* C45, 2989 (1992).

“ β -delayed Proton Decay of ^{20}Mg and its Astrophysical Implications,” J. Görres, M. Wiescher, K. Scheller, D.J. Morrissey, B.M. Sherrill, D. Bazin and J.A. Winger, *Phys. Rev.* C46, 833 (1992).

“Alpha Capture on ^{14}C and its Astrophysical Implications,” J. Görres, S.M. Graff, M. Wiescher, R.E. Azuma, C.A. Barnes and T.R. Wang, Nucl. Phys. A548, 414 (1992).

“Reaction Cycles and Flow Impedances in the rp-Process,” M. Wiescher, J. Görres, C. Iliadis and L. van Wormer, Revista Mexicana de Fisica 38, Suplemento 2, 215 (1992).

“The Astrophysical Implications of Low Energy Resonances in $^{22}\text{Ne} + \alpha$,” U. Giesen, C.P. Browne, J. Görres, S. Graff, C. Iliadis, H.P. Trautvetter, M. Wiescher, V. Harms, K.L. Kratz, B. Pfeiffer, R.E. Azuma, M. Buckby and J.D. King, Nucl. Phys. A561, 95 (1993).

“Explosive Hydrogen Burning of ^{31}P ,” C. Iliadis, J. Görres, J.G. Ross, K.W. Scheller, M. Wiescher, C. Grama, T. Schange, H.P. Trautvetter and H.C. Evans, Nucl. Phys. A559, 83 (1993).

“The Reaction $^{36}\text{Ar}(p,\gamma)^{37}\text{K}$ in Explosive Hydrogen Burning,” C. Iliadis, J.G. Ross, J. Görres, M. Wiescher, S.M. Graff and R.E. Azuma, Phys. Rev. C45, 2989 (1993).

“The Influence of Low Energy Resonances on the Reaction Rate of $^{18}\text{O}(\alpha,\gamma)^{22}\text{Ne}$,” U. Giesen, C.P. Browne, J. Görres, J.G. Ross, M. Wiescher, R.E. Azuma, J.D. King, J.B. Vise and M. Buckby, Nucl. Phys. A567, 146 (1994).

“Cross Section and Astrophysical S-Factor for the $^{13}\text{C}(p,\gamma)^{14}\text{N}$ Reaction” J.D. King, R.E. Azuma, J.B. Vise, J. Görres, C. Rolfs, H.P. Trautvetter and A.E. Vlieks, Nucl. Phys. A567, 354 (1994).

“Explosive Hydrogen Burning of ^{35}Cl ,” C. Iliadis, J. Görres, J.G. Ross, K.W. Scheller, M. Wiescher, G. Roters, H.P. Trautvetter, R.E. Azuma and H.C. Evans, Nucl. Phys. A571, 132 (1994).

“Study of the β -Delayed Neutron Decay of ^{18}N ,” K.W. Scheller, J. Görres, J.G. Ross, M. Wiescher, R. Harkewicz, D.J. Morrissey, B.M. Sherrill, M. Steiner, N.A. Orr and J.A. Winger, Phys. Rev. C49, 46 (1994).

“The Reaction Rate for $^{31}\text{S}(p,\gamma)^{32}\text{Cl}$ and its Influence on the SiP-Cycle in Hot Stellar Hydrogen Burning,” S. Vouzoukas, C.P. Browne, U. Giesen, J. Görres, S.M. Graff, C. Iliadis, L.O. Lamm, J. Meissner, J.G. Ross, K.W. Scheller, L. van Wormer, M. Wiescher, A.A. Rollefson and H. Herndl, Phys. Rev. C50, 1185 (1994).

“Reaction Rates and Reaction Sequences in the rp-Process,” L. van Wormer, J. Görres, C. Iliadis, M. Wiescher and F.-K. Thielemann, Ap. J. 432, 326 (1994).

“Neutron Sources in Stellar Helium Burning and s-Process Nucleosynthesis in Massive Stars,” M. Wiescher, U. Giesen, J. Görres, F. Käppeler, I. Baraffe, M. El Eid, M. Busso, C. Raitieri and R. Gallino, Revista Mexicana de Fisica 40 (1994).

“Lifetimes of Levels in ^{20}F ,” J. Görres, J. Meissner, J.G. Ross, K.W. Scheller, S. Vouzoukas, M. Wiescher and J.D. Hinnefeld, Phys. Rev. C50, R1270 (1994).

“Neutron Sources in Stellar Helium Burning and s-Process Nucleosynthesis in Massive Stars,” F. Käppeler, M. Wiescher, U. Giesen, J. Görres, I. Baraffe, M. El Eid, M. Busso, C. Raitieri and R. Gallino, Ap. J. 437, 396 (1994).

- “Bridging the Waiting Points - The Role of Two-Proton Capture Reactions in the rp-Process,” J. Görres, M. Wiescher and F.-K. Thielemann, *Phys. Rev. C* 51, 392 (1995).
- “Study of the β -Delayed Neutron Decay of ^{17}C and ^{18}C ,” K.W. Scheller, J. Görres, S. Vouzoukas, M. Wiescher, B. Pfeiffer, K.-L. Kratz, D.J. Morrissey, B.M. Sherrill, M. Steiner, M. Hellström and J.A. Winger, *Nucl. Phys. A* 582, 109 (1995).
- “Excitation energies in ^{20}Na above the proton threshold,” J. Görres and M. Wiescher, *Phys. Rev. C* 52, 412 (1995).
- “A direct measurement of the $^{18}\text{F}(p,\alpha)^{15}\text{O}$ reaction,” R. Coszach, M. Cogneau, C.R. Binon, T. Davinson, P. Decrock, Th. Delbar, M. Gaelens, W. Galster, J. Görres, J.S. Graulich, R. Irvine, D. Labar, P. Leleux, M. Loiselet, C. Michotte, R. Neal, G. Ryckewaert, A.S. Schotter, J. Vanhorenbeeck, J. Vervier, M. Wiescher and Ph. Woods, *Phys. Lett. B* 353, 184 (1995).
- “Proton capture reactions in the rp-process,” H. Herndl, J. Görres, M. Wiescher, B.A. Brown and L. Van Wormer, *Phys. Rev. C* 53, 1078 (1995).
- “Indirect study of low-energy resonances in $^{31}\text{P}(p,\alpha)^{28}\text{Si}$ and $^{35}\text{Cl}(p,\alpha)^{32}\text{S}$,” J.G. Ross, J. Görres, C. Iliadis, S. Vouzoukas, M. Wiescher, R.B. Vogelaar, S. Utku, N.P.T. Bateman and P.D. Parker, *Phys. Rev. C* 52, 1681 (1995).
- “Two-neutron capture reactions in supernovae neutrino bubbles,” J. Görres, H. Herndl, I.J. Thompson and M. Wiescher, *Phys. Rev. C* 52, 2231 (1995).
- “Neutron capture cross section of ^{18}O and its astrophysical implications,” J. Meissner, H. Schatz, J. Görres, H. Herndl, M. Wiescher, H. Beer and F. Käppeler, *Phys. Rev. C* 53, 459 (1996).
- “The endpoint of the rp-process,” H. Schatz, A. Aprahamian, B.A. Brown, J. Görres, H. Herndl, K.-L. Kratz, P. Möller, B. Pfeiffer, T. Rauscher, J.F. Rembges, F.-K. Thielemann, M. Wiescher and L. van Wormer, *Nucl. Phys. A* 621, 417c (1997).
- “ $^{31}\text{S}(p,\gamma)^{32}\text{Cl}$ reaction in explosive hydrogen burning,” A. Lefebvre, S. Vouzoukas, P. Aguer, G. Bogaert, A. Coc, A. Denker, F. de Oliveira, S. Fortier, J. Görres, J. Kiener, J.M. Maison, M.G. Porquet, L. Rosier, V. Tatischeff, J.P. Thibaud and M. Wiescher, *Nucl. Phys. A* 621, 199c (1997).
- “First measurement of excited states in the very proton rich nucleus ^{24}Si and the consequences for ^{22}Na nucleosynthesis in novae,” H. Schatz, J. Görres, H. Herndl, E. Stech, P. Tischhauser, M. Wiescher, A. Bacher, G. Berg, T. Black, S. Choi, C. Foster, X. Jiang and E. Stephenson, *Phys. Rev. Lett.* 79, 3845 (1997).
- “The $^{18}\text{F}(p,\alpha)$ reaction and its astrophysical implications,” J.S. Graulich, F. Binon, W. Bradfield-Smith, M. Cogneau, R. Coszach, T. Davinson, Th. Delbar, M. Gaelens, W. Galster, J. Görres, D. Labar, P. Leleux, M. Loiselet, J. McKenzie, R. Neal, G. Ryckewaert, A.C. Shotter, J. Vanhorenbeeck, J. Vervier, M. Wiescher and Ph. Woods, *Nuclear Physics A* 626, 751 (1997).
- “Lifetime of ^{44}Ti as a probe for supernova models,” J. Görres, J. Meissner, H. Schatz, E. Stech, P. Tischhauser, M. Wiescher, D. Bazin, R. Harkewicz, M. Hellström, B. Sherrill, M. Steiner, R.N. Boyd, L. Buchmann, D.H. Hartmann and J.D. Hinnefeld, *Phys. Rev. Lett.* 80, 2554 (1998).

“Reaction Parameter for rp-Process Calculating Above $Z=32$,” H. Schatz, A. Aprahamian, J. Görres, M. Wiescher, F.-K. Thielemann, T. Rauscher, J. F. Rembges, B. Pfeiffer, P. Möller, K.L. Kratz, H. Herndl, B.A. Brown and H. Rebel, *Physics Reports* 294, 167 (1998).

“New isomer in ^{80}Y ,” J. Döring, H. Schatz, A. Aprahamian, R.C. de Haan, J. Görres, M. Wiescher, W.B. Walters, J. Rikowska, L.T. Brown, C.N. Davids, C.J. Lister, D. Seweryniak and B. Foy, *Phys. Rev. C* 57, 1 (1998).

“Study of the $^{56}\text{Ni}(d,p)^{57}\text{Ni}$ Reaction and the Astrophysical $^{56}\text{Ni}(p,\gamma)^{57}\text{Cu}$ Reaction Rate,” K.E. Rehm, F. Borasi, C.L. Jiang, D. Ackermann, I. Ahmad, B.A. Brown, F. Brumwell, C.N. Davids, P. Decrock, S.M. Fischer, J. Görres, J. Greene, G. Hackmann, B. Harss, D. Henderson, W. Henning, R.V.F. Janssens, G. McMichael, V. Nanal, D. Nisius, J. Nolen, R.C. Pardo, M. Paul, P. Reiter, J.P. Schiffer, D. Seweryniak, R.E. Segel, M. Wiescher and A.H. Wuosmaa, *Physics Rev. Lett.* 80, 676 (1998).

“The Breakout from the Hot CNO Cycle,” S. Utku, J.G. Ross, N. Bateman, D.W. Bardayan, A.A. Chen, J. Görres, A.J. Howard, P.D. Parker, M.S. Smith, R.B. Vogelaar, M. Wiescher and K. Yildiz, *Phys. Rev. C* 57, 2731 (1998).

“Lifetime of levels in ^{37}K ,” J.P. Hinnefeld, J. Görres, J. Meissner, P. Tischhauser, M. Wiescher, *Phys. Rev. C* 58, 2563 (1998).

“Low-energy radioactive ion beam induced nuclear reactions,” A.N. Ostrowski, A.C. Shotter, W. Bradfield-Smith, A.M. Laird, A. diPietro, T. Davinson, S. Morrow, P.J. Woods, S. Cherubini, W. Galster, J.S. Graulich, P. Leleux, L. Michel, A. Ninane, J. Vervier, M. Aliotta, C. Cali, F. Cappazzello, A. Cunsolo, C. Spitaleri, J. Görres, M. Wiescher, J. Rahighi and J. Hinnefeld, *J. Phys. G* 24, 1553 (1998).

“Radioactive decay of ^{80}Y and low-lying states in ^{80}Sr ,” J. Döring, A. Aprahamian, R.C. deHaan, J. Görres, H. Schatz, M. Wiescher, W.B. Walters, L.T. Brown, C.N. Davids, C.J. Lister, and D. Deweryniak, *Phys. Rev. C* 59, 59-70 (1999).

“Nuclear physics far from stability and explosive nucleosynthesis processes,” K.-L. Kratz, B. Pfeiffer, M. Hannawald, F.-K. Thielemann, J. Görres, H. Schatz, and M. Wiescher, *Nuovo Cim.* III-A, 1043-1054 (1998).

“Break-Out Reactions from the CNO Cycles,” M. Wiescher, J. Görres, H. Schatz, *J. of Physics G* 25, R133-R161 (1999).

“Investigation of (α,p) reactions using a Radioactive Beam,” W. Bradfield-Smith, T. Davinson, A. DiPietro, A.M. Laird, A.N. Ostrowski, A.C. Shotter, P.J. Woods, S. Cherubini, W. Galster, J.S. Graulich, P. Leleux, L. Michel, A. Ninane, J. Vervier, J. Görres, M. Wiescher, J. Rahighi, and J. Hinnefeld, *Nuclear Instruments and Methods* 425, 1-7 (1999).

“Breakout from the hot CNO cycle via the $^{18}\text{Ne}(\alpha,p)^{21}\text{Na}$ reaction,” W. Bradfield-Smith, T. Davinson, A. DiPietro, A.M. Laird, A.N. Ostrowski, A.C. Shotter, P.J. Woods, S. Cherubini, W. Galster, J.S. Graulich, P. Leleux, L. Michel, A. Ninane, J. Vervier, J. Görres, M. Wiescher, J. Rahighi, and J. Hinnefeld, *Phys. Rev. C* 59, 3402-3409 (1999).

“Measurements of proton radiative capture cross sections relevant to the astrophysical rp- and γ -process,” F.R. Chloupek, A.St.J. Murphy, R.N. Boyd, A.L. Cole, J. Görres, R.T. Guray, G. Raimann, J.J. Zach, T. Rauscher, J.V. Schwarzenberg, P. Tischhauser, and M. Wiescher, Nucl. Phys. A 652, 391-405 (1999).

“ $T_Z = -1$ nuclei in the rp-process – astrophysical implications and a new experimental approach,” H. Schatz, A. Bacher, G.P.A. Berg, T.C. Black, S. Choi, C.C. Foster, J. Görres, K. Jiang, B. Lozowski, E. Stech, E.J. Stephenson, P. Tischhauser, and M. Wiescher, Nucl. Phys. A654, 924c-927c (1999).

“Reaction rates for neutron capture reactions to C, N, and isotopes to the neutron rich side of stability,” H. Herndl, R. Hofinger, J. Jank, H. Oberhammer, J. Görres, M. Wiescher, T.-K. Thielemann, B.A. Brown, Phys. Rev. C60, 064614-1 – 046614-12 (1999).

“Nuclear structure near the particle drip-lines and explosive nucleosynthesis processes,” K.-L. Kratz, J. Görres, B. Pfeiffer, and M. Wiescher, J. Radioanalytical and Nucl. Chem. 243, 133-140 (2000).

“Nuclear structure and galactic γ -ray activity,” J. Görres, J. Res. Nat. Inst. Stand. Tech. 105, 101-105 (2000).

“Capture of α particles by isospin-symmetric nuclei,” T. Rauscher, F.-K. Thielemann, J. Görres, and M. Wiescher, Nucl. Phys. A 675, 695-721 (2000).

“Experiments with a radioactive ^{56}Ni beam,” K.E. Rehm, F. Borasi, C.L. Jiang, D. Ackermann, I. Ahmad, F. Brumwell, C.N. Davids, P. Decrock, S.M. Fischer, J. Görres, J.P. Greene, G. Hackmann, B. Harss, D. Henderson, W. Henning, R.V.F. Janssens, G. McMichael, V. Nanal, D. Nisius, J. Nolen, R.C. Pardo, M. Paul, P. Reiter, J.P. Schiffer, D. Deweryniak, R.E. Segel, I. Wiedenhöver, M. Wiescher, and A.H. Wuosmaa, Nuclear Instruments and Methods 449, 208-216 (2000).

“Low-energy resonances in $^{14}\text{N}(\alpha, \gamma)^{18}\text{F}$ and their astrophysical implications,” J. Görres, C. Arlandini, U. Giesen, M. Heil, F. Käppeler, H. Leiste, E. Stech, and M. Wiescher, Phys. Rev. C62, 055801 (2000).

“7.07 MeV resonant state in ^{19}Ne reexamined through a new measurement of the $^{18}\text{F}(p, \alpha)^{15}\text{O}$ reaction and $^{18}\text{F}(p, p)$ scattering,” J.-S. Graulich, S. Cherubini, R. Coszach, S. El Hajjami, W. Galster, P. Leleux, W. Bradfield-Smith, T. Davinson, A. Di Pietro, A.C. Shotter, J. Görres, M. Wiescher, F. Binion, and J. Vanhorenbeeck, Phys. Rev. C63, 011302(R) (2000).

“Topics in stellar He burning,” J. Görres, C. Arlandini, U. Giesen, M. Heil, F. Käppeler, H. Leiste, E. Stech, and M. Wiescher, Nucl. Phys. A 688, 225c-228c (2001).

“Proton radiative capture cross sections on ^{102}Pd at energies of astrophysical interest,” N. Özkan, A. St.J. Murphy, R.N. Boyd, A.L. Cole, R. deHaan, M. Famiano, J. Görres, R.T. Guray, M. Howard, L. Sahin, and M. Wiescher, Nucl. Phys. A 688, 459-461 (2001).

“Breakout from the hot-CNO cycle via the $^{18}\text{Ne}(\alpha, p)^{21}\text{Na}$ reaction,” D. Groombridge, W. Bradfield-Smith, S. Cherubini, T. Davinson, A. Di Pietro, P. Figuera, J. Görres, J.S. Graulich, A.M. Laird, P. Leleux, A. Musumarra, A. Ninane, A.N. Ostrowski, J. Rahighi, H. Schatz, A.C. Shotter, M. Wiescher, and P.J. Woods, Nucl. Phys. A 688, 472-474 (2001).

“A measurement of the $^{13}\text{C}(\alpha,\alpha)$ differential cross section and its application to the $^{13}\text{C}(\alpha,n)$ reaction,” M. Heil, A. Couture, J. Daly, R. Detwiler, J. Görres, G. Hale, F. Käppeler, R. Reifarth, U. Giesen, E. Stech, P. Tischhauser, C. Ugalde, and M. Wiescher, Nucl. Phys. A 688, 499-501 (2001).

“Restrictions on the stellar $^{12}\text{C}(\alpha,\gamma)^{16}\text{O}$ rate from elastic α - ^{12}C scattering ,” L. Buchmann, P. Tischhauser, R.E. Azuma, R. Detwiler, U. Giesen, J. Görres, M. Heil, J. Hinnefeld, F. Käppeler, J.J. Kolata, H. Schatz, A. Shotter, E. Stech, S. Vouzoukas, and M. Wiescher, Nucl. Phys. A 688, 259-262 (2001).

“Using sub-Coulomb transfer reactions to study the low-energy $^{12}\text{C}(\alpha,\gamma)^{16}\text{O}$ S -factor ,” C.R. Brune, J. Daly, R. Detwiler, B. Fisher, W.H. Geist, J. Görres, H.J. Karwowski, R.W. Kavanagh, D.S. Leonard, P. Tischhauser, K.D. Veal, and M. Wiescher, Nucl. Phys. A 688, 263-266 (2001).

“The 7.07 MeV resonance in ^{19}Ne revisited,” J.-S. Graulich, S. Cherubini, R. Coszach, S. El Hajjami, W. Galster, P. Leleux, W. Bradfield-Smith, T. Davinson, A. Di Pietro, A.C. Shotter, J. Görres, M. Wiescher, F. Binion, and J. Vanhorenbeeck, Nucl. Phys. A 688, 138c-141c (2001).

“Shell model based thermonuclear (p,γ) rates in the pf-shell,” J.L. Fisker, J. Görres, K. Langanke, G. Martinez-Pinedo, and M. Wiescher, Nucl. Phys. A 688, 453c-455c (2001).

“Shell-model based reaction rates for rp-process nuclei in the mass range $A = 44$ -63,” J.L. Fisker, V. Barnard, J. Görres, K. Langanke, G. Martinez-Pinedo, M.D. Wiescher, Atomic Data and Nuclear Data Tables 79, 1 (2001).

“Elastic $\alpha - ^{12}\text{C}$ Scattering and the $^{12}\text{C}(\alpha,\gamma)^{16}\text{O}$ $E2$ S Factor,” P. Tischhauser, R.E. Azuma, L. Buchmann, R. Detwiler, U. Giesen, J. Görres, M. Heil, J. Hinnefeld, F. Käppeler, J.J. Kolata, H. Schatz, A. Shotter, E. Stech, S. Vouzoukas, and M. Wiescher, Phys. Rev. Lett. 88, 072501 (2002).

“Cross section measurements of the $^{102}\text{Pd}(p,\gamma)^{103}\text{Ag}$, $^{116}\text{Sn}(p,\gamma)^{117}\text{Sb}$, and $^{112}\text{Sn}(\alpha,\gamma)^{116}\text{Te}$ reactions relevant to the astrophysical rp- and γ -processes,” N. Özkan, A. St.J. Murphy, R.N. Boyd, A.L. Cole, M. Famiano, R.T. Güray, M. Howard, L. Şahin, J.J. Zach, R. deHaan, J. Görres, M.C. Wiescher, M.S. Islam, and T. Rauscher, Nucl. Phys. A 710, 469-485 (2002).

“M1 and Gamow-Teller transitions in T-1/2 nuclei ^{23}Na and ^{23}Mg ,” Y. Fujita, Y. Shimbara, I. Hamamoto, T. Adachi, G.P.A. Berg, H. Fujimura, H. Fujita, J. Görres, K. Hara, K. Hatanaka, J. Kamiya, T. Kawabata, Y. Kitamura, Y. Shimizu, M. Uchida, H.P. Yoshida, M. Yoshifuku, and M. Yosoi, Phys. Rev. C 66, 044313 (2002).

“Breakout from the hot CNO cycle via the $^{18}\text{Ne}(\alpha,p)^{21}\text{Na}$ reaction. II. Extended energy range $E_{c.m.}\sim 1.7$ -2.9 MeV,” D. Groombridge, A.C. Shotter, W. Bradfield-Smith, S. Cherubini, T. Davinson, A. Di Pietro, J. Görres, J.S. Graulich, A.M. Laird, P. Leleux, A. Musumarra, A. Ninane, A.N. Ostrowski, J. Rahighi, H. Schatz, M. Wiescher, and P.J. Woods, Phys. Rev. C 66, 055802 (2002).

“Nuclear-reaction rates in the thermonuclear runaway phase of accreting neutron stars,” M. Wiescher, V. Barnard, J.L. Fisker, J. Görres, K. Langanke, G. Martinez-Pinedo, F. Rembges, H. Schatz, and F.K. Thielemann, Eur. Phys. J. A 15, 59-63 (2002).

“Rotational and vibrational excitations in ^{84}Zr studied through in-beam and ^{84}Nb β -decay spectroscopy,” J. Döring, R.A. Kaye, A. Aprahamian, M.W. Cooper, J. Daly, C.N. Davids, R.C. de Haan, J. Görres, S.R. Leshner, J.J. Ressler, D. Seweryniak, E.J. Stech, A. Susalla, S.L. Tabor, J. Uusitlo, W.B. Walters, and M. Wiescher, *Phys. Rev. C* 67, 014315 (2003).

“Resonance states in ^{22}Mg for reaction rates in the rp-process,” G.P.A. Berg, K. Hatanaka, M. Wiescher, H. Schatz, T. Adachi, A.D. Bacher, C.C. Foster, Y. Fujita, H. Fujita, K. Fujita, J. Görres, Ch. Herman, J. Kamiya, N. Sakamoto, Y. Sakemi, Y. Shimbara, Y. Shimizu, E.J. Stephenson, T. Wakasa, and M. Yosoi, *Nucl. Phys. A* 718, 608c (2003).

“Counting ^{44}Ti nuclei from the $^{40}\text{Ca}(\alpha, \gamma)^{44}\text{Ti}$ reaction,” M. Paul, C. Feldstein, I. Ahmad, D. Berkovits, C. Bordeanu, J. Caggiano, S. Ghelberg, J. Görres, J. Greene, M. Hass, A. Heinz, D. Henderson, S.K. Hui, R.V.F. Janssens, C.L. Jiang, S. Jiang, Y. Nirel, R.C. Pardo, T. Pennington, K.E. Rehm, G. Savard, G. Verri, R. Vondrasek, I. Wiedenhover, and M. Wiescher, *Nucl. Phys. A* 718, 239c (2003).

“Nucleosynthesis in TP-AGB stars and the production of ^{19}F ,” J. Görres, S. Dababneh, A. Couture, M. Heil, F. Käppeler, H. Leiste, M. Lugaro, C. Ugalde, and M. Wiescher, *Nucl. Phys. A* 718, 155c (2003).

“Stellar He burning of ^{18}O : A measurement of low-energy resonances and their astrophysical implications,” S. Dababneh, M. Heil, F. Käppeler, J. Görres, M. Wiescher, R. Reifarth, and H. Leiste, *Phys. Rev. C* 68, 025801 (2003).

“Gamma spectroscopy using two Clover detectors in close geometry,” S. Dababneh, N. Patronis, P.A. Assimakopoulos, J. Görres, M. Heil, F. Käppeler, D. Karamanis, S. O’Brien, and R. Reifarth, *Nucl. Instr. and Meth. A* 517, 230-239 (2004).

“Complete structure determination of the astrophysically important nucleus Na-20 below the proton threshold,” D. Seweryniak, P.J. Woods, B. Blank, M.P. Carpenter, T. Davinson, S.J. Freeman, J. Görres, A. Heinz, R.V.F. Janssens, H. Mahmud, T.L. Khoo, Z. Liu, G. Mukherjee, E. Rehm, F. Sarazin, J. Shergur, M. Shawcross, S. Sinha, and A. Woehr, *Phys. Lett. B* 590(3-4), 170-175 (2004).

“The $N = Z$ rp-process waiting-point nucleus ^{68}Se and its astrophysical implications,” A. Wöhr, A. Aprahamian, P. Boutachkov, J.L. Galache, J. Görres, M. Shawcross, A. Teymurazyan, M.C. Wiescher, D.S. Brenner, C.N. Davids, S.M. Fischer, A.M. Heinz, R.V.F. Janssens, and D. Seweryniak, *Nucl. Phys. A* 742, 349-362 (2004).

“Reaction rate uncertainties and the production of ^{19}F in asymptotic giant branch stars,” M. Lugaro, C. Ugalde, A.I. Karakas, J. Görres, M. Wiescher, J.C. Lattanzio, and R.C. Cannon, *Astrophysical Journal* 615, 934-946 (2004).

“Rates for reactions relevant to fluorine nucleosynthesis,” C. Ugalde, J. Görres, M. Lugaro, M. Wiescher, *Memorie della Societa Sstronomica Haliana* 75, 712-716 (2004).

“A comprehensive study of the $^{106}\text{Cd}(\alpha, \gamma)^{110}\text{Sn}$ reaction at energies relevant to the p-process,” Gy. Gyürky, Zs. Fülöp, G. Kiss, Z. Máté, E. Somorjai, J. Görres, A. Palumbo, M. Wiescher, D. Galaviz, A. Kretschmer, *Nucl. Phys. A* 758, 517c-520c (2005).

“The reaction rate for the destruction of fluorine in AGB stars,” C. Ugalde, R. Azuma, A. Couture, J. Görres, M. Heil, K. Scheller, E. Stech, W. Tan and M. Wiescher, *Nucl. Phys. A* 758, 577-580 (2005).

- “Stellar neutron capture rates of ^{14}C ,” R. Reifarh, M. Heil, R. Plag, U. Besserer, S. Dababneh, L. Dörr, J. Görres, R.C. Haight, F. Käppeler, A. Mengoni, S. O’Brien, N. Patronis, R. Rundberg, M. Wiescher, and J.B. Willhelmy, *Nucl. Phys. A* **758**, 787-790 (2005).
- “The effect of the $^{19}\text{F}(\alpha, p)^{22}\text{Ne}$ reaction rate uncertainty on the yield of fluorine from Wolf-Rayet Stars,” R.J. Stancliffe, M. Lugaro, C. Ugalde, C.A. Tout, J. Görres, M. Wiescher, *MNRAS* **360**, 375-379 (2005).
- “Lifetime of the astrophysically important 4.03-MeV state in ^{19}Ne ,” W.P. Tan, J. Görres, J. Daly, M. Couder, A. Couture, H.Y. Lee, E. Stech, E. Strandberg, C. Ugalde, and M. Wiescher, *Phys. Rev. C* **72**, 041302(R) (2005).
- “A study of alpha capture cross-sections of ^{112}Sn ,” N. Özkan, G. Efe, R.T. Güray, A. Palumbo, M. Wiescher, J. Görres, H.-Y. Lee, Gy. Gyürky, E. Somorjai and Zs. Fülöp, *European Physical Journal A – Hadrons and Nuclei*, Vol. 27, Supp. 1, 145-148 (2006).
- “Sensitivity of p Process Nucleosynthesis to Nuclear Reaction Rates in a 25 Solar Mass Supernova Model,” W. Rapp, J. Görres, M. Wiescher, H. Schatz, and F. Käppeler, *Astrophys. J. Suppl.* **653**, 474 (2006).
- “Charged Particle Reaction Rates from Stellar H to C Burning,” M. Wiescher, R.E. Azuma, L. Gasques, J. Görres, M. Pignatari, E. Simpson, *M. Soc. Astr. It.* **77**, 910 (2006).
- “Two Neutron Capture Reactions and the r-Process,” A. Bartlett, J. Görres, G.J. Mathews, K. Otsuki, M. Wiescher, D. Frekers, A. Mengoni, J. Tostevin, *Phys. Rev. C* **74**, 015802 (2006).
- “Alpha-induced cross sections of ^{106}Cd for the astrophysical p-process,” Gy. Gyürky, G.G. Kiss, Z. Elekes, Zs. Fulop, E. Somorjai, A. Palumbo, J. Görres, H.Y. Lee, W. Rapp, M. Wiescher, N. Özkan, R.T. Guray, G. Efe, T Rauscher, *Phys. Rev. C* **74**, 025805 (2006).
- “The $^{19}\text{F}(\alpha, p \gamma)^{22}\text{Ne}$ reaction and the abundance of fluorine in Asymptotic Giant Branch (AGB) stars,” C. Ugalde, A. Couture, J. Gorres, E. Stech, M. Wiescher, *Revista Mexicana de Fisica* **52**(1) 46-49 Suppl. S (2006).
- “Mg and Al production in intermediate-mass asymptotic giant branch stars,” A.I. Karakas, M. Lugaro, C. Ugalde, M. Wiescher, J. Görres, *New Astronomy Reviews* **50** (7-8) 500-503 (2006).
- “The importance of $^{15}\text{O}(\alpha, \gamma)^{19}\text{Ne}$ to X-ray bursts and superbursts,” J.L. Fisker, J. Görres, M. Wiescher, B. Davids, *Astrophysical Journal* **650** (1) 332-337 (2006).
- “Astrophysical S factor for alpha-capture on ^{112}Sn in the p-process energy range,” N. Ozkan, G. Efe, R.T. Guray, A. Palumbo, J. Görres, H.Y. Lee, L.O. Lamm, W. Rapp, E. Stech, M. Wiescher, G. Gyurky, Z. Fulop, and E. Somorjai, *Phys. Rev. C* **75** (2) 025801 (2007).
- “Astrophysical S factor for α capture on ^{112}Sn in the p-process energy range,” N. Özkan, G. Efe, R. T. Güray, A. Palumbo, J. Görres, H. Y. Lee, L. O. Lamm, W. Rapp, E. Stech, M. Wiescher, Gy. Gyürky, Zs. Fülöp, and E. Somorjai, *Phys. Rev. C* **75**, 025801 (2007).
- “New measurements of the $^{19}\text{F}(n, \gamma)^{20}\text{F}$ cross section and their implications for the stellar reaction rate,” E. Uberseder, M. Heil, F. Käppeler, J. Görres, M. Wiescher, *Phys. Rev. C* **75**, 035801 (2007).

- “Astrophysical nuclear reactions and the break-out from the hot CNO cycles,” M. Wiescher, G. P. A. Berg, M. Couder, J. L. Fisker, Y. Fujita, J. Görres, M. N. Harakeh, K. Hatanaka, A. Matic, W. Tan, A. M. van den Berg, *Progress in Particle and Nuclear Physics* **59**, 51 (2007).
- “ $^{15}\text{O}(\alpha,\gamma)^{19}\text{Ne}$ breakout reaction and impact on X-ray bursts,” W. P. Tan, J. L. Fisker, J. Görres, M. Couder, M. Wiescher, *Phys. Rev. Lett.* **98**, 242503 (2007).
- “The $^{15}\text{O}(\alpha,\gamma)^{19}\text{Ne}$ reaction rate and the stability of thermonuclear burning on accreting neutron stars,” J. L. Fisker, W. Tan, J. Görres, M. Wiescher, R. L. Cooper, *Astro. J.* **665**, 637 (2007).
- “Measurement of the $^{19}\text{F}(p,\gamma)^{20}\text{Ne}$ reaction and interference terms from $E_{\text{c.m.}}=200\text{-}760$ keV,” A. Couture, M. Beard, M. Couder, J. Görres, L. Lamm, P. J. LeBlanc, H. Y. Lee, S. O'Brien, A. Palumbo, E. Stech, E. Strandberg, W. Tan, E. Uberseder, C. Ugalde, M. Wiescher, and R. Azuma, *Phys. Rev. C* **77**, 015802 (2008).
- “The $^{14}\text{C}(n,\gamma)$ cross section between 10 keV and 1 MeV,” R. Reifarh, M. Heil, C. Forssén, U. Besserer, A. Couture, S. Dababneh, L. Dörr, J. Görres, R. C. Haight, F. Käppeler, A. Mengoni, S. O'Brien, N. Patronis, R. Plag, R. S. Rundberg, M. Wiescher, and J. B. Wilhelmy, *Phys. Rev. C* **77**, 015804 (2008).
- “Design of the recoil mass separator St. George,” M. Couder, G.P.A. Berg, J. Görres, P.J. LeBlanc, L.O. Lamm, E. Stech, M. Wiescher and J. Hinnefeld, *Nucl. Instr. Meth. A* **587**, 35 (2008).
- “Thermonuclear rate for the $^{19}\text{F}(\alpha,p)^{22}\text{Ne}$ reaction at stellar temperatures,” C. Ugalde, R. E. Azuma, A. Couture, J. Görres, H. Y. Lee, E. Stech, E. Strandberg, W. Tan, and M. Wiescher, *Phys. Rev. C* **77**, 035801 (2008).
- “The Impact of the $^{18}\text{F}(\alpha,p)^{21}\text{Ne}$ Reaction on Asymptotic Giant Branch Nucleosynthesis,” A. Karakas, H.-Y. Lee, M. Lugaro, J. Görres, M. Wiescher, *Astrophys. J.* **676**, 1254 (2008).
- “ $^{24}\text{Mg}(\alpha,\gamma)^{28}\text{Si}$ resonance parameters at low α -particle energies,” E. Strandberg, M. Beard, M. Couder, A. Couture, S. Falahat, J. Görres, P. J. LeBlanc, H. Y. Lee, S. O'Brien, A. Palumbo, E. Stech, W. P. Tan, C. Ugalde, M. Wiescher, H. Costantini, K. Scheller, M. Pignatari, R. Azuma, L. Buchmann, *Phys. Rev. C* **77**, 055801 (2008).
- “The $^{13}\text{C}(\alpha,n)$ reaction and its role as a neutron source for the s process,” M. Heil, R. Detwiler, R. E. Azuma, A. Couture, J. Daly, J. Görres, F. Käppeler, R. Reifarh, P. Tischhauser, C. Ugalde, and M. Wiescher, *Phys. Rev. C* **78**, 025803 (2008).
- “Production of stable tellurium evaporated targets,” J.P. Greene, A. Palumbo, W.P. Tan, J. Görres, M. Wiescher, *Nucl. Instr. & Methods A* **590**, 76-78 (2008).
- “Design of the recoil mass separator St. George,” M. Couder, G.P.A. Berg, J. Görres, P.J. LeBlanc, L.O. Lamm, E. Stech, M. Wiescher and J. Hinnefeld, *Nucl. Instr. Meth. A* **587**, 35 (2008).

“Measurement of the $^{60}\text{Fe}(n, \gamma)^{61}\text{Fe}$ Cross Section at Stellar Temperatures,” E. Uberseder, R. Reifarth, D. Schumann, I. Dillmann, C. Domingo Pardo, J. Görres, M. Heil, F. Käppeler, J. Marganiec, J. Neuhausen, M. Pignatari, F. Voss, S. Walter, and M. Wiescher, *Phys. Rev. Lett.* **102**, 151101 (2009).

“Measurement of elastic $^{12}\text{C} + \alpha$ scattering: Details of the experiment, analysis, and discussion of phase shifts,” P. Tischhauser, A. Couture, R. Detwiler, J. Görres, C. Ugalde, E. Stech, M. Wiescher, H. Heil, F. Käppeler, R.E. Azuma, L. Buchmann, *Phys. Rev. C* **79**, 055803 (2009).

“Measurement of the decay branching ratios of the α -unbound states in ^{19}Ne and the $^{15}\text{O}(\alpha, \gamma)$ reaction rate,” W.P. Tan, J. Görres, M. Beard, M. Couder, A. Couture, S. Falahat, J.L. Fisker, L. Lamm, P.J. LeBlanc, H.Y. Lee, S. O’Brien, A. Palumbo, E. Stech, E. Strandberg, and M. Wiescher, *Phys. Rev. C* **79**, 055805 (2009).

“Cross-section measurement of the $^{18}\text{Fe}(\alpha, p)^{21}\text{Ne}$ reaction and possible implication for neutron production in explosive helium burning,” H.Y. Lee, M. Couder, A. Couture, S. Falahat, J. Görres, L. Lamm, P.J. LeBlanc, S. O’Brien, A. Palumbo, E. Stech, E. Strandberg, W. Tan, C. Ugalde, and M. Wiescher, *Phys. Rev. C* **80**, 025805 (2009).

“Measurements of proton-induced reaction cross sections on ^{120}Te for the astrophysical p process,” R.T. Güray, N. Özkan, C. Yalçın, A. Palumbo, R. deBoer, J. Görres, P.J. LeBlanc, S. O’Brien, E. Strandberg, W.P. Tan, M. Wiescher, Zs. Fülöp, E. Somorjai, H.Y. Le, and J.P. Greene, *Phys. Rev. C* **80**, 035804 (2009).

“Production and characterization of oxygen-reduced implanted ^{21}Ne targets,” H.Y. Lee, J. Görres, H.-W. Becker, E. Stech, E. Strandberg, and M. Wiescher, *Nuclear Instruments and Methods in Physics Research B* (in print) 2009.

“Preparation of a ^{60}Fe target for nuclear astrophysics experiments,” D. Schumann, J. Neuhausen, I. Dillmann, C. Domingo Pardo, F. Käppeler, J. Marganiec, F. Voss, S. Walter, M. Heil, R. Reifarth, J. Goerres, E. Uberseder, M. Wiescher, and M. Pignatari, *Nuclear Instruments and Methods A* (in print) 2009.

PUBLICATIONS IN CONFERENCE PROCEEDINGS

“The Ne-Na Cycle and the $^{12}\text{C}+\alpha$ Reaction,” H.P. Trautvetter, J. Görres, K.U. Kettner and C. Rolfs, C. Chiosi and A. Renzini (eds), *Stellar Nucleosynthesis*, p. 79, 1984, D. Reidel Publ. Co.

“Explosive Hydrogen Burning in Novae and Proton Capture on Short-Lived Unstable Nuclei,” F.-K. Thielemann, M. Wiescher, J. Görres and H. Ritter, *Proceedings of the Accelerated Radioactive Beams Workshop*, Parksville, Canada, p. 53, 1985.

“Proton Capture on ^{13}C and ^{13}N ,” R.E. Azuma, J.D. King, J.B. Vise, J. Görres, H.P. Trautvetter, C. Rolfs and A. Vliks, *Proceedings of the Accelerated Radioactive Beams Workshop*, Parksville, Canada, p. 70, 1985.

“Reaction Rates in the rp-Process and Nucleosynthesis in Novae,” M. Wiescher, J. Görres, F.-K. Thielemann and H. Ritter, *Nucleosynthesis and its Implications on Nuclear and Particle Physics*, p 105, 1986, D. Reidel Publ. Co.

“ γ -Ray Spectroscopy with 1% of the Fusion Cross Section Using a 4π Charged Particle Detector,” T. Chapuran, D.P. Balamuth, J. Görres and J. Arrison, *Proceedings of the IUPAP Nuclear Physics Conference*, Harrogate, UK, 1986, Institute of Physics, London.

“New Experimental Results for Nuclear Reaction in Explosive Hydrogen Burning,” J. Görres and M. Wiescher, *Proc. of the Symp. on the “Origin and Distribution of the Elements in the Universe,”* New Orleans, 1987, p.715.

“New Experimental Results for Nuclear Reactions in Explosive Hydrogen Burning,” M. Wiescher, J. Görres, L.O. Lamm, C.P. Browne, B.W. Filippone and B. Vogelaar 4. *Workshop on Nuclear Astrophysics*, Ringberg, 1987, Springer Lecture Notes, 287 (1988) 54.

“Reaction Rates in the rp-Process beyond $^{13}\text{N}(p,\gamma)^{14}\text{O}$,” M. Wiescher and J. Görres, *Radioactive Nuclear Beams*, World Scientific, Singapore (1990) 229.

“Nucleosynthesis in Nonstandard Big Bang Models,” M. Wiescher and J. Görres, *Notas de Fisica* 13 (1990) 261.

“Capture Reactions on ^{14}C in Inhomogeneous Big Bang Nucleosynthesis,” M. Wiescher, J. Görres and F.-K. Thielemann, in: *Capture Gamma Ray Spectroscopy*, AIP 238 (1990) 840.

“Capture Reactions on ^{14}C in Inhomogeneous Big Bang Nucleosynthesis,” J. Görres, M. Wiescher, R.E. Azuma, C.A. Barnes, H. Beer, F. Käppeler and F.-K. Thielemann, *Radioactive Nuclear Beams 1991*, *Proceedings of the Second International Conference on Radioactive Nuclear Beams*, Louvain-la-Neuve 1991, p.293, 1992, IOP Publishing.

“Reaction Flow and Nucleosynthesis in the rp-Process,” M. Wiescher, L. van Wormer, J. Görres and F.-K. Thielemann, *Radioactive Nuclear Beams 1991, Proceedings of the Second International Conference on Radioactive Nuclear Beams, Louvain-la-Neuve 1991*, p.353, 1992, IOP Publishing.

“Low Energy Resonances in $^{18}\text{O}+\alpha$ and $^{22}\text{Ne}+\alpha$,” M. Wiescher, U. Giesen, J. Görres, R.E. Azuma, K.L Kratz, H.P. Trautvetter, *Nuclei in the Cosmos*, eds. F. Käppeler and K. Wisshak, p.191, 1993, IOP Publishing.

“Nuclear Reaction Cycles in Explosive Hydrogen Burning,” C. Iliadis, J. Görres, L. van Wormer, M. Wiescher, F.-K. Thielemann, *Nuclei in the Cosmos*, eds. F Käppeler and K. Wisshak, p.343, 1993, IOP Publishing.

“Reaction Rates and Reaction Sequences in the rp-Process,” M. Wiescher, J. Görres, C. Iliadis, L. van Wormer, F.-K. Thielemann, *Nuclei far from Stability*, eds. R. Neugart and A. Wöhr, p.845, 1993, IOP Publishing.

“Phosphorous-Sulfur and Chlorine-Argon cycles in the rp-process,” C. Iliadis, J. Görres, M. Wiescher, H.P. Trautvetter, *Proceedings of the 7th Workshop on Nuclear Astrophysics, MPA/P7*, p. 81 (1993).

“The Reaction Rate for $^{31}\text{S}(p,\gamma)^{32}\text{Cl}$ and its Influence on the SiP-Cycle in Hot Stellar Hydrogen Burning,” S. Vouzoukas, C.P. Browne, J. Görres, H. Herndl, C. Iliadis, J. Meissner, J.G. Ross, L. van Wormer, M. Wiescher, A. Lefebvre, P. Aguer, A. Coc and J.P. Thibaud, *Nuclei in the Cosmos III*, eds. M. Busso, R. Gallino, C. Raiteri, p. 259, 1995, American Institute of Physics.

“Sequential Proton Capture Reactions in the rp-Process,” L. van Wormer, J. Görres, H. Herndl, M. Wiescher, B.A. Brown and F.-K. Thielemann, *Nuclei in the Cosmos III*, eds. M. Busso, R. Gallino, C. Raiteri, p. 263, 1995, American Institute of Physics.

“Measurement of the Half-Life of ^{44}Ti ,” J. Meissner, J. Görres, H. Schatz, S. Vouzoukas, M. Wiescher, L. Buchmann, D. Bazin, J.A. Brown, M. Hellström, J.H. Kelley, R.A. Kryger, D.J. Morrissey, M. Steiner, K.W. Scheller and R.N. Boyd, *Nuclei in the Cosmos III*, eds. M. Busso, R. Gallino, C. Raiteri, p. 303, 1996, American Institute of Physics.

“Nucleosynthesis at the proton drip-line – A challenge for nuclear physics,” H. Schatz, L. Bildsten, J. Görres, M. Wiescher and F.-K. Thielemann, *Intersection between particle and nuclear physics 412*, p. 987 (1997).

“The rp-process in X-Ray bursts,” M. Wiescher, A. Aprahamian, J. Döring, J. Görres, H. Schatz, *ENAM 98, American Institute for Physics 455*, p. 819 (1998).

“Lifetime of ^{44}Ti as probe for supernova models,” J. Görres, J. Meissner, H. Schatz, E. Stech, P. Tischhauser, M. Wiescher, D. Bazin, R. Harkewicz, M. Hellström, B. Sherrill, M. Steiner, R.N. Boyd, L. Buchmann, D.H. Hartmann and J.D. Hinnefeld, *Proceedings of the International Workshop XXVI on Gross Properties and Nuclear Excitations, GSI (Darmstadt)*, p. 182 (1998).

“Nuclear Structure and Galactic γ -ray activity,” J. Görres, H. Schatz, M. Wiescher, Proceedings from the Second Oak Ridge Symposium on Atomic and Nuclear Astrophysics, Institute of Physics Publishing, Bristol, p. 443 (1998).

“Explosive H-burning, the rp-process, and x-ray bursts,” F.-K. Thielemann, H. Schatz, T. Rauscher, J.-F. Rembges, J. Görres, M. Wiescher, and L. Bildsten, Stellar Evolution, Stellar Explosions and Galactic Chemical Evolution, Proceedings of the 2nd Oak Ridge Symposium on Atomic and Nuclear Astrophysics, Oak Ridge, Tennessee, 2-6 December 1997. Edited by Anthony Mezzacappa. Institute of Physics Publishing, 1998, p. 483.

“The rp-process in X-ray bursts,” M. Wiescher, A. Aprahamian, J. Döring, J. Görres, Nuclear Structure 98, American Institute of Physics 481, p. 545 (1999).

“Elastic scattering results from $^{12}\text{C}(\alpha,\alpha)^{12}\text{C}$ and implications for $^{12}\text{C}(\alpha,\gamma)$,” P. Tischhauser, R.E. Azuma, L. Buchmann, R. Detwiler, U. Giesen, J. Görres, M. Heil, J. Kolata, A. Shotter, E. Stech, M. Wiescher, Nuclei in the Cosmos V, Editions Frontieres, p. 99 (1999).

“Break-out from the hot CNO cycle via the $^{18}\text{Ne}(\alpha,p)^{21}\text{Na}$,” W. Bradfield-Smith, T. Davinson, A. Di Pietro, A. Laird, A. Ostrowski, A. Shotter, P. Woods, S. Cherubini, W. Galster, J.S. Graulich, P. Leleux, L. Michel, A. Ninane, J. Vervier, J. Görres, M. Wiescher, J. Rahighi, and J. Hinnefeld, Nuclei in the Cosmos V, Editions Frontieres, p. 419 (1999).

“Measurements of low energy proton radiative capture cross sections,” A. Murphy, F. Chloupek, R. Boyd, A. Cole, J. Görres, R. Guray, G. Raimann, J. von Schwarzenberg and M. Wiescher, Nuclei in the Cosmos V, Editions Frontieres, p. 447 (1999).

“Reaction rates for helium burning,” J. Görres, S. Dababneh, C. Ugalde, F. Käppeler, and M. Wiescher, Proceedings of the 11th Workshop on “Nuclear Astrophysics,” Ringberg Castle, Tegernsee, Germany, February 11-16, 2002, Wolfgang Hillebrandt and Ewald Müller (Eds.) MPA/P13, Garching b. München, Germany: Max-Planck-Institut für Astrophysik, p. 75-78 (2002).

“ $^{19}\text{F}(p,\gamma)^{20}\text{Ne}$: Putting a Lid on the CNO Cycle,” A. Couture, M. Beard, M. Couder, J. Görres, L. Lamm, P. LeBlanc, H.-Y. Lee, S. O’Brien, A. Palumbo, E. Stech, E. Strandberg, W. Tan, E. Überseder, C. Ugalde, and M. Wiescher, Proceedings of 12th International Symposium on Capture Gamma-ray Spectroscopy and Related Topics, Notre Dame, Indiana, A. Woehr and A. Aprahamian, Eds., pp. 186-190 (2006).

“Threshold States in ^{19}Ne and the CNO Breakout Reaction $^{15}\text{O}(\alpha,\gamma)^{19}\text{Ne}$,” W.P. Tan, J. Görres, J. Daly, M. Couder, H.Y. Lee, E. Stech, E. Strandberg, C. Ugalde, and M. Wiescher, Proceedings of 12th International Symposium on Capture Gamma-ray Spectroscopy and Related Topics, Notre Dame, Indiana, A. Woehr and A. Aprahamian, Eds., pp. 191-195 (2006).

“Radiative Capture Reactions and α -Elastic Scattering on ^{106}Cd for the Astrophysical p-Process,” Gy. Gyurky, Z. Elekes, G.G. Kiss, Zs. Fülöp, E. Somorjai, Z. Máté, J. Görres, A. Palumbo, M. Wiescher, H.-Y. Lee, N. Özkan, R.T. Güray, G. Efe, D. Galaviz, A. Kretschmer, K. Sonnabend, A. Zilges, and T. Rauscher, Proceedings of 12th International Symposium on Capture Gamma-ray Spectroscopy and Related Topics, Notre Dame, Indiana, A. Woehr and A. Aprahamian, Eds., pp. 201-208 (2006).

“ $^{18}\text{F}(\alpha, p)^{21}\text{Ne}$ Reaction: Neutron Source for r-Process in Supernovae,” H.-Y. Lee, M. Beard, H.-W. Becker, M. Couder, A. Couture, J. Görres, L. Lamm, P. LeBlanc, S. O’Brien, A. Palumbo, E. Stech, E. Strandberg, W. Tan, C. Ugalde, and M. Wiescher, Proceedings of 12th International Symposium on Capture Gamma-ray Spectroscopy and Related Topics, Notre Dame, Indiana, A. Woehr and A. Aprahamian, Eds., pp. 581-582 (2006).

“ ^{106}Cd and ^{112}Sn : Alpha-Induced Cross Section Measurements for the Astrophysical P-Process,” A. Palumbo, J. Görres, H.-Y. Lee, M. Wiescher, W. Rapp, N. Özkan, R.T. Güray, G. Efe, Gy. Gyurky, Zs. Fülöp, and E. Somorjai, Proceedings of 12th International Symposium on Capture Gamma-ray Spectroscopy and Related Topics, Notre Dame, Indiana, A. Woehr and A. Aprahamian, Eds., pp. 585-586 (2006).

“Multichannel R-matrix Analysis of CNO Cycle Reactions,” E.C. Simpson, R.E. Azuma, M. Wiescher, A. Champagne, P. Bertone, H.-P. Trautvetter, J. Görres, and C. Ugalde, Proceedings of 12th International Symposium on Capture Gamma-ray Spectroscopy and Related Topics, Notre Dame, Indiana, A. Woehr and A. Aprahamian, Eds., pp. 599-600 (2006).

“Origin of the main r-process elements,” K. Otsuki, J. Truran, M. Wiescher, J. Görres, G.J. Mathews, D. Frekers, A. Mengoni, A. Bartlett, J. Tostevin in *Origin of Matter and Evolution of Galaxies: International Symposium on Origin of Matter and Evolution of Galaxies 2005: New Horizon of Nuclear Astrophysics and Cosmology*, AIP Conf. Proc. 847, pp. 227-232 (2006).

“Experimental study of the variation of alpha elastic scattering cross sections along isotopic and isotonic chains at low energies,” G.G. Kiss, D. Galaviz, Gy Gyurky, Z. Elekes, Zs. Fülöp, E. Somorjai, K. Sonnabend, A. Zilges, P. Mohr, J. Görres, M. Wiescher, N. Özkan, T. Güray, C. Yalcin, M. Avrigeanu, in *Origin of Matter and Evolution of Galaxies: 10th International Symposium on Origin of Matter and Evolution of Galaxies: From the Dawn of Universe to the Formation of Solar System*. AIP Conf. Proc.1016, pp. 221-226 (2008).

INVITED TALKS

“New Experimental Results for Nuclear Reactions in Explosive Nucleosynthesis” Invited talk, Symposium on the Origin and Distribution of the Elements, New Orleans, LA, Sept. 9, 1987.

“Breakout from the CNO Cycle and the $^{19}\text{Ne}(p,\gamma)^{20}\text{Na}$ Reaction” Seminar, Michigan State University, East Lansing, MI, Nov. 22, 1989.

“Nuclear Structure Studies and Nucleosynthesis Patterns” Invited talk, Workshop on A1200 Experiments, Michigan State University, East Lansing, MI, Feb. 3, 1990.

“Radioactive Ion Beams and Explosive Nucleosynthesis” Invited talk, Eleventh International Conference on the Application of Accelerators in Research and Industry, Denton, TX, Nov. 6, 1990.

“Capture Reactions on ^{14}C and Nonstandard Big Bang Nucleosynthesis” Seminar, Duke University, Durham, NC, May 5, 1991

“Reaction Flow and Nucleosynthesis in the rp-Process” Invited talk, Second International Conference on Radioactive Nuclear Beams, Louvain-la-Neuve, Belgium, Aug. 19-21, 1991.

“rp-Process Measurements with High-Intensity RNBs” Invited Talk, Workshop on the Production and Use of Intense Radioactive Ion Beams at the Isospin Laboratory, Oak Ridge, Tennessee, October 7-11, 1992.

“Strategies for Nuclear Astrophysics Studies with Radioactive Ion Beams” Invited Talk, ISAC Workshop at Chateau Lake Louise Lake Louise, Canada, February 17-19, 1994.

“Nucleosynthesis along the Proton Drip Line” Invited Talk, Gull Lake Conference on Near Physics near the Drip Line, Gull Lake, Michigan, August 21-24, 1996.

“Nuclear Structure and γ -ray Astronomy,” Invited Talk, Workshop on Future Experiments and Detectors for Nuclear Structure and Astrophysics at the Upgraded NSCL, Michigan State University, East Lansing, Michigan, August 8-9, 1997.

“Nuclear Structure and Galactic γ -ray Activity,” Invited Talk, Second Oak Ridge Symposium on Atomic and Nuclear Astrophysics, Oak Ridge, Tennessee, December 2-6, 1997.

“Lifetime of ^{44}Ti as Probe for Supernova Models,” Invited Talk, International Workshop on Gross Properties of Nuclei and Nuclear Excitations, Hirschegg, Austria, January 11-17, 1998.

“Nuclear Structure and Galactic γ -ray Activity,” Invited Talk, Workshop on Applications of High Precision Gamma Spectroscopy, Notre Dame, Indiana, July 1-3, 1998.

“Low-energy resonances in $^{14}\text{N}(\alpha,\gamma)^{18}\text{F}$ and their astrophysical implications,” Invited Talk, 3rd Workshop on Frontiers in Nuclear Astrophysics, Notre Dame, Indiana, April 19-20, 2000.

“Topics in Stellar He Burning,” Invited Talk, Nucleosynthesis 2000 Workshop, American Chemical Society Conference, Washington, DC, August 20-25, 2000.

“Breakout from the CNO cycles,” Invited Talk, 33rd Great Lakes Joint Regional Meeting, American Chemical Society Conference, Grand Rapid, Michigan, June 11-13, 2001.

“Reaction Rates for Helium Burning,” Invited Talk, Eleventh Workshop on ‘Nuclear Astrophysics,’ Ringberg Castle, Germany, February 12, 2002.

“Alpha Capture in Stellar Evolution and Explosion,” Invited Talk, Canadian Association of Physicists Congress, Charlottetown, PEI, Canada, June 8-11, 2003.

“Alpha Capture in Stellar Evolution and Explosion,” Invited Talk, 12th Workshop on ‘Nuclear Astrophysics,’ Ringberg Castle, Germany, February 22, 2004.

The role of alpha induced reactions in nuclear astrophysics,” Invited Lecture, Carpathian Summer School of Physics 2005, Mamaia-Constanta, Romania, June 13-24, 2005.

“Breakout from the CNO cycle,” Invited Talk, International Workshop XXXIV on Gross Properties of Nuclei and Nuclear Excitations Hirschegg, Kleinwalsertal, Austria, January 15-21, 2006.

“Alpha-induced reactions in stellar burning,” Invited Talk, Nuclei in the Cosmos IX, Geneva, Switzerland, June 26-30, 2006.

“Stellar Nuclear Astrophysics II,” Invited Talk, Town meeting on Astrophysics, Study of Nuclei, Neutrinos, Neutrons, Fundamental Symmetries, Chicago, Illinois, January 19-21, 2007.

“Experimental Approaches Towards the Measurement of Alpha Induced Reactions,” Invited Talk, IXth Torino Workshop on Evolution and Nucleosynthesis in AGB Stars, Perugia, Italy, October 22-26, 2007.

“Alpha Capture Studies at Notre Dame,” Invited Talk, Workshop on R-Matrix and Nuclear Reactions in Stellar Hydrogen and Helium Burning, Santa Fe, New Mexico, April 21-23, 2008.

“Neutron Sources in Stellar Carbon Burning,” Invited Talk, Workshop on Frontiers in Nuclear Astrophysics, Waikoloa, Hawaii, October 13, 2009.