

Guenter W. Lugmair - Bibliography

PUBLISHED WORK

1. Formann, E., E. Hechtl, G. Lugmair, F. Ruedenauer, F.P. Viehboek and H. Wotke, "Operating Experience with the Seibersdorf Inhomogeneous Sector Field Isotope Separator". Nuclear Instruments and Methods 38, 144-147 (1965).
2. Formann, E., G. Lugmair, F. Ruedenauer, H. Wotke and F.P. Viehboeck, "Die Separation Von Stabilen Isotopen der Seltener Erden". Acta Physica Austriaca 23, 55-63 (1966).
3. Lugmair, G. and F.P. Viehboeck, "Die Bestimmung des Einfangquerschnittes von Gd-156 für Reakneutronen". Acta Physica Austriaca XXIII, 64-69 (1966).
4. Dobrozemsky, R., E. Formann, G. Lugmair, F. Pichlmayer, F.P. Viehboeck and H. Wotke, "Pile Neutron Capture Cross Sections of Rare Earth Isotopes". Proc. of the Conf. on Nuclear Data-Microscopic Cross Section and Other Data Basic for Reactors, Paris, October (1966).
5. Marti, K., G.W. Lugmair and H.C. Urey, "Solar Wind Gases, Cosmic-Ray Spallation Products, and the Irradiation History". Science 167, 548-550, (1970).
6. Lugmair, G.W., "Neutron Capture Effects in Lunar Material". Paper presented at the 18th Annual Conference on Mass Spectrometry and Allied Topics, June, 1970, San Francisco, CA, p. B49 (1970).
7. Marti, K., G.W. Lugmair and H.C. Urey, "Solar Wind Gases, Cosmic-Ray Spallation Products and the Irradiation History of Apollo 11 Samples". Proc. of the Apollo 11 Lunar Sci. Conf. 2, 1357-1367 (1970).
8. Marti, K. and G.W. Lugmair, " Kr^{81} -Kr and K-Ar⁴⁰ Ages, Cosmic-Ray Spallation Products and Neutron Effects in Apollo 11 and 12 Lunar Samples". 2nd Lunar Sci. Conf. Abstracts, Houston, 62 (1971).
9. Marti, K. and G.W. Lugmair, " Kr^{81} -Kr and K-Ar⁴⁰ Ages, Cosmic-Ray Spallation Products and Neutron Effects in Lunar Samples from Oceanus Procellarum". Proc. of 2nd Lunar Sci. Conf., 2, 1591-1605, M.I.T. Press (1971).
10. Lugmair, G.W. and K. Marti, "Neutron Capture Effects in Lunar Gadolinium and the Irradiation Histories of Some Lunar Rocks". Earth Planet. Sci. Lett. 13, 32-42 (1971).

11. Lugmair, G.W. and K. Marti, "Neutron and Spallation Effects in Fra Mauro Regolith", *Lunar Sciences III*, Lunar Sci. Inst., Contrib. 88, 495 (1972).
12. Lugmair, G.W. and K. Marti, "Exposure Ages and Neutron Capture Record in Lunar Samples from Fra Mauro". Proc. 3rd Lunar Sci. Conf. 2, Suppl. 3, *Geochim. Cosmochim. Acta*, 1891-1897 (1972).
13. Marti, K., B.D. Lightner and G.W. Lugmair, "On ^{244}Pu in Lunar Rocks from Fra Mauro and Implications Regarding their Origin". *The Moon* 8, 241-250 (1973).
14. Marti, K., B.D. Lightner, G.W. Lugmair, T.W. Osborn and N.B. Scheinin, "I. On the Early Lunar History: Evidence ^{244}Pu and ^{143}Nd . II. The Age of North Ray Crater". *Lunar Science IV*, 502-504, Lunar Sci. Inst., Houston (1973).
15. Lugmair, G.W., "Sm-Nd Ages: A New Dating Method." Given at Meteoritical Society Meeting, Los Angeles, Aug. 7-9, 1974. *Meteoritics* 9, #4, p. 369 (1974). Abstract.
16. Lugmair, G.W., N.B. Scheinin and K. Marti, "Search for Extinct ^{146}Sm : I. The Isotopic Abundance of ^{142}Nd in the Juvinas Meteorite". *Earth Planet. Sci. Lett.* 27, 79-84 (1975).
17. Lugmair, G.W., N.B. Scheinin and K. Marti, "Sm-Nd age of Apollo 17 Basalt 75075: Two-Stage Igneous Processes in Mare Basalt Genesis". *Lunar Science VI*, Part II, 531-533, Lunar Sci. Inst., Houston (1975).
18. Lugmair, G.W., N.B. Scheinin and K. Marti, "Sm-Nd Age and History of Apollo 17 Basalt 75075: Evidence for early differentiation of the lunar exterior". Proc. of 6th Lunar Sci. Conf., Suppl. 6, *Geochim. Cosmochim. Acta* 2, 1419-1429 (1975).
19. Lugmair, G.W. and N.B. Scheinin, "Sm-Nd Systematics of the Stannern Meteorite." *Meteoritics* 10, #4, pp. 447-448 (1975). Abstract.
20. Lugmair, G.W., "Sm-Nd Systematics of Some Apollo 17 Basalts". *Lunar Sci. Inst. Origins of Mare Basalts Conf. "Origins of Mare Basalts and Their Implications of Lunar Evolution"*, Contrib. #234, 107-110, Houston (1975).
21. James, O.B., D.P. Blanchard, J.W. Jacobs, J.C. Brannon, L.A. Haskin, A. Brecher, W. Compston, K. Marti, G.W. Lugmair, J. Gros, K. Takahashi and D. Braddy, "Consortium Studies of Aphanitic Lithologies and Two Anorthositic Gabbro Clasts in Breccia 73215". *Lunar Science VII*, Pt. I, 420-425, Lunar Sci. Inst., Houston (1976).

22. Lugmair, G.W., J.P. Kurtz, K. Marti and N.B. Scheinin, "The Low Sm-Nd Region of the Moon: Evolution and History of a Troctolite and a KREEP Basalt". *Lunar Science VII*, Pt. I, 509-511, Lunar Sci. Inst., Houston (1976).
23. Keil, K., M. Prinz, P.F. Hlava, W.S. Curvello, G.J. Wasserburg, F. Tera, D.A. Papanastassiou, J.C. Hunke, A.V. Murali, M.-S. Ma, R.A. Schmitt, G.W. Lugmair, K. Marti, N.B. Scheinin and R.N. Clayton, "Progress by the Consorts of Angra dos Reis". *Lunar Sci. VII*, Pt. I, 443-445, Lunar Sci. Inst., Houston (1976).
24. Lugmair, G.W., K. Marti, J.P. Kurtz and N.B. Scheinin, "History and Genesis of Lunar Troctolite 76535 or "How Old is Old?" *Proc. of Seventh Lunar Sci. Conf.*, Suppl. 7, *Geochim. Cosmochim. Acta* 2, 2009-2033 (1976).
25. Marti, K., C. Black and G.W. Lugmair, "Pu-244 in the Early Solar System". Given at Meteoritical Society Mtg., Oct. 18-21, 1976. *Meteoritics* 11,#4, 328-329 (1976). Abstract.
26. Scheinin, Norman B., Gunter W. Lugmair and K. Marti, "Sm-Nd Systematics and Evidence for Extinct ^{146}Sm in an Allende Inclusion." Given at Meteoritical Society Mtg., Oct. 18-21, 1976. *Meteoritics* 11, #4, 357-358 (1976). Abstract.
27. Lugmair, Gunter W., and Norman B. Scheinin, "Sm-Nd Systematics of Angra dos Reis." Given at Meteoritical Soc. Mtg., Oct. 18-21, 1976. *Meteoritics* 11, #4 322-323 (1976). Abstract.
28. Lugmair, G.W. and K. Marti, "Sm-Nd-Pu Timepieces in the Angra dos Reis Meteorite". *Earth Planet. Sci. Lett.* 35, 273-284 (1977).
29. Lugmair, G.W. and K. Marti, "Evolution of the Lunar Interior: Sm-Nd Systematics of A15 Green Glass and the Question of the Lunar Initial $^{143}\text{Nd}/^{144}\text{Nd}$ ". *Lunar Sciences VIII*, Pt. II, Lunar Sci. Inst., Houston, 597-599 (1977).
30. Marti, K., G.W. Lugmair and N.B. Scheinin, "Sm-Nd-Pu Systematics in the Early Solar System". *Lunar Science VIII*, Pt. II, Lunar Sci. Inst., Houston, 619-621 (1977).
31. Carlson, R.W., J.D. Macdougall and G.W. Lugmair, "Sm-Nd Constraints on the Evolution of Oceanic Rocks." *EOS* 58, 533 (1977). Abstract.

32. Bernatowicz, T., R.J. Drozd, C.M. Hohenburg, G.W. Lugmair, C.J. Morgan and F.A. Podosek, "The Regolith History of 14307". Proc. Lunar. Sci. Conf., 8th, 2763-2783 (1977).
33. Lugmair, G.W. and R.W. Carlson, "Sm-Nd Systematics of the Serra de Magé Eucrite." Meteoritics 12, #3, 300-301 (1977). Abstract.
34. Lugmair, G.W. and K. Marti, "Lunar Initial $^{143}\text{Nd}/^{144}\text{Nd}$ (LIND): Differential Evolution of the Lunar Crust and Mantle". Earth Planet. Sci. Lett. 39, 349-357 (1978).
35. Carlson, R.W., J.D. Macdougall, and G.W. Lugmair, "Differential Sm/Nd Evolution in Ocean Basalts." Abstract, Fall AGU Mtg., 1977. Trans. Am. Geophys. Union (EOS) 59, #5, p. 496, May (1978). Abstract.
36. Carlson, R.W., J.D. Macdougall and G.W. Lugmair, "Differential Sm/Nd Evolution in Oceanic Basalts". Geophys. Res. Lett. 5, #4, 229-232, April (1978).
37. Macdougall, J.D., R.W. Carlson and G.W. Lugmair, "Basalt source regions: Constraints from Sm-Nd". Abstract Volume from IASPEI/AVCEI Assembly, Durham, August 8-19th (1977).
38. Lugmair, G.W. and R.W. Carlson, "Sm-Nd Systematics of KREEP". Lunar and Planet. Science IX, Pt. II, Lunar and Planet. Inst., Houston, 669-671 (1978).
39. Marti, K., P. Eberhardt, N. Grogler, K. Keil, G.W. Lugmair, A. Stettler, G.J. Taylor and R.D. Warner, "Search for Pieces of the Ancient Lunar Crust: A Study of Clasts in Rock 67915". Lunar and Planet. Sci. IX, Pt. II, Lunar and Planet. Inst., Houston, 696-698 (1978).
40. Lugmair, G.W., K. Marti and N.B. Scheinin, "Incomplete Mixing of Products from R-, P- and S-Process Nucleosynthesis: Sm-Nd Systematics in Allende Inclusions". Lunar and Planet. Sci. IX, Pt. II, Lunar and Planet. Inst., Houston, 672-674 (1978).
41. Lugmair, G.W., "REE Isotopic Anomalies in EK 1-4-1: Truth or Consequences?". Proc. 4th International Conf. on Geochron., Cosmochron. and Isotope Geol., Snowmass, CO, Aug. 20-25, Geol. Surv. Open-File Rpt. #78-701, 262-265 (1978).

42. Carlson, R.W., J.D. Macdougall and G.W. Lugmair, "Implications for the Structure of Chemical Heterogeneity in the Mantle from Nd and Sr Isotopic Variation". Proc. 4th International Conf. on Geochron., Cosmochron. and Isotope Geol., Snowmass, CO, Aug. 20-25, Geol. Surv. Open-File Rpt. #78-701, 58-60 (1978).
43. Lugmair, G.W. and N.B. Scheinin, "REE Isotopes in Allende Residue." Meteoritical Society-Sudbury, 1978, August 14-17. Meteoritics 13, #4, p. 541, December 31 (1978). Abstract.
44. Lugmair, G.W. and R.W. Carlson, "The Sm-Nd History of KREEP". Proc. Lunar and Planet. Sci. Conf. IX, 689-704 (1978).
45. Keil, K., M. Prinz, C.B. Gomes, G.E. Harlow, G.W. Lugmair et al., "O Meteorito Serra de Magé: Origem e Historia de um "Cumulate de Norito Anorthositico". (1978). Abstract.
46. Carlson, R.W. and G.W. Lugmair, "Sm-Nd Study of Pristine KREEP Basalt 15386". Lunar and Planet. Science X, Lunar and Planet. Inst., Houston, 178-180 (1979). Abstract.
47. Carlson, R.W., J.D. Macdougall and G.W. Lugmair, "Nd and Sr Isotopic Variation in Basalts of the Columbia River Province." AGU Spring Meeting, 1979, EOS 60, #18, p. 407 (1979).
48. Carlson, R.W. and G.W. Lugmair, "Sm-Nd Constraints on Early Lunar Differentiation and the Evolution of KREEP". Earth and Planet. Sci. Lett. 45, 123-132 (1979).
49. Lugmair, G.W., "The State of the Isotopic Anomalies Game". Invited talk at Met. Soc. Heidelberg 1979. Abstract in Meteoritics 14, #4, p. 477. (1979).
50. Jagoutz, E., H. Wänke, and G.W. Lugmair, "Sm-Nd and Sr Isotopes of Primitive Lherzolites and Implications for the Isotope Stratigraphy of the Earth's Mantle." Abstract, Proc. German Mineralogical Society (1979).
51. Stosch, H.G., R.W. Carlson and G.W. Lugmair, "Episodic Mantle Differentiation: Nd and Sr Isotopic Evidence". Earth and Planet. Sci. Lett. 47, 263-271 (1980).
52. Carlson, R.W. and G.W. Lugmair, "Early History Recorded by Norite 78236". Conf. Lunar Highlands Crust, 9-11, Lunar and Planet. Inst., Houston (1979).
53. Stosch, H.G., E. Jagoutz, R.W. Carlson and G.W. Lugmair, "Mantle Differentiation as Recorded by Ultramafic Nodules: Oceanic Mantle

Beneath Continental Crust." Abstract, Fall Mtg. of Amer. Geophys. Union, Dec. 3-7, 1979, San Francisco. (1979).

54. Jagoutz, E., R.W. Carlson and G.W. Lugmair, "Equilibrated Nd-Unequilibrated Sr Isotopes in Mantle Xenoliths". Nature 286, 708-710, Aug. 4 (1980).
55. Carlson, R.W. and G.W. Lugmair, "78236, A Primary, but Partially Senile, Lunar Norite". Lunar and Planet. Science XI, 125-127, Lunar and Planet. Inst., Houston (1980). Abstract.
56. Niemeyer, S. and G.W. Lugmair, "Ti Isotope Anomalies in an "Un-Fun" Allende Inclusion. Abstract, 43rd Met. Soc. Mtg., La Jolla, p. 36 (1980).
57. Carlson, R.W., and G.W. Lugmair, "Origin of Continental Flood Basalts: Columbia River Province." Abstract. Sub. to VIII Nat. Symp. on Isotope Geochem., Moscow, 1980 (1980).
58. Lugmair, G.W. and R.A. Carlson, "Duration of Lunar Crustal Formation". Abstract. Sub. VIII Nat. Symp. Isotope Geochem., Moscow, 1980 (1980).
59. Thiemans, M.H., G.W. Lugmair and R.N. Clayton, "Nitrogen and Samarium Isotopes in Ancient Lunar Microbreccias." Abstract, 43rd Met. Soc. Mtg., La Jolla, p. 82 (1980) and Meteoritics 15, p. 377 (1980).
60. Carlson, R.W., G.W. Lugmair and J.D. Macdougall, "Crustal Influence in the Generation of Continental Flood Basalts". Nature 289, 160-162 (1981).
61. Carlson, R.W. and G.W. Lugmair, "Time and Duration of Lunar Highlands Crust Formation". Earth and Planet. Sci. Lett. 52, 227-238 (1981).
62. Carlson, R.W., T. Tanaka and G.W. Lugmair, "Sm-Nd Age of Lunar Lherzolite 67667". Lunar and Planet. Sci. XII, Lunar and Planet. Sci. Inst., Houston, 126-128 (1981). Abstract.
63. Niemeyer, S. and G.W. Lugmair, "Ubiquitous Isotopic Anomalies in Ti from Normal Allende Inclusions". Earth and Planet. Sci. Lett. 53, 211-225 (1981).
64. Niemeyer, S. and G.W. Lugmair, "Ti Isotopes in Allende Inclusions and Unequilibrated Chondrite Chondrules". Lunar and Planet. Sci. XII, Lunar and Planet. Inst., Houston, 768-770 (1981). Abstract.
65. Shimamura, T. and G.W. Lugmair, "U-Isotopic Abundances". Lunar and Planet. Sciences XII, Lunar and Planet. Inst., Houston, 976-978 (1981). Abstract.

66. Carlson, R.W., J.D. Macdougall and G.W. Lugmair, "Columbia River Volcanism: The Question of Mantle Heterogeneity or Crustal Contamination". *Geochim. Cosmochim. Acta* 45, 2483-2499 (1981).
67. Niemeyer, S. and G.W. Lugmair, "Titanium Isotopic Anomalies in Cl and C2 Chondrites. Abstract, 44th Met. Soc. Mtg., Bern, A2, p. 2 (1981). Also in *Meteoritics* 16, #4, p. 366 (1981).
68. Carlson, R.W. and G.W. Lugmair, "Sm-Nd Age of Lherzolite 67667: Implications for the Processes Involved in Lunar Crustal Formation". *Earth and Planet. Sci. Lett.* 56, 1-8 (1981).
69. Newman, S., J.D. Macdougall, R.C. Finkel, G.W. Lugmair and C.S. MacIsaac, "Fine Scale Isotopic Structure in Basalts from the East Pacific Rise at 21°N". Abstract, EOS 62, #17, V-100, p. 423, (1981).
70. Macdougall, J.D., G.W. Lugmair, J. Mahoney, A.V. Murali and K. Gopalan, "Deccan and Rajmahal Traps, India: Further Evidence for Crustal Components in Flood Basalts. Abstract, EOS 62, #17, V-162, p. 432, (1981).
71. Mahoney, J., J.D. Macdougall, G.W. Lugmair et al., "Isotopic and Chemical Evidence for Crustal Contamination of Magmas from Depleted Subcontinental Mantle at Mahabaleshwar, India. Abstract. EOS 62, #45, V3-1-B-6, p. 1075 (1981).
72. Macdougall, J.D. and G.W. Lugmair, "Isotopic Characteristics of East Pacific Rise Basalts". Abstract. EOS 63, #18, V51-1, p. 472, May 4 (1982).
73. Macdougall, J.D., G.W. Lugmair and J.F. Kerridge, "Time of Aqueous Activity on Cl Parent Body". *Lunar and Planet. Science XIII*, Lunar and Planet. Inst., Houston, 455-456 (1982). Abstract.
74. Shimamura, T. and G.W. Lugmair, "Ni Isotopic Compositions in Terrestrial and Meteoritic Samples". *Lunar and Planet. Science XIII*, Lunar and Planet. Inst., Houston, 722-723, Pt. II (1982). Abstract.
75. Shimamura, T. and G.W. Lugmair, "Ni Isotopic Composition in Meteoritic Samples and Search for Extinct ^{60}Fe ". 5th Internat. Conf. on Geochron., Cosmochron. and Isotopic Geol., Nikko, Japan. (1982). Abstract.
76. Macdougall, J.D., G.W. Lugmair and J.F. Kerridge, "Sr Isotopic Evidence for Early Aqueous Activity on the Orgueil Parent Body". 5th Int. Conf. on Geochron., Cosmochron. and Isotopic Geol., Nikko, Japan. (1982). Abstract.

77. Niemeyer, S. and G.W. Lugmair, "Titanium Isotopes in Meteorites: Tieschitz and More Allende". 5th Int. Conf. on Geochron., Cosmochron. and Isotope Geol., Nikko, Japan, 267-268 (1982). Abstract.
78. Lugmair, G.W. and J.D. Macdougall, "Ocean Ridge and Continental Flood Basalt Sources: How Do They Differ?". 5th Int. Conf. on Geochron., Cosmochron. and Isotope Geol., Nikko, Japan, 220-221 (1982). Abstract.
79. Mahoney, J., J.D. Macdougall, G.W. Lugmair, A.V. Murali, M. Sandar Das and K. Gopalan, "Origin of the Deccan Trap Flows at Mahabaleshwar" inferred from Nd and Sr Isotopic and Chemical Evidence. Earth and Planet. Sci. Lett. 60, 47-60 (1982).
80. Shimamura, T. and G.W. Lugmair, "Ni Isotopic Compositions in Allende and Other Meteorites". EPSL 63, #2, 177-188, May (1983).
81. Lewis, R.S., Edward Anders, T. Shimamura and G.W. Lugmair, "Search for Isotopic Anomalies Correlated with CCF Xenon". Abstract, Lunar and Planet. Sci. XIV, Lunar and Planet. Inst., Houston, 136-137 (1983).
82. Macdougall, J.D., G.W. Lugmair and J.F. Kerridge, "Are Orgueil Carbonates Contemporary with Parent Body Formation?" Abstract, Lunar and Planet. Sci. XIV, Lunar and Planet. Inst., Houston, 454-455 (1983).
83. Lugmair, G.W., T. Shimamura, Roy S. Lewis and Edward Anders, " ^{146}Sm was Alive and Kicking in Allende; Isotopic Abundance Patterns in Allende Residues. II Nd, Sm and Sr". Abstract, Lunar and Planet. Sci. XIV, Lunar and Planet. Inst., Houston, 448-449 (1983).
84. Macdougall, J.D., G.W. Lugmair and J. Mahoney, "The Nature of the Mantle Sources for Continental Flood Basalts". Abstract, IUGG, Hamburg (1983).
85. Mahoney, J.J., J.D. Macdougall, G.W. Lugmair, K. Gopalan and P. Das Gupta, "Isotopic and Geochemical Investigation of the Rajmahal Traps and Ninetyeast Ridge: Their Relation to the Kerguelen Hotspot." Abstract. Fall Mtg., AGU (1982).
86. Carlson, R.W., G.W. Lugmair and J.D. Macdougall, "Columbia River volcanism: The Question of Mantle Heterogeneity or Crustal Contamination" (reply to a comment by D.J. DePaulo). Geochim. Cosmochim. Acta 47, 845-846 (1983).
87. Mahoney, J.J., J.D. Macdougall, G.W. Lugmair and K. Gopalan, "Kerguelen hotspot source for Rajmahal Traps and Ninetyeast Ridge?" Nature 303, 385-389, June 2 (1983).

88. Lugmair, G.W., T. Shimamura, R.S. Lewis and E. Anders, "Isotopic Abundance Patterns in Allende Residues - Origin and Implications." Abstract. 46th Met. Soc. Mtg., Mainz (1983).
89. Shimamura, T., M.H.A. Jungck and G.W. Lugmair, "Allende Inclusion "TE": Is There FUN with UN?". Abstract. 46th Met. Soc. Mtg., Mainz (1983).
90. Macdougall, J.D., K. Gopalan and G.W. Lugmair, "An Ancient Depleted Mantle Source for Archean Crust in Rajasthan, India." Abstract. Archean Geochemistry-Early Crustal Genesis Workshop, Ottawa, LPI Pub., Aug. (1983).
91. Macdougall, J.D., K. Gopalan, G.W. Lugmair et al., "The Banded Gneiss Complex of Rajasthan, India: Early Crust from Depleted Mantle at the ~3.5 AE?" Abstract. EOS Spring Mtg. (1983).
92. Lewis, Roy, Ed Anders, T. Shimamura and G.W. Lugmair, "Barium Isotopes in Allende Meteorite: Evidence Against an Extinct Superheavy Element". Science 222, 1013-1015, Dec. (1983).
93. Lugmair, G.W., T. Shimamura, Roy Lewis and Ed Anders, " ^{146}Sm in the Early Solar System: Evidence from Neodymium in the Allende Meteorite". Science 222, 1015-1018, Dec. 2 (1983).
94. Stosch, H.G., G.W. Lugmair and H.A. Seck, "The nature of the lithospheric continental mantle: More Evidence from spinel peridotite xenoliths". Abstract. EOS Fall Mtg., (1983).
95. Mahoney, J., J.D. Macdougall, G.W. Lugmair and K. Gopalan, "Isotopically similar interbedded alkalic and tholeiitic basalts, northern Deccan Plateau, India". Abstract. EOS, Fall Mtg. (1983).
96. Stosch, H.G., G.W. Lugmair and V.I. Kovalenko, "Depleted lithospheric mantle underneath Mongolia: evidence from peridotite xenoliths." Abstract. International Geol. Congr. 27th Mtg., Moscow (1984).
97. Stosch, H.G., G.W. Lugmair and H.A. Seck, "Evolution and geochemistry of the lower continental crust: Granulite-facies xenoliths from the Eifel/FRG." Abstract, Joint Mtg. of Geol. Verein./German Geophys. Soc., 74th Ann. Mtg., Mainz, Germany (1984).
98. Zhu, B.-Q., C.-X Mao, G.W. Lugmair and J.D. Macdougall, "Isotopic and Geochemical Evidence for the Origin of Plio-Pleistocene Volcanic Rocks Near the Indo-Eurasian Collisional Margin at Tengchong, China". Earth Planet. Sci. Lett. 65, 263-275 (1983).

99. Shimamura, T. and G.W. Lugmair, "Uranium Isotopic Abundance in Allende Residue". Abstract, Lunar and Planet. Sci. XV, Lunar and Planet. Inst., Houston, 776-777 (1984).
100. Jungck, M.H.A., T. Shimamura and G.W. Lugmair, "Are ^{48}Ca Anomalies Endemic or Ubiquitous in Allende CAIs?" Abstract, Lunar and Planet. Sci. XV, Lunar and Planet. Inst., Houston, 423-424 (1984).
101. Stosch, H.-G. and G.W. Lugmair, "Evolution of the Lower Continental Crust: Granulite Facies Xenoliths from the Eifel, Germany". Nature 311, 368-370 (1984).
102. Niemeyer, S. and G.W. Lugmair, "Titanium Isotopic Anomalies in Meteorites". Geochim. Cosmochim. Acta 48, 1401-1416 (1984).
103. Jungck, M.H.A., T. Shimamura and G.W. Lugmair, "Ca Isotope Variations in Allende". Geochim. Cosmochim. Acta 48, 2651-2658 (1984).
104. Macdougall, J.D., G.W. Lugmair and J.F. Kerridge, "Early Solar System Aqueous Activity: Sr Isotopic Evidence from the Orgueil CI Meteorite". Nature 307, 249-251, Jan. 19 (1984).
105. Rajan, R.S. and G.W. Lugmair, "Search for neutron effects in the Elephant Moraine Shergottite", Lunar and Planet. Sci. XVI, Houston, 681-682 (1985). Abstract.
106. Macdougall, J.D. and G.W. Lugmair, "Extreme isotopic homogeneity among basalts from the southern East Pacific Rise: mantle or mixing effect?" Nature 313, 209-211 (1985).
107. Mahoney, J.J., J.D. Macdougall, G.W. Lugmair, K. Gopalan and P. Krishnamurthy, "Origin of contemporaneous tholeiitic and K-rich alkalic lavas: a case study from northern Deccan Plateau, India". Earth Planet. Sci. Lett. 72, 39-53 (1985).
108. Prombo, C.A. and G.W. Lugmair, "Are Ca and Ti Isotopic Anomalies Correlated (or were they ever?). Abstract. Met. Soc. Mtg., Bordeaux (1985).
109. Niemeyer, S. and G.W. Lugmair, "Implications of Ti isotopic anomalies in meteorites". In: Rapports Isotopiques dans le Systeme Solaire, Paris, June, 1984, Cepadues-Editions, Cepad, 71-75 (1985).
110. Rajan, R.S., G. Lugmair, A.S. Tahmane and G. Poupeau, "Nuclear tracks, Sm isotopes and neutron capture effects in the Elephant Moraine shergottite". Geochim. Cosmochim. Acta 50, 1039-1042 (1986).

111. Prombo, C. and G.W. Lugmair, "Search for correlated isotope effects in Allende CAI's". Abstract, Lunar and Planetary Science Conf. XVII, Houston, 1986, pp. 685-686. (1986).
112. Macdougall, J.D. and G.W. Lugmair, "Sr and Nd isotopes in basalts from the East Pacific Rise: Significance for mantle heterogeneity. Earth Planet. Sci. Lett. 77, 273-284 (1986).
113. Lugmair, G.W., "Isotopic anomalies in the heavy elements: R-, S-, and P-process effects". Terra Cognita 6, #2, 129, SH5 (1986).
114. Stosch, H.-G. and Lugmair, G.W., "Geochemistry and evolution of eclogites from the Münchberg Gneiss Massif/W. Germany". Terra Cognita 6, #2, 254, W8 (1986).
115. Stosch, H.-G. and Lugmair, G.W., "Trace element and Sr and Nd isotope geochemistry of peridotite xenoliths from the Eifel (W. Germany) and their bearing on the evolution of the subcontinental lithosphere". EPSL 80, 281-298 (1986).
116. Stosch, H.-G., Lugmair, G.W. and Kovalenko, V.I., "Spinel peridotite xenoliths from the Tariat depression, Mongolia. II: Geochemistry and Nd and Sr isotopic composition and their implications for the evolution of the subcontinental lithosphere". Geochim. Cosmochim. Acta 50, 2601-2614 (1986).
117. Cheng, Qun, Macdougall, J.D. and Lugmair, G.W., "Isotopic Studies of Easter and Sala y Gomez Islands". Abstract, Eos 44, p. 1272 (1986).
118. Macdougall, J.D., Lugmair, G.W. and Hekinian, R., "Isotopic Gradient Along the Southern EPR: An Easter Hotspot Connection?". Abstract, Eos 44, p. 1253 (1986).
119. Birck, J.-L., Prombo, C.A. and Lugmair, G.W., "Ni and Cr Isotopes in Allende Inclusions". Extended abstract, XVIII Lunar and Planetary Science Conference, Houston, p. 79 (1987).
120. Lugmair, G.W., "The Age of the Lunar Crust: 60025 - Methusalah's Legacy". Extended abstract, XVIII Lunar and Planetary Science Conference, Houston, p. 584 (1987).
121. Prombo, C.A., Hashimoto, A., Birck, J.-L., Lugmair, G.W. and Grossman, L., "Search for Correlated Isotopic Effects in Allende CAIs: II. Comparison with Mineralogical Data". Extended abstract, XVIII Lunar and Planetary Science Conference, Houston, p. 804 (1987).

122. Stosch, H.-G., Lugmair, G.W. and Seck, H.A., "Geochemistry of Granulite Facies Lower Crustal Xenoliths: Implications for the Geological History of the Lower Continental Crust Below the Eifel, West Germany". Geol. Soc. Spec. Pub. 24, 309-317 (1987).
123. Lugmair, G.W. and Prombo, C.A., "Isotopic Anomalies in Meteorites: Nickel Isotopes in Allende". Extended abstract, XVIII LPSC, Press Abstracts, Houston, p. 79-81 (1987).
124. Brannon, J.C., Podosek, F.A. and Lugmair, G.W., "Strontium, Neodymium and Plutonium in Chondritic Phosphates". Extended abstract, XVIII LPSC, Houston, p. 121-122 (1987).
125. Rajan, R.S. and Lugmair, G.W., "Neutron Capture Effects in Asteroidal Regoliths". Extended abstract, XVIII LPSC, Houston, p. 818-819 (1987).
126. Birck, J.-L. and Lugmair, G.W., "Ni and Cr Isotopes in Allende Inclusions". Abstract, 50th Met. Soc. Conf., p. 326 (1987).
127. Prombo, C.A. and Lugmair, G.W., "Ca, Ti and Mg Isotopic Anomalies in Allende CAI HN-3 and Bulk Kakangari". Abstract, 50th Met. Soc. Conf., p. 483 (1987).
128. Rajan, R.S. and Lugmair, G.W., "Neutron Capture Effects in Asteroidal Regoliths". Abstract, 50th Met. Soc. Conf., p. 486 (1987).
129. Brannon, J.C., Podosek, F.A. and Lugmair, G.W., "Initial $^{87}\text{Sr}/^{86}\text{Sr}$ and Sm-Nd Chronology of Chondritic Meteorites. Proc. of 18th LPSC Sci. Conf., 555-564 (1987).
130. Cheng, Q., Park, K.-H., Macdougall, J.D., Zindler, A., Lugmair, G.W., Staudigel, H., Hawkins, J. and Lonsdale, P., "Isotopic Evidence for a Hotspot Origin of the Louisville Seamount Chain". In: Seamounts, Islands and Atolls (B.H. Keating, P. Freyer, R. Batiza and G.W. Boehler, eds.). Geophys. Monograph 43, Am. Geophys. U., 283-296 (1987).
131. Shervais, John W., Lawrence A. Taylor, G.W. Lugmair, Robert Clayton, T. Mayeda and Randy Korotev, "Early Proterozoic Oceanic Crust and the Evolution of Sub-Continental Mantle: Eclogites and Related Rocks from Southern Africa". Geol. Soc. Amer. Bull. 100, 411-423 (1988).
132. Prombo, C.A. and Lugmair, G.W., "Calcium Isotope Disequilibrium in Allende Inclusion HN-3", Extended Abstract, XIX LPSC, Houston, p. 951-952 (1988).

133. Birck, J.-L. and Lugmair, G.W., "Nickel and Chromium Isotopes in Allende Inclusions", EPSL 90, 131-143 (1988).
134. Carlson, R.W. and Lugmair, G.W., "The Age of Ferroan Anorthosite 60025: Oldest Crust on a Young Moon?", EPSL 90, 119-130 (1988).
135. Stosch, H.-G., Lugmair, G.W., Reys, Ch. and Seck, H.A., "Zur Entwicklung der mittleren Kruste unter der Eifel", abstract, Fortschritte der Mineralogie 66, p. 152, 1988.
136. Lugmair, G.W., Galer, S.J.G. and Loss, R., "Rb-Sr and Other Isotopic Studies of the Angrite LEW 86010". Extended abstract, XX LPSC, Houston, p. 604-605 (1989).
137. Loss, R.D. and Lugmair, G.W., "A Search for Zinc Isotope Anomalies in CAIs: First Results". Extended abstract, XX LPSC, Houston, p. 588-589 (1989).
138. Lugmair, G.W. and Galer, S.J.G., "Isotopic Evolution and Age of Angrite LEW 86010". Abstract, Meteoritics 24, v. 4, p. 296 (1989).
139. Loss, R.D. and Lugmair, G.W., "On the Distribution of Zinc Isotope Anomalies Within Allende CAIs". Abstract, Meteoritics 24, v. 4, p. 295 (1989).
140. Macdougall, J.D. and Lugmair, G.W., "Chronology of Chemical Change in the Orgueil CI Chondrite Based on Sr Isotope Systematics". Abstract, Meteoritics 24, v. 4, p. 297 (1989).
141. Rajan, R.S. and Lugmair, G.W., "Solar Flare Tracks and Neutron Capture Effects in the Carbonaceous Gas-Rich Meteorite Murchison". Abstract, Meteoritics 24, v. 4, p. 318 (1989).
142. Loss, R.D., Lugmair, G.W., MacPherson, G.J. and Davis, A.M., "Isotope Anomalies in Vigarano CAIs - Hic et Ubique". Extended abstract, XXI LPSC, Houston, p. 718-719 (1990).
143. Goodrich, C.A., Patchett, P.J., Lugmair, G.W. and Drake, M.J., "Sm-Nd Isotopic Systematics of Ureilites: A 3.74 Ga Isochron for Kenna, Novo Urei, and ALHA77257". Extended abstract, XXI LPSC, Houston, pp. 425-426 (1990).
144. Volpe, A.M., Macdougall, J.D., Lugmair, G.W., Hawkins, J.H. and Lonsdale, P., "Fine-scale Isotopic Variation in Mariana Trough Basalts: Evidence for Heterogeneity and a Recycled Component in Backarc Basin Mantle". EPSL 100, pp. 251-264 (1990).

145. Loss, R.D. and Lugmair, G.W., "Zinc Isotope Anomalies in Allende Meteorite Inclusions". *Astrophys. Jour.* 360, pp. L59-L62 (1990).
146. Lugmair, Gunter W., "Measuring isotopic anomalies from Ba to Zn with Multi-dynamic Algorithms". V.M. Goldschmidt Conference, May 1990.
147. Stosch, H.-G. and Lugmair, G.W., "Geochemistry and Evolution of MORB-type Eclogites from the Münchberg Massif, Southern Germany". *Earth Planet. Sci. Lett.* 99, pp. 230-249 (1990).
148. Loss, R.D., Lugmair, G.W., MacPherson, G.J. and Davis, A.M., "Isotopically Distinct Reservoirs in the Early Solar System". Abstract, *Meteoritics* 25, pp. 380-381 (1990).
149. Goodrich, C.A., Patchett, J.P., Lugmair, G.W. and Drake, M.J., "Sm-Nd and Rb-Sr Isotopic Systematics of Ureilites". *GCA* 55, pp. 829-848 (1991).
150. Lewis, R.S., Huss, G.R. and Lugmair, G.W., "Finally, Ba and Sr Accompanying Xe-HL in Diamonds from Allende". Extended abstract, LPSC XXII, pp. 807-808 (1991).
151. Goodrich, C.A. and Lugmair, G.W., "PCA82506: A Ureilite with LREE-enriched Component and a Whole-Rock Sm-Nd Model Age of 4.55 Ga". Extended abstract, LPSC XXII, pp. 467-468 (1991).
152. Lugmair, G.W., Galer, S.J.G. and Carlson, R.W., "Isotope Systematics of Cumulate Eucrite EET-87520". Abstract, *Meteoritics* 26, p. 368 (1992).
153. Lugmair, G.W., MacIsaac, C. and Shukolyukov, A., "The ^{53}Mn - ^{53}Cr Isotope System and Early Planetary Evolution". Extended abstract, LPSC XXIII, Houston (1992).
154. Shukolyukov, A. and Lugmair, G.W., "First Evidence for Live ^{60}Fe in the Early Solar System". Extended abstract, LPSC XXIII, Houston (1992).
155. Goodrich, C.A. and Lugmair, G.W., "Addition of LREE-enriched Material to a Ureilite at 4.23 Ga: Evidence for Episodic Metasomatism?". Extended abstract, LPSC XXIII, Houston (1992).
156. Lugmair, G.W. and Galer, S.J.G., "Age and Isotopic Relationships Among the Angrites Lewis Cliff 86010 and Angra dos Reis". *GCA* 56, pp. 1673-1694 (1992).
157. Shukolyukov, A. and Lugmair, G.W., " ^{60}Fe -Light My Fire". Abstract, *Meteoritics* 27, p. 289 (1992).

158. Shukolyukov, A. and Lugmair, G.W., "Live Iron-60 in the Early Solar System". *Science* 259, pp. 1138-1142 (1993).
159. Cheng, Q.C., Macdougall, J.D. and Lugmair, G.W., "Geochemical Studies of Tahiti, Teahitia and Mehetia, Society Island Chain". *J. Volc. Geotherm. Res.*, 155-184 (1993).
160. Goodrich, Cyrena Anne and Gunter W. Lugmair, "Stalking the LREE-Enriched Component in Ureilites". Extended abstract, LPSC XXIV, Houston, pp. 547-548 (1993).
161. Shukolyukov, A. and G.W. Lugmair, " ^{60}Fe and the Evolution of Eucrites". Extended abstract, LPSC XXIV, Houston, pp. 1305-1306 (1993).
162. Shukolyukov, A. and Lugmair, G.W., " ^{60}Fe in Eucrites". *EPSL* 119, 159-166 (1993).
163. Lugmair, G.W., MacIsaac, C. and Shukolyukov, A., "Small Time Differences in Differentiated Meteorites Recorded by the ^{53}Mn - ^{53}Cr Chronometer". Extended abstract, LPSC XXV, Houston (1994).
164. Mahoney, J.J., Sinton, J.M., Kurz, M.D., Macdougall, J.D., Spencer, K.J., and G.W. Lugmair, "Isotope and Trace Element Characteristics of a Super-Fast Spreading Ridge: East Pacific Rise, 13-23°S." *EPSL* 121, 173-193 (1994).
165. Lugmair, G.W., MacIsaac, C. and Shukolyukov, A., "Small Time Differences Recorded in Differentiated Meteorites". Abstract, *Meteoritics* 29, 493-494 (1994).
166. Lugmair, G.W., MacIsaac, C. and Shukolyukov, A., "The Abundance of ^{60}Fe in the Early Solar System". In *Proceedings of "Nuclei in the Cosmos III"*, 591-594. (1994).
167. Loss, R.D., Lugmair, G.W., Davis, A.M. and MacPherson, G.J., "Isotopically Distinct Reservoirs in the Solar Nebula: Isotope Anomalies in Vigarano Meteorite Inclusions". *Astrophys. Jour.* 436, L193-L196 (1994).
168. Wadhwa, M. and Lugmair, G.W., "Sm-Nd Systematics of the Eucrite Chervony Kut". Extended abstract, LPSC XXVI, Houston, pp. 1453-1454 (1995).
169. Lugmair, G.W. and MacIsaac, C., "Radial Heterogeneity of ^{53}Mn in the Early Solar System?" Extended abstract, LPSC XXVI, Houston, pp. 879-880 (1995).

170. Goodrich, Cyrena Anne and Lugmair, Gunter W., "Stalking the LREE-Enriched Component in Ureilites". GCA 59, 2609-2620 (1995).
171. Wadhwa, M. and Lugmair, G.W., "Samarium-Neodymium and Manganese-Chromium Systematics in the Eucrite Caldera". Extended Abstract, Meteoritics 30, p. 592 (1995).
172. Goodrich, C.A., Lugmair, G.W., Drake, M.J. and Patchett, P.J., Comment on "U-Th-Pb and Sm-Nd Isotopic Systematics of the Goalpara Ureilite: Resolution of Terrestrial Contamination" by N. Torigoye-Kita, K. Misawa and M. Tatsumoto. GCA 59, p. 4083-4085 (1995).
173. Lugmair, G.W., Shukolyukov, A. and MacIsaac, Ch., "Radial Heterogeneity of ^{53}Mn in the Early Solar System and the Place of Origin of Ordinary Chondrites". Extended abstract, LPSC XXVII, Houston (1996).
174. Shukolyukov, A. and Lugmair, G.W., " ^{60}Fe - ^{60}Ni Isotope System in the Eucrite Caldera". Extended abstract, Meteoritics & Planet. Sci. 31, p. A129 (1996).
175. Galer, S.J.G. and Lugmair, G.W., "Lead Isotope Systematics of Noncumulate Eucrites". Extended abstract, Meteoritics & Planet. Sci. 31, p. A47 (1996).
176. Wadhwa, M. and Lugmair, G.W., "The Formation Age of Carbonates in ALH 84001". Extended abstract, Meteoritics & Planet. Sci. 31, p. A145 (1996).
177. Zipfel, J., Shukolyukov, A. and Lugmair, G.W., "Manganese-Chromium Systematics in the Acapulco Meteorite". Extended abstract, Meteoritics & Planet. Sci. 31, p. A160 (1996).
178. Wadhwa, M. and Lugmair, G.W., "Age of the Eucrite 'Caldera' from Convergence of Long-lived and Short-lived Chronometers". GCA 60, p. 4889-4893 (1996).
179. Lugmair, G.W. and Shukolyukov, A., " ^{53}Mn - ^{53}Cr Isotope Systematics of the HED Parent Body". Extended abstract, LPSC XXVIII, Houston, pp. 851-852 (1997).
180. Shukolyukov, A. and Lugmair, G.W., "The ^{53}Mn - ^{53}Cr Isotope System in the Omolon Pallasite and the Half-life of ^{187}Re ". Extended abstract, LPSC XXVIII, Houston, pp. 1315-1316 (1997).
181. Wadhwa, M., Shukolyukov, A. and Lugmair, G.W., "The Relationship between Basaltic Clasts in Mesosiderites and the HED Meteorites: Clues

- from Mn-Cr Systematics of two Vaca Muerta Clasts". Extended abstract, LPSC XXVIII, Houston, pp. 1487-1488 (1997).
182. Bogdanovski, O., Shukolyukov, A, and Lugmair, G.W., " ^{53}Mn - ^{53}Cr Isotope System in the Divnoe Meteorite". Extended abstract, Meteoritics & Planet. Sci. 32, p. A16 (1997).
183. Shukolyukov, A. and Lugmair, G.W., " ^{53}Mn - ^{53}Cr Chronology of Noncumulate and Cumulate Eucrites". Extended abstract, Meteoritics & Planet. Sci. 32, pp. A120-A121 (1997).
184. Dreibus, G., H. Wänke and G. W. Lugmair, "Volatile Inventories of Mars and Earth and their Implication for the Evolution of the Planetary Atmospheres". Conf. on Early Mars: Geologic and Hydrologic Evolution, Physical and Chemical Environments, and the Implications for Life", LPI Contrib. No. 916, pp. 26-27 (1997).
185. Wadhwa, M., A. Shukolyukov and G. W. Lugmair, " ^{53}Mn - ^{53}Cr Systematics in Brachina: a Record of one of the Earliest Phases of Igneous Activity on an Asteroid?", Extended abstract, LPSC XXIX, Houston, pp. 1480-1481, (1998).
186. Shukolyukov, A. and G. W. Lugmair, "The ^{53}Mn - ^{53}Cr Isotope System in the Indarch EH4 Chondrite: Further Argument for ^{53}Mn Heterogeneity in the Early Solar System.", Extended abstract, LPSC XXIX, Houston, pp. 1208-1209, (1998).
187. Ott, U. and G. W. Lugmair, "Noble Gas Study of El Djouf 001: Evidence for 'Normal' Presolar Grain Inventory". Extended abstract, Meteoritics & Planet. Sci. 33, p. A119-A120 (1998).
188. Shukolyukov, A., G. W. Lugmair and Ch. MacIsaac, "Chromium in the Cretaceous-Tertiary Boundary Layer: First Isotopic Evidence for an Impactor and its Type". Extended abstract, Meteoritics & Planet. Sci. 33, p. A144-A145 (1998).
189. Lugmair G. W. and A. Shukolyukov, "Early Solar System Timescales according to ^{53}Mn - ^{53}Cr Systematics". GCA 62, pp. 2863-2886, (1998).
190. Shukolyukov A., F. T. Kyte, G. W. Lugmair, and D. R. Lowe, "The Oldest Impact Deposits on Earth - First Confirmation of an Extraterrestrial Component". Extended abstract to the Conference on "Impacts and the Early Earth", (1998).

191. Shukolyukov, A. and G. W. Lugmair, "Chromium Isotopic Evidence for the Cretaceous-Tertiary Impactor and its Type". *Science*, **282**, pp 927-929, (1998).
192. Shukolyukov, A. and G. W. Lugmair, "The ^{53}Mn - ^{53}Cr Isotope Systematics of the Enstatite Chondrites". *LPSC XXX*, Extended Abstract #1093, (1999).
193. Wadhwa M., A. Shukolyukov, A.M. Davis and G. W. Lugmair, "Origin of Silicate Clasts in Mesosiderites: Trace Element Microdistribution and Mn-Cr Systematics tell the Tale ". *LPSC XXX*, Extended Abstract #1707, (1999).
194. Brückner J., G. Dreibus, G. W. Lugmair, R. Rieder, H. Wänke , and T. Economou, "Chemical Composition of the Martian Surface as Derived from the Pathfinder, Viking, and Martian Meteorite Data". *LPSC XXX*, Extended Abstract #1250, (1999).
195. Lugmair G. W. and Shukolyukov A., " ^{53}Mn and ^{60}Fe in the Early Solar System". In Proceedings of the Workshop "Astronomy with Radioactivities", Editors R. Diehl and D. Hartmann, pp. 205-212, (1999).
196. Shukolyukov A., Lugmair G.W., Koeberl C., and Reimold W.U. (1999) Chromium in the Morokweng impact melt: Isotope evidence for extraterrestrial component and type of the impactor. *Meteoritics & Planet. Sci.* **34**, A107-A108 (abstr.).
197. Shukolyukov A., F. T. Kyte, G. W. Lugmair, D. R. Lowe, and G. R. Byerly, "The Oldest Impact Deposit on Earth - First Confirmation of an Extraterrestrial Component". In "Impacts and the Early Earth", Editors: I Gilmour and Ch. Köberl. Pp. 99-115, (2000).
198. Shukolyukov, A. and G. W. Lugmair, "The ^{53}Mn - ^{53}Cr Systematics of the Enstatite Achondrites". *LPSC XXXI*, Extended Abstract #1473, (2000).
199. Shukolyukov A. and Lugmair G.W. (2000) Extraterrestrial matter on Earth: Evidence from the Cr isotopes. Catastrophic Events&Mass Extinctions: Impacts and Beyond, Vienna, July 9-12, 2000, LPI Contribution #1053, 197-198 (extended abstract).
200. Koeberl C., Reimold W.U., Shukolyukov A., and Lugmair G.W. (2000) Comparison of Os and Cr isotopic methods for the detection of meteoritic components in impact melt rocks from the Morokweng and Vredefort impact structures, South Africa. Catastrophic Events&Mass Extinctions: Impacts and Beyond, Vienna, July 9-12, 2000, LPI Contribution #1053, 103-104 (extended abstract).

201. Polnau E., Lugmair G.W., Shukolyukov A., and MacIsaac Ch. "Manganese-Chromium Isotopic Systematics in the Ordinary Chondrite Forest Vale (H4)". Extended abstract, Meteoritics & Planet. Sci. **35** A128 (2000).
202. Shukolyukov, A. and G. W. Lugmair, "Chromium Isotopic Anomalies in the Carbonaceous Chondrites Allende and Orgueil and a Potential Connection between Chromium-54 and Oxygen Isotopes". Extended abstract, Meteoritics & Planet. Sci. **35** A146 (2000).
203. Shukolyukov, A., Kyte F.T., Lugmair G.W., Lowe D.R., and Byerly G.R., "Early Archean Spherule Beds: Confirmation if Impact Origin". Extended abstract, Meteoritics & Planet. Sci. **35** A146-A147 (2000).
204. Carlson R. W. and G. W. Lugmair, "Timescales of Planetesimal Formation and Differentiation based on Extinct Radioisotopes". In "Origin of the Earth and Moon" (Univ. of Arizona Press, Tucson). Pp. 25-44, (2000).
205. Shukolyukov, A. and G. W. Lugmair, "On the ^{53}Mn Heterogeneity in the Early Solar System" *Space Sci. Rev.* 92, pp. 225-236, (research article) (2000).
206. Begemann F., Ludwig K.R, Lugmair G.W., Min K.W., Nyquist L.E., Patchett P.J., Renne P.R., Shih, C.-Y. Villa I.M., Walker R.E., "Call for an Improved Set of Decay Constants for Geochronological Use". GCA **65**, pp. 111-121, (2001).
207. Shukolyukov A. and Lugmair G. W., "Cr Isotope Systematics in the Pallasite Eagle Station: Chronology and Evidence for a Genetic Link to Carbonaceous Chondrites". LPSC XXXII, Extended Abstract #1365, (2001).
208. Polnau E. and Lugmair G. W., "Mn-Cr Isotopic Systematics in the Two Ordinary Chondrites Richardon (H5) and Ste. Marguerite (H4)", LPSC XXXII, Extended Abstract #1527, (2001).
209. Maas R., Loss R. D, Rosman K. J .R., De Laeter J. R., Lewis R. S., Huss G. R., and Lugmair G. W. "Isotope Anomalies in Tellurium and Palladium from Allende Nanodiamonds". Meteoritics & Planet. Sci. 36, pp. 849-858, (research article) (2001).
210. Lugmair G. W. and Shukolyukov A., "Early Solar System Events and Time Scales". Meteoritics & Planet. Sci., **36**, 1017-1026, (research article) (2001)
211. Shukolyukov A. and Lugmair G.W., Mn-Cr isotope systematics in bulk samples of the carbonaceous chondrites. *Meteoritics & Planet. Sci.* **26**, A188-A189. (abstract) (2001)

212. Lugmair G.W. and Shukolyukov A. ^{53}Mn and ^{60}Fe in the early solar system. *Journal of the Italian Astronomical Society* **72**, 403-411, (research article) (2001).
213. Shukolyukov A., Castillo P., Simonson B.M., and Lugmair G.W Chromium in Archean spherule layers from Hamerslay Basin, Western Australia: isotopic evidence for extraterrestrial component. In *Lunar and Planetary Science XXXIII*, #1369. Lunar and Planetary Institute, Houston. (extended abstract). (2002)
214. Jagoutz E., Jotter R., Varela M.E., Zartman R., Kurat G. and Lugmair G.W., "Pb-U-Th Isotopic Evolution of the D'Orbigny Angrite", LPSC XXXIII, Extended Abstract #1043, (2002).
215. Zinner E., Hoppe P., and Lugmair G.W., "Radiogenic ^{26}Mg in Ste Marguerite and Forest Vale Plagioclase: Can ^{26}Al be used as Chronometer?", LPSC XXXIII, #1204, (Extended Abstract) (2002).
216. Köberl Ch., Peucker-Ehrenbrink B., Reimold W. U., Shukolyukov A., and Lugmair G. W., "A Comparison of the Osmium and Chromium Isotopic Methods for the Detection of Meteoritic Components in Impactites: Examples from the Morokweng and Vredefort Impact Structures, South Africa". In Proceedings of the Conference on "Catastrophic Events and Mass Extinctions: Impacts and Beyond". Boulder, Colorado, Geological Society of America, Special Paper 356, pp. 607-617. (2002)
217. Shukolyukov A. and Lugmair G. W., "Chronology of Asteroid Accretion and Differentiation". in Bottke W.F., Jr, Cellino A., Paolicci P. Binzel R.P., eds, *Asteroids III*, The University of Arizona Press, Tucson, pp. 687-695. (2003)
218. Shukolyukov A. and Lugmair G.W., Chromium isotopic composition of the acid-resistant residues from carbonaceous chondrites. *Meteoritics & Planet. Sci.* **38**, A46. (2003)
219. Shukolyukov A., Lugmair G.W, and O. Bogdanovski Manganese-Chromium isotope systematics of Ivuna, Kainsaz and other carbonaceous chondrites. In *Lunar and Planetary Science XXXIV*, #1279. Lunar and Planetary Institute, Houston. (extended abstract). (2003)
220. S. Mostefaoui, G. W. Lugmair, P. Hoppe, A. ElGoresy; First *in Situ* NanoSIMS Evidence for Live ^{60}Fe in Semarkona and Chervony Kut.. In *Lunar and Planetary Science XXXIV*, #1585, Lunar and Planetary Institute, Houston. (extended abstract). (2003)
221. D. P. Glavin and G. W. Lugmair, Mn-Cr Isotope Systematics in the LL Type Ordinary Chondrite St. Severin. In *Lunar and Planetary*

Science XXXIV, #1276, Lunar and Planetary Institute, Houston.
(extended abstract). (2003)

222. J. Brückner, R. Rieder, R. Gellert, G. Klingelhöfer, H. Michaelis, R. Bertrand, and G. Lugmair, In-Situ Geochemical Investigations Of Planetary Surfaces Using Compact Geochemistry Packages. AGU (Abstract), (2003).
223. D. P. Glavin, E. Jagoutz, and G. W. Lugmair, Mn-Cr Chronology Of The D'orbigny Angrite. *Meteoritics & Planet. Sci.* **38**, A40. (abstract) (2003)
224. E. Jagoutz, R. Jotter, A. Kubny, M. E. Varela, R. Zartman, G. Kurat, and G. W. Lugmair, Cm?-U-Th-Pb Isotopic Evolution Of The D'Orbigny Angrite. *Meteoritics & Planet. Sci.* **38**, A81. (abstract) (2003)
225. O. Bogdanovski and G. W. Lugmair, Manganese-Chromium Isotope Systematics Of A Highly Unusual Differentiated Meteorite: NWA011. *Meteoritics & Planet. Sci.* **38**, A54. (abstract) (2003)
226. Kyte F.T., Shukolyukov A., Lugmair G.W., Lowe D.R., and Byerly G.R. Early Archean spherule beds: Chromium isotopes confirm origin from multiple impacts of projectiles of carbonaceous chondrites type. *Geology* **31**, 283-286 (research article). (2003)
227. Kyte, F.T., Shukolyukov, A., Lugmair, G., Lowe D.R. and Byerly G.R. (2003). Reply to comments by A. Glikson on "Early Archean spherule beds: Chromium isotopes confirm origin through multiple impacts of carbonaceous chondrite type projectiles," *Geology*, 31: 283-286, (2003). *Geology Online Forum*, 37e.
228. Wadhwa M., Shukolyukov A., Davis A.M., Lugmair G.W., and Mittlefehldt D.W. Differentiation History of the Mesosiderite Parent Body: Constraints from Trace Elements and Manganese-Chromium Isotope Systematics in Vaca Muerta Silicate Clasts. *Geochimica et Cosmochimica Acta* **67**, 5047-5069 (research article) (2003)
229. Hoppe P., Ott U., and Lugmair G.W., NanoSIMS, the new tool of choice: ^{26}Al , ^{44}Ti , ^{49}V , ^{53}Mn , ^{60}Fe , and more. *New Astronomy Reviews* **48**, 171-176. (research article) (2004)
230. Mostefaoui S., Lugmair G.W., Hoppe P., and El Goresy A. Evidence for live ^{60}Fe in meteorites. *New Astronomy Reviews* **48**, 155-159. (research article) (2004)

231. Ott U., Hoppe P., and Lugmair G.W., Developments in Instrumentation for Isotopic Analyses of Pre-Solar Grains. *New Astronomy Reviews* **48**, 165-169. (research article) (2004)
232. Koeberl Ch., Shukolyukov A., and Lugmair G.W. An Ordinary Chondrite Impactor - Composition For The Bosumtwi Impact Structure, Ghana, West Africa: Discussion Of Siderophile Element Contents And Os And Cr Isotope Data. In *Lunar and Planetary Science XXXV*, #1256, Lunar and Planetary Institute, Houston. (extended abstract). (2004)
233. Mostefaoui S., Lugmair G. W., Hoppe P. In-Situ Evidence For Live Iron-60 In The Early Solar System: A Potential Heat Source For Planetary Differentiation From A Nearby Supernova Explosion. In *Lunar and Planetary Science XXXV*, #1271, Lunar and Planetary Institute, Houston. (extended abstract). (2004)
234. Hoppe P., Macdougall D., Lugmair G. W. High Spatial Resolution Ion Microprobe Measurements Refine Chronology Of Orgueil Carbonate Formation. In *Lunar and Planetary Science XXXV*, #1313, Lunar and Planetary Institute, Houston. (extended abstract). (2004)
235. Friedrich J. M., Ott U., Lugmair G. W. Revisiting Extraterrestrial U Isotope Ratios. In *Lunar and Planetary Science XXXV*, #1575, Lunar and Planetary Institute, Houston. (extended abstract). (2004)
236. Bogdanovski O., And Lugmair G. W. Manganese-Chromium Isotope Systematics Of Basaltic Achondrite Northwest Africa 011. In *Lunar and Planetary Science XXXV*, #1715, Lunar and Planetary Institute, Houston. (extended abstract). (2004)
237. Kyte F. T., Shukolyukov A., Hildebrand A. R., Lugmair G. W., Hanova J. Initial Cr-Isotopic And Iridium Measurments Of Concentrates From Lateeocene Cpx-Spherule Deposits. In *Lunar and Planetary Science XXXV*, #1824, Lunar and Planetary Institute, Houston. (extended abstract). (2004)
238. Shukolyukov A., Lugmair G. W., Becker L., Macisaac C., Poreda R. Extraterrestrial Chromium In The Permian-Triassic Boundary At Graphite Peak, Antarctica. In *Lunar and Planetary Science XXXV*, #1875, Lunar and Planetary Institute, Houston. (extended abstract). (2004)
239. Rieder R., Gellert R., Brückner J., Clark B. C., Dreibus G., d'Uston C., Economou T., Klingelhöfer G., Lugmair G. W., Wänke H., Yen A., Zipfel J., Squyres S. W. and the Athena Science Team. APXS On Mars: Analyses Of Soils And Rocks At Gusev Crater And Meridiani Planum.

In *Lunar and Planetary Science XXXV*, #2172, Lunar and Planetary Institute, Houston. (extended abstract). (2004)

240. Glavin D. P., Kubny A., Jagoutz E., and Lugmair G. W. Mn-Cr isotope systematics of the D'Orbigny angrite. *Meteoritics and Planet. Sci.* **39**, 693-700, (research article) (2004).
241. Shukolyukov A., Lugmair G. W. Manganese-chromium isotope systematics of enstatite meteorites Manganese-chromium isotope systematics of enstatite meteorites. *Geochimica et Cosmochimica Acta* **68**, 2875-2888 (research article) (2004).
242. R. Gellert, R. Rieder, R. C. Anderson, J. Brückner, B. C. Clark, G. Dreibus, T. Economou, G. Klingelhöfer, G. W. Lugmair, D. W. Ming, S. W. Squyres, C. d'Uston, H. Wänke, A. Yen, J. Zipfel. Chemical Composition of Martian Rocks and Soils in Gusev Crater From the Alpha Particle X-ray Spectrometer. *Science* **305**, 829-832 (research article) (2004).
243. J. Zipfel, R. Anderson, J. Brückner, B. C. Clark, G. Dreibus, T. Economou, R. Gellert, G. Klingelhöfer, G. W. Lugmair, D. Ming, R. Rieder, S. W. Squyres, C. d'Uston, H. Wänke, A. Yen, and the Athena Science Team. Apxs Analyses Of Bounce Rock – The First Shergottite On Mars. *Meteoritics and Planet. Sci.* **39**, A118 (abstract) (2004).
244. H. J. Melosh, P. Cassen, D. Sears, and G. Lugmair. Role Of Planetary Impacts In Thermal Processing Of Chondrite Materials. In Workshop on *Chondrites and the Protoplanetary Disk*. (extended abstract #9119), (2004).
245. R. Rieder, R. Gellert, R. C. Anderson, J. Brückner, B. C. Clark, G. Dreibus, T. Economou, G. Klingelhöfer, G. W. Lugmair, D. W. Ming, S. W. Squyres, C. d'Uston, H. Wänke, A. Yen, J. Zipfel. Chemistry of Rocks and Soils at Meridiani Planum from the Alpha Particle X-ray Spectrometer. *Science* **306**, 1746-1749 (research article) (2004).
246. S. Mostefaoui, G. W. Lugmair, and P. Hoppe. The Search For Extinct Iron-60 In Iron Meteorites. In *Lunar and Planetary Science XXXVI*, #1611, Lunar and Planetary Institute, Houston. (extended abstract). (2005).
247. J. Brückner, G. Dreibus, E. Jagoutz, R. Gellert, G. Lugmair, R. Rieder, H. Wänke, J. Zipfel, G. Klingelhöfer, B. C. Clark, D. W. Ming, A. Yen, K. E. Herkenhoff, and the Athena Science Team. Hematite On The Surface Of Meridiani Planum And Gusev Crater. In *Lunar and Planetary Science XXXVI*, #1767, Lunar and Planetary Institute, Houston. (extended abstract). (2005).

248. R.Gellert, J.Zipfel, J.Brückner, G. Dreibus, G. Lugmair, R. Rieder, H. Wänke, G. Klingelhöfer, B. C. Clark, D. W. Ming, A. Yen, S. Squyres, and the Athena Science Team. Results of the Alpha-Particle-X-ray Spectrometer on Board of the Mars Exploration Rovers. In *Lunar and Planetary Science XXXVI*, #1997, Lunar and Planetary Institute, Houston. (extended abstract). (2005).
249. M. Wadhwa, Y. Amelin, O. Bogdanovski, A. Shukolyukov, G. W. Lugmair and P. Janney. High Precision Relative And Absolute Ages For Asuka 881394, A Unique And Ancient Basalt. In *Lunar and Planetary Science XXXVI*, #2126, Lunar and Planetary Institute, Houston. (extended abstract). (2005).
250. S. Mostefaoui, S.; G. W. Lugmair, P. Hoppe. ^{60}Fe : A Heat Source for Planetary Differentiation from a Nearby Supernova Explosion. The Astrophysical Journal, Volume 625, Issue 1, pp. 271-277. (research article) (2005).
251. R. Gellert, R. Rieder, J. Brückner, B. Clark, G. Dreibus, G. Klingelhöfer, G. Lugmair, D. Ming, H. Wänke, A. Yen, J. Zipfel, and S. Squyres. The Alpha Particle X-Ray Spectrometer (APXS): Results from Gusev Crater and Calibration Report. *JGR* 111, E02S05, doi:10.1029/2005JE002555. (research article) (2006).
252. A. Shukolyukov and G.W. Lugmair. Manganese–chromium isotope systematics of carbonaceous chondrites. *Earth Planet. Sci. Lett.* **250**, 200–213. (research article) (2006).
253. Y Amelin, M Wadhwa, and G Lugmair. Pb-Isotopic Dating Of Meteorites Using ^{202}Pb - ^{205}Pb Double-Spike: Comparison With Other High-Resolution Chronometers. In *Lunar and Planetary Science XXXVII*, #1970, Lunar and Planetary Institute, Houston. (extended abstract) (2006).
254. A. Shukolyukov and G.W. Lugmair. The Mn-Cr isotope systematics in the ureilites Kenna and LEW 85440. In *Lunar and Planetary Science XXXVII*, #1478, Lunar and Planetary Institute, Houston. (extended abstract) (2006).
255. Maier W.D., Andreoli M., McDonald I., Higgins M.D., Boyce A.J., Shukolyukov A., Lugmair G.W., Ashwal L.D., Graeser P., Ripley E., and Hart R. Discovery of an asteroid clast in the Morokweng impact melt sheet, South Africa. *Nature* **441**, 203-206. (research article) (2006).
256. M. Wadhwa, Y. Amelin, A. M. Davis, G. W. Lugmair, B. Meyer, M. Gounelle, S. J. Desch. From Dust to Planetesimals: Implications for the Solar Protoplanetary Disk from Short-lived Radionuclides. In *Protostars*

and Planets V, Univ. of Arizona Press, p. 835-845. (book chapter) (2007).

257. A. Shukolyukov and G.W. Lugmair. The Mn-Cr isotope systematics of bulk angrites. In *Lunar and Planetary Science XXXVIII*, #1423, Lunar and Planetary Institute, Houston. (extended abstract). (2007).
258. C. Koeberl, A. Shukolyukov and G.W. Lugmair. Chromium isotopic studies of terrestrial impact craters: Identification of meteoritic components at Bosumtwi, Clearwater East, Lappajarvi and Rochechouart. *Earth Planet. Sci. Lett.*, 256, p. 534-546. (research article) (2007).
259. P. Hoppe, D. MacDougall, and G. W. Lugmair. High spatial resolution ion microprobe measurements refine chronology of carbonate formation in Orgueil. *Meteoritics & Planetary Science* 42, p. 1309–1320. (research article) (2007).
260. M. Wadhwa, Y. Amelin, M. Bizzarro, N. Kita, T. Kleine, G. W. Lugmair, and Q. Yin. Comparison of short-lived and long-lived chronometers: towards a consistent chronology of the early solar system. In *Workshop on the Chronology of Meteorites and the Early Solar System*, Lunar and Planetary Institute #1374, Houston. (extended abstract). (2007).
261. G. W.Lugmair, J.-L.Birck, L E.Nyquist, A.Shukolyukov, A.Trinquier, M.Wadhwa, ⁵³Q.-Z ⁵³Yin. The MN- CR System. In *Workshop on the Chronology of Meteorites and the Early Solar System*, Lunar and Planetary Institute #1374, Houston. (extended abstract). (2007).
262. M. Bizzarro, J.-L. Birck, J. Chen, G. Huss, G. Lugmair, S. Mostefaoui, D. Papanastassiou, A. Shukolyukov, G. Quitté, S. Tachibana, M. Wadhwa. Nickel isotope anomalies in meteorites and the ⁶⁰Fe-⁶⁰Ni clock. In *Workshop on the Chronology of Meteorites and the Early Solar System*, Lunar and Planetary Institute #1374, Houston. (extended abstract). (2007).
263. M. Wadhwa, Y. Amelin, M. Bizzarro, N. Kita, T. Kleine, G. W. Lugmair, and Q. Yin. Comparison of short-lived and long-lived chronometers: towards a consistent chronology of the early solar system. In *Workshop on the Chronology of Meteorites and the Early Solar System*, Lunar and Planetary Institute #1374, Houston. (extended abstract). (2007).
264. A. Shukolyukov and G.W. Lugmair. Mn – Cr chronology of eucrite CMS 04049 and angrite NWA 2999. In *Lunar and Planetary Science*

XXXIX, Lunar and Planetary Institute, Houston. (extended abstract). (2008).

265. A. Shukolyukov, G.W. Lugmair, and A.J. Irving. Mn – Cr isotope systematics of angrite Northwest Africa 4801. In *Lunar and Planetary Science XL*, Lunar and Planetary Institute, Houston. (extended abstract). (2009).
266. R.Gellert, J.L.Campbell, P.L.King, L.A.Leshin, G.W.Lugmair, J.G.Spray, S.W.Squyres, A.S.Yen. The Alpha-Particle-X-ray-Spectrometer (APXS) for the Mars Science Laboratory (MSL) Rover Mission. In *Lunar and Planetary Science XL*,, Lunar and Planetary Institute, Houston. (extended abstract). (2009).
267. M. Wadhwa, Y. Amelin, O. Bogdanovski, A. Shukolyukov , G. W. Lugmair, and P. Janney. Ancient Relative and Absolute Ages for a Basaltic Meteorite: Implications for Time Scales of Planetesimal Accretion and Differentiation. *Geochimica et Cosmochimica Acta* 73 p. 5189–5201 (research article). (2009).
268. A. Shukolyukov, G. Lugmair, J. M. D. Day, R. J. Walker, D. Rumble, III, D. Nakashima, K. Nagao and A. J. Irving. Constraints on the formation age, highly siderophile element budget and noble gas isotope compositions of Northwest Africa 5400: an ultramafic achondrite with terrestrial isotopic characteristics. In *Lunar and Planetary Science XLI*, #1492, Lunar and Planetary Institute, Houston. (extended abstract). (2010).