

NS2102: Astrobiology and Astrophysics

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Alonso Ricardo, 'ORIGIN OF LIFE ON EARTH' (2009) 301 Scientific American
<http://gl9sn3dh2u.search.serialssolutions.com/?ctx_ver=Z39.88-2004&ctx_enc=info%253Aofi%252Fenc%253AUTF-8&rft_id=info:sid/summon.serialssolutions.com&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&rft.genre=article&rft.atitle=ORIGIN+OF+LIFE+ON+EARTH&rft.jtitle=Scientific+American&rft.au=Alonso+Ricardo&rft.au=Jack+W+Szostak&rft.date=2009-09-01&rft.pub=Scientific+American%252C+Incorporated&rft.issn=0036-8733&rft.eissn=1946-7087&rft.volume=301&rft.issue=3&rft.spage=54&rft.externalDocID=1851532311¶mdict=en-US>

Averill, Bruce and Eldredge, Patricia, Chemistry: Principles, Patterns, and Applications (International ed, Pearson Benjamin Cummings 2007)

Bada JL, 'New Insights into Prebiotic Chemistry from Stanley Miller's Spark Discharge Experiments' 42 2186 <<http://pubs.rsc.org/en/content/articlepdf/2013/cs/c3cs35433d>>

Barton, Nicholas H., Evolution (Cold Spring Harbor Laboratory Press 2007)

Berg, Jeremy M., Tymoczko, John L., and Stryer, Lubert, Biochemistry (7th ed, W H Freeman 2011)
<<https://bibliu.com/users/saml/samlLeicester?RelayState=eyJjdXN0b21fbGF1bmNoX3VybCl6liMvdmlldy9ib29rcy85NzgxMzE5MjQ4MDYyL2VwdWlVt0VCUFMveGh0bWwvYmVvYXZk3ODZzMTkxMTQ2NzFfY29udGVudHMuaHRtbCJ9>>

Boss AP, 'Giant Planet Formation by Gravitational Instability' (1997) 276 Science 1836

Brin GD, 'The Great Silence - the Controversy Concerning Extraterrestrial Intelligent Life', 24 283 <<http://adsabs.harvard.edu/full/1983QJRAS..24..283B>>

Brooker, Robert J., Biology (2nd ed, McGraw-Hill Higher Education 2010)

Brown, Theodore L., Chemistry: The Central Science (12th ed, Prentice Hall 2012)

Burrows, Andrew, Chemistry3: Introducing Inorganic, Organic and Physical Chemistry (Oxford University Press 2009)
<<https://bibliu.com/app/#/view/books/9780192529893/epub/OEBPS/contents.html>>

Canganella F and Wiegel J, 'Extremophiles: From Abyssal to Terrestrial Ecosystems and Possibly Beyond' (2011) 98 Naturwissenschaften 253

Carl Sagan, 'A Search for Life on Earth from the Galileo Spacecraft' (1993) 365 Nature
<http://gl9sn3dh2u.search.serialssolutions.com/?ctx_ver=Z39.88-2004&ctx_enc=info%253Aofi%252Fenc%253AUTF-8&rft_id=info:sid/summon.serialssolutions.com&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&rft.genre=article&rft.atitle=A+SEARCH+FOR+LIFE+ON+EARTH+FROM+THE+GALILEO+SPACECRAFT&rft.jtitle=Nature&rft.date=1993-09-03&rft.pub=Nature&rft.issn=0028-0836&rft.eissn=1473-2925&rft.volume=365&rft.issue=6453&rft.spage=365&rft.externalDocID=1851532311¶mdict=en-US>

3Aofi%252Fenc%253AUTF-8&rft_id=info:sid/summon.serialssolutions.com&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&rft.genre=article&rft.atitle=A+search+for+life+on+Earth+from+the+Galileo+spacecraft&rft.jtitle=Nature&rft.au=Carl+Sagan&rft.au=W+Reid+Thompson&rft.au=Robert+Carlson&rft.au=Donald+Gurnett&rft.date=1993-10-21&rft.pub=Nature+Publishing+Group&rft.issn=0028-0836&rft.eissn=1476-4687&rft.volume=365&rft.issue=6448&rft.spage=715&rft.externalDocID=1033560451¶mdict=en-US>

Carroll, Bradley W. and Ostlie, Dale A., *An Introduction to Modern Astrophysics* (2nd International ed, Pearson Addison-Wesley 2007)

Charbonneau D and others, 'Detection of Planetary Transits Across a Sun-like Star' (2000) 529 *The Astrophysical Journal* L45

Dartnell L, *Knowledge : How to Rebuild Our World from Scratch* (Vintage 2014)

Deguchi S and others, 'Microbial Growth at Hyperaccelerations up to $403,627 \times g$ ' (2011) 108 *Proceedings of the National Academy of Sciences* 7997

Di Giulio M, 'Biological Evidence against the Panspermia Theory' (2010) 266 *Journal of Theoretical Biology* 569

Freedman, Roger A., Geller, Robert M., and Kaufmann, William J., *Universe* (9th ed, WH Freeman 2011)

Gilmour, Iain and others, *An Introduction to Astrobiology* (Cambridge University Press/Open University Press 2004)

Gislason SR and others, 'Direct Evidence of the Feedback between Climate and Weathering' (2009) 277 *Earth and Planetary Science Letters* 213

Grotzinger, John P. and Jordan, Thomas H., *Understanding Earth* (6th ed, W H Freeman 2010)

Guo J and others, 'Habitable Zones and UV Habitable Zones around Host Stars' (2010) 325 *Astrophysics and Space Science* 25

Hart MH, 'Explanation for the Absence of Extraterrestrials on Earth.' 640 128
<http://articles.adsabs.harvard.edu/cgi-bin/nph-iarticle_query?1975QJRAS..16..128H&data_type=PDF_HIGH&whole_paper=YES&type=PRINTER&filetype=.pdf>
Housecroft, Catherine E. and Constable, Edwin C., *Chemistry: An Introduction to Organic, Inorganic and Physical Chemistry* (4th ed, Prentice Hall 2010)

Hüttenhofer A, Schattner P and Polacek N, 'Non-Coding RNAs: Hope or Hype?' (2005) 21 *Trends in Genetics* 289

Inaba S, Wetherill GW and Ikoma M, 'Formation of Gas Giant Planets: Core Accretion Models with Fragmentation and Planetary Envelope' (2003) 166 *Icarus* 46

Kallenbach R, Benz W and Lugmair G, 'Introduction: Timescales for the Formation of Terrestrial Planets' in W Benz, R Kallenbach and GW Lugmair (eds), *From dust to terrestrial planets*, vol Space sciences series of ISSI (Springer Science+Business Media, BV 2012)

Kasting J, 'Habitable Zones around Main Sequence Stars' (1993) 101 Icarus 108

Kauffman, Stuart A., *The Origins of Order: Self-Organization and Selection in Evolution* (Oxford University Press 1993)

—, *At Home in the Universe: The Search for Laws of Complexity* (Penguin 1996)

Lada CJ, 'Stellar Multiplicity and the Initial Mass Function: Most Stars Are Single' (2006) 640 *The Astrophysical Journal* L63

Lane, Nick, *Life Ascending: The Ten Great Inventions of Evolution* (Profile 2009)

Lineweaver CH, 'The Galactic Habitable Zone and the Age Distribution of Complex Life in the Milky Way' (2004) 303 *Science* 59

Lissauer J, 'The Outer Planets and Their Moons: Formation of the Outer Planets', *The outer planets and their moons: comparative studies of the outer planets prior to the exploration of the Saturn system by Cassini-Huygens: volume resulting from an ISSI workshop, 12-16 January 2004, Bern, Switzerland, vol 19* (Springer 2005)
<<https://ebookcentral.proquest.com/lib/leicester/detail.action?docID=303249>>

Lissauer JJ and De Pater I, *Fundamental Planetary Science: Physics, Chemistry and Habitability* (Cambridge University Press 2013)
<<http://site.ebrary.com/lib/leicester/docDetail.action?docID=10812136>>

Lundin R, Lammer H and Ribas I, 'Planetary Magnetic Fields and Solar Forcing: Implications for Atmospheric Evolution' (2007) 129 *Space Science Reviews* 245

Lunine, Jonathan Irving, *Astrobiology: A Multidisciplinary Approach* (Pearson Addison Wesley 2005)

Mao S and Paczynski B, 'Gravitational Microlensing by Double Stars and Planetary Systems' (1991) 374 *The Astrophysical Journal*

Mattick JS, 'Opinion: RNA Regulation: A New Genetics?' (2004) 5 *Nature Reviews Genetics* 316

—, 'Opinion: RNA Regulation: A New Genetics?' (2004) 5 *Nature Reviews Genetics* 316

Mattick JS, 'Small Regulatory RNAs in Mammals' (2005) 14 *Human Molecular Genetics* R121

Mayor M and Queloz D, 'A Jupiter-Mass Companion to a Solar-Type Star' (1995) 378 *Nature* 355

'Microbial Growth at Hyperaccelerations up to $403,627 \times g$ ' (10AD) 108
<<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3093466/?tool=pmcentrez&rendertype=abstract>>

Murray, Robert K. and Harper, Harold A., *Harper's Illustrated Biochemistry* (28th ed, McGraw-Hill Medical 2009)
<<https://ebookcentral.proquest.com/lib/leicester/detail.action?docID=4657718>>

Nelson, David L., Cox, Michael M., and Lehninger, Albert L., Lehninger Principles of Biochemistry (6th ed, WH Freeman 2013)
<<https://bibliu.com/users/saml/samlLeicester?RelayState=eyJjdXN0b21fbGF1bmNoX3VybC16liMvdmlldy9ib29rcy85NzgxMzE5MTUwODc3L2VwdWlvT0VCUFMveGh0bWwvbmVsXzk3O DE0NjQxODc5NTdfY29udC5odG1sln0%3D>>

'Panspermia (Wikipedia)' <<https://en.wikipedia.org/wiki/Panspermia>>

Plaxco, Kevin W. and Gross, Michael, Astrobiology: A Brief Introduction (2nd ed, Johns Hopkins University Press 2011)

Raven, Peter H. and others, Biology (10th ed, McGraw-Hill 2014)

Reece, Jane B. and Campbell, Neil A., Biology (9th ed, Pearson Education 2011)
<http://le.alma.exlibrisgroup.com/view/action/uresolver.do?operation=resolveService&package_service_id=5663610340002746&institutionId=2746&customerId=2745>

Sullivan, Woodruff Turner and Baross, John A., Planets and Life: The Emerging Science of Astrobiology (Cambridge University Press 2007)

Swain MR and others, 'A Ground-Based near-Infrared Emission Spectrum of the Exoplanet HD 189733b' (2010) 463 Nature 637

'The Evolution of Organelles'
<<http://www.sumanasinc.com/webcontent/animations/content/organelles.html>>

Thommes EW, Matsumura S and Rasio FA, 'Gas Disks to Gas Giants: Simulating the Birth of Planetary Systems' (2008) 321 Science 814

Tipler, Paul A. and Mosca, Gene P., Physics for Scientists and Engineers: With Modern Physics (6th ed, WH Freeman 2008)
<<https://bibliu.com/app/#/view/books/9781319155988/pdf2html/index.html>>

Walker JCG, Hays PB and Kasting JF, 'A Negative Feedback Mechanism for the Long-Term Stabilization of Earth's Surface Temperature' (1981) 86 Journal of Geophysical Research

Wesson PS, 'Cosmology, Extraterrestrial Intelligence, and a Resolution of the Fermi-Hart Par' 31 161 <<http://adsabs.harvard.edu/abs/1990QJRAS..31..161W>>

Wickramasinghe NC and Trevors JT, 'Non-Terrestrial Origin of Life: A Transformative Research Paradigm Shift' (2013) 132 Theory in Biosciences 133

Willenbring JK and von Blanckenburg F, 'Long-Term Stability of Global Erosion Rates and Weathering during Late-Cenozoic Cooling' (2010) 465 Nature 211

Zumdahl, Steven S., Chemical Principles (6th ed, Brooks/Cole 2009)
<http://le.alma.exlibrisgroup.com/view/action/uresolver.do?operation=resolveService&package_service_id=5663963920002746&institutionId=2746&customerId=2745>