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| 1. Record Nr.           | UNINA9910451954503321   |
| Titolo                  | The limits of organic life in planetary systems [[electronic resource] /] / Committee on the Limits of Organic Life in Planetary Systems, Committee on the Origins and Evolution of Life ; Space Studies Board, Division on Engineering and Physical Sciences ; Board on Life Sciences, Division on Earth and Life Sciences ; National Research Council of the National Academies   |
| Pubbl/distr/stampa      | Washington, D.C., : National Academies Press, c2007   |
| ISBN                    | 1-280-93469-7<br>9786610934690<br>0-309-66906-5   |
| Descrizione fisica      | 1 online resource (116 p.)  |
| Disciplina              | 576.8/39  |
| Soggetti                | Life on other planets<br>Space environment<br>Electronic books.   |
| Lingua di pubblicazione | Inglese   |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| Note generali           | Description based upon print version of record.   |
| Nota di contenuto       | ""Front matter ""; ""Preface""; ""Acknowledgments""; ""Contents""; ""Executive Summary""; ""1 Introduction""; ""2 A Sketch of the Chemistry Behind Known Carbon-based Life on Earth""; ""3 Pushing the Boundaries of Life""; ""4 Alternatives to Terran Biochemistry in Water""; ""5 Origin of Life""; ""6 Why Water? Toward More Exotic Habitats""; ""7 Life Detection and Biomarkers""; ""8 Conclusions and Recommendations""; ""Appendixes""; ""A Glossary""; ""B Biographies of Committee Members and Staff"" |

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| 2. Record Nr.           | UNINA9910806183603321  |
| Titolo                  | Signs of life : a report based on the April 2000 workshop on life detection techniques // Committee on the Origins and Evolution of Life, Space Studies Board, Division on Engineering and Physical Sciences, Board on Life Sciences, Division on Earth and Life Studies, National Research Council of the National Academies  |
| Pubbl/distr/stampa      | Washington, D.C., : National Academy Press, c2002  |
| ISBN                    | 0-309-17012-5<br>1-280-20952-6<br>9786610209521<br>0-309-50944-0   |
| Edizione                | [1st ed.]  |
| Descrizione fisica      | 1 online resource (162 p.)   |
| Soggetti                | Life - Origin<br>Life on other planets<br>Space biology  |
| Lingua di pubblicazione | Inglese  |
| Formato                 | Materiale a stampa   |
| Livello bibliografico   | Monografia   |
| Note generali           | Bibliographic Level Mode of Issuance: Monograph  |
| Nota di bibliografia    | Includes bibliographical references.   |
| Nota di contenuto       | Front Matter -- Preface -- Contents -- Executive Summary -- 1 Detection of Life -- 2 Sample Return -- 3 Detecting Extant Life -- 4 Detecting Extinct Life -- 5 Conclusions and Recommendations -- A Glossary and Acronyms -- B Workshop Agenda -- C Workshop Papers -- Session 1: Introduction to the Detection of Life -- HISTORY OF LIFE DETECTION APPROACHES -- NATURE OF BIOCHEMISTRY IN THE UNIVERSE -- CHANCE AND NECESSITY IN BIOMOLECULAR CHEMISTRY: IS LIFE AS WE KNOW IT UNIVERSAL? -- SELF-ASSEMBLY PROCESSES: STEPS TOWARD LIFE'S ORIGINS -- DETECTING LIFE ON EXTRASOLAR PLANETS -- REFERENCES FOR PAPERS IN SESSION 1 -- Session 2: Sample Return -- SAMPLE RETURN FROM PRIMITIVE BODIES -- MARS SAMPLE RETURN: LIFE DETECTION AT ALL LEVELS -- SEARCHING FOR LIFE ON EUROPA FROM A SPACECRAFT LANDER -- SAMPLE RETURN FROM TITAN FOR EXO BIOLOGY -- PLANETARY QUARANTINE -- REFERENCES FOR PAPERS IN SESSION 2 -- Session 3: Detecting Extant |

Life -- X-RAY MICROSCOPY AND THE DETECTION OF LIFE --  
CHARACTERIZING THE INTACT MICROBE-MINERAL INTERFACE --  
SINGLE-POLYMER MODEL DETECTION USING NANOPORES -- EXTANT  
LIFE DETECTION USING STABLE ISOTOPES AND PROTEIN-CHIP  
TECHNOLOGY -- IRON BIOMINERALS AS BIOMARKERS -- TIME-OF-  
FLIGHT MASS SPECTROMETERS: MINIATURIZED INSTRUMENTS WITH A  
BIOLOGICAL MASS RANGE -- LIFE DETECTION USING MOLECULAR  
METHODS -- REFERENCES FOR PAPERS IN SESSION 3.

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