

Contents

Acknowledgments xi

Introduction xiii

Key Figures xxiii

1 Making New Matter 1

2 Repositioned Atoms 19

3 DNA on Demand 35

4 Artificial Organisms 49

5 Ecosystems to Order 63

6 Relocating and Resurrecting Species 81

7 The Evolutionary Power of Cities 105

8 How to Turn Back the Sun 117

9 Remixing the Atmosphere 137

10 Synthetic Humanity 151

11 The Transitional Moment 163

Afterword: A Postscript on the Wild 175

Notes 179

Further Reading 187

Index 189