

复杂航天领域动态

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本期目录

【研究动态：空间引力波探测】	1
◇ 空间激光干涉仪 (space laser interferometer)	1
◇ 应变振幅谱密度 (strain amplitude spectral density)	3
◇ 灵敏度曲线 (sensitivity curve)	4
◇ 引力波天文学 (gravitational wave astronomy)	6
◇ 引力波探测器 (gravitational waves detectors)	8
◇ 干涉仪测量 (interferometer measurement)	10
◇ 减少干扰 (disturbance reduction)	13
【机构扫描】	14
◇ NASA	14
◇ ESA	17
◇ LIGO	17

本期概要：

本期动态专题扫描了空间引力波探测在空间激光干涉仪、应变振幅谱密度、灵敏度曲线、引力波天文学、引力波探测器、干涉仪测量、减少干扰，这几个研究方向发表的论文情况。在机构扫描部分，检索了 NASA、ESA 和 LIGO 在空间引力波探测的论文发表情况。

【研究动态：空间引力波探测】

一百年前，爱因斯坦在创立了广义相对论后不久就提出了引力波存在预言。百年来，世界各国的科学家为寻找和发现引力波付出了巨大的努力，建造了多种实验装置。2016年2月11日，LIGO(激光干涉引力波观测站)实验组宣布直接观测到引力波信号。这一划时代的发现开启了引力波物理和天文学以及量子宇宙物理研究的新纪元。空间引力波探测已被列入中国科学院制订的空间2050年规划。

◇ 空间激光干涉仪 (space laser interferometer) ¹

通过检索 EI 数据库，2016 年以来空间激光干涉仪在空间引力波探测研究方向涉及 19 篇最新的研究论文：

- 1. Constraining nonperturbative strong-field effects in scalar-tensor gravity by combining pulsar timing and laser-interferometer gravitational-wave detectors**
Shao, Lijing (Max Planck Institute for Gravitational Physics, Albert Einstein Institute, Am Mühlenberg 1, Potsdam; D-14476, Germany); Sennett, Noah; Buonanno, Alessandra; Kramer, Michael; Wex, Norbert **Source:** *Physical Review X*, v 7, n 4, October 27, 2017
Database: Compendex
- 2. Research and development of electrostatic accelerometers for space science missions at HUST**
Bai, Yanzheng (MOE Key Laboratory of Fundamental Physical Quantities Measurement, Hubei Key Laboratory of Gravitation and Quantum Physics, School of Physics, Huazhong University of Science and Technology, Wuhan; 430074, China); Li, Zhuxi; Hu, Ming; Liu, Li; Qu, Shaobo; Tan, Dingyin; Tu, Haibo; Wu, Shuchao; Yin, Hang; Li, Hongyin; Zhou, Zebing **Source:** *Sensors (Switzerland)*, v 17, n 9, September 2017
Database: Compendex
- 3. Enhanced Gravitational Wave Science with LISA and gLISA.**
Tinto, Massimo (Jet Propulsion Laboratory, California Institute of Technology, 4800 Oak Grove Drive, Pasadena; CA; 91109, United States) **Source:** *Journal of Physics: Conference Series*, v 840, n 1, June 1, 2017, *11th International LISA Symposium*
Database: Compendex
- 4. Multi-band gravitational wave astronomy: Science with joint space- and ground-based observations of black hole binaries**
Sesana, Alberto (School of Physics and Astronomy, University of Birmingham, Edgbaston, Birmingham; B15 2TT, United Kingdom) **Source:** *Journal of Physics: Conference Series*, v 840, n 1, June 1, 2017, *11th International LISA Symposium*
Database: Compendex
- 5. A new torsion pendulum for gravitational reference sensor technology development**
Ciani, Giacomo (University of Florida, Gainesville; FL; 32611, United States); Chilton, Andrew; Apple, Stephen; Olatunde, Taiwo; Aitken, Michael; Mueller, Guido; Conklin, John W. **Source:** *Review of Scientific Instruments*, v 88, n 6, June 1, 2017
Database: Compendex
- 6. Charge-Induced Force Noise on Free-Falling Test Masses: Results from LISA Pathfinder**
Armano, M. (European Space Astronomy Centre, European Space Agency, Villanueva de la Cañada, Madrid; 28692, Spain); Audley, H.; Auger, G.; Baird, J.T.; Binetruy, P.; Born, M.; Bortoluzzi, D.; Brandt,

¹ EI 数据库检索策略: (((space laser interferometer) WN KY) AND ((Spa* Grav* wav* det*) WN KY)) + (2017 OR 2016) WN YR

- N.; Bursi, A.; Caleno, M.; Cavalleri, A.; Cesarini, A.; Cruise, M.; Danzmann, K.; De Deus Silva, M.; Diepholz, I.; Dolesi, R.; Dunbar, N.; Ferraioli, L.; Ferroni, V.; Fitzsimons, E.D.; Flatscher, R.; Freschi, M.; Gallegos, J.; García Marirrodriga, C.; Gerndt, R.; Gesa, L.; Gibert, F.; Giardini, D.; Giusteri, R.; Grimani, C.; Grzymisch, J.; Harrison, I.; Heinzl, G.; Hewitson, M.; Hollington, D.; Hueller, M.; Huesler, J.; Inchauspé, H.; Jennrich, O.; Jetzer, P.; Johlander, B.; Karnesis, N.; Kaune, B.; Killow, C.J.; Korsakova, N.; Lloro, I.; Liu, L.; López-Zaragoza, J.P.; Maarschalkerweerd, R.; Madden, S.; Mance, D.; Martín, V.; Martin-Polo, L.; Martino, J.; Martin-Porqueras, F.; Mateos, I.; McNamara, P.W.; Mendes, J.; Mendes, L.; Moroni, A.; Nofrarias, M.; Paczkowski, S.; Perreur-Lloyd, M.; Petiteau, A.; Pivato, P.; Plagnol, E.; Prat, P.; Ragnit, U.; Ramos-Castro, J.; Reiche, J.; Romera Perez, J.A.; Robertson, D.I.; Rozemeijer, H.; Rivas, F.; Russano, G.; Sarra, P.; Schleicher, A.; Slutsky, J.; Sopaerta, C.; Sumner, T.J.; Texier, D.; Thorpe, J.I.; Trenkel, C.; Vetrugno, D.; Vitale, S.; Wanner, G.; Ward, H.; Wass, P.J.; Wealthy, D.; Weber, W.J.; Wittchen, A.; Zanon, C.; Ziegler, T.; Zweifel, P. **Source:** *Physical Review Letters*, v 118, n 17, April 26, 2017
Database: Compendex
7. **Interferometric wavefront sensing with a single diode using spatial light modulation**
Ralph, D. Tarquin (Australian National University, Canberra, Australia); Altin, Paul A.; Rabeling, David S.; McClelland, David E.; Shaddock, Daniel A. **Source:** *Applied Optics*, v 56, n 8, p 2353-2358, March 10, 2017
Database: Compendex
8. **Spectroscopy of Kerr Black Holes with Earth- and Space-Based Interferometers**
Berti, Emanuele (Department of Physics and Astronomy, University of Mississippi, University; MS; 38677, United States); Sesana, Alberto; Barausse, Enrico; Cardoso, Vitor; Belczynski, Krzysztof **Source:** *Physical Review Letters*, v 117, n 10, September 2, 2016
Database: Compendex
9. **The optimization for Libsvm training in analysis of LIGO data**
Zhang, Zheng (College of Electrical Engineering, Zhejiang University, Hangzhou; 310007, China); Wei, Wei **Source:** *Chinese Control Conference, CCC*, v 2016-August, p 7011-7014, August 26, 2016, *Proceedings of the 35th Chinese Control Conference, CCC 2016*
Database: Compendex
10. **Multiband Gravitational-Wave Astronomy: Parameter Estimation and Tests of General Relativity with Space- and Ground-Based Detectors**
Vitale, Salvatore (LIGO, Massachusetts Institute of Technology, Cambridge; MA; 02139, United States) **Source:** *Physical Review Letters*, v 117, n 5, July 27, 2016
Database: Compendex
11. **Journal of Physics: Conference Series**
Source: *Journal of Physics: Conference Series*, v 731, n 1, July 26, 2016, *International Conference on Gravitation Cosmology and Continuum Mechanics (Dedicated to the Centenary of Kirill Petrovich Staniukovich)*
Database: Compendex
12. **Proceedings of the International Symposium on Symbolic and Algebraic Computation, ISSAC**
Source: *Proceedings of the International Symposium on Symbolic and Algebraic Computation, ISSAC*, v 20-22-July-2016, July 20, 2016, *ISSAC 2016 - Proceedings of the 2016 ACM International Symposium on Symbolic and Algebraic Computation*
Database: Compendex
13. **High-Performance Optical Frequency References for Space**
Schuldt, Thilo (German Aerospace Center (DLR), Institute of Space Systems, Robert-Hooke-Straße 7, Bremen; 28359, Germany); Döringshoff, Klaus; Milke, Alexander; Sanjuan, Josep; Gohlke, Martin; Kovalchuk, Evgeny V.; Gürlebeck, Norman; Peters, Achim; Braxmaier, Claus **Source:** *Journal of Physics: Conference Series*, v 723, n 1, July 4, 2016, *8th Symposium on Frequency Standards and Metrology 2015*
Database: Compendex
14. **Prospects for Multiband Gravitational-Wave Astronomy after GW150914**
Sesana, Alberto (School of Physics and Astronomy, University of Birmingham, Edgbaston, Birmingham; B15 2TT, United Kingdom) **Source:** *Physical Review Letters*, v 116, n 23, June 8, 2016
Database: Compendex
15. **GW150914 and gravitational-wave astronomy**
Liu, Jian (School of Physics, University of Western Australia, Nedlands; WA; 6009, Australia); Wang,

- Gang; Hu, Yiming; Zhang, Teng; Luo, Ziren; Wang, Qinglan; Shao, Lijing **Source:** *Kexue Tongbao/Chinese Science Bulletin*, v 61, n 14, p 1502-1524, May 15, 2016 **Language:** Chinese
Database: Compendex
16. **A comprehensive simulation of weak-light phase-locking for space-borne gravitational wave antenna**
Dong, Yu Hui (National Microgravity Laboratory (NML), Institute of Mechanics, Chinese Academy of Sciences, Beijing; 100190, China); Liu, He Shan; Luo, Zi Ren; Li, Yu Qiong; Jin, Gang **Source:** *Science China Technological Sciences*, v 59, n 5, p 730-737, May 1, 2016
Database: Compendex
17. **Quantum test of the equivalence principle and space-time aboard the International Space Station**
Williams, Jason (Jet Propulsion Laboratory, California Institute of Technology, Pasadena; CA, United States); Chiow, Sheng-Wey; Yu, Nan; Müller, Holger **Source:** *New Journal of Physics*, v 18, n 2, February 17, 2016
Database: Compendex
18. **Experimental demonstration of deep frequency modulation interferometry**
Isleif, Katharina-Sophie (Leibniz Universität Hannover, Institute for Gravitational Physics, Callinstr. 38, Hannover, Germany); Gerberding, Oliver; Schwarze, Thomas S.; Mehmet, Moritz; Heinzl, Gerhard; Cervantes, Felipe Guzmán **Source:** *Optics Express*, v 24, n 2, p 1676-1684, January 25, 2016
Database: Compendex
19. **Precision requirements and innovative manufacturing for ultrahigh precision laser interferometry of gravitational-wave astronomy**
Ni, Wei-Tou (School of Optical-Electrical and Computer Engineering, University of Shanghai for Science and Technology, 516 Jun Gong Rd., Shanghai; 200093, China); Han, Sen; Jin, Tao **Source:** *Proceedings of SPIE - The International Society for Optical Engineering*, v 10023, 2016, *Optical Metrology and Inspection for Industrial Applications IV*
Database: Compendex
20. **Laser frequency and intensity stabilization for advanced LIGO**
Hall, Evan (Department of Physics, California Institute of Technology, United States) **Source:** *18th Coherent Laser Radar Conference and the Lidar Working Group on Space Based Winds, CLRC 2016*, 2016, *18th Coherent Laser Radar Conference and the Lidar Working Group on Space Based Winds, CLRC 2016*
Database: Compendex

◇ 应变振幅谱密度 (strain amplitude spectral density) ²

通过检索 EI 数据库，应变振幅谱密度在空间引力波探测研究方向涉及 3 篇研究论文：

1. **Directional Limits on Persistent Gravitational Waves from Advanced LIGO's First Observing Run**
Abbott, B.P. (LIGO, California Institute of Technology, Pasadena; CA; 91125, United States); Abbott, R.; Abbott, T.D.; Abernathy, M.R.; Acernese, F.; Ackley, K.; Adams, C.; Adams, T.; Addesso, P.; Adhikari, R.X.; Adya, V.B.; Affeldt, C.; Agathos, M.; Agatsuma, K.; Aggarwal, N.; Aguiar, O.D.; Aiello, L.; Ain, A.; Ajith, P.; Allen, B.; Allocca, A.; Altin, P.A.; Ananyeva, A.; Anderson, S.B.; Anderson, W.G.; Appert, S.; Arai, K.; Araya, M.C.; Areeda, J.S.; Arnaud, N.; Arun, K.G.; Ascenzi, S.; Ashton, G.; Ast, M.; Aston, S.M.; Astone, P.; Aufmuth, P.; Aulbert, C.; Avila-Alvarez, A.; Babak, S.; Bacon, P.; Bader, M.K.M.; Baker, P.T.; Baldaccini, F.; Ballardin, G.; Ballmer, S.W.; Barayoga, J.C.; Barclay, S.E.; Barish, B.C.; Barker, D.; Barone, F.; Barr, B.; Barsotti, L.; Barsuglia, M.; Barta, D.; Bartlett, J.; Bartos, I.; Bassiri, R.; Basti, A.; Batch, J.C.; Baune, C.; Bavigadda, V.; Bazzan, M.; Beer, C.; Bejger, M.; Belahcene, I.; Belgin, M.; Bell, A.S.; Berger, B.K.; Bergmann, G.; Berry, C.P.L.; Bersanetti, D.; Bertolini, A.; Betzwieser, J.; Bhagwat, S.; Bhandare, R.; Bilenko, I.A.; Billingsley, G.; Billman, C.R.; Birch, J.; Birney, R.; Birnholtz, O.; Biscans, S.; Biscoveanu, A.S.; Bisht, A.; Bitossi, M.; Biwer, C.; Bizouard, M.A.; Blackburn, J.K.; Blackman, J.; Blair, C.D.; Blair, D.G.; Blair, R.M.; Bloemen, S.; Bock, O.; Boer, M.; Bogaert, G.; Bohe, A.; Bondu, F.; Bonnand, R.; Boom, B.A.; Bork, R.; Boschi, V.; Bose, S.; Bouffanais, Y.; Bozzi, A.; Bradaschia, C.; Brady, P.R.; Braginsky, V.B.; Branchesi, M.; Brau, J.E.; Briant, T.; Brillet, A.; Brinkmann, M.; Brisson, V.; Brockill, P.; Broida, J.E.; Brooks, A.F.; Brown, D.A.; Brown,

²EI 数据库检索策略: (((strain amplitude spectral density) WN KY) AND ((Gravitational wave) WN KY)

- D.D.; Brown, N.M.; Brunett, S.; Buchanan, C.C.; Buikema, A.; Bulik, T.; Bulten, H.J.; Buonanno, A.; Buskulic, D.; Buy, C.; Byer, R.L.; Cabero, M.; Cadonati, L.; Cagnoli, G.; Cahillane, C.; Calderón Bustillo, J.; Callister, T.A.; Calloni, E.; Camp, J.B.; Campbell, W.; Canepa, M.; Cannon, K.C.; Cao, H.; Cao, J.; Capano, C.D.; Capocasa, E.; Carbognani, F.; Caride, S.; Casanueva Diaz, J.; Casentini, C.; Caudill, S.; Cavaglia, M.; Cavalier, F.; Cavalieri, R.; Cella, G.; Cepeda, C.B.; Cerboni Baiardi, L.; Cerretani, G.; Cesarini, E.; Chamberlin, S.J.; Chan, M.; Chao, S.; Charlton, P.; Chassande-Mottin, E.; Cheeseboro, B.D.; Chen, H.Y.; Chen, Y.; Cheng, H.-P.; Chincarini, A. **Source:** *Physical Review Letters*, v 118, n 12, March 24, 2017
Database: Compendex
2. **Measurement of fluctuations of electrostatic force acting between a dielectric plate and an electrostatic drive**
Koptsov, D.V. (Faculty of Physics, M.V. Lomonosov Moscow State University, Moscow; 119991, Russia); Prokhorov, L.G.; Mitrofanov, V.P. **Source:** *Review of Scientific Instruments*, v 88, n 4, April 1, 2017
Database: Compendex
3. **A little inflation in the early universe at the QCD phase transition**
Boeckel, Tillmann (Institut für Theoretische Physik, Universität Heidelberg, Philosophenweg 16, D-69120 Heidelberg, Germany); Schaffner-Bielich, Jürgen **Source:** *Physical Review Letters*, v 105, n 4, July 19, 2010
Database: Compendex

◇ 灵敏度曲线 (sensitivity curve) ³

通过检索 EI 数据库, 灵敏度曲线在空间引力波探测研究方向涉及 18 篇研究论文:

1. **Enhanced Gravitational Wave Science with LISA and gLISA.**
Tinto, Massimo (Jet Propulsion Laboratory, California Institute of Technology, 4800 Oak Grove Drive, Pasadena; CA; 91109, United States) **Source:** *Journal of Physics: Conference Series*, v 840, n 1, June 1, 2017, *11th International LISA Symposium*
Database: Compendex
2. **Comparison of thermal ir and visible signatures of graveyard orbit objects**
Skinner, Mark A. (Boeing Company, 4411 The 25 Way NE, Albuquerque; NM; 87109, United States); Russell, Ray W.; Kelecy, Tom; Gregory, Steve; Rudy, Richard J.; Kim, Daryl L. **Source:** *Proceedings of the International Astronautical Congress, IAC*, v 3, p 1930-1941, 2015, *66th International Astronautical Congress 2015, IAC 2015: Space - The Gateway for Mankind's Future*
Database: Compendex
3. **The gamma-ray transient monitor for ISS-lobster**
Yacobi, Lee (Department of Physics, Asher Space Research Institute, Technion, Israel); Abramov, Reuven; Kaidar, Avner; Lupu, Nachman; Malka, Haim; Vdovin, Alex; Frid, Alex; Tarem, Shlomit; Behar, Ehud **Source:** *Proceedings of the International Astronautical Congress, IAC*, v 4, p 2835-2839, 2015, *66th International Astronautical Congress 2015, IAC 2015: Space - The Gateway for Mankind's Future*
Database: Compendex
4. **The gravitational wave emission of white dwarf dynamical interactions**
Aznar-Siguán, Gabriela (Departament de Física Aplicada, Universitat Politècnica de Catalunya, c/Esteve Terrades 5, Castelldefels, Spain); García-Berro, Enrique; Lorén-Aguilar, Pablo **Source:** *Astrophysics and Space Science Proceedings*, v 40, p 175-183, 2015
Database: Compendex
5. **2013 2nd International Conference on Applied Mechanics and Materials, ICAMM 2013**
Source: *Applied Mechanics and Materials*, v 477-478, 2014, *Applied Mechanics and Materials II*
Database: Compendex
6. **2013 2nd International Conference on Mechanics and Control Engineering, ICMCE 2013**
Source: *Applied Mechanics and Materials*, v 446-447, 2014, *Advanced Research in Material Science and Mechanical Engineering*

³EI 数据库检索策略: (((sensitivity curve) WN KY) AND ((Spa* Grav* wav* det*) WN KY))

- Database:** Compendex
7. **2013 International Conference on Mechanical Structures and Smart Materials, ICMSSM 2013**
Source: *Applied Mechanics and Materials*, v 487, 2014, *Mechanical Structures and Smart Materials*
Database: Compendex
 8. **2013 International Forum on Computer and Information Technology, IFCIT 2013**
Source: *Applied Mechanics and Materials*, v 519-520, 2014, *Computer and Information Technology*
Database: Compendex
 9. **Mapping the Moho with seismic surface waves: A review, resolution analysis, and recommended inversion strategies**
Lebedev, Sergei (Dublin Institute for Advanced Studies, School of Cosmic Physics, Geophysics Section, 5 Merrion Square, Dublin 2, Ireland); Adam, Joanne M.-C.; Meier, Thomas **Source:** *Tectonophysics*, v 609, p 377-394, December 8, 2013
Database: Compendex
 10. **2013 International Conference on Advanced Engineering Materials and Architecture Science, ICAEMAS 2013**
Source: *Advanced Materials Research*, v 790, 2013, *Material and Environmental Science, Building Engineering, Biomedical and Bioinformatics Technologies*
Database: Compendex
 11. **2013 International Conference on Civil, Architecture and Building Materials, 3rd CEABM 2013**
Source: *Applied Mechanics and Materials*, v 353-354, 2013, *Advances in Civil and Industrial Engineering*
Database: Compendex
 12. **2nd International Conference on Materials Science and Engineering, ICMSE 2013**
Source: *Advanced Materials Research*, v 668, 2013, *Materials Science and Engineering II*
Database: Compendex
 13. **Low frequency - High sensitivity horizontal monolithic Folded-pendulum as sensor in the automatic control of ground-based and space telescopes**
Acernese, F. (Dip. di Scienze Farmaceutiche e Biomediche, Università Degli Studi di Salerno, Italy); De Rosa, R.; Giordano, G.; Romano, R.; Barone, F. **Source:** *Proceedings of SPIE - The International Society for Optical Engineering*, v 8444, 2012, *Ground-Based and Airborne Telescopes IV*
Database: Compendex
 14. **A cosmological view of extreme mass-ratio inspirals in nuclear star clusters**
Mapelli, M. (INAF-Osservatorio Astronomico di Padova, Vicolo dell'Osservatorio 5, 35122 Padova, Italy); Ripamonti, E.; Vecchio, A.; Graham, A.W.; Gualandris, A. **Source:** *Astronomy and Astrophysics*, v 542, 2012
Database: Compendex
 15. **Cryogenic stray light testing of the James webb space telescope: An easy approach**
Liepmann, Till W. (Optical Telescope Element Systems Engineering, James Webb Space Telescope, Northrop Grumman, 1 Space Park Dr; R8/2757C, Redondo Beach, CA 90278, United States) **Source:** *Proceedings of SPIE - The International Society for Optical Engineering*, v 7439, 2009, *Astronomical and Space Optical Systems*
Database: Compendex
 16. **Instabilities in free-surface Hartmann flow at low magnetic Prandtl numbers**
Giannakis, Dimitrios (The University of Chicago) **Source:** *ProQuest Dissertations and Theses Global*, 2009
Database: Compendex
 17. **Searching gravitational waves from pulsars, using laser beam interferometers**
Resimbau, T. (LIGO laboratory, Massachusetts Inst. of Technology, Cambridge, MA 02139, United States); De Freitas Pacheco, J.A. **Source:** *Astronomy and Astrophysics*, v 401, n 1, p 385-388, April I 2003
Database: Compendex
 18. **Space-based gravitational wave astrophysics**
Larson, Shane L. (Montana State University) **Source:** *ProQuest Dissertations and Theses Global*, 1999
Database: Compendex

◇ 引力波天文学 (gravitational wave astronomy) ⁴

通过检索 EI 数据库, 2016 年以来引力波天文学在空间引力波探测研究方向涉及 18 篇最新的研究论文:

1. **Multi-band gravitational wave astronomy: Science with joint space- and ground-based observations of black hole binaries**
 Sesana, Alberto (School of Physics and Astronomy, University of Birmingham, Edgbaston, Birmingham; B15 2TT, United Kingdom) **Source:** *Journal of Physics: Conference Series*, v 840, n 1, June 1, 2017, *11th International LISA Symposium*
Database: Compendex
2. **The status of DECIGO**
 Sato, Shuichi (Faculty of Science and Engineering, Hosei University, kajinocho, Tokyo; 184-8584, Japan); Kawamura, Seiji; Ando, Masaki; Nakamura, Takashi; Tsubono, Kimio; Araya, Akito; Funaki, Ikkoh; Ioka, Kunihito; Kanda, Nobuyuki; Moriwaki, Shigenori; Musha, Mitsuru; Nakazawa, Kazuhiro; Numata, Kenji; Sakai, Shin-ichiro; Seto, Naoki; Takashima, Takeshi; Tanaka, Takahiro; Agatsuma, Kazuhiro; Aoyanagi, Koh-Suke; Arai, Koji; Asada, Hideki; Aso, Yoichi; Chiba, Takeshi; Ebisuzaki, Toshikazu; Ejiri, Yumiko; Enoki, Motohiro; Eriguchi, Yoshiharu; Fujimoto, Masa-Katsu; Fujita, Ryuichi; Fukushima, Mitsuhiko; Futamase, Toshifumi; Ganzu, Katsuhiko; Harada, Tomohiro; Hashimoto, Tatsuaki; Hayama, Kazuhiro; Hikida, Wataru; Himemoto, Yoshiaki; Hirabayashi, Hisashi; Hiramatsu, Takashi; Hong, Feng-Lei; Horisawa, Hideyuki; Hosokawa, Mizuhiko; Ichiki, Kiyotomo; Ikegami, Takeshi; Inoue, Kaiki T.; Ishidoshiro, Koji; Ishihara, Hideki; Ishikawa, Takehiko; Ishizaki, Hideharu; Ito, Hiroyuki; Itoh, Yousuke; Kawashima, Nobuki; Kawazoe, Fumiko; Kishimoto, Naoko; Kiuchi, Kenta; Kobayashi, Shiho; Kohri, Kazunori; Koizumi, Hiroyuki; Kojima, Yasufumi; Kokeyama, Keiko; Kokuyama, Wataru; Kotake, Kei; Kozai, Yoshihide; Kudoh, Hideaki; Kunimori, Hiroo; Kuninaka, Hitoshi; Kuroda, Kazuaki; Maeda, Kei-ichi; Matsuhara, Hideo; Mino, Yasushi; Miyakawa, Osamu; Miyoki, Shinji; Morimoto, Mutsuko Y.; Morioka, Tomoko; Morisawa, Toshiyuki; Mukohyama, Shinji; Nagano, Shigeo; Naito, Isao; Nakamura, Kouji; Nakano, Hiroyuki; Nakao, Kenichi; Nakasuka, Shinichi; Nakayama, Yoshinori; Nishida, Erina; Nishiyama, Kazutaka; Nishizawa, Atsushi; Niwa, Yoshito; Noumi, Taiga; Obuchi, Yoshiyuki; Ohashi, Masatake; Ohishi, Naoko; Ohkawa, Masashi; Okada, Norio; Onozato, Kouji; Oohara, Kenichi; Sago, Norichika; Saijo, Motoyuki; Sakagami, Masaaki; Sakata, Shihori; Sasaki, Misao; Sato, Takashi; Shibata, Masaru; Shinkai, Hisaaki; Somiya, Kentaro; Sotani, Hajime; Sugiyama, Naoshi; Suwa, Yudai; Suzuki, Rieko; Tagoshi, Hideyuki; Takahashi, Fuminobu; Takahashi, Kakeru; Takahashi, Keitaro; Takahashi, Ryutarou; Takahashi, Ryuichi; Takahashi, Tadayuki; Takahashi, Hirotaka; Akiteru, Takamori; Takano, Tadashi; Taniguchi, Keisuke; Taruya, Atsushi; Tashiro, Hiroyuki; Torii, Yasuo; Toyoshima, Morio; Tsujikawa, Shinji; Tsunesada, Yoshiki; Ueda, Akitoshi; Ueda, Ken-ichi; Utashima, Masayoshi; Wakabayashi, Yaka; Yamakawa, Hiroshi; Yamamoto, Kazuhiro; Yamazaki, Toshitaka; Yokoyama, Jun'ichi; Yoo, Chul-Moon; Yoshida, Shijun; Yoshino, Taizoh **Source:** *Journal of Physics: Conference Series*, v 840, n 1, June 1, 2017, *11th International LISA Symposium*
Database: Compendex
3. **SALT long-slit spectroscopy of quasar HE 0435-4312: Fast displacement of the Mg II emission line**
 Sredzińska, J. (Nicolaus Copernicus Astronomical Center, Polish Academy of Sciences, Bartycka 18, Warsaw; 00-716, Poland); Czerny, B.; Hryniewicz, K.; Krupa, M.; Kurcz, A.; Marziani, P.; Adhikari, T.P.; Basak, R.; You, B.; Wang, J.-M.; Hu, C.; Pych, W.; Bilicki, M. **Source:** *Astronomy and Astrophysics*, v 601, May 1, 2017
Database: Compendex
4. **The puzzling case of the radio-loud QSO 3C 186: A gravitational wave recoiling black hole in a young radio source?**
 Chiaberge, M. (Space Telescope Science Institute, 3700 San Martin Dr., Baltimore; MD; 21210, United States); Ely, J.C.; Meyer, E.T.; Georganopoulos, M.; Marinucci, A.; Bianchi, S.; Tremblay, G.R.; Hilbert, B.; Kotyla, J.P.; Capetti, A.; Baum, S.A.; Macchetto, F.D.; Miley, G.; O'dea, C.P.; Perlman, E.S.; Sparks, W.B.; Norman, C. **Source:** *Astronomy and Astrophysics*, v 600, April 1, 2017
Database: Compendex
5. **Addressing Data Analysis Challenges in Gravitational Wave Searches Using the Particle Swarm Optimization Algorithm**

⁴EI 数据库检索策略: ((((((gravitational wave astronomy) WN KY) AND ((Spa* Grav* wav* det*) WN KY))) AND ((2017 OR 2016) WN YR)))

- Weerathunga, Thilina Shihan (The University of Texas at San Antonio) **Source:** *ProQuest Dissertations and Theses Global*, 2017
Database: Compendex
6. **Multiband Gravitational-Wave Astronomy: Parameter Estimation and Tests of General Relativity with Space- and Ground-Based Detectors**
Vitale, Salvatore (LIGO, Massachusetts Institute of Technology, Cambridge; MA; 02139, United States) **Source:** *Physical Review Letters*, v 117, n 5, July 27, 2016
Database: Compendex
 7. **Multi-messenger astronomy: Gravitational waves, neutrinos, photons, and cosmic rays**
Branchesi, Marica (Università degli Studi di Urbino Carlo Bo, via A. Saffi 2, Urbino; 61029, Italy) **Source:** *Journal of Physics: Conference Series*, v 718, n 2, June 9, 2016, *XIV International Conference on Topics in Astroparticle and Underground Physics, TAUP 2015 - Review Contributions*
Database: Compendex
 8. **Prospects for Multiband Gravitational-Wave Astronomy after GW150914**
Sesana, Alberto (School of Physics and Astronomy, University of Birmingham, Edgbaston, Birmingham; B15 2TT, United Kingdom) **Source:** *Physical Review Letters*, v 116, n 23, June 8, 2016
Database: Compendex
 9. **The gravitational wave models for binary compact objects**
Cai, Ronggen (Institute of Theoretical Physics, Chinese Academy of Sciences, Beijing; 100190, China); Cao, Zhoujian; Han, Wenbiao **Source:** *Kexue Tongbao/Chinese Science Bulletin*, v 61, n 14, p 1525-1535, May 15, 2016 **Language:** Chinese
Database: Compendex
 10. **GW150914 and gravitational-wave astronomy**
Liu, Jian (School of Physics, University of Western Australia, Nedlands; WA; 6009, Australia); Wang, Gang; Hu, Yiming; Zhang, Teng; Luo, Ziren; Wang, Qinglan; Shao, Lijing **Source:** *Kexue Tongbao/Chinese Science Bulletin*, v 61, n 14, p 1502-1524, May 15, 2016 **Language:** Chinese
Database: Compendex
 11. **A road-map for dark matter and dark energy research in China**
Ji, Xiangdong (Department of Physics and Astronomy, Shanghai Jiao Tong University, Shanghai; 200240, China); Zhang, Xinmin; Chen, Xun **Source:** *Kexue Tongbao/Chinese Science Bulletin*, v 61, n 11, p 1181-1187, April 15, 2016 **Language:** Chinese
Database: Compendex
 12. **A new route towards merging massive black holes**
Marchant, Pablo (Argelander-Institut für Astronomie, Universität Bonn, Auf dem Hügel 71, Bonn, Germany); Langer, Norbert; Podsiadlowski, Philipp; Tauris, Thomas M.; Moriya, Takashi J. **Source:** *Astronomy and Astrophysics*, v 588, April 1, 2016
Database: Compendex
 13. **Precision requirements and innovative manufacturing for ultrahigh precision laser interferometry of gravitational-wave astronomy**
Ni, Wei-Tou (School of Optical-Electrical and Computer Engineering, University of Shanghai for Science and Technology, 516 Jun Gong Rd., Shanghai; 200093, China); Han, Sen; Jin, Tao **Source:** *Proceedings of SPIE - The International Society for Optical Engineering*, v 10023, 2016, *Optical Metrology and Inspection for Industrial Applications IV*
Database: Compendex
 14. **Fused silica challenges in sensitive space applications**
Criddle, Josephine (Heraeus Quartz UK Ltd, Neptune Road, Wallsend; NE28 6DD, United Kingdom); Nürnberg, Frank; Sawyer, Robert; Bauer, Peter; Langner, Andreas; Schötz, Gerhard **Source:** *Proceedings of SPIE - The International Society for Optical Engineering*, v 9912, 2016, *Advances in Optical and Mechanical Technologies for Telescopes and Instrumentation II*
Database: Compendex
 15. **Monsters in the dark: High energy signatures of black hole formation with multimessenger astronomy**
Urban, Alexander L. (The University of Wisconsin - Milwaukee) **Source:** *ProQuest Dissertations and Theses Global*, 2016
Database: Compendex
 16. **New 50-m-class single-dish telescope: Large Submillimeter Telescope (LST)**

Kawabe, Ryohei (National Astronomical Observatory of Japan, 2-21-1 Osawa, Mitaka, Tokyo; 181-8588, Japan); Kohno, Kotaro; Tamura, Yoichi; Takekoshi, Tatsuya; Oshima, Tai; Ishii, ShunSource: *Proceedings of SPIE - The International Society for Optical Engineering*, v 9906, 2016, *Ground-Based and Airborne Telescopes VI*

Database: Compendex

17. **The future of space astronomy: Electromagnetic vs gravitational waves & HE neutrinos?**

Ubertini, Pietro (INAF, Institute for Space Astrophysics and Planetology, Via Fosso del Cavaliere 100, Rome; 00133, Italy) Source: *Proceedings of the International Astronautical Congress, IAC, 2016, IAC 2016 - 67th International Astronautical Congress: Making Space Accessible and Affordable to All Countries*

Database: Compendex

18. **The e-ASTROGAM gamma-ray space mission**

Tatischeff, V. (CSNSM, IN2P3, CNRS, Univ Paris-Sud, Orsay Cedex; F-91405, France); Tavani, M.; Von Ballmoos, P.; Hanlon, L.; Oberlack, U.; Aboudan, A.; Argan, A.; Bernard, D.; Brogna, A.; Bulgarelli, A.; Bykov, A.; Campana, R.; Caraveo, P.; Cardillo, M.; Coppi, P.; De Angelis, A.; Diehl, R.; Donnarumma, I.; Fioretti, V.; Giuliani, A.; Grenier, I.; Grove, J.E.; Hamadache, C.; Hartmann, D.; Hernanz, M.; Isern, J.; Kanbach, G.; Kiener, J.; Knödseder, J.; Labanti, C.; Laurent, P.; Limousin, O.; Longo, F.; Marisaldi, M.; McBreen, S.; McEnery, J.E.; Mereghetti, S.; Mirabel, F.; Morselli, A.; Nakazawa, K.; Peyré, J.; Piano, G.; Pittori, C.; Sabatini, S.; Stawarz, L.; Thompson, D.J.; Ulyanov, A.; Walter, R.; Wu, X.; Zdziarski, A.; Zoglauer, A. Source: *Proceedings of SPIE - The International Society for Optical Engineering*, v 9905, 2016, *Space Telescopes and Instrumentation 2016: Ultraviolet to Gamma Ray*

Database: Compendex

◇ 引力波探测器 (gravitational waves detectors) ⁵

通过检索 EI 数据库, 2016 年以来引力波探测器研究方向涉及 13 篇最新的研究论文:

1. **Single-Frequency Fiber Amplifiers for Next-Generation Gravitational Wave Detectors**

Steinke, Michael (Laser Zentrum Hannover e.V., Germany (e-mail: m.steinke@lzh.de)); Tunnermann, Henrik; Kuhn, Vincent; Theeg, Thomas; Karow, Malte; de Varona, Omar; Jahn, Philipp; Booker, Phillip; Neumann, Jorg; Webels, Peter; Kracht, Dietmar Source: *IEEE Journal of Selected Topics in Quantum Electronics*, October 5, 2017

Article in Press

Database: Compendex

2. **Multimessenger Prospects with Gravitational Waves and Neutrinos after LIGO's First Discovery**

Bartos, Imre (Department of Physics, Columbia University, New York; NY; 10027, United States) Source: *Journal of Physics: Conference Series*, v 888, n 1, September 20, 2017, *XXVII International Conference on Neutrino Physics and Astrophysics, Neutrino 2016*

Database: Compendex

3. **The joint search for gravitational wave and low energy neutrino signals from core-collapse supernovae: Methodology and status report**

Gromov, M.B. (Lomonosov Moscow State University, Skobeltsyn Institute of Nuclear Physics, Moscow; 119234, Russia); Casentini, C. Source: *Journal of Physics: Conference Series*, v 888, n 1, September 20, 2017, *XXVII International Conference on Neutrino Physics and Astrophysics, Neutrino 2016*

Database: Compendex

4. **High-Energy Neutrino follow-up of first gravitational wave event GW150914**

Coleiro, Alexis (APC, Université Paris Diderot, CNRS/IN2P3, CEA/Irfu, Observatoire de Paris, Sorbonne Paris Cité, 10 rue Alice Domon et Léonie Duquet, Paris Cedex 13; 75205, France); Baret, Bruny; Pradier, Thierry Source: *Journal of Physics: Conference Series*, v 888, n 1, September 20, 2017, *XXVII International Conference on Neutrino Physics and Astrophysics, Neutrino 2016*

Database: Compendex

5. **Development of digital system for the wide-field x-ray imaging detector aboard Kanazawa-SAT3**

⁵EI 数据库检索策略: (((gravitational waves detectors) WN CV)) + (2017 OR 2016) WN YR

- Kagawa, Yasuaki (Kanazawa University, Kakuma, Kanazawa, Ishikawa; 920-1192, Japan); Yonetoku, Daisuke; Sawano, Tatsuya; Mihara, Tatehiro; Kyutoku, Koutarou; Ikeda, Hirokazu; Yoshida, Kazuki; Ina, Masao; Ota, Kaichi; Suzuki, Daichi; Miyao, Kouga; Watanabe, Syouta; Hatori, Satoshi; Kume, Kyo; Mizushima, Satoshi; Hasegawa, Takashi **Source:** *Proceedings of SPIE - The International Society for Optical Engineering*, v 10397, 2017, *UV, X-Ray, and Gamma-Ray Space Instrumentation for Astronomy XX*
Database: Compendex
6. **The Advanced Virgo monolithic fused silica suspension**
Aisa, D. (University of Urbino, INFN, Firenze, Italy); Aisa, S.; Campeggi, C.; Colombini, M.; Conte, A.; Farnesini, L.; Majorana, E.; Mezzani, F.; Montani, M.; Naticchioni, L.; Perciballi, M.; Piergiovanni, F.; Piluso, A.; Puppo, P.; Rapagnani, P.; Travasso, F.; Vicerè, A.; Vocca, H. **Source:** *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, v 824, p 644-645, July 11, 2016
Database: Compendex
7. **Methodology of the joint search for Gravitational Wave and Low Energy Neutrino signals from Core-Collapse Supernovae**
Casentini, Claudio (Università degli Studi di Roma Tor Vergata, Dipartimento di Fisica, Via della Ricerca Scientifica 1, Roma; 00133, Italy) **Source:** *Journal of Physics: Conference Series*, v 718, n 7, June 9, 2016, *XIV International Conference on Topics in Astroparticle and Underground Physics, TAUP 2015 - Gravitational Waves*
Database: Compendex
8. **Multi-messenger astronomy: Gravitational waves, neutrinos, photons, and cosmic rays**
Branchesi, Marica (Università degli Studi di Urbino Carlo Bo, via A. Saffi 2, Urbino; 61029, Italy) **Source:** *Journal of Physics: Conference Series*, v 718, n 2, June 9, 2016, *XIV International Conference on Topics in Astroparticle and Underground Physics, TAUP 2015 - Review Contributions*
Database: Compendex
9. **Methodological studies on the search for Gravitational Waves and Neutrinos from Type II Supernovae**
Casentini, Claudio (Università degli Studi di Roma Tor Vergata, Dipartimento di Fisica, Via della Ricerca Scientifica 1, Roma; 00133, Italy) **Source:** *Journal of Physics: Conference Series*, v 689, n 1, March 1, 2016, *6th Young Researcher Meeting, L'Aquila 2015*
Database: Compendex
10. **The stochastic background of gravitational waves due to the f-mode instability in neutron stars**
Surace, M. (Theoretical Astrophysics, IAAT, Eberhard-Karls University of Tübingen, Tübingen, Germany); Kokkotas, K.D.; Pnigouras, P. **Source:** *Astronomy and Astrophysics*, v 586, February 1, 2016
Database: Compendex
11. **Optical characterization of the BICEP3 CMB polarimeter at the South Pole**
Karkare, K.S. (Harvard-Smithsonian Center for Astrophysics, 60 Garden St., MS 42, Cambridge; MA; 02138, United States); Ade, P.A.R.; Ahmed, Z.; Alexander, K.D.; Amiri, M.; Barkats, D.; Benton, S.J.; Bischoff, C.A.; Bock, J.J.; Boenish, H.; Bowens-Rubin, R.; Buder, I.; Bullock, E.; Buza, V.; Connors, J.; Filippini, J.P.; Fliescher, S.T.; Grayson, J.A.; Halpern, M.; Harrison, S.A.; Hilton, G.C.; Hristov, V.V.; Hui, H.; Irwin, K.D.; Kang, J.H.; Karpel, E.; Kefeli, S.; Kernasovskiy, S.A.; Kovac, J.M.; Kuo, C.L.; Leitch, E.M.; Lueker, M.; Megerian, K.G.; Monticue, V.; Namikawa, T.; Netterfield, C.B.; Nguyen, H.T.; O'Brient, R.; Ogburn, R.W.; Pryke, C.L.; Reintsema, C.D.; Richter, S.; St Germaine, M.T.; Schwarz, R.; Sheehy, C.D.; Staniszewski, Z.K.; Steinbach, B.; Teply, G.P.; Thompson, K.L.; Tolan, J.E.; Tucker, C.; Turner, A.D.; Vieregg, A.G.; Wandui, A.; Weber, A.; Willmert, J.; Wong, C.L.; Wu, W.L.K.; Yoon, K.W. **Source:** *Proceedings of SPIE - The International Society for Optical Engineering*, v 9914, 2016, *Millimeter, Submillimeter, and Far-Infrared Detectors and Instrumentation for Astronomy VIII*
Database: Compendex
12. **POLARBEAR-2: An instrument for CMB polarization measurements**
Inoue, Y. (Institute of Physics, Academia Sinica, Taipei, Taiwan); Ade, P.; Akiba, Y.; Aleman, C.; Arnold, K.; Baccigalupi, C.; Barch, B.; Barron, D.; Bender, A.; Boettger, D.; Borrill, J.; Chapman, S.; Chinone, Y.; Cukierman, A.; De Haan, T.; Dobbs, M.A.; Ducout, A.; Dunner, R.; Elleflot, T.; Errard, J.; Fabbian, G.; Feeney, S.; Feng, C.; Fuller, G.; Gilbert, A.J.; Goeckner-Wald, N.; Groh, J.; Hall, G.; Halverson, N.; Hamada, T.; Hasegawa, M.; Hattori, K.; Hazumi, M.; Hill, C.; Holzapfel, W.L.; Hori, Y.; Howe, L.; Irie, F.; Jaehnig, G.; Jaffe, A.; Jeong, O.; Katayama, N.; Kaufman, J.P.; Kazemzadeh, K.; Keating, B.G.; Kermish, Z.; Kesitalo, R.; Kisner, T.S.; Kusaka, A.; Le Jeune, M.; Lee, A.T.; Leon, D.; Linder, E.V.; Lowry, L.; Matsuda, F.; Matsumura, T.; Miller, N.; Mizukami, K.; Montgomery, J.; Navaroli, M.; Nishino, H.; Paar, H.; Peloton, J.; Poletti, D.; Puglisi, G.; Raum, C.R.; Rebeiz, G.M.; Reichardt, C.L.; Richards, P.L.; Ross, C.; Rotermund, K.M.; Segawa, Y.; Sherwin,

B.D.; Shirley, I.; Siritanasak, P.; Stebor, N.; Stompor, R.; Suzuki, A.; Tajima, O.; Takada, S.; Takatori, S.; Teply, G.P.; Tikhomirov, A.; Tomaru, T.; Whitehorn, N.; Zahn, A.; Zahn, O. **Source:** *Proceedings of SPIE - The International Society for Optical Engineering*, v 9914, 2016, *Millimeter, Submillimeter, and Far-Infrared Detectors and Instrumentation for Astronomy VIII*

Database: Compendex

13. The Simons Array CMB polarization experiment

Stebor, N. (Center for Astrophysics and Space Science, University of California, San Diego; CA; 92093, United States); Ade, P.; Akiba, Y.; Aleman, C.; Arnold, K.; Baccigalupi, C.; Barch, B.; Barron, D.; Beckman, S.; Bender, A.; Boettger, D.; Borrill, J.; Chapman, S.; Chinone, Y.; Cukierman, A.; De Haan, T.; Dobbs, M.; Ducout, A.; Dunner, R.; Elleflot, T.; Errard, J.; Fabbian, G.; Feeney, S.; Feng, C.; Fujino, T.; Fuller, G.; Gilbert, A.J.; Goeckner-Wald, N.; Groh, J.; Hall, G.; Halverson, N.; Hamada, T.; Hasegawa, M.; Hattori, K.; Hazumi, M.; Hill, C.; Holzapfel, W.L.; Hori, Y.; Howe, L.; Inoue, Y.; Irie, F.; Jaehnig, G.; Jaffe, A.; Jeong, O.; Katayama, N.; Kaufman, J.P.; Kazemzadeh, K.; Keating, B.G.; Kermish, Z.; Keskitalo, R.; Kisner, T.; Kusaka, A.; Le Jeune, M.; Lee, A.T.; Leon, D.; Linder, E.V.; Lowry, L.; Matsuda, F.; Matsumura, T.; Miller, N.; Montgomery, J.; Navaroli, M.; Nishino, H.; Paar, H.; Peloton, J.; Poletti, D.; Puglisi, G.; Raum, C.R.; Rebeiz, G.M.; Reichardt, C.L.; Richards, P.L.; Ross, C.; Rotermund, K.M.; Segawa, Y.; Sherwin, B.D.; Shirley, I.; Siritanasak, P.; Steinmetz, L.; Stompor, R.; Suzuki, A.; Tajima, O.; Takada, S.; Takatori, S.; Teply, G.P.; Tikhomirov, A.; Tomaru, T.; Westbrook, B.; Whitehorn, N.; Zahn, A.; Zahn, O. **Source:** *Proceedings of SPIE - The International Society for Optical Engineering*, v 9914, 2016, *Millimeter, Submillimeter, and Far-Infrared Detectors and Instrumentation for Astronomy VIII*

Database: Compendex

◇ 干涉仪测量 (interferometer measurement)⁶

通过检索 EI 数据库, 2016 年以来干涉仪测量在空间引力波探测研究方向涉及 23 篇最新的研究论文:

1. Testing the Binary Black Hole Nature of a Compact Binary Coalescence

Krishnendu, N.V. (Chennai Mathematical Institute, Siruseri; 603103, India); Arun, K.G.; Mishra, Chandra Kant **Source:** *Physical Review Letters*, v 119, n 9, August 31, 2017

Database: Compendex

2. Enhanced Gravitational Wave Science with LISA and gLISA.

Tinto, Massimo (Jet Propulsion Laboratory, California Institute of Technology, 4800 Oak Grove Drive, Pasadena; CA; 91109, United States) **Source:** *Journal of Physics: Conference Series*, v 840, n 1, June 1, 2017, *11th International LISA Symposium*

Database: Compendex

3. A new torsion pendulum for gravitational reference sensor technology development

Ciani, Giacomo (University of Florida, Gainesville; FL; 32611, United States); Chilton, Andrew; Apple, Stephen; Olatunde, Taiwo; Aitken, Michael; Mueller, Guido; Conklin, John W. **Source:** *Review of Scientific Instruments*, v 88, n 6, June 1, 2017

Database: Compendex

4. The status of DECIGO

Sato, Shuichi (Faculty of Science and Engineering, Hosei University, kajinocho, Tokyo; 184-8584, Japan); Kawamura, Seiji; Ando, Masaki; Nakamura, Takashi; Tsubono, Kimio; Araya, Akito; Funaki, Ikkoh; Ioka, Kunihito; Kanda, Nobuyuki; Moriwaki, Shigenori; Musha, Mitsuru; Nakazawa, Kazuhiro; Numata, Kenji; Sakai, Shin-Ichiro; Seto, Naoki; Takashima, Takeshi; Tanaka, Takahiro; Agatsuma, Kazuhiro; Aoyanagi, Koh-Suke; Arai, Koji; Asada, Hideki; Aso, Yoichi; Chiba, Takeshi; Ebisuzaki, Toshikazu; Ejiri, Yumiko; Enoki, Motohiro; Eriguchi, Yoshiharu; Fujimoto, Masa-Katsu; Fujita, Ryuichi; Fukushima, Mitsuhiro; Futamase, Toshifumi; Gzanu, Katsuhiko; Harada, Tomohiro; Hashimoto, Tatsuaki; Hayama, Kazuhiro; Hikida, Wataru; Himemoto, Yoshiaki; Hirabayashi, Hisashi; Hiramatsu, Takashi; Hong, Feng-Lei; Horisawa, Hideyuki; Hosokawa, Mizuhiko; Ichiki, Kiyotomo; Ikegami, Takeshi; Inoue, Kaiki T.; Ishidoshiro, Koji; Ishihara, Hideki; Ishikawa, Takehiko; Ishizaki, Hideharu; Ito, Hiroyuki; Itoh, Yousuke; Kawashima, Nobuki; Kawazoe,

⁶EI 数据库检索策略: (((interferometer measurement) WN KY) AND ((Spa* Grav* wav* det*) WN KY)) + (2017 OR 2016) WN YR

- Fumiko; Kishimoto, Naoko; Kiuchi, Kenta; Kobayashi, Shiho; Kohri, Kazunori; Koizumi, Hiroyuki; Kojima, Yasufumi; Kokeyama, Keiko; Kokuyama, Wataru; Kotake, Kei; Kozai, Yoshihide; Kudoh, Hideaki; Kunimori, Hiroo; Kuninaka, Hitoshi; Kuroda, Kazuaki; Maeda, Kei-Ichi; Matsuhara, Hideo; Mino, Yasushi; Miyakawa, Osamu; Miyoki, Shinji; Morimoto, Mutsuko Y.; Morioka, Tomoko; Morisawa, Toshiyuki; Mukohyama, Shinji; Nagano, Shigeo; Naito, Isao; Nakamura, Kouji; Nakano, Hiroyuki; Nakao, Kenichi; Nakasuka, Shinichi; Nakayama, Yoshinori; Nishida, Erina; Nishiyama, Kazutaka; Nishizawa, Atsushi; Niwa, Yoshito; Noumi, Taiga; Obuchi, Yoshiyuki; Ohashi, Masatake; Ohishi, Naoko; Ohkawa, Masashi; Okada, Norio; Onozato, Kouji; Oohara, Kenichi; Sago, Norichika; Saijo, Motoyuki; Sakagami, Masaaki; Sakata, Shihori; Sasaki, Misao; Sato, Takashi; Shibata, Masaru; Shinkai, Hisaaki; Somiya, Kentaro; Sotani, Hajime; Sugiyama, Naoshi; Suwa, Yudai; Suzuki, Rieko; Tagoshi, Hideyuki; Takahashi, Fuminobu; Takahashi, Kakeru; Takahashi, Keitaro; Takahashi, Ryutarō; Takahashi, Ryuichi; Takahashi, Tadayuki; Takahashi, Hiroataka; Akiteru, Takamori; Takano, Tadashi; Taniguchi, Keisuke; Taruya, Atsushi; Tashiro, Hiroyuki; Torii, Yasuo; Toyoshima, Morio; Tsujikawa, Shinji; Tsunesada, Yoshiki; Ueda, Akitoshi; Ueda, Ken-Ichi; Utashima, Masayoshi; Wakabayashi, Yaka; Yamakawa, Hiroshi; Yamamoto, Kazuhiro; Yamazaki, Toshitaka; Yokoyama, Jun'Ichi; Yoo, Chul-Moon; Yoshida, Shijun; Yoshino, Taizoh **Source:** *Journal of Physics: Conference Series*, v 840, n 1, June 1, 2017, *11th International LISA Symposium*
Database: Compendex
5. **Results on the measurement of the soot coefficients for ternary hydrocarbons mixtures on board ISS: Ergebnisse der Messung der Soret-Koeffizienten für ternäre Kohlenwasserstoffmischungen an Bord der ISS**
Ahadi, A. (Department of Mechanical and Industrial Engineering, Ryerson University, Toronto; M5B 2 K3, Canada); Saghir, M.Z. **Source:** *Materialwissenschaft und Werkstofftechnik*, v 48, n 5, p 373-377, May 2017
Database: Compendex
6. **Charge-Induced Force Noise on Free-Falling Test Masses: Results from LISA Pathfinder**
Armano, M. (European Space Astronomy Centre, European Space Agency, Villanueva de la Cañada, Madrid; 28692, Spain); Audley, H.; Auger, G.; Baird, J.T.; Binetruy, P.; Born, M.; Bortoluzzi, D.; Brandt, N.; Bursi, A.; Caleno, M.; Cavalleri, A.; Cesarini, A.; Cruise, M.; Danzmann, K.; De Deus Silva, M.; Diepholz, I.; Dolesi, R.; Dunbar, N.; Ferrarioli, L.; Ferroni, V.; Fitzsimons, E.D.; Flatscher, R.; Freschi, M.; Gallegos, J.; García Marín Rodríguez, C.; Gerndt, R.; Gesa, L.; Gibert, F.; Giardini, D.; Giusteri, R.; Grimaldi, C.; Grzymisch, J.; Harrison, I.; Heinzel, G.; Hewitson, M.; Hollington, D.; Hueller, M.; Huesler, J.; Inchauspé, H.; Jennrich, O.; Jetzer, P.; Johlander, B.; Karnesis, N.; Kaune, B.; Killow, C.J.; Korsakova, N.; Lloro, I.; Liu, L.; López-Zaragoza, J.P.; Maarschalkerweerd, R.; Madden, S.; Mance, D.; Martín, V.; Martín-Polo, L.; Martino, J.; Martín-Porqueras, F.; Mateos, I.; McNamara, P.W.; Mendes, J.; Mendes, L.; Moroni, A.; Nofrarias, M.; Paczkowski, S.; Perreux-Lloyd, M.; Petiteau, A.; Pivato, P.; Plagnol, E.; Prat, P.; Ragnit, U.; Ramos-Castro, J.; Reiche, J.; Romera Perez, J.A.; Robertson, D.I.; Rozemeijer, H.; Rivas, F.; Russano, G.; Sarra, P.; Schleicher, A.; Slutsky, J.; Sopuerta, C.; Sumner, T.J.; Texier, D.; Thorpe, J.I.; Trenkel, C.; Vetrugno, D.; Vitale, S.; Wanner, G.; Ward, H.; Wass, P.J.; Wealthy, D.; Weber, W.J.; Wittchen, A.; Zanon, C.; Ziegler, T.; Zweifel, P. **Source:** *Physical Review Letters*, v 118, n 17, April 26, 2017
Database: Compendex
7. **Beating the Standard Sensitivity-Bandwidth Limit of Cavity-Enhanced Interferometers with Internal Squeezed-Light Generation**
Korobko, M. (Institut für Laserphysik und Zentrum für Optische Quantentechnologien, Universität Hamburg, Luruper Chaussee 149, Hamburg; 22761, Germany); Kleybolte, L.; Ast, S.; Miao, H.; Chen, Y.; Schnabel, R. **Source:** *Physical Review Letters*, v 118, n 14, April 7, 2017
Database: Compendex
8. **Spectroscopy of Kerr Black Holes with Earth- and Space-Based Interferometers**
Berti, Emanuele (Department of Physics and Astronomy, University of Mississippi, University; MS; 38677, United States); Sesana, Alberto; Barausse, Enrico; Cardoso, Vitor; Belczynski, Krzysztof **Source:** *Physical Review Letters*, v 117, n 10, September 2, 2016
Database: Compendex
9. **Multiband Gravitational-Wave Astronomy: Parameter Estimation and Tests of General Relativity with Space- and Ground-Based Detectors**
Vitale, Salvatore (LIGO, Massachusetts Institute of Technology, Cambridge; MA; 02139, United States) **Source:** *Physical Review Letters*, v 117, n 5, July 27, 2016
Database: Compendex
10. **On the direct detection of gravitational waves, and some of the problems of improving laser interferometers**
Pustovoyt, V.I. (Center Photonics, Bauman Moscow State Technical University, Moscow, Russia) **Source:** *Journal of Physics: Conference Series*, v 731, n 1, July 26, 2016, *International Conference on*

Gravitation Cosmology and Continuum Mechanics (Dedicated to the Centenary of Kirill Petrovich Staniukovich)

Database: Compendex

11. **High-Performance Optical Frequency References for Space**

Schuldt, Thilo (German Aerospace Center (DLR), Institute of Space Systems, Robert-Hooke-Straße 7, Bremen; 28359, Germany); Döringshoff, Klaus; Milke, Alexander; Sanjuan, Josep; Gohlke, Martin; Kovalchuk, Evgeny V.; Gürlebeck, Norman; Peters, Achim; Braxmaier, Claus **Source:** *Journal of Physics: Conference Series*, v 723, n 1, July 4, 2016, *8th Symposium on Frequency Standards and Metrology 2015*

Database: Compendex

12. **Optical testbed for the LISA phasemeter**

Schwarze, T.S. (Max-Planck-Institut für Gravitationsphysik (Albert-Einstein-Institut), And Institut für Gravitationsphysik, Leibniz Universität Hannover, Callinstrasse 38, Hannover; 30167, Germany); Fernández Barranco, G.; Penkert, D.; Gerberding, O.; Heinzel, G.; Danzmann, K. **Source:** *Journal of Physics: Conference Series*, v 716, n 1, June 2, 2016, *11th Edoardo Amaldi Conference on Gravitational Waves, AMALDI 2015*

Database: Compendex

13. **Measuring Earth: Current status of the GRACE Follow-On Laser Ranging Interferometer**

Schütze, Daniel (Max Planck Institute for Gravitational Physics, Albert Einstein Institute, Institute for Gravitational Physics, Leibniz University Hannover, Callinstr. 38, Hannover; D-30167, Germany) **Source:** *Journal of Physics: Conference Series*, v 716, n 1, June 2, 2016, *11th Edoardo Amaldi Conference on Gravitational Waves, AMALDI 2015*

Database: Compendex

14. **The microgravity DSC-DCMIX1 mission onboard ISS: Experiment description and results on the measurement of the Soret coefficients for isobutylbenzene, dodecane, tetralin ternary hydrocarbons mixtures**

Ahadi, Amirhossein (Microgravity Laboratory, Mechanical and Industrial Engineering Department, Ryerson University, Toronto, Canada); Saghir, M. Ziad **Source:** *Experimental Thermal and Fluid Science*, v 74, p 296-307, June 01, 2016

Database: Compendex

15. **Medium range structural order in amorphous tantalum spatially resolved with changes to atomic structure by thermal annealing**

Hart, Martin J. (SUPA, School of Physics and Astronomy, University of Glasgow, Kelvin Building, United Kingdom); Bassiri, Riccardo; Borisenko, Konstantin B.; Véron, Muriel; Rauch, Edgar F.; Martin, Iain W.; Rowan, Sheila; Fejer, Martin M.; Maclaren, Ian **Source:** *Journal of Non-Crystalline Solids*, v 438, p 10-17, April 15, 2016

Database: Compendex

16. **Quantum test of the equivalence principle and space-time aboard the International Space Station**

Williams, Jason (Jet Propulsion Laboratory, California Institute of Technology, Pasadena; CA, United States); Chiow, Sheng-Wey; Yu, Nan; Müller, Holger **Source:** *New Journal of Physics*, v 18, n 2, February 17, 2016

Database: Compendex

17. **Experimental demonstration of deep frequency modulation interferometry**

Isleif, Katharina-Sophie (Leibniz Universität Hannover, Institute for Gravitational Physics, Callinstr. 38, Hannover, Germany); Gerberding, Oliver; Schwarze, Thomas S.; Mehmet, Moritz; Heinzel, Gerhard; Cervantes, Felipe Guzmán **Source:** *Optics Express*, v 24, n 2, p 1676-1684, January 25, 2016

Database: Compendex

18. **Precision requirements and innovative manufacturing for ultrahigh precision laser interferometry of gravitational-wave astronomy**

Ni, Wei-Tou (School of Optical-Electrical and Computer Engineering, University of Shanghai for Science and Technology, 516 Jun Gong Rd., Shanghai; 200093, China); Han, Sen; Jin, Tao **Source:** *Proceedings of SPIE - The International Society for Optical Engineering*, v 10023, 2016, *Optical Metrology and Inspection for Industrial Applications IV*

Database: Compendex

19. **Proceedings of SPIE - The International Society for Optical Engineering**

Source: *Proceedings of SPIE - The International Society for Optical Engineering*, v 9980, 2016, *Quantum Communications and Quantum Imaging XIV*

Database: Compendex

20. **MIGA: Combining laser and matter wave interferometry for mass distribution monitoring and advanced geodesy**
Canuel, B. (MIGA Consortium, France); Pelisson, S.; Amand, L.; Bertoldi, A.; Cormier, E.; Fang, B.; Gaffet, S.; Geiger, R.; Harms, J.; Holleville, D.; Landragin, A.; Lefèvre, G.; Lhermite, J.; Mielec, N.; Prevedelli, M.; Riou, I.; Bouyer, P. **Source:** *Proceedings of SPIE - The International Society for Optical Engineering*, v 9900, 2016, *Quantum Optics*
Database: Compendex
21. **Laser frequency and intensity stabilization for advanced LIGO**
Hall, Evan (Department of Physics, California Institute of Technology, United States) **Source:** *18th Coherent Laser Radar Conference and the Lidar Working Group on Space Based Winds, CLRC 2016*, 2016, *18th Coherent Laser Radar Conference and the Lidar Working Group on Space Based Winds, CLRC 2016*
Database: Compendex
22. **A step-wise steerable source of illumination for low-noise "violin-Mode" shadow sensors, intended for use in interferometric gravitational wave detectors**
Lockerbie, N.A. (SUPA (Scottish Universities Physics Alliance), Department of Physics, University of Strathclyde, 107 Rottenrow, Glasgow, United Kingdom); Tokmakov, K.V. **Source:** *Review of Scientific Instruments*, v 87, n 1, January 1, 2016
Database: Compendex
23. **Star tracker performance during the early phases of the lisa pathfinder mission**
Grzymisch, Jonathan (ESA (ESTEC), Netherlands); Castellini, Francesco; Zuiani, Federico; Cordero, Federico; Povoleri, Angelo; Pereira, Vasco; Watt, Mark; Harkins, James; Mikkelsen, Ole; Davidsen, Peter **Source:** *Proceedings of the International Astronautical Congress, IAC, 2016, IAC 2016 - 67th International Astronautical Congress: Making Space Accessible and Affordable to All Countries*
Database: Compendex

◇ 减少干扰 (disturbance reduction)⁷

通过检索 EI 数据库，减少干扰在空间引力波探测研究方向涉及 9 篇最新的研究论文：

1. **Regional gravity modeling based on heterogeneous data sets by using Poisson wavelets radial basis functions**
Wu, Yi-Hao (School of Geodesy and Geomatics, Wuhan University, Wuhan; 430079, China); Luo, Zhi-Cai; Zhou, Bo-Yang **Source:** *Acta Geophysica Sinica*, v 59, n 3, p 852-864, March 1, 2016 **Language:** Chinese
Database: Compendex
2. **GLISA: Geosynchronous laser interferometer space antenna concepts with off-the-shelf satellites**
Tinto, M. (Jet Propulsion Laboratory, California Institute of Technology, MS. 238-737, 4800 Oak Grove Drive, Pasadena; CA, United States); Debra, D.; Buchman, S.; Tilley, S. **Source:** *Review of Scientific Instruments*, v 86, n 1, January 1, 2015
Database: Compendex
3. **Cesium exposure test of the colloid micro-newton thruster for the LISA pathfinder mission**
Anderson, John R. (Jet Propulsion Laboratory, California Institute of Technology, Pasadena, CA, 91109, United States); Ziemer, John K.; Bulit, Alexandra **Source:** *48th AIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit 2012*, 2012, *48th AIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit 2012*
Database: Compendex
4. **Investigation of a deep infiltration gallery intake for a large seawater desalination project**
Shatila, Makrom H. (RBF Consulting (a Baker Company), 9755 Clairemont Mesa Blvd., San Diego, CA 92124-1324, United States); Lopez Jr., Cesar; Williams, Dennis E.; Findley, Paul L. **Source:** *AWWA/AMTA Membrane Technology Conference and Exposition 2012*, p 946-959, 2012, *AWWA/AMTA Membrane Technology Conference and Exposition 2012*

⁷EI 数据库检索策略: ((disturbance reduction) WN KY) AND ((Spa* Grav* wav* det*) WN KY)

Database: Compendex

5. **Colloid thruster contamination modeling for the LISA pathfinder mission**
Anderson, John R. (Jet Propulsion Laboratory, California Institute of Technology, Thermal and Propulsion Section, MS 125-109, Pasadena, CA, 91109, United States); Ziemer, John K. **Source:** *47th AIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit 2011*, 2011, *47th AIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit 2011*
Database: Compendex
6. **Analytic and interferometric techniques for the Laser Interferometer Space Antenna**
Pollack, Scott E. (University of Colorado at Boulder) **Source:** *ProQuest Dissertations and Theses Global*, 2005
Database: Compendex
7. **Control of the laser interferometer space antenna**
Maghami, P.G. (NASA Goddard Space Flight Center, Guidance, Navigation and Control Division, Greenbelt, MD 20771); Hyde, T.T.; Kim, J. **Source:** *European Space Agency, (Special Publication) ESA SP*, n 548, p 411-416, 2004, *Proceedings of the 18th International Symposium on Space Flight Dynamics*
Database: Compendex
8. **Equatorial waves including the Madden-Julian oscillation in TRMM rainfall and OLR data**
Cho, Hye-Kyung (Department of Atmospheric Sciences, Texas A and M University, College Station, TX 77845-3150, United States); Bowman, Kenneth P.; North, Gerald R. **Source:** *Journal of Climate*, v 17, n 22, p 4387-4406, November 15, 2004
Database: Compendex
9. **Microthrust propulsion for the LISA mission**
Ziemer, John K. (Jet Propulsion Laboratory, California Institute of Technology, Pasadena, CA 91109, United States); Merkowit, Stephen M. **Source:** *40th AIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit*, 2004, *40th AIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit*
Database: Compendex

【机构扫描】

☆ NASA

中文名称: 美国国家航空航天局

英文名称: National Aeronautics and Space Administration

机构网址: <http://www.nasa.gov/>

通过检索 EI 数据库, NASA 从 2016 年以来在空间引力波探测方面, 共有 19 篇论文⁸:

1. **Kepler sheds new and unprecedented light on the variability of a blue supergiant: Gravity waves in the O9.5Iab star HD 188209**
Aerts, C. (Instituut voor Sterrenkunde, KU Leuven, Celestijnenlaan 200D, Leuven; 3001, Belgium); Símón-Díaz, S.; Bloemen, S.; Debosscher, J.; Pápics, P.I.; Bryson, S.; Still, M.; Moravveji, E.; Williamson, M.H.; Grundahl, F.; Fredslund Andersen, M.; Antoci, V.; Pallé, P.L.; Christensen-Dalsgaard, J.; Rogers, T.M. **Source:** *Astronomy and Astrophysics*, v 602, June 1, 2017
Database: Compendex
2. **The status of DECIGO**
Sato, Shuichi (Faculty of Science and Engineering, Hosei University, kajinocho, Tokyo; 184-8584,

⁸EI 数据库检索策略: (((Spa* Grav* wav* det*) WN KY) AND ((NASA or Nat* Aer* Spa* Adm*) WN AF)) + (2017 OR 2016) WN YR

Japan); Kawamura, Seiji; Ando, Masaki; Nakamura, Takashi; Tsubono, Kimio; Araya, Akito; Funaki, Ikkoh; Ioka, Kunihito; Kanda, Nobuyuki; Moriwaki, Shigenori; Musha, Mitsuru; Nakazawa, Kazuhiro; Numata, Kenji; Sakai, Shin-Ichiro; Seto, Naoki; Takashima, Takeshi; Tanaka, Takahiro; Agatsuma, Kazuhiro; Aoyanagi, Koh-Suke; Arai, Koji; Asada, Hideki; Aso, Yoichi; Chiba, Takeshi; Ebisuzaki, Toshikazu; Ejiri, Yumiko; Enoki, Motohiro; Eriguchi, Yoshiharu; Fujimoto, Masa-Katsu; Fujita, Ryuichi; Fukushima, Mitsuhiko; Futamase, Toshifumi; Ganzu, Katsuhiko; Harada, Tomohiro; Hashimoto, Tatsuaki; Hayama, Kazuhiro; Hikida, Wataru; Himemoto, Yoshiaki; Hirabayashi, Hisashi; Hiramatsu, Takashi; Hong, Feng-Lei; Horisawa, Hideyuki; Hosokawa, Mizuhiko; Ichiki, Kiyotomo; Ikegami, Takeshi; Inoue, Kaiki T.; Ishidoshiro, Koji; Ishihara, Hideki; Ishikawa, Takehiko; Ishizaki, Hideharu; Ito, Hiroyuki; Itoh, Yousuke; Kawashima, Nobuki; Kawazoe, Fumiko; Kishimoto, Naoko; Kiuchi, Kenta; Kobayashi, Shiho; Kohri, Kazunori; Koizumi, Hiroyuki; Kojima, Yasufumi; Kokeyama, Keiko; Kokuyama, Wataru; Kotake, Kei; Kozai, Yoshihide; Kudoh, Hideaki; Kunimori, Hiroo; Kuninaka, Hitoshi; Kuroda, Kazuaki; Maeda, Kei-Ichi; Matsuhara, Hideo; Mino, Yasushi; Miyakawa, Osamu; Miyoki, Shinji; Morimoto, Mutsuko Y.; Morioka, Tomoko; Morisawa, Toshiyuki; Mukohyama, Shinji; Nagano, Shigeo; Naito, Isao; Nakamura, Kouji; Nakano, Hiroyuki; Nakao, Kenichi; Nakasuka, Shinichi; Nakayama, Yoshinori; Nishida, Erina; Nishiyama, Kazutaka; Nishizawa, Atsushi; Niwa, Yoshito; Noumi, Taiga; Obuchi, Yoshiyuki; Ohashi, Masatake; Ohishi, Naoko; Ohkawa, Masashi; Okada, Norio; Onozato, Kouji; Oohara, Kenichi; Sago, Norichika; Saijo, Motoyuki; Sakagami, Masaaki; Sakata, Shihori; Sasaki, Misao; Sato, Takashi; Shibata, Masaru; Shinkai, Hisaaki; Somiya, Kentaro; Sotani, Hajime; Sugiyama, Naoshi; Suwa, Yudai; Suzuki, Rieko; Tagoshi, Hideyuki; Takahashi, Fuminobu; Takahashi, Kakeru; Takahashi, Keitaro; Takahashi, Ryutarō; Takahashi, Ryuichi; Takahashi, Tadayuki; Takahashi, Hirota; Akiteru, Takamori; Takano, Tadashi; Taniguchi, Keisuke; Taruya, Atsushi; Tashiro, Hiroyuki; Torii, Yasuo; Toyoshima, Morio; Tsujikawa, Shinji; Tsunesada, Yoshiki; Ueda, Akitoshi; Ueda, Ken-Ichi; Utashima, Masayoshi; Wakabayashi, Yaka; Yamakawa, Hiroshi; Yamamoto, Kazuhiro; Yamazaki, Toshitaka; Yokoyama, Jun'Ichi; Yoo, Chul-Moon; Yoshida, Shijun; Yoshino, Taizoh **Source:** *Journal of Physics: Conference Series*, v 840, n 1, June 1, 2017, *11th International LISA Symposium*

Database: Compendex

3. Charge-Induced Force Noise on Free-Falling Test Masses: Results from LISA Pathfinder

Armano, M. (European Space Astronomy Centre, European Space Agency, Villanueva de la Cañada, Madrid; 28692, Spain); Audley, H.; Auger, G.; Baird, J.T.; Binetruy, P.; Born, M.; Bortoluzzi, D.; Brandt, N.; Bursi, A.; Caleno, M.; Cavalleri, A.; Cesarini, A.; Cruise, M.; Danzmann, K.; De Deus Silva, M.; Diepholz, I.; Dolesi, R.; Dunbar, N.; Ferraioli, L.; Ferroni, V.; Fitzsimons, E.D.; Flatscher, R.; Freschi, M.; Gallegos, J.; García Marirrodriga, C.; Gerndt, R.; Gesa, L.; Gibert, F.; Giardini, D.; Giusteri, R.; Grimaldi, C.; Grzymisch, J.; Harrison, I.; Heinzel, G.; Hewitson, M.; Hollington, D.; Hueller, M.; Huesler, J.; Inchauspé, H.; Jennrich, O.; Jetzer, P.; Johlander, B.; Karnesis, N.; Kaune, B.; Killow, C.J.; Korsakova, N.; Lloro, I.; Liu, L.; López-Zaragoza, J.P.; Maarschalkerweerd, R.; Madden, S.; Mance, D.; Martín, V.; Martín-Polo, L.; Martino, J.; Martín-Porqueras, F.; Mateos, I.; McNamara, P.W.; Mendes, J.; Mendes, L.; Moroni, A.; Nofrarias, M.; Paczkowski, S.; Perreux-Lloyd, M.; Petiteau, A.; Pivato, P.; Plagnol, E.; Prat, P.; Ragnit, U.; Ramos-Castro, J.; Reiche, J.; Romera Perez, J.A.; Robertson, D.I.; Rozemeijer, H.; Rivas, F.; Russano, G.; Sarra, P.; Schleicher, A.; Slutsky, J.; Sopuerta, C.; Sumner, T.J.; Texier, D.; Thorpe, J.I.; Trenkel, C.; Vetrugno, D.; Vitale, S.; Wanner, G.; Ward, H.; Wass, P.J.; Wealthy, D.; Weber, W.J.; Wittchen, A.; Zanon, C.; Ziegler, T.; Zweifel, P. **Source:** *Physical Review Letters*, v 118, n 17, April 26, 2017

Database: Compendex

4. The puzzling case of the radio-loud QSO 3C 186: A gravitational wave recoiling black hole in a young radio source?

Chiaberge, M. (Space Telescope Science Institute, 3700 San Martin Dr., Baltimore; MD; 21210, United States); Ely, J.C.; Meyer, E.T.; Georganopoulos, M.; Marinucci, A.; Bianchi, S.; Tremblay, G.R.; Hilbert, B.; Kotyla, J.P.; Capetti, A.; Baum, S.A.; Macchetto, F.D.; Miley, G.; O'dea, C.P.; Perlman, E.S.; Sparks, W.B.; Norman, C. **Source:** *Astronomy and Astrophysics*, v 600, April 1, 2017

Database: Compendex

5. Satellite-based observations of tsunami-induced mesosphere airglow perturbations

Yang, Yu-Ming (Jet Propulsion Laboratory, California Institute of Technology, Pasadena; CA, United States); Verkhoglyadova, Olga; Mlynczak, Martin G.; Mannucci, Anthony J.; Meng, Xing; Langley, Richard B.; Hunt, Linda A. **Source:** *Geophysical Research Letters*, v 44, n 1, p 522-532, January 16, 2017

Database: Compendex

6. A Case Study of the Mechanisms Modulating the Evolution of Valley Fog

Hang, C. (Department of Mechanical Engineering, University of Utah, Salt Lake City; UT, United States); Nadeau, D.F.; Gultepe, I.; Hoch, S.W.; Román-Cascón, C.; Pryor, K.; Fernando, H.J.S.; Creegan, E.D.; Leo, L.S.; Silver, Z.; Pardyjak, E.R. **Source:** *Pure and Applied Geophysics*, v 173, n 9, p 3011-3030, September 1, 2016

- Database:** Compendex
7. **Detection and measurement of micrometeoroids with LISA Pathfinder**
 Thorpe, J.I. (Gravitational Astrophysics Laboratory, NASA Goddard Space Flight Center, Greenbelt; MD, United States); Parvini, C.; Trigo-Rodríguez, J.M. **Source:** *Astronomy and Astrophysics*, v 586, February 1, 2016
Database: Compendex
 8. **The Cosmology Large Angular Scale Surveyor**
 Harrington, Kathleen (Dept. of Physics and Astronomy, Johns Hopkins University, Baltimore; MD; 21218, United States); Marriage, Tobias; Ali, Aamir; Appel, John W.; Bennett, Charles L.; Boone, Fletcher; Brewer, Michael; Chan, Manwei; Chuss, David T.; Colazo, Felipe; Dahal, Sumit; Denis, Kevin; Dünner, Rolando; Eimer, Joseph; Essinger-Hileman, Thomas; Fluxa, Pedro; Halpern, Mark; Hilton, Gene; Hinshaw, Gary F.; Hubmayr, Johannes; Iuliano, Jeffrey; Karakla, John; McMahon, Jeff; Miller, Nathan T.; Moseley, Samuel H.; Palma, Gonzalo; Parker, Lucas; Petroff, Matthew; Pradenas, Bastián; Rostem, Karwan; Sagliocca, Marco; Valle, Deniz; Watts, Duncan; Wollack, Edward; Xu, Zhilei; Zeng, Lingzhen **Source:** *Proceedings of SPIE - The International Society for Optical Engineering*, v 9914, 2016, *Millimeter, Submillimeter, and Far-Infrared Detectors and Instrumentation for Astronomy VIII*
Database: Compendex
 9. **Optical telescope system-level design considerations for a space-based gravitational wave mission**
 Livas, Jeffrey C. (NASA Goddard Space Flight Center, 8800 Greenbelt Road, Greenbelt; MD; 20771, United States); Sankar, Shannon R. **Source:** *Proceedings of SPIE - The International Society for Optical Engineering*, v 9904, 2016, *Space Telescopes and Instrumentation 2016: Optical, Infrared, and Millimeter Wave*
Database: Compendex
 10. **The primordial inflation explorer (PIXIE)**
 Kogut, Alan (Code 665, NASA Goddard Space Flight Center, Greenbelt; MD; 20771, United States); Chluba, Jens; Fixsen, Dale J.; Meyer, Stephan; Spergel, David **Source:** *Proceedings of SPIE - The International Society for Optical Engineering*, v 9904, 2016, *Space Telescopes and Instrumentation 2016: Optical, Infrared, and Millimeter Wave*
Database: Compendex
 11. **The e-ASTROGAM gamma-ray space mission**
 Tatischeff, V. (CSNSM, IN2P3, CNRS, Univ Paris-Sud, Orsay Cedex; F-91405, France); Tavani, M.; Von Ballmoos, P.; Hanlon, L.; Oberlack, U.; Aboudan, A.; Argan, A.; Bernard, D.; Brogna, A.; Bulgarelli, A.; Bykov, A.; Campana, R.; Caraveo, P.; Cardillo, M.; Coppi, P.; De Angelis, A.; Diehl, R.; Donnarumma, I.; Fioretti, V.; Giuliani, A.; Grenier, I.; Grove, J.E.; Hamadache, C.; Hartmann, D.; Hernanz, M.; Isern, J.; Kanbach, G.; Kiener, J.; Knödseder, J.; Labanti, C.; Laurent, P.; Limousin, O.; Longo, F.; Marisaldi, M.; McBreen, S.; McEnery, J.E.; Mereghetti, S.; Mirabel, F.; Morselli, A.; Nakazawa, K.; Peyré, J.; Piano, G.; Pittori, C.; Sabatini, S.; Stawarz, L.; Thompson, D.J.; Ulyanov, A.; Walter, R.; Wu, X.; Zdziarski, A.; Zoglauer, A. **Source:** *Proceedings of SPIE - The International Society for Optical Engineering*, v 9905, 2016, *Space Telescopes and Instrumentation 2016: Ultraviolet to Gamma Ray*
Database: Compendex
 12. **Large Observatory for x-ray Timing (LOFT-P): A Probe-class mission concept study**
 Wilson-Hodge, Colleen A. (NASA, Marshall Space Flight Center, Huntsville; AL, United States); Ray, Paul S.; Chakrabarty, Deepto; Feroci, Marco; Alvarez, Laura; Baysinger, Michael; Becker, Chris; Bozzo, Enrico; Brandt, Soren; Carson, Billy; Chapman, Jack; Dominguez, Alexandra; Fabisinski, Leo; Gangl, Bert; Garcia, Jay; Griffith, Christopher; Hernanz, Margarita; Hickman, Robert; Hopkins, Randall; Hui, Michelle; Ingram, Luster; Jenke, Peter; Korpela, Seppo; Maccarone, Tom; Michalska, Malgorzata; Pohl, Martin; Santangelo, Andrea; Schanne, Stephane; Schnell, Andrew; Stella, Luigi; Van Der Klis, Michiel; Watts, Anna; Winter, Berend; Zane, Silvia **Source:** *Proceedings of SPIE - The International Society for Optical Engineering*, v 9905, 2016, *Space Telescopes and Instrumentation 2016: Ultraviolet to Gamma Ray*
Database: Compendex
 13. **Advanced topographic laser altimeter system (ATLAS) receiver telescope assembly (RTA) and transmitter alignment and test**
 Hagopian, John (National Aeronautic and Space Administration, Goddard Space Flight Center, 8800 Greenbelt Road, Greenbelt; MD; 20776, United States); Bolcar, Matthew; Chambers, John; Crane, Allen; Eegholm, Bente; Evans, Tyler; Hetherington, Samuel; Mentzell, Eric; Thompson, Patrick L.; Ramos-Izquierdo, Luis; Vaughn, David **Source:** *Proceedings of SPIE - The International Society for Optical Engineering*, v 9972, 2016, *Earth Observing Systems XXI*
Database: Compendex

✧ ESA

中文名称：欧洲航天局

英文名称：European Space Agency

机构网址：<http://www.esa.int/>

通过检索 EI 数据库，ESA 从 2016 年以来在空间引力波探测方面，共有 5 篇论文⁹：

- 1. Charge-Induced Force Noise on Free-Falling Test Masses: Results from LISA Pathfinder**
 Armano, M. (European Space Astronomy Centre, European Space Agency, Villanueva de la Cañada, Madrid; 28692, Spain); Audley, H.; Auger, G.; Baird, J.T.; Binetruy, P.; Born, M.; Bortoluzzi, D.; Brandt, N.; Bursi, A.; Caleno, M.; Cavalleri, A.; Cesarini, A.; Cruise, M.; Danzmann, K.; De Deus Silva, M.; Diepholz, I.; Dolesi, R.; Dunbar, N.; Ferraioli, L.; Ferroni, V.; Fitzsimons, E.D.; Flatscher, R.; Freschi, M.; Gallegos, J.; García Marirrodriga, C.; Gerndt, R.; Gesa, L.; Gibert, F.; Giardini, D.; Giusteri, R.; Grimaldi, C.; Grzysch, J.; Harrison, I.; Heinzl, G.; Hewitson, M.; Hollington, D.; Hueller, M.; Huesler, J.; Inchauspé, H.; Jennrich, O.; Jetzer, P.; Johlander, B.; Karnesis, N.; Kaune, B.; Killow, C.J.; Korsakova, N.; Lloro, I.; Liu, L.; López-Zaragoza, J.P.; Maarschalkerweerd, R.; Madden, S.; Mance, D.; Martín, V.; Martín-Polo, L.; Martino, J.; Martín-Porqueras, F.; Mateos, I.; McNamara, P.W.; Mendes, J.; Mendes, L.; Moroni, A.; Nofrarias, M.; Paczkowski, S.; Perreux-Lloyd, M.; Petiteau, A.; Pivato, P.; Plagnol, E.; Prat, P.; Ragnit, U.; Ramos-Castro, J.; Reiche, J.; Romera Perez, J.A.; Robertson, D.I.; Rozemeijer, H.; Rivas, F.; Russano, G.; Sarra, P.; Schleicher, A.; Slutsky, J.; Sopuerta, C.; Sumner, T.J.; Texier, D.; Thorpe, J.I.; Trenkel, C.; Vetrugno, D.; Vitale, S.; Wanner, G.; Ward, H.; Wass, P.J.; Wealthy, D.; Weber, W.J.; Wittchen, A.; Zononi, C.; Ziegler, T.; Zweifel, P. **Source:** *Physical Review Letters*, v 118, n 17, April 26, 2017
Database: Compendex
- 2. Science and payloads for the next decades of ESA's Cosmic Vision program**
 Heske, Astrid (European Space Agency, ESTEC, Keplerlaan 1, AZ Noordwijk; 2201, Netherlands) **Source:** *IEEE Aerospace Conference Proceedings*, v 2016-June, June 27, 2016, 2016 IEEE Aerospace Conference, AERO 2016
Database: Compendex
- 3. Jupiter icy moons explorer (JUICE)**
 Witasse, O. (European Space Agency, ESTEC, Scientific Support Office, Keplerlaan 1, Noordwijk; 2200 AG, Netherlands) **Source:** *Proceedings of the International Astronautical Congress, IAC, 2016, IAC 2016 - 67th International Astronautical Congress: Making Space Accessible and Affordable to All Countries*
Database: Compendex
- 4. LISA pathfinder: New methods for acquisition of signal after large apogee raising maneuvers**
 Bellei, G. (DEIMOS Space at ESOC, Darmstadt, Germany); Droll, P.; Delhaise, F.; Harrison, I.; Amend, D. **Source:** *SpaceOps 2016 Conference, 2016, SpaceOps 2016 Conference*
Database: Compendex
- 5. LISA pathfinder: New methods for acquisition of signal after large apogee raising maneuvers**
 Bellei, G. (DEIMOS Space, ESOC, Darmstadt, Germany); Droll, P.; Delhaise, F.; Harrison, I.; Amend, D. **Source:** *14th International Conference on Space Operations, 2016, 2016, 14th International Conference on Space Operations*
Database: Compendex

✧ LIGO

中文名称：激光干涉仪引力波天文台

⁹EI 数据库检索策略: (((Spa* Grav* wav* det*) WN KY) AND ((EAS or Eur* Spa* Age*) WN AF)) + (2017 OR 2016) WN YR

简介: LIGO 是 laser interferometer gravitational wave observatory 的缩写, 是借助于激光干涉仪来聆听来自宇宙深处引力波的大型研究仪器。截至目前, LIGO 由两个干涉仪组成, 每一个都带有两个 4 千米长的臂并组成 L 型, 它们分别位于相距 3000 千米的美国南海岸 Livingston 和美国西北海岸 Hanford。通过检索 EI 数据库, LIGO 在空间引力波探测方面, 共有 29 篇论文¹⁰:

1. **Multiband Gravitational-Wave Astronomy: Parameter Estimation and Tests of General Relativity with Space- and Ground-Based Detectors**
Vitale, Salvatore (LIGO, Massachusetts Institute of Technology, Cambridge; MA; 02139, United States) **Source:** *Physical Review Letters*, v 117, n 5, July 27, 2016
Database: Compendex
2. **Gravitational wave astronomy: the current status**
Blair, David (School of Physics, The University of Western Australia, Crawley; WA, Australia); Ju, Li; Zhao, ChunNong; Wen, LinQing; Chu, Qi; Fang, Qi; Cai, RongGen; Gao, JiangRui; Lin, XueChun; Liu, Dong; Wu, Ling-An; Zhu, ZongHong; Reitze, David H.; Arai, Koji; Zhang, Fan; Flaminio, Raffaele; Zhu, XingJiang; Hobbs, George; Manchester, Richard N.; Shannon, Ryan M.; Baccigalupi, Carlo; Gao, Wei; Xu, Peng; Bian, Xing; Cao, ZhouJian; Chang, ZiJing; Dong, Peng; Gong, XueFei; Huang, ShuangLin; Ju, Peng; Luo, ZiRen; Qiang, Li'E; Tang, WenLin; Wan, XiaoYun; Wang, Yue; Xu, ShengNian; Zang, YunLong; Zhang, HaiPeng; Lau, Yun-Kau; Ni, Wei-Tou **Source:** *Science China: Physics, Mechanics and Astronomy*, v 58, n 12, p 1-41, December 1, 2015
Database: Compendex
3. **Accelerated gravitational wave parameter estimation with reduced order modeling**
Canizares, Priscilla (Institute of Astronomy, Madingley Road, Cambridge; CB3 0HA, United Kingdom); Field, Scott E.; Gair, Jonathan; Raymond, Vivien; Smith, Rory; Tiglio, Manuel **Source:** *Physical Review Letters*, v 114, n 7, February 20, 2015
Database: Compendex
4. **Improved upper limits on the stochastic gravitational-wave background from 2009-2010 LIGO and Virgo data**
Aasi, J. (LIGO - California Institute of Technology, Pasadena; CA; 91125, United States); Abbott, B.P.; Abbott, R.; Abbott, T.; Abernathy, M.R.; Accadia, T.; Acernese, F.; Ackley, K.; Adams, C.; Adams, T.; Addesso, P.; Adhikari, R.X.; Affeldt, C.; Agathos, M.; Aggarwal, N.; Aguiar, O.D.; Ain, A.; Ajith, P.; Alesic, A.; Allen, B.; Allocca, A.; Amariutei, D.; Andersen, M.; Anderson, R.; Anderson, S.B.; Anderson, W.G.; Arai, K.; Araya, M.C.; Arceneaux, C.; Areeda, J.; Aston, S.M.; Astone, P.; Aufmuth, P.; Aulbert, C.; Austin, L.; Aylott, B.E.; Babak, S.; Baker, P.T.; Ballardín, G.; Ballmer, S.W.; Barayoga, J.C.; Barbet, M.; Barish, B.C.; Barker, D.; Barone, F.; Barr, B.; Barsotti, L.; Barsuglia, M.; Barton, M.A.; Bartos, I.; Bassiri, R.; Basti, A.; Batch, J.C.; Bauchrowitz, J.; Bauer, Th. S.; Behnke, B.; Bejger, M.; Beker, M.G.; Belczynski, C.; Bell, A.S.; Bell, C.; Bergmann, G.; Bersanetti, D.; Bertolini, A.; Betzwieser, J.; Beyersdorf, P.T.; Bilenko, I.A.; Billingsley, G.; Birch, J.; Biscans, S.; Bitossi, M.; Bizouard, M.A.; Black, E.; Blackburn, J.K.; Blackburn, L.; Blair, D.; Bloemen, S.; Blom, M.; Bock, O.; Bodiya, T.P.; Boer, M.; Bogaert, G.; Bogan, C.; Bond, C.; Bondu, F.; Bonelli, L.; Bonnand, R.; Bork, R.; Born, M.; Boschi, V.; Bose, Sukanta; Bosi, L.; Bradaschia, C.; Brady, P.R.; Braginsky, V.B.; Branchesi, M.; Brau, J.E.; Briant, T.; Bridges, D.O.; Brillet, A.; Brinkmann, M.; Brisson, V.; Brooks, A.F.; Brown, D.A.; Brown, D.D.; Brückner, F.; Buchman, S.; Bulik, T.; Bulten, H.J.; Buonanno, A.; Burman, R.; Buskulic, D.; Buy, C.; Cadonati, L.; Cagnoli, G.; Bustillo, J. Calderón; Calloni, E.; Camp, J.B.; Campsie, P.; Cannon, K.C.; Canuel, B.; Cao, J.; Capano, C.D.; Carbognani, F.; Carbone, L.; Caride, S.; Castiglia, A.; Caudill, S.; Cavaglià, M.; Cavalier, F.; Cavalieri, R.; Celerier, C.; Cella, G.; Cepeda, C.; Cesarini, E.; Chakraborty, R.; Chalermongsak, T.; Chamberlin, S.J.; Chao, S.; Charlton, P.; Chassande-Mottin, E.; Chen, X.; Chen, Y.; Chincarini, A.; Chiummo, A.; Cho, H.S.; Chow, J.; Christensen, N.; Chu, Q.; Chua, S.S.Y.; Chung, S.; Ciani, G.; Clara, F.; Clark, J.A.; Cleva, F.; Coccia, E.; Cohadon, P.-F.; Colla, A.; Collette, C.; Colombini, M.; Cominsky, L.; Constanancio, M.; Conte, A.; Cook, D.; Corbitt, T.R.; Cordier, M.; Cornish, N.; Corpuz, A.; Corsi, A.; Costa, C.A. **Source:** *Physical Review Letters*, v 113, n 23, December 2, 2014
Database: Compendex
5. **Simple Model of Complete Precessing Black-Hole-Binary Gravitational Waveforms**
Hannam, Mark (School of Physics and Astronomy, Cardiff University, Queens Building, Cardiff; CF24 3AA, United Kingdom); Schmidt, Patricia; Bohé, Alejandro; Haegel, Leïla; Husa, Sascha; Ohme, Frank; Pratten,

¹⁰EI 数据库检索策略: (((Spa* Grav* wav* det*) WN KY) AND ((LIGO) WN AF))

Geraint; Pürrer, Michael **Source:** *Physical Review Letters*, v 113, n 15, October 7, 2014

Database: Compendex

6. **Constraints on cosmic strings from the ligo-virgo gravitational-wave detectors**

Aasi, J. (LIGO, California Institute of Technology, Pasadena, CA 91125, United States); Abadie, J.; Abbott, B.P.; Abbott, R.; Abbott, T.; Abernathy, M.R.; Accadia, T.; Acernese, F.; Adams, C.; Adams, T.; Adhikari, R.X.; Affeldt, C.; Agathos, M.; Aggarwal, N.; Aguiar, O.D.; Ajith, P.; Allen, B.; Allocca, A.; Amador Ceron, E.; Amariutei, D.; Anderson, R.A.; Anderson, S.B.; Anderson, W.G.; Arai, K.; Araya, M.C.; Arceneaux, C.; Areeda, J.; Ast, S.; Aston, S.M.; Astone, P.; Aufmuth, P.; Aulbert, C.; Austin, L.; Aylott, B.E.; Babak, S.; Baker, P.T.; Ballardín, G.; Ballmer, S.W.; Barayoga, J.C.; Barker, D.; Barnum, S.H.; Barone, F.; Barr, B.; Barsotti, L.; Barsuglia, M.; Barton, M.A.; Bartos, I.; Bassiri, R.; Basti, A.; Batch, J.; Bauchrowitz, J.; Bauer, Th. S.; Bebronne, M.; Behnke, B.; Bejger, M.; Beker, M.G.; Bell, A.S.; Bell, C.; Belopolski, I.; Bergmann, G.; Berliner, J.M.; Bersanetti, D.; Bertolini, A.; Bessis, D.; Betzwieser, J.; Beyersdorf, P.T.; Bhadbhade, T.; Bilenko, I.A.; Billingsley, G.; Birch, J.; Bitossi, M.; Bizouard, M.A.; Black, E.; Blackburn, J.K.; Blackburn, L.; Blair, D.; Blom, M.; Bock, O.; Bodiya, T.P.; Boer, M.; Bogan, C.; Bond, C.; Bondu, F.; Bonelli, L.; Bonnand, R.; Bork, R.; Born, M.; Boschi, V.; Bose, S.; Bosi, L.; Bowers, J.; Bradaschia, C.; Brady, P.R.; Braginsky, V.B.; Branchesi, M.; Brannen, C.A.; Brau, J.E.; Breyer, J.; Briant, T.; Bridges, D.O.; Brillet, A.; Brinkmann, M.; Brisson, V.; Britzger, M.; Brooks, A.F.; Brown, D.A.; Brown, D.D.; Brückner, F.; Bulik, T.; Bulten, H.J.; Buonanno, A.; Buskulic, D.; Buy, C.; Byer, R.L.; Cadonati, L.; Cagnoli, G.; Calderón Bustillo, J.; Calloni, E.; Camp, J.B.; Campsie, P.; Cannon, K.C.; Canuel, B.; Cao, J.; Capano, C.D.; Carbognani, F.; Carbone, L.; Caride, S.; Castiglia, A.; Caudill, S.; Cavaglià, M.; Cavalier, F.; Cavalieri, R.; Cella, G.; Cepeda, C.; Cesarini, E.; Chakraborty, R.; Chalermongsak, T.; Chao, S.; Charlton, P.; Chassande-Mottin, E.; Chen, X.; Chen, Y.; Chincarini, A.; Chiummo, A.; Cho, H.S.; Chow, J.; Christensen, N.; Chu, Q.; Chua, S.S.Y.; Chung, S.; Ciani, G.; Clara, F.; Clark, D.E.; Clark, J.A.; Cleva, F.; Coccia, E.; Cohadon, P.-F.; Colla, A.; Colombini, M.; Constancio Jr., M.; Conte, A.; Conte, R.; Cook, D.; Corbitt, T.R.; Cordier, M.; Cornish, N.; Corsi, A.; Costa, C.A.; Coughlin, M.W.; Coulon, J.-P. **Source:** *Physical Review Letters*, v 112, n 13, April 4, 2014

Database: Compendex

7. **Technique for in situ measurement of free spectral range and transverse mode spacing of optical cavities**

Stochino, Alberto (LIGO Laboratory, MS 100-36, California Institute of Technology, Pasadena, CA 91125, United States); Arai, Koji; Adhikari, Rana X. **Source:** *Applied Optics*, v 51, n 27, p 6571-6577, September 20, 2012

Database: Compendex

8. **First low-latency LIGO+Virgo search for binary inspirals and their electromagnetic counterparts**

Abadie, J. (LIGO-California Institute of Technology, Pasadena, CA 91125, United States); Abbott, B.P.; Abbott, R.; Abbott, T.D.; Abernathy, M.; Accadia, T.; Acernese, F.; Adams, C.; Adhikari, R.; Affeldt, C.; Agathos, M.; Agatsuma, K.; Ajith, P.; Allen, B.; Amador Ceron, E.; Amariutei, D.; Anderson, S.B.; Anderson, W.G.; Arai, K.; Arain, M.A.; Araya, M.C.; Aston, S.M.; Astone, P.; Atkinson, D.; Aufmuth, P.; Aulbert, C.; Aylott, B.E.; Babak, S.; Baker, P.; Ballardín, G.; Ballmer, S.; Barayoga, J.C.B.; Barker, D.; Barone, F.; Barr, B.; Barsotti, L.; Barsuglia, M.; Barton, M.A.; Bartos, I.; Bassiri, R.; Bastarrika, M.; Basti, A.; Batch, J.; Bauchrowitz, J.; Bauer, Th. S.; Bebronne, M.; Beck, D.; Behnke, B.; Bejger, M.; Beker, M.G.; Bell, A.S.; Belletoile, A.; Belopolski, I.; Benacquista, M.; Berliner, J.M.; Bertolini, A.; Betzwieser, J.; Beveridge, N.; Beyersdorf, P.T.; Bilenko, I.A.; Billingsley, G.; Birch, J.; Biswas, R.; Bitossi, M.; Bizouard, M.A.; Black, E.; Blackburn, J.K.; Blackburn, L.; Blair, D.; Bland, B.; Blom, M.; Bock, O.; Bodiya, T.P.; Bogan, C.; Bondarescu, R.; Bondu, F.; Bonelli, L.; Bonnand, R.; Bork, R.; Born, M.; Boschi, V.; Bose, S.; Bosi, L.; Bouhou, B.; Braccini, S.; Bradaschia, C.; Brady, P.R.; Braginsky, V.B.; Branchesi, M.; Brau, J.E.; Breyer, J.; Briant, T.; Bridges, D.O.; Brillet, A.; Brinkmann, M.; Brisson, V.; Britzger, M.; Brooks, A.F.; Brown, D.A.; Bulik, T.; Bulten, H.J.; Buonanno, A.; Burguet-Castell, J.; Buskulic, D.; Buy, C.; Byer, R.L.; Cadonati, L.; Cagnoli, G.; Calloni, E.; Camp, J.B.; Campsie, P.; Cannizzo, J.; Cannon, K.; Canuel, B.; Cao, J.; Capano, C.D.; Carbognani, F.; Carbone, L.; Caride, S.; Caudill, S.; Cavaglià, M.; Cavalier, F.; Cavalieri, R.; Cella, G.; Cepeda, C.; Cesarini, E.; Chaibi, O.; Chalermongsak, T.; Charlton, P.; Chassande-Mottin, E.; Chelkowski, S.; Chen, W.; Chen, X.; Chen, Y.; Chincarini, A.; Chiummo, A.; Cho, H.S.; Chow, J.; Christensen, N.; Chua, S.S.Y.; Chung, C.T.Y.; Chung, S.; Ciani, G.; Clara, F.; Clark, D.E.; Clark, J.; Clayton, J.H.; Cleva, F.; Coccia, E.; Cohadon, P.-F.; Colacino, C.N.; Colas, J.; Colla, A.; Colombini, M.; Conte, A.; Conte, R.; Cook, D.; Corbitt, T.R.; Cordier, M.; Cornish, N.; Corsi, A.; Costa, C.A.; Coughlin, M.; Coulon, J.-P.; Couvares, P.; Coward, D.M.; Cowart, M.; Coyne, D.C.; Creighton, J.D.E. **Source:** *Astronomy and Astrophysics*, v 541, 2012

Database: Compendex

9. **LIGO: The laser interferometer gravitational-wave observatory**

Fritschel, Peter (LIGO Laboratory, Massachusetts Institute of Technology, Cambridge, MA; 02139, United States) **Source:** *Advanced Gravitational Wave Detectors*, v 9780521874298, p 113-132, January 1, 2012

Database: Compendex

10. **Observational constraints on multimessenger sources of gravitational waves and high-energy neutrinos**
Bartos, Imre (Department of Physics, Columbia University, New York, NY 10027, United States); Finley, Chad; Corsi, Alessandra; Márka, Szabolcs **Source:** *Physical Review Letters*, v 107, n 25, December 14, 2011
Database: Compendex
11. **Inspiral-merger-ringdown waveforms for black-hole binaries with nonprecessing spins**
Ajith, P. (LIGO Laboratory, California Institute of Technology, Pasadena, CA 91125, United States); Hannam, M.; Husa, S.; Chen, Y.; Brüggmann, B.; Dorband, N.; Müller, D.; Ohme, F.; Pollney, D.; Reisswig, C.; Santamaría, L.; Seiler, J. **Source:** *Physical Review Letters*, v 106, n 24, June 15, 2011
Database: Compendex
12. **Calibration of the LIGO gravitational wave detectors in the fifth science run**
Abadie, J. (Albert-Einstein-Institut, Max-Planck-Institut für Gravitationsphysik, D-14476 Golm, Germany); Abbott, B.P.; Abbott, R.; Abernathy, M.; Adams, C.; Adhikari, R.; Ajith, P.; Allen, B.; Allen, G.; Amador Ceron, E.; Amin, R.S.; Anderson, S.B.; Anderson, W.G.; Arain, M.A.; Araya, M.; Aronsson, M.; Aso, Y.; Aston, S.; Atkinson, D.E.; Aufmuth, P.; Aulbert, C.; Babak, S.; Baker, P.; Ballmer, S.; Barker, D.; Barnum, S.; Barr, B.; Barriga, P.; Barsotti, L.; Barton, M.A.; Bartos, I.; Bassiri, R.; Bastarrika, M.; Bauchrowitz, J.; Behnke, B.; Benacquista, M.; Bertolini, A.; Betzwieser, J.; Beveridge, N.; Beyersdorf, P.T.; Bilenko, I.A.; Billingsley, G.; Birch, J.; Biswas, R.; Black, E.; Blackburn, J.K.; Blackburn, L.; Blair, D.; Bland, B.; Bock, O.; Bodiya, T.P.; Bondarescu, R.; Bork, R.; Born, M.; Bose, S.; Boyle, M.; Brady, P.R.; Braginsky, V.B.; Brau, J.E.; Breyer, J.; Bridges, D.O.; Brinkmann, M.; Britzger, M.; Brooks, A.F.; Brown, D.A.; Buonanno, A.; Burguetcastell, J.; Burmeister, O.; Byer, R.L.; Cadonati, L.; Cain, J.; Camp, J.B.; Campsie, P.; Cannizzo, J.; Cannon, K.C.; Cao, J.; Capano, C.; Caride, S.; Caudill, S.; Cavaglià, M.; Cepeda, C.; Chalermongsak, T.; Chalkley, E.; Charlton, P.; Chelkowski, S.; Chen, Y.; Christensen, N.; Chua, S.S.Y.; Chung, C.T.Y.; Clark, D.; Clark, J.; Clayton, J.H.; Conte, R.; Cook, D.; Corbitt, T.R.; Cornish, N.; Costa, C.A.; Coward, D.M.; Coyne, D.C.; Creighton, J.D.E.; Creighton, T.D.; Cruise, A.M.; Culter, R.M.; Cumming, A.; Cunningham, L.; Dahl, K.; Danilishin, S.L.; Dannenberg, R.; Danzmann, K.; Das, K.; Daudert, B.; Davies, G.; Davis, A.; Daw, E.J.; Dayanga, T.; Debra, D.; Degallaix, J.; Dergachev, V.; Derosa, R.; Desalvo, R.; Devanka, P.; Dhurandhar, S.; Di Palma, I.; Daz, M.; Donovan, F.; Dooley, K.L.; Doomes, E.E.; Dorsher, S.; Douglas, E.S.D.; Drever, R.W.P.; Driggers, J.C.; Dueck, J.; Dumas, J.-C.; Eberle, T.; Edgar, M.; Edwards, M.; Effler, A.; Ehrens, P.; Engel, R.; Etzel, T.; Evans, M.; Evans, T.; Fairhurst, S.; Fan, Y.; Farr, B.F.; Fazi, D.; Fehrmann, H.; Feldbaum, D.; Finn, L.S.; Flanagan, M.; Flasch, K.; Foley, S.; Forrest, C.; Forsi, E.; Fotopoulos, N.; Frede, M.; Frei, M.; Frei, Z.; Freise, A.; Frey, R.; Fricke, T.T.; Friedrich, D.; Fritschel, P.; Frolov, V.V.; Fulda, P.; Fyffe, M.; Garofoli, J.A.; Gholami, I.; Ghosh, S.; Giaime, J.A.; Giampanis, S. **Source:** *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, v 624, n 1, p 223-240, December 1, 2010
Database: Compendex
13. **All-Sky LIGO search for periodic gravitational waves in the early fifth-science-run data**
Abbott, B.P. (Albert-Einstein-Institut, Max-Planck-Institut für Gravitationsphysik, D-14476 Golm, Germany); Abbott, R.; Adhikari, R.; Ajith, P.; Allen, B.; Allen, G.; Amin, R.S.; Anderson, S.B.; Anderson, W.G.; Arain, M.A.; Araya, M.; Armandula, H.; Armor, P.; Aso, Y.; Aston, S.; Aufmuth, P.; Aulbert, C.; Babak, S.; Baker, P.; Ballmer, S.; Bantilan, H.; Barish, B.C.; Barker, C.; Barker, D.; Barr, B.; Barriga, P.; Barsotti, L.; Barton, M.A.; Bartos, I.; Bassiri, R.; Bastarrika, M.; Behnke, B.; Benacquista, M.; Betzwieser, J.; Beyersdorf, P.T.; Bilenko, I.A.; Billingsley, G.; Biswas, R.; Black, E.; Blackburn, J.K.; Blackburn, L.; Blair, D.; Bland, B.; Bodiya, T.P.; Bogue, L.; Bork, R.; Boschi, V.; Bose, S.; Brady, P.R.; Braginsky, V.B.; Brau, J.E.; Brinkmann, M.; Brooks, A.F.; Brown, D.A.; Brunet, G.; Bullington, A.; Buonanno, A.; Burmeister, O.; Byer, R.L.; Cadonati, L.; Cagnoli, G.; Camp, J.B.; Cannizzo, J.; Cannon, K.C.; Cao, J.; Cardenas, L.; Cardoso, V.; Caride, S.; Casebolt, T.; Castaldi, G.; Caudill, S.; Cavaglià, M.; Cepeda, C.; Chalkley, E.; Charlton, P.; Chatterji, S.; Chelkowski, S.; Chen, Y.; Christensen, N.; Clark, D.; Clark, J.; Clayton, J.H.; Cokelaer, T.; Conte, R.; Cook, D.; Corbitt, T.R.C.; Cornish, N.; Coyne, D.C.; Creighton, J.D.E.; Creighton, T.D.; Cruise, A.M.; Cumming, A.; Cunningham, L.; Cutler, R.M.; Danzmann, K.; Daudert, B.; Davies, G.; Debra, D.; Degallaix, J.; Dergachev, V.; Desai, S.; Desalvo, R.; Dhurandhar, S.; Díaz, M.; Dickson, J.; Dietz, A.; Donovan, F.; Dooley, K.L.; Doomes, E.E.; Drever, R.W.P.; Duke, I.; Dumas, J.-C.; Dwyer, J.; Echols, C.; Edgar, M.; Effler, A.; Ehrens, P.; Ely, G.; Espinoza, E.; Etzel, T.; Evans, M.; Evans, T.; Fairhurst, S.; Faltas, Y.; Fan, Y.; Fazi, D.; Fejer, M.M.; Finn, L.S.; Flasch, K.; Foley, S.; Forrest, C.; Fotopoulos, N.; Franzen, A.; Frei, Z.; Freise, A.; Frey, R.; Fricke, T.T.; Fritschel, P.; Frolov, V.V.; Fyffe, M.; Garofoli, J.A.; Gholami, I.; Giaime, J.A.; Giampanis, S.; Giardino, K.D.; Goda, K.; Goetz, E.; Goggin, L.M.; González, G.; Gossler, S.; Gouaty, R.; Grant, A.; Gras, S.; Gray, C.; Gray, M.; Greenhalgh, R.J.S.; Gretarsson, A.M.; Grimaldi, F.; Grosso, R.; Grote, H.; Grunewald, S.; Guenther, M.; Gustafson, E.K.; Gustafson, R.; Hage, B.; Hallam, J.M.; Hanna, C.; Hanson, J.; Harms, J.; Harry, G.M.; Harstad, E.D.; Haughian, E. **Source:** *Physical Review Letters*, v 102, n 11, March 20, 2009
Database: Compendex
14. **Decigo: The Japanese space gravitational wave antenna**

Ando, Masaki (Department of Physics, University of Tokyo, Bunkyo, Tokyo 113-0033, Japan); Kawamura, Seiji; Nakamura, Takashi; Seto, Naoki; Tsubono, Kimio; Numata, Kenji; Takahashi, Ryuichi; Musha, Mitsuru; Ueda, Ken-Ichi; Funaki, Ikko; Moriwaki, Shigenori; Takashima, Takeshi; Sakai, Shin-Ichiro; Sato, Takashi; Kanda, Nobuyuki; Nagano, Shigeo; Hosokawa, Mizuhiko; Ishikawa, Takehiko; Sato, Shuichi; Aso, Yoichi; Morimoto, Mutsuko Y.; Agatsuma, Kazuhiro; Akutsu, Tomomi; Akutsu, Tomotada; Aoyanagi, Koh-Suke; Arai, Koji; Arase, Yuta; Araya, Akito; Asada, Hideki; Chiba, Takeshi; Ebisuzaki, Toshikazu; Enoki, Motohiro; Eriguchi, Yoshiharu; Hong, Feng-Lei; Fujimoto, Masa-Katsu; Fukushima, Mitsuhiro; Futamase, Toshifumi; Ganzu, Katsuhiko; Harada, Tomohiro; Hashimoto, Tatsuaki; Hayama, Kazuhiro; Hikida, Wataru; Himemoto, Yoshiaki; Hirabayashi, Hisashi; Hiramatsu, Takashi; Horisawa, Hideyuki; Ichiki, Kiyotomo; Ikegami, Takeshi; Inoue, Kaiki T.; Ioka, Kunihito; Ishidoshiro, Koji; Ito, Hiroyuki; Itoh, Yousuke; Kamagasaki, Shogo; Kawashima, Nobuki; Kawazoe, Fumiko; Kirihara, Hiroyuki; Kishimoto, Naoko; Kiuchi, Kenta; Klaus, Werner; Kobayashi, Shiho; Kohri, Kazunori; Koizumi, Hiroyuki; Kojima, Yasufumi; Kokeyama, Keiko; Kokuyama, Wataru; Kotake, Kei; Kozai, Yoshihide; Kudoh, Hideaki; Kunimori, Hiroo; Kuninaka, Hitoshi; Kuroda, Kazuaki; Maeda, Kei-Ichi; Matsuhara, Hideo; Mino, Yasushi; Miura, Jun-Ichi; Miyakawa, Osamu; Miyoki, Shinji; Morioka, Tomoko; Morisawa, Toshiyuki; Mukohyama, Shinji; Naito, Isao; Nakagawa, Noriyasu; Nakamura, Kouji; Nakano, Hiroyuki; Nakao, Kenichi; Nakasuka, Shinichi; Nakayama, Yoshinori; Nishida, Erina; Nishiyama, Kazutaka; Nishizawa, Atsushi; Niwa, Yoshito; Ohashi, Masatake; Ohishi, Naoko; Ohkawa, Masashi; Okutomi, Akira; Onozato, Kouji; Oohara, Kenichi; Sago, Norichika; Saijo, Motoyuki; Sakagami, Masaaki; Sakata, Shihori; Sasaki, Misao; Shibata, Masaru; Shinkai, Hisaaki; Somiya, Kentaro; Sotani, Hajime; Sugiyama, Naoshi; Tagoshi, Hideyuki; Takahashi, Tadayuki; Takahashi, Ryutaro; Takahashi, Kakeru; Takahashi, Hirotaka; Akiteru, Takamori; Takano, Tadashi; Tanaka, Takahiro; Taniguchi, Keisuke; Taruya, Atsushi; Tashiro, Hiroyuki; Tokuda, Mitsuru; Tokunari, Masao; Toyoshima, Morio; Tsujikawa, Shinji; Tsunesada, Yoshiki; Utashima, Masayoshi; Yamakawa, Hiroshi; Yamamoto, Kazuhiro; Yamazaki, Toshihiko; Yokoyama, Juntchi; Yoo, Chul-Moon; Yoshida, Shijun; Yoshino, Taizoh **Source:** *11th Marcel Grossmann Meeting on Recent Developments in Theoretical and Experimental General Relativity, Gravitation and Relativistic Field Theories - Proc. of the MG11 Meeting on General Relativity*, p 2393-2397, 2008, *11th Marcel Grossmann Meeting on Recent Developments in Theoretical and Experimental General Relativity, Gravitation and Relativistic Field Theories - Proc. of the MG11 Meeting on General Relativity*

Database: Compendex

15. **The search for gravitational waves**

Raab, F.J. (Reporting for the LIGO Scientific Collaboration, LIGO Hanford Observatory, Richland, WA 99354, United States) **Source:** *2008 IEEE International Frequency Control Symposium, FCS*, p 1-9, 2008, *2008 IEEE International Frequency Control Symposium, FCS*

Database: Compendex

16. **The Big Bang Observer: High laser power for gravitational wave astrophysics**

Harry, Gregory M. (LIGO Laboratory, Massachusetts Institute of Technology, Cambridge MA 02139, United States); Folkner, William; Fritschel, Peter; Phinney, E. Sterl; Shaddock, Daniel A. **Source:** *Conference on Lasers and Electro-Optics, 2007, CLEO 2007, 2007, Conference on Lasers and Electro-Optics, 2007, CLEO 2007*

Database: Compendex

17. **Passive, nonlinear, mechanical structures for seismic attenuation**

DeSalvo, Riccardo (LIGO Laboratory, California Institute of Technology, Pasadena, CA 91125, United States) **Source:** *Journal of Computational and Nonlinear Dynamics*, v 2, n 4, p 290-298, October 2007

Database: Compendex

18. **Gravitational-wave stochastic background from cosmic strings**

Siemens, Xavier (Center for Gravitation and Cosmology, Department of Physics, University of Wisconsin-Milwaukee, P.O. Box 413, WI 53201, United States); Mandic, Vuk; Creighton, Jolien **Source:** *Physical Review Letters*, v 98, n 11, March 13, 2007

Database: Compendex

19. **The big bang observer: High laser power for gravitational wave astrophysics**

Harry, Gregory M. (LIGO Laboratory, Massachusetts Institute of Technology, Cambridge MA, 02139, United States); Folkner, William; Fritschel, Peter; Sterl, Phinney, E.; Shaddock, Daniel A. **Source:** *Optics InfoBase Conference Papers, 2007, Photonic Applications Systems Technologies Conference, PhAST 2007*

Database: Compendex

20. **A case study on the use of workflow technologies for scientific analysis: Gravitational wave data analysis**

Brown, Duncan A. (LIGO Laboratory, California Institute of Technology, Pasadena, CA 91125, United States); Brady, Patrick R.; Dietz, Alexander; Cao, Junwei; Johnson, Ben; McNabb, John **Source:** *Workflows for e-Science: Scientific Workflows for Grids*, p 39-59, 2007

Database: Compendex

21. **The big bang observer: High laser power for gravitational wave astrophysics**
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联系我们

- ✚ 中国科学院国家空间科学中心图书馆
陈诚 chch@nssc.ac.cn 010-62586435
周吉 zhouji@nssc.ac.cn 010-62582801

- ✚ 中国科学院复杂航天系统电子信息技术重点实验室
周丽丽 zhoulili@nssc.ac.cn 010-61611130

- ✚ 中国科学院文献情报中心用户服务与知识传播中心
王靖娴 wangjx@mail.las.ac.cn 010-82626611-6150