Umut **Yıldız**, Ph.D. (CV)

Contact Information

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Professional Experience

NASA/JPL (Jet Propulsion Laboratory), USA — Space Telecommunications Engineer 01/2016–
NASA/JPL (Jet Propulsion Laboratory), USA — Key Staff Member 09/2019–

- Run simulations to perform spectrum and radio frequency interference analysis for deep space telecom purposes. Works include: Assigning new deep space frequencies for the upcoming deep space missions. Protecting deep space communications from possible interference of the near-Earth missions.

NASA/JPL (Jet Propulsion Laboratory), USA — Caltech Postdoctoral Scholar 09/2013–12/2015

- Led a study of a large scale Herschel spectral survey of ionized nitrogen [N II] toward the Galactic plane, in order to quantify the abundance of ionized gas in the warm interstellar medium.

Leiden University, The Netherlands — Postdoctoral Researcher 05/2013–08/2013

- Developed the *LOMASS* (Leiden Observatory Single-dish Submm Spectral Database of Low-mass YSOs) database and accumulated thousands of spectral data that have been observed with many sub-/millimeter telescopes for a large number of low-mass protostars over many years.
- Research on observations of carbonmonoxide (CO) obtained from the telescopes in Hawaii (JCMT) and Chile (APEX) to quantify the outflows and UV heating around the newly forming stars.

Leiden University, The Netherlands — Research Assistant 12/2008–05/2013

- Research on the feedback effects of newly forming stars via using sub-/millimeter observations of H_2O, O_2, and CO molecules.
- Developed the WISH (Water In Star-forming regions with Herschel) data reduction pipeline "WISH Live Data Show", which had interacted with the Herschel Science Archive, then reduced and visualized the data, so that the team members obtained publication quality data 24 hours after the Herschel observations.

"ESO Turkiye" Initiative, Turkey — General Coordinator 10/2011–current

- Coordinating the negotiation efforts for Turkish membership to European Southern Observatory (ESO) between the Turkish Ministry of Transport and ESO council with a team of 60+ professionals. Upon success, it will be a $100M+ project for 10 years (http://www.esoturkiye.org).

Education

Ph.D., Astrophysics, Leiden University, Leiden Observatory, The Netherlands 2013

- Thesis: *"Warm and Cold Gas in Low-Mass Protostars: Herschel Space Observatory and Ground-Based Surveys"*; Advisors: Prof. Dr. E.F. van Dishoeck & Dr. L.E. Kristensen

MSc, Astronomy, Kapteyn Astronomical Institute, University of Groningen, The Netherlands 2008

- Thesis: *"Stellar Populations of Dwarf Galaxies: Optical and Near-IR Surface Photometry of Quiescent Dwarf Galaxies"*; Advisor: Prof. Dr. R.F. Peletier

BSc, Astronomy and Space Sciences (Honors) & Maths (Minor), Ankara University, Turkey 2004

BCert, Astronomy, University College London, United Kingdom 2002

Technical Skills

Programming Experience: Python, R, MySQL, LaTeX, HTML, PHP, Gildas, *Herschel*-HIPE, IRAF
Scientific Experience: dealing with very large data sets; data and error analysis; data visualization; image processing; modeling of complex systems; hands-on observation experience from the European, Hawaiian and Chilean telescopes; scientific writing and communication
Academic Expertise: Astrophysics, Astrochemistry, Observational IR & sub-/millimeter astronomy

Publications Summary

- h-index of 28, # of citations 2521 as of Aug 2020 (Source: Publons, Researcher-ID: C-5257-2011).
- *Author* of 51 refereed publications, 5 of which are *first-authored*, in top peer-reviewed scientific journals including Science, Astronomy & Astrophysics, The Astrophysical Journal, and others.
- *Author* of 25 international conference abstracts and proceedings, of which 10 are *first-authored*.
- *Author* of NASA Press Release on the discovery of low abundance of molecular oxygen on Sun-like protostars (http://www.herschel.caltech.edu/news/nhsc2014-006).
- *Co-author* of four press releases about the discovery of H_2O and O_2 in the star forming regions.
- Many *press interviews* regarding astronomy and space sciences on Turkish TV and newspapers.
- All publications are available online at Publons.

Fellowships and Awards

- Interplanetary Network Directorate Team Award at NASA's Jet Propulsion Laboratory 08/31/2017
- Caltech Postdoctoral Fellowship at NASA's Jet Propulsion Laboratory 09/2013–12/2015
- European Southern Observatory (ESO) grant for observation trip to Chile 12/2014
- League of European Research Universities (LERU) Doctoral School, *"Development of leadership skills for employment in enterprise, government and academia"*, UPMC, Paris, France 07/2013
- *Best Poster Award* at "Herschel's view of Star & Planet Formation Symp.", Grenoble, France 03/2012
- Leidse Sterrewacht Funds for observing trip to Chile, APEX observing run 06/2011
- International Astronomical Union grant to participate IAU280 Symp., Spain 05/2011
- *Honor Poster Award* at the 64$^{\text{th}}$ Dutch Astronomers Conference, Kerkrade 05/2009
- Leiden University Doctoral Fellowship, The Netherlands 12/2008-05/2013
- MAGPOP Research Fellowship at the Instituto de Astrofísica de Canarias 10/2007-02/2008
- "Student van de Maand (Student of the Month)" in Dutch-Turkish "EKIN" magazine 10/2006
- Graduated top 5% from University of Ankara, Dept. of Astronomy and Space Sciences 06/2004
- Prime Minister Scholarship for undergraduate studies

Press Releases

- *Herschel* Uncovers a Dearth of Oxygen near a New Star (NASA/IPAC Press Release)

Intern

SRON (Space Research Organisation of the Netherlands), Groningen — Intern 10/2009–02/2010

- Tested and verified the performance of Herschel Space Observatory HIFI's data reduction and analysis software 'HIPE' with the calibration team at the HIFI Instrument Control Center during the telescope's "Performance Verification" stage with the very first Herschel data.

Instituto de Astrofísica de Canarias, Tenerife, Spain — Research Assistant 10/2007–02/2008

- Research on near-infrared photometric observations of nearby dwarf galaxies.

Academic & Teaching Experience

- **Referee**: Astrophysical Journal, Astrophysical Journal Letters, Astronomy & Astrophysics 2015–...
- Board Member of DAG, East Anatolian Observatory Project (4m IR telescope) 2011–...
- MSc project co-supervision, Jaya Ramchandani, University of Leiden 09/2012
- MSc project co-supervision, Irene San José García, University of Leiden 12/2010
- Teaching Assistant, Stellar Structure and Evolution, University of Leiden Spring 2010
- Teaching Assistant, Beta1op1 Astronomy, University of Groningen 09/2006 – 02/2007
- Supervisor, "Spectroscopy of the Solar Corona" exchange project at the total solar eclipse of March 29, 2006 with the Tubitak National Observatory and Groningen University 10/2005 - 05/2006

Memberships, Other Experiences

- Member of International Astronomical Union (IAU) 2015–...
- Member of American Astronomical Society (AAS) 2014–...
- Member of European Astronomical Society (EAS) 2019–...
- Member of Turkish Astronomical Society (TAD) 2012–...
- Member of Planetary Society, Mars Society 2015–...

Observing Projects

PI of SOFIA: Cycle 8 06-0241; Where is the oxygen in high mass protostellar outflows? (Do-if-time)
PI of SOFIA: Cycle 6 06-0109; Where is the oxygen in protostellar outflows? (Priority 1; 4.8 hr)
PI of SOFIA: Cycle 5 05-0142; COPS-GREAT2: CO in ProtoStars with GREAT (Do-if-time)
PI of two NASA IRTF Projects: (*i*) 2017B084 (7.5 hrs); (*ii*) 2016B113 (7 hrs)
PI of three successful James Clerk Maxwell Telescope (JCMT) Projects: (*i*) M11BN05 (64 hrs); (*ii*) M11AN05 (17 hrs); (*iii*) M09BN01 (21 hrs)
Associate: Herschel OT2 Project ([N II] Observations to define the source of [C II] Emission)
Associate: Herschel Guaranteed Time Key Program (WISH: Water In Star-forming regions with Herschel)
Associate: Herschel Open Time Key Program (HOP: Herschel Oxygen Project)
Associate: Herschel Open Time Key Program (DIGIT: Dust, Ice and Gas In Time)
Associate: International Time Program (MAGPOP: Multiwavelength Analysis of Galaxy Populations)
Co-I of 40+ successful observing proposals to obtain time on ALMA, Herschel, APEX, JCMT, IRAM 30m, SMT, and SOFIA telescopes.

Observing Experience

SOFIA Airbourne Observatory (Palmdale and Christchurch), upGREAT; Dec 4, 2018; Jun 7, 2019
'PI Guest Observer'

APEX Telescope (Llano de Chajnantor, Chile), SuperCam & SHFI instruments; Dec 9-21, 2014
'ESO observer'

SMT (Submillimeter Telescope) (Mt Graham, Arizona, USA), SuperCam Instrument; Apr 1-8, 2014
'Various JPL and University of Arizona projects executed including my own'

APEX Telescope (Llano de Chajnantor, Chile), CHAMP$^+$ & SHFI instruments; Jun 12-23, 2011
'Various MPIfR and Dutch observing proposals executed including my own'

IRAM 30m Telescope (Sierra Nevada, Spain), EMIR instrument; Jun 05-09, 2009
'Search for complex molecules around the protostar B1-b', (014-09)

James Clerk Maxwell Telescope (JCMT, Mauna Kea, Hawaii), RxA instrument; Feb 09-13, 2009
'Methanol as a probe of chemical conditions in young low mass stars', (M09AN05)

William Herschel Telescope (La Palma, Spain), Oasis Instrument, Dec 21-22, 2005
Integral field spectroscopy of dwarf ellipticals, (MAGPOP ITP, Run4)

Maksutov Telescope (University of Ankara Observatory, Turkey), Feb 2003 - Feb 2004
'Photometry of W Uma and Algol type eclipsing binary stars', one night/week during one year

Public Outreach

Outreach e-/conferences about astronomy and career in science for middle and high school students in Turkey. So far, reached more than 300k+ students with 180+ connections to 2200+ schools (https://umutayildiz.com/events-all/.

Twitter: umutayildiz *"Science and space related outreach via social media"*
Fourth most followed astrophysicist in the world with 490k+ followers according to truesciphi.org/ast_fol.html

Columnist: *"Popular Science Turkey"*
"See articles" (Monthly column since Jun 2017)

Columnist: *"Atlas Magazine"*
"See articles" (Monthly column since Apr 2017)

Academic Activities (Talks, Posters, Summer Schools, etc.)

Poster: *'Where is the Oxygen in high-mass protostars?'*
225$^{\text{th}}$ American Astronomical Society Meeting (Honolulu, USA, Jan 4-8, 2020)

Participant: *"COSPAR 2018"* (Pasadena, USA, Jul 14-22, 2018)

Local Organizing Committee: *"Astrochemistry; Past, Present, & Future; A Meeting in Celebration of Ewine van Dishoeck"* (Pasadena, USA, Jul 10-13, 2018)

Fall School: *"Radio Frequency Spectrum Management"* (Anne Arundel Community College, USA, Sep 2016 – Jan 2017)

Judge: *"Physics and Astronomy Grand Award Judge"*
"INTEL ISEF, International Science and Engineering Fair" (Los Angeles, USA, May 17, 2017)

Symposium co-organizer & Talk: *"Herschel Galactic plane survey of ionized gas traced by [NII]"*
Pasadena Postdoc Symposium (Lake Arrowhead, CA, USA, Apr 8-10, 2015)

Poster: *"Herschel Galactic plane survey of ionized gas traced by [NII]"*
225$^{\rm th}$ American Astronomical Society Meeting (Seattle, USA, Jan 4-9, 2015)

Summer School: *"Astrostatistics School"*, Caltech (Pasadena, USA, Sep 17-19, 2014)

Summer School: *"Big Data Analytics"*, Caltech (Pasadena, USA, Sep 2-12, 2014)

Poster: *"Herschel Galactic plane survey of ionized gas traced by [NII]"*
JPL Postdoc Research Day (Pasadena, USA, Jul 29, 2014)

Colloquium: *"Star formation with millimeter molecular line observations"*
University of Ankara (Ankara, Turkey, Jun 11, 2014)
University of Turkish Aerospace (Ankara, Turkey, Jun 10, 2014)

Judge: *"Physics and Astronomy Grand Award Judge"*
"INTEL ISEF, International Science and Engineering Fair" (Los Angeles, USA, May 13-14, 2014)

Talk: *"Warm and cold gas in low-mass protostars"*, JPL Science Fair (Pasadena, USA, Mar 24, 2014)

Poster: *"Stringent limits of O_2 abundance toward a low-mass protostar with Herschel-HIFI"*
223$^{\rm rd}$ American Astronomical Society Meeting (Washington, D.C., USA, Jan 4-9, 2014)

Poster: *"Deep O_2 observations toward a low-mass protostar with Herschel-HIFI"*
Protostars and Planets VI (Heidelberg, Germany, Jul 15-20, 2013)

Summer School: *"Development of leadership skills for enterprise, government and academia"*
LERU Doctoral Summer School, University Pierre & Marie Curie, (Paris, France, Jul 8-12, 2013)

Contributed Talk: *"High-J CO survey of low-mass protostars with Herschel"*
68$^{\rm th}$ Dutch Astronomers Conference (Lommel, Belgium, May 15-17, 2013)

PhD Colloquium: *"High-J CO and O_2 in Low-Mass Star Forming Regions with Herschel"*
Leiden Observatory (Leiden, Netherlands, Mar 4, 2013)

Lunch Talk: *"High-J CO and O_2 in Low-Mass Star Forming Regions with $Herschel$"*
NASA/JPL (Pasadena, USA, Nov 20, 2012)

Lunch Talk: *"High-J CO and O_2 in LM YSOs with $Herschel$ and Turkish mm-Telescope Project"*
Caltech Cahill Center for Astronomy & Astrophysics (Pasadena, USA, Nov 19, 2012)

Invited Talk: *"Star Formation with sub-/mm astronomy and National Radiotelescope"*
Contributed Talk: *"Journey of Turkish Membership to ESO - Türkiye'nin ESO'ya Üyelik Yolculuğu"*
18$^{\rm th}$ Turkish National Astronomy Congress (Malatya, Turkey, Aug 27-31, 2012)

Poster: *"High-J CO Survey of Low-Mass Protostars Observed with Herschel-HIFI and LOMASS Database"*
Herschel's view of Star and Planet Formation Symposium (Grenoble, France, Mar 20-23, 2012)

Contributed Talk: *"Survey of APEX-CHAMP$^+$ High-J CO Observations of LowMass YSOs"*
Science with the APEX Telescope Conf. (Ringberg Castle, Germany, Feb 12-15, 2012)

Invited Talk: *Star Formation"*, 14$^{\rm th}$ National Stargazing Festival (Antalya, Turkey, Jul 8-10, 2011)

Colloquium Talk: *"Low-Mass Star Formation"*, ALMA/ESO Joint Offices (Santiago, Chile, Jun 24, 2011)

Poster: *"High-J CO Survey of Low-Mass Protostars Observed with Herschel-HIFI"*
IAU 280 Symposium, Molecular Universe (Toledo, Spain, May 29-Jun 4, 2011)

Invited Talk: *"Star-Formation in the IR/submm"*
IR Astronomy in Turkey and East Anatolian Observatory (Erzurum, Turkey, Apr 1-3, 2011)

Talk: *"WISH Key Program & HIFI Data Reduction"*
HIFI KP Data Processing Meeting (Groningen, Netherlands, Jan 27-28, 2011)

Talk: *"Low-Mass High-J CO Survey with HIFI"*, WISH Meeting (Leiden, Netherlands, Jan 24-26, 2011)

Talk: *"Low-Mass Star Formation"*, ASTRON NOVA Fall School (Dwingeloo, Netherlands, Oct 3-8, 2010)

Poster: *"New Constraints on Low-Mass Star Formation by Herschel-HIFI"*

The 5th Zermatt ISM Symposium (Zermatt, Switzerland, Sep 20-24, 2010)

Talk: *"WISH Low-Mass Team Overview"*, WISH Meeting (Zermatt, Switzerland, Sep 22, 2010)

Talk: *"WISH First Results"*, Leiden Observatory Science Day (Leiden, Netherlands, Sep 9, 2010)

Talk: *"WISH Water in Star-Forming Regions with Herschel"*
Leiden Observatory PhD Discussions (Leiden, Netherlands, Jun 4, 2010)

Talk: *"Low-Mass Star Formation as Revealed by Warm CO CHAMP$^+$ Mapping"*
WISH Meeting (Leiden, Netherlands, Nov 23-27, 2009)

Summer School: *5th IRAM 30m Summer School, Paving the way: From mm to far-IR Astronomy*
Institut de Radioastronomie Millimétrique, (Sierra Nevada, Spain, Sep 4-11, 2009)

Poster: *"The Shocking Truth about Star Formation as Revealed by Warm CO CHAMP$^+$ Mapping"*
64th Dutch Astronomers Conference (Kerkrade, Netherlands, May 13-15, 2009)

Seminar: *"Optical and Near-IR Surface Photometry of Quiescent Dwarf Galaxies"*
Leiden Observatory, AstroChem Seminar (Leiden, Netherlands, Sep 19, 2008)

Lunch Talk: *"Optical and Near-IR Surface Photometry of Quiescent Dwarf Galaxies"*
Kapteyn Institute, (Groningen, Netherlands, Apr 23, 2008)

Summer School: *MAGPOP, Multiwavelength Analysis of Galaxy Populations Summer School*
Max Planck Institute for Extraterrestrial Physics & MAGPOP (Seeon, Germany, Aug 6-11, 2007)

Talk: *"Near-IR image Data Reduction Procedures"*, MAGPOP-ITP (Nottingham, UK, May 17-18, 2007)

Extra-curricular Activities

Photography, World History, Astroarcheology, World Travel (visited 20+ countries around the globe)

Refereed Publications

(First Author publications)

51. **Yıldız, U. A.**; Kristensen, L. E.; van Dishoeck, E. F.; Hogerheijde, M. R.; Karska, A.; Belloche, A.; Endo, A.; Frieswijk, W.; Guesten, R.; van Kempen, T. A.; Leurini, S.; Nagy, Z.; Perez-Beaupuits, J. P.; Risacher, C.; van der Marel, N.; van Weeren, R. J.; Wyrowsky, F.; *APEX-CHAMP$^+$ high-J CO observations of low–mass young stellar objects: IV. Mechanical and radiative feedback*, 2015, Astronomy & Astrophysics, Vol. 576, A109 [ADS]

50. **Yıldız, U. A.**; Acharyya, K.; Goldsmith, P. F.; van Dishoeck, E. F.; Melnick, G.; Snell, R.; Liseau, R.; Chen, J-H.; Pagani, L.; Bergin, E.; Caselli, P.; Herbst, E.; Visser, R.; Gerin, M.; *Deep observations of O_2 toward a low-mass protostar with Herschel-HIFI*, 2013, Astronomy & Astrophysics, Vol. 558, A58 [ADS]

    Press Release: **Herschel Uncovers a Dearth of Oxygen near a New Star** (NASA/IPAC)

49. **Yıldız, U. A.**; Kristensen, L. E.; van Dishoeck, E. F.; San José-García, I.; Karska, A.; Harsono, D.; Tafalla, M.; Fuente, A.; Visser, R.; Jørgensen, J.; Hogerheijde, M.; *Water in low-mass star-forming regions with Herschel: High-J CO survey observed with HIFI*; 2013, Astronomy & Astrophysics, Vol. 556, A89 [ADS]

48. **Yıldız U. A.**; Kristensen, L. E.; van Dishoeck, E. F.; Belloche, A.; van Kempen, T. A.; Hogerheijde, M. R.; Guesten, R.; van der Marel, N.; *APEX-CHAMP$^+$ high-J CO observations of low–mass young stellar objects: III. NGC 1333 IRAS 4A/4B envelope, outflow and UV heating*; 2012, Astronomy & Astrophysics, Vol. 542, A86 [ADS]

47. **Yıldız, U. A.**; van Dishoeck, E. F.; Kristensen, L. E.; Visser, R.; Jørgensen, J. K.; Herczeg, G. J.; van Kempen, T. A.; Hogerheijde, M. R.; Doty, S. D.; Benz, A. O.; Bruderer, S.; Wampfler, S. F.; Deul, E.; Bachiller, R.; Baudry, A.; Benedettini, M.; Bergin, E.; Bjerkeli, P.; Blake, G. A.; Bontemps, S.; Braine, J.; Caselli, P.; Cernicharo, J.; Codella, C.; Daniel, F.; di Giorgio, A. M.; Dominik, C.; Encrenaz, P.; Fich, M.; Fuente, A.; Giannini, T.; Goicoechea, J. R.; de Graauw, Th.; Helmich, F.; Herpin, F.; Jacq, T.; Johnstone, D.; Larsson, B.; Lis, D.; Liseau, R.; Liu, F.-C.; Marseille, M.; McCoey, C.; Melnick, G.; Neufeld, D.; Nisini, B.; Olberg, M.; Parise, B.; Pearson, J. C.; Plume, R.; Risacher, C.; Santiago-García, J.; Saraceno, P.; Shipman, R.; Tafalla, M.; Tielens, A. G. G. M.; van der Tak, F.; Wyrowski, F.; Dieleman, P.; Jellema, W.; Ossenkopf, V.; Schieder, R.; Stutzki,

J.; *Herschel/HIFI observations of high-J CO lines in the NGC 1333 low-mass star-forming region*; 2010, Astronomy & Astrophysics, Vol. 521, L40 [ADS]

(Co-Author publications)

46. Yang, Y.-L.; Green, J. D.; Evans, N. J., II; Lee, J.-E.; Jorgensen, J. K.; Kristensen, L. E.; Mottram, J. C.; Herczeg, G.; Karska, A.; Dionatos, O.; Bergin, E. A.; Bouwman, J.; van Dishoeck, E. F.; van Kempen, T. A.; Larson, R. L.; **Yıldız, U. A.**; *CO in Protostars (COPS): Herschel-SPIRE Spectroscopy of Embedded Protostars*; 2018, Astrophysical Journal, Vol 860, 174 [ADS]
45. Kristensen, L.E.; van Dishoeck, E.F.; Mottram, J.C.; A. Karska, A.; **Yıldız, U. A.**; Bergin, E.A.; Bjerkeli, P.; Cabrit, S.; Doty, S.; Evans, N.J.; Gusdorf, A.; Harsono, D.; Herczeg, G.J., Johnstone, D.; Jørgensen, J.K.; van Kempen, T.A.; Lee, J.-E.; Maret, S.; Tafalla, M.; Visser, R.; and Wampfler, S.F.; *Origin of warm and hot gas emission from low-mass protostars: Herschel-HIFI observations of CO J=16–15? I. Line profiles, physical conditions, and H2O abundance*; 2017, A&A, Vol 605, A93 [ADS]
44. Heyer, M.; Goldsmith, P. F.; **Yıldız, U. A.**; Snell, R. L.; Falgarone, E.; Pineda, J.; *Striations in the Taurus molecular cloud: Kelvin-Helmholtz instability or MHD waves?*; 2016, MNRAS, Vol 461, 3918H [ADS]
43. Goldsmith, P. F.; **Yıldız, U. A.**; Langer, W. D.; Pineda, J. L.; *Herschel Galactic plane survey of [NII] fine structure emission*; 2015, Astrophysical Journal, Vol 814, 133 [ADS]
42. Carney, M. T.; **Yıldız, U. A.**; Mottram, J. C.; van Dishoeck, E. F.; Ramchandani, J.; Jørgensen, J. K.; Classifying the embedded young stellar population in Perseus and Taurus & the LOMASS database; 2016, A&A, Vol 586, A44 [ADS]
41. Santangelo, G.; Nisini, B.; Codella, C.; Lorenzani, A.; **Yıldız, U. A.**; Antoniucci, S.; Bjerkeli, P.; Cabrit, S.; Giannini, T.; Kristensen, L.; Liseau, R.; Mottram, J. C.; Tafalla, M.; van Dishoeck, E. F.; *Water distribution in shocked regions of the NGC1333-IRAS4A protostellar outflow*; 2014, A&A, Vol 568, A125 [ADS]
40. Fuente, A.; Cernicharo, J.; Caselli, P.; McCoey, C.; Johnstone, D.; Fich, M.; van Kempen, T.; Palau, Aina; **Yıldız, U. A.**; Tercero, B.; Lopez, A.; *The hot core towards the intermediate mass protostar NGC7129 FIRS 2: Chemical similarities with Orion KL*; 2014, A&A, Vol 568, A65 [ADS]
39. Coutens, A.; Vastel, C.; Cabrit, S.; Codella, C.; Kristensen, L. E.; Ceccarelli, C.; van Dishoeck, E. F.; Boogert, A. C. A.; Bottinelli, S.; Castets, A.; Caux, E.; Comito, C.; Demyk, K.; Herpin, F.; Lefloch, B.; McCoey, C.; Mottram, J. C.; Parise, B.; Taquet, V.; van der Tak, F. F. S.; Visser, R.; **Yıldız, U. A.**; *Deuterated water in the solar-type protostars NGC 1333 IRAS 4A and IRAS 4B*; 2013, A&A, Vol. 560, A39 [ADS]
38. van der Marel, N.; Kristensen, L. E.; Visser, R.; Mottram, J. C.; **Yıldız, U. A.**; and van Dishoeck E. F.; *Outflow forces of low mass embedded objects in Ophiuchus: a quantitative comparison of analysis methods*; 2013, A&A, Vol. 556, A76 [ADS]
37. Green, J. D.; Evans, N. J., II; Jørgensen, J. K.; Herczeg, G. J.; Kristensen, L. E.; Lee, J-E.; Dionatos, O.; **Yıldız, U. A.**; Salyk, C.; and 12 co-authors; *Embedded Protostars in the Dust, Ice, and Gas In Time (DIGIT) Key Program: Continuum SEDs, and an Inventory of Characteristic Far-Infrared Lines from PACS Spectroscopy*; 2013, ApJ, Vol. 770, 123 [ADS]
36. San José-García, I; Mottram, J. C.; Kristensen L. E.; van Dishoeck E. F.; **Yıldız, U. A.**; van der Tak, F. F. S.; Herpin, F.; Visser, R.; McCoey, C.; Wyrowski, F.; Braine, J.; and Johnstone, D.; *Herschel-HIFI observations of high-J CO and isotopologues in star-forming regions: from low- to high-mass*; 2013, A&A, Vol. 553, A125 [ADS]
35. Tafalla, M.; Liseau, R.; Nisini, B.; Bachiller, R.; Santiago-Garcia, J.; van Dishoeck, E. F.; Kristensen, L. E.; Herczeg G. J.; and **Yıldız, U. A.**; *High-pressure water in bipolar outflows, Results from a Herschel-WISH survey*; 2013, A&A, Vol. 551, A116 [ADS]
34. Karska, A.; Herczeg, G. J.; van Dishoeck, E. F.; Wampfler, S. F.; Kristensen, L. E.; Goicoechea, J. R.; Visser, R.; Nisini, B.; San-Jose Garcia, I.; Bruderer, S.; Sniady, P.; Doty, S.; Fedele, D.; **Yıldız, U. A.**; Benz, A. O.; Bergin, E.; Caselli, P.; Herpin, F.; Hogerheijde, M. R.; Johnstone,

D.; Jørgensen, J. K.; Liseau, R.; Tafalla, M.; van der Tak, F.; Wyrowski, F.; *Water in star forming regions with Herschel (WISH) III. Far-infrared cooling lines in low-mass young stellar objects* 2013, A&A, Vol. 552, A141 [ADS]

33. Caselli, Paola; Keto, Eric; Bergin, Edwin A.; Tafalla, Mario; Aikawa, Yuri; Douglas, Thomas; Pagani, Laurent; **Yıldız, Umut A.**; van der Tak, Floris F. S.; Walmsley, C. Malcolm; Codella, Claudio; Nisini, Brunella; Kristensen, Lars E.; van Dishoeck, Ewine F.; *First detection of water vapor in a pre-stellar core*; The Astrophysical Journal Letters, 2012, Vol. 759, 37 [ADS]

32. Kristensen, L. E.; van Dishoeck, E. F.; Bergin, E. A.; Visser, R.; **Yıldız, U. A.**; San José-García, I.; Jørgensen, J. K.; Herczeg, G. J.; Johnstone, D.; Wampfler, S. F.; Benz, A. O.; Bruderer, S.; Cabrit, S.; Caselli, P.; Doty, S. D.; Harsono, D.; Herpin, F.; Hogerheijde, M. R.; Karska, A.; van Kempen, T. A.; Liseau, R.; Nisini, B.; Tafalla, M.; van der Tak, F.; Wyrowski, F.; *Water in star-forming regions with Herschel (WISH): II. Evolution of 557 GHz 1_{10}-1_{01} emission in low-mass protostars*; 2012, A&A, Vol. 542, A8 [ADS]

31. Fuente, A.; Caselli, P.; McCoey, C.; Cernicharo, J.; Johnstone, D.; Fich, M.; van Kempen, T.; van Dishoeck, E.; **Yıldız, U.**; Visser, R.; Kristensen, L.; Alonso-Albi, T.; Herpin, F.; Tisi, S.; *The abundance of $C^{18}O$ and HDO in the envelope and hot core of the intermediate mass protostar NGC 7129 FIRS 2*; 2012, A&A, Vol. 540, A75 [ADS]

30. Herczeg, G. J.; Karska, A.; Bruderer, S.; Kristensen, L. E.; van Dishoeck, E. F.; Jørgensen, J. K.; Visser, R.; Wampfler, S. F.; Bergin, E. A.; **Yıldız, U.**; Pontoppidan, K. M.; Gracia-Carpio, J.; *Water in star-forming regions with Herschel: highly excited molecular emission from the NGC 1333 IRAS 4B outflow*; 2012, A&A, Vol. 540, A84 [ADS]

29. Hogerheijde, M. R.; Bergin, E. A.; Brinch, C.; Cleeves, L. I.; Fogel, J. K. J.; Blake, G. A.; Dominik, C.; Lis, D. C.; Melnick, G.; Neufeld, D.; Panić, O.; Pearson, J. C.; Kristensen, L.; **Yıldız, U. A.**; van Dishoeck, E. F.; *Detection of the Water Reservoir in a Forming Planetary System*; 2011, **Science**, Vol. 334 no. 6054 pp. 338-340 [ADS]

28. Kristensen, L. E.; van Dishoeck, E. F.; Tafalla, M.; Bachiller, R.; Nisini, B.; Liseau, R.; **Yıldız, U. A.**; *Water in low-mass star-forming regions with Herschel (WISH-LM). High-velocity H_2O bullets in L1448-MM observed with HIFI*, 2010, A&A, Vol. 531, L1 [ADS]

27. Kristensen, L. E.; Visser, R.; van Dishoeck, E. F.; **Yıldız, U. A.**; Doty, S. D.; Herczeg, G. J.; Liu, F.-C.; Parise, B.; Jørgensen, J. K.; van Kempen, T. A.; Brinch, C.; Wampfler, S. F.; Bruderer, S.; Benz, A. O.; Hogerheijde, M. R.; Deul, E.; and the WISH Team; *Water in low-mass star-forming regions with Herschel: HIFI spectroscopy of NGC1333*; 2010, A&A, Vol. 521, L30 [ADS]

26. Caselli, P.; Keto, E.; Pagani, L.; Aikawa, Y.; **Yıldız, U. A.**; van der Tak, F. F. S.; Tafalla, M.; Bergin, E. A.; Nisini, B.; Codella, C.; van Dishoeck, E. F.; and the WISH Team; *Water vapor toward starless cores: the Herschel view*; 2010, A&A, Vol. 521, L29 [ADS]

25. Bergin, E. A.; Hogerheijde, M. R.; Brinch, C.; Fogel, J.; **Yıldız, U. A.**; Kristensen, L. E.; van Dishoeck, E. F.; Bell, T. A.; and the WISH Team; *Sensitive limits on the abundance of cold water vapor in the DM Tau protoplanetary disk*; 2010, A&A, Vol. 521, L33 [ADS]

24. Toloba, E.; Boselli, A.; Gorgas, J.; Peletier, R. F.; Cenarro, A. J.; Gadotti, D. A.; Gil de Paz, A.; Pedraz, S.;, **Yıldız U.**; *Kinematic Properties as Probes of the Evolution of Dwarf Galaxies in the Virgo Cluster*; 2009, ApJ, Vol. 707, L17 [ADS]

(Team publications)

(My major contribution is to create a WISH Herschel-HIFI data reduction pipeline that are used in the following WISH papers and observations & reductions of the ground-based observations.)

23. Du, F.; Bergin, E. A.; Hogerheijde, M.; van Dishoeck, E. F.; Blake, G.; Bruderer, S.; Cleeves, I.; Dominik, C.; Fedele, D.; Lis, D. C.; Melnick, G.; Neufeld, D.; Pearson, J.; **Yıldız, U.**; *Survey of cold water lines in protoplanetary disks: indications of systematic volatile depletion* 2017, The Astrophysical Journal, Vol 842, id. 98 [ADS]

22. Mottram, J. C.; van Dishoeck, E. F.; Kristensen, L. E.; Karska, A.; San Jose-Garcia, I.; Khanna, S.; Herczeg, G. J.; Andr, Ph.; Bontemps, S.; Cabrit, S.; Carney, M. T.; Drozdovskaya, M. N.;

Dunham, M. M.; Evans, N. J.; Fedele, D.; Green, J. D.; Harsono, D.; Johnstone, D.; Jørgensen, J. K.; Könyves, V.; Nisini, B.; Persson, M. V.; Tafalla, M.; Visser, R.; **Yıldız, U. A.**; *Outflows, infall and evolution of a sample of embedded low-mass protostars. The William Herschel Line Legacy (WILL) survey* 2017, A&A, Vol 600, 99 [ADS]

21. Salinas, V. N.; Hogerheijde, M. R.; Bergin, E. A.; Cleeves, L. I.; Brinch, C.; Blake, G. A.; Lis, D. C.; Melnick, G. J.; Panic, O.; Pearson, J. C.; Kristensen, L.; **Yıldız, U. A.**; van Dishoeck, E. F. *First detection of gas-phase ammonia in a planet-forming disk*; 2016, A&A, Vol 591, 122 [ADS]
20. Kama, M.; Bruderer, S.; Carney, M.; Hogerheijde. M.; van Dishoeck, E.; and 21 co-authors incl. **Yıldız, U. A.**; *Observations and modelling of CO and [CI] in protoplanetary disks: First detections of [CI] and constraints on the carbon abundance*; 2016, A&A, Vol 588, 108 [ADS]
19. van Kempen, T. A.; Hogerheijde, M. R.; van Dishoeck, E. F.; Kristensen, L. E.; Belloche, A.; and 20 co-authors incl. **Yıldız, U. A.**; *Outflow forces in intermediate mass star formation*; 2016, A&A, Vol 587, A17 [ADS]
18. Chen, J-H.; Goldsmith, P. F.; Viti, S.; Snell, R.; Lis, D. C.; Benz, A.; Bergin, E.; Black, J.; Caselli, P.; Encrenaz, P.; Falgarone, E.; Goicoechea, J. R.; Hjalmarson, A.; Hollenbach, D.; Kaufman, M.; Melnick, G.; Neufeld, D.; Pagani, L.; van der Tak, F.; van Dishoeck, E.; **Yıldız, U. A.**; *Herschel HIFI observations of O_2 toward Orion: special conditions for shock enhanced emission*; 2014, ApJ, Vol 793, A111 [ADS]
17. Liseau, R.; Goldsmith, P. F.; Larsson, B.; Pagani, L.; and 35 co-authors incl. **Yıldız, U. A.**; *Multi-line detection of O_2 toward ρ Oph A*; 2012, A&A, Vol. 541, A73 [ADS]
16. Roelfsema, P. R.; Helmich, F. P.; Teyssier, D.; Ossenkopf, V.; Morris, P.; Olberg, M.; Shipman, R.; Risacher, C.; and 90 co-authors incl. **Yıldız, U.**; *In-orbit performance of Herschel-HIFI*; 2012, A&A, Vol. 537, A17 [ADS]
15. Goldsmith, P. F.; Liseau, R.; Bell, T. A.; Black, J. H.; Chen, J-H.; Hollenbach, D; Kaufman, M. J.; Li, D.; Lis, D. C.; Melnick, G.; Neufeld, D.; Pagani, L.; Snell, R.; and 22 co-authors incl. **Yıldız, U.**; *Herschel Measurements of Molecular Oxygen in Orion*; 2011, ApJ, Vol. 737, A96 [ADS]
14. van Dishoeck, E. F.; Kristensen, L. E.; Benz, A. O.; Bergin, E. A.; Caselli, P.; Cernicharo, J.; Herpin, F.; Hogerheijde, M. R.; Johnstone, D.; Liseau, R.; Nisini, B.; Shipman, R.; Tafalla, M.; and 59 co-authors incl. **Yıldız, U. A.**; *Water in Star-forming Regions with the Herschel Space Observatory (WISH). I. Overview of Key Program and First Results*; 2011, PASP, 123, 138V [ADS]
13. Wampfler, S. F.; Herczeg, G. J.; Bruderer, S.; Benz, A. O.; van Dishoeck, E. F.; Kristensen, L. E.; Visser, R.; Doty, S. D.; Melchior, M.; van Kempen, T. A.; **Yıldız, U. A.**; and WISH Team; *Herschel observations of the hydroxyl radical (OH) in YSOs*; 2010, A&A, Vol. 521, L36 [ADS]
12. Bruderer, S.; Benz, A. O.; van Dishoeck, E. F.; Melchior, M.; Doty, S. D.; van der Tak, F.; Stäuber, P.; Wampfler, S. F.; Dedes, C.; **Yıldız, U. A.**; Pagani, L.; Giannini, T.; de Graauw, Th.; and the WISH Team; *Herschel-HIFI detections of hydrides towards AFGL 2591 (Envelope emission versus tenuous cloud absorption)*; 2010, A&A, Vol. 521, L44 [ADS]
11. Johnstone, D.; Fich, M.; McCoey, C.; van Kempen, T. A.; Fuente, A.; Kristensen, L. E.; Cernicharo, J.; Caselli, P.; Visser, R.; and 52 co-authors incl. **Yıldız, U. A.**; *Herschel/HIFI spectroscopy of the intermediate mass protostar NGC 7129 FIRS 2*; 2010, A&A, Vol. 521, L41 [ADS]
10. Chavarría, L.; Herpin, F.; Jacq, T.; Braine, J.; Bontemps, S.; Baudry, A.; Marseille, M.; van der Tak, F.; Pietropaoli, B.; Wyrowski, F.; Shipman, R.; and 51 co-authors incl. **Yıldız, U. A.**; *Water in massive star-forming regions: HIFI observations of W3 IRS5*; 2010, A&A, Vol. 521, L37 [ADS]
9. Benz, A. O.; Bruderer, S.; van Dishoeck, E. F.; Stäuber, P.; Wampfler, S. F.; Melchior, M.; Dedes, C.; Wyrowski, F.; Doty, S. D.; and 60 co-authors incl. **Yıldız, U. A.**; *Hydrides in Young Stellar Objects: Radiation tracers in a protostar-disk-outflow system*; 2010, A&A, Vol. 521, L35 [ADS]
8. Wyrowski, F.; van der Tak, F.; Herpin, F.; Baudry, A.; Bontemps, S.; Chavarría, L.; Frieswijk, W.; Jacq, T.; Marseille, M.; Shipman, R.; and 55 co-authors incl. **Yıldız, U. A.**; *Variations in H_2O^+/H_2O ratios toward massive star-forming regions*; 2010, A&A, Vol. 521, L34 [ADS]

7. Marseille, M. G.; van der Tak, F. F. S.; Herpin, F.; Wyrowski, F.; Chavarría, L.; Pietropaoli, B.; and 65 co-authors incl. **Yıldız, U. A.**; *Water abundances in high-mass protostellar envelopes: Herschel observations with HIFI*; 2010, A&A, Vol. 521, L32 [ADS]
6. Sturm, B.; Bouwman, J.; Henning, Th.; Evans, N. J.; Acke, B.; Mulders, G. D.; and 37 co-authors incl. **Yıldız, U. A.**; *First results of the Herschel key program "Dust, Ice and Gas In Time" (DIGIT): Dust and gas spectroscopy of HD 100546*; 2010, A&A, Vol. 518, L129 [ADS]
5. van Kempen, T. A.; Green, J. D.; Evans, N. J.; van Dishoeck, E. F.; and 41 co-authors incl. **Yıldız, U. A.**; *Dust, Ice, and Gas In Time (DIGIT) Herschel program first results. A full PACS-SED scan of the gas line emission in protostar DK Cha*; 2010, A&A, Vol. 518, L128 [ADS]
4. van Kempen, T. A.; Kristensen, L. E.; Herczeg, G. J.; Visser, R.; van Dishoeck, E. F.; Wampfler, S. F.; Bruderer, S.; Benz, A. O.; and 46 co-authors incl. **Yıldız, U. A.**; *Origin of the hot gas in low-mass protostars. Herschel-PACS spectroscopy of HH 46*; 2010, A&A, Vol. 518, L121 [ADS]
3. Nisini, B.; Benedettini, M.; Codella, C.; Giannini, T.; Liseau, R.; Neufeld, D.; Tafalla, M.; van Dishoeck, E. F.; and 47 co-authors incl. **Yıldız, U. A.**; *Water cooling of shocks in protostellar outflows. Herschel-PACS map of L1157*; 2010, A&A, Vol. 518, L120 [ADS]
2. van der Tak, F. F. S.; Marseille, M. G.; Herpin, F.; Wyrowski, F.; and 54 co-authors incl. **Yıldız, U. A.**; *Water abundance variations around high-mass protostars: HIFI observations of the DR21 region*; 2010, A&A, Vol. 518, L107 [ADS]
1. Fich, M.; Johnstone, D.; van Kempen, T. A.; McCoey, C.; Fuente, A.; Caselli, P.; Kristensen, L. E.; Plume, R.; Cernicharo, J.; and 52 co-authors incl. **Yıldız, U. A.**; *Herschel-PACS spectroscopy of the intermediate mass protostar NGC 7129 FIRS 2*; 2010, A&A, Vol. 518, L86 [ADS]

For publication links, please follow ADS link https://bit.ly/adsumutayildiz.

Conference Proceedings & Abstracts

25. **Yıldız, Umut**; Kristensen, Lars; *Where is the Oxygen in high-mass protostars?*; 235$^{\text{th}}$ American Astronomical Society Meeting, Honolulu, USA, Jan 4-8, 2020 [ADS]
24. Goldsmith, Paul; Heyer, Mark H.; **Yıldız, Umut**; Snell, Ronald L.; Falgarone, Edith; Pineda, Jorge L.; *Striae and MHD Waves in Molecular Clouds*; 229$^{\text{th}}$ American Astronomical Society Meeting, Grapevine, USA, Jan 3-7, 2017 [ADS]
23. **Yıldız, Umut**; Goldsmith, Paul; Pineda, Jorge; Langer, William; *Herschel Galactic plane survey of ionized gas traced by [NII]*; 225$^{\text{th}}$ American Astronomical Society Meeting, Seattle, USA, Jan 4-9, 2015 [ADS]
22. **Yıldız, Umut**; Acharyya, Kinsuk; Goldsmith, Paul; van Dishoeck, Ewine; and HOP Team; *Stringent limits of O_2 abundance toward a low-mass protostar with Herschel-HIFI*; 223$^{\text{rd}}$ American Astronomical Society Meeting, Washington, D.C., USA, Jan 4-9, 2014 [AAS]
21. **Yıldız, U.**; Acharyya, K.; Goldsmith, P.; van Dishoeck, E.; Melnick, G.; Snell, R.; Liseau, R.; Chen, J-H.; Pagani, L.; Bergin, E.; Caselli, P.; Herbst, E.; Kristensen, L.; Visser, R.; Lis, D.; Gerin, M.; *Deep O_2 observations toward a low-mass protostar with Herschel-HIFI*; Protostars and Planets VI, Heidelberg, Germany, Jul 15-20, 2013 [ADS]
20. San Jose-Garcia, I.; Mottram, J. C.; van Dishoeck, E. F.; Kristensen, L. E.; **Yıldız, U. A.**; *High-J CO lines from low- to high-mass YSOs: the dynamics of protostellar envelopes*; Protostars and Planets VI, Heidelberg, Germany, Jul 15-20, 2013 [ADS]
19. **Yıldız, Umut A.**; van Dishoeck, Ewine F.; Kristensen, Lars E.; *Star Formation with sub-/mm Astronomy - Milimetre/milimetre-altı Astronomisi ile Yıldız Oluşumu*; 18$^{\text{th}}$ Turkish National Astronomy Congress, Malatya, Turkey, Aug 27-31, 2012 [pdf]
18. **Yıldız, U. A.**; Solmaz, A.; Önal, Ö.; Mirahmetoğlu, H.; Saygaç, A. T.; Güneş, M.; Yıldız, M. K.; Özyar, Ü. F.; Şahin, Ö.; Tuğral, M. R.; Atmaca, G.; Kayhan, C.; Yeşilyaprak, C.; Dağtekin, N. D.; Yaşar, E.; Çoban, M.; Canımkurbey, B.; Öztürk, P.; Tokalı, S.; Salman, G.; Zor, H.; Şensoy, A.; İnam, S. Ç.; Koçak, F.; Özdemir, T.; Erdoğdu, Ç.; Akı, F. N.; Ekinci, M.; Dönmez, Çağatay K.; Nasıroğlu, İ.; Aykutalp, A.; Höçük, S.; Engin, M. F.; Aliş, S.; Yelkenci, K.; Yelkenci, A. T.;

Özeren, F. F.; Çabuk, S.; Ataman, E.; Akkuş, T.; Tuncel, E.; Bucakhan, F.; Taşkın, S.; Öztürk, F.; Şahin, T.; Baltacı, N.; Başpınar, S.; Uzunyayla, P.; Konak, N. D.; Etli, Ö.; Yılmaz, F.; Dönmez, O.; Topal, S.; Kalkan, S.; Sonbaş, E.; Küpçü-Yoldaş, A.; *Journey of Turkish Membership to ESO - Turkiye'nin ESO'ya uyelik yolculuğu*; 18th Turkish National Astronomy Congress, Malatya, Turkey, Aug 27-31, 2012 [pdf]

17. **Yıldız, Umut A.**; Küçük, İbrahim; Öztürk, Fahri; Topal, Selçuk; Akgiray, Ahmed; Beklen, Elif; Gürkan-Uygun, Gülay; Ünal, Oktay; Ergin, Tülün; *Turkish National Radiotelescope Project*; 18th Turkish National Astronomy Congress, Malatya, Turkey, Aug 27-31, 2012 [pdf]

16. San José-García, I.; Mottram, J. C.; Kristensen, L. E.; van Dishoeck, E. F.; **Yıldız, U. A.** and the WISH team; *Studying the star-formation across the mass spectrum with Herschel-HIFI observations of CO*; Galactic Scale Star Formation, Heidelberg, 30 July-3 August 2012

15. San José-García, I.; Mottram, J.C.; Kristensen, L.E.; van Dishoeck, E.F.; **Yıldız, U. A.** and WISH team; *Studying the star-formation across the mass spectrum with Herschel-HIFI observations of CO*; European Week of Astronomy and Space Science (EWASS), Symp.2, Rome, Jul 6, 2012 [pdf]

14. Hogerheijde, M. R.; Bergin, E. A.; Brinch, C.; Cleeves, L. I.; Fogel, J. K. J.; Blake, G. A.; Dominik, C.; Lis, D. C.; Melnick, G.; Neufeld, D.; Panić, O.; Pearson, J. C.; Kristensen, L.; **Yıldız, U. A.**; van Dishoeck, E. F.; *Cold water and ammonia vapor in protoplanetary disks*; European Week of Astronomy and Space Science (EWASS), Symposium 2, Rome, Jul 6, 2012 [pdf]

13. **Yıldız, U. A.**; van Dishoeck, E. F.; Kristensen, L. E.; Ramchandani, J.; San José-García, I.; Mottram, J. C.; Jørgensen, J. K.; and the WISH Team; *High-J CO survey of low-mass protostars observed with Herschel-HIFI and LOMASS database*; From atoms to pebbles, Herschel's view of Star and Planet Formation Symposium, Grenoble, France, March 20-23, 2012 [pdf]

12. Kristensen, L. E.; van Dishoeck, E. F.; Visser, R.; Mottram, J. C.; Herczeg, G. J.; Jørgensen, J. K.; Bruderer, S.; Harsono, D.; Hogerheijde, M. R.; Karska, A.; San José-García, I.; Wampfler, S.; **Yıldız U. A.**; and the WISH team; *Feedback from low-mass protostars onto their surroundings: some like it hot*; From atoms to pebbles, Herschel's view of Star and Planet Formation Symposium, Grenoble, France, March 20-23, 2012 [ADS]

11. Hogerheijde, M. R.; Bergin, E. A.; Brinch, C.; and 12 co-authors including **Yıldız, U. A.**; *Herschel observations of cold water vapor and ammonia in protoplanetary disks*; From atoms to pebbles, Herschel's view of Star and Planet Formation Symp., Grenoble, France, March 20-23, 2012 [ADS]

10. Hogerheijde, M. R.; Bergin, E. A.; Brinch, C.; and 12 co-authors including **Yıldız, U. A.**; *Detecting cold water vapor in a planet-forming disk*; Star Formation through Spectroimaging at High Angular Resolution Workshop, Taipei, Taiwan, June 20-24, 2011 [pdf]

9. **Yıldız, U. A.**; Kristensen, L. E.; van Dishoeck, E. F.; Jørgensen, J. K.; Visser, R.; San José-García, I.; Herschel WISH Team *High-J CO survey of low-mass protostars observed with Herschel-HIFI*; The Molecular Universe, Proceedings of the 280th Symposium of the International Astronomical Union, Toledo, Spain, May 30-June 3, 2011, #388 [ADS]

8. San José-García, I.; Kristensen, L. E.; **Yıldız, U. A.**; van Dishoeck, E. F.; Herschel WISH Team; *Linking high-J CO emission from low- to high-mass protostars with Herschel-HIFI*; The Molecular Universe, Proceedings of the 280th Symposium of the International Astronomical Union, Toledo, Spain, May 30-June 3, 2011, #326 [ADS]

7. Herczeg, G. J.; Karska, A.; Kristensen, L. E.; van Dishoeck, E. F.; Visser, R.; Jorgensen, J.; Bruderer, S.; **Yıldız, U.**; Wish Team; *Warm water in Herschel/PACS observations of NGC 1333 IRAS 4B: the outflow, not the disk!*; "The Molecular Universe, Proceedings of the 280th Symposium of the International Astronomical Union, Toledo, Spain", May 30-June 3, 2011, #195 [ADS]

6. Hogerheijde, M. R.; Bergin, E. A.; Brinch, C.; and 12 co-authors including **Yıldız, U. A.**; *Detecting the cold water reservoir in a protoplanetary disk*; "The Molecular Universe, Proc. of the 280th Symp. of the International Astronomical Union, Toledo, Spain", May 30-June 3, 2011, #16 [ADS]

5. Kristensen, L. E.; van Dishoeck, E.; **Yıldız, U.**; Visser, R.; Herczeg, G.; Jorgensen, J.; van Kempen, T.; Hogerheijde, M.; WISH Team; *WISHes coming true: low-mass protostars as chemical*

fountains; "The Molecular Universe, Proceedings of the 280$^{\text{th}}$ Symposium of the International Astronomical Union, Toledo, Spain", May 30-June 3, 2011, #10 [ADS]

4. **Yıldız, U.**; van Dishoeck, E. F.; Kristensen, L. E.; Visser, R.; Herczeg, G.; van Kempen, T. A.; Jørgensen, J. K.; Hogerheijde, M. R.; Wish Team; *"Energetic processes revealed by spectrally resolved high-J CO lines in low-mass star-forming regions with Herschel-HIFI"*, 2011, Zermatt 5$^{\text{th}}$ ISM Symposium "Conditions and impact of star formation: New results with Herschel and beyond", September 19-24, 2010 [ADS]
3. Kristensen, L. E.; Visser, R.; van Dishoeck, E. F.; **Yıldız, U.**; Herczeg, G. J.; Doty, S.; Jørgensen, J. K.; van Kempen, T. A.; Brinch, C.; Wampfler, S.; Bruderer, S.; Benz, A. O.; *Wishes Coming True: Water in low-mass star-forming regions with Herschel*; 2011, Proceedings of 5$^{\text{th}}$ Zermatt ISM Symposium "Conditions and impact of star formation: New results with Herschel and beyond", September 19-24, 2010 [ADS]
2. Wampfler, S. F.; Herczeg, G. J.; Bruderer, S.; Benz, A. O.; van Dishoeck, E. F.; Kristensen, L. E.; van Kempen, T. A.; Doty, S. D.; Visser, R.; **Yıldız, U.**; and the WISH Team; *"Probing the Water Chemistry in Young Stellar Objects with Hydroxyl Observations'*, 2011, Zermatt 5$^{\text{th}}$ ISM Symposium "Conditions and impact of star formation: New results with Herschel and beyond", September 19-24, 2010 [pdf]
1. **Yıldız, U.**; van Dishoeck, E. F.; Kristensen, L. E.; van Kempen, T. A.; Belloche, A.; Guesten, R.; *The shocking truth about star formation as revealed by warm CO CHAMP^{+} Mapping*; 64$^{\text{th}}$ Nederlandse Astronomen Conferentie (NAC) held in Rolduc, Kerkrade, May 13-15, 2009 [pdf]

Technical Memos

1. **Yıldız, U.**, *Noise Characteristics of Herschel-HIFI*, a technical report submitted to HIFI Instrument Control Center during the Performance Verification Stage, Nov 2009

Popular Articles Single Author

67. **Popular Science Turkey**, Dec 2019, Vol: 92 [pdf]
(2019 Nobel Fizik Ödülü: Fiziksel Kozmoloji)
66. **Atlas**, Dec 2019, Vol: 321 [pdf]
(ARROKOTH: En uzak ziyaret)
65. **Popular Science Turkey**, Nov 2019, Vol: 91 [pdf]
(2019 Nobel Fizik Ödülü: Ötegezegenlerin Keşfi)
64. **Atlas**, Nov 2019, Vol: 320 [pdf]
(2I/BORISOV Kuyrukluyıldızı: Yıldızlararası yeni ziyaretçi)
63. **Popular Science Turkey**, Oct 2019, Vol: 90 [pdf]
(Hindistan Chandrayaan-2 ile yine Ay'da)
62. **Atlas**, Oct 2019, Vol: 319 [pdf]
(Yeni bir ötegezegende su bulundu)
61. **Popular Science Turkey**, Sep 2019, Vol: 89 [pdf]
(Su ayıları Ay'da)
60. **Atlas**, Sep 2019, Vol: 318 [pdf]
(Ay Projeleri: Uydumuza insanlı uçuşlar)
59. **Popular Science Turkey**, Aug 2019, Vol: 88 [pdf]
(Ay Yolculukları Neden Durdu?)
58. **Atlas**, Aug 2019, Vol: 317 [pdf]
(NASA'nın DRAGONFLY Misyonu: Titan'da yaşam arayan drone)
57. **Popular Science Turkey**, Jul 2019, Vol: 87 [pdf]
(Uzaydan Internet Projesi: Starlink)
56. **Atlas**, Jul 2019, Vol: 316 [pdf]
(SOFIA UÇAK GÖZLEMEVI: Uçan teleskop)

55. **Popular Science Turkey**, Jun 2019, Vol: 86 [pdf]
(Yine ve Yeniden Ay)
54. **Atlas**, Jun 2019, Vol: 315 [pdf]
(Ay nasıl oluştu?)
53. **Popular Science Turkey**, May 2019, Vol: 85 [pdf]
(Olay Ufku Teleskobu ve ilk karadelik fotoğrafı)
52. **Atlas**, May 2019, Vol: 314 [pdf]
(Güneş'in 6.5 milyar katı)
51. **Popular Science Turkey**, Apr 2019, Vol: 84 [pdf]
(NASA ve uzay ajanslarının bütçeleri)
50. **Atlas**, Apr 2019, Vol: 313 [pdf]
(NASA'nın OSIRIS-REx Misyonu: Bennu asteroidinin dumanları)
49. **Popular Science Turkey**, Mar 2019, Vol: 83 [pdf]
(Mars One rüyası sona erdi)
48. **Atlas**, Mar 2019, Vol: 312 [pdf]
(Mars'ın ikiz robotlarına veda: Ay'ın "öbür" tarafında)
47. **Popular Science Turkey**, Feb 2019, Vol: 82 [pdf]
(Uzak Galaksilerden Gelen Hızlı Radyo Atımları)
46. **Atlas**, Feb 2019, Vol: 311 [pdf]
(Çin'in Chang'e-4 Misyonu: Ay'ın "öbür" tarafında)
45. **Popular Science Turkey**, Jan 2019, Vol: 81 [pdf]
(SOFIA Uçak Teleskobuyla Gözlemim)
44. **Atlas**, Jan 2019, Vol: 310 [pdf]
(Plüton'un ötesine yolculuk)
43. **Popular Science Turkey**, Dec 2018, Vol: 80 [pdf]
(Gezegen Avcısı Kepler, Emekli Oldu)
42. **Atlas**, Dec 2018, Vol: 309 [pdf]
(Evrenin genişlemesini kim keşfetti?)
41. **Popular Science Turkey**, Nov 2018, Vol: 79 [pdf]
(Mars'ta Doğacak Ilk Bebek)
40. **Atlas**, Nov 2018, Vol: 308 [pdf]
(Evren dönüyor mu?)
39. **Popular Science Turkey**, Oct 2018, Vol: 78 [pdf]
(NASA Nasıl Kuruldu?)
38. **Atlas**, Oct 2018, Vol: 307 [pdf]
(NASA 60 Yaşında)
37. **Popular Science Turkey**, Sep 2018, Vol: 77 [pdf]
(Ilkel Dünyamızın Ilk Anları)
36. **Atlas**, Sep 2018, Vol: 306 [pdf]
(Samanyolu Galaksimiz Kaç Yaşında)
35. **Popular Science Turkey**, Aug 2018, Vol: 76 [pdf]
(Parker Güneş Sondası, Güneş'e Dokunacak)
34. **Atlas**, Aug 2018, Vol: 305 [pdf]
(Parker Güneş Aracı, Güneş'e Yolculuk)
33. **Bilim ve Utopya**, Jul 2018, Vol: [pdf]
(Mars'ta fırtına ve metan bulmacası)

32. **Popular Science Turkey**, Jul 2018, Vol: 75 [pdf]
(Mars'ta Metan Bilmecesi)
31. **Atlas**, Jul 2018, Vol: 304 [pdf]
(Mars'ta küresel fırtına)
30. **Popular Science Turkey**, Jun 2018, Vol: 74 [pdf]
(Uzayda İletişim Kararması)
29. **Atlas**, Jun 2018, Vol: 303 [pdf]
(Europa uydusu su püskürtüyor)
28. **Popular Science Turkey**, May 2018, Vol: 73 [pdf]
(InSight Misyonu ve Mars'ta Deprem)
27. **Atlas**, May 2018, Vol: 302 [pdf]
(Uydu Mezarlıkları: İşi biten uydular nereye gider?)
26. **Popular Science Turkey**, Apr 2018, Vol: 72 [pdf]
(Yeni öte gezegen kaşifi TESS yola çıkıyor)
25. **Atlas**, Apr 2018, Vol: 301 [pdf]
(Stephen Hawking'in Ardından)
24. **Popular Science Turkey**, Mar 2018, Vol: 71 [pdf]
(Falcon Heavy: Ucuz Uzay Uçuşları Başlasın)
23. **Atlas**, Mar 2018, Vol: 300 [pdf]
(Uzaydaki kırmızı Tesla)
22. **Kafasına Göre**, Mar-Apr 2018, Vol: [pdf]
(SpaceX: Bir Uzay Şirketinin Anatomisi)
21. **Popular Science Turkey**, Feb 2018, Vol: 70 [pdf]
(Dünya Dışı Akıllı Yaşama Mesaj Gönderdik, Acaba Gitti mi?)
20. **Atlas**, Feb 2018, Vol: 299 [pdf]
(Ozon tabakası deliği küçülüyor)
19. **Popular Science Turkey**, Jan 2018, Vol: 69 [pdf]
(Çok Geç Olmadan Mars'ta Yaşamı Bulmalıyız)
18. **Atlas**, Jan 2018, Vol: 298 [pdf]
(Yıldızlararası ziyaretçi, Asteroit Oamuamua)
17. **Popular Science Turkey**, Dec 2017, Vol: 68 [pdf]
(Dünya, uzak bir öte gezegenden nasıl görünürdü?)
16. **Atlas**, Dec 2017, Vol: 297 [pdf]
(Evrendeki en büyük yapı)
15. **Atlas**, Nov 2017, Vol: 296 [pdf]
(Nobel Fizik ödülü: Kütleçekim Dalgaları)
14. **Popular Science Turkey**, Oct 2017, Vol: 66 [pdf]
(Insanlık 10 Yıl içinde Mars'a gidebilir mi?)
13. **Atlas**, Oct 2017, Vol: 295 [pdf]
(Voyager Programı; 40 yıldır bitmeyen keşif)
12. **Herkese Bilim Teknoloji**, Sep 2017, [pdf]
(Ve Satürn kaşifi Cassini'ye veda ettik
11. **Popular Science Turkey**, Sep 2017, Vol: 65 [pdf]
(Curiosity'nin Mars'taki 5 yılı)
10. **Atlas**, Sep 2017, Vol: 294 [pdf]
(Evrenin yaşı nasıl hesaplanıyor?)

9. **Popular Science Turkey**, Aug 2017, Vol: 64 [pdf]
Dawn the Asteroid Belt Explorer, (Asteroit Kuşağı Kaşifi Dawn)
8. **Atlas**, Aug 2017, Vol: 293 [pdf]
(Samanyolunda kaç yıldız var?)
7. **Popular Science Turkey**, Jul 2017, Vol: 63 [pdf]
Importance of Student Clubs at Universities, (Üniversitelerde Öğrenci Kulüplerinin Önemi)
6. **Atlas**, Jul 2017, Vol: 292 [pdf]
Jupiter: Three Belt Planet (Jupiter: Üç kuşaklı gezegen),
5. **Popular Science Turkey**, Jun 2017, Vol: 62 [pdf]
Cassini's Deep Dive on Saturn Rings, (Cassini'nin Satürn Halkalarına Derin Dalışı)
4. **Atlas**, Jun 2017, Vol: 291 [pdf]
Saturn: Mystery of Rings Unveiling (Satürn: Halkaların Gizemi Çözülüyor)
3. **Atlas**, May 2017, Vol: 290 [pdf]
Possible Life on Enceladus (Enceladus'ta Yaşam Íhtimali)
2. **Atlas**, Apr 2017, Vol: 289, Page: 38-39 [pdf]
Searching for Earth-Like Planets (Dünya-Benzeri Gezegenler Peşinde)
1. **Tübitak Bilim ve Teknik Dergisi**, Oct 2011, Vol: 527, Page: 30-35 [pdf]
Science with ALMA (ALMA ile Bilim)

Popular Articles Multi Author

3. Umit Kavak, **Umut A. Yıldız**, *A Telescope Near the Edge of Space: STO-2, (Uzayın Eşiğinde bir Balon Teleskop: STO-2)*, Tübitak Bilim ve Teknik, Mar 2017, Vol: 592 [pdf]
2. **Umut A. Yıldız**, Selcuk Topal, *Big Data Hero: Data Scientist, (Büyük Veri Kahramanı: Veri Bilimcisi)*, Tübitak Bilim ve Teknik, Apr 2015, Vol: 569, Page: 64-67 [pdf]
1. Efe Tuncel, **Umut A. Yıldız**, *APEX Telescope: First Precursor to ALMA, (APEX Teleskobu: ALMA'nın ilk Öncüsü)*, Tübitak Bilim ve Teknik, Dec 2012, Vol: 541, Page: 38-42 [pdf]