

Umut Yıldız, Ph.D. (CV)

CONTACT INFORMATION

NASA Jet Propulsion Laboratory
California Institute of Technology
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Alternative Name: Umut A. Yıldız 🐦: [umutayildiz](#)

PROFESSIONAL EXPERIENCE

NASA/JPL (Jet Propulsion Laboratory), USA — Space Telecommunications Engineer 01/2016–

- 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 H₂O, O₂, and CO molecules.
- Developed a data reduction pipeline “*WISH Live Data Show*”, which was used by the WISH (Water In Star-forming regions with Herschel) team members. The pipeline had interacted with Herschel Science Archive and quickly 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>).

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.

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, L^AT_EX, 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 27, # of citations 2228 as of Apr 2019 (Source: Web of Science, R-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 24 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 H₂O and O₂ in the star forming regions.
- Many *press interviews* regarding astronomy and space sciences on Turkish TV and newspapers.
- All publications are available online at <http://bit.ly/adsyildiz>.

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 64th 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](#))

ACADEMIC &
TEACHING
EXPERIENCE

- **Referee:** *Astrophysical Journal*, *Astrophysical Journal Letters*, *Astronomy & Astrophysics* 2015–...
- JPL Star formation lunch talk organizer, Jet Propulsion Laboratory 10/2014–12/2015
- 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–...
- Board Member of DAG, East Anatolian Observatory Project (4m IR telescope) 2011–...
- Co-I of Turkish National 30+ meter sub-/millimeter–Telescope Project 2013–...
- Member of [Planetary Society](#) 2015–...
- Member of [Mars Society](#) 2017–...
- Amateur Radio Technician, Call Sign: KK6TJJ 2015–...
- Member of [TAMSAT/AMSAT-TR](#), Association of Turkish Amateur Satellite Technologies 2011–...
- President of ASART - Amateur Astronomy Research Club at Ankara University 1999

OBSERVING
PROJECTS

PI of SOFIA Telescope Project: Cycle 6 06-0109; Where is the oxygen in protostellar outflows? (Priority 1; 4.8 hr to be observed in 2018/2019)
PI of SOFIA Telescope Project: 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
'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 250k+ students with 150+ connections to 2000+ schools (yildiz.space/conf.html).
Twitter: [umutayildiz](https://twitter.com/umutayildiz) "Science and space related outreach via social media"
Fourth most followed astrophysicist in the world with 456k+ followers according to "<http://truesciphil.org/ast.html>"
Columnist: "Popular Science Turkey"
"See articles" (Monthly column since Jun 2017)
Columnist: "Atlas Magazine"
"See articles" (Monthly column since Apr 2017)

ACADEMIC
ACTIVITIES

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)

(TALKS,
POSTERS,
SUMMER
SCHOOLS, ETC.)

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]"*
225th 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 O₂ abundance toward a low-mass protostar with Herschel-HIFI"*
223rd American Astronomical Society Meeting (Washington, D.C., USA, Jan 4-9, 2014)

Poster: *"Deep O₂ 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"*
68th Dutch Astronomers Conference (Lommel, Belgium, May 15-17, 2013)

PhD Colloquium: *"High-J CO and O₂ in Low-Mass Star Forming Regions with Herschel"*
Leiden Observatory (Leiden, Netherlands, Mar 4, 2013)

Lunch Talk: *"High-J CO and O₂ in Low-Mass Star Forming Regions with Herschel"*
NASA/JPL (Pasadena, USA, Nov 20, 2012)

Lunch Talk: *"High-J CO and O₂ 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"*
18th 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"*, 14th 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)

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

EXTRA-
CURRICULAR
ACTIVITIES
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 O₂ 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.; Bjerke, P.; Blake, G. A.; Bontemp, 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.**; Antonucci, 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]
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