

## 2060BIB.TEX: A BIBLIOGRAPHY OF 2060 CHIRON REFERENCES

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- ALAMANY, M. (1988) Brilla inesperado del asteroide Chiron. *Astrum* **82**, 22.
- ALTENHOFF, W.J. AND STUMPPF, P. (1995) Size estimate of “asteroid” 2060 Chiron from 250 GHz measurements. *Astron. Astrophys.* **293**, L41–L42.
- ALTENHOFF, W.J., BERTOLDI, F. AND MENTEN, K.M. (2004) Size estimates of some optically bright KBOs. *Astron. Astrophys.* **415**, 771–775.
- ALVAREZ-CANDAL, A.A., DUFFARD, R., LARES, M., LEIVA, M., PIVATO, M.C., AND SÁNCHEZ, A.G. (2000) Estudio fotométrico del Centauro (2060) Chiron. *Bol. Asoc. Argentina de Astron.* **44**, 22.
- ARAUJO, R.A.N., SFAIR, R., AND WINTER, O.C. (2016) Rings under close encounters with the giant planets: Chariklo vs Chiron. *Astrophys. Jour.* **824**, no. 2, 80.
- ARAUJO, R.A.N., WINTER, O.C., AND SFAIR, R. (2018) Rings under close encounters with the giant planets: Chariklo versus Chiron. *Mon. Not. Roy. Astron. Soc.* **479**, no. 4, 4770–4477.
- ASHBROOK, J. (1978) Kowal’s strange slow-moving object. *Sky and Tel.* **55**, 4–5.
- BAGNULO, S., BOEHNHARDT, H., MUINONEN, K., KOLOKOLOVA, L., BELSKAYA, I., AND BARUCCI, M.A. (2006) Exploring the surface properties of transneptunian objects and Centaurs with polarimetric FORS1/VLT observations. *Astron. Astrophys.* **450**, 1239–1248.
- BAILEY, M.E. (1992) Origin of short-period comets. *Cel. Mech. and Dynam. Astron.* **54**, 49–61.
- BAILEY, M.E., CHAMBERS, J.E., AND HAHN, G. (1992) Detection of comet nuclei at large heliocentric distances. *Mon. Not. Roy. Astron. Soc.* **254**, 581–588.
- BARUCCI, M.A., LAZZARIN, M., AND TOZZI, G.P. (1999) Compositional surface variety among the Centaurs. *Astron. Jour.* **117**, 1929–1932.
- BARUCCI, M.A., BROWN, M.E., EMERY, J.P., AND MERLIN, F. (2008) “Composition and surface properties of transneptunian objects and Centaurs.” In *The Solar System Beyond Neptune*, M.A. Barucci, H. Boehnhardt, D.P. Cruikshank, and A. Morbidelli, eds. (Tucson: Univ. Arizona Press), pp. 143–160.
- Barucci, M.A., Brown, M.E., Emery, J.P., and Merlin, F. (2008) “Composition and surface properties of transneptunian objects and Centaurs.” In *The Solar System Beyond Neptune*, M. A. Barucci, H. Boehnhardt, D. P. Cruikshank, and A. Morbidelli, eds. University of Arizona Press, pp. 143–160.
- BARENTSEN, G. AND THE KEPLER TEAM. (2016) The Solar System Survey by NASA’s K2 Mission. *Bull. Amer. Astron. Soc.* **227**, 421.02 (Abstract).
- BARUCCI, M.A. AND LAZZARIN, M. (2000) “Optical observations of trans-Neptunian and Centaur objects.” In *Eds. A. Fitzsimmons, D. Jewitt, and R.M. West*, ed. Minor bodies in the outer solar system. (Proceedings of the ESO Workshop held at Garching, Germany, 2-5 November 1998), pp. 51.
- BASANO, L. AND HUGHES, D.W. (1979) A modified Titius–Bode law for planetary orbits. *Nuovo Cimento C, Serie 1* **2C**, 505–510.

- BAUER, J.M., MEECH, K.J., BUIE, M.W., AND HAINAUT, O.R. (1997) Long term observations of Chiron at large heliocentric distances. *Bull. Amer. Astron. Soc.* **29**, 1021–1022 (Abstract).
- BAUER, J.M. AND MEECH, K.J. (1997) Observations of Chiron at large distances from the Sun. *Meteoritics and Planetary Sci.* **32**, A10 (Abstract).
- BAUER, J.M. AND MEECH, K.J. (1999) Ground-based observations of Centaurs: searching for faint coma. *Bull. Amer. Astron. Soc.* **31**, 1095–1096 (Abstract).
- BAUER, J.M., MEECH, K.J., OWEN T.C., ROUSH, T.L., AND DAHM, S.E. (2001) Chiron’s spectrum at outburst. *Bull. Amer. Astron. Soc.* **33**, 1048 (Abstract).
- BAUER, J.M. (2003) *A physical study of Centaurs*. Univ. of Hawaii, Honolulu, HI, 157 pp.
- BAUER, J.M., BURATTI, B., MEECH, K.J., HICK, M.D., FERNÁNDEZ, Y.R., AND BEDIENT, J. (2004) Chiron’s outburst behavior. *Bull. Amer. Astron. Soc.* **36**, 1069 (Abstract).
- BEEKMAN, G (1990) Chiron meer komeet dan planetoide. *Zenit* **17**, no. 10, 370–372.
- BELSKAYA, I.N., BAGNULO, S., BARUCCI, M.A., MUINONEN, K., TOZZI, G.P., FORNASIER, S., AND KOLOKOLOVA, L. (2010) Polarimetry of Centaurs (2060) Chiron, (5145) Pholus and (10199) Chariklo. *Icarus* **210**, no. 1, 472–479.
- BENEDETTI ROSSI, G., SICARDY, B., BUIE, M.W., BRAGA-RIBAS, F., ORTIZ, J.L., DUFFARD, R., CAMARGO, J., VIEIRA-MARTINS, R., GRATADUR, D., AND DUMAS, C. (2016) HST observations of Chiron: preliminary results. *Bull. Amer. Astron. Soc.* **48**, no. 7, 7–8 (Abstract).
- BENEDICT, G.F., SHELUS, P.J., AND MULHOLLAND, J.D. (1978) Astrometric observations of the faint satellites of Jupiter and minor planets, 1974–1977. *Astron. Jour.* **83**, 999–1002.
- BENKHOFF, J. (1995) Numerical simulations of the gas flux at the surface of a 2060 Chiron. *Bull. Amer. Astron. Soc.* **27**, 1338 (Abstract).
- BOCKLÉE-MORVAN, D., LELLOUCH, E., BIVER, N., PAUBERT, G., BAUER, J., COLOM, P., AND LIS, D.C. (2001) Search for CO gas in Pluto, Centaurs, and Kuiper Belt Objects at radio wavelengths. *Astron. Astrophys.* **377**, 343–353.
- BOICE, D.C., KONNO, I., STERN, S.A., AND HUEBNER, W.F. (1991) “Modeling the coma of 2060 Chiron.” Paper given at *International Conference on Asteroids, Comets, and Meteors 1991*, Flagstaff, AZ, June 24–28, p. 26.
- BOICE, D.C., STERN, S.A., AND HUEBNER, W.F. (1991) On the atmosphere of 2060 Chiron. *Lunar & Planetary Sci.* **XXII**, 121 (Abstract).
- BOICE, D.C., KONNO, I., STERN, S.A., AND HUEBNER, W.F. (1992) A preliminary model of the coma of 2060 Chiron. *Proc. Int. Conf. on Asteroids, Comets, and Meteors* **1992**, 85–88.
- BOICE, D.C., SEKIGUCHI, T., UKITA, N., AND HASEGAWA, H. (1999) Comet 95P/Chiron. *IAU Circular No. 7179*, 3.
- BOICE, D.C. AND BENKHOFF, J. (2015) “3200 Phaethon, Asteroid or Comet Nucleus?” Paper given at *IAU General Assembly Meeting #29*, August, 2258088.
- BOICE, D. AND BOONMASAI, P. (2020) Are Centaurs comet nuclei? *Bull. Amer. Astron. Soc.* **52**, no. 3, 129.03 (Abstract).
- BOICE, D.C. AND BOONMASAI, P. (2020) A comet by any other name would smell as sweet. *Bull. Amer. Astron. Soc.* **52**, no. 6, 404.01 (Abstract).
- BOONMASAI, P. AND BOICE, D.C. (2021) Are Centaurs comets? *43rd COSPAR Scientific Assembly. 28 January–04 February 2021, Paris, France* **297**, (Abstract).
- BOUSKA, J. (1978) Object Kowal 1977 UB. *Říše hvězd* **59**, 37.
- BOWELL, E., BUS S.J., SKIFF, B.A., AND CUNNINGHAM, C.J. (1988) (2060) Chiron. *IAU Circular No. 4579*, 2.

- BOWELL, E. (1991) Detection of CN emission from (2060) Chiron. *Reports of Planetary Astronomy—1991 NASA Technical Memorandum 4329*, 145–146 (Abstract).
- BOWELL, E. (1991) Studies of asteroids, comets, and Jupiter’s outer satellites. *Reports of Planetary Astronomy—1991 NASA Technical Memorandum 4329*, 15–17 (Abstract).
- BRISSET, J. AND WESTCOTT, C. (2021) Collisional viscosity of icy dust aggregates in planetary rings. *Bull. Amer. Astron. Soc.* **53**, no. 7, 503.06 (Abstract).
- BROSCH, N. (1995) The first UV spectrum of 2060 Chiron. *Mon. Not. Roy. Astron. Soc.* **276**, 1185–1190.
- BROWN, M.E., KORESKE, C.D., AND BLAKE, G.A. (1998) Detection of water ice on Nereid. *Astrophys. Jour.* **508**, L175–L176.
- BROWN, M.E. (1998) Infrared spectroscopy of Centaurs and irregular satellites. *Bull. Amer. Astron. Soc.* **30**, 1112 (Abstract).
- BROWN, W.R. AND LUU, J.X. (1997) Physical properties of Centaurs. *Bull. Amer. Astron. Soc.* **29**, 1021 (Abstract).
- BROWN, W.R. AND LUU, J.X. (1998) Properties of model comae around Kuiper Belt and Centaur Objects. *Icarus* **135**, 415–430.
- BUIE, M.W., OLKIN, C., McDONALD, S., FORD, C., FOUST, J., SOPATA, L., ELLIOT, J.L., MARCIALIS, R., HILL, R., BUS, S.J., AND MESEROLE, R., WASSERMAN, L., SPENCER, J., DUNHAM, E., YOUNG, J. JARRETT, T.H., BEICHMAN, C.A., HERTER, T., TELESCO, C., SCHULZ, B., CAMPINS, H., AND OSIP, D. (1993) (2060) Chiron. *IAU Circular No. 5898*, 1.
- BURATTI, B.J. AND DUNBAR, R.S. (1991) Observation of a rapid decrease in the brightness of the coma of 2060 Chiron in 1990 January. *Astrophys. Jour.* **366**, L47–L49.
- BURATTI, B.J., MARCIALIS, R.L., HOWELL, E.S., AND NOLAN, M.C. (1991) “CCD photometry of 2060 Chiron, 1991 January.” Paper given at *International Conference on Asteroids, Comets, and Meteors 1991*, Flagstaff, AZ, June 24–28, p. 33.
- BURATTI, B.J., MARCIALIS, R.L., AND DUNBAR, R.S. (1991) Photometry of the comet 2060 Chiron. *Reports of the Planetary Geology and Geophysics Program—1991. NASA Technical Memorandum 4300*, 407–408.
- BUS, S.J., BOWELL, E., AND HARRIS, A.W. (1987) 2060 Chiron: CCD photometry. *Bull. Amer. Astron. Soc.* **19**, 851 (Abstract).
- BUS, S.J., BOWELL, E., AND FRENCH, L.M. (1988) (2060) Chiron. *IAU Circular No. 4684*, 2.
- BUS, S.J., BOWELL, E., HARRIS, A.W., AND HEWITT, A.V. (1989) 2060 Chiron and P/Schwassmann-Wachmann I: two unusual comets. *Bull. Amer. Astron. Soc.* **20**, 836 (Abstract).
- BUS, S.J., BOWELL, E., HARRIS, A.W., AND HEWITT, A.V. (1988) 2060 Chiron: CCD and electronographic photometry. *Bull. Amer. Astron. Soc.* **20**, 856 (Abstract).
- BUS, S.J., BOWELL, E., HARRIS, A.W., AND HEWITT, A.V. (1989) 2060 Chiron: CCD and electronographic photometry. *Icarus* **77**, 223–238.
- BUS, S.J., SCHLEICHER, D.G., BOWELL, E., AND A’HEARN, M.A. (1990) Detection of gaseous emission from 2060 Chiron. *Bull. Amer. Astron. Soc.* **22**, 1088 (Abstract).
- BUS, S.J., A’HEARN, M.F., SCHLEICHER, D.G., AND BOWELL, E. (1991) Detection of CN emission from (2060) Chiron. *Science* **251**, 774–777.
- BUS, S.J., BOWELL, E., STERN, S.A., AND A’HEARN, M.F. (1991) “Chiron: evidence for historic cometary activity.” Paper given at *International Conference on Asteroids, Comets, and Meteors, 1991*, Flagstaff, AZ, June 24–28, p. 34.
- BUS, S.J., WASSERMAN, L.H., AND ELLIOT, J.L. (1993) Chiron stellar occultation candidates: 1993–1996. *Bull. Amer. Astron. Soc.* **25**, 1058 (Abstract).

- BUS, S.J., WASSERMAN, L.H., AND ELLIOT, J.L. (1994) Chiron stellar occultation candidates: 1993–1996. *Astron. Jour.* **107**, 1814–1824.
- BUS, S.J., BUIE, M.W., SCHLEICHER, D.G., HUBBARD, W.B., MARCIALIS, R.L., HILL, R., WASSERMAN, L.H., SPENCER, J.W., MILL, R.L., FRANZ, O.G., BOSH, A.S., DUNHAM, E.W., FORD, C.H., YOUNG, J.W., ELLIOT, J.L., MESEROLE, R., OLKIN, C.B., McDONALD, S.W., FOUST, J.A., SOPATA, L.M., AND BANDYOPADHYAY, R.M. (1996) Stellar occultation by 2060 Chiron. *Icarus* **123**, 478–490.
- BUS, S.J., A’HEARN, M.F., BOWELL, E., AND STERN, S.A. (2001) (2060) Chiron: evidence for activity near aphelion. *Icarus* **150**, 94–103.
- CAMPINS, H., JEWITT, D., AND TELESKO, C. (1992) (2060) Chiron. *IAU Circular No. 5457*, 2.
- CAMPINS, H., JEWITT, D., AND TELESKO, C.M. (1992) Simultaneous visible and thermal-infrared observations of object (2060) Chiron. *Bull. Amer. Astron. Soc.* **24**, no. 3, 993 (Abstract).
- CAMPINS, H., TELESKO, C.M., OSIP, D.J., RIEKE, G.H., RIEKE, M.J., AND SCHULZ, B. (1994) The color temperature of (2060) Chiron: a warm and small nucleus. *Astron. Jour.* **108**, 2318–2322.
- CAMPINS, H. AND RIEKE, M. (1996) (2060) Chiron. *IAU Circular No. 6305*, 1.
- CAPRIA, M.T., CORADINI, A., DESANCTIS, M.C., AND OROSEI, R. (2000) Chiron activity and thermal evolution. *Astron. Jour.* **119**, 3112–3118.
- CASOLI, F. (1995) Chiron: ast/’eroïde, comète ou planète? *La Recherche* **275**, 456–457.
- CELLONE, S.A. AND SILVA, A.M. (2000) Actividad cometaria en 2060 Chiron durante un mínimo de brillo. *Boletín de la Asociación Argentina de Astronomía* **44**, 3.
- CHURYUMOV, K.I. AND VADIMOVA, I. (1990) Chiron — an asteroid or comet? *Zemlya Vseleennaya* **3**, 66 (Abstract).
- CIKOTA, S., FERNÁNDEZ-VALENZUELA, E., ORTIZ, J.L., MORALES, N., DUFFARD, R., ACEITUNO, J., CIKOTA, A., AND SANTOS-SAENZ, P. (2018) Activity of (2060) Chiron possibly caused by impacts? *Mon. Not. Roy. Astron. Soc.* **475**, no. 2, 2512–2518.
- COCHRAN, W.D., COCHRAN, A.L., AND BARKER, E.S. (1989) “Spectroscopy of asteroids in unusual orbits.” In *Asteroids, Comets, and Meteors II* (Eds. C.-I. Lagerkvist, B.A. Lindblad, H. Lundstedt, and H. Rickman), Uppsala, Sweden, pp. 181–185.
- COCHRAN, A.L., BARKER, E., AND SAWYER, S. (1988) (2060) Chiron. *IAU Circular No. 4586*, 2.
- COCHRAN, W., AND COCHRAN, A. (1990) (2060) Chiron. *IAU Circular No. 5144*, 1.
- COMBES, M. (1978) Un astéroïde entre Saturne et Uranus: 1977 UB. *Ciel et Terre* **94**, 54.
- COMBES, M. AND MEEUS, J. (1978) Un nouvel asteroïde exceptionnel: 1977 UB. *L’Astronomie* **92**, 231.
- COMBES, M. AND MEEUS, J. (1995) De buitenste planetoiden (I). *Heelal* **40**, 60–63.
- COMBES, M. AND MEEUS, J. (1995) De buitenste planetoiden (II). *Heelal* **40**, 88–91.
- CROSWELL, K. (1990) The changing face of Chiron. *New Scientist* **127**, 48–51.
- CRUIKSHANK, D.P., HARTMANN, W.K., AND THOLEN, D.J. (1988) (2060) Chiron. *IAU Circular No. 4653*, 1.
- CRUIKSHANK, D.P. (1998) Laboratory astrophysics in solar system studies—an overview. *Earth, Moon, and Planets* **80**, 3–33.
- CUNNINGHAM, C. (1988) The anomalous brightening of 2060 Chiron in early 1988—CCD observations. *Jour. Roy. Astron. Soc. Canada* **82**, 286.
- CUZZI, J.N. AND ESTRADA, P.R. (1996) Compositional evolution of Saturn’s rings: ice, tholin, and “Chiron”-dust. *Bull. Amer. Astron. Soc.* **28**, 1124 (Abstract).

- DAHLGREN, M., LAGERKVIST, C.-L., FITZSIMMONS, A., AND WILLIAMS, I.P. (1990) “CCD photometry of 2060 Chiron.” In *Proc. of the Nordic–Baltic Astronomy Meeting* (Ed. C.-I. Lagerkvist, D. Kiselman, and M. Lindgren), Uppsala, Sweden, 83–84.
- DAHLGREN, M., LAGERKVIST, C.-L., FITZSIMMONS, A., AND WILLIAMS, I.P. (1991) Differential CCD photometry of Dubiago, Chiron, and Hektor. *Mon. Not. Roy. Astron. Soc.* **250**, 115–118.
- DAVIES, J. (1985) Can comets become asteroids? *Astronomy* **13**, no. 1, 66–70.
- DAVIES, J.K., MCBRIDE, N., ELLISON, S.L., GREEN, S.F., AND BALLANTYNE, D.R. (1998) Visible and infrared photometry of six Centaurs. *Icarus* **134**, 213–227.
- DAVIS, D.R. AND FARINAELLA, P. (1997) Collisional evolution of Edgeworth–Kuiper Belt Objects. *Icarus* **125**, 50–60.
- DEGEWIJ, J., CRUIKSHANK, D.P., HARTMANN, W.K., AND CAPPS, R.W. (1981) Periodic Comet Schwassmann–Wachmann 1 and (2060) Chiron. *IAU Circular No. 3577*, 1.
- DEGEWIJ, J. AND TEDESCO, E.F. (1982) “Do comets evolve into asteroids—evidence from physical studies.” In *Comets*, L.L. Wilkening, eds. (Tucson: Univ. Arizona Press), pp. 665–695.
- DE LUISE, F., DOTTO, E., FORNASIER, S., BARUCCI, M.A., PINILLA-ALONSO, N., PERNA, D., AND MARZARI, F. (2010) A peculiar family of Jupiter Trojans: The Eurybates. *Icarus* **209**, no. 2, 586–590.
- DE SANTANA, T. AND WINTER, O. (2016) Centaur’s ring system formation by close encounters. *Bull. Amer. Astron. Soc.* **48**, no. 7, 39–40 (Abstract).
- DOBSON, M., FITZSIMMONS, A., SCHWAMB, M.E., KELLEY, M.S.P., LISTER, T., DENNEAU, L., HEINZE, A., SHINGLES, L., SMITH, K.W., TONRY, J., WEILAND, H., YOUNG, D.R., BENECCHI, S., AND VERBISCHER, A. (2021) Enhanced Activity in (2060) Chiron. *The Astronomer’s Telegram*, 14903.
- DOBSON, M.M., SCHWAMB, M.E., FITZSIMMONS, A., KELLEY, M.S.P., LISTER, T., SHINGLES, L.J., DENNEAU, L., HEINZE, A.N., SMITH, K.W., TONRY, J.L., WEILAND, H., YOUNG, D.R., BENECCHI, S.D., AND VERBISCHER, A.J. (2021) New or increased cometary activity in (2060) 95P/Chiron. *Res. Notes of the Amer. Astron. Soc.* **5**, no. 9, 211.
- DOBSON, M. AND THE ATLAS SURVEY TEAM AND OUTER SOLAR SYSTEM PHASE CURVES COLLABORATION (2021) Centaur and Kuiper Belt Object Pphase curves from the Asteroid Terrestrial–impact Last Alert System Survey. *European Planetary Science Congress 2021*, EPSC2021-677 (Abstract).
- DONES, L., LEVISON, H.F., AND DUNCAN, M.J. (1994) Long-term integrations of Chiron and Pholus. *Bull. Amer. Astron. Soc.* **26**, 1154 (Abstract).
- DONES, L., LEVISON, H., AND DUNCAN, M. (1996) “On the dynamical lifetimes of planet–crossing objects.” In *Eds. T.W. Rettig and J.M. Hahn*, ed. Completing the inventory of the solar system. (Astronomical Society of the Pacific Conference Proceedings, volume 107), pp. 233–244.
- DONES, L. AND WOMACK, M. (2020) Physical evolution model for Jupiter-family comets and Centaurs. *EPSC Abstracts* **14**, 515 (Abstract).
- DORESSOUNDIRAM, A., PEIXINHO, N., DOUCET, C., MOUSIS, O., BARUCCI, M.A., PETIT, J.M. AND VEILLET, C. (2006) The Meudon Multicolor Survey (2MS) of Centaurs and trans-neptunian objects: extended dataset and status on the correlations reported. *Icarus* **174**, 90–104.
- DUFFARD, R., LAZZARO, D., PINTO, S., CARVANO, J., ANGELI, C., ALVAREZ CANDAL, A., AND FERNÁNDEZ, S. (2002) New activity of Chiron: 5 years of photometric monitoring. *ACM ???, ???* (Abstract).
- DUFFARD, R., LAZZARO, D., PINTO, S., CARVANO, J., ANGELI, C., ALVAREZ CANDAL, A., AND FERNÁNDEZ, S. (2002) New activity of Chiron: results from 5 years of photometric monitoring. *Icarus* **160**, 44–51.
- DUNBAR, R.S., BURATTI, B.J., AND TEDESCO, E.F. (1990) Evidence for a rapid decrease in the brightness of 2060 Chiron’s coma during January 1990. *Bull. Amer. Astron. Soc.* **22**, no. 3, 1099 (Abstract).
- DUNHAM, D. (1978) Possible occultation by 2060 Chiron. *Occultation Newsletter* **1**, 158.

- DURDA, D.D. AND STERN, S.A. (2000) Collision rates in the present-day Kuiper Belt and Centaur regions: applications to surface activation and modification on comets, Kuiper Belt Objects, Centaurs, and Pluto-Charon. *Icarus* **145**, 220–229.
- EBERHART, J. (1981) Chiron—a comet to be. *Sci. News* **120**, 358.
- EBERHART, J. (1989) Chiron’s brightening hints it’s a comet. *Sci. News* **135**, 247.
- EBERHART, J. (1990) First view of Chiron’s farthest fringes. *Sci. News* **137**, 244.
- EVERHART, E. (1979) “Chaotic orbits in the solar system.” In *Asteroids*, T. Gehrels, eds. (Tucson: Univ. Arizona Press), pp. 283–288.
- ELLIOT, J.L., DUNHAM, E.W., OLKIN, C.B., FORD, C., STONE, R.P.S., McDONALD, S.W., BANDYOPADHYAY, R.M., GILMORE, D.K., RANK, D.M., TEMI, P., LAZZARO, D., HUBBARD, W.B., REITSEMA, H., BARUCCI, A., BARROSO, J., BUS, S.J., LOPES, D.F., BUIE, M., SICARDY, B., MARCIALIS, R., FORYTA, D.W., AND KURTZ, D. (1994) Occultation by (2060) Chiron. *IAU Circular No. 5965*, 1.
- ELLIOT, J.L., OLKIN, C.B., DUNHAM, E.W., FORD, C., GILMORE, D.K., RANK, D.M., TEMI, P., KURTZ, D., BANDYOPADHYAY, R.M., BUS, S.J., McDONALD, S.W., BARROSO, J., LAZZARO, D., LOPES, D.F., BARUCCI, A., BOSH, A.S., BUIE, M.W., MILLIS, R.L., WASSERMAN, L.H., DAHN, C.C., FORYTA, D.W., HUBBARD, W.B., MARCIALIS, R.L., REITSEMA, H., SICARDY B., AND STONE, R.P.S. (1994) Material near the nucleus of Chiron from stellar occultation observations. *Bull. Amer. Astron. Soc.* **26**, no. 3, 1153 (Abstract).
- ELLIOT, J.L., OLKIN, C.B., DUNHAM, E.W., FORD, C., GILMORE, D.K., KURTZ, D., LAZZARO, D., RANK, D.M., TEMI, P., BANDYOPADHYAY, R.M., BARROSO, J., BARUCCI, A., BOSH, A.S., BUIE, M.W., BUS, S.J., DAHN, C.C., FORYTA, D.W., HUBBARD, W.B., LOPES, D.F., MARCIALIS, R.L., McDONALD, S.W., MILLIS, R.L., REITSEMA, H., SCHLEICHER, D.G., SICARDY B., AND STONE, R.P.S., AND WASSERMAN, L.H. (1995) Jet-like features near the nucleus of Chiron. *Nature* **373**, 46–49.
- ELLIOT, J.L., DUNHAM, E.W., AND OLKIN, C.B. (1995) “Exploring small bodies in the outer solar system with stellar occultations.” In *Astronomical Society of the Pacific, Airborne Astronomy Symposium on the Galactic Ecosystem: From Gas to Stars to Dust* (73), 285–296.
- ELLIOT, J.L. (1998) Stellar occultation studies of the solar system. *NASA Technical Report CR-97-206750*, ??? (Abstract).
- ELLIOT, J.L. (1998) New mysteries at Chiron. *NASA Technical Report CR-1998-206757*, ??? (Abstract).
- ELLIOT, J.L. (2002) Stellar occultation studies of Pluto, Triton, Charon, and Chiron. *Technical Report, Massachusetts Inst. of Tech., Cambridge, MA, Dept. of Earth, Atmospheric and Planetary Sciences*.
- ELLIOT, J.L. AND KERN, S.D. (2003) Probing large KBOs for atmospheres and nearby companions. *Bull. Amer. Astron. Soc.* **35**, 991 (Abstract).
- ENCRENAZ, T. (2015) “Chiron.” In *Encyclopedia of Astrobiology* (eds. M. Gargaud, W.M. Irvine, R. Amils, R., H.J. Cleaves, II, D.L. Pinti, J.C. Quintanilla, D. Rouan, T. Spohn, S. Tirard, and M. Viso. Berlin, Heidelberg: Springer Berlin Heidelberg), 502.
- EWALD, D. (1990) Chiron — Komet oder planetoid und weitere Rätsel am rand unseres sonnensystems. *KPM* **5**, 39-41.
- FANALE, F.P. AND SALVAIL, J.R. (1997) The cometary activity of Chiron: a stratigraphic model. *Icarus* **125**, 397–405.
- FERNÁNDEZ-VALENZUELA, E., ORTIZ, J.L., DUFFARD, R., AND SANTOS-SANZ, P. (2018) Physical properties of trans-Neptunian objects and centaurs. *Bull. Amer. Astron. Soc.* **50**, 509.09 (Abstract).
- FERNANDEZ-VALENZUELA, E., MORALES, N., ORTIZ, J., SICARDY, B., SANTOS-SANZ, P., BENEDETTI-ROSSI, G., VARA-LUBIANO, M., ASSAFIN, M., ROMMEL, F., LUCKY STAR TEAM, AND THE BIENOR OCCULTATION TEAM. (2020) The intriguing shape of Bienor. *Bull. Amer. Astron. Soc.* **52**, no. 6, 203.04 (Abstract).

- WOMACK, M. (2020) Observations of active Centaurs and distant comets (Invited Speaker). *Bull. Amer. Astron. Soc.* **52**, no. 6, 112.04 (Abstract).
- FERNÁNDEZ, J.A. AND GALLARDO, T. (1994) The transfer of comets from parabolic orbits to short-period orbits: numerical studies. *Astron. Astrophys.* **281**, 911–922.
- FERNÁNDEZ, Y.R., LISSE, C.M., WELLNITZ, D.D., A’HEARN, M.F., KUNDU, A., BUIE, M.W., DUNHAM, E.W., MILLIS, R.L., NYE, R.A., STANSBERRY, J.A., WASSERMAN, L.H., GOLDEN, M.E., PERSSON, M., HOWELL, R.R., MARCIALIS, R.L., SPITALE, J.N., HOFFMANN, W.F., DAYAL, A., DEUTSCH, L.K., FAZIOM G.G., HORA, J.L., HANNER, M.S., RESSLER, M., KOSTIUK, T., AND LIVENGOOD, T.A. (1997) Multiwavelength observations of the nucleus and coma of comet Hale–Bopp. *Bull. Amer. Astron. Soc.* **29**, 1047 (Abstract).
- FERNÁNDEZ, Y.R., JEWITT, D.C., AND SHEPPARD, S.S. (2000) Thermal emission from two Centaurs and two possible extinct comets. *Bull. Amer. Astron. Soc.* **32**, 1032 (Abstract).
- FERNÁNDEZ, Y.R., JEWITT, D.C., AND SHEPPARD, S.S. (2002) Thermal properties of Centaurs Asbolus and Chiron. *Astron. Jour.* **123**, 1050–1055.
- FORNASIER, S., LIM, T., MÜLLER, T., PANUZZO, P., SANTOS-SANZ, P., VILENIUS, E., BOENHARDT, H., STANSBERRY, J., DELSANTI, A., HENRY, F., KISS, C., PAL, A., DUFFARD, R., BARUCCI, A., AND DOTTO, E. (2011) Sub-millimeter observations of Centaurs and TNOs from the Herschel space telescope. *EPSC Abstracts* **11**, 712 (Abstract).
- FORNASIER, S., LELLOUCH, E., MUELLER, T., PANUZZO, P., KISS, C., SANTOS-SANZ, P., LIM, T., VILENIUS, E., STANSBERRY, J., MOMMERT, M., TOZZI, G., BOCKELEEE-MORVAN, D., DUFFARD, R., MOTTOLA, S., AND TNOs ARE COOL TEAM. (2012) Physical and thermal properties of the Centaurs 2060 Chiron and 10199 Chariklo: results from far-infrared observations with the Herschel Space Observatory. *Bull. Amer. Astron. Soc.* **44**, 310.14 (Abstract).
- FORNASIER, S., LELLOUCH, E., MÜLLER, T., SANTOS-SANZ, P., PANUZZO, P., KISS, C., LIM, T., MOMMERT, M., BOCKELÉE-MORVAN, D., VILENIUS, E., STANSBERRY, J., TOZZI, G.P., MOTTOLA, S., DELSANTI, A., CROVISIER, J., DUFFARD, R., HENRY, F., LACERDA, P., BARUCCI, A., AND GICQUEL, A. (2013) TNOs are Cool: A survey of the trans-Neptunian region. VIII. combined Herschel PACS and SPIRE observations of nine bright targets at 70–500  $\mu\text{m}$ . *Astron. Astrophys.* **555**, A15.
- FORNASIER, S., LELLOUCH, E., MÜLLER, T., PANUZZO, P., KISS, C., LIM, T., MOMMERT, M., BOCKELÉE-MORVAN, D., VILENIUS, E., TOZZI, G.P., MOTTOLA, S., DUFFARD, R., AND BARUCCI, M.A. (2015) A portrait of the Centaur 2060 Chiron: new results from groundbased and Herschel observations. *EPSC Abstracts* **8**, 208 (Abstract).
- FOSTER, M.J., GREEN, S.F., MCBRIDE, N., AND DAVIES, J.K. (1999) Note: Detection of water ice on 2060 Chiron. *Icarus* **141**, 408–410.
- FRANZ, O.G., WASSERMAN, L.H., BUIE, M.W., BOSH, A.S., BUS, S.J., AND ELLIOT, J.L. (1996) HST-FGS observation confirms the binarity of the Chiron occultation star Ch02. *Bull. Amer. Astron. Soc.* **28**, 1188 (Abstract).
- FRENCH, L.M., VILAS, F., HARTMANN, W.K., AND THOLEN, D.J. (1989) “Distant asteroids and Chiron.” In *Asteroids II*, R. Binzel, T. Gehrels, and M. Matthews, eds. (Tucson: Univ. Arizona Press), pp. 468–486.
- FULLE, M. (1994) Spin axis orientation of 2060 Chiron from dust coma modeling. *Astron. Astrophys.* **282**, 980–988.
- FULLE, M., GIL, AND A.O., PASIAN, F. (1995) HST observation of the inner coma of 2060 Chiron. *Planetary and Spa. Sci.* **43**, 1473–1477.
- GABRYSZEWSKI, R. (2002) 2060 Chiron—chaotic dynamical evolution and its implications. *Acta Astron.* **52**, 305–315.
- GABRYSZEWSKI, R. (2002) Centaurs: can they enrich the Halley-type comets population? *Adv. Spa. Res.* **29**, no. 8, 1243–1248.

- GALIAZZO, M., DEL LA FUENTE MARCOS, C., DEL LA FUENTE MARCOS, R., CARRARO, G., MARIS, M., AND MONTALTO, M. (2016) Photometry of Centaurs and trans-Neptunian objects: 2060 Chiron (1977 UB), 10199 Chariklo (1997 CU<sub>26</sub>), 38628 Huya (2000 EB<sub>173</sub>), 28978 Ixion (2001 KX<sub>76</sub>), and 90482 Orcus (2004 DW). *Astrophys. Spa. Sci.* **361**, no. 7, 212.
- GEHRELS, T., VESELY, C.D., SATHER, R., GREEN, R., AND KOWAL, C.T. (1977) Slow-moving object Kowal. *IAU Circular No. 3130*.
- GEHRELS, T. (1984) The asteroids—fundamental studies. *L’Astronomie* **98**, 115–132.
- GORKYAVI, N. (2015) Size distribution of particles in Saturn’s rings, missed moonlets and misinterpretation of Chariklo rings. *Proc. Nat. Acad. Sci.* **112**, no. 31, 9536–9541.
- GRONKOWSKI, P. AND WESOŁOWSKI, M. (2016) A review of cometary outbursts at large heliocentric distances. *Earth, Moon, and Planets* **119**, no. 1, 23–33.
- GULAK, YU.K. (1979) On the discovery of Chiron, the rings of Uranus, and Jupiter. *Astron. Tsirk.* **1061**, 6.
- GULAK, YU.K. (1980) The commensurabilities (resonances) in the solar system. *Astronomicheskii Zhurnal* **57**, 152–153.
- GULBIS, A., EMERY, J., RUPRECHT, J., BOSCH, A., PERSON, M., BIANCO, F., BUS, S., AND ZANGARI, A. (2014) Analysis of infrared spectra of a stellar occultation by the active Centaur (2060) Chiron. *Asteroids, Comets, and Meteorites 2014*, 188 (Abstract).
- GUNTER, ??? (1978) Charles Kowal and his slow moving object (Chiron). *Tonight’s Asteroids* **39**, 1.
- GUPTA, A., NADKARNI-GHOSH, S., AND SHARMA, I. (2016) Simulation of rings about ellipsoidal bodies. *Bull. Amer. Astron. Soc.* **48**, no. 7, 47 (Abstract).
- GROUSSIN, O., PESCHKE, S., AND LAMY, P.L. (2000) Properties of 2060 Chiron from infrared ISOPHOT observations. *Bull. Amer. Astron. Soc.* **32**, 1031 (Abstract).
- GROUSSIN, O., LAMY, P.L., AND JORDA, L. (2004) Properties of the nuclei of Chiron and Chariklo. *Astron. Astrophys.* **413**, 1163–1175.
- HAHN, G. AND BAILEY, M.E. (1990) Rapid dynamical evolution of giant comet Chiron. *Nature* **348**, 132–136.
- HAINAUT, O.R. AND DELSANTI, A.C. (2002) Colors of minor bodies in the outer solar system: a statistical analysis. *Astron. Astrophys.* **389**, 641–664.
- HAINAUT, O.R., DELSANTI, A.C., AND JOURDEUIL, E. (2002) MBOSS color evolution tracks: a simple empirical model. *Bull. Amer. Astron. Soc.* **34**, 872 (Abstract).
- HARRIS, W., FERNANDEZ, Y.R., SARID, G., STECKLOFF, J.K., VOLK, K., WOMACK, M., AND WOODNEY, L.M. (2021) Active primordial bodies: exploration of the primordial composition of ice-rich planetesimals and early-stage evolution in the outer solar system. (Whitepaper #296 submitted to the Planetary Science and Astrobiology Decadal Survey 2023-2032.) *Bull. Amer. Astron. Soc.* **53**, no. 4, 296.
- HARTMANN, W.K. (1980) Surface evolution of two-component stone/ice bodies in the Jupiter region. *Icarus* **44**, 441–453.
- HARTMANN, W.K., CRUIKSHANK, D.P., DEGEWIJ, J., AND CAPPS, R.W. (1981) Surface materials on unusual planetary object Chiron. *Icarus* **47**, 333–341.
- HARTMANN, W.K., CRUIKSHANK, D.P., AND DEGEWIJ, J. (1982) Remote comets and related bodies *VJHK* colorimetry and surface materials. *Icarus* **52**, 377–408.
- HARTMANN, W.K. (1986) “Small bodies in the outer solar system: surface materials and relationships.” In *Small bodies in the outer solar system* (Estec, Noordwijk, Netherlands), 129–130.
- HARTMANN, W.K., THOLEN, D.J., CRUIKSHANK, D.P., BROWN, R.H., AND MORRISON, D. (1988) 2060 Chiron and P/Schwassman–Wachmann 1: two unusual comets. *Bull. Amer. Astron. Soc.* **20**, no. 3, 836 (Abstract).



- HARTMANN, W.K. (1989) More links between comet nuclei and dark, distant asteroids: predictions supported. *Bull. Amer. Astron. Soc.* **21**, 964 (Abstract).
- HARTMANN, W.K., THOLEN D.J., MEECH, K., AND CRUIKSHANK, D.P. (1989) “Asteroid” 2060 Chiron: status report on probable cometary activity. *Lunar & Planetary Sci.* **XX**, 379 (Abstract).
- HARTMANN, W.K., THOLEN, D.J., MEECH, K., AND CRUIKSHANK, D.P. (1990) 2060 Chiron: colorimetry and cometary behavior. *Icarus* **83**, 1–15.
- HARTMANN, W.K., THOLEN, D.J., MEECH, K. AND CRUIKSHANK, D.P. (1990) “Asteroid” 2060 Chiron: blurring the distinction between asteroids and comets. *Meteoritics* **24**, 274 (Abstract).
- HARTMANN, W.K. (1990) The changing face of Chiron. *Astronomy* **18**, 44–48.
- HARTMANN, W.K. (1990) Common nature of small bodies in the solar system. *Priroda ???*, 60–64 (Sept. 1990).
- HARTMANN, W.K. (1993) The physical mechanism of comet outbursts: an experiment. *Lunar & Planetary Sci.* **XXIV**, 609–610 (Abstract).
- HARTMANN, W.K. (2015) Physical mechanism of comet (and asteroid) outbursts: the movie. *Annual Meeting of the Meteoritical Society* **78**, 5002 (Abstract).
- HEDMAN, M.M. (2015) Why are dense planetary rings only found between 8 AU and 20 AU? *Astrophys. Jour.Lett.* **801**, no. 2, L33.
- HINDLEY, K. (1978) Chiron—the celestial Centaur. *New Scientist* **77**, 300–301.
- HODGSON, R.G. (1978) The discovery of Chiron: some reflections. *Minor Planet Bull.* **5**, 21.
- HODGSON, R.G. (1978) The discovery of Chiron: some reflections. *The Astronomer* **14**, 198–199.
- HOLLIS, A.J. (1989) The nature of 2060 Chiron. *Jour. Brit. Astron. Assoc.* **99**, no. 4, 159.
- HORNER, J., EVANS, N.W., BAILEY, M.E., AND ASHER, D.J. (2003) The population of comet-like bodies in the solar system. *Mon. Not. Roy. Astron. Soc.* **343**, 1057–1066.
- HORNER, J., EVANS, N.W., AND BAILEY, M.E. (2004) Simulations of the population of Centaurs I: the bulk statistics. *Mon. Not. Roy. Astron. Soc.* **354**, 798–810.
- HORNER, J., EVANS, N.W., AND BAILEY, M.E. (2004) Simulations of the population of Centaurs II: individual objects. *Mon. Not. Roy. Astron. Soc.* **355**, 321–329.
- HUNTEN, D.M. (1995) “Our planetary system: The solar system.” In *Astronomical Society of the Pacific, Airborne Astronomy Symposium on the Galactic Ecosystem: From Gas to Stars to Dust* (73), 281–284.
- HYODO, R., CHARNOZ, S., GENDA, H., AND OHTSUKI, K. (2018) Formation of Centaurs’ rings through their partial tidal disruption during planetary encounters. *Astrophys. Jour. Lett.* **828**, no. 1, L8.
- IP, W.-H. (1991) Dust emission from 2060 Chiron. *Proc. Int. Conf. on Asteroids, Comets, and Meteors* **1991**, 97.
- IP, W.-H. AND FERNÁNDEZ, J.A. (1997) On dynamical scattering of Kuiper Belt Objects in 2:3 resonance with Neptune into short-period comets. *Astron. Astrophys.* **324**, 778–784.
- JAHN, J. (1986) (2060) Chiron—ein seltsamer kleinplanet. *KPM* **1**, 38.
- JARVIS, K.S. AND VILAS, F. (2000) Searching for clues to the composition of trans-Neptunian objects. *Bull. Amer. Astron. Soc.* **32**, 1641 (Abstract).
- JEDICKE, R. AND HERRON, J.D. (1996) Spacewatch—observational constraints on the Centaur population. *Bull. Amer. Astron. Soc.* **28**, 1096 (Abstract).
- JEDICKE, R. AND HERRON, J.D. (1997) Observational constraints on the Centaur population. *Icarus* **127**, 494–507.
- JEWITT, D.C. AND LUU, J.X. (1991) Submillimeter photometry of 2060 Chiron. *Bull. Amer. Astron. Soc.* **23**, no. 3, 1158 (Abstract).

- JEWITT, D.C. AND LUU, J.X. (1992) Submillimeter continuum observations of 2060 Chiron. *Astron. Jour.* **104**, 398–404, 492.
- KERN, S., MCCARTHY, D., CAMPINS, H., BROWN, R.H., RIEKE, M., AND STOLOVY, S. (1999) 1–2.5 micron spectra of Centaurs and Trans-Neptunian Objects. *Bull. Amer. Astron. Soc.* **31**, 1094 (Abstract).
- KERR, R.A. (1988) Comet source: close to Neptune. *Science* **239**, 1372–1373.
- KERR, R.A. (1995) Home of planetary wanderers is sized up for first time. *Science* **268**, 1704.
- KISS, C., PAL, A., ANIKÓ, T.F., MARCINIAK, A., MUELLER, T.G., KISS, L.L., SZABO, G.M., SZABO, R., SARNECZKY, K., AND MOLNAR, L. (2016) Physical characteristics of Centaurs and trans-Neptunian objects from combined K2 and Herschel observations. *Bull. Amer. Astron. Soc.* **48**, no. 7, 8 (Abstract).
- KLEMOLA, A.R., MILLIS, R.L., AND WASSERMAN, L.H. (1984) Appulses to (2060) Chiron. *IAU Circular No. 3944*, 2.
- KLEMOLA, A.R., AND HARLAN, E.A. (1986) Astrometric observations of outer planets and minor planets 1984–1985. *Astron. Jour.* **92**, 195–198.
- KOHLER, S. (2019) Rings from close encounters. *AAS Nova Highlight (02 September 2016)*1472.
- KOVALENKO, N., CHURYUMOV, K., AND BABENKO, YU. (2002) The investigations of orbital evolution of Centaurs 2060 Chiron, P/Oterma and P/Schwassmann-Wachmann 1. *34th COSPAR Scientific Assembly. 10–19 October 2002, Houston, TX* p. **723**, (Abstract).
- KOVALENKO, N.S., BABENKO, Y.G., AND CHURYUMOV, K.I. (2002) Modeling of the orbital evolution of 2060 Chiron. *Earth, Moon, and Planets* **90**, 489–494.
- KOVALENKO, N.S., CHURYUMOV, K.I., AND CHURYUMOV, K.I. (2003) “On dynamical and physical evolution of 95P/Chiron as Centaurs representative.” Paper given at *54th International Astronautical Conference of the International Astronautical Federation, the International Academy of Astronautics, and the International Institute of Space Law*, Bremen, Germany, 29 September–03 October 2003.
- KOVALENKO, N. AND CHURYUMOV, K. (2004) Modeling of comet 95P/Chiron brightness. *35th COSPAR Scientific Assembly. 18–25 July 2004, Paris, France* p. **4077**, (Abstract).
- KOVALENKO, N.S., CHURYUMOV, K.I., AND BABENKO, Y.G. (2011) Orbital evolution of 95/P Chiron, 39P/Oterma, 29P/Shwassmann-Wachmann 1, and of 33 Centaurs. *Astronomical School’s Report* **7**, no. 2, 230–233.
- KOWAL, C.T. (1977) 1977 UB. *IAU Circular No. 3129*.
- KOWAL, C., DRESSLER, A., ADAMS, R., RICHSTONE, D., BOROSON, T., GREEN, R., MARSDEN, B.G., AND AKSNES, K. (1977) 1977 UB (Slow-moving object Kowal. *IAU Circular No. 3134*, 6.
- KOWAL, C., DEBRUYN, A.G., AND ADAMS, R. (1977) 1977 UB. *IAU Circular No. 3143*.
- KOWAL, C.T. AND LILLER, W. (1977) 1977 UB. *IAU Circular No. 3147*.
- KOWAL, C.T. (1978) Surprise in the solar system. *The Sciences* **18**, 12–15.
- KOWAL, C.T. AND LILLER, W. (1978) The discovery and orbit of 1977 UB. *Bull. Amer. Astron. Soc.* **10**, 481 (Abstract).
- KOWAL, C.T. (1978) 2060 Chiron. *Sky and Tel.* **55**, 195 (Letter to editor).
- KOWAL, C.T. (1979) “Chiron.” In *Asteroids*, T. Gehrels, eds. (Tucson: Univ. Arizona Press), pp. 436–439.
- KOWAL, C.T. (1983) The Chiron mystery. *Omni* **5**, no. 9, 28.
- KOWAL, C.T. (1989) A solar system survey. *Icarus* **77**, 118–123.
- KOWAL, C.T., LILLER, W., AND MARSDEN, B.G. (1979) “The discovery and orbit of (2060) Chiron.” In *Dynamics of the solar system. IAU Symposium Series No. 81* (R. Duncombe, ed. Reidel, Boston, MA), 245–250.
- KRANZER, W. (1978) Das objekt zwischen Saturn and Uranus (Chiron). *Phys. Bull.* **34**, 192.

- KRASTINŠ, M. (1996) The Chiron at perihelion. *Zvaigžnotā Debess* **151**, no. 151, 13–16.
- KRESÁK, Ľ. (1979) “Dynamical interrelations among comets and asteroids.” In *Asteroids*, T. Gehrels, eds. (Tucson: Univ. Arizona Press), pp. 436–439.
- KRETLOW, M. (2020) Beyond Jupiter — (2060) Chiron. *Jour. for Occultation Astronomy* **10**, no. 20, 20–23.
- LAGERKVIST, C.-I., FITZSIMMONS, A., MAGNUSSEN, P.R., AND WEST, R.M. (1991) (2060) Chiron. *IAU Circular No. 5163*, 3.
- LANDGRAF, W. (1982) Verbesserung der Massewerte der Planeten Saturn und Uranus aufgrund der kleinen Planeten (944) Hidalgo und (2060) Chiron. *Mitteilungen astronomischer Vereinigungen Südwestdeutschlands* **21**, no. 9–12, 100, 112, 126, 141.
- LANDGRAF, W. (1983) Determination of the masses of Saturn and Uranus from an analysis of the motion of the minor planets (944) Hidalgo and (2060) Chiron. *Astron. Astrophys.* **119**, L95–L100.
- LARSON, S. AND MARCIALIS, R. (1992) (2060) Chiron. *IAU Circular No. 5669*, 2.
- LAVIOLETTE, P.A. (1987) The cometary breakup hypothesis re-examined. *Mon. Not. Roy. Astron. Soc.* **224**, 945–951.
- LAWTON, A.T. (1978) Asteroid Chiron—the first of a few? *Spaceflight* **20**, 312–313.
- LAZZARIN, M. AND BARUCCI, M.A. (1998) Spectroscopic investigation of the Centaurs. *Bull. Amer. Astron. Soc.* **30**, 1114 (Abstract).
- LAZZARO, D., FLORCZAK, M.A., BETZLER, A., WINTER, O.C., GUILIATTI-WINTER, S.M., ANGELI, C.A., AND FORYTA, D.W. (1996) 2060 Chiron back to a minimum of brightness. *Planetary and Spa. Sci.* **44**, 1547–1550 (Abstract).
- LAZZARO, D., FLORCZAK, M.A., BETZLER, A., ANGELI, C.A., GUILIATTI-WINTER, S.M., WINTER, O.C., AND FORYTA, D.W. (1995) Photometric observations of (2060 Chiron). *Bull. Amer. Astron. Soc.* **27**, 1125.
- LAZZARO, D., FLORCZAK, M.A., BETZLER, A., ANGELI, C.A., GUILIATTI-WINTER, S.M., WINTER, O.C., AND FORYTA, D.W. (1996) Photometric observations of (2060 Chiron). *Rev. Mex. de Astron. y Astrophys. Ser. de Conf.* **4**, 114.
- LAZZARO, D., FLORCZAK, M.A., ANGELI, C.A., CARVANO, J.M., BETZLER, A.S., BARUCCI, M.A., AND FULCHIGIONI, M. (1997) Small solar system objects spectroscopic survey: first results. *Bull. Amer. Astron. Soc.* **29**, 975–976 (Abstract).
- LAZZARO, D., FLORCZAK, M.A., ANGELI, C.A., CARVANO, J.M., BETZLER, A.S., CASATI, A.A., BARUCCI, M.A., DORESSOUNDIRAM, A., AND LAZZARIN, M. (1998) Photometric monitoring of 2060 Chiron’s brightness at perihelion. *Planetary and Spa. Sci.* **45**, 1607–1614.
- LEBOFSKY, L.A., THOLEN, D.J., RIEKE, G.H., AND LEBOFSKY, M.J. (1984) 2060 Chiron: visual and thermal infrared observations. *Icarus* **60**, 532–537.
- LEBOFSKY, L.A. (1991) Visual and near-IR spectrophotometry of asteroids. *Reports of Planetary Astronomy—1991 NASA Technical Memorandum ???*, 170 (Abstract).
- LELLOUCH, E., MORENO, R., MÜLLER, T., FORNASIER, S., SANTOS-SANZ, P., MOULLET, A., GURWELL, M.A., STANSBERRY, J., LEIVA, R., SICARDY, B., BUTLER, B.J., AND BOSSIER, J. (2017) The thermal emission of Centaurs and trans-Neptunian objects at submm wavelengths from ALMA observations. *Bull. Amer. Astron. Soc.* **49**, no. 5, 216.07 (Abstract).
- LELLOUCH, E., MORENO, R., MÜLLER, T., FORNASIER, S., SANTOS-SANZ, P., MOULLET, A., GURWELL, M.A., STANSBERRY, J., LEIVA, R., SICARDY, B., BUTLER, B.J., AND BOSSIER, J. (2017) The thermal emission of Centaurs and trans-Neptunian objects at submm wavelengths from ALMA observations. *Astron. Astrophys.* **608**, A45.
- LELLOUCH, E., MORENO, R., BOCKELÉE-MORVAN, D., BIVER, N., AND SANTOS-SANZ, P. (2022) Size and albedo of the largest detected Oort-cloud object: Comet C/2014 UN271 (Bernardinelli–Bernstein). *Astron. Astrophys.Lett.* **659**, L1.

- LEWIS, M.C. AND SICKAFOOSE, A.A. (2017) Confining the rings of Chariklo with resonant perturbations. *Bull. Amer. Astron. Soc.* **49**, no. 5, 220.01 (Abstract).
- LEVISON, H.F. AND DUNCAN, M.J. (1990) A search for proto-comets in the outer region of the solar system. *Astron. Jour.* **100**, 1669–1675.
- LILLER, W., CHAISSON, L.J., AND MARSDEN, B.G. (1977) 1977 UB. *IAU Circular No. 3151*.
- LILLER, W. AND CHAISSON, L.J., AND KOSAI, H. (1977) 1977 UB. *IAU Circular No. 3156*.
- LILLY, E., HSIEH, H., BAUER, J., STECKLOFF, J., JEVČÁK, P., WERYK, R., WAINSCOAT, R.J., AND SCHAMBEAU, C. (2021) No activity among 13 Centaurs discovered in the Pan-STARRS1 Detection Database. *Planetary Sci. Jour.* **2**, no. 4, 155.
- LUCIANO PEREIRA, C., EMILIO, M., AND BRAGA-RIBAS, F. (2019) “The search for rings in the stellar occultation by (2060) Chiron on November 18th 2018.” Paper given at *XLIII Reunião o Anual da Sociedade Astronômica Brasileira*, University os São Paulo — São Paulo, rasil, September 2019..
- LUU, J.X. AND JEWITT, D.C. (1990) Cometary activity in 2060 Chiron. *Bull. Amer. Astron. Soc.* **22**, 1088 (Abstract).
- LUU, J.X. AND JEWITT, D.C. (1990) Cometary activity in 2060 Chiron. *Astron. Jour.* **100**, 913–932.
- LUU, J.X. AND JEWITT, D.C. (1990) Chiron’s coma: a color-coded photograph. *Sky and Tel.* **80**, 119.
- LUU, J. AND ANNIS, J. (1991) (2060) Chiron. *IAU Circular No. 5211*.
- LUU, J.X. (1991) “Activity in distant comets.” Paper given at *International Conference on Asteroids, Comets, and Meteors, 1991*, Flagstaff, AZ, June 24–28.
- LUU, J.X. (1993) Cometary activity in distant comets—Chiron. *Pub. Astron. Soc. Pacific* **105**, 946–950.
- LUU, J.X. (1993) Spectral diversity among the nuclei of comets. *Icarus* **104**, 138–148.
- LUU, J. (1994) Comets disguised as asteroids. *Pub. Astron. Soc. Pacific* **106**, 425–435.
- LUU, J.X., JEWITT, D.C., AND CLOUTIS, E. (1994) Near-infrared spectroscopy of primitive solar system objects. *Icarus* **109**, 133–144.
- LUU, J.X. AND JEWITT, D.C. (1998) Optical and infrared reflectance spectrum of Kuiper Belt Object 1996TL66. *Astrophys. Jour. Lett.* **495**, L117.
- LUU, J.X., JEWITT, D.C., AND TRUJILLO, C. (2000) Water ice in 2060 Chiron and its implications for Centaur and Kuiper Belt Objects. *Astrophys. Jour.* **531**, L151–L154.
- MACH, K.D. AND SAMARASINHA, N.H. (2000) Investigations into the dust atmosphere of 2060 Chiron. *Bull. Amer. Astron. Soc.* **32**, 1032 (Abstract).
- MACLEAN, A. (1988) Lost moons of Saturn? *Sky and Tel.* **75**, 349 (letter to editor).
- MARAN, S.P. (1979) Is it an asteroid, a comet, or a moon? *Nat. Hist.* **88**, no. 1, 108–111.
- MARCIALIS, R.L. (1989) CCD observations of 2060 Chiron, 1984–1985. *Bull. Amer. Astron. Soc.* **19**, 965 (Abstract).
- MARCIALIS, R.L. AND BUS, S.J. (1991) The first Workshop on 2060 Chiron: What manner of beast is the Centaur? *Bull. Amer. Astron. Soc.* **23**, 1157 (Abstract).
- MARCIALIS, R.L. AND LARSON, S.M. (1993) Deep CCD imaging and photometry of 2060 Chiron during the 1992–1993 apparition. *Bull. Amer. Astron. Soc.* **25**, 1057 (Abstract).
- MARCIALIS, R.L. AND BURATTI, B.J. (1993) CCD photometry of 2060 Chiron in 1985 and 1991. *Icarus* **104**, 234–243.
- MARCIALIS, R.L., HUBBARD, W.B., HILL, R., BUS, S.J., ELLIOT, J.L., OLKIN, C., McDONALD, S., FOUST, J., SOPATA, L., BANDYOPADHYAY, R., MESEROLE, R., BUIE, M.W., SPENCER, J.R., WASSERMAN, L.H., MILLIS R., DUNHAM, E., BEICHMAN, C.A., JARRETT, T.H., YOUNG, J., FORD, C., AND HERTER, T. (1994) The 1993 Nov 07 occultation of Ch02 by 2060 Chiron. *Bull. Amer. Astron. Soc.* **26**, 1153 (Abstract).

- MARCIALIS, R. AND HILL, R. (1994) Chiron credit. *Sky and Tel.* **87**, 8 (Letter to Editor).
- MARZARI, F., FARINELLA, P., AND VANZANI, V. (1995) Are Trojan collisional families a source for short-period comets? *Astron. Astrophys.* **299**, 267–276.
- MARSDEN, B.G. (1994) Notice regarding designations and names of comets. *IAU Circular No. 6076*.
- MARSDEN, B.G. AND OFFUTT, W.B. (2000) Pinning down the orbits of transneptunian objects. *Bull. Amer. Astron. Soc.* **32**, 689 (Abstract).
- MARTON, G., KISS, C., FARKAS-TAKÁS, AND IGNÁCZ, B. (2017) Search for signatures of extended emission around dwarf planets on Hubble Space Telescope archival images. *Bull. Amer. Astron. Soc.* **49**, no. 5, 216.05 (Abstract).
- MARTON, G., KISS, C., MÜLLER, T.G., LELLOUCH, E., PÁL, A., MOLNÁR, L. (2017) K2 and Herschel/PACS light curve of the Centaur 2060 Chiron. *EPSC Abstracts* **11**, 213 (Abstract).
- MARX, ??? (1979) Neues von 1977 UB = Chiron. *Astr. und Raumfahrt* **1**, 30.
- MCCROSKY, R.E. AND MARSDEN, B.G. (1986) Astrometric observations of comets and asteroids and subsequent orbital investigations. *Reports of Planetary Astronomy—1985 NASA Technical Memorandum* ???, 105.
- MCDONALD, S.W., PERSON, M.J., BUS, S.J., AND ELLIOT, J.L. (1995) Occultation candidates for Triton, Charon, and Pluto–Charon. *Bull. Amer. Astron. Soc.* **27**, 1101 (Abstract).
- MCMILLAN, R.S., BRESSI, T.H., DESCOUR, A.S., GEHRELS, T., LARSEN, J.A., MONTANI, J.L., PERRY, M.L., READ, M.T., AND TUBBILOLO, A.F. (1998) Progress report on the 1.8-meter Spacewatch telescope. *Bull. Amer. Astron. Soc.* **30**, 1114 (Abstract).
- MEECH, K. (1989) The coma of 2060 Chiron. *Bull. Amer. Astron. Soc.* **21**, 933 (Abstract).
- MEECH, K., AND BELTON, M. (1989) (2060) Chiron. *IAU Circular No. 4770*, 1.
- MEECH, K. (1990) (2060) Chiron. *IAU Circular No. 4947*, 3.
- MEECH, K.J., AND BELTON, M.J.S. (1990) The atmosphere of 2060 Chiron. *Astron. Jour.* **100**, 1323–1338.
- MEECH, K.J. (1991) (2060) Chiron. *IAU Circular No. 5159*, 2.
- MEECH, K., BUIE, M.W., MULLER, B.E.A., AND BELTON, M.J.S. (1993) The coma and light curve of Chiron. *Bull. Amer. Astron. Soc.* **25**, no. 3, 1057 (Abstract).
- MEECH, K. (1994) HST observations of Chiron’s inner coma—a possible bound atmosphere? *Bull. Amer. Astron. Soc.* **26**, no. 3, 1152–1153 (Abstract).
- MEECH, K. (1997) Observational search for cometary aging processes. *NASA Technical Report CR-1997-207819*, ??? (Abstract).
- MEECH, K.J., BUIE, M.W., SAMARASINHA, N.H., MUELLER, B.E.A., AND BELTON, M.J.S. (1997) Observations of structures in the inner coma of Chiron with the HST Planetary Camera. *Astron. Jour.* **113**, 844–862.
- MEEUS, J. (1978) L’orbite de Chiron. *Ciel et Terre* **94**, 324.
- MILOGRADOV-TURIN, J. (1978) Novi član Sunčevog sistema. (New member of the solar system.) *Visiona* **26**, 1–2.
- MINK, D.J. AND STERN, S.A. (1990) Occultations of Space Telescope guide stars by 2060 Chiron: 1990–1995. *Bull. Amer. Astron. Soc.* **22**, no. 4, 1358 (Abstract).
- MINK, D.J. (1991) A search for stellar occultations by Uranus, Neptune, Pluto, and their satellites: 1990–1999. *Smithsonian Astrophysical Observatory Final Report, 1 Jan. 1989–31 Dec. 1990*.
- MINTON, D.A., HESSELBROCK, A., ANND BRISSET, J. (2018) Formation of Centaur rings from binary collapse. *Bull. Amer. Astron. Soc.* **50**, 219.06 (Abstract).
- MORRISON, D.P. AND CRUIKSHANK, D.P. (1981) “The outer solar system.” In *The new solar system* (Sky Publishing, Cambridge, MA), 167–176, 216.

- MUELLER, T.G. (2015) “Herschel Survey of the Trans-Neptunian population.” Paper given at *IAU General Assembly Meeting #29*, August, 2256607.
- MULHOLLAND, J.D. (1978) Pluto’s neighbor (Letter to editor). *Science* **201**, 867.
- NAKAMURA, T. AND YOSHIKAWA, M. (1993) Orbital evolution of giant comet-like objects. *Cel. Mech. and Dynam. Astron.* **57**, 113–121.
- NAPIER, W.M. (2015) Giant comets and mass extinctions of life. *Mon. Not. Roy. Astron. Soc.* **48**, 27–36.
- NEELY, J., TARKINGTON, E., AND DEAN, M. (1978) *Ephemeris of Chiron, 1890–2000*. (Phenomena Publications, Toronto, Canada), ??? pp.
- NEELY, J., TARKINGTON, E., POTTENGER, M., AND DEAN, M. (1980) *Ephemeris of Chiron, 1890–2000; with additional longitudes, 1686–1889*. (Phenomena Publications, Toronto, Canada), ??? pp.
- NIEMI, A. AND WEST, R.M. (1978) 1977 UB. *IAU Circular No. 3215*.
- OIKAWA, S. AND EVERHART, E. (1979) Past and future orbit of 1977 UB, object Chiron. *Astron. Jour.* **84**, 134–139.
- OLKIN, C.B., ELLIOT, J.L., DUNHAM, E.W., FORD, C., GILMORE, D.K., RANK, D.M., AND TEMI, P. (1994) Further analysis of the Ch08 occultation by 2060 Chiron using the KAO observations. *Bull. Amer. Astron. Soc.* **26**, no. 3, 1153 (Abstract).
- OLKIN, C.B., ELLIOT, J.L., DUNHAM, E.W., FORD, C., GILMORE, D.K., RANK, D.M., AND TEMI, P. (1995) “On the size of particles near the nucleus of 2060 Chiron.” In *Astronomical Society of the Pacific, Airborne Astronomy Symposium on the Galactic Ecosystem: From Gas to Stars to Dust (73)*, 333–336.
- OLSSON-STEEL, D. (1987) Planetary close encounters—probability distributions of resultant orbital elements and application to Hidalgo and Chiron. *Icarus* **69**, 51–69.
- ORTIZ, J.L., DUFFARD, R., PINILLA-ALONSO, N., ALVAREZ-CANDAL, A., SANTOS-SANZ, P., MORALES, N., FERNÁNDEZ-VALENZUELA, E., LICANDRO, J., CAMPO BAGATIN, A., AND THIROUIN, A. (2015) Possible ring material around centaur (2060) Chiron. *Astron. Astrophys.* **576**, A18–29.
- ORTIZ, J.L., DUFFARD, R., PINILLA-ALONSO, N., ALVAREZ-CANDAL, A., SANTOS-SANZ, P., MORALES, N., FERNÁNDEZ-VALENZUELA, E., LICANDRO, J., CAMPO BAGATIN, A., AND THIROUIN, A. (2015) Chiron, another Centaur with ring material. *EPSC Abstracts* **10**, 230 (Abstract).
- ORTIZ, J.L., SANTOS-SANZ, P., SICARDY, B., BENEDETTI-ROSSI, G., BÉRARD, D., MORALES, N., DUFFARD, R., BRAGA-RIBAS, F., HOPP, U., RIES, C., NASCIMBENI, V., MARZARI, F., GRANATA, V., PÁL, A., KISS, C., PRIBULLA, T., KOMŽÍK, R., HORNOCH, K., PRAVEC, P., BACCI, P., MAESTRIPIERI, M., NERLI, L., MAZZEI, L., BACHINI, M., MARTINELLI, F., SUCCI, G., CIABATTARI, F., MIKUZ, H., CARBOGNANI, A., GAHRKEN, B., MOTTOLA, S., HELLMICH, S., ROMMEL, F.L., FERNÁNDEZ-VALENZUELA, E., CAMPO BAGATIN, A., CIKOTA, S., CIKOTA, A., LECACHEUX, J., VIEIRA-MARTINS, R., CAMARGO, J.I.B., ASSAFIN, M., COLAS, F., BEHREND, R., DESMARS, J., MEZA, E., ALVAREZ-CANDAL, A., BEISKER, W., GOMES-JUNIOR, A.R., MORGADO, B.E., ROQUES, F., VACHIER, F., BERTHIER, J., MUELLER, T.G., MADIEDO, J.M., UNSALAN, O., SONBAS, E., KARAMAN, N., ERECE, O., KOSEOGLU, D.T., OZISIK, T., KALKAN, S., GUNAY, Y., NIAEL, M.S., SATIR, O., YESILYAPRAK, C., PUSKULLU, C., KABAS, A., DEMIRCAN, O., ALIKAKOS, J., CHARMANDARIS, V., LETO, G., OHLERT, J., CHRISTILLE, J.M., SZAKÁTS, R., TAKÁCSNÉ FARKAS, A., VARGA-VEREBÉLYI, E., MARTON, G., MARCINIAK, A., BARTCZAK, P., SANTANA-ROS, T., BUTKIEWICZ-BAK, M., DUDZIŃSKI, G., ALÍ-LAGOVA, V., GAZEAS, K., TZOUGANATOS, L., PASCHALIS, N., TSAMIS, V., SÁNCHEZ-LAVEGA, A., PÉREZ-HOYOS, S., HUESO, R., GUIRADO, J.C., PERIS, V., AND IGLESIAS-MARZOA, R. (2017) The size, shape, density and ring of the dwarf planet Haumea from a stellar occultation. *Nature* **550**, no. 7675, 219–223.
- PARKER, J.W., STERN, S.A., FESTOU, M.C., AND A’HEARN, M.F., AND WEINTRAUB, D.A. (1997) The first UV spectroscopic observation of Chiron in outburst. *Lunar & Planetary Sci.* **XXVIII**, 75 (Abstract).

- PARKER, J.W., STERN, S.A., A'HEARN, M.F., BERTAUX, J.L., FELDMAN, P.D., FESTOU, M.C., SCHULZ, R., AND WEINTRAUB, D.A. (1996) HST/FOC UV observations of Chiron and Wirtanen. *Bull. Amer. Astron. Soc.* **28**, 1083–1084 (Abstract).
- PARKER, J.W., STERN, S.A., FESTOU, M.C., AND A'HEARN, M.F. (1997) Ultraviolet observations of Chiron with the HST/FOS: examining a Centaur's gray matter. *Astron. Jour.* **113**, 1899–1908.
- PARKER, J. (2000) "Chiron." In *Encyclopedia of Astronomy and Astrophysics*, ed. P. Murdin (Bristol, Institute of Physics Publishing), pp. 2149.
- PEIXINHO, N., THIROUIN, A., TEGLER, S.C., DI SISTO, R., DELSANTI, A., GUILBERT-LEPOUTRE, A., AND BAUER, J.G. (2020) "From Centaurs to Comets — 40 years." In *The Trans-Neptunian Solar System* (Dina Prialnik, Maria Antoinetta Barucci, and Leslie Young, eds.), 307–329.
- PERSON, M.J., BUS, S.J., WASSERMAN, L.H., AND ELLIOT, J.L. (1996) Chiron stellar occultation candidates: 1996–2000 *Astron. Jour.* **112**, 1683–1689.
- PEESCHKE, S.B., GRUN, E., AND THE ISOPHOT COMET TEAM (1997) Comets with ISOPHOT. *Bull. Amer. Astron. Soc.* **29**, 1029–1030 (Abstract).
- PEESCHKE, S.B., GRUN, E., AND THE ISOPHOT COMET TEAM (1997) Properties of cometary comae, deduced with ISOPHOT. *Bull. Amer. Astron. Soc.* **29**, 1260 (Abstract).
- PEESCHKE, S.B., GRUN, E., STICKEL, M., LISSE, C.M., AND HEINRICHSEN, I. (1999) Cometary comae with ISOPHOT. *Bull. Amer. Astron. Soc.* **31**, no. 4, 1128 (Abstract).
- PRIALNIK, D. (1997) Crystallization and porosity as clues to distant activity of comets. *Bull. Amer. Astron. Soc.* **29**, 1032 (Abstract).
- PRIALNIK, D., BROSCHE, N., AND IANOVICI, D. (1995) Modelling the activity of 2060 Chiron. *Mon. Not. Roy. Astron. Soc.* **276**, 1148–1154.
- RAUER, H., BIVER, N., CROVISIER, J., BOCKLEE-MORVAN, D., COLOM, P., DESPOIS, D., IP, W.-H., JORDA, L., LELLOUCH, E., PAUBERT, G., AND THOMAS, N. (1997) Millimetric and optical observations of Chiron. *Planetary and Spa. Sci.* **45**, 799–805.
- RIDPATH, I. (1977) The mini-planet. *New Scientist* **76**, 406–407.
- ROMANISHIN, W., TEGLER, S.C., LEVINE, J. AND BUTLER, N. (1997) *BVR* photometry of Centaur objects 1995 GO, 1993 HA2, and 5145 Pholus. *Astron. Jour.* **113**, 1893–1898.
- ROMON-MARTIN, J., BARUCCI, M.A., DE BERGH, C., AND PEIXINHO, N. (2001) Spectroscopy of Centaurs Asbolus and Chiron: observations over a full rotational period. *Bull. Amer. Astron. Soc.* **33**, 1034 (Abstract).
- ROMON-MARTIN, J., DELAHODDE, C., BARUCCI, M.A., DEBERGH, C., AND PEIXINHO, N. (2003) Photometric and spectroscopic observations of (2060) Chiron at the ESO Very Large Telescope. *Astron. Astrophys.* **400**, 369–373.
- RUPRECHT, J.D., BOSH, A.S., PERSON, M.J., BIANCO, F.B., FULTON, B.J., GULBIS, A.A., BUS, S.J., AND ZANGARI, A.M. (2013) 29 November 2011 stellar occultation by 2060 Chiron: symmetric jet-like features. *Bull. Amer. Astron. Soc.* **45**, 414.07 (Abstract).
- RUPRECHT, J.D., BOSH, A.S., PERSON, M.J., BIANCO, F.B., FULTON, B.J., GULBIS, A.A., BUS, S.J., AND ZANGARI, A.M. (2015) 29 November 2011 stellar occultation by 2060 Chiron: symmetric jet-like features. *Icarus* **252**, 271–276.
- SANTOS-SANZ, P., MORALES, N., FERNÁNDEZ-VALENZUELA, E., ORTIZ, J.L., SICARDY, B., BENEDETTI-ROSSI, G., VARA-LUBIANO, M., ASSAFIN, M., LUANE ROMMEL, F., PEREIRA, C.L., BRAGA-RIBAS, F., SOUAMI, D., DUFFARD, R., VIEIRA MARTINS, R., ORGANERO, F., HERNÁNDEZ, L.A., FONSECA, F., IGLESIAS MARZOA, R., LAMADRID, J.L., AND ALONSO, S. (2020) The January 11th, 2019 stellar occultation by the elongated centaur Bienor. *EPSC Abstracts* **14**, 784 (Abstract).

- SANTOS-SANZ, P., ORTIZ, J.L., SICARDY, B., BENEDETTI-ROSSI, G., MORALES, N., FERNÁNDEZ-VALENZUELA, E., DUFFARD, R., IGLESIAS-MARZOA, R., LAMADRID, J.L., MAÍCAS, N., PÉREZ, L., GAZEAS, K., GUIRADO, J.C., PERIS, V., BALLESTEROS, F.J., ORGANERO, F., ANA-HERNÁNDEZ, L., FONSECA, F., ALVAREZ-CANDAL, A., JIMÉNEZ-TEJA, Y., VARA-LUBIANO, M., BRAGA-RIBAS, F., CAMARGO, J.I.B., DESMARS, J., ASSAFIN, M., VIEIRA-MARTINS, R., ALIKAKOS, J., BOUTET, M., BRETTON, M., CARBOGNANI, A., CHARMANDARIS, V., CIABATTARI, F., DELINCAK, P., FUAMBUENA LEIVA, A., GONZÁLEZ, H., HAYMES, T., HELLMICH, S., HORBOWICZ, J., JENNINGS, M., KATTENTIDT, B., KISS, Cs, KOMŽÍK, R., LECACHEUX, J., MARCINIAK, A., MOINDROT, S., MOTTOLA, S., PAL, A., PASCHALIS, N., PASTOR, S., PERELLO, C., PRIBULLA, T., RATINAUD, C., REYES, J.A., SANCHEZ, J., SCHNABEL, C., SELVA, A., SIGNORET, F., SONBAS, E., AND ALÍ-LAGO, V. (2021) The 2017 May 20<sup>th</sup> stellar occultation by the elongated centaur (95626) 2002 GZ32. *Mon. Not. Roy. Astron. Soc.* **501**, no. 4, 6062–6075.
- SANZOVO, G.C., SANZOVO, D.T., DE ALMEIDA, A.A., AND BOCZKO, R. (2004) Correlation between total visual magnitudes and the outgassing rates of CO and dust in (2060) Chiron beyond 8 AU. *35th COSPAR Scientific Assembly. 18–25 July 2004, Paris, France* p. **937**, (Abstract).
- SARCANDER, M. (1983) Chiron—Ein einzigartiges mitglied unseres sonnensystems. *Sterne und Weltram ???*, 329.
- SCHOLL, H. (1978) History and evolution of Chiron’s orbit. *Bull. Amer. Astron. Soc.* **11**, 801 (Abstract).
- SCHOLL, H. (1979) History and evolution of Chiron’s orbit. *Icarus* **40**, 345–349.
- SCHOLL, H. (1980) Ist das Objekt (2060) Chiron ein kleiner Planet oder ein Komet? *Mitt. Astron. Gesell.* **48**, 91.
- SCHOLL, H. (1981) Dynamics of the asteroids. *Mem. Soc. Ital. Astron.* **52**, 515–522.
- SCHWARTZ, G., MCCROSKY, R.E., SHAO, C.-V., MULHOLLAND, J.D., SHELUS, P.J., AND DRITSCHEL, M.A. (1977) 1977 UB. *IAU Circular No. 3140*.
- SEKIGUCHI, T., WATANABE, J., AND BOICE, D.C. (1998) The dusty carbon monoxide coma of (2060) P/Chiron. *Bull. Amer. Astron. Soc.* **30**, 1114 (Abstract).
- SFAIR, R., ARAUJO, R., AND WINTER, O.C. (2017) Chariklo vs Chiron: the stability of the rings due to planetary close encounters. *Bull. Amer. Astron. Soc.* **49**, no. 5, 216.13 (Abstract).
- SFAIR, R., ARAUJO, R., AND WINTER, O.C. (2018) Rings under close encounters with the giant planets: Chariklo vs Chiron. *Bull. Amer. Astron. Soc.* **50**, 315.05. (Abstract).
- SICARDY, B., BUIE, M.W., BENEDETTI-ROSSI, G., BRAGA-RIBAS, F., BUENO DE CAMARGO, J.I., DUFFARD, R., ORTIZ, J.L., GRATADOUR, D., AND DUMAS, C. (2015) Constraints on Chariklo’s rings from HST and VLT observations. *Bull. Amer. Astron. Soc.* **47**, no. 5, 104.01 (Abstract).
- SICARDY, B., LEIVA, R., ORTIZ, J.L., SANZ, P.S., RENNER, S., EL MOUTAMID, M., BERARD, D., DESMARS, J., MEZA, E., ROSSI, G., BRAGA-RIBAS, F., CAMARGO, J., VIEIRA-MARTINS, R., MORALES, N., DUFFARD, R., COLAS, F., MAQUET, L., BOULEY, S., BATH, K.L., BEISKER, W., DAUVERGE, J.L., AND KRETLOW, M. (2017) Dynamics of rings around elongated bodies. *Bull. Amer. Astron. Soc.* **49**, no. 5, 501.01 (Abstract).
- SICARDY, B., RENNER, S., LEIVA, R., ROQUES, F., EL MOUTAMID, M.E, SANTOS-SANZ, P., AND DESMARS, J. (2020) “The dynamics of rings around Centaurs and Trans-Neptunian objects.” In *The Trans-Neptunian Solar System* (Dina Prialnik, Maria Antoinetta Barucci, and Leslie Young, eds.), 249–269.
- SICKAFOOSE, A.A., EMERY, J.P., BOSH, A.S., PERSON, M.J., ZULUAGA, C., RUPRECHT, J.D., BIANCO, F., BUS, S.J., AND ZANGARI, A.M. (2016) Multi-wavelength analysis of a 2011 stellar occultation by Chiron. *Bull. Amer. Astron. Soc.* **48**, no. 7, 8 (Abstract).



- SICKAFOOSE, A.A., BOSH, A.S., EMERY, J.P., PERSON, M.J., ZULUAGA, C.A., WOMACK, M., RUPRECHT, J.D., BIANCO, F.B., AND ZANGARI, A.M. (2020) Characterization of material around the centaur (2060) Chiron from a visible and near-infrared stellar occultation in 2011. *Mon. Not. Roy. Astron. Soc.* **491**, no. 3, 3643–3654.
- SILVA, A.M. AND CELLONE, S. (1998) “CCD observations of Chiron 2060.” Paper given at *IX Latin American Regional IAU Meeting, “Focal Points in Latin American Astronomy”, held in Tonantzintla, Mexico. Eds: A. Aguilar, A. Carraminana*, Nov 9-13, 1998.
- SILVA, A.M. AND CELLONE, S. (2001) Cometary activity in 2060 Chiron at minimum brightness. *Planetary and Spa. Sci.* **49**, 1325–1330.
- SINGER, K.N., STERN, S.A., ELLIOT, J., KARIMI, R.R., STERN, D., CHIMELEWSKI, A.B., FONG, M.J., ANDREWS, J., BOTTKER, W.F., OLKIN, C.B., PROPSTER, P., AND THURMAN, S.W. (2021) A new spacecraft mission concept combining the first exploration of the Centaurs and an astrophysical space telescope for the outer solar system. *Planetary and Spa. Sci.* **205**, 105290.
- SMITH, R.C. (1978) Origin of slow moving object Kowal. *Nature* **229**, 230.
- SMITH, R.C. (1980) Did Chiron come from the asteroid belt? *The Observatory* **100**, 67–68.
- SOLC, M., VANYSEK, V., AND GRUEN, E. (1994) Strategy for infrared photometry of comets with ISO. *Meteoritics* **29**, 536 (Abstract).
- SOUZA-FELICIANO, A.C., ALVAREZ-CANDAL, A., AND JIMÉNEZ-TEJA, Y. (2018) The Wavelet theory applied to the study of spectra of Trans-Neptunian objects. *Bull. Amer. Astron. Soc.* **50**, 311.10 (Abstract).
- SOUZA-FELICIANO, A.C., ALVAREZ-CANDAL, A., AND JIMÉNEZ-TEJA, Y. (2018) The Wavelet theory applied to the study of spectra of Trans-Neptunian objects. *Astron. Astrophys.* **614**, A92.
- SPENCER, J.R., LEBOSKY, L.A., AND SYKES, M.V. (1989) Systematic biases in radiometric diameter determinations. *Icarus* **78**, 337–354.
- STANSBERRY, J.A. AND DAVIS, D.R. (2000) Devolatilization of Kuiper Belt Objects through deep, impact-generated fracture systems. *Bull. Amer. Astron. Soc.* **32**, 1030 (Abstract).
- STANSBERRY, J., GRUNDY, W., BROWN, M., CRUIKSHANK, D., SPENCER, J., TRILLING, D., AND MARGOT, J.L. (2008) “Physical properties of Kuiper Belt and Centaur objects: constraints from Spitzer Space Telescope.” In *The solar system beyond Neptune* (M.A. Barucci, H. Boehnhardt, D.P. Cruikshank, and A. Morbidelli, eds.), University of Arizona Press, Tucson 161–179.
- STERN, S.A. (1989) Implications of volatile release from object 2060 Chiron. *Pub. Astron. Soc. Pacific* **101**, 126–132.
- STERN, S.A., JACKSON A.A., AND BOICE, D.C. (1994) Numerical simulations of particle orbits around 2060 Chiron. *Astron. Jour.* **107**, 765–771.
- STERN, S.A. (1994) Chiron: interloper from the Kuiper Disk? *Astronomy* **22**, no. 8, 26.
- STERN, S.A. (1994) 2060 Chiron: an emerging view of an active world. *Bull. Amer. Astron. Soc.* **26**, no. 3, 1152.
- STERN, S.A. (1995) The Chiron Perihelion Campaign. *Sky and Tel.* **89**, no. 3, 32–34.
- STERN, S.A. AND CAMPINS, H. (1996) Chiron and the Centaurs: escapees from the Kuiper Belt. *Nature* **382**, 507–510.
- STERN, S.A. (1989) “Constraints on the origin of object 2060 Chiron.” Paper given at *International Symposium on Asteroids, Comets, and Meteorites*, Helsinki, Finland.
- STERN, S.A. (1995) Solar system—Chiron illuminated. *Nature* **373**, 23–24.
- STERN, S.A., PARKER, J.W., BOWELL, E., BUIE, M.W., BUS, J.S., FESTOU, M.C., FLYNN, B., A’HEARN, M.F., TRAFTON, L.M., AND WEINTRAUB, D. (1996) HST observations of ultraviolet reflectance properties of outer solar system objects: Triton and Chiron. *Bull. Amer. Astron. Soc.* **28**, 870–871 (Abstract).

- STERN, S.A., CUNNINGHAM, N.J., AND SCHINDHELM, E. (2014) First ultraviolet reflectance measurements of several Kuiper Belt Objects, Kuiper Belt Object satellites, and new ultraviolet measurements of a Centaur. *Astron. Jour.* **147**, no. 5, 102.
- STERN, S.A., SINGER, K.N., NOLL, K., VERBISCHER, A., LEVISON, H.F., BOTTKKE, W.F., AND STERN, D. (2018) Exploring the Kuiper Belt close to home: a mission to explore Centaurs. *Bull. Amer. Astron. Soc.* **50**, 305.10. (Abstract).
- STEVENSON, D.J. (1993) Volatile loss from accreting icy protoplanets. *Lunar & Planetary Sci.* **XXIV**, 1355–1356 (Abstract).
- STROH, M. (1992) Son of Chiron: now showing in space. *Sci. News* **141**, 87.
- SYKES, M.V. AND WEISSMAN, P.R. (1991) Are extreme seasonal variations controlling Chiron’s activity? *Bull. Amer. Astron. Soc.* **23**, no. 3, 1158–1159 (Abstract).
- TEGLER, S., ROMANISHIN, W., LEVINE, J., AND BUTLER, N. (1996) B, V, and R band photometry of trans-Neptunian objects and Centaur objects. *Bull. Amer. Astron. Soc.* **28**, 1081 (Abstract).
- SYKES, M.V., AND WALKER, R.G. (1991) Constraints on the diameter and albedo of 2060 Chiron. *Science* **251**, 777–780.
- SYKES, M.V., CUTRI, R.M., FOWLER, J.W., THOLEN, D.J., AND SKRUTSKIE, M.F. (2000) Comets in the 2MASS Second Incremental Data Release. *Bull. Amer. Astron. Soc.* **32**, 1080 (Abstract).
- TEGLER, S., ROMANISHIN, W., LEVINE, J., AND BUTLER, N. (1996) B, V, and R band photometry of Trans-Neptunian Objects and Centaur Objects. *Bull. Amer. Astron. Soc.* **28**, 1081 (Abstract).
- THOLEN, D.J., HARTMANN, W.K., AND CRUIKSHANK, D.P. (1988) (2060) Chiron. *IAU Circular No. 4554*, 2.
- THOLEN, D.J. (1990) Asteroid news notes. *Minor Planet Bull.* **16**, 39.
- THOLEN, D.J. (1991) Visual and infrared investigations of planet-crossing asteroids and outer solar system objects. *Reports of Planetary Astronomy—1991 NASA Technical Memorandum 4329*, 127–128 (Abstract).
- THOMAS, N. (1996) The thermal emission of Kuiper Belt Objects. *Bull. Amer. Astron. Soc.* **28**, 1081 (Abstract).
- THOMAS, N., FITZSIMMONS, A., AND IP, W.H. (1997) The thermal emission of Kuiper Belt objects. *Planetary and Spa. Sci.* **45**, 295–309.
- TOZZI, G.-P., BAGNULO, S., BARUCCI, M.A., BELSKAYA, I.N., FORNASIER, S., AND MOTTOLA, S. (2012) Search for coma in Centaurs (2060) Chiron, (5145) Pholus, and (10199) Chariklo. *Bull. Amer. Astron. Soc.* **44**, 310.15 (Abstract).
- VANOUPINES, P. AND NIEUWENHUYSEIN, P. (1995) “Online information sources about astronomy: the Chiron case.” In *ed. D.I. Raïtt*, ed. Proceedings of the 19th International Online Information Meeting, London, December 1995 (311–325), pp. .
- VANYSEK, V. (1993) What secrets are hiding the minor planets Chiron and Pholus? *Říše hvězd* **74**, no. 2, 30–31.
- VASHKOVIAK, M.A. (1981) Evolution of asteroid orbits different from those in the main belt. *Kosmicheskie Issledovaniia* **19**, 528–538.
- VOLK, K. (2020) Active Centaurs in context: understanding future members of the Jupiter family comets. *Bull. Amer. Astron. Soc.* **52**, no. 6, 112.02 (Abstract).
- WALLERSTEIN, G. (1978) Letter to editor. *SandT* **55**, 195.
- WALLENTINSEN, D. (1978) On the possible diameter of Chiron. *Minor Planet Bull.* **5**, 30.
- WALLENTINSEN, D. (1980) Chiron: minor object of major interest. *Plan. Astron.* **1**, 9–10, 27.
- WEIBEL, W.M., KAULA, W.M., AND NEWMAN, W.I. (1990) A computer search for stable orbits between Jupiter and Saturn. *Icarus* **83**, 382–390.

- WEINTRAUB, D.A., TEGLER, S.C., AND ROMANISHIN, W. (1997) Visible and near-infrared photometry of the Centaur objects 1995 GO and 5145 Pholus. *Icarus* **128**, 456–463.
- WEISSMAN, P.R. (1993) Comets at the solar system’s edge. *Sky and Tel.* **85**, no. 1, 26–29.
- WESOŁOWSKI, M. AND GRONKOWSKI, P. (2018) A new simple model of comets-like activity of Centaurs. *Earth, Moon, and Planets* **121**, no. 3, 105–125.
- WEST, R.M. (1990) (2060) Chiron. *IAU Circular No. 4947*.
- WEST, R.M. (1990) (2060) Chiron. *IAU Circular No. 4970, 1*.
- WEST, R.M. (1990) Chiron’s blue coma. *The ESO Messenger* **60**, 57–59.
- WEST, R.M. (1991) A photometric study of (2060) Chiron and its coma. *Astron. Astrophys.* **241**, 635–645.
- WEST, R.M. (1992) Another Chiron-type object. *ESO Messenger* **67**, 34–35.
- WILLIAMS, G.T., MARSDEN, B.G., AND KOWAL, C.T. (1977) 1977 UB. *IAU Circular No. 3145*.
- WINTER, F.H. AND VAN DER LINDEN, R. (2020) Looking back. *Aerospace America* **58**, no. 1, 63.
- WOMACK, M. (1994) (2060) Chiron. *IAU Circular No. 5957, 2*.
- WOMACK, M. AND STERN, S.A. (1994) Searches for CO and HCN in the coma of 2060 Chiron. *Bull. Amer. Astron. Soc.* **26**, no. 3, 1153. (Abstract).
- WOMACK, M. AND STERN, S.A. (1995) (2060) Chiron = Comet 95P/Chiron. *IAU Circular No. 6193, 1*.
- WOMACK, M. AND STERN, S.A. (1995) Detection of carbon monoxide in 2060 Chiron. *Bull. Amer. Astron. Soc.* **27**, 1143. (Abstract).
- WOMACK, M. AND STERN, S.A. (1997) Observations of carbon monoxide in (2060) Chiron. *Lunar & Planetary Sci.* **XXVIII**, 575 (Abstract).
- WOMACK, M. AND STERN, S.A. (1999) The detection of carbon monoxide gas emission in (2060) Chiron. *Astronomicheskii Vestnik* **33**, 187–191.
- WOMACK, M. (2000) Cometary activity beyond 4 AU. *Bull. Amer. Astron. Soc.* **32**, 1076 (Abstract).
- WOMACK, M., SARID, G., AND WIERZCHOS, K. (2016) Gaseous activity of distant comets. *Bull. Amer. Astron. Soc.* **48**, no. 7, 204 (Abstract).
- WOMACK, M., SARID, G., AND WIERZCHOS, K. (2017) CO in distantly active comets. *Pub. Astron. Soc. Pacific* **129**, no. 973, 031001.
- WOMACK, M. (2020) Observations of active Centaurs and distant comets (Invited Speaker). *Bull. Amer. Astron. Soc.* **52**, no. 6, 112.04 (Abstract).
- WOOD, C.A. AND MENDELL, W.W. (1982) Comets, asteroids, and meteorites: a new paradigm if interrelations. *Lunar & Planetary Sci.* **XIII**, 877–878 (Abstract).
- WOOD, C.A., HORNER, J., HINSE, T.C., AND MARSDEN, S.C. (2018) The dynamical history of 2060 Chiron and its proposed ring system. *Astron. Jour.* **155**, no. 1, 2.
- WOOD, J., HORNER, J., HINSE, T.C., AND MARSDEN, S.C. (2018) Measuring the severity of close encounters between ringed small bodies and planets. *Mon. Not. Roy. Astron. Soc.* **480**, no. 3, 4183–4198.
- WOOD, J., HORNER, J., HINSE, T., AND MARSDEN, S.C. (2018) Finding a lower bound on the ring limit for planetary close encounters with ringed Centaurs. *Bull. Amer. Astron. Soc.* **50**, 305.07 (Abstract).
- YABUSHITA, S. (1993) Thermal evolution of cometary nuclei by radioactive heating and possible formation of organic chemicals. *Mon. Not. Roy. Astron. Soc.* **260**, 819–825.
- ZAPPALÀ, V. (1978) Chiron: cometa, asteroide o decimo pianeta? *Orione* **1**, 49.
- ZELLNER, B., THIRUNAGARI, A., AND BENDER, D. (1985) The large-scale structure of the asteroid belt. *Icarus* **62**, 505–511.
- ZIOLKOWSKI, K. (1992) Chiron—an unusual asteroid or a big comet? *Urania* **63**, no. 3, 71–78.

- (1978) Object 1977 UB. *Kometnyj Tsirk.* 220.
- (1978) 1977 UB: 2060 Chiron. *Yamamoto Cir.* 1867.
- (1978) 1977 UB: 2060 Chiron. *Yamamoto Cir.* 1868.
- (1978) 1977 UB: 2060 Chiron. *Yamamoto Cir.* 1869.
- (1978) 1977 UB: 2060 Chiron. *Yamamoto Cir.* 1870.
- (1978) 1977 UB: 2060 Chiron. *Yamamoto Cir.* 1871.
- (1978) 1977 UB: 2060 Chiron. *Yamamoto Cir.* 1872.
- (1978) 1977 UB (2060 Chiron). *Yamamoto Cir.* 1873.
- (1978) 2060 Chiron. *Sky and Tel.* **55**, 106.
- (1978) 2060 Chiron. *Sky and Tel.* **56**, 5.
- (1978) Chiron a new planet in the solar system. *ESO Messenger* **12**, 6.
- (1978) 1977 UB (2060 Chiron). *Brit. Astron. Assoc. Cir.* 583.
- (1988) Past and future orbit of Chiron. *Sky and Tel.* **57**, 247.
- (1988) Chiron brightens. *Sky and Tel.* **75**, no. 4, 358.
- (1988) 2060 Chiron update. *Sky and Tel.* **75**, no. 6, 583.
- (1989) 2060 Chiron. *Brit. Astron. Assoc. Cir.* **687**, .
- (1989) 2060 Chiron = Comet Kowal? *Sky and Tel.* **78**, 14.
- (1989) Chiron becomes a comet. *Astronomy* **17**, no. 9, 14.
- (1991) Chiron: cyanogen gas emission detected. *Astronomy* **19**, no. 5, 22.
- (1991) Chiron still a puzzle. *Jour. Brit. Astron. Assoc.* **101**, no. 3, 136.
- (199???) Jets on Chiron. *Astronomy* ???, no. ???, 15.
- (1995) Chiron: smaller but brighter? *Astronomy* **23**, no. 7, 26.
- (EDITORS.) (2015) News Note: Possible ring system found around a minor planet. *Mon. Not. Astron. Soc. South Africa* **vol.74**, no. 4, 53–55.
- ??? (1990) (2060 Chiron). *Yamamoto Obs. Cir.* 21432.
- ??? (1991) (2060 Chiron). *Yamamoto Obs. Cir.* 21602.
- ??? (1993) (2060 Chiron). *Yamamoto Obs. Cir.* 22152.
- ??? (1995) (2060 Chiron) = Comet 95P/Chiron. *Yamamoto Obs. Cir.* 22442.

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