

## 1. PUBBLICAZIONI SU RIVISTE NAZIONALI E SU ATTI DI CONVEGNI

- 1) Colangeli, L., Blanco, A., Borghesi, A., Bussoletti, E., Fonti, S., Orofino, V.: "Componenti delle polveri cosmiche: risultati sperimentali in laboratorio e modelli di simulazione di involucri circumstellari", in *Proceedings of the third Cosmic-Physics National Conference*, C. Castagnoli Editor, Editrice Compositori, Bologna (Italy), 125-137 (1986).
- 2) Blanco, A., Borghesi, A., Bussoletti, E., Colangeli, L., Fonti, S., Orofino, V.: "Some results about laboratory dust analysis in the FIR range", in *A Space-born Sub-millimeter Astronomy Mission*, N. Longdon Editor, ESA SP-260, 141-146 (1986).
- 3) Blanco, A., Borghesi, A., Fonti, S., Orofino, V., Bussoletti, E., Colangeli, L.: "Laboratory amorphous carbon: a possible analogue of cometary dust", in *The diversity and similarity of comets*, E.J. Rolfe and B. Battrick Editors, ESA SP-278, 677-679 (1987).
- 4) Bussoletti, E., Colangeli, L., Orofino, V.: "Solid carbon in space", in *Experiments on cosmic dust analogues*, E. Bussoletti, C. Fusco and G. Longo Editors, Kluwer Academic Publishers, Dordrecht (Holland), 63-73 (1988).
- 5) Blanco, A., Bussoletti, E., Colangeli, L., Fonti, S., Orofino, V.: "Experimental evidences for HAC and PAHs soup in space", in *Experiments on cosmic dust analogues*, E. Bussoletti, C. Fusco and G. Longo Editors, Kluwer Academic Publishers, Dordrecht (Holland), 137-143 (1988).
- 6) Blanco, A., Borghesi, A., Bussoletti, E., Colangeli, L., Fonti, S., Orofino, V.: "Amorphous carbon and silicon carbide around carbon stars", in *Experiments on cosmic dust analogues*, E. Bussoletti, C. Fusco and G. Longo Editors, Kluwer Academic Publishers, Dordrecht (Holland), 167-173 (1988).
- 7) Blanco, A., Borghesi, A., Fonti, S., Orofino, V., Bussoletti, E., Colangeli, L.: "Temperature dependence of PAH molecules absorption bands", in *Dust in the universe*, M.E. Bailey and D. A. Williams Editors, Cambridge University Press, Cambridge (England), 287-290 (1988).
- 8) Blanco, A., Borghesi, A., Bussoletti, E., Colangeli, L., Fonti, S., Lugara', M., Orofino, V., Scamarcio, G.: "Raman properties of various carbonaceous materials and their astrophysical implications", in *Interstellar dust: Contributed Papers*, L. J. Allamandola and A.G.G.M. Tielens Editors, NASA Science Publication, NASA CP-3036, 149-150 (1989).
- 9) Blanco, A., Borghesi, A., Bussoletti, E., Colangeli, L., Fonti, S., Gumlich, H.E., Jung, C., Orofino, V., Schwehm, G.: "VUV-visible measurements on different samples of amorphous carbon", in *Interstellar dust: Contributed papers*, L.J. Allamandola and A.G.G.M. Tielens Editors, NASA CP-3036, 363-368 (1989).
- 10) Blanco A., Borghesi A., Bussoletti E., Colangeli L., Fonti S., Orofino V.: "IR emission from circumstellar envelopes of C-rich stars" in *Interstellar dust: Contributed Papers*, L. J. Allamandola and A.G.G.M. Tielens Editors, NASA CP-3036, 505-506 (1989).
- 11) Colangeli, L., Schwehm, G., Bussoletti, E., Blanco, A., Borghesi, A., Fonti, S., Orofino, V.: "Experimental evidences for amorphous carbon grains in comets", in *Interstellar dust: Contributed papers*, L.J. Allamandola and A.G.G.M. Tielens Editors, NASA CP-3036, 437-442 (1989).
- 12) Colangeli, L., Schwehm, G., Bussoletti, E., Fonti, S., Blanco, A., Orofino, V.: "The 'unidentified IR bands' in laboratory, in interstellar medium and in comets", in *Proc. of ESLAB Symposium #. 22* (Salamanca), ESA SP-290, 49-53 (1989).
- 13) Blanco, A., Bussoletti, E., Colangeli, L., Fonti, S., Fusco, C., Mennella, V., Orofino, V., Vittone, A.: "Carbonaceous solid materials: from laboratory to space", in *Dusty objects in the universe*, E. Bussoletti and A. Vittone Editors, Kluwer Academic Publishers, Dordrecht (Holland), 1-8 (1990).
- 14) Blanco, A., Borghesi, A., Orofino, V., Bussoletti, E., Fonti, S., Colangeli, L.: "The unidentified infrared bands and space observations with ISO", *Mem. S.A.It.*, 61, 41 (1990).
- 15) Orofino, V.: "Amorphous carbon grains in IRC +10216", *Mem. S.A.It.*, 61, 55 (1990).

- 16) Blanco, A., Orofino, V., Bussoletti, E., Fonti, S., Colangeli, L., Stephens, J.R.: "Laboratory spectra of amorphous and crystalline olivine: an application to comet Halley IR spectrum", in *Origin and evolution of interplanetary dust*, A.C. Lvasseur-Regourd and H. Hasegawa Editors, Kluwer Academic Publishers, Dordrecht (Holland), 125-128 (1991).
- 17) Blanco A., Fonti S., Orofino V.: "Silicon carbide grains in cometary dust ?", in *Astronomical infrared spectroscopy: future observational directions*, S. Kwok Editor, A.S.P. Conference Series vol. 41, 47-48 (1993).
- 18) Blanco A., Borghesi A., Fonti S., Orofino V.: "Nature of the dust in the envelopes of some carbon-rich IRAS sources", in *Astronomical infrared spectroscopy: future observational directions*, S. Kwok Editor, A.S.P. Conference Series vol. 41, 121-122 (1993).
- 19) Muci, A.M., Blanco, A., Fonti, S., Orofino, V.: "Amorphous carbon grains and the circumstellar extinction around c-rich objects" in *Molecules and grains in space*, I. Nenner Editor, AIP Press, Conference Proc. vol. 312, 795-800, New York, U.S.A. (1994).
- 20) Blanco A., Fonti S., Muci A. M., Orofino V.: "Formation of cosmic carbon dust analogs in partially hydrogenated atmosphere", in *From stardust to planetesimals: contibuted papers*, M. E. Cress, A. G. G. M. Tielens, and Y. J. Pendleton Eds., NASA CP 3343, 69-72 (1996) .
- 21) Blanco A., Fonti S., Orofino V., Proce R. , Rotundi A.: "Determinaton of the infrared optical constants of limestone submicronic particles", in *Cosmic Physics in the Year 2000*, S. Aiello et al. Eds., Editrice Compositori, Bologna (Italy), 177-181 (1997).
- 22) Orofino V., Blanco A., Fonti S., Formisano V.: "Spectroscopic search for carbonates on Mars", in *Planetary Sciences: Second Italian Meeting*. Published by Alenia Aerospazio, A. Manara and E. Dotto eds., Bormio, Italy, 65-75 (1998).
- 23) Orofino V., Blanco A., Blecka M.I., Fonti S., Jurewicz A.: "Search for carbonates on the surface of Mars by means of the Planetary Fourier Spectrometer", *Ann. Geophys.*, 16, C 994-995 (1998).
- 24) Fonti S., Blanco A., De Carlo F., Orofino V., Solazzo S., Blecka M.I.: "Development of an improved method of measuring spectral emissivity of analog solar system regoliths and dust", in *Thermal Emission Spectroscopy and Analysis of Dust, Disks and Regoliths*, M.L. Sitko, A. L. Sprague and D. K. Lynch eds., ASP Conference Series vol. 196, 301-311 (2000).
- 25) Fonti S., Blanco A., Blecka , M. I., Jurewicz A., Orofino V., "On the problem of the "missing" carbonates on Mars", *Lunar Plan. Sci. Conf. XXXI*, CD-ROM, LPI Contribution No. 1000, Abstract #1577 (2000).
- 26) Luk'yanchuk B.S., Luches A., Blanco A., Orofino V., "Physical modelling of the interstellar dust", in *ALT 99 International Conference on Advanced Laser Technologies*, V.I. Pustovoy and V.I. Konov eds., Proceedings of SPIE, 4070, 154-165 (2000).
- 27) Blanco A., Fonti S., Orofino V., Blecka , M. I., Jurewicz A., "Carbonates on Mars", in *Planetary Science: Third Italian meeting*. Published by Alenia Spazio, E. Dotto, and A. Manara eds., Bormio, Italy, 119-124 (2000)
- 28) Orofino V., Blanco A., Blecka M.I., Fonti S., Jurewicz A., Kossacki K., Marra A.C.: "Presence and spectroscopic detectability of carbonates on Mars", in *What are the Prospects for Cosmic Physics in Italy?* (Invited paper), S. Aiello and A. Blanco eds., SIF CP 68, Bologna (Italy), 77-84 (2000)
- 29) Polimeno N., Blanco A., Fonti S., Orofino V.: "Composite particles and the spectrum of Hale-Bopp comet", in *What are the Prospects for Cosmic Physics in Italy?* S. Aiello and A. Blanco eds., SIF CP 68, Bologna (Italy), 125-129 (2000)
- 30) Fonti S., Blanco A., Blecka M.I., De Carlo F., Orofino V.: "Laboratory measurement of spectral emissivity related to space experiments", in *What are the Prospects for Cosmic Physics in Italy?* S. Aiello and A. Blanco eds., SIF CP 68, Bologna (Italy), 143-147 (2000)

- 31) Fonti S., Blanco A., Blecka M.I., De Carlo F., Orofino V., Polimeno N.: "Spectral emissivity as a tool for the interpretation of Martian data: a laboratory approach", Lunar Plan. Sci. Conf. XXXII, CD-ROM, LPI Contribution No. 1080, Abstract #1279 (2001)
- 32) Leone G., Wilson L., Orofino V., Fonti S.: "Gorgonum Chaos: are the seepage-runoff features really recent?", Lunar Plan. Sci. Conf. XXXII, CD-ROM, LPI Contribution No. 1080, Abstract #1649 (2001)
- 33) Thompson S. P., Fonti S., Verrienti C., Blanco A., Orofino V., Tang. C.C.: "Combined IR and XRD study of crystallization in amorphous MgSiO<sub>3</sub>", Meteor. and Planet. Sci., 36, A206, (2001)
- 34) Blanco A., Orofino V., Fonti S., De Carlo F., Marra A.C., Marzo G., Politi R.: "Laboratory studies of carbonate grains and applications to Martian spectra", in *Solids and Molecules in Space I*, S. Aiello, B. Barsella and C. Cecchi-Pestellini eds, S.I.F., 169-178 (2002).
- 35) Grin E., Cabrol N.A., Leone G., Orofino V.: "Strategy for the in situ search of evaporite and carbonate deposits in Gusev crater within the 2003 MER A landing ellipse", Lunar Plan. Sci. Conf. XXXIII, CD-ROM, Abstract #1143 (2002).
- 36) Blanco A., Fonti S., Orofino V., De Carlo F., D'Elia M., Marra A. C., Marzo G. A., Politi R.: "Laboratory studies of carbonates in support to Mars exploration" in *Planetray Science: Forth Italian meeting*. Published by Alenia Spazio, E. Dotto, and A. Manara eds., Bormio, Italy, 53 - 56 (2002).
- 37) Thompson S. P., Fonti S., Verrienti C., Blanco A., Orofino V., Tang. C.C., Roberts M.A.: "Crystalline evolution in annealed amorphous MgSiO<sub>3</sub>", in *Proc. of Asteroids, Comets, Meteors International Conference - ACM 2002*. B. Warmbein ed., ESA SP-500, ESA Publications Division, Noordwijk, Netherlands, 677 – 680 (2002).
- 38) Politi R., Marzo G.A., Blanco A., De Carlo F., Fonti S., Marra A.C., Orofino V.: "Spectroscopic search for signatures of fossils in terrestrial layered rocks", in *Proc. of the Second European Workshop on Exo-Astrobiology*, H. Lacoste Editor. ESA SP-518, ESA Publications Division, Noordwijk, Netherlands, ISBN 92-9092-828-X, 391 – 394 (2002).
- 39) D'Elia M., Blanco A., De Carlo F., Fonti S., Marra A.C., Marzo G.A., Orofino V., Politi R.: "Electron microscopy in support of laboratory measurements for the Mars Express space mission" in *Proc. of the 6th Multinational Congress on Microscopy - European Extension*, O. Milat and D. Ježek eds. Published by Croatian Society for Electron Microscopy, Frankopanska 1/dvor, Zagreb, Croatia, 454 – 455 (2003).
- 40) Orofino V., Blanco A., Fonti S., Formisano V., Marra A. C., Maturilli A.: "Identification and observability of suitable sites for the spectroscopic search of carbonate deposits on Mars", in *Planetray Science: Fifth Italian meeting*. Published by Alenia Spazio, A. Blanco, E. Dotto, and V. Orofino eds., Gallipoli, Italy, 15-19 September 2003, 103-108 (2004)
- 41) D'Elia M., Blanco A., De Carlo F., Fonti S., Marra A.C., Marzo G.A., Orofino V., Politi R.: "Study and characterization of minerals in planetary science using Scanning Electron Microscopy" in *Planetray Science: Fifth Italian meeting*. Published by Alenia Spazio, A. Blanco, E. Dotto, and V. Orofino eds., Gallipoli, Italy, 15-19 September 2003, 229-232 (2004)
- 42) Politi R., Marzo G.A., Blanco A., Fonti S., Orofino V.: "Identification of Microfossils Features as Martian Analogs via Spectroscopic Analysis" in *Planetray Science: Fifth Italian meeting*. Published by Alenia Spazio, A. Blanco, E. Dotto, and V. Orofino eds., Gallipoli, Italy, 15-19 September 2003, 243-246 (2004)
- 43) Verrienti C., D'Elia M., Fonti S., Orofino V., Thompson S.P., Lennie A.R.: "Thermal annealing of silicates" in *Planetray Science: Fifth Italian meeting*. Published by Alenia Spazio, A. Blanco, E. Dotto, and V. Orofino eds., Gallipoli, Italy, 15-19 September 2003, 253-256 (2004)
- 44) Politi R., Marzo G.A., Blanco A., Fonti S., Orofino V.: "Searching for spectral signatures of fossils: modelling and applications", in *Proc. of the Third European Workshop on Exo-Astrobiology*, 18 - 20 November 2003, Madrid, Spain. R. A. Harris and L. Ouweland eds., ESA SP-545, Noordwijk, Netherlands: ESA Publications Division, ISBN 92-9092-856-5, 267 – 268 (2004).

- 45) Formisano V., ..., Orofino V., ... et al.: "PFS: the Planetary Fourier Spectrometer for Mars Express" in Mars Express: the scientific payload. A. Wilson ed., ESA SP-1240, Noordwijk, Netherlands: ESA Publications Division, ISBN 92-9092-556-6, 71 – 94 (2004).
- 46) Brunetto R., Orofino V., Strazzulla G.: "Space weathering on minor bodies induced by ion irradiation: some experimental results", Mem. S.A.It. Suppl. 6, 45-50 (2005).
- 47) Blanco A., D'Elia M., Licchelli D., Orofino V., Fonti S.: "The infrared spectroscopy of biotic and abiotic minerals: its relevance to Mars studies", Mem. S.A.It. Suppl. 6, 72-75 (2005).
- 48) Orofino V., Blanco A., D'Elia M., De Carlo F., Fonti S., Marra A.C., Marzo G.A., Politi R., Verrienti C.: "Spectroscopic studies of materials relevant for the hydrological evolution of Mars", Mem. S.A.It. Suppl. 6, 76-81 (2005).
- 49) D'Elia M., Blanco A., Licchelli D., Orofino V., Fonti S.: "A comparative study of biotic and abiotic minerals in the context of the research of life on Mars", in *Proc. of 7<sup>th</sup> Multinational Congress on Microscopy*, June 26-30, 2005, Portorož, Slovenia. M. Čeh, G. Dražič, and S. Fidler eds., 361-362 (2005).
- 50) Strazzulla G., Brunetto R., Gomis O., Leto G., Orofino V.: "Ion irradiation of solids of planetological interest", Mem. S.A.It. Suppl. 9, 157-160 (2006).
- 51) Blanco A., D'Elia M., Licchelli D., Orofino V., Fonti S.: "Studies of biominerals relevant to the search for life on Mars ", *Origins of Life and Evolution of Biospheres*, 36, 621-622 (2006)
- 52) Fonti S., De Carlo F., Marzo G. A., Altieri F., Blanco A., Dinoi A., Marra A. C., Orofino V., Politi R., Verrienti C., "A radiative transfer model applied to the analysis of dust suspended in the Martian atmosphere", in *Proc. of the 2nd workshop on Mars atmosphere modelling and observations*, February 27 - March 3, 2006, Granada, Spain. F. Forget et al. eds., 225-228 (2006).
- 53) Marra A.C., Blanco A., Dinoi A., Fonti S., Marzo G.A., Orofino V., Politi R.: "Extinction spectra of particulate materials: the role of tiny dust covering larger grains", in *Proc. of the 9th Conference on Electromagnetic and Light Scattering by Nonspherical Particles: Theory, Measurements and Applications*, June 5-9, 2006, Saint Petersburg, Russia. N. Voshchinnikov ed., 175-177 (2006).
- 54) Brunetto R., Strazzulla G., Orofino V.: "Space weathering: from laboratory to observations", Mem. S.A.It. Suppl. 11, 159-163 (2007).
- 55) Blanco A., D'Elia M., Licchelli D., Orofino V., Fonti S.: "Physical characterization of biominerals of Martian interest", Mem. S.A.It. Suppl. 11, 164-168 (2007).
- 56) Montanaro S., Politi R., Blanco A., Dinoi A., Fonti S., Marra A.C., Marzo G.A., Orofino V.: "Planetary soil simulation: binary mixtures reflectance spectra", Mem. S.A.It. Suppl. 11, 220-224 (2007).
- 57) Blanco A., D'Elia M., Licchelli D., Orofino V., Fonti S., Montanaro S.: "The search for ancient life on Mars and the IR spectroscopy of Earth analogues ", Mem. S.A.It. Suppl. 12, 133-137 (2008).
- 58) Fonti S., F. Mancarella, Blanco A., Orofino V.: "Laboratory Emission Measurements for the Interpretation of Mercury Surface Spectra" in the Joint Thematic Workshop on Messenger-BepiColombo Missions to Mercury, 3-5 June 2009, Parma (Italy), Book of Abstract pp. 49-50 (2009)
- 59) Roush, T.L., Marzo, G.A., Fonti, S., Orofino, V., Blanco, A.: "The search for evidence of aqueous activity in putative paleolake basins on Mars using CRISM spectral data", in *Proc. of the European Planetary Science Congress 2009*, 14-18 September, Potsdam, Germany. Vol. 4, EPSC2009-90 (2009).
- 60) Facchini, A., Fonti, S., Blanco, A., D'Elia, M., Liuzzi, G., Orofino, V.: "Laboratory spectral measurement of particulate samples of altered olivine and related planetological studies" *Proceedings of the European Planetary Science Congress 2010*, held 19-25 September in Rome, Italy, Vol. 5, EPSC2010-372 (2010).
- 61) Roush, T.L., Marzo, G.A., Fonti, S., Orofino, V., Blanco, A.: "Spectral Evidence of Aqueous Activity in Two Putative Martian Paleolakes", *Proceedings of the European Planetary Science Congress 2010*, held 19-25 September in Rome, Italy, Vol. 5, EPSC2010-254 (2010).

62) Blanco A., D'Elia M., Licchelli D., Orofino V., Fonti S., Marzo, G.A.: "Preservation of biosignatures in clay-rich systems: implications for Martian exobiology", Mem. S.A.It. Suppl. 16, 101-105 (2011).

63) Orofino V., Blanco A., D'Elia M., Fonti S. Giuri, M.: "Spectroscopic analysis of particulate samples of altered olivine for planetological studies", Mem. S.A.It. Suppl. 16, 113-118 (2011).

64) Blanco, A., Orofino, V., D'Elia, M., Fonti, S., Mastandrea, A., Guido, A., Russo, F.: A Spectroscopic Method for Identifying Biotic Carbonates in Terrestrial Rocks and Application to Mars. European Planetary Science Congress 2011, EPSC Abstracts, 6, 1201-1202 (2011).

65) D'Elia, M., Blanco, A., Orofino, V., Fonti, S., Mastandrea, A., Guido, A., Russo, F.: A spectroscopic tool for the detection of biocarbonates. Mem. S.A.It. Suppl., in press (2011).

66) Mancarella, F., Facchini, A., Liuzzi, G., Blanco, A., D'Elia, M., Fonti, S., Orofino, V.: Misure spettrali in laboratorio di campioni particolati di olivina alterata e studi planetologici. Mem. S.A.It. Suppl., in press (2011).

67) Tosti, F., Guido, A., Mastandrea, A., Russo, F., Blanco, A., Orofino, V., Fonti, S., D'Elia, M.: Characterization of fossil organic matter with Fourier-Transform Infrared (FTIR) Spectroscopy: an attempt to record extraterrestrial life. Mem. S.A.It. Suppl., in press (2011).

68) Roush, T.L., Marzo, G.A., Fonti, S., Orofino, V., Blanco, A., Gross, C., Wendt, L.: Assessing spectral evidence of aqueous activity in two putative martian paleolakes, XLII Lunar Planetary Science Conf.. Contribution No. 1608, 1181-1182 (2011).

## 2. PUBBLICAZIONI SU RIVISTE INTERNAZIONALI

1) Borghesi, A., Bussoletti, E., Colangeli, L., Orofino, V., Guido, M., Nunziante-Cesaro, S.: "2.5 - 300  $\mu\text{m}$  laboratory observations of submicron SiC particles as cosmic dust candidates", *Infrared Phys.*, 26, 37-42 (1986).

2) Bussoletti, E., Colangeli, L., Borghesi, A., Orofino, V.: "Tabulated extinction efficiencies for various types of submicron amorphous carbon grains in the wavelength range 1000  $\text{\AA}$  - 300  $\mu\text{m}$ ", *Astron. Astrophys. Suppl. Ser.*, 70, 257-268 (1987).

3) Bussoletti, E., Colangeli, L., Orofino, V.: "Interstellar amorphous carbon", *Astrophys. J. (Letters)*, 321, L87-L90 (1987).

4) Orofino, V., Colangeli, L., Bussoletti, E., Strafella, F.: "Amorphous carbon around carbon stars", *Astrophys. Space Sci.* 138, 127-140 (1987).

5) Blanco, A., Bussoletti, E., Colangeli L., Fonti, S., Orofino, V.: "Raman spectra of submicron amorphous carbon grains and mixtures of polycyclic aromatic hydrocarbons", *Infrared Phys.*, 28, 383-388 (1988).

6) Colangeli, L., Schwehm, G., Bussoletti, E., Blanco, A., Borghesi, A., Fonti, S., Orofino, V.: "Carbonaceous materials as components of cometary dust", *Adv. Space Res.*, 9, 285-289 (1989).

7) Blanco, A., Borghesi, A., Orofino, V., Bussoletti, E., Fonti, S., Fusco, C., Colangeli, L., Schwehm, G., De Blasi, C.: "Amorphous carbon and carbonaceous materials in space - I: Laboratory measurements", *Il Nuovo Cimento*, 13 C, 231-240 (1990).

8) Blanco, A., Borghesi, A., Orofino, V., Bussoletti, E., Fonti, S., Fusco, C., Colangeli, L., Schwehm, G.: "Amorphous carbon and carbonaceous materials in space - II: Astrophysical implications", *Il Nuovo Cimento*, 13 C, 241-248 (1990).

- 9) Fonti, S., Blanco, A., Bussoletti, E., Colangeli, L., Lugara', M., Mennella, V., Orofino, V., Scamarcio, G.: "Raman spectra of different carbonaceous materials of astrophysical interest", *Infrared Phys.*, 30, 19-25 (1990).
- 10) Colangeli, L., Schwehm, G., Bussoletti, E., Fonti, S., Blanco, A., Orofino, V.: "Hydrogenated amorphous carbon grains in comet Halley ?", *Astrophys. J.*, 348, 718-724 (1990).
- 11) Blanco, A., Fonti, S., Orofino, V.: "Temperature behaviour of infrared spectra of polycyclic aromatic hydrocarbons and the unidentified infrared bands", *Astrophys. J.*, 364, 152-156 (1990).
- 12) Orofino, V., Colangeli, L., Bussoletti, E., Blanco, A., Fonti, S.: "Amorphous carbon grains and emission spectra of IRC +10216", *Astron. Astrophys.*, 231, 105-110 (1990).
- 13) Orofino, V., Mennella, V., Blanco, A., Bussoletti, E., Colangeli, L., Fonti, S.: "Experimental extinction properties of granular mixtures of silicon carbide and amorphous carbon", *Astron. Astrophys.*, 252, 315-319 (1991).
- 14) Colangeli, L., Baratta, G.A., Blanco, A., Bussoletti, E., Fonti, S., Mennella, V., Orofino, V., Strazzulla, G.: "The composition of cometary materials: laboratory results", *Ann. Geophysicae*, 10, 184 -189 (1992).
- 15) Blanco, A., Orofino, V., Martino, M., Fonti, S., Stephens, J. R.: "Laboratory study of silicates and application to cometary dust", *Il Nuovo Cimento*, 15 C, 1091-1096 (1992).
- 16) De Luca, M., Blanco, A., Orofino, V.: "Far infrared emission by dust in Bok globule Barnard 335", *Mon. Not. R. Astron. Soc.*, 262, 805-811 (1993).
- 17) Blanco, A., Borghesi A., Fonti, S., Orofino, V.: "Silicon carbide in laboratory, in interstellar space and in the solar system", *Il Nuovo Cimento*, 16 C, 627-634 (1993).
- 18) Orofino, V., Blanco, A., Fonti, S.: "Silicon carbide: a possible component of the cometary dust", *Astron. Astrophys.*, 282, 657-662 (1994).
- 19) Blanco, A., Borghesi A., Fonti, S., Orofino, V.: "Amorphous carbon and silicon carbide grain mixtures in the envelopes of carbon stars", *Astron. Astrophys.*, 283, 561-566 (1994).
- 20) Muci, A.M., Blanco, A., Fonti, S., Orofino, V.: "Ultraviolet spectra of amorphous carbon grains: comparison with the circumstellar extinction around C-rich objects", *Astrophys. J.*, 436, 831-836 (1994).
- 21) Blanco, A., Borghesi, A., Fonti, S., Orofino, V.: "The FIR emission of dust particles around C-rich IRAS sources", *Astrophys. Spa. Sci.*, 224, 227-231 (1995).
- 22) Blanco, A., Fonti, S., Orofino, V.: "A model for the amorphous carbon grains around C-rich objects", *Astrophys. J.*, 448, 339-345 (1995).
- 23) Stephens, J.R., Blanco, A., Bussoletti, E., Colangeli, L., Fonti, S., Mennella, V., Orofino, V.: "Effect of composition on infrared spectra of syntethic amorphous silicate cosmic dust analogues", *Plan. Space Sci.*, 43, 1241-1246 (1995).
- 24) Jurewicz, A., Orofino, V., Blanco, A., Fonti, S.: "Radiation transfer modelling of the dust torus of Phobos in view of the Mars 94/96 mission", *Plan. Space Sci.*, 43, 1479-1483 (1995).
- 25) Blanco, A., Fonti, S., Orofino, V.: "On the interstellar extinction hump and laboratory carbonaceous grains", *Astrophys. J.*, 462, 1020-1025 (1996).
- 26) Blanco A., Fonti S., Muci A.M., Orofino V.: "Carbon grains produced in partially hydrogenated atmospheres and their astrophysical relevance", *Astrophys. J.*, 472, 419-423 (1996).
- 27) Blecka M. I., Blanco A., Fonti S., Muci A.M., Orofino V.: "Modelling the influence of surface emittance and atmospheric trasmittance on Martian spectra", *Adv. Space Res.*, 19, 1281-1284 (1997).

- 28) Blanco A., Borghesi A., Fonti S., Orofino V., Strafella F.: "The infrared emission of carbonaceous particles around C-rich IRAS sources", *Il Nuovo Cimento*, 20 C, 693-698 (1997).
- 29) Muci A.M., Blanco A., Fonti S., Orofino V.: "Laboratory simulations of Martian dust ", *Adv. Space Res.*, 20, 1605-1608 (1997).
- 30) Blanco A., Borghesi A., Fonti S., Orofino V.: "Circumstellar emission from dust envelopes around carbon stars showing the silicon carbide feature", *Astron. Astrophys.*, 330, 505-514 (1998).
- 31) Coradini A., ..., Orofino V., ...et al.: "VIRTIS: an imaging spectrometer for the Rosetta mission", *Plan. Space Sci.*, 46, 1291-1304 (1998).
- 32) Orofino V., Blanco A., Fonti S., Proce R., Rotundi A.: "The infrared optical constants of limestone particles and implications for the search of carbonates on Mars", *Plan. Space Sci.*, 46, 1659-1669 (1998).
- 33) Orofino V., Grygorczuk J., Jurewicz A.: "Photometric modelling of the Martian dust rings", *Plan. Space Sci.*, 46, 1697-1709 (1998).
- 34) Blanco A., Fonti S., Orofino V.: "The 4.6 micron feature of -SiH groups in silicates dust grains and infrared cometary spectra", *Plan. Space Sci.*, 47, 781-785 (1999).
- 35) Blanco A., Borghesi A., Epifani E., Fonti S., Orofino V., Strafella F.: "Variability of circumstellar emission from dust envelopes around carbon stars", *Astrophys. Space Sci.*, 262, 107-113 (1999).
- 36) Orofino V., Blanco A., Blecka M.I., De Carlo F., Fonti S., Jurewicz A.: "The spectroscopic search for carbonates on the surface and in the atmosphere of Mars: laboratory measurements and numerical simulations", *Adv. Space Res.*, 23, 1609-1612 (1999).
- 37) Blanco A., Cappello D., Fonti S., Ientile A., Orofino V.: "Processing of amorphous carbon grains produced in hydrogen-rich atmosphere", *Adv. Space Res.*, 24, 443-447 (1999).
- 38) Fonti S., Solazzo S., Blanco A., Orofino V.: "An infrared zoom for space applications", *Plan. Space Sci.*, 48, 523-528 (2000).
- 39) Blanco A., Borghesi A., Fonti S., Orofino V.: "On the distance and mass-loss rate of carbon stars showing the silicon carbide emission feature", *Astron. Astrophys.*, 357, 515-519 (2000).
- 40) Orofino V., Blanco A., Blecka M.I., Fonti S., Jurewicz A.: "Carbonates and coated particles on Mars", *Plan. Space Sci.*, 48, 1341-1347 (2000).
- 41) Fonti S., Jurewicz A., Blanco A., Blecka M.I., Orofino V.: "Presence and detection of carbonates on the Martian surface", *Jou. Geophys. Res.*, 106, 27815-27822 (2001)
- 42) Jurewicz A., Blecka M.I., Blanco A., Fonti S., Orofino V.: "A study of physical processes on the surface of Mars and their possible bearing on the detectability of carbonates", *Adv. Space Res.*, 28, 1191-1196 (2001)
- 43) Fonti S., Blanco A., Blecka M.I., De Carlo F., Orofino V.: "Measurements of spectral emissivity related to planetary missions", *Adv. Space Res.*, 29, 789-795 (2002)
- 44) Orofino V., Blanco A., Fonti S., Marra A.C., Polimeno, N.: "The complex refractive index of limestone particles: an extension to the FIR range for Mars applications", *Plan. Space Sci.*, 50, 839-847 (2002)
- 45) Thompson S. P., Fonti S., Verrienti C., Blanco A., Orofino V., Tang. C.C.: "Laboratory study of annealed amorphous MgSiO<sub>3</sub> silicate using IR spectroscopy and X-ray diffraction", *Astron. Astrophys.*, 395, 705-717 (2002).
- 46) Thompson S. P., Fonti S., Verrienti C., Blanco A., Orofino V., Tang. C. C.: "Crystalline comet dust: laboratory experiments on a simple silicate system", *Meteor. and Planet. Sci.*, 38, 457-468 (2003).

- 47) Fonti S., Arnold G., Blanco A., Colangeli L., D'Elia M., De Carlo F., Erard S., Esposito F., Formisano V., Marra A. C., Marzo G. A., Orofino V., Palomba E., Piccioni G., Polimeno N., Politi R.: "Laboratory measurements in support of the spectroscopy experiments on board the Mars Express mission", *Recent Res. Devel. Astron. & Astrophys.*, 1, 137-153 (2003).
- 48) Bellucci G., Altieri F., Blecka M., Bonsignori R., Coppo P., Fonti S., Marzo G., Meli S., Moreno J.J.L., Moshkin B., Ori G.G., Orofino V., Politi R., Preti G., Romoli A., Roush T., Saggin B., Sgavetti M., Stam D., Zasova L.: "Infrared spectroscopy of Mars for exobiology applications", *Recent Res. Devel. Astron. & Astrophys.*, 1, 839-857 (2003).
- 49) Jurewicz A., Orofino V., Marra A.C., Blanco A.: "Optical constants of powdered limestone obtained by taking into account the grain shapes: applicability to Martian studies", *Astron. Astrophys.*, 410, 1055-1062 (2003).
- 50) Marzo G. A., Blanco A., De Carlo F., D'Elia M., Fonti S., Marra A.C., Orofino V., Politi R.: "The optical constants of gypsum particles as analog of Martian sulfates", *Adv. Space Res*, 33, 2246-2251 (2004).
- 51) Strazzulla G., Dotto E., Binzel R., Brunetto R., Barucci M.A., Blanco A., Orofino V.: "Spectral alteration of the meteorite Epinal (H5) induced by heavy ion irradiation: a simulation of space weathering effects on Near Earth Asteroids", *Icarus*, 174, 31-35 (2005).
- 52) Formisano V., ..., Orofino V., ... et al.: "The Planetary Fourier Spectrometer (PFS) onboard the European Mars Express mission", *Plan. Space Sci.*, 53, 963-974 (2005).
- 53) Marra A.C., Blanco A., Fonti S., Jurewicz A., Orofino V.: "Fine hematite particles of Martian interest: absorption spectra and optical constants", *J. Phys. Conf. Series*, 6, 132-138 (2005).
- 54) Brunetto R., Romano F., Blanco A., Fonti S., Martino M., Orofino V., Verrienti C.: "Space weathering of silicates simulated by nanosecond pulse UV excimer laser", *Icarus*, 108, 546-554 (2006).
- 55) Marra A.C., Politi R., Blanco A., Brunetto R., Fonti S., Marzo G.A., Orofino V.: "Optical constants of particulate minerals from reflectance measurements: the case of calcite", *J. Quant. Spectr. Rad. Transf.*, 100, 250-255 (2006).
- 56) Marzo G. A., Roush T. L., Blanco A., Fonti S., Orofino V.: "Cluster analysis of planetary remote sensing spectral data", *J. Geophys. Res.*, 111, E03002, doi:10.1029/2005JE002532 (2006).
- 57) Orofino V., Politi, R., Blanco A., Fonti S.: "Diffuse reflectance of altered olivine grains: remote sensing detection and implications for Mars studies", *Plan. Space Sci.*, 54, 784-793 (2006).
- 58) Brunetto R., Vernazza P., Marchi S., Birlan M., Fulchignoni M., Orofino V., Strazzulla G.: "Modelling asteroid surfaces from observations and irradiation experiments: the case of 832 Karin", *Icarus*, 184, 327-337 (2006).
- 59) D'Elia M., Blanco A., Licchelli D., Orofino V., Fonti S., Pomati F., Burns B.: "Infrared spectral properties of recent and fossil biominerals of Martian interest", *Nuovo Cimento*, 121 B, 833-842 (2006).
- 60) Orofino V., Blanco A., D'Elia M., Licchelli D., Fonti S.: "Infrared spectroscopy of carbonate samples of biotic origin relevant to Mars exobiological studies", *Icarus*, 187, 457-463 (2007).
- 61) Brunetto R., Roush T.L., Marra A.C., Orofino V.: "Optical characterization of laser ablated silicates", *Icarus*, 191, 381-393 (2007).
- 62) Drossart P., ..., Orofino V., ...et al.: "Scientific goals for the observation of Venus by VIRTIS on ESA/Venus Express mission", *Plan. Space Sci.*, 55, 1653-1672 (2007).
- 63) Marzo G.A., Politi R., Blanco A., Brunetto R., Fonti S., Orofino V.: "On potential spectroscopic detection of microfossils on Mars", *Earth, Moon and Planets*, DOI 10.1007/s11038-007-9153-7 (2007).
- 64) Piccioni G., ..., Orofino V., ...et al.: "South polar features on Venus similar to those near the north pole", *Nature*, 450, 637-640 (2007).



- 65) Drossart P., ..., Orofino V., ...et al.: "A dynamic upper atmosphere of Venus as revealed by VIRTIS on Venus Express", *Nature*, 450, 641-645 (2007).
- 66) Thompson S. P., Verrienti C., Fonti S., Orofino V., Blanco A.: "Crystallisation processes in cosmic silicates: Laboratory progress towards understanding structural spectral relationships", *Adv. Space Res.*, 39, 375-391 (2007).
- 67) Marzo G.A., Roush T.L., Blanco A., Fonti S., Orofino V.: " Statistical exploration and volume reduction of planetary remote sensing spectral data", *J. Geophys. Res.*, 113, E12009, doi:10.1029/2008JE003219 (2008).
- 68) Orofino V., Goldspiel, J., Carofalo I., Blanco A., Fonti S., Marzo G.A.: "Evaluation of carbonate abundance in putative Martian paleolake basins, Icarus, 200, 426-435 (2009).
- 69) Orofino V., Blanco A., D'Elia M., Fonti S., Licchelli D.: "Time dependent degradation of biotic carbonates and the search for past life on Mars", *Plan. Space Sci.*, 57, 632–639 (2009)
- 70) Coradini, A., ..., Orofino V., ... et al.: "The Martian Atmosphere as Observed by VIRTIS-M on Rosetta Spacecraft", *J. Geophys. Res.*, 115, doi:10.1029/2009JE003345 (2010).
- 71) Fonti S., Montanaro S., Politi R., Blanco A., Marra A.C., Marzo G.A., Orofino V.: "Infrared reflectance spectra of particulate mixtures", *Jou. Geophys. Res.*, 115, doi:10.1029/2009JE003461 (2010).
- 72) Orofino V., Blanco A., D'Elia M., Licchelli D., Fonti S., Marzo G.A.: "Study of terrestrial fossils in phyllosilicate-rich soils: possible analogue for the search of biosignatures on Mars", *Icarus*, 208, 202-206 (2010).
- 73) Marra, A.C., Lane, M.D. Orofino, V., Blanco, A., Fonti, S.: "Midinfrared spectra and optical constants of bulk hematite: Comparison with particulate hematite spectra", *Icarus*, 211, 839-848 (2011).
- 74) Blanco, A., Orofino, V., D'Elia, M., Fonti, S., Mastandrea, A., Guido, A., Russo, F.: A spectroscopic method for identifying terrestrial biocarbonates and application to Mars. *Icarus* 213, 473-479 (2011).
- 75) Coradini, A., ..., Orofino, V. et al.: The Surface Composition and Temperature of Asteroid 21 Lutetia As Observed by Rosetta/VIRTIS, *Science*, 334, 492-494 (2011).
- 76) Roush, T.L., Marzo, G.A., Fonti, S., Orofino, V., Blanco, A., Gross, C., Wendt, L.: Assessing spectral evidence of aqueous activity in two putative martian paleolakes, *Icarus*, 214, 240-245 (2011).
- 77) Blanco, A., Orofino, V., D'Elia, M., Fonti, S., Mastandrea, A., Guido, A., Russo, F.: Infrared spectroscopy of microbially induced carbonates and past life on Mars. *Astrobiology*, 2012; (submitted)

### 3. PUBBLICAZIONI DIVULGATIVE

- 1) Orofino V.: "I mari del Pianeta Rosso", *L'Astronomia*, 183, 20-29 (1998)
- 2) Orofino V.: "Acqua su Marte?", *L'Astronomia*, 212, 18-33 (2000)
- 3) Orofino V.: "La ricerca della vita su Marte", in *20 Anni di attività*, Associazione Culturale Isaac Newton, a cura di C. Distratis, 161-164 (2006)
- 4) Orofino V.: "Pietra Leccese su Marte?", *Bollettino Univ. Salento*, 20, 3-7 (2009)

#### 4. PUBBLICAZIONI SU RIVISTE ELETTRONICHE

1) Orofino, V., *Stato evolutivo delle stelle della Cintura di Orione ed implicazioni archeoastronomiche*. On-line article (e-print arXiv) at <http://arxiv.org/abs/1109.3284> (2011).

2) Orofino, V., *A quantitative astronomical analysis of the Orion Correlation Theory*. On-line article (e-print arXiv) at <http://arxiv.org/abs/1109.6266> (2011).