Andrea Raponi

List of Publications by Year
in descending order

80 papers	3,311 citations	172457 29 h-index	149698 56 g-index
82 all docs	82 docs citations	82 times ranked	1728 citing authors

#	Article	IF	Citations
1	The organic-rich surface of comet 67P/Churyumov-Gerasimenko as seen by VIRTIS/Rosetta. Science, 2015, 347, aaa0628.	12.6	293
2	Ammoniated phyllosilicates with a likely outer Solar System origin on (1) Ceres. Nature, 2015, 528, 241-244.	27.8	276
3	Bright carbonate deposits as evidence of aqueous alteration on (1) Ceres. Nature, 2016, 536, 54-57.	27.8	240
4	The diurnal cycle of water ice on comet 67P/Churyumovâ€“Gerasimenko. Nature, 2015, 525, 500-503.	27.8	199
5	Distribution of phyllosilicates on the surface of Ceres. Science, 2016, 353, .	12.6	159
6	Localized aliphatic organic material on the surface of Ceres. Science, 2017, 355, 719-722.	12.6	152
7	Detection of local H ₂ O exposed at the surface of Ceres. Science, 2016, 353, .	12.6	128
8	Refractory and semi-volatile organics at the surface of comet 67P/Churyumov-Gerasimenko: Insights from the VIRTIS/Rosetta imaging spectrometer. Icarus, 2016, 272, 32-47.	2.5	127
9	Ammonium salts are a reservoir of nitrogen on a cometary nucleus and possibly on some asteroids. Science, 2020, 367, .	12.6	115
10	Exposed water ice on the nucleus of comet 67P/Churyumovâ€“Gerasimenko. Nature, 2016, 529, 368-372.	27.8	104
11	Nature, formation, and distribution of carbonates on Ceres. Science Advances, 2018, 4, e1701645.	10.3	83
12	Spectral analysis of Ahuna Mons from Dawn mission's visibleâ€infrared spectrometer. Geophysical Research Letters, 2017, 44, 97-104.	4.0	74
13	Photometric properties of comet 67P/Churyumov-Gerasimenko from VIRTIS-M onboard Rosetta. Astronomy and Astrophysics, 2015, 583, A31.	5.1	71
14	Spectrophotometric properties of dwarf planet Ceres from the VIR spectrometer on board the Dawn mission. Astronomy and Astrophysics, 2017, 598, A130.	5.1	69
15	Detection of exposed H₂O ice on the nucleus of comet 67P/Churyumov-Gerasimenko. Astronomy and Astrophysics, 2016, 595, A102.	5.1	67
16	Mineralogy of Occator crater on Ceres and insight into its evolution from the properties of carbonates, phyllosilicates, and chlorides. Icarus, 2019, 320, 83-96.	2.5	63
17	An aqueously altered carbon-rich Ceres. Nature Astronomy, 2019, 3, 140-145.	10.1	62
18	Seasonal exposure of carbon dioxide ice on the nucleus of comet 67P/Churyumov-Gerasimenko. Science, 2016, 354, 1563-1566.	12.6	61

#	Article	IF	Citations
19	Fresh emplacement of hydrated sodium chloride on Ceres from ascending salty fluids. Nature Astronomy, 2020, 4, 786-793.	10.1	60
20	The global surface composition of 67P/CG nucleus by Rosetta/VIRTIS. (I) Prelanding mission phase. Icarus, 2016, 274, 334-349.	2.5	54
21	Exposed H2O-rich areas detected on Ceres with the dawn visible and infrared mapping spectrometer. Icarus, 2019, 318, 22-41.	2.5	47
22	Artifacts reduction in VIR/Dawn data. Review of Scientific Instruments, 2016, 87, 124501.	1.3	44
23	Variations in the amount of water ice on Ceresâ€™ surface suggest a seasonal water cycle. Science Advances, 2018, 4, eaao3757.	10.3	43
24	Infrared detection of aliphatic organics on a cometary nucleus. Nature Astronomy, 2020, 4, 500-505.	10.1	41
25	The Philae lander reveals low-strength primitive ice inside cometary boulders. Nature, 2020, 586, 697-701.	27.8	40
26	An orbital water-ice cycle on comet 67P from colour changes. Nature, 2020, 578, 49-52.	27.8	36
27	The changing temperature of the nucleus of comet 67P induced by morphological and seasonal effects. Nature Astronomy, 2019, 3, 649-658.	10.1	34
28	Compositional differences among Bright Spots on the Ceres surface. Icarus, 2019, 320, 202-212.	2.5	33
29	Comet 67P/CG Nucleus Composition and Comparison to Other Comets. Space Science Reviews, 2019, 215, 1.	8.1	32
30	Characteristics of organic matter on Ceres from VIR/Dawn high spatial resolution spectra. Monthly Notices of the Royal Astronomical Society, 2019, 482, 2407-2421.	4.4	30
31	Ceres's global and localized mineralogical composition determined by Dawn's Visible and Infrared Spectrometer (<scp>VIR</scp>). Meteoritics and Planetary Science, 2018, 53, 1844-1865.	1.6	29
32	Laboratory simulations of the Vis-NIR spectra of comet 67P using sub-Âµm sized cosmochemical analogues. Icarus, 2018, 306, 306-318.	2.5	23
33	How pristine is the interior of the comet 67P/Churyumovâ€“Gerasimenko?. Monthly Notices of the Royal Astronomical Society, 2017, 469, S685-S694.	4.4	22
34	Mineralogy and temperature of crater Haulani on Ceres. Meteoritics and Planetary Science, 2018, 53, 1902-1924.	1.6	21
35	Summer outbursts in the coma of comet 67P/Churyumovâ€“Gerasimenko as observed by Rosettaâ€“VIRTIS. Monthly Notices of the Royal Astronomical Society, 2018, 481, 1235-1250.	4.4	20
36	Mineralogical mapping of Coniraya quadrangle of the dwarf planet Ceres. Icarus, 2019, 318, 99-110.	2.5	20

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37	Macro and micro structures of pebble-made cometary nuclei reconciled by seasonal evolution. Nature Astronomy, 2022, 6, 546-553.	10.1	20
38	Synthesis of the special issue: The formation and evolution of Ceresâ€™ Occator crater. Icarus, 2019, 320, 213-225.	2.5	17
39	Photometry of Ceres and Occator faculae as inferred from VIR/Dawn data. Icarus, 2019, 320, 97-109.	2.5	17
40	Photometric behaviour of 67P/Churyumovâ€“Gerasimenko and analysis of its pre-perihelion diurnal variations. Monthly Notices of the Royal Astronomical Society, 2017, 469, S346-S356.	4.4	16
41	Serendipitous infrared observations of Europa by Juno/JIRAM. Icarus, 2019, 328, 1-13.	2.5	15
42	The temporal evolution of exposed water ice-rich areas on the surface of 67P/Churyumov-Gerasimenko: spectral analysis. Monthly Notices of the Royal Astronomical Society, 0, , stw3281.	4.4	13
43	Thermal Stability of Water Ice in Ceres' Craters: The Case of Juling Crater. Journal of Geophysical Research E: Planets, 2018, 123, 2445-2463.	3.6	13
44	Organic Material on Ceres: Insights from Visible and Infrared Space Observations. Life, 2021, 11, 9.	2.4	12
45	Hydroxylated Mg-rich Amorphous Silicates: A New Component of the 3.2 Î¼m Absorption Band of Comet 67P/Churyumovâ€“Gerasimenko. Astrophysical Journal Letters, 2020, 897, L37.	8.3	12
46	Mineralogical analysis of the Ac-H-6 Haulani quadrangle of the dwarf planet Ceres. Icarus, 2019, 318, 170-187.	2.5	11
47	Mineralogy of the Occator quadrangle. Icarus, 2019, 318, 205-211.	2.5	11
48	A Probabilistic Approach to Determination of Ceres' Average Surface Composition From Dawn Visibleâ€Infrared Mapping Spectrometer and Gamma Ray and Neutron Detector Data. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006606.	3.6	11
49	and seasonal variability. Monthly Notices of the Royal Astronomical Society, 0, , stw3177.	4.4	10
50	The spectral parameter maps of Ceres from NASA/DAWN VIR data. Icarus, 2019, 318, 14-21.	2.5	9
51	Correction of the VIR-visible data set from the Dawn mission. Review of Scientific Instruments, 2019, 90, 123110.	1.3	9
52	Ac-H-11 Sintana and Ac-H-12 Toharu quadrangles: Assessing the large and small scale heterogeneities of Ceresâ€™ surface. Icarus, 2019, 318, 230-240.	2.5	9
53	High Thermal Inertia Zones on Ceres From Dawn Data. Journal of Geophysical Research E: Planets, 2020, 125, e2018JE005733.	3.6	9
54	Analysis of night-side dust activity on comet 67P observed by VIRTIS-M: a new method to constrain the thermal inertia on the surface. Astronomy and Astrophysics, 2019, 630, A21.	5.1	8

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55	67P/Churyumovâ€“Gerasimenko active areas before perihelion identified by GIADA and VIRTIS data fusion. Monthly Notices of the Royal Astronomical Society, 2019, 483, 2165-2176.	4.4	8
56	Mineralogical analysis of quadrangle Ac-H-10 Rongo on the dwarf planet Ceres. Icarus, 2019, 318, 212-229.	2.5	8
57	Mineralogical mapping of the Kerwan quadrangle on Ceres. Icarus, 2019, 318, 188-194.	2.5	8
58	Ceres observed at low phase angles by VIR-Dawn. Astronomy and Astrophysics, 2020, 634, A39.	5.1	8
59	The surface of (1) Ceres in visible light as seen by Dawn/VIR. Astronomy and Astrophysics, 2020, 642, A74.	5.1	8
60	Continuum definition for â^¼3.1, â^¼3.4 and â^¼4.0 Âµm absorption bands in Ceres spectra and evaluation of effects of smoothing procedure in the retrieved spectral parameters. Advances in Space Research, 2018, 62, 2342-2354.	2.6	7
61	Surface temperatures and water ice sublimation rate of Oxo crater: a comparison with Juling crater. Journal of Geophysical Research E: Planets, 2018, 124, 2.	3.6	7
62	Spectral analysis of the Cerean geological unit crater central peak material as an indicator of subsurface mineral composition. Icarus, 2019, 318, 75-98.	2.5	6
63	Mineralogy of the Urvaraâ€“Yalode region on Ceres. Icarus, 2019, 318, 241-250.	2.5	6
64	The surface composition of Ceresâ€™ Ezinu quadrangle analyzed by the Dawn mission. Icarus, 2019, 318, 124-146.	2.5	6
65	Highâ€Temperature VISâ€IR Spectroscopy of NH‹sub›4‹/sub›â€Phyllosilicates. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006696.	3.6	6
66	Laboratory Investigations Coupled to VIR/Dawn Observations to Quantify the Large Concentrations of Organic Matter on Ceres. Minerals (Basel, Switzerland), 2021, 11, 719.	2.0	6
67	VIS-NIR/SWIR Spectral Properties of H2O Ice Depending on Particle Size and Surface Temperature. Minerals (Basel, Switzerland), 2021, 11, 1328.	2.0	6
68	Spectral investigation of quadrangle AC-H 3 of the dwarf planet Ceres â€“ The region of impact crater Dantu. Icarus, 2019, 318, 111-123.	2.5	5
69	The Measurement of Solar Diameter and Limb Darkening Function with the Eclipse Observations. Solar Physics, 2012, 278, 269-283.	2.5	4
70	VIS-IR Spectroscopy of Mixtures of Water Ice, Organic Matter, and Opaque Mineral in Support of Small Body Remote Sensing Observations. Minerals (Basel, Switzerland), 2021, 11, 1222.	2.0	4
71	Temporal evolution of the permanent shadowed regions at Mercury poles: applications for spectral detection of ices by SIMBIOSYS-VIHI on BepiColombo mission. Monthly Notices of the Royal Astronomical Society, 2020, 498, 1308-1318.	4.4	3
72	Correction of the VIR-visible dataset from the Dawn mission at Vesta. Review of Scientific Instruments, 2020, 91, 123102.	1.3	3

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73	Properties of the dust in the coma of 67P/Churyumov-Gerasimenko observed with VIRTIS- M. Monthly Notices of the Royal Astronomical Society, 2016, , stw3197.	4.4	2
74	MINERALOGICAL MAPPING OF THE OCCATOR QUADRANGLE. , 2016, , .		2
75	The mineralogy of Ceresâ€™ Nawish quadrangle. Icarus, 2019, 318, 195-204.	2.5	1
76	Mineralogy mapping of the Ac-H-5 Fejokoo quadrangle of Ceres. Icarus, 2019, 318, 147-169.	2.5	1
77	The surface of (4) Vesta in visible light as seen by Dawn/VIR. Astronomy and Astrophysics, 2021, 653, A118.	5.1	1
78	MINERALOGICAL ANALYSIS OF THE QUADRANGLES AC-11 SINTANA AND AC-12 TOHARU ON THE DWARF PLANET CERES. , 2016, , .		1
79	Thermal inertia of Occator's faculae on Ceres. Planetary and Space Science, 2021, 205, 105285.	1.7	0
80	Ceresâ€™ Surface Composition. , 2022, , 105-120.		0