Mario Parente

List of Publications by Year
in descending order

41 papers	3,793 citations	430874 18 h-index	526287 27 g-index
42 all docs	42 docs citations	42 times ranked	3037 citing authors

#	Article	IF	Citations
1	Clay sediments derived from fluvial activity in and around Ladon basin, Mars. Icarus, 2022, 384, 115090.	2.5	4
2	A new method for atmospheric correction and de-noising of CRISM hyperspectral data. Icarus, 2021, 354, 114024.	2.5	12
3	Adversarial feature learning for improved mineral mapping of CRISM data. Icarus, 2021, 355, 114107.	2.5	11
4	Updated Perspectives and Hypotheses on the Mineralogy of Lower Mt. Sharp, Mars, as Seen From Orbit. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006372.	3.6	21
5	Successes and challenges of factor analysis/target transformation application to visible-to-near-infrared hyperspectral data. Icarus, 2021, 365, 114402.	2.5	8
6	Characteristics, Origins, and Biosignature Preservation Potential of Carbonate‐Bearing Rocks Within and Outside of Jezero Crater. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006898.	3.6	16
7	Multiple mineral horizons in layered outcrops at Mawrth Vallis, Mars, signify changing geochemical environments on early Mars. Icarus, 2020, 341, 113634.	2.5	24
8	Orbital Identification of Hydrated Silica in Jezero Crater, Mars. Geophysical Research Letters, 2019, 46, 12771-12782.	4.0	53
9	On Clustering and Embedding Mixture Manifolds Using a Low Rank Neighborhood Approach. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 3890-3903.	6.3	4
10	Neural network radiative transfer for imaging spectroscopy. Atmospheric Measurement Techniques, 2019, 12, 2567-2578.	3.1	21
11	Nonlinear Hyperspectral Unmixing With Graphical Models. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 4844-4856.	6.3	23
12	New CRISM Data Products for Improved Characterization and Analysis of the Mars2020 Landing Site. , 2019, , .		2
13	Predicting olivine composition using Raman spectroscopy through band shift and multivariate analyses. American Mineralogist, 2018, 103, 1827-1836.	1.9	25
14	Hyperspectral Band Selection From Statistical Wavelet Models. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 2111-2123.	6.3	46
15	Estimation of the Number of Endmembers in a Hyperspectral Image via the Hubness Phenomenon. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 2191-2200.	6.3	11
16	Semisupervised Endmember Identification in Nonlinear Spectral Mixtures via Semantic Representation. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 3272-3286.	6.3	4
17	Perfect Recovery Conditions for Non-negative Sparse Modeling. IEEE Transactions on Signal Processing, 2017, 65, 69-80.	5.3	11
18	Sparse unmixing with adaptive background. , 2017, , .		1

#	Article	IF	Citations
19	Pixel purity vertex component analysis. , 2017, , .		1
20	Unmixing in the presence of nuisances with deep generative models. , 2017, , .		1
21	Estimation of the number of endmembers via the hubness phenomenon. , 2016, , .		3
22	On the performance of sparse unmixing on non-linear mixtures. , 2016, , .		1
23	Unmixing multiple intimate mixtures via a locally low-rank representation. , 2016, , .		1
24	Simultaneous clustering and embedding for multiple intimate mixtures. , 2015, , .		2
25	Hyperspectral unmixing via semantic spectral representations. , 2014, , .		3
26	A Review of Nonlinear Hyperspectral Unmixing Methods. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 1844-1868.	4.9	401
27	Unmixing multiple intimate mixtures using manifold clustering. , 2014, , .		1
28	Tailoring non-homogeneous Markov chain wavelet models for hyperspectral signature classification. , 2014, , .		4
29	Non-homogeneous hidden Markov chain models for wavelet-based hyperspectral image processing. , 2013, , .		6
30	What the ancient phyllosilicates at Mawrth Vallis can tell us about possible habitability on early Mars. Planetary and Space Science, 2013, 86, 130-149.	1.7	99
31	Mineralogy and morphology of geologic units at Libya Montes, Mars: Ancient aqueously derived outcrops, mafic flows, fluvial features, and impacts. Journal of Geophysical Research E: Planets, 2013, 118, 487-513.	3.6	56
32	Graph-based identification of boundary points for unmixing and anomaly detection. , 2013, , .		3
33	A new semantic wavelet-based spectral representation. , 2013, , .		4
34	Hyperspectral Unmixing Overview: Geometrical, Statistical, and Sparse Regression-Based Approaches. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2012, 5, 354-379.	4.9	2,181
35	Interpretation of reflectance spectra of clay mineral-silica mixtures: implications for Martian clay mineralogy at Mawrth Vallis. Clays and Clay Minerals, 2011, 59, 400-415.	1.3	46
36	Decomposition of mineral absorption bands using nonlinear least squares curve fitting: Application to Martian meteorites and CRISM data. Planetary and Space Science, 2011, 59, 423-442.	1.7	35

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37	The Mawrth Vallis Region of Mars: A Potential Landing Site for the Mars Science Laboratory (MSL) Mission. Astrobiology, 2010, 10, 687-703.	3.0	48
38	An improvement to the volcano-scan algorithm for atmospheric correction of CRISM and OMEGA spectral data. Planetary and Space Science, 2009, 57, 809-815.	1.7	166
39	Spectral unmixing for mineral identification in pancam images of soils in Gusev crater, Mars. Icarus, 2009, 203, 421-436.	2.5	26
40	Mineralogy of the Paso Robles soils on Mars. American Mineralogist, 2008, 93, 728-739.	1.9	80
41	Phyllosilicate Diversity and Past Aqueous Activity Revealed at Mawrth Vallis, Mars. Science, 2008, 321, 830-833.	12.6	328