

# Silvia Prati

## List of Publications by Year in descending order

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93  
papers

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citations

172386

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254106

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94  
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94  
docs citations

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times ranked

2297  
citing authors

#	ARTICLE	IF	CITATIONS
1	An effective strategy for the monitoring of microplastics in complex aquatic matrices: Exploiting the potential of near infrared hyperspectral imaging (NIR-HSI). <i>Chemosphere</i> , 2022, 286, 131861.	4.2	7
2	Development of a multi-method analytical approach based on the combination of synchrotron radiation X-ray micro-analytical techniques and vibrational micro-spectroscopy methods to unveil the causes and mechanism of darkening of "fake-gilded" decorations in a Cimabue painting. <i>Journal of Analytical Atomic Spectrometry</i> , 2022, 37, 114-129.	1.6	10
3	Quantifying spatial variation in the uptake of microplastic by mussels using biodeposit traps: A field-based study. <i>Marine Pollution Bulletin</i> , 2022, 174, 113305.	2.3	1
4	Combining elemental and immunochemical analyses to characterize diagenetic alteration patterns in ancient skeletal remains. <i>Scientific Reports</i> , 2022, 12, 5112.	1.6	5
5	Notice of Removal: A Movie Should Be Forever: Monitoring the Degradation Pathway of Photographic Films. , 2022, , .		0
6	Analytical studies on commercial artists'™ colour charts from Das Deutsche Farbenbuch (1925) – identification of synthetic and natural organic colourants by Raman microscopy, surface-enhanced Raman spectroscopy and metal underlayer ATR-FTIR spectroscopy. <i>Heritage Science</i> , 2022, 10, .	1.0	4
7	Near-infrared hyperspectral imaging (NIR-HSI) and normalized difference image (NDI) data processing: An advanced method to map collagen in archaeological bones. <i>Talanta</i> , 2021, 226, 122126.	2.9	11
8	Deep eutectic solvent and agar: a new green gel to remove proteinaceous-based varnishes from paintings. <i>Journal of Cultural Heritage</i> , 2021, 51, 138-144.	1.5	12
9	Macroscopic mid-FTIR mapping and clustering-based automated data-reduction: An advanced diagnostic tool for in situ investigations of artworks. <i>Talanta</i> , 2020, 209, 120575.	2.9	7
10	Rapid and direct detection of small microplastics in aquatic samples by a new near infrared hyperspectral imaging (NIR-HSI) method. <i>Chemosphere</i> , 2020, 260, 127655.	4.2	30
11	Organogel Coupled with Microstructured Electrospun Polymeric Nonwovens for the Effective Cleaning of Sensitive Surfaces. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 39620-39629.	4.0	18
12	Non-invasive characterisation of molecular diffusion of agent into turbid matrix using micro-SORS. <i>Talanta</i> , 2020, 218, 121078.	2.9	9
13	Do different habits affect microplastics contents in organisms? A trait-based analysis on salt marsh species. <i>Marine Pollution Bulletin</i> , 2020, 153, 110983.	2.3	43
14	A new miniaturised short-wave infrared (SWIR) spectrometer for on-site cultural heritage investigations. <i>Talanta</i> , 2020, 218, 121112.	2.9	13
15	A new bio-based organogel for the removal of wax coating from indoor bronze surfaces. <i>Heritage Science</i> , 2019, 7, .	1.0	13
16	Thin-layer chromatography/metal underlayer-ATR FTIR methodology for the study of synthetic dyes extracted from degraded wool fibres. <i>New Journal of Chemistry</i> , 2019, 43, 9411-9419.	1.4	7
17	Cleaning oil paintings: NMR relaxometry and SPME to evaluate the effects of green solvents and innovative green gels. <i>New Journal of Chemistry</i> , 2019, 43, 8229-8238.	1.4	28
18	Microplastic in wild populations of the omnivorous crab <i>Carcinus aestuarii</i> : A review and a regional-scale test of extraction methods, including microfibrils. <i>Environmental Pollution</i> , 2019, 251, 117-127.	3.7	63

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19	MID-FTIR macro mapping and clustering-based automatic brushing: an advanced diagnostic tool for in situ investigations of artworks. , 2019, , .		1
20	Advanced analytical investigation on degradation markers in wall paintings. <i>Microchemical Journal</i> , 2018, 139, 278-294.	2.3	34
21	Miniaturized Biosensors to Preserve and Monitor Cultural Heritage: from Medical to Conservation Diagnosis. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 7385-7389.	7.2	22
22	Miniaturized Biosensors to Preserve and Monitor Cultural Heritage: from Medical to Conservation Diagnosis. <i>Angewandte Chemie</i> , 2018, 130, 7507-7511.	1.6	11
23	Ancient encaustic: An experimental exploration of technology, ageing behaviour and approaches to analytical investigation. <i>Microchemical Journal</i> , 2018, 138, 472-487.	2.3	23
24	Sustainability in art conservation: a novel bio-based organogel for the cleaning of water sensitive works of art. <i>Pure and Applied Chemistry</i> , 2018, 90, 239-251.	0.9	37
25	From macro to micro: An advanced macro X-ray fluorescence (MA-XRF) imaging approach for the study of painted surfaces. <i>Microchemical Journal</i> , 2018, 137, 277-284.	2.3	12
26	A new analytical approach to characterize the effect of $\beta$ -ray sterilization on wood. <i>Microchemical Journal</i> , 2018, 143, 493-502.	2.3	6
27	$^1\text{H}$ NMR depth profiles combined with portable and micro-analytical techniques for evaluating cleaning methods and identifying original, non-original, and degraded materials of a 16th century Italian wall painting. <i>Microchemical Journal</i> , 2018, 141, 40-50.	2.3	9
28	Characterization of outdoor bronze monument patinas: the potentialities of near-infrared spectroscopic analysis. <i>Environmental Science and Pollution Research</i> , 2018, 25, 24379-24393.	2.7	22
29	A new integrated TLC/MU-ATR/SERS advanced approach for the identification of trace amounts of dyes in mixtures. <i>Analytica Chimica Acta</i> , 2017, 991, 104-112.	2.6	17
30	Sensitive $\text{SERS}$ on the fiber-optic detection of synthetic organic dyes by laser photoinduced plasmonic Ag nanoparticles. <i>Journal of Raman Spectroscopy</i> , 2017, 48, 925-934.	1.2	13
31	A follow-up on the analytical study of discolouration of the marble statues of Orsanmichele in Florence. <i>Environmental Science and Pollution Research</i> , 2017, 24, 334-352.	2.7	3
32	A Multivariate Methodological Workflow for the Analysis of FTIR Chemical Mapping Applied on Historic Paint Stratigraphies. <i>International Journal of Analytical Chemistry</i> , 2017, 2017, 1-12.	0.4	10
33	Identification of dyes in toned and tinted XX century cinematographic films by surface enhanced Raman spectroscopy. <i>Journal of Raman Spectroscopy</i> , 2016, 47, 337-344.	1.2	7
34	The potential of spectral and hyperspectral-imaging techniques for bacterial detection in food: A case study on lactic acid bacteria. <i>Talanta</i> , 2016, 153, 111-119.	2.9	37
35	New Frontiers in Application of FTIR Microscopy for Characterization of Cultural Heritage Materials. <i>Topics in Current Chemistry</i> , 2016, 374, 26.	3.0	28
36	Immunochemical Micro Imaging Analyses for the Detection of Proteins in Artworks. <i>Topics in Current Chemistry</i> , 2016, 374, 32.	3.0	2

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37	Analyses of trace amounts of dyes with a new enhanced sensitivity FTIR spectroscopic technique: MU-ATR (metal underlayer ATR spectroscopy). <i>Analytica Chimica Acta</i> , 2016, 941, 67-79.	2.6	15
38	The Green Attitude in Art Conservation: Polyhydroxybutyrate-based Gels for the Cleaning of Oil Paintings. <i>ChemistrySelect</i> , 2016, 1, 4502-4508.	0.7	31
39	Colorimetric analysis of painting materials using polymer-supported polydiacetylene films. <i>New Journal of Chemistry</i> , 2016, 40, 9054-9059.	1.4	15
40	ATR-FTIR microscopy in mapping mode for the study of verdigris and its secondary products. <i>Applied Physics A: Materials Science and Processing</i> , 2016, 122, 1.	1.1	17
41	A portable device for on site detection of chicken ovalbumin in artworks by chemiluminescent immunochemical contact imaging. <i>Microchemical Journal</i> , 2016, 124, 247-255.	2.3	9
42	The golden age of the Neapolitan lutherie (1750-1800): new insights on the varnishes and decorations of ten historic mandolins. <i>Applied Physics A: Materials Science and Processing</i> , 2015, 118, 7-16.	1.1	6
43	Use of nano gold obtained by laser ablation for SEIRA analyses of colorants. <i>Heritage Science</i> , 2014, 2, .	1.0	13
44	Localization of proteins in paint cross-sections by scanning electrochemical microscopy as an alternative immunochemical detection technique. <i>Analytica Chimica Acta</i> , 2014, 831, 31-37.	2.6	19
45	Crystallization of CaCO <sub>3</sub> in the Presence of Ethanolamine Reveals Transient Meso-like Crystals. <i>Crystal Growth and Design</i> , 2014, 14, 5922-5928.	1.4	3
46	Chinese archaeological artefacts: Microstructure and corrosion behaviour of high-leaded bronzes. <i>Journal of Cultural Heritage</i> , 2014, 15, 283-291.	1.5	38
47	The use of laser pyrolysis-GC-MS for the analysis of paint cross sections. <i>Journal of Analytical and Applied Pyrolysis</i> , 2014, 105, 327-334.	2.6	12
48	FT-NIR microscopy: An advanced spectroscopic approach for the characterisation of paint cross-sections. <i>Microchemical Journal</i> , 2014, 112, 87-96.	2.3	24
49	Development of innovative embedding procedures for the analyses of paint cross sections in ATR FTIR microscopy. <i>Analytical and Bioanalytical Chemistry</i> , 2013, 405, 895-905.	1.9	27
50	Single and multiplexed immunoassays for the chemiluminescent imaging detection of animal glues in historical paint cross-sections. <i>Analytical and Bioanalytical Chemistry</i> , 2013, 405, 933-940.	1.9	29
51	A scientific approach to the characterization of the painting materials of Fra Mattia della Robbia polychrome terracotta altarpiece. <i>Applied Physics A: Materials Science and Processing</i> , 2013, 113, 1055-1064.	1.1	4
52	Analysis of paint cross-sections: a combined multivariate approach for the interpretation of ATR-FTIR hyperspectral data arrays. <i>Analytical and Bioanalytical Chemistry</i> , 2013, 405, 625-633.	1.9	27
53	Alternative SERRS probes for the immunochemical localization of ovalbumin in paintings: an advanced mapping detection approach. <i>Analyt, The</i> , 2013, 138, 4532.	1.7	23
54	Evaluation of the effect of different paint cross section preparation methods on the performances of Fourier transformed infrared microscopy in total reflection mode. <i>Microchemical Journal</i> , 2013, 110, 314-319.	2.3	17

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55	Py-SPME-GC-MS with on-fiber derivatization as a new solvent-less technique for the study of polar macromolecules: Application to natural gums. <i>Microchemical Journal</i> , 2013, 110, 719-725.	2.3	16
56	An advanced multivariate approach for processing X-ray fluorescence spectral and hyperspectral data from non-invasive in situ analyses on painted surfaces. <i>Analytica Chimica Acta</i> , 2012, 752, 30-38.	2.6	34
57	Pigment identification in a Greek icon by optical microscopy and infrared microspectroscopy. <i>Journal of Cultural Heritage</i> , 2012, 13, 107-113.	1.5	22
58	Evaluation of the effect of six different paint cross section preparation methods on the performances of Fourier Transformed Infrared microscopy in attenuated total reflection mode. <i>Microchemical Journal</i> , 2012, 103, 79-89.	2.3	26
59	Effects of Imidazolium Ionic Liquids on Growth, Photosynthetic Efficiency, and Cellular Components of the Diatoms <i>Skeletonema marinoi</i> and <i>Phaeodactylum tricornutum</i> . <i>Chemical Research in Toxicology</i> , 2011, 24, 392-401.	1.7	40
60	Behaviour of phospholipids in analytical reactive pyrolysis. <i>Journal of Thermal Analysis and Calorimetry</i> , 2011, 104, 415-421.	2.0	3
61	Development of a multiplexed chemiluminescent immunochemical imaging technique for the simultaneous localization of different proteins in painting micro cross-sections. <i>Analytical and Bioanalytical Chemistry</i> , 2011, 399, 2889-2897.	1.9	36
62	Development of an analytical procedure for evaluation of the protective behaviour of innovative fungal patinas on archaeological and artistic metal artefacts. <i>Analytical and Bioanalytical Chemistry</i> , 2011, 399, 2899-2907.	1.9	22
63	Application of ATR-far-infrared spectroscopy to the analysis of natural resins. <i>Analytical and Bioanalytical Chemistry</i> , 2011, 399, 3081-3091.	1.9	38
64	Analytical chemistry for cultural heritage: a key discipline in conservation research. <i>Analytical and Bioanalytical Chemistry</i> , 2011, 399, 2885-2887.	1.9	10
65	Performance evaluation of mapping and linear imaging FTIR microspectroscopy for the characterisation of paint cross sections. <i>Analytical and Bioanalytical Chemistry</i> , 2010, 396, 899-910.	1.9	53
66	Macro-ATR-FT-IR spectroscopic imaging analysis of paint cross-sections. <i>Vibrational Spectroscopy</i> , 2010, 53, 274-278.	1.2	51
67	New Advances in the Application of FTIR Microscopy and Spectroscopy for the Characterization of Artistic Materials. <i>Accounts of Chemical Research</i> , 2010, 43, 792-801.	7.6	130
68	Vaterite in the mortars of a mosaic in the Saint Peter basilica, Vatican (Rome). <i>Journal of Cultural Heritage</i> , 2009, 10, 248-257.	1.5	36
69	ATR and transmission analysis of pigments by means of far infrared spectroscopy. <i>Analytical and Bioanalytical Chemistry</i> , 2009, 394, 1023-1032.	1.9	25
70	Ultrasensitive chemiluminescent immunochemical identification and localization of protein components in painting cross-sections by microscope low-light imaging. <i>Analytical and Bioanalytical Chemistry</i> , 2008, 392, 29-35.	1.9	40
71	Attenuated total reflection micro FTIR characterisation of pigment-binder interaction in reconstructed paint films. <i>Analytical and Bioanalytical Chemistry</i> , 2008, 392, 65-76.	1.9	152
72	Far infrared and Raman spectroscopy analysis of inorganic pigments. <i>Journal of Raman Spectroscopy</i> , 2008, 39, 1104-1112.	1.2	43

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73	ULTRASENSITIVE CHEMILUMINESCENT IMMUNOCHEMICAL LOCALISATION OF PROTEIN COMPONENTS IN PAINTING CROSS-SECTIONS. , 2008, , .		0
74	Composition and content of seed flavonoids in forage and grain legume crops. Journal of Separation Science, 2007, 30, 491-501.	1.3	35
75	Attenuated Total Reflectionâ€”Fourier transform infrared microspectroscopic mapping for the characterisation of paint cross-sections. Analytica Chimica Acta, 2007, 599, 107-117.	2.6	76
76	The influence of nanopowder metal oxides on the methylating activity of dimethyl carbonate in analytical pyrolysis. Journal of Analytical and Applied Pyrolysis, 2007, 79, 2-8.	2.6	6
77	Application of analytical pyrolysis for the characterisation of old inks. Journal of Analytical and Applied Pyrolysis, 2007, 80, 400-405.	2.6	23
78	Diagnostic study of the materials and painting techniques in â€œThe Dinner of Emmausâ€”by Gregorio (and) Tj ETQc0 0 0 rgBT /Overlo	2.5	4
79	Use ofÂ”pyrolysis-gas chromatography/mass spectrometry toÂ”characterise binding media andÂ”protectives from aÂ”Coronelliâ€”s terrestrial globe. Journal of Cultural Heritage, 2006, 7, 67-70.	1.5	13
80	Effect of pigments on the analysis of fatty acids in siccative oils by pyrolysis methylation and silylation. Journal of Analytical and Applied Pyrolysis, 2005, 74, 39-44.	2.6	35
81	Dimethyl carbonate as a novel methylating reagent for fatty acids in analytical pyrolysis. Journal of Chromatography A, 2005, 1065, 257-264.	1.8	22
82	Profiling fatty acids in vegetable oils by reactive pyrolysisâ€”gas chromatography with dimethyl carbonate and titanium silicate. Journal of Chromatography A, 2005, 1100, 218-222.	1.8	30
83	Identification of Indigo Dyes in Painting Layers by Pyrolysis Methylation and Silylation. A Case Study: ?The Dinner of Emmaus? by G. Preti. Chromatographia, 2005, 61, 403-408.	0.7	26
84	Analytical study of traditional decorative materials and techniques used in Ming Dynasty wooden architecture. The case of the Drum Tower in Xiâ€”an, P.R. of China. Journal of Cultural Heritage, 2004, 5, 273-283.	1.5	43
85	Analysis of proteinaceous binders by in-situ pyrolysis and silylation. Chromatographia, 2003, 57, 645-648.	0.7	30
86	Off-line pyrolysis/silylation of cellulose and chitin. Journal of Analytical and Applied Pyrolysis, 2003, 68-69, 163-171.	2.6	31
87	Molecular characterisation of organic material in air fine particles (PM10) using conventional and reactive pyrolysis-gas chromatography-mass spectrometry. Journal of Environmental Monitoring, 2002, 4, 210-215.	2.1	19
88	Py-GC-MS of the synthetic polymers used in past restorations on Giotto's mural paintings at the Scrovegni Chapel (Padova). Chromatographia, 2002, 56, 763-767.	0.7	15
89	Characterisation of natural resins by pyrolysisâ€”Silylation. Chromatographia, 2002, 55, 611-616.	0.7	54
90	Gas chromatography/mass spectrometric characterisation of pyrolysis/silylation products of glucose and cellulose. Rapid Communications in Mass Spectrometry, 2002, 16, 2349-2355.	0.7	78

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91	In-situ pyrolysis and silylation for analysis of lipid materials used in paint layers. <i>Chromatographia</i> , 2001, 53, 311-314.	0.7	58
92	Gas chromatographic-mass spectrometric analysis of products arising from pyrolysis of amino acids in the presence of hexamethyldisilazane. <i>Journal of Chromatography A</i> , 2001, 922, 235-241.	1.8	60
93	DSC Application in the Conservation Field. <i>Magyar Árvad Kémlemeznyek</i> , 2001, 66, 315-327.	1.4	13