## Raphael A Viscarra Rossel

List of Publications by Year in descending order

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157 papers

13,628 citations

54 h-index 22147 113 g-index

181 all docs

181 docs citations

181 times ranked

7890 citing authors

| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Improved global-scale predictions of soil carbon stocks with Millennial Version 2. Soil Biology and Biochemistry, 2022, 164, 108466.                                | 4.2 | 36        |
| 2  | Modelling soil water retention and waterâ€holding capacity with visible–nearâ€infrared spectra and machine learning. European Journal of Soil Science, 2022, 73, .  | 1.8 | 14        |
| 3  | Evaluation of Two Portable Hyperspectral-Sensor-Based Instruments to Predict Key Soil Properties in Canadian Soils. Sensors, 2022, 22, 2556.                        | 2.1 | 5         |
| 4  | Estimating soil fungal abundance and diversity at a macroecological scale with deep learning spectrotransfer functions. Soil, 2022, 8, 223-235.                     | 2.2 | 6         |
| 5  | The costâ€effectiveness of reflectance spectroscopy for estimating soil organic carbon. European Journal of Soil Science, 2022, 73, .                               | 1.8 | 29        |
| 6  | Deep transfer learning of global spectra for local soil carbon monitoring. ISPRS Journal of Photogrammetry and Remote Sensing, 2022, 188, 190-200.                  | 4.9 | 26        |
| 7  | Environmental controls of soil fungal abundance and diversity in Australia's diverse ecosystems. Soil Biology and Biochemistry, 2022, 170, 108694.                  | 4.2 | 8         |
| 8  | Diffuse reflectance spectroscopy characterises the functional chemistry of soil organic carbon in agricultural soils. European Journal of Soil Science, 2022, 73, . | 1.8 | 3         |
| 9  | Assessment of the Effect of Soil Sample Preparation, Water Content and Excitation Time on Proximal X-ray Fluorescence Sensing. Sensors, 2022, 22, 4572.             | 2.1 | 2         |
| 10 | Miniaturised visible and near-infrared spectrometers for assessing soil health indicators in mine site rehabilitation. Soil, 2022, 8, 467-486.                      | 2.2 | 5         |
| 11 | Diffuse reflectance spectroscopy for estimating soil properties: A technology for the 21st century. European Journal of Soil Science, 2022, 73, .                   | 1.8 | 30        |
| 12 | National-scale spectroscopic assessment of soil organic carbon in forests of the Czech Republic. Geoderma, 2021, 385, 114832.                                       | 2.3 | 21        |
| 13 | Automated spectroscopic modelling with optimised convolutional neural networks. Scientific Reports, 2021, 11, 208.  | 1.6 | 22        |
| 14 | Similar importance of edaphic and climatic factors for controlling soil organic carbon stocks of the world. Biogeosciences, 2021, 18, 2063-2073.                    | 1.3 | 23        |
| 15 | Quantifying soil carbon in temperate peatlands using a mid-IR soil spectral library. Soil, 2021, 7, 193-215.  | 2.2 | 3         |
| 16 | Developing the Swiss mid-infrared soil spectral library for local estimation and monitoring. Soil, 2021, 7, 525-546.  | 2.2 | 13        |
| 17 | Evaluating the Precision and Accuracy of Proximal Soil vis–NIR Sensors for Estimating Soil Organic Matter and Texture. Soil Systems, 2021, 5, 48.                   | 1.0 | 15        |
| 18 | Wavelet geographically weighted regression for spectroscopic modelling of soil properties. Scientific Reports, 2021, 11, 17503.                                     | 1.6 | 9         |

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|----|---|-----|-----------|
| 19 | Assessing the response of soil carbon in Australia to changing inputs and climate using a consistent modelling framework. Biogeosciences, 2021, 18, 5185-5202.  | 1.3 | 4         |
| 20 | Multi-source data fusion of big spatial-temporal data in soil, geo-engineering and environmental studies. Science of the Total Environment, 2021, 788, 147842.  | 3.9 | 12        |
| 21 | Spectroscopic measurements and imaging of soil colour for field scale estimation of soil organic carbon. Geoderma, 2020, 357, 113972.                           | 2.3 | 46        |
| 22 | Soil carbon simulation confounded by different pool initialisation. Nutrient Cycling in Agroecosystems, 2020, 116, 245-255.                                     | 1.1 | 10        |
| 23 | Continental-scale magnetic properties of surficial Australian soils. Earth-Science Reviews, 2020, 203, 103028.  | 4.0 | 9         |
| 24 | Bioclimatic variables as important spatial predictors of soil hydraulic properties across Australia's agricultural region. Geoderma Regional, 2020, 23, e00344. | 0.9 | 6         |
| 25 | Examining assumptions of soil microbial ecology in the monitoring of ecological restoration. Ecological Solutions and Evidence, 2020, 1, e12031.                | 0.8 | 20        |
| 26 | A simple approach to estimate coastal soil salinity using digital camera images. Soil Research, 2020, 58, 737.  | 0.6 | 6         |
| 27 | Interactive effects of elevation and land use on soil bacterial communities in the Tibetan Plateau.<br>Pedosphere, 2020, 30, 817-831.                           | 2.1 | 21        |
| 28 | On the interpretability of predictors in spatial data science: the information horizon. Scientific Reports, 2020, 10, 16737.                                    | 1.6 | 17        |
| 29 | Modelling potentially toxic elements in forest soils with vis–NIR spectra and learning algorithms. Environmental Pollution, 2020, 267, 115574.                  | 3.7 | 33        |
| 30 | Soil environment grouping system based on spectral, climate, and terrain data: a quantitative branch of soil series. Soil, 2020, 6, 163-177.                    | 2.2 | 10        |
| 31 | Distinct controls over the temporal dynamics of soil carbon fractions after land use change. Global Change Biology, 2020, 26, 4614-4625.                        | 4.2 | 48        |
| 32 | A multivariate method for matching soil classification systems, with an Australian example. Soil Research, 2020, 58, 519.                                       | 0.6 | 4         |
| 33 | Microbial dynamics and soil physicochemical properties explain largeâ€scale variations in soil organic carbon. Global Change Biology, 2020, 26, 2668-2685.      | 4.2 | 56        |
| 34 | National digital soil map of organic matter in topsoil and its associated uncertainty in 1980's China. Geoderma, 2019, 335, 47-56.                              | 2.3 | 80        |
| 35 | Baseline map of soil organic carbon in Tibet and its uncertainty in the 1980s. Geoderma, 2019, 334, 124-133.  | 2.3 | 35        |
| 36 | Spectral fusion by Outer Product Analysis (OPA) to improve predictions of soil organic C. Geoderma, 2019, 335, 35-46.   | 2.3 | 40        |

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|----|---|-----|-----------|
| 37 | Teleconnections in spatial modelling. Geoderma, 2019, 354, 113854.  | 2.3 | 9         |
| 38 | The relevant range of scales for multi-scale contextual spatial modelling. Scientific Reports, 2019, 9, 14800.  | 1.6 | 13        |
| 39 | X-ray fluorescence and visible near infrared sensor fusion for predicting soil chromium content.<br>Geoderma, 2019, 352, 61-69.   | 2.3 | 57        |
| 40 | Continental-scale soil carbon composition and vulnerability modulated by regional environmental controls. Nature Geoscience, 2019, 12, 547-552.   | 5.4 | 92        |
| 41 | Soil bacterial abundance and diversity better explained and predicted with spectro-transfer functions. Soil Biology and Biochemistry, 2019, 129, 29-38.   | 4.2 | 23        |
| 42 | Updating a national soil classification with spectroscopic predictions and digital soil mapping. Catena, 2018, 164, 125-134.  | 2.2 | 47        |
| 43 | Magnetic Domain State Diagnosis in Soils, Loess, and Marine Sediments From Multiple Firstâ€Order<br>Reversal Curveâ€Type Diagrams. Journal of Geophysical Research: Solid Earth, 2018, 123, 998-1017. | 1.4 | 9         |
| 44 | The costâ€efficiency and reliability of two methods for soil organic C accounting. Land Degradation and Development, 2018, 29, 506-520.   | 1.8 | 18        |
| 45 | Proximal spectral sensing in pedological assessments: vis–NIR spectra for soil classification based on weathering and pedogenesis. Geoderma, 2018, 318, 123-136.                                      | 2.3 | 57        |
| 46 | Current and future assessments of soil erosion by water on the Tibetan Plateau based on RUSLE and CMIP5 climate models. Science of the Total Environment, 2018, 635, 673-686.                         | 3.9 | 184       |
| 47 | Multiscale contextual spatial modelling with the Gaussian scale space. Geoderma, 2018, 310, 128-137.  | 2.3 | 46        |
| 48 | Multi-scale digital soil mapping with deep learning. Scientific Reports, 2018, 8, 15244.  | 1.6 | 85        |
| 49 | Continental soil drivers of ammonium and nitrate in Australia. Soil, 2018, 4, 213-224.  | 2.2 | 5         |
| 50 | A geostatistical sensor data fusion approach for delineating homogeneous management zones in Precision Agriculture. Catena, 2018, 167, 293-304.   | 2.2 | 41        |
| 51 | Integrating multi-source data to improve water erosion mapping in Tibet, China. Catena, 2018, 169, 31-45.   | 2.2 | 25        |
| 52 | Proximal Soil and Plant Sensing. Assa, Cssa and Sssa, 2018, , 119-140.  | 0.6 | 16        |
| 53 | Spatial modelling with Euclidean distance fields and machine learning. European Journal of Soil Science, 2018, 69, 757-770.   | 1.8 | 91        |
| 54 | Proximal sensing for soil carbon accounting. Soil, 2018, 4, 101-122.  | 2.2 | 29        |

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| 55 | Evaluation of two methods to eliminate the effect of water from soilÂvis–NIR spectra for predictions of organic carbon. Geoderma, 2017, 296, 98-107.   | 2.3 | 65        |
| 56 | Novel Proximal Sensing for Monitoring Soil Organic C Stocks and Condition. Environmental Science & Env | 4.6 | 74        |
| 57 | Soil legacy data rescue via GlobalSoilMap and other international and national initiatives. GeoResJ, 2017, 14, 1-19.   | 1.4 | 102       |
| 58 | <scp>rsâ€local</scp> dataâ€mines information from spectral libraries to improve local calibrations.<br>European Journal of Soil Science, 2017, 68, 840-852.  | 1.8 | 58        |
| 59 | Guest Editorial: Near Infrared Spectroscopy for a Better Understanding of Soil. Journal of Near<br>Infrared Spectroscopy, 2016, 24, v-vi.  | 0.8 | 3         |
| 60 | Soil sensing: A new paradigm for agriculture. Agricultural Systems, 2016, 148, 71-74.  | 3.2 | 128       |
| 61 | Assessment of soil properties in situ using a prototype portable MIR spectrometer in two agricultural fields. Biosystems Engineering, 2016, 152, 14-27.  | 1.9 | 54        |
| 62 | Sensing of soil bulk density for more accurate carbon accounting. European Journal of Soil Science, 2016, 67, 504-513.   | 1.8 | 39        |
| 63 | Can the sequestered carbon in agricultural soil be maintained with changes in management, temperature and rainfall? A sensitivity assessment. Geoderma, 2016, 268, 22-28.  | 2.3 | 7         |
| 64 | Prediction of soil attributes using the Chinese soil spectral library and standardized spectra recorded at field conditions. Soil and Tillage Research, 2016, 155, 492-500.  | 2.6 | 71        |
| 65 | Proximal sensing of Cu in soil and lettuce using portable X-ray fluorescence spectrometry. Geoderma, 2016, 265, 6-11.  | 2.3 | 50        |
| 66 | A global spectral library to characterize the world's soil. Earth-Science Reviews, 2016, 155, 198-230.   | 4.0 | 546       |
| 67 | Baseline estimates of soil organic carbon by proximal sensing: Comparing design-based, model-assisted and model-based inference. Geoderma, 2016, 265, 152-163.   | 2.3 | 62        |
| 68 | Assimilating satellite imagery and visible–near infrared spectroscopy to model and map soil loss by water erosion in Australia. Environmental Modelling and Software, 2016, 77, 156-167.   | 1.9 | 106       |
| 69 | A new detailed map of total phosphorus stocks in Australian soil. Science of the Total Environment, 2016, 542, 1040-1049.  | 3.9 | 53        |
| 70 | Do we really need large spectral libraries for local scale SOC assessment with NIR spectroscopy?. Soil and Tillage Research, 2016, 155, 501-509.   | 2.6 | 88        |
| 71 | How does grinding affect the mid-infrared spectra of soil and their multivariate calibrations to texture and organic carbon?. Soil Research, 2015, 53, 913.  | 0.6 | 62        |
| 72 | Soil and Landscape Grid of Australia. Soil Research, 2015, 53, 835.  | 0.6 | 167       |

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| 73 | Developing the Australian mid-infrared spectroscopic database using data from the Australian Soil Resource Information System. Soil Research, 2015, 53, 922.  | 0.6 | 19        |
| 74 | Soil organic carbon and its fractions estimated by visible–near infrared transfer functions. European Journal of Soil Science, 2015, 66, 438-450.   | 1.8 | 99        |
| 75 | Prediction of soil organic matter using a spatially constrained local partial least squares regression and the <scp>C</scp> hinese visâ€" <scp>NIR</scp> spectral library. European Journal of Soil Science, 2015, 66, 679-687. | 1.8 | 138       |
| 76 | Proximal soil sensing of soil texture and organic matter with a prototype portable midâ€infrared spectrometer. European Journal of Soil Science, 2015, 66, 661-669.   | 1.8 | 32        |
| 77 | Improved estimates of organic carbon using proximally sensed vis– <scp>NIR</scp> spectra corrected by piecewise direct standardization. European Journal of Soil Science, 2015, 66, 670-678.                                    | 1.8 | 49        |
| 78 | Selected papers from the Third Global Workshop on Proximal Soil Sensing 2013. European Journal of Soil Science, 2015, 66, 629-630.  | 1.8 | 0         |
| 79 | Accounting for the effects of water and the environment on proximally sensed vis– <scp>NIR</scp> soil spectra and their calibrations. European Journal of Soil Science, 2015, 66, 555-565.                                      | 1.8 | 133       |
| 80 | Toxicity and bioaccumulation of Cu in an accumulator crop (Lactuca sativa L.) in different Australian agricultural soils. Scientia Horticulturae, 2015, 193, 346-352.   | 1.7 | 16        |
| 81 | Spectral libraries for quantitative analyses of tropical Brazilian soils: Comparing vis–NIR and mid-IR reflectance data. Geoderma, 2015, 255-256, 81-93.  | 2.3 | 155       |
| 82 | Integrating geospatial and multiâ€depth laboratory spectral data for mapping soil classes in a geologically complex area in southeastern <scp>B</scp> razil. European Journal of Soil Science, 2015, 66, 767-779.               | 1.8 | 20        |
| 83 | The Australian three-dimensional soil grid: Australia's contribution to the GlobalSoilMap project.<br>Soil Research, 2015, 53, 845.   | 0.6 | 201       |
| 84 | Foreword to â€~Soil & Landscape Grid of Australia'. Soil Research, 2015, 53, i.   | 0.6 | 0         |
| 85 | Australian net (1950s–1990) soil organic carbon erosion: implications for CO <sub>2</sub> emission and land–atmosphere modelling. Biogeosciences, 2014, 11, 5235-5244.  | 1.3 | 26        |
| 86 | Baseline map of organic carbon in Australian soil to support national carbon accounting and monitoring under climate change. Global Change Biology, 2014, 20, 2953-2970.  | 4.2 | 222       |
| 87 | Assessment of soil organic carbon at local scale with spiked ⟨scp⟩NIR⟨/scp⟩ calibrations: effects of selection and extraâ€weighting on the spiking subset. European Journal of Soil Science, 2014, 65, 248-263.                 | 1.8 | 85        |
| 88 | Applications of proximal sensing to soil science. European Journal of Soil Science, 2014, 65, 815-815.  | 1.8 | 0         |
| 89 | Curvelet transform to study scale-dependent anisotropic soil spatial variation. Geoderma, 2014, 213, 589-599.   | 2.3 | 15        |
| 90 | The Performance of Visible, Near-, and Mid-Infrared Reflectance Spectroscopy for Prediction of Soil Physical, Chemical, and Biological Properties. Applied Spectroscopy Reviews, 2014, 49, 139-186.                             | 3.4 | 559       |

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| 91  | Development of a national VNIR soil-spectral library for soil classification and prediction of organic matter concentrations. Science China Earth Sciences, 2014, 57, 1671-1680.                                   | 2.3 | 143       |
| 92  | Soil classification using visible/near-infrared diffuse reflectance spectra from multiple depths. Geoderma, 2014, 223-225, 73-78.  | 2.3 | 91        |
| 93  | Mapping gamma radiation and its uncertainty from weathering products in a Tasmanian landscape with a proximal sensor and random forest kriging. Earth Surface Processes and Landforms, 2014, 39, 735-748.          | 1.2 | 39        |
| 94  | Special issue on proximal soil sensing. Geoderma, 2013, 199, 1.  | 2.3 | 4         |
| 95  | The importance of sampling support for explaining change in soil organic carbon. Geoderma, 2013, 193-194, 323-325.   | 2.3 | 15        |
| 96  | Separating scale-specific soil spatial variability: A comparison of multi-resolution analysis and empirical mode decomposition. Geoderma, 2013, 209-210, 57-64.  | 2.3 | 43        |
| 97  | Distance and similarity-search metrics for use with soil vis–NIR spectra. Geoderma, 2013, 199, 43-53.  | 2.3 | 63        |
| 98  | Characterizing scale―and locationâ€specific variation in nonâ€linear soil systems using the wavelet transform. European Journal of Soil Science, 2013, 64, 706-715.  | 1.8 | 15        |
| 99  | The likelihood of observing dust-stimulated phytoplankton growth in waters proximal to the Australian continent. Journal of Marine Systems, 2013, 117-118, 43-52.  | 0.9 | 30        |
| 100 | Soil Analysis Using Visible and Near Infrared Spectroscopy. Methods in Molecular Biology, 2013, 953, 95-107.   | 0.4 | 27        |
| 101 | Fluctuations in methodâ€ofâ€moments variograms caused by clustered sampling and their elimination by declustering and residual maximum likelihood estimation. European Journal of Soil Science, 2013, 64, 401-409. | 1.8 | 17        |
| 102 | Soil organic carbon dust emission: an omitted global source of atmospheric <scp><cop>CO<sub>2</sub></cop></scp> . Global Change Biology, 2013, 19, 3238-3244.  | 4.2 | 56        |
| 103 | Visible-Near Infrared Spectra as a Proxy for Topsoil Texture and Glacial Boundaries. Soil Science<br>Society of America Journal, 2013, 77, 568-579.  | 1.2 | 55        |
| 104 | Quantitative Soil Spectroscopy. Applied and Environmental Soil Science, 2013, 2013, 1-3.   | 0.8 | 29        |
| 105 | Multiple observation types reduce uncertainty in Australia's terrestrial carbon and water cycles. Biogeosciences, 2013, 10, 2011-2040.   | 1.3 | 100       |
| 106 | Separating Scale-Specific Spatial Variability in Two Dimensions using Bi-Dimensional Empirical Mode Decomposition. Soil Science Society of America Journal, 2013, 77, 1991-1995.                                   | 1.2 | 15        |
| 107 | Predicting soil properties from the Australian soil visible–near infrared spectroscopic database.<br>European Journal of Soil Science, 2012, 63, 848-860.  | 1.8 | 237       |
| 108 | Reflectance spectroscopy: a tool for predicting soil properties related to the incidence of Fe chlorosis. Spanish Journal of Agricultural Research, 2012, 10, 1133.  | 0.3 | 15        |

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|-----|--|-----|-----------|
| 109 | Spatial uncertainty of the $\langle \sup 137 \langle \sup \rangle$ Cs reference inventory for Australian soil. Journal of Geophysical Research, 2011, 116, .             | 3.3 | 11        |
| 110 | Spatial uncertainty of <sup>137</sup> Cs-derived net (1950s–1990) soil redistribution for Australia. Journal of Geophysical Research, 2011, 116, .                       | 3.3 | 22        |
| 111 | Fine-resolution multiscale mapping of clay minerals in Australian soils measured with near infrared spectra. Journal of Geophysical Research, 2011, 116, .               | 3.3 | 78        |
| 112 | Proximal Soil Sensing: An Effective Approach for Soil Measurements in Space and Time. Advances in Agronomy, 2011, 113, 243-291.  | 2.4 | 165       |
| 113 | Using targeted sampling to process multivariate soil sensing data. Geoderma, 2011, 163, 63-73.   | 2.3 | 43        |
| 114 | Advances in Agronomy. Advances in Agronomy, 2011, , iii.   | 2.4 | 5         |
| 115 | Discrimination of Australian soil horizons and classes from their visible-near infrared spectra. European Journal of Soil Science, 2011, 62, 637-647.                    | 1.8 | 85        |
| 116 | On the soil information content of visible–near infrared reflectance spectra. European Journal of Soil Science, 2011, 62, 442-453.                                       | 1.8 | 64        |
| 117 | Digitally mapping the information content of visible–near infrared spectra of surficial Australian soils. Remote Sensing of Environment, 2011, 115, 1443-1455.           | 4.6 | 102       |
| 118 | Precision Agriculture: Proximal Soil Sensing. Encyclopedia of Earth Sciences Series, 2011, , 650-656.  | 0.1 | 9         |
| 119 | Spatial Modeling of a Soil Fertility Index using Visible–Nearâ€Infrared Spectra and Terrain Attributes.<br>Soil Science Society of America Journal, 2010, 74, 1293-1300. | 1.2 | 38        |
| 120 | Using Wavelets to Analyse Proximally Sensed Vis–NIR Soil Spectra. , 2010, , 201-210.   |     | 1         |
| 121 | Diagnostic Screening of Urban Soil Contaminants Using Diffuse Reflectance Spectroscopy. , 2010, , 191-199.   |     | 4         |
| 122 | Diffuse Reflectance Spectroscopy for High-Resolution Soil Sensing. , 2010, , 29-47.  |     | 31        |
| 123 | Mapping iron oxides and the color of Australian soil using visible–nearâ€infrared reflectance spectra.<br>Journal of Geophysical Research, 2010, 115, .                  | 3.3 | 79        |
| 124 | Visible and Near Infrared Spectroscopy in Soil Science. Advances in Agronomy, 2010, 107, 163-215.  | 2.4 | 953       |
| 125 | Environmental sensor networks for vegetation, animal and soil sciences. International Journal of Applied Earth Observation and Geoinformation, 2010, 12, 303-316.        | 1.4 | 55        |
| 126 | The potential of NIR spectroscopy to predict stability parameters in sewage sludge and derived compost. Geoderma, 2010, 158, 93-100.                                     | 2.3 | 21        |

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| 127 | Using data mining to model and interpret soil diffuse reflectance spectra. Geoderma, 2010, 158, 46-54.  | 2.3 | 912       |
| 128 | Development of On-the-Go Proximal Soil Sensor Systems. , 2010, , 15-28.   |     | 25        |
| 129 | Proximal Soil Nutrient Sensing Using Electrochemical Sensors. , 2010, , 77-88.  |     | 12        |
| 130 | Using Proximal Soil Sensors for Digital Soil Mapping. , 2010, , 79-92.  |     | 2         |
| 131 | Diagnostic screening of urban soil contaminants using diffuse reflectance spectroscopy. Soil Research, 2009, 47, 433.   | 0.6 | 40        |
| 132 | Improved analysis and modelling of soil diffuse reflectance spectra using wavelets. European Journal of Soil Science, 2009, 60, 453-464.  | 1.8 | 95        |
| 133 | Regional predictions of soil organic carbon content from spectral reflectance measurements.<br>Biosystems Engineering, 2009, 104, 442-446.                                      | 1.9 | 45        |
| 134 | In situ measurements of soil colour, mineral composition and clay content by vis–NIR spectroscopy. Geoderma, 2009, 150, 253-266.  | 2.3 | 366       |
| 135 | The Soil Spectroscopy Group and the Development of a Global Soil Spectral Library. NIR News, 2009, 20, 14-15.   | 1.6 | 37        |
| 136 | Using a digital camera to measure soil organic carbon and iron contents. Biosystems Engineering, 2008, 100, 149-159.  | 1.9 | 133       |
| 137 | ParLeS: Software for chemometric analysis of spectroscopic data. Chemometrics and Intelligent Laboratory Systems, 2008, 90, 72-83.  | 1.8 | 244       |
| 138 | Soil organic carbon prediction by hyperspectral remote sensing and field vis-NIR spectroscopy: An Australian case study. Geoderma, 2008, 146, 403-411.                          | 2.3 | 458       |
| 139 | Using a legacy soil sample to develop a mid-IR spectral library. Soil Research, 2008, 46, 1.  | 0.6 | 140       |
| 140 | Diffuse Reflectance Spectroscopy as a Tool for Digital Soil Mapping. , 2008, , 165-172.   |     | 16        |
| 141 | Comparing Spectral Soil Inference Systems and Midâ€Infrared Spectroscopic Predictions of Soil Moisture Retention. Soil Science Society of America Journal, 2008, 72, 1394-1400. | 1.2 | 24        |
| 142 | Robust Modelling of Soil Diffuse Reflectance Spectra by "Bagging-Partial Least Squares Regression― Journal of Near Infrared Spectroscopy, 2007, 15, 39-47.                      | 0.8 | 98        |
| 143 | Multivariate calibration of hyperspectral ?-ray energy spectra for proximal soil sensing. European Journal of Soil Science, 2007, 58, 343-353.                                  | 1.8 | 142       |
| 144 | Visible, near infrared, mid infrared or combined diffuse reflectance spectroscopy for simultaneous assessment of various soil properties. Geoderma, 2006, 131, 59-75.           | 2.3 | 1,613     |

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|-----|---|-----|-----------|
| 145 | Colour space models for soil science. Geoderma, 2006, 133, 320-337.   | 2.3 | 309       |
| 146 | Spectral soil analysis and inference systems: A powerful combination for solving the soil data crisis. Geoderma, 2006, 136, 272-278.                              | 2.3 | 164       |
| 147 | Determining the composition of mineral-organic mixes using UV–vis–NIR diffuse reflectance spectroscopy. Geoderma, 2006, 137, 70-82.                               | 2.3 | 415       |
| 148 | Spatial point-process statistics: concepts and application to the analysis of lead contamination in urban soil. Environmetrics, 2005, 16, 339-355.                | 0.6 | 9         |
| 149 | Rapid, quantitative and spatial field measurements of soil pH using an Ion Sensitive Field Effect<br>Transistor. Geoderma, 2004, 119, 9-20.                       | 2.3 | 35        |
| 150 | Modelling the kinetics of buffer reactions for rapid field predictions of lime requirements. Geoderma, 2003, 114, 49-63.  | 2.3 | 9         |
| 151 | Spatioâ€Temporal Simulation of the Fieldâ€Scale Evolution of Organic Carbon over the Landscape. Soil Science Society of America Journal, 2003, 67, 1477-1486.     | 1.2 | 37        |
| 152 | A response-surface calibration model for rapid and versatile site-specific lime-requirement predictions in south-eastern Australia. Soil Research, 2001, 39, 185. | 0.6 | 20        |
| 153 | Assessment of the production and economic risks of site-specific liming using geostatistical uncertainty modelling. Environmetrics, 2001, 12, 699-711.            | 0.6 | 21        |
| 154 | Title is missing!. Precision Agriculture, 2000, 2, 163-178.   | 3.1 | 3         |
| 155 | Laboratory evaluation of a proximal sensing technique for simultaneous measurement of soil clay and water content. Geoderma, 1998, 85, 19-39.                     | 2.3 | 155       |
| 156 | Soil chemical analytical accuracy and costs: implications from precision agriculture. Australian Journal of Experimental Agriculture, 1998, 38, 765.              | 1.0 | 155       |
| 157 | Spatial Prediction for Precision Agriculture. Assa, Cssa and Sssa, 0, , 331-342.  | 0.6 | 17        |