

Publicaciones

1. Button ES, Marshall M, Sánchez-Rodríguez AR, Blaud A, Abadie M, Chadwick DR, Jones DL. [Greenhouse gas production, diffusion and consumption in a soil profile under maize and wheat production](#). GEODERMA 430, 116310, 2023
2. Dodd RJ, Chadwick DR, Hill PW, Hayes F, Sánchez-Rodríguez AR, Gwynn-Jones D, Smart SM, Jones DL. [Resilience of ecosystem service delivery in grasslands in response to single and compound extreme weather events](#). SCIENCE OF THE TOTAL ENVIRONMENT, 861, 160660, 2022
3. González-Guzmán A, Rey M-D, Froussart E, Quesada-Moraga E. Elucidating the effect of endophytic entomopathogenic fungi on bread wheat growth through signaling of immune response-related hormones. ENVIRONMENTAL MICROBIOLOGY 88, <https://doi.org/10.1128/aem.00882-22>
4. Fruett T, Inda AV, Barrón V, Zinn YL, Taha K, Fernandes AFD. [Impact of crop production and eucalyptus forestry on a Ferralsol under native grassland in southern Brazil](#). GEODERMA Regional 31, e00575, 2022
5. López-Moral A, Sánchez-Rodríguez AR, Trapero A, Agustí-Brisach C. [Establishment of a method to collect root exudates from olive plants and its validation by determining the effect of root exudates against *Verticillium dahliae*](#). PLANT AND SOIL <https://doi.org/10.1007/s11104-022-05770-1>, 2022
6. Cao W, Jiang Z, Gai C, Barrón V, Torrent J, Zhong Y, Liu Q. [Re-visiting the quantification of hematite by diffuse reflectance spectroscopy](#). MINERALS 12 (7), 872 2022
7. Porto de Oliveira R, Barbosa RS, Marques Júnior J, Jacques Agra Bezerra da Silva Y, Barrón V, Silva Dantas J, Do Amaral Resende JM, Veniciús Santana Gualberto A. [Mid-Infrared Spectrum Analysis for Mapping Attributes of Cohesive Soils in Brazil](#). COMMUNICATIONS IN SOIL SCIENCE AND PLANT ANALYSIS 53 (10), 1277-1293, 2022
8. Di Lorio E, Circelli L, Angelico R, Torrent J, Tan W, Colombo C. [Environmental implications of interaction between humic substances and iron oxide nanoparticles: A review](#). CHEMOSPHERE, 135172, 2022
9. Jiang Z, Liu Q, Roberts AP, Dekkers MJ, Barrón V, Torrent J, Li S. [The magnetic and color reflectance properties of hematite: From Earth to Mars](#). REVIEWS OF GEOPHYSICS 60 (1), e2020RG000698, 2022
10. Carswell A, Sánchez-Rodríguez AR, Saunders K, le Cocq K, Shaw R, Cotton J, Zhang Y, Evans J, Chadwick DR, Jones DL, Misselbrook T. [Combining targeted grass traits with red clover improves grassland performance and reduces need for nitrogen fertilisation](#). EUROPEAN JOURNAL OF AGRONOMY 133, 126433, 2022
11. González-Caballo P, Barrón V, Torrent J, del Campillo MC, Sánchez-Rodríguez AR. [Wheat and Maize Grown on Two Contrasting Zinc-deficient Calcareous Soils Respond Differently to Soil and Foliar Application of Zinc](#). JOURNAL OF SOIL SCIENCE AND PLANT NUTRITION, 22, 1718–1731, 2022
12. Pavinato PS, Sánchez-Rodríguez AR, Tiecher T. [Sustainable phosphorus use in agriculture](#). FRONTIERS IN AGRONOMY 4, 1-2, 2022
13. Fink J, Sánchez-Rodríguez AR, Frosi G, Eckert D, Bonetti JA, Bastiani K, Lavratti A, Inda AV, Zanquetti A. [Industrial saline wastewater in a corn-soybean rotation to](#)

Publicaciones grupo AGR-165 Edafología

- [enhance crop yield without compromising soil health in a subtropical soil](#). JOURNAL OF ENVIRONMENTAL MANAGEMENT 296, 113341, 2021
14. Zarzosa PS, Herraiz AD, Olmo M, Ruiz-Benito P, Barrón V, Bastias CC, Enrique G, Villar R. [Linking functional traits with tree growth and forest productivity in Quercus ilex forests along a climatic gradient](#). SCIENCE OF THE TOTAL ENVIRONMENT 786, 147468, 2021
15. González-Guzmán A, Raya-Díaz S, Sacristán D, Yousef M, Sánchez-Rodríguez AR, Barrón V, del Campillo MC, Torrent J. [Effects of entomopathogenic fungi on durum wheat nutrition and growth in the field](#). EUROPEAN JOURNAL OF AGRONOMY 128, 126282, 2021
16. Sacristán D, González-Guzmán A, Torrent J, del Campillo MC. [Optimum Olsen Phosphorus/ZincDTPA ratio for the initial growth of maize in agricultural soils of the Mediterranean region](#). JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE 101, 3056-3064, 2021
17. Sánchez-Rodríguez AR, Marín-Paredes M, González-Guzmán A, Méndez JM, Sánchez-Parra M, Sacristán D, Fuentes-García M, Barrón V, Torrent J, del Campillo MC. [Zinc biofortification strategies for wheat grown on calcareous Vertisols in southern Spain: application method and rate](#). PLANT AND SOIL 462, 125-140, 2021
18. Salazar PC, Navarro-Cerrillo RM, Grados N, Cruz G, Barrón V, Villar R. [Leaf nutrients in Prosopis pallida are determined by soil chemical attributes under eutric conditions in a dryland forest](#). TREES 35 (2), 375-386, 2021
19. McKay Fletcher DM, Shaw R, Sánchez-Rodríguez AR, Daly KR, Van Veelen A, Jones DL, Roose T. [Quantifying citrate-enhanced phosphate root uptake using microdialysis](#). PLANT AND SOIL 461, 69-89, 2021
20. Sánchez-Rodríguez AR, Rey MD, Nechate-Drif H, Castillejo MA, Jorrín-Novo J, Torrent J, del Campillo MC, Sacristán D. [Combining P and Zn fertilization to enhance yield and grain quality in maize grown on Mediterranean soils](#). SCIENTIFIC REPORTS 11 (1), 1-14, 2021
21. Lampinen J, Tuomi M, Fischer LK, Neuenkamp L, Alday JG, Bucharova A, Cancellieri L, Casado-Arzuaga I, Čeplová N, Cerveró L, Deák B, Eriksson O, Fellowes MDE, Fernández de Manuel B, Filibeck G, González-Guzmán A, Hinojosa MB, Kowarik I, Lumbierres B, Miguel A, Pardo R, Pons X, Rodríguez-García E, Schröder R, Gaia Sperandii M, Unterweger P, Valkó O, Vázquez V, Klaus VH. [Acceptance of near-natural greenspace management relates to ecological and socio-cultural assigned values among European urbanites](#). BASIC AND APPLIED ECOLOGY 50, 119-131, 2021
22. González-Guzmán A, Sánchez-Rodríguez AR, Quesada-Moraga E, del Campillo MC, Yousef-Yousef M. [Optimizing wheat seed treatment with entomopathogenic fungi for improving plant growth at early development stages](#). SPANISH JOURNAL OF AGRICULTURAL RESEARCH, 19 (4), e1004-e1004, 2021

Publicaciones grupo AGR-165 Edafología

23. Ramos PV, Inda AV, Barrón V, Teixeira DDB, Marques Jr. J. [Magnetic susceptibility in the prediction of soil attributes in southern Brazil](#). SOIL SCIENCE SOCIETY OF AMERICA JOURNAL 85 (1), 102-116, 2021
24. Fink J, Borga G, Frosi G, Junior CP, Pitta CSR, Sánchez-Rodríguez AR. [Enhancing wheat and soybean yields in a subtropical oxisol through effective P fertilization strategies](#). JOURNAL OF SOIL SCIENCE AND PLANT NUTRITION 20 (4), 1605-1613, 2020
25. Ren J, Long X, Ji J, Barrón V, Torrent J, Wang Y, Xie S. [Different enrichment patterns of magnetic particles modulated by primary iron-phosphorous input](#).
■
GEOPHYSICAL RESEARCH LETTERS 47 (22), e2020GL090439, 2020
26. Ramos PV, Inda AV, Barrón V, Siquiera DS, Júnior JM, Teixeira DDB. [Color in subtropical brazilian soils as determined with a Munsell chart and by diffuse reflectance spectroscopy](#). CATENA 193, 104609, 2020
27. de Oliveira JS, Inda AV, Barrón V, Torrent J, Tiecher T, de Oliveira Camargo FV. [Soil properties governing phosphorus adsorption in soils of Southern Brazil](#). GEODERMA REGIONAL 22, e00318, 2020
28. Fink J, Sánchez-Rodríguez AR, Souza CP, Pierozan Junior C, Lagos FS, Frosi G, Eckert D, Schwengber A. [Adjusting P-K Fertilization and Liming Strategies to Enhance Yield of Cherry Tomato Plants Grown on an Oxisol](#). COMMUNICATIONS IN SOIL SCIENCE AND PLANT ANALYSIS 51 (13), 1736-1746, 2020
29. González-Guzmán A, Sacristán D, Quesada-Moraga E, Torrent J, del Campillo MC, Sánchez-Rodríguez AR. [Effects of entomopathogenic fungi on growth and nutrition in wheat grown on two calcareous soils: Influence of the fungus application method](#). ANNALS OF APPLIED BIOLOGY 177, 26-40, 2020
30. Fischer LK, Neuenkamp L, Lampinen J, Tuomi M, Alday JG, Bucharova A, Cancellieri L, Casado-Arzuaga I, Čeplová N, Cerveró L, Deák B, Eriksson O, Fellowes MDE, Fernández de Manuel B, Goffredo Filibeck, Adrián González-Guzmán, M Belen Hinojosa, Ingo Kowarik, Lumbierres B, Miguel A, Pardo R, Pons

X, Rodríguez-García E, Schröder R, Gaia Sperandii M, Unterweger P, Valkó O,

Vázquez V, Klaus VH. [Public attitudes toward biodiversity-friendly greenspace](#)

■
[management in Europe](#). CONSERVATION LETTERS 13 (4), e12718

31. Poggere GC, Barrón V, Inda AV, Barbosa JZ, Brito ADB, Curi N. Linking phosphorus sorption and magnetic susceptibility in clays and tropical soils. SOIL RESEARCH 58, 430-440, 2020
32. González-Guzmán A, Sacristán D, Sánchez-Rodríguez AR, Barrón V, Torrent J, del Campillo MC. [Soil nutrients effects on the performance of durum wheat inoculated with entomopathogenic fungi](#). AGRONOMY 10 (4), 589, 2020
33. Barrón, Vidal; Méndez, José M.; Balbuena, José; Cruz-Yusta, Manuel; Sánchez, Luis; Giménez, Carmen; Sacristán, Daniel; González-Guzmán, Adrián; Sánchez-Rodríguez, Antonio R.; Skiba, Ute M.; Inda, Alberto V.; Marques, José, Jr.; Recio, José M.; Delgado, Antonio; del Campillo, María C.; Torrent, José. Photochemical emission and fixation of NO_x gases in soils. SCIENCE OF THE TOTAL ENVIRONMENT. 702, ELSEVIER, 01/02/2020.
34. Silva, Laercio Santos; Marques Junior, José; Barrón, Vidal; Gomes, Romario Pimenta; Teixeira, Daniel De Bortoli; Siqueira, Diego Silva; Vasconcelos, Vinicius. Spatial variability of iron oxides in soils from Brazilian sandstone and basalt. CATENA. 185, ELSEVIER, 01/02/2020.
35. Fletcher, D. M. McKay; Shaw, R.; Sánchez-Rodríguez, A. R.; Daly, K. R.; van Veelen, A.; Jones, D. L.; Roose, T. Quantifying citrate-enhanced phosphate root uptake using microdialysis. PLANT AND SOIL. SPRINGER, 05/12/2019.
36. Menéndez, Inmaculada; Campeny, Marc; Quevedo-González, Luis; Mangas, José; Llovet, Xavier; Tauler, Esperanca; Barrón, Vidal; Torrent, José; Méndez-Ramos, Jorge. Distribution of REE-bearing minerals in felsic magmatic rocks and paleosols from Gran Canaria, Spain: Intraplate oceanic islands as a new example of potential, non-conventional sources of rare-earth elements. JOURNAL OF GEOCHEMICAL EXPLORATION. 204, pp. 270-288. ELSEVIER, 01/09/2019.
37. Menéndez, Inmaculada; Mangas, José; Tauler, Esperanca; Barrón, Vidal; Torrent, José; Betancort, Juan F.; Santana, Angelo; Manuel Recio, José; Quevedo-González, Luis A.; Alonso, Ignacio; Méndez-Ramos, Jorge. Aeolian influx and related environmental conditions on Gran Canaria during the early Pleistocene. QUATERNARY RESEARCH. 91 - 1, pp. 35 - 50. 01/01/2019.
38. Jordanova, Neli; Jordanova, Diana; Barrón, Vidal. Wildfire severity: Environmental effects revealed by soil magnetic properties. LAND DEGRADATION & DEVELOPMENT. 30 - 18, pp. 2226 - 2242. WILEY, 22/08/2019.
39. Harvey, Rachel J.; Chadwick, David R.; Rafael Sánchez-Rodríguez, Antonio; Jones, Davey L. Agroecosystem resilience in response to extreme winter flooding.

- AGRICULTURE ECOSYSTEMS & ENVIRONMENT. 279, pp. 1-13. ELSEVIER, 01/07/2019.
40. Cowan, N.; Levy, P.; Drewer, J.; Carswell, A.; Shaw, R.; Simmons, I.; Bache, C.; Marinheiro, J.; Brichet, J.; Sánchez-Rodríguez, A. R.; Cotton, J.; Hill, P. W.; Chadwick, D. R.; Jones, D. L.; Misselbrook, T. H.; Skiba, U. Application of Bayesian statistics to estimate nitrous oxide emission factors of three nitrogen fertilisers on UK grasslands. ENVIRONMENT INTERNATIONAL. 128, pp. 362 - 370. PERGAMON-ELSEVIER SCIENCE LTD, 01/07/2019
 41. Jordanova, Neli; Jordanova, Diana; Barrón, Vidal; Lesigysarski, Dejan; Kostadinova-Avramova, María. Rock-magnetic and color characteristics of archaeological samples from burnt clay from destructions and ceramics in relation to their firing temperature. ARCHAEOLOGICAL AND ANTHROPOLOGICAL SCIENCES. 11 - 7, pp. 3595 - 3612. SPRINGER HEIDELBERG, 01/07/2019.
 42. Carswell, Alison; Shaw, Rory; Hunt, John; Rafael Sánchez-Rodríguez, Antonio; Saunders, Karen; Cotton, Joséph; Hill, Paul W.; Chadwick, Dave R.; Jones, Davey L.; Misselbrook, Tom H. Assessing the benefits and wider costs of different N fertilisers for grassland agriculture. ARCHIVES OF AGRONOMY AND SOIL SCIENCE. 65 - 5, pp. 625-639. TAYLOR & FRANCIS LTD, 16/04/2019.
 43. Salazar, Pablo C.; Navarro-Cerrillo, Rafael M.; Grados, Nora; Cruz, Gastón; Barrón, Vidal; Villar, Rafael. Tree size and leaf traits determine the fertility island effect in Prosopis pallida dryland forest in Northern Peru. PLANT AND SOIL. 437 - 1-2, pp. 117 - 135. SPRINGER, 01/04/2019.
 44. Horta, Carmo; Monteiro, Fernando; Madeira, Manuel; Torrent, José. Crop use and profile distribution of phosphorus in soils that developed on mafic rocks in southern Portugal. ARCHIVES OF AGRONOMY AND SOIL SCIENCE. 65 - 4, pp. 465 - 477. TAYLOR & FRANCIS LTD, 21/03/2019.
 45. Sánchez-Rodríguez, Antonio Rafael; Nie, Chengrong; Hill, Paul W.; Chadwick, David R.; Jones, Davey L. Extreme flood events at higher temperatures exacerbate the loss of soil functionality and trace gas emissions in grassland. SOIL BIOLOGY & BIOCHEMISTRY. 130, pp. 227 - 236. PERGAMON-ELSEVIER SCIENCE LTD, 01/03/2019.
 46. Bavaresco, Jovana; Fink, Jesse R.; Moraes, Moacir T.; Sánchez-Rodríguez, Antonio R.; Anghinoni, Ibanor. Chromium from Hydrolyzed Leather Affects Soybean Growth and Nodulation. PEDOSPHERE. 29 - 1, pp. 95 - 101. SCIENCE PRESS, 01/02/2019.
 47. Sánchez-Rodríguez, Antonio Rafael; Hill, Paul W.; Chadwick, David R.; Jones, Davey L. Typology of extreme flood event leads to differential impacts on soil functioning. SOIL BIOLOGY & BIOCHEMISTRY. 129, pp. 153 - 168. PERGAMON-ELSEVIER SCIENCE LTD, 01/02/2019.
 48. Sacristán, Daniel; González-Guzman, Adrián; Barrón, Vidal; Torrent, José; Del Campillo, María C. Phosphorus-induced zinc deficiency in wheat pot-grown on noncalcareous and calcareous soils of different properties. ARCHIVES OF AGRONOMY AND SOIL SCIENCE. 65 - 2, pp. 208 - 223. TAYLOR & FRANCIS LTD, 28/01/2019.
 49. Barbosa, Ronny Sobreira; Marques Junior, José; Barrón, Vidal; Martins Filho, Marcilio Vieira; Siqueira, Diego Silva; Peluco, Rafael Goncalves; Camargo, Livia

Publicaciones grupo AGR-165 Edafología

- Arantes; Silva, Laercio Santos. Prediction and mapping of erodibility factors (USLE and WEPP) by magnetic susceptibility in basalt-derived soils in northeastern SAO Paulo state, Brazil. ENVIRONMENTAL EARTH SCIENCES. 78 - 1, SPRINGER, 01/01/2019.
50. Jordanova, Diana; Jordanova, Neli; Barrón, Vidal; Petrov, Petar. The signs of past wildfires encoded in the magnetic properties of forest soils. CATENA. 171, pp. 265 - 279. ELSEVIER SCIENCE BV, 01/12/2018.
51. Agusti-Brisach, C.; Raya-Ortega, M. C.; Trapero, C.; Roca, L. F.; Luque, F.; Lopez-Moral, A.; Fuentes, M.; Trapero, A. First Report of Fusarium pseudograminearum Causing Crown Rot of Wheat in Europe. PLANT DISEASE. 102 - 8, pp. 1670 - 1670. 01/08/2018.
52. Jiang, Zhaoxia; Liu, Qingsong; Roberts, Andrew P.; Barrón, Vidal; Torrent, José; Zhang, Qiang. A new model for transformation of ferrihydrite to hematite in soils and sediments. GEOLOGY. 46 - 11, pp. 987 - 990. GEOLOGICAL SOC AMER, INC, 01/11/2018.
53. Poggere, Giovana Clarice; Inda, Alberto Vasconcellos; Barrón, Vidal; Kampf, Nestor; Barrera de Brito, Angela Dayana; Barbosa, Julierme Zimmer; Curi, Nilton. Maghemite quantification and magnetic signature of Brazilian soils with contrasting parent materials. APPLIED CLAY SCIENCE. 161, pp. 385 - 394. ELSEVIER SCIENCE BV, 01/09/2018.
54. Sánchez-Rodríguez, Antonio R.; Carswell, Alison M.; Shaw, Rory; Hunt, John; Saunders, Karen; Cotton, Joséph; Chadwick, Dave R.; Jones, Davey L.; Misselbrook, Tom H. Advanced Processing of Food Waste Based Digestate for Mitigating Nitrogen Losses in a Winter Wheat Crop. FRONTIERS IN SUSTAINABLE FOOD SYSTEMS. 2, FRONTIERS MEDIA SA, 17/07/2018.
55. Camargo, Livia Arantes; Marques Jr, José; Barrón, Vidal; Ferracciu Alleoni, Luis Reynaldo; Pereira, Gener Tadeu; Teixeira, Daniel De Bortoli; Rabelo de Souza Bahia, Angelica Santos. Predicting potentially toxic elements in tropical soils from iron oxides, magnetic susceptibility and diffuse reflectance spectra. CATENA. 165, pp. 503 - 515. ELSEVIER SCIENCE BV, 01/06/2018.
56. Sánchez-Rodríguez, Antonio Rafael; Chadwick, David R.; Tatton, Gemma S.; Hill, Paul W.; Jones, Davey L. Comparative effects of prolonged freshwater and saline flooding on nitrogen cycling in an agricultural soil. APPLIED SOIL ECOLOGY. 125, pp. 56 - 70. ELSEVIER, 01/04/2018.
57. Spinola, Diogo Noses; Portes, Raquel de Castro; Srivastava, Pankaj; Torrent, José; Barrón, Vidal; Kuehn, Peter. Diagenetic reddening of Early Eocene paleosols on King George Island, Antarctica. GEODERMA. 315, pp. 149 - 159. ELSEVIER SCIENCE BV, 01/04/2018.
58. Jones, D. L.; Magthab, E. A.; Gleeson, D. B.; Hill, P. W.; Sánchez-Rodríguez, A. R.; Roberts, P.; Ge, T.; Murphy, D. V. Microbial competition for nitrogen and carbon is as intense in the subsoil as in the topsoil. SOIL BIOLOGY & BIOCHEMISTRY. 117, pp. 72 - 82. PERGAMON-ELSEVIER SCIENCE LTD, 01/02/2018.
59. Sánchez-Rodríguez, Antonio R.; Raya-Díaz, Silvia; María Zamarreno, Angel; María García-Mina, José; Carmen del Campillo, María; Quesada-Moraga, Enrique. An endophytic Beauveria bassiana strain increases spike production in bread and durum wheat plants and effectively controls cotton leafworm (Spodoptera littoralis)

- larvae. *BIOLOGICAL CONTROL*. 116, pp. 90 - 102. ACADEMIC PRESS INC ELSEVIER SCIENCE, 01/01/2018.
60. Horta, Carmo; Roboredo, Marta; Carneiro, Joao Paulo; Duarte, Antonio Canatario; Torrent, José; Sharpley, Andrew. Organic amendments as a source of phosphorus: agronomic and environmental impact of different animal manures applied to an acid soil. *ARCHIVES OF AGRONOMY AND SOIL SCIENCE*. 64 - 2, pp. 257 - 271. TAYLOR & FRANCIS LTD, 01/01/2018.
61. Gómez, J. A.; Francia, J. R.; Guzman, G.; Vanwalleghem, T.; Duran Zuazo, V. H.; Castillo, C.; Aranda, M.; Carceles, B.; Moreno, A.; Torrent, J.; Barrón, V. Lateral Transfer of Organic Carbon and Phosphorus by Water Erosion at Hillslope Scale in Southern Spain Olive Orchards. *VADOSE ZONE JOURNAL*. 16 - 12, SOIL SCI SOC AMER, 01/12/2017.
62. Raya-Diaz, Silvia; Sánchez-Rodríguez, Antonio Rafael; Manuel Segura-Fernández, José; del Carmen del Campillo, María; Quesada-Moraga, Enrique. Entomopathogenic fungi-based mechanisms for improved Fe nutrition in sorghum plants grown on calcareous substrates. *PLOS ONE*. 12 - 10, PUBLIC LIBRARY SCIENCE, 05/10/2017.
63. Sánchez-Rodríguez, Antonio R.; Hill, Paul W.; Chadwick, David R.; Jones, Davey L. Crop residues exacerbate the negative effects of extreme flooding on soil quality. *BIOLOGY AND FERTILITY OF SOILS*. 53 - 7, pp. 751 - 765. SPRINGER, 01/10/2017.
64. Raya-Diaz, Silvia; Quesada-Moraga, Enrique; Barrón, Vidal; Carmen del Campillo, María; Rafael Sánchez-Rodríguez, Antonio. Redefining the dose of the entomopathogenic fungus *Metarhizium brunneum* (Ascomycota, Hypocreales) to increase Fe bioavailability and promote plant growth in calcareous and sandy soils. *PLANT AND SOIL*. 418 - 1-2, pp. 387 - 404. SPRINGER, 01/09/2017.
65. Sánchez-Rodríguez, Antonio R.; Carmen del Campillo, María; Torrent, José. Phosphorus reduces the zinc concentration in cereals pot-grown on calcareous Vertisols from southern Spain. *JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE*. 97 - 10, pp. 3427 - 3432. WILEY, 15/08/2017.
66. Claudio, Colombo; di Iorio, Erika; Liu, Qingsong; Jiang, Zhaoxia; Barrón, Vidal. Iron Oxide Nanoparticles in Soils: Environmental and Agronomic Importance. *JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY*. 17 - 7, pp. 4449 - 4460. 01/07/2017.
67. Zhao, Lulu; Hong, Hanlie; Fang, Qian; Yin, Ke; Wang, Chaowen; Li, Zhaohui; Torrent, José; Cheng, Feng; Algeo, Thomas J. Monsoonal climate evolution in southern China since 1.2 Ma: New constraints from Fe-oxide records in red earth sediments from the Shengli section, Chengdu Basin. *PALAEOGEOGRAPHY PALAEOCLIMATOLOGY PALAEOECOLOGY*. 473, pp. 1 - 15. ELSEVIER SCIENCE BV, 01/05/2017.
68. Bavaresco, Jovana; Fink, Jesse R.; Rodrigues, María Lucia K.; Gianello, Clesio; Barrón, Vidal; Torrent, José. Chromium Adsorption in Different Mineralogical Fractions from Subtropical Soils. *PEDOSPHERE*. 27 - 1, pp. 106 - 111. SCIENCE PRESS, 01/02/2017.
69. Bavaresco, Jovana; Fink, Jesse R.; Rodrigues, María Lucia K.; Gianello, Clesio; Barrón, Vidal; Torrent, José. Chromium Displacement in Subtropical Soils Fertilized

- with Hydrolysed Leather: A Laboratory Study. BULLETIN OF ENVIRONMENTAL CONTAMINATION AND TOXICOLOGY. 97 - 6, pp. 881 - 887. SPRINGER, 01/12/2016.
70. Pedraza, Veronica; Perea, Francisco; Saavedra, Milagros; Fuentes, Mariano; Alcantara, Cristina. &ITVicia narbonensis&IT-&ITAvena strigosa&IT mixture, a viable alternative in rainfed cropping systems under Mediterranean conditions. SPANISH JOURNAL OF AGRICULTURAL RESEARCH. 15 - 4, SPANISH NATL INST AGRICULTURAL & FOOD RESEARCH & TECHNOLO, 01/12/2017.
71. Recena, Ramiro; Diaz, Isabel; Carmen del Campillo, María; Torrent, José; Delgado, Antonio. Calculation of threshold Olsen P values for fertilizer response from soil properties. AGRONOMY FOR SUSTAINABLE DEVELOPMENT. 36 - 4, SPRINGER FRANCE, 01/12/2016.
72. Schaller, M.; Ehlers, T. A.; Stor, T.; Torrent, J.; Lobato, L.; Christl, M.; Vockenhuber, C. Spatial and temporal variations in denudation rates derived from cosmogenic nuclides in four European fluvial terrace sequences. GEOMORPHOLOGY. 274, pp. 180 - 192. ELSEVIER, 01/12/2016.
73. Long, Xiaoyong; Ji, Junfeng; Barrón, Vidal; Torrent, José. Climatic thresholds for pedogenic iron oxides under aerobic conditions: Processes and their significance in paleoclimate reconstruction. QUATERNARY SCIENCE REVIEWS. 150, pp. 264 - 277. PERGAMON-ELSEVIER SCIENCE LTD, 15/10/2016.
74. Schaller, Mirjam; Ehlers, Todd A.; Stor, Tomas; Torrent, José; Lobato, Leonardo; Christl, Marcus; Vockenhuber, Christof. Timing of European fluvial terrace formation and incision rates constrained by cosmogenic nuclide dating. EARTH AND PLANETARY SCIENCE LETTERS. 451, pp. 221 - 231. ELSEVIER SCIENCE BV, 01/10/2016.
75. Diaz, Isabel; Torrent, José. Changes in Olsen P in Relation to P Balance in Contrasting Agricultural Soils. PEDOSPHERE. 26 - 5, pp. 636 - 642. SCIENCE PRESS, 01/10/2016.
76. Sánchez-Rodríguez, Antonio Rafael; Barrón, Vidal; Carmen Del Campillo, María; Quesada-Moraga, Enrique. The entomopathogenic fungus *Metarhizium brunneum*: a tool for alleviating Fe chlorosis. PLANT AND SOIL. 406 - 1-2, pp. 295 - 310. SPRINGER, 01/09/2016.
77. Olmo, Manuel; María Lozano, Ana; Barrón, Vidal; Villar, Rafael. Spatial heterogeneity of soil biochar content affects soil quality and wheat growth and yield. SCIENCE OF THE TOTAL ENVIRONMENT. 562, pp. 690 - 700. ELSEVIER SCIENCE BV, 15/08/2016.
78. Ortiz-Medina, L.; Fernandez-Ahumada, E.; Lara-Velez, P.; Taguas, E. V.; Gallardo-Cobos, R.; del Campillo, M. C.; Guerrero-Ginel, J. E. Designing an accompanying ecosystem to foster entrepreneurship among agronomic and forestry engineering students. Opinion and commitment of university lecturers. EUROPEAN JOURNAL OF ENGINEERING EDUCATION. 41 - 4, pp. 393 - 410. TAYLOR & FRANCIS LTD, 01/08/2016.
79. Jiang, Zhaoxia; Liu, Qingsong; Dekkers, Mark J.; Barrón, Vidal; Torrent, José; Roberts, Andrew P. Control of Earth-like magnetic fields on the transformation of ferrihydrite to hematite and goethite. SCIENTIFIC REPORTS. 6, NATURE PUBLISHING GROUP, 26/07/2016.

80. Fink, Jesse Rodrigo; Inda, Alberto Vasconcellos; Tiecher, Tales; Barrón, Vidal. Iron oxides and organic matter on soil phosphorus availability. *CIENCIA E AGROTECNOLOGIA*. 40 - 4, pp. 369 - 379. 01/07/2016.
81. Gutierrez, L.; Barrón, V.; Andres-Verges, M.; Serna, C. J.; Veintemillas-Verdaguer, S.; Morales, M. P.; Lazaro, F. J. Detailed magnetic monitoring of the enhanced magnetism of ferrihydrite along its progressive transformation into hematite. *JOURNAL OF GEOPHYSICAL RESEARCH-SOLID EARTH*. 121 - 6, pp. 4118 - 4129. AMER GEOPHYSICAL UNION, 01/06/2016.
82. Hu, Pengxiang; Jiang, Zhaoxia; Liu, Qingsong; Heslop, David; Roberts, Andrew P.; Torrent, José; Barrón, Vidal. Estimating the concentration of aluminum-substituted hematite and goethite using diffuse reflectance spectrometry and rock magnetism: Feasibility and limitations. *JOURNAL OF GEOPHYSICAL RESEARCH-SOLID EARTH*. 121 6, pp. 4180 - 4194. AMER GEOPHYSICAL UNION, 01/06/2016.
83. Jiang, Zhaoxia; Liu, Qingsong; Zhao, Xiang; Roberts, Andrew P.; Heslop, David; Barrón, Vidal; Torrent, José. Magnetism of Al-substituted magnetite reduced from Al-hematite. *JOURNAL OF GEOPHYSICAL RESEARCH-SOLID EARTH*. 121 - 6, pp. 4195 - 4210. AMER GEOPHYSICAL UNION, 01/06/2016.
84. Liu, Qingsong; Zhang, Chunxia; Torrent, José; Barrón, Vidal; Hu, Pengxiang; Jiang, Zhaoxia; Duan, Zongqi. Factors Controlling Magnetism of Reddish Brown Soil Profiles from Calcarenites in Southern Spain: Dust Input or In-situ Pedogenesis?. *FRONTIERS IN EARTH SCIENCE*. 4, FRONTIERS MEDIA SA, 10/05/2016
85. Albuquerque, José Antonio; Sánchez, Marta; Mora, Manuel; Barrón, Vidal. Slow pyrolysis of relevant biomasses in the Mediterranean basin. Part 2. Char characterisation for carbon sequestration and agricultural uses. *JOURNAL OF CLEANER PRODUCTION*. 120, pp. 191 - 197. ELSEVIER SCI LTD, 01/05/2016.
86. , Jesse R.; Inda, Alberto V.; Bavaresco, Jovana; Barrón, Vidal; Torrent, José; Bayer, Cimelio. Phosphorus adsorption and desorption in undisturbed samples from subtropical soils under conventional tillage or no-tillage. *JOURNAL OF PLANT NUTRITION AND SOIL SCIENCE*. 179 - 2, pp. 198 - 205. WILEY-V C H VERLAG GMBH, 01/04/2016.
87. Fink, Jesse R.; Inda, Alberto V.; Bavaresco, Jovana; Sánchez-Rodríguez, Antonio R.; Barrón, Vidal; Torrent, José; Bayer, Cimelio. Diffusion and uptake of phosphorus, and root development of corn seedlings, in three contrasting subtropical soils under conventional tillage or no-tillage. *BIOLOGY AND FERTILITY OF SOILS*. 52 - 2, pp. 203 - 210. SPRINGER, 01/02/2016.
88. Fink, Jesse R.; Inda, Alberto V.; Bavaresco, Jovana; Barrón, Vidal; Torrent, José; Bayer, Cimelio. Adsorption and desorption of phosphorus in subtropical soils as affected by management system and mineralogy. *SOIL & TILLAGE RESEARCH*. 155, pp. 62 - 68. ELSEVIER SCIENCE BV, 01/01/2016.
89. Sánchez-Rodríguez, Antonio R.; Carmen Del Campillo, María; Quesada-Moraga, Enrique. *Beauveria bassiana*: An entomopathogenic fungus alleviates Fe chlorosis symptoms in plants grown on calcareous substrates. *SCIENTIA HORTICULTURAE*. 197, pp. 193 - 202. ELSEVIER, 14/12/2015.
90. Torrent, José; Del Campillo, María C.; Barrón, Vidal. Predicting cation exchange capacity from hygroscopic moisture in agricultural soils of Western Europe.

- SPANISH JOURNAL OF AGRICULTURAL RESEARCH. 13 - 4, SPANISH NATL INST AGRICULTURAL & FOOD RESEARCH & TECHNOLO, 01/12/2015
91. Jiang, Zhaoxia; Liu, Qingsong; Dekkers, Mark J.; Tauxe, Lisa; Qin, Huafeng; Barrón, Vidal; Torrent, José. Acquisition of chemical remanent magnetization during experimental ferrihydrite-hematite conversion in Earth-like magnetic field-implications for paleomagnetic studies of red beds. *EARTH AND PLANETARY SCIENCE LETTERS*. 428, pp. 1 - 10. ELSEVIER SCIENCE BV, 15/10/2015.
 92. Recena, Ramiro; Torrent, Jose; Carmen del Campillo, Maria; Delgado, Antonio. Accuracy of Olsen P to assess plant P uptake in relation to soil properties and P forms. *AGRONOMY FOR SUSTAINABLE DEVELOPMENT*. 35 - 4, pp. 1571 - 1579. SPRINGER FRANCE, 01/10/2015
 93. Albuquerque, Jose Antonio; Cabello, Marta; Avelino, Rebeca; Barron, Vidal; Carmen del Campillo, Maria; Torrent, Jose. Plant growth responses to biochar amendment of Mediterranean soils deficient in iron and phosphorus. *JOURNAL OF PLANT NUTRITION AND SOIL SCIENCE*. 178 - 4, pp. 567 - 575. WILEY-V C H VERLAG GMBH, 01/08/2015.
 94. Camargo, Livia Arantes; Marques Junior, Jose; Barron, Vidal; Ferracciu Alleoni, Luis Reynaldo; Barbosa, Ronny Sobreira; Pereira, Gener Tadeu. Mapping of clay, iron oxide and adsorbed phosphate in Oxisols using diffuse reflectance spectroscopy. *GEODERMA*. 251, pp. 124 - 132. ELSEVIER SCIENCE BV, 01/08/2015.
 95. Long, Xiaoyong; Ji, Junfeng; Balsam, William; Barron, Vidal; Torrent, Jose. Grain growth and transformation of pedogenic magnetic particles in red Ferralsols. *GEOPHYSICAL RESEARCH LETTERS*. 42 - 14, pp. 5762 - 5770. AMER GEOPHYSICAL UNION, 28/07/2015
 96. Sanchez-Alcala, I.; del Campillo, M. C.; Torrent, J. Critical Olsen P and CaCl₂-P levels as related to soil properties: results from micropot experiments. *SOIL USE AND MANAGEMENT*. 31 - 2, pp. 233 - 240. WILEY, 01/06/2015.
 97. Guzman, Gema; Laguna, Ana; Carlos Canasveras, Juan; Boulal, Hakim; Barron, Vidal; Gomez-Macpherson, Helena; Vicente Giraldez, Juan; Alfonso Gomez, Jose. Study of sediment movement in an irrigated maize-cotton system combining rainfall simulations, sediment tracers and soil erosion models. *JOURNAL OF HYDROLOGY*. 524, pp. 227 - 242. ELSEVIER SCIENCE BV, 01/05/2015.
 98. Srivastava, Priyeshu; Sangode, Satish J.; Torrent, Jose. Mineral magnetic and diffuse reflectance spectroscopy characteristics of the Deccan volcanic bole beds: Implications to genesis and transformations of iron oxides. *GEODERMA*. 239, pp. 317 - 330. ELSEVIER SCIENCE BV, 01/02/2015.
 99. Gama, Florinda; Saavedra, Teresa; Diaz, Isabel; del Carmen Campillo, Maria; de Varennes, Amarilis; Duarte, Amilcar; Pestana, Maribela; Jose Correia, Pedro. Fe deficiency induction in *Poncirus trifoliata* rootstock growing in nutrient solution changes its performance after transplant to soil. *SCIENTIA HORTICULTURAE*. 182, pp. 102 - 109. ELSEVIER, 23/01/2015.
 100. Staunton, S.; Ludwig, B.; Torrent, J. Barrow, NJA mechanistic model for describing the sorption and desorption of phosphate by soil. *Journal of Soil Science*, 34, 733-750. *EUROPEAN JOURNAL OF SOIL SCIENCE*. 66 - 1, pp. 4 - 8. WILEY, 01/01/2015.