

# ANDREW STEPHEN KOWALSKI

Grupo de Investigación: FÍSICA DE LA ATMÓSFERA (Cod.: RNM119)

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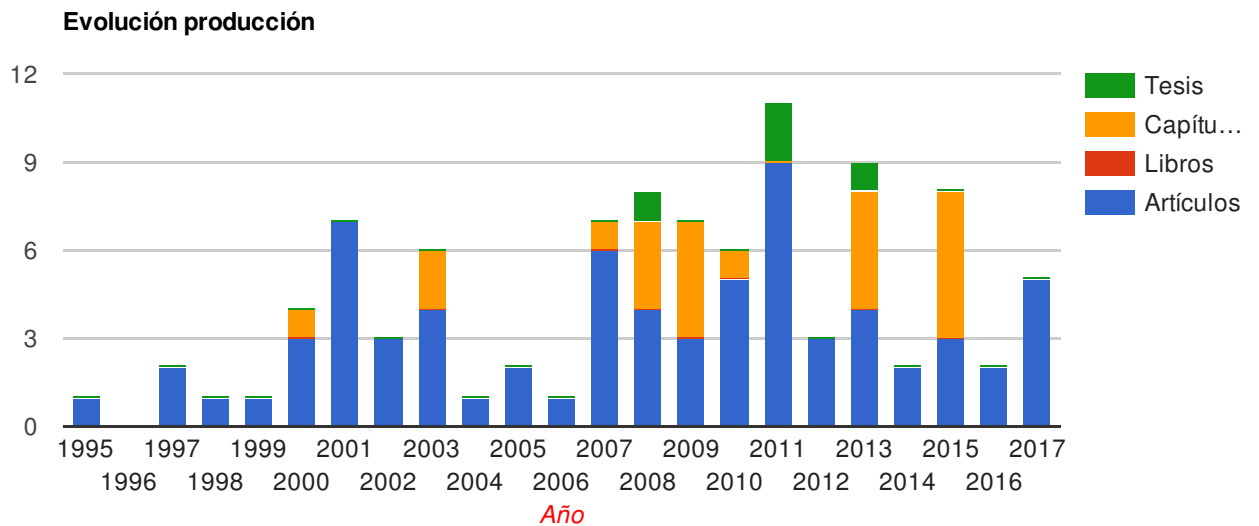
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Ficha del Directorio

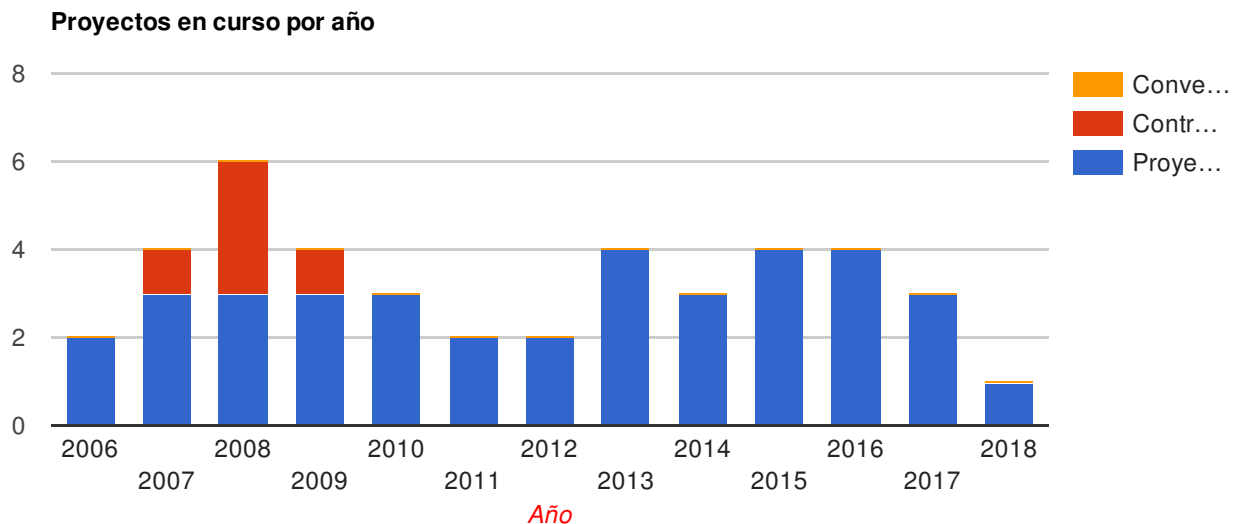
## Producción 97

Artículos (72) Libros (0) Capítulos de Libros (21) Tesis dirigidas (4)



## Proyectos dirigidos 12

Proyectos (9) Contratos (3) Convenios (0)



## Actividades 7

Titulo publicación	Fuente	Tipo	Fecha
Evaluation of eddy covariance latent heat fluxes with independent lysimeter and sapflow estimates in a mediterranean savannah ecosystem	Agricultural and forest meteorology	Articulo	2017
Net ecosystem co2 exchange in an irrigated olive orchard of se spain: influence of weed cover	Agriculture, ecosystems & environment	Articulo	2017
Subterranean ventilation of allochthonous co2 governs net co2 exchange in a semiarid mediterranean grassland	Agricultural and forest meteorology	Articulo	2017
Subterranean ventilation of allochthonous co2 governs net co2 exchange in semiarid mediterranean grassland	Agricultural and forest meteorology	Articulo	2017
The boundary condition for vertical velocity and its interdependence with surface gas exchange	Atmospheric chemistry and physics	Articulo	2017
Surface-parallel sensor orientation for assessing energy balance components on mountain slopes	Boundary-layer meteorology	Articulo	2016
Winds induce co2 exchange with the atmosphere and vadose zone transport in a karstic ecosystem	Journal of geophysical research: biogeosciences	Articulo	2016
Analysing uncertainties in the calculation of fluxes using whole-plant chambers: random and systematic errors	Plant and soil	Articulo	2015
Análisis dinámico de los flujos de carbono suelo-atmósfera	Manual de seguimiento del cambio global: una propuesta para ambientes áridos y semiaridos	Capítulo de libro	2015
Enhancement of the net co2 release of a semiarid grassland in se spain by rain pulses	Journal of geophysical research: biogeosciences	Articulo	2015
Facilidad de implementación del seguimiento de funciones de los ecosistemas	Manual de seguimiento del cambio global: una propuesta para ambientes áridos y semiaridos	Capítulo de libro	2015
Gaseous stomatal exchange and relation to ecosystem functioning	Review and integration of biosphere-atmosphere modelling of reactive trace gases and volatile aerosols	Capítulo de libro	2015
Intercambios de co2 y vapor de agua a escala de ecosistema	La huella del cambio global en sierra nevada: retos para la conservación	Capítulo de libro	2015
O3 and nox exchange	Review and integration of biosphere-atmosphere modelling of reactive trace gases and volatile aerosols	Capítulo de libro	2015
Seasonality of net carbon exchanges of mediterranean ecosystems across an altitudinal gradient	Journal of arid environments	Articulo	2015
Aboveground respiratory co2 effluxes from olive trees (olea europaea l.)		Articulo	2014
Comment on "using the gradient method to determine soil gas flux: a review"	Agricultural and forest meteorology	Articulo	2014
Atmospheric turbulence triggers pronounced diel pattern in karst carbonate geochemistry	Biogeosciences	Articulo	2013
Cave ventilation is influenced by variations in the co2-dependent virtual temperature	International journal of speleology	Articulo	2013
Characterization of co2 exchanges in deep soils and caves and their role in the net ecosystem carbon balance	Universidad de granada. facultad de ciencias	Tesis doctoral	2013
Deep co2 soil inhalation / exhalation induced by synoptic pressure changes and atmospheric tides in a carbonated semiarid steppe	Biogeosciences	Articulo	2013
Efecto de la saca de la madera quemada sobre el balance de	Conservar aprovechando: cómo integrar el cambio global en la	Capítulo	2013

c y la restauración post-incendio	Integrar el cambio global en la gestión de los montes españoles	de libro	2010
Efecto del manejo de la madera quemada sobre la restauración y regeneración post- incendio: implicaciones para la gestión y para el conjunto del ecosistema	Actas del vi congreso forestal español	Capítulo de libro	2013
Isolating the effect of subterranean ventilation on co2 emissions from drylands to the atmosphere	Agricultural and forest meteorology	Articulo	2013
Towards a virtual framework for bilingual selflearning in subjects related to atmospheric physics for the degree in physics and environmental sciences	Proceedings of edulearn13 conference	Capítulo de libro	2013
Técnicas para medir intercambios de co2 en ecosistemas del sureste de España	Juan Antonio Morente Chiquero: in memoriam	Capítulo de libro	2013
Commonalities of carbon dioxide exchange in semiarid regions with monsoon and mediterranean climates	Journal of arid environments	Articulo	2012
Endogenous circadian regulation of carbon dioxide exchange in terrestrial ecosystems	Global change biology	Articulo	2012
Exact averaging of atmospheric state and flow variables	Journal of the atmospheric sciences	Articulo	2012
Adjustment of annual nee and et for the open-path irga self-heating correction: magnitude and approximation over a range of climate	Agricultural and forest meteorology	Articulo	2011
Carbon and water exchange in semiarid ecosystems in Spain	Journal of arid environments	Articulo	2011
Efecto del manejo de la madera quemada después de un incendio sobre el ciclo del carbono y nutrientes en un ecosistema de montaña mediterránea	Universidad de Granada. Ecología	Tesis doctoral	2011
Intercambios de co2 y vapor de agua en ecosistemas de alta montaña de matorral mediterráneo	Universidad de Granada	Tesis doctoral	2011
Post-fire salvage logging reduces carbon sequestration in mediterranean coniferous forest	Forest ecology and management	Articulo	2011
Post-fire soil respiration in relation to burnt wood management in a mediterranean mountain ecosystem	Forest ecology and management	Articulo	2011
Post-fire salvage logging reduces carbon sequestration in mediterranean coniferous forest	Forest ecology and management	Articulo	2011
Scalar arguments of the mathematical functions defining molecular and turbulent transport of heat and mass in compressible fluids	Tellus. series b: chemical and physical meteorology	Articulo	2011
Short-term co2(g) exchange between a shallow karstic cavity and the external atmosphere during summer: role of the surface soil layer	Atmospheric environment	Articulo	2011
Subterranean co2 ventilation and its role in the net ecosystem carbon balance of a karstic shrubland	Geophysical research letters	Articulo	2011
Temporal dynamics of soil water balance components in a karst range in southeastern Spain: estimation of potential recharge	Hydrological sciences journal	Articulo	2011
A new definition of the virtual temperature, valid for the atmosphere and the co2-rich air of the vadose zone	Journal of applied meteorology and climatology	Articulo	2010
Analyzing the major drivers of nee in a mediterranean alpine shrubland	Biogeosciences	Articulo	2010
Cuantificación y procedencia de los intercambios de co2 en un ecosistema carbonatado mediante la técnica de eddy covariance y el análisis de los isótopos estables de carbono	Ecosistemas	Articulo	2010
Environmental control of carbon fluxes in forest ecosystems in France: a comparison of temperate, mediterranean and	Forests, carbon cycle, and climate change	Capítulo de libro	2010

tropical forests	change	co2 fluxes		
Hidden, abiotic co2 flows and gaseous reservoirs in the terrestrial carbon cycle: review and perspectives	Agricultural and forest meteorology	Articulo	2010	
Ventilation of subterranean co2 and eddy covariance incongruities over carbonate ecosystems	Biogeosciences	Articulo	2010	
A practical framework for learning about weather and climate	International conference os education, research and innovation. iceri	Capítulo de libro	2009	
Adapting the teaching of physics for environmental sciences to the educational framework of the xxi century	International conference os education, research and innovation. iceri	Capítulo de libro	2009	
Assessing diffuse and concentrated recharge in average - and dry- rainfall year in a semiarid carbonate sloping aquifer, a preliminary report	Avances en el estudios sobre desertificación    advances in studies on desertification	Capítulo de libro	2009	
Dew contribution to the water balance in a semiarid coastal steppe ecosystem	Avances en el estudios sobre desertificación    advances in studies on desertification	Capítulo de libro	2009	
Evidence of altitudinal increase in photosynthetic capacity: gas exchange measurements at ambient and constant co2 partial pressures	Annals of forest science	Articulo	2009	
Interannual co2 exchange of a sparse mediterranean shrubland on a carbonaceous substrate	Journal of geophysical research	Articulo	2009	
Ventilation of subterranean co2 and eddy covariance incongruities over carbonaceous ecosystems	Biogeosciences discussions	Articulo	2009	
Can flux tower research neglect geochemical co2 exchange?	Agricultural and forest meteorology	Articulo	2008	
Comment on the storage term in eddy flux calculations	Agricultural and forest meteorology	Articulo	2008	
Consequences of uncertainties in co2 density for estimating net ecosystem co2 exchange by open-path eddy covariance	Boundary-layer meteorology	Articulo	2008	
Estimacion de la radiacion neta a escala diaria/diurna a partir de datos instantaneos para la determinacion de la evapotranspiracion real mediante teledeteccion en medios semiaridos	Agua y cultura. serie hidrogeología y aguas subterranas	Capítulo de libro	2008	
Estimación de la radiación neta a escala diaria/diurna a partir de datos instantáneos para la determinación de la evapotranspiración real mediante teledetección en medios semiáridos.	Agua y cultura. vii simposio sobre el agua en andalucia	Capítulo de libro	2008	
Intercambios de co2 entre atmosfera y ecosistemas karsticos: aplicabilidad de las técnicas comunmente empleadas	Universidad de granada. física aplicada	Tesis doctoral	2008	
Magnani et al. reply	Nature	Articulo	2008	
Soil water balance in a semiarid coastal range: potential recharge estimation	Hydrological extremes in small basins	Capítulo de libro	2008	
Diseño de prácticas en asignaturas relacionadas con la física en la titulación de cc. ambientales	Xxxi reunión bienal de la real sociedad española de física. comunicaciones científicas	Capítulo de libro	2007	
Effects of climate warming and declining species richness in grassland model ecosystems: acclimation of co2 fluxes	Biogeosciences	Articulo	2007	
Fluxes of oxidised and reduced nitrogen above a mixed coniferous forest exposed to various nitrogen emission sources	Environmental pollution	Articulo	2007	
Interactive comment on ¿dependence of co2 advection patterns on wind direction on a gentle forested slope¿ by b. heinesch et al.	Biogeosciences discussions	Articulo	2007	
On the relationship between the eddy covariance, the				

turbulent flux, and surface exchange for a trace gas such as co2	Boundary-layer meteorology	Articulo	2007
The human footprint in the carbon cycle of temperate and boreal forests	Nature	Articulo	2007
Variations in daytime net carbon and water exchange in a montane shrubland ecosystem in southeast Spain	Photosynthetica	Articulo	2007
The eddy covariance technique: a tool to quantify ecosystem CO <sub>2</sub> exchange.	Acta granatense	Articulo	2006
Driving forces for ammonia fluxes over mixed forest subjected to high deposition loads	Atmospheric environment	Articulo	2005
Pan-European δ <sup>13</sup> C values of air and organic matter from forest ecosystems	Global change biology	Articulo	2005
Paired comparisons of carbon exchange between undisturbed and regenerating stands in four managed forests in Europe	Global change biology	Articulo	2004
A model-based study of carbon fluxes at ten European forest sites	Fluxes of carbon, water and energy of European forests	Capítulo de libro	2003
Analyzing the ecosystem carbon dynamics of four European coniferous forests using a biogeochemistry model	Ecosystems	Articulo	2003
Coniferous forests (Scots and maritime pine): carbon and water fluxes, balances, ecological and ecophysiological determinants	Fluxes of carbon, water and energy of European forests	Capítulo de libro	2003
Net ecosystem CO <sub>2</sub> exchange of mixed forest in Belgium over 5 years	Agricultural and forest meteorology	Articulo	2003
The annual carbon budget of a French pine forest ( <i>Pinus pinaster</i> ) following harvest	Global change biology	Articulo	2003
Water flux estimates from a Belgian Scots pine stand: a comparison of different approaches	Journal of hydrology	Articulo	2003
Energy balance closure at fluxnet sites	Agricultural and forest meteorology	Articulo	2002
Phase and amplitude of ecosystem carbon release and uptake potentials as derived from fluxnet measurements	Agricultural and forest meteorology	Articulo	2002
Seasonality of ecosystem respiration and gross primary production as derived from fluxnet measurements	Agricultural and forest meteorology	Articulo	2002
Carbon balance gradient in European forests: should we doubt 'surprising results'? a reply to Piovesan & Adams	Journal of vegetation science	Articulo	2001
Deliquescence induces eddy covariance and estimable dry deposition errors	Atmospheric environment	Articulo	2001
Forest floor CO <sub>2</sub> fluxes estimated by eddy covariance and chamber-based model	Agricultural and forest meteorology	Articulo	2001
Gap filling strategies for defensible annual sums of net ecosystem exchange	Agricultural and forest meteorology	Articulo	2001
Gap filling strategies for long term energy flux data sets	Agricultural and forest meteorology	Articulo	2001
Modelling short-term CO <sub>2</sub> fluxes and long-term tree growth in temperate forests with aspects	Ecological modelling	Articulo	2001
Productivity overshadows temperature in determining soil and ecosystem respiration across European forests	Global change biology	Articulo	2001
Assessing forest soil CO <sub>2</sub> efflux: an in situ comparison of four techniques	Tree physiology	Articulo	2000
Eddy fluxes above a Belgian, Campine forest and relationships with predicting variables	Forest ecosystem modelling, upscaling and remote sensing	Capítulo de libro	2000
Estimates of the annual net carbon and water exchange of forests: the Euroflux methodology	Advances in ecological research	Articulo	2000

forests: the eddy correlation methodology

Respiration as the main determinant of carbon balance in european forests	Nature	Articulo	2000
Near-surface fluxes of cloud water evolve vertically	Quarterly journal of the royal meteorological society	Articulo	1999
New estimate of the carbon sink strength of eu forests integrating flux measurements, field surveys, and space observations: 0.17-0.35 gt(c)	Ambio	Articulo	1998
Deployment and evaluation of a system for ground-based measurement of cloud liquid water fluxes	Journal of atmospheric and oceanic technology	Articulo	1997
Ionic and trace element composition of cloud and rain water collected on the olympic peninsula of washington state	Atmospheric environment	Articulo	1997
Eddy correlation measurements of size-dependent cloud droplet turbulent fluxes to complex terrain	Tellus	Articulo	1995

	<b>Título proyecto</b>	<b>Tipo</b>	<b>Inicio</b>	<b>Fin</b>
1	Hacia el balance integrado de gases de efecto invernadero en ecosistemas nacionales de alto impacto social y económico (geispain)	Proyecto	1/1/15	12/31/18
2	Hacia el balance integrado de gases de efecto invernadero en ecosistemas nacionales de alto impacto social y económico	Proyecto	1/1/15	12/31/17
3	Balance de carbono en el olivar: efecto de la presencia de la cubierta vegetal (carbolivar)	Proyecto	6/27/13	6/26/17
4	Balance de carbono en el olivar: efecto de la presencia de la cubierta vegetal	Proyecto	1/1/13	12/31/16
5	Greenhouse gas management in european land use systems	Proyecto	1/1/10	6/30/14
6	Red de monitorización de los flujos de carbono en ecosistemas mediterráneos españoles ¿ cuantificación y estudio de procesos	Proyecto	1/1/11	12/31/13
7	Balance de carbono y agua en ecosistemas de matorral mediterráneo: predicción de su respuesta al cambio climático (bacaema)	Proyecto	4/1/06	3/31/10
8	Efecto de los tratamientos selvícolas post-incendio sobre el flujo de co2 y el balance de carbono: análisis de pautas que optimicen la captura de c en ecosistemas mediterráneos	Proyecto	2/12/07	2/12/10
9	Balance de carbono y de agua en ecosistemas de matorral mediterráneo en andalucía: efecto del cambio climático	Proyecto	3/1/06	11/1/09
10	Red sistemática de los flujos de carbono y energía en ecosistemas terrestres en españa. torre de medida laguna seca	Contrato	12/1/08	2/28/09
11	Evaluación de técnicas para la cuantificación de carbono asimilado o emitido por los ecosistemas terrestres	Contrato	5/1/08	11/30/08
12	Red de observación sistemática de los flujos de carbono y energía en ecosistemas terrestres en españa	Contrato	4/24/07	9/30/08

## Actividades 7

<b>Título actividad</b>	<b>Fuente</b>	<b>Tipo</b>	<b>Fecha</b>
Cinco propuestas de proyectos evaluados para el anep	Anep	Experiencia en evaluación	Jan 1, 2006
Participación en comité de revista: boundary-layer meteorology		Comités científicos de revista	Jan 1, 2000
Participación en comité de revista: tellus. series b, chemical and physical meteorology		Comités científicos de revista	Jan 1, 2000
Participación en comité de revista: ecological applications		Comités científicos de revista	Jan 1, 2000
Participación en comité de revista: global change biology		Comités científicos de revista	Jan 1, 2000
Participación en comité de revista: forest ecology and management		Comités científicos de revista	Jan 1, 2000
Participación en comité de revista: agricultural and forest meteorology		Comités científicos de revista	Jan 1, 2000

## Colaboradores

- **Penélope SERRANO Serrano Ortiz (44)**
- **ENRIQUE PEREZ SANCHEZ-CAÑETE (23)**
- **LUCAS ALADOS ARBOLEDAS (10)**
- **OSCAR PÉREZ PRIEGO (9)**
- **JORGE CASTRO GUTIERREZ (5)**
- **FRANCISCO JOSE OLMO REYES (4)**

- MARÍA JESÚS ESTEBAN PARRA (3)
- SARA MARAÑÓN JIMÉNEZ (3)
- CARLOS MORENO DE JONG VAN COEVORDEN (2)
- INMACULADA FOYO MORENO (2)
- REGINO ZAMORA RODRIGUEZ (2)
- ALBERTO CAZORLA CABRERA (1)
- Alexandro B. Leverkus (1)
- CAROLINA CARDELL FERNANDEZ (1)
- JERONIMO VIDA MANZANO (1)
- JESÚS FERNÁNDEZ GÁLVEZ (1)
- JOSÉ RAMÓN GUZMÁN ÁLVAREZ (1)
- JUAN LUIS GUERRERO RASCADO (1)
- SONIA RAQUEL GÁMIZ FORTIS (1)