Kevin S Powell

List of Publications by Year
in descending order

89 papers	2,890 citations	236925 25 h-index	175258 52 g-index
89 all docs	89 docs citations	89 times ranked	1876 citing authors

#	Article	IF	Citations
1	Transcriptomics Reveal Several Novel Viruses from Canegrubs (Coleoptera: Scarabaeidae) in Central Queensland, Australia. Viruses, 2022, 14, 649.	3.3	4
2	Feeding behaviour of Bactericera cockerelli (Åulc) (Hemiptera: Psylloidea: Triozidae) changes when infected with Candidatus Liberibacter solanacearum. Arthropod-Plant Interactions, 2020, 14, 653-669.	1.1	6
3	Hot water immersion as a disinfestation treatment for grapevine root cuttings against genetically diverse grape phylloxera Daktulosphaira vitifoliae Fitch. Australian Journal of Grape and Wine Research, 2019, 25, 396-403.	2.1	1
4	Towards a global DNA barcode reference library for quarantine identifications of lepidopteran stemborers, with an emphasis on sugarcane pests. Scientific Reports, 2019, 9, 7039.	3.3	16
5	Occurrence and diversity of entomopathogenic fungi (Beauveria spp. and Metarhizium spp.) in Australian vineyard soils. Journal of Invertebrate Pathology, 2019, 164, 69-77.	3.2	21
6	Dry heat as a disinfestation treatment against genetically diverse strains of grape phylloxera. Australian Journal of Grape and Wine Research, 2018, 24, 301-304.	2.1	1
7	Efficacy of steam and hot water disinfestation treatments against genetically diverse strains of grape phylloxeraDaktulosphaira vitifoliaeFitch (Hemiptera: Phylloxeridae) on viticulture equipment and machinery. Australian Journal of Grape and Wine Research, 2018, 24, 275-281.	2.1	2
8	Accounting for spatially heterogeneous conditions in localâ€scale surveillance strategies: case study of the biosecurity insect pest, grape phylloxera (Daktulosphaira vitifoliae (Fitch)). Pest Management Science, 2018, 74, 2724-2737.	3.4	2
9	Genetic identification of SNP markers linked to a new grape phylloxera resistant locus in Vitis cinerea for marker-assisted selection. BMC Plant Biology, 2018, 18, 360.	3.6	28
10	Elevated CO2 and virus infection impacts wheat and aphid metabolism. Metabolomics, 2018, 14, 133.	3.0	7
11	Multi and hyperspectral UAV remote sensing: Grapevine phylloxera detection in vineyards. , 2018, , .		8
12	A Novel Methodology for Improving Plant Pest Surveillance in Vineyards and Crops Using UAV-Based Hyperspectral and Spatial Data. Sensors, 2018, 18, 260.	3.8	139
13	Effectiveness of sodium hypochlorite as a disinfestation treatment against genetically diverse strains of grape phylloxeraDaktulosphaira vitifoliaeFitch (Hemiptera: Phylloxeridae). Australian Journal of Grape and Wine Research, 2017, 23, 432-440.	2.1	5
14	A Review of Perennial Ryegrass Endophytes and Their Potential Use in the Management of African Black Beetle in Perennial Grazing Systems in Australia. Frontiers in Plant Science, 2017, 8, 3.	3.6	19
15	Acizzia solanicola (Hemiptera: Psyllidae) probing behaviour on two Solanum spp. and implications for possible pathogen spread. PLoS ONE, 2017, 12, e0178609.	2.5	3
16	Virus infection mediates the effects of elevated CO2 on plants and vectors. Scientific Reports, 2016, 6, 22785.	3.3	52
17	Barley yellow dwarf virus infection and elevated CO 2 alter the antioxidants ascorbate and glutathione in wheat. Journal of Plant Physiology, 2016, 199, 96-99.	3.5	7
18	Scientific Opinion: Improving the Definition of Grape Phylloxera Biotypes and Standardizing Biotype Screening Protocols. American Journal of Enology and Viticulture, 2016, 67, 371-376.	1.7	27

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19	Risk mapping of redheaded cockchafer (Adoryphorus couloni) (Burmeister) infestations using a combination of novel k-means clustering and on-the-go plant and soil sensing technologies. Precision Agriculture, 2016, 17, 1-17.	6.0	23
20	The effect of elevated CO2 and virus infection on the primary metabolism of wheat. Functional Plant Biology, 2016, 43, 892.	2.1	22
21	Development and feeding effect of frosted scaleParthenolecanium pruinosumâ€...Cocquillet (Hemiptera:) Tj ETQq1 1 0.784314 rgBT /O 21, 451-457.	2.1	7
22	Host Symptom Expression and Antioxidant Defence Systems of Wheat Infected with Barley Yellow Dwarf Virus and Grown Under Elevated CO2. Procedia Environmental Sciences, 2015, 29, 177-178.	1.4	2
23	Feeding Behavior ofDiaphorina citri(Hemiptera: Liviidae) and Its Acquisition of â€˜CandidatusLiberibacter Asiaticusâ€™, on Huanglongbing-InfectedCitrus reticulataLeaves of Several Maturity Stages. Florida Entomologist, 2015, 98, 186-192.	0.5	42
24	'TAKING THE STRAIN' - SELECTING THE RIGHT ROOTSTOCK TO PROTECT AGAINST ENDEMIC PHYLLOXERA STRAINS. Acta Horticulturae, 2014, , 99-107.	0.2	3
25	Biology and management of the redheaded pasture cockchaferAdoryphorus couloni(Burmeister) (Scarabaeidae: Dynastinae) in Australia: a review of current knowledge. Austral Entomology, 2014, 53, 144-158.	1.4	5
26	Discovery of three woolly apple aphid <scp>E</scp>riosoma lanigerum (<scp>H</scp>emiptera:) Tj ETQq0 0 0 rgBT /Overlock 10 tree resistance. Austral Entomology, 2014, 53, 280-287.	1.4	4
27	THE GRAPE PHYLLOXERA GENOME SEQUENCING PROJECT. Acta Horticulturae, 2014, , 15-19.	0.2	2
28	ROOT-FEEDING GRAPE PHYLLOXERA: APPROACHES FOR IMPROVED DETECTION AND REDUCED QUARANTINE RISK. Acta Horticulturae, 2014, , 37-44.	0.2	0
29	NUCLEAR MAGNETIC RESONANCE METABOLIC PROFILING OF LEAVES FROM VITIS VINIFERA INFESTED WITH ROOT-FEEDING GRAPE PHYLLOXERA (DAKTULOSPHAIRA VITIFOLIAE FITCH) UNDER FIELD CONDITIONS. Acta Horticulturae, 2014, , 59-66.	0.2	1
30	The Biology, Physiology and Hostâ€“Plant Interactions of Grape Phylloxera Daktulosphaira vitifoliae. Advances in Insect Physiology, 2013, , 159-218.	2.7	41
31	EPG monitoring of the probing behaviour of the common brown leafhopper Orosius orientalis on artificial diet and selected host plants. Arthropod-Plant Interactions, 2012, 6, 405-415.	1.1	35
32	A Holistic Approach to Future Management of Grapevine Phylloxera. , 2012, , 219-251.		15
33	Influence of temperature and humidity on mortality of grapevine phylloxera Daktulosphaira vitifoliae clonal lineages: a scientific validation of a disinfestation procedure for viticultural machinery. Australian Journal of Grape and Wine Research, 2012, 18, 43-47.	2.1	13
34	Grape phylloxera (Daktulosphaira vitifoliae) â€“ a review ofÂpotential detection and alternative management options. Annals of Applied Biology, 2012, 161, 91-115.	2.5	44
35	Incursion preparedness: anticipating the arrival of an economically important plant pathogen Xylella fastidiosa Wells (Proteobacteria: Xanthomonadaceae) and the insect vector Homalodisca vitripennis (Germar) (Hemiptera: Cicadellidae) in Australia. Australian Journal of Entomology, 2012, 51, 209-220.	1.1	19
36	Spatial trade-offs in the digestive and reproductive systems of grape phylloxera. Australian Journal of Zoology, 2011, 59, 392.	1.0	5

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37	ROOTSTOCK SCREENING FOR PHYLLOXERA RESISTANCE UNDER CONTROLLED CONDITIONS USING SELECTED PHYLLOXERA CLONAL LINEAGES. Acta Horticulturae, 2011, , 33-39.	0.2	5
38	TOWARDS IMPROVED EARLY DETECTION OF GRAPEVINE PHYLLOXERA (DAKTULOSPHAIRA VITIFOLIAE FITCH) USING A RISK-BASED ASSESSMENT. Acta Horticulturae, 2011, , 123-131.	0.2	9
39	EARLY DETECTION OF GRAPE PHYLLOXERA (DAKTULOSPHAIRA VITIFOLIAE FITCH) INFESTATION THROUGH IDENTIFICATION OF CHEMICAL BIOMARKERS. Acta Horticulturae, 2011, , 17-24.	0.2	9
40	NEW HYBRID ROOTSTOCK RESISTANCE SCREENING FOR PHYLLOXERA UNDER LABORATORY CONDITIONS. Acta Horticulturae, 2011, , 53-58.	0.2	10
41	PHYLLOXERA EXTENSION: NATIONAL PHYLLOXERA MANAGEMENT AND IDENTIFICATION WORKSHOPS. Acta Horticulturae, 2011, , 85-92.	0.2	0
42	GRAPEVINE LEAF PIGMENT RESPONSE TO ROOT INFESTATION BY PHYLLOXERA. Acta Horticulturae, 2011, , 93-99.	0.2	2
43	The ecology of Bactrocera tryoni (Diptera: Tephritidae): what do we know to assist pest management?. Annals of Applied Biology, 2011, 158, 26-54.	2.5	184
44	Vectors and alternative hosts of Tobacco yellow dwarf virus in southeastern Australia. Annals of Applied Biology, 2010, 157, 13-24.	2.5	20
45	Diversity of Cicadellidae in agricultural production areas in the Ovens Valley, northâ€east Victoria, Australia. Australian Journal of Entomology, 2010, 49, 213-220.	1.1	11
46	Seasonal activity and abundance of Orosius orientalis (Hemiptera: Cicadellidae) at agricultural sites in Southeastern Australia. Journal of Applied Entomology, 2010, 134, 91-97.	1.8	6
47	Clone lineages of grape phylloxera differ in their performance on Vitis vinifera. Bulletin of Entomological Research, 2010, 100, 671-678.	1.0	14
48	MONITORING GRAPE PHYLLOXERA POPULATIONS USING SIMPLE NON-DESTRUCTIVE TRAPPING SYSTEMS. Acta Horticulturae, 2009, , 29-34.	0.2	11
49	Antiâ€metabolic effects of Galanthus nivalis agglutinin and wheat germ agglutinin on nymphal stages of the common brown leafhopper using a novel artificial diet system. Entomologia Experimentalis Et Applicata, 2009, 131, 99-105.	1.4	18
50	USING OBJECTIVE BIOPHYSICAL MEASUREMENTS AS THE BASIS OF TARGETED SURVEILLANCE FOR DETECTION OF GRAPEVINE PHYLLOXERA DAKTULOSPHAIRA VITIFOLIAE FITCH: PRELIMINARY FINDINGS. Acta Horticulturae, 2009, , 71-80.	0.2	6
51	GRAPE PHYLLOXERA: NEW INVESTIGATIONS INTO THE BIOLOGY OF AN OLD GRAPEVINE PEST. Acta Horticulturae, 2009, , 63-70.	0.2	6
52	REDUCING THE RISK OF PHYLLOXERA TRANSFER ON VITICULTURAL WASTE AND MACHINERY. Acta Horticulturae, 2009, , 53-62.	0.2	9
53	Assaying the potential benefits of thiamethoxam and imidacloprid for phylloxera suppression and improvements to grapevine vigour. Crop Protection, 2008, 27, 1229-1236.	2.1	14
54	Developing and Testing a Diagnostic Probe for Grape Phylloxera Applicable to Soil Samples. Journal of Economic Entomology, 2008, 101, 1934-1943.	1.8	16

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55	GRAPE PHYLLOXERA EXTERNAL MORPHOLOGY OBSERVATIONS UNDER SCANNING ELECTRON MICROSCOPY. Acta Horticulturae, 2007, , 107-114.	0.2	7
56	PRELIMINARY INVESTIGATIONS OF PIGMENT RESPONSES TO PHYLLOXERA INFESTATION. Acta Horticulturae, 2007, , 123-133.	0.2	2
57	INSIGHTS INTO THE EARLY DETECTION OF GRAPEVINE PHYLLOXERA FROM IN SITU HYPERSPECTRAL DATA. Acta Horticulturae, 2007, , 59-74.	0.2	4
58	COMPOSTED WINERY WASTE AND ITS INFLUENCE ON GRAPE PHYLLOXERA IN UNGRAFTED VINEYARDS. Acta Horticulturae, 2007, , 143-149.	0.2	6
59	RELATIONSHIPS BETWEEN GRAPE PHYLLOXERA ABUNDANCE, FUNGAL INTERACTIONS AND GRAPEVINE DECLINE. Acta Horticulturae, 2007, , 151-157.	0.2	10
60	THE USE OF DNA MARKERS FOR PEST MANAGEMENT - CLONAL LINEAGES AND POPULATION BIOLOGY OF GRAPE PHYLLOXERA. Acta Horticulturae, 2007, , 183-195.	0.2	20
61	THE DEVELOPMENT OF A POLYMERASE CHAIN REACTION METHOD FOR THE RAPID IDENTIFICATION OF GRAPE PHYLLOXERA IN VINEYARD SOIL. Acta Horticulturae, 2007, , 75-88.	0.2	1
62	ROOTSTOCK-PHYLLOXERA INTERACTIONS UNDER AUSTRALIAN FIELD CONDITIONS. Acta Horticulturae, 2007, , 115-122.	0.2	8
63	DETECTION OF PHYLLOXERA INFESTATION IN GRAPEVINES BY NMR METHODS. Acta Horticulturae, 2007, , 173-181.	0.2	10
64	COMPOSTED GREEN WASTE - ITS INFLUENCE ON GRAPE PHYLLOXERA IN UNGRAFTED VINEYARDS. Acta Horticulturae, 2007, , 135-142.	0.2	0
65	SCREENING FOR ROOTSTOCK RESISTANCE TO GRAPEVINE PHYLLOXERA GENOTYPES FROM AUSTRALIAN VINEYARDS UNDER CONTROLLED CONDITIONS. Acta Horticulturae, 2007, , 159-166.	0.2	10
66	Influence of composted green waste on the population dynamics and dispersal of grapevine phylloxera Daktulosphaira vitifoliae. Agriculture, Ecosystems and Environment, 2007, 119, 33-38.	5.3	10
67	CHARACTERISING THE ROOT-FEEDING HABITS OF GRAPE PHYLLOXERA USING ELECTRICAL PENETRATION GRAPH. Acta Horticulturae, 2007, , 33-46.	0.2	10
68	A method of wavelength selection and spectral discrimination of hyperspectral reflectance spectrometry. IEEE Transactions on Geoscience and Remote Sensing, 2006, 44, 1986-1994.	6.3	48
69	Comparison of PROSPECT and HPLC estimates of leaf chlorophyll contents in a grapevine stress study. International Journal of Remote Sensing, 2006, 27, 817-823.	2.9	46
70	Changes in Grape Phylloxera Abundance in Ungrafted Vineyards. Journal of Economic Entomology, 2006, 99, 1774-1783.	1.8	20
71	Consequences of Transferring Three Sorghum Genes for Secondary Metabolite (Cyanogenic) Tj ETQq1 1 0.784314 rgBT /Overlock 10	2.4	33
72	Phylloxera-infested grapevines have reduced chlorophyll and increased photoprotective pigment content â€" can leaf pigment composition aid pest detection?. Functional Plant Biology, 2006, 33, 507.	2.1	66

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73	Changes in Grape Phylloxera Abundance in Ungrafted Vineyards. Journal of Economic Entomology, 2006, 99, 1774-1783.	1.8	5
74	Effect of sodium hypochlorite on first instar phylloxera (Daktulosphaira vitifoliae Fitch) mortality. Australian Journal of Grape and Wine Research, 2003, 9, 107-109.	2.1	12
75	INFLUENCE OF SOIL TYPE AND CLIMATE ON THE POPULATION DYNAMICS OF GRAPEVINE PHYLLOXERA IN AUSTRALIA. Acta Horticulturae, 2003, , 33-41.	0.2	16
76	Mortality of grape phylloxera in composting organics. Australian Journal of Grape and Wine Research, 2002, 8, 48-55.	2.1	8
77	Antimetabolic effects of plant lectins towards nymphal stages of the planthoppers Tarophagous proserpina and Nilaparvata lugens. Entomologia Experimentalis Et Applicata, 2001, 99, 71-78.	1.4	58
78	Yield decline of sweet potato in the humid lowlands of Papua New Guinea. Agriculture, Ecosystems and Environment, 2000, 79, 259-269.	5.3	40
79	Immunohistochemical and developmental studies to elucidate the mechanism of action of the snowdrop lectin on the rice brown planthopper, Nilaparvata lugens (Stal).. Journal of Insect Physiology, 1998, 44, 529-539.	2.0	172
80	Production and purification of active snowdrop lectin in Escherichia coli. FEBS Journal, 1998, 252, 59-65.	0.2	26
81	Expression of snowdrop lectin (GNA) in transgenic rice plants confers resistance to rice brown planthopper. Plant Journal, 1998, 15, 469-477.	5.7	299
82	Transgenic potato plants with enhanced resistance to the peachâ€potato aphid Myzus persicae. Entomologia Experimentalis Et Applicata, 1996, 79, 295-307.	1.4	157
83	Antifeedant effects of plant lectins and an enzyme on the adult stage of the rice brown planthopper, Nilaparvata lugens. Entomologia Experimentalis Et Applicata, 1995, 75, 51-59.	1.4	103
84	Different antimetabolic effects of related lectins towards nymphal stages of Nilaparvata lugens. Entomologia Experimentalis Et Applicata, 1995, 75, 61-65.	1.4	80
85	Expression of snowdrop lectin in transgenic tobacco plants results in added protection against aphids. Transgenic Research, 1995, 4, 18-25.	2.4	256
86	Use of the rice sucrose synthase-1 promoter to direct phloem-specific expression of Î²-glucuronidase and snowdrop lectin genes in transgenic tobacco plants. Journal of Experimental Botany, 1994, 45, 623-631.	4.8	105
87	Insect-resistant transgenic plants: choosing the gene to do the â€˜jobâ€™. Biochemical Society Transactions, 1994, 22, 944-949.	3.4	38
88	Antimetabolic effects of plant lectins and plant and fungal enzymes on the nymphal stages of two important rice pests, Nilaparvata lugens and Nephotettix cincticeps. Entomologia Experimentalis Et Applicata, 1993, 66, 119-126.	1.4	157
89	Approaches to insect resistance using transgenic plants. Philosophical Transactions of the Royal Society B: Biological Sciences, 1993, 342, 279-286.	4.0	66