Mitogen-activated protein kinase cascades in signaling plant growth and development

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#	Paper	IF	Citations
388	OsMAPK6, a mitogen-activated protein kinase, influences rice grain size and biomass production. **2015**, 84, 672-81		96
387	De novo transcriptome sequencing and comprehensive analysis of the drought-responsive genes in the desert plant Cynanchum komarovii. **2015**, 16, 753		31
386	Characterization, expression patterns and functional analysis of the MAPK and MAPKK genes in watermelon (Citrullus lanatus). *BMC Plant Biology*, **2015**, 15, 298	5.3	24
385	The Arabidopsis mitogen-activated protein kinase 6 is associated with Ɛtubulin on microtubules, phosphorylates EB1c and maintains spindle orientation under nitrosative stress. *New Phytologist*, **2015**, 207, 1061-74	9.8	20
384	Calcium specificity signaling mechanisms in abscisic acid signal transduction in Arabidopsis guard cells. **2015**, 4,		110
383	RACK1, scaffolding a heterotrimeric G protein and a MAPK cascade. *Trends in Plant Science*, **2015**, 20, 405-7	13.1	26
382	Genome-wide identification of MAPK, MAPKK, and MAPKKK gene families and transcriptional profiling analysis during development and stress response in cucumber. **2015**, 16, 386		83
381	Multilayered Regulation of Ethylene Induction Plays a Positive Role in Arabidopsis Resistance against Pseudomonas syringae. *Plant Physiology*, **2015**, 169, 299-312	6.6	56
380	Trichoderma as biostimulant: exploiting the multilevel properties of a plant beneficial fungus. **2015** , 196, 109-123		196
379	Role of Protein Tyrosine Phosphatases in Plants. **2015**, 16, 224-36		36
378	Kinase-Associated Phosphoisoform Assay: a novel candidate-based method to detect specific kinase-substrate phosphorylation interactions in vivo. *BMC Plant Biology*, **2016**, 16, 204	5.3	7
377	Proteomic Identification of Differentially Expressed Proteins during Alfalfa (L.) Flower Development. *Frontiers in Plant Science*, **2016**, 7, 1502	6.2	8
376	Mitogen-activated protein kinase pathways are required for melatonin-mediated defense responses in plants. **2016**, 60, 327-35		85
375	Molecular characterization of biotic and abiotic stress-responsive MAP kinase genes, IbMPK3 and IbMPK6, in sweetpotato. **2016**, 108, 37-48		14
374	A brief history of the TDIF-PXY signalling module: balancing meristem identity and differentiation during vascular development. *New Phytologist*, **2016**, 209, 474-84	9.8	47
373	AtSRP1, SMALL RUBBER PARTICLE PROTEIN HOMOLOG, functions in pollen growth and development in Arabidopsis. **2016**, 475, 223-9		5
372	Lineage-specific stem cells, signals and asymmetries during stomatal development. **2016**, 143, 1259-70		55

371	The Cotton Mitogen-Activated Protein Kinase Kinase 3 Functions in Drought Tolerance by Regulating Stomatal Responses and Root Growth. **2016**, 57, 1629-42		51
370	Approaches to Heavy Metal Tolerance in Plants. **2016**,		17
369	iTAK: A Program for Genome-wide Prediction and Classification of Plant Transcription Factors, Transcriptional Regulators, and Protein Kinases. **2016**, 9, 1667-1670		352
368	A double-mutant collection targeting MAP kinase related genes in Arabidopsis for studying genetic interactions. **2016**, 88, 867-878		6
367	Stomagenesis versus myogenesis: Parallels in intrinsic and extrinsic regulation of transcription factor mediated specialized cell-type differentiation in plants and animals. **2016**, 58, 341-54		5
366	Cold regulation of plastid ascorbate peroxidases serves as a priming hub controlling ROS signaling in Arabidopsis thaliana. *BMC Plant Biology*, **2016**, 16, 163	5.3	45
365	Up-to-Date Workflow for Plant (Phospho)proteomics Identifies Differential Drought-Responsive Phosphorylation Events in Maize Leaves. **2016**, 15, 4304-4317		40
364	Analysis of crystal structure of Arabidopsis MPK6 and generation of its mutants with higher activity. **2016**, 6, 25646		8
363	Heavy Metal Stress Signalling in Plants. **2016**, 33-55		1
362	On numerical study of periodic solutions of a delay equation in biological models. **2016**, 10, 86-96		0
361	Oligogalacturonic acids promote tomato fruit ripening through the regulation of 1-aminocyclopropane-1-carboxylic acid synthesis at the transcriptional and post-translational levels. *BMC Plant Biology*, **2016**, 16, 13	5.3	11
360	Comparative transcript profiling of resistant and susceptible peanut post-harvest seeds in response to aflatoxin production by Aspergillus flavus. *BMC Plant Biology*, **2016**, 16, 54	5.3	29
359	Pathogen-Responsive MPK3 and MPK6 Reprogram the Biosynthesis of Indole Glucosinolates and Their Derivatives in Arabidopsis Immunity. **2016**, 28, 1144-62		82
358	Quantitative phosphoproteomic analysis of early seed development in rice (Oryza sativa L.). **2016**, 90, 249-65		29
357	Protein-protein interactions in plant mitogen-activated protein kinase cascades. **2016**, 67, 607-18		28
356	A Phytophthora infestans RXLR effector targets plant PP1c isoforms that promote late blight disease. *Nature Communications*, **2016**, 7, 10311	17.4	73
355	Ectopic expression of TAPETUM DETERMINANT1 affects ovule development in Arabidopsis. **2016**, 67, 1311-26		14
354	Bacillus cereus AR156 activates PAMP-triggered immunity and induces a systemic acquired resistance through a NPR1-and SA-dependent signaling pathway. **2016**, 469, 120-125		48

353	Analysis of soybean tissue culture protein dynamics using difference gel electrophoresis. **2016**, 130, 56-64		3
352	Functional analysis of NtMPK2 uncovers its positive role in response to Pseudomonas syringae pv. tomato DC3000 in tobacco. **2016**, 90, 19-31		4
351	Arabidopsis MAPKKK18 positively regulates drought stress resistance via downstream MAPKK3. **2017**, 484, 292-297		44
350	Regulation of the wheat MAP kinase phosphatase 1 by 14-3-3 proteins. *Plant Science*, **2017**, 257, 37-47	5.3	8
349	Regulation of Stomatal Immunity by Interdependent Functions of a Pathogen-Responsive MPK3/MPK6 Cascade and Abscisic Acid. **2017**, 29, 526-542		76
348	Mild osmotic stress promotes 4-methoxy indolyl-3-methyl glucosinolate biosynthesis mediated by the MKK9-MPK3/MPK6 cascade in Arabidopsis. *Plant Cell Reports*, **2017**, 36, 543-555	5.1	11
347	Review: Mitogen-Activated Protein Kinases in nutritional signaling in Arabidopsis. *Plant Science*, **2017**, 260, 101-108	5.3	34
346	The association of changes in DNA methylation with temperature-dependent sex determination in cucumber. **2017**, 68, 2899-2912		31
345	AIK1, A Mitogen-Activated Protein Kinase, Modulates Abscisic Acid Responses through the MKK5-MPK6 Kinase Cascade. *Plant Physiology*, **2017**, 173, 1391-1408	6.6	65
344	Cell Signalling Mechanisms in Plants. **2017**, 1-9		3
343	Overexpressing OsMAPK12-1 inhibits plant growth and enhances resistance to bacterial disease in rice. **2017**, 44, 694-704		5
342	Salicylic acid seed priming instigates defense mechanism by inducing PR-Proteins in Solanum melongena L. upon infection with Verticillium dahliae Kleb. **2017**, 117, 12-23		27
341	Conservation of Chitin-Induced MAPK Signaling Pathways in Rice and Arabidopsis. **2017**, 58, 993-1002		52
340	A phosphoproteomic landscape of rice (Oryza sativa) tissues. **2017**, 160, 458-475		17
339	MAP Kinase PrMPK9-1 Contributes to the Self-Incompatibility Response. *Plant Physiology*, **2017**, 174, 1226-1237	6.6	14
338	MtMAPKK4 is an essential gene for growth and reproduction of Medicago truncatula. **2017**, 159, 492-503		6
337	A review of redox signaling and the control of MAP kinase pathway in plants. **2017**, 11, 192-204		94
336	Activation of ZmMKK10, a maize mitogen-activated protein kinase kinase, induces ethylene-dependent cell death. *Plant Science*, **2017**, 264, 129-137	5.3	7

335	Maternal control of embryogenesis by MPK6 and its upstream MKK4/MKK5 in Arabidopsis. **2017**, 92, 1005-1019		43
334	Global Identification, Classification, and Expression Analysis of MAPKKK genes: Functional Characterization of MdRaf5 Reveals Evolution and Drought-Responsive Profile in Apple. **2017**, 7, 13511		11
333	The integration of G and MAPK signaling cascade in zygote development. **2017**, 7, 8732		25
332	Digital gene expression analysis during floral transition in pak choi (Brassica rapa subsp. chinensis). **2017**, 1-9		1
331	Regulation of cotton (Gossypium hirsutum) drought responses by mitogen-activated protein (MAP) kinase cascade-mediated phosphorylation of GhWRKY59. *New Phytologist*, **2017**, 215, 1462-1475	9.8	40
330	An Arabidopsis kinase cascade influences auxin-responsive cell expansion. **2017**, 92, 68-81		21
329	Characterization of the MAPK Gene Family and PbrMAPK13 Response to Hormone and Temperature Stresses via Different Expression Pattern in Pyrus bretschneideri Pollen. **2017**, 142, 163-174		0
328	MAP Kinase Signaling Turns to ICE. **2017**, 43, 545-546		9
327	Genetic dissection of adventitious shoot regeneration in roses by employing genome-wide association studies. *Plant Cell Reports*, **2017**, 36, 1493-1505	5.1	16
326	Phylogenomic analysis of MKKs and MAPKs from 16 legumes and detection of interacting pairs in chickpea divulge MAPK signalling modules. **2017**, 7, 5026		10
325	Role and interrelationship of MEK1-MPK6 cascade, hydrogen peroxide and nitric oxide in darkness-induced stomatal closure. *Plant Science*, **2017**, 262, 190-199	5.3	20
324	miRNA limits MAP kinase-mediated immunity: optimization of plant fitness. **2017**, 68, 5685-5687		2
323	From network to phenotype: the dynamic wiring of an Arabidopsis transcriptional network induced by osmotic stress. **2017**, 13, 961		41
322	The Mammalian Peptide Adrenomedullin Acts as a Growth Factor in Tobacco Plants. **2017**, 8, 219		
321	Genome-wide identification and analysis of MAPK and MAPKK gene family in Chinese jujube (Ziziphus jujuba Mill.). **2017**, 18, 855		22
320	Bioinformatics identification and transcript profile analysis of the mitogen-activated protein kinase gene family in the diploid woodland strawberry Fragaria vesca. **2017**, 12, e0178596		10
319	Harnessing Genetic Diversity of Wild Gene Pools to Enhance Wheat Crop Production and Sustainability: Challenges and Opportunities. **2017**, 9, 55		23
318	The Tomato Mitogen-Activated Protein Kinase SlMPK1 Is as a Negative Regulator of the High-Temperature Stress Response. *Plant Physiology*, **2018**, 177, 633-651	6.6	42

317	Molecular Aspects of Plant-Pathogen Interaction. **2018**,		5
316	YODA MAP3K kinase regulates plant immune responses conferring broad-spectrum disease resistance. *New Phytologist*, **2018**, 218, 661-680	9.8	31
315	Recent Advancement on Map Kinase Cascade in Biotic Stress. **2018**, 139-158		3
314	Morphological, transcriptomics and biochemical characterization of new dwarf mutant of Brassica napus. *Plant Science*, **2018**, 270, 97-113	5.3	8
313	MAP kinases associate with high molecular weight multiprotein complexes. **2018**, 69, 643-654		4
312	Plant cell surface receptor-mediated signaling - a common theme amid diversity. **2018**, 131,		73
311	Mitogen activated protein kinase 6 and MAP kinase phosphatase 1 are involved in the response of Arabidopsis roots to L-glutamate. **2018**, 96, 339-351		6
310	Arabidopsis MKK10-MPK6 mediates red-light-regulated opening of seedling cotyledons through phosphorylation of PIF3. **2018**, 69, 423-439		12
309	Analysis of MAPK and MAPKK gene families in wheat and related Triticeae species. **2018**, 19, 178		20
308	Mitogen-activated protein kinases concentrate in the vicinity of chromosomes and may regulate directly cellular patterning in Vicia faba embryos. **2018**, 248, 307-322		1
307	Physiology and transcriptome analyses reveal a protective effect of the radical scavenger melatonin in aging maize seeds. **2018**, 52, 1094-1109		8
306	Negatively Regulates the OsMKKK10-OsMKK4-OsMPK6 Cascade to Coordinate the Trade-off between Grain Number per Panicle and Grain Size in Rice. **2018**, 30, 871-888		106
305	BIFURCATE FLOWER TRUSS: a novel locus controlling inflorescence branching in tomato contains a defective MAP kinase gene. **2018**, 69, 2581-2593		3
304	A guanine insert in OsBBS1 leads to early leaf senescence and salt stress sensitivity in rice (Oryza sativa L.). *Plant Cell Reports*, **2018**, 37, 933-946	5.1	26
303	Control of grain size in rice. **2018**, 31, 237-251		87
302	Molecular dynamics in germinating, endophyte-colonized quinoa seeds. **2018**, 422, 135-154		10
301	Mitogen-activated protein kinases and calcium-dependent protein kinases are involved in wounding-induced ethylene biosynthesis in Arabidopsis thaliana. **2018**, 41, 134-147		39
300	Characterization of auxin transporter PIN6 plasma membrane targeting reveals a function for PIN6 in plant bolting. *New Phytologist*, **2018**, 217, 1610-1624	9.8	24

299	Coevolving MAPK and PID phosphosites indicate an ancient environmental control of PIN auxin transporters in land plants. **2018**, 592, 89-102		27
298	Genome-wide identification of the MAPK gene family in chickpea and expression analysis during development and stress response. **2018**, 13, 25-35		10
297	De novo transcriptomic profiling of the clonal Leymus chinensis response to long-term overgrazing-induced memory. **2018**, 8, 17912		1
296	Biosorption of Cr(vi) from aqueous solution using dormant spores of .. **2018**, 8, 38157-38165		23
295	The Antitumor Activities of. **2018**, 8, 473		24
294	The MAP3K-Coding () Gene Is Essential to the Formation of Unreduced Embryo Sacs in. *Frontiers in Plant Science*, **2018**, 9, 1547	6.2	15
293	Cellular Complexity in MAPK Signaling in Plants: Questions and Emerging Tools to Answer Them. *Frontiers in Plant Science*, **2018**, 9, 1674	6.2	29
292	Regulation of pollen lipid body biogenesis by MAP kinases and downstream WRKY transcription factors in Arabidopsis. **2018**, 14, e1007880		16
291	Non-TAL Effectors From pv. Suppress Peptidoglycan-Triggered MAPK Activation in Rice. *Frontiers in Plant Science*, **2018**, 9, 1857	6.2	10
290	Studying on the strictly self-compatibility mechanism of 'Liuyefeitao' peach (Prunus persica L.). **2018**, 13, e0200914		
289	Full-length transcriptome sequences of ephemeral plant Arabidopsis pumila provides insight into gene expression dynamics during continuous salt stress. **2018**, 19, 717		36
288	In silico-prediction of protein-protein interactions network about MAPKs and PP2Cs reveals a novel docking site variants in Brachypodium distachyon. **2018**, 8, 15083		6
287	Mitogen-activated protein kinases MPK4 and MPK12 are key components mediating CO -induced stomatal movements. **2018**, 96, 1018-1035		19
286	Efficient CRISPR/Cas9-based genome editing and its application to conditional genetic analysis in Marchantia polymorpha. **2018**, 13, e0205117		75
285	Mitogen-Activated Protein Kinase Cascades in Plant Hormone Signaling. *Frontiers in Plant Science*, **2018**, 9, 1387	6.2	119
284	Extending the cascade: identification of a mitogen-activated protein kinase phosphatase playing a key role in rice yield. **2018**, 95, 935-936		1
283	The kinome of pineapple: catalog and insights into functions in crassulacean acid metabolism plants. *BMC Plant Biology*, **2018**, 18, 199	5.3	7
282	Identifying Candidate Genes for Enhancing Grain Zn Concentration in Wheat. *Frontiers in Plant Science*, **2018**, 9, 1313	6.2	42

281	Simple Sequence Repeat (SSR) Genetic Linkage Map of D Genome Diploid Cotton Derived from an Interspecific Cross between Gossypium davidsonii and Gossypium klotzschianum. *International Journal of Molecular Sciences*, **2018**, 19,	6.3	21
280	The MAPK Kinase Kinase GmMEKK1 Regulates Cell Death and Defense Responses. *Plant Physiology*, **2018**, 178, 907-922	6.6	21
279	Control of Grain Size and Weight by the OsMKKK10-OsMKK4-OsMAPK6 Signaling Pathway in Rice. **2018**, 11, 860-873		74
278	A mitogen-activated protein kinase phosphatase influences grain size and weight in rice. **2018**, 95, 937-946		28
277	Omics for understanding the mechanisms of Streptomyces lydicus A01 promoting the growth of tomato seedlings. **2018**, 431, 129-141		6
276	Comparative analysis of plant MKK gene family reveals novel expansion mechanism of the members and sheds new light on functional conservation. **2018**, 19, 407		18
275	Expressing Impairs Plant Growth but Enhances the Resistance of Rice to the Striped Stem Borer. *International Journal of Molecular Sciences*, **2018**, 19,	6.3	15
274	A CH zinc-finger protein OsZFP213 interacts with OsMAPK3 to enhance salt tolerance in rice. *Journal of Plant Physiology*, **2018**, 229, 100-110	3.6	29
273	Conveying endogenous and exogenous signals: MAPK cascades in plant growth and defense. **2018**, 45, 1-10		105
272	Knockout of SlMAPK3 Reduced Disease Resistance to Botrytis cinerea in Tomato Plants. **2018**, 66, 8949-8956		45
271	The Quest for MAP Kinase Substrates: Gaining Momentum. *Trends in Plant Science*, **2018**, 23, 918-932	13.1	19
270	VOCs-mediated hormonal signaling and crosstalk with plant growth promoting microbes. **2018**, 38, 1277-1296		52
269	Possible role of plant MAP kinases in the biogenesis and transcription regulation of rice microRNA pathway factors. **2018**, 129, 238-243		1
268	Protein Kinases in Shaping Plant Architecture. **2018**, 19, 390-400		2
267	Active photosynthetic inhibition mediated by MPK3/MPK6 is critical to effector-triggered immunity. **2018**, 16, e2004122		86
266	Genome-wide identification and role of MKK and MPK gene families in clubroot resistance of Brassica rapa. **2018**, 13, e0191015		6
265	Involvement of Mitogen-Activated Protein Kinases in Abiotic Stress Responses in Plants. **2018**, 389-395		5
264	Preparing plants for improved cold tolerance by priming. **2019**, 42, 782-800		46

263	Proteomic characterization of MPK4 signaling network and putative substrates. **2019**, 101, 325-339		5
262	BRASSINOSTEROID-INSENSITIVE2 Negatively Regulates the Stability of Transcription Factor ICE1 in Response to Cold Stress in Arabidopsis. **2019**, 31, 2682-2696		48
261	Mapping and analysis of QTLs related to seed length and seed width in Glycine max. **2019**, 138, 733-740		0
260	Chitosan promoting formononetin and calycosin accumulation in Astragalus membranaceus hairy root cultures via mitogen-activated protein kinase signaling cascades. **2019**, 9, 10367		12
259	The MPK8-TCP14 pathway promotes seed germination in Arabidopsis. **2019**, 100, 677-692		11
258	Silencing has different effects on rice pests in the field. **2019**, 14, e1640562		5
257	Concurrent overexpression of rice G-protein and subunits provide enhanced tolerance to sheath blight disease and abiotic stress in rice. **2019**, 250, 1505-1520		10
256	a Stress-Responsive Protein Kinase, Positively Regulates Rice Resistance to via Phytohormone Dynamics. *International Journal of Molecular Sciences*, **2019**, 20,	6.3	19
255	Magnesium Deficiency Induced Global Transcriptome Change in Leaves Revealed by RNA-Seq. *International Journal of Molecular Sciences*, **2019**, 20,	6.3	19
254	Genome-wide characterization and expression profiling of the MAPKKK genes in L. **2019**, 62, 609-622		3
253	Maize leaves drought-responsive genes revealed by comparative transcriptome of two cultivars during the filling stage. **2019**, 14, e0223786		7
252	Root Transcriptomic Analysis Reveals Global Changes Induced by Systemic Infection of with Mild and Severe Variants of Potato Spindle Tuber Viroid. **2019**, 11,		13
251	Noncanonical auxin signaling regulates cell division pattern during lateral root development. **2019**, 116, 21285-21290		33
250	Chemical genetic identification of a lectin receptor kinase that transduces immune responses and interferes with abscisic acid signaling. **2019**, 98, 492-510		11
249	An MAP kinase interacts with LHK1 and regulates nodule organogenesis in Lotus japonicus. **2019**, 62, 1203-1217		6
248	Identification and Characterization of Mitogen-Activated Protein Kinase (MAPK) Genes in Sunflower (L.). *Plants*, **2019**, 8,	4.5	11
247	The Solanum chacoense Fertilization-Related Kinase 3 (ScFRK3) is involved in male and female gametophyte development. *BMC Plant Biology*, **2019**, 19, 202	5.3	4
246	Bipartite anchoring of SCREAM enforces stomatal initiation by coupling MAP kinases to SPEECHLESS. **2019**, 5, 742-754		33

245	The MKK7-MPK6 MAP Kinase Module Is a Regulator of Meristem Quiescence or Active Growth in Arabidopsis. *Frontiers in Plant Science*, **2019**, 10, 202	6.2	10
244	The mitogen-activated protein kinase 4-phosphorylated heat shock factor A4A regulates responses to combined salt and heat stresses. **2019**, 70, 4903-4918		29
243	Porcine epidemic diarrhea virus infections induce apoptosis in Vero cells via a reactive oxygen species (ROS)/p53, but not p38 MAPK and SAPK/JNK signalling pathways. **2019**, 232, 1-12		25
242	Climatic Change and Metabolome Fluxes. **2019**, 179-237		
241	Metabolite and transcript profiling of Guinea grass (Panicum maximum Jacq) response to elevated [CO] and temperature. **2019**, 15, 51		17
240	High Temporal-Resolution Transcriptome Landscape of Early Maize Seed Development. **2019**, 31, 974-992		55
239	Early Evolution of the Mitogen-Activated Protein Kinase Family in the Plant Kingdom. **2019**, 9, 4094		5
238	Signaling Molecules in Ecophysiological Response Mechanisms of Salt-Stressed Plants. **2019**, 1-18		1
237	A MAPK cascade downstream of IDA-HAE/HSL2 ligand-receptor pair in lateral root emergence. **2019**, 5, 414-423		50
236	The Rice Phosphate Transporter Protein OsPT8 Regulates Disease Resistance and Plant Growth. **2019**, 9, 5408		13
235	Populus trichocarpa clade A PP2C protein phosphatases: their stress-induced expression patterns, interactions in core abscisic acid signaling, and potential for regulation of growth and development. **2019**, 100, 303-317		10
234	Molecular Networks of Seed Size Control in Plants. **2019**, 70, 435-463		121
233	Multifaceted plant G protein: interaction network, agronomic potential, and beyond. **2019**, 249, 1259-1266		8
232	Functional Analysis of MaWRKY24 in Transcriptional Activation of Autophagy-Related Gene 8f/g and Plant Disease Susceptibility to Soil-Borne f. sp.. **2019**, 8,		4
231	Transcriptome Analysis Reveals Complex Molecular Mechanisms Underlying UV Tolerance of Wheat (Triticum aestivum, L.). **2019**, 67, 563-577		15
230	Regulation of GDSL Lipase Gene Expression by the MPK3/MPK6 Cascade and Its Downstream WRKY Transcription Factors in Immunity. **2019**, 32, 673-684		11
229	A FRster resonance energy transfer sensor for live-cell imaging of mitogen-activated protein kinase activity in Arabidopsis. **2019**, 97, 970-983		12
228	Novel loci and a role for nitric oxide for seed dormancy and preharvest sprouting in barley. **2019**, 42, 1318-1327		19

227	Mitogen-Activated Protein Kinase Phosphatase 1 (MKP1) Negatively Regulates the Production of Reactive Oxygen Species During Arabidopsis Immune Responses. **2019**, 32, 464-478		14
226	Look Closely, the Beautiful May Be Small: Precursor-Derived Peptides in Plants. **2019**, 70, 153-186		48
225	Type one protein phosphatases (TOPPs) contribute to the plant defense response in Arabidopsis. *Journal of Integrative Plant Biology*, **2020**, 62, 360-377	8.3	18
224	Tacrolimus Therapy in Steroid-Refractory Ulcerative Colitis: A Review. **2020**, 26, 24-32		13
223	Silencing GmFLS2 enhances the susceptibility of soybean to bacterial pathogen through attenuating the activation of GmMAPK signaling pathway. *Plant Science*, **2020**, 292, 110386	5.3	8
222	Phosphorylation-Related Crosstalk Between Distant Regions of the Core Region of the Coat Protein Contributes to Virion Assembly of Plum Pox Virus. **2020**, 33, 653-667		5
221	NADPH-H2O2 shows different functions in regulating thermotolerance under different high temperatures in Solanum pimpinellifolium L. **2020**, 261, 108997		1
220	Functional characterization of Mitogen-Activated Protein Kinase Kinase (MAPKK) gene in Halophytic Salicornia europaea against salt stress. **2020**, 171, 103934		10
219	A bHLH transcription factor, MYC2, imparts salt intolerance by regulating proline biosynthesis in Arabidopsis. **2020**, 287, 2560-2576		31
218	MAPK-like protein 1 positively regulates maize seedling drought sensitivity by suppressing ABA biosynthesis. **2020**, 102, 747-760		16
217	Receptor-Like Protein Kinases Function Upstream of MAPKs in Regulating Plant Development. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	1
216	Protein Phosphatase Mediated Responses in Plant Host-Pathogen Interactions. **2020**, 289-330		1
215	Differential expression of MEKK subfamily genes in L. in response to abscisic acid and drought stress. **2020**, 15, 1822019		3
214	Expanding the Toolkit of Fluorescent Biosensors for Studying Mitogen Activated Protein Kinases in Plants. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	3
213	MAPK Enzymes: a ROS Activated Signaling Sensors Involved in Modulating Heat Stress Response, Tolerance and Grain Stability of Wheat under Heat Stress. **2020**, 10, 380		9
212	The Function of MAPK Cascades in Response to Various Stresses in Horticultural Plants. *Frontiers in Plant Science*, **2020**, 11, 952	6.2	19
211	MabZIP74 interacts with MaMAPK11-3 to regulate the transcription of MaACO1/4 during banana fruit ripening. **2020**, 169, 111293		9
210	Stigma Receptivity Is Controlled by Functionally Redundant MAPK Pathway Components in Arabidopsis. **2020**, 13, 1582-1593		6

209	Identification of a candidate gene associated with isoflavone content in soybean seeds using genome-wide association and linkage mapping. **2020**, 104, 950-963		7
208	Isolation and functional characterization of the mitogen-activated protein kinase kinase gene MAPKK1 from Panax notoginseng. **2020**, 158, 1-13		
207	Mitogen-Activated Protein Kinase Cascade and Reactive Oxygen Species Metabolism are Involved in Acibenzolar-S-Methyl-Induced Disease Resistance in Apples. **2020**, 68, 10928-10936		6
206	Engineering drought tolerance in plants by modification of transcription and signalling factors. **2020**, 34, 781-789		8
205	Expanding the Mitogen-Activated Protein Kinase (MAPK) Universe: An Update on MAP4Ks. *Frontiers in Plant Science*, **2020**, 11, 1220	6.2	5
204	Amplification and cloning of arabidopsis 6xhis-tagged mpk6 fusion encoded gene to characterize biochemical mitogen-activated protein kinase in disease resistance role against Fusarium graminearum. **2020**, 575, 012002		
203	Global mRNA and microRNA expression dynamics in response to anthracnose infection in sorghum. **2020**, 21, 760		7
202	Recent Advances in Arabidopsis CLE Peptide Signaling. *Trends in Plant Science*, **2020**, 25, 1005-1016	13.1	35
201	GOLVEN peptide signalling through RGI receptors and MPK6 restricts asymmetric cell division during lateral root initiation. **2020**, 6, 533-543		19
200	Genome-wide identification and functional characterization of cotton (Gossypium hirsutum) MAPKKK gene family in response to drought stress. *BMC Plant Biology*, **2020**, 20, 217	5.3	12
199	Regulations of reactive oxygen species in plants abiotic stress: an integrated overview. **2020**, 323-353		0
198	A Kinase-Phosphatase-Transcription Factor Module Regulates Adventitious Root Emergence in Arabidopsis Root-Hypocotyl Junctions. **2020**, 13, 1162-1177		4
197	The Pepper MAP Kinase CaAIMK1 Positively Regulates ABA and Drought Stress Responses. *Frontiers in Plant Science*, **2020**, 11, 720	6.2	9
196	Genome-wide identification of MAPK cascade genes reveals the GhMAP3K14-GhMKK11-GhMPK31 pathway is involved in the drought response in cotton. **2020**, 103, 211-223		12
195	How Plants Sense and Respond to Stressful Environments. *Plant Physiology*, **2020**, 182, 1624-1635	6.6	136
194	Receptors of CLE Peptides in Plants. **2020**, 67, 1-16		5
193	Plant transcriptional regulation in modulating cross-tolerance to stress. **2020**, 231-245		1
192	Transcriptome Analysis of Wounding in the Model Grass. *Plants*, **2020**, 9,	4.5	2

191	Acts Upstream of the OsMKKK10-OsMKK4-OsMPK6 Cascade to Control Spikelet Number by Regulating Cytokinin Metabolism in Rice. **2020**, 32, 2763-2779		27
190	Exogenous strigolactones promote lateral root growth by reducing the endogenous auxin level in rapeseed. **2020**, 19, 465-482		8
189	Revisiting the ORCA gene cluster that regulates terpenoid indole alkaloid biosynthesis in Catharanthus roseus. *Plant Science*, **2020**, 293, 110408	5.3	28
188	Mapping proteome-wide targets of protein kinases in plant stress responses. **2020**, 117, 3270-3280		49
187	Primary nitrate responses mediated by calcium signalling and diverse protein phosphorylation. **2020**, 71, 4428-4441		15
186	Coordination and Crosstalk between Autophagosome and Multivesicular Body Pathways in Plant Stress Responses. **2020**, 9,		6
185	Wounding and Insect Feeding Trigger Two Independent MAPK Pathways with Distinct Regulation and Kinetics. **2020**, 32, 1988-2003		18
184	Genome-Wide Identification, Phylogeny, and Expressional Profiles of the Mitogen-Activated Protein Kinase Kinase Kinase (MAPKKK) Gene Family in Pyropia yezoensis. **2020**, 7,		4
183	The MAPK substrate MASS proteins regulate stomatal development in Arabidopsis. **2020**, 16, e1008706		8
182	The disruption of the MAPKK gene triggering the synthesis of flavonoids in endophytic fungus Phomopsis liquidambaris. **2021**, 43, 119-132		4
181	Phytomelatonin: An Emerging Regulator of Plant Biotic Stress Resistance. *Trends in Plant Science*, **2021**, 26, 70-82	13.1	41
180	Hypersensitive response: From NLR pathogen recognition to cell death response. **2021**, 178, 268-280		6
179	Benzoic and salicylic acid are the signaling molecules of Chlorella cells for improving cell growth. **2021**, 265, 129084		6
178	MAPK11 regulates seed germination and ABA signaling in tomato by phosphorylating SnRKs. **2021**, 72, 1677-1690		5
177	Approaching the genetic dissection of indirect adventitious organogenesis process in tomato explants. *Plant Science*, **2021**, 302, 110721	5.3	0
176	Friends, neighbours and enemies: an overview of the communal and social biology of plants. **2021**, 44, 997-1013		9
175	The intracellular ROS accumulation in elicitor-induced immunity requires the multiple organelle-targeted Arabidopsis NPK1-related protein kinases. **2021**, 44, 931-947		1
174	Genome-wide analysis of mitogen-activated protein (MAP) kinase gene family expression in response to biotic and abiotic stresses in sugarcane. **2021**, 171, 86-107		4

173	Roles of FERONIA-like receptor genes in regulating grain size and quality in rice. **2021**, 64, 294-310		5
172	Biopeptides of Pyropia yezoensis and their potential health benefits: A review. **2021**, 11, 375		3
171	A systems biology approach identifies a regulator, BplERF1, of cold tolerance in Betula platyphylla. **2021**, 1, 1-10		1
170	A novel positive feedback mechanism of ABI5 phosphorylation by mitogen activated protein kinase-3 regulates ABA signaling inArabidopsis.		1
169	Plant Mitogen-Activated Protein Kinase Cascades in Environmental Stresses. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	15
168	ERECTA signaling regulates plant immune responses via chromatin-mediated promotion of WRKY33 binding to target genes. *New Phytologist*, **2021**, 230, 737-756	9.8	6
167	Update on the Roles of Rice MAPK Cascades. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	5
166	Rice calcium/calmodulin-dependent protein kinase directly phosphorylates a mitogen-activated protein kinase kinase to regulate abscisic acid responses. **2021**, 33, 1790-1812		7
165	Molecular Characterization of the Infecting in Egypt and the Control of Its Deleterious Effects with Melatonin and Salicylic Acid. *Plants*, **2021**, 10,	4.5	28
164	Ethylene-induced stomatal closure is mediated via MKK1/3-MPK3/6 cascade to EIN2 and EIN3. *Journal of Integrative Plant Biology*, **2021**, 63, 1324-1340	8.3	2
163	RING finger protein RGLG1 and RGLG2 negatively modulate MAPKKK18 mediated drought stress tolerance in Arabidopsis. *Journal of Integrative Plant Biology*, **2021**, 63, 484-493	8.3	4
162	Genome-wide identification and expression pattern of SnRK gene family under several hormone treatments and its role in floral scent emission in. **2021**, 9, e10883		2
161	Comparative analysis of and gene families reveals differential evolutionary patterns in inbred lines. **2021**, 9, e11238		4
160	Mitogen-Activated Protein Kinase Functions as a Positive Regulator of Drought Stress Response and Abscisic Acid Signaling in. *Frontiers in Plant Science*, **2021**, 12, 646707	6.2	3
159	A phylogenetic study of the members of the MAPK and MEK families across Viridiplantae. **2021**, 16, e0250584		0
158	Cross Inhibition of MPK10 and WRKY10 Participating in the Growth of Endosperm in. *Frontiers in Plant Science*, **2021**, 12, 640346	6.2	1
157	Label-Free Proteomic Analysis of Smoke-Drying and Shade-Drying Processes of Postharvest Rhubarb: A Comparative Study. *Frontiers in Plant Science*, **2021**, 12, 663180	6.2	0
156	Enhancing single-cell bioconversion efficiency by harnessing nanosecond pulsed electric field processing. **2021**, 53, 107780		3

155	Lectin receptor-like kinase LecRK-VIII.2 is a missing link in MAPK signaling-mediated yield control. *Plant Physiology*, **2021**, 187, 303-320	6.6	3
154	A gain-of-function mutation of OsMAPK6 leads to long grain in rice. **2021**, 9, 1481-1481		0
153	Apple MPK4 mediates phosphorylation of MYB1 to enhance light-induced anthocyanin accumulation. **2021**, 106, 1728-1745		7
152	A Systematic Review of Melatonin in Plants: An Example of Evolution of Literature. *Frontiers in Plant Science*, **2021**, 12, 683047	6.2	8
151	Protein kinase and phosphatase control of plant temperature responses. **2021**,		2
150	The rice Raf-like MAPKKK OsILA1 confers broad-spectrum resistance to bacterial blight by suppressing the OsMAPKK4-OsMAPK6 cascade. *Journal of Integrative Plant Biology*, **2021**, 63, 1815-1842	8.3	5
149	Genome wide investigation of MAPKKKs from Cicer arietinum and their involvement in plant defense against Helicoverpa armigera. *Physiological and Molecular Plant Pathology*, **2021**, 115, 101685	2.6	1
148	PIN-mediated polar auxin transport regulations in plant tropic responses. *New Phytologist*, **2021**, 232, 510-522	9.8	5
147	A Comprehensive Phylogenetic Analysis of the MAP4K Family in the Green Lineage. *Frontiers in Plant Science*, **2021**, 12, 650171	6.2	
146	MPK3/6-induced degradation of ARR1/10/12 promotes salt tolerance in Arabidopsis. **2021**, 22, e52457		12
145	Proteomics unravels new candidate genes of Dasypyrum villosum for improving wheat quality. **2021**, 245, 104292		1
144	Discovery of a Novel Mitogen-Activated Protein Kinase (FgGpmk1) Inhibitor for the Treatment of Fusarium Head Blight. **2021**, 64, 13841-13852		2
143	High temperature associated microRNAs and their potential roles in mediating heat tolerance in the leaf of banana inoculated with Serendipita indica. 1-16		2
142	Phosphoproteomic Analysis of Thermomorphogenic Responses in. *Frontiers in Plant Science*, **2021**, 12, 753148	6.2	0
141	MKK4/5-MPK3/6 Cascade Regulates -Mediated Transformation by Modulating Plant Immunity in. *Frontiers in Plant Science*, **2021**, 12, 731690	6.2	1
140	Multiple phosphorylation events of the mitochondrial membrane protein TTM1 regulate cell death during senescence. **2021**, 108, 766-780		1
139	Transcriptomics Analysis of Heat Stress-Induced Genes in Pepper (Capsicum annuum L.) Seedlings. **2021**, 7, 339		1
138	Transcriptional regulation of plant seed development. **2021**, 173, 2013-2025		2

137	Biology of plants coping stresses: epigenetic modifications and genetic engineering. **2022**, 144, 270-283		1
136	Probing Membrane Protein Interactions and Signaling Molecule Homeostasis in Plants by Förster Resonance Energy Transfer Analysis. **2021**,		2
135	Influences Morphology and Grain Size in Rice. **2021**, 1-14		1
134	Role of Protein Phosphatases in Signaling, Potassium Transport, and Abiotic Stress Responses. **2020**, 203-232		3
133	Plant Immunity, Priming, and Systemic Resistance as Mechanisms for Trichoderma spp. Biocontrol. **2020**, 81-110		6
132	The YDA-MKK4/MKK5-MPK3/MPK6 Cascade Functions Downstream of the RGF1-RGI Ligand-Receptor Pair in Regulating Mitotic Activity in Root Apical Meristem. **2020**, 13, 1608-1623		21
131	Efficient CRISPR/Cas9-based genome editing and its application to conditional genetic analysis in Marchantia polymorpha.		6
130	Co-regulation of indole glucosinolates and camalexin biosynthesis by CPK5/CPK6 and MPK3/MPK6 signaling pathways. *Journal of Integrative Plant Biology*, **2020**, 62, 1780-1796	8.3	15
129	Mitogen-Activated Protein Kinase Cascade MKK7-MPK6 Plays Important Roles in Plant Development and Regulates Shoot Branching by Phosphorylating PIN1 in Arabidopsis. **2016**, 14, e1002550		65
128	Comprehensive analysis of mitogen-activated protein kinase cascades in chrysanthemum. **2018**, 6, e5037		5
127	Transcriptome analysis of the induction of somatic embryogenesis in and the participation of ARF and Aux/IAA genes. **2019**, 7, e7752		11
126	ZmMPK5 phosphorylates ZmNAC49 to enhance oxidative stress tolerance in maize. *New Phytologist* , **2021**, 232, 2400-2417	9.8	2
125	Identification, evolution and expression analyses of mapk gene family in Japanese flounder (Paralichthys olivaceus) provide insight into its divergent functions on biotic and abiotic stresses response. **2021**, 241, 106005		0
124	Salicylic acid: A key regulator of redox signalling and plant immunity. **2021**, 168, 381-397		12
123	Bipartite anchoring of SCREAM enforces stomatal initiation by coupling MAP Kinases to SPEECHLESS.		
122	Determining the scale at which variation in WUE traits changes population yields.		
121	Wounding and insect feeding trigger two independent MAPK pathways with distinct regulation and kinetics.		
120	Mechanisms and approaches towards enhanced drought tolerance in cassava (Manihot esculenta). **2021**, 28, 100227		3

119	Determining the scale at which variation in a single gene changes population yields. **2020**, 9,		1
118	Stigma Receptivity is controlled by Functionally Redundant MAPK Pathway Components in Arabidopsis.		1
117	Insight into the Influencing Mechanism of Endophytic Bacteria on the Adsorption of Heavy Metals by Plants: A Review. **2021**, 13, 1401-1414		2
116	Phosphorylation of the mitochondrial triphosphate tunnel metalloenzyme TTM1 regulates programmed cell death in senescence.		
115	Rice Calcium/Calmodulin-Dependent Protein Kinase Directly Phosphorylates a Mitogen-Activated Protein Kinase Kinase to Regulate Abscisic Acid Responses.		
114	The involvement of gaseous signaling molecules in plant MAPK cascades: function and signal transduction. **2021**, 254, 127		3
113	Mitogen-activated protein kinases associated sites of tobacco REPRESSION OF SHOOT GROWTH regulates its localization in plant cells.		
112	Regulatory interactions in phytohormone stress signaling implying plants resistance and resilience mechanisms. **2021**, 30, 813		3
111	Chlorosis seedling lethality 1 encoding a MAP3K protein is essential for chloroplast development in rice.. *BMC Plant Biology*, **2022**, 22, 20	5.3	1
110	Cloning and Functional analysis of Mitogen-activated protein kinases 6(MAPK6)Gene in Lettuce.		0
109	Identification and characterization of mkk genes and their expression profiles in rainbow trout (Oncorhynchus mykiss) symptomatically or asymptomatically infected with Vibrio anguillarum.. **2021**, 121, 1-1		0
108	miRNA-Mediated Regulation of Biotic and Abiotic Stress Responses in Plants. **2021**, 463-492		
107	Grape VvMAPK9 positively regulates salt tolerance in Arabidopsis and grape callus through regulating the antioxidative system. **2022**, 148, 609		0
106	Biological Parts for Engineering Abiotic Stress Tolerance in Plants. **2022**, 2022, 1-41		4
105	Genome-wide identification and evolution of WNK kinases in Bambusoideae and transcriptional profiling during abiotic stress in .. **2022**, 10, e12718		1
104	Series-Spatial Transcriptome Profiling of Leafy Head Reveals the Key Transition Leaves for Head Formation in Chinese Cabbage.. *Frontiers in Plant Science*, **2021**, 12, 787826	6.2	4
103	MAP kinase cascades in plant development and immune signaling.. **2022**, e53817		0
102	Exploring the Adaptive Responses of Plants to Abiotic Stresses Using Transcriptome Data. **2022**, 12, 211		2

101	Proteomics and Functional Analysis Revealed TaGSTU6/TaCBSX3 Enhances Wheat Resistance to Powdery Mildew.		
100	Gene mining of 100-grain weight and the number of four-seed pods in soybean (Glycine max).		0
99	Promoting Effect of Plant Hormone Gibberellin (Ga3) on Co-Metabolism of Sulfamethoxazole by Microalgae Chlorella Pyrenoidosa.		
98	Promoting Effect of Plant Hormone Gibberellin (Ga3) on Co-Metabolism of Sulfamethoxazole by Microalgae Chlorella Pyrenoidosa.		
97	Multilocation proteins in organelle communication: Based on protein-protein interactions.. **2022**, 6, e386		0
96	MAP3K□1/2 Interact with MOB1A/1B and Play Important Roles in Control of Pollen Germination through Crosstalk with JA Signaling in Arabidopsis.. *International Journal of Molecular Sciences*, **2022**, 23,	6.3	1
95	The Protein Phosphatase GhAP2C1 Interacts Together with GhMPK4 to Synergistically Regulate the Immune Response to in Cotton.. *International Journal of Molecular Sciences*, **2022**, 23,	6.3	0
94	Mitogen-Activated Protein Kinase and Substrate Identification in Plant Growth and Development.. *International Journal of Molecular Sciences*, **2022**, 23,	6.3	0
93	Mitogen-activated protein kinase 4 is obligatory for late pollen and early fruit development in tomato.. **2022**, 9, uhac048		0
92	OsMAPK6 phosphorylates a zinc finger protein OsLIC to promote downstream OsWRKY30 for rice resistance to bacterial blight and leaf streak.. *Journal of Integrative Plant Biology*, **2022**,	8.3	1
91	Regulatory Mechanisms of Mitogen-Activated Protein Kinase Cascades in Plants: More than Sequential Phosphorylation.. *International Journal of Molecular Sciences*, **2022**, 23,	6.3	1
90	Integrated Analysis of Physiological, mRNA Sequencing, and miRNA Sequencing Data Reveals a Specific Mechanism for the Response to Continuous Cropping Obstacles in Roots.. *Frontiers in Plant Science*, **2022**, 13, 853110	6.2	0
89	Emerging roles of protein phosphorylation in plant iron homeostasis.. *Trends in Plant Science*, **2022**,	13.1	0
88	An miR156-regulated Nucleobase-Ascorbate Transporter 2 Confers Cadmium Tolerance via Enhanced Anti-oxidative Capacity in Barley. *Journal of Advanced Research*, **2022**,	13	1
87	Regulation of Arabidopsis Matrix Metalloproteinases by Mitogen-Activated Protein Kinases and Their Function in Leaf Senescence.. *Frontiers in Plant Science*, **2022**, 13, 864986	6.2	
86	Induce defense response of DADS in eggplants during the biotrophic phase of Verticillium dahliae.. *BMC Plant Biology*, **2022**, 22, 172	5.3	1
85	Promoting effect of plant hormone gibberellin on co-metabolism of sulfamethoxazole by microalgae Chlorella pyrenoidosa.. *Bioresource Technology*, **2022**, 126900	11	1
84	PeMPK7 is induced in an ROS-dependent manner and confers poplar para-hydroxybenzoic acid stress resistance through the removal of ROS. *Industrial Crops and Products*, **2022**, 182, 114861	5.9	1

83	PdEPFL6 reduces stomatal density to improve drought tolerance in poplar. *Industrial Crops and Products*, **2022**, 182, 114873	5.9	2
82	Comparative transcriptome analysis of two sugarcane varieties in response to diazotrophic plant growth promoting endophyte Enterobacter roggenkampii ED5. *Journal of Plant Interactions*, **2022**, 17, 75-84	3.8	0
81	Biostimulant Capacity of an Enzymatic Extract From Rice Bran Against Ozone-Induced Damage in. *Frontiers in Plant Science*, **2021**, 12, 749422	6.2	0
80	Image_1.PNG. **2020**,		
79	Image_2.pdf. **2020**,		
78	Table_1.XLSX. **2020**,		
77	Table_2.XLSX. **2020**,		
76	Table_3.XLSX. **2020**,		
75	Table_4.XLSX. **2020**,		
74	Image_1.PDF. **2020**,		
73	Image_2.PDF. **2020**,		
72	Table_1.PDF. **2020**,		
71	Data_Sheet_1.PDF. **2018**,		
70	Data_Sheet_1.PDF. **2018**,		
69	Image_2.jpg. **2018**,		
68	Table_1.xlsx. **2018**,		
67	Table_2.DOCX. **2018**,		
66	Table_3.XLSX. **2018**,		

65	Table_4.XLSX. **2018**,		
64	Table_5.XLSX. **2018**,		
63	Image_1.TIF. **2018**,		
62	Image_2.tif. **2018**,		
61	Image_3.tif. **2018**,		
60	Image_4.TIF. **2018**,		
59	Image_5.pdf. **2018**,		
58	Table_1.pdf. **2018**,		
57	Table_2.pdf. **2018**,		
56	Table_3.pdf. **2018**,		
55	Table_1.DOCX. **2018**,		
54	Table_1.XLSX. **2018**,		
53	Function of Protein Kinases in Leaf Senescence of Plants.. *Frontiers in Plant Science*, **2022**, 13, 864215	6.2	0
52	QTL Analysis of Z414, a Chromosome Segment Substitution Line with Short, Wide Grains, and Substitution Mapping of qGL11 in Rice.. *Rice*, **2022**, 15, 25	5.8	0
51	Genome-wide identification and characterization of the MAPKKK, MKK, and MPK families in Chinese elite maize inbred line Huangzaosi.. *Plant Genome*, **2022**, e20216	4.4	1
50	Trace phenolic acids simultaneously enhance degradation of chlorophenol and biofuel production by Chlorella regularis.. *Water Research*, **2022**, 218, 118524	12.5	0
49	Cooperative regulation of PBI1 and MAPKs controls WRKY45 transcription factor in rice immunity.. *Nature Communications*, **2022**, 13, 2397	17.4	1
48	Bacterial cyclodipeptides elicit Arabidopsis thaliana immune responses reducing the pathogenic effects of Pseudomonas aeruginosa PAO1 ambB/pvdl and PA4078/pvdl strains on plant development. *Journal of Plant Physiology*, **2022**, 153738	3.6	0

47	Transcriptome and Physiological Analyses of a Navel Orange Mutant with Improved Drought Tolerance and Water Use Efficiency Caused by Increases of Cuticular Wax Accumulation and ROS Scavenging Capacity. *International Journal of Molecular Sciences*, **2022**, 23, 5660	6.3	0
46	Overlapping functions of YDA and MAPKKK3/MAPKKK5 upstream of MPK3/MPK6 in plant immunity and growth/development. *Journal of Integrative Plant Biology*,	8.3	0
45	Rhizospheric volatilome in modulating induced systemic resistance against biotic stress: A new paradigm for future food security. *Physiological and Molecular Plant Pathology*, **2022**, 120, 101852	2.6	1
44	G-protein couples MAPK cascade through maize heterotrimeric G□subunit. *Plant Cell Reports*,	5.1	1
43	Transcriptome Analysis Reveals that Exogenous Melatonin Confers Lilium Disease Resistance to Botrytis elliptica. *Frontiers in Genetics*, 13,	4.5	1
42	Group □ WRKY transcription factors regulate cotton resistance to Fusarium oxysporum by promoting GhMKK2 -mediated flavonoid biosynthesis. *New Phytologist*,	9.8	2
41	What□ new in protein kinase/phosphatase signalling in the control of plant immunity?. *Essays in Biochemistry*,	7.6	2
40	Comparative Transcriptome Analysis Reveals Common and Developmental Stage-Specific Genes That Respond to Low Nitrogen in Maize Leaves. *Plants*, **2022**, 11, 1550	4.5	
39	Joint toxicity mechanisms of binary emerging PFAS mixture on algae (Chlorella pyrenoidosa) at environmental concentration. *Journal of Hazardous Materials*, **2022**, 437, 129355	12.8	1
38	The carbohydrate elicitor Riclinoctaose facilitates defense and growth of potato roots by inducing changes in transcriptional and metabolic profiles. *Plant Science*, **2022**, 322, 111349	5.3	0
37	Genome-Wide Identification and Expression Analysis of SnRK Gene Family under Abiotic Stress in Cucumber (Cucumis sativus L.). *Agronomy*, **2022**, 12, 1550	3.6	0
36	Transcriptome Analysis Reveals the Response Mechanism of Frl-Mediated Resistance to Fusarium oxysporum f. sp. radicis-lycopersici (FORL) Infection in Tomato. *International Journal of Molecular Sciences*, **2022**, 23, 7078	6.3	0
35	Genome-Wide Identification of MAPKK and MAPKKK Gene Family Members and Transcriptional Profiling Analysis during Bud Dormancy in Pear (Pyrus x bretschneideri). *Plants*, **2022**, 11, 1731	4.5	
34	Physiological and Differential Proteomic Analysis at Seedling Stage by Induction of Heavy-Ion Beam Radiation in Wheat Seeds. *Frontiers in Genetics*, 13,	4.5	0
33	Crystal structure of the phosphorylated <italic>Arabidopsis</italic> MKK5 reveals activation mechanism of MAPK kinases. *Acta Biochimica Et Biophysica Sinica*, **2022**,	2.8	
32	Glutathione S-transferase interactions enhance wheat resistance to powdery mildew but not wheat stripe rust. *Plant Physiology*,	6.6	1
31	Transcriptome Analysis of Sponge Gourd (Luffa cylindrica) Reveals Candidate Genes Associated with Fruit Size. **2022**, 12, 1810		0
30	Integrative analysis of transcriptome and miRNAome reveals molecular mechanisms regulating pericarp thickness in sweet corn during kernel development. 13,		

29	Mitogen-Activated Protein Kinases Associated Sites of Tobacco Repression of Shoot Growth Regulates Its Localization in Plant Cells. **2022**, 23, 8941	1
28	Genome-wide identification of MPK and MKK gene families and their responses to phytohormone treatment and abiotic stress in foxtail millet.	0
27	Oilseed rape MPK1 mediates reactive oxygen species-dependent cell death and jasmonic acid-induced leaf senescence. **2022**, 202, 105028	
26	Silicon nanoparticles in higher plants: Uptake, action, stress tolerance, and crosstalk with phytohormones, antioxidants, and other signalling molecules. **2022**, 310, 119855	1
25	Genome-wide identification of MAPK family genes and their response to abiotic stresses in tea plant (Camellia sinensis). **2022**, 17, 1064-1074	0
24	Transcriptional Memory in Taraxacum mongolicum in Response to Long-Term Different Grazing Intensities. **2022**, 11, 2251	0
23	The MKK2a Gene Involved in the MAPK Signaling Cascades Enhances Populus Salt Tolerance. **2022**, 23, 10185	1
22	Genome-Wide Identification and Expression Analysis of MAPK Gene Family in Lettuce (Lactuca sativa L.) and Functional Analysis of LsMAPK4 in High- Temperature-Induced Bolting. **2022**, 23, 11129	1
21	Uncovering the mechanism of anthocyanin accumulation in a purple-leaved variety of foxtail millet (Setaria italica) by transcriptome analysis. 10, e14099	0
20	Genetic manipulation of stress-induced mitogen-activated protein kinase modulates early stages of the nodulation process inMedicago sativa.	0
19	MAPK Gene Family in Lactuca sativa: Genome-Wide Identification, Regulatory Network, and Expression Patterns in Stem Development and Stress Responses. **2022**, 8, 1087	0
18	The GhMAP3K62-GhMKK16-GhMPK32 kinase cascade regulates drought tolerance by activating GhEDT1-mediated ABA accumulation in cotton. **2022**,	0
17	Emerging roles of protein phosphorylation in regulation of stomatal development. **2023**, 280, 153882	0
16	PlMAPK1 facilitates growth and photosynthesis of herbaceous peony (Paeonia lactiflora Pall.) under high-temperature stress. **2023**, 310, 111701	0
15	HvVPE3, a gene closely associated with Cd uptake and tolerance in barley. **2023**, 206, 105154	0
14	Identification and Expression Analysis of MPK and MKK Gene Families in Pecan (Carya illinoinensis). **2022**, 23, 15190	0
13	Geminiviral C4/AC4 proteins: An emerging component of the viral arsenal against plant defence. **2023**,	0
12	Protein Kinases as Potential Targets Contribute to the Development of Agrochemicals. **2023**, 71, 52-64	0

11	Post-embryonic function of GLOBULAR EMBRYO 4 (GLE4)/OsMPK6 in rice development. **2023**,	0
10	EDR1 associates with its homologs to synergistically regulate plant immunity in Arabidopsis. **2023**, 330, 111619	0
9	Comprehensive genome-wide identification and functional characterization of MAPK cascade gene families in Nelumbo. **2023**, 233, 123543	0
8	MAPK cascade and ROS metabolism are involved in GABA-induced disease resistance in red pitaya fruit. **2023**, 200, 112324	0
7	Overexpression of GmNF-YA14 produced multiple phenotypes in soybean. **2023**, 210, 105316	0
6	BnaMPK3s promote organ size by interacting with BnaARF2s in Brassica napus. **2023**, 21, 899-901	0
5	LG5, a Novel Allele of EUI1, Regulates Grain Size and Flag Leaf Angle in Rice. **2023**, 12, 675	0
4	MAPKKKs in Plants: Multidimensional Regulators of Plant Growth and Stress Responses. **2023**, 24, 4117	0
3	CRK41 Modulates Microtubule Depolymerization in Response to Salt Stress in Arabidopsis. **2023**, 12, 1285	0
2	Amyloplast sedimentation repolarizes LAZYs to achieve gravity sensing in plants.	0
1	Revisiting the role of MAPK signalling pathway in plants and its manipulation for crop improvement.	0