## Arvind M Kayastha

List of Publications by Year in descending order

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122 papers 2,972 citations

147801 31 h-index 214800 47 g-index

126 all docs

 $\begin{array}{c} 126 \\ \\ \text{docs citations} \end{array}$ 

times ranked

126

2985 citing authors

#	Article	IF	CITATIONS
1	Current and future trends on polymer-based enzyme immobilization. , 2021, , 1-25.		O
2	Interactions Between Amyloid- $\hat{l}^2$ (1-42) and Hydroxyapatite-Cholesterol Spherules Associated with Age-Related Macular Degeneration. Protein Journal, 2021, 40, 849-856.	1.6	0
3	Biophysical Investigation of the Interplay between the Conformational Species of Domain-Swapped GB1 Amyloid Mutant through Real–Time Monitoring of Amyloid Fibrillation. ACS Omega, 2021, 6, 34359-34366.	3.5	1
4	Immobilization of fenugreek $\hat{I}^2$ -amylase onto functionalized tungsten disulfide nanoparticles using response surface methodology: Its characterization and interaction with maltose and sucrose. Colloids and Surfaces B: Biointerfaces, 2020, 185, 110600.	5.0	7
5	In Silico Analysis of New Potent Anti-hyperglycemic Molecule for Diabetes Type 2 Management. International Journal of Peptide Research and Therapeutics, 2020, 26, 1031-1042.	1.9	O
6	Nanoparticles decorated carbon nanotubes as novel matrix: A comparative study of influences of immobilization on the catalytic properties of Lens culinaris $\hat{l}^2$ -galactosidase (Lc $\hat{l}^2$ -gal). International Journal of Biological Macromolecules, 2020, 144, 770-780.	<b>7.</b> 5	8
7	An NMR based panorama of the heterogeneous biology of acute respiratory distress syndrome (ARDS) from the standpoint of metabolic biomarkers. NMR in Biomedicine, 2020, 33, e4192.	2.8	7
8	Lens culinaris $\hat{l}^2$ -galactosidase (Lsbgal): Insights into its purification, biochemical characterization and trisaccharides synthesis. Bioorganic Chemistry, 2020, 95, 103543.	4.1	6
9	Immobilization of fenugreek $\hat{l}^2$ -amylase onto functionalized graphene quantum dots (GQDs) using Box-Behnken design: Its biochemical, thermodynamic and kinetic studies. International Journal of Biological Macromolecules, 2020, 144, 170-182.	7.5	34
10	Interactions between hydroxyapatite and cholesterol associated with calcification in age-related macular degeneration. Biophysical Chemistry, 2020, 265, 106430.	2.8	6
11	Identification and characterization of Dicer-like genes in leaf rust pathogen (Puccinia triticina) of wheat. Functional and Integrative Genomics, 2020, 20, 711-721.	3.5	5
12	Denaturant Induced Equilibrium Unfolding and Conformational Transitional Studies of Germinated Fenugreek Î <sup>2</sup> -Amylase Revealed Molten Globule like State at Low pH. Protein and Peptide Letters, 2020, 27, 1046-1057.	0.9	0
13	Nitrogen Doped Carbon Quantum Dots Modified by Lens culinaris $\hat{l}^2$ -Galactosidase as a Fluorescent Probe for Detection of Lactose. Journal of Fluorescence, 2019, 29, 1213-1219.	2.5	6
14	Carbon nanotubes molybdenum disulfide 3D nanocomposite as novel nanoscaffolds to immobilize Lens culinaris Î <sup>2</sup> -galactosidase (Lsbgal): Robust stability, reusability, and effective bioconversion of lactose in whey. Food Chemistry, 2019, 297, 125005.	8.2	18
15	Biochemical and thermodynamic characterization of de novo synthesized $\hat{l}^2$ -amylase from fenugreek. International Journal of Biological Macromolecules, 2019, 130, 786-797.	<b>7.</b> 5	9
16	Wastewater remediation via combo-technology. , 2019, , 91-126.		1
17	Immobilization of Urease on DEAE-Cellulose Strips for One Step Urea Detection. Annals of the National Academy of Medical Sciences (India), 2019, 55, 024-027.	0.3	1
18	Discovery and profiling of small RNAs from Puccinia triticina by deep sequencing and identification of their potential targets in wheat. Functional and Integrative Genomics, 2019, 19, 391-407.	3.5	37

#	Article	IF	Citations
19	Enzymatic hydrolysis of native granular starches by a new $\hat{l}^2$ -amylase from peanut (Arachis hypogaea). Food Chemistry, 2019, 276, 583-590.	8.2	31
20	An antioxidant rich novel $\hat{I}^2$ -amylase from peanuts (Arachis hypogaea): Its purification, biochemical characterization and potential applications. International Journal of Biological Macromolecules, 2018, 111, 148-157.	<b>7.</b> 5	13
21	QPRTase modified N-doped carbon quantum dots: A fluorescent bioprobe for selective detection of neurotoxin quinolinic acid in human serum. Biosensors and Bioelectronics, 2018, 101, 103-109.	10.1	35
22	Covalent immobilization of peanut $\hat{l}^2$ -amylase for producing industrial nano-biocatalysts: A comparative study of kinetics, stability and reusability of the immobilized enzyme. Food Chemistry, 2018, 245, 488-499.	8.2	69
23	Comparative Characterization of Peanut $\hat{I}^2$ -Amylase Immobilization onto Graphene Oxide and Graphene Oxide Carbon Nanotubes by Solid-State NMR. Journal of Physical Chemistry C, 2018, 122, 19259-19265.	3.1	11
24	Purification, biochemical characterization and Insilico modeling of $\hat{l}_{\pm}$ -amylase from Vicia faba. Journal of Molecular Liquids, 2017, 234, 133-141.	4.9	10
25	Covalent immobilization of $\hat{l}^2$ -amylase onto functionalized molybdenum sulfide nanosheets, its kinetics and stability studies: A gateway to boost enzyme application. Chemical Engineering Journal, 2017, 328, 215-227.	12.7	74
26	Excellent storage stability and sensitive detection of neurotoxin quinolinic acid. Biosensors and Bioelectronics, 2017, 90, 224-229.	10.1	15
27	Ultra fast magic angle spinning solid – state NMR spectroscopy of intact bone. Magnetic Resonance in Chemistry, 2016, 54, 132-135.	1.9	24
28	Heat, Acid and Chemically Induced Unfolding Pathways, Conformational Stability and Structure-Function Relationship in Wheat α-Amylase. PLoS ONE, 2015, 10, e0129203.	2.5	17
29	α-Amylase immobilization onto functionalized graphene nanosheets as scaffolds: Its characterization, kinetics and potential applications in starch based industries. Biochemistry and Biophysics Reports, 2015, 3, 18-25.	1.3	27
30	Partially reduced graphene oxide–gold nanorods composite based bioelectrode of improved sensing performance. Talanta, 2015, 144, 745-754.	5.5	22
31	Immobilisation of Fenugreek $\hat{I}^2$ -amylase on chitosan/PVP blend and chitosan coated PVC beads: A comparative study. Food Chemistry, 2015, 172, 844-851.	8.2	24
32	Metabolic profiling of human lung injury by 1H high-resolution nuclear magnetic resonance spectroscopy of blood serum. Metabolomics, 2015, 11, 166-174.	3.0	24
33	Functionalized Graphene Sheets As Immobilization Matrix for Fenugreek $\hat{I}^2$ -Amylase: Enzyme Kinetics and Stability Studies. PLoS ONE, 2014, 9, e113408.	2.5	39
34	Bioinformatics for Legume Genomics Research. , 2014, , 249-275.		2
35	Cicer α-galactosidase immobilization onto functionalized graphene nanosheets using response surface method and its applications. Food Chemistry, 2014, 142, 430-438.	8.2	79
36	$\hat{l}_{\pm}$ -Amylase from wheat (Triticum aestivum) seeds: Its purification, biochemical attributes and active site studies. Food Chemistry, 2014, 162, 1-9.	8.2	38

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37	Identification of active site residues of Fenugreek $\hat{l}^2$ -amylase: Chemical modification and in silico approach. Plant Physiology and Biochemistry, 2014, 83, 217-224.	5.8	3
38	Optimal immobilization of $\hat{l}$ ±-amylase from wheat (Triticum aestivum) onto DEAE-cellulose using response surface methodology and its characterization. Journal of Molecular Catalysis B: Enzymatic, 2014, 104, 75-81.	1.8	37
39	î'-Amylase from Starchless Seeds of Trigonella Foenum-Graecum and Its Localization in Germinating Seeds. PLoS ONE, 2014, 9, e88697.	2.5	28
40	A novel application of Cicer α-galactosidase in reduction of raffinose family oligosaccharides in soybean flour. Journal of Plant Biochemistry and Biotechnology, 2013, 22, 353-356.	1.7	17
41	Evidence for a Molten Globule State in Cicer α-Galactosidase Induced by pH, Temperature, and Guanidine Hydrochloride. Applied Biochemistry and Biotechnology, 2013, 169, 2315-2325.	2.9	12
42	Purification and Characterization of $\hat{l}_{\pm}$ -Galactosidase from White Chickpea (Cicer arietinum). Journal of Agricultural and Food Chemistry, 2012, 60, 3253-3259.	5.2	31
43	Cicer α-galactosidase immobilization onto chitosan and Amberlite MB-150: optimization, characterization, and its applications. Carbohydrate Research, 2012, 358, 61-66.	2.3	27
44	Immobilization of $\hat{I}^2$ -Galactosidase onto Functionalized Graphene Nano-sheets Using Response Surface Methodology and Its Analytical Applications. PLoS ONE, 2012, 7, e40708.	2.5	79
45	α-Amylase: General Properties, Mechanism and Biotechnological Applications - A Review. Current Biotechnology, 2012, 1, 98-107.	0.4	13
46	Immobilization of α-amylase from germinated mung beans (Vigna radiata) on Fuller's earth by adsorption. Journal of Plant Biochemistry and Biotechnology, 2012, 21, 229-234.	1.7	3
47	A $\hat{l}^2$ -galactosidase from chick pea (Cicer arietinum) seeds: Its purification, biochemical properties and industrial applications. Food Chemistry, 2012, 134, 1113-1122.	8.2	30
48	Optimisation of immobilisation conditions for chick pea $\hat{l}^2$ -galactosidase (CpGAL) to alkylamine glass using response surface methodology and its applications in lactose hydrolysis. Food Chemistry, 2012, 134, 1650-1657.	8.2	55
49	Thermal, Chemical and pH Induced Denaturation of a Multimeric $\hat{l}^2$ -Galactosidase Reveals Multiple Unfolding Pathways. PLoS ONE, 2012, 7, e50380.	2.5	95
50	Studies of Histidine Residues in Soybean (Glycine max) Urease. Protein and Peptide Letters, 2012, 19, 657-662.	0.9	0
51	Response surface analysis of nano-ureases from Canavalia ensiformis and Cajanus cajan. International Journal of Biological Macromolecules, 2011, 49, 674-680.	7.5	8
52	Structural Stability of Soybean (Glycine max) & Structural Stability of Soybea	0.9	7
53	Immobilization of soybean (Glycine max) $\hat{l}$ ±-amylase onto Chitosan and Amberlite MB-150 beads: Optimization and characterization. Journal of Molecular Catalysis B: Enzymatic, 2011, 69, 8-14.	1.8	97
54	Guanidine hydrochloride and urea-induced unfolding of Brugia malayi hexokinase. European Biophysics Journal, 2010, 39, 289-297.	2.2	17

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55	The effect of calcium binding on the unfolding barrier: A kinetic study on homologous $\hat{l}$ ±-amylases. Biophysical Chemistry, 2010, 151, 54-60.	2.8	21
56	α-Amylase from germinating soybean (Glycine max) seeds – Purification, characterization and sequential similarity of conserved and catalytic amino acid residues. Phytochemistry, 2010, 71, 1657-1666.	2.9	46
57	Soybean (Glycine max) urease: Significance of sulfhydryl groups in urea catalysis. Plant Physiology and Biochemistry, 2010, 48, 746-750.	5.8	15
58	Insights into pH-Induced Conformational Transition of $\hat{I}^2$ -Galactosidase from Pisum sativum Leading to its Multimerization. Applied Biochemistry and Biotechnology, 2010, 162, 2294-2312.	2.9	7
59	Inhibition studies of soybean ( <i>Glycine max</i> ) urease with heavy metals, sodium salts of mineral acids, boric acid, and boronic acids. Journal of Enzyme Inhibition and Medicinal Chemistry, 2010, 25, 646-652.	5.2	26
60	Plant $\hat{l}^2$ -Galactosidases: Physiological Significance and Recent Advances in Technological Applications. Journal of Plant Biochemistry and Biotechnology, 2010, 19, 9-20.	1.7	20
61	Immobilization of soybean (Glycine max) urease on alginate and chitosan beads showing improved stability: Analytical applications. Journal of Molecular Catalysis B: Enzymatic, 2009, 58, 138-145.	1.8	105
62	Optimal immobilization of $\hat{l}^2$ -galactosidase from Pea (PsBGAL) onto Sephadex and chitosan beads using response surface methodology and its applications. Bioresource Technology, 2009, 100, 2667-2675.	9.6	88
63	Lactose nano-probe optimized using response surface methodology. Biosensors and Bioelectronics, 2009, 25, 784-790.	10.1	45
64	Stabilization of $\hat{I}^2$ -Galactosidase (from Peas) by Immobilization onto Amberlite MB-150 Beads and Its Application in Lactose Hydrolysis. Journal of Agricultural and Food Chemistry, 2009, 57, 682-688.	5.2	54
65	A Î <sup>2</sup> -Galactosidase from Pea Seeds ( <i>Ps</i> BGAL): Purification, Stabilization, Catalytic Energetics, Conformational Heterogeneity, and Its Significance. Journal of Agricultural and Food Chemistry, 2009, 57, 7086-7096.	5.2	18
66	Conformational stability and integrity of $\hat{l}_{\pm}$ -amylase from mung beans: Evidence of kinetic intermediate in GdmCl-induced unfolding. Biophysical Chemistry, 2008, 137, 95-99.	2.8	22
67	Trehalose-Producing Enzymes MTSase and MTHase in Anabaena 7120 Under NaCl Stress. Current Microbiology, 2008, 56, 429-435.	2.2	10
68	Molecular cloning and characterization of Brugia malayi hexokinase. Parasitology International, 2008, 57, 354-361.	1.3	27
69	Purification and Characterization of a Novel Protease from the Latex of Pedilanthus tithymaloids. Protein and Peptide Letters, 2008, 15, 1009-1016.	0.9	8
70	$\hat{l}_{\pm}$ -Amylase from mung beans (Vigna radiata) $\hat{a}$ $\in$ "Correlation of biochemical properties and tertiary structure by homology modelling. Phytochemistry, 2007, 68, 1623-1631.	2.9	39
71	Immobilization of α-amylase from mung beans (Vigna radiata) on Amberlite MB 150 and chitosan beads: A comparative study. Journal of Molecular Catalysis B: Enzymatic, 2007, 49, 69-74.	1.8	80
72	Immobilization of Urease from Pigeonpea (Cajanus cajan) on Agar Tablets and Its Application in Urea Assay. Applied Biochemistry and Biotechnology, 2007, 142, 291-297.	2.9	28

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73	Kinetics and diffusion studies in urease-alginate biocatalyst beads. Oriental Pharmacy and Experimental Medicine, 2007, 7, 79-84.	1.2	4
74	Boric acid and boronic acids inhibition of pigeonpea urease. Journal of Enzyme Inhibition and Medicinal Chemistry, 2006, 21, 467-470.	5.2	22
<b>7</b> 5	Antibacterial potential of $\hat{I}^3$ -linolenic acid from Fischerella sp. colonizing Neem tree bark. World Journal of Microbiology and Biotechnology, 2006, 22, 443-448.	3.6	31
76	Improved stability of urease upon coupling to alkylamine and arylamine glass and its analytical use. Journal of Molecular Catalysis B: Enzymatic, 2006, 38, 104-112.	1.8	37
77	Effect of Organic Solvents on the Molten Globule State of Procerain: β-Sheet to α-Helix Switchover in Presence of Trifluoroethanol. Protein and Peptide Letters, 2006, 13, 545-547.	0.9	14
78	Purification and characterization of an allosteric fructose-1,6-bisphosphate aldolase from germinating mung beans (Vigna radiata). Phytochemistry, 2005, 66, 968-974.	2.9	15
79	Solid state potentiometric sensor for the estimation of tributyrin and urea. Sensors and Actuators B: Chemical, 2005, 107, 418-423.	7.8	44
80	Fabrication of a Potentiometric/Amperometric Bifunctional Enzyme Microbiosensor. Analytical Chemistry, 2005, 77, 5063-5067.	6.5	15
81	Response of Garden Pea to Nickel Toxicity. Journal of Plant Nutrition, 2005, 27, 1543-1560.	1.9	8
82	Identification of maltooligosyltrehalose synthase and maltooligosyltrehalose trehalohydrolase enzymes catalysing trehalose biosynthesis in Anabaena 7120 exposed to NaCl stress. Journal of Plant Physiology, 2005, 162, 1030-1037.	3.5	13
83	Spectroscopic Characterization Of Phaseolus Vulgaris Leucoagglutinin. Protein and Peptide Letters, 2004, 11, 1-7.	0.9	13
84	Immobilization of pigeonpea ( <i>Cajanus cajan</i> ) urease on DEAEâ€cellulose paper strips for urea estimation. Biotechnology and Applied Biochemistry, 2004, 39, 323-327.	3.1	49
85	Unfolding and refolding of Leucoagglutinin (PHA-L), an oligomeric lectin from kidney beans (Phaseolus vulgaris). Biochimica Et Biophysica Acta - General Subjects, 2004, 1674, 40-49.	2.4	14
86	Molecular Asymmetry in Pigeonpea Urease: pH Inactivation Studies. Journal of Plant Biochemistry and Biotechnology, 2003, 12, 49-51.	1.7	2
87	Purification and characterization of a thermostable $\hat{l}^2$ -Galactosidase from kidney beans (Phaseolus) Tj ETQq $1\ 1$	0.784314	rgBT_/Overlo
88	Purification and characterization of urease from dehusked pigeonpea (Cajanus cajan L.) seeds. Phytochemistry, 2002, 61, 513-521.	2.9	80
89	Plant Pyruvate Kinase. Biologia Plantarum, 2002, 45, 1-10.	1.9	48
90	Kinetics of Inhibition and Molecular Asymmetry in Pigeonpea (Cajanus cajan) Urease. Journal of Biochemistry, Molecular Biology, and Biophysics: JBMBB: the Official Journal of the Federation of Asian and Oceanian Biochemists and Molecular Biologists (FAOBMB), 2002, 6, 1-6.	0.4	9

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91	Thermal Stability of Phaseolus vulgaris Leucoagglutinin: a Differential Scanning Calorimetry Study. BMB Reports, 2002, 35, 472-475.	2.4	17
92	Induction of Chitinase and $\hat{l}^2$ -1,3-glucanase in Resistant and Susceptible Wheat Lines Following Infection with Alternaria triticina. Journal of Plant Biochemistry and Biotechnology, 2001, 10, 71-74.	1.7	3
93	Response of Rhizobium leguminosarum to nickel stress. World Journal of Microbiology and Biotechnology, 2001, 17, 667-672.	3.6	16
94	Pigeonpea (Cajanus cajan L.) Urease Immobilized on Glutaraldehyde-Activated Chitosan Beads and Its Analytical Applications. Applied Biochemistry and Biotechnology, 2001, 96, 041-054.	2.9	51
95	Characterization of gelatin-immobilized pigeonpea urease and preparation of a new urea biosensor. Biotechnology and Applied Biochemistry, 2001, 34, 55.	3.1	76
96	Studies on the histidine residues in pigeonpea (Cajanus cajan L.) urease. Journal of Molecular Catalysis B: Enzymatic, 2001, 16, 81-89.	1.8	8
97	The Role of Peroxidase and Polyphenol Oxidase Isozymes in Wheat Resistance to Alternaria triticina. Biologia Plantarum, 2000, 43, 559-562.	1.9	18
98	Significance of sulfhydryl groups in the activity of urease from pigeonpea (Cajanus cajan L.) seeds. Plant Science, 2000, 159, 149-158.	3.6	35
99	A simple laboratory experiment for teaching enzyme immobilization with urease and its application in blood urea estimation. Biochemical Education, 1999, 27, 114-117.	0.1	34
100	Metal Uptake and Thiol Production in Spirodela polyrhiza (L.) SP20. Journal of Plant Physiology, 1999, 154, 634-640.	3.5	7
101	Title is missing!. World Journal of Microbiology and Biotechnology, 1998, 14, 927-929.	3.6	22
102	The Role of Phenolics and Peroxidase in Resistance to Alternaria triticina in Bread Wheat (Triticum) Tj ETQq0 0 0	rgBT_/Ove	erlock 10 Tf 50
103	Kinetics of Thermal Inactivation and Molecular Asymmetry of Urease from Dehusked Pigeongea (Cajanus cajan L.) Seeds. Journal of Plant Biochemistry and Biotechnology, 1998, 7, 121-124.	1.7	10
104	Immobilization of Urease from Pigeonpea ( <i>Cajanus cajan</i> L.) in Polyacrylamide Gels and Calcium Alginate Beads. Biotechnology and Applied Biochemistry, 1998, 27, 25-29.	3.1	50
105	Interactions of aldolase and glyceraldehyde-3-phosphate dehydrogenase: molecular mass studies. IUBMB Life, 1997, 42, 507-515.	3.4	0
106	Enzyme entrapped inside the reversed micelle in the fabrication of a new urea sensor., 1997, 54, 329-332.		29
107	Application of short column gel permeation in the study of protein-protein interactions. Journal of Proteomics, 1996, 31, 23-30.	2.4	1
108	An assay procedure for determining the rate of an enzyme reaction lacking an optical signal: validity of coupled enzyme assays. Biochemical Education, 1996, 24, 56-59.	0.1	4

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109	Volume 227, No. 1/2. FEBS Journal, 1995, 228, 1030-1030.	0.2	O
110	Phosphoglycerate-kinase-glyceraldehyde-3-phosphate-dehydrogenase Interaction. Molecular Mass Studies. FEBS Journal, 1995, 227, 556-562.	0.2	12
111	Advances in the molecular recognition of DNA â€" A step towards therapeutic drug design. Biochemical Education, 1995, 23, 56-64.	0.1	1
112	Mechanism of DNA-drug interactions. Applied Biochemistry and Biotechnology, 1994, 47, 39-55.	2.9	5
113	Protein engineering a novel way to elucidate structure — function relationships. Biochemical Education, 1993, 21, 59-66.	0.1	O
114	Substrate-Induced Stability of Glyceraldehyde 3-Phosphate Dehydrogenase from Mung Beans (Vigna) Tj ETQq0 (	0	Overlock 10 Tf
115	Substitution of glutamic acid 109 by aspartic acid alters the substrate specificity and catalytic activity of the .betasubunit in the tryptophan synthase bienzyme complex from Salmonella typhimurium. Biochemistry, 1992, 31, 1180-1190.	2.5	70
116	Metabolite channelling in tryptophan synthase. Journal of Theoretical Biology, 1992, 158, 133-134.	1.7	4
117	Biotechnology programme at Banaras Hindu University, India. Biochemical Education, 1992, 20, 103-105.	0.1	O
118	Determination of accessible bed volume of gels by short column filtration. Biochemical Education, 1992, 20, 116-118.	0.1	14
119	Amperometric enzyme sensor for glucose based on graphite paste-modified electrodes. Applied Biochemistry and Biotechnology, 1992, 33, 139-144.	2.9	37
120	A colorimetric assay for a pyridoxal phosphate-dependent $\hat{l}^2$ -replacement reaction with l-cysteine: Application to studies of wild-type and mutant tryptophan synthase $\hat{l}\pm2\hat{l}^22$ complexes. Analytical Biochemistry, 1991, 193, 200-203.	2.4	10
121	Isolation and Characterization of Phospho <i>enol</i> pyruvate Phosphatase from Germinating Mung Beans ( <i>Vigna radiata</i> ). Plant Physiology, 1990, 93, 194-200.	4.8	15
122	Chemical inactivation and active site groups of phosphoenolpyruvate-phosphatase from germinating mung beans (Vigna radiata). Plant Science, 1989, 65, 161-170.	3.6	8