Ching-Sing Chai

List of Publications by Year
in descending order

143 papers	5,676 citations	87723 38 h-index	102304 66 g-index
148 all docs	148 docs citations	148 times ranked	2765 citing authors

#	Article	IF	Citations
1	Development of the new media literacy scale for EFL learners in China: a validation study. Interactive Learning Environments, 2023, 31, 244-257.	4.4	8
2	Self-assessment first or peer-assessment first: effects of video-based formative practice on learnersâ€™ English public speaking anxiety and performance. Computer Assisted Language Learning, 2023, 36, 806-839.	4.8	7
3	A scoping review on flipped classroom approach in language education: challenges, implications and an interaction model. Computer Assisted Language Learning, 2022, 35, 1218-1249.	4.8	22
4	Creation and Evaluation of a Pretertiary Artificial Intelligence (AI) Curriculum. IEEE Transactions on Education, 2022, 65, 30-39.	2.0	72
5	A critical review of research on technological pedagogical and content knowledge (TPACK) in language teaching. Computer Assisted Language Learning, 2022, 35, 948-971.	4.8	47
6	Exploring secondary school teachersâ€™ TPACK for video-based flipped learning: the role of pedagogical beliefs. Education and Information Technologies, 2022, 27, 8793-8819.	3.5	8
7	Modeling Chinese Teachersâ€™ Efficacies for the Teaching of Integrated STEM With Interdisciplinary Communication and Epistemic Fluency. Frontiers in Psychology, 2022, 13, .	1.1	1
8	Trends and exemplary practices of STEM teacher professional development programs in K-12 contexts: A systematic review of empirical studies. Computers and Education, 2022, 189, 104577.	5.1	24
9	Probing in-service elementary school teachersâ€™ perceptions of TPACK for games, attitudes towards games, and actual teaching usage: a study of their structural models and teaching experiences. Educational Studies, 2021, 47, 734-750.	1.4	14
10	Understanding the pedagogical potential of Interactive Spherical Video-based Virtual Reality from the teachersâ€™ perspective through the ACE framework. Interactive Learning Environments, 2021, 29, 618-633.	4.4	32
11	Understanding Hong Kong primary school English teachersâ€™ continuance intention to teach with ICT. Computer Assisted Language Learning, 2021, 34, 528-551.	4.8	70
12	Modeling the structural relationship among primary studentsâ€™ motivation to learn artificial intelligence. Computers and Education Artificial Intelligence, 2021, 2, 100006.	6.9	33
13	Teachersâ€™ Conceptions of Teaching Chinese Descriptive Composition With Interactive Spherical Video-Based Virtual Reality. Frontiers in Psychology, 2021, 12, 591708.	1.1	22
14	Intrinsic Motivation and Sophisticated Epistemic Beliefs Are Promising Pathways to Science Achievement: Evidence From High Achieving Regions in the East and the West. Frontiers in Psychology, 2021, 12, 581193.	1.1	9
15	A Review of Artificial Intelligence (AI) in Education from 2010 to 2020. Complexity, 2021, 2021, 1-18.	0.9	102
16	Modelling the Relationship Between Chinese University Studentsâ€™ Authentic Language Learning and Their English Self-efficacy During the COVID-19 Pandemic. Asia-Pacific Education Researcher, 2021, 30, 217-228.	2.2	22
17	Does Relatedness Matter for Online Self-regulated Learning to Promote Perceived Learning Gains and Satisfaction?. Asia-Pacific Education Researcher, 2021, 30, 205-215.	2.2	27
18	Modeling learnersâ€™ self-concept in Chinese descriptive writing based on the affordances of a virtual reality-supported environment. Education and Information Technologies, 2021, 26, 6013-6032.	3.5	15

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19	Using automatic speech recognition technology to enhance EFL learnersâ€™ oral language complexity in a flipped classroom. Australasian Journal of Educational Technology, 2021, 37, 110-131.	2.0	18
20	A Study of Disposition, Engagement, Efficacy, and Vitality of Teachers in Designing Science, Technology, Engineering, and Mathematics Education. Frontiers in Psychology, 2021, 12, 661631.	1.1	7
21	A Pilot Study of Studentsâ€™ Behavioral Intention to Use AI for Language Learning in Higher Education. , 2021, , .		0
22	Validating the General Extended Technology Acceptance Model for E-Learning: Evidence From an Online English as a Foreign Language Course Amid COVID-19. Frontiers in Psychology, 2021, 12, 671615.	1.1	19
23	Teachers with a growth mindset are motivated and engaged: the relationships among mindsets, motivation, and engagement in teaching. Social Psychology of Education, 2021, 24, 1663-1684.	1.2	5
24	Exploring the Structural Relationship Among Teachersâ€™ Technostress, Technological Pedagogical Content Knowledge (TPACK), Computer Self-efficacy and School Support. Asia-Pacific Education Researcher, 2020, 29, 147-157.	2.2	88
25	Fostering Studentsâ€™ Scientific Inquiry through Computer-Supported Collaborative Knowledge Building. Research in Science Education, 2020, 50, 2035-2053.	1.4	12
26	Fostering college studentsâ€™ design thinking in a knowledge-building environment. Educational Technology Research and Development, 2020, 68, 949-974.	2.0	8
27	Kindergarten teachersâ€™ perceptions of whole-child development: The roles of leadership practices and professional learning communities. Educational Management Administration and Leadership, 2020, 48, 875-892.	2.2	24
28	Examining the Effect of Semantic Relatedness on the Acquisition of English Collocations. Journal of Psycholinguistic Research, 2020, 49, 199-222.	0.7	1
29	Development of the Motivation and Engagement in Virtual Reality Chinese Language Learning Questionnaire (MEVRCLQ). , 2020, , .		3
30	Indonesian Science, Mathematics, and Engineering Preservice Teachersâ€™ Experiences in STEM-TPACK Design-Based Learning. Sustainability, 2020, 12, 9050.	1.6	28
31	An Extended Theory of Planned Behavior for the Modelling of Chinese Secondary School Studentsâ€™ Intention to Learn Artificial Intelligence. Mathematics, 2020, 8, 2089.	1.1	48
32	Factors Influencing Students' Behavioral Intention to Continue Artificial Intelligence Learning. , 2020, , .		20
33	Surveying Chinese teachers' technological pedagogical STEM knowledge: a pilot validation of STEM-TPACK survey. International Journal of Mobile Learning and Organisation, 2020, 14, 203.	0.2	10
34	Sustainable Curriculum Planning for Artificial Intelligence Education: A Self-Determination Theory Perspective. Sustainability, 2020, 12, 5568.	1.6	105
35	Promoting Studentsâ€™ Well-Being by Developing Their Readiness for the Artificial Intelligence Age. Sustainability, 2020, 12, 6597.	1.6	56
36	Development and Predictive Validity of the Computational Thinking Disposition Questionnaire. Sustainability, 2020, 12, 4459.	1.6	17

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37	Teacher Conceptions Matter: Exploring the Relationships Between Mathematics Teachersâ€™ Conceptions and Commitment in China. Asia-Pacific Education Researcher, 2020, 29, 581-592.	2.2	3
38	Traversing the context of professional learning communities: development and implementation of Technological Pedagogical Content Knowledge of a primary science teacher. Research in Science and Technological Education, 2019, 37, 147-167.	1.4	18
39	Teacher Professional Development for Science, Technology, Engineering and Mathematics (STEM) Education: A Review from the Perspectives of Technological Pedagogical Content (TPACK). Asia-Pacific Education Researcher, 2019, 28, 5-13.	2.2	72
40	Information Communication Technology. Springer Texts in Education, 2019, , 149-168.	0.0	3
41	Examining pre-service teachersâ€™ knowledge of teaching multimodal literacies: a validation of a TPACK survey. Educational Media International, 2019, 56, 285-299.	0.9	16
42	A PISA-2015 Comparative Meta-Analysis between Singapore and Finland: Relations of Studentsâ€™ Interest in Science, Perceived ICT Competence, and Environmental Awareness and Optimism. International Journal of Environmental Research and Public Health, 2019, 16, 5157.	1.2	4
43	STEM Education in Asia Pacific: Challenges and Development. Asia-Pacific Education Researcher, 2019, 28, 1-4.	2.2	59
44	Adoption of flipped learning in social humanities education: the FIBER experience in secondary schools. Interactive Learning Environments, 2019, 27, 1222-1238.	4.4	24
45	Hong Kong Teachersâ€™ Self-efficacy and Concerns About STEM Education. Asia-Pacific Education Researcher, 2019, 28, 35-45.	2.2	56
46	Fostering design-oriented collective reflection among preservice teachers through principle-based knowledge building activities. Computers and Education, 2019, 130, 105-120.	5.1	29
47	Exploring the Effects of Contextual Factors on In-Service Teachersâ€™ Engagement in STEM Teaching. Asia-Pacific Education Researcher, 2019, 28, 25-34.	2.2	21
48	Enhancing and Modeling Teachersâ€™ Design Beliefs and Efficacy of Technological Pedagogical Content Knowledge for 21st Century Quality Learning. Journal of Educational Computing Research, 2019, 57, 360-384.	3.6	53
49	Teachersâ€™ actual and preferred perceptions of twenty-first century learning competencies: a Chinese perspective. Asia Pacific Education Review, 2018, 19, 307-317.	1.4	30
50	Creating tools for inquiry-based mathematics learning from technological pedagogical content knowledge perspectives: Collaborative design approach. Australasian Journal of Educational Technology, 2018, 34, .	2.0	4
51	Teacher Professional Development for TPACK-21CL. Journal of Educational Computing Research, 2017, 55, 172-196.	3.6	106
52	Studentsâ€™ conceptions of and approaches to knowledge building and its relationship to learning outcomes. Interactive Learning Environments, 2017, 25, 749-761.	4.4	8
53	Exploring the impact of teacher experience on questioning techniques in a Knowledge Building classroom. Journal of Computers in Education, 2017, 4, 27-42.	5.0	7
54	Two tales of time: uncovering the significance of sequential patterns among contribution types in knowledge-building discourse. Interactive Learning Environments, 2017, 25, 162-175.	4.4	73

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55	Changing teachersâ€™ TPACK and design beliefs through the Scaffolded TPACK Lesson Design Model (STLDM). Learning: Research and Practice, 2017, 3, 114-129.	1.1	26
56	The Relationship Between Teachersâ€™ Online Homework Guidance and Technological Pedagogical Content Knowledge about Educational Use of Web. Asia-Pacific Education Researcher, 2017, 26, 239-247.	2.2	9
57	Principle-based design: Development of adaptive mathematics teaching practices and beliefs in a knowledge building environment. Computers and Education, 2017, 115, 38-55.	5.1	21
58	An analysis of collaborative problemâ€solving activities mediated by individualâ€based and collaborative computer simulations. Journal of Computer Assisted Learning, 2017, 33, 649-662.	3.3	26
59	Developing reflective dispositions through collaborative knowledge-building during small group Bible study. International Journal of Christianity and Education, 2017, 21, 126-145.	0.3	0
60	Professional learning for 21st century education. Journal of Computers in Education, 2017, 4, 1-4.	5.0	45
61	The learning revolution: from pedagogues to designers of learning. Learning: Research and Practice, 2017, 3, 79-84.	1.1	6
62	Examining the validity of the technological pedagogical content knowledge (TPACK) framework for preservice chemistry teachers. Australasian Journal of Educational Technology, 2017, 33, .	2.0	36
63	Seven design frames that teachers use when considering technological pedagogical content knowledge (TPACK). Computers and Education, 2016, 102, 244-257.	5.1	67
64	Seamlessly learning Chinese: contextual meaning making and vocabulary growth in a seamless Chinese as a second language learning environment. Instructional Science, 2016, 44, 399-422.	1.1	32
65	A Pilot Study of Students' Perceptions of Collaborative Knowledge Building in 21st Century Learning with Their Knowledge Building Behaviors. , 2016, , .		0
66	Singapore primary and secondary students' motivated approaches for learning: A validation study. Learning and Individual Differences, 2016, 45, 282-290.	1.5	18
67	Exploring the development of college students' epistemic views during their knowledge building activities. Computers and Education, 2016, 98, 1-13.	5.1	25
68	Introduction: Cocreating Technological Pedagogical Content Knowledge (TPACK) for the Transformation of Nan Chiau Primary School. , 2016, , 1-7.		0
69	Validation and profile of Chinese pre-service teachersâ€™ technological pedagogical content knowledge scale. Asia-Pacific Journal of Teacher Education, 2016, 44, 49-65.	1.2	36
70	Building Epistemic Repertoire Among Primary 3 Students for Social Studies. , 2016, , 109-128.		2
71	Design Thinking for Education. , 2015, , .		118
72	College Students Constructing Collective Knowledge of Natural Science History in a Collaborative Knowledge Building Community. Journal of Science Education and Technology, 2015, 24, 549-561.	2.4	15

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73	Employing the TPACK Framework for Researcher-Teacher Co-Design of a Mobile-Assisted Seamless Language Learning Environment. IEEE Transactions on Learning Technologies, 2015, 8, 31-42.	2.2	43
74	Enculturating seamless language learning through artifact creation and social interaction process. Interactive Learning Environments, 2015, 23, 130-157.	4.4	39
75	Technological Pedagogical Content Knowledge (TPACK) and Design Thinking: A Framework to Support ICT Lesson Design for 21st Century Learning. Asia-Pacific Education Researcher, 2015, 24, 535-543.	2.2	104
76	Assessing multidimensional studentsâ€™ perceptions of twenty-first-century learning practices. Asia Pacific Education Review, 2015, 16, 389-398.	1.4	78
77	A survey to examine teachersâ€™ perceptions of design dispositions, lesson design practices, and their relationships with technological pedagogical content knowledge (TPACK). Asia-Pacific Journal of Teacher Education, 2015, 43, 378-391.	1.2	35
78	Design Thinking and 21st Century Skills. , 2015, , 33-46.		9
79	Technological Pedagogical Content KnowledgeÂ(TPACK) for Pedagogical Improvement: Editorial for Special Issue on TPACK. Asia-Pacific Education Researcher, 2015, 24, 459-462.	2.2	26
80	What Seams Do We Remove in Learning a Language?â€“Towards a Seamless Language Learning Framework. , 2015, , 295-317.		11
81	Towards a Web 2.0 TPACK Lesson Design Framework: Applications of a Web 2.0 TPACK Survey of Singapore Preservice Teachers. Education Innovation Series, 2015, , 161-180.	0.3	9
82	Design Thinking and Education. , 2015, , 1-15.		25
83	Emerging Practices and Issues of New Media and Learning. Education Innovation Series, 2015, , 1-8.	0.3	0
84	Critical Perspectives on Design and Design Thinking. , 2015, , 17-31.		0
85	Design Thinking and Preservice Teachers. , 2015, , 67-86.		1
86	Design Thinking and Children. , 2015, , 47-66.		1
87	Development and validation of the knowledge-building environment scale. Learning and Individual Differences, 2014, 30, 124-132.	1.5	16
88	Assessing South China (Guangzhou) High School Studentsâ€™ Views on Nature of Science: A Validation Study. Science and Education, 2014, 23, 843-863.	1.7	12
89	Students' perceptions of selfâ€directed learning and collaborative learning with and without technology. Journal of Computer Assisted Learning, 2014, 30, 425-437.	3.3	68
90	Teacher clusters and their perceptions of technological pedagogical content knowledge (TPACK) development through ICT lesson design. Computers and Education, 2014, 70, 222-232.	5.1	92

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91	Fostering a collaborative and creative climate in a college class through idea-centered knowledge-building. Instructional Science, 2014, 42, 389-407.	1.1	32
92	Deepening ICT integration through multilevel design of Technological Pedagogical Content Knowledge. Journal of Computers in Education, 2014, 1, 1-17.	5.0	34
93	TPACK-in-Action: Unpacking the contextual influences of teachers' construction of technological pedagogical content knowledge (TPACK). Computers and Education, 2014, 78, 20-29.	5.1	117
94	Harnessing Emerging Technologies to Build the Next Generation of Knowledge Creation Platform for School Students. Education Innovation Series, 2014, , 75-95.	0.3	2
95	Knowledge Creation in Singapore Schools: Our Journey and Ways Forward. Education Innovation Series, 2014, , 283-301.	0.3	2
96	Identifying Science Teachersâ€™ Perceptions of Technological Pedagogical and Content Knowledge (TPACK). Journal of Science Education and Technology, 2013, 22, 325-336.	2.4	136
97	Exploring Singaporean Chinese Language Teachersâ€™ Technological Pedagogical Content Knowledge and its Relationship to the Teachersâ€™ Pedagogical Beliefs. Asia-Pacific Education Researcher, 2013, 22, 657-666.	2.2	48
98	Facilitating Studentsâ€™ Development of Their Views on Nature of Science: A Knowledge Building Approach. Asia-Pacific Education Researcher, 2013, 22, 521-530.	2.2	18
99	Measuring Singaporean Studentsâ€™ Motivation and Strategies of Bilingual Learning. Asia-Pacific Education Researcher, 2013, 22, 263-272.	2.2	12
100	Turkish and Singaporean Pre-service Physics Teachersâ€™ Beliefs about Teaching and Use of Technology. Asia-Pacific Education Researcher, 2013, 22, 155-162.	2.2	9
101	Examining practicing teachersâ€™ perceptions of technological pedagogical content knowledge (TPACK) pathways: a structural equation modeling approach. Instructional Science, 2013, 41, 793-809.	1.1	113
102	High school studentsâ€™ scientific epistemological beliefs, motivation in learning science, and their relationships: A comparative study within the Chinese culture. International Journal of Educational Development, 2013, 33, 37-47.	1.4	46
103	Exploring Preschool Teachers' Technological Pedagogical Content Knowledge of Educational Games. Journal of Educational Computing Research, 2013, 49, 461-479.	3.6	36
104	An initial examination of Singaporean seventh and eighth gradersâ€™ views of nature of science. Research in Science and Technological Education, 2013, 31, 117-132.	1.4	5
105	Looking Back at the Future School Journey. , 2013, , 195-199.		1
106	Surveying in-service preschool teachers' technological pedagogical content knowledge. Australasian Journal of Educational Technology, 2013, 29, .	2.0	43
107	Towards a seamless language learning framework mediated by the ubiquitous technology. International Journal of Mobile Learning and Organisation, 2012, 6, 156.	0.2	20
108	A comparison of scientific epistemological views between mainland China and Taiwan high school students. Asia Pacific Education Review, 2012, 13, 17-26.	1.4	12

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109	Examining preservice teachers' perceived knowledge of TPACK and cyberwellness through structural equation modeling. Australasian Journal of Educational Technology, 2012, 28, .	2.0	35
110	The "third"-order barrier for technology-integration instruction: Implications for teacher education. Australasian Journal of Educational Technology, 2012, 28, .	2.0	125
111	Modeling primary school pre-service teachersâ€™ Technological Pedagogical Content Knowledge (TPACK) for meaningful learning with information and communication technology (ICT). Computers and Education, 2011, 57, 1184-1193.	5.1	268
112	Towards a new era of knowledge creation: a brief discussion of the epistemology for knowledge creation. International Journal of Continuing Engineering Education and Life-Long Learning, 2011, 21, 1.	0.1	4
113	Two exploratory studies of the relationships between teachers' epistemic beliefs and their online interactions. International Journal of Continuing Engineering Education and Life-Long Learning, 2011, 21, 13.	0.1	3
114	The Internet and teacher education: Traversing between the digitized world and schools. Internet and Higher Education, 2011, 14, 3-9.	4.2	28
115	Teacher-education studentsâ€™ views about knowledge building theory and practice. Instructional Science, 2011, 39, 467-482.	1.1	41
116	Students' views of the nature of science: A critical review of research. Science Education, 2011, 95, 961-999.	1.8	198
117	Singaporean pre-service teachersâ€™ beliefs about epistemology, teaching and learning, and technology. Teacher Development, 2011, 15, 485-498.	0.4	8
118	A framework for developing preâ€service teachersâ€™ competencies in using technologies to enhance teaching and learning. Educational Media International, 2011, 48, 69-83.	0.9	41
119	A blended collaborative writing approach for Chinese L2 primary school students. Australasian Journal of Educational Technology, 2011, 27, .	2.0	19
120	Profiling preâ€service teachersâ€™ awareness and regulation of their own thinking: evidence from an Asian country. Teacher Development, 2010, 14, 295-306.	0.4	9
121	Examining the technological pedagogical content knowledge of Singapore preâ€service teachers with a largeâ€scale survey. Journal of Computer Assisted Learning, 2010, 26, 563-573.	3.3	197
122	The self-directed learning with technology scale (SDLTS) for young students: An initial development and validation. Computers and Education, 2010, 55, 1764-1771.	5.1	58
123	Designing Web 2.0 based constructivistâ€oriented eâ€learning units. Campus Wide Information Systems, 2010, 27, 68-78.	1.1	0
124	Modelling the Relationships among Beliefs about Learning, Knowledge, and Teaching of Pre-Service Teachers in Singapore. Asia-Pacific Education Researcher, 2010, 19, .	2.2	25
125	The relationships among Singaporean preservice teachers' ICT competencies, pedagogical beliefs and their beliefs on the espoused use of ICT. Asia-Pacific Education Researcher, 2010, 19, .	2.2	35
126	Modelling pre-service teachersâ€™ perceived usefulness of an ICT-based student-centred learning (SCL) curriculum: a Singapore study. Asia Pacific Education Review, 2009, 10, 535-545.	1.4	17

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127	Assessing the intention to use technology among pre-service teachers in Singapore and Malaysia: A multigroup invariance analysis of the Technology Acceptance Model (TAM). Computers and Education, 2009, 53, 1000-1009.	5.1	263
128	The change in epistemological beliefs and beliefs about teaching and learning: a study among pre-service teachers. Asia-Pacific Journal of Teacher Education, 2009, 37, 351-362.	1.2	51
129	Professional Development of Teachers for Computer-Supported Collaborative Learning: A Knowledge-Building Approach. Teachers College Record, 2009, 111, 1296-1327.	0.4	51
130	Understanding preâ€service teachers' computer attitudes: applying and extending the technology acceptance model. Journal of Computer Assisted Learning, 2008, 24, 128-143.	3.3	365
131	Teachersâ€™ pedagogical beliefs and their planning and conduct of computerâ€mediated classroom lessons. British Journal of Educational Technology, 2008, 39, 807-828.	3.9	171
132	Rethinking classroom-oriented instructional development models to mediate instructional planning in technology-enhanced learning environments. Teaching and Teacher Education, 2008, 24, 2002-2013.	1.6	19
133	Beliefs about teaching and uses of technology among preâ€service teachers. Asia-Pacific Journal of Teacher Education, 2008, 36, 163-174.	1.2	117
134	Teachersâ€™ perceptions of teaching and learning in a knowledgeâ€building community: an exploratory case study. Learning, Media and Technology, 2006, 31, 133-148.	2.1	12
135	Epistemological beliefs on teaching and learning: a survey among preâ€service teachers in Singapore. Educational Media International, 2006, 43, 285-298.	0.9	59
136	COMPUTER-SUPPORTED COLLABORATIVE LEARNING FOR KNOWLEDGE CREATION. , 2006, , 579-601.		2
137	An activity-theoretical approach to research of ICT integration in Singapore schools: Orienting activities and learner autonomy. Computers and Education, 2004, 43, 215-236.	5.1	69
138	A conducive classroom environment for IT integration: a collective case study of primary schools in Singapore. , 0, , .		0
139	Examining pre-service teachersâ€™ design capacities for web-based 21st century new culture of learning. Australasian Journal of Educational Technology, 0, , .	2.0	22
140	Methodological Considerations for Quantitative Content Analysis of Online Interactions. , 0, , 611-630.		1
141	A literature review of questionnaires for the assessment of online learning with a specific focus on the factors and items employed. Australasian Journal of Educational Technology, 0, , 182-204.	2.0	2
142	Promoting Secondary Students' Twenty-First Century Skills and STEM Career Interests Through a Crossover Program of STEM and Community Service Education. Frontiers in Psychology, 0, 13, .	1.1	7
143	Integrating Automatic Speech Recognition Technology Into Vocabulary Learning in a Flipped English Class for Chinese College Students. Frontiers in Psychology, 0, 13, .	1.1	2