Global_idx	Year	Title	Link	Training time	Number of parameters	Resources	Total Compute Info	Company connection	Countries	Funding info	Commercial funding	Energy consumption	Environment	TDP/W	Number of GPUs	Training time	Energy cost
Unique ID for the article	Publication year	Title of the ISMIR article	Link to the article	How long did the training take in total on how many GPUs, if specified	How many parameters were included in total, if specified: search "param"	Have the computational resources used for training been specified (e.g. number of GPU)	Inclusion of the total compute information on the model training: Full/Partial/None. Partial will refer to cases where number of GPU is stated.	Did the authors indicate an affiliation with a company (if yes, which)	Which countries are the authors affiliated to?	Is funding information included in the paper (search "fund", "support")?	Was the research fully or partially funded by private companies	How much energy was consumed in the process (if specified)	Does the article discuss issues related to environment or environmental concerns (search "environment", "sustainab", "ecolog", carbon, energy, kWh)	Termal Design Power of the indicated GPU model (W).	The number of GPUs used in the model training	Training time (hours)	The total energy cost of training (kWh)
1	2023	Timbre Transfer Using Image-to-Image Denoising Diffusion Implicit Models	https://archives.ismir.net/ismir2023/paper/000029.pdf	No	No	No	None	No	Italy	No	Not available	N/A	No	N/A	N/A	N/A	N/A
2	2023	Polyfusion: A Diffusion Model for Polyphonic Score Generation With Internal and External Controls	https://archives.ismir.net/ismir2023/paper/000026.pdf	No		No	None	No	UAE, Singapore, China	No	Not available	No	No	N/A	N/A	N/A	N/A
3	2023	Mono-to-Stereo Through Parametric Stereo Generation	https://archives.ismir.net/ismir2023/paper/000035.pdf	No	Yes: 34.5M parameters	No	None	Yes: Dolby Laboratories	Spain	No	Not available	No	No	N/A	N/A	N/A	N/A
4	2023	VampNet: Music Generation via Masked Acoustic Token Modeling	https://archives.ismir.net/ismir2023/paper/000042.pdf	No	No	Yes: GPU memory budget of 72GB	Partial	Yes: Descript Inc.	USA	No	Not available	No	No	N/A	N/A	N/A	N/A
5	2023	Exploring Sampling Techniques for Generating Melodies With a Transformer Language Model	https://archives.ismir.net/ismir2023/paper/000096.pdf	No		No	None	Yes: Sony Computer Science Laboratories (CSL)	Austria, France	Yes, ERC	No	No	No	N/A	N/A	N/A	N/A
6	2023	Composer's assistant: An interactive transformer for multi-track MIDI infilling	https://archives.ismir.net/ismir2023/paper/000038.pdf	No		No	Partial	No	USA	Uni IT support	No	No	No	N/A	N/A	N/A	N/A
7	2023	Scoreperformer: Expressive piano performance	https://archives.ismir.net/ismir2023/paper/000069.pdf	No	No	No	None	Yes: Peachnote GmbH	Russia, Germany	Uni IT support	No	No	No	N/A	N/A	N/A	N/A
8	2023	Singing voice synthesis using differentiable LPC glottal-flow-inspired wavetables	https://archives.ismir.net/ismir2023/paper/000079.pdf	No	Yes: 0.7M parameters	Yes: "The benchmark was conducted on an Ubuntu 20.04 LTS machine with an i5-4790k processor and an NVIDIA GeForce RTX 3070 GPU"	Partial	No	UK		No	No	No	N/A	N/A	N/A	N/A
9	2023	Text-to-Lyrics Generation With Image-Based Semantics and Reduced Risk of Plagiarism	https://archives.ismir.net/ismir2023/paper/000047.pdf	No	No	No	None	No	Japan	Public	No	No	No	N/A	N/A	N/A	N/A
10	2022	Music Translation: Generating Piano Arrangements in Different Playing Levels	https://archives.ismir.net/ismir2022/paper/000003.pdf	No	No	No	None	Yes: Simply	Israel	No	Not available	No	No	N/A	N/A	N/A	N/A
11	2022	DDSP-Based Singing Vocoders: A New Subtractive-Based Synthesizer and a Comprehensive Evaluation.	https://archives.ismir.net/ismir2022/paper/000008.pdf	Yes: Regular version up to 2.5 days and Resource-limited version [3min data] 3h training	Yes: 500k parameters	Yes: "For fair comparison, we train the vocoders of different approaches using a dedicated NVIDIA GeForce RTX 3090 GPU each."	Full	Yes: 470 Music Group, Taiwan AI Labs, PARC	Taiwan, USA	Public	No	No	No	350	1	63	22.05
12	2022	Pop Music Generation with Controllable Phrase Lengths	https://archives.ismir.net/ismir2022/paper/000014.pdf	No		No	None	No	Japan	Public	No	No	No	N/A	N/A	N/A	N/A
13	2022	Exploiting Pre-trained Feature Networks for Generative Adversarial Networks in Audio-domain Loop Generation	https://archives.ismir.net/ismir2022/paper/000015.pdf	Yes(ish): Figure 4 indicates 12-hour training (times 4?)	No	Yes: Single V100 GPU	Full	Yes: Taiwan AI Labs	Taiwan	Public	N/A	No	No	250	1	48	12.00
14	2022	Modeling the rhythm from lyrics for melody generation of pop song	https://archives.ismir.net/ismir2022/paper/000016.pdf	10 + 1,5 h	No	Yes: Single Tesla-V100-SXM2-32GB GPU	Full	Yes: ByteDance	China	No	Not available	No	No	250	1	12	2.88
15	2022	Sketching the Expression: Flexible Rendering of Expressive Piano Performance with Self-Supervised Learning	https://archives.ismir.net/ismir2022/paper/000020.pdf	No	No	No	None	No	South Korea	No	Not available	No	No	N/A	N/A	N/A	N/A
16	2022	Jukedrummer: Conditional Beat-Aware Audio-Domain Drum Accompaniment Generation via Transformer VQ-VAE	https://archives.ismir.net/ismir2022/paper/000022.pdf	Yes: 2 days	Yes: 25M parameters	Yes: Single GeForce GTX 1080 Ti GPU	Full	Yes: Taiwan AI Labs	China, Taiwan	Public	No	No	No	250	1	48	12.00
17	2022	Accomontage2: A Complete Harmonization and Accompaniment Arrangement System	https://archives.ismir.net/ismir2022/paper/000029.pdf	No		No	None	No	China, Singapore, UAE	No	Not available	No	No	N/A	N/A	N/A	N/A
18	2022	Generating Coherent Drum Accompaniment with Fills and Improvisations	https://archives.ismir.net/ismir2022/paper/000031.pdf	No	No	No	None	No	India, USA	No	Not available	No	No	N/A	N/A	N/A	N/A
19	2022	Symbolic Music Loop Generation with Neural Discrete Representations	https://archives.ismir.net/ismir2022/paper/000048.pdf	No	No	No	None	Yes: LG AI Research	USA	No	Not available	No	No	N/A	N/A	N/A	N/A
20	2022	Musika! Fast Infinite Waveform Music Generation	https://archives.ismir.net/ismir2022/paper/000065.pdf	Yes: 23 h on a RTX 2080 Ti GPU + Table 1: "For the Musika models, we include both the generation of the latent vectors and the decoding step to the waveform domain. We use a RTX 2080 Ti and a Ryzen 3950x as the GPU and CPU, respectively. We report the average of 100 trials."	No	Yes: A RTX 2080 Ti (GPU) + and a Ryzen 3950x (CPU)	Partial	No	Austria	No	Not available	No	No	250	1	23	5.75
21	2022	Symphony Generation with Permutation Invariant Language Model	https://archives.ismir.net/ismir2022/paper/000066.pdf	No		Yes: Eight 2080 Ti GPU	Partial	No	China, UK	Public	No	No	No	N/A	N/A	N/A	N/A
22	2022	Multi-instrument Music Synthesis with Spectrogram Diffusion	https://archives.ismir.net/ismir2022/paper/000072.pdf	Yes: "Depending on model size and hardware availability, training took 44-134 hours"	Yes: "We trained four versions of the synthesis model: an 85M parameter "small" autoregressive model with no spectrogram context, an 85M parameter "small" diffusion model with no context, a 104M parameter "small" diffusion model with context, and a 412M parameter "base" diffusion model with context."	Yes: 64 TPUv4s	Full	Yes: Google Research, Brain Team	USA	No	Not available	No	No	192	64	356	4374.53
23	2022	DDX7: Differentiable FM Synthesis of Musical Instrument Sounds	https://archives.ismir.net/ismir2022/paper/000073.pdf	No	Yes: 400k parameters	No	None	No	UK	Public	No	No	No	N/A	N/A	N/A	N/A
24	2022	Meloform: Generating Melody with Musical Form Based on Expert Systems and Neural Networks	https://archives.ismir.net/ismir2022/paper/000068.pdf	No		No	None	Yes: Microsoft Research Asia and Microsoft Azure Speech	China	No	Not available	No	No	N/A	N/A	N/A	N/A
25	2022	An Exploration of Generating Sheet Music Images	https://archives.ismir.net/ismir2022/paper/000084.pdf	No	No	No	None	No	USA	Public	No	No	No	N/A	N/A	N/A	N/A
26	2022	Generating Music with Sentiment Using Transformer-GANs	https://archives.ismir.net/ismir2022/paper/000086.pdf	No	Yes: "The baseline has ~40M parameters, while our generator has ~25M and our Discriminator has ~27M."	No	None	No	Brazil	No	Not available	No	No	N/A	N/A	N/A	N/A
27	2022	Emotion-Driven Harmonisation and Tempo Arrangement of Melodies Using Transfer Learning	https://archives.ismir.net/ismir2022/paper/000089.pdf	No	No	No, but indirect indication: "The generated arrangement could be computed quickly even with Intel(R) Core(TM) i7-9700K CPU (less than approximately 2.5 seconds per 16 bars of melody for any compared models)"	None	No	UK	No	Not available	No	No	N/A	N/A	N/A	N/A
28	2022	Melody Infilling with User-Provided Structural Context	https://archives.ismir.net/ismir2022/paper/000100.pdf	No		No	None	Yes: Taiwan AI Labs	Taiwan, China	Public	No	No	No	N/A	N/A	N/A	N/A
29	2022	Domain Adversarial Training on Conditional Variational Auto-Encoder for Controllable Music Generation	https://archives.ismir.net/ismir2022/paper/000111.pdf	Yes: 15 hours	Yes: "Our VAE and BERT discriminator each have 12.55M and 3.24M trainable parameters."	Yes: A Geforce-2080Ti-12GB GPU	Full	No	Singapore, China, UAE	No	Not available	No	No	250	1	15	3.75
30	2021	A Contextual Latent Space Model: Subsequence Modulation in Melodic Sequence	https://archives.ismir.net/ismir2021/paper/000002.pdf	No	No	No	None	Yes: Sony Computer Science Laboratories	Japan	No	Not available	No	No	N/A	N/A	N/A	N/A
31	2021	Variable-Length Music Score Infilling via XLNet and Musically Specialized Positional Encoding	https://archives.ismir.net/ismir2021/paper/000011.pdf	No		No	None	No	Taiwan	No	Not available	No	No	N/A	N/A	N/A	N/A
32	2021	Controllable deep melody generation via hierarchical music structure representation	https://archives.ismir.net/ismir2021/paper/000017.pdf	No	No	No	None	Yes: Adobe	USA	No	Not available	No	No	N/A	N/A	N/A	N/A
33	2021	MINGUS: Melodic Improvisation Neural Generator Using Seq2Seq	https://archives.ismir.net/ismir2021/paper/000051.pdf	No	No	No	None	No	France	No	Not available	No	No	N/A	N/A	N/A	N/A
34	2021	Symbolic Music Generation with Diffusion Models	https://archives.ismir.net/ismir2021/paper/000058.pdf	Yes, 13 hours	Yes: "about 30M" parameters	Yes, Single Tesla V100	Full	Yes: Google Brain	USA	No	Not available	No	No	250	1	13	3.25
35	2021	Is Disentanglement enough? On Latent Representations for Controllable Music Generation	https://archives.ismir.net/ismir2021/paper/000064.pdf	No	No	No	None	No	USA	Yes	NVidia GPU grant	No	No	N/A	N/A	N/A	N/A
36	2021	SinTra: Learning an inspiration model from a single multi-track music segment	https://archives.ismir.net/ismir2021/paper/000083.pdf	No		Yes: Single GeForce GTX Titan X	Partial	No	China	Yes	No	No	No	N/A	N/A	N/A	N/A
37	2021	MusicBERT: Pre-training Music Representation for Music Understanding and Controllable Generation	https://archives.ismir.net/ismir2021/paper/000090.pdf	No	No	No	None	No	China	No	Not available	No	No	N/A	N/A	N/A	N/A
38	2021	SurpriseNet: Melody Harmonization Conditioning on User-controlled Surprise Contours	https://archives.ismir.net/ismir2021/paper/000012.pdf	No	No	No	None	No	Taiwan	No	Not available	No	No	N/A	N/A	N/A	N/A

Red Columns: Used for computations in the paper.

#	Year	Title	Link	Training Time	Parameters	GPU	Reproducibility	Industry	Country	Open?	Availability	Col13	Col14	N1	N2	N3	N4
39	2021	Learning long-term music representations via hierarchical contextual constraints	https://archives.ismir.net/ismir2021/paper/000092.pdf	No	No	No	None	No	China	No	Not available	No	No	N/A	N/A	N/A	N/A
40	2021	CollageNet: Fusing arbitrary melody and accompaniment into a coherent song	https://archives.ismir.net/ismir2021/paper/000098.pdf	No	No	No	None	No	China, USA	Yes	No	No	No	N/A	N/A	N/A	N/A
41	2021	AccoMontage: Accompaniment Arrangement via Phrase Selection and Style Transfer	https://archives.ismir.net/ismir2021/paper/000104.pdf	No	No	No	None	No	China	No	Not available	No	No	N/A	N/A	N/A	N/A
42	2020	Improving Polyphonic Music Models with Feature-Rich Encoding.	https://archives.ismir.net/ismir2020/paper/000012.pdf	Yes, 3.25 hours	No	Yes: Single T4 Tensor Core GPU	Full	Yes: Humtap	Finland	No	Not available	No	No	70	1	3	0.23
43	2020	Chord Jazzification: Learning Jazz Interpretations of Chord Symbols.	https://archives.ismir.net/ismir2020/paper/000090.pdf	No	No	No	None	No	Japan, Taiwan	Yes	No	No	No	N/A	N/A	N/A	N/A
44	2020	Learning Interpretable Representation for Controllable Polyphonic Music Generation.	https://archives.ismir.net/ismir2020/paper/000094.pdf	No	No	No	None	No	China	No	Not available	No	No	N/A	N/A	N/A	N/A
45	2020	Connective Fusion: Learning Transformational Joining of Sequences with Application to Melody Creation.	https://archives.ismir.net/ismir2020/paper/000095.pdf	No	No	No	None	Yes: Sony Computer Science Laboratories	Japan	No	Not available	No	No	N/A	N/A	N/A	N/A
46	2020	Attributes-Aware Deep Music Transformation.	https://archives.ismir.net/ismir2020/paper/000099.pdf	No	No	No	None	No	Japan, France	Yes	No	No	No	N/A	N/A	N/A	N/A
47	2020	BebopNet: Deep Neural Models for Personalized Jazz Improvisations	https://archives.ismir.net/ismir2020/paper/000132.pdf	No	No	Yes: Single Titan X GPU	Partial	No	Israel	No	Not available	No	No	N/A	N/A	N/A	N/A
48	2020	Controllable Music Generation via Factorized Representations of Pitch and Rhythm.	https://archives.ismir.net/ismir2020/paper/000146.pdf	No	No	No	None	Yes: Smule	USA	Yes	Yes: Cygames	No	No	N/A	N/A	N/A	N/A
49	2020	Music FaderNets: Controllable Music Generation Based on High-Level Features via Low-Level Feature Modelling.	https://archives.ismir.net/ismir2020/paper/000222.pdf	No	No	No	None	No	Singapore	Yes	No	No	No	N/A	N/A	N/A	N/A
50	2020	Neural Loop Combiner: Neural Network Models for Assessing the Compatibility of Loops.	https://archives.ismir.net/ismir2020/paper/000225.pdf	No	No	No	None	Yes: TikTok	Taiwan, UK	Yes	No	No	No	N/A	N/A	N/A	N/A
51	2020	CONLON: A Pseudo-Song Generator Based on a New Pianoroll, Wasserstein Autoencoders, and Optimal Interpolations.	https://archives.ismir.net/ismir2020/paper/000236.pdf	No	No	No	None	Yes: Musi-co	Italy, Netherlands	No	Not available	No	No	N/A	N/A	N/A	N/A
52	2020	Generating Music with a Self-Correcting Non-Chronological Autoregressive Model	https://archives.ismir.net/ismir2020/paper/000247.pdf	No	No	No	None	Yes: Amazon Web Services	USA	No	Not available	No	No	N/A	N/A	N/A	N/A
53	2020	Hierarchical Timbre-Painting and Articulation Generation.	https://archives.ismir.net/ismir2020/paper/000310.pdf	No	Yes: 5.6M parameters	Yes: "Models such as ours are trained on a single GPU"	Partial	No	Israel	Yes	No	No	No	N/A	N/A	N/A	N/A
54	2020	The Jazz Transformer on the Front Line: Exploring the Shortcomings of AI-Composed Music through Quantitative Measures.	https://archives.ismir.net/ismir2020/paper/000339.pdf	Yes: "roughly a full day"	Yes: 41M parameters	Yes: Single NVIDIA GTX 1080-Ti	Full	No	Taiwan	No	Not available	No	No	250	1	24	6.00
55	2019	Learning to Traverse Latent Spaces for Musical Score Inpainting	https://archives.ismir.net/ismir2019/paper/000040.pdf	No	No	No	None	Yes: Sony CSL	USA, France	No	Not available	No	No	N/A	N/A	N/A	N/A
56	2019	Deep Music Analogy Via Latent Representation Disentanglement	https://archives.ismir.net/ismir2019/paper/000072.pdf	No	No	No	None	No	China, USA	Public	No	No	No	N/A	N/A	N/A	N/A
57	2019	BandNet: A Neural Network-based, Multi-Instrument Beatles-Style MIDI Music Composition Machine	https://archives.ismir.net/ismir2019/paper/000079.pdf	No	No	No	None	Yes: Snap Inc	USA	No	Not available	No	No	N/A	N/A	N/A	N/A
58	2019	LakhNES: Improving multi-instrumental music generation with cross-domain pre-training	https://archives.ismir.net/ismir2019/paper/000083.pdf	Yes: "less than a day"	Yes: 40M parameters	Yes: Four NVIDIA Titan X GPUs	Full	No	USA	Public	Yes: GPUs used in this research were donated by NVIDIA	No	No	250	4	20	20.00
59	2019	Controlling Symbolic Music Generation based on Concept Learning from Domain Knowledge	https://archives.ismir.net/ismir2019/paper/000100.pdf	No	No	No	None	Yes: Sony Computer Science Laboratories	Japan	No	Not available	No	No	N/A	N/A	N/A	N/A
60	2019	Rendering Music Performance With Interpretation Variations Using Conditional Variational RNN	https://archives.ismir.net/ismir2019/paper/000105.pdf	No	No	No	None	Yes: Yamaha Corporation	Japan	No	Not available	No	No	N/A	N/A	N/A	N/A
61	2018	Transferring the Style of Homophonic Music Using Recurrent Neural Networks and Autoregressive Models.	https://archives.ismir.net/ismir2018/paper/000286.pdf	No	No	No	None	No	China	Public	No	No	No	N/A	N/A	N/A	N/A
62	2018	StructureNet: Inducing Structure in Generated Melodies	https://archives.ismir.net/ismir2018/paper/000126.pdf	No	No	No	None	Yes: Jukedeck Ltd	UK	No	Not available	No	No	N/A	N/A	N/A	N/A
63	2018	Music generation and transformation with moment matching-scattering inverse networks	https://archives.ismir.net/ismir2018/paper/000131.pdf	No	No	Partially: Mentions GPU but no further details	None	No	France	Public	No	No	No	N/A	N/A	N/A	N/A
64	2018	A Predictive Model for Music Based on Learned Interval Representations	https://archives.ismir.net/ismir2018/paper/000179.pdf	No	No	No	None	Yes: Sony Computer Science Laboratories (CSL),	Austria, France	Public	No	No	No	N/A	N/A	N/A	N/A
65	2018	Conditioning Deep Generative Raw Audio Models for Structured Automatic Music.	https://archives.ismir.net/ismir2018/paper/000192.pdf	No	No	No	None	No	USA	Public	No	No	No	N/A	N/A	N/A	N/A
66	2018	Interactive Arrangement of Chords and Melodies Based on a Tree-Structured Generative Model	https://archives.ismir.net/ismir2018/paper/000001.pdf	No	No	No	None	No	Japan	Public	No	No	No	N/A	N/A	N/A	N/A
67	2018	MIDI-VAE: Modeling Dynamics and Instrumentation of Music with Applications to Style Transfer.	https://archives.ismir.net/ismir2018/paper/000204.pdf	Yes: 48 hours	No	Yes: All models are trained on single GPUs (GTX 1080). (there are four models)	Full	No	Switzerland	No	Not available	No	No	170	1	192	32.64
68	2018	Convolutional Generative Adversarial Networks with Binary Neurons for Polyphonic Music Generation	https://archives.ismir.net/ismir2018/paper/000218.pdf	No	Yes: 3.7M ("The number of parameters for the proposed, ablated-I and ablated-II models is 3.7M, 3.4M and 4.6M, respectively")	No	None	No	Taiwan	No	Not available	No	No	N/A	N/A	N/A	N/A
69	2018	A Generalized Parsing Framework for Generative Models of Harmonic Syntax.	https://archives.ismir.net/ismir2018/paper/000256.pdf	No	No	No	None	No	Switzerland, Germany, Ca	Public	No	No	No	N/A	N/A	N/A	N/A
70	2018	Part-invariant Model For Music Generation And Harmonization	https://archives.ismir.net/ismir2018/paper/000293.pdf	No	No	No	None	No	USA	No	Not available	No	No	N/A	N/A	N/A	N/A
71	2017	Sampling Variations of Sequences for Structured Music Generation	https://archives.ismir.net/ismir2017/paper/000050.pdf	No	No	No	None	Yes: Sony CSL	France	Public	No	No	No	N/A	N/A	N/A	N/A
72	2017	Counterpoint by Convolution	https://archives.ismir.net/ismir2017/paper/000187.pdf	No	No	No	None	Yes: Google Brain	Canada	Public	No	No	No	N/A	N/A	N/A	N/A
73	2017	MidiNet: A Convolutional Generative Adversarial Network for Symbolic-Domain Music Generation	https://archives.ismir.net/ismir2017/paper/000226.pdf	No	No	No	None	No	Taiwan	No	Not available	No	No	N/A	N/A	N/A	N/A
74	2017	Scale- and Rhythm-Aware Musical Note Estimation for Vocal F0 Trajectories Based on a Semi-Tatum-Synchronous Hierarchical Hidden Semi-Markov Model	https://archives.ismir.net/ismir2017/paper/000004.pdf	No	No	No	None	No	Japan	Yes	No	No	No	N/A	N/A	N/A	N/A
75	2017	A Study on LSTM Networks for Polyphonic Music Sequence Modelling	https://archives.ismir.net/ismir2017/paper/000060.pdf	No	No	No	None	No	UK	Yes	No	No	No	N/A	N/A	N/A	N/A
76	2017	Automatic Stylistic Composition of Bach Chorales with Deep LSTM	https://archives.ismir.net/ismir2017/paper/000156.pdf	No	No	No	None	Yes: Microsoft	UK	No	No	No	No	N/A	N/A	N/A	N/A
77	2017	Generating Nontrivial Melodies for Music as a Service	https://archives.ismir.net/ismir2017/paper/000178.pdf	Yes: four days	No	Yes: Single Nvidia Tesla K80	Full	No	USA	No	Not available	No	No	300	1	96	28.80
78	2017	Song2Guitar: A Difficulty-Aware Arrangement System for Generating Guitar Solo Covers from Polyphonic Audio of Popular Music	https://archives.ismir.net/ismir2017/paper/000041.pdf	No	No	No	None	No	Japan	Yes	No	No	No	N/A	N/A	N/A	N/A
79	2017	From Bach to the Beatles: The Simulation of Human Tonal Expectation Using Ecologically-Trained Predictive Models	https://archives.ismir.net/ismir2017/paper/000129.pdf	No	No	No	None	No	Austria, Singapore	Yes	No	No	No	N/A	N/A	N/A	N/A
80	2017	Chord Generation from Symbolic Melody Using BLSTM Networks	https://archives.ismir.net/ismir2017/paper/000134.pdf	No	No	No	None	No	Korea	Yes	Yes: Kakao Corp, Kakao Brain Corp	No	No	N/A	N/A	N/A	N/A

(Note appearing at far right of row 78: AH)