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Predictive coding under the free-energy principle

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890	The timing of vision - how neural processing links to different temporal dynamics. **2011**, 2, 151		7

889	Active inference, attention, and motor preparation. **2011**, 2, 218		79
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886	Predictive Context Influences Perceptual Selection during Binocular Rivalry. **2011**, 5, 166		33
885	Free energy and dendritic self-organization. **2011**, 5, 80		32
884	The feeling of action tendencies: on the emotional regulation of goal-directed behavior. **2011**, 2, 346		39
883	Building a neuroscience of pleasure and well-being. **2011**, 1, 1-3		108
882	Neural processing as causal inference. **2011**, 21, 774-81		146
881	Predictive coding. **2011**, 2, 580-593		220
880	Effective connectivity determines the nature of subjective experience in grapheme-color synesthesia. **2011**, 31, 9879-84		88
879	Dynamic causal modeling of subcortical connectivity of language. **2011**, 31, 2712-7		47
878	Predictive coding and pitch processing in the auditory cortex. **2011**, 23, 3084-94		51
877	Time scale hierarchies in the functional organization of complex behaviors. **2011**, 7, e1002198		33
876	A Free Energy Principle for Biological Systems. **2012**, 14, 2100-2121		163
875	Variability of perceptual multistability: from brain state to individual trait. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2012**, 367, 988-1000	5.8	46
874	Mapping human pitch representation in a distributed system using depth-electrode recordings and modeling. **2012**, 32, 13348-51		19
873	Feeling the strain: predicting the third dimension of core affect. **2012**, 35, 166-7		
872	Dynamic neural systems enable adaptive, flexible memories. **2012**, 36, 1646-66		58

871	Active inference and agency: optimal control without cost functions. **2012**, 106, 523-41	133
870	¿Es el yo simplemente la recompensa?. **2012**, 19, 42-48	
869	Embodied inference and spatial cognition. **2012**, 13 Suppl 1, S171-7	23
868	Multiple sensitivity profiles to diversity and transition structure in non-stationary input. **2012**, 60, 991-1005	29
867	Stimulus repetition probability effects on repetition suppression are position invariant for faces. **2012**, 60, 2128-35	45
866	Dynamic causal modelling of precision and synaptic gain in visual perception - an EEG study. **2012**, 63, 223-31	51
865	Crossmodal correspondences between sounds and tastes. **2012**, 1	109
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863	Valence-specific modulation in the accumulation of perceptual evidence prior to visual scene recognition. **2012**, 7, e38064	7
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861	What is value-accumulated reward or evidence?. **2012**, 6, 11	32
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859	Toward a neural basis of interactive alignment in conversation. **2012**, 6, 185	44
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857	Recognizing recurrent neural networks (rRNN): Bayesian inference for recurrent neural networks. **2012**, 106, 201-17	14
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854	Mental imagery in music performance: underlying mechanisms and potential benefits. **2012**, 1252, 206-13	99

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852	Computational Models of Hallucinations. **2013**, 289-313	9
851	Temporal prediction errors modulate cingulate-insular coupling. **2013**, 71, 147-57	24
850	Do temporal processes underlie left hemisphere dominance in speech perception?. **2013**, 127, 36-45	36
849	Steps to a Properly Embodied Cognitive science. **2013**, 22-23, 1-11	21
848	Characterising reward outcome signals in sensory cortex. **2013**, 83, 329-34	12
847	Active inference, sensory attenuation and illusions. **2013**, 14, 411-27	238
846	Corticostriatal contributions to musical expectancy perception. **2013**, 25, 1062-77	41
845	Cognitive resource depletion in religious interactions. **2013**, 3, 39-55	63
844	Auditory-motor interactions for the production of native and non-native speech. **2013**, 33, 2376-87	17
843	Free energy, precision and learning: the role of cholinergic neuromodulation. **2013**, 33, 8227-36	183
842	Mechanisms of enhancing visual-speech recognition by prior auditory information. **2013**, 65, 109-18	21
841	Processing of speech and non-speech sounds in the supratemporal plane: auditory input preference does not predict sensitivity to statistical structure. **2013**, 66, 318-32	39
840	The right hemisphere supports but does not replace left hemisphere auditory function in patients with persisting aphasia. **2013**, 136, 1901-12	35
839	Modelling trial-by-trial changes in the mismatch negativity. **2013**, 9, e1002911	90
838	The impact of neurodegeneration on network connectivity: a study of change detection in frontotemporal dementia. **2013**, 25, 802-13	28
837	Brain systems for probabilistic and dynamic prediction: computational specificity and integration. **2013**, 11, e1001662	27
836	Charles Bonnet syndrome: evidence for a generative model in the cortex?. **2013**, 9, e1003134	28

835	From birdsong to human speech recognition: bayesian inference on a hierarchy of nonlinear dynamical systems. **2013**, 9, e1003219	34
834	Information and Metabolism in Bacterial Chemotaxis. **2013**, 15, 311-326	23
833	A neurocomputational model of the mismatch negativity. **2013**, 9, e1003288	68
832	Dissociable effects of surprise and model update in parietal and anterior cingulate cortex. **2013**, 110, E3660-9	204
831	Finding and feeling the musical beat: striatal dissociations between detection and prediction of regularity. **2013**, 23, 913-21	153
830	Contributions of low and high spatial frequency processing to impaired object recognition circuitry in schizophrenia. **2013**, 23, 1849-58	48
829	Predictive codes of familiarity and context during the perceptual learning of facial identities. **2013**, 4, 2698	24
828	The computational anatomy of psychosis. **2013**, 4, 47	423
827	The human brain maintains contradictory and redundant auditory sensory predictions. **2013**, 8, e53634	25
826	Predictive feedback and conscious visual experience. **2012**, 3, 620	81
825	Novelty or surprise?. **2013**, 4, 907	147
824	The ADaptation and Anticipation Model (ADAM) of sensorimotor synchronization. **2013**, 7, 253	82
823	Minimal self-models and the free energy principle. **2013**, 7, 547	120
822	Do cortical gamma oscillations promote or suppress perception? An under-asked question with an over-assumed answer. **2013**, 7, 595	47
821	The functional anatomy of attention: a DCM study. **2013**, 7, 784	29
820	Making predictions in a changing world-inference, uncertainty, and learning. **2013**, 7, 105	54
819	Facial motion engages predictive visual mechanisms. **2014**, 9, e91038	6
818	Predictive codes of interoception, emotion, and the self. **2014**, 5, 189	11

817	Separate and concurrent symbolic predictions of sound features are processed differently. **2014**, 5, 1295	4
816	The predictive mind and the experience of visual art work. **2014**, 5, 1417	15
815	Dynamical predictions of insular hubs for social cognition and their application to stroke. **2014**, 8, 380	10
814	Sensory-to-motor integration during auditory repetition: a combined fMRI and lesion study. **2014**, 8, 24	24
813	Dissociating dynamic probability and predictability in observed actions-an fMRI study. **2014**, 8, 273	13
812	An aberrant precision account of autism. **2014**, 8, 302	310
811	Eluding the illusion? Schizophrenia, dopamine and the McGurk effect. **2014**, 8, 565	22
810	Tickle me, I think I might be dreaming! Sensory attenuation, self-other distinction, and predictive processing in lucid dreams. **2014**, 8, 717	6
809	Stable individual characteristics in the perception of multiple embedded patterns in multistable auditory stimuli. **2014**, 8, 25	28
808	Speech perception under adverse conditions: insights from behavioral, computational, and neuroscience research. **2014**, 7, 126	45
807	Compressive mapping of number to space reflects dynamic encoding mechanisms, not static logarithmic transform. **2014**, 111, 7867-72	146
806	Sketch for a Theory of Evolution Based on Coding. **2014**, 7, 181-201	3
805	Understanding effector selectivity in human posterior parietal cortex by combining information patterns and activation measures. **2014**, 34, 7102-12	43
804	Effective connectivity reveals right-hemisphere dominance in audiospatial perception: implications for models of spatial neglect. **2014**, 34, 5003-11	58
803	Mystical Experience in the Lab. **2014**, 26, 217-245	28
802	Building on prior knowledge: schema-dependent encoding processes relate to academic performance. **2014**, 26, 2250-61	91
801	Neural underpinnings of music: the polyrhythmic brain. **2014**, 829, 339-56	10
800	A taxonomy of prospection: introducing an organizational framework for future-oriented cognition. **2014**, 111, 18414-21	268

799	Tension-related activity in the orbitofrontal cortex and amygdala: an fMRI study with music. **2014**, 9, 1515-23	57
798	Uncertainty in visual and auditory series is coded by modality-general and modality-specific neural systems. **2014**, 35, 1111-28	43
797	On the development of auditory distraction: A review. **2014**, 3, 72-91	40
796	From the phenomenology to the mechanisms of consciousness: Integrated Information Theory 3.0. **2014**, 10, e1003588	435
795	The scope and limits of action semantics: Reply to comments on 'Action semantics: A unifying conceptual framework for the selective use of multimodal and modality-specific object knowledge'. **2014**, 11, 273-9	6
794	The free-energy self: a predictive coding account of self-recognition. **2014**, 41, 85-97	275
793	Suppression of the auditory N1-component for heartbeat-related sounds reflects interoceptive predictive coding. **2014**, 99, 172-82	40
792	The extrastriate body area is involved in illusory limb ownership. **2014**, 86, 514-24	52
791	Predictive regularity representations in violation detection and auditory stream segregation: from conceptual to computational models. **2014**, 27, 565-77	61
790	Developmental changes in effective connectivity associated with relational reasoning. **2014**, 35, 3262-76	24
789	Autism, oxytocin and interoception. **2014**, 47, 410-30	230
788	Vision: efficient adaptive coding. **2014**, 24, R1096-8	51
787	Repetition probability effects for inverted faces. **2014**, 102 Pt 2, 416-23	29
786	Decoding neural representational spaces using multivariate pattern analysis. **2014**, 37, 435-56	386
785	Development of spatial integration depends on top-down and interhemispheric connections that can be perturbed in migraine: a DCM analysis. **2014**, 35 Suppl 1, 215-24	13
784	Cognitive Dynamics: From Attractors to Active Inference. **2014**, 102, 427-445	48
783	"Clinical brain profiling": a neuroscientific diagnostic approach for mental disorders. **2014**, 83, 450-64	2
782	Temporal prediction errors in visual and auditory cortices. **2014**, 24, R309-10	52

781	Critical Slowing and Perception. **2014**, 191-226		2
780	Deficits in predictive coding underlie hallucinations in schizophrenia. **2014**, 34, 8072-82		109
779	Toward a general psychological model of tension and suspense. **2015**, 6, 79		63
778	Network activity underlying the illusory self-attribution of a dummy arm. **2015**, 36, 2284-304		63
777	Eating with our eyes: on the color of flavor. 603-618		1
776	Artworks as dichotomous objects: implications for the scientific study of aesthetic experience. **2015**, 9, 295		9
775	Implicit learning of predictable sound sequences modulates human brain responses at different levels of the auditory hierarchy. **2015**, 9, 505		31
774	Response: No need to match: a comment on Bach, Nicholson, and Hudson's "Affordance-Matching Hypothesis". **2015**, 9, 685		2
773	Area V5-a microcosm of the visual brain. **2015**, 9, 21		54
772	When Passive Feels Active--Delusion-Proneness Alters Self-Recognition in the Moving Rubber Hand Illusion. **2015**, 10, e0128549		9
771	Hierarchical Novelty-Familiarity Representation in the Visual System by Modular Predictive Coding. **2015**, 10, e0144636		2
770	Unifying treatments for depression: an application of the Free Energy Principle. **2015**, 6, 153		28
769	Temporal prediction errors modulate task-switching performance. **2015**, 6, 1185		13
768	A Balanced Mind: A Network Perspective on Mood and Motivation Brain Pathways. **2015**, 13-28		
767	A massively asynchronous, parallel brain. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2015**, 370,	5.8	26
766	Impact prediction by looming visual stimuli enhances tactile detection. **2015**, 35, 4179-89		54
765	Constructing, Perceiving, and Maintaining Scenes: Hippocampal Activity and Connectivity. **2015**, 25, 3836-55		100
764	The relationship between stimulus repetitions and fulfilled expectations. **2015**, 67, 175-82		33

763	Computational model of visual hallucination in dementia with Lewy bodies. **2015**, 62, 73-82	4
762	Movement preparation improves touch perception without awareness. **2015**, 137, 189-195	7
761	A Duet for one. **2015**, 36, 390-405	194
760	Fast oscillatory dynamics during language comprehension: Unification versus maintenance and prediction?. **2015**, 148, 51-63	68
759	Precision and neuronal dynamics in the human posterior parietal cortex during evidence accumulation. **2015**, 107, 219-228	33
758	Learning verbs more effectively through meaning congruent action animations. **2015**, 39, 107-122	13
757	Hierarchical Organization of Frontotemporal Networks for the Prediction of Stimuli across Multiple Dimensions. **2015**, 35, 9255-64	50
756	The Faces of Predictive Coding. **2015**, 35, 8997-9006	43
755	Prediction and constraint in audiovisual speech perception. **2015**, 68, 169-81	112
754	Attentional Enhancement of Auditory Mismatch Responses: a DCM/MEG Study. **2015**, 25, 4273-83	119
753	Combined eye tracking and fMRI reveals neural basis of linguistic predictions during sentence comprehension. **2015**, 68, 33-47	72
752	Active inference, communication and hermeneutics. **2015**, 68, 129-43	176
751	Predictive Coding: How Many Faces?. **2015**, 35, 14689-90	
750	STARE: Spatio-Temporal Attention Relocation for Multiple Structured Activities Detection. **2015**, 24, 5916-27	13
749	Unsigned value prediction-error modulates the motor system in absence of choice. **2015**, 122, 73-9	11
748	Object identification leads to a conceptual broadening of object representations in lateral prefrontal cortex. **2015**, 76, 62-78	7
747	Anticipating conflict: Neural correlates of a Bayesian belief and its motor consequence. **2015**, 119, 286-95	46
746	Predictive coding accounts of shared representations in parieto-insular networks. **2015**, 70, 442-54	24

745	Neural correlates of perceptual grouping effects in the processing of sound omission by musicians and nonmusicians. **2015**, 319, 25-31	5
744	How the human brain exchanges information across sensory modalities to recognize other people. **2015**, 36, 324-39	20
743	Brain prediction of auditory emphasis by facial expressions during audiovisual continuous speech. **2015**, 28, 494-505	9
742	LFP and oscillations-what do they tell us?. **2015**, 31, 1-6	116
741	Neural Network Underlying Recovery from Disowned Bodily States Induced by the Rubber Hand Illusion. **2016**, 2016, 8307175	7
740	Temporal Uncertainty and Temporal Estimation Errors Affect Insular Activity and the Frontostriatal Indirect Pathway during Action Update: A Predictive Coding Study. **2016**, 10, 276	4
739	Bodily Experience in Schizophrenia: Factors Underlying a Disturbed Sense of Body Ownership. **2016** , 10, 305	25
738	Neurobiology of Anorexia Nervosa: Serotonin Dysfunctions Link Self-Starvation with Body Image Disturbances through an Impaired Body Memory. **2016**, 10, 600	28
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735	Dream to Predict? REM Dreaming as Prospective Coding. **2015**, 6, 1961	16
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730	Vocal Interactivity in-and-between Humans, Animals, and Robots. **2016**, 3,	5
729	Prefrontal Cortex Activation Reflects Efficient Exploitation of Higher-order Statistical Structure. **2016**, 28, 1909-1922	2
728	Comparison of Gated Audiovisual Speech Identification in Elderly Hearing Aid Users and Elderly Normal-Hearing Individuals: Effects of Adding Visual Cues to Auditory Speech Stimuli. **2016**, 20,	13

727	Predicting "When" in Discourse Engages the Human Dorsal Auditory Stream: An fMRI Study Using Naturalistic Stories. **2016**, 36, 12180-12191	20
726	Expectations about person identity modulate the face-sensitive N170. **2016**, 85, 54-64	21
725	Differential neural mechanisms for early and late prediction error detection. **2016**, 6, 24350	8
724	Timing predictability enhances regularity encoding in the human subcortical auditory pathway. **2016**, 6, 37405	14
723	Tracing the Flow of Perceptual Features in an Algorithmic Brain Network. **2015**, 5, 17681	24
722	Neural mechanisms of sentence comprehension based on predictive processes and decision certainty: Electrophysiological evidence from non-canonical linearizations in a flexible word order language. **2016**, 1633, 149-166	18
721	Believing is Seeing: A Perspective on Perceiving Images of Objects on the Shroud of Turin. **2016**, 38, 232-251	
720	Hallucinations as top-down effects on perception. **2016**, 1, 393-400	54
719	Neural sensitivity to syllable frequency and mutual information in speech perception and production. **2016**, 136, 106-21	10
718	Predictive coding of multisensory timing. **2016**, 8, 200-206	34
717	Sentence understanding depends on contextual use of semantic and real world knowledge. **2016**, 136, 10-25	5
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714	Attenuation of visual reafferent signals in the parietal cortex during voluntary movement. **2016**, 116, 1831-1839	13
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709 Shape perception enhances perceived contrast: evidence for excitatory predictive feedback?. **2016**, 6, 22944 14

708 The Neurochemical Basis of Motivation for Affiliative Touch. **2016**, 239-264 1

707 Different coding strategies for the perception of stable and changeable facial attributes. **2016**, 6, 32239 67

706 Introducing a Pictographic Language for Envisioning a Rich Variety of Enactive Systems with Different Degrees of Complexity. **2016**, 13, 74 5

705 Under the hood of statistical learning: A statistical MMN reflects the magnitude of transitional probabilities in auditory sequences. **2016**, 6, 19741 47

704 Optimal Perceived Timing: Integrating Sensory Information with Dynamically Updated Expectations. **2016**, 6, 28563 21

703 Optimizing Word Learning via Links to Perceptual and Motoric Experience. **2016**, 28, 495-522 10

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701 Computational modelling of movement-related beta-oscillatory dynamics in human motor cortex. **2016**, 133, 224-232 28

700 Convergent evidence for hierarchical prediction networks from human electrocorticography and magnetoencephalography. **2016**, 82, 192-205 43

699 The Experience of Coincidence: An Integrated Psychological and Neurocognitive Perspective. **2016**, 171-185 3

698 The aetiopathogenesis of fatigue: unpredictable, complex and persistent. **2016**, 117, 139-48 12

697 Incremental learning of perceptual and conceptual representations and the puzzle of neural repetition suppression. **2016**, 23, 1055-71 15

696 Predictive coding and representationalism. **2016**, 193, 559-582 94

695 Towards Deep Developmental Learning. **2016**, 8, 99-114 28

694 The contribution of surprise to the prediction based modulation of fMRI responses. **2016**, 84, 105-12 18

693 A predictive coding account of MMN reduction in schizophrenia. **2016**, 116, 68-74 33

692 Anterior insula coordinates hierarchical processing of tactile mismatch responses. **2016**, 127, 34-43 60

691	Altered Prefrontal Excitation/Inhibition Balance and Prefrontal Output: Markers of Aging in Human Memory Networks. **2016**, 26, 4315-4326	36
690	Principles of Neural Information Processing. **2016**, 1-102	
689	Electrophysiological correlates of self-specific prediction errors in the human brain. **2016**, 125, 13-24	10
688	A review of predictive coding algorithms. **2017**, 112, 92-97	160
687	To be precise, the details don't matter: On predictive processing, precision, and level of detail of predictions. **2017**, 112, 84-91	33
686	Temporal orienting precedes intersensory attention and has opposing effects on early evoked brain activity. **2017**, 148, 230-239	13
685	Magnetoencephalography for brain electrophysiology and imaging. **2017**, 20, 327-339	329
684	A Role of Sleep in Forming Predictive Codes. **2017**, 117-132	6
683	How does religious experience work in predictive minds?. **2017**, 7, 320-323	7
682	A Hierarchical Predictive Coding Model of Object Recognition in Natural Images. **2017**, 9, 151-167	32
681	Developmental visual perception deficits with no indications of prosopagnosia in a child with abnormal eye movements. **2017**, 100, 64-78	2
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679	Integrating speech in time depends on temporal expectancies and attention. **2017**, 93, 28-40	5
678	A predictive coding framework for a developmental agent: Speech motor skill acquisition and speech production. **2017**, 92, 24-41	6
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676	Expectation violation and attention to pain jointly modulate neural gain in somatosensory cortex. **2017**, 153, 109-121	29
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674	With or without you: predictive coding and Bayesian inference in the brain. **2017**, 46, 219-227	99

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671	A predictive coding model of gaze shifts and the underlying neurophysiology. **2017**, 25, 770-801	3
670	Computational Psychosomatics and Computational Psychiatry: Toward a Joint Framework for Differential Diagnosis. **2017**, 82, 421-430	92
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668	Beyond Autism: Introducing the Dialectical Misattunement Hypothesis and a Bayesian Account of Intersubjectivity. **2017**, 50, 355-372	76
667	Teaching resident physicians the power of implicit bias and how it impacts patient care utilizing patients who have experienced incarceration as a model. **2017**, 52, 345-354	5
666	Working memory, attention, and salience in active inference. **2017**, 7, 14678	105
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663	The dynamics of resting fluctuations in the brain: metastability and its dynamical cortical core. **2017** , 7, 3095	175
662	Stimulus context alters neural representations of faces in inferotemporal cortex. **2017**, 117, 336-347	5
661	Neural mechanisms underlying valence inferences to sound: The role of the right angular gyrus. **2017**, 102, 144-162	4
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655	Iterative free-energy optimization for recurrent neural networks (INFERNO). **2017**, 12, e0173684	6
654	Teaching resident physicians to work with the previously incarcerated patient. **2017**, 52, 277-285	1
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652	Attention. **2018**, 1-75	2
651	Predictable information in neural signals during resting state is reduced in autism spectrum disorder. **2018**, 39, 3227-3240	8
650	Causal inference and temporal predictions in audiovisual perception of speech and music. **2018**, 1423, 102	12
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645	The processing of mispredicted and unpredicted sensory inputs interact differently with attention. **2018**, 111, 85-91	11
644	Increased MMN amplitude following passive perceptual learning with LTP-like rapid stimulation. **2018**, 666, 28-31	10
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642	Knowing when to stop: Aberrant precision and evidence accumulation in schizophrenia. **2018**, 197, 386-391	16
641	Predictive Coding in Area V4: Dynamic Shape Discrimination under Partial Occlusion. **2018**, 30, 1209-1257	3
640	The anticipating brain is not a scientist: the free-energy principle from an ecological-enactive perspective. **2018**, 195, 2417-2444	168
639	Active inference, enactivism and the hermeneutics of social cognition. **2018**, 195, 2627-2648	89
638	From cognitivism to autopoiesis: towards a computational framework for the embodied mind. **2018**, 195, 2459-2482	149

637	Character and theory of mind: an integrative approach. **2018**, 175, 1217-1241	14
636	Information-Theoretic Properties of Auditory Sequences Dynamically Influence Expectation and Memory. **2018**, 42, 43-76	28
635	Prediction Error in the PMd As a Criterion for Biological Motion Discrimination: A Computational Account. **2018**, 10, 237-249	2
634	The anchoring bias reflects rational use of cognitive resources. **2018**, 25, 322-349	51
633	Neural Encoding and Decoding with Deep Learning for Dynamic Natural Vision. **2018**, 28, 4136-4160	95
632	Causal cortical dynamics of a predictive enhancement of speech intelligibility. **2018**, 166, 247-258	35
631	Balancing New against Old Information: The Role of Puzzlement Surprise in Learning. **2018**, 30, 34-83	29
630	Altering spatial priority maps via statistical learning of target selection and distractor filtering. **2018**, 102, 67-95	88
629	Language Prediction Is Reflected by Coupling between Frontal Gamma and Posterior Alpha Oscillations. **2018**, 30, 432-447	36
628	Evidence for spatiotemporally distinct effects of image repetition and perceptual expectations as measured by event-related potentials. **2018**, 169, 94-105	14
627	Anticipated moments: temporal structure in attention. **2018**, 19, 34-48	206
626	Direct perception and the predictive mind. **2018**, 175, 3145-3164	9
625	Sciences of Observation. **2018**, 3, 29	3
624	Forget-me-some: General versus special purpose models in a hierarchical probabilistic task. **2018**, 13, e0205974	4
623	Learning Representations of Spatial Displacement through Sensorimotor Prediction. **2018**,	1
622	Altered predictive capability of the brain network EEG model in schizophrenia during cognition. **2018**, 201, 120-129	8
621	YOUR BRAIN ON NARRATION. **2018**, 9,	
620	Musical Creativity and Depth of Implicit Knowledge: Spectral and Temporal Individualities in Improvisation. **2018**, 12, 89	12

619	Sound Change Integration Error: An Explanatory Model of Tinnitus. **2018**, 12, 831	3
618	Neural Correlate of Transition Violation and Deviance Detection in the Songbird Auditory Forebrain. **2018**, 12, 46	4
617	Inhibition-excitation balance in the parietal cortex modulates volitional control for auditory and visual multistability. **2018**, 8, 14548	21
616	Deep active inference. **2018**, 112, 547-573	39
615	Behavioural and neural evidence for self-reinforcing expectancy effects on pain. **2018**, 2, 838-855	47
614	The Anatomy of Inference: Generative Models and Brain Structure. **2018**, 12, 90	78
613	Enhanced deviant responses in patterned relative to random sound sequences. **2018**, 109, 92-103	32
612	The Predictive Coding Account of Psychosis. **2018**, 84, 634-643	253
611	Brain activation during the expectations of sensory experience for cutaneous electrical stimulation. **2018**, 19, 982-989	7
610	The periaqueductal gray and Bayesian integration in placebo analgesia. **2018**, 7,	40
609	Active Inference, Belief Propagation, and the Bethe Approximation. **2018**, 30, 2530-2567	16
608	One wouldn't expect an expert bowler to hit only two pins: Hierarchical predictive processing of agent-caused events. **2018**, 71, 2643-2654	2
607	Hypernatural Monitoring: A Social Rehearsal Account of Smartphone Addiction. **2018**, 9, 141	47
606	Illusory Motion Reproduced by Deep Neural Networks Trained for Prediction. **2018**, 9, 345	25
605	Neural circuits for long-range color filling-in. **2018**, 181, 30-43	7
604	Computational Neuropsychology and Bayesian Inference. **2018**, 12, 61	66
603	Neurophysiological Markers of Statistical Learning in Music and Language: Hierarchy, Entropy, and Uncertainty. **2018**, 8,	24
602	Neuroimaging results suggest the role of prediction in cross-domain priming. **2018**, 8, 10356	8

601	Fantasy, dream, vision, and hallucination: Approaches from a parallactic neuro-psychoanalytic perspective. **2018**, 20, 15-31	6
600	Placing meta-stable states of consciousness within the predictive coding hierarchy: The deceleration of the accelerated prediction error. **2018**, 63, 123-142	9
599	Active Inference in OpenAI Gym: A Paradigm for´Computational Investigations Into Psychiatric´Illness. **2018**, 3, 809-818	23
598	Principles of Temporal Processing Across the Cortical Hierarchy. **2018**, 389, 161-174	35
597	The event-related potential component P3a is diminished by identical deviance repetition, but not by non-identical repetitions. **2018**, 236, 1519-1530	7
596	Losing my hand. Body ownership attenuation after virtual lesion of the primary motor cortex. **2018**, 48, 2272-2287	28
595	Fast Inference Predictive Coding: A Novel Model for Constructing Deep Neural Networks. **2019**, 30, 1150-1165	24
594	"I" and "Me": The Self in the Context of Consciousness. **2018**, 9, 1656	9
593	Are incongruent objects harder to identify? The functional significance of the N300 component. **2018**, 117, 222-232	24
592	Neural correlates of dynamic emotion perception in schizophrenia and the influence of prior expectations. **2018**, 202, 129-137	3
591	Somatosensory deficits. **2018**, 151, 185-206	6
590	Music, dance, and other art forms: New insights into the links between hedonia (pleasure) and eudaimonia (well-being). **2018**, 237, 129-152	7
589	Decision-making in schizophrenia: A predictive-coding perspective. **2019**, 190, 133-143	33
588	Scruff: A Deep Probabilistic Cognitive Architecture for Predictive Processing. **2019**, 245-259	1
587	Selective Prefrontal Disinhibition in a Roving Auditory Oddball Paradigm Under N-Methyl-D-Aspartate Receptor Blockade. **2019**, 4, 140-150	21
586	Is there a prediction network? Meta-analytic evidence for a cortical-subcortical network likely subserving prediction. **2019**, 105, 262-275	29
585	Body representations as indexed by oscillatory EEG activities in the context of tactile novelty processing. **2019**, 132, 107144	2
584	Musical interaction is influenced by underlying predictive models and musical expertise. **2019**, 9, 11048	16

583	The peripheral preview effect with faces: Combined EEG and eye-tracking suggests multiple stages of trans-saccadic predictive and non-predictive processing. **2019**, 200, 344-362	16
582	Harnessing Entropy via Predictive Analytics to Optimize Outcomes in the Pedagogical System: An Artificial Intelligence-Based Bayesian Networks Approach. **2019**, 9, 158	8
581	Intelligent architectures for robotics: The merging of cognition and emotion. **2019**, 31, 157-170	9
580	An integrative framework for perceptual disturbances in psychosis. **2019**, 20, 763-778	28
579	AnoPCN. **2019**,	31
578	A Sound-Sensitive Source of Alpha Oscillations in Human Non-Primary Auditory Cortex. **2019**, 39, 8679-8689	26
577	A Kuramoto model of self-other integration across interpersonal synchronization strategies. **2019**, 15, e1007422	26
576	Rapid Brain Responses to Familiar vs. Unfamiliar Music - an EEG and Pupillometry study. **2019**, 9, 15570	15
575	Pessimistic outcome expectancy does not explain ambiguity aversion in decision-making under uncertainty. **2019**, 9, 12177	1
574	The Rhetoric and Reality of Anthropomorphism in Artificial Intelligence. **2019**, 29, 417-440	28
573	Perceptual awareness and active inference. **2019**, 2019, niz012	26
572	Deficits in Auditory Rhythm Perception in Children With Auditory Processing Disorder Are Unrelated to Attention. **2019**, 13, 953	3
571	The prefrontal cortex in the neurology clinic. **2019**, 163, 3-15	11
570	A mosaic of Chu spaces and Channel Theory II: applications to object identification and mereological complexity. **2019**, 31, 237-265	10
569	From Computation to the First-Person: Auditory-Verbal Hallucinations and Delusions of Thought Interference in Schizophrenia-Spectrum Psychoses. **2019**, 45, S56-S66	13
568	Impaired Corollary Discharge in Psychosis and At-Risk States: Integrating Neurodevelopmental, Phenomenological, and Clinical Perspectives. **2019**, 4, 832-841	8
567	Modelling face memory reveals task-generalizable representations. **2019**, 3, 817-826	9
566	Sensorimotor beta power reflects the precision-weighting afforded to sensory prediction errors. **2019**, 200, 59-71	17

565	Action-Dependent Processing of Touch in the Human Parietal Operculum and Posterior Insula. **2020**, 30, 607-617	13
564	REBUS and the Anarchic Brain: Toward a Unified Model of the Brain Action of Psychedelics. **2019**, 71, 316-344	171
563	Shades of surprise: Assessing surprise as a function of degree of deviance and expectation constraints. **2019**, 192, 103986	5
562	Vision, an Optical User Interface. **2019**, 48, 545-601	6
561	Visual hallucinations, thalamocortical physiology and Lewy body disease: A review. **2019**, 103, 337-351	11
560	Neural Speech Tracking in the Theta and in the Delta Frequency Band Differentially Encode Clarity and Comprehension of Speech in Noise. **2019**, 39, 5750-5759	44
559	Variational autoencoder: An unsupervised model for encoding and decoding fMRI activity in visual cortex. **2019**, 198, 125-136	46
558	Expectation and attention increase the integration of top-down and bottom-up signals in perception through different pathways. **2019**, 17, e3000233	25
557	Learning and forgetting using reinforced Bayesian change detection. **2019**, 15, e1006713	10
556	Electrophysiological correlates of prediction formation in anticipation of reward- and punishment-related feedback signals. **2019**, 56, e13379	8
555	Attention modulates topology and dynamics of auditory sensory gating. **2019**, 40, 2981-2994	11
554	Neuronal message passing using Mean-field, Bethe, and Marginal approximations. **2019**, 9, 1889	60
553	A context-change account of temporal distinctiveness. **2019**, 47, 1158-1172	6
552	Simulating Active Inference Processes by Message Passing. **2019**, 6, 20	19
551	The Somatotopy of Mental Tactile Imagery. **2019**, 13, 10	9
550	Trial-by-trial surprise-decoding model for visual and auditory binary oddball tasks. **2019**, 196, 302-317	6
549	Presentation Probability of Visual-Auditory Pairs Modulates Visually Induced Auditory Predictions. **2019**, 31, 1110-1125	5
548	Vision: Filling Black Holes. **2019**, 29, R245-R248	

547	Hallucinations Research: Into the Future, and Beyond. **2019**, 45, NP-NP	78
546	Predictive Coding as Stimulus Avoidance in Spiking Neural Networks. **2019**,	1
545	Passing the Message: Representation Transfer in Modular Balanced Networks. **2019**, 13, 79	4
544	Similar Expectation Effects for Immediate and Delayed Stimulus Repetitions. **2019**, 13, 1379	
543	Belief updating in depression is not related to increased sensitivity to unexpectedly negative information. **2019**, 123, 103509	11
542	Modeling Sensory Preference in Speech Motor Planning: A Bayesian Modeling Framework. **2019**, 10, 2339	1
541	Information generation as a functional basis of consciousness. **2019**, 2019, niz016	16
540	Incremental Learning of Abnormalities in Autonomous Systems. **2019**,	3
539	Exposing Pathological Sensory Predictions in Tinnitus Using Auditory Intensity Deviant Evoked Responses. **2019**, 39, 10096-10103	10
538	Hallucinations and Strong Priors. **2019**, 23, 114-127	148
537	The Ganzfeld experience-A stably inducible altered state of consciousness: Effects of different auditory homogenizations. **2019**, 8, 66-81	9
536	Neuronal phase consistency tracks dynamic changes in acoustic spectral regularity. **2019**, 49, 1268-1287	1
535	Computational modelling approaches to meditation research: why should we care?. **2019**, 28, 49-53	5
534	Sympathetic responding to unconditioned stimuli predicts subsequent threat expectancy, orienting, and visuocortical bias in human aversive Pavlovian conditioning. **2019**, 140, 64-74	5
533	Activity in perceptual classification networks as a basis for human subjective time perception. **2019**, 10, 267	27
532	Do 'early' brain responses reveal word form prediction during language comprehension? A critical review. **2019**, 96, 367-400	54
531	Motor output, neural states and auditory perception. **2019**, 96, 116-126	17
530	The Social Brain Automatically Predicts Others' Future Mental States. **2019**, 39, 140-148	25

529	The sound of beauty: How complexity determines aesthetic preference. **2019**, 192, 146-152	12
528	An information-theoretic perspective on the costs of cognition. **2019**, 123, 5-18	41
527	Connectomics of bipolar disorder: a critical review, and evidence for dynamic instabilities within interoceptive networks. **2019**, 24, 1296-1318	47
526	Stereotypes, theory of mind, and the action prediction hierarchy. **2019**, 196, 2821-2846	14
525	Agency detection in predictive minds: a virtual reality study. **2019**, 9, 52-64	10
524	The Bayesian observer and supernatural agents. **2019**, 9, 99-104	1
523	Predictive coding in agency detection. **2019**, 9, 65-84	15
522	The role of alcohol in expectancy-driven mystical experiences: a pre-registered field study using placebo brain stimulation. **2019**, 9, 108-125	7
521	Bayesian Modelling of Induced Responses and Neuronal Rhythms. **2019**, 32, 569-582	3
520	Dose-dependent modulation of the visually evoked N1/N170 by perceptual surprise: a clear demonstration of prediction-error signalling. **2020**, 52, 4442-4452	12
519	Morphogenesis as Bayesian inference: A variational approach to pattern formation and control in complex biological systems. **2020**, 33, 88-108	39
518	Development of predictive responses in theory of mind brain regions. **2020**, 23, e12863	18
517	A Bayesian Account of Psychopathy: A Model of Lacks Remorse and Self-Aggrandizing. **2018**, 2, 92-140	6
516	Syllable as a unit of information transfer in linguistic communication: The entropy syllable parsing model. **2020**, 11, e1518	5
515	Perceptual Decision Parameters and Their Relation to Self-Reported Pain: A Drift Diffusion Account. **2020**, 21, 324-333	3
514	Cortical Tracking of Surprisal during Continuous Speech Comprehension. **2020**, 32, 155-166	20
513	Attentional Modulation of Vision Versus Proprioception During Action. **2020**, 30, 1637-1648	21
512	The Benacerraf Problem as a Challenge for Ontic Structural Realism **2020**, 28, 35-59	2

511	Prediction-error signals to violated expectations about person identity and head orientation are doubly-dissociated across dorsal and ventral visual stream regions. **2020**, 206, 116325	3
510	Threat Prediction from Schemas as a Source of Bias in Pain Perception. **2020**, 40, 1538-1548	12
509	People represent mental states in terms of rationality, social impact, and valence: Validating the 3d Mind Model. **2020**, 125, 44-59	6
508	The phenomenology and cognitive neuroscience of experienced temporality. **2020**, 19, 747-771	7
507	Lip-Reading Enables the Brain to Synthesize Auditory Features of Unknown Silent Speech. **2020**, 40, 1053-106527	
506	Minimizing prediction errors in predictive processing: from inconsistency to non-representationalism. **2020**, 19, 997-1017	4
505	Active sampling in visual search is coupled to the cardiac cycle. **2020**, 196, 104149	29
504	Suboptimal learning of tactile-spatial predictions in patients with complex regional pain syndrome. **2020**, 161, 369-378	3
503	Perceiving actions before they happen: psychological dimensions scaffold neural action prediction. **2021**, 16, 807-815	3
502	Auditory Mismatch Negativity Under Predictive Coding Framework and Its Role in Psychotic Disorders. **2020**, 11, 557932	5
501	Cognitive Aging and Culture: Older Brain Predictions about Different Environments. **2020**, 457-479	
500	An integrative explanation of action. **2020**, 198, 104266	1
499	Investigating cortico-subcortical circuits during auditory sensory attenuation: A combined magnetoencephalographic and dynamic causal modeling study. **2020**, 41, 4419-4430	1
498	The Digital Phenotyping Project: A Psychoanalytical and Network Theory Perspective. **2020**, 11, 1218	6
497	Statistical learning of transition patterns in the songbird auditory forebrain. **2020**, 10, 7848	1
496	Modules or Mean-Fields?. **2020**, 22,	13
495	Information flow in context-dependent hierarchical Bayesian inference. **2020**, 1-32	7
494	Sources of predictive information in dynamical neural networks. **2020**, 10, 16901	2

493 Remodeling of brain morphology in temporal lobe epilepsy. **2020**, 10, e01825 1

492 Hallucinations Under Psychedelics and in the Schizophrenia Spectrum: An Interdisciplinary and Multiscale Comparison. **2020**, 46, 1396-1408 20

491 Embodied Predictions, Agency, and Psychosis. **2020**, 3, 27 9

490 Changing Body Representation Through Full Body Ownership Illusions Might Foster Motor Rehabilitation Outcome in Patients With Stroke. **2020**, 11, 1962 15

489 Semantic Predictive Coding with Arbitrated Generative Adversarial Networks. **2020**, 2, 307-326 2

488 Equivalence of the Frame and Halting Problems. **2020**, 13, 175 5

487 Voluntary control of auditory hallucinations: phenomenology to therapeutic implications. **2020**, 6, 19 5

486 Inner Navigation and Theta Activity: From Movement to Cognition and Hypnosis According to the Sphere Model of Consciousness. **2020**, 5

485 Active inference on discrete state-spaces: A synthesis. **2020**, 99, 102447 67

484 Musical Tension Associated With Violations of Hierarchical Structure. **2020**, 14, 578112

483 Scaling Active Inference. **2020**, 17

482 Learning Foreign Language Vocabulary with Gestures and Pictures Enhances Vocabulary Memory for Several Months Post-Learning in Eight-Year-Old School Children. **2020**, 32, 815-850 9

481 Neuroscience: From Sensory Discrimination to Choice in Gustatory Cortex. **2020**, 30, R444-R446

480 The Prospective Sense of Agency is Rooted in Local and Global Properties of Intrinsic Functional Brain Networks. **2020**, 32, 1764-1779 1

479 Deep learning and cognitive science. **2020**, 203, 104365 19

478 The role of Hebbian learning in human perception: a methodological and theoretical review of the human Visual Long-Term Potentiation paradigm. **2020**, 115, 220-237 12

477 PCT and beyond. **2020**, 557-582

476 An Integrated World Modeling Theory (IWMT) of Consciousness: Combining Integrated Information and Global Neuronal Workspace Theories With the Free Energy Principle and Active Inference Framework; Toward Solving the Hard Problem and Characterizing Agentic Causation. **2020**, 3, 30 29

475	The evolving sense of agency: Context recency and quality modulate the interaction between prospective and retrospective processes. **2020**, 80, 102903	4
474	Constructing and Forgetting Temporal Context in the Human Cerebral Cortex. **2020**, 106, 675-686.e11	38
473	The effect of hand motion and object orientation on the automatic detection of orientation: A visual mismatch negativity study. **2020**, 15, e0229223	
472	Synchronising internal and external information: a commentary on Meyer, Sun & Martin (2020). **2020**, 35, 1129-1132	3
471	Using Neural Circuit Interrogation in Rodents to Unravel Human Speech Decoding. **2020**, 14, 2	4
470	Active inference under visuo-proprioceptive conflict: Simulation and empirical results. **2020**, 10, 4010	13
469	Modeling perception and behavior in individuals at clinical high risk for psychosis: Support for the predictive processing framework. **2020**, 226, 167-175	9
468	Do Process-1 simulations generate the epistemic feelings that drive Process-2 decision making?. **2020**, 21, 533-553	6
467	Using reinforcement learning models in social neuroscience: frameworks, pitfalls and suggestions of best practices. **2020**, 15, 695-707	25
466	The musical brain. **2020**, 1-40	1
465	Combining predictive coding and neural oscillations enables online syllable recognition in natural speech. **2020**, 11, 3117	17
464	A systematic evaluation of the evidence for perceptual control theory in tracking studies. **2020**, 112, 616-633	7
463	Lossy-Context Surprisal: An Information-Theoretic Model of Memory Effects in Sentence Processing. **2020**, 44, e12814	27
462	Predictive context biases binocular rivalry in children and adults with no positive relation to two measures of social cognition. **2020**, 10, 2059	1
461	. **2020**, 7, 3774-3789	8
460	Alien limb syndrome: A Bayesian account of unwanted actions. **2020**, 127, 29-41	10
459	Linguistic predictability influences auditory stimulus classification within two concurrent speech streams. **2020**, 57, e13547	2
458	Large-scale Functional Integration, Rather than Functional Dissociation along Dorsal and Ventral Streams, Underlies Visual Perception and Action. **2020**, 32, 847-861	4

457	Fame in the predictive brain: a deflationary approach to explaining consciousness in the prediction error minimization framework. **2020**, 198, 7781	6
456	Sensorimotor Integration Can Enhance Auditory Perception. **2020**, 10, 1496	7
455	From allostatic agents to counterfactual cognisers: active inference, biological regulation, and the origins of cognition. **2020**, 35, 1	36
454	Toward Enhanced Teleoperation Through Embodiment. **2020**, 7, 14	14
453	The Difficulty of Effectively Using Allocentric Prior Information in a Spatial Recall Task. **2020**, 10, 7000	
452	Retrospective Inference as a Form of Bounded Rationality, and Its Beneficial Influence on Learning. **2020**, 3, 2	1
451	Predicting the Past from Minimal Traces: Episodic Memory and its Distinction from Imagination and Preservation. **2020**, 11, 301-333	19
450	Rethinking post-traumatic stress disorder - A predictive processing perspective. **2020**, 113, 448-460	18
449	Confidence in Decision-Making during Probabilistic Tactile Learning Related to Distinct Thalamo-Prefrontal Pathways. **2020**, 30, 4677-4688	1
448	Modulations of Insular Projections by Prior Belief Mediate the Precision of Prediction Error during Tactile Learning. **2020**, 40, 3827-3837	1
447	Encoding of deterministic and stochastic auditory rules in the human brain: The mismatch negativity mechanism does not reflect basic probability. **2021**, 399, 107907	4
446	State anxiety biases estimates of uncertainty and impairs reward learning in volatile environments. **2021**, 224, 117424	10
445	The predictive global neuronal workspace: A formal active inference model of visual consciousness. **2021**, 199, 101918	22
444	Theta Phase Synchrony Is Sensitive to Corollary Discharge Abnormalities in Early Illness Schizophrenia but Not in the Psychosis Risk Syndrome. **2021**, 47, 415-423	5
443	Time will tell: Object categorization and emotional engagement during processing of degraded natural scenes. **2020**, 58, e13704	3
442	Perceptual learning of tone patterns changes the effective connectivity between Heschl's gyrus and planum temporale. **2021**, 42, 941-952	6
441	Brain-inspired distributed cognitive architecture. **2021**, 66, 13-20	0
440	Computational Models of Interoception and Body Regulation. **2021**, 44, 63-76	35

439	Expected TMS excites the motor system less effectively than unexpected stimulation. **2021**, 226, 117541	5
438	When Beliefs Face Reality: An Integrative Review of Belief Updating in Mental Health and Illness. **2021**, 16, 247-274	20
437	Perceptual variability: Implications for learning and generalization. **2021**, 28, 1-19	6
436	A computational perspective on faith: religious reasoning and Bayesian decision. **2021**, 11, 147-164	2
435	Perceiving deviance. **2021**, 198, 6955-6967	
434	A continuum hypothesis of psychotomimetic rapid antidepressants. **2021**, 5, 23982128211007772	2
433	The Motivational Processes of Sense-Making.	1
432	Stream-specific feedback inputs to the primate primary visual cortex. **2021**, 12, 228	8
431	Modulation of early auditory processing by visual information: Prediction or bimodal integration?. **2021**, 83, 1538-1551	2
430	Face-like configurations modulate electrophysiological mismatch responses. **2021**, 53, 1869-1884	0
429	Human perception and neurocognitive development across the lifespan. **2021**, 199-221	1
428	Failure to Perceive Change: From Neurons to Social Networks. 1	0
427	Zooming-in on higher-level vision: High-resolution fMRI for understanding visual perception and awareness. **2021**, 207, 101998	1
426	Sorting pain out of salience: assessment of pain facial expressions in the human fetus. **2021**, 6, e882	5
425	Integrating Cybernetic Big Five Theory with the free energy principle: A new strategy for modeling personalities as complex systems. **2021**, 617-649	4
424	Disrupted connectivity within visual, attentional and salience networks in the visual snow syndrome. **2021**, 42, 2032-2044	12
423	Modeling and Analysis of EEG Brain Network in High Altitude Task State. **2021**, 468-480	
422	Subjective visibility report is facilitated by conscious predictions only. **2021**, 87, 103048	2

421	Dynamic Predictive Coding with Hypernetworks.	0
420	Predictive coding models for pain perception. **2021**, 49, 107-127	3
419	Neural surprise in somatosensory Bayesian learning. **2021**, 17, e1008068	3
418	Expectation-Based Gist Facilitation: Rapid Scene Understanding and the Role of Top-Down Information.	1
417	Laminar dynamics of beta bursts in human motor cortex.	1
416	Brain-inspired model for early vocal learning and correspondence matching using free-energy optimization. **2021**, 17, e1008566	0
415	Sensorimotor Representation Learning for an Active Self in Robots: A Model Survey. **2021**, 35, 9-35	6
414	State anxiety alters the neural oscillatory correlates of predictions and prediction errors during reward learning.	
413	How Does the Brain Represent Speech?. **2021**, 58-96	0
412	Reference Frame Induced Symmetry Breaking on Holographic Screens. **2021**, 13, 408	5
411	Altered effective connectivity in sensorimotor cortices: a novel signature of severity and clinical course in depression.	1
410	Text type attribution modulates pre-stimulus alpha power in sentence reading. **2021**, 214, 104894	2
409	Dynamical processing of orientation precision in the primary visual cortex.	
408	Deficits of hierarchical predictive coding in left spatial neglect. **2021**, 3, fcab111	5
407	Structural and contextual priors affect visual search in children with and without autism. **2021**, 14, 1484-1495	1
406	Pupil dilation indexes automatic and dynamic inference about the precision of stimulus distributions. **2021**, 101, 102503	
405	Pooling in a predictive model of V1 explains functional and structural diversity across species.	1
404	Enhanced inter-regional coupling of neural responses and repetition suppression provide separate contributions to long-term behavioral priming. **2021**, 4, 487	1

403	Representational Pattern Similarity of Electrical Brain Activity Reveals Rapid and Specific Prediction during Language Comprehension. **2021**, 31, 4300-4313	2
402	Neural Dynamics under Active Inference: Plausibility and Efficiency of Information Processing. **2021**, 23,	9
401	Cortico-Fugal Regulation of Predictive Coding.	1
400	Towards a causal role of Broca area in language: A TMS-EEG study on syntactic prediction.	0
399	Neurophysiological and functional neuroanatomical coding of statistical and deterministic rule information during sequence learning. **2021**, 42, 3182-3201	6
398	How higher goals are constructed and collapse under stress: A hierarchical Bayesian control systems perspective. **2021**, 123, 257-285	6
397	A free energy reconstruction of arguments for panpsychism. 1	1
396	The predictive brain model in diagnostic reasoning. **2021**, 6, 1-8	0
395	Enacting Media. An Embodied Account of Enculturation Between Neuromediality and New Cognitive Media Theory. **2021**, 12, 635993	4
394	Impaired and Intact Aspects of Attentional Competition and Prioritization during Visual Working Memory Encoding in Schizophrenia.	
393	Predictive Intelligence for Learning and Optimization. **2021**, 162-188	
392	Adapting non-invasive human recordings along multiple task-axes shows unfolding of spontaneous and over-trained choice. **2021**, 10,	2
391	Message Passing and Metabolism. **2021**, 23,	2
390	Neuronal Sequence Models for Bayesian Online Inference. **2021**, 4, 530937	1
389	The Influences of Category Learning on Perceptual Reconstructions. **2021**, 45, e12981	2
388	Editorial: Probabilistic Perspectives on Brain (Dys)function. **2021**, 4, 710179	
387	Low-level, prediction-based sensory and motor processes are unimpaired in Autism. **2021**, 156, 107835	1
386	A predictive processing framework of tool use. **2021**, 139, 211-221	1

385	How the Discrepancy Between Prior Expectations and New Information Influences Expectation Updating in Depression□he Greater, the Better?. 216770262110246	3
384	Seeing thought in the future: literate forecasting and forecasting literacy. **2021**, 5, 229-265	1
383	Linguistic modulation of the neural encoding of phonemes.	
382	Magic, Bayes and wows: A Bayesian account of magic tricks. **2021**, 126, 515-527	2
381	Evidence and implications of abnormal predictive coding in dementia. **2021**,	3
380	The default mode network in cognition: a topographical perspective. **2021**, 22, 503-513	38
379	Procedural Control Versus Resources as Potential Origins of Human Hyper Selectivity. **2021**, 12, 718141	1
378	Variational free energy, individual fitness, and population dynamics under acute stress: Comment on "Dynamic and thermodynamic models of adaptation" by Alexander N. Gorban et al. **2021**, 37, 111-115	1
377	Modulation of the Primary Auditory Thalamus When Recognizing Speech with Background Noise. **2021**, 41, 7136-7147	1
376	The sense of presence: lessons from virtual reality. **2021**, 11, 335-351	3
375	No Evidence for the Involvement of Cognitive Immunisation in Updating Beliefs About the Self in Three Non-Clinical Samples. **2021**, 1-19	0
374	The extrafoveal preview paradigm as a measure of predictive, active sampling in visual perception. **2021**, 21, 12	0
373	More than words: word predictability, prosody, gesture and mouth movements in natural language comprehension. **2021**, 288, 20210500	4
372	Towards prevention and prediction of infectious diseases with virus sterilization using ultraviolet light and low-temperature plasma and bio-sensing devices for health and hygiene care.	1
371	Motor Cortex Causally Contributes to Vocabulary Translation following Sensorimotor-Enriched Training. **2021**, 41, 8618-8631	2
370	A direct interareal feedback-to-feedforward circuit in primate visual cortex. **2021**, 12, 4911	2
369	Meta-analytic evidence of differential prefrontal and early sensory cortex activity during non-social sensory perception in autism. **2021**, 127, 146-157	1
368	Computational models of the "active self" and its disturbances in schizophrenia. **2021**, 93, 103155	2

367	Active Inference as a Computational Framework for Consciousness. 1	4
366	Contextual prediction modulates musical tension: Evidence from behavioral and neural responses. **2021**, 152, 105771	0
365	Computational framework for investigating predictive processing in auditory perception. **2021**, 360, 109177	0
364	COSMO-Onset: A Neurally-Inspired Computational Model of Spoken Word Recognition, Combining Top-Down Prediction and Bottom-Up Detection of Syllabic Onsets. **2021**, 15, 653975	0
363	Processing rhythm in speech and music: Shared mechanisms and implications for developmental speech and language disorders. **2021**, 35, 771-791	11
362	Sustained neural activity correlates with rapid perceptual learning of auditory patterns. **2021**, 238, 118238	3
361	Expectations boost the reconstruction of auditoryfeatures from electrophysiological responses to noisy speech.	1
360	The Anticipatory and Task-Driven Nature of Visual Perception. **2021**, 31, 5354-5362	1
359	Dynamics underlying auditory-object-boundary detection in primary auditory cortex. **2021**, 54, 7274-7288	0
358	Altered effective connectivity in sensorimotor cortices is a signature of severity and clinical course in depression. **2021**, 118,	3
357	Expectation-driven novelty effects in episodic memory. **2021**, 183, 107466	6
356	Laminar dynamics of high amplitude beta bursts in human motor cortex. **2021**, 242, 118479	3
355	The posterior auditory field is the chief generator of prediction error signals in the auditory cortex. **2021**, 242, 118446	4
354	Bidirectional interaction between visual and motor generative models using Predictive Coding and Active Inference. **2021**, 143, 638-656	2
353	Data-driven transition matrix estimation in probabilistic learning models for autonomous driving. **2021**, 188, 108170	2
352	Bibliography. **2021**, 393-459	
351	Post-traumatic stress disorder is associated with alterations in evoked cortical activation during visual recognition of scenes. **2021**, 31, 102752	
350	A Predictive Coding Account for Chaotic Itinerancy. **2021**, 581-592	

349	Learning to control tinnitus. **2021**,		0
348	Learning from unexpected events in the neocortical microcircuit.		5
347	Top-Down Inference in the Auditory System: Potential Roles for Corticofugal Projections. **2020**, 14, 615259		12
346	The Evolution of Aesthetics: A Review of Models. **2016**, 271-299		5
345	Connection Between Scripts Embedding Motor Schemes and Decision Making. **2017**, 51-67		1
344	Delusions and Prediction Error. **2018**, 35-66		3
343	Towards a Neuroscience of Well-Being: Implications of Insights from Pleasure Research. **2013**, 81-100		5
342	Is Spoken Language All-or-Nothing? Implications for Future Speech-Based Human-Machine Interaction. **2017**, 281-291		13
341	Memory influences visual cognition across multiple functional states of interactive cortical dynamics. **2019**, 303-386		3
340	Going in circles is the way forward: the role of recurrence in visual inference. **2020**, 65, 176-193		17
339	Prediction and memory: A predictive coding account. **2020**, 192, 101821		37
338	Bringing science to the study of ancient senses - archaeology and visual psychology. **2020**, 52, 183-204		1
337	Experiencing presence. **2020**, 10, 166-182		4
336	Cognitive Biology. **2011**,		23
335	Reconciling competing mechanisms posited to underlie auditory verbal hallucinations. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2021**, 376, 20190702	5.8	4
334	The dynamics of resting fluctuations in the brain: metastability and its dynamical cortical core.		5
333	Efficient Information Contents Flow Down from Memory to Predict the Identity of Faces.		2
332	Word predictability, prosody, gesture and mouth movements in face-to-face language comprehension.		2

331	Distinct Hierarchical Alterations of Intrinsic Neural Timescales Account for Different Manifestations of Psychosis.	0
330	The Predictive Global Neuronal Workspace: A Formal Active Inference Model of Visual Consciousness.	3
329	The prospective sense of agency is rooted in local and global properties of intrinsic functional brain networks.	1
328	A predictive processing model of episodic memory and time perception.	3
327	Projections of non-invasive human recordings into state space show unfolding of spontaneous and over-trained choice.	1
326	Stream-Specific Feedback Inputs to the Primate Primary Visual Cortex.	1
325	Neural surprise in somatosensory Bayesian learning.	1
324	Spatiotemporal whole-brain dynamics of auditory patterns recognition.	4
323	A direct interareal feedback-to-feedforward circuit in primate visual cortex.	4
322	Neurophysiological coding of statistical and deterministic rule information.	1
321	The Spatial Memory Pipeline: a model of egocentric to allocentric understanding in mammalian brains.	2
320	Predicting speech from a cortical hierarchy of event-based timescales.	2
319	An information-theoretic perspective on the costs of cognition.	2
318	Enhanced deviant responses in patterned relative to random sound sequences.	1
317	Variational Autoencoder: An Unsupervised Model for Modeling and Decoding fMRI Activity in Visual Cortex.	7
316	Neural circuits for long-range color filling-in.	1
315	Active sampling in visual search is coupled to the cardiac cycle.	2
314	Musical interaction is influenced by underlying predictive models and musical expertise.	3

313	Predictive coding with neural transmission delays: a real-time temporal alignment hypothesis.	3
312	Combining predictive coding with neural oscillations optimizes on-line speech processing.	2
311	Neurocomputational underpinnings of expected surprise.	3
310	SURPRISING THREATS ACCELERATE EVIDENCE ACCUMULATION FOR CONSCIOUS PERCEPTION.	2
309	A sound-sensitive source of alpha oscillations in human non-primary auditory cortex.	1
308	Modulation of the primary auditory thalamus when recognising speech in noise.	2
307	Constructing and Forgetting Temporal Context in the Human Cerebral Cortex.	4
306	State anxiety biases estimates of uncertainty during reward learning in volatile environments.	1
305	Potential of deep predictive coding networks for spatiotemporal tsunami wavefield prediction. **2020**, 7,	2
304	The Emergence of Synaesthesia in a Neuronal Network Model via Changes in Perceptual Sensitivity and Plasticity. **2016**, 12, e1004959	13
303	Reading a suspenseful literary text activates brain areas related to social cognition and predictive inference. **2015**, 10, e0124550	44
302	Bayesian prediction of placebo analgesia in an instrumental learning model. **2017**, 12, e0172609	11
301	Using stochastic language models (SLM) to map lexical, syntactic, and phonological information processing in the brain. **2017**, 12, e0177794	27
300	Signed reward prediction errors drive declarative learning. **2018**, 13, e0189212	20
299	Predictive Coding with Neural Transmission Delays: A Real-Time Temporal Alignment Hypothesis. **2019**, 6,	16
298	Deep Active Inference and Scene Construction. **2020**, 3, 509354	10
297	Temporal structure in associative retrieval. **2015**, 4,	43
296	Neural signatures of perceptual inference. **2016**, 5, e11476	80

295	Unexpected arousal modulates the influence of sensory noise on confidence. **2016**, 5,	99
294	Lamina-specific cortical dynamics in human visual and sensorimotor cortices. **2018**, 7,	26
293	Brain signatures of a multiscale process of sequence learning in humans. **2019**, 8,	31
292	Atypical intrinsic neural timescale in autism. **2019**, 8,	48
291	Anterior insular cortex plays a critical role in interoceptive attention. **2019**, 8,	39
290	Modulation of tonotopic ventral medial geniculate body is behaviorally relevant for speech recognition. **2019**, 8,	16
289	Alterations in the amplitude and burst rate of beta oscillations impair reward-dependent motor learning in anxiety. **2020**, 9,	9
288	Cortical encoding of melodic expectations in human temporal cortex. **2020**, 9,	26
287	Distinct hierarchical alterations of intrinsic neural timescales account for different manifestations of psychosis. **2020**, 9,	11
286	Tightening the Biological Constraints on Gradient-Based Predictive Coding. **2021**,	0
285	Modulation of neural activity in frontopolar cortex drives reward-based motor learning. **2021**, 11, 20303	
284	Broadband Dynamics Rather than Frequency-Specific Rhythms Underlie Prediction Error in the Primate Auditory Cortex. **2021**, 41, 9374-9391	0
283	Dynamic Expectation Maximization Algorithm for Estimation of Linear Systems with Colored Noise. **2021**, 23,	3
282	Mask exposure during COVID-19 changes emotional face processing. **2021**, 16, e0258470	8
281	A Precuneal Causal Loop Mediates External and Internal Information Integration in the Human Brain. **2021**, 41, 9944-9956	2
280	Language. **2011**, 625-665	
279	Mind and Brain (Body). **2011**, 666-677	
278	Intentionality and Conceptualization. **2011**, 573-593	

277 Final Philosophical Remarks. **2011**, 678-687

276 The Organism as a Semiotic and Cybernetic System. **2011**, 248-274

275 What Symbols Are. **2011**, 562-572

274 Development and Culture. **2011**, 604-624

273 Memory. **2011**, 494-512

272 Decisional, Emotional, and Cognitive Systems. **2011**, 440-460

271 Learning. **2011**, 479-493

270 Dealing with Target Motion and Our Own Movement. **2011**, 135-150

269 Behavior. **2011**, 461-478

268 Phylogeny. **2011**, 275-316

267 Ontogeny. **2011**, 317-334

266 The Brain as an Information-Control System. **2011**, 423-439

265 Consciousness. **2011**, 594-603

264 Vision. **2011**, 104-134

263 The Basic Symbolic Systems. **2011**, 515-561

262 The Brain: An Outlook. **2011**, 66-103

261 Epigeny. **2011**, 335-377

260 Complexity: A Necessary Condition. **2011**, 153-197

259	General Features of Life. **2011**, 198-247	
258	Representational Semiotics. **2011**, 378-422	
257	Introduction. **2011**, 1-4	
256	Quantum Mechanics as a General Framework. **2011**, 7-32	
255	Quantum and Classical Information and Entropy. **2011**, 33-65	
254	Auditory Perceptual Organization. **2014**, 1-15	0
253	Mental Effort: Brain and Autonomic Correlates in Health and Disease. **2015**, 237-253	1
252	Embodiment und Sense of Agency. **2017**, 773-819	1
251	Formative Childhood from a Neurobiological Perspective. **2017**, 215-224	
250	Perceptual Expectations do not Modulate Image Repetition Effects as Measured by Event-Related Potentials.	
249	Serial dependence transfers between perceptual objects.	0
248	Time without clocks: Human time perception based on perceptual classification.	2
247	Laminar-specific cortical dynamics in human visual and sensorimotor cortices.	3
246	Learning and Forgetting Using Reinforced Bayesian Change Detection.	
245	Expectation and attention increase the integration of top-down and bottom-up signals in perception through different pathways.	
244	Alterations in the amplitude and burst distribution of sensorimotor beta oscillations impair reward-dependent motor learning in anxiety.	
243	Rapid Brain Responses to Familiar vs. Unfamiliar Music an EEG and Pupillometry study.	
242	Previewing a face in the periphery reduces the fN170: Combined EEG and eye-tracking suggests two stages of trans-saccadic predictive processes.	1

241	Prediction-error signals to violated expectations about person identity and head orientation are doubly-dissociated across the dorsal and ventral visual streams.	0
240	Integration of Literature Across Countries: Challenges, Opportunities, and Implications for Future Research. **2019**, 369-378	
239	Category Theory and Quantum Mechanics. **2019**, 717-835	
238	Phenomenal Aspects of the Self. **2019**, 159-210	
237	The effects of aging on neural signatures of temporal regularity processing in sounds.	1
236	Modulation of tonotopic ventral MGB is behaviorally relevant for speech recognition.	
235	Retrospective inference as a form of bounded rationality, and its beneficial influence on learning.	0
234	Large-scale functional integration, rather than functional dissociation along dorsal and ventral streams, underlies visual perception and action.	
233	Extended categorization of conjunction object stimuli decreases the latency of attentional feature selection and recruits orthography-linked ERPs.	
232	A Kuramoto model of self-other integration across interpersonal synchronization strategies.	
231	Cortical encoding of melodic expectations in human temporal cortex.	0
230	Decoding the sound of hand-object interactions in primary somatosensory cortex.	
229	Sub-Optimal Learning of Tactile-Spatial Predictions in Patients with Complex Regional Pain Syndrome.	
228	Distinct Mechanisms of Imagery Differentially Influence Speech Perception. **2019**, 6,	4
227	Active inference under visuo-proprioceptive conflict: Simulation and empirical results.	
226	Learning of complex auditory patterns changes intrinsic and feedforward effective connectivity between Heschl gyrus and planum temporale.	
225	Predictive coding models for pain perception.	0
224	Sources of predictive information in dynamical neural networks.	

223	Deep Active Inference and Scene Construction.	1
222	Enhanced inter-regional coupling of neural responses underlies long-term behavioral priming.	
221	When you ignore what you see: How to study proof-readers error in pseudocode reading. **2020**,	1
220	Strategic and non-strategic semantic expectations hierarchically modulate neural processing.	
219	A Precuneal Causal Loop Mediates External and Internal Information Integration in the Human Brain.	
218	Predictability-Based Source Segregation and Sensory Deviance Detection in Auditory Aging. **2021**, 15, 734231	0
217	Precision control for a flexible body representation. **2021**, 134, 104401-104401	6
216	Acquisition and Use of 'Priors' in Autism: Typical in Deciding Where to Look, Atypical in Deciding What Is There. **2021**, 51, 3744-3758	2
215	Interoceptive active inference and self-representation in social anxiety disorder (SAD): exploring the neurocognitive traits of the SAD self.	0
214	Broadband Dynamics Rather than Frequency-Specific Rhythms Underlie Prediction Error in the Primate Auditory Cortex.	0
213	The Rhetoric and Reality of Anthropomorphism in Artificial Intelligence. **2020**, 45-65	0
212	Disorders of music processing in dementia. **2020**, 107-149	0
211	Visual Information Processing. **2020**, 36-53	
210	Towards domain-general predictive coding: Expected TMS excites the motor system less effectively than unexpected stimulation.	
209	Human Information Interaction and the Cognitive Predicting Theory of Trust. **2020**,	0
208	Representational pattern similarity of electrical brain activity reveals rapid and specific prediction during language comprehension.	
207	Decoding Predictions and Violations of Object Position and Category in Time-resolved EEG.	
206	Understanding, Explanation, and Active Inference. **2021**, 15, 772641	1

205 Subjective visibility report is facilitated by conscious predictions only.

204 Functional Modulation of Primary Motor Cortex During Action Selection. **2012**, 183-205 0

203 Neurophysiological network dynamics of pitch change detection.

202 Low-level, prediction-based sensory and motor processes are unimpaired in Autism.

201 Homeostatic brain network mechanisms facilitate perceptual binding of audio-visual speech.

200 The effects of developmental trauma on reinforcement learning and its relationship to psychotic experiences: a behavioural study. 0

199 Delusion and Dopamine: Neuronal Insights in Psychotropic Drug Therapy. **2021**, 1-20 0

198 A Bayesian brain model of adaptive behavior: an application to the Wisconsin Card Sorting Task. **2020**, 8, e10316 1

197 Sustained neural activity correlates with rapid perceptual learning of auditory patterns.

196 Strategic and Non-Strategic Semantic Expectations Hierarchically Modulate Neural Processing. **2020**, 7,

195 Cognitive and visual processing performance in Parkinson's disease patients with vs without visual hallucinations: A meta-analysis. **2021**, 146, 161-172 0

194 Neurocomputational underpinnings of expected surprise. **2021**, 1

193 Resonating MindsEmergent Collaboration Through Hierarchical Active Inference. 1 1

192 Active Inference Through Energy Minimization in Multimodal Affective Human-Robot Interaction.. **2021**, 8, 684401 2

191 What happened when? Brain and behavioral responses to violated expectations about the structure and content of episodic memories. 2

190 Learning induces coordinated neuronal plasticity of metabolic demands and functional brain networks.

189 A Parametric Framework to Generate Visual Illusions Using Python. **2021**, 50, 950-965 1

188 Predicting speech from a cortical hierarchy of event-based time scales. **2021**, 7, eabi6070 4

187	Intrinsic cerebellar functional connectivity of social cognition and theory of mind in first-episode psychosis patients. **2021**, 7, 59	1
186	Looking from the top: enhanced top-down sensorimotor processing in somatic anxiety.	
185	State anxiety alters the neural oscillatory correlates of predictions and prediction errors during reward-based learning.. **2022**, 249, 118895	1
184	A tale of two architectures free energy, its models, and modularity.. **2021**, 98, 103257	1
183	Towards autonomous artificial agents with an active self: Modeling sense of control in situated action. **2022**, 72, 50-62	0
182	Strategic and Non-Strategic Semantic Expectations Hierarchically Modulate Neural Processing. **2020**, 7, ENEURO.0229-20.2020	
181	Picture completion reveals developmental change in representational drawing ability: An analysis using a convolutional neural network. **2020**,	0
180	Theories, Models, and Hypotheses. **2021**, 83-188	
179	Douleur chronique chez l□enfant et l□adolescent : la place de l□attachement dans une lecture de codage pr□dictif. **2021**, 60, 215-222	
178	Active Predictive Coding Networks: A Neural Solution to the Problem of Learning Reference Frames and Part-Whole Hierarchies.	0
177	[The predictive mind: An introduction to Bayesian Brain Theory].. **2022**,	0
176	Different types of uncertainty distinguished by monkey prefrontal neurons.. **2022**, 3, tgac002	
175	Interoception as modeling, allostasis as control.. **2021**, 167, 108242	8
174	Person identity-specific adaptation effects in the ventral occipito-temporal cortex.. **2022**,	
173	Predictive coding in ASD: inflexible weighting of prediction errors when switching from stable to volatile environments.	1
172	Entropy, free energy, symmetry and dynamics in the brain. **2022**, 3, 015007	3
171	MEG Correlates of Temporal Regularity Relevant to Pitch Perception in Human Auditory Cortex.. **2022**, 249, 118879	0
170	Tradition and Invention: The Bifocal Stance Theory of Cultural Evolution.. **2022**, 1-50	0

169	How sensory and hedonic expectations shape perceived properties of regular and non-alcoholic beer. **2022**, 99, 104562	0
168	Selective influence of dopamine on electrocortical signatures of error monitoring: a combined EEG and immersive virtual reality study in Parkinson disease.	
167	Neurofeedback and neural self-regulation: a new perspective based on allostasis.. **2022**,	0
166	Developmental Language Disorder as Syntactic Prediction Impairment.. **2022**, 6,	1
165	Inferring in Circles: Active Inference in Continuous State Space Using Hierarchical Gaussian Filtering of Sufficient Statistics. **2021**, 810-818	
164	Sensorimotor Visual Perception on Embodied System Using Free Energy Principle. **2021**, 865-877	0
163	A robot or a dumper truck? Facilitating play-based social learning across neurotypes. **2022**, 7, 239694152210867	
162	Rhythmic modulation of prediction errors: a possible role for the beta-range in speech processing.	0
161	Cross-frequency brain network dynamics support pitch change detection.. **2022**,	0
160	The sound of silence: Predictive error responses to unexpected sound omission in adults.. **2022**,	0
159	A Predictive Coding Framework for Understanding Major Depression.. **2022**, 16, 787495	0
158	Stochastic Motion Stimuli Influence Perceptual Choices in Human Participants.. **2021**, 15, 749728	
157	Percolation may explain efficiency, robustness, and economy of the brain. 1-42	
156	Cortico-fugal regulation of predictive coding.. **2022**, 11,	1
155	Decision uncertainty during hypothesis testing enhances memory accuracy for incidental information.. **2022**, 29, 93-99	
154	Reduced Precision Underwrites Ego Dissolution and Therapeutic Outcomes Under Psychedelics.. **2022**, 16, 827400	0
153	Past and Future Explanations for Depersonalization and Derealization Disorder: A Role for Predictive Coding.. **2022**, 16, 744487	0
152	Diverse functions of the auditory cortico-collicular pathway.. **2022**, 108488	0

151	Expectations boost the reconstruction of auditory features from electrophysiological responses to noisy speech.. **2022**,	1
150	Twelve- and Fourteen-Year-Old School Children Differentially Benefit from Sensorimotor- and Multisensory-Enriched Vocabulary Training. 1	1
149	Toward Standard Guidelines to Design the Sense of Embodiment in Teleoperation Applications: A Review and Toolbox. 1-30	0
148	Active Inference and Epistemic Value in Graphical Models.. **2022**, 9, 794464	1
147	Late N1 and Post Imperative Negative Variation analysis depending on the previous trial history in paradigms of increasing auditory complexity.. **2022**,	
146	Developmental switch in prediction and adaptation to pain in human neonates.	0
145	The neural hierarchy of consciousness.. **2022**, 108202	0
144	How expectancy violations facilitate learning to cope with pain - An experimental approach.. **2022**, 157, 110807	0
143	No effect of focused attention and open monitoring meditation on EEG auditory mismatch negativity in expert and novice practitioners.. **2022**,	0
142	Why Can the Brain (and Not a Computer) Make Sense of the Liar Paradox?. **2021**, 9,	0
141	Permutation Entropy as a Universal Disorder Criterion: How Disorders at Different Scale Levels Are Manifestations of the Same Underlying Principle.. **2021**, 23,	0
140	Brain-heart dynamics in emotional regulation under uncertainty indexes depressive risk.	
139	Bayesian mechanics for stationary processes.. **2021**, 477, 20210518	10
138	Emotion Dynamics as Hierarchical Bayesian Inference in Time.	
137	Adaptive discrimination of antigen risk by predictive coding in immune system.	
136	Perception of the ambiguous motion quartet: A stimulus-observer interaction approach.. **2021**, 21, 12	
135	Perception as controlled hallucination.	
134	Flexible Intentions in the Posterior Parietal Cortex: An Active Inference Theory.	1

133 fdata-03-00027.pdf. **2020**,

132 fdata-03-00027.xml. **2020**,

131 fdata-03-00027-g0001.tif. **2020**,

130 fdata-03-00027-g0002.tif. **2020**,

129 Table_1.XLSX. **2018**,

128 Table_2.XLSX. **2018**,

127 Data_Sheet_1.pdf. **2018**,

126 Data_Sheet_1.pdf. **2019**,

125 Table_1.DOCX. **2018**,

124 Data_Sheet_1.PDF. **2019**,

123 Data_Sheet_1.pdf. **2020**,

122 Data_Sheet_1.pdf. **2020**,

121 What Happened When? Cerebral Processing of Modified Structure and Content in Episodic Cueing.. **2022**, 1-19 1

120 Structure Learning in Predictive Processing Needs Revision. 1 0

119 Clinical Manifestations of Body Memories: The Impact of Past Bodily Experiences on Mental Health. **2022**, 12, 594 0

118 From representations in predictive processing to degrees of representational features.

117 Conditioned hallucinations and prior over-weighting are state-sensitive markers of hallucination susceptibility. **2022**, 0

116 Surprising Threats Accelerate Conscious Perception. **2022**, 16,

115	Learning to suppress likely distractor locations in visual search is driven by the local distractor frequency.	0
114	Learning induces coordinated neuronal plasticity of metabolic demands and functional brain networks.. **2022**, 5, 428	0
113	Decoding violated sensory expectations from the auditory cortex of anaesthetized mice: Hierarchical recurrent neural network depicts separate danger and safety units.	
112	The Motivational Processes of Sense-Making. **2022**, 3-30	0
111	Whole-brain computation of cognitive versus acoustic errors in music.	
110	Theories and models of negative symptoms in schizophrenia and clinical implications.	1
109	Twenty years of investigation with the case of prosopagnosia PS to understand human face identity recognition. Part II: Neural basis. **2022**, 108279	1
108	Neuroscience and architecture: Modulating behavior through sensorimotor responses to the built environment. **2022**, 138, 104715	2
107	Towards a multiscale QoE assessment of mediated social communication. **2022**, 7,	0
106	Differences in Prediction May Underlie Language Disorder in Autism. 13,	1
105	Art and Perception: Using Empirical Aesthetics in Research on Consciousness. 13,	
104	A Predictive Processing Model of Episodic Memory and Time Perception. **2022**, 34, 1501-1544	0
103	Decoding violated sensory expectations from the auditory cortex of anaesthetised mice: Hierarchical recurrent neural network depicts separate danger and safety units.	0
102	Sensorimotor Interaction Against Trauma. 16,	
101	Differentiating Bayesian model updating and model revision based on their prediction error dynamics.	
100	Auditory Perceptual Organization. **2022**, 277-288	
99	An insula hierarchical network architecture for active interoceptive inference. **2022**, 9,	0
98	Beauty and Uncertainty as Transformative Factors: A Free Energy Principle Account of Aesthetic Diagnosis and Intervention in Gestalt Psychotherapy. 16,	

97 Enhanced top-down sensorimotor processing in somatic anxiety. **2022**, 12, 0

96 Pooling strategies in V1 can account for the functional and structural diversity across species. **2022**, 18, e1010270

95 Pharmacological, Neural, and Psychological Mechanisms underlying Psychedelics: A Critical Review. **2022**, 104793 3

94 Doxastic justification through dispositions to cause. **2022**, 200,

93 Human Perception Engineering. **2022**, 157-181

92 Copyright Page. **2011**, iv-iv

91 Foreword. **2011**, vii-viii

90 Dedication. **2011**, v-vi

89 List of abbreviations. **2011**, xix-xx

88 Epigraph. **2011**, xi-xii

87 Author's Preface. **2011**, ix-x

86 Temporal gradient characteristics of automatic neural representation for orthographic consistency in Chinese characters.

85 Investigating Predictive Coding in Younger and Older Children Using MEG and a Multi-Feature Auditory Oddball Paradigm.

84 Th□rie multidimensionnelle et computationnelle de l□umeur. **2022**, 0

83 The neurophysiological effect of NMDA-R antagonism of frontotemporal lobar degeneration is conditional on individual GABA concentration. **2022**, 12,

82 Digital computing through randomness and order in neural networks. **2022**, 119, 0

81 Contrastive self-supervised learning: review, progress, challenges and future research directions. 0

80 Inner speech as a cognitive tool□r what is the point of talking to oneself?. 1-24

79	Reaction Time Mismatch Costs Change with the Likelihood of Stimulus Response Compatibility.	
78	Learned uncertainty: The free energy principle in anxiety. 13,	0
77	Connecting the free energy principle with quantum cognition. 16,	1
76	Cuerpos que hablan: apuntes sobre la transmisi testimonial de las v timas del franquismo en la Querella Argentina. **2022**, 77, e012	0
75	Learned but Not Chosen: A Reward Competition Feedback Model for the Origins of Sexual Preferences and Orientations. **2022**, 443-490	1
74	The world seems different in a social context: A neural network analysis of human experimental data. **2022**, 17, e0273643	0
73	Decoding sounds depicting hand bject interactions in primary somatosensory cortex.	0
72	A matter of availability: Neural representations of task-relevant stimulus features are sharper when stimuli are memorized rather than perceived.	0
71	Time-resolved dynamic computational modeling of human EEG recordings reveals gradients of generative mechanisms for the MMN response.	0
70	A vessel without a pilot: Bodily and affective experience in the Cotard delusion of inexistence.	0
69	AIT Foundations of Structured Experience. 1-39	0
68	Object memory is multisensory: Task-irrelevant sounds improve recollection.	0
67	A Bayesian model for chronic pain. 3,	0
66	An enactivist-inspired mathematical model of cognition. 16,	1
65	Losses resulting from deliberate exploration trigger beta oscillations in frontal cortex.	0
64	Flexible patterns of information transfer in frustrated networks of phase oscillators.	0
63	On the role of feedback in image recognition under noise and adversarial attacks: A predictive coding perspective. **2022**,	0
62	EEG mismatch responses in a multi-modal roving stimulus paradigm provide evidence for probabilistic inference across audition, somatosensation and vision.	0

61	The Relationship Between Negative Affect, State Mindfulness, and the Role of Personality. **2022**, 13, 2729-2737	0
60	Online neurostimulation of Broca's area does not interfere with syntactic predictions: A combined TMS-EEG approach to basic linguistic combination. 13,	1
59	Prefrontal-Parietal-cTBS Effects on Metacognitive Awareness: Real or Illusory?.	0
58	Cerveau maternel : Théorie bayésienne de l'intéroception maternelle pendant la grossesse et le postpartum. **2022**,	0
57	Follow the sound of my violin: Granger causality reflects information flow in sound. 16,	0
56	Long-range connections and mixed diffusion in fractional networks. **2022**, 608, 128269	0
55	Delusion and Dopamine: Neuronal Insights in Psychotropic Drug Therapy. **2022**, 955-974	0
54	T.M. Luhrmann, How God Becomes Real: Kindling the Presence of Invisible Others. **2022**, 16,	0
53	Tracking lexical and semantic prediction error underlying the N400 using artificial neural network models of sentence processing.	0
52	Whole-brain computation of cognitive versus acoustic errors in music: A mismatch negativity study. **2022**, 2, 100145	0
51	All-or-None Evaluation of Prediction Certainty in Autism.	0
50	Adaptive discrimination between harmful and harmless antigens in the immune system by predictive coding. **2023**, 26, 105754	0
49	Increased functional activity, bottom-up and intrinsic effective connectivity in autism. **2023**, 37, 103293	0
48	A Commentary on Towards autonomous artificial agents with an active self: Modeling sense of control in situated action. **2023**, 79, 1-3	0
47	If the discrepancy between expectations and actual information is too large, expectation change decreases □A replication study. **2023**, 79, 101831	0
46	Binding Dancers Into Attractors. **2022**,	0
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