

# Jiri Petrzela

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/137260/publications.pdf>

Version: 2024-02-01

82  
papers

852  
citations

623574

14  
h-index

580701

25  
g-index

82  
all docs

82  
docs citations

82  
times ranked

434  
citing authors

#	ARTICLE	IF	CITATIONS
1	New class of chaotic systems with circular equilibrium. <i>Nonlinear Dynamics</i> , 2015, 81, 1143-1149.	2.7	133
2	Simple Chaotic Flow with Circle and Square Equilibrium. <i>International Journal of Bifurcation and Chaos in Applied Sciences and Engineering</i> , 2016, 26, 1650137.	0.7	97
3	Linearly tunable quadrature oscillator derived from LC Colpitts structure using voltage differencing transconductance amplifier and adjustable current amplifier. <i>Analog Integrated Circuits and Signal Processing</i> , 2014, 81, 121-136.	0.9	32
4	Current-Mode Network Structures Dedicated for Simulation of Dynamical Systems with Plane Continuum of Equilibrium. <i>Journal of Circuits, Systems and Computers</i> , 2018, 27, 1830004.	1.0	30
5	First-order adjustable transfer sections for synthesis suitable for special purposes in constant phase block approximation. <i>AEU - International Journal of Electronics and Communications</i> , 2015, 69, 1334-1345.	1.7	27
6	Synthesis and design of constant phase elements based on the multiplication of electronically controllable bilinear immittances in practice. <i>AEU - International Journal of Electronics and Communications</i> , 2017, 78, 98-113.	1.7	27
7	Multi-valued static memory with resonant tunneling diodes as natural source of chaos. <i>Nonlinear Dynamics</i> , 2018, 94, 1867-1887.	2.7	26
8	Reconnection-less OTA-based Biquad Filter with Electronically Reconfigurable Transfers. <i>Elektronika Ir Elektrotechnika</i> , 2015, 21, .	0.4	23
9	Comparison of Two Solutions of Quadrature Oscillators With Linear Control of Frequency of Oscillation Employing Modern Commercially Available Devices. <i>Circuits, Systems, and Signal Processing</i> , 2015, 34, 3449-3469.	1.2	22
10	Strange Attractors Generated by Multiple-Valued Static Memory Cell with Polynomial Approximation of Resonant Tunneling Diodes. <i>Entropy</i> , 2018, 20, 697.	1.1	20
11	Minimal Realizations of Autonomous Chaotic Oscillators Based on Trans-Immittance Filters. <i>IEEE Access</i> , 2019, 7, 17561-17577.	2.6	20
12	New Chaotic Dynamical System with a Conic-Shaped Equilibrium Located on the Plane Structure. <i>Applied Sciences (Switzerland)</i> , 2017, 7, 976.	1.3	19
13	On the existence of chaos in the electronically adjustable structures of the state variable filters. <i>International Journal of Circuit Theory and Applications</i> , 2016, 44, 1779-1797.	1.3	17
14	Fundamental analog cells for fractional-order two-port synthesis. , 2013, , .		16
15	Implementation of constant phase elements using low-Q band-pass and band-reject filtering sections. , 2016, , .		16
16	Capacitance Multiplier Using Small Values of Multiplication Factors for Adjustability Extension and Parasitic Resistance Cancellation Technique. <i>IEEE Access</i> , 2020, 8, 144382-144392.	2.6	16
17	Fractional-Order Chaotic Memory with Wideband Constant Phase Elements. <i>Entropy</i> , 2020, 22, 422.	1.1	15
18	Electronically tunable simple oscillator based on single-output and multiple-output transistor. <i>IEICE Electronics Express</i> , 2009, 6, 1476-1482.	0.3	12

#	ARTICLE	IF	CITATIONS
19	Fundamental oscillators based on diamond transistors. , 2010, , .		12
20	Analog continuous-time filtering extended to fractional-order network elements. , 2013, , .		12
21	Simple approach for synthesis of fractional-order grounded immittances based on OTAs. , 2016, , .		11
22	Phase shift keying modulator design employing electronically controllable all-pass sections. Analog Integrated Circuits and Signal Processing, 2016, 89, 781-800.	0.9	11
23	Methods for Extended Tunability in Quadrature Oscillators Based on Enhanced Electronic Control of Time Constants. IEEE Transactions on Instrumentation and Measurement, 2018, 67, 1495-1505.	2.4	11
24	CMOS Current Feedback Operational Amplifier-Based Relaxation Generator for Capacity to Voltage Sensor Interface. Sensors, 2018, 18, 4488.	2.1	11
25	Practical aspects of operation of simple triangular and square wave generator employing diamond transistor and controllable amplifiers. , 2013, , .		10
26	Fracmemristor chaotic oscillator with multistable and antimonotonicity properties. Journal of Advanced Research, 2020, 25, 137-145.	4.4	10
27	Current mode tunable KHN filter based on controlled MO-CFTAs. , 2009, , .		9
28	Integer-and Fractional-Order Integral and Derivative Two-Port Summations: Practical Design Considerations. Applied Sciences (Switzerland), 2020, 10, 54.	1.3	9
29	Systematic design procedure towards reconfigurable first-order filters. , 2014, , .		8
30	Accurate Constant Phase Elements Dedicated for Audio Signal Processing. Applied Sciences (Switzerland), 2019, 9, 4888.	1.3	8
31	Analog Multipliers-Based Double Output Voltage Phase Detector for Low-Frequency Demodulation of Frequency Modulated Signals. IEEE Access, 2021, 9, 93062-93078.	2.6	8
32	A note on fractional-order two-terminal devices in filtering applications. , 2014, , .		7
33	Arbitrary phase shifters with increasing phase. , 2015, , .		7
34	Evidence of Strange Attractors in Class C Amplifier with Single Bipolar Transistor: Polynomial and Piecewise-Linear Case. Entropy, 2021, 23, 175.	1.1	7
35	Chaotic and Hyperchaotic Dynamics of a Clapp Oscillator. Mathematics, 2022, 10, 1868.	1.1	7
36	Comparison of atmospheric losses in 850 nm and 1550 nm optical windows. , 2010, , .		6

#	ARTICLE	IF	CITATIONS
37	Current feedback operational amplifier based two-port frequency equalizer. , 2017, , .		6
38	Design of complex fractional-order immittances for simple PID regulation. , 2017, , .		6
39	New Reconfigurable Universal SISO Biquad Filter Implemented by Advanced CMOS Active Elements. , 2018, , .		6
40	New Nonlinear Active Element Dedicated to Modeling Chaotic Dynamics with Complex Polynomial Vector Fields. Entropy, 2019, 21, 871.	1.1	6
41	Generalized Single Stage Class C Amplifier: Analysis from the Viewpoint of Chaotic Behavior. Applied Sciences (Switzerland), 2020, 10, 5025.	1.3	6
42	New Chaotic Oscillator Derived from Class C Single Transistor-Based Amplifier. Mathematical Problems in Engineering, 2020, 2020, 1-18.	0.6	6
43	High frequency chaos converters. , 2010, , .		5
44	Special electronically reconfigurable lossy/lossless integrator in application of functional generator. , 2017, , .		5
45	Research of the Operator's Advisory System Based on Fuzzy Logic for Pelletizing Equipment. Symmetry, 2019, 11, 1396.	1.1	5
46	Hyperchaotic Self-Oscillations of Two-Stage Class C Amplifier With Generalized Transistors. IEEE Access, 2021, 9, 62182-62194.	2.6	5
47	Electronically tunable analog chaos converters. , 2012, , .		4
48	Tunable oscillator derived from Colpitts structure with simply controllable condition of oscillation and synthetic inductor based on current amplifier and voltage differencing transconductance amplifier. , 2013, , .		4
49	Quadrature oscillator solution suitable with arbitrary and electronically adjustable phase shift. , 2015, , .		4
50	Bilinear reconfigurable filters derived by using matrix method of unknown nodal voltages. , 2015, , .		4
51	Implementation of a custom Chua's diode for chaos generating applications. , 2016, , .		4
52	Single active parameter tunable simple band-pass filter: Methods for tunability range extension. , 2017, , .		4
53	Design of integer/fractional-order filter with electronically reconfigurable transfer response. , 2017, , .		4
54	Arbitrary phase shifters with decreasing phase. , 2015, , .		3

#	ARTICLE	IF	CITATIONS
55	Dual slot-superstrate terahertz antenna without Si-lens. , 2017, , .		3
56	Exponentially tunable voltage controlled quadrature oscillator. , 2017, , .		3
57	Illuminance Sensing in Agriculture Applications Based on Infra-Red Short-Range Compact Transmitter Using 0.35 $\mu\text{m}$ CMOS Active Device. IEEE Access, 2020, 8, 18149-18161.	2.6	3
58	Chaotic and Hyperchaotic Self-Oscillations of Lambda Diode Composed by Generalized Bipolar Transistors. Applied Sciences (Switzerland), 2021, 11, 3326.	1.3	3
59	Advanced parallel processing of Lyapunov exponents verified by practical circuit. , 2011, , .		2
60	Circuit realization of the inertia neuron. , 2011, , .		2
61	Novel circuit implementation of the N&#x00F3;se-Hoover thermostated dynamic system. , 2011, , .		2
62	Analog implementations of dynamical systems with equilibria degenerated into plane objects. , 2016, , .		2
63	Practical design of the voltage controllable quadrature oscillator for operation in MHz bands employing new behavioral model of variable-voltage-gain current conveyor of second generation. Journal of Computational Electronics, 2018, 17, 1685-1694.	1.3	2
64	Simple Chaotic Oscillator with Wideband Passive Fractional-Order Inductor. , 2019, , .		2
65	Chaotic Oscillations in Cascoded and Darlington-Type Amplifier Having Generalized Transistors. Mathematics, 2022, 10, 532.	1.1	2
66	On the piecewise-linear approximation of the polynomial chaotic dynamics. , 2011, , .		1
67	Analog implementation of gotthans-petrzela oscillator with virtual equilibria. , 2011, , .		1
68	Dynamical Tangles in Third-Order Oscillator with Single Jump Function. Scientific World Journal, The, 2014, 2014, 1-12.	0.8	1
69	Modulator based on electronic change of phase shift in simple oscillator. , 2015, , .		1
70	On the Canonical Circuit Realizations of Fourth-Order and Fifth-Order Hyperjerk Chaotic Function. , 2019, , .		1
71	Binary Memory Implemented by Using Variable Gain Amplifiers With Multipliers. IEEE Access, 2020, 8, 197276-197286.	2.6	1
72	Binary memory with orthogonal eigenspaces: from stable states to chaotic oscillations. European Physical Journal: Special Topics, 2020, 229, 1021-1032.	1.2	1

#	ARTICLE	IF	CITATIONS
73	Behavioral models of current conveyor of second generation with advanced controllable inter-terminal relations. , 2015, , .		0
74	Experimental confirmation of chaos in dynamical systems with line equilibrium. , 2015, , .		0
75	Utilization of DVCC element for modeling driven nonlinear dynamics. , 2015, , .		0
76	Arbitrary generation of phase shift by pseudodifferential bilinear sections and their application. , 2017, , .		0
77	Chaotic Admittance with Analog Multipliers. , 2018, , .		0
78	Design of Fractional-Order Integrator Controlled by Single Voltage Gain. , 2019, , .		0
79	Simple Chaotic Oscillator with Filtering Passive Two-Port Having Fractional-Order Segments. , 2019, , .		0
80	Circuit Equivalent to Rucklidge System. , 2019, , .		0
81	Brief Contribution to Geometrical Theory of Zeroes and Poles of Bifractional Filters. , 2020, , .		0
82	Hyperchaotic behavior of oscillator with cross-coupled transistor pair. , 2022, , .		0