

# K J Vinoy

## List of Publications by Year in descending order

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189  
papers

2,801  
citations

257357

24  
h-index

289141

40  
g-index

195  
all docs

195  
docs citations

195  
times ranked

2360  
citing authors

#	ARTICLE	IF	CITATIONS
1	Fast Solution of High Stochastic Dimensional EM Problems Using Proper Orthogonal Decomposition. IEEE Microwave and Wireless Components Letters, 2022, 32, 483-486.	2.0	3
2	Performance Improvement of an Archimedean Spiral Antenna for 2–18 GHz Applications. IEEE Antennas and Wireless Propagation Letters, 2022, 21, 1383-1387.	2.4	5
3	Modeling of spatial permittivity variations using Karhunen–Loève expansion for stochastic electromagnetic problems. International Journal of RF and Microwave Computer-Aided Engineering, 2022, 32, .	0.8	2
4	A Miniaturized Angularly Stable FSS for Shielding GSM 0.9, 1.8, and Wi-Fi 2.4 GHz Bands. IEEE Transactions on Electromagnetic Compatibility, 2021, 63, 1605-1608.	1.4	9
5	Porous fibres of a polymer blend for broadband microwave absorption. Materials Advances, 2021, 2, 3613-3619.	2.6	3
6	A Novel Method for Intrusive Stochastic Estimation of Geometric Tolerance Effects in Finite Element Electromagnetic Analysis. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 4329-4340.	2.9	7
7	Effect of Beam tunnels on Resonant Frequency of Cylindrical Reentrant Cavity. Defence Science Journal, 2021, 71, 332-336.	0.5	0
8	A Stochastic Radial Point Interpolation Method for Wideband Uncertainty Analysis. IEEE Antennas and Wireless Propagation Letters, 2021, 20, 1755-1759.	2.4	3
9	Microwave absorption efficiency of poly (vinyl-butylal)/Ultra-thin nickel coated fly ash cenosphere composite. Surfaces and Interfaces, 2020, 19, 100430.	1.5	7
10	Analysis for unloaded quality factor of a rectangular double-reentrant cavity with circular cylindrical ferrule for klystron using Wheeler's incremental inductance rule. Journal of Electromagnetic Waves and Applications, 2020, 34, 201-212.	1.0	0
11	Design of Front-End Modules for MMwave 5G Communication. , 2020, , .		2
12	Analytical Modeling and Experimental Studies on Tapered Post Re-Entrant Cavity Resonator. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 5190-5199.	2.9	2
13	Inverse Multiquadric Radial Basis Functions in Eigenvalue Analysis of a Circular Waveguide Using Radial Point Interpolation Method. IEEE Microwave and Wireless Components Letters, 2020, 30, 537-540.	2.0	9
14	Large Group Delay in Microstrip Circuit Using Coupled Open Stubs and Collocated Ground Slots. IEEE Microwave and Wireless Components Letters, 2020, 30, 553-556.	2.0	6
15	Neumann-Expansion-Based FEM for Uncertainty Quantification of Permittivity Variations. IEEE Antennas and Wireless Propagation Letters, 2020, 19, 561-565.	2.4	8
16	Design of 4 GHz 1-Bit Phase Quantized Beam Steering Transmitarray. , 2019, , .		0
17	Spectral Stochastic FEM for Uncertainty Quantification Due to Multiple Dielectric Variabilities. IEEE Antennas and Wireless Propagation Letters, 2019, 18, 1961-1965.	2.4	11
18	A Fast Polynomial Chaos Expansion for Uncertainty Quantification in Stochastic Electromagnetic Problems. IEEE Antennas and Wireless Propagation Letters, 2019, 18, 2120-2124.	2.4	31

#	ARTICLE	IF	CITATIONS
19	Thermally robust thin-metal membrane capacitive RF MEMS switch. ISSS Journal of Micro and Smart Systems, 2019, 8, 31-40.	1.0	1
20	A simple method for estimating the quality factor of cylindrical re-entrant cavity of Klystrons. Journal of Electromagnetic Waves and Applications, 2019, 33, 1082-1091.	1.0	7
21	Enhancement of microwave absorption bandwidth of polymer blend using ferromagnetic gadolinium silicide nanoparticles. Materials Letters, 2019, 252, 178-181.	1.3	12
22	SLL Degradation due to Quantized Phase Control in Moderate Phased Arrays. , 2019, , .		0
23	An Analysis of Achievable Highest SLL in Moderate Phased Arrays with Quantized Control. , 2019, , .		0
24	Equivalent Circuit Analysis of a Rectangular Double-Reentrant Cavity With Circular Cylindrical Ferrule for Klystrons. IEEE Transactions on Electron Devices, 2019, 66, 4952-4956.	1.6	2
25	A Reconfigurable Array for Media Based Spatial Modulation. , 2019, , .		0
26	Design and Implementation of High Frequency and Large Group Delay Bridged-T All Pass Network. , 2019, , .		1
27	Gadolinium silicide ( $Gd_{5}Si_{4}$ ) nanoparticles for tuneable broad band microwave absorption. Materials Research Express, 2019, 6, 055053.	0.8	12
28	Stochastic Finite Element Method for Electromagnetic Material Property Variations Over Multiple Subdomains. , 2019, , .		1
29	Low-voltage high-reliability MEMS switch for millimeter wave 5G applications. Journal of Micromechanics and Microengineering, 2018, 28, 075012.	1.5	37
30	Industrial waste fly ash cenosphere composites based broad band microwave absorber. Composites Part B: Engineering, 2018, 134, 151-163.	5.9	69
31	Morphology controllable microwave absorption property of polyvinylbutyral (PVB)- $MnO_2$ nanocomposites. Composites Part B: Engineering, 2018, 132, 188-196.	5.9	74
32	Tri-Band Band-Stop Frequency Selective Surface using Tortuous Jerusalem Cross with Angularly Stable Response. , 2018, , .		1
33	Spectral Stochastic Edge Element Method for Complex EM Problems. , 2018, , .		2
34	Design of a Compact PIFA for Telemetry Applications. , 2018, , .		0
35	Design of a High Gain Low Profile Antenna for a Passive Radar. , 2018, , .		1
36	A Reconfigurable Screen in the Antenna Nearfield for Media-Based Modulation Scheme. , 2018, , .		4

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37	Polyvinylbutyralâ€“Polyaniline Nanocomposite for High Microwave Absorption Efficiency. ACS Omega, 2018, 3, 16542-16548.	1.6	22
38	Tailorable electromagnetic interference shielding using nickel coated glass fabric-epoxy composite with excellent mechanical property. Composites Communications, 2018, 10, 110-115.	3.3	24
39	Design of a Compact Radio Frequency Cavity Resonator as a Sensor for Dielectric Liquids. , 2018, , .		1
40	FEM based Methods for Uncertainty Quantification in Electromagnetics. , 2018, , .		3
41	Effect of surface roughness on bandwidth of a high frequency multiple beam klystron. , 2018, , .		2
42	Wideband stripline fed tapered slot antenna with integral coupler for wide scan angle active phased array. IET Microwaves, Antennas and Propagation, 2018, 12, 1487-1493.	0.7	8
43	Electromagnetic interference shielding efficiency of MnO <sub>2</sub> nanorod doped polyaniline film. Materials Research Express, 2017, 4, 025013.	0.8	40
44	Electromagnetic interference shielding effectiveness of polyaniline-nickel oxide coated cenosphere composite film. Composites Communications, 2017, 4, 37-42.	3.3	66
45	Surface-Micromachined Capacitive RF Switches With Low Actuation Voltage and Steady Contact. Journal of Microelectromechanical Systems, 2017, 26, 643-652.	1.7	44
46	Microwave absorption property of PVB-polyaniline nanocomposite. , 2017, , .		2
47	Wideband monopulse antenna system for short range CW RADAR application. , 2017, , .		0
48	Signal diversity using reconfigurable all pass networks for wideband systems. , 2017, , .		1
49	A hybrid structured-unstructured meshing approach for time domain EM analysis of curved geometries. , 2017, , .		1
50	Equal sidelobe patterns for microstrip patch antenna arrays. , 2017, , .		2
51	Design of an ultra high frequency wireless charging station. , 2016, , .		0
52	RF energy harvesting chip powered sensor node. , 2016, , .		6
53	Design of wideband semi-lumped all-pass network for linear group delay response. , 2016, , .		2
54	A novel approach for high Q microwave re-entrant cavity resonator at S-band. , 2016, , .		3

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55	Multiple square beam hole slow wave structure at W band. , 2016, , .		1
56	Design of cascaded all pass network with monotonous group delay response for broadband radio frequency applications. IET Microwaves, Antennas and Propagation, 2016, 10, 808-815.	0.7	17
57	A Novel All-Pass Network Implementation for Improved Group Delay Performance. IEEE Microwave and Wireless Components Letters, 2016, 26, 804-806.	2.0	12
58	Lightweight polyaniline-cobalt coated fly ash cenosphere composite film for electromagnetic interference shielding. Electronic Materials Letters, 2016, 12, 603-609.	1.0	37
59	Influence of MnO <sub>2</sub> decorated Fe nano cauliflowers on microwave absorption and impedance matching of polyvinylbutyral (PVB) matrix. Materials Research Express, 2016, 3, 095003.	0.8	17
60	Wide-band real-time frequency measurement using compressive receiver. , 2016, , .		2
61	A high efficiency 2.4GHz RF to DC converter using 130nm CMOS Cross-Coupled Rectifier. , 2016, , .		6
62	Evaluation of electromagnetic interference shielding using Poly(3,4-ethylenedioxythiophene) Polystyrene sulfonate blend. , 2016, , .		4
63	A low cost approach for realization of W band folded waveguide travelling wave tube. , 2016, , .		1
64	InN Quantum Dot Based Infra-Red Photodetectors. Journal of Nanoscience and Nanotechnology, 2016, 16, 709-714.	0.9	11
65	Microstrip coupled line bandpass filter using quasi minkowski fractal shape for suppression of the second harmonic. , 2015, , .		5
66	An efficient architecture for battery-less terminals for internet of things. , 2015, , .		1
67	Some practical considerations of RF to DC converter using low V <sub>th</sub> CMOS rectifier. , 2015, , .		2
68	Design of a compact dual-band antenna for RF power transfer in an aircraft fuel tank. , 2015, , .		3
69	Radiation efficiencies of a compact planar antenna with different meander line configurations. , 2015, , .		0
70	Temperature dependent electrical characterisation of Pt/HfO <sub>2</sub> /n-GaN metal-insulator-semiconductor (MIS) Schottky diodes. AIP Advances, 2015, 5, .	0.6	54
71	Design of wideband tunable dispersive delay using cascaded all pass networks. , 2015, , .		3
72	NFC for Pervasive Healthcare Monitoring. , 2015, , .		2

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73	Nickel coated flyash (Ni-FAC) cenosphere doped polyaniline composite film for electromagnetic shielding. Materials Research Express, 2015, 2, 036403.	0.8	12
74	A reduced order model for electromagnetic scattering using multilevel Krylov subspace splitting. , 2015, , .		1
75	Analysis of absorption characteristics of stacked patch arrays on moderately lossy dielectric layers. Applied Physics A: Materials Science and Processing, 2015, 119, 1143-1148.	1.1	4
76	RF powered integrated system for IoT applications. , 2015, , .		5
77	Planar micro-wire array with microwave plasma frequency and use of its near zero $\epsilon$ for antenna gain enhancement. , 2014, , .		0
78	Design, fabrication and characterization of capacitive RF MEMS switches with low pull-in voltage. , 2014, , .		23
79	Plasmonic enhancement of photocurrent in GaN based UV photodetectors. , 2014, , .		9
80	Spectral stochastic finite element method for periodic structure. , 2014, , .		12
81	Design of cascaded three-conductor coupled line filter. Microwave and Optical Technology Letters, 2014, 56, 2431-2436.	0.9	1
82	Pt/n-GaN metal-semiconductor and Pt/HfO <sub>2</sub> /n-GaN metal-insulator-semiconductor Schottky diodes. Materials Research Society Symposia Proceedings, 2014, 1736, 7.	0.1	0
83	Efficient finite element model order reduction of electromagnetic systems using fast converging Jacobi-Davidson Iteration. , 2014, , .		0
84	Wireless aircraft fuel quantity indication system. , 2014, , .		2
85	High directivity DGS-based coupler. Journal of Electromagnetic Waves and Applications, 2014, 28, 1068-1074.	1.0	2
86	Real-time frequency discriminator using two stage all-pass network. , 2014, , .		6
87	A tuned rectifier for RF energy harvesting from ambient radiations. AEU - International Journal of Electronics and Communications, 2013, 67, 564-569.	1.7	33
88	Miniaturized ultra wide band filter with extended stop band. Microwave and Optical Technology Letters, 2013, 55, 703-705.	0.9	2
89	Analysis of multi-conductor coupled microstrip lines with an aperture in the ground plane for the design of a broadband filter. Journal of Electromagnetic Waves and Applications, 2013, 27, 856-867.	1.0	5
90	CMOS-Compatible and Scalable Deposition of Nanocrystalline Zinc Ferrite Thin Film to Improve Inductance Density of Integrated RF Inductor. IEEE Transactions on Magnetics, 2013, 49, 4323-4326.	1.2	20

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91	Miniaturized Defected Ground High Isolation Crossovers. IEEE Microwave and Wireless Components Letters, 2013, 23, 347-349.	2.0	7
92	Group delay engineering using cascaded all pass filters for wideband chirp waveform generation. , 2013, , .		8
93	Augmented Krylov model order reduction for finite element approximation of plane wave scattering problems. , 2013, , .		6
94	Jacobi-Davidson iteration based reduced order finite element models for radar cross-section. , 2013, , .		0
95	Design of ultra wideband conformal antenna array on a concave surface for medical imaging applications. , 2013, , .		1
96	Immersible antenna for RF energy harvesting. , 2013, , .		3
97	A thin radar absorbing material using a stacked ring-patch array. , 2013, , .		0
98	Energy-efficient synthesis of ferrite powders and films. Materials Research Society Symposia Proceedings, 2012, 1386, 1.	0.1	1
99	Compact polarization dependent EBG surface with fractal boundary patches. , 2012, , .		7
100	Studies on ultra wideband triangular patch antennas for imaging applications. , 2012, , .		4
101	Multi-port network modeling of stub loaded Microstrip ring antenna for dual-band operations. , 2012, , .		1
102	Low-Thermal-Budget Solution Processing of Thin Films of Zinc Ferrite and Other Complex Oxides. Materials Research Society Symposia Proceedings, 2012, 1400, 66.	0.1	2
103	Towards a broadband chirped pulse Fourier transform microwave spectrometer. Indian Journal of Physics, 2012, 86, 225-235.	0.9	2
104	ZnFe <sub>2</sub> O <sub>4</sub> : Rapid and sub-100 Å°C synthesis and anneal-tuned magnetic properties. Journal of Materials Chemistry, 2012, 22, 2149-2156.	6.7	51
105	Analysis of modified microstrip line and its application. , 2012, , .		6
106	Multi-Port Network Approach for the Analysis of Dual Band Fractal Microstrip Antennas. IEEE Transactions on Antennas and Propagation, 2012, 60, 5100-5106.	3.1	30
107	Approximate synthesis formulas for microstrip line with aperture in ground plane. International Journal of RF and Microwave Computer-Aided Engineering, 2012, 22, 124-130.	0.8	4
108	Electronically tunable zero order resonator based on CRLH-TLs. , 2011, , .		0

#	ARTICLE	IF	CITATIONS
109	Generation of a short-duration ultrawideband chirped-pulse using CRLH Transmission lines. , 2011, , .		1
110			



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127	P2-1: Non-resonant perturbation formula for interaction impedance measurement for a folded-waveguide SWS. , 2010, , .		1
128	P2-6: Analysis of a ridge-loaded rectangular folded-waveguide SWS. , 2010, , .		0
129	A stacked ring-patch artificial substrate for surface waves suppression and in phase reflection. , 2010, , .		3
130	Elliptic slot antenna for broadband wireless communications. , 2010, , .		1
131	Indian Nanoelectronics Users Program: An Outreach Vehicle to Expedite Nanoelectronics Research in India. , 2010, , .		1
132	Coplanar Capacitively Coupled Probe Fed Microstrip Antennas for Wideband Applications. IEEE Transactions on Antennas and Propagation, 2010, 58, 3131-3138.	3.1	67
133	DESIGN OF NARROWBAND BANDPASS FILTER ON COPLANAR WAVEGUIDE USING SPIRAL SLOTS. Progress in Electromagnetics Research Letters, 2009, 6, 139-148.	0.4	11
134	MICROSTRIP SQUARE RING ANTENNA FOR DUAL-BAND OPERATION. Progress in Electromagnetics Research, 2009, 93, 41-56.	1.6	66
135	A BROADBAND SUSPENDED MICROSTRIP ANTENNA FOR CIRCULAR POLARIZATION. Progress in Electromagnetics Research, 2009, 90, 353-368.	1.6	79
136	DESIGN OF A COMPACT RECTANGULAR DIELECTRIC RESONATOR ANTENNA AT 2.4 GHZ. Progress in Electromagnetics Research C, 2009, 11, 69-79.	0.6	26
137	ANALYSIS AND DESIGN OF A COMPACT MULTI-LAYER ULTRA WIDE BAND FILTER. Progress in Electromagnetics Research C, 2009, 7, 111-123.	0.6	13
138	A Compact Defected Ground Microstrip Device with Photonic Bandgap Effects. Journal of Electromagnetic Waves and Applications, 2009, 23, 255-266.	1.0	9
139	Equivalent Circuit Analysis of Serpentine Folded-waveguide Slow-wave Structures for Millimeter-wave Traveling-wave Tubes. Journal of Infrared, Millimeter, and Terahertz Waves, 2009, 30, 151-158.	1.2	11
140	Analysis of Rectangular Folded-Waveguide Millimeter-Wave Slow-wave Structures using Conformal Transformations. Journal of Infrared, Millimeter, and Terahertz Waves, 2009, 30, 294-301.	1.2	7
141	A compact two layer broadside coupled UWB filter. , 2009, , .		0
142	Analysis and Design of Two Layered Ultra Wide Band Filter. Journal of Electromagnetic Waves and Applications, 2009, 23, 1235-1243.	1.0	20
143	Design of multi-frequency microstrip antennas using multiple rings. IET Microwaves, Antennas and Propagation, 2009, 3, 77.	0.7	19
144	A wideband microstrip antenna with symmetric radiation patterns. Microwave and Optical Technology Letters, 2008, 50, 1991-1995.	0.9	17

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145	Analysis of serpentine folded-waveguide slow-wave structures by elliptical conformal transformation. , 2008, , .		1
146	Design Studies of Ultra-Wideband Microstrip Antennas with a Small Capacitive Feed. International Journal of Antennas and Propagation, 2007, 2007, 1-8.	0.7	39
147	Design and Optimization of Broadband Micromachined Antenna. , 2006, , .		2
148	A NEW MEASURE OF LACUNARITY FOR GENERALIZED FRACTALS AND ITS IMPACT IN THE ELECTROMAGNETIC BEHAVIOR OF KOCH DIPOLE ANTENNAS. Fractals, 2006, 14, 271-282.	1.8	23
149	Equivalent material parameter extraction of double strip loaded waveguide. IEICE Electronics Express, 2005, 2, 165-169.	0.3	3
150	Design optimization of micromachined ferroelectric-based phase shifter using modified ground coplanar waveguide. Microwave and Optical Technology Letters, 2005, 46, 185-188.	0.9	0
151	IMPACT OF FRACTAL DIMENSION IN THE DESIGN OF MULTI-RESONANT FRACTAL ANTENNAS. Fractals, 2004, 12, 55-66.	1.8	14
152	Reply to Comments on "On the Relationship Between Fractal Dimension and the Performance of Multi-Resonant Dipole Antennas Using Koch Curves" IEEE Transactions on Antennas and Propagation, 2004, 52, 1627-1628.	3.1	3
153	On the relationship between fractal dimension and the performance of multi-resonant dipole antennas using koch curves. IEEE Transactions on Antennas and Propagation, 2003, 51, 2296-2303.	3.1	143
154	Use of polymer and ceramic thin film materials to reduce the actuation voltage of a distributed micro-electromechanical system phase shifter. Smart Materials and Structures, 2003, 12, N9-N13.	1.8	0
155	Carbon nanotubes, fillers, and FSS as potential EM absorbers. , 2003, , .		4
156	Design and development of micromachined bilateral interdigital coplanar waveguide RF phase shifter compatible with lateral double diffused metal oxide semiconductor voltage controller on silicon. Smart Materials and Structures, 2003, 12, 769-775.	1.8	4
157	RF MEMS and reconfigurable antennas for communication systems. , 2003, , .		4
158	Bilateral interdigital CPW phase shifter using BaSrTiO <sub>3</sub> thin film on poly-Si/Si substrate for electronically steerable antenna architecture. , 2003, , .		1
159	<title>Optimized multilayered graded fractal FSS: microgenetic algorithm and comparison with experiment</title>. , 2002, , .		0
160	<title>Wireless health monitoring of cracks in structures with MEMS-IDT sensors</title>. , 2002, , .		9
161	<title>RF MEMS phase shifter by microstereolithography on silicon</title>. , 2002, 4700, 58.		1
162	Authors' reply to "comments on Hilbert curve fractal antenna: A small resonant antenna for VHF/UHF applications?". Microwave and Optical Technology Letters, 2002, 35, 421-421.	0.9	0

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163	Design of reconfigurable fractal antennas and RF-MEMS for space-based systems. Smart Materials and Structures, 2001, 10, 1211-1223.	1.8	36
164	Optimized multilayered wideband absorbers with graded fractal FSS. , 2001, 4334, 176.		2
165	Performance improvement of rf MEMS capacitive switches with high-dielectric-constant materials. , 2001, , .		2
166	Micromachined systems for rf and microwave antenna applications. , 2001, , .		3
167	Small resonant fractal antennas. , 2001, , .		0
168	RF MEMS and reconfigurable conformal fractal antennas. , 2001, 4236, 194.		2
169	Hilbert curve fractal antenna: A small resonant antenna for VHF/UHF applications. Microwave and Optical Technology Letters, 2001, 29, 215-219.	0.9	138
170	Design of reconfigurable fractal antennas and rf MEMS for spaced-based communication systems. , 2001, 4591, 185.		0
171	Application of MEMS in microwave and millimeter wave systems. , 2001, , .		2
172	Distributed MEMS phase shifters by microstereolithography on silicon substrates for microwave and millimeter wave applications. Smart Materials and Structures, 2001, 10, 1224-1229.	1.8	9
173	Design and Development of Tunable Multi-Layer Smart Antennas Using Ferroelectric Materials. Journal of Intelligent Material Systems and Structures, 2000, 11, 294-299.	1.4	3
174	Design and Development of Tunable Multi-Layer Smart Antennas Using Ferroelectric Materials. Journal of Intelligent Material Systems and Structures, 2000, 11, 294-299.	1.4	5
175	Gain-enhanced electronically tunable microstrip patch antenna. Microwave and Optical Technology Letters, 1999, 23, 368-370.	0.9	7
176	Radar Absorbing Materials. , 1996, , .		374
177	Trends in RAM. , 1996, , 169-173.		0
178	Trends in radar absorbing materials technology. Sadhana - Academy Proceedings in Engineering Sciences, 1995, 20, 815-850.	0.8	75
179	Parallelization strategies for the UTD codes. , 0, , .		0
180	Low voltage tunable capacitors for RF MEM filters and antenna applications. , 0, , .		4

#	ARTICLE	IF	CITATIONS
181	Resonant frequency of Hilbert curve fractal antennas. , 0, , .		43
182	Hilbert curve fractal antennas with reconfigurable characteristics. , 0, , .		18
183	Multi-band characteristics and fractal dimension of dipole antennas with Koch curve geometry. , 0, , .		10
184	Fractal dimension and frequency response of fractal shaped antennas. , 0, , .		12
185	Tailoring the dielectric properties of meta materials. , 0, , .		2
186	Experimental results of planar meta materials. , 0, , .		0
187	CPW phase shifter using barium strontium titanate thin film on silicon substrate. , 0, , .		4
188	A Silicon Micromachined Photonic Band Gap Cell, Characteristics and an Application. , 0, , .		0
189	A Design Procedure for Micromachined Antennas on Semiconductor Substrates. , 0, , .		5